

STATE COLLEGE AREA SCHOOL DISTRICT ADMINISTRATION OFFICES

131 W Nittany Avenue • STATE COLLEGE PENNSYLVANIA • 16801 TELEPHONE: 814-231-1016 -- FAX: 814023104130

To: Board of School Directors

From: Ed Poprik, Randy Brown and Bob O'Donnell

Date: May 6, 2016

Re: Document Submission to PDE

It is recommended that the Board of School Directors approve the submission of the District-Wide Facilities Master Plan (DWFMP) Elementary Options (included in the presentation) and Energy Models for the Elementary Projects as presented and attached.



ENERGY STAR[®] Statement of Energy Design Intent (SEDI)¹ Option Reno: State College Area School District, Radio Park ES, AUN# 110148002

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Primary Property	Type: K-12 School
Gross Floor Area	(ft ²): 76,600

Estimated Date of Certification of Occupancy:

Date Generated: May 06, 2016

- 1. This form may be used to apply for the ENERGY STAR Designed to Earn. This form was generated from Portfolio Manager's target finder: http://www.portfoliomanager.energystar.gov/targetfinder.
- 2. The ENERGY STAR Score is based on total source energy. The scale is 1-100. A score of 75 is the minimum to be eligible for the ENERGY STAR.

Property & Contact Information for D	Design Project	
Property Address Option Reno: State College Area School District, Radio Park ES, AUN# 110148002 800 West Cherry Lane State College, Pennsylvania 16803	Project Architect	Owner Contact
Property ID: 4965994	Architect Of Record	Property Owner

Estimated Design Energy		
Fuel Type	Usage	Energy Rate (\$/Unit)
Electric - Grid	440,517 kWh (thousand Watt-hours)	Not Provided
Natural Gas	23,340 ccf (hundred cubic feet)	Not Provided

This Use Detail is used to calculate the 1-100	ENERGY STAR Score
K-12 School	
Number of Workers on Main Shift	60
♠Percent That Can Be Cooled	90
Number of Computers	175
★Gymnasium Floor Area	4,691 Sq. Ft.
Number of Walk-in Refrigeration/Freezer Units	2
Cooking Facilities	Yes
★School District	State College
★Weekend Operation	Yes
★Student Seating Capacity	500
★High School	No
♠ Percent That Can Be Heated	90
ross Floor Area €	76,600 Sq. Ft.
★Months in Use	10

Design Energy and Emission Results			
Metric	Design Project	Median Property	Estimated Savings
ENERGY STAR Score (1-100)	92	50	N/A
Energy Reduction (from Median)(%)	-41	0	N/A
Source Energy Use Intensity (kBtu/ft²/yr)	94	159	65
Site Energy Use Intensity (kBtu/ft²/yr)	50	86	36
Source Energy Use (kBtu/yr)	7,233,976	12,251,657	5,017,681
Site Energy Use (kBtu/yr)	3,897,728	6,601,297	2,703,569
Energy Costs (\$)	63,864	108,162	44,298
Total GHG Emissions (Metric Tons CO2e)	429	726	297

Designed to earn the ENERGY STAR: Application Checklist This section is only required if you are using this document to apply for Designed to Earn the ENERGY STAR. All design of that achieve an EPA energy performance score of 75 or higher are eligible for this certification. 1) Does the intended function or use for the property match the criteria of a property type that's eligible to receive an ENERGY STAR score? If you are not sure that your property design is eligible for a design ENERGY STAR score, please describe the property's major functions: 2) Is the design project at least 95% complete with construction documents? If no, please explain: 3) Is the property unoccupied and not yet generating energy bills? 4) Do energy calculations account for the whole building intended operations and all energy sources? 5) Is the Architect of Record (AOR) an ENERGY STAR partner? 6) Will the AOR review the SEDI with building owner before they sign the Owner Letter of Intent? 7) Do the AOR and Building Owner agree that EPA may use information from this document in ENERGY STAR program materials? 8) Are you seeking other qualifications for this design project? If so, please select all that apply: AIA 2030 Commitment	720
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If you are not sure that your property design is eligible for a design ENERGY STAR score, please describe the property's major functions: Yes	
ENERGY STAR score, please describe the property's major functions: 2) Is the design project at least 95% complete with construction documents?	Yes No/Not Sure
If no, please explain: Yes	
4) Do energy calculations account for the whole building intended operations and all energy sources? No No Solution in the Accordance of Recordance of Recordance (AOR) and ENERGY STAR partner? No No No No No No No No No N	Yes No
and all energy sources? 5) Is the Architect of Record (AOR) an ENERGY STAR partner? Yes No No 6) Will the AOR review the SEDI with building owner before they sign the Owner Letter of Intent? 7) Do the AOR and Building Owner agree that EPA may use information from this document in ENERGY STAR program materials? No No If so, please select all that apply:	Yes No
6) Will the AOR review the SEDI with building owner before they sign the Owner Letter of Intent? 7) Do the AOR and Building Owner agree that EPA may use information from this document in ENERGY STAR program materials? 8) Are you seeking other qualifications for this design project? If so, please select all that apply:	Yes No
Owner Letter of Intent? 7) Do the AOR and Building Owner agree that EPA may use information from this document in ENERGY STAR program materials? 8) Are you seeking other qualifications for this design project? If so, please select all that apply:	Yes No
this document in ENERGY STAR program materials? 8) Are you seeking other qualifications for this design project? If so, please select all that apply:	Yes No
If so, please select all that apply:	Yes No
	Yes No
AIA 2030 Commitment	
Architecture 2030 Challenge Federal, State or Local Disclosure Ordinance Green Globes LEED Other, please indicate:	

Professional Verification	
I (Name) verify that the above inform	nation is true and correct to the best of my knowledge.
Signature:Date:	
Verifying Professional	
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Note: When applying for the ENERGY STAR Designed to I	Earn, the Verifying Professional Stamp



ENERGY STAR[®] Statement of Energy Design Intent (SEDI)¹ Option New: State College Area School District, Radio Park ES, AUN# 110148002

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J	J

Primary Property Type: K-12 School Gross Floor Area (ft²): 76,600

Estimated Date of Certification of Occupancy:

Date Generated: May 06, 2016

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Property & Contact Information for D	esign Project	
Property Address Option New: State College Area School District, Radio Park ES, AUN# 110148002 800 West Cherry Lane State College, Pennsylvania 16803	Project Architect	Owner Contact
Property ID: 4966025	Architect Of Record	Property Owner
		, ()
Estimated Design Energy		

Estimated Design Energy		
Fuel Type	Usage	Energy Rate (\$/Unit)
Electric - Grid	391,820 kWh (thousand Watt-hours)	Not Provided
Natural Gas	21,800 ccf (hundred cubic feet)	Not Provided

stimated Design Use Details	
This Use Detail is used to calculate the 1-100 E	NERGY STAR Score.
K-12 School	
Number of Workers on Main Shift	60
Percent That Can Be Cooled	90
Number of Computers	175
☆ Gymnasium Floor Area	4,941 Sq. Ft.
Number of Walk-in Refrigeration/Freezer Units	2
Cooking Facilities	Yes
School District	State College Area
★Student Seating Capacity	500
★Weekend Operation	Yes
tigh School this High School	No
rercent That Can Be Heated ₽	90
ross Floor Area €	76,600 Sq. Ft.
Months in Use	10

Design Energy and Emission Results			
Metric	Design Project	Median Property	Estimated Savings
ENERGY STAR Score (1-100)	95	50	N/A
Energy Reduction (from Median)(%)	-46.6	0	N/A
Source Energy Use Intensity (kBtu/ft²/yr)	85	159	74
Site Energy Use Intensity (kBtu/ft²/yr)	46	87	41
Source Energy Use (kBtu/yr)	6,546,348	12,251,657	5,705,309
Site Energy Use (kBtu/yr)	3,573,569	6,688,026	3,114,457
Energy Costs (\$)	57,777	108,132	50,355
Total GHG Emissions (Metric Tons CO2e)	387	725	338

TOTAL GHG EITHS	sions (Metric Tons CO2e)	307	725	336
Designed to ear	rn the ENERGY STAR: Application Checkl	list		
	ly required if you are using this document to appl PA energy performance score of 75 or higher are			STAR. All design projects
	nded function or use for the property match the cr that's eligible to receive an ENERGY STAR score		Yes	No/Not Sure
	not sure that your property design is eligible for a STAR score, please describe the property's majo			
2) Is the design pureling of the state of th	project at least 95% complete with construction dese explain:	ocuments?	☐ Yes	□ No
3) Is the property	vunoccupied and not yet generating energy bills?	?	Yes	□ No
4) Do energy calcand all energy	culations account for the whole building intended sources?	operations	Yes	□ No
5) Is the Architec	et of Record (AOR) an ENERGY STAR partner?		Yes	□ No
6) Will the AOR r Owner Letter of	review the SEDI with building owner before they sof Intent?	sign the	Yes	□ No
	nd Building Owner agree that EPA may use infor in ENERGY STAR program materials?	mation from	Yes	□ No
	ng other qualifications for this design project? se select all that apply:		Yes	□ No
	AIA 2030 Commitment Architecture 2030 Challenge Federal, State or Local Disclosure Ordinance Green Globes LEED Other, please indicate:			

Professional Verification	
I (Name) verify that the above information is true	e and correct to the best of my knowledge.
Signature:Date:	
Verifying Professional	
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ENERGY STAR[®] Statement of Energy Design Intent (SEDI)¹ Option Reno: State College Area School District, Houserville ES, AUN# 110148002

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Primary Property Type: K-12 School Gross Floor Area (ft²): 68,000

Estimated Date of Certification of Occupancy:

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Property & Contact Information for Design Project			
Property Address Option Reno: State College Area School District, Houserville ES, AUN# 110148002 217 Scholl Street State College, Pennsylvania 16801	Project Architect	Owner Contact	
Property ID: 4966011	Architect Of Record	Property Owner	

Estimated Design Energy		
Fuel Type	Usage	Energy Rate (\$/Unit)
Electric - Grid	421,059 kWh (thousand Watt-hours)	Not Provided
Natural Gas	22,719 ccf (hundred cubic feet)	Not Provided

Estimated Design Use Details	
This Use Detail is used to calculate the 1-100 E	ENERGY STAR Score.
K-12 School	
★Number of Workers on Main Shift	48
♠ Percent That Can Be Cooled	90
Number of Computers	150
★Gymnasium Floor Area	5,367 Sq. Ft.
★Number of Walk-in Refrigeration/Freezer Units	2
☆Cooking Facilities	Yes
★ School District	State College Area
★Student Seating Capacity	400
★Weekend Operation	Yes
★High School	No
♠ Percent That Can Be Heated	90
☆Gross Floor Area	68,000 Sq. Ft.
★Months in Use	10

Design Energy and Emission Results			
Metric	Design Project	Median Property	Estimated Savings
ENERGY STAR Score (1-100)	89	50	N/A
Energy Reduction (from Median)(%)	-37.3	0	N/A
Source Energy Use Intensity (kBtu/ft²/yr)	102	163	61
Site Energy Use Intensity (kBtu/ft²/yr)	55	88	33
Source Energy Use (kBtu/yr)	6,958,608	11,090,450	4,131,842
Site Energy Use (kBtu/yr)	3,767,622	6,004,739	2,237,117
Energy Costs (\$)	61,427	97,901	36,474
Total GHG Emissions (Metric Tons CO2e)	412	657	245

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Designed to earn the ENERGY STAR: Application Checklist		
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Does the intended function or use for the property match the criteria of a property type that's eligible to receive an ENERGY STAR score?	Yes	No/Not Sure
If you are not sure that your property design is eligible for a design ENERGY STAR score, please describe the property's major functions:		
Is the design project at least 95% complete with construction documents? If no, please explain:	Yes	□ No
3) Is the property unoccupied and not yet generating energy bills? 4) December a constitution account for the whole building intended exerctions.	Yes	□ No
4) Do energy calculations account for the whole building intended operations and all energy sources?	Yes	∐ No
5) Is the Architect of Record (AOR) an ENERGY STAR partner?	Yes	□ No
6) Will the AOR review the SEDI with building owner before they sign the Owner Letter of Intent?	Yes	□ No
7) Do the AOR and Building Owner agree that EPA may use information from this document in ENERGY STAR program materials?	Yes	□ No
8) Are you seeking other qualifications for this design project? If so, please select all that apply: AIA 2030 Commitment Architecture 2030 Challenge Federal, State or Local Disclosure Ordinance Green Globes LEED Other, please indicate:	Yes	□ No

Professional Verification	
I (Name) verify that the above information is true	ue and correct to the best of my knowledge.
Signature:Date:	
Verifying Professional	
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ENERGY STAR[®] Statement of Energy Design Intent (SEDI)¹ Option New: State College Area School District, Houserville ES, AUN# 110148002

Q	5
J	J

Primary Property Type: K-12 School Gross Floor Area (ft²): 68,000

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Property & Contact Information for Design Project			
Property Address Option New: State College Area School District, Houserville ES, AUN# 110148002 217 Scholl Street State College, Pennsylvania 16801	Project Architect	Owner Contact	
Property ID: 4966040	Architect Of Record	Property Owner	

Estimated Design Energy		
Fuel Type	Usage	Energy Rate (\$/Unit)
Electric - Grid	347,829 kWh (thousand Watt-hours)	Not Provided
Natural Gas	19,352 ccf (hundred cubic feet)	Not Provided

Estimated Design Use Details	
A	INFDOV STAD Soore
This Use Detail is used to calculate the 1-100 E K-12 School	ENERGY STAR Score.
Number of Workers on Main Shift	48
◆Percent That Can Be Cooled	90
Number of Computers	150
☆Gymnasium Floor Area	5,367 Sq. Ft.
★Number of Walk-in Refrigeration/Freezer Units	2
★Cooking Facilities	Yes
★School District	State College Area
★Student Seating Capacity	400
★Weekend Operation	Yes
★High School	No
♠ Percent That Can Be Heated	90
★Gross Floor Area	68,000 Sq. Ft.
★Months in Use	10

Design Energy and Emission Results			
Metric	Design Project	Median Property	Estimated Savings
ENERGY STAR Score (1-100)	95	50	N/A
Energy Reduction (from Median)(%)	-47.6	0	N/A
Source Energy Use Intensity (kBtu/ft²/yr)	85	163	78
Site Energy Use Intensity (kBtu/ft²/yr)	46	89	43
Source Energy Use (kBtu/yr)	5,811,319	11,090,450	5,279,131
Site Energy Use (kBtu/yr)	3,172,307	6,054,102	2,881,795
Energy Costs (\$)	51,290	97,884	46,594
Total GHG Emissions (Metric Tons CO2e)	343	656	313

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1) Does the intended function or use for the property match the criteria property type that's eligible to receive an ENERGY STAR score?	of a Yes	No/Not Sure
If you are not sure that your property design is eligible for a design ENERGY STAR score, please describe the property's major fund		
2) Is the design project at least 95% complete with construction docum If no, please explain:	ents? प Yes	□ No
3) Is the property unoccupied and not yet generating energy bills?	☐ Yes	□ No
4) Do energy calculations account for the whole building intended oper and all energy sources?	ations Yes	□ No
5) Is the Architect of Record (AOR) an ENERGY STAR partner?	Yes	□ No
6) Will the AOR review the SEDI with building owner before they sign the Owner Letter of Intent?	ne Yes	□ No
7) Do the AOR and Building Owner agree that EPA may use information this document in ENERGY STAR program materials?	on from Yes	□ No
8) Are you seeking other qualifications for this design project? If so, please select all that apply: AIA 2030 Commitment Architecture 2030 Challenge Federal, State or Local Disclosure Ordinance Green Globes LEED Other, please indicate:	☐ Yes	□ No

Professional Verification	
I (Name) verify that the above information is true	e and correct to the best of my knowledge.
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Verifying Professional	
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ENERGY STAR[®] Statement of Energy Design Intent (SEDI)¹ Option Reno, State College Area School District, Corl St ES, AUN# 110148002

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Primary Property Type: K-12 School Gross Floor Area (ft²): 49,502

Estimated Date of Certification of Occupancy: _

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Property & Contact Information for I	Design Project	
Property Address Option Reno, State College Area School District, Corl St ES, AUN# 110148002 235 South Corl Street State College, Pennsylvania 16801	Project Architect	Owner Contact
Property ID: 4966051	Architect Of Record	Property Owner
		, ()
Estimated Design Energy		
Fuel Type	Usage	Energy Rate (\$/Unit)
Flectric - Grid	325 642 kWh (thousand Watt-hours)	Not Provided

Estimated Design Energy		
Fuel Type	Usage	Energy Rate (\$/Unit)
Electric - Grid	325,642 kWh (thousand Watt-hours)	Not Provided
Natural Gas	19,456 ccf (hundred cubic feet)	Not Provided

Estimated Design Use Details	
🖈 This Use Detail is used to calculate the 1-100 E	NERGY STAR Score.
K-12 School	
★Number of Workers on Main Shift	40
★Percent That Can Be Cooled	70
★Number of Computers	125
★Gymnasium Floor Area	5,104 Sq. Ft.
★Number of Walk-in Refrigeration/Freezer Units	2
★Cooking Facilities	Yes
★School District	State College Area
★Student Seating Capacity	325
★Weekend Operation	Yes
★ High School	No
★Percent That Can Be Heated	90
★Gross Floor Area	49,502 Sq. Ft.
★Months in Use	10

Design Energy and Emission Results			
Metric	Design Project	Median Property	Estimated Savings
ENERGY STAR Score (1-100)	86	50	N/A
Energy Reduction (from Median)(%)	-33.5	0	N/A
Source Energy Use Intensity (kBtu/ft²/yr)	112	169	57
Site Energy Use Intensity (kBtu/ft²/yr)	62	94	32
Source Energy Use (kBtu/yr)	5,584,819	8,399,153	2,814,334
Site Energy Use (kBtu/yr)	3,107,276	4,673,112	1,565,836
Energy Costs (\$)	49,271	74,100	24,829
Total GHG Emissions (Metric Tons CO2e)	329	495	166

Total GHG Emis	sions (Metric Tons CO2e)	329	495	100
Designed to ear	rn the ENERGY STAR: Application Checkl	list		
	ly required if you are using this document to appl PA energy performance score of 75 or higher are			STAR. All design projects
	nded function or use for the property match the cr that's eligible to receive an ENERGY STAR score		Yes	No/Not Sure
	not sure that your property design is eligible for a STAR score, please describe the property's majo			
2) Is the design pleas	project at least 95% complete with construction dese explain:	ocuments?	Yes	□ No
3) Is the property	vunoccupied and not yet generating energy bills?	?	Yes	□ No
 Do energy cal and all energy 	culations account for the whole building intended sources?	operations	Yes	No
5) Is the Architec	t of Record (AOR) an ENERGY STAR partner?		Yes	□ No
6) Will the AOR of Owner Letter of	review the SEDI with building owner before they sof Intent?	sign the	Yes	No
	nd Building Owner agree that EPA may use infor in ENERGY STAR program materials?	mation from	Yes	No
	ng other qualifications for this design project? se select all that apply:		Yes	□ No
	AIA 2030 Commitment Architecture 2030 Challenge Federal, State or Local Disclosure Ordinance Green Globes LEED Other, please indicate:			

Professional Verification	
I (Name) verify that the above information is tru	e and correct to the best of my knowledge.
Signature:Date:	
Verifying Professional	
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