



# **CRO Planning & Design**

Communities | Recreation | Open Space

## Technical Proposal for Accessible Recreation Design for Town Parks

Town of Bristol, Vermont

1/10/2024

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# Statement of Interest & Project Understanding

CRO Planning & Design is excited to submit this proposal to assist the Town of Bristol in developing strategies and designs for enhancing accessibility at Eagle, Sycamore, and Memorial Parks in partnership with our frequent collaborators Stantec Engineering

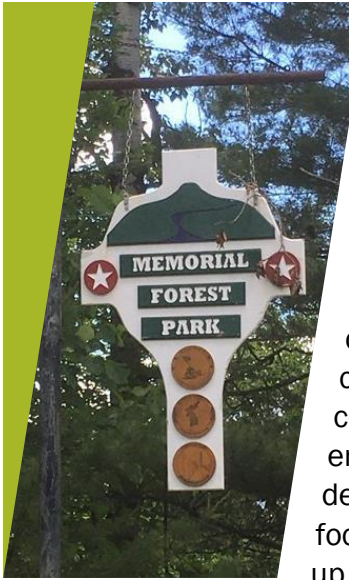
and Vermont Adaptive Ski & Sports. Our project team members have visited Sycamore, Eagle, and Memorial Parks many times over the years as park users. We understand the incredible value each of these parks provide to the Bristol community today, and lament the repeated flood damage and loss of the accessible fishing piers that were once at Eagle Park. We know first-hand that many of these parks are nearly impossible to access for people with varied mobility today, despite the Town's laudable efforts to provide and maintain enhanced access to some areas and experiences. We also recognize the Town's emphasis on increasing accessibility in each park's recently updated management plan. We applaud the efforts to enhance these assets and hope we can offer a fresh perspective on access improvements at these sites. We will seek to provide additional value over previous design explorations by delivering flood and climate resilient solutions that can serve all park users needs for generations to come without the need for rebuilds coupled with years of inaccessibility to residents.

Our collaborative consultant team is committed to helping everyBODY in Vermont access a diverse range of outdoor recreation experiences. We are uniquely qualified to help the Town of Bristol with this accessible recreation design project as we bring rich, national experiences in recreation management, accessible park planning, and universal design as well as a deep understanding of the local landscape, stakeholders, funding mechanisms, and recreational assets in Vermont. As a team comprised of both recreation professionals and design professionals, we can help detangle the wide range of issues, solutions, and considerations that may come into play. On the recreation side, CRO Planning & Design and Vermont Adaptive's experiences with adaptive users needs and the maintenance and management strategies needed to provide these experiences to them over the long-term will greatly benefit the Town and these projects. Likewise, CRO Planning & Design and Stantec's nuanced approaches to site constraints, protection of natural resources, and cutting-edge design solutions will serve this project well from concept design to construction documents and beyond. Our



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project team members have helped deliver conceptual and final design plans for dozens of park enhancement here in Vermont and across the United States. We have helped shepherd these projects through funding and implementation and have supported the ongoing recreation management and maintenance on the site after projects have been built.

**CRO Planning & Design** was founded in 2023 to help build better connections between recreation management issues and planning & design solutions. Providing accessible recreation opportunities is a core value of our firm, and we continually seek out projects that aid communities in enhancing their offerings for people of all abilities to enjoy together. We have over 30 years of combined experience with park design projects and many of our first initiatives as a new company have focused on accessibility and adaptive recreation. We have just wrapped up performing extensive statewide accessibility research for Tennessee

State Parks and are currently working with Vermont Adaptive to help advocate for more research in adaptive recreation participation and its economic impacts in Vermont.

CRO Planning & Design is also rooted right here in Vermont – Drew Pollak-Bruce, CRO’s Founder and Principal, is based in Burlington and has successfully carried out projects throughout the state that have improved recreational access for communities and enhanced the quality of their recreational offerings. He serves on the executive committees of the [Vermont Recreation and Parks Association \(VRPA\)](#) and [VT Community Development Association \(VCDA\)](#), and holds incredibly close connections to agencies and organizations like the Vermont Outdoor Recreation Economic Collaborative (VOREC) and the Agency of Commerce and Community Development (ACCD). He also has extensive experience and knowledge of accessible and sustainable trail design standards having helped author the [Vermont Town Forest Trail Standards Guide](#) for the Department of Forests, Parks, and Recreation (FPR) while working for his previous employer. Abigail Johnson, CRO’s Recreation Designer, is also based in the Upper Valley and has worked on accessible recreation since her time at Dartmouth where she organized the college’s first conference on Equity and Inclusion in the Outdoors. In addition to working with us at CRO Planning & Design, Abigail also currently serves as a Conservation Legacy Fellow with the National Park Service. Her work supports adaptive recreation and the use of mobility devices in parks across the United States. So far in her fellowship, Abigail has developed resources to educate park staff about the different types of mobility devices that exist to allow people with disabilities to access trails with rugged terrain, and she supports parks in developing programs to loan out adaptive equipment.







**Vermont Adaptive Ski & Sports** is a nationally recognized organization that empowers people of all abilities through inclusive sports and recreational programming. With a mission to empower individuals with disabilities through promoting independence and access to sports and recreational activities, Vermont Adaptive Ski & Sports aims to guide the state towards a more accessible future through advisory roles and representation on boards and committees that influence outdoor recreation planning for Vermont. Employees of Vermont

Adaptive Ski & Sports have evaluated trails and recreational spaces for adaptive feasibility in the past, directly helping the designs of spaces to be more inclusive and accessible for those of all abilities. Through their work, the organization has helped communities and the state itself become nationally recognized accessible recreation destinations. In this project, employees of Vermont Adaptive Ski and Sports would provide important insight in designing Bristol's park spaces to be welcoming and enjoyable to visitors of all abilities. This firsthand guidance will provide long-standing benefits for Bristol, ensuring that each park possesses accessible features that are approved by Vermont's most esteemed adaptive recreation authorities.

**Stantec** has provided comprehensive design and consulting services in the Green Mountain State for more than a half century. Our small state ranks among the strongest in the nation in its commitment to protecting its rich environment, including mountains and streams that offer extraordinary outdoor recreational opportunities. Stantec has more than 50 engineers, planners, and scientists in its South Burlington, Vermont office servicing municipalities across the state. Stantec's Vermont team is well-versed in park accessibility in Vermont and is currently working with the City of Burlington and the Chittenden County Regional Planning Commission (CCRPC) to assess accessibility-related deficiencies that create barriers for access to each of City's 34 owned and operated parks. The Vermont Agency of Transportation (VTTrans) is also the Vermont office's largest client. VTTrans relies on Stantec for the planning, design, and implementation of a broad range of infrastructure projects. Stantec's depth of local experience in developing physical improvements that connect Vermont people to Vermont places will greatly benefit the team. In addition, Stantec's broader team of experts in over 100 offices across New England and the world have specialists with extensive experience in virtually all aspects of accessible outdoor amenity design and permitting that we can draw upon as needed.

Our consultant team's proposed process and scope of services is provided below, along with further details on our team member's qualifications, previous project experiences, and references. We appreciate the opportunity to submit a proposal and welcome any questions or clarifications you may have.



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## Proposed Scope of Services

The proposed scope of services below outlines the tasks and anticipated process our consultant team will take to collaboratively deliver this project. We propose two distinct phases for the project: Phase 1—Conceptual Design and Phase 2—Final Design & Construction Documents.

Our comprehensive conceptual design process will assess: 1) Community Vision; 2) Accessibility Needs & Opportunities; 3) Universal Design Solutions & Options; 4) Development Costs, Permits, & Constraints; 5) Grants, Funding, Implementation, & Phasing; and 6) On-going Operations & Maintenance.

The conceptual design phase will explore the full range of equitable access solutions—both immediate and long-term—so the Town can capitalize on quicker, easier improvements while also staying open to improvements that could greatly improve adaptive recreation experiences but could potentially require more process, funding, and permitting. We will work closely with the Town and project Steering Committee to refine both the final design plans and the grants, funding, and implementation strategies to ensure seamless movement of the identified projects into construction.

We hope this proposed scope of work will serve as a solid foundation for consideration but look forward to discussing specific tasks and approaches with you further in an interview or kickoff call.

## Phase 1: Conceptual Design

### Kickoff Meetings and Project Team Collaboration

We are excited about the opportunity to collaborate with the Town of Bristol to develop plans and designs that facilitate opportunities for people of diverse abilities to access and experience Eagle Park, Sycamore Park, and Memorial Park. We could begin the project as quickly as the contract can be executed and anticipate bringing together a Steering Committee to kick off the project, identify future meetings with key stakeholders, and outline expectations for the project's process and deliverables. We will regularly meet with the project team to check in on progress, collaborate on tasks, overview engagement, and identify action items to undertake before future meetings. We are flexible with your team's needs and are





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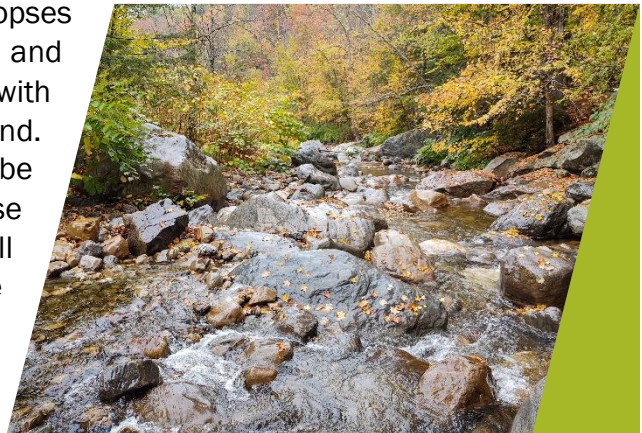
available to meet virtually with the project team or project manager as frequently as desired. Beyond check-in meetings, our team is available to attend additional meetings with the Town and your partners throughout the duration of the contract period to contribute data, knowledge, and time to address respective needs and provide updates.

We will also create a digital project portal to allow you to share any existing data or documents you may have on recreational use, past park designs, individual park management plans, spatial layers, and/or any other data relevant to the project's success. We will use this digital portal to share back draft materials throughout the project, with it serving as the "information hub" between CRO Planning & Design and the project team.

### **Steering Committee Engagement & Strategy Development**

Our consultant team is eager to engage with Bristol's public servants, community partners, and residents to develop well-informed, accessible designs for Eagle, Sycamore, and Memorial Parks. We place public engagement and local collaboration at the core of our planning values to ensure any recreational investments, plans, or strategies we propose accurately reflect the needs and desires of the communities we work with. Our local Vermont-based team is nearby in Chittenden County so travel is relatively quick and efficient. We also possess a dynamic suite of engagement software, analytical tools, and expertise that will enhance the time we spend engaging with stakeholders and allow us to collect valuable data to inform the project's development.

We will work quickly to establish a Steering Committee at the beginning of the project composed of the consultant team, representatives of the local Conservation Commission, Recreation Department, Bike/Pedestrian Committee, Town Staff, and any other interested stakeholders or members of the public you might desire. The Steering Committee will meet regularly to maintain the project's momentum towards an organic, community-oriented outcome that enhances accessible recreational opportunities for Bristol's parks. Our team is skilled in facilitation and can employ live polling software to gain "in the moment" feedback in tandem with meeting notes and recordings to obtain in-depth, valuable synopses of discussions. All meeting notes, materials, and polling questions will be recorded and shared with attendees and partners who could not attend. Meeting summaries and outcomes will be available to the project team as well. During these meetings, CRO Planning & Design's team will facilitate working sessions to clearly articulate project goals and objectives as well as identify constraints or concerns that could impede project success. From there, we will develop tangible strategies that overcome community-



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specific challenges to produce final site designs and management recommendations that are directly tailored to Bristol’s needs.

## **Community Visioning, Site Visits, & Existing Conditions Assessment**

Members of our team will visit Bristol throughout the project to assess existing conditions and facilitate in-person meetings with the Steering Committee, Selectboard, and the public pertaining to conceptual plans and preliminary designs. We anticipate multiple site visits throughout the duration

of the project that will allow for sufficient public engagement, site review, and design analysis. We will make connections with local stakeholders, conduct community visioning, assess existing conditions, and brainstorm solutions all throughout this period.

We will work closely with the Steering Committee and project team to develop a community engagement strategy that creatively educates community members about the project while providing opportunities for feedback about how to best design park accessibility features to meet their needs now and into the future. We have found providing several options for public feedback in such processes is often desirable to ensure equity, inclusion, and broad participation.

In addition to one or more public meetings with the Selectboard, which we have found are often best at the “draft and final concept plan stages,” the engagement strategy could also include a variety of pre-design community visioning. This could include in-person strategies such as open house public meetings, attending existing community/organization meetings and events, and posting informational flyers/displays in the parks, library, or other civic spaces. It could also include digital strategies such as social media blurbs and/or infographics, short surveys, or “digital whiteboards” for residents to provide their input on the project.

We have visited Sycamore, Eagle, and Memorial Parks in the past as park users and have thoroughly examined the recently developed individual park management plans to form a







foundational understanding of each property’s existing conditions, opportunities, and challenges. This understanding will be strengthened once we comprehensively evaluate the overall conditions and accessibility feasibility of the three parks during our site visits. This evaluation includes a spatial inventory of all known trails, facilities, infrastructure, and open spaces within the parks, mapped via GIS software. Additionally, a parking lot assessment, accessibility analysis of paths on park terrain, and an evaluation of access to scenic viewpoints, picnicking areas, and other park hotspots will occur with the consideration of features

like slope, surface material, and pedestrian traffic flow. Our team is well-versed in assessing existing recreation conditions pertaining to accessibility – for example, Abigail Johnson works with the National Park Service to develop accessible recreation standards for our federal recreation areas; additionally, members from Vermont Adaptive, Vermont’s non-profit authority on adaptive recreation, will join us to provide in-depth context on existing accessibility barriers at the parks and design best practices to overcome them. We will describe how current trails, parking lots, restrooms/infrastructure, and terrain currently impact accessibility, laying the foundation for identifying future improvements. The existing conditions assessment will provide accessibility benchmarks for each park through the development of an existing conditions matrix, informing designs that will facilitate access to people of diverse abilities. The existing conditions assessments for each park will be documented as individual reports and included in the final plan.

<b>Equitable Use</b>	<b>Flexibility in Use</b>	<b>Simple &amp; Intuitive Use</b>	<b>Perceptible Information</b>	<b>Tolerance for Error</b>	<b>Low Physical Effort</b>	<b>Size &amp; Space for Approach and Use</b>
Useful & marketable to people of all abilities.  <b>Example:</b> Automatic doors	Accommodates a wide range of preferences & abilities.  <b>Example:</b> Adjustable chair	Easy to understand regardless of language or concentration level.  <b>Example:</b> Universal symbols	Clearly communicates regardless of sensory abilities or ambient conditions.  <b>Example:</b> Sidewalk warning pads/tactile paving	Minimizes hazards & consequences from accident or misuse.  <b>Example:</b> Car auto unlocks when driver exits but the remains inside	Effectively & easily used with minimum effort.  <b>Example:</b> Ramps to buildings or park features	Appropriate size & space is provided for approach, reach, manipulate, and use for all body sizes, postures, or mobility.  <b>Example:</b> Picnic table with clearance for someone in a wheelchair

**7 Principles of Universal Design**

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## Conceptual Plan Development

Upon the completion of the existing conditions assessments, we will develop conceptual plans for each of the three parks that detail potential routes to expand access and recreational enjoyment for visitors of all abilities through identified parking, trail, picnicking, and scenic viewing enhancements and the application of universal design principles. Our design team will develop multiple conceptual sketches that visually display design options and how they would integrate into the parks' current landscapes. Our team will ensure that improvements and design components in the

conceptual plans align with the management objectives identified in the management plans of each park. For example, the conceptual plan for Sycamore Park will include design solutions that enhance accessibility for open spaces, promote accessibility for as many users as possible, and provide opportunities for educational programs. With flood resiliency in mind, these inclusive design solutions will enhance access while protecting sensitive resources by keeping impacts focused within specific paths and spaces. These conceptual plans and their tactics to address accessibility will be collaboratively reviewed by CRO Planning & Design's team and the Steering Committee to ensure that any potential design sketches, solutions, and plans are in line with the community's expectations before broader review with the Selectboard and public. After identified modifications or changes to the conceptual plans are applied, our team will work with engineering partners at Stantec to flag any permit needs that may arise through newly planned accessible designs, which will be reviewed in-depth once final design features are selected. We will also evaluate potential development costs, funding sources, and implementation strategies for each potential design solution to provide clear and complete information for the community and Selectboard to prioritize solutions and make informed phasing and implementation decisions.

Once conceptual plans and development information is in a shareable condition, our team will convene an in-person public meeting in conjunction with a Selectboard meeting to help refine and prioritize potential design solutions. Like our meetings with the Steering Committee, we will employ a variety of engagement strategies to meaningfully interact with the public and obtain feedback that will inform the successful development of accessible park features that are backed by the community. We will develop agendas, PowerPoint presentations, live polls, and supporting materials for the meeting. The meeting can also be recorded and saved for further review and to allow residents and stakeholders who could not attend the meeting to view. Feedback received during the public meeting will be recorded, discussed among the





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Steering Committee, and incorporated into the conceptual plans to inform preliminary designs and final recommendations.

## Preliminary Design Plan Development

Once conceptual plans are formalized through the incorporation of feedback provided by the Selectboard, the public, and the Steering Committee, our team will finalize the preliminary design plans for each park to communicate development goals and preferred strategies, tactics, and timelines for implementation. Preliminary design

plans will align with accessibility best practices and the community's vision for accessible parks in Bristol and will include design perspectives/renderings, site information, and cost estimates for construction, maintenance, and other associated built improvements that facilitate universal access to the three parks. Design recommendations may include enhancements to trails and paths, parking spaces, on-site infrastructure, viewpoints, picnicking areas, and other recreational assets that provide high quality recreation experiences to visitors of all abilities.

## Final Conceptual Plan Recommendations, Reports, & Presentation

Upon the finalization of the preliminary design plans, our team will work with the Steering Committee to compile all relevant documents into a final report that includes outreach methodology, individual park plans, final site design drawings, contract, permit requirements, cost estimates, and recommendations for next steps along with a proposed funding strategy and implementation timeline. Our team is intimately familiar with the likely state, federal, and private funding sources for the accessibility projects that could be identified through this process. For example, one of the few other projects our team will be working on the same time as this accessibility project is the [2024 Vermont Statewide Comprehensive Outdoor Recreation Plan \(SCORP\) and VT Outdoor Recreation Economic Collaborative \(VOREC\) Action Plan](#). Vermont's SCORP and VOREC Action Plan will directly inform grant projects, priorities, and application processes for [Land and Water Conservation Fund \(LWCF\)](#) grant funds, [VOREC Community Grant Program](#) grant funds, and [Recreational Trail Program \(RTP\)](#) grant funds and we will be able to leverage these experiences to ensure the Town of Bristol can help develop the most competitive grant applications possible for these projects.

We will lean on the Steering Committee and adaptive partners to review and provide feedback for the final report, ensuring that it is sufficient for the range of stakeholders relevant to Bristol's adaptive outdoor recreation space. Supportive materials such as charts, graphs, maps, infographics, preliminary designs, and outreach materials will also be included in the final document. This report intends to inform the public, stakeholders, decision-makers,



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and prospective funders about Bristol's plan for enhancing access to its recreation spaces, developed in a manner that successfully sets the Town up to apply for funding opportunities. Through this process, we will also identify which projects should be immediately moved into the next phase of final design and construction documents. We will work closely with you to understand all permitting and design costs and can factor that into phasing and implementation strategies. Components of the final report relevant to engineering, construction, and implementation will be compiled and packaged to jumpstart the development of project construction documents, ready to be put out for bids.

We will then present the final design plans, cost estimates, and next step recommendations to the Selectboard and public, likely at a regularly scheduled selectboard. Our presentation to the Selectboard will overview our methodology, scope of work, the plan itself, and overall recommendations for accessible design, development, and implementation. Our team is happy to develop the presentations, answer any questions from the public and/or boards, and speak about the beneficial impacts that the accessible improvements will have on the community. We will also be available to answer any follow-up questions and present at additional meetings with decision-makers and stakeholders if necessary. All identified deliverables will be delivered in paper in addition to digital formats that allow for electronic distribution.





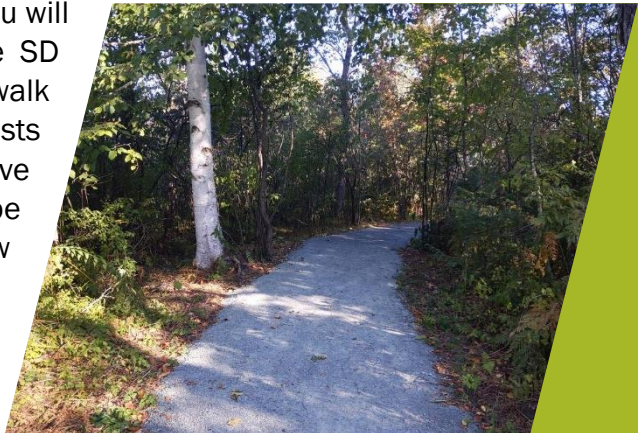


## Phase 2: Final Design & Construction Documents

Based on our previous experiences with similar park improvement projects, we have found there can be significant variability in the level of design details and permitting that may be required to get to “shovel-ready” construction documents for the various types of accessibility improvements that could be explored in the conceptual design phase. For example, for improvement projects within state highway rights of way like Routes 17 or 116 VTrans would require significantly more design detailing and permitting than would be needed to implement accessible limestone dust picnic pads in one of the parks, or even similar projects in the right of way along Lincoln Road which is Town owned. And as noted by the Town in the RFP’s question-and-answer period, projects involving river access could also involve more permitting than others. We anticipate incorporating potential design costs and permitting needs into all our visioning discussions and concept planning with you and the Bristol community to ensure we explore the full range of equitable access solutions that are both immediate and long-term. We will work closely with the Town and Steering Committee to develop the phasing and implementation plan and to identify projects to immediately carry forward into the final design and construction document phase, depending on available funding.

### Construction Documentation

We will produce final design and construction documents for identified projects that can be ready to be put out to bid for construction. Final construction documents would be oriented towards the level of detail and permitting needed for identified funding sources, such as the “Project Implementation Track” of the VOREC Community Grant Program. The type of project (hardscape patios/plazas, sidewalks, fishing piers, limestone dust pads, trails, etc. etc.) and the type of contractor who may implement the project for you will also greatly impact the level of design details needed. For example, the level of design details needed for a local Vermont trail builder, like the VT Youth Conservation Corps or Timber and Stone, to build an accessible path will be very different from the level of design details you will need for one of the general contractors, like SD Ireland, who might bid on a hardscape or sidewalk project in Vermont. With both recreation specialists and civil engineers on the team, we have experience with every type of project that could be envisioned and a deep understanding of how parks and recreation projects get built. We are uniquely familiar with all the likely funding sources and contractors you might need to



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work with and can support any level of detail and permitting that may be required from the very basic to the highly detailed.

### Project Closeout

We will provide your team with all collected data and project materials via a digital project folder upon project closeout. Your team will own these materials and can use them as you wish. We will ensure that all files, data, and documentation align with the Bristol's preferred format and are compatible for continued reference, including future recreation

planning updates. Our team will carefully document the project's process from start to finish and will provide your team with an electronic "process methodology" document that records the project's working timeline, detailed information about partner roles, and other process information useful to reference for plan updates or new improvement plans. Our client-oriented team is always available to reach in case your team has any follow-up questions about the project.





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## Proposed Project Schedule

Our team is prepared to meet the six-month timeline and milestones set forth in the RFP if desired, but feel a nine-month timeline might allow for more ideal review and input periods for the Steering Committee and public. It would also align with the Town’s goals of being prepared for construction grants. While the timelines have not yet been announced for the next rounds, the VOREC Community Grants and LWCF applications have traditionally been due in December and Recreational

Trail Program applications in February. Our proposed timeline is demonstrated in the schedule graphic below, but we are happy to discuss any desired modifications to the schedule.

Project Task	Feb	Mar	April	May	June	July	Aug	Sept	Oct
<b>Phase 1: Conceptual Design</b>									
Kickoff Meetings and Project Team Collaboration									
Steering Committee Engagement & Strategy Development									
Community Visioning, Site Visits, & Existing Conditions Assessment									
Conceptual Plan Development									
Preliminary Design Plan Development									
Final Conceptual Plan Recommendations, Reports, & Presentation									
<b>Phase 2: Final Design &amp; Construction Documents</b>									
Construction Documentation									
Project Closeout									

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## Proposed Project Timetable & Associated Hours

The approximate number of hours each project team member is estimated to participate in the project and each associated task is identified in the project timetable below.

Project Task	CRO Planning & Design			Vermont Adaptive		Stantec	
	Drew Pollak-Bruce	Brett Rannow	Abigail Johnson	Jeff Alexander	Felicia Fowler	Chris Gendron	Sean Neely
<b>Phase 1: Conceptual Design</b>							
Kickoff Meetings and Project Team Collaboration	8	8	2	2	2	2	8
Steering Committee Engagement & Strategy Development	24	40	16	2	8	1	4
Community Visioning, Site Visits, & Existing Conditions Assessment	40	40	40	8	12	4	24
Conceptual Plan Development	24	60	32	8	8	1	4
Preliminary Design Plan Development	24	24	12	2	2	1	4
Final Conceptual Plan Recommendations, Reports, & Presentation	16	40	12	2	4	1	4
<b>Phase 2: Final Design &amp; Construction Documents</b>							
Construction Documentation	Range: moderate involvement	Range: moderate involvement	Range: moderate involvement	Range: minimal involvement	Range: minimal involvement	Range: moderate involvement	Range: moderate involvement
Project Closeout							





## Team Qualifications & Expertise

### Firm Description—CRO Planning & Design

CRO Planning & Design is a Limited Liability Corporation (LLC) founded in Burlington, Vermont in July 2023. We are a planning and design consultancy focused in three core areas: **C**ommunities, **R**ecreation, and **O**pen Space.

Our small interdisciplinary team of planners, recreation specialists, and landscape architects have extensive experience in every stage of parks, recreation, trails, and public lands project development—feasibility, analysis, planning, design, permitting, construction, and operations & management.

CRO Planning & Design helps municipalities, counties, regions, state agencies, federal land managers, non-profits, and private sector clients navigate complex projects on public lands across North America. We are proven experts in delivering multi-party planning and design processes, community visioning, and collaborative stakeholder engagement.

We believe in wholistic systems thinking and thrive in projects that embrace the linkages between recreation and community development, land conservation, and natural systems. We employ a comprehensive ‘landscape management approach’ in all our work to help ensure the best outcomes are achieved for both human recreators and all the other precious species, resources, and values present in our parks and public lands.

We also recognize the often-deep connections between communities and their recreational assets, and don’t cut off our thinking at the park boundaries. We are equally adept at discussing tourism management and the downtown economics of outdoor recreation as we are discussing detailed trail design and recreation management out in the field.

Our firm was founded to help build better connections between recreation management issues and planning & design solutions, and we are perfectly positioned to support the development of accessible recreation designs for Bristol’s Town Parks. Learn more at [www.CROplanning.com](http://www.CROplanning.com)!



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## Areas of Expertise

What we can do...







### CRO Planning & Design's Experience

CRO Planning & Design's staff possess over 30 years of combined experience helping towns, counties, and regions across the United States develop forward-thinking parks, recreation, trails and outdoor accessibility plans that employ cutting-edge design standards and international best practices for systemwide management and development of recreational assets. We have performed planning and development projects for local, regional, state, and federal government entities and have worked closely with adaptive groups to formulate plans that highlight the importance of accessibility and incorporate adaptive considerations into long-range visions. We are experts in applying recreational management tenets like Visitor Use Management and Benefits Based Management to plan and design trails, infrastructure, and amenities that provide high quality experiences and provide numerous benefits to recreators of all abilities, the surrounding environment, and community itself.

Additionally, Drew Pollak-Bruce has worked on dozens of park planning projects that include accessible design components and is more than comfortable navigating design and permitting needs for successful, accessible parks that highlight communities' unique assets. Drew has received multiple awards surrounding excellence in planning in Vermont and across the US and Brett Rannow developed a 'trailhead design best practices' guideline for the US Forest Service in his past work as well as worked for a variety of municipal parks and recreation agencies, particularly in facilities management that included ensuring accessibility standards are met for departments. Additionally, Abigail Johnson, CRO's Recreation Researcher & Designer, possesses extensive experience in accessible recreation as she currently holds a fellowship with the National Park Service that specifically focuses on developing accessible recreation standards for federal recreation spaces. The project team's combined expertise in municipal park planning, design, and development with an emphasis on accessibility are ideal for this project.

CRO Planning & Design staff are also national experts in outdoor recreation-oriented public engagement. For example, Drew Pollak-Bruce recently presented an educational session entitled "Equity, Inclusion, and Public Meetings" at the 2022 National Outdoor Recreation Conference and has presented many other similar sessions with titles like "Public Meeting Success" or "Engaging Your Community Virtually: Harnessing Online & Socially Distanced Tools in the Times of COVID" at the International Trails Symposium, the Vermont Conference on Recreation, and other state and regional conferences. We are published recreational researchers and understand the immense value of, as well as the requirements for, collecting high quality data from the public, decision-makers, and stakeholders to drive plan development and effective decision making. By engaging in multiple methods of qualitative and quantitative outreach, we gain valuable insights into community recreation demand, community concerns, and accessibility requirements that might not be apparent without direct input. We work to address concerns, mitigate negative impacts, and find creative solutions that balance stakeholders' diverse needs through active community engagement.

## Vermont Adaptive Ski & Sports Team Description

Vermont Adaptive Ski & Sports is a nationally recognized organization that empowers people of all abilities through inclusive sports and recreational programming. Vermont Adaptive Ski & Sports serves clients of all abilities with physical, cognitive and emotional/behavioral disabilities from all over the world. Many programs include environmental education, wellness, and special programs designed specifically for veterans. Beyond sports and programming, the organization is a well-respected partner in guiding Vermont's outdoor adaptive recreation landscape. With nearly 400 active volunteers, plus generous partners and sponsors, and an amazing base of clients and friends, Vermont Adaptive has been at the forefront of sports and recreation for those with disabilities for more than 30 years. Vermont Adaptive Ski & Sports serves clients of all abilities with physical, cognitive, and emotional/behavioral disabilities from all over the world. Vermont Adaptive promotes independence and furthers equality through access and instruction to sports and recreational opportunities including alpine skiing, snowboarding, and other winter sports; kayaking, canoeing, stand-up paddle boarding, sailing, cycling, hiking, rock climbing, tennis, horseback riding, environmental programs, CORE Connections wellness retreats, and more. Vermont Adaptive has a mission to empower individuals with disabilities through promoting independence and access to sports and recreational activities, and will help guide our design team in the development and review of the conceptual design plans for Eagle, Sycamore, and Memorial Parks.



**Jeff Alexander:** Jeff Alexander has been Director of Strategic Partnerships and Business Development at Vermont Adaptive Ski and Sports since 2017. He has worked in the NFL, MLB and Major Indoor Soccer League, as well as various minor league affiliates. Jeff has an Environmental Science degree from Drexel University and worked in Marketing and Events for over 25 years. He represents Vermont Adaptive on the Vermont Mountain Bike Association (VMBA) and Vermont Outdoor Business Alliance JEDI (Justice, Equity, Diversity and Inclusion) Committees. Jeff has a Visually Impaired and Cognitive Adaptive Snowboard Instruction Certification and a BICP Level 1 Adaptive Mountain Bike Certification. He is passionate about making sure everyBODY has access to play in Vermont. His claim to fame is being a Pro-Bowl Mascot for the Philadelphia Eagles in the mid 90s.



**Felicia Fowler:** Felicia Fowler is a Recreation Therapist and Program Manager for Vermont Adaptive Ski & Sports, having been working in the field of adaptive sports and recreation for 10 years. Through her time with Vermont Adaptive she has helped to exponentially grow year round programming including developing an adaptive mountain bike program. In addition to hands on programming year round, she prioritizes advocacy and accessibility in outdoor spaces for people with disabilities. She holds a Master's in Therapeutic Recreation Administration from UNH as well as a Bachelor's in Recreation Management & Policy.



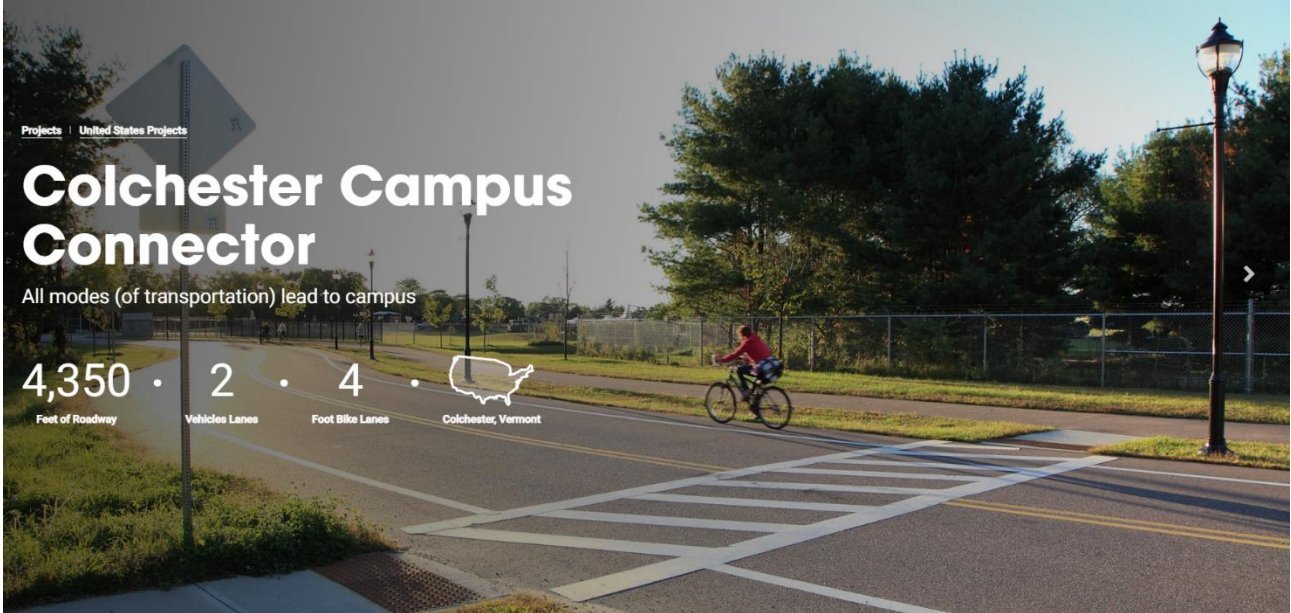
### Firm Description

Stantec and its predecessor, Dufrense-Hernry, have been in the business of building Vermont communities for more than 50 years. With a



# Stantec

long-term commitment to the people and places they serve, Stantec team members connect to projects on a personal level and strive to advance the quality of life in every community. Their work begins at the intersection of community, creativity, and client relationships—approaching each project with their signifying philosophy “We Design With Community In Mind.” Our staff members in South Burlington provide diverse services in the Urban Land, Transportation, Environmental, Buildings, and Industrial markets to both public and private clients who have chosen to live and work in this appealing environment. These offices are also an integral part of the network of more than 100 Stantec offices in North America that provide global solutions to clients’ needs through local delivery. Stantec’s multidisciplinary approach is the key to the successful completion of its clients’ projects. Our engineers, landscape architects, planners, environmentalists, and other professionals work collaboratively to serve our clients’ various needs. We specialize in assisting public and private sector clients with the transformation of their ideas into reality.



# CRO Planning & Design

Communities | Recreation | Open Space

## Team Member Resumes



Drew Pollak-Bruce, CPRP

### Founder & Principal

**Education:** Master of Regional Planning—Cornell University  
Bachelor of Arts, Political Science—University of Colorado at Boulder

**Professional Certifications:** Certified Park & Recreation Professional (CPRP)

**Experience:** Drew has extensive experience in trails, open space, and recreation planning and a background land use and multi-modal transportation planning, public policy, growth management, community development, and public participation. Over his 20-year career in outdoor recreation, Drew has worked as a professional planner, advocate, and journalist often focusing on the intersection of communities, recreation, and open space.

Prior to founding CRO Planning & Design, Drew worked for the private consulting firm SE Group for 12 years, serving as a Senior Project Manager and Senior Recreation Planner. Before that, Drew worked as an Assistant Editor for New Urban News Publications, a Trails Program Manager for the non-profit Parks and Trails New York (PTNY), and a professional lobbyist and advocate for the associated non-profit New Yorkers for Active Transportation (NY4AT). While pursuing his master's degree, Drew served as an Assistant Instructor at Cornell University for the courses Wilderness and Wildlands; Planning, Power and Decision Making; and Urban Theory and Spatial Development.

**Professional Associations & Memberships:** Drew is the President of the Board for the Society of Outdoor Recreation Professionals—the organization that puts on the National Outdoor Recreation Conference each year—and sits on the Executive Committee of the VT Recreation and Parks Association and the VT Community Development Association. He is also a member of the American Planning Association, the National Recreation and Parks Association, the Colorado Recreation and Parks Association, the Association of Pedestrian and Bicycle Professionals, and the International Ecotourism Society.

### Professional Awards:

- **2023 Project of the Year, Kingdom Trails Network Capacity Study**, Vermont Planners Association (VPA).
- **2023 Vermont Public Places Honor Award, Missisquoi Valley Rail Trail Marketing, Branding, and Wayfinding Project**, Vermont chapter of the American Society of Landscape Architects (VT ASLA), Vermont Planners Association (VPA), and Vermont Urban and Community Forestry (UCF).
- **2023 APA Virginia Jamestown Award – Locality of the Year, Cumberland Plateau Outdoor Recreation Economic Analysis and Development Plan**, American Planning Association's Virginia Chapter.
- **2023 Vermont Public Places Honor Award, Kingdom Trails Network Capacity Study**, VT ASLA, Vermont Planners Association (VPA), and Vermont Urban and Community Forestry (UCF).



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- **2022 Planning, Research, and Analysis Award of Excellence**, Minnesota Discovery Center Master Plan, Vermont Chapter of the American Society of Landscape Architects (VT ASLA).
- **2020 Plan of the Year**, Enosburg Falls Vital Village Master Plan, Vermont Planners Association (VPA).
- **2020 Landscape Planning and Analysis Merit Award**, Enosburg Falls Vital Village Master Plan, Vermont Chapter of the American Society of Landscape Architects (VT ASLA).
- **2019 Vermont Public Places Honor Award**, Town Forest Recreation Planning Assistance Program, Vermont Chapter of the American Society of Landscape Architects (VT ASLA), Vermont Planners Association (VPA), and Vermont Urban and Community Forestry (UCF).
- **2018 Plan of the Year**, Rediscovering Chester: Village Center Master Plan, Vermont Planners Association (VPA).
- **2018 Landscape Planning and Analysis Merit Award**, Rediscovering Chester: Village Center Master Plan, Vermont Chapter of the American Society of Landscape Architects (VT ASLA).
- **2014 Honor Award for Sustainability and Environmental Permitting**, Town of Nederland Comprehensive Plan, Colorado Chapter of the American Planning Association (CO APA).
- **2012 Merit Award for Outstanding Project**, Town of Ridgway Land Use Plan, Colorado Chapter of the American Planning Association (CO APA).

## Recent Presentations (2023-2021):

- **2023 Vermont Conference On Recreation**, Striking a Balance—the Kingdom Trails Network Capacity Study, Vermont Recreation and Parks Association (VRPA).
- **2023 Statewide Comprehensive Outdoor Recreation Plan (SCORP) Webinar Series**, Multiple Topics, Society of Outdoor Recreation Professionals (SORP).
- **2023 International Trails Symposium**, Bridging the Divide: How Trails and Public Lands Built Community & Fostered More Constructive Dialog, American Trails and Professional Trail Builders Association (PTBA).
- **2023 Statewide Comprehensive Outdoor Recreation Plan (SCORP) Workshop**, Innovations in Data Collection, Society of Outdoor Recreation Professionals (SORP).
- **2023 Vermont Outdoor Recreation and Economic Vitality Conference**, Recreation and Economic Vitality: The Numbers, Vermont Community Development Association
- **2022 National Outdoor Recreation Conference**, Society of Outdoor Recreation Professionals (SORP).
  - Equity, Inclusion, and Public Meetings
  - Opening Keynote Kickoff & Welcome Presentation
  - NORC Awards Ceremony
  - Closing Plenary: Federal Outdoor Recreation Leadership Perspectives on Transformation in Outdoor Recreation
- **2022 Vermont Town Forest Stewardship Webinar Series**, Engaging Your Community Virtually: Harnessing Online & Socially Distanced Tools in the Times of COVID, Vermont Urban and Community Forestry.
- **2021 Vermont Conference on Recreation**, VT Recreation and Parks Association (VRPA).
  - Energizing Your Local Outdoor Recreation Economy.
  - How Do E-bikes Fit Into Your Trail System.

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**Brett Rannow**  
**Associate Planner**

**Education:** Master of Science, Natural Resource Science & Management—University of Minnesota; Bachelor of Science, Recreation, Parks, & Protected Area Management—University of Minnesota

**Experience:** Based out of Minneapolis, Minnesota, Brett's experience with recreation, community, trails, and open space management is extensive and wide-ranging. From municipal parks and recreation programming in urban settings to managing visitors in remote wilderness systems, he prospers in solving complex recreation challenges and is dedicated to identifying beneficial solutions for clients and communities alike. Brett's education and background provides him with a suite of knowledge in land use planning, public policy, public engagement, stakeholder facilitation, active transportation systems, and planning for the economic, social, & environmental impacts that stem from recreational systems. He has participated in a wide variety of recreation projects from both client and consultant perspectives and understands the needs of both to successfully carry out projects.

Brett supervises CRO's projects surrounding recreation planning, active transportation, visitor management, trail development, data analytics, and community engagement. Going beyond consultation, he actively works with the public and stakeholders to identify solutions that are embraced by communities. Brett has been involved in municipal, regional, state, and federal projects and his academic research background assures clients that he will always provide them with reliable reports and forward-thinking solutions. Where recreation lies, Brett thrives.

Outdoor recreation planning and enhancing local recreation experiences are the cornerstone of Brett's passion and expertise. Brett started his outdoor recreation career managing and maintaining multi-use trails in remote sections of Alaska, which is what hooked him to pursue the career path. Since then and prior to joining CRO Planning & Design, he managed systems and operations for municipal, regional, federal, and non-profit recreation management agencies. Brett's firsthand experience managing outdoor recreation amenities benefits his planning work as he understands the direct needs of managers while also the importance of long-range, tangible planning to smoothly carry out vital groundwork. He is also a published research author in two peer-reviewed academic journals, highlighting his research accolades and professional writing abilities. Brett's combination of experience and graduate education was highlighted in his visitor use management project work for one of the country's busiest recreation areas, the White River National Forest. During his time there, he carried out projects related to active transportation, overnight wilderness permitting, equitable access to federal lands, trail and amenity planning, and visitation analyses. He is highly attuned to the needs of residents, management agencies, and key stakeholders, especially with understanding the importance of community-guided decision making. Brett is highly responsive and prides himself on establishing close relationships with clients and communities. He regularly engaged with the public in his previous roles and has performed outreach for local, statewide, and academic recreation departments.

**Professional Associations & Memberships:** Brett is a member of the Minnesota Recreation and Parks Association (MRPA) and was MRPA's 2020 Young Professional & Student Network Chair. He is also a member of the Society of Outdoor Recreation Professionals and the Society



for Wilderness Stewardship. He is also a member of the SCORP Workgroup of the Society of Outdoor Recreation Professionals.

## Professional Awards:

- **2022 National Outdoor Recreation Conference Scholar**, Society of Outdoor Recreation Professionals.
- **2022 Career Development Grant**, Council of Graduate Students.
- **Academic Excellence and Leadership Award**, Olseth Family Scholarship.

## Recent Presentations (2023-2021):

- **2023 Statewide Comprehensive Outdoor Recreation Plan (SCORP) Webinar Series, Data Collection Methods & Considerations**, Society of Outdoor Recreation Professionals (SORP). [Recording](#)
- **2023 Journal of Outdoor Recreation & Tourism**. “Research note: The impact of advanced information communication technologies on visitor acceptance of forest management in response to emerald ash borer.”
- **2023 Environmental Management**. “What really works? Testing augmented and virtual reality messaging in terrestrial invasive species management communications to impact visitor preferences and deter visitor displacement.”
- **2023 Forestry & Wildlife Research & Practice Review**. “Do Advanced Communication Technologies Influence Visitor Acceptance? A Case of Terrestrial Invasive Species Management.” University of Minnesota Extension.
- **2022 National Outdoor Recreation Conference**. “Decreasing Displacement: Does Information Presentation Matter?” Society of Outdoor Recreation Professionals (SORP).
- **2022 UFOR Field Day**. “Talking Technology: Exploring Augmented and Virtual Reality Messaging in Terrestrial Invasive Communications.” University of Minnesota Urban Forestry Outreach & Research.
- **2020 Minnesota Recreation and Parks Association Annual Conference**. “Minnesota Recreation and Parks Association Young Professional & Student Network – the Value of a Network.” Minnesota Recreation and Parks Association (MRPA).

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**Abigail Johnson**

**Recreation Researcher & Designer**

**Education:** Bachelor of Arts, Quantitative Social Science, Human-Centered Design – Dartmouth University (2023)

**Experience:** Based out of Hanover, NH, Abigail combines her passion for the outdoors with a strong background in data science and human-centered design to make outdoor recreation more accessible for all.

Abigail currently serves as a Conservation Legacy Fellow with the National Park Service. Her work supports adaptive recreation and the use of mobility devices in parks. So far in her fellowship, Abigail has developed resources to educate park staff about the different types of mobility devices that exist to allow people with disabilities to access trails with rugged terrain, and she supports parks in developing programs to loan out adaptive equipment. Through her work, Abigail has quickly developed subject-matter expertise in accessible and adaptive recreation.

Abigail has served as a project manager on four design projects with Design for Change USA and the Digital Applied Learning and Innovation (DALI) Lab at Dartmouth. Her work spans from creating new leadership positions and events within the Dartmouth Outing Club to developing apps to help farmers who raise cattle or practice agroforestry collect data to track the health of their farms. She has expertise in experience, UI/UX, and product design and is skilled in community engagement, interviewing, and survey design and implementation.

A member of the Dartmouth Class of 2023, Abigail was active in the Dartmouth Outing Club as a hiking and paddling leader, introducing students to the outdoors in the White Mountain National Forest and on backpacking and camping trips around the country. She was elected president of the Dartmouth Outing Club in her sophomore year and again in her junior year. In 2021, she organized the college's first conference on Equity and Inclusion in the Outdoors.

**Professional Associations & Memberships:** Abigail is currently a member of the Society of Outdoor Recreation Professionals.

## **Recent Articles & Presentations:**

- **2021 Valley News.** *“On the Trails: Pay Attention to the Hidden Power of the Outdoors.”*
- **2021 ITE Journal.** *“Why Attention to Complete Streets Implementation is So Important in Serving Historically Disadvantaged Communities.”*





## Christopher Gendron PE

Senior Associate, Community Development  
13 years of experience · South Burlington, Vermont

Chris is passionate about working on projects that grow and enhance our communities. Since joining Stantec in 2010, he has developed projects ranging from small engineering studies to large project such as the BETA Technology's assembly facility. He takes pride in working cooperatively with the design team, owners, and regulators to ensure projects are delivered to the client's satisfaction. While his focus is on land development projects, he has a broad depth of experience across many disciplines including aviation, transportation, bike/ped, and stormwater treatment. He has also developed close relationships with scientists, landscape architects, and engineers across the region to support clients across multiple facets of project development.

### EDUCATION

Bachelor of Science, Civil Engineering, Norwich University, Vermont, 2010

### REGISTRATIONS

Professional Engineer #104146, State of Vermont

Engineering Intern #53952, State of Vermont

### MEMBERSHIPS

President, American Society of Civil Engineers

### AWARDS

2013 Design and Technical Excellence, Waterbury Main Street

2018 Vermont Section of ASCE Young Engineer of the Year

2019 Vermont Section of ASCE Young Engineer of the Year

2019 Vermont Young Engineer of the Year

### PROJECT EXPERIENCE

Vermont Rail Trail Improvements | Various Locations, Vermont

Provided engineering services to increase accessibility and safety for three (3) of Vermont's rail trails including the Beebe Spur, Missisquoi Valley and the Delaware & Hudson. Improvements included new connections, ADA crossings, vehicle blockades and surface improvements.

CCRPC Lake Street Scoping | Burlington, Vermont, United States

Project manager responsible for studying various improvements to Burlington's popular Lake Street along Waterfront Park related to stormwater treatment, pedestrians, and cyclists.

Rutland Smart Growth Connections | Rutland-West Rutland, Vermont

Explored various alternatives to provide multimodal and roadway updates to the existing transportation system by addressing safety concerns while connecting and strengthening activity centers

VT Route 15 Multimodal Corridor Study | Essex Junction, Vermont

Responsible for presenting alternative sidewalk and bike path designs in a scoping report. Gathered existing conditions such as crash history, traffic data and utility locations. Estimates and designs for each alternative were Mr. Gendron's responsibility.

SRTS Warren Sidewalk Scoping Study | Warren, Vermont

Presented alternative sidewalk and bike path designs in a scoping report. Estimates and designs for each alternative were Mr. Gendron's responsibility.

Northwest Regional Planning Commission St. Albans Path Study | St. Albans, Vermont

Provided engineering support regarding the feasibility of the various alternatives. This included exploring cost, ADA compliancy, various roadway crossing (tunnel, bridge, at grade), slope/ROW impacts, utility conflicts, drainage, path safety, traffic impacts, constructibility and environmental impacts.

VT Route 15 Shared Use Path | Essex Junction, Vermont

Provided engineer and planning services for the VT Route 15 shared use path through Colchester and Essex between Lime Kiln Road and Susie Wilson Road.

Central Vermont Regional Planning Commission Stowe Morristown Path Study | Stowe-Morristown, Vermont

Provided engineering support regarding the feasibility of the various alternatives. This included exploring cost, ADA compliancy, slope/ROW impacts, utility conflicts, path safety, traffic impacts, constructibility and environmental impacts. Responsible for gathering and creating graphics for existing information including but not limited to traffic data, crash history, topographical features, utility locations and roadway dimensions.

# CRO Planning & Design

Communities | Recreation | Open Space



## Sean Neely

Transportation Designer  
14 years of experience · South Burlington, Vermont

Mr. Neely provides planning, analysis, design, CADD, and GIS support on a range of transportation projects. Sean completed a master's degree at the University of Vermont (UVM) in civil engineering for transportation, and a certificate of graduate studies in sustainable transportation systems and planning. He worked as a research assistant at the UVM Transportation Research Center (TRC) both before and during graduate school. Prior to working at the TRC, Sean practiced consulting for planning and engineering projects across the country. He holds a bachelor's degree from the University of Southern Maine in environmental science and policy, with foci in community planning and geographic information systems (GIS).

### EDUCATION

Master of Science, Civil Engineering, University of Vermont, Burlington, Vermont, 2016

Bachelor's Degree, Environmental Science, University of Southern Maine, Portland, Maine, 2005

Certificate of Graduate Studies in Sustainable Transportation Systems & Planning, University of Vermont, Burlington, Vermont, 2016

### PROJECT EXPERIENCE

#### Burlington University Place | Burlington, Vermont

Providing project engineering support for the planning and design of improvements to University Place, a multimodal street serving the needs of people travelling by foot, bicycle, transit, and motor vehicle at the interface between City street and the historic gateway of the University of Vermont. Involved with existing conditions assessment, public input survey review, development and evaluation of alternatives, and design of the selected alternative.

#### Kingdom Trails Network Capacity Study, Kingdom Trails Association | Lyndon, Vermont

Providing project support for this network capacity study led by SE Group to address issues and capacity of the Kingdom Trails network and enhance the network's positive impact on the host communities. The project explores a new Welcome Center location, access portal improvements, connections and crossings, and ways to disperse users. Providing existing conditions assessment, including roadway conditions, traffic volumes, turning movement counts, vehicle mix, bicycle/pedestrian volumes, vehicle speeds, crash history, transit service, and parking issues. Supporting development and evaluation of alternatives for Welcome Center location(s), improvements and programming to promote safe and comfortable movement through the village centers for both visitors and locals, and opportunities for parking, access, traffic, and intersections.

#### Vermont Route 15 Scoping Study | Town of Essex and Essex Junction, Vermont

Provided project engineering support including existing conditions compilation and analysis, public input facilitation, schematic design of potential roadway improvements, traffic analysis, and report preparation for this scoping study. The project included scoping services for multimodal roadway improvements for VT Route 15 along a half mile urban arterial section from Ethan Allen Avenue to West Street Extension, in Essex and Essex Junction, Vermont.

#### I-89 Exit 14 Alternative Transportation Crossing Study | South Burlington, Vermont

Responsible for project support in assembling existing conditions; stakeholder and public outreach; alternatives development and evaluation; drawing and graphics production; and report preparation for this scoping effort to study the feasibility of an alternative transportation crossing of Interstate I-89 in the vicinity of Exit 14 at US Route 2 / Williston Road in South Burlington, VT. The goal of the project is to recommend an alternative transportation crossing option that will better serve cyclists and pedestrians traveling between Burlington and South Burlington, with the support of the community, so that funding may be pursued for engineering, permitting, and ultimately construction.

#### Northfield Ridge + River Routes Master Plan | Northfield, Vermont

Providing project support for this plan led by SE Group to better connect Northfield's population nodes to each other and the outdoor activity centers within the local community through community engagement and infrastructure improvement planning. Summarizing existing conditions for traffic conditions, crash history, pedestrian and bicycle facilities. Identifying opportunities and constraints for transportation and infrastructure components, including pedestrian and bicycle facility improvements, roadway improvements, and traffic calming.

#### Kingdom Trails Network Capacity Study, Kingdom Trails Association | Lyndon, Vermont

Providing project support for this network capacity study led by SE Group to address issues and capacity of the Kingdom Trails network and enhance the network's positive impact on the host communities. The project explores a new Welcome Center location, access portal improvements, connections and crossings, and ways to disperse users. Providing existing conditions assessment, including roadway conditions, traffic volumes, turning movement counts, vehicle mix, bicycle/pedestrian volumes, vehicle speeds, crash history, transit service, and parking issues. Supporting development and evaluation of alternatives for Welcome Center location(s), improvements and programming to promote safe and comfortable movement through the village centers for both visitors and locals, and opportunities for parking, access, traffic, and intersections.

#### Enosburg Falls Village Master Plan | Enosburg, Vermont

Provided project support for this Village Master Plan led by SE Group, summarizing existing conditions for traffic conditions, crash history, pedestrian and bicycle facilities. Identified opportunities and constraints for pedestrian and bicycle infrastructure improvements, roadway improvements, and traffic calming. Supported development and assessment of alternatives and provided order of magnitude cost information.



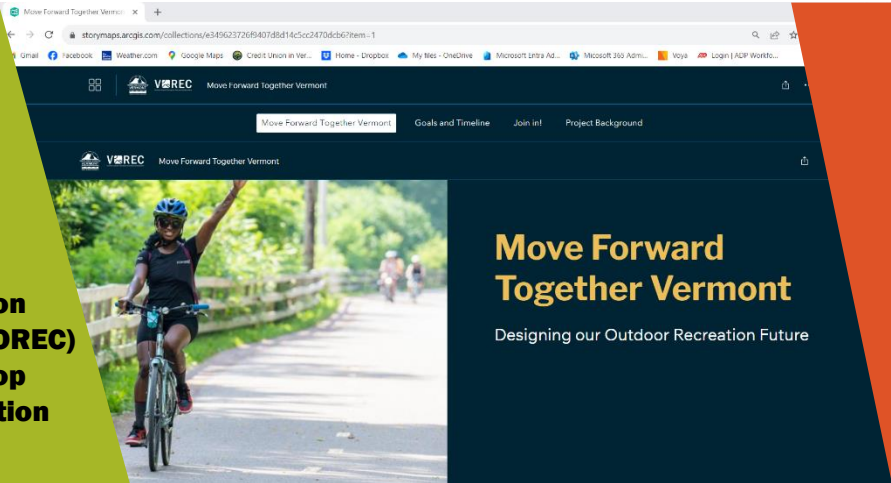
# Relevant Project Summaries

## Vermont Statewide Comprehensive Outdoor Recreation Plan & VOREC Action Plan

CRO Planning & Design is just kicking off Vermont’s next Statewide Comprehensive Outdoor Recreation Plan (SCORP) planning process with the VT Department of Forests, Parks and Recreation (FPR) and the Vermont Outdoor Recreation Economic Collaborative (VOREC). The process will take place throughout 2024 and looks to combine the SCORP planning endeavor with the development of Vermont’s next VOREC Action Plan, which guides the state’s office of outdoor recreation activities and grant programs, so priorities and activities are coordinated across outdoor recreation funding and planning across the state. Activities will include: 1) Completing and analyzing a statistically valid user survey of Vermonters’ current recreation uses and desired needs; 2) Compiling existing trail and recreation data and creating a consolidated, up-to-date, and high quality statewide trails layer for the state; 3) Facilitating affinity group sessions; 4) Writing and designing a high quality, easily readable final SCORP with graphics and text for approval by the Governor and the National Park Service; and 5) Creating digital and/or paper outreach materials based on the final SCORP report and VOREC Action Plan for outdoor recreation stakeholders in Vermont. Our team’s concurrent work on this effort will significantly benefit the Town of Bristol in developing park designs and projects that will seamlessly align with statewide funding priorities and grant applications. Learn more at: <https://fpr.vermont.gov/move-forward-together-vermont>.



**Collaborative Planning Across State Agencies**  
**The Department of Forests, Parks and Recreation (FPR) and the Vermont Outdoor Recreation Economic Collaborative (VOREC) are joining forces to develop Vermont’s Outdoor Recreation vision and priorities!**



# CRO Planning & Design

Communities | Recreation | Open Space

## City of Burlington Parks Access Project

Stantec was selected by the City of Burlington through the Chittenden County Regional Planning Commission (CCRPC) to assess accessibility-related deficiencies that create barriers for access to the City's 34 owned and operated parks. Stantec has developed an assessment framework to evaluate each park and will continue to perform these assessments through 2024 working towards making final recommendations for improvement.

### ROOSEVELT PARK

Roosevelt Park is in Burlington, Vermont. It is approximately three and a half acres in size. It serves as the main park for the Boys and Girls Club located next to the park as well as the surrounding community. A shared use path runs through the center of the park connecting Willow St. and Oak St. The park has amenities such as Little League baseball field, baseball courts, and tennis courts, bathroom facilities, and a playground across Willow St. There are no designated parking spaces for the park. People may park in the public on-street parking along the park perimeter.



#### PARK ACCESS

##### Accessibility Issues

- There are no sidewalks along the park's perimeter except for a short segment along the northeastern corner.
- The sidewalks, ramps, and crosswalks along Walnut St., Oak St., Willow St., and at the park entrances, are in poor condition and are not ADA compliant.
- There is no sign at the Green Mountain Transit stop in front of the Boys & Girls Club.
- The playground's entrances do not have ramps to the sidewalk and have gates that can block the sidewalk if left open.

##### Suggested Improvements

- A.** Add sidewalks along the park's perimeter. \$\$\$\$
- B.** Improve the sidewalks, ramps, and crosswalks along Oak St., Willow St., Walnut St., and at the park entrances. \$\$
- C.** Add a sign for the transit stop in front of the Boys & Girls Club. \$
- D.** Add ramps and new gates at both playground entrances. \$

CONSTRUCTION COST: \$100,000 - \$150,000



#### PARKING

##### Accessibility Issues

- There are no designated ADA parking spaces along the park's perimeter.

##### Suggested Improvements

- E.** Add two ADA compliant parking spaces for the parallel parking on Willow St. closest to the park's entrance. \$

CONSTRUCTION COST: \$5,000 - \$10,000



#### CONNECTIONS THROUGH PARK

##### Accessibility Issues

- The shared use path entrance on Oak St. does not have a detectable warning surface and does not connect to a crosswalk or ramp.
- The sidewalk connecting the shared use path and the crosswalk on Oak St. is narrow and in poor condition.

##### Suggested Improvements

- F.** Repoute the shared use path to align with the crosswalk on Oak St. \$

CONSTRUCTION COST: \$10,000 - \$20,000

\$ = \$0 - \$5,000    \$\$ = \$5,000 - \$25,000    \$\$\$ = \$25,000 - \$50,000    \$\$\$\$ = \$50,000+





# Arms Forest Trail Design & Scoping Study

## City of Burlington, Vermont

Arms Forest is a very special place in the City of Burlington. It provides extremely important recreational opportunities and is home to very unique ecosystems and socio-historical resources - all of which required careful planning and management. Its current recreational opportunities include hiking, dog walking, mountain biking, cross country running, and Nordic skiing among others. The forest also provides immense educational values, with the Burlington High School, the Rock Point School, the Crows Path program, and a myriad of other educational programs all utilizing the space. In addition, Arms Forest is home to rare natural communities, important geological features, and provides excellent habitat for a wide range of wildlife including large mammals, cavity-nesting birds, and forest amphibians like the spotted salamander. Amazingly, this is not all the small forest is home to—it also contains a wealth of historical and cultural resources from farming, to quarrying, and beyond. With all these diverse values at play, a clear and comprehensive roadmap for the redevelopment of the trail system in the forest was needed as the City and its partners work to enhance this important community asset for both accessibility and improved ecological conditions. Creating this roadmap through a robust, community-driven trail design process is the overall intent of this plan and project.

CRO Planning & Design’s Founder and Principal, Drew Pollak-Bruce, served as the Project Manager and Senior Recreation Planner for the City of Burlington Arms Forest Trail Design & Scoping Study in 2019 while working for his previous employer, SE Group. The project was supported by Josh Ryan of Timber & Stone, LLC as a subconsultant.



### Guiding Principles for Trail Recommendations

To respond to the social and environmental sensitivities on the site and ensure sustainable trails into the future, the following principles have been established to guide the trail system recommendations at Arms Forest:

- 1** Protects the unique ecological and cultural assets of the site
- 2** Provides ongoing stewardship of the trails and adjoining natural systems
- 3** Requires minimal maintenance, restoration or decommissioning of unsustainable trails
- 4** Uses control points to minimize disturbance to sensitive areas
- 5** Follows natural contours to minimize erosion, avoids fall lines
- 6** Uses thoughtful design to keep users on the trail and out of sensitive areas
- 7** Provides a variety of user experiences



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## Making the Case for Tourism Oriented Mountain Biking and Adaptive Recreation in Tennessee State Parks

CRO Planning & Design is currently working for Tennessee State Parks and the TN State Park Conservancy to study the potential impact of adding new, tourism-oriented mountain bike trail systems and additional adaptive trail sport opportunities (adaptive mountain biking and hiking via handcycles or other off-road wheelchairs) to State Parks throughout their system. The study involves extensive stakeholder engagement, a robust regional market analysis for mountain biking and adaptive sports, a trail use projection, a fiscal and operational analysis to understand the revenue potential and operational planning considerations for TN State Parks, and an economic impact analysis to understand the potential benefits to local businesses and the surrounding community.

Three infographics were delivered for the agency to be shared with decision-makers and the public to generate interest in mountain bike trail development and spur discussions surrounding funding the development of an adaptive, tourism-oriented mountain bike trail system and trail crews to sustain them. This study and infographics demonstrate both our understanding of the operational costs and economic benefits of trails and recreation activities but also our ability to use graphic communications.

### Tourism-Oriented Mountain Biking & Adaptive Recreation Impact Study

This study reviews the social, managerial, and economic impacts of developing an adaptive, tourism-oriented mountain bike trail system within one of Tennessee's State Parks, using Fall Creek as a case study.

The State is currently evaluating potential homes for the trail system. No matter the location, any envisioned trail developed by the State is envisioned to be accessible for adaptive recreators.

Different levels of trail development were reviewed to understand ranges of development costs, maintenance needs, and subsequent economic benefits produced to the community and park itself.

A tourism-oriented mountain bike trail aims to attract regional and out of state visitors by offering high quality, multi-day riding experiences.

#### "Tourism-Oriented" Trails?

- 20+ Miles** of dynamic trail with varying difficulty
- Infrastructure** to support bikers (rentals, pump track, food/drinks)
- Optimized** for fun mountain biking experiences, events, and races
- Designed** to promote tourism and multi-day visits

### Accessible & Adaptive Trails

Different types of adaptive trails provide different experiences for visitors. Some visitors may want to hike in the woods while others may want to ride a flowy bike trail.

- ADA Accessible Trail**: ADA-specific design criteria with wide, hard surfaces. Provides developed recreation experiences.
- Adaptive Mountain Bike Trail**: Natural surface trail with fun, rolling features of varying difficulty. Provides mountain biking experiences.
- Adaptive Hiking Trail**: Natural surface trail with narrower corridors. Provides remote hiking experiences.

For any trail, partnerships are key! Working with local mountain biking clubs and supportive groups are necessary to keep trails healthy, rideable, and marketable.

Southern Offroad Bicycle Association (SOBA) chapters can serve as excellent trail partners with TSP and being the trail's local champion.

TSP's envisioned trail system will support both adaptive hiking and mountain biking!

#### What Should be Developed?

Development Model	Trail Description	Cost
"Loyston" Model	Flowy trail with minimal built features to enhance sustainability, built and maintained by volunteers with TVA support	\$
"Oak Mountain" Model	Interconnective system with purposeful features of varying difficulty, professionally built and maintained with volunteer support	\$\$
"Monument Trails" Model	Trail designed for top-notch MTB experiences and overnight tourism, designed and built by world-class trail builders, maintained by park staff with volunteer support	\$\$\$

Development models are named after "case study" parks/trail systems with features that would align to Tennessee's envisioned trail system.

Models range in their development breadth, trail offerings, and maintenance needs.

Each model provides different user experiences and potential for attracting a consistent overnight userbase.



# South Burlington Parks Accessibility & Design Study

As requested by the City of South Burlington and the Chittenden County Regional Planning Commission, seven (7) of South Burlington’s public parks were evaluated for accessibility. Stantec produced a report outlining deficiencies and recommend improvements to enhance accessibility for all users along with construction cost estimates associated with each improvement. The report focused on the evaluation of parking, approach-entrance, and park features.





# CRO Planning & Design

Communities | Recreation | Open Space



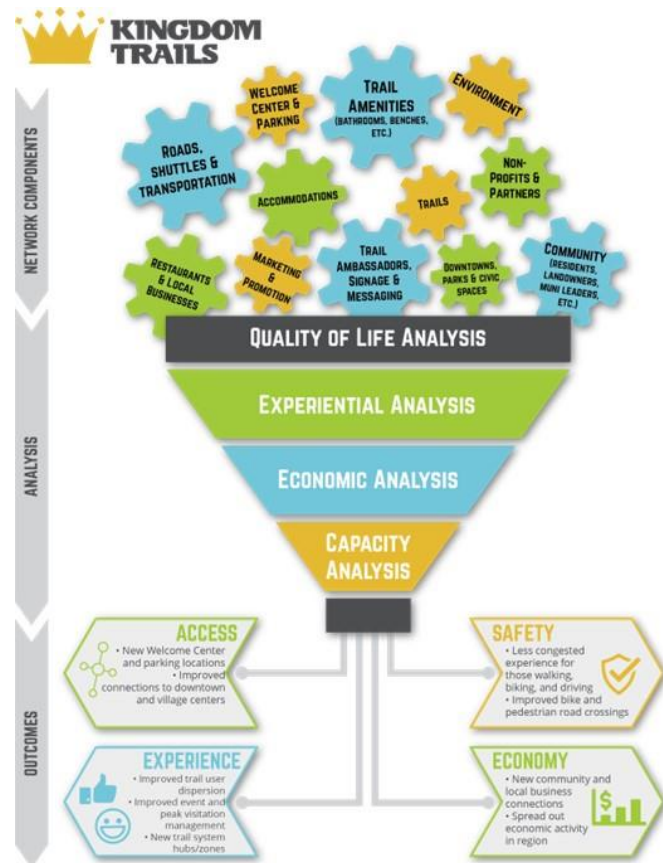
## Kingdom Trails Network Capacity Study & Accessible Welcome Center Conceptual Design

The Kingdom Trails Network Capacity Study was a planning process conducting 2020/21 to address issues and capacity of the Kingdom Trails network and enhance the network's positive impact on the host communities. The project explored a new Welcome Center location, access portal improvements, connections and crossings, and opportunities to disperse users. Key project elements included data collection on existing levels of use and experience, engagement with the host communities, a network analysis that includes traffic and parking, and conceptual designs for potential improvements. Throughout, the project team sought input from community members and users on a vision, existing issues with the system, and potential improvements.

The Kingdom Trail Association has an incredible grant and development team and was able to pursue several grants to immediately begin constructing some recommendations and conduct follow up design studies. One of those was a conceptual design plan for Kingdom Trails new Welcome Center and community recreation hub, which would include Kingdom Trails first “KTA-controlled” parking (all other parking for the systems 100,000+ annual visitors is provided on private and partners land!!!). Kingdom Trails hosts extensive adaptive programs and users and part of the vision for the Welcome Center is to have the absolute best place in Vermont to get out of a car and onto a bike or handcycle. The welcome center was designed to be fully ADA and adaptive recreation accessible as is all of the surrounding parking and campus.

CRO Planning & Design's Founder and Principal, Drew Pollak-Bruce, served as the Project Manager and Senior Recreation Planner for the projects while working for his previous employer, SE Group. This project also represents a previous collaboration of our entire consultant team, as Stantec and Vermont Adaptive were both subconsultants on the project.

Visit [www.kingdomtrails.org/networkcapacity](http://www.kingdomtrails.org/networkcapacity) for more info!





# Vermont Town Forest Trail Design Guide



The Vermont Town Forest Trail Design Guide was developed as part of the Vermont Town Forest Recreation Planning Toolkit, an initiative of the Department of Forests, Parks, and Recreation and the Vermont Urban and Community Forestry Program, to provide general guidance for designing and developing trails in town forests and beyond. For more information about the Toolkit visit, [www.vtcommunityforestry.org/projects/town-forests/town-forest-recreation-planning-toolkit](http://www.vtcommunityforestry.org/projects/town-forests/town-forest-recreation-planning-toolkit).

The guide provides trail planning, design, and development guidance, drawing from a combination of national standards and best practices. The guidelines represent best practices for developing trails that are physically, ecologically, and economically sustainable. A comprehensive trail classification system was also developed to enhance consistency among agencies and trail advocates in how different types of trails are described and planned. The principles of trail design that make trails more visually appealing and enjoyable are also included. Universal design principles are applied throughout the guide and it includes a full range of trail types.

CRO Planning & Design’s Founder and Principal, Drew Pollak-Bruce, served as the Project Manager and Senior Recreation Planner for the Town Forest Recreation Planning Project in 2018 while working for his previous employer, SE Group.

Vermont Town Forest Trail Design Guide

**HIKING**  
(UNIVERSAL ACCESS)  
Trail Character

Universal access trails provide recreational opportunities for people of all ability levels allowing them to experience the natural environment and the many benefits it provides. While generally located on gentler terrain these trails should provide a variety of user experiences and take advantage of naturally occurring features along the route. These don't need to be lowland/wetland only trails. Natural features such as changes in topography, views, waterways and other places of interest should be considered during layout.

Full guidelines can be found at:  
USDA Accessibility Guidebook for Outdoor Recreation and Trails

<https://www.fs.fed.us/recreation/programs/accessibility/pubs/pdfpubs/pdf12232806/pdf12232806Pdpi300.pdf>



Trail Profile		
<b>Tread Width</b> 36" - 60"	<b>Cross Slope</b> 2%-3%	<b>Accessibility</b> Follow USDA Accessibility Guidebook for Outdoor Recreation and Trails Standards
<b>Corridor Width</b> 6' - 12'	<b>Construction/Material</b> Firm and stable surface material. Generally imported but native material may be used if suitable. Generally free of obstacles. Passing spaces needed on trails with tread under 60"	
<b>Corridor Height</b> 8'-12'	<b>Turn Radius</b> Varies	<b>Easement Width</b> Tread + 10' min.
<b>Longitudinal Slope</b> 0 - 5% average, 5% - 8.33% for 200' Max between resting interval, 8.33% - 10% for 30' Max between resting interval, 10% - 12% for 10' Max between resting interval	<b>Sight Lines/Distance</b> Varies	

## Project Team References

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