ROBERT EHMET HAYES & ASSOCIATES, PLLC

ARCHITECTS

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October 20, 2023

VIA EMAIL

To:

Mr. Jay Brewer, Superintendent

Dayton Independent Schools

Re:

Dayton Independent Schools - Athletic Complex - Bid Package #2 - Dayton Stadium

REH #168-523 / BG #23-538

Enclosures:

1. Review Schematic Design Documents, dated October 25, 2023.

2. Copy of BG-2 dated October 13, 2023

3. Copy of BG-3 dated October 13, 2023.

Action Required:

1. Obtain Board approval of the Schematic Design Documents, BG-2 and BG-3.

2. Execute both the BG-2 and BG-3. Return a copy of each to our office for subsequent upload to KDE and retain a copy for your records.

doseph Hayes

JAH:jhf

BG-2

702 KAR 4:160

OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

PROJECT TYPE: Vec	District Name: <u>Dayton Ind</u>	lependent	District Code:	147 Date: 10/13/2	Facility Name:	Dayton High School REH: 168-523		School Code: 010	
Name Name Public Name									
Addition	PROJECT TYPE:	Yes	No			Gross Building Area (sf.)			
Renovation	New Building	Ø				2,400			
Provisions for Future Expansion: Proposed Alternates:	Addition								
Proposed Alternates: (1) Parking Lot (2) Fiddinouse/Fitness Center (3) Fiddinouse/Fitness Center (4) Fiddinouse/Fitness Center (5) Fiddinouse/Fitness Center (6) Fiddinouse/Fitness Center (7) Fitness	Renovation								
California Construction Constr	Provisions for Future	Expansion:							
Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed. BUILDING CONSTRUCTION CHARACTERISTICS:	(2) Fieldhouse/Fitness Center								
Description of Building Structure: Foundation: Concrete Exterior Walls: Wood Frame with EPDM Membrane Exterior Walls: Wood Frame with EPDM Membrane									
Foundation: Concrete Exterior Walls: Wood Frame with Erick Veneer Roof Structure: Wood Frame with EPDM Membrane ENERGY EFFICIENT DESIGN (KRS 167.450 and KRS 167.455): None - New	BUILDING CONSTRUCTION CHARACTERISTICS:								
Exertor Walls: Wood Frame with Brick Veneer Roof Structure: Wood Frame with EPDM Membrane ENERGY EFFICIENT DESIGN (KRS 167.450 and KRS 167.455): None - New	Description of Buildin	g Structure:							
Roof Structure:									
ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455): None - New	Exterior Walls	Wood Fram	e with Bric	k Veneer					
None - New	Roof Structure:	Wood Fram	e with EPI	OM Membrane					
None - New	ENERGY EFFICIENT	DESIGN (IC	DC 457 45	O and VDC 45	7 465\.				
Unknown at this time Energy Consumption Target (kBtu/sf/yr)		I DESIGN (K	KS 157.40	0 and KRS 15	<u>/.455)</u> ;				
YES NO LEED Certified Other:	None - New	_Energy Con	sumption '	'Existing" (kBtu	/sf/yr)				
	Unknown at this time	_Energy Con	sumption ⁻	Гarget (kВtu/sf/	'yr)				
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								
		LEED Certif	ied	Other:	·				
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□ □ □ 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): 6,600 Avg. Exterior Wall R-Value: R2 Gross Window / Door Area (sf): 410 Avg. Window/Door R-Value: R2 Gross Roof Area (sf): 2,400 Avg. Roof R-Value: R13 Exterior Wall Type: □ Other: Other: Roofing Type: B Other: HVAC System Type: Unknown at this time. Other: Classroom Lighting: E - LED Other: Active Daylighting: B Other: Passive Daylighting: G Other:			Lif	e Cycle Cost A	nalysis Soft	ware Used:	·		
Energy Efficient Design Features: (See List Page 4, or Use Drop Down List) East / West Building Orientation □ YES ☑ NO Gross Exterior Wall Area (sf): 6,600 Avg. Exterior Wall R-Value: R21 Gross Window / Door Area (sf): 410 Avg. Window/Door R-Value: R2 Gross Roof Area (sf): 2,400 Avg. Roof R-Value: R13 Exterior Wall Type: □ □ Other: Roofing Type: □ □ Unknown at this time. Other: HVAC System Type: □ □ Unknown at this time. Other: Classroom Lighting: □ □ Unknown at this time. Other: Passive Daylighting: □ ○ ○ ○	If not yes to one or	more of the a	above, exp	olain why.					
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Exterior Wall Type: C Other: C Roofing Type: B Other:						Avg. v			
Roofing Type: B Other: HVAC System Type: Unknown at this time. Other: Classroom Lighting: E - LED Other: Active Daylighting: B Other: Passive Daylighting: G Other:	Gross Roof Area (St):		2,40	0			Avg. Roof R-value:	K13	
HVAC System Type: Unknown at this time. Other: Classroom Lighting: E - LED Other: Active Daylighting: B Other: Passive Daylighting: G Other:	Exterior Wall Type:	c	_					Other:	
Classroom Lighting: E - LED Other: Active Daylighting: B Other: Passive Daylighting: G Other:	Roofing Type:	В						Other:	
Classroom Lighting: E - LED Other: Active Daylighting: B Other: Passive Daylighting: G Other:	HVAC System Type: Unknown at this time.						Other:		
Passive Daylighting: G Other:	Classroom Lighting: E - LED						Other:		
	Active Daylighting: B						Other:		
On Site Energy Generation: G Other:	Passive Daylighting:	G						Other:	
	On Site Energy Generation: G Other:								

OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

Project: Dayton Independe	ent Schools - Ath	nletic Comp	olex - BP#2 - S		
Air Purification Systems :	YES [ON [71	REH: 168-523	Date: 10/13/23
Gray Water System :	YES [
Low Water Use Fixtures :	YES [_		
Othor	120				
			······································		
PLUMBING:					
Type of Sewage Disposal:	Public				
HEATING, VENTILATION	AND AIR COND	DITIONING	<u>ì</u> :		
Heating Only:	Heating & Med Ventilation Onl			HVAC: X	A/C Only:
Fuel Source/Backup (if app	olicable):			,	<u> </u>
ELECTRICAL:					
Source of Electric Power:	Utility Padmou	nt Transfo	rmer	Lighting Intensity (fc.) Std. Classrooms	
Voltage Serving Facility:	Unknown at th	is time.		Library/Media Ctr Science Lab	
Number of Convenience C	utlets:			Science Cirm	
Classrooms	N/A N/A			Band/Music Business Ed	
Library/Media Center Business Ed	N/A			Shops	
Family & Consumer Science				Corridors	
Camera System:	Yes			Stairways Cafeteria	
				Pre-School Clrm Art Classroom	
				Gymnasium	
SPECIAL EQUIPMENT:					
System C	onduit Only		Conduit	& Wiring	Complete with Equipment
Bell					X .
Fire Alarm					X
Intercom					X
Telephone Television					X
Computer					
Wireless Network					X
Interactive White bd Voice Amplification					
FIXED EQUIPMENT: N/A					
Teacher Cabinet			(Custodial Room Shelves	
Student Lockers				Science Laboratories	
Folding Bleachers			_	Family & Consumer Sci	
Library Furnishings Dry Food Shelves		·	_	Other Other	
-			_		

OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

roject: Dayton Inde			roject #168-523	Date: 8/1	6/23		
Complex - BP#1 - Tower Replacement		ry Cooling					
INTERIOR FINISH	I SCHEDULE:						
AREA	FLOOR	WAINSCOT	WALLS	CEILIN	CEILING		
General Office	_			_			
Corridors Custodial							
Kitchen							
Cafeteria Gym				_			
Showers/Locker		······································					
Toilets Library/Media Cnt	Resinous		FRP	Drywall			
Classrooms							
Music Art							
Science							
FMD				_			
OTHER AREAS							
				_			
Miscellaneous Pro	piect Specific Feat	ures:					
Kentucky Register	red Architect:	- Date:	10/13/2023				
		Signate Robert Ehmet Hay	ure es & Associates, PLLC	Date:			
Kentucky Register	red Engineer:	Date:	10/13/20/23				
		Signati	ure				
Board Designee o	r Superintendent:	_ Date:	Date:				
		Signati	ure				

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