

**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**

X Public  Charter  Title I X Magnet  Private  Independent  Rural

Name of Principal: Mr. Christopher Roche

Official School Name: Western CT Academy for International Studies Elementary Magnet School

Official School Name Mailing Address: 201 University Boulevard, Danbury, CT 06811

County: Fairfield State School Code Number \*:

Telephone: 203.778.7462 Fax: 203.778.7466

Web site/URL: <https://sites.google.com/danbury.k12.ct.us/ais/home>

E-mail:



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

Date: 3-27-18

(Principal's Signature)

Name of Superintendent: Dr. Sal V. Pascarella

District Name: Danbury Public Schools

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

Date: 3-27-18

(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: Connecticut State Department of Education

Name of Nominating Authority: Dr. Dianna R. Wentzell, Commissioner of Education

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

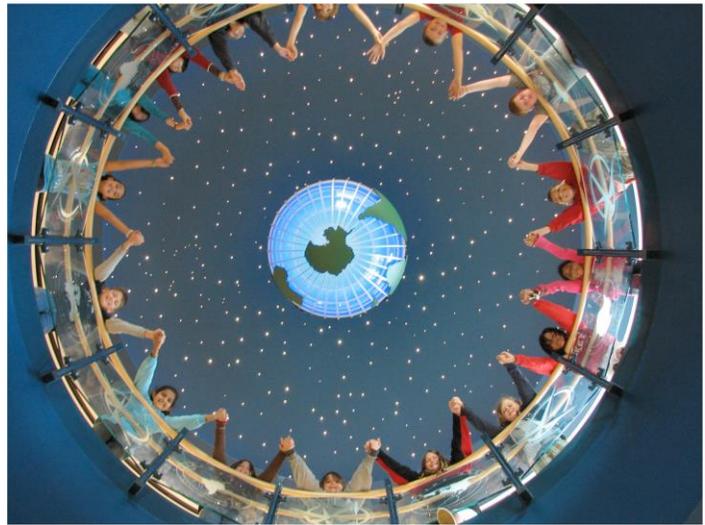
Date: 03/27/18

(Nominating Authority's Signature)

**SUMMARY AND DOCUMENTATION OF NOMINEE’S ACHIEVEMENTS**

Western Connecticut Academy for International Studies Elementary Magnet School (AIS) is a publicly funded K-5 magnet school located in Danbury, Connecticut. The school serves 391 students from 11 towns. 55% of AIS students are eligible for free or reduced lunch. Danbury is an urban city, but AIS is located on Western Connecticut State University’s Westside campus, adjacent to a large nature preserve. As the school’s title indicates, AIS engages students in a curriculum and a structure that encourages them to develop and use a global perspective early in their educational career. The international theme, woven through all subjects, is supported with units of study based on countries, continents, and cultures, engaging young students’ innate curiosity and openness to learning. Spanish, one of the leading languages in the world, is the World Language taught daily at AIS, beginning in kindergarten.

An early participant in the Connecticut Green LEAF School’s program, AIS had 7 teachers enrolled in a two-year sustainability professional development opportunity. Educators have learned how to incorporate school gardens, schoolyards and the resources used in schools within their curriculum. AIS teachers crafted many interdisciplinary lessons that utilized these themes. They were able to expand the focus of AIS to support sustainability and environmental literacy through their school’s international lens.



**Figure 1 AIS students looking down from their school's rotunda.**



**Figure 2 AIS Peace Pledge in English and Spanish.**

AIS’s school philosophy encourages students to look outside themselves and be part of a larger community. Students develop skills in communication, conflict resolution, and social advocacy via effective modeling practices throughout their school day as well as instruction during community time. Furthermore, AIS’s International Studies theme is centered on the concept of peace and our role as peacekeepers in the world. Hence, the AIS community starts each day reciting the school’s Peace Pledge in English and in Spanish. (Figure 2)

Embracing the 3 pillars of the Green Ribbon program, AIS has instilled “green” into the curriculum, the social and health programming, and in how its students look at their world. In the curriculum, examples include the many outdoor curricular activities and field trips. The school participates in both Jane Goodall’s Roots and Shoots club (Figure 3), as well as John Farrell’s Bridges of Peace and Hope. (Figure 4)



**Figure 3 Jane Goodall from Roots and Shoots joins AIS students to fly their giant peace dove.**



**Figure 4 John Farrell from Bridge of Peace and Hope leads AIS students in songs.**

In support of health and wellness, the school has an active school garden program that is threaded in all grades K-5, and serves as an outreach arm to support student and family nutrition and provide fresh produce for local charities. A spring and fall walking program offers AIS students and families an opportunity to start the day off in a healthy way.

Respect for and conservation of resources is shown throughout the school's many programs, including student-organized recycling and composting, and the 5<sup>th</sup> grade student-led initiative to install water bottle filling stations.

AIS students learn to be environmentally aware through participation in activities, such as food composting in the cafeteria, community garden activities, school and home recycling efforts, as well as through bonds with organizations, such as Roots and Shoots. AIS has an ongoing relationship with the Roots and Shoots Club of Western Connecticut State University (WCSU). Several years ago, WCSU students made a peace dove for AIS out of recycled materials, including a tomato cage, rubber tire tubes, Polyvinyl chloride pipe, and a recycled bed sheet. While AIS students painted the dove's face, the handprints of students and staff as well as those of our mentors, Jane Goodall and John Farrell, created the dove's feathers. During our annual Peace Day celebration, AIS 5<sup>th</sup> graders fly the dove, while John Farrell performs music and sings with our entire student body outside by AIS's Peace Pole.

Furthermore, when WCSU completed their permaculture garden, AIS students helped to work on the design of the garden and grew some of the herbs that eventually went into it. To commemorate the garden, AIS students along with Jane Goodall flew the peace dove at the opening ceremony.

AIS is fortunate to be part of a district that has a strong focus on resource management, as a means of saving on waste, cost and the environment. Our school practices energy management through our active building controls, and air quality management through the work of our Tools for Schools team and anti-idling policies. Waste is managed at the district level through single stream recycling and in the school's daily practice with composting of cafeteria waste. Other district programs help our student health and wellness by having our busses run on cleaner propane fuel, and using only certified green cleaning products.

### Education for Sustainability and Environmental Literacy

During the 2016-2017 school year, a team of four adults and 38 students, who wanted to make a difference in the world, started the first Bridges of Peace and Hope Club in the United States under the direction of its founder, singer and songwriter, John Farrell: “Our mission at Bridges of Peace and Hope is to introduce young people around the globe so they can build friendships and caring communities dedicated to promoting peace, understanding, and collaboration.” These ideals include collaboration with diverse individuals and groups under the supervision of school staff and volunteers. This school-based club reaches out to other groups locally and internationally to share ideas, foster friendships, and work together on activities that promote respect, empathy, as well as awareness and appreciation of cultural diversity. Various projects, activities, and methods of communication help to support and to build bridges of understanding between communities, in addition to promoting peace and global citizenship.

Environmental literacy is carried out through all curricular disciplines at AIS, including art, music, and physical education. The Green Team Visual Arts teacher skillfully incorporates math, science, and International Studies, linking artistic expression to the larger ideas of how education impacts student learning and student interests, which guide their choices. While all AIS students create works and learn about light and color (light refraction, formulas), shapes, patterns, sense of space and depth, and texture, each grade level has its own unique lessons based on skill and knowledge that increases over time from year to year.

For example, Kindergarten students compare and contrast fairytale toy bears and the real-life animals. In addition to learning about the hibernation cycles of bears and other animals, kindergartners research the natural environment of animals and study the varied weather patterns of New England in the month of March.

Building upon their past experience, 1st grade students study and use geometric and organic/abstract shapes in their artwork using these shapes to create their own version of the African Savannah.

2<sup>nd</sup> grade students study Van Gogh and his Sunflower paintings, then paint from observation of still-life bouquets. Afterward, students dissect the flowers to learn about the different parts of a flower and understand their function. Making a connection to this year’s SpaceX launch, 2nd graders also worked on rocket designs with galaxy backgrounds, using geometric and organic shapes.



**Figure 5 Examples of AIS student artwork inspired by the environment and science lessons.**



**Figure 6 AIS student animal art projects.**

AIS 3rd grade students learn about linear and radial symmetry and identify these concepts as they occur in nature. They create a design of 2-D and 3-D shapes and folded paper forms, utilizing the mathematical and scientific concepts they have reviewed, including fractions and symmetry. Similarly, 4th grade students create self-portraits using their knowledge of fractions, proportions, and linear symmetry and explore how and where these concepts occur naturally in the world.

5th grade students continue to expand their skills through Observational Drawing, concentrating on contour lines of still-life objects and the shadows they cast. AIS students connect with students in other countries, learning that societies around the world hold many of the same values, including caring about the planet and seeking solutions to protect it.

Similarly, AIS students are inspired by their music studies to learn more about saving and protecting the earth. In addition to learning and performing “Love Song to the Earth,” a song which is a collaborative effort by various international artists, producers, and music directors, who are concerned with caring for the earth, AIS 2nd grade students perform a nature-centered concert entitled “Earthchild.” All of the songs are selected intentionally emphasizing the earth’s beautiful attributes, climate awareness, recycling, water conservation, as well as other aspects of the environment.

In addition to the curricular connections during school hours, AIS students have many opportunities to join after-school enrichment programs that encourage resource efficiency. For the past eight years, students from grades K-5 have participated in Odyssey of the Mind, a creative problem-solving program that encourages students to “think outside the box” with limited budgets for materials. Participants are encouraged to use materials creatively by recycling and repurposing them, thereby learning a variety of “green” practices. Some past team ideas have included a dress made of plastic bags, a candy wrapper covered jacket, bottle cap covered vests, an overall made out of stamps, and Play-Doh cap ties, among others.

### **Supporting the Health and Wellness of Our Students**

AIS programming supports the whole child, from education, social outreach and world view, to nutrition and health. The school strives to help each child find his or her voice. Ghandi said, “Be the change you wish to see in the world.” This philosophy encapsulates all of the qualities of the new Student Leadership Club. Students in grades 3-5 underwent a rigorous application process and interview. Students were selected based upon their desire to continue to help AIS reach its fullest potential. Students articulated a concern that in past years the student voice was missing from the decision-making process. The Student Leadership team is designed to provide opportunities for students to take ownership of their learning and take our school to the next level. To this end, the 40-member team of students has created subcommittees, such as School Newspaper (electronic), creation of Theme Days, Service Learning opportunities, and a subcommittee focused on public relations to recruit students to our magnet school. Students in grades 3-5 also decided to become “Reading Buddies” to

kindergartners, thus fostering a love of reading in our youngest students along with serving as role models for future leadership team members.

After only two weeks in existence, this club was featured in local newspapers as they sought to raise money for recess equipment in an effort to promote the health and wellness of all students. The club is student-planned, student-led, and staff is only allowed to ask guiding questions rather than give directives.

In recent years, AIS has expanded the school's gardening programs and enhanced environmental literacy throughout the school. Students from grades K-5 learn about gardening, nutrition, and the environment, which ties in directly with the school's mission to encourage students to become socially responsible and environmentally aware global citizens. Each grade level has a specific garden to prepare, plant, tend, and close. Each year spirals in the focus of plant life and sophistication of expectation. Students in grades K-1 learn about the parts and purpose of plants; they learn basic tending techniques; and they begin to look for patterns and to notice the natural world around them. They begin to understand that bright colors attract pollinators and that annual plants need to be planted yearly, while perennials come back every year. They begin to see the mutual benefits between wild flowers and bees and butterflies. Second and third grade students take the process full circle, from learning how to cultivate healthy soil to planting vegetables and fruits for sustainability. After harvesting, students may taste their fruits, vegetables, and herbs, which instills a lifelong interest in gardening and healthy eating habits. Students also learn different techniques to gardening, such as: 3 sisters, 4x4, raised beds, companion planting, and many others. Fourth grade students focus on herbs, the purpose of maintaining healthy soil, and herbs that support insects and pollinators. While some students extend the purposefulness of certain herbs by freezing them for future use, fifth graders make use of grow lights indoors to lengthen the growing season through hydroponic farming. They learn how to adapt with limited planting space, and therefore use water and



**Figure 7 AIS students help to plant spring plants in the garden.**

nutrients to sustain plant life. They grow their own flowers for school graduation, and then continue the lifecycle of the plants by taking them home and transitioning them into soil.



**Figure 8 AIS students harvest vegetables in the summer.**

During the summer, AIS student and parent volunteers maintain the gardening program under the direction of AIS's Green Team leader. While the students and their families consume some of the produce they have grown, the school also donates a significant portion to area food banks, shelters, and other community services locations. Then, when the students return in the fall, they close the garden.



In 2016 AIS received a grant through the Whole Foods Kids Foundation School Garden Grant Program. AIS maintains a noteworthy partnership with the local Whole Foods Market that affords students with the opportunity to visit the Market, learn about nutrition, how far foods travel, and the reasons to buy locally. As a result, students also recognize and appreciate the importance of building local community relationships.

While students learn the basics of healthy food choices through our gardening program, AIS follows the National School Lunch Program. Vegetarian meals, such as macaroni & cheese, cheese and vegetable pizzas, mozzarella sticks, and grilled cheese sandwiches, among others, are available monthly, whereas salads are offered every day.

AIS students are encouraged to participate in many outdoor activities throughout the school year. When the weather permits, AIS students have 30 minutes of daily outside recess. During outdoor recess, our students have access to a playground, blacktop, full grass field, and a gaga pit. Students are encouraged to wear sunscreen to school and are allowed to bring additional sunscreen or wear hats or long sleeves to protect themselves from overexposure to the sun.

Physical Education (PE) instruction at AIS includes time outdoors. All students have 40 minutes of PE weekly. Once students reach the 4th grade, they are given the results of their CT Physical Fitness Assessment. Using the rubric provided, they determine their current level of fitness and then set individual goals for improvement in each of the areas of fitness on which they are tested. Students also receive a handout of the FITT (frequency, intensity, time, and type) method to design their fitness plans. Students learn the Frequency or days per week to exercise to maintain or improve health. In addition to learning about the types of activities/exercises/sports that are aerobic, students become more aware of the level of Intensity of exercise, the necessary Time to perform an exercise as well as the selection of the correct Type of exercise to match the fitness component on which they are working. This program highlights upper body, abdominal, and flexibility exercises that students may select for their program.

In the fall and spring, the school nurse offers students and their families an opportunity to participate in a Walking Club before school hours. On Tuesdays and Thursdays from 8:00-8:30 AM, students and families walk outside, as long as walking conditions are safe (weather-related). During bad weather, the Walking Club walks inside the school building.

### **Conserving Resources in Our School**

AIS celebrates Earth Day with an annual school-wide field trip involving a viewing of the latest DisneyNature earth day movie release. Since 2011, AIS students have seen: *Earth, Oceans, African Cats, Chimpanzees, Bears, Monkey Kingdom, and Born In China*. This year, AIS students will be seeing *Dolphins*. In addition to developing a better understanding of how much our world is interconnected, students participate in a shared school community experience that expands the international studies curriculum with real life examples of what students are learning about the earth. The yearly trip has become not only a tradition to which students look forward, but also one of the most memorable experiences to AIS alumni.

As part of AIS's environmental education studies, students are continuously learning about all of the elements of composting. On a daily basis, students identify which part of their lunch is compostable. While all AIS students separate out recyclable plastic from food and paper products that are appropriate to compost, a specific group of students collects and checks the materials to ensure that they are indeed compostable. Students review the

composting guidelines often to develop a better understanding of why certain products can be composted, as well as the differences in choosing organic versus nonorganic products and materials. 5th grade students work with custodial staff to deposit compost into bins, balance the compost with browns, and turn the bins to promote decomposition. As a result, all students learn about and observe decomposition.

AIS students and staff also maintain and harvest compost through the school's vermiculture program. Students learn that worms not only increase the amount of air and water in soil, but also produce castings that are full of nutrients for the soil. As a result, they begin to understand how essential worms are for the environment, for composting food scraps, and for gardens and plants. Students then use waste from their snacks to maintain the health of the compost bin, and families and staff have sponsored maintaining bins over the summer. Then students harvest the worm castings and use it to amend garden soil, further emphasizing the importance of worms. They also enjoy reading about the daily adventures of a worm in Doreen Cronin's "Diary of a Worm", which is written from the worm's perspective.

2nd grade students connect their classroom learning about erosion to the real world during a field trip to Sherwood Isle. While there, students participate in hands-on activities that show how the earth's surface changes because of the effects of weather. Through these activities, they notice how the sand changes, and shells are affected by water, and how certain plants that are native to the land help to support and counter erosion.

AIS 3rd grade students visit the Old Quarry Nature Center in Danbury, CT where they learn about how rock was mined in the quarry and used in local construction, the effects of erosion as well as how the removal of the rock changed the natural landscape of the Quarry. Students learn how the Quarry site was at one time used as a local dump and how remnants of the trash that was buried there are still breaking down and posing risks for local species living in the woods. A representative from the Housatonic Resource Recovery Authority visits AIS 3<sup>rd</sup> graders every year and students learn about reducing and reusing and how trash is burned and turned into energy, creating problems in the form of toxic ash and air pollution.

AIS fourth graders have the unique opportunity to participate in the State of Connecticut Trout in the Classroom program, through which they learn about raising and releasing trout into local waterways. In addition to observing the trout life cycle, they begin to appreciate the value of the trout in the ecosystem. Students learn how to make the living conditions of the trout as real as it would be if they were being raised in the wild. They monitor the temperature and PH levels of the water; keep the tank dark, which in the wild keeps the trout fish safe from predators, like birds and humans; and share the responsibility of feeding the fish and cleaning the tank each week. Students also recognize that some of the challenges the trout might face once they are released into the wild, including predators, pollution, and drought. In order to provide the fish with a healthy habitat, students learn the importance of not throwing garbage into lakes, streams, ponds, and oceans. Several years ago, AIS students released their farm-raised trout into the Still River in Danbury where they saw first-hand all of the garbage that had been dumped along and into the river. Consequently, AIS students, with the help of a local business, organized a cleanup team. Through this rewarding experience, students recognize that if one small thing changes in the ecosystem, the entire ecosystem could suffer; they gain the feeling of responsibility in caring for another living thing, and feel empowered in making a difference in their environment.

In 2017 AIS 5th grade students led the school to install refillable water bottle stations to reduce the plastic water bottles used at the school. Students composed speeches and letters, then presented their arguments to the PTO and personally spoke with the PTO board members to advocate for reducing plastic water bottles at the school.



Because of the two new water stations installed at the school, students now can see firsthand how many bottles are being conserved.

At AIS students become socially responsible global citizens who use technology to access the world. Having a variety of wireless devices offers children the opportunity to enhance and enrich their education through independent and guided learning explorations, while reducing trash and waste paper. As a result, children gain real world experiences that can be transferred to the community while interacting and learning about themselves and others.

Moreover, the use of technology carries over to school-wide communications. To reduce paper being sent home to families, AIS has incorporated school messenger, voice robocalls, Facebook, email and REMIND application communications. In addition, AIS students can work on individual and group projects through Google Classroom from anywhere and share information virtually. To encourage recycling, bins are placed in each classroom, the main office, and in teachers' lounges. Recently, all AIS students participated in a recycling contest after students from a local high school conducted an informative training session. Furthermore, families are encouraged to carpool during school events, such as Family Picnic day, Meet the Teachers night, and school concerts. New this year, Danbury Schools district buses transitioned to Propane Fuel, and buses are prohibited from idling their engines in an effort to reduce fuel usage and reduce air pollution.

In addition to teaching resource management, our school and district facilities team works tirelessly to save resources and save money. To accomplish this, AIS has a building management system which controls both the HVAC and outdoor lighting. Timers on our outdoor lights conserve energy. As part of this building management system there are unoccupied setbacks to conserve energy. We also have carbon dioxide sensors built into the air handlers, so that outside fresh air is added based both need and room occupancy.

There is also a water filtration system which is serviced on a regular basis by Danbury Public Works.

AIS has an active Tools for Schools team, which meets on a yearly basis. The team inspects the building each spring to identify problems and works with students and faculty throughout the year to maintain our progress on attaining quality indoor air.

AIS and the Danbury Public Schools have committed to use only green products for cleaning. From the general all-purpose cleaner, neutral cleaner, glass cleaner, floor finish, floor stripper, and restroom cleaner, only approved certified products are used in our buildings.

In addition, Danbury Public Schools is dedicated to sharing information with our school community about our compliance with the state's Environment laws including links on the Facility Department's website to current reports and our integrated pest management policy.

Danbury Public schools has an anti-idling policy and all district busses are fueled by propane to reduce pollution and greenhouse gases.

In support of energy management, the district posts a memo to all staff annually restricting the use of appliances in classrooms and offices. Any eligible appliances purchased by the district are Energy Star rated to make sure we are achieving the best energy performance over the life of that equipment.



Both the school and district are focused on reducing waste. We minimize waste through management practices, and have instituted single stream recycling. In addition, we have a second waste management company that recycles our used white paper for all district buildings. AIS Magnet School has taken their waste management even further, saving the food waste from the cafeteria to compost for the gardens and reducing landfill waste.

## **SUBMISSION**

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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](mailto: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](mailto: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.