

FLOYD COUNTY BOARD OF EDUCATION Danny Adkins, Superintendent 442 KY RT 550 Eastern, KY 41622 Telephone (606) 886-2354 Fax (606) 886-4550 www.floyd.kyschools.us

Sherry Robinson- Chair - District 5 William Newsome, Jr., Vice-Chair - District 3 Linda C. Gearheart, Member - District 1 Dr. Chandra Varia, Member- District 2 Rhonda Meade, Member - District 4

Date: March 23, 2020

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

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

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

Background and Rationale:

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

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

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

Director

702 KAR 4:160

District Name:	Floyd Cour	nty Schools	District Code:	Facility 175 Name:	James D. Adams Middle School	School Code:	
Projec	ct Name:	Floyd Count	ty Schools Guara	anteed Energy Saving	s Contract		
PROJEC	T TYPE:	Yes	No	Gross Buil	ding Area (sf.)		
New Build	ding		7				
Addition			abla				
Renovation	on	\checkmark		81	518		
Provisions	s for Future	Expansion:					
Proposed	Alternates:)				,
		(2))				
Describe	special cond	• •		l alternates, attach a s	upplemental sheet, if needed.		
BUILDING	G CONSTR	UCTION CHA	ARACTERISTIC	S:			
	on of Buildin			_			
•		_					
Ro	of Structure	:					
ENEDOV	CEELOIENT	- DEGION //	D0 457 450 and	KD0 457 455)-			
			RS 157.450 and				
3	32.6	_Energy Con	sumption "Existi	ng" (kBtu/sf/yr)			
2	29.5	_Energy Con	sumption Target	t (kBtu/sf/yr)			
YES	NO						
	V	LEED Certif	fied	Other:			
	\checkmark	Designed to	meet Energy St	tar			
	7	Exceeds AS	SHRAE 90.1(200	7) by 10% (Minimum)			
$ \mathbf{Z} $				·	rating Cost Effective Design		
		Li	fe Cycle Cost An	alysis Software Used:		,	
If not yes	s to one or i	more of the	above, explain v	why			
		Designed to	be Net-Zero				
	☑	•	be Net-Zero Re	eady			
Fneray 5	fficient Dos	sian Feature	s: (See Liet Da	ge 4, or Use Drop Do	own list)		
	est Building (_	s. (See List Fa		onn Elst)		
	terior Wall A		□ 1E3		Ava Exterior Well B Value		
		` '			_ Avg. Exterior Wall R-Value:		
	indow / Door	` '			_ Avg. Window/Door R-Value:		
	oof Area (sf):				Avg. Roof R-Value:	_	
	Wall Type:					Other:	
Roofing T						Other:	
		B - water source	ce heat pump system	with air make up		Other:	
	m Lighting:	E - other				Other:	LED
	aylighting:	F - none				Other:	
	Daylighting:					Other:	
On Site E	nergy Gene	ration:	G - none			Other:	

702 KAR 4:160

Gray Water System: YES	Air Purification System	ns: YES 🗆 NO [V		
PLUMBING: Type of Sewage Disposal:	Gray Water System :	YES 🗆 NO (
Type of Sewage Disposal:	Othorn		_		
Type of Sewage Disposal:				The state of the s	
Heating Only:	PLUMBING:				
Heating Only:	Type of Sewage Dispo	osal:			
Ventilation Only	HEATING, VENTILAT	TION AND AIR CONDITIONING	:		
Source of Electric Power: AEP	Heating Only:			HVAC: x	A/C Only:
Source of Electric Power: AEP	Fuel Source/Backup (if applicable): N/A			
Std. Classrooms 50	ELECTRICAL:				
Voltage Serving Facility: 480V/3Phase	Source of Electric Pov	wer: AEP			
Number of Convenience Outlets:	Voltage Serving Facili	ty: 480V/3Phase			75
Band/Music 50	Number of Convenien	uso Outloto:			
Business Ed 50					
Shops 50		•			
Stainways 20	Business Ed			Shops	
Cafeteria 50 Pre-School Clrm NA Art Classroom 50 Gymnasium 50 SPECIAL EQUIPMENT: System Conduit Only Conduit & Wiring Complete with Equipment Bell	Family & Consumer S	cience			
Pre-School Clrm	•				
Art Classroom Gymnasium 100 50	Camera System:				
System Conduit Only Conduit & Wiring Complete with Equipment					
System					
Bell NA Clock NA Fire Alarm NA Intercom NA Telephone NA Television NA Computer NA Wireless Network NA Interactive White bd NA Voice Amplification NA FIXED EQUIPMENT: Teacher Cabinet Custodial Room Shelves Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other			Conduit &	Wiring	Complete with Equipment
Clock NA Fire Alarm NA Intercom NA Telephone NA Television NA Computer NA Wireless Network NA Interactive White bd NA Voice Amplification NA FIXED EQUIPMENT: Teacher Cabinet Custodial Room Shelves Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other	•	·			NA
Fire Alarm NA Intercom NA Telephone NA Television NA Computer NA Wireless Network NA Interactive White bd NA Voice Amplification NA FIXED EQUIPMENT: Custodial Room Shelves Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other					NA
Telephone NA Television NA Computer NA Wireless Network NA Interactive White bd NA Voice Amplification NA FIXED EQUIPMENT: Teacher Cabinet Custodial Room Shelves Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other					
Television NA Computer NA Wireless Network NA Interactive White bd NA Voice Amplification NA FIXED EQUIPMENT: Teacher Cabinet Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other					
Computer Wireless Network Interactive White bd Voice Amplification FIXED EQUIPMENT: Teacher Cabinet Student Lockers Folding Bleachers Library Furnishings NA NA NA Custodial Room Shelves Science Laboratories Family & Consumer Sci Other					
Wireless Network NA Interactive White bd NA Voice Amplification NA FIXED EQUIPMENT: Teacher Cabinet Custodial Room Shelves Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other					
Interactive White bd Voice Amplification FIXED EQUIPMENT: Teacher Cabinet Student Lockers Student Lockers Folding Bleachers Library Furnishings NA NA NA Custodial Room Shelves Science Laboratories Family & Consumer Sci Other					
FIXED EQUIPMENT: Teacher Cabinet Student Lockers Folding Bleachers Library Furnishings Custodial Room Shelves Science Laboratories Family & Consumer Sci Other					
Teacher Cabinet Custodial Room Shelves Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other	Voice Amplification				NA
Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other	FIXED EQUIPMENT:	-			
Student Lockers Science Laboratories Folding Bleachers Family & Consumer Sci Library Furnishings Other	Teacher Cabinet		Cu	stodial Room Shelves	
Library Furnishings Other			_		
Dry Food Snelves Other					
	Dry Food Shelves			IEI	

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 Pro	ject Specific Featu	ıres:	talian and the second s		
Kentucky Register	ed Architect:	Signature	Э	Date:	
Kentucky Register	ed Engineer:	Signature	Э	Date:	
Board Designee o	r Superintendent:	Signature)	Date:	

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

- 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

BG-2

KENTUCKY DEPARTMENT OF EDUCATION

702 KAR 4:160

District Name: Floyd County Schools	District Facility Code: 175 Name: A	llen Elementary School	School Code:
Project Name: Floyd Count	ty Schools Guaranteed Energy Savings (Contract	
PROJECT TYPE: Yes	No Gross Buildin	ng Area (sf.)	
New Building □			
Addition	<u></u>		
Renovation 🔽		04	
Provisions for Future Expansion:			
Proposed Alternates: (1)			
(2))		
Describe special conditions, phasi	ng of project and alternates, attach a sup	oplemental sheet, if needed.	
BUILDING CONSTRUCTION CHA	ARACTERISTICS:		
Description of Building Structure: Foundation:			
Roof Structure:			
ENERGY EFFICIENT DESIGN (K	PS 157 450 and KPS 157 455):		
	sumption "Existing" (kBtu/sf/yr)		
Energy Con	sumption Target (kBtu/sf/yr)		
YES NO			
☐ ☑ LEED Certif		Marie Tree	<u> </u>
•	meet Energy Star		
	SHRAE 90.1(2007) by 10% (Minimum)		
	ling Life Cycle Cost Analysis Demonstrat		
	fe Cycle Cost Analysis Software Used:		
If not yes to one or more of the	ibove, explain wny.		
☐ ☑ Designed to	be Net-Zero		
☐ ☑ Designed to	be Net-Zero Ready		
Energy Efficient Design Feature	s: (See List Page 4, or Use Drop Dow	rn List)	
East / West Building Orientation	☐ YES ☐ NO	,	
Gross Exterior Wall Area (sf):		Avg. Exterior Wall R-Value:	
Gross Window / Door Area (sf):		Avg. Window/Door R-Value:	
Gross Roof Area (sf):		Avg. Roof R-Value:	
Exterior Wall Type:			Other:
Roofing Type:			Other:
HVAC System Type: B - water source	e heat pump system with air make up		Other:
Classroom Lighting: E - other			Other: LED
Active Daylighting: F - none			Other:
Passive Daylighting: G-none			Other:
On Site Energy Generation:	G - none		Other:

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Air Purification Systems Gray Water System:	S: YES [=	Image: section of the content of the con			
Low Water Use Fixture	_] NO	✓			
PLUMBING:						
Type of Sewage Dispos	sal:					
HEATING, VENTILATI	ON AND AIR COND	TIONIN	<u>G</u> :			
Heating Only:	Heating & Mec			·	HVAC: x	A/C Only:
Fuel Source/Backup (if	applicable): N/	Α				
ELECTRICAL:						
Source of Electric Power	er: <u>AEP</u>				Lighting Intensity (fc.): Std. Classrooms	50
Voltage Serving Facility	/: <u>480V/3Phase</u>	480V/3Phase			Library/Media Ctr	75
Number of Convenience	o Outlots:				Science Lab Science Clrm	50 50
Classrooms					Band/Music	50
Library/Media Center	*				Business Ed	50
Business Ed					Shops	50
Family & Consumer Sc	ience				Corridors	20 · 20
Camera System:					Stairways Cafeteria	50
Camera Gystem.					Pre-School Cirm	NA
					Art Classroom	100
					Gymnasium	50
SPECIAL EQUIPMENT	<u>r</u> : Conduit Only			Conduit (& Wiring	Complete with Equipment
Bell	-					NA
Clock					,	NA
Fire Alarm						NA
Intercom _						NA NA
Telephone _						NA NA
Television _ Computer						NA NA
Wireless Network						NA
Interactive White bd						NA
Voice Amplification _						NA NA
FIXED EQUIPMENT:						
Teacher Cabinet					Custodial Room Shelves	
Student Lockers					Science Laboratories	
Folding Bleachers					amily & Consumer Sci	
Library Furnishings _ Dry Food Shelves					Other Other	

BG-2

KENTUCKY DEPARTMENT OF EDUCATION

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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 Pro	ject Specific Feature	es:		
Kentucky Register	ed Architect:			Date:
		Signature		
Kentucky Register	ed Engineer:			Date:
	J	Signature		
Board Designee or	· Superintendent:			Date:
-		Signature		

Exterior Wall Type

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- F other, describe

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- E wind generation (to support the entire building's energy needs)
- F other
- G none

702 KAR 4:160

Project Name: Floyd County Schools Guaranteed Energy Savings Contract PROJECT TYPE: Yes No Gross Building Area (sf.) New Building
New Building
Renovation
Provisions for Future Expansion: Proposed Alternates: (1)
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:
Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed. BUILDING CONSTRUCTION CHARACTERISTICS: Description of Building Structure: Foundation: Exterior Walls:
Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed. BUILDING CONSTRUCTION CHARACTERISTICS: Description of Building Structure: Foundation: Exterior Walls:
BUILDING CONSTRUCTION CHARACTERISTICS: Description of Building Structure: Foundation: Exterior Walls:
Description of Building Structure: Foundation: Exterior Walls:
Foundation: Exterior Walls:
Exterior Walls:
Exterior Walls:
Roof Structure:
ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):
Energy Consumption "Existing" (kBtu/sf/yr)
39.1 Energy Consumption Target (kBtu/sf/yr)
YES NO
□ ☑ LEED Certified Other:
□ Designed to meet Energy Star
☐ Exceeds ASHRAE 90.1(2007) by 10% (Minimum)
☑ Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design
Life Cycle Cost Analysis Software Used:
If not yes to one or more of the above, explain why.
□ ☑ Designed to be Net-Zero
□ ☑ Designed to be Net-Zero Ready
Energy Efficient Design Features: (See List Page 4, or Use Drop Down List)
East / West Building Orientation
Gross Exterior Wall Area (sf): Avg. Exterior Wall R-Value:
Gross Window / Door Area (sf): Avg. Window/Door R-Value:
Gross Roof Area (sf): Avg. Roof R-Value:
Exterior Wall Type: Other:
Roofing Type: Other:
HVAC System Type: L - other Other: Packaged Units
Classroom Lighting: E - other Other: LED
Active Daylighting: F-none Other:
Passive Daylighting: G-none Other:
On Site Energy Generation: G-none Other:

702 KAR 4:160

Air Purification System	ns: YES 🗆 NO 🗹		
Gray Water System :	YES NO 🗸		
Low Water Use Fixture Other:	es: YES 🗆 NO 🗹		
PLUMBING:			
Type of Sewage Dispo	osal:		
HEATING, VENTILAT	ION AND AIR CONDITIONING:	1	
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC:x	A/C Only:
Fuel Source/Backup (i	if applicable): N/A		
ELECTRICAL:		***************************************	
Source of Electric Pov	ver: AEP	Lighting Intensity (fc.): Std. Classrooms	50
Voltage Serving Facili	ty: 480V/3Phase	Library/Media Ctr	75
Number of Convenien	co Outlets:	Science Lab Science Clrm	50 50
Classrooms	ce Odliets.	Band/Music	50
Library/Media Center		Business Ed	50
Business Ed		Shops	50
Family & Consumer S	cience	Corridors	20
Comoro Sustam:		Stairways Cafeteria	20 50
Camera System:		Pre-School Clrm	NA
		Art Classroom	100
		Gymnasium	50
SPECIAL EQUIPMEN	<u>ιπ</u> :		
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell			NA NA
Clock Fire Alarm			NA NA
Intercom			NA
Telephone	-		NA
Television			NA
Computer	-		NA NA
Wireless Network Interactive White bd		· · · · · · · · · · · · · · · · · · ·	NA NA
Voice Amplification			NA NA
FIXED EQUIPMENT:	-		
Topobor Cobinet		Custodial Room Shelves	
Teacher Cabinet Student Lockers		Science Laboratories	
Folding Bleachers		Family & Consumer Sci	
Library Furnishings		Other	
Dry Food Shelves		Other	

702 KAR 4:160

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 Pro	ject Specific Feat	ures:			
Kentucky Register	ed Architect:	Signature	Э	Date:	-
Kentucky Register	ed Engineer:	Signature	Э	Date:	•
Board Designee o	Superintendent:	Signature		Date:	-

Exterior Wall Type

- A face brick, captured air space, board insulation and waterproof CMU
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- E other, describe

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- J hybrid chilled beam/geothermal system
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- G none

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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

702 KAR 4:160

District Name: Floyd Cou	inty Schools	District Code:	Facility 175 Name:	Betsy Layne Elementary School	School Code:
Project Name:	Floyd Coun	ity Schools Guarant	eed Energy Saving	gs Contract	
PROJECT TYPE: New Building	Yes	No ☑	Gross Bu	ilding Area (sf.)	
Addition		$\overline{\mathcal{Q}}$			
Renovation	$\overline{\mathcal{Q}}$		8	8737	
Provisions for Future	Expansion:				
Proposed Alternates	: (1)			
	(2	5) 3)			
Describe special cor	ditions, phas	ing of project and a	lternates, attach a	supplemental sheet, if needed.	
BUILDING CONSTR	RUCTION CH	ARACTERISTICS:			
Description of Buildin	ng Structure:				
•	•				
Roof Structure	e:				
ENERGY EFFICIEN	T DESIGN (F	(RS 157.450 and K	RS 157.455):		
57.6	_Energy Co	nsumption "Existing	" (kBtu/sf/yr)		
52.9	Energy Co	nsumption Target ((Btu/sf/yr)		
YES NO					
	LEED Cert	ified	Other:		
	Designed t	o meet Energy Star			
	Exceeds A	SHRAE 90.1(2007)	by 10% (Minimum)	
			•	strating Cost Effective Design	
				d:	
If not yes to one or	more of the	above, explain wh			
	Designed t	o be Net-Zero			
	•	o be Net-Zero Read	y i		
Energy Efficient De	sign Feature	es: (See List Page	4, or Use Drop D	own List)	
East / West Building		☐ YES [□ NO	According to the state of the s	
Gross Exterior Wall	, ,	*******		Avg. Exterior Wall R-Value:	
Gross Window / Doo Gross Roof Area (sf				Avg. Window/Door R-Value: Avg. Roof R-Value:	
Exterior Wall Type:	·				Other:
Roofing Type:					Other:
HVAC System Type	: B - water sou	rce heat pump system wi	ith air make up		Other:
Classroom Lighting:		panip ojotom m			Other: LED
Active Daylighting:	F - none				Other:
Passive Daylighting:					Other:
On Site Energy Gen		G - none			Other:
••					

702 KAR 4:160

Air Purification System	s: YES 🗆 NO	V		
Gray Water System :	YES 🗆 NO	V		
Low Water Use Fixture Other:	es: YES 🗆 NO	V		
PLUMBING:				
Type of Sewage Dispo	osal:			
HEATING, VENTILAT	ION AND AIR CONDITIONIN	<u>IG</u> :		
Heating Only:	Heating & Mechanical: Ventilation Only		HVAC: x	A/C Only:
Fuel Source/Backup (i	f applicable): N/A			-
ELECTRICAL:				
Source of Electric Pov	ver: AEP		Lighting Intensity (fc.):	
Vallage Consider Facility	400) //0Db		Std. Classrooms	50 75
Voltage Serving Facili	ty: <u>480V/3Phase</u>		Library/Media Ctr Science Lab	50
Number of Convenien	ce Outlets:		Science Clrm	50
Classrooms			Band/Music	50
Library/Media Center			Business Ed	50
Business Ed			Shops	50
Family & Consumer S	cience		Corridors	20
0 0 1			Stairways	20
Camera System:			Cafeteria Pre-School Clrm	50 NA
			Art Classroom	100
			Gymnasium	50
SPECIAL EQUIPMEN				
System	Conduit Only	Conduit	& Wiring	Complete with Equipment
Bell Clock				NA NA
Fire Alarm				NA NA
Intercom				NA
Telephone				NA
Television				NA NA
Computer			<u> </u>	NA NA
Wireless Network Interactive White bd				NA NA
Voice Amplification				NA
FIXED EQUIPMENT:				
Teacher Cabinet		(Custodial Room Shelves	
Student Lockers			Science Laboratories	
Folding Bleachers			amily & 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 Pro	ject Specific Feat	ures:		
Kentucky Register	ed Architect:	Signature)	Date:
Kentucky Register	red Engineer:	Signature)	Date:
Board Designee o	r Superintendent:	Signature	9	Date:

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
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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

- 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:	Floyd Co.	unty Schools	District Code:	Facility 175 Name:	Duff Allen Central Elementary	School Code:	
Pro	ect Name:	Floyd Count	ty Schools Guaran	teed Energy Saving	ps Contract		
PROJE	CT TYPE:	Yes	No	Gross Bu	ilding Area (sf.)		
New Bu	ilding						
Addition	1		7				
Renova	tion	V		8	3027		
Provisio	ns for Future	Expansion:					
Propos	ed Alternates:)				
		(2) (3)					
Describ	e enecial con	(*)					
Descrip	e special con	endons, priasii	ig or brolect and a	ternates, attach a :	supplemental sheet, if needed.		
BUILDI	NG CONSTR	UCTION CH	RACTERISTICS.				
Descrip	tion of Buildin	a Structure:					
ш-осольр		T					
							7
	TYREIN AASHS						
R	oof Structure						
∃/\∃.{e	Yesegen	DESIGN (K	RS 157,450 and K	RS 157.455):			
	48.2	Energy Cons	sumption "Existing"	(kBtu/sf/yr)			
	43.2	Energy Cons	sumption Target (k	Btu/sf/yr)			
YES	NO						
	V	LEED Certifi	ed	Other:			
	\square		meet Energy Star				
			HRAE 90.1(2007)				
Ø					rating Cost Effective Design		
W. mark	_ 40 - 10 - 10	Life	e Cycle Cost Analy	sis Software Used:			
If not ye	s to one or i	nore of the a	bove, explain wh	y			
	v	Designed to	be Net-Zero				
		Designed to	be Net-Zero Read	у			
Energy	Efficient Des	ion Features	: (See List Page	4. or Use Drop D	nam Lieth		
	est Building (NO			
Gross E	xterior Wall A	rea (sf):			Avg. Exterior Wall R-Value:		
4	/indow / Door				Avg. Window/Door R-Value:		
Gross R	oof Area (sf):				Avg. Roof R-Value:		
Exterior	Wall Type:					Other:	
Roofing	Туре:	4				Other:	
HVAC S	ystem Type:	B - water source	heat pump system with	n air make up		Other:	
	om Lighting:	E - other				Other:	LED
	aylighting:	F - none				Other:	
	Daylighting:					Other:	
On Site	Energy Gener	ration:	G - none			Other:	

Air Purification System	ms:	YES		NO	I				
Gray Water System:		YES		NO					
Low Water Use Fixture Other:		YES	_	NO	_				
PLUMBING:									
Type of Sewage Disp	osal: _								
HEATING, VENTILAT	TION AN	D AIR CON	DITIO	NINC	3:				
Heating Only:		eating & Me entilation O		ical:	-		HVAC:x	A/C Only:	
Fuel Source/Backup (if applica	ble):	V/A						
Source of Electric Pov	wer: Bi	g Sandy Ri	CC				Lighting Intensity (fc.)	:	
Voltage Serving Facili	itv: 48	30V/3Phase					Std. Classrooms Library/Media Ctr	50 75	
							Science Lab	50	
Number of Convenien	ice Outle	ts:					Science Cirm	50	
Classrooms							Band/Music	50	
Library/Media Center							Business Ed	50	
Business Ed	–						Shops	50	
Family & Consumer S	cience_						Corridors	20	
Camana Statement							Stairways	20	
Camera System:	_						Cafeteria	50	
							Pre-School Cirm	NA	
							Art Classroom	100	
							Gymnasium	50	
SPECIAL FOUIPMEN	II:								
System Bell	Condi	uit Only			Co	nduit &	Wiring		ith Equipment
Clock								NA NA	
Fire Alarm								NA NA	
Intercom								NA	
Telephone								NA NA	
Television								NA NA	
Computer								NA	
Wireless Network								NA	
Interactive White bd								NA	
Voice Amplification								NA	
FIXED EQUIPMENT:									
Teacher Cabinet						C	stodial Room Shelves		
Student Lockers					_		ience Laboratories	-	
Folding Bleachers				_	-		mily & Consumer Sci	-	
Library Furnishings					_		her		
Dry Food Shelves					_		her	-	

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									
FMD				_					
OTHER AREAS									
					_				
				_					
Miscellaneous Pro	ect Specific Featu	ires:							
					_				
Kentucky Register	ed Architect:			Date:					
		Signature	*						
Kentucky Register	ed Engineer:			Date:					
,		Signature							
Board Designee or Superintendent:									
-	-	Signature							

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
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- F none

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- E solar tubes with internal dimmers
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- G none

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- 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: Floyd Co	ounty Schools	District _Code:	Facility 175_Name:	Betsy Layne High School	School Code:					
Project Name:	Floyd Coun	Floyd County Schools Guaranteed Energy Savings Contract								
PROJECT TYPE: New Building Addition Renovation Provisions for Future Proposed Alternate	Yes U Expansion: s: (1)	No 2 3	Gross Build	ding Area (sf.)						
Describe special co	(3			upplemental sheet, if needed.						
BUILDING CONST	RUCTION CH	ARACTERISTICS	S:							
Description of Build		/110101211101110	-							
·	-					·····				
Roof Structu										
ENERGY EFFICIE										
41.6		nsumption "Existir								
39.0	Energy Cor	nsumption Target	(kBtu/sf/yr)							
YES NO										
	LEED Certi									
	_	o meet Energy Sta	ar 7) by 10% (Minimum)							
		•		ating Cost Effective Design						
				ating Cost Enective Design						
If not yes to one o			rbs.							
	Designed to	o be Net-Zero								
	Designed to	o be Net-Zero Re	ady							
Energy Efficient D	esign Feature	es: (See List Pa	ge 4, or Use Drop Do	wn List)						
East / West Buildin	_	☐ YES	□ NO	·						
Gross Exterior Wal	l Area (sf):			Avg. Exterior Wall R-Value:						
Gross Window / Do	oor Area (sf):			Avg. Window/Door R-Value:						
Gross Roof Area (s	sf):			Avg. Roof R-Value:						
Exterior Wall Type:					Other:					
Roofing Type:					Other:					
HVAC System Type	e: L - other				Other:	VRF & Air Source Split Systems				
Classroom Lighting	j: E - other				Other:	LED				
Active Daylighting:	F - none				Other:					
Passive Daylighting					Other:	-				
On Site Energy Ge	neration:	G - none			Other:					

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Air Purification Systems	: YES \(\sigma\) NO \(\sigma\)		
Gray Water System :	YES NO		
Low Water Use Fixtures			
Other			
PLUMBING:			
Type of Sewage Dispos	sal:		
HEATING, VENTILATION	ON AND AIR CONDITIONING:		
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC: x	A/C Only:
Fuel Source/Backup (if	applicable): N/A		
ELECTRICAL:			
Source of Electric Power	er: AEP	Lighting Intensity (fc.):	
		Std. Classrooms	50
Voltage Serving Facility	480V/3Phase	Library/Media Ctr	75 50
Number of Convenience	e Outlets	Science Lab Science Clrm	50
Classrooms	e Outlets.	Dand/Music	50
Library/Media Center		Pusinosa Ed	50
Business Ed		Shops	50
Family & Consumer Sci	ience		20
Comoro Cuotomi		Stairways Cafeteria	<u>20</u> 50
Camera System:		Pre-School Cirm	 NA
		Art Classroom	100
		Gymnasium	50
SPECIAL EQUIPMENT	<u>[</u> :		
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell _ Clock			NA NA
Fire Alarm			NA NA
Intercom			NA
Telephone			NA
Television _			NA NA
Computer Wireless Network			NA NA
Interactive White bd			NA
Voice Amplification			NA
FIXED EQUIPMENT:			
Teacher Cabinet		Custodial Room Shelves	_
Student Lockers		Science Laboratories	
Folding Bleachers		Family & Consumer Sci	
Library Furnishings		Other Other	
Dry Food Shelves		Ottiel	

INTERIOR FINISH	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										
OTTLICTALLO										
Miscellaneous Pro	ject Specific Feature	es:								
				1 11111						
Kentucky Register	ed Architect:			Date:						
		Signature								
Kentucky Register	Kentucky Registered Engineer: Date:									
	•	Signature								
Board Designee o	r Superintendent:			Date:						
		Signature								

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

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Classroom Lighting List

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- G none

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- 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:	Floyd Cour	nty Schools	District Code:	Facility 175 Name:	May Valley Elementary School	School Code:
Proje	ect Name:	Floyd Count	y Schools Guarante	ed Energy Savin	ngs Contract	
New Buil Addition Renovati Provision	-	(1)	No		uilding Area (sf.) 48065	
Describe	special cond	(3)			supplemental sheet, if needed.	
BUILDIN	IG CONSTR	UCTION CHA	ARACTERISTICS:			
Descripti	ion of Building Foundation:					200 A 100 100 100 100 100 100 100 100 100
E	xterior Walls:					
	oof Structure:					
ENERGY	Y EFFICIENT	DESIGN (K	RS 157.450 and KF	RS 157.455):		
	50.3	_Energy Con	sumption "Existing"	(kBtu/sf/yr)		
	35.0	Energy Con	sumption Target (kt	Btu/sf/yr)		
YES	NO					
	v	LEED Certif	ied (Other:		
	V	•	meet Energy Star			
	Z		SHRAE 90.1(2007) t	-	•	
☑ ☑			•	•	strating Cost Effective Design	
If not ve	s to one or i		re Cycle Cost Analys above, explain why		d:	
				<u> </u>		
	V	Designed to	be Net-Zero			
	V	Designed to	be Net-Zero Ready	1		
East / W Gross Ex Gross W	Efficient Des lest Building (exterior Wall A lindow / Door oof Area (sf):	Orientation rea (sf): Area (sf):		4, or Use Drop I NO	Down List) Avg. Exterior Wall R-Value: Avg. Window/Door R-Value: Avg. Roof R-Value:	
	Wall Type:					Other:
Roofing	• •			stic single ply over rig	gid insulation	Other:
			ce heat pump system with	air make up		Other: LED
	om Lighting: aylighting:	E - other F - none				Other: LED Other:
	Daylighting:					Other:
	Energy Gene	•	G - none			Other:
	. 07					

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Air Purification System	ns: YES 🗆 NO 🗵		
Gray Water System :	YES 🗆 NO 🗹		
Low Water Use Fixture Other:	es: YES 🗆 NO 🗵		
PLUMBING:			·
Type of Sewage Dispo	osal:		
HEATING, VENTILAT	ION AND AIR CONDITIONING:		
Heating Only:	Heating & Mechanical: _ Ventilation Only	HVAC: x	A/C Only:
Fuel Source/Backup (f applicable): N/A		
ELECTRICAL:			
Source of Electric Pov	ver: AEP	Lighting Intensity (fc.): Std. Classrooms	50
Voltage Serving Facili	ty: 480V/3Phase	Library/Media Ctr	75
		Science Lab	50
Number of Convenien Classrooms		Science CIrm Band/Music	50 50
Library/Media Center		Business Ed	50
Business Ed		Shops	50
Family & Consumer S	cience		20
		Stairways	20
Camera System:		Cafeteria	50
		Pre-School Clrm Art Classroom	NA 100
		Gymnasium	50
SPECIAL EQUIPMEN	<u>IT</u> :	- Gyriinasiani	
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell	•	U	NA
Clock			NA
Fire Alarm			NA
Intercom			NA
Telephone			NA NA
Television Computer			NA NA
Wireless Network		-	NA
Interactive White bd			NA
Voice Amplification			NA
FIXED EQUIPMENT:			
Teacher Cabinet		Custodial Room Shelves	
Student Lockers		Science Laboratories	
Folding Bleachers		Family & Consumer Sci	
Library Furnishings		Other	
Dry Food Shelves		Other	
	· · · · · · · · · · · · · · · · · · ·		

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KENTUCKY DEPARTMENT OF EDUCATION

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INTERIOR FINISH	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 Pro	ject Specific Featur	es:						
Kentucky Register	ed Architect:	Signature		Date:				
Kentucky Register	ed Engineer:	Signature		Date:				
Board Designee o	r Superintendent:	Signature		Date:				

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

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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:	Floyd Cou	nty Schools	District Code:	Facility 175 Name:	Prestonsburg Elementary School	School Code:		
Proje	Project Name: Floyd County Schools Guaranteed Energy Savings Contract							
PROJEC	T TYPE:	Yes	No	Gross Build	ding Area (sf.)			
New Build	ding		7					
Addition			V					
Renovation	on	V		73	000			
Provision	s for Future	Expansion:						
Proposed	d Alternates:	(1)					
		(2 (3)			***************************************		
Describe	special con-	•		ternates, attach a s	upplemental sheet, if needed.		<u> </u>	
BUILDIN	G CONSTR	UCTION CH	ARACTERISTICS:					
Description	on of Buildin	g Structure:						
•		-						
E	xterior Walls					,		
Ro	oof Structure	:						
ENEDON	/ FEE!CIEN	F DECICAL (V	DC 457 450 and V	DC 457 455).				
		-	RS 157.450 and K					
	32.8	_Energy Cor	sumption "Existing"	' (kBtu/sf/yr)				
	28.5	_Energy Cor	sumption Target (k	Btu/sf/yr)				
YES	NO							
	✓	LEED Certi	fied	Other:				
	V	Designed to	meet Energy Star					
	V		SHRAE 90.1(2007)	•				
V			•	•	rating Cost Effective Design			
If not ye	s to one or	more of the	above, explain wh	y				
		Designed to	be Net-Zero					
	$\overline{\mathbf{Z}}$	Designed to	be Net-Zero Read	у				
Eneray F	Efficient De	sion Feature	s: (See List Page	4. or Use Drop Do	own List)			
	est Building	_] NO	- · · · · - · · - · · · · · · · · · · ·			
	kterior Wall				Avg. Exterior Wall R-Value:			
	indow / Doo	, ,			Avg. Window/Door R-Value:			
	oof Area (sf)				Avg. Roof R-Value:			
	Wall Type:					Other:		
Roofing	• • •					Other:		
_	• •	C - ground sou	urce heat pump system v	vith air make up		Other:		
	om Lighting:	E - other				Other:	LED	
	aylighting:	F - none				Other:		
	Daylighting:	G - none				Other:		
On Site I	Energy Gene	eration:	G - none			Other:		

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Air Purification System	s: YES 🗆 NO [7		
Gray Water System :	YES 🗆 NO	√		
Low Water Use Fixture Other:	es: YES 🗆 NO	_		
PLUMBING:				
Type of Sewage Dispo	osal:			
HEATING, VENTILAT	ION AND AIR CONDITIONING	;		
Heating Only:	Heating & Mechanical: Ventilation Only		HVAC: x	A/C Only:
Fuel Source/Backup (i	f applicable): N/A			
ELECTRICAL:				-
Source of Electric Pow	ver: Big Sandy RECC		Lighting Intensity (fc.): Std. Classrooms	: 50
Voltage Serving Facilit	y: 480V/3Phase		Library/Media Ctr	75
Number of Convenience	an Outlata		Science Lab Science Clrm	50
Classrooms			Band/Music	50
Library/Media Center			Business Ed	50
Business Ed			Shops	50
Family & Consumer So			Corridors	20
			Stairways	20
Camera System:			Cafeteria Pre-School Clrm	50 NA
			Art Classroom	100
			Gymnasium	50
SPECIAL EQUIPMEN	<u>T</u> : Conduit Only	Conduit &	Wiring	Complete with Equipment
Bell				NA
Clock				NA
Fire Alarm				NA
Intercom		•••		NA NA
Telephone Television		·		NA NA
Computer				NA NA
Wireless Network				NA NA
Interactive White bd				NA
Voice Amplification .				NA NA
FIXED EQUIPMENT:				
Teacher Cabinet		_	stodial Room Shelves	
Student Lockers			ence Laboratories	
Folding Bleachers		_	mily & Consumer Sci	
Library Furnishings Dry Food Shelves		Oth Oth		

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KENTUCKY DEPARTMENT OF EDUCATION

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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 Pro	ject Specific Featur	es:					
Kentucky Register	ed Architect:	Signature		Date:			
Kentucky Register	ed Engineer:	Signature		Date:			
Board Designee of	r Superintendent:	Signature		Date:			

Exterior Wall Type

- A face brick, captured air space, board insulation and waterproof CMU
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- H hybrid geothermal/variable refrigerant volume (VRV) with air make up
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- 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

- 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:	Floyd Cour	nty Schools	District Code:	Facility 175 Name:	Prestonsburg High School	School Code:				
Projec	t Name:	Floyd Count	Floyd County Schools Guaranteed Energy Savings Contract							
PROJECT TYPE: Yes		Yes	No	Gross Bui						
New Building □			\checkmark							
Addition			\checkmark							
Renovation		7		12	21013					
Provisions	for Future	Expansion:								
Proposed Alternates:		(1))							
		(2))							
Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed.										
BUILDING CONSTRUCTION CHARACTERISTICS:										
Descriptio	n of Buildin	g Structure:								
i	Foundation									
Roo	of Structure:									
ENEDGY	EEEICIENT	DESIGN (K	RS 157.450 and KF	PS 157 455):						
4	9.5	_Energy Con	sumption "Existing"	(kBtu/st/yr)						
4	5.0	_Energy Con	sumption Target (kl	Btu/sf/yr)						
YES	NO									
	V	LEED Certif	fied (Other:						
	\checkmark	Designed to	meet Energy Star							
	V	Exceeds AS	SHRAE 90.1(2007) I	by 10% (Minimum))					
V		Whole Build	ling Life Cycle Cost	Analysis Demons	trating Cost Effective Design					
		Lit	fe Cycle Cost Analy	sis Software Used	l:					
If not yes	to one or i	nore of the	above, explain why	/						
П	<u> </u>	Designed to	be Net-Zero							
	✓		be Net-Zero Read	/						
_	_	ŭ	•	•	loven Lint\					
		_	s: (See List Page		OWII LIST)					
	st Building		□ YES □	l NO	Ave. Esterios MAN D Malves					
Gross Exterior Wall Area (sf):					Avg. Exterior Wall R-Value:					
Gross Window / Door Area (sf): Gross Roof Area (sf): 941					Avg. Window/Door R-Value: Avg. Roof R-Value:	28				
Exterior Wall Type: Roofing Type:			C - pla	Other: Other:						
= -:		R - water source	ce heat pump system with	Other:						
Classroom Lighting:			, iour puint ayaicin will	Other: LED						
Active Daylighting:		F - none		Other:						
Passive Daylighting:				Other:						
On Site Energy Gene			G - none			Other:				
OII OILE L	noigy Oche	iauoii.	G - none							

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Air Purification System	s: YES 🗆 NO 🖸					
Gray Water System : YES NO		2				
Low Water Use Fixture Other:	es: YES □ NO ⊡	2				
PLUMBING:						
Type of Sewage Dispo	osal:					
HEATING, VENTILAT	ION AND AIR CONDITIONING:					
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC: x	A/C Only:			
Fuel Source/Backup (i	f applicable): N/A					
ELECTRICAL:						
Source of Electric Pow	ver: AEP	Lighting Intensity (fc.):				
Codice of Licother of	7.61.	Std. Classrooms	50			
Voltage Serving Facili	y: <u>480V/3Phase</u>	Library/Media Ctr	75			
		Science Lab	50			
Number of Convenien	ce Outlets:	Science Clrm	50			
Classrooms			50 50			
Library/Media Center		Chana				
Business Ed		Shops _	50 20			
Family & Consumer S	cience		20			
0		Stairways _	50			
Camera System:		Cafeteria _ Pre-School Clrm	NA			
		Art Classroom	100			
		Gymnasium	50			
SPECIAL EQUIPMEN	IT:	<u>_</u>				
	— Conduit Only	Conduit & Wiring	Complete with Equipment			
System	Conduit Only	Conduit & Willing				
Bell			NA NA			
Clock Fire Alarm			NA NA			
Intercom	···		NA NA			
Telephone			NA			
Television			NA			
Computer			NA			
Wireless Network			NA			
Interactive White bd			NA			
Voice Amplification			NA			
FIXED EQUIPMENT:	-					
Teacher Cabinet	Custodial Room Shelves					
Student Lockers		Science Laboratories				
Folding Bleachers		Family & Consumer Sci				
Library Furnishings		Other				
Dry Food Shelves		Other				

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KENTUCKY DEPARTMENT OF EDUCATION

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INTERIOR FINISH SCHEDULE:									
AREA	FLOOR	WAINSCOT	WALLS	CEILING					
General Office Corridors Custodial Kitchen Cafeteria Gym Showers/Locker Toilets Library/Media Cntr Classrooms Music Art Science FMD OTHER AREAS									
Miscellaneous Project Specific Features:									
Kentucky Register	ed Architect:	Signature		Date:					
Kentucky Register	ed Engineer:	Signature		Date:					
Board Designee of	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
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- B lower classroom clerestory lighting that does NOT require sloping the ceiling place
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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: <u>Floyd</u>	County Schools	District Code:	Facility 175 Name:	Renaissance Learning Center	School Code:		
Project Nam	Project Name: Floyd County Schools Guaranteed Energy Savings Contract						
PROJECT TYPE	: Yes	No	Gross Bu	ilding Area (sf.)			
New Building		7					
Addition		V					
Renovation	✓		2	3800			
Provisions for Fi	iture Expansion:						
Proposed Altern	ates: ((1)					
	((2)					
		(3)					
Describe specia	conditions, pha	sing of project ai	nd alternates, attach a	supplemental sheet, if needed.			
BUILDING COM	STRUCTION C	HARACTERISTI	<u>CS</u> :				
Description of B	uilding Structure	:					
•	-						
Exterior	'Valls:						
Roof Stru	cture:						
ENERGY EFFIC	IENT DESIGN (KRS 157.450 ar	nd KRS 157.455):				
86.4	Energy Co	onsumption "Exis	sting" (kBtu/sf/yr)				
81.6	Energy Co	onsumption Targ	et (kBtu/sf/yr)				
YES NO		, ,	, ,,				
	LEED Cei	rtified	Other:				
	Designed	to meet Energy	Star				
	Exceeds /	ASHRAE 90.1(20	007) by 10% (Minimum)			
2	Whole Bu	ilding Life Cycle	Cost Analysis Demons	strating Cost Effective Design			
		Life Cycle Cost /	Analysis Software Used	d:			
If not yes to on	e or more of the	e above, explaii	n why.				
	Designed	to be Net-Zero					
	Designed	to be Net-Zero F	Ready				
Energy Efficier	t Design Festu	res: (See List I	Page 4, or Use Drop D	Down List)			
East / West Bui	•	•	□ NO				
Gross Exterior	-			Avg. Exterior Wall R-Value:			
Gross Window	, ,			Avg. Window/Door R-Value:			
Gross Roof Are				Avg. Roof R-Value:	***************************************		
Exterior Wall Ty					Other:		
Roofing Type:	<u> </u>				Other:		
HVAC System	VDe: L-other				Other: VAV		
Classroom Ligh					Other: LED		
Active Daylighti					Other:		
Passive Dayligh					Other:		
On Site Energy		G - none			Other:		

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Air Purification Systen	ns: YES NO 🗸		
Gray Water System :	YES 🗆 NO 🗹]	
Low Water Use Fixtur Other:	es: YES 🗆 NO 🗹	-	
PLUMBING:			
Type of Sewage Dispe	osal:		
HEATING, VENTILAT	TION AND AIR CONDITIONING:		
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC: x	A/C Only:
Fuel Source/Backup (if applicable): N/A		
ELECTRICAL:			
Source of Electric Pov	ver: AEP	Lighting Intensity (fc.):	
		Std. Classrooms	50
Voltage Serving Facili	ty: 480V/3Phase	Library/Media Ctr _ Science Lab	75 50
Number of Convenier	ice Outlets:	Science Clrm	50
Classrooms		Rand/Music	50
Library/Media Center		Business Ed	50
Business Ed		Shops	50
Family & Consumer S	cience		20
		Stairways _	20
Camera System:	•	Cafeteria	50
		Pre-School Cirm	NA 100
		Art Classroom	100
		Gymnasium	50
SPECIAL EQUIPMEN	<u>1T</u> :		
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell			NA NA
Clock	<u></u> .		NA NA
Fire Alarm Intercom			NA NA
Telephone			NA NA
Television			NA
Computer		-	NA
Wireless Network	-		NA
Interactive White bd			NA
Voice Amplification			NA
FIXED EQUIPMENT:			
Teacher Cabinet		Custodial Room Shelves	
Student Lockers		Science Laboratories	
Folding Bleachers		Family & Consumer Sci	
Library Furnishings		Other	
Dry Food Shelves		Other	

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KENTUCKY DEPARTMENT OF EDUCATION

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INTERIOR FINISH SCHEDULE:						
AREA	FLOOR	WAINSCOT	WALLS	CEILING		
General Office						
Corridors						
Custodial Kitchen						
Cafeteria						
Gym						
Showers/Locker						
Toilets Library/Media Cntr			The state of the s			
Classrooms						
Music						
Art						
Science FMD						
TIVID						
OTHER AREAS						
Miscellaneous Pro	ject Specific Feature	es:				
V						
Kentucky Register	ed Architect:			Date:		
Signature						
Kentucky Registered Engineer: Date:						
		Signature				
Board Designee or	r 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
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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
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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

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
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Passive Daylight Systems List

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- 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

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

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District Name:	Floyd Cour	nty Schools	District Code:	Facility 175 Name:	South Floyd Elementary School	School Code:		
Proje	ct Name:	Floyd County Schools Guaranteed Energy Savings Contract						
PROJECT New Buil	T TYPE:	Yes	No ☑	Gross Build	ling Area (sf.)			
Addition			\checkmark					
Renovati	on	V		102	199			
Provision	s for Future	Expansion:						
Proposed	d Alternates:	(1))					
		(2)						
Describe	special cond	ditions, phasi			upplemental sheet, if needed.			
BUILDIN	IG CONSTR	UCTION CH	ARACTERISTICS:					
Descripti	on of Building	_						
E:								
	oof Structure:							
ENERGY	/ EFFICIENT	DESIGN (K	RS 157.450 and KR	S 157.455):				
	40.9	Energy Con	sumption "Existing"	(kBtu/sf/yr)				
	36.0	Energy Con	sumption Target (kE	tu/sf/yr)				
YES	NO	-						
	 ☑	LEED Certif	ied C	ther:				
	7	Designed to	meet Energy Star					
	V		SHRAE 90.1(2007) b					
V			•	•	ating Cost Effective Design			
lf	- 4							
ir not ye	s to one or i	nore of the a	above, explain why	•				
	V	Designed to	be Net-Zero					
	v	Designed to	be Net-Zero Ready					
	Efficient Des est Building (•	s: (See List Page	I, or Use Drop Do NO	wn List)			
	kterior Wall A				Avg. Exterior Wall R-Value:	****		
	/indow / Door	, ,			Avg. Window/Door R-Value:			
Gross R	oof Area (sf):	60936	5		Avg. Roof R-Value:	•		
	Wall Type:					Other:		
Roofing		D. weter early	no hoot nume a rate with	air maka us		Other:		
	ystem Type: om Lighting:	E - other	ce heat pump system with	ан шаке ир		Other: LED		
	aylighting:	F - none				Other:		
	Daylighting:					Other:		
	Energy Gene		G - none			Other:		

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Air Purification System	ns: YES NO 🖸		
Gray Water System :	YES 🗆 NO 🖸]	
Low Water Use Fixture Other:	es: YES NO 🗹		
PLUMBING:			
Type of Sewage Dispo	osal:		
HEATING, VENTILAT	TON AND AIR CONDITIONING:		
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC:x	A/C Only:
Fuel Source/Backup (if applicable): N/A		
ELECTRICAL:			
Source of Electric Pov	ver: AEP	Lighting Intensity (fc.): Std. Classrooms	50
Voltage Serving Facili	ty: 480V/3Phase	Library/Media Ctr	75
Number of Convenien	oo Outlete:	Science Lab Science Clrm	50 50
Classrooms	ce Odliets.	Band/Music	50
Library/Media Center		Business Ed	50
Business Ed		Chana	50
Family & Consumer S	cience		20
0		Stairways	20 50
Camera System:		Cafeteria _ Pre-School Clrm	NA
		Art Classroom	100
		Gymnasium	50
SPECIAL EQUIPMEN		Operatority 9 Williams	Complete with Equipment
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell Clock			NA NA
Fire Alarm			NA
Intercom			NA
Telephone			NA
Television			NA NA
Computer Wireless Network			NA NA
Interactive White bd			NA NA
Voice Amplification			NA
FIXED EQUIPMENT:	-		
Teacher Cabinet		Custodial Room Shelves	
Student Lockers		Science Laboratories	
Folding Bleachers		Family & Consumer Sci	
Library Furnishings		Other	
Dry Food Shelves		Other	

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KENTUCKY DEPARTMENT OF EDUCATION

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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 AREAC						
OTHER AREAS						
	-					
Miscellaneous Pro	ject Specific Featur	es:				
Kentucky Registered Architect: Date:						
Signature						
Kentucky Registered Engineer: Date:						
, J	J	Signature	_			
Board Designee o	r 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
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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
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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

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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

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District Name:	Floyd Cou	nty Schools	District Code:	Facility 175 Name:	Stumbo Elementary School	School Code:	
Project	t Name:	Floyd County Schools Guaranteed Energy Savings Contract					
PROJECT	TYPE:	Yes	No	Gross Build	ding Area (sf.)		
New Buildi	ing		V				
Addition			\Box				
Renovation	n	V		58	900		
Provisions	for Future	Expansion:		·			
Proposed	Alternates:	(1)				
·		(2					
		(3)				
Describe s	special cond	ditions, phasi	ng of project and	alternates, attach a s	upplemental sheet, if needed.		
DIW DING	CONCER	UCTION OU	A D A OTE DIOTIO				
			ARACTERISTICS	<u>.</u>			
		g Structure:					
	Foundation	·					
Ext	erior Walls						
Roc	of Structure	-					
						***************************************	•
ENERGY	EFFICIENT	r design (K	RS 157.450 and	KRS 157.455):			
2	9.4	_Energy Cor	sumption "Existin	g" (kBtu/sf/yr)			
2	6.5	_Energy Cor	sumption Target	(kBtu/sf/yr)			
YES	NO						
	V	LEED Certi	fied	Other:			
	V	Designed to	meet Energy Sta	ar			
	V	Exceeds AS	SHRAE 90.1(2007	') by 10% (Minimum)			
V					rating Cost Effective Design		
		Li	fe Cycle Cost Ana	alysis Software Used:			
If not yes	to one or	more of the	above, explain w	rhy.			
П	▽	Designed to	be Net-Zero				
	☑	•	be Net-Zero Rea	adv			
_	_	•		•			
		_		je 4, or Use Drop Do	own List)		
	st Building		☐ YES	□ NO			
Gross Ext	erior Wall A	rea (sf):			Avg. Exterior Wall R-Value:		
Gross Wir	ndow / Dooi	r Area (sf):			Avg. Window/Door R-Value:		
Gross Roo	of Area (sf):	·			Avg. Roof R-Value:		
Exterior W	/all Type:					_ Other:	
Roofing Ty	уре:					Other:	
HVAC Sys	stem Type:	C - ground sou	ırce heat pump systen	n with air make up		Other:	
Classroon	n Lighting:	E - other				Other:	LED
Active Day	ylighting:	F - none				Other:	
Passive D	aylighting:	G - none				Other:	
	nergy Gene	'	G - none			Other:	

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OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

Air Purification System	ns: YES 🗆 NO 🖪		
Gray Water System :	YES 🗆 NO 🛭		
Low Water Use Fixture Other:	es: YES NO E	<u> </u>	
PLUMBING:			
Type of Sewage Dispo	osal:		
HEATING, VENTILAT	ION AND AIR CONDITIONING:		
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC: x /	A/C Only:
Fuel Source/Backup (i	f applicable): N/A		
ELECTRICAL:			
Source of Electric Pov	ver: AEP	Lighting Intensity (fc.):	
		Std. Classrooms	50
Voltage Serving Facili	ty: 208V/3Phase	Library/Media Ctr	75 50
Number of Convenien	ce Outlets:	Science Lab Science Clrm	50
Classrooms	ce Outlets.	Band/Music	50
Library/Media Center		Pusinoss Ed	50
Business Ed		Shone	50
Family & Consumer S	cience		20
0 0		Stairways	20
Camera System:	-	Cafeteria Pre-School Clrm	50 NA
		Art Classroom	100
		Gymnasium	50
SPECIAL EQUIPMEN	<u>IT</u> :		
System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell Clock			NA NA
Fire Alarm			NA NA
Intercom			NA
Telephone			NA
Television			NA
Computer Wireless Network			NA NA
Interactive White bd			NA NA
Voice Amplification			NA
FIXED EQUIPMENT:			
Teacher Cabinet		Custodial Room Shelves	
Student Lockers		Science Laboratories	
Folding Bleachers		Family & Consumer Sci	
Library Furnishings		Other	
Dry Food Shelves		_ Other	

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KENTUCKY DEPARTMENT OF EDUCATION 702 KAR 4:160

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 Pro	Miscellaneous Project Specific Features:						
Kentucky Register	ed Architect;	Signature		Date:			
Kentucky Register	ed Engineer:	Signature		Date:			
Board Designee o	r 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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- J hybrid chilled beam/geothermal system
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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

- 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