PART II - HIGHLIGHTS REPORT READY SUMMARY NARRATIVE

HEC Academy, Northampton, Massachusetts

HEC Academy is a therapeutic, public special education high school. Students participate in SEL classes four days per week with a curriculum that includes body positivity, anti-bullying, transition skills, and social skills building. Students have access to yoga and meditation classes, standing desks, sensory tools, a "weightrium," and regular walks along an adjacent bike path. Because we are a small school with a dedicated staff that fosters close relationships with our students, we have been able to work closely with students to transform our sustainability practices over the past three years. We are guided by a Strategic Plan that centers sustainability in all of our practices and requires the school to use only environmentally friendly cleaning and landscaping products. After a 2022 energy audit, we replaced all of our lights with LED lights, insulated our pipes, and incorporated sustainability into the design for an upcoming building renovation. In addition, we installed filtered water stations supplied with reusable cups, as well as water-saving faucets and air dryers in our bathrooms. In 2022, students designed and created a school garden that is now at the heart of integrated environmental science and food education lessons, including weekly cooking classes that deepen students' knowledge of nutrition, cultural food traditions, and kitchen skills. By redistributing uneaten food to local food justice projects and composting, we have reduced our food waste by over 90%. Our environmental science and food education classes partner with a local food justice organization that provides us with organic produce throughout the year, and students gain hands-on knowledge of climate change through field trips to local farms. Students volunteer at a number of sustainability organizations and projects, such as the annual Northampton Toy Exchange, in which they divert thousands of textiles, toys, and baby items from the waste stream to be redistributed to families in need. They also volunteer at a community kitchen preparing food for community members experiencing food insecurity. In 2023, we converted from disposable to reusable lunch containers, silverware, plates, cups, and food storage containers. Designing paperless lessons has enabled us to reduce our school's paper usage by 74%. At the end of the 2022-23 school year, out of the 48 participating schools, our school won one of three Massachusetts DEP Green Team grand prizes "for going above and beyond in [our] efforts to promote sustainability and responsible citizenship in [our] communities."

PART III - DOCUMENTATION

Green Ribbon Schools Pillar 1: Reducing Environmental Impact

Improvements to K-12 school facilities save schools money, strengthen the nation's energy security, and conserve natural resources.

Pillar 1, Element A: Improved energy conservation/energy-efficient building(s)

HEC Academy is part of the Collaborative for Educational Services (CES). Built into CES's 2023 Strategic Plan is Objective 1.4: "Recognizing that climate change impacts both current and future generations of learners, CES will intentionally pursue teaching, learning, and decision-making that applies a climate justice lens." This objective is woven into all of our decisions as a school and, for CES, as a larger educational organization.

A central goal of the sustainability objective within our strategic plan is to reduce our C02 emissions through monitoring and conserving energy usage, making building efficiency improvements, changing our transportation practices, recycling and reusing materials, preserving resources, and incorporating renewable energy whenever possible. Following this objective, HEC Academy and CES completed an agency-wide energy MassSAVE energy audit last year and began taking recommended steps toward energy efficiency, including insulating 10,625 square feet of piping for an energy savings of $13.30 per month and replacing all fluorescent lights with LED lights. National Grid projects that the estimated savings for this change to LED lights will be 18,701.70 kWh annually. This change both reduced our energy demands and improved the health of students sensitive to the motion created by fluorescent lights. The operations team created a timeline for further building improvements, and CES has set aside funding for an architect to design sustainable, energy-efficient improvements to the HEC Academy building as part of CES's capital improvement planning process. Additionally, HEC has been approved for solar panels from the Phippen Adams Foundation as soon as our roof needs replacing.

Students are an active part of conservation efforts, alerting staff to turn down radiators when needed, turning off lights in classrooms that are not in use, monitoring water usage, and reminding each other about ways to conserve energy both at school and at home.

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

In 2021, HEC Academy installed four filtered, refrigerated water bottle filling stations throughout the school to replace a bottled water delivery service. This new system enabled us to provide clean, filtered water to all students while significantly conserving water and transportation resources. In addition, our bathrooms are equipped with faucet aerators to reduce water usage by 1 gpm and with automatic faucet shut-offs.

In 2022, HEC Academy teamed up with Klean Kanteen to distribute reusable water bottles (donated by Klean Kanteen) to all students in order to decrease the use of disposable cups. In 2023, HEC Academy was awarded a Mass. DEP (Department of Environmental Protection) Reduce, Reuse, Repair Micro-Grant, with which we purchased reusable cups for all water stations for students to use when they do not have thermoses immediately available. In addition, we installed electric kettles and reusable mugs in all common snack areas. Providing several forms of reusable drinking vessels has decreased our school's disposable cup usage by approximately 13,500 cups/year (25 students x 3 cups per day x 180

days on average). Through these efforts we have eliminated students' reliance on disposable cups and instilled in them the value of conserving both water and disposable water containers.

As part of our organizational strategic plan, the Collaborative for Educational Services as a whole, including HEC Academy, discontinued providing bottled water at all school and organizational events. This has reduced our carbon footprint through the elimination of plastic vessels and the energy to transport bottled water from suppliers to event sites.

In 2022, we established a school garden to divert rainwater to grow food consumed by students. We installed a drip system to reduce the need for additional water in the garden, and we do not use any water to maintain a lawn.

Pillar 1, Element C: Reduced waste production and improved recycling and composting programs

As part of our resource conservation efforts, all classes at HEC have transitioned to being conducted on Google Classroom in order to save paper. Comparing the years before and after COVID demonstrates a significant reduction in our paper usage. For example, during the 2017-18 school year, HEC ordered 21 cases of paper (10 reams per case) and 18 individual reams; during the 2021-22 school year HEC ordered 18 cases of paper; during the 2022-23 school year HEC ordered 8 cases of paper; and during the 2023-24 school year HEC ordered 6 cases. This trend shows an approximately 74% reduction in paper usage over those years. In addition to this reduction, HEC also drastically reduced our orders of lined notebook paper, poster-sized easel pads, notepads, etc. While paper-based work is provided to students who benefit from it, the vast majority of academic assignments are now completed electronically. This has enabled HEC and CES to reduce the number of photocopiers onsite by over half, saving both electricity and maintenance costs.

Since the 2022-23 school year, HEC Academy has been a Massachusetts DEP registered Green Team school, and in our first year won a grand prize (awarded to three out of 48 participating schools) for our recycling, composting, and innovative resource conservation efforts. As part of this process, all of our students have signed a green pledge form pledging to care for the environment through specific steps, such as growing their own food, not wasting resources, paying attention to conserving energy, purchasing used clothes, etc. Our students volunteer monthly at the Village Closet in Huntington, MA, a project that diverts 13,304 pounds of textiles, 88 pounds of books, and thousands of pounds of toys from the waste stream by redistributing them for free to families in need. In addition, in 2022, we successfully applied to the Center for EcoTechnology for a composter and have been composting our food and garden waste ever since. Before this, in January of 2021, HEC Academy students and staff began a coordinated effort to eliminate food waste. Before 2021, approximately 3,600 pounds of food were thrown away, but with a system-wide examination of how to divert food from the landfill, virtually no food now is thrown in the garbage. The vast majority of uneaten food is delivered to community projects addressing food insecurity, and the food that cannot be redistributed is composted and used in our school garden. HEC Academy teachers deliver leftover school breakfast and lunch food to the Pedal People's free community pantry in Florence, MA and Touch the Sky food distribution in Pulaski Park in Northampton, MA. As a result of our ongoing education about food waste (which is now incorporated into our food education curriculum), composting, and food redistribution, we have cut down on the school's food waste by over 90%.

In response to a student advocacy project, HEC Academy administrators approved the incorporation of food education and cooking classes into the curriculum. In these cooking classes students use both the food they grow in the school garden and leftover ingredients from school lunches (such as fruits, cheeses, sauces, milk, etc.) to make nutritious dishes that are distributed to all students. In addition, they learn about climate change's effects on crops and farming practices through field trips to local farms and orchards and through our partnership with Grow Food Northampton (GFN), a local food justice organization.

In the autumn of 2023, we used part of the Mass. DEP Reduce, Reuse, Repair Micro-Grant to convert from disposable to reusable lunch containers, silverware, plates, cups, and food storage containers. Because HEC Academy is such a small school, we have traditionally received school lunches from the Northampton School District. These lunches have been delivered in disposable, one-time-use containers. With this Mass. DEP grant, we've been able to purchase reusable containers and work with the director of food services to create a plan to transition fully to reusable containers. This transition will save us approximately 2,160 lunch containers per school year. With our transition to reusable silverware, plates, bowls, and cups, we will divert approximately 36,000 pieces from the landfill per year. In addition, with the purchase of reusable food storage containers to store leftover food from cooking classes, breakfasts, and lunches, we will divert hundreds of food storage containers from the waste stream annually.

HEC Academy also recycles paper, metal, and plastic. Students are educated about the importance of reuse and recycling at the beginning of every school year, and student representatives monitor recycling efforts throughout the year, including educating each other about recycling contamination and compost requirements, as well as providing suggestions for saving products from the waste stream.

In addition, HEC Academy and CES organize an annual technology recycling program to reduce electronic waste through recycling and reuse. On an as-needed basis, we work with tech recycling companies to arrange pickups at our offices and other programs to ensure that old and unused technology (laptops, desktops, printers, monitors, etc) is disposed of properly. We have expanded this program to allow staff to drop off equipment from home so they can also take advantage of the recycling program. We also participate in battery recycling programs where staff can drop off old batteries at the office where they are collected in a disposal box and then sent off for recycling. We also send old toner cartridges back to companies for recycling or reuse. The count from the recycling company for the 2022 tech recycling event, which diverted over 1,000 pounds from the landfill, is as follows: 2 CRT monitors, 36 LCD monitors, 110 laptops, 2 miscellaneous, 58 PCs, 18 printers/scanners/copiers, 1 server, 2 smartboards, 2 switches/networking equipment, 5 televisions, 2 tablets, 1 UPS, 4 iMacs, and 50 iPads, for a total of 293 items.

Pillar 1, Element D: Use of alternative transportation to, during, and from school

As part of our strategic plan, which requires us to run all of our decisions through a sustainability lens, CES set a protocol in 2023 to encourage employees to work remotely when possible in order to save fuel and energy. HEC Academy employees who are able to work remotely during professional development (PD) are encouraged to do so, though because HEC is a school, on- site presence is required for all but PD days.

HEC Academy employees are encouraged to bicycle, carpool, or take public transportation to work, and approximately 25% of clinicians and teachers regularly commute to work by one of these means, including approximately 7.5% of staff who bicycle commute year-round. Of the employees who drive to work, at least 33% drive electric or hybrid vehicles.

Because we are a regional collaborative school serving students from multiple school districts within a range of approximately an hour away in every direction, alternative forms of transportation for students tend to be difficult to implement consistently and depend on different municipalities' alternative fuel busing priorities. However, students in local school districts regularly bicycle, e-bike, or walk to school.

Green Ribbon Schools Pillar 2: Improved Health and Wellness

Healthy school environments help students and educators remain healthy and strong.

Pillar 2, Element A: An integrated school environmental health program

Following Objective 1.4 of our strategic plan, all of our operational decisions are now filtered through an environmental sustainability lens. We actively take measures to make sure that our school's air quality is healthy. We have a contract with Dee Services for quarterly HVAC inspections to check and replace our air filters as needed, and in response to COVID, we installed air filters in all classrooms and common spaces throughout our school.

All of our purchases are vetted through a sustainability lens, so our purchasing and procurement are filtered for environmental health, and our cleaning, gardening, and landscaping products are nontoxic. Both our cleaning company and landscaping company are required to use non-toxic, environmentally sound products.

Pillar 2, Element B: Health, Wellness, and Nutrition

Because HEC Academy is a special education high school with a higher-than-average rate of mental health diagnoses among students, SEL (social emotional learning) is an integral part of our school's curriculum. Our staff-to-student ratio is higher than 1:2, including a full clinical staff available to students during all of the hours that school is operating. Students participate in SEL classes four days per week with a curriculum that includes body positivity, anti-bullying, transition skills, and social skills building. During the fall of 2023, all clinical staff who teach SEL classes went through a professional development course in teaching body positivity, and they incorporated this training into their curriculum. In addition to SEL classes, every HEC student is assigned to a clinician and participates in weekly therapy, in addition to having access to our full clinical staff for any additional support that is needed.

All students are required to complete a sex education class that includes education about gender and sexuality, healthy relationships, identity development, and healthy communication. In addition to sex education, ongoing SEL classes, clinical sessions, and access to clinical support whenever needed, LGBTQI students have access to weekly Gen Q drop-in sessions, which provide a safe environment in which students can discuss LGBTQI issues, access gender-affirming products, and participate in political organizing projects. Gender and sexuality education is incorporated into HEC's curriculum and all aspects of HEC's culture.

During the 2022-2023 school year, one of our two special education teaching coordinators was accepted into the Pilot Light food education fellowship program, which provided a year of professional development lessons on how to create a food education curriculum, which the school implemented starting in the 2022-2023 school year. After an end-of-year student advocacy project laid out a plan for food education/cooking classes to be incorporated into our curriculum, the HEC administration supported this student-led effort by implementing weekly cooking and nutrition classes for all students. Through our partnership with food justice organization Grow Food Northampton (GFN) and the food students grow in our school garden, we have been able to incorporate organic vegetables and organically raised meat products into our cooking classes every week. Our curriculum includes field trips to orchards and farms to witness climate change's effects on crops and farmers' practices, and students have taken active steps to help farmers, including volunteering for flood cleanup after the flood of 2023 wiped out most of GFN's crops.

To build students' physical skills, we have been able to provide students with a variety of physical education offerings, including CrossFit with a personal trainer, yoga and meditation classes, rock climbing at a local rock climbing gym, basketball, and weight training. In addition, through the school's token system, through which students earn privileges by participating in classes and activities, students are able to earn daily walks along the bike path located adjacent to the school or into downtown Northampton, two blocks from the school.

Green Ribbon Schools Pillar 3: Effective Environmental and Sustainability Education

Incorporating environmental and sustainability concepts into your education program can create a community of green-minded citizens.

Pillar 3, Element A: Interdisciplinary learning/coursework

The curriculum at HEC Academy includes regular hands-on learning and community service projects. For example, HEC students maintain an organic garden in which they grow vegetables and herbs that they incorporate into weekly cooking classes. The garden and farm-based field trips have also been an integral part of environmental science class, as students learn through living examples about the ways in which climate change has impacted local farmers' crops and practices. Sustainability is woven into all of HEC students' learning. For example, all HEC students are issued a Chromebook, and the majority of academic assignments are completed electronically so that students can actively see themselves saving reams of paper every year.

Students at HEC Academy are presented with regular opportunities to volunteer in the community to develop transition skills, and the focus of these efforts for the past two years has been environmental sustainability. Students volunteer monthly at the Village Closet in Huntington, MA, an organization that diverts 13,304 pounds of textiles, 88 pounds of books, and thousands of pounds of toys from the landfill annually in order to provide these items to families in need. Students also volunteer monthly at the Manna Community Kitchen in Northampton, where they prepare and serve food to people experiencing food insecurity.

Through relationship-building and hands-on learning, students come to understand the lived effects of class differences, access to mental health support, and factors that affect people's access to healthy food. HEC Academy has built an ongoing partnership with the food justice organization Grow Food Northampton (GFN), and through field trips to the GFN experimental plot, students have learned about how climate change and different farming projects have affected soil and crop health. Students also volunteered for flood cleanup after GFN farmland and community gardens were flooded in 2023.

Within our school building, students take responsibility for collecting and tending compost, making sure there are enough reusable cups at water fountains, and learning about saving resources through hands-on practice. In math class, students estimate how many pieces of silverware, plates, and cups they use per day and per week and then extrapolated those totals to estimate their annual impact by changing from disposable to reusable products. In environmental science class students examine local mini-ecosystems and draw conclusions about the factors affecting them. In history class students learn about how the climate justice movement has grown out of other social movements with a focus on how traditionally marginalized people's perspectives and actions have transformed ideas about social justice in U.S. and world history. Through all of this volunteer work and hands-on learning, students learn about the relationship between climate change, environmental waste, and economic inequality.

Pillar 3, Element B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

Environmental and sustainability education is incorporated into all science classes. For example, in biology class, students compare microbiome health to the health of other ecosystems. Sustainability and climate change are central themes in environmental science classes, where students learn about

the environmental effects of fertilizers used in modern agriculture vs. in organic farming, strategies for conserving water and energy resources, the effects of global warming on different geographic regions, the climate change movement, etc. Examples of chemists who have invented climate mitigation techniques are embedded into chemistry class. Whenever possible, sustainability-focused examples are used to illustrate scientific concepts in all classes.

- For example, students in the environmental science class in 2022 designed our school garden, including creating a budget for tools and plants, researching growing zones, choosing their favorite vegetables and charting the nutritional content of each vegetable, planning the plots according to vegetable growing conditions and requirements, and then collecting data on different crops' development. Every year now students plan what vegetables they want to grow and continue to develop their school garden using data from the previous year's crops.
- In math classes, students learn about financial literacy with a focus on socially responsible investing, including the environmental impacts and prospects of different corporations' work.
- In English Language Arts class, sustainability-focused books like William Kamkwanda's The Boy Who Harnessed the Wind are regularly incorporated into the curriculum.
- In history class, students learn about the Sunrise Movement, along with other global climate change organizing, the disability rights movement, LGBTQI movement, and other social justice movements.

Through HEC Academy's years-long partnership with Grow Food Northampton, students have collaborated with farmers and community gardeners to develop service-learning projects; worked with GFN's onsite ecological biologist as part of environmental science class to learn about annual vs. perennial plants' effects on soil health and the impact of different crop combinations, farming techniques, and hybrid wheat experiments on plants' climate resilience; learned about strategies for flood mitigation; and researched and ordered a library of food, gardening, and environmental education books for the Little Free Library that HEC students constructed for GFN to educate community gardeners and engage children and teenagers with farming practices. This local resource has provided ongoing hands-on classroom opportunities for learning. In addition to field trips and volunteer trips to GFN's farmland, GFN provides HEC students with weekly deliveries of organic produce to incorporate into cooking classes and has provided cooking demonstrations, food education literature, and garden development help. HEC students also work every year with the Food Bank of Western Massachusetts to research hunger in Massachusetts, food apartheid, and food systems and to participate in Monte's March, which raises money and awareness about food insecurity in our community.

Pillar 3, Element C: Development of civic engagement knowledge and skills

HEC Academy has an active Key Club, which works with the Northampton High School Key Club on sustainability-focused activities. For example, Key Club members organize an annual Toy Exchange every December for the city of Northampton, which diverts an auditorium full of toys and books from the waste stream and encourages families away from a consumerist lifestyle by collecting free, lightly used toys from the Toy Drive. Key Club members also volunteer at the Village Closet, devoted to recirculating clothing, toys, books, and baby-related items to families who need them. Members also

volunteered for flood cleanup at Grow Food Northampton (GFN) in the summer of 2023 as part of HEC Academy's ongoing partnership with GFN, a food justice organization. In addition, Key Club members conducted research about hunger, food apartheid, climate change, and food systems in Massachusetts and raised $1,855 for the Food Bank of Western Massachusetts through their participation in Monte's March. In an ongoing way, Key Club members care for the school community's reuse and recycling efforts and educate their peers about topics such as recycling contamination and conservation of resources.

HEC Academy students have also actively participated in an ongoing partnership with local food justice organization Grow Food Northampton. After receiving a service-learning grant in 2022, students worked with GFN to determine what needs HEC students could help GFN with. Students interviewed GFN staff and community garden members, who expressed a need for help in engaging children and teenagers while their families tended to their community garden plots. At GFN's request, HEC students have been working with a woodworking instructor to build an activity center that they've filled with garden, animal-education, and sustainability activities, as well as a Little Free Library that they've filled with cooking, gardening, and environmental education books. Students researched and ordered all of the books based on widening the education of children, teenagers, and their families as they work in their garden plots. This service learning project has given HEC students a sense of purpose about how to engage community members in their local food system and how to educate them about climate change, animal habitats, food and nutrition, and related topics.

In addition to student civic engagement, HEC staff dedicate hundreds of hours annually to volunteering, activism, organizing, and other forms of civic engagement in their communities. For example, one staff member donates approximately 80 hours annually of volunteer work at the Northampton ReCenter, a free swap shop that collects people's unwanted household goods and redistributes them to people who need them, diverting approximately 16,800 pounds of goods from the landfill annually. Two staff members work with the Northampton ReUse Committee and Kiwanis Club on sustainability initiatives, such as styrofoam recycling and repair events. Two staff members are actively involved with the BagShare Project, in which members sew reusable bags from scrap materials and distribute these bags to local businesses in order to decrease their usage of disposable paper and plastic bags. Several staff members are involved in the nonviolent movement organizing against military action, wars, and LGBTQI oppression.

HEC Academy also assigns a representative to the CES Green Team, an advisory committee that works with CES administrators to plan and implement sustainability policy and practices. The CES Green Team's mission is to center sustainability and climate justice principles within CES's policies, procedures, and operations. Additionally, we support the integration of climate justice education and advocacy into the agency's work with the diverse communities it serves. The fact that HEC and CES have a dedicated Green Team to hold ourselves accountable to our school and organization's sustainability goals speaks to our commitment to these values.

If applicable, please indicate any previous environmental or sustainability awards that your organization has received in the past 5 years.

For the 2022-23 school year, in addition to being awarded an Environmental Eagles Certificate of Recognition, HEC Academy's GREEN TEAM was one of three schools, out of a participating 48, to win a

grand prize (awarded on May 25, 2023) from the Massachusetts Department of Environmental Protection (Mass. DEP) and the Executive Office of Energy and Environmental Affairs (EEA). We were awarded this grand prize for our "outstanding efforts to increase recycling and pollution prevention in our school and community." Energy and Environmental Affairs Secretary Rebecca Tepper commented, "I congratulate all of the Green Team teachers and students. They showed outstanding leadership and initiative during the past school year to raise environmental awareness and promote waste reduction, reuse, recycling, and composting in their schools, homes, and communities." The three schools that won grand prizes were awarded for going above and beyond in their efforts to promote sustainability and responsible citizenship in their communities.

On November 28, 2023, the Village Closet awarded HEC Academy students the 2023 Helping Hand Award for their consistent dedication to diverting clothing, toys, and books from the waste stream through their enthusiastic monthly volunteer efforts.