

District Name: Hopkins County District Code: _____ Facility Name: Hanson Elementary School Code: _____

Project Name: Hanson Elementary School

PROJECT TYPE: Yes No Gross Building Area (sf.)
 New Building 72280
 Addition _____
 Renovation _____

Provisions for Future Expansion: _____

Proposed Alternates: (1) Possibly Trane Controls and/or Trane Equipment.
 (2) Owner Preferred Door Hardware
 (3) _____

Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed.

BUILDING CONSTRUCTION CHARACTERISTICS:

Description of Building Structure:

Foundation: Reinforced Poured Concrete

Exterior Walls: Insulated Concrete Form

Roof Structure: Steel Deck with Steel Joists

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

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

30 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. System comparisons were not required as two major objectives for the project are ICF envelope and geothermal heating/cooling. No other system surpasses this combination.

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): 46057 Avg. Exterior Wall R-Value: 30

Gross Window / Door Area (sf): 9425 Avg. Window/Door R-Value: U Value .28

Gross Roof Area (sf): 60573 Avg. Roof R-Value: _____

Exterior Wall Type: D - face brick, ICF poured concrete, interior finish system Other: _____

Roofing Type: D - metal roofing over nailable deck with insulation Other: TPO

HVAC System Type: C - ground source heat pump system with air make up Other: _____

Classroom Lighting: E - other Other: All LED Lighting

Active Daylighting: B - occupancy light control sensors Other: _____

Passive Daylighting: G - none Other: _____

On Site Energy Generation: G - none Other: _____

Air Purification Systems : YES NO
Gray Water System : YES NO
Low Water Use Fixtures : YES NO
Other: Plasma filter system in most units RA stream.

PLUMBING:

Type of Sewage Disposal: Gravity sewer to municipal system.

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): Geothermal, natural gas, and electric.

ELECTRICAL:

Source of Electric Power: LGE/KU

Voltage Serving Facility: 480V/277V/3Phase/4Wire

Number of Convenience Outlets:
Classrooms 12
Library/Media Center 25
Business Ed NA
Family & Consumer Science NA

Camera System: Approx. 39 IP Cameras

Lighting Intensity (fc.):
Std. Classrooms 50
Library/Media Ctr 75
Science Lab NA
Science Clrm NA
Band/Music NA
Business Ed NA
Shops NA
Corridors 30
Stairways 30
Cafeteria 50
Pre-School Clrm 75
Art Classroom 100
Gymnasium 50

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

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

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Corridors	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Custodial	Sealed Concrete	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Kitchen	Quarry Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Cafeteria	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Gym	Wood Athletic Floor	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Showers/Locker	Ceramic Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Toilets	Ceramic Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Library/Media Cntr	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Classrooms	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Music	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Art	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile
Science	N/A	N/A	N/A	N/A
FMD	Luxury Vinyl Tile	N/A	Painted CMU/Gypsum	Acoustical Ceiling Tile

OTHER AREAS

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Miscellaneous Project Specific Features: _____

Kentucky Registered Architect: Andrew H. Owens, AIA CID Date: _____
Signature

Kentucky Registered Engineer: Baccus L. Oliver, PE Date: _____
Signature

Board Designee or Superintendent: _____ Date: _____
Signature

Energy Efficient Design Features Lists

Exterior Wall Type

- A - face brick, captured air space, board insulation and waterproof CMU
- B - face brick, captured air space, sprayed insulation on CMU
- C - face brick, captured air space, sheathing over metal insulated stud system, interior finish system
- D - face brick, ICF poured concrete, interior finish system
- E - other, describe

Roofing Type List

- A - modified bitumen over rigid insulation
- B - EPDM over rigid insulation
- C - plastic single ply over rigid insulation
- D - metal roofing over nailable deck with insulation
- E - asphalt shingle roofing over nailable deck with insulation
- F - other, describe

HVAC System Type List

- A - two pipe unit ventilator system
- B - water source heat pump system with air make up
- C - ground source heat pump system with air make up
- D - hybrid water source heat pump system with boiler/chiller and well field with air make up
- E - variable refrigerant flow (VRF) with air make up
- F - hybrid geothermal/variable refrigerant flow (VRF) with air make up
- G - variable refrigerant volume (VRV) with air make up
- H - hybrid geothermal/variable refrigerant volume (VRV) with air make up
- I - chilled beam system
- J - hybrid chilled beam/geothermal system
- L - other

Classroom Lighting List

- A - T8 fluorescent fixtures
- B - T5 fluorescent fixtures
- C - high energy gas fixtures
- D - low voltage systems
- E - other

Active Daylight System List

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

Passive Daylight Systems List

- A - upper classroom clerestory lighting with sloped ceiling plane
- B - lower classroom clerestory lighting that does NOT require sloping the ceiling plane
- C - exterior light shelves
- D - solar tubes without dimming
- E - solar tubes with internal dimmers
- F - other
- G - none

On Site Energy Generation List

- A - solar water heating
- B - solar electric generation (small units for demonstration or for limited areas)
- C - solar electric generation (to support the entire building's energy needs)
- D - wind generation (small units for demonstration or for limited areas)
- E - wind generation (to support the entire building's energy needs)
- F - other
- G - none

For Reference