PROPOSAL FOR SCULPTURE
DEWEY PARK
BURLINGTON CITY ARTISTS INCLUSIVITY COMMISSION
BURLINGTON, VERMONT

“HERE I AM”

INCLUSIVE + ICONIC + INTERACTIVE + INSPIRING COMMUNITY INVOLVEMENT

BY JILL PITKO
SUMMARY

A. KEY DESIGN FEATURES of “Here I Am”

1) IT GIVES CONTEXT: “Here I Am” showcases the beauty of Burlington locals. Visitors will experience the past, present, and future of the North End.

2) THE EXPERIENCE IS A JOURNEY: This sculpture is a Journey of changing perspectives. Up close, portraits of Burlington locals will be featured on square columns. From afar, a Vermont nature scene or an inspiring message will become visible as columns merge into an optical illusion. Pathways will lead to 3 seating/climbing/playing areas where the optical illusion is best seen. Located on the seating areas are QR codes linking the audience to a neighbor’s story.

3) “Here I Am” IS INTERACTIVE: The residents of the North End will participate during the creation of “Here I Am”. Their faces and stories are the main feature of the sculpture. Dewey Park and “Here I Am” will be a congregation area for years to come, continually provoking discussion and serving as an historical archive of the neighborhood. The North End Community residents will Identify with the artwork. This public art element will inspire: INCLUSION, EQUITY, and BELONGING.

➢ STRONG COMMUNITY ENGAGEMENT DURING THE CREATION OF “Here I Am”:
  • Portraits of the Community
    o Photographic volunteer participation solicited through a partnering with local organizations: O.N.E. Community Center, Community Economic Development Office (Trusted Community Voices, My Brother and Sister’s Keeper), etc.
    o Local photographers and photography students will be petitioned to assist in the project: University Photography Departments and/or SOCAPA (School of Creative and Performing Arts at Champlain College).
    o The artist will ensure that diversity is represented by referring to the REIB demographic mapping of the area’s business/cultural participants as well as comparing with local census data.
  • Recorded Stories of the Community
    o In assistance with StoryCorps, stories of the North End will be recorded, shared via QR code link, and archived in the National Library of Congress.
    o This webpage will continually be maintained by StoryCorps and anyone in the Community can record and upload stories to the page in the future.
  • Vermont Nature Vista Contest
    o The background photos of Burlington will be awarded to local photographers.

➢ STRONG COMMUNITY INTERACTION WITH “Here I Am” FOR YEARS TO COME:
  • The community will continually visit to:
    o View the photos of friends and family
    o Listen to the ever changing stories of their neighbors
    o Gather to Relax, Play, and Meet with others
  • Annual Events: This artwork will be a gathering space to celebrate the neighborhood and its diversity in annual celebrations.
• Education outreach: the artist may also tour local schools with STEAM (Science, Technology, Engineering, Art, Math) projects correlating to the Dewey Park public art creation.

4) “Here I Am” IS COLORFUL, INVITING, ACCESSIBLE, AND POSSESSES FLEXIBLE DESIGN FEATURES:
This public art element has attractive positioning and accessibility with vibrant colors and brilliant lights.
- The vista and portrait images on the columns, the pavers, and the modular seating/play areas are colorful and will be especially appealing in the winter months.
- Solar lighting atop the columns and within blocks will invite the community.
- Accessibility follows US Play Area Guidelines for Mobility, Hearing, and Vision Impaired
- An initial site survey will finalize positioning and design. The design is flexible to accommodate the natural features of Dewey Park.

5) THIS PROJECT WILL BE EXECUTED WITH TECHNICAL EXPERTISE:
As a Mechanical Engineer and Project Manager with experience in public art, the artist has designed this sculpture with particular attention to the durability of chosen materials ensuring that it will enjoy a long life with little maintenance. This sculpture will be a source of enjoyment for years to come.
- USES TECHNOLOGY TO ENSURE DURABILITY, LONGEVITY, AND MAINTENANCE EASE
  • Thorough Research: This design is a result of many weeks of research. The artist has contacted multiple entities, not limited to: steel suppliers and fabricators, wide format printing and photo/graphic aluminum anodization specialists, engineers, paver suppliers and landscapers, concrete color pigment suppliers, solar light suppliers and electricians, concrete fabricators, mathematicians, etc.
  • Well Informed Choices: The artist has weighed the advantages and disadvantages of multiple materials and construction options. The final design is the most durable, cost advantageous, and easiest to maintain.
  • Climate Specific: The artist has taken into account the Vermont climate in designing this piece. Decisions have been made with regard to snow clearing, UV exposure, humidity/freezing/thawing effects on materials, etc. This artwork is site specific and will stand the test of time in the Burlington environment.
- EXPERIENCE IN PROJECT MANAGEMENT AND PUBLIC ART
  • 2012 Public Art Commission Winner, University College Dublin, Ireland (Budget: $120,000)
  • US Air Force Veteran, Project Engineer, Space and Missile Command, Construction of Satellite Tracking Stations in Thule AB, Greenland
  • Well Connected and Knowledgeable Network: The artist’s mentor, sculptor Sandra Bell, is a resource to the day. As her technician for over 6 years, Jill Pitko assisted with 5 of over 15 public art commissions.

B. BUDGET
- The budget is compiled from many quotes and design options.
Experience in Project Management gives the artist expertise in staying within the allotted budget.
Fabricators/contractors/engineers will be chosen for skill, expertise, timeliness, and cost.

C. PROPOSED TIMELINE
Experience in Public Art Commissions gives the artist expertise in coordinating with many entities and getting the job done within a reasonable and expected timeframe.

D. DETAILS AND LOGISTICS
18 square tube steel columns (1ft x 1 ft x 10ft), staggered in a colorful brick paved circular footprint, will feature hundreds portraits of the Burlington community, natural Vermont vistas, and inspiring messages. Three paved pathways will lead viewers to modular block seating/climbing areas where the different optical illusions will emerge while listening to recordings of their neighbor's stories.

E. PHOTOS AND SITE MAP

F. APPENDIX – ADDITIONAL TECHNICAL DETAILS
1) Well Honed and Flexible Design:
   • This sculpture has been designed to withstand the elements and poses no health risk or danger to the public.
   • Once the initial site survey is completed, the footprint and number of columns can be adjusted. Likewise, the seating configuration is modular and therefore easily redesigned around trees.

2) Design choices based on Durability, Longevity, Low Maintenance:
   Materials have been chosen because they are the most durable, long-lived, cost-effective, and easiest to maintain. The following is an excerpt of the artist's extensive research in a variety of technologies:

   A. COLUMNS AND GRAPHICS
   ✓ Internal Armature: Galvanized Carbon Steel Square Tubes (powder coated)
   ✓ Cladding: OP3 UV Resistant Acrylic Plexiglas
   ✓ Printing: Backprinting on Acrylic
   ✓ Lighting: Solar Lighting ('Post' lights atop each column)

   B. CIRCULAR FOOTPRINT OF COLUMNED AREA, PATHWAYS, AND SEATING/CLIMBING AREA
   ✓ Precast Colored Concrete Bricks and Concrete Slab Cladding by Lanxess
   ✓ Lighting: Solar Lighting (Embedded paver lights at the foot of columns, within the pathways, and embedded within the concrete slabs of seating blocks)

   C. AUDIO RECORDING AND ARCHIVAL OF NORTH END STORIES
   ✓ Story Archival: Listen, Honor, Share
   StoryCorps will assist the audio recording and archival of neighborhood stories. Stories of the North End could include subjects like: family, friendship, hardship, hope, challenges, occupations, backgrounds, cultural festivities, etc. Listening will promote understanding. Their stories will bridge and unite the community.
   ✓ QR Codes
At 3 seating locations around the columned area, an acrylic plaque picturing a site specific QR code will be mounted within the concrete seating blocks. Once scanned, the QR code will connect the viewer’s smart phone to a URL (webpage) and MP3 file within the StoryCorps archive.

LOW MAINTENANCE and SAFE:
- Generating a Static QR code is a one-time cost. The QR code will be permanently connected to the URL without fees.
- Using a QR code is SAFE. Once the QR code is generated, it unalterable and remains a safe way to reach a website.

D. Math behind the OPTICAL ILLUSION (Forced Perspective/Parallax Effect)
To determine the scaled factor by which images of far columns must be increased so that the near and far columns appear the same size, a simple mathematical problem is solved using the proportional ratio of the distance the columns are to the viewer.
A. KEY DESIGN FEATURES of “Here I Am”

1) GIVES CONTEXT
   - WHO are our neighbors in the Burlington Community?
   - HOW do we see our neighbors?
   - HOW do we include?
   - ARE my neighbors like me? Do we all feel belonging?

2) EXPERIENCED AS A JOURNEY
   - Perspective
   - Connection
   - Unity
   - Understanding
   - Performativity
   - Unique

3) IT IS INTERACTIVE
   - Strong Community Engagement During the Creation of “Here I Am”
     inspires: i. Equity, ii. Inclusion, iii. Belonging
     - Portraits of the Community
     - Recorded Stories of the Community
     - Vermont Nature Vista Contest
   - Strong Community Interaction with “Here I Am” for Years to come
     - View, Listen, Relax, and Play
     - Celebrate with Annual Events
     - Educational Outreach with STEAM

4) COLORFUL, INVITING, AND ACCESSIBLE WITH FLEXIBLE DESIGN FEATURES
   - Colorful Pop
   - Inviting Low Energy Lighting
   - 360 Degree View: Iconic, Intimate
   - Accessible
   - Flexibility Accommodates Original Landscaping

5) EXECUTED WITH TECHNICAL EXPERTISE
   - Uses Technology to Ensure Durability, Longevity and Maintenance Ease
     - Thorough Research
     - Well Informed Choices
     - Specific to Climate
   - Experience in Project Management and Public Art

B. BUDGET
C. PROPOSED TIMELINE

D. DETAILS AND LOGISTICS

E. PHOTOS AND SITE MAPS

F. APPENDIX – ADDITIONAL TECHNICAL DETAILS

1) WELL HONED AND FLEXIBLE DESIGN
2) DESIGN CHOICES ARE DURABLE, LONG-LIVED, AND LOW MAINTENANCE
   A. Columns and Graphics
   B. Circular Footprint of Columned Area, Pathways, and Seating/Climbing Area
   C. Audio Recording and Archival of North End Stories
      ➢ Story Archival: StoryCorps
      ➢ QR Codes
   D. Math of Optical Illusions (Forced Perspective/Parallax Effect)
A. KEY DESIGN FEATURES of “Here I Am”

1) “HERE I AM” GIVES CONTEXT: “Here I Am” showcases the beauty of Burlington locals. Visitors will experience the past, present, and future of the North End.

WHO are our neighbors in the Burlington Community?

- WE ARE DIFFERENT AND DIFFERENCE MAKES US STRONG. The Burlington Community, like America, is a diverse ecosystem of immigrants and native peoples. The very fabric of the Community’s identity is made up of individual threads - the people themselves.

HOW do we see our neighbors?

- PORTRAITS OF THE COMMUNITY. This interactive place making element will feature the portraits of the individuals that make up the city of Burlington. This sculpture will show how each person is integral to the fabric and strength of the community. The fabric is made strong by each single contribution.

HOW do we include?

- VISTAS OF VERMONT. The weave of each thread in concert with the others, makes a community fruitful. This sculpture also features vistas of Burlington and Vermont. The individual portraits are the foundation of the community, they will merge into the beauty of the natural surrounding area.

ARE my neighbors like me? Do we all feel belonging?

- HEAR NEIGHBOR’S STORIES THAT DEFINE THEM. Seating areas will gather young and old alike to relax and play. QR codes will be placed in these areas, leading the visitor to a website where they can hear a neighbor’s shared stories, learn about the people right next door to them, and discover how each has enriched the fabric of their community. These stories can be added by everyone in the future and archived as a larger, living history of the area.
2) “HERE I AM” IS A JOURNEY: This sculpture is a Journey of changing perspectives, just as enlightenment and progress is.

- **PERSPECTIVE:** Changing perspectives might change perspective. Adults and kids alike will enjoy visiting Dewey Park to wander in and amongst the columns looking for their friends and family pictured on the columns. They will be featured side by side with their neighbors, in equal footing with all members of society. Residents will see that their Community has embraced them: their identity, their physicality, who they are.

- **CONNECTION:** Immigrants came to the Vermont and Burlington shores seeking a better life: financial opportunity, freedom to practice religion, freedom from persecution. Some came from abroad – waves of French Canadians, Irish, and Eastern Europeans looked for work in the lumber and textile industries. Others moved from within our nation, fleeing slavery. Today, Burlington still welcomes refugees from other countries and provides a home for ‘political refugees’ from within the nation. The landscape of the human heart also changes when we confront others who are different from us. Sometimes leading to segregation, stratification, and discrimination. If we take the time to learn about our neighbors we will find differences on the surface, but underneath there is commonality. This sculpture challenges the viewer to find that common ground. All the portraits are residents, all consider the North End and Burlington their home. Can we listen to their stories and find unity?

- **UNITY:** A Stronger Fabric, a Fruitful Community. This artwork will
show that individuals are important to the Burlington Community, for without, there could not be a bigger picture, a stronger fabric, a fruitful community. The diversity, the texture of the fabric makes Burlington a vibrant place. This artwork recognizes the contributions of all.

- **UNDERSTANDING: The Journey of Understanding.** Residents and visitors will play and wander around and within the columns, trying discover the larger images of the Burlington area. Up close we are just individuals, but from afar we see that everyone is integral to the larger whole. Equity, Inclusion, and Belonging is a journey towards understanding. There are many ways to view the sculpture, there are many backgrounds from which the Burlington community hails, there are many ways to pursue your dreams. The sculpture’s images are constantly brought in and out of perspective. It is that journey that mimics life. The journey impacts an understanding of ourselves and our relationship to the greater community.

- **PERFORMATIVITY: This public art element has Performativity.** The artwork invites passerbys to explore it. A visitor’s first impression might provoke curiosity. Upon exploring it: seeing the details of the portraits, discovering the angle at which the columns merge into a vista, or noticing a QR code and finding where it leads - these further experiences will produce varying emotional responses. The sculpture has many perspectives, making it a unique visit every time. “It is the process of becoming that is exciting; it is not the point of arrival.” Marco Cianfanelli, sculptor referencing “The Capture Site” of Nelson Mandela.

- **UNIQUE – PARALLAX EFFECT, ANAMORPHIC ART: This sculpture is an optical illusion!** This sculpture employs the use of forced perspective and anamorphic art techniques to scale images on each column so that when viewed from afar, they appear to be the same size.
  - **Seating Areas are Optimal Vantage Points:** There will be seating areas at the 9, 12, and 3 o'clock positions (if standing on Spring Street looking towards Dewey Park) surrounding the central columns located within the paved circle.
These seating areas are located at a specific distance where the optical illusion is best viewed from i.e. optimal vantage points where the pictures on the columns merge or inspiring messages will appear.

- **View Vistas, Discover Inspiring Messages:** At 9 o'clock and 3 o'clock, if the viewer sits on the blocks (20 feet away from the circle) at the end of the pathway and looks towards the columns, the columns will merge into a picture of the Vermont landscape. When the viewer is seated in the blocks at the 12 o'clock position (or standing on Spring Street at the 6 o’clock position, 10 feet away from the circle of columns), the audience can discover inspiring messages. The letters will spell “I Am Burlington” or “Here I Am VT”.

- **Depth of Field and Scale:** As you know, objects close appear larger than those in the distance. Therefore the columns in the distance appear smaller (and likewise for the pictures printed on each column). To create the illusion of similar depths, the images must be scaled by the appropriate ratio proportional to the distance so that far and close columns will appear to be the same size.

- **Optical Illusion:** This sculpture uses forced perspective. The images on the far columns are stretched (increased in scale) in relation to the columns close to the viewer. By doing so, when viewed from the
optimal vantage point, the images on the columns appear the same size – the images appear as if they are at the same perceived depth. Similarly, the distances between the columns are distorted when viewed from afar. The artist uses this distortion and the parallax effect to create the illusion that the columns appear as a flat wall. The images on the columns will merge into one continuous picture.

3) IT IS INTERACTIVE: The residents of the North End will participate during the creation of “Here I Am”. Burlington faces and stories are the main feature of the sculpture. Dewey Park and “Here I Am” will be a congregation area for years to come, continually provoking discussion and serving as an archive of the history of the neighborhood. The North End Community residents will identify with the artwork because they will have helped to create it. This public art element will inspire: INCLUSION, EQUITY, and BELONGING. Education and Continual Engagement are the key factors in breaking down racial, ethnic, religious, and gender based barriers. This artwork is interactive – the artwork is an opportunity.

i) Strong Community Engagement During the Creation of “Here I Am” inspires EQUITY:
PARTICIPATE: The people – the heart of this city – will be featured in this artwork. In a series of community events, the residents of Burlington will volunteer to have their portrait photographed. The diversity of the Burlington population will be highlighted, spanning across race, ethnic group, age, and occupation. The portraits will be placed side by side, as neighbors, portraying the larger Community. Every resident will be shown as important part of the whole structure.

- Hundreds or thousands of portraits could be featured. To accomplish this photography the artist will partner with local organizations to assist in the portrait taking. The University of Vermont, Champlain College, and Community College of Vermont Photography Departments will be petitioned to accompany the artist while visiting local organizations to photograph residents (*once permission is obtained*). Local photography clubs and SOCAPA (School of Creative and Performing Arts at Champlain College) students could also assist the artist photograph at markets or special events throughout the year. Students and Photoshop enthusiasts could also help with the editing of the larger mosaic.

- In partnership with many organizations, the Community will be photographed. Particular attention will be given to photograph those
of diversity and/or minority in the community and residents of the North End. Local organizations that promote and embrace difference will be petitioned: REIB outreach programs; More than a Market; University of Vermont (ALANA, Center for Cultural Plurism, Mosaic Center, Prism Center); United Way of Northwest Vermont; Vermont Professionals of Color Network; Community Economic Development Office (Trusted Community Voices, My Brother and Sister’s Keeper, etc.) as well as collaborating with local establishments like Front Porch Forum; Libraries; O.N.E. (Old North End Arts and Business Network); Schools; Community centers; Senior living centers; VFW; Rotary Club; Shriners; Boys/Girls Club; Burlington Parks, Recreation, and Waterfront; Neighborhood Planning Association; University of Vermont Medical Center; Fletcher Hospital; and the list goes on!

❖ **JOIN in on Community Events:** The artist (and other collaborating volunteers) can photograph others in the community by hosting a booth and joining in at markets and events: Dewey Park Market, Green Up Day, and more!
  o Partnering with ‘More than a Market, Historic New England’ can connect the past to the present of the North End. Depending on the quality of archived materials, portraits of the past could also be added to the columns.

❖ **ENSURE that Diversity is Represented:** The artist will ensure that diversity is represented by referring to the REIB demographic mapping of the area’s business/cultural participants as well as comparing with local census data.

❖ **PRESERVE:** The “Selfie” Images will be printed in a mosaic pattern on each surface of a square steel column. Different to mosaic collage software, the images of the people featured here will retain the true colors
the photograph. Only the portrait backgrounds will change color as needed to match an overall image.

ii) Strong Community Engagement During the Creation of “Here I Am” inspires INCLUSION:

- **SEE:** Each photograph is important to the larger image. Each person is important to the Burlington Community. Viewed from afar, the individual mosaic photographs will morph into a larger nature vista of Burlington. Featured scenes may be awarded to a local photographer via a community-wide contest!
  - The sculpture’s main feature is a circular paved footprint where 18 Columns will be staggered. From certain angles, the columns will merge into a 4 thematic collages. 2 of those collages will feature a colorful backdrop highlighting the beauty of Vermont while the other 2 collages will contain inspiring text.
  - The photos in this proposal of ‘Lake Champlain with Mountains’ by Sven Kielhorn and ‘Autumn Reflection’ by Richard Ricciardi are just examples of photos that could be the final background. Local photographers could compete to win one of two background photographs that showcase the natural surroundings: Adirondacks, Lake Champlain, Camel’s Hump, Autumn Trees, Waterfalls, Rolling Hills, etc.
  - At night the columns will alight. No column will be brighter than the others, but as a whole, their brilliance will merge into a beacon of inclusivity and beauty.

iii) Strong Community Engagement During the Creation of “Here I Am” inspires BELONGING:

- **LISTEN:** This sculpture will highlight the local heroes of the Burlington Community, especially those whose story is forgotten in
history books, people of color or oppressed groups, or the everyday neighbor who is a pillar in their own families.

- A cross section of locals who volunteer to be interviewed can share a story of their choosing: who they are, what they do, or their relationship to Burlington and its culture. Story Corps will partner with the artist to record audio from the residents. StoryCorps is an American non-profit organization whose mission is to record, preserve, and share the stories of Americans from all backgrounds and beliefs. StoryCorps has a number of recording tools particularly their StoryCorps Connect App which gives the ability to record as many times as you’d like regardless of location.

- These stories can be archived for easy listening and shared. At various seating areas in the sculpture permanent QR codes will be affixed, where from a Smartphone, the code can be scanned, linking the visitor to a StoryCorps website page with the archived Burlington recording in MP3 format. At least 3 QR codes will be located around the park and all stories can be accessed from the same webpage.

- All uploaded interviews are indefinitely archived in the American Folklife Center at the Library of Congress where future generations can listen in. Additionally, anyone in the Community can record and upload stories to the page in the future. The Connect App by StoryCorps is easy to use. This webpage linked by the QR codes will continually be maintained by StoryCorps.
PARTNER with ‘More Than A Market’ “More than a Market is a multi-year project that explores the immigrant experience in Burlington and Winooski, Vermont, through the stories of new American-owned markets in the past and present. [Exploring] markets of the past [and featuring] interviews with current market owners and their customers, contemporary photographs, and a community-generated photography.” Adding both portraits of the past onto the columns and possibly recorded historic North End stories, would highlight how this area has always been home to immigrants and is no stranger to diversity.

iv) Strong Community Interaction for Years to come inspires EQUITY:

UNDERSTAND: By Listening to the Stories. The community will relax in 3 seating areas – pausing to hear a neighbor’s story in an intimate setting like conversing with a friend. Maybe the story is similar to their own, inspiring empathy. Maybe it is unlike what they’ve experienced in their own lives. Perhaps listening creates understanding and compassion, a call to action, a call for reform. This sculpture will open the dialogue to racial ‘otherness’, ignorance, or stereotypes as seen on TV.

v) Strong Community Interaction for years to come inspires INCLUSION:

IDENTIFY: This Public Art will Involve the Community. When a community participates in an artwork, they feel an emotional connection to the place. Art adds to their identity. Art brings people together. Art inspires us to include, to respect, to respond.

- Perfect as a meeting place, seating area, and photo opportunity, this tasteful and fun sculpture will draw visitors to area and be embraced by the locals.
This sculpture is an optical illusion, a maze, a seat, it is a vibrant portrait of the Burlington community.

vi) Strong Community Interaction for years to come inspires BELONGING:

❖ LEARN: Inspire the next generation of Burlington and uncover the Secrets to making Sculpture by Exploring Optical Illusions! The artist’s background besides sculpture is Mechanical Engineering and STEM/STEAM Educational outreach. The artist would love to tour local schools concurrently with the build to explain the STEAM behind Dewey Park public art project. Scaling a model and understanding depth of field demonstrates the practical and everyday usage of Math! Students can learn how STEAM is integral to life-long learning and critical thinking skills!

❖ CELEBRATE: This sculpture is a Celebration, an Annual Event to embrace diversity in the Burlington Community!

- An annual event could be organized to celebrate diversity. Participants will be encouraged to take selfies! Upload their photos, record more stories, and continually add to the online archive. Additionally this event could also be a fundraiser for other community projects.
- Attendees will make cultural art and learn the local history: the contributions of people of color, oppressed groups, and local heroes.
- Ongoing throughout the year: within the standing columns, the public will gather for local storytelling. Host small circle discussions on local topics. Serve as a public forum or concert space.

4) COLORFUL, INVITING, AND ACCESSIBLE WITH FLEXIBLE DESIGN FEATURES: This public art
element has Attractive Positioning and Accessibility with Vibrant Colors and Brilliant Lights. This interactive place making element is vibrant – just like the residents of Burlington!

- **COLORFUL POP:** From the images on the columns, to the modular seating/play areas and paved brick footprint – vibrant color will invite! Careful consideration was given to envisage the sculpture in every season: what would compliment the full leaf of summer? What would brighten the monotone winter months? As a native of Syracuse, NY, the artist knows first hand the weather New England receives. The stunning vistas and patterns of color on the columns will be a striking beacon in the backdrop of snow.
  - The images on the columns will be bright and vibrant and lightfast, depicting the full diversity of residents and the spectacular surrounding nature.
  - The modular seating blocks will be colored with UV resistant pigment mixed with durable concrete.
  - The circular footprint of the columned area and the paths leading out the optimal vantage points/seating areas will be paved in pigmented concrete bricks and compliment the colors featured in the columns.

- **INVITING LOW ENERGY LIGHTING:** This park and public art element will be a beacon for the community. It will show greater Burlington that the North End neighborhood is here and welcomes everyone. Many features within this public art element will be illuminated.
  - Each square tube column will have a solar light atop.
  - The columns will also be lit up from below with solar lights embedded
within the concrete pavers, making the images on the columns visible at any time of the day and night.

- The modular seating blocks will also contain solar elements at various locations around the seating area. The many lights will attract visitors during all months and times, providing a safe and beautiful environment to gather.

**360 DEGREE VIEW:** The scale and height of the sculpture make an attractive welcome to the common area from every angle.

- **ICONIC:** Due the columns’ spacing, the whole of the park will be visible at any point in time. The sculpture will be a central feature complimenting the surrounding greenery and neighborhood.

- **INTIMATE:** The artwork is sizable, but seating areas and little niches make it an intimate meeting area as well. Walking in either direction, beautiful images of Burlington grab your attention. Meander in and out of the columns and see the detail of each individual portrait. Relax on a seat and listen to a local’s story.

**ACCESSIBLE. In accordance with the US Government Guidelines for Accessibility in Play Areas, the following features are included in the design:**

- The QR code will also be displayed in braille.
- All StoryCorps archived material is transcribed for the hearing impaired.
- There will be a minimum 32” clearance route for wheelchairs beside columns. Wheelchairs will have access to view every column. The portraits will be located on the lower third of the sculpture so that children and wheelchair bound are able to view.
Optimal viewpoints to view the optical illusions are seated positions. This allows wheelchair users to remain in their chairs and likewise experience.

Brick pavers are suitable for wheelchairs and are embedded within the park grass allowing for a smooth and even transition from grass to brick.

Modular seating blocks are of minimum heights for elderly and physically challenged.

Lettering of inspiring messages are color contrasted and greater than 4.5:1 with sufficiently large font (greater than 2 ft.).

Vista images (for optical illusion) will be chosen with colorblindness in mind, avoiding sensitive combinations.

**FLEXIBLE: The location and footprint of this sculpture can be changed to match an initial site survey.**

- Upon awarding, the artist will subcontract a surveyor to map the area. Utilities will provide ‘Dig Safe’ maps to further ascertain the location of underground utilities. These will be given to the engineers and foundation contractors for evaluation and determination of sculpture requirements.
- Depending on the size of the footprint, the number of columns/diameter of center circle can be adjusted.
- The location of seating blocks at each seating area can also be changed to allow for trees and park features.
- Subcontracted engineers will advise if adjustments are needed to the dimensions of the circular footprint, lengths of various paths, and locations of the modular blocks in the seating area in regards to sidewalk depth requirements, boundary subsurface utilities, and landscape features.

5) EXECUTED WITH TECHNICAL EXPERTISE: The artist has experience. As a Mechanical Engineer and Project Manager with experience in public art, the artist has designed this sculpture with particular attention to the durability of
chosen materials ensuring that it will enjoy a long life with little maintenance. This public art element will be easy and affordable to maintain. This sculpture will be source of enjoyment for years to come.

 пенетрирует TECHNOLOGY TO ENSURE DURABILITY, LONGEVITY, MAINTENANCE EASE

- THOROUGH RESEARCH: Many technologies were explored to determine the best materials and many businesses were consulted to find the best value for money. The artist has contacted multiple entities to design the sculpture, not limited to: steel suppliers and fabricators, wide format printing and photo/graphic aluminum anodization specialists, ink suppliers, engineers, paver suppliers and landscapers, concrete color pigment suppliers, solar light suppliers and electricians, concrete fabricators, mathematicians, etc.

- WELL INFORMED CHOICES: The artist has weighed the advantages and disadvantages of multiple materials and construction options:
  - Pavers vs. Poured concrete slab
  - Concrete Paver vs. Stone vs. Brick
  - Stainless Steel (316/304) vs. Galvanized Carbon Steel square tubes
  - Extruded vs. manufactured columns vs. manually welded columns
  - Backprint of acrylic/polyester vs. Vinyl laminate printing vs. Photo anodization of aluminum
  - Printing with UV resistant inorganic inks vs. organic pigments
  - Modular Concrete Blocks vs. Glass Fiber Reinforced Concrete benches
  - Solar lighting vs. Power grid connection

- SPECIFIC TO CLIMATE: This sculpture has been designed to withstand the elements and poses no health risk or danger to the public. Careful attention has been given to the structural strength and composition of this piece so that it is suitable for the Vermont climate. The artwork will withstand the weight of an adoring public or a heavy snowfall. The footprint can be easily shoveled/plowed free of snow.
Please see the next section for further details.

**EXPERIENCED PROJECT MANAGEMENT AND PUBLIC ART**

- 2012 Public Art Commission Winner, University College Dublin, Ireland (Budget: $120,000)
- US Air Force Veteran, Project Engineer, Space and Missile Command, Construction of Satellite Tracking Stations in Thule AB, Greenland
- Well Connected and Knowledgeable Network: The artist’s mentor, sculptor Sandra Bell, is a resource to the day. As her sculpture technician for over 6 years, Jill Pitko assisted with 5 of over 15 public art commissions.
B. DETAILS AND LOGISTICS

Dimensions*:
- Total area = 60ft x 30 ft x 10ft
- Columned Footprint = 21ft diameter
- Square Column Dimensions = 1 x 1 x 10ft
- Number of Columns = 18
- Portrait Dimensions on Columns = 2in < x < 4in
- Portrait Location on Columns = 2ft < x < 5ft

Optimal viewing distance of vistas = 20ft
Optimal viewing distance of lettering = 10ft
Pathways = 3 concrete brick paver paths
Pathway Length from circle = 10 ft < x < 20ft
Pathway Width = 1ft < x < 3ft

Seating area: 3 locations
Modular Seating/Climbing Block dimensions:
- 1.5 x 1.5 x 1.5ft
- 1 x 1 x 1ft
- 2 x 1 x .5ft

Materials:

COLUMNS:
- Galvanized Stainless Steel Square Tube
- UV Filtering Acrylic Panels
- Latex Ink Digital Print
- Solar Lights (mounted on top, ~1x1x.5ft)

PATHS/CIRCULAR COLUMNED AREA:
- Concrete Foundation with Substructure
- Colored Precast Concrete Brick Pavers
- Solar Light Pavers

SEATS:
- Precast Colored Concrete Panels
- Reinforced Concrete Base
- Solar Lights (embedded in seat concrete cladding)
Substructure:  

Columns: The steel columns will be hollow and structurally strong unto themselves. The columns will be secured with brackets at their base to a fortified concrete foundation substructure as prescribed by foundation and structural engineers.

Foundation/Base Support: The reinforced concrete foundation will be embedded within the ground and paved at ground level with fixings to be mated to the steel.

Position:  

The sculpture will be placed roughly centered within the green space of Dewey Park. Care will be given to remove and replant trees if necessary. Pathways will be added to lead to seating/listening areas. Ample space surrounds the pathways, allowing for market tents. See below map indicating where tents may be located.

Colors:  

The backgrounds of the portrait photographs and larger mosaic collages will be bright and colorful against the neighborhood skyline. It will be especially vibrant in the winter months. UV resistant latex ink and UV filtering acrylic panels will ensure that the printed colors will not fade for the lifetime of the sculpture. Likewise, the pigments used in concrete
pavers and seating blocks will be made with special UV resistant materials and will be lightfast, durable, low maintenance, and long lived.

**Engineering:** Engineering will be handled by the subcontracted foundation/structural engineers.

**Installation:** Installation will be handled by foundation contractors or separate subcontract.

**Lighting:** Low voltage lighting will be mounted to the top of each column, embedded in between pavers at the base of each column, and within randomly selected seating blocks. Solar panels will be their main energy source.

**Accessibility** Multiple features accommodate mobility, hearing, and sight impaired individuals. Please see Section A.4 for specific details.

**Landscaping:** The columned area and paths to the seating areas will be lain with colored concrete pavers. Surrounding areas will be grass as is currently. Care will be given to remove and replant trees if necessary, but in most cases the sculpture design is flexible and will allow for slight changes in location and seating patterns. A subcontracted site survey will determine final design. The artist will collaborate with Parks staff throughout the process to communicate changes and arrange for continued maintenance.

**Insurance:** The entire process off site and during installation periods will be covered throughout by individual subcontractors.
C. PROPOSED TIMELINE

Stage I: Solicit Community Participation: Portraits and Recordings
• Contact entities to assist photography 12 weeks
• Contact StoryCorps to assist recording
• Outreach to organizations: advertise and market (coordinate with events, set up booths)
• Advertise Vista Photograph Contest
• Photograph Community
• Photo Editing
• Scaled Graphic Manipulation for Printing

Stage II: Site Survey, Engineering, and Design Finalization (may occur earlier/concurrently with Stage I if snow is not a problem)
• Site Survey 6 weeks
• Finalize Design with Engineers
  o CAD
  o Substructure Foundation Requirements Defined
  o Internal Armature Requirements for Seats Defined
• Coordinate with local Contractor for build of Substructure Foundation
• Apply/Secure Building Permits

Stage III: Procure and Fabricate 7 weeks
• Seats/Pathways
  o Procure pigment for concrete
  o Fabricate concrete brick pavers
  o Fabricate colored concrete cladding blocks for seats
• Columns
  o Order Steel Square Tubes
  o Deliver Steel Square Tubes to Metal Fabricator
  o Metal Fabricator to weld ‘feet’ brackets to secure column to foundation fixings and weld steel ‘cap’ to column top to cover and mount solar lights
  o Powder coat exterior
• **Graphics**
  - Order acrylic panels
  - Finalize and Prep Graphic Files
  - Printing
  - Acrylic Panel Sealer/Anti-graffiti coating sealer Application

**Stage IV: Foundation and Installation**  
8 weeks  
• Foundation  
  - Foundation and Pathway Excavation  
  - Lay Foundation of circular footprint/install fixings  
  - Build Concrete Seating Foundation  
  - Lay and Compact Gravel for Paths  
• Paver installation  
• Mount colored concrete cladding onto seating armature/foundation

**Stage V: Transport/Siting/Installation**  
3 weeks  
• Column Installation  
• Solar Lights Installation (within pavers, within seats, atop columns)  
• Acrylic Panel Installation

**TOTAL**  
36 weeks

Timelines obtained from supplier vendors and contractors are as of December 2021. Material availability is subject to change and must be reconfirmed upon ordering. Due to high construction demand and supplier shortages in the current economic climate, prices and timelines may fluctuate.
## D. PROPOSED BUDGET

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Survey</td>
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</tr>
<tr>
<td>Metal Fabricator/Welding Services</td>
<td>5,000</td>
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<tr>
<td>Carbon Steel Square Tubes (1x1x10ft, 250, galvanized)</td>
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<tr>
<td>Engineering (Structural/Foundation) and CAD</td>
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<tr>
<td>UV Filtering Acrylic Panels</td>
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<tr>
<td>(Anti-Graffiti Sealant and Adhesive)</td>
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<tr>
<td>Graphics Printing</td>
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<tr>
<td>Photography Equipment, Services, and Advertising</td>
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</tr>
<tr>
<td>Audio Recording Equipment/Support</td>
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<tr>
<td>Photoshop/Graphic Editing</td>
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<td>Colored Concrete Pigment, Concrete Brick Paver/Concrete Seat Cladding</td>
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<td>Fabrication, Sealant</td>
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<td>Foundation</td>
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<td>Paver Installation and Sealant Application</td>
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<tr>
<td>Powder Coat Columns</td>
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<tr>
<td>Solar Lights (columns, seating, pavers)</td>
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<tr>
<td>Artistic Fee</td>
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</table>

**TOTAL:** $150,000

Quotes obtained from supplier vendors are as of December 2021, prices are subject to availability and must be reconfirmed upon ordering. Due to high construction demand and supplier shortages in the current economic climate, prices and timelines may fluctuate.
E. PHOTOS AND SITE MAP
F. APPENDIX — ADDITIONAL TECHNICAL DETAILS

1) Well Honed and Flexible Design:
   - This sculpture has been designed to withstand the elements and poses no health risk or danger to the public. Careful attention has been given to the structural strength and composition of this piece so that it is suitable for the Vermont climate. The artwork will withstand the weight of an adoring public or a heavy snowfall. The footprint can be easily shoveled/plowed free of snow.
   - Once site survey is completed, the footprint and number of columns can be adjusted. Likewise, the seating configuration is modular and therefore easily adjusted around trees.
   - After photographing the community, the artist will ensure that diversity is represented by referring to the REIB demographic mapping of the area’s business/cultural participants as well as comparing with local census data.
     - If sufficient photographs have been taken to reflect the above, the size of the photographs on the columns can be adjusted according to the number of participants.

2) Design choices based on Durability, Longevity, and Low Maintenance: The artist has strived to obtain the most durable, long-lived, cost-effective, and low maintenance materials. The following is an excerpt of her design choices and thorough research in a variety of technologies:

A. COLUMNS AND GRAPHICS
   Internal Armature: Galvanized Carbon Steel Square Tubes (powdercoated)
   Cladding: OP3 UV Resistant Acrylic Plexiglas
   Printing: Backprinting on Acrylic
   - 18 Columns will stand in a prescribed formation. The position of these columns are determined from the Parallax effect and Scale/Depth of Field formula. From various vantage points in the seating areas, the columns will merge revealing an optical illusion: a Vermont nature vista or an inspiring message.
   - Images of Burlington resident portraits, landscapes of Vermont, and inspiring messages will be backprinted onto sheets of UV filtering acrylic panels. The exterior of the steel columns will be clad in these acrylic
panels. These panels will be glued with a strong 2 part adhesive to prevent moisture and will be bolted to the columns to prevent theft.

- The acrylic panels will protect the graphics from UV rays and prevent fading. They will also protect the images from being scratched or weathered by the elements. Additionally the acrylic panels will be coated in an Anti-Graffiti solution, resulting in easy cleaning in the event of vandalism.

- The structurally strong, corrosion resistant galvanized steel columns will be secured with brackets at their base to a fortified concrete foundation substructure as prescribed by foundation and structural engineers. The reinforced concrete foundation will be embedded within the ground and paved at ground level with fixings to be mated to the steel.

- **COLUMNS DESIGN CRITERIA:**
  - Stainless Steel (316/304) vs. Galvanized Carbon Steel tubes
    - **IDEAL CHOICE:** Galvanized mild carbon steel square tube columns
    - **PROCESS:**
      - The composition and fabrication of galvanized steel involves coating mild carbon steel with a thin layer of zinc. Zinc protects the steel beneath it from rust and degradations due to the weather.
      - Stainless steel is made by adding chromium to molten steel.
    - **DURABILITY and LONGEVITY:**
      - Galvanized steel stands up to water well.
      - Stainless Steel is unusually strong and resistant to rusting caused by water.
    - **PROS AND CONS:**
      - Galvanized steel is more ductile and easier to work with than stainless steel.
      - Stainless is stronger and more corrosion-resistant but it is twice the price from 2 years ago and also involves greater welding labor costs. Quotes from Atlantic Steel are upwards from $70,000. Stainless is cost prohibitive.
    - **LOW MAINTENANCE:**
      - “If you are building the rocket that will send the Space Force to Mars, you will probably need to work with stainless steel. You will also need stainless steel if you get a contract to build an ocean-bound submarine. But for most down to earth uses of steel on land, your most economical choice, in terms of both material and labor costs and life of the project, will be galvanized steel.” Crossroadsgalvanizing.com
      - The steel in this project is used an as internal armature for the printed acrylic cladding. The steel will further be protected from the
environment in this aspect and additionally, exposed areas might be powder coated to last.

- **Extruded vs. Manufactured columns vs. Manually welded columns**
  - **IDEAL CHOICE:** Manufactured square tube columns
  - **PROCESS:**
    - Plate steel is manufactured into square tubes. The welding of these tubes is done by machine.
    - Extruded metals is obtained by pushing molten metal through a die.
    - Manual weld of steel panels is performed by human fabricators.
  - **PROS AND CONS:**
    - Manufactured seamless square tubes are fabricated in a highly controlled environment wherein the steel panels are prevented from warping and bending and therefore promotes tighter tolerances. Hand welding similar would result in an imperfect shape.
    - Manufactured tubes are cost-efficient, readily available in standardized long lengths, and there are fast lead times.
    - Extruded tubing is very expensive. While strong, with high pressure resistance and superior corrosion resistance, it is only used in special circumstances or harsh environments i.e. oil and gas, chemical injection lines, below sea level, etc.

- **PRINTING – PHOTOS – GRAPHICS DESIGN CRITERIA:**
  - **Backprinting of acrylic/polyester vs. Vinyl laminate printing vs. Photo anodization of aluminum**
    - **IDEAL CHOICE:** Backprinting of acrylic/polyester
    - **PROCESS:**
      - **ACRYLIC:** Backprinting is performed using wide format printers and latex ink, the digital image is printed upon the ‘back’ or inward surface of the substrate. In this case, the printed surface is the acrylic face that sits on top of the steel columns. Therefore the image is protected behind >1/8” of substrate.
      - **VINYL:** Vinyl Laminate printing is a well honed technology that has been in existence for 20 plus years. Latex ink is printed upon 3M vinyl laminate which is adhered to signage, cars, planes, etc.
      - **ANODIZE:** Photo Anodization is an advanced printing technology using high heat (ink is vaporized) and high pressure to transfer, fuse, and seal an image onto an Anodized Aluminum surface. After image transfer, anodization continues and the aluminum panel is built up with a coating so that the image layer is subsurface (scratch resistant). The digital image will be permanent and integral to the anodize coating.
    - **DURABILITY and LONGEVITY:**
✓ ACRYLIC: Back-printing or surf printing is the best printing option for this public art element and the Burlington environment. The artwork will have UV protection. The process uses latex inks which are lightfast. Back printing on acrylic ensures the longevity of the print by adding an extra layer of substrate protection on the surface above the graphic. Printing directly onto acrylic delivers high-resolution images with durability and unmatched high resolution detail.

• 98% UV protection is possible with acrylic. The chosen frame grade acrylic sheets are specially manufactured to be OP3 UV resistant and P99 glare resistant. This makes the acrylic crystal clear with high optical clarity, ideal for displaying and preserving artwork or photographs even outdoors.

• “Perfect for high-end artwork and prints, this acrylic sheet blocks against harmful UV rays with outstanding resistance to long-term sunlight and weathering that will preserve media for years to come. Combined with a soft matte finish, this non-glare acrylic helps minimize glare and reflections, so media can be viewed with ease. Inspected to ensure there no imperfections, this acrylic sheet offers the ultimate protection against UV light while providing superior impact-resistance. Perfect for outdoor applications, high-end museums, galleries, and much more.”

• Cell cast acrylic is more expensive to manufacture but it is harder than extruded acrylic so it is less susceptible to scratching. Additionally, cell cast acrylic typically has fewer impurities such as ripples or specks.

• Acrylic acts as a barrier to protect the images from scratches and vandalism. Acrylic provides an extra layer of protection from the elements – dust particles and various allergens included.

• PLEXIGLAS® does not yellow, crack, or become brittle as a result of sunlight and weathering and is guaranteed for over for 30 years. Panels will retain a high level of transparency and will not break by hail.

• Latex inks are fade resistant and waterproof.

• Panels can be replaced and reprinted as needed.

✓ VINYL: Latex print on vinyl laminate has a long track record of durable signage for many industries.

• 3M has specially designed its vinyl laminate to grab onto the latex ink image and holdfast. Perfect for cars, trucks, and advertising.

• Latex inks are fade resistant and waterproof
• Vinyl laminate breaks down after 10 years of use. The combined effects of sunlight and weathering causes the substrate to crack, peel, and become brittle.

✓ ANODIZE: Photo Anodization on Aluminum is very hard, durable, weather-resistant and corrosion resistant that protects the base metal. Used on Martian Rovers it an electrochemical process that forms a protective coating of aluminum oxide on the surface of aluminum. The reproduction on anodized aluminum is photo-quality resolution with vibrant, full-colored images.

• Subsurface image transfer underneath anodized layer. Cannot be scratched (vandal proof). It will not peel, flake, or chip like other topcoat graphics.

• Hail will damage and dent the aluminum, likewise someone poking/hitting it. Anodized surfaces may succumb to acidic pollutants in urban environments, unless coated.

• Panels can be replaced and reprinted as needed. Aluminum can be recycled.

• The high color digital photo transfer uses aqueous (water-based) inks. It is not suitable for outdoor pieces, unless coated with UV resistant formula. Organic inks tend to not be light fast for long periods of extended UV exposure.

• Alternatively, some processes like MetalPhoto print in archival, silver-halide (similar to developing a piece of photographic film) are suitable for all environments and harsh operating conditions including weather/sunlight, heat, abrasion, chemicals, and salt-spray. The drawback is that this process is monochromatic, still the image’s details maintain their original appearance perfectly for decades (20 outdoor guarantee).

### LOW MAINTENANCE:

✓ All types: Cleaning not necessary or normal soap/water

o **Printing with UV resistant inorganic inks vs. organic pigments**

  - IDEAL CHOICE: Printing with UV resistant inorganic latex ink

### CONDITIONS:

✓ The UV Index informs the public of the level of UV exposure expected on a given day. Vermont is considered Zone 1 which receives low amounts of UV light on average throughout the year. According to the
EPA and scale at the right, Vermont receives on average moderate UV exposure during the summer and low exposure during the winter.

- Digital prints on VERTICAL columns receive far less direct UV rays, than angled or flat signage surfaces. “Graphics that are orientated vertically will last longer than signs in a horizontal orientation. The best example is when you are in the sun, your legs don’t get sunburned as much as your shoulders do, which are horizontal. The reduced amounts of direct sunlight will help preserve the vividness of your chosen hues.”

- Printing with latex inks are far more resistant to UV rays versus organic inks.

**DURABILITY and LONGEVITY:**
- ACRYLIC AND VINYL: The use of latex inorganic inks that are naturally UV resistant, plus with the use of UV filtering acrylic (as opposed to vinyl), low incidence of UV on vertical signage, and low UV occurrence in Zone 1 means LONG LASTING VIBRANT COLOR FOR DECADES.

- Wide format print companies will be chosen based on their understanding of the importance of rich, radiant colors. They will have the tools necessary to preserve brightness, regardless of the selected colors and have UV inks that specialize in fade resistance.

- ANODIZE: Most anodize dyes are organic and susceptible to fading in UV exposure over time.

**Portrait Photography vs. Digital selfie booths**

**IDEAL CHOICE: Portrait Photography**

**PROS AND CONS:**
- Portrait photography including digital camera, tripod, remote shutter, lighting ring and umbrella, ‘green screen’ backdrop provides vibrant, high resolution images. It will capture the diversity and beauty of the Burlington residents.
- Digital selfie booths take pictures of very low resolution.
- For adequate printing and reproduction, photos must be 100dpi.
LIGHTING DESIGN CRITERIA:
- Solar lighting vs. Power grid connection
  - IDEAL CHOICE: Solar Lighting (Embedded paver lights at the foot of columns and within the concrete seat cladding. ‘Post’ lights atop each column.)
  - DURABILITY and LONGEVITY:
    - Solar lights last decades.
    - Environmentally friendly and powered solely by the sun.
    - Electricity bill savings
    - Many solar cells charge within a few hours.
    - Chosen lights will be waterproof and UV protected.
    - Lights come in slip resistant acrylic material, can hold the weight of a car, and are scratch resistant.
  - LOW MAINTENANCE:
    - LED bulbs require less energy and have greater longevity than traditional bulbs
    - LED bulbs and/or rechargeable batteries can be easily replaced from pavers, seating areas, or atop columns if need be.
    - Using renewable energy, solar lights are a cost efficient way of using the sunlight to store energy and light up the columns and seating areas all through the night.

B. CIRCULAR FOOTPRINT OF COLUMNED AREA, PATHWAYS, AND SEATING/CLIMBING AREA
Precast Colored Concrete Bricks and Colored Concrete Slab Cladding by Lanxess Pigments
- The colorful precast concrete bricks and cladding of the seat blocks will consist of concrete dyed with intensive colors and weather-resistant inorganic pigments of the time-tested Bayferrox brand from Lanxess. The lightfastness and weather resistance of Bayferrox® iron oxide pigments ensures that paving blocks keep their rich color even over decades of intensive exposure to the elements. A fact proved by long-term outdoor
weathering tests under different climate conditions. Lanxess is the leading manufacturer of synthetic iron-oxide pigments worldwide and one of the leading manufacturers of inorganic pigments based on chromium oxides.

The choice of brick pigments and seating areas was inspired by the “Urban Star” by Annabau, Vetra, Lanxess, and Lucem in Augsberg, Germany. In reference to this sculpture, Oliver Fleschentraeger, Market Segment Construction Manager in the Inorganic Pigments (IPG) business unit at Lanxess said, “The structure, as well as the desired color effect, were designed for a long-term lifetime. It was therefore decided to use iron-oxide pigments that are known to remain color-stable for decades and to stand up to wind and weather.”

Seating Specifications: The blocks, in various configurations, will measure 1ft x 1ft x 1ft, 1.5ft x 1.5ft x 1.5ft, and 2ft x 1ft x .5ft. The number of each size will be site specific to the seating area and will accommodate and give way, where necessary, to trees, landscaping, and external and underground obstacles. The surfaces of the concrete cubes will have a slightly sloping flat roof so water does not collect on the surfaces, and the danger of freezing over in winter is low.

The seating areas will be founded on a reinforced-concrete ground slab of 10in thickness. The ground slab will be supported on layered subsoil that will be compacted layer by layer. On the reinforced-concrete slab, a solid, stepped substructure of normal-weight concrete will be erected to support the colored concrete cube cladding. The concrete cubes will be mounted directly on the substructure and ground slab. The concrete surface will be sealed. Drainage mortar in combination with stepped drainage will ensure the required drainage below the concrete cubes.

➢ PAVING AND SEATING AREA DESIGN CRITERIA:

- Pavers vs. Poured Concrete Slab
  - IDEAL CHOICE: Pre-cast Concrete Brick Pavers
  - PROCESS:
    - Pavers are separate pieces of brick, stone, or concrete that can be arranged to create a unique space and come in many colors and patterns.
The ground to be paved must be properly graded and leveled with adequate drainage systems to avoid water pooling. The expected foot traffic, paver permeability, slope, and drainage requirements will determine leveling of the circular footprint of the columns and the pathways.

**DURABILITY and LONGEVITY:**
- “Pavers are durable, nonslip, and low maintenance, which are just a few of the reasons why they’re a great return on investment.” Bob Vila.
- Concrete paving stones are built to last – up to 50 years. Concrete pavers can handle both heat and freezing temperatures with the right sealant. Though slab concrete is also good in various climates, it is prone to settling and cracking.
- Pavers can take up to four times the amount of weight that concrete can handle.
- While concrete can be treated with different products to make it more slip resistant, pavers by virtue of the textured casting mold, naturally help prevent slipping.

**OTHER PROS:**
- Precast colored concrete brick brings color, style, and compliments the artwork.
- A paver can be of various shapes and sizes which allows for a flexible design.

**LOW MAINTENANCE:**
- A paver can have little to no maintenance if the major material components and additives are well chosen. See Pigmented concrete vs. Painting/Staining
- Pavers are easily replaceable. If a brick is damaged, only that stone needs to be removed and replaced.
- Given the ground temperature fluctuation resulting from continual freezing and thawing in the Vermont climate, in addition to the possible interaction of tree root systems, a paver will forgive the expected expansion/contraction and shifting that occurs over time.
- Pavers can be spray cleaned if needed.
Winter snow clearing: plastic shovel or type of snow plows with either rubber or polyurethane cutting edges, and snow blowers with polyurethane or plastic shoes can be used to minimize the risk of any damage.

- **Pigmented concrete vs. Painting/Staining concrete**
  - **IDEAL CHOICE: Pre-cast Pigmented Concrete Brick Pavers**
  - **PROCESS:**
    ✓ In the case of pigmented colored concrete, the pigment is mixed in with the concrete before it is poured. The color is consistent all the way through and therefore wear or weathering is not apparent as opposed to dyes or stains that only change the color of the upper layer of concrete and are applied after the concrete has dried and set.
  - **DURABILITY and LONGEVITY:**
    ✓ Bricks/Seat cladding slabs must be pre-cast from molds.
      - Mixing and pouring into a mold at the fabrication site, ensures color consistency and a smooth pour vs. mixing and pouring on-site which is subject to humidity and other temperamental environment factors.
      - A professional company will mix the concrete to make sure it is cured properly to prevent surface cracking.
      - Pavers WILL be sealed to protect it from weathering and heavy foot traffic.
      - Pavers will not be easily eroded or weathered if there is a uniform curing process.
    ✓ The pigment itself is lightfast and won’t fade, therefore pigmented concrete won’t fade, the pigment is baked in. Additional UV resistant coatings can be applied to also prevent the grey in the concrete from fading.
  - **OTHER PROS:**
    ✓ Concrete pavers are less expensive than brick pavers.

C. AUDIO RECORDING AND ARCHIVAL OF NORTH END STORIES
- **STORY ARCHIVAL: Listen, Honor, Share**
  - While residents are being photographed for the portraits, they will be asked if they want to share a story with us at a later time. StoryCorps will assist
the audio recording and archival of these neighborhood stories. Stories of the North End could include subjects like: family, friendship, hardship, hope, challenges, occupations, backgrounds, cultural festivities, etc. These stories promote understanding and empathy. These stories will bridge and unite all in the community.

- **PROCESS:**
  - “The StoryCorps App is free to download and use. It combines the StoryCorps model with the ability to record many times, regardless of location. In addition to being housed in the StoryCorps Archive for easy listening (and sharing), all uploaded interviews are indefinitely archived at the Library of Congress as well.”
  - StoryCorps has a number of recording tools, in particular, a new remote recording tool called StoryCorps Connect. “Developed in March 2020 in response to the COVID-19 pandemic, StoryCorps Connect is a first-of-its kind platform that enables the recording of a StoryCorps interview remotely using video conference technology. The audio and a still photo from each interview goes into the archive at the American Folklife Center at the Library of Congress. The interview becomes part of American history, and hundreds of years from now, future generations will listen in.”

- **LOW MAINTENANCE:**
  - Anyone in the Community can record and upload stories to the StoryCorps Burlington page in the future. The StoryCorps Connect App is easy to use. This webpage linked by the QR codes will continually be maintained by StoryCorps.
  - In addition to partnering with StoryCorps, other local organizations could have access to this wonderful historical archive such as the Burlington library, More Than a Market – Historic New England, etc.

- **QR CODE**
  - QR codes are digital doorways! At 3 seating locations around the columned area, an acrylic plaque picturing a site specific QR code will be mounted within the concrete seating blocks. Once scanned, the QR code will connect the viewer’s smart phone to a specific URL (webpage) within
the StoryCorps archive. The viewer can choose a story to listen to simply by clicking play and listening to the MP3 file.

- “A QR Code is a 2-D square-shaped black and white barcode that can be read by smartphones. QR Codes store information that can be used to make a call, send a message/email, open a website, or even redirect to a location.”
- “A QR Code works in a similar fashion to that of a barcode. It is a machine-scannable image that can be read by smartphones either via its native camera or third-party apps. Every QR Code contains small data packets in the form of dots that hold a certain piece of information. When a smartphone is directed at a QR Code, it displays the user information that is easily understandable.”

- **LOW MAINTENANCE:**
  - Generating a *Static* QR code is a one-time cost. The QR code will be permanently connected to the URL without fees. If at any point in the future StoryCorps changes its archival web addresses (infrequent) a former page is always rerouted to the new page.

- **SAFE:**
  - Using a QR code is SAFE. An online QR code generator can prevent downloading any malware. Once the QR code is generated, it unalterable and remains a safe way to reach a website.

**D. THE MATH BEHIND THE OPTICAL ILLUSIONS (FORCED PERSPECTIVE AND THE PARALLAX EFFECT)**

- To determine the scaled factor by which images of far columns must be increased so that the near and far columns appear the same size, a simple mathematical problem is solved using the proportional ratio of distance the columns are to the viewer. The image slices in the top right photo are the resultant size that each individual column must be printed. Shorter slices will be mounted on near columns, longer slices are print images
for columns further away. When viewed from a distance, the images appear the same size.

- Scaled depth of field relies on the angle at which an object is viewed. “The larger the angle an object subtends, the larger the apparent size of the object. The subtended angle increases as the object moves closer to the [viewer]. Two objects with different actual sizes have the same apparent size when they subtend the same angle.” In this case, the images on far and near columns can appear the same size if viewed from a sufficiently far distance and if the perspective is forced (i.e. close columns have a short image mounted on it, far columns have a stretched image).

- Using an Anamorphic phenomenon technique, the spectator is required to occupy a specific vantage point to view a recognizable image. “The word is derived from the Greek prefix ana-, meaning "back" or "again", and the word morphe, meaning "shape" or "form".”

- Therefore from the following equations, the landscape or letter images can be scaled appropriately. It is important to note, that only the landscape backgrounds are stretched, not the portrait photos.

\[
x' = x_0 + \frac{(x-x_0)}{d/(z+d)}
\]

\[
y' = y_0 + \frac{(y-y_0)}{d/(z+d)}
\]