



places2040 Leadership Awards Program
Application for Recognition: Little Conestoga Blue/Green Corridor
September 14, 2020

On behalf of the entire Little Conestoga Blue/Green Corridor Project Team, ELA Group, Inc. submits the following Application Package and Supporting Materials.

Application Information

Project Name: Little Conestoga Blue/Green Corridor:
Feasibility Study & Stakeholder Engagement

Award Category: Taking Care of What We Have

Participants Names/Organizations: Steinman Foundation: Robert Krasne, Shane Zimmerman, Lauren Frick,
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Web Links: Project: <https://elagroup.exavault.com/share/view/249e8-7w61grh>
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Project Description: In 100 Words

Initiated by the Steinman Foundation, this Project proposes extensive streambank, floodplain, and wetland restoration and legacy sediment removal within a 2.5-mile corridor of the Little Conestoga Creek, yielding flood reduction benefits and environmental/biodiversity gains for the Creek, Susquehanna River, Chesapeake Bay, the Commonwealth of Pennsylvania, Lancaster County, and the underlying municipalities and property owners.

The Project would also establish multi-modal trails, linking residents/visitors with employment, commerce, essential services, recreation, and education/interpretation opportunities.

Even through COVID-19, the municipalities, property owners, stakeholders, agencies, and potential funders were actively engaged, laying the foundation for Project implementation which is both expeditious and replicable.

Narrative

A. Overview

On behalf of and at the sole cost of the Steinman Foundation, the Project Team (including the aforementioned representatives of the Steinman Foundation, LandStudies, and ELA Group) completed its **Feasibility Study** (which is submitted with this Application) on October 1, 2019. The Study highlights the following attributes of the Project, located between Marietta Avenue (to the south) and the Creek's confluence with Swarr Run (to the north).

- Within this 2.5-mile reach, the Little Conestoga Creek passes through 4 municipalities, 40 properties, and under five roadways, one highway (Route 30), one railroad (Norfolk Southern), and one covered bridge.
- In addition to 1.7 miles of proposed stream restoration, some 27.5 acres of floodplain and wetland restoration would be accomplished by first removing over 140,000 Cubic Yards of centuries-old legacy sediment.
- 2.9 miles of multi-modal trails would be developed, linking residents and visitors, via non-motorized means, to places of employment, commerce, essential services, recreation, and education/interpretation opportunity; this trail system would substantially advance Lancaster County's **Active Transportation Plan**.
- The Project represents between \$10- and \$14-million in project costs plus on-going, annual maintenance.

Understanding its wide-ranging benefits, the Foundation asked the Project Team to begin presenting the Project to community-based advisors; property owners; officials within local, county, state, and federal government; and potential funders. From November 2019 through mid-March 2020, over thirty such meetings were conducted before the COVID-19 pandemic and social distancing caused the nature of meetings to change, but not be stopped; for all intents and purposes, these meetings were completed, virtually, by mid-June 2020.

Why undertake such an ambitious Project and, to the best of our ability, continue undeterred during this "new normal"? Simply, the Steinman Foundation and its Project Team believe that the Little Conestoga Blue/Green Corridor is that important and, frankly, cannot be implemented soon enough. Again, why?

- The removal of legacy sediments will increase or improve the carrying-capacity of the floodplain and potentially reduce the impact and mitigate the damage caused by flooding on the 40 adjoining properties and those downstream.
- The removal of legacy sediments and the restoration of the Creek and its attendant wetlands will substantially reduce sediment and nutrient loading which degrade the Creek, Susquehanna River, and Chesapeake Bay.
- Through the constructed improvements and their long-term management and maintenance, the biodiversity, ecologic function, and habitat along this reach of the Creek and its adjoining floodplains/wetlands will be restored and could further catalyze restoration projects elsewhere in the watershed, let alone the County.
- The multi-modal trail, trailheads, and environmental educational/interpretive opportunities would also connect residents and visitors to trail systems on lands of Franklin & Marshall College and the Lancaster County Solid Waste Management Authority; employment, shopping, hospitality, and entertainment at Park City Mall and The Crossings; healthcare at Penn Medicine/Lancaster General Health's Suburban Pavilion; and visitation of loved ones at Mennonite Home/Woodcrest Villa.

The Foundation and Project Team anticipate that implementation of the Project could begin as early as Fall 2021, after working collaboratively with the PA Department of Environmental Protection through a Design & Engineering and review process unique to the Project's potential and outcomes.

Simply, this visionary project is unparalleled in its scope, its breadth, and its potential to be replicated. Frankly, it could be nominated in at least two other categories ("Connecting People, Place, and Opportunity" and "Thinking Beyond Boundaries"). Nonetheless, we are pleased to apply for recognition as an extraordinary example of "Taking Care of What We Have."

B. Planning Leadership Principles

Although the Little Conestoga Blue/Green Corridor is submitted, at this time, as a Planning and Stakeholder Engagement project which could be under construction by this time next year, the Project Team strongly believes that it is a Project which exhibits strong planning principles.

- **Effectiveness**

- As planned and when completed, this Project will be the largest, single undertaking of its nature in Lancaster County. As such, the 1) sediment and nutrient-pollution reductions and 2) restoration of the carrying capacity of over 27 acres of floodplain will advance the County's and municipalities' compliance with the Chesapeake Bay Initiative and mitigate the damage caused by flooding within the Corridor.
- The stream, floodplain, and wetland restoration will restore biodiversity of both aquatic (blue) and land-based (green) habitats through the restoration of biologic and aquatic functions and the use of native plants. In other words, the blue and green landscape will be restored to its original, centuries-old appearance and function, improving the quality of life of residents, visitors, fauna, and flora.
- Not to be overshadowed by the restoration, floodplain, and biodiversity benefits, the multi-modal trail system will provide connectivity (to recreation, education/interpretation, employment/commerce, and essential service opportunities) within a captivating open space defined by its "blueway" and "greenway." The Project Team is keenly aware that this Project's trail system could connect to and also set in motion the extension of other trail systems.
- Just as the improvements have been well-planned, their long-term effectiveness will not be left to chance. The Project will establish long-term easements on private property by which to maintain 1) the restoration improvements within the Corridor and 2) the trail system for public use. In addition to the establishment of these two types of easements, the Project calls for the establishment of a long-term, endowment-based fund for annual maintenance of the restoration improvements.
- The Project's **Feasibility Study** was conducted under strict confidence. Therefore, it was not until the Study was completed that the Project was able to become a true example of stakeholder engagement (even during this time of COVID-19). We have met with each municipality several times and with each property owner at least once, either in-person or virtually. The Project has drawn keen attention and assistance from key partners, including Dan Zimmerman (Manager of Warwick Township), the Lancaster County Conservancy, PA Department of Conservation & Natural Resources (PADCNR), Lancaster County Planning Commission, Lancaster Clean Water Partners, and Little Conestoga Watershed Alliance. Engagement with State agency stakeholders has included the PA Department of Environmental Protection (PADEP) and PA Department of Transportation (PennDOT). Numerous meetings have been conducted with potential funders [including the PADCNR, PADEP, and US Army Corps of Engineers (ACOE)]; federal, State, and County officials; and civic/community partners.
- In blazing this trail, the Project Team has also been focused on the replicability of such an undertaking. We believe that this Project (and others like it) cannot be implemented fast enough. Every delay in completion of such Projects is another delay that leads to further impairment of the County's waterways and the Chesapeake Bay. We are heartened to find that State agencies agree and, as a result, are

prepared to expedite the review and permitting of this Project, which speaks volumes to the Project's effectiveness.

- **Innovation**

In large part due to the magnitude and gravitas of the Little Conestoga Blue/Green Corridor Project, four direct innovations will be set in motion:

1. The PADEP will review and approve the Project as a "single" permit, combining the range of improvements and encroachments under an expedited review and permitting process.
2. Matching PADEP's innovation in permitting, the scope of the Project will be a catalyst by which the PADEP will roll-out a long-anticipated funding vehicle, possibly in concert with PA Infrastructure Investment Authority (PennVEST) funding, paired to the outcomes of this Project.
3. The Project will allow for the establishment of sedimentation and pollution reduction credits, the "credit bank" for which the PADEP is willing to authorize via a relatively straight-forward "Memorandum of Understanding" process.
4. The ACOE has expressed a strong desire to provide funding to the construction of the first two, most-impactful areas of improvements; not simply because of the floodplain restoration aspects of the project, but because of the stacked ecologic benefits (streambank/wetland restoration, sedimentation/pollution reduction, and restored biodiversity) that this project will yield.

We strongly believe that few of these innovations would have been set in motion had it not been for this Project's scale and impact, and the extensive collaboration and engagement that have been at its core.

- **Use of Best Practices**

As thoroughly described in this Narrative, this Project exhibits numerous "Best Practices," especially those which advance *places2040*. The Project Team believes that one evidence of the Project's exhibited best practices is that we honestly debated whether this Project fit best in the category of "Taking Care of What We Have," when nominating this Project for award recognition. We believe the Project could also have been nominated in the categories of "Connecting People, Place, and Opportunity" (focusing on the multi-modal trail aspects of the Project) and "Thinking Beyond Boundaries" (focusing on the Project's benefits to the County, four municipalities, 40 property owners, Susquehanna River, and Chesapeake Bay).

Regardless of the category and in addition to the best practices already described in this Narrative, we believe that some of the best practices deployed for this Project surround engagement and collaboration with a wide range of stakeholders to the Project. Further, it has been vitally important for us to have recruited advisors to assist us in charting our way as we move from feasibility to stakeholder engagement, design/engineering and permitting to implementation.

Along the way, we have seen advisors and stakeholders, alike, volunteer to assist us as true "champions" for this Project's success. We do not take credit for this; rather it speaks to the enthusiasm with which stakeholders have responded to the Project and its benefits.

- **Replicability**

As mentioned above, this Project has generated its own gravitas as a result of its scope, benefits, and the support it has garnered from a wide range of stakeholders; not the least of which is the support it has garnered from the PADEP, in terms of 1) the Project's ultimate review and approval and 2) as a potential source of funding.

Through vision, determination, collaboration, and engagement, the Project Team has provided the PADEP with a perfect example of a substantive project that could be approved under the concept of “one permit;” in which, when we deliver what we promise, in terms of environmental gain, projects like this should be “greenlighted.” Meanwhile, because they have confidence in this Project, the PADEP is encouraging the Project Team to utilize a “Memorandum of Understanding” to establish the credit bank described above.

Further, it is through this same mix of attributes that the PADEP has the confidence in this Project by which to deploy an innovative funding vehicle, possibly in concert with PennVEST, by which to potentially fund a portion of the Project’s costs.

Because of the model we have built and the course we have set, the PADEP should have the confidence to greenlight other organizations, efforts, and projects which will yield similar benefits.

- **Partnerships/Collaboration**

In the interest of brevity, we will let the text on this topic speak for itself as already provided in the categories of “Effectiveness” and “Use of Best Practices.”

As a result of the engagement and collaborative processes we have implemented, we have developed a range of partnerships, from property owners to municipalities, review agencies to funders.

- **Effective Communication**

Effective communication is fundamental to sound stakeholder engagement, collaboration, and the building of partnerships. Effective communication is characterized by integrity, empathy, completeness, dexterity, and regularity. By doing so, you build trust and confidence that this Project can and will move from feasibility to detailed planning/permitting to implementation.

It must be noted that the above hallmarks of effective communication have been sorely tested in the age of COVID-19. How do you convey integrity and empathy, when your three best tools, in this curious time of no in-person meetings, are email, telephone, and meeting via “Zoom”? Simply, you must be determined, you must be thorough and genuine, and follow-up on all promises and commitments made. Be prepared for an occasional disappointment, but do not become discouraged.

And, above all else, be an attentive listener.

- **Civic Engagement**

Again, in the interest of brevity, you will find that civic/stakeholder engagement has been a consistent theme and guiding principle for this Project, especially after the completion of the **Feasibility Study**.

To the best of our knowledge, we have left no one out of the conversations around this Project.

- **Advocacy**

As a result of the above-described collaboration, communication, and civic engagement processes, the Project Team has achieved the following:

- Recruited a number of key advisors and stakeholders, who have, themselves, become advocates and champions for the project;
- Gained commitments for innovative and expedited review processes from key review agencies;
- Identified substantial funding sources to enable implementation/construction of the Project; and

- Developed a Draft Memorandum of Understanding, which is currently being reviewed by the four municipalities, in order to fund the next level of Design & Engineering, further quantify both the Project's costs and derived benefits, and establish the credit bank structure by which to secure compliance with the Chesapeake Bay Initiative.

More important than all of the above advocacy to-date is the advocacy and consensus building that has been initiated and continues with the 40 property owners. What we have found is that there is both 1) an overwhelming understanding of the importance of the streambank, floodplain, and wetland restoration work and 2) overwhelming support for this work to be completed on private property.

Naturally, what we have also learned is that there is somewhat less enthusiasm for implementing the multi-modal trail improvements on private property. To this end, we are committed to collaborating with each property owner to evolve a trail layout that achieves consensus among the property owners. Building this consensus will be a primary undertaking of the next level of Design & Engineering.

- **Consistency with Planning**

As more-fully described in the attached **Feasibility Study**, the Little Conestoga Blue/Green Corridor Project closely aligns with community planning goals and objectives and, in doing so, sets in motion actions which substantially advance the Chesapeake Bay Initiative (the compact struck between the States within the Bay's watershed, during PA Governor Ridge's administration).

The Project advances Lancaster County's Comprehensive Plan, **places2040**, adopted in 2018, as follows:

- Three of eight community priorities are directly addressed by the Project: transportation alternatives and connections; providing additional parks, trails, and natural areas; and cooperating, working together, and sharing resources across boundaries.
- Of five "Big Ideas," the Project directly addresses three: taking care of what we have; connecting people, place, and opportunity; and thinking beyond boundaries.
- Of seven "Catalytic Tools," the Project directly applies to five: practicing place-based planning and analysis; utilizing/implementing official maps; investing in infrastructure and public services; collaborating to implement the Comprehensive Plan's policies; and aligning community resources with these policies.
- Finally and very specifically, the Project advances the County's "Future Land Use and Transportation Map," which designates the Little Conestoga Creek as a Conservation Zone replete with trail system.

The Project also advances the County's **Active Transportation Plan**, adopted in 2019, as follows:

- Directly addressing community input, the Plan's "Goals" include improving access and connectivity; enhancing health; protecting the environment; creating economic opportunity; and increasing safety. Each of these goals is advanced by this Project.
- The Plan recommends "Active Transportation Improvements" including corridor improvements; mobility hubs; shared use trails which complete gaps in the network; connecting hubs of activity; improving safety; and identifying corridors that are ideal for linking communities and landscapes. Each of these improvements is embodied in this Project.
- Specifically, the proposed multi-modal trail advances the County's vision for a 15-mile, shared-use trail known as the "Greater Lancaster Heritage Pathway." This Project would directly facilitate the connection of the Village of Leola with Rohrerstown and the Penn Medicine/Lancaster General Health Suburban Pavilion; connect 200,000 residents with places of employment, essential services, and commercial/retail venues; and include on- and off-road components creating safe places to walk, ride,

and commute. In doing so, the Project's multi-modal trail will also connect to trail systems already existing on Franklin & Marshall College's Natural Lands, Lancaster County Solid Waste Management Authority's Dorwart Park, and adjoining properties (including The Crossings and Penn Medicine/Lancaster General Health Suburban Pavilion).

The Project also advances the following Water Resource Plans:

- **Little Conestoga Watershed Action Plan:** This Plan identifies a number of priority actions to be undertaken. The Little Conestoga Blue/Green Corridor Project would implement a range of these actions, especially in those improvements proposed north of Route 30.
- **Lancaster County - Pennsylvania Phase 3 Watershed Implementation Plan:** Among the measurable goals of this Plan, the "WIP" identifies sedimentation and nutrient reductions directly effected by Best Management Practices (BMP's), stormwater management initiatives, riparian buffers, stream and floodplain restorations, and land use practices. Advancing each of these goals and strategies is at the heart of this Project.

As is to be expected, this Project also advances the municipalities' Comprehensive Plans and Land Use Ordinance requirements which, by-and-large, identify this Corridor as a greenway to be overlain with non-vehicular trails. These Plans and Ordinance requirements are more-fully documented in the Project's **Feasibility Study**.

Finally, the Steinman Foundation, of its own initiative, has undertaken this Project, thus far at its sole cost, to develop a Project whose inherent intent is to advance the above-outlined planning initiatives. In other words, the Project's proposed improvements are not a secondary benefit of another land planning/land development project or initiative; simply, one of the very purposes of this Project is to advance these initiatives.

C. Award Category Criteria

Again, although submitted as a planning project, once constructed and completed, the Little Conestoga Blue/Green Corridor Project will have addressed the following criteria.

- **Preservation of Large Contiguous Areas of Agricultural Land**

In many ways, the focus of this Project is on addressing non-point source pollution in the forms of sedimentation, nitrogen, and phosphorous, at least a portion of which is the result of historical deforestation, farming, and low-head dam construction to power milling operations along the County's waterways. The Project Team believes that projects, like the Little Conestoga Blue/Green Corridor Project, and the innovative ways that they can be permitted and implemented provide optimism for the balancing of upland farming/production with substantive, downstream environmental restoration projects. In doing so, we can reverse past environmental damage and help to preserve agricultural production on the large, contiguous land areas required for same.

Against this overarching backdrop, it is important to note that this Project is located alongside of and includes the Miller Farm, located in East Hempfield Township, which is in its third century of agricultural production all of which have been under nine generations of Miller family ownership. As is to be expected, the Miller brothers are the first property owners with whom we met to discuss the Project, including the restoration and trail improvements conceptually planned for their farm. It is not hyperbole to recount that the brothers' reaction has been extremely positive and heartening to the Project and the Project Team. In turn, considerable care has been taken to address their long-term interest to maintain their farm in production, while planning the Project's improvements, establishing the above-referenced easements, and replenishing their fields with the placement of excavated legacy sediments where the soil mantle has, over the years, been depleted.

- **An Interconnected Network of Greenways and Open Space**

As thoroughly documented above in “Consistency with Planning,” the Project Team’s vision for this Corridor is wholly consistent with State, County, and municipal planning; in fact, it is one of the chief reasons for the undertaking of this Project.

However, in providing an interconnected network of greenways and open spaces, this Project anticipates that this Corridor will be highly-functioning and beneficial through the “stacking” of benefits from environmental gains (through restoration improvements to re-establishing biodiversity) overlain with an extensive multi-modal trail system.

As a result, this Project will add to the quality of life for property owners and trail users, from Lancaster County through the surrounding region.

- **Strategies to Preserve the Farmer as Well as the Farm**

As noted above and in the interest of brevity, this Project has the potential of effecting a broader framework by which upland agricultural production can benefit from well-planned and well-executed downstream restoration projects, especially when innovative programs and funding sources can be brought to bear. In this way, projects like the Little Conestoga Blue/Green Corridor have the potential to help preserve the farmer and the farm while accomplishing a substantial environmental gain; it need not be a choice between one or the other.

And, as also noted above, this project has been planned in collaboration with the Millers in order to address macro-level land-use and preservation, establishment of easements, and micro-level opportunities for the replenishing of soil on their land through the relocation of legacy sediments.

Together, these strategies have the opportunity to be replicated well beyond this Project.

- **Regional Management of Stormwater**

Where some restoration projects are understandably implemented in order to yield stormwater benefits for residential, commercial, and industrial land development initiatives, this project is solely undertaken to yield restoration benefits and pollution reduction, overlain with the benefits of a multi-modal trail system.

As a result, this Project does not provide, per se, stormwater detention, retention, or rate control. What it does provide is substantial floodplain restoration through the removal of over 140,000 CY of legacy sediment. The immediate impact of this action is to restore the carrying capacity of the floodplain which, for centuries, has been displaced by historical sedimentation.

By removing these legacy sediments, wetlands will be re-established within the floodplain. These wetlands will once again enjoy the biologic and hydrologic connection with the Little Conestoga Creek and underlying groundwater table, a connection that has also been impaired by centuries of sedimentation.

In these ways, flooding within this region of the Little Conestoga Creek will be mitigated (especially during short-term, high-intensity storm events) and the quality of stormwater runoff will be improved through the re-establishment of long-lost, highly-functioning wetlands.

- **Protection and Restoration of Natural Systems**

As previously described, in addition to the proposed flood mitigation and water-quality improvements, the biodiversity of both the blue and green landscapes of this Corridor will be improved through the use of native plantings, re-establishment of aquatic species, and the natural re-population of plant and animal communities that cannot thrive within the Corridor today. To do so, along a 2.5-mile, urbanized Corridor at the edge of four municipalities speaks volumes of the vision, impact, and importance of this Project.

- **Maintenance and Improvement to Community Infrastructure**

As documented in the *Feasibility Study*, this Project will require a substantial capital investment. Fortunately and to-date, the Project Team has identified potential funding sources that are substantial and, in some cases, highly-innovative. Consequently, we believe that the implementation of restoration and trail improvements can be completed at a modicum of local investment.

What then?

In order to maintain these infrastructure improvements, the Project Team has begun efforts to establish the framework and the funding mechanism by which to do so. As described above, both the restoration areas and trail would be overlain with a set of easements which will provide for the long-term maintenance and upkeep of both. Further, we have engaged in substantive meetings with various entities to be tasked with maintaining the restoration and trail improvements. These meetings have included discussions around the establishment of an endowment-based funding source for the restoration improvements and potential municipal funding sources for trail maintenance and upkeep.

In these ways, the ecologic benefit of the restoration improvements and the safe-functioning of the trail improvements will be maintained in perpetuity.

- **Maintenance, Rehabilitation, and Reuse of Existing Buildings**

No existing buildings are located within the easement areas that would be established for the Project.

- **Sustainable Supply of Clean Water**

As described in myriad ways above, one of the primary motivations for this Project is the restoration of the biologic and hydrologic functions of the Little Conestoga Creek and the wetlands adjoining it; wetlands which, long ago, were snuffed-out by the deposition of legacy sediments.

In making substantial investments to implement the restoration improvements, maintain them, and establish a long-term credit bank structure, the Project will yield clean water improvements that are sustainable. Indeed, these improvements will also be beneficial to individual property owners and the community at-large, from the Little Conestoga Creek downstream to the Chesapeake Bay, and for generations to come.

- **Stewardship of Our Heritage**

We cannot erase the damage done by centuries of sedimentation caused by past forestry, agriculture, and milling operations within this 2.5-mile section of the Little Conestoga Creek; nor, necessarily, should we. What we can do is reverse the trend, restore the ecology within this Corridor, and acknowledge that our heritage, sometimes, does come at a cost.

As has been mentioned above, the *Feasibility Study* identifies opportunities for education and interpretation. From trailheads located along the Corridor, wayfinding signage, to signage that explains the purpose and function of the restoration improvements, the Project will tell the story to future generations. It will be a complex story to tell accurately and without bias. That, beginning in the Colonial Period, settlers set in-motion changes to the landscape and waterways that would have long-term consequences. More importantly, in 2019, the Steinman Foundation undertook an initiative to reverse those consequences; an initiative which, through extensive stakeholder engagement, was embraced and implemented.

- **Promotion of Entrepreneurship and Local Businesses**

While not a primary driver of this Project, it is important to note that the Project Team's initial outreach has identified several companies, both along and outside of the Corridor, who want to be part of this project; not out of an entrepreneurial interest, but as good corporate citizens.

D. Other Attributes

Eleven months after the **Feasibility Study** was completed and since we began engaging with the community with regard to the Little Conestoga Blue/Green Corridor Project, it is important to note an interesting phenomenon.

The Project Team has been contacted by and/or received word about property owners, outside of the current 2.5-mile limits of this Project, who want their properties to be included in the Project's scope. They are primarily interested in seeing the restoration improvements extended to include their properties, addressing their concerns and their aspirations.

While we trust that this Project merits Leadership Awards recognition, these neighbors' outreach is its own reward.

Supporting Materials

In addition to the foregoing Applicant Information, Project Description, and Narrative, our Application Package also includes a digital version of the **Feasibility Study for the Little Conestoga Blue/Green Corridor** (Completed on October 1, 2019 and Revised in August 2020).