U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity(DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2015-2018

☐ Public ☐ Charter ☐ Title I ☐ Magnet X Private ☐ Independent ☐ Rural

Name of Principal: **Mr. Cornelius G. Begley**
Official School Name: **Saint Leo the Great School**
Official School Name Mailing Address: **550 Newman Springs Road, Lincroft, NJ 07738**
County: **Monmouth** State School Code Number *: **26-0780-17H**

Telephone: **732-741-3133** Fax: **732-741-2241**

Web site/URL: www.saintleothegreatschool.com E-mail: stleoprincipal@saintleothegreatschool.com

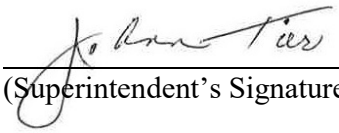
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Cornelius G. Begley

_____ Date: **January 24, 2019**

(Principal's Signature)

Name of Superintendent: **Mrs. JoAnn Tier**
District Name: **Diocese of Trenton**
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



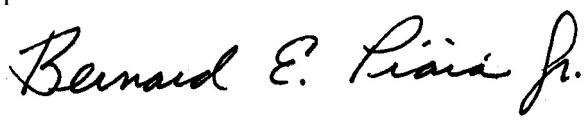
Date: **January 28, 2019**
(Superintendent's Signature)

Nominating Authority's Certifications
The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: **New Jersey Department of Education**

Name of Nominating Authority: **Mr. Bernard E. Piaia, Jr.**
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)
I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.



Date: **February 14, 2019**
(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: March 31, 2018

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering

and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

School Contact Information
School Name: Saint Leo the Great School District: Diocese of Trenton
Street Address: 550 Newman Springs Road
City: Lincroft State: New Jersey Zip: 07738
Website: http://www.saintleothegreatschool.com/slg/Student%20Life/Students%20in%20Action/
Principal Name: Cornelius Begley
Principal Email Address: stleoprincipal@saintleothegreatschool.com Phone Number: 732-741-3133
Lead Applicant Name (if different): Richard Romero
Lead Applicant Email: rromero@saintleothegreatschool.com Phone Number: 732-741-3133 xt.209

Level [X] Pre K - 8	School Type ( ) Public (X) Private/Independent ( ) Charter	How would you describe your school? ( ) Urban (X) Suburban ( ) Rural	Total Enrolled: 577
Does your school serve 40% or more students from disadvantaged households? ( ) Yes (X) No			Graduation rate: 100% Attendance rate: 98%

SUMMARY NARRATIVE:

Saint Leo the Great School is a non-public, catholic school with the mission of developing youth entrusted to its care through spiritual, educational, social and athletic activities. Its daily mission reinforces Pope Francis's teaching of personal responsibility for local and global environmental stewardship. Saint Leo the Great School has grown from a school serving grades 1 through 4 serving 201 students in 1960 to a school serving preschool through grade 8 serving approximately 600 students. The Administrators, faculty and staff, guide the student body to a deeper knowledge and practice of the Faith. The Parish Green Team, under the leadership of the pastor, Business Administrator, and Principal and leadership of the Diocese of Trenton, has been implementing "green" initiatives over the past five years. The Green Goal is to raise environmental awareness and eliminate negative environmental footprint.

With a focus on grounds improvement, building management, and expanding the Saint Leo the Great's environmental practices, programs, policies and curriculum, in 2017 the school established the position of Director of Operations (DOO) to bring expertise to the school's "Clean School Initiative" in collaboration with the New Jersey Building and Grounds Association. Using EPA Energy Star Portfolio Manager, the school is using a holistic approach to view the interrelationships among policies, curriculum, and utility usage and facility management operations.

Significant campus projects are underway that have already produced cost savings and other efficiencies. A phased replacement program is in progress to replace roof top HVAC equipment with High Efficiency Energy Star rated units. A phased program to replace lighting with LED lights is underway. In addition, the school installed high efficiency fans in classrooms and has begun a phased program, to replace windows and insulation. Lastly, the school is installing a half acre solar field, which is designed to absorb 85% of the school's fossil fuel power needs. The school has started to reap benefits in terms of energy used or costs from many of the measures described above.

The school uses water judiciously and continues to make efforts to reduce consumption further. School grounds are home to over 22 native species of wild flowers, shrubs, trees and grasses. The school uses plantings for erosion protection and slope retention and for natural/grass high traffic parking area preservation. Also, a rooftop drainage system feeds into the courtyard for subsurface watering.

Our athletic facilities are home to interscholastic sports program that involves over 60% of our students in interscholastic sports from Cross Country, Basketball, Soccer, Baseball, Cheerleading, and Track & Field. In every grade, the school integrates "the Positivity Project," a national program model designed toward building character strengths on values found in the Scriptures. The Positivity Project establishes benchmarks and guidelines for character building. As the Gospel as foundation, the school teaches total well-being in Mind (meditation and coping techniques), Body (physical fitness and nutritional wellness) and Soul (spirituality and Catholic Faith).

In 2014, the school's nature courtyard located in the center of the school building was designated by the National Wildlife Federation as a "Certified Wildlife Habitat" and serves as a living classroom for students. Many varieties of birds, insects and other small animals visit our courtyard which also serves as a meditation garden used for individual solitude and prayer. Our preschoolers grow butterfly habitats and release the butterflies into the courtyard wildlife sanctuary while older students study New Jersey's native species and the role they play in the environment. Additional facility upgrades include our STEAM labs recently outfitted with S+B USA's SpaceStation Science Lab to promote collaborative group learning with seating on all sides of this unique center point design.

The school is particularly proud its religious education program that extends its faith-based Catholic history through environmental learning experiences. For example, the school's "Brick Building" exercise utilizes environmental, engineering and scientific principles by simulating the experience of the enslaved Israelites. Using top soil, straw, water, aluminum loaf pans and large buckets, student made the mixture ancient Israelites used to make brick during their enslavement in Egypt. Approximately 100 summer students from schools throughout the area formed building teams and used the raw natural material to make bricks, then placed them in the courtyard to bake into a hard brick in the summer sun. The children formed their own teams, allocated their own resources and formed their own processes for work distribution.

Reinforcing Pope Francis's teaching of our personal responsibility for local and global environmental stewardship, an African Village Environmental Stewardship lesson with a water scarcity relay race demonstrates the issues of global clean water scarcity how the social justice teachings of the Catholic Church can help change this problem. The relay teams were given an empty bucket and each team member given a 3oz paper cup and instructed to collect clean water and return it to their village and fill the bucket in 30 minutes.

In addition, younger students build miniature wind fields and study the parts and life-cycle of seeds by planting pumpkins and watermelons celebrating with a Fall and Spring harvest. 3rd and 4th grades plant evergreen seedlings on Earth Day in the garden and transplant them around campus each Fall. Older students simulate oil spills and cleanups studying the domino effect on impacted life forms and research waste reductions and its impact on the planet students while constructing functioning robots, designing playground equipment and dams from recycled/up-cycled materials.

It is an exciting time at St. Leo the Great as the school transitions to more efficient equipment and plans the implementation of further initiatives that will advance sustainability at the school.

SCHOOL PROFILE: GREEN SCHOOL PROGRAM AND AWARDS (Cross-Cutting Question)

1. Has your school participated in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes **X** Pillar I Benchmark Program: Using EPA Energy Star Portfolio Manager, organizationally we are connecting the efficiency dots of our programs, policies, procedures, and curriculum to our utility usage and facility management operations. As of September 2018, our Energy Star Score is 61.
   Pillar II Benchmark Program: Participating in the Positivity Project which establishes benchmarks and guidance for Character Building with daily dedicated 15-minute time slots in every class to discuss the Character Word(s) of the

day such as Environmental Awareness, Leadership, Kindness, Friend, Mindfulness, Love of Learning and their application in everyday life.

2. Has your school, staff or student body received any awards for facilities, health or environment? Yes X Award(s) and year(s) U.S. Department of Education Blue Ribbon School of Excellence 2012 & 2018: Placing in the top 10 percent on state or national assessments, among other criteria, this recognition represents the standard of excellence exhibited by the Saint Leo the Great academic community. National Wildlife Federation "Certified Wildlife Habitat": In 2014 our nature courtyard located in the center of the school building was designated as a "Certified Wildlife Habitat" and serves as a living classroom for students with flowers, vegetables, trees, shrubs and wild life including birds, insects and other small animals. Our courtyard also serves as a meditation garden used for individual solitude and prayer.

3. Has your school identified or created a place for teachers to go to share lessons on Sustainability? Yes X We have our outdoor Wild Life Habitat where our faculty conducts classes in environmental sciences, sustainability and "green art". We also just completed an extensive renovation of our STEAM wing where we built a state-of-the-art Science Laboratory that is shared among the faculty during and after school. Our STEAM labs have been outfitted with S+B USA's SpaceStation Science Lab to promote collaborative group with seating on all sides of this unique center point design allowing the teacher to address all students within an 9' range and generous worktop for each student to have ample work space. Since installation, our teacher has seen increase in collaboration among student's as evidenced by the team project performance and overall enthusiasm by students and requests by students to use the laboratory.

4. Has your School Board adopted a Green Strategic Plan or sustainability policy? Yes X No___ (50 word max) Our Principal and Pastor embrace green practices along with the Diocese of Trenton. Our Board is advisory in nature but has supported environmental capital building projects, maintenance and our operations green maintenance policy. Some of our board members are actively involved in maintaining our Wild Life Habitat Courtyard.

5. Has your school created a Green Team? Yes X No___ If yes, list team members and their roles.

   Dir. Operations, Dir. Food Service, Science Teachers, Math Teacher, Art Teacher, Language Arts Teacher, School Nurses, School Counselor, Transportation Coordinator, Physical Ed Teacher, and Parish Finance Officer.

6. Has your school seen a cost savings from green initiatives? Yes X No __ If yes, input **cost savings** data into table:

Our best evidence is in the Water Utility where we installed a well for irrigation usage. In the Summer of 2018 we began our Roof Top HVAC Unit replacement program replacing 2 of our 18-year old units with two High Efficiency Energy Star Rated Units and scheduled annual replacement of 2-3 units per year until all 33 units are replaced. Our donor capital funding will dictate how aggressive we can be. We have also converted approximately 30% of the school lighting with LED (100% of the lighting in the Arts & Athletic Center and parking lot converted). We have also begun a window replacement and re-insulation program completing 25% of the school. We installed high efficiency ceiling fans in all of the classrooms as a basic climate control tool. We believe we had a temporary spike in electric due to an inefficient AC running in the church during the Summer that shares a meter with the school. We believe gas decreases are related to the school building improvements.

	Electric Energy Consumption (kwh)	Natural Gas or Fuel Oil Consumption (therms)	Electric Utility Costs ($)	Natural Gas Utility Costs ($)	Total Utility Costs ($)	Annual Savings ($)	% Reduction from Baseline Year
FY14-15	173,865	25,650	47,639	13,338	60,977	Baseline	Baseline
FY15-16	172,500	24,390	52,785	12,682	65,467	4,490	+7%
FY16-17	144,464	24,400	53,213	12,688	64,901	(566)	(.09%)
FY17-18	168,016	21,250	53,397	15,703	74,647	9,746	+15%

PILLAR I: REDUCED ENVIRONMENTAL IMPACT

Element 1A: Reduced/eliminated greenhouse gas (GHG) emissions. Use Portfolio Manager format if possible

7. Can your school document a reduction in **Greenhouse Gas emissions**? *Yes X or No __ Evidence in table below.* Data obtained from district utility bills, etc.), as reported by (District Personnel). Data was derived from utility bills and reported by the Business Administrator. Since inception Saint Leo The Great School embraced "environmental stewardship". We practice environmental stewardship because it's in our DNA, in our Faith, it's woven through the very fabric of who we are as a strong, thriving Catholic Community. **Where data came from (utility bills?, and reported by Facilities Director or School Business Admin (or head of school, etc)**

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil Consumption (gallons)	CO2 from Electric 1.52 lbs/kwh	CO2 from Natural 11.7 lbs/therms	Carbon Dioxide from Fuel Oil 26.033 lbs/gal	Total # of Staff & Students	MT eCO2 /person	% Decrease from prior year
FY14-15	173865	25650	0	264274	300105	0	645	.875	
FY15-16	172500	24390	0	262200	273168	0	638	.839	(4%)
FY16-17	144464	24400	0	219585	285480	0	640	.789	(6%)
FY17-18	168016	21250	0	255384	248625	0	630	.795	.8%

8. Has your school conducted an energy audit of its facilities? (e.g. LGEA, Eco-Schools Energy Audit) Yes **X** No___

Percent reduction: **very modest to date%** Unit used **kBTU/sq ft** : Time period: from **March 2019** to **March 2018** **Who conducted audit?** JDC Energy Services, Inc conducted the audit.

9. What is your EPA ENERGY STAR SCORE: **61** YEAR: **2018** Has your school received or met the requirements for EPA ENERGY STAR certification (score of 75 or above) Yes___ No **X**

10. Percentage of school's energy is obtained from on-site renewable energy generation: _____Type_____ purchased renewable energy: _____Type_____ We have approvals to build our half acre Solar Field with construction to begin December 2018 and operational March 2019. Once operational the system is designed to assume 85% of the energy needs for the entire campus.

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy programs: (Ex. ACES) Yes_____ No **X** If yes, what programs? _____

11. Has your school reduced its total non-transportation energy use from an initial baseline? Yes X No

How did you document this reduction? Bills were used for the calculation. The meter is a combined reading for the church and the school. School is 45,248sq.ft. the church is 13,125sq.ft. We believe the efficiencies have come from the school building due to the energy saving steps we've taken such as window gasket replacements throughout the school to refit windows, HVAC unit replacement to energy efficient units, Smart Controls on units, new energy efficient lighting in new construction and transitioning to LED lighting in 60% of the remaining space. We are continuing on the LED transitioning for the next 3 years to complete the 5 year plan.

	Electric Energy Consumption (kwh) 1kwh=3.412 kBtu	Natural Gas Consumption (therms) 1therm=100kBtu	Fuel Oil Consump-tion (gallons) 1 gal. = 139 kBtu	Total kBtu	kBTU/sq.ft.	kBTU/ sq.ft.	% Reduction From Baseline
FY14-15	593227	2565000	0	3160227	58373	54.13	Baseline
FY15-16	588570	2439000	0	3027570	58373	51.86	(.036%)
FY16-17	492911	2440000	0	2932911	58373	50.24	(.034%)
FY17-18	573270	2125000	0	2698270	58373	46.22	(.084%)

12. What year was school originally constructed? **1959** Total building area (sq.ft) **45,248**

13. Has your school constructed or renovated building(s) in the past ten years? (**X**) Yes ( ) No For renovated building(s): Is building LEED Certified? Yes____ No **X** level:_____ Total renovated area: **6,000sq.ft.**

Element 1B: Improved water quality, efficiency, and conservation

Water and Grounds

14. Can you demonstrate a reduction in your school's total water consumption (measured in gal/square foot) from an initial baseline? Yes **X** No If yes, please complete the table below. If no, please explain. (max 50 words)
In 2016 we installed a well through a joint venture Grant program with Investors Bank. The well has taken over the irrigation system for the entire 17 acre campus. Prior to the well project irrigation had run through the school meter and was limited to a small area of the campus. Saint Leo's observes all drought warnings and municipal declarations for water conservation and limited- to- no sprinkling. We self-regulate and limit sprinkling in extended dry conditions even if a warning hasn't gone out. We have also installed trickle underground watering to carefully control bed watering.

	Water Consumption (gallons)	Total Occupants	Gallons Per Occupant	% Reduction from FY 2014
FY14-15	345,000	635	543.30	Baseline
FY15-16	336,000	630	533.33	1.8%
FY16-17	184,000	625	294.40	45%
FY17-18	182,000	625	291.20	1%

Do you include after-hour activities in your calculations? (adult sport leagues & education, scouting, community events, etc.?) Yes **X** No____ How was reduction documented? **Utility Bills**

15. Describe any strategies you use to discourage single-use beverage containers on school property and assure the recycling of those containers if/when purchased and used at athletic locations, or other outdoor events. (Ex. Hydration Stations, bottle refilling fountains) (50-words max) We are installing refilling stations in the cafeteria and Athletic Fields All water refill station will be up and running for the Spring 2019 season**.** We have a campus-wide recycling program and coordinate our recycling with Freehold Cartage our waste disposal contractor. The athletic department uses reusable water jugs and bottles on the field for our athletes. Side-by-side recycling and waste disposal containers throughout the campus.

16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? **80%** What types of plants are used and where are they located? Have you preserved any areas with native vegetation with minimal disturbance? The direct school property is home to over 22 native species of wild flowers, shrubs, trees and grasses. Our entire campus is professionally landscape designed and has been almost since the inception of the Parish. We have a wide-diverse planting scheme with native plantings and seasonal plantings. The landscape architect strategically placed some of the plantings to meet multi-purpose needs, such as elevated bank retention has rapid water absorption species, high traffic walkway areas have durable less water requirement species, athletic field perimeters utilize heavier shrub plantings. We are a reasonably flat campus with slight grading for athletic field draining. We have a heavily wooded perimeter that is left natural that includes a cemetery dating back to the 1700's that we voluntarily maintain.

17. How have you incorporated native plants into your landscaping? (50-words max)
We have a variety of native annual and perennial plantings represented in our shrubs, trees and plants. Our Landscapers rotate planting by seasons. Selected campus samples are also represented in our protected courtyard gardens. We use planting for erosion protection and slope retention and for natural/grass high traffic parking area preservation. Examples are: Red Maple, Sugar Maple, Shadblow Serviceberry, Bearberry/Kinnikinick, Swamp milkweed, Redbud, Summerweet, Threadleaf Tickweed, Flowering Dogwood, Red Twig Dogwood, Coneflower, Virginia Sweetspire, Cardinal Flower, Sweetbay Magnolia, Cinnamon Fern, Switchgrass, Moss Phlox, White Pine, Red Oak, Black Eyed Susan, Canadian Hemlock, Arrowood Viburnum.

18. Describe alternate Non-potable water sources used for irrigation (e.g. roof or parking lot run-off).
We have a rooftop drainage system that feeds into our courtyard gardens as subsurface watering. We have a well used for irrigating the entire 17 acres.

19. Describe efforts to reduce storm water run-off or reduce impervious pavement (e.g. rain gardens, bio swales, storm water basins). (50-words max)

We maintain large grass parking lot areas on the campus rather than expand paved areas. Our paved parking areas are graded to have rain water run toward a grass picnic area and recreation field and turf parking area, therefore avoiding run-off into storm drain systems and local streets.

20a. Our school's drinking water comes from: (X) Municipal water source ( ) Well on school property(AKA a non transient non-community water system) ( ) Other:

If well on school property, school complies with all monitoring requirements? Yes___ No___
If well on school property, drinking water meets all applicable standards? Yes___ No___
Have all drinking water violations been corrected, if applicable? Yes___ No___
NJDEP Sampling & Regulatory Guidance for Drinking Water Systems (http://www.nj.gov/dep/watersupply/dws-sampreg.html) NJDOE Lead Testing Regulations at N.J.A.C. 6A:26-12.4 with additional definitions at 6A:26-1.2 (http://www.state.nj.us/education/code/current/title6a/chap26.pdf)

21. Describe how your school's water supply is protected from contamination. (Ex. Backflow preventers) (50-words max)

Our school water supply is fully code compliant with backflow preventers on all irrigation systems, exterior hose bibs. Backflow preventer valves are on each of the 5 boilers.

22. Describe the program you have in place to control lead in drinking water (e.g., pipe flushing, old plumbing solder). NJDEP Lead in Drinking Water (http://www.nj.gov/dep/watersupply/dwc-lead-public.html) (50-words max)

In 2017-2018 we performed a comprehensive water pipe restoration project and faucet replacement throughout the entire school. We conducted the state mandated lead testing on ALL of our water sources, not just random sampling. We up graded sink faucets with lead filtering.

23. Describe how your school's site grading, irrigation system and schedule is appropriate for your climate, soil conditions, and plant materials for water conservation and/or improved storm water management. (50-word max)

Our watering policy is to reduce and eliminate watering of lawn areas, ie. never during drought, only water sports fields as needed which is in line with our financial budgeting for utilities and to be in step with State and Municipal watering requirements. Our athletic fields were rebuilt to be graded to drain off a planted berm that feeds down into an outdoor; picnic, Chapel Area and forested area allowing for less irrigation demand. Our landscape contractor utilizes a seasonal variation in grass cutting height to support root growth and lower watering demands. Irrigation system is scheduled for maximum water preservation.

24. What percentage of school grounds are green space? (ex. Green roof, rain gardens, native plants, solar panels, fish farms, raised beds, living walls, wetlands/marsh, forest, grassland, etc.) **70-80**% and list items (50 word max)

At the present we have forested areas, formal gardens, manicured lawns, raised beds, vegetable gardens, plant/tree nursery, meditation garden, statuary gardens and outdoor Chapel area, dirt bocce courts, wood chip/mulch playground surface, grassed parking lot. A half-acre solar field will be online March 2019. Solar on roofs is not feasible for our existing structures because our building is older.

Element 1C: Reduce waste production – Waste/Hazardous Waste

25a. What percentage of solid waste (including food service waste) is diverted from landfills or incinerators due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): **8cy X 8 X 85% = 54.4**
B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): **10cy X 6 X 80% = 48**
C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): **4cy X 6 X 90%**

= 21.6
Recycling Rate = ((B + C) ÷ (A + B + C) x 100): **56.13**
Monthly waste generated per person = (A/number of students and staff): **56.13/710 = .079 cubic yards/mo. per person**

25b. Is school lunch waste composted on-site? Yes X No Percent 10% We are just starting a program with students managing the process with food services, a teacher/advisor and expanding dedicated physical space and anticipate a minimum of 20% of compostable sources should be captured. We have a small composting project that is curriculum based.

25c. Do you have a zero-waste goal? **Yes** X No __ Describe (50 words max) We are in the process of establishing a Zero Waste policy that would be practically integrated into the Parish/School and all the vendor relationships which is required for a true Zero Waste operation. We recognize our potential as an influencer to combat environmental injustice including the proliferation of climate change.

26. What percentage of your school's total office/classroom paper content contains at least 30% post-consumer material, or fiber from forests certified as responsibly managed and/or chlorine-free?
100% of paper purchased by the school is Certified FSC indicating responsible forest and environmental management in the making of the product.

27. Do you include after-hour activities in your garbage reduction calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes **X** No____. We have no choice but to include all facility usage.

28. Describe how you have reduced your paper consumption, and how you measured that reduction or other uses you created for the materials (e.g. working and reviewing online, white boards). (50-word max) Grades 6-8 use MS Surface Computers, Promethian Board Teacher Platforms are in all grades and every classroom. We have printer tracking/counting technology on pass code protected printers audited by a third party. Parent communications are through parent portal. Report Cards are electronic. Instant Alert is used for "news and notices".

29. List the types and amounts of hazardous waste generated at your school**:** We rarely, if ever generate hazardous waste that falls into any of these categories. As an elementary school our science labs do not generate hazardous materials. We have gone to completely green cleaning products. A small amount of paint is kept on the premises for maintenance. We do dispose of old fluorescent light bulbs through the Monmouth County Recycling center that provides tracking receipts. We do have a grease trap that is pumped by a certified removal service that provides the required tracking documents.

30a. Describe other measures taken to reduce or eliminate solid waste and hazardous waste (on-site composting etc.). (ex. Switching to re-usable cafeteria trays, silverware, etc.) (100-word max) We switched to reusable cafeteria trays 10 years ago. Grass clippings and leaves are mulched in the cutting process. We also changed printer supply vendors to Laser Save a print cartridge recycling company that also reduces our cartridge costs by approximately 12% and keeps cartridges out of the trash cycle.

30b. Describe how electronics are handled at the end of their useful life. (TV, computers, toner, etc.) Total pounds of electronics discarded as hazardous waste? _____ Total weight of material reused? _____
Was any donated? Y___ N **X** (E-CYCLE: www.nj.gov/dep/dshw/ewaste/index.html EPEAT: www.epeat.net/)
End of life electronics are taken to Monmouth County Certified Recycling Centers and Middletown township certified disposal center for non-recyclable electronics, for documented disposal. But the amount and instance of disposal is negligible. It would be no more than 2-5 actual pieces of equipment over the past 2-3 years.

31. Which green cleaning custodial standard is used? We model practices and processes in line with our contractors and recognize CIMS standards. What percentage of products are certified? 90%
What third party certified green cleaning product standard does your school use? Describe the measures your school has taken to use only green cleaning products: This year we replaced our custodial contractor by bid with **Capitol Cleaning Contractors, Inc.**, a certified green and sustainable custodial cleaning firm. Over the past year we have

transitioned in-house cleaning supplies to green certified, using Envirox and ZOONO/Chem Dry for 100% of our cleaning processes. We follow a bidding process for contractors as per the Diocese of Trenton. 5 companies submitted proposals and we made our selection based on the company which best met all our requirements: environmental credentials, trained personnel, most up to date equipment and cleaning methods, offered training to in-house people, offered a management team that was school experienced, was financially stable, had a NJ branch facility and had previously serviced other schools in the area that we could rely on for references."

32. If your school has a nurse's office, how does the nurse track regulated medical waste? Describe the tools or mechanisms used to track this waste. Indicate (X) if you have the following:

___School has a Generator ID number, unless exempted;

X School manages the regulated medical waste on-site properly? (Use the proper containers, properly segregate the regulated medical waste, and properly store the containers) Managed on site in the nurse's office by using a regulated sharps waste container that is securely stored with the required safety lid. When sharps container is full it is securely packaged as per medical waste facility instructions and shipped to an authorized regulated medical waste facility licensed for disposal. A waste tracking document is completed with the tracking process to ensure delivery with completed documents and records retained for 3 years in the nurse's office.

___School uses a licensed and registered regulated medical waste transporter, unless exempted?

___School ships the regulated medical waste to a facility authorized to accept the regulated medical waste?

X School completes the proper paperwork to document the shipment and maintain records for 3 years?

X School files the generator annual report, unless exempted?

33. Is a Hazardous Waste Policy for storage, management and disposal of chemicals in laboratories and other areas with hazardous waste, in place and actively enforced? Yes X No____ We have a policy and safety practices & procedures in place. As an elementary school we generate no hazardous waste in the laboratories.

34. Do you have Underground Storage Tanks located at your School? None

35. Is your school compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirement? (Air permits required for boilers, emergency generators, space heaters and hot water heaters that have a maximum rated heat input of 1 million BTU/Hr or greater, to the burning chamber. Schools might require an air permit for certain woodshop operations (See what can be permitted.) Yes____ No____ List Permits:_____ We do not meet the minimum standard for requiring an Air Quality Permit. Our small boilers are State inspected annually and certified by the State of NJ. Also inspected and certified by Hartford Steam Boiler.

Element 1D: Use of Alternative Transportation

36. What percentage of students walk/bike/skateboard, ride a school bus/use public transportation, or carpool (2+ students per car) to/from school? (Note if your school does not use school buses). How were these percentages collected and calculated? (50-word max) 82% of our students are school bus riders. 18% of students are car & voluntary carpool riders. Our students come from 28 different communities. Some students live over 10 miles from school, so walking isn't a viable option. 82% was calculated by dividing the number of bus riders (473) by the total number of students (577).

37. Indicate (X) if you have implemented the following.

X Designated carpool parking spaces We have 50 carpool spaces and a green field parking area utilized by car poolers.

X A well-publicized no idling policy that applies to all vehicles (including school buses, cars and delivery trucks) Our "no idling" policy is posted throughout our campus.

X Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows Our car pooling/car rider loading areas are over 100 feet from the actual school building.

38. If your school has only bus transportation, describe how your transportation is efficient and has reduced its environmental impact (more efficient bus routes, diesel retrofits, biodiesel fuel, electric vehicles). (50-word max) We do not own any buses, all buses are under contract vendors. Our bus routes strive to be environmentally conscientious by consolidating routes for students in a large geographical area. Additionally, we share routes with 5

other schools in the area and serve as the transportation hub. This results in greater efficiency and lower fuel usage for all the schools and bus companies.

Summary Question for Pillar 1: Describe any other innovative practices and partnerships for reducing environmental impact. (100-word max)

In 2017 we added the position of Director of Operations (DOO) with a goal of bringing a focus on environmental building management, improving grounds maintenance and utilizing existing resources as pivot points to document and expand environmental practices, programs, policies and curriculum in place, and encourage new efforts. We also sponsored our DOO to become trained and certified by NJDOE and Rutgers University as a "Certified Education Facility Manager" (CEFM) to bring focus and expertise to our "Clean School Initiative" in collaboration with the New Jersey Building and Grounds Association. Our coordinated transportation program with multiple schools and serving as the HUB creates not only efficiencies for our school but all seven of the schools in the program.

PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS AND STAFF

Element 2A: Integrated School Environmental Health program

Environmental Health

1. Has your school conducted any "Occupant Survey" with teachers and students? If so, please state the date(s) and over results of the survey.(CHPS Occupant Survey) Yes. Similar to CHPS tool, result is similar. It's an employee survey we conduct mid-year to help us get a sense of general building maintenance & cleaning, equipment needs, potential for capital projects, adjustments to new facility building projects, environmental/climate controls, suggestions for improvements.

2. Do you have an Operations & Maintenance Policy for your building? Yes X No_____

3. Does your school have an Integrated Pest Management plan? Yes X No____ Date last updated: 2018. We review the plan annually with our pest management contractor, Western Pest Control.

4. Indicate (X) which of the following practices your school employs to minimize exposure to hazardous contaminants. Provide specific examples of actions taken for each checked practice.

   - ☐ X School conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides. We have a strict policy to not use any chemical pesticides while students are in session. We collaborate closely with our contractor to assure no chemical pesticides are used in any student, staff or faculty active environments. We follow the state regulations for pesticide application in education environments and follow the State Building & Grounds Association recommendations for Environmental Code Compliance #43. We work with our Pest Management & Landscape contractors to use low impact products compatible with minimal risk when applied. We follow a "recommended list" of products for contractors. Some examples contractors use when appropriate are: Cedar Oil, Citric Acid, Citronella, Linseed Oil, Sodium chloride, White Pepper, Neem oil. For low impact pesticide situations, boric acid, diatomaceous earth.
   - ☐ X School reduces or does not use fertilizer on our property. We do not use fertilizers on student active areas while students are in session. We follow the state regulations for pesticide application in education environments and follow the State Building & Grounds Association recommendations for Environmental Code Compliance #43
   - ☐ X School prohibits smoking on campus and in public school buses. All facility access areas have required signage to advise visitors of "no Smoking" policy.
   - ☐ X School has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.
   - ☐ X School uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) We use a licensed contractor Advantage Fire Safety to install and inspect all our CO monitor alarms annually.
   - ☐ __School does not have any fuel burning combustion appliances (e.g. boilers, generators, hot water heaters)

- ☐ __School has tested all frequently occupied rooms in contact with the ground, and first floor rooms above basement spaces that are not frequently occupied for radon gas and has fixed and retested rooms with levels that tested at or above 4 pCi/L . **NJ Recommends School Radon Testing** ___ Yes **X** No
- ☐ __School built with radon resistant construction features tested to confirm levels below 4 pCi/L. Yes___No ___
- ☐ __Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure to this pesticide/wood sealing preservative. **N/A**

6. Describe how your school controls and manages chemicals routinely used in the school, as well as construction or cleaning activity that produces odors or dust, to minimize student and staff exposure. (100-word max) Our cleaning products are stored securely. Contractors/construction isn't permitted while the building is occupied. Primary building cleaning is conducted during late night hours when the building is empty. We manage chemicals following the NJ Hazard Communication Standard. Annual interviews are conducted to identify chemicals and to ensure proper labels. Safety Data Sheets are kept in the Main Office. All new staff members have Right-to-Know training and refresher training is provided to employees who routinely work with chemicals. Construction is scheduled during summer breaks to reduce exposure of staff and students to dust, and odors.
7. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max) Our building is fully Air Conditioned. Our cleaning and maintenance is rigorous; All entrance mats, foyer carpets/mats and classroom carpets are cleaned on daily, weekly or monthly schedules based on usage and treated quarterly with antibacterial FDA approved, environmentally friendly solutions. We do not conduct any outside maintenance or landscaping activity in direct proximity to the school when school is in session. We clean our air filters quarterly. All HVAC equipment is inspected semi-annually, as well as by request. The variable height Water Hog mat program assures a higher dirt trap rate. The mats are cleaned every night.

   Is your school signed up to receive air quality alerts through Enviroflash which issues notifications of days when poor air quality is forecasted to occur? Learn more Yes **X** No The Director of Operations maintains an E-File of the daily air quality report in the event any family has questions.

   Has your school developed a plan for implementation to modify activities to protect the health of students and teachers when poor air quality is forecasted? Yes **X** No____ We modify activities whenever it's in the best interest and the safety & welfare of our students, faculty & staff. We provide copies of our response policies & procedures to our families, staff and faculty.

   Have you provided brochures to students, teachers and parents to educate them about air quality and steps they can take to protect their health and decrease their contribution to ozone pollution? Yes __ No X
8. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup any visible mold or remove moldy materials when found. (100-word max) Preventive roof and building maintenance inspections are done daily to find and prevent leaks and moisture/mold issues. When leaks occur, repairs are made promptly by in-house maintenance staff or contracted expert services. When wet materials are found they are removed immediately and the affected area cleaned and dried. The building is fully air conditioned to control humidity with new humidity regulators installed on rooftop units, and regular maintenance on condensate drain pans and lines ensure the moisture is removed from the building properly. All roof and building drains are inspected and cleaned weekly.
9. Our school has installed local exhaust systems for major airborne contaminant sources. Yes **X** No___ Describe (max 100 words) HVAC system's air handlers exchange air throughout the building as system specification state 5-7 times per hour. Also the school kitchen has exhaust systems for cooking that exhausts the air in the kitchen continuously during food preparation. Our air handling systems are directly vented to the outdoors and any mixed air is filtered to industry specifications back into the occupied spaces.
10. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100-word max) We have a ventilation maintenance contract with ABLE Mechanical to inspect, service and repair all systems and equipment semi-annually. ABLE Mechanical has two technical mechanics assigned to our school to maintain a consistent service plan.
11. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with filtered outside air, consistent with state or local codes, or national ventilation guidelines. (100-word

max) Our school is fully air controlled by extensive HVAC systems specifically designed to meet square footage requirements and occupant guidelines, as well as all state and local codes. In some spaces our equipment exceeds codes. The building air handlers ensure ventilation air exchange rates of 5 to 8 air changes per hour, the units are designed to mix 20%-30% outdoor air. Calibration is check by ABLE Mechanical semi-annually.

12. Indicate (X) steps your school has taken to protect indoor environmental quality:
    - ☐ X Implementing US EPA IAQ Tools for Schools and/**or** Checklists are used to conduct periodic IAQ inspections by contractors, Air Doctors and in-house check list inspections.
    - ☐ X Conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.

13. Indicate (X) if your school's green procurement practices pertain to the following: (Buy Recyled / Buy Green)

☐ X Construction	☐ ___Fleets	☐ X Office Supplies(where possible)
☐ X Carpets	☐ X Food Services	☐ X Paper
☐ X Cleaning	☐ X Landscaping	☐ X Other (50 word max) paper towels & toilet paper recycled
☐ X Electronics	☐ ___Meetings & Conferences	

14. What system do you use to determine if the above products and services are considered sustainable? (ex. DOE Purchasing for Energy Efficient Products, CHPS High Performance Database, Electronic Product Environmental Assessment Tool (EPEAT**)** EPEAT, We also conduct independent online searches for other credible sustainable certified credentials used by our contractors and vendors such as CIMS & FSC. **Green Seal Standards for cleaning chemicals and paper product.**

Element 2B: Nutrition and Fitness

Food and Nutrition, Fitness and Outdoor time

15. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of innovative practices, partnerships and actions for each statement below (100-word max each)

- ☐ X Our school participates in a Farm to School program to use local, fresh food. Our director of Food Services has initiated discussions with our provision suppliers and local Health Dept, to incorporate locally grown supplies were possible with the plan to expand the program in 2019 to a robust program in conjunction with other schools. We are looking for stand-alone opportunities. Our present Director is retiring after the 2018-19 and a priority for a new Director is to be knowledgeable in environmental and sustainable operations.
- ☐ X Our school has an on-site food garden that teaches nutrition and environmental education, describe. Our Certified Wild Life Habitat courtyard has a seasonal garden where the students grow fruits and vegetables. We started 3 years ago growing specific foods such as herbs, pumpkins and sunflowers as consumables for students and are now expanding the program.
- ☐ X Our students spent at least 120 minutes per week over the past year in school supervised physical education.
- ☐ X At least 50% of our students' annual physical education takes place outdoors. All of our students K-8 participate in outdoor physical education. Weather permitting, we also have students outdoors for 25 minute recess periods where they are provided with athletic & recreational equipment and permitted to organize themselves into activities.
- ☐ X Our school has a School Wellness Policy that addresses both nutrition AND physical activity. Our school has a Wellness policy that addresses both nutrition & physical activity. Our PE curriculum strives not only to offer a certain level of activity but introduce students to life time sports and activities. We teach the benefits of improved physical and mental performance from balanced nutrition. We also integrate health measures into assessments by using performance rubrics for health & fitness activities, matched to content & unit objectives.
- ☐ X Our school has a School Wellness Committee that meets at least once a year. The wellness committee consists of the Principal, school nurses, counselor, operations director and Vice Principal and convenes every August. Policies and procedures as well as facility maintenance toward managing allergies, infections, flu out breaks, over all building health. Health measures are integrated into curriculum reviews, student performance considerations.

Health assessments are discussed for scoliosis screenings, hearing screening, vision screening and tracking height, weight and blood pressure. Staff & faculty flu, tetanus, whooping cough vaccines are offered on site through a cooperative program with Rite Aid pharmacy. We also offer nutrition and weight control support to staff and faculty through our Food Service Director via the Whole 30 program. We also offer employee yoga and once a year our PTA offers Faculty & Staff Appreciation Day and has Massage Therapists come to the school for onsite massages. We actively promote National Fitness & Nutrition Month

- ☐ X Health measures are integrated into assessments. We also integrate health measures into assessments by using performance rubrics for health & fitness activities, matched to content & unit objectives
- ☐ ___At least 50% of our students have participated in the EPA's Sunwise, or equivalent program.
- ☐ X Some food purchased by our school food service is locally sourced from regional farms. Our food service Director is investigating locally sourced options with our venders. We hope to have an option by the Spring.

16. What environmental tech. supplements curriculum? (weather station, energy monitoring system, GIS, web cam, etc) We installed new climate control desk top and mobile device monitoring on our new HVAC units that serve our STEAM classrooms that allow teachers and students to control the temperatures and comfort levels in classrooms while build operations can monitor activity and troubleshoot any problems. We have a complete technology lab that accommodates up to 30 students and is used to integrate a wide range of integrated STEAM curriculum. +We have had weather and wind monitoring station which is currently being relocated. In 5-8 grade all students are provided Surface Personal Computers for their personal use and for research as well as an alternative to text books.

17. Describe the type of outdoor education, exercise and recreation available. (100-word max) Students participate in, formal and informal game play, organized team sports, fitness challenges, pep rallies to introduce changing of athletic seasons, movement classes, tumbling. We have excellent facilities that are age appropriate for ALL students K-8 and Pre-schoolers. 100% of the students participate in the physical education program. 50% of the students participate in interscholastic athletic programs, such as Cross Country, Track & Field, Basketball, Baseball, Softball, Soccer and Cheerleading. We have annual coed flag football events, pep rally's with relays and other physical activities. We have a pre-school & kindergarten program that connects to the Positivity Project and combines the character building traits with physical exercise, good health, wellness, nutrition, yoga, performing simulations for skiing, ice skating, group dance, stretching to open their hearts and minds.

Coordinated School Health, Mental Health, School Climate, and Safety

18. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? X Yes ___ No If yes, describe your health-related initiatives or approaches: Our physical education program is an integral component of teaching students the mantra of a well-adjusted and prepared student is prepared with mind, body & spirit. Coordinated with our school Counselor to encourage and teach meaningful self-expression, confidence, emotional well-being and socialization supports the physical challenges. Additionally, coordinated through the school counselor and nurses is ongoing student & faculty education on personal hygiene, allergies, CPR, flu prevention, use of Epi-Pens. CPR is offered as an elective course to students and mandatory training for staff and faculty.

19. Does your school partner with postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety? X Yes ___ No If yes, describe partnerships: We partner with Hackensack Meridian Health/Jersey Shore University Medical Center for CPR training for the middle school. 5th grade visits Centra State Medical Center for hygiene and anatomy education. Our younger grades visit Long Street Farm and other gardens & farms through the Monmouth County Park System. We also partner with Wemrock Farms for various Holiday Education programs. We have a very active Food Bank and Senior lunch program our students volunteer in.

20. Does your school have a school nurse and/or a school-based health center? X Yes ___ No We have 2 school nurses on staff with a well-equipped nurses office. Adult & Pediatric AED's are stationed throughout the school and campus. Coaches are provided with mobile/travel AED's.

21. Describe efforts to support student mental health and school climate (anti-bullying programs, peer counseling, etc.): We have a very robust program for anti-bullying. We have a cyber bullying program conducted by the Middletown Police Department. Our school counselor is trained in anti-bullying counseling strategies and conducts group, as well as individual interventions. We offer the "BABES" program for grades 1-4, Life Skills program for 5th grade. A formal program for grades K-3 offering weekly lessons taught by the school counselor on, Test Anxiety, social and Emotional Behaviors, Feelings Expression. 4-8th grades monthly lessons integrated into curriculum on Mindset, Relaxation, Anxiety, Self Esteem and Test Anxiety. Our staff has gone through suicide watch and prevention training. Also in every grade we integrate "The Positivity Project" a national program model designed toward building character strengths on values found in Scriptures. Character discussions start every day for every student with the discussions pivoting around a particular "key" word, such as Leadership, Fitness, Healthy Eating, Kindness, Loyalty, Honesty and out of these words students unfold relational behaviors that exemplify what they perceive the word to mean and what model behaviors might be to demonstrate the "Key" word.

Summary Question for Pillar 2: Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max) With the Gospel as foundation we teach total well-being in Mind (meditation & coping techniques), Body (physical fitness & nutritional wellness) and Soul (our spirituality & Catholic faith). Safety is a top priority, we partner with Middletown Police Department Special Task Force and conduct their response training during the summer and winter. We also conduct Safety & Response training through the "ALICE" Institute. We conduct training in Readiness and Emergency Management in Schools; through the REMS Technical Assistance Center. Our maintenance staff obtains certification in Asbestos Awareness & Safety, HAZCOM Standards and IAQ Preventive Maintenance and Awareness.

PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

Element 3A: Interdisciplinary learning that prepares students to navigate the key inter-relationships between dynamic physical and social systems (E/S literacy) is documented, assessed for and mapped.

1. Indicate (X) which practices your school employs to help ensure effective environmental and sustainability education. Provide examples of actions taken for each practice, highlighting innovative practices and partnerships.

X School has an environmental or sustainability literacy requirement. (200-word max) Non-public schools K-8 do not have a requirement however that has never been a guideline for Saint Leo The Great School. Our Faith and Catholic School Culture is a higher standard and makes environmental preservation and sustainability Stewardship of the world we live in a requirement. Because our curriculum is based in our gospel, the concept of stewardship of the environment and our responsibility to care and respect all living things is applied in lessons, our daily prayers and that knowledge is tested through academic standards.

X Recurring E/S concepts are integrated throughout an interdisciplinary curriculum. (200-words) Our Religious foundation teaches creation of life inspiring our students to care for creation which flows into teaching concepts of environmental justice. Every grade from pre-school through 8th grade has structured curriculum and informal cultural E/S educational opportunities. We grow vegetables and fruits for harvest, tree seedlings for transplanting around campus and even a worm garden for propagating worms that are relocated throughout the campus. We utilize recycled material for teaching engineering principles and mechanical movement through robotics. All grades art curriculum combines engineering design principles with our science curriculum to build actual life size Rain Forests that take over entire classrooms. We conduct simulated oil spills and cleanups studying the domino effect on impacted life forms. We have our preschoolers grow Butterfly habitats and then release them into our courtyard wildlife sanctuary. We participate in the national recognition days, Earth Day, America Recycles Day, etc. Our 6th grade students design a 3-D model of eukaryotic cell organelles, teaching Photosynthesis and glucose synthesis in plants, how proteins are stored, packaged and processed and how the environment impacts the synthesis process. Our preschooler are taught examples of healthy eating, keeping a clean environment, healthy exercise and basics of mindfulness, stretching.

X Student learning of environmental & sustainability concepts is evidenced by authentic assessments. (200-word max) Building our new STEAM wing in 2018 has enhanced the learning environment and teaching environment. The new classrooms encourage Process Learning and enhanced opportunities for students to test scientific concepts, mathematical principles, design dynamics, and many other approaches to problem solving. Some traditional testing

modalities are used however we are seeing benefits in hands-on practical design problem solving to test a student's grasp of the subject. Separate and apart from our STEAM curriculum we have applied competency assessments in environmental related chapters and case studies in history, civics/social studies. Our testing process is demanding and is designed to prepare our students for their next level, as well as to open their minds to their potential beyond school.

X Students evidence high levels of proficiency in these assessments. (100-word max) We utilize the IOWA Standardized Test and the Catholic Diocesan High School Placement Test, as well as ongoing standard subject matter chapter testing. In 2012 and again in 2018 Saint Leo's was recognized in as a National Blue Ribbon school by the Department of Education as attestation and validation of academic assessment proficiency. The Blue Ribbon Schools of Excellence Department of Education Program honors public and non-public elementary, middle and high schools that have placed in the top 10 percent on state or national assessments, among other criteria.

X Professional development (PD) in environmental and sustainability education (E/S) are provided to teachers**.** We provide tuition support for our teachers to continue to refine their professional development in subject matter courses relevant to integrating environmental and sustainability subjects & topics into curriculum. We conduct on campus professional development workshops with environmental and sustainability components in them such as how to help maintain proper room temperatures through proper shading & light usage, how to properly supplement classroom cleaning processes to improve infection control, . Our nursing staff provides professional in-service education on environmental wellness, safety and contemporary health issues.

X Describe the PD in which faculty or administrators participated and how it contributed to the implementation of your E/S Goals. When was the PD held? Who attended? (200-words) We have mandatory monthly professional development programs. These are 90 minute to 2 hour mandatory workshops. Environmental, Health & safety examples would be: Cleaning classroom environments, recognizing child abuse, child injury prevention and response, CPR, Anti-terrorism response, Allergic reaction response, classroom recycling, classroom first aid. We normally have 80-85 participants including faculty, staff and administration.

X Environmental/Sustainability Education is offered in after-hour school programs (200 words) We host girl scouts, boy scouts and an extensive Religious Education program for public school children. We are particularly proud of our Religious Education program that extends our faith based opportunity to share our Catholic history through environmental experiences. One of our faith based teaching moments utilizing environmental, engineering and scientific principles came through a "Brick Building" exercise. Simulating the experience of the enslaved Israelites we brought in top soil, straw, water, aluminum loaf pans and large buckets and made the mixture ancient Israelites used to make brick during their enslavement in Egypt through hands on learning. Approximately 100 summer students from public schools throughout the area formed building teams and used the raw natural material to make bricks, then placed them in the courtyard to bake into a hard brick in the summer sun. It was great, the children formed their own teams, allocated their own resources and formed their own processes for work distribution.

Element 3B: Use of (E/S) to prepare students for career pathways and to develop STEM/STEAM content, knowledge, and thinking skills.

2.How does your school use sustainability and the environment as a context for learning science, technology, engineering [art] and mathematics (STEM/STEAM), thinking skills and content knowledge? (200-word max) The STEAM curriculum teaches process problem solving to individuals and teams. In 5th grade students construct functioning robots from recycled materials of household items. Students research recycling, up cycling, repurposing and reducing waste and impact on the planet. 1st and 2nd grade has planting cycle programs in the Fall using pumpkins and watermelons in the Spring. Students study the anatomy and life cycle of the seeds. In March, students track their growth then replant them in the school garden in Spring with Fall harvest as the goal. The lesson is also teaching the food chain. 3rd and 4th grade plant evergreen seedlings on Earth Day in the school gardens and transplant them in the Fall around campus. Students plant 3 different varieties of Sunflowers and study the energy and food potential of Sunflowers. We registered through TERRACYCLE for the Entenmann's "Little Bites Plastic Pouches" and the "Clear Entenmann's Mini Packages". The box was upcycled, lined with paper and placed in the Cafeteria for collection. We have lessons in Engineering where students have designed playground equipment and dams out of recycled materials. Students study native animals of NJ and the role they play in environmental sustainability, birds, bees, ants.

3. How does your school use sustainability and the environment as a context for learning green technologies and/or
career pathways? Please describe student performance criteria and assessment results (200-word max)

Students are taught from pre-school through eighth grade they are Stewards of the environment and world they will go out in. As a Catholic Elementary School we have a responsibility to help students make the next choice for High School. Part of the selection process is evaluating core curriculum of high schools being considered.
One of the options students consider are courses and curriculum in Environmental Studies. We help our students evaluate those options. In addition to the Catholic HS's we place our students in our students pursue acceptance into the Monmouth County Vocational HS system consisting of the Nationally ranked Biotechnology HS, High Technology HS, Academy of Health & Science, and Marine Academy of Science & Technology. Our student's hands on experience using process problem solving, research teams, technology equipment, state-of the-art classrooms, outside environmental living laboratory and a comprehensive fully integrated STEAM curriculum provide the elementary building blocks for future academic and professional career paths. We use a battery of assessment approaches including, standardized (formal) evaluations, qualitative (informal assessments), basic evaluations, comprehensive evaluations, curriculum-based measurement and screenings. All methods are intended to meet or exceed gradient academic assessment standards as outlined by the Diocese of Trenton and the NJ Department of Education.

4.How does your school address teaching the science of sustainability in your K-12 scope and sequence? Saint Leo the Great is a Pre-K thru 8th grade school, so for our scope in science as related to sustainability we hold to the general NJDOE guide that by the end of grade 2, 5 and 8 objectives must be met as indicated by each standard sequence. *What science standards do you target*? New Jersey Student Learning Standards: Science Model Curriculum
What evidence of student learning are you assessing for and monitoring in this area? New Jersey science, technology, and engineering standards are implemented across all grades. Science standards are adapted for pre-K. Students are assessed in standards through subject matter tests, classwork, classroom participation, projects and how they perform as a member of project teams. Sustainable lessons are integrated at each grade level as they link to their specific standards.

Not Applicable to Saint Leo: Percentage of last year's eligible HS graduates who completed the Environmental Science / Earth Systems (or similar environmental course) course during their high school career: **N/A**

Element 3C: Development and application of authentic civic engagement knowledge, skills and dispositions through place based learning experiences (project-based/service) and community partnerships

5. Describe students' civic/community engagement projects integrating environment, environmental justice (as defined by EPA) and sustainability topics. (200-word max) At Saint Leo The Great we are not just a school but a Catholic community. The gradual process of integration of internalized values is concretely expressed through service to God and community. We believe in the capacity of the individual to lead with compassion, learn with commitment, and act with courage. Focusing on the needs of each child, we achieve our purpose by word and deed. Students are inspired to achieve the highest standards in intellectual achievement through developmentally appropriate instruction that allows for individual differences and learning styles. Students are taught equal justice for all people and a belief that everyone should have an opportunity for a safe, healthy clean environment. Our projects are inclusive of all groups; students conduct food drives and community lunch programs, food and supply campaigns for our military. Our students volunteer work with the community is well recognized as a partnership that children can directly link to their own school experiences. They participate in the care and wellness program with our adjacent senior community Luftman Towers, and community service required credit hours through participating in local community environmental cleanup projects, school sponsored recycling projects, food drives and clothing drives.

6. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200-word max) (ex. citizen science, field trips, overnight camping, retreats)

We use our extensive campus outdoor settings as living classrooms for science, social studies, reading, self-reflection & meditation and religious teaching. Outdoor field trip experiences are also plentiful including visits to Wemrock Farms, Long Street Farms, Turtleback Zoo, Liberty Science Center, Centra State Medical Center, Rutgers Science Institute, and other field experiences. We also work with the Monmouth County Park System to participate in their environmental programs.

7. Describe students' outdoor learning/ place based learning experiences at every grade level. (200 word max)

Every grade level participates in a project and curriculum that challenges them to be engaged in an environmental issue. Each grade has environmental focuses that have integrated aspects into their specific science units. At every grade there are examples of integrated environmental education, our 5th grade has a project wherein they make robots out of recycled material from home. Our Jr. Pee Wee cross country team makes team awards out of painted rocks. Our younger grades build mini-wind fields. Our older grades conduct environmental scavenger hunts. All of our grades and subjects have cross and integrated environmental outdoor learning opportunities in our Wild Life Habitat. **Using recycled materials, 6th grade students design a 3-D model of eukaryotic cell organelles.**

8. Describe how partnerships help your school and other schools integrate the 3 Pillars into the curriculum, student learning and school culture. Include both the scope and impact of these partnerships. In what ways is your school sharing & promoting (outside of school) its efforts to uphold all 3 Pillars? (Ex. student exchange forum, sister school program, global PBL program, state-wide professional learning communities) (Max 200-words)

Our Principal sits on a Catholic School Leadership Council that exchanges ideas and innovations in teaching, school operations, curriculum, safety & security and other current and evolving topics in education. Both our Principal and Director of Operations are active members of the New Jersey Building and Grounds Association for the exchange of ideas, policies and practices for environmental practices & operations around the state. Our Principal has also obtained his license and certification in Food Service Operations for operating the school cafeteria to enhance his support of our Food Services Director on integrating nutrition with academic performance. We engage the Diocese of Trenton on a shared service platform for Risk Management and Safety as we did for our Lead Water Testing Project. Our Solar Field and Well project are the result of collaboration with businesses and the Diocese of Trenton. We believe all 3 Pillars of the Green Ribbon program are expressed in the Saint Leo The Great School Mission Statement when we say: " ***It's sacred mission is the formation of youth entrusted to its care through spiritual, educational, social and athletic activities.***

9. How are your descriptions in number 8 supported or enhanced by your efforts in Pillar 1 to reduce environmental impact and costs for your school. (Max 100-words)

Our descriptions in number 8 are supported ***and*** enhanced by our effort outlined in the responses in Pillar 1 by laying the foundation activities and philosophy to capture important data that helps us track and trend our efforts that provide an operational road map for future environmental and operational strategies. Those strategies help us with resource allocation and are integral toward achieving our educational goals, objectives and mission expressed in our response to number 8. Having our leadership on the forefront of our environmental and sustainability program provides a firm academic compass for curriculum development, facility management and strategic organizational direction.

Summary Questions for Pillar 3: Describe any other ways that your school integrates all three pillars into curricula, student learning and school culture to provide effective environmental and sustainability education. Highlight innovative or unique practices and partnerships. (Max 200-words)

Our culture is a value life, faith based, stewardship accountability culture. By teaching our students the capacity and character to lead with compassion, learn with commitment, and act with courage, we are teaching them the critical qualities and building blocks needed to help preserve the environment. Our summer Religious education program offered to public school children is an excellent example of community outreach, expansion of school culture with environmental & faith integration that uses hands on projects in straw & clay brick building teaching not only the plight of the Israelites in Egypt but also the engineering and natural resource principles of ancient brick making. We also have the African Village Environmental Stewardship & Environmental Justice Lesson taught through the "Water Scarcity Relay Race". This event teaches the issue of global clean water scarcity and how the social justice teachings of the Catholic Church can help change this problem. It reinforces Pope Francis's teaching of our personal responsibility for local and global environmental stewardship. The relay teams were given an empty bucket and each team member given a 3oz paper cup and instructed to collect clean water and return it to their village and fill the bucket in 30 minutes.