## ROBERT EHMET HAYES & ASSOCIATES, PLLC

#### ARCHITECTS

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ROBERT EHMET HAYES (1961-2009)

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NOAH C. ONKST

October 4, 2018

VIA EMAIL and HAND DELIVERY

To: Mr. Greg Duty, Superintendent

Southgate Independent Schools

RE: Southgate Public School – Renovations

BG #19-033 / REH #350-1217

Enclosures: 1. One copy of the Design Development Drawings, dated October 4, 2018.

2. Two copies of associated BG-2 and BG-3, both dated October 4, 2018

Action

Required: 1. Obtain Board approval of the Design Development Drawings, BG-2 and BG-3.

2. Execute the BG-2 and BG-3 forms,

3. Retain one copy of each for your file and return the others to our office. Upon receipt, we will upload to KDE for their approval along with the Design Development Drawings.

4. Advise of any changes to be made.

Ehmet Hayes

EH:a

# KENTUCKY DEPARTMENT OF EDUCATION

702 KAR 4:160

# BG-2 OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

District Name:	Southgate	Independent	District Code:	537	Facility Name:	Southgate F	Public School	School Code:	010	_	
Proje	ect Name:	Renovations				REH Projec	ct #3 <b>50-1217</b>		Date: 5/12/16	10-4-18	
PROJEC	T TYPE:	Yes	No		Gross Bu	ilding Area (s	ef.)		•		
New Buil						, , , , , , , , , , , , , , , , , , , ,	,				
Addition		_ 			·		_				
Renovati	ion	_ 			3	4,870	– (entire building a	nd mobiles	)		
Provision	ns for Future							•		_	
Propose	d Alternates:	(1)	To be det	ermined						_	
		(2)								-	
<b>5</b> "		(3)						· · · · · · · · · · · · · · · · · · ·		-	
Describe	special con	ditions, phasi	ng of proje	ect and alterna	tes, attach a	supplementa	al sheet, if needed	•			
BUILDING CONSTRUCTION CHARACTERISTICS:											
	ion of Buildin										
Descripti	Foundation	_									
-										<del>-</del> -	
E	xterior vvalis	: Load bearin	g masonry		<u> </u>					<b>-</b>	
Ro	oof Structure	: Steel deck o	n steel jois	sts and assum	ed wood in o	riginal buildin	g			- -	
		-								-	
<u>ENERG`</u>	Y EFFICIEN	<u>r design (k</u>	RS 157.45	0 and KRS 1	5 <u>7.455)</u> :						
		_Energy Cor	sumption	"Existing" (kBt	u/sf/yr)	-					
		_Energy Cor	sumption	Target (kBtu/s	f/yr)						
YES	NO										
	<b>[X</b> ]	LEED Certi	fied	Other	:						
	X	Designed to	meet Ene	ergy Star						_	
	X	Exceeds AS	SHRAE 90	.1(2007) by 10	)% (Minimum	1)					
	X	Whole Build	ding Life C	ycle Cost Ana	lysis Demons	strating Cost	Effective Design				
			-	ost Analysis S ·						-	
If not yes	s to one or m	ore of the ab	ove, expla	in why.	LEED is no	ot in budget a	nd not feasible on t	this renovat	lion.	<del></del>	
	X	Designed to	be Net-Z	ero							
	X	Designed to	be Net-Z	ero Ready							
Energy	Efficient De	sign Feature	s (See Lis	t Page 4, or Us	e Drop Down	List):					
East / W	est Building	Orientation	□ YE	s 🗆 No	)	,					
	xterior Wall					Avg. Exte	erior Wall R-Value	):			
	Vindow / Doo	• •				Avg. Win	dow/Door R-Value				
Gross R	loof Area (sf)	:				_	Avg. Roof R-Value			<del></del>	
	Wall Type:							Other:		_	
Roofing	Type:							Other:			
HVAC S	System Type:	VFR and R	TU's					Other:		_	
Classro	om Lighting:	N/A						Other:			
Active D	Daylighting:	N/A	.,					Other:		_	
Passive	Daylighting:	N/A						Other:			
On Site	Energy Gen	eration:	N/A				<del> </del>	Other:			

# KENTUCKY DEPARTMENT OF EDUCATION

BG-2

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# **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

Project: Southgte Public Sc	hool - Renovations		R	EH Proje	ct # <b>350-1217</b>	*********	Date: 10/1/18
Air Purification Systems :	YES 🗆	NO	X				
Gray Water System:	YES 🗆	ΝО	X				
Low Water Use Fixtures :	YES 🗆	NO	X				
Other:				-			
PLUMBING:					·		
Type of Sewage Disposal:	<u></u>						
HEATING, VENTILATION	AND AIR CONDITION	ONINC	<u>à</u> :				
Heating Only:	Heating & Mechar Ventilation Only	nical:	_		HVAC:_	X	A/C Only:
Fuel Source/Backup (if ap	plicable):						
ELECTRICAL:							
Source of Electric Power:	Utility			<del> </del>	Lighting Inter		A 1 ( A
Voltage Serving Facility:	120/208 3 Phase				Library/Media Science Lab	a Ctr	N/A
Number of Convenience C	Outlets:				Science Clrn		
Classrooms	<u>N/A</u>				Band/Music		
Library/Media Center Business Ed	N/A N/A		<del></del>		Business Ed Shops		
Family & Consumer Scier					Corridors		
ranning & Consumer Scien	IOGIN/A			<del></del>	Stairways		•
Camera System:	N/A				Cafeteria		
					Pre-School (		
					Art Classroo Gymnasium	Ш	<u> </u>
SPECIAL EQUIPMENT:					·		
System	Conduit Only			Condui	t & Wiring		Complete with Equipment
Bell N/A			_				
Clock				·			
Fire Alarm			-				
Intercom Telephone							
Television			_	······································			
Computer							
Wireless Network			_				
Interactive White bd							
Voice Amplification ▼			-				
FIXED EQUIPMENT:							
Teacher Cabinet				C	ustodial Room	shelv	es
Student Lockers xx					cience Labora		
Folding Bleachers			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		amily & Consu	ımer So	CÌ
Library Furnishings					)ther )ther		<u> </u>
Dry Food Shelves					/ LI 104		

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Project: Southgte	Public School - Ren	ovations REH Proje	ect #350-1217	Date: 10/1/18
INTERIOR FINIS	H SCHEDULE:			
AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office				
Corridors	Carpet	N/A	Drywall & existing plaster	Acoustic & existing tin
Custodial			With the boundary law and the second	
Kitchen			ditambalan di santangan pertangan di kananan	
Cafeteria	·		Milestille Making Manifest and Angeles	Name of the Association of the A
Gym Showers/Locker	And the state of t		International and the anti-photo-infector-system to the contract of the contra	
Toilets				Tention in a training and the second
Library/Media Cnt		the substitution of the su		
Classrooms	Sales Statute Company of the Company		WWW.	(Bertrier) - traffic for a first control of the second of
Music			**************************************	And the state of t
Art			Special designation of the second sec	And the second s
Science		The state of the s	Mark Call Print Company Committee Co	
FMD			And the second and the second	
OTHER AREAS		When the second		MAN BAR PARAMETER AND
			palleren linge Company of the text of the section o	CAN THE RESIDENCE AND ASSESSMENT OF THE PROPERTY OF THE PROPER
•				
Miscellaneous Pro	oject Specific Featur	es:		
	•			
Kentucky Register	red Architect:			Date: 10-4-18
		Signature		Approximation to the control of the
		Robert Ehmet Hayes &	Associates, PLLC	
		VIAI	(	
Kentucky Register	red Engineer:	MAN TAN		Date: 9-27-18
		Signature		
		KLH Engineers, PSC		
Board Designee o	r Superintendent:			Date:
		Signature	1 0 0 0 0 0 0 0 0 0 0	
		Southgate Independent	t Board of Education	

## KENTUCKY DEPARTMENT OF EDUCATION

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# **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

BG-2

### **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

# **KENTUCKY DEPARTMENT OF EDUCATION** 702 KAR 4:160

# BG-3 STATEMENT OF PROBABLE COST

District District Name: Southgate Independent Code: 537	Facility Name:	Southgate Public School	School Code: 010
Project Name: Renovations		REH Project #350-121	7 Date: 10/4/18
Project Phase: Design Developme	nt: 🗹	Construction Do	cuments:
1. Site Development	\$		
2. General Construction	\$	160,000	
3. Heating, Ventilation & Air Conditioning	\$	485,500	
4. Plumbing (Include Sprinkler System)	\$		
5. Electrical Work	\$	207,000	
6. Sewage Disposal System	\$		
7. Total Construction Cost (1-6)	•		852,500
8. Site Acquisition Cost (Purchase Price)	\$		
9. Legal Services Bank and Rating Fee	\$	7,500	
10. Fiscal Agent Fee	\$	6,000	
11. Bond Discount	\$	11,400	
12. Architect/Engineer Fee	\$	77,833	
13. Construction/Manager Fee (if Applicable)	\$		
14. Equipment/Furnishings (Not Fixed)/Computers	\$		
15. Property & Topographic Survey	\$		
16. Geotechnical Survey & Report	\$		
17. Special Inspections	\$	5,000	
18. Asbestos Abatement	\$	10,000	
19. Commissioning Fee	\$	5,000	
20. Plan Review Fee	\$		
21. Printing & Distribution of Bid Docs	\$	750	
22. Contingencies - Minimum 5% of Line 7	\$	42,625	
23. Testing and Balancing	\$	5,000	
24. Total Other Cost (8-23)			171,108
25. TOTAL PROJECT COST (line 7 + line 24)			\$1,023,608
a. Gross Square Foot Area*			
b. Total Cost Per Square Foot			
c. Total Cost Per Pupil		\$	
d. Gross Sq. Ft. Area of Alternates * Base Bid Area Only		_	
Kentucky Registered Architect/Engineer:		Dat	te: <u>10/4/18</u>
Board of Education Designee:		Dat	te: