

PROJECT BRIEF / REQUIRED SERVICES
Architecture and Engineering

Rouge Gateway Visitor, Learning and Community Centre Project
Rouge National Urban Park, Toronto, ON

TABLE OF CONTENTS

1. Project Information	2
1.1 Purpose	2
1.2 Terminology.....	2
1.3 Background	3
1.4 Project Overview and Considerations	4
1.5 Design Principles	6
1.6 Scope of Work.....	8
1.7 Reference Documents	13
1.8 Budget	14
1.9 Proposed Schedule.....	14
2. General Objectives and Project Administration	15
3. Initiation Phase.....	18
4. Pre-Design Services	18
5. Schematic Design Services	21
6. Design Development Services	24
7. Construction Document Services.....	28
8. Tendering Services	30
9. Construction Administration Services	30
10. Post-Construction Services.....	36
Appendix A: Rouge National Urban Park Map.....	38
Appendix B: Rouge Gateway Site Map.....	39
Appendix C: Coordinated Consultant Work	40
Appendix D: Distribution of Work Between Parallel Contracts	42

1. Project Information

1.1 Purpose

This Request for Proposal (RFP) is for Parks Canada to engage an architectural firm to complete schematic design, design development, and construction documents for the Rouge Gateway, the flagship visitor, learning and community centre for Rouge National Urban Park (RNUP). It also includes the provision of tendering services, construction administration, and post-construction services. The project delivery will follow the traditional design-bid-build approach.

A separate firm (the Visitor Experience Design Firm), will be contracted through a separate but parallel RFP and will be responsible for the turnkey planning, concept development, content development, design, fabrication, shipping, installation, training and warranty of the visitor experience elements that will be offered within and around the visitor centre, including a range of associated outdoor experiential elements.

The architect will be the Prime Consultant on this project and will be required to work closely with the Visitor Experience Design Firm to coordinate and integrate visitor experience elements into the building design and site plan.

The Rouge Gateway will serve as a learning, orientation and community facility where students, visitors and residents can gather and learn about RNUP's natural, cultural, agricultural and Indigenous heritage, as well as about Parks Canada's places across the country.

1.2 Terminology

Co-design: Specifically in reference to our Indigenous partners, to collaboratively create content with stakeholders within the design process to ensure the results meet their needs. Also commonly known as collaborative design or participatory design.

Consultant: Refers to the proponent of this contract. The Consultant is responsible for carrying out the work as described herein.

Contractor: Refers to the 'Construction Contractors' carrying out the work. The Contractor's execution of work will be reviewed by the Consultant to ensure conformance of work with design drawings, as well as to ensure the Contractor is implementing their proposed health and safety measures to protect workers, site, staff and public. The Contractor shall be the Prime Contractor and will assume sole responsibility for Health and Safety on the job site; however, hazardous occurrences prevention remains a primary interest of Parks Canada.

Project Authority: Refers to the Parks Canada Project Manager or their representative. The Project Authority acts as the owner's representative and ultimate authority over all works and parties on the project. The Project Authority shall act as the main contact for the Consultant.

FNAC: First Nations Advisory Circle. Indigenous advisory body consisting of representatives from ten First Nations with an expressed interest, and historic and cultural connection to the area of the national urban park. <https://www.pc.gc.ca/en/pn-np/on/rouge/info/partenaires-partners/indigene-indigenous>.

Gender-Based Analysis Plus (GBA+): An analytical process used to assess how diverse groups of women, men and non-binary people may experience policies, programs and initiatives. <https://cfc-swc.gc.ca/gba-acis/index-en.html>

PCA: Parks Canada Agency.

RNUP: Rouge National Urban Park.

Visitor Experience (VE) Design Firm: Refers to the firm responsible for designing, fabricating and installing the experiential design package consisting of all visitor experience elements for the Rouge Gateway project.

1.3 Background

1.3.1 Parks Canada

The Parks Canada Agency (PCA) protects and presents nationally significant examples of Canada's natural and cultural heritage, and fosters public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations. National parks, national historic sites and national marine conservation areas, of which Parks Canada is the proud steward, offer to Canadians the opportunity to live meaningful experiences and to personally connect with these heritage places. In carrying out its responsibilities, Parks Canada works in collaboration with Indigenous peoples, stakeholders and neighbouring communities. Visitor experience plays a key role in achieving this vision by connecting Canadians to their heritage, by providing a quality visitor experience, and by promoting stewardship of natural and cultural resources.

1.3.2 Rouge National Urban Park

Rouge National Urban Park (RNUP) is Canada's first and only national urban park and is located in the heart of the Greater Toronto Area. A rich assembly of natural, cultural and agricultural landscapes, RNUP is home to amazing biodiversity, some of the last remaining working farms in the Greater Toronto Area, Carolinian ecosystems and endangered species, Toronto's only campground, one of the region's largest marshes, a beach, amazing hiking opportunities, and human history dating back over 10,000 years, including some of Canada's oldest known Indigenous sites.

The establishment of Rouge National Urban Park builds on nearly four decades of commitment and collaboration. The very existence of the park is a testament to the passion, persistence, and success of the many people, organizations, First Nations and government agencies that have come together to ensure that the land will be protected for generations to come. Once completed, RNUP will be one of the largest urban parks in the world, spanning 79.1 square kilometres from Lake Ontario to the Oak Ridges Moraine, overlapping the cities of Toronto, Markham and Pickering and the Township of Uxbridge (see Appendix A Map). The park will be 23 times the size of Central Park in New York once fully established. Currently, the park is 95% complete.

1.3.2.1 RNUP Visitor Offer

As Canada's first-ever national urban park, Rouge National Urban Park is positioned to become the premiere "learn-to" park and a "gateway" to introduce visitors to Parks Canada's incredible network of protected areas. This new visitor hub will work to connect, prepare and inspire visitors to explore as well as support enhanced visitor experience offers and operations.

Once fully established, Rouge National Urban Park will facilitate experiences through a 75+ kilometer trail network connecting Rouge Beach in Toronto to the Oak Ridges Moraine in Uxbridge. In addition to this Rouge Gateway experience development, trails will provide a primary means for visitors to experience the park landscape, and will serve to connect facilities as well as the park's many access points and provide a key link with the interpretation, recreation and learning opportunities for visitors.

Parks Canada staff and volunteers offer weekly guided walks in Rouge National Urban Park which feature topics such as birding, wildlife, welcome to the Rouge, Club Parka (program for kids 2-6) and Xplorers (program for kids 7-12). Parks Canada has also run several annual special events including Taste of the Trail, Rouge After Dark, and WinterRouge. The park is also home to Glen Rouge Campground – the only campground within the City of Toronto – where staff facilitate Learn-to Camp programming.

The Rouge Gateway will support Parks Canada's ability to engage visitors who are accustomed to urban and suburban settings and smaller municipal parks, as well as those who seek more adventurous opportunities. The Rouge Gateway will also provide visitors from the Greater Toronto Area with a space to learn more about Parks Canada places and other topics related to Canada's natural and cultural heritage.

1.3.2.2 Tourism and Socio-Economic Context

Within a one hour's drive of approximately 20 percent of Canada's population, Rouge National Urban Park will provide an unprecedented opportunity for residents and visitors travelling to and from the Greater Toronto Area to connect with nature. Entry to the park is free and the park is envisioned to be a four-season destination. The current annual visitation to the park as a whole is estimated at around 500,000, and this number is expected to significantly grow in the coming years as the park develops and awareness of it builds. Key visitor segments for Parks Canada and RNUP include young families, large multi-generational families, newcomers to Canada and younger urban millennials and centennials.

A tourism market analysis for the Rouge Gateway is currently in the final stages of development and will be made available to successful bidders upon award of contract. The analysis will define the visitor experience vision, key goals and indicators, target markets and expected attendance for the site. This report will be an integral reference document that will inform the experiential planning and design of the facility.

1.4 Project Overview and Considerations

The Rouge Gateway is intended to provide both information and orientation to visitors, as well as to be a destination visitor experience in and of itself. In so far as RNUP is positioned as the 'gateway' park within the Parks Canada family of protected areas, this primary visitor, learning and community facility is intended to perform multiple gateway functions for residents, visitors and youth groups. Entry into the facility is the first step towards exploring not only RNUP but Parks Canada places across the country. Like a portal, the Rouge Gateway will serve to seamlessly transition visitors from an urban to a natural setting – instilling a sense of escape, a desire for discovery and the confidence to explore further.

The Rouge Gateway will also include office space options for Parks Canada or community/vendor staff. Different options for staff office space will be investigated as part of the design process.

1.4.1 Project Vision

Create a flagship visitor hub with multi-purpose gathering spaces and visitor amenities which will function as an iconic gateway to both RNUP and Parks Canada. This gateway will feature an aesthetically and environmentally progressive, universally accessible building along with outdoor programmable event space with a learning focus on Indigenous, natural, cultural and agricultural heritage through integrated interpretive installations and design elements. The Gateway will welcome park visitors, youth groups and community members and anchor Parks Canada's presence in Canada's largest metropolitan area.

1.4.2 Project Site

The project location is a former overflow parking lot of the Toronto Zoo, on the east side of Meadowvale Road (Appendix B). The site includes the parking area, grassy areas, granular pathways, and some mature trees, including a significant forested strip that runs east-west across the site. The site is bounded on the north side by Zoo Road, which is owned by the Toronto and Region Conservation Authority (TRCA) and leased to the Toronto Zoo, and on the west side by an access road for the ZooShare biogas plant. The plant itself is located south of the project site. East of the site is a forested area that slopes down to the Little Rouge River.

Any modifications to the entry to the site along Zoo Road will require coordination with the TRCA, the Toronto Zoo and the City of Toronto. The site plan must involve close coordination with the Toronto Zoo and

ZooShare to consider and allow for access requirements for the ZooShare biogas plant, including regular truck access to transfer material into and out of the plant. Visual and physical barriers may be required to prevent visitor access to the plant and reduce visual impacts of the plant on the project site. Odour from the plant operations is not expected to be a concern but may still require mitigation through building and site plan design.

Several RNUP trails are located in the surrounding area, including the Vista Trail, which passes through the project site. A heavily frequented, two-level wooden observation platform with views of the Rouge Valley is located along the Vista Trail a few minutes from the project site. Improvements to the Vista Trail up to the existing observation platform should be considered as part of this project. Zoo Road is used to access additional trails, including the Beare Wetlands Loop/Cedar Trail and the Orchard Trail. As a major trail intersection, this site has been used by Parks Canada as a popular venue for RNUP events, including WinterRouge, Earth Run and Rouge After Dark. The site is also accessible by public transit (TTC bus), although some engagement with the TTC will be required in developing a bus drop-off area as part of the site plan.

The Rouge Gateway will also connect with local and regional trail networks such as The Meadoway, a TRCA-led initiative to transform a hydro corridor into a 16-kilometre stretch of urban greenspace and meadowlands linking the Don Valley with RNUP. The City of Toronto's Beare Hill Park (currently under development) is also located near the project site. Trail connections will be an important consideration in the site plan. Disruptions to trail access and use must be minimized during construction.

The historic Pearse House is located in the northern corner of the site and is home to the Rouge Valley Foundation (RVF), a non-profit organization that runs conservation and educational programming, mainly for children, in the Rouge Valley. The RVF currently has a small parking lot beside the house for their employees and visitors. Parks Canada has committed to the RVF continuing operations in the Pearse House, however the area surrounding the house, including the parking lot, is open to redevelopment as required for the overall site plan. Access to the Pearse House must be maintained throughout the construction phase.

The site also currently houses two Parks Canada oTENTiks (a cross between a cabin and a tent) which serve as a temporary welcome area for visitors to obtain information and speak to Parks Canada staff. These oTENTiks may be relocated or removed as necessary for the site plan. PCA does not anticipate providing visitor services at the site while the building construction and site development is underway.

1.4.3 Indigenous Partners and Stakeholder and Public Engagement

Collaboration with Indigenous partners and key RNUP stakeholders, and engagement with the greater public will be a defining and important component of this project.

Parks Canada works closely with the RNUP First Nations Advisory Circle (FNAC) consisting of 10 First Nations with an expressed interest, and historic and cultural connection to RNUP (<https://www.pc.gc.ca/en/pn-np/on/rouge/info/partenaires-partners/indigene-indigenous>). Significant FNAC engagement will occur throughout the design phase, with opportunities at various stages to provide input to inform the design, as well as to review design options and drawings.

Engagement with other key stakeholders, such as NGOs, municipalities and major partners, will also occur throughout the design phase. A list of key stakeholders will be provided upon contract award.

Parks Canada will lead the organization and planning of engagement sessions with Indigenous partners and stakeholders, and the Consultant will provide technical assistance, prepare materials, facilitate workshops and deliver presentations at meetings as required. Input from Indigenous partners and stakeholders shall be incorporated into the design as appropriate.

Public engagement will occur as part of the Schematic Design stage to inform the selection of a design option for further development. The Consultant will be required to participate in an in-person Public

Information Session(s) based on an engagement strategy created by Parks Canada or an engagement firm to be retained by Parks Canada. Parks Canada and/or the engagement firm will be responsible for organizing and leading the Public Information Session, while the Consultant will prepare materials and present at the Public Information Session. Parks Canada and/or the engagement firm will also create an online engagement platform to collect public feedback on the schematic design options. The Consultant will be required to provide content for the online platform.

The responsibilities of the Consultant related to Indigenous partner, stakeholder, and public engagement are further detailed in the Required Services sections below.

1.5 Design Principles

The Consultant must take into account the following key design principles throughout the lifecycle of the project:

Leadership in Environmental Design

- This project must align with the objectives and commitments of the Government of Canada's Greening Government Strategy and the specific requirements outlined in the Real Property Guidance document:
 - <https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html>
 - Reference document – Greening Government Strategy: Real Property Guidance
- At a minimum, this project must meet the requirements of the Parks Canada Green Building Directive (2012).
- Use the Integrated Design Process to optimize the design.
- Achieve net zero carbon building emission.
- Target a high level of sustainable development certification, such as LEED Platinum certification. Specific sustainability targets and certifications are currently being established and will become available upon contract award.
- Incorporate cutting-edge sustainable solutions in the spirit of sustainable development standards and certifications such as the Living Building Challenge and Passive House.
- Sustainable construction through the use of locally-sourced materials, energy-saving materials, materials with lower than average embodied carbon and renewable technologies, whenever possible
- Optimize the building envelope to minimize energy demand. Perform energy modelling to design and demonstrate sustainability goals.
- Analyse effects of climate change on building components and systems over the life of the Project. Consider future climate projections in building and site design and account for potential increased cooling load and other climate change adaptations as outlined in the Greening Government Strategy: Real Property Guidance document.
- Life-cycle assessment must be considered in design and selection of building materials.
- Avoid the use of Red List building materials (<https://living-future.org/declare/declare-about/red-list/>)
- Consider sustainable design approaches such as:
 - Natural insulation and drainage via green roof
 - Rainwater harvesting and grey water reuse
 - Solar power and other methods of on-site renewable energy generation
 - Potential energy sharing partnership with the ZooShare biogas plant located adjacent to the site (thermal, electric, or natural gas)
 - Passive solar design and other methods to reduce heating and cooling loads and demands
- At least 15 public EV charging stations, or one per 30 parking spaces, whichever is greater.
- At least 1 PCA fleet vehicle EV charging station per five staff office spaces in the building.
- Public transit connectivity (bus loops, transit infrastructure, etc.).

- Active transportation friendly, including bike facilities and consideration of connections with local and regional pathways and trails.
- Includes Services to document and prepare submissions to independent bodies for review and certification of achieved sustainable design objectives

Achieve Design Excellence

- Unique aesthetic that fits with the character of the surrounding area.
- Interpretive elements incorporated seamlessly into the architectural design of the building and surrounding site.
- Creates a seamless transition between indoor and outdoor spaces. It is important for visitors to be drawn outside to gather. Consider biophilic design to enhance connectivity to the natural environment.
- Highlights the iconic viewscape of the surrounding Rouge Valley.
- Incorporates flexible multi-use spaces to maximize utility within the building footprint.
- Design considers visitor safety, security and CPTED (crime prevention through environmental design).
- Refer to the Rouge Gateway Design Inspiration Package for examples of design elements for consideration.
- The structural design of the facility should take inspiration from the aesthetic guidelines outlined in the RNUP Common Look and Feel design catalog.
 - The RNUP Common Look and Feel design catalogue provides design direction for a series of elements that will, over time, create a consistent and cohesive look and feel for built elements within the park. This design catalogue has been developed in collaboration with Indigenous Partners and stakeholders to fashion a unique aesthetic for the RNUP that is sympathetic to the Parks Canada brand so that Park elements are both recognizable as Parks Canada assets as well as RNUP elements. It details an established palette of materials, colours and motifs for architecture, signage and landscape elements within the park that will help to shape the look and feel of the Rouge Gateway design. The intent of this guiding document is to inform – not restrict – the creative design process.

Scalability

- The Rouge Gateway building(s) and vital site components will make up the bulk of the initial capital investment through this scope of work.
- Subsequent components may be identified in the conceptual designs and site plan, for future implementation.
- Although additional components may be added at later phases, the completion of the work outlined in this Statement of Work must provide a facility and site plan that achieve the full project vision and are fully operational. Later phases, should they be implemented, would serve to complement and expand upon this scope of work.

Indigenous Co-Design and Partnership

- First Nations Advisory Circle members will be engaged throughout the project to provide input and review designs. All creative input and feedback provided by Indigenous partners must be considered by the Consultant and integrated where appropriate.
- Inclusion of a dedicated First Nations Advisory Circle gathering space.
- Consideration for traditional structures incorporated into the design and indigenous procurement strategies for the design and/or build of these structures.
- Place and space naming opportunities – in an Indigenous language(s) – for the building and site components are respectfully afforded to the First Nations Advisory Circle, especially the future name of the Rouge Gateway.
- The project schedule submitted by the Consultant must allow sufficient time for consideration and feedback from this Advisory Circle.

Integrated Interpretive Approach

- The VE Design Firm will be responsible for developing all visitor experience elements of the project, however, the Consultant will be required to work closely and constructively with the VE Design Firm throughout the lifecycle of the project to integrate these elements into the building design and site plan.
- Design of the Rouge Gateway will feature a holistic site interpretation plan that layers non-personal interpretation opportunities into all aspects of the design (from architectural structure to landscaping) in order to create an immersive visitor experience.
- The VE Design Firm shall not limit themselves to designing for a particular area (e.g. an exhibit hall) but should consider all available public spaces (including washrooms and eating areas) as interpretive exhibition space.
- The VE Design Firm must also design flexible space with options for future interpretive program delivery in mind, both informal and facilitated learning.

Exceed Accessibility and Inclusion Expectations

- Accessibility and inclusivity must be considered throughout the design process, striving to exceed municipal, provincial, and federal standards and guidelines wherever possible.
- Consider both physical and cognitive differences in designing spaces that are accessible and inclusive to as many people as possible.
- Apply Gender-Based Analysis Plus (GBA+) process throughout the project design.
- At its core, universal design is flexible, adaptable, safe and efficient. The following seven principles form the basis of universal design in order to create a truly universal user experience:
 - It's Equal: The design is useful to people with diverse abilities and backgrounds. This means the user experience is identical to all users – it's safe, secure and doesn't isolate or stigmatize anyone
 - It's Flexible: The design accommodates all individual preferences and abilities, such as tools that allow for right or left handed use, or standing or seated use.
 - It's Simple and Intuitive: The design is easy to understand and operate, allows for different literacy levels and language abilities.
 - It Uses Perceptible Information: The design makes it easy to provide pictorial, verbal and tactile directions/instructions to communicate information effectively to the user regardless of ambient conditions or sensory abilities.
 - It Minimizes Risks and Accidents: The design minimizes hazards and risks of accidental or unintended actions by arranging commonly used elements in most accessible locations and hazardous elements either removed or shielded.
 - It Requires Low Physical Effort: The design can be used efficiently and comfortably, with little effort.
 - It's Appropriately Sized and Spaced: The design incorporates enough size and space for approaching, reaching, manipulating and using, regardless of user's body size, posture or mobility. The space should accommodate assistive devices, a service animal or a personal attendant. Whether standing or sitting, the design provides a clear line of sight and allows for a comfortable reach modified for a variety of hand or grip size.

1.6 Scope of Work

This will be a multi-disciplinary design project. It is anticipated that the prime consultant will be an Architecture consulting firm, providing all the necessary professional services to the full extent that may be required by provincial or territorial law in the province of Ontario. The consultant team must provide expertise in a variety of disciplines including but not limited to the following specialties or key sub-consultants:

- Structural Engineering
 - Including but not limited to all services related to the structural integrity of the *Work*, including building foundations and superstructure and secondary supports such as loose masonry, steel lintels, exhibit custom support (indoor and outdoor) including the design of associated foundation or anchoring systems which require a seal from an Engineer. Also includes viewing platforms, shelters and stand-alone elevated structures.

- Mechanical Engineering
 - Including but not limited to all services related to mechanical systems and their controls including: plumbing and drainage; heating, ventilating and air conditioning; fire protection; process piping and equipment; and other special systems required to achieve sustainability goals and on-site energy generation.
- Electrical Engineering
 - Including but not limited to all services related to electrical systems and their controls including: normal and emergency power; lighting; communications; lightning protection; grounding; fire protection; access control; and other special systems required to achieve sustainability goals and on-site energy generation or integration of exhibit elements.
- Civil Engineering,
 - Including but not limited to building, site services, storm management, parking lot, access roads, vehicular and pedestrian access design (including structures such as bridge, culvert, viewing platforms, etc.), and other active transport paths within site limit.
- Geotechnical Engineering
- Traffic Engineering
- Municipal Engineering
- Code Specialist
- Hardware Consulting Services
- Vertical Transportation Consulting Services
- Security, Building Security, Communication Systems and Life Safety Consulting Services.
- Building Sciences Consulting Services
- Landscape Architecture
- Environmental Engineering and Specialists
- Universal Accessibility Consultant
- Interior Design Consulting Services
- Kitchen Consultant
- Lighting Consultant
- Acoustic Consultant
- Cost Consultant
- Fire Protection Engineer,
- LEED consultant (or equivalent: Sustainability Consultant having proven expertise on the retained sustainable certification(s))
 - Including but not limited to Services to document and prepare submissions to independent bodies for review and certification of achieved sustainable design objectives
- Energy Modelling
 - Including simulations and demonstration of sustainability goals / Energy Budget.
- Commissioning Services
- Any other specialist services as proposed by the prime consultant. The design of all components of this project must adhere to the design principles listed in Section 1.5. The scope of work is to be read in conjunction with the Required Services sections that follow, which explain the level of effort required for each section. Refer to Appendix D for more details on the professional services to be provided and the coordination and division of responsibilities with the VE Design Firm engaged by PCA.

1.6.1 Site Development

Design a site plan including, but not limited to, the following components:

Municipal Utilities Connections (if required, depending on the retained option for site services)

- PCA will hire a Municipal Engineering firm to design municipal infrastructure and utility services that will be required to bring to the site. Construction documents and site supervision for this work will be done in parallel through a separate firm. The Consultant will be required to coordinate designs, drawings and specifications with the Municipal Engineering firm. At a minimum coordination will be

required to define capacity requirements, delineation of the work between the Contractors and sequencing of the work.

Vehicle Entry and Exit Routes

- Review available data from initial site analysis study and acquire any additional required data (including but not limited to vehicle, pedestrian, transit, cyclist, bus, emergency vehicle and truck traffic) and develop future expected traffic projections.
- Investigate access options for vehicle entry to and exit from the site.
- Discuss road access options with the City of Toronto, Toronto Zoo, and TRCA, as required
- Design vehicle access routes, including any alterations to roadways within the project site and in adjacent non-RNUP land, and tree planting or other landscape alterations.
- Investigate transit access options including a potential bus loop and stop for TTC buses. Work with the City of Toronto and TTC to design and implement new transit access.

Parking Lot

- Design parking lot to allow for sufficient individual vehicle parking, large vehicle (e.g. RV) parking and bus parking (250-400 parking spaces). Also allow for bicycle parking (minimum 50 bicycle capacity).
- Create safe travel routes and optimize circulation of vehicles, bicycles and pedestrians within the parking lot.
- Design a drop off zone and an accessible parking area.
- Design a bus drop off zone.
- Design separate parking area for PCA fleet vehicles and personal staff vehicle parking.
- Ensure parking lot has adequate drainage to avoid standing water in spring flooding and other wet conditions.
- Design snow storage areas.
- Consider and incorporate sustainable design and low impact development practices into the parking lot design, such as:
 - Stormwater management – permeable pavement, bioretention areas, infiltration trenches.
 - Native vegetation plantings throughout the parking lot, including shade trees to reduce the urban heat island effect.
 - EV charging stations.

Visitor Entry, Circulation, and Trails

- Design pathways for visitor entry and circulation through the site
- Plan directional wayfinding and regulatory signage that adheres to PCA standards and guidelines to direct visitors through the site
- Design entryway that builds anticipation, creates a distinctive 'sense of arrival' for visitors and reinforces Parks Canada brand essence in the area
- Redesign elements of the landscape as required, including alterations to existing paths, the RVF parking lot, fences, trees, and grades/slopes
- Incorporate the existing Vista Trail into the site plan, with alterations as required for visitor circulation through the site and improvements to meet universal access standards.

Other Site Elements and Considerations

- Design an accessible viewing area such as a deck, platform, tower, rooftop lookout, or other structure that provides views of the Rouge Valley to the east of the project site. The design of the viewing area must consider environmental impacts, slope stability, high visitor traffic and long-term maintenance requirements.
- Design outdoor gathering spaces, including shade and shelter. These spaces may be used by general visitors as well as groups such as the RNUP FNAC, guided walks, school groups, day camps, tour groups, and interpretive workshops.
- Design an outdoor picnic area with sufficient space and waste disposal facilities.
- Include bike racks and a bike repair station in the site plan.

- Consider outdoor spaces targeted towards families and children, including multi-generational groups.
- Consider how outdoor spaces can be used for RNUP or external events, including requirements such as access to power and water, emergency access, and loading zones.
- Consider incorporating a small-scale agricultural demonstration area into the site.
- Create a lighting plan for the site, considering vehicle routes, parking lot, and pedestrian routes.
- Create a planting plan for the site, incorporating native species.
- Integrate interpretive elements (to be designed by the VE Design Firm) into the site plan.
- Consider accessibility and inclusivity in all aspects of the site plan.
- Consider how the site plan and building location will impact RVF operations at Pearse House. Design solutions to clearly distinguish PCA and RVF as separate entities and reduce visitor confusion.
- All signage and text must be provided in the two official languages (English and French). If other languages are to be integrated, PCA will provide the translation.

1.6.2 Visitor, Learning and Community Centre

The total building area for the Rouge Gateway is estimated to be 900-1400 square metres and may consist of one or more buildings. The exact building area and space allocations for individual building components will be further defined as part of this scope of work.

Design a new visitor, learning and community centre building(s) including, but not limited to, the following components:

Welcome and Reception Area

- This area will welcome and orient visitors through a combination of self-directed information and information provided by Parks Canada visitor services staff.

Multipurpose Learning Space

- Space for groups to participate in third party or Parks Canada led educational programming.
- This space may be dedicated or multi-use and must include all required components to support programming needs (e.g. cubbies/lockers, storage space, A/V equipment/setup, etc.). It should be flexible to accommodate different programs and group needs.

Gathering Space

- Indoor gathering and secondary orientation space for use by organized groups as well as general visitors.
- This space should also serve as a warming or cooling area and respite from inclement weather.
- Could be incorporated into reception area.

Indigenous Partner Space

- This space will be further defined through engagement with the RNUP First Nations Advisory Circle, but may include dedicated FNAC gathering space, ceremonial space, programming space, and/or a traditional structure such as a sweat lodge.

Gift Shop/Retail Space

- Retail space for Parks Canada merchandise and utilitarian items, with potential to be run by Parks Canada staff working in the welcome and reception area.
- Could be a dedicated interior space or a secured corner/kiosk within the main reception area
- The Consultant will be responsible for designing the retail space, but fit-up will be by others.

Family/Kids Space

- This space will be targeted towards families with children, with opportunities for child-friendly activities and integration with the Club Parka and Xplorers programs.

Food Service/Kitchen

- Parks Canada is undertaking a food services feasibility assessment and intends to issue a Request for Interest to identify potential food service operators.
- The food service offer will be further defined by PCA with input from the potential food service operator, but may consist of café or cafeteria style service with the ability to adjust service level seasonally (i.e. reduced offer in the winter).
- The Consultant will design the commercial kitchen space based on the outcomes of the above assessment.
- The VE Design Firm will be responsible for the interior design of the eating area and other public elements of the food service offer.
- Consider potential for an additional commercial, certified kitchen for external group use for special events and third party rentals.
- Consider potential for outdoor patio space as part of the food service offer.

Washrooms

- Universal, gender neutral, barrier-free washrooms must be included in the design.
- Some washrooms should be accessible outside of the operating hours of the building, to allow for potential third party rentals of spaces within the building and general visitor access from outside the building after hours. This could be achieved through a separate washroom building, or washrooms accessible from the outside of the main building.

Multi-use Space/Event Space

- This space should be adaptable to various uses, including hosting RNUP events, external events, presentations, meetings, staff training sessions, musical concerts, performances, weddings, etc.
- This space may be rented to third party groups and could be accessible separately from the remainder of the building to allow for secure access outside of hours of operation.

Volunteer Space

- Space for volunteers to prepare for guided walks and other volunteer activities.
- Secure storage for materials and equipment used by volunteers.

Support Spaces

- Appropriate storage space to support all operations of the visitor, learning and community centre.
- Secure space for cash management for retail and visitor services operations.

Staff Office Space

- Office space for Parks Canada and vendor or partner staff, including meeting space, a staff kitchen and washrooms. This space should be visually separate from the visitor-focused components of the building.
- The Consultant is responsible for designing all office spaces. Office furniture will be procured separately by PCA.
- PCA anticipates that the building will have space for a minimum of five year-round staff, with the ability to expand capacity during the summer to include additional seasonal staff.
- Cost, space requirements and feasibility of additional staff office capacity (up to 40 staff) must be investigated at the Pre-Design stage in order to confirm the functional program.

Security

- Define and establish project-specific environmental security design principles with Parks Canada Representatives.
- Develop a security plan for the project, based on design principles and an acceptable threat and risk assessment of the site that will consider similar sites and activities in similar settings.
- Design security systems, including video surveillance, access control system, electronic key system, alarm system, and monitoring for the building and site, including requirements for security systems UPS.

- Incorporate principles of Crime Prevention Through Environmental Design (CPTED) in all aspects of the project.
- Design must consider flows and circulation patterns of all possible persons accessing or using the building and site. In doing so, the service provider will consider employee and visitor safety as well as other elements of security threats and risks such as theft and vandalism.
- Assist in determining areas of the building and the site that will be accessible to the public and areas that will have controlled access.
- Consider requirements for potential third party rental spaces and washrooms to be accessible separately from other areas of the building.
- Consider requirements for separation of staff office space and visitor spaces (including parking spaces and loading/unloading areas for deliveries)
- Design lighting for the building and site to minimize unwanted activities and increase security.
- Analyze different technologies and security approaches, as required, and provide a comparison table including technical, capital cost and maintenance/operation cost analysis to help select the appropriate technology for each security component.
- Unless otherwise directed, all security planning will aim to adhere to the most recent versions of the Treasury Board Policy on Government Security as well as all associated guides, standards and directives (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=16578>). The service provider will also consider all applicable guides of the RCMP Technical Security Branch (<https://www.rcmp-grc.gc.ca/physec-secmat/pubs/index-eng.htm>) including G1-005 Guide to the Preparation of Physical Security Briefs (<https://www.rcmp-grc.gc.ca/physec-secmat/pubs/g1-005-eng.htm>) as well as other relevant industry security standards and security requirements specific to Parks Canada.
- All recommendations will require approval from PCA security before being submitted to the project.

Additional Considerations

- The design of the building(s) should be harmonious with the surroundings, considering the transitions between indoor and outdoor spaces and reflective of the visitor journey from an urban setting to a natural landscape.
- Accessibility and inclusivity must be considered in all aspects of the building design.
- Interpretive elements (to be designed by the VE Design Firm) must be integrated into the building design.
- The capacity to provide public Wi-Fi must be included in the building design.
- Integrate with internal park radio and cellular communications systems (used by park wardens).
- All signage and text must be provided in the two official languages (French and English). If other languages are to be integrated, PCA will provide the translation.

1.7 Reference Documents

The following documents are available for reference:

- Site map (Appendix B)
- Rouge National Urban Park Management Plan (2019):
 - <https://www.pc.gc.ca/en/pn-np/on/rouge/info/gestion-management>
- Parks Canada Green Building Directive (2012)
- Greening Government Strategy: Real Property Guidance (2019)
- RNUP Common Look and Feel Design Catalog (2020)
- Rouge Gateway Design Inspiration Package (2020)

The following documents will be made available after contract award:

- Draft project schedule
- Professional schedules
- Site Analysis Report
- Preliminary program

- Survey drawings
- Rouge Gateway Tourism Market Analysis (2020)
- Toronto Gateway Welcome Area Potential Sites Report (2019)
- On Target: A Strategic Focus for External Relations and Visitor Experience (2019-2022)
- RNUP Viewscapes Report (2018)
- Government of Canada Workplace Fit-up Standards
- RNUP First Nations Engagement Primer
- First Nations Advisory Circle (FNAC) Members Overview
- Relevant notes from previous FNAC engagement sessions
- Parks Canada Exterior Signage Standards and Guidelines
- Parks Canada Brand Expression Tools
- Parks Canada Accessibility and Inclusion Principles (V1.1)
- ZooShare documents - Transportation Plan, Natural Heritage Assessment, Water Bodies Assessment

1.8 Budget

The construction tender budget for this project is \$13 million, excluding applicable tax and the VE Design Firm's contract. This includes both building construction and site development. The VE Design Firm's budget, including design, fabrication and installation of visitor experience elements, is expected to be not more than \$2.65 million, excluding applicable tax.

The Rouge Gateway building(s) and vital components of the site will be the focus of this initial capital investment. Additional non-vital or enriched site components identified in the conceptual designs may be implemented in the future. At the Pre-Design and Schematic Design stages, the consultant will be required to identify priority site elements to be included as part of this project scope, as well as additional elements for future consideration, as needed.

1.9 Proposed Schedule

The target date for the Rouge Gateway to open to the public is spring of 2025. The following is a proposed schedule for key milestones in the project. The Consultant will be responsible for developing a full project schedule, in conjunction with the VE Design Firm, as part of the Initiation Phase. The project schedule must allow sufficient time for PCA reviews at each stage of the design, as well as stakeholder and FNAC review at the Schematic Design and Design Development stages.

Initiation Phase

Tentative Contract award date	October 30 th , 2020
Completed coordinated Implementation Strategy and Schedule	December 2020

Pre-Design Services

Completed Pre-Design Reports (A&E and VE)	Mid-April 2021
---	----------------

Schematic Design Services

Schematic Design Options (draft)	End of May 2021
Completed Schematic Design Report (& VE Concept Design packages)	Mid-July 2021
Completed engagement and selection of design option	Early September 2021

Design Development Services

Completed Design Development Report (& VE Final Experiential Design Content Package)	Late February 2022
--	--------------------

Construction Document Services

Completed 33% construction documents	Late May 2022
Completed 66% construction documents	Early August 2022
Completed 99% construction documents	Late October 2022
Completed 100% construction documents	Early December 2022

Tender Call and Construction Contract Award

Mid- December 2022 to Mid April 2023

Execution Phase

Construction by General Contractor	May 2023 to Dec.2024
VE Shop Drawing and Fabrication	January 2023 to Dec. 2024
Substantial completion & Building Occupancy	Early January 2025
VE Installation	Jan 2025 to Early March 2025

Close-out and Move in

End of March 2025 to End of April 2025

Target Opening

May 2025

2. General Objectives and Project Administration

2.1 Roles and Responsibilities

2.1.1 PCA

- The Project Authority has overall responsibility for the progress of the project, including management, administration and coordination of the activities as set out in this document.
- PCA will review all aspects of the Consultant's work on a continuing basis.
- The Project Authority will provide, in a timely manner, project information, written decisions and requests, including acceptances and approvals relating to the Services provided by the Consultant.
- PCA will complete an impact assessment for the project including:
 - Archaeology Overview Assessment
 - Archaeology Impact Assessment
 - Detailed Impact Assessment

2.1.2 Consultant

The Consultant will:

- Provide and coordinate the work of all professional disciplines required to deliver the services described in this document.
- Incorporate PCA's, Indigenous Partners', and stakeholders' needs into the required project deliverables.
- Coordinate and creatively collaborate on the building and site design with the VE Design Firm throughout the lifecycle of the project to ensure cohesive and integrated design.
- Establish a team capable of effectively delivering the services described in this document and ensure continuity of key personnel working in a dedicated effort for the project life. For proposed changes to the roles of any persons to be employed by the Consultant to provide services for the project, submit in writing to the Project Authority for approval the name, qualifications, and experience of the proposed individual(s).
- Provide rigorous quality assurance reviews during the design and construction administration stages, including the application of value architecture/engineering reviews in the design.
- Ensure designs meet all updated National Codes requirements (currently in review and expected to be released in spring 2021).

- Deliver the project within the time frame and assigned budget in accordance with the project plan developed during the Pre-Design stage.
- Make changes in the Services to be provided for the Project, including changes which may increase or decrease the original scope of services, when requested in writing by the Project Authority. Prior to commencing such changes, advise the Project Authority of any known and anticipated effects of the changes on the construction cost estimate, Consultant fees, project schedule, and other matters concerning the project.
- Provide a Consultant fee forecast as per the government financial year (April 1 – March 31) and update this forecast as required.
- After the contract is awarded, provide a project cost forecast as per government financial year, and update this forecast as required.
- Provide monthly status reports identifying the progress of deliverables and any instances where the project schedule or cost plan is not being met.
- Based on the Detailed Impact Assessment completed by PCA, incorporate mitigations and best management practices for construction into the specifications.

2.2 Coordination with PCA

- The Project Authority assigned to the project is the Project Manager and acts as the liaison between the Consultant, PCA, and the Contractor.
- Unless stated otherwise by the Project Authority, the Consultant will obtain all Federal and Provincial requirements, permits and approvals necessary for the work.
- The Consultant must advise the Project Authority of any changes that may affect schedule or budget and obtain written approval from the Project Authority before proceeding.

2.3 PCA Reviews and Acceptance of Consultant Deliverables

- The Consultant must obtain Project Authority approval at each project stage.
- The Project Authority reserves the right to reject unsatisfactory work. In the event the Project Authority may identify areas of concern, including errors, omissions, and areas of inadequate detail, the Consultant Team shall make such revisions as are subsequently agreed to be necessary.
- No acceptance by the Project Authority, whether expressed or implied, shall be deemed to relieve the Consultant of professional or technical responsibility for the project and compliance with the terms and conditions of the Contract.
- Project Authority acceptances do not prohibit rejection of work which is determined to be unsatisfactory at later stages of review. If progressive design development or technical investigation reveals that earlier acceptances should be withdrawn, the Consultant is responsible for redesigning work and resubmitting for acceptance at the Consultant's cost.

2.4 Lines of Communication

- Unless otherwise requested by the Project Authority, the Consultant shall communicate with the Project Authority only.
- During Construction Tender stage, the Contracting Authority will conduct all correspondence with bidders and award the Contract with the assistance from the Project Authority (with recommendation from the Consultant).
- During construction stage, the Project Authority (with recommendation from the Consultant) shall submit the Contemplated Change Notice (CCN) with the Contractor's quote to the Contracting Authority who will issue the Change Orders.

2.5 Coordination with Sub-Consultants

The consultant shall:

- Throughout all phases of the project, assume responsibility for coordinating the work of any sub-consultants and specialists retained by the Consultant or by the Project Authority.
- Ensure clear, accurate and ongoing communication of all project information including design concept, budget, and scheduling issues (including changes) as they relate to the responsibilities of all sub-consultants and specialists.

- Ensure sub-consultants and specialists provide adequate site review services, attend all required meetings and attend site meetings when they coincide with site reviews.

2.6 Coordination with VE Design Firm

- The Consultant will be required to work closely with the VE Design Firm to integrate visitor experience elements into the design of the building and surrounding site.
- The Consultant and VE Design Firm will attend regular meetings with PCA to ensure continuity and full integration of the building, site and visitor experience design components.
- Refer to Appendix C and Appendix D for more details on the expected coordination and division of responsibilities between the Consultant and the VE Design Firm.
- The Consultant will have veto rights over the VE Design Firm in regards to Building Standards and Code.
- In the event of conflicting recommendations or designs proposed by the Consultant and VE Design Firm, PCA will retain the final decision.

2.7 Meetings

- The Consultant will be required to travel to the RNUP region on occasion to conduct creative workshops, meet with surrounding communities, and engage with Indigenous partners along with the VE Design Firm.
- Whenever feasible and appropriate, in-person meetings are important for developing positive working relationships with local partners, however phone or teleconference options may be explored. In light of the rapidly evolving COVID-19 situation, PCA is committed to being flexible and understanding of the fact that in-person meetings may not be advised. Meeting formats will be assessed on a case-by-case based on the most up-to-date advice from public health officials and agency directives.
- The Project Authority will arrange meetings generally every two weeks throughout the design and tendering stages of the project, for representatives from: PCA, Consultant, VE Design Firm. Additional meetings may be required to address any issues that may arise.
- The Project Authority will arrange meetings generally every two weeks throughout the construction period, for representatives from: PCA, Consultant, VE Design Firm, Contractor, major sub-trades. Additional meetings may be required to address any issues that may arise.
- The Consultant shall prepare and distribute minutes within three (3) working days of the meeting.

2.8 Project Response Time

- Key personnel of the Consultant and Sub-Consultants or specialist firms must generally be personally available to attend meetings and respond to inquiries within three (3) working days of the Project Authority's request. However, during the execution phase, critical items that are flagged as having significant impact on schedule and cost will require a response within 24 hours.
- Following PCA reviews of draft Consultant reports, the Consultant must complete all necessary revisions within ten (10) working days of receiving PCA comments.

2.9 Media

- The consultant shall not respond to requests for project-related information or questions from the media. Such inquiries are to be directed to the Project Authority.

2.10 Other Authorities Having Jurisdiction

- Although the Federal Government does not formally recognize jurisdictions at other levels of government, voluntary compliance with the requirements of these other levels of government is a requirement.
- Codes, regulations, by laws and decisions of "authorities having jurisdiction" will be observed. In cases of overlap, the most stringent will apply. The Consultant shall identify other jurisdictions appropriate to the project.
- PCA will voluntarily comply with the applicable provincial/territorial Occupational Health and Safety Acts and Regulations, in addition to the related Canada Occupational Safety and Health Acts and Regulations.

3. Initiation Phase

3.1 General Requirements

- The purpose of this stage is to ensure the consultant has reviewed all project documentation, integrated project requirements, identified and evaluated conflicts or problems, provided alternative strategies, and presented and received approval on a project scope, delivery process, and schedule required to deliver a cohesive quality project. The approved Implementation Strategy and Schedule will become the baseline schedule to monitor project progress and will be utilized throughout the project to guide project delivery.

3.2 Role of PCA

- Facilitate project kick off meeting and park tour with Consultant and VE Design Firm.
- Provide all available background reports, visitor, and technical data, including geotechnical, survey, regulatory, ecological and site utilities information.
- Review and provide a quality assurance report on the Consultant's Implementation Strategy and Schedule.
- Review revisions and Consultant response to the PCA quality assurance report.
- Review and approve the final Implementation Strategy and Schedule.

3.3 Responsibilities of the Consultant

- Attend project kick off meeting and park tour with PCA and VE Design Firm (anticipated to be 1.5 days).
- Review and analyze all available reports, studies, and data provided by PCA and identify any missing technical information.
- Develop an implementation strategy and project schedule in coordination with the VE Design Firm:
 - Outline all activities, milestones, and deliverables required for the effective delivery of the project and identify time frames for submissions, reviews, and acceptances.
 - Establish communication structure between PCA, Consultant, and VE Design Firm.
 - Confirm project scope and division of work between Consultant and VE Design Firm.

3.4 Deliverables

Implementation Strategy and Schedule:

- Prepare and submit a project Implementation Strategy and Schedule in coordination with the VE Design Firm for review and approval by the Project Authority (draft and final review).
- This proposal must identify in detail the tasks and timing involved in each phase of the project.
- Must also include a detailed schedule of value and budget monitoring strategy.
- Revise as required by the Project Authority and resubmit for acceptance.

4. Pre-Design Services

4.1 General Requirements

- Review and report on all aspects of the project requirements. The Consultant will further review and analyze all available program information, consult with PCA and Authorities Having Jurisdiction and deliver a comprehensive and integrated Pre-Design Report. This report will form the basis for the scope of work for the remainder of the project and will be utilized throughout the project to guide the project delivery.

- Prepare a conceptual plan for the site and building to reflect the current construction tender budget of \$13 million. Provide a sense of scale, building massing, siting, including parking, traffic flow and landscaping. This conceptual plan will be presented to the PCA management team at the end of the Pre-Design Stage.

4.2 Role of PCA

- Organize staff attendance at the Integrated Design Workshop.
- Organize stakeholder attendance at the Integrated Design Workshop.
- Organize FNAC community visits for the Integrated Design Workshops.
- Provide any input and feedback previously received from the RNUP First Nations Advisory Circle.
- Provide functional program direction.
- Review and provide a quality assurance report on the consultant's Pre-Design Report.
- Review revisions and consultant response to the PCA quality assurance report.
- Review and Approve the final Pre-Design Report.
- Liaise on all functional areas with PCA staff.

4.3 Responsibilities of the Consultant

The scope and activities of the Consultant shall include but are not limited to the following:

4.3.1 Engagement

- Plan and facilitate the following Integrated Design Workshops in coordination with the VE Design Firm. The input acquired during the Integrated Design Workshops will inform the program analysis as well as the creation of design schemes at the Schematic Design stage.
 - One (1) in-person Integrated Design Workshop with PCA staff.
 - One (1) in-person Integrated Design Workshop with key external stakeholders.
 - A minimum of five (5) in-person Integrated Design Workshops with FNAC communities. The Consultant will be required to travel to individual FNAC communities to facilitate the workshops. Nine of the ten Nations are located in Southern Ontario, with the tenth located within Quebec City.
 - If in-person meetings are not possible due to travel or gathering restrictions, the workshops should be held online.
- Track, compile and summarize feedback received during the Integrated Design Workshops.
- Prepare Engagement section of the Pre-Design Report.

4.3.2 Codes and Regulatory Analysis

- Review and analyze regulatory and statutory requirements.
- Identify and verify all authorities having jurisdiction over the project.
- Identify applicable codes, regulations and standards, including PCA, Public Services and Procurement Canada and Treasury Board standards, directives and requirements.
- Prepare Codes and Regulatory Analysis section of the Pre-Design Report.

4.3.3 Program Analysis

- Establish detailed functional and technical requirements based on preliminary input from PCA and the Integrated Design Workshops, including but not limited to the following:
 - Identify site requirements, such as parking, circulation, and outdoor space.
 - Identify priority site elements to be included in this scope of work and secondary site elements for consideration in the future.
 - Identify functions and space requirements for all building components. Identify the different types of spaces, their required areas and interrelation.
 - Identify capacity for staff office space within the available budget after all other building and site requirements have been considered.
- Prepare Program Analysis section of the Pre-Design Report.

4.3.4 Site Analysis and Investigation

- Review and analyze all available information provided by PCA and complete all necessary additional site investigation required for the project.
- Prepare Site Investigation section of the Pre-Design Report.

4.3.5 Building Analysis

- Include all technical and functional considerations and future uses for building.
- Floor plans, elevations.
- Building area.
- Building massing.
- Specific Materials and assemblies to be used.
- Prepare Building Analysis section of the Pre-Design Report.

4.3.6 Budget, Schedule and Risk Analysis

- Review and analyze the project budget and schedule data, constraints and opportunities.
- Advise and recommend budget and schedule modifications and outline risk implications and mitigation strategies.
- Prepare Class D estimate.
- Prepare risk implications and mitigation strategies.
- Prepare Budget estimate, Schedule and Risk Analysis section of the Pre-Design Report.

4.4 Deliverables

Pre-Design Report

- Prepare and submit an integrated Pre-Design Report which includes all technical and functional considerations for review and approval by the Project Authority.
- Revise as required by the Project Authority and resubmit for acceptance.
- The Report will be used as a basis for monthly monitoring and reporting of progress and will require supplements and modifications to reflect changes in project parameters as may be identified and approved throughout the project life cycle.

Pre-Design Report content shall include but is not limited to the following:

- Executive Summary: intended to provide a précis of the Pre-Design Report and outline any recommendations requiring PCA approval.
- Engagement summary.
- Codes and Regulatory analysis.
- Functional and technical program analysis, including but not limited to:
 - Program Statement
 - Building Summary Space List
 - Overall Adjacency Diagrams.
 - Stacking Diagrams
 - Growth and Phase Development
 - Circulation and Open Space Requirements
 - Functional relationship Diagrams/ Room by Room
 - Loading/Unloading/Storage Facilities Requirements
 - Transportation Requirements
 - Building Finishes
 - Room Data Sheets
 - Furnishing, Equipment and Built-Ins
 - Window Treatment
- Site analysis, parking plan, general vehicular and pedestrian flow.
- Site Life Safety Considerations
- Environmental Considerations

- Building Analysis including all functional considerations and future uses for interior and exterior of the building/project.
- Budget, Schedule and Risk analysis, including Class D cost estimates.
- Response to PCA Quality Assurance Report.

5. Schematic Design Services

5.1 General Requirements

- The objective of the Schematic Design stage is to explore two distinctly different design schemes (including technical and environmental strategies), to allow comparison, analysis against project requirements and selection of a design direction for preparation of a final design concept.
- Concepts must correspond to and complement the two experiential design concept options that will be prepared simultaneously by the VE Design Firm.
- Schematic Design options will undergo FNAC and stakeholder review, followed by public engagement, consisting of a public information session and an online engagement platform (led by PCA or an engagement firm retained by PCA). The Consultant will prepare all materials for FNAC and stakeholder review and will present the schematic design options to FNAC members for feedback. The Consultant will also prepare all materials for public engagement and will present and respond to questions at the public information session.
- Schematic Design is to be presented in sketch format (3D model, to scale), fully integrated and supported by two distinctly different architectural solutions, along with massing models, visitor experience design concepts and site interpretation plan options (to be prepared by the VE Design Firm), parking options, site photographs and narrative description.

5.2 Role of PCA

- Lead FNAC and stakeholder engagement.
- Liaise on all functional and technical areas with PCA staff.
- Review and comment on preliminary Consultant submissions and presentation.
- Review and provide a quality assurance report on the Consultant's Schematic Design Report.
- Review revisions and Consultant response to the PCA quality assurance report.
- Coordinate and communicate to the Consultant all FNAC and stakeholder input on the design schemes.
- Review and accept the final Schematic Design Report.
- Provide a public engagement strategy, created by PCA or an engagement firm retained by PCA.
- Review Consultant's public display, presentation, and online materials prior to the Public Information Session and opening of the online engagement platform.
- Organize and facilitate the Public Information Session (possibly in conjunction with a separate engagement firm) and answer any general questions related to Parks Canada or RNUP.
- Select the design option to be further developed in Design Development.
- Authorize Consultant to proceed to Design Development.

5.3 Responsibilities of the Consultant

The Consultant scope and activities shall include but are not limited to the following:

5.3.1 Engagement

- Present the two draft Schematic Design Options to the project team and key PCA staff for preliminary comments and confirmation of design direction.
- Prepare Schematic Design brief for FNAC and stakeholder review of the design schemes.
- Present the two draft Schematic Design Options to FNAC members. This may occur at the annual

- FNAC meeting held in RNUP or through online meetings.
- Incorporate PCA, FNAC and stakeholder feedback into the final Schematic Design Report.
- Prepare public display materials, present design schemes and answer questions at the Public Information Session(s).
- Prepare all content and materials to be posted on the online engagement platform.

5.3.2 Regulatory

- Each discipline will begin reviews of applicable statutes, regulations, codes, and by-laws as appropriate for this stage of design.

5.3.3 Architectural

Site Analysis and Design Options – prepare two (2) schematic site plans including:

- Proposed building outlines, site components, orientation, main accesses, and traffic patterns.
- Site features and restrictions, based on recent survey drawings.
- Influences and existing structures.
- Subsurface features.
- Historical site features.
- Archaeological site features.
- Environmental site features including sustainable design strategies (e.g. storm water management, hard and soft landscaping, including parking, waste management (garbage bin location and ease of access for maintenance staff), etc.).

Prepare two (2) Design Options:

- Functional Considerations – the Consultant shall provide detailed functional and technical considerations for the various designs they create.
- Schematic building floor plans showing all spaces in the functional and technical program, linking interior and exterior spaces.
- Sketch elevations and sections indicating the basic design approach and aesthetic philosophy.
- Sketch perspectives and massing studies.
- Gross building areas and summary of main accommodation areas required and proposed.

5.3.4 Structural

- Proposed structural systems including foundation methods, explanatory sketches, etc. and a copy of the site investigation report on which the design is based.
- Initial seismic, wind, snow, rain and loading analysis based on site-specific features and climatic conditions.

5.3.5 Mechanical

- The schematic design submission shall include a description of specific mechanical requirements and function for each area in the project. Identify any unique or specialized equipment required by the facility. Incorporate in the submission a schedule of requirements listing all rooms and identify the mechanical building services to be provided.
- Explain in the concept submission the manner in which the proposed mechanical systems correlate with user requirements.
- Identify the volume of outdoor air to be supplied per person.
- Identify the delivery rate of supply air to occupied spaces.
- Identify whether fulltime operating staff will be needed for operating any of the mechanical equipment. Differentiate between staff needed by code requirements versus staff needed because of the nature and size of the facility.
- Identify existing and proposed size, capacity and location of entry points into the building of all mechanical services.
- Identify in square meters the area to be provided for mechanical rooms and then identify what percentage of total building area this represents. Identify location of mechanical horizontal and vertical spaces in the building.
- Analysis of alternative mechanical schemes at the schematic design stage shall reveal energy

consumption of building systems, operating and maintenance costs on a month-by-month basis for a time span of one year. Accordingly, the estimated energy, operating and maintenance costs shall be used in lifecycle cost analyses in order to determine the most beneficial mechanical systems alternative. Lifecycle cost analyses shall be based on a projected building life of 50 years.

- Carry out energy analysis on system alternatives.
- Establish an energy budget for the building and compare it to energy consumption of other similar buildings. Total energy consumed in the building shall be expressed in kWh/m² per year.
- Submit a complete energy analysis using a Canadian-recognized energy analysis tool.
- Identify the type of boilers to be used (i.e. cast iron sectional, fire tube, etc.) and provide an economic and technical explanation of the reason for the type of boiler to be used.
- Propose water consumption and wastewater amount for the design of the building systems and tie-in with available utility lines or to other on-site standalone systems.

5.3.6 Electrical

- Identify existing and propose basic electrical systems of significance to the early design, including but not limited to: life safety, power (regular/emergency), lighting, communications and security.
- Proposed site plan showing location of proposed equipment and service entrances.
- Distribution diagram showing single line diagrams to distribution centers.
- Floor plans complete with locations of major electrical equipment and distribution centers.
- Communication systems: identify existing communication systems including radio, emergency, phone, data, optic fiber and cable systems. Include a proposed systems description.
- Propose Communication Rooms, conduits, radio and telecommunication cable or fiber optic systems, layout and requirements.
- Provide an electrical design synopsis, describing the electrical work in sufficient detail for assessment and approval by the Project Authority. Include feasibility and economic studies of proposed systems complete with cost figures and loads; power consumption and energy management.
- Propose protection to all electrical systems.

5.3.7 Commissioning

- Define Commissioning Requirements and Commissioning Team.
- Provide preliminary Commissioning Plan.
- Identify in square meters the area to be provided to maintenance personnel, including storage and workshops for mechanical, electrical and housekeeping.
- Define project verification archives (data storage and retrieval system).

5.3.8 Environmental

- Prepare Waste Management Plan.
- Identify building and site elements and design choices relevant to the sustainable development certification(s) being targeted.

5.3.9 Budget, Schedule and Risk Analysis

Prepare/update:

- Updated Class D cost estimate for each design option.
- Milestone project schedule, including allowances for reviews and approvals for each stage of the project life cycle.
- Risk implications and mitigation strategies.

5.4 Deliverables

Schematic Design Brief:

- Summary of the two Schematic Design options, for FNAC and stakeholder review.

Schematic Design Report:

- Prepare and submit a Draft Schematic Design Report for review and acceptance by the Project Authority in coordination with the VE Design Firm's Experiential Design Concepts.
- Revise as requested by the Project Authority and resubmit for formal acceptance.
- Present the Schematic Design options to the project team and key PCA staff.
- The Report will update the Pre-Design Report, consolidate the service requirements identified above, and will continue to be utilized as the benchmark project control document to monitor progress of the project. The Schematic Design Report shall be web-enabled.

Schematic Design Report Content shall include but is not limited to the following:

- Executive Summary – intended to provide an outline of any recommendations requiring Project Authority approval.
- Design Approach and Philosophy.
- Codes and Regulatory Analysis:
 - Prepare Preliminary code analysis and regulations analysis, including energy code,
 - Identify authorities having jurisdiction.
- Program Analysis and Options.
- Analysis and Schematic Design Drawings:
 - Site Analysis and Design Options (include parking strategy).
 - Building Analysis and Design Options.
 - Architectural, structural, mechanical and electrical building systems descriptions.
 - Site Plan.
 - Principal floor plan(s).
 - Schematic sections and elevations.
 - Massing representation.
 - Other Illustrative sketches, rendering to convey the intent of the design.
 - For the public consultation and engagement sessions provide fly-through video showing the main space and circulation throughout the site and the building, high quality graphics and renderings for both concepts.
 - Models may be prepared using a software of the Consultant's choice but all files must be saved in a manner such that models may be viewed using Autodesk software suit and saved as an AutoCAD ver. 2010 file (*.DWG). Models will need to be rendered (overlaid) with semi-realistic tones, colours and textures to enable viewers to understand the different volumes, materials and treatments inherent in the existing condition and option(s) during screenshots and walk-through modes.
- Budget, Schedule and Risk Analysis, including an updated Class D cost estimate for each design option.
- Sustainability requirements.
- Response to PCA Quality Assurance Report.
- Commissioning Plan.

6. Design Development Services

6.1 General Requirements

- The objective of the Design Development stage is to further refine and develop the design option selected at the Schematic Design stage.
- The Consultant must obtain written authorization from the Project Authority before proceeding with Design Development.

6.2 Role of PCA

- Review and comment on preliminary Consultant submissions.
- Review and provide a quality assurance report on the Consultant's Design Development Report.
- Review revisions and Consultant response to the PCA quality assurance report.

- Review and accept the final Design Development Report;
- Liaise on all functional and technical areas with PCA staff.
- Authorize Consultant to proceed to Construction Documents.
- Submit rezoning application, if required.

6.3 Responsibilities of the Consultant

The Consultant scope and activities shall include but are not limited to the following:

6.3.1 Engagement

- Prepare a Design Development brief for FNAC and stakeholder review that summarizes key elements of the Design Development Report.

6.3.2 Regulatory

- Refine, develop and prepare detailed code analysis and detailed regulations analysis.
- Present design to the Authorities Having Jurisdiction and obtain their preliminary review comments.

6.3.3 Architectural

- Assist to apply for rezoning submission, if required.
- Prepare Development Permit submission package, including but not limited to: drawings, specifications, required reports and documents, in both digital copy and paper copies along with three (3) duplicate copies of the material finishes and colour board.
- Assist Project Authority to apply for Development Permit, follow-through with the Permit process and provide assistance until the Permit is issued. Update approved Permit submissions and re-submit as required.

The Consultant is responsible for all design activities including but not limited to:

- Site and Landscape plan:
 - Site features and restrictions (i.e. topographical features, climatic influences, setback requirements, easements, utility right of way, existing buildings and/or structures, parking, layout, etc.).
 - Subsurface features and above grade infrastructure/services, including type, capacities and limitations (i.e. storm water drainage, fire protection, domestic water, sewer, power, telecommunications etc.).
 - Archaeological and Historical site features (information may be provided by PCA).
 - Environmental site features including sustainable design strategies (i.e. storm water management, landscaping etc.)
- Floor Plans of each floor showing all accommodation required with room names and calculated areas, including all necessary circulation areas, stairs, elevators, etc. and ancillary spaces anticipated for service use. Indicate building grids, modules, etc., and key dimensions.
- Fixture, Furniture and Equipment plans which include, but are not limited to: a report detailing the functional considerations for the space/building – how those would look, where they would be situated, recommendations for best material.
- Roof Plan showing slope, drainage, roof top equipment.
- Cross-sections through the building(s) to show floor levels, room heights, exterior-grade elevations and roof height.
- Detail Sections of walls, building-envelope design features or other special design features requiring illustration and explanation at this stage, including fireproofing methods.
- Partition plans, reflected ceiling plans, finish schedules, door/window schedules.
- Elevations showing proportion/massing, material type and size, color, texture, finishes, height, floor level, exterior grade.
- Standard details and special details.
- Sustainable design summary of strategies.
- Provide NMS specifications, including identification of all components and finishes and sustainable

procurement strategies.

6.3.4 Structural

- Drawings indicating the proposed structural framing system, structural materials and standard, significant or unusual details proposed. Provide separate structural drawings. Include a copy of the structural load/data analysis on which the design is based;
- Update seismic and loading analysis based on site-specific soil conditions and climatic conditions.

6.3.5 Mechanical

- Site Plan showing service entrances for water supply, sanitary and storm drains and connections to utility services or on-site system, including all key invert elevations.
- Drawings showing preliminary sizing of ventilation, cooling and heating systems showing locations and all major equipment layouts in mechanical rooms.
- Drawings of plumbing system, showing routing and sizing of major lines and location of pumping and other equipment where required.
- Drawings of the fire protection systems showing major components.
- Produce preliminary designs based on the approved schematic design. Update the energy analysis and energy budget established at the schematic design stage.
- Update the schedule of requirements.
- Provide information of all internal and external energy loads in sufficient detail to determine the compatibility of the proposal with existing services, approved concept and energy budget.
- Analysis of selected equipment and plant with schematics and calculations sufficient to justify the economy of the selected systems.
- Describe the mechanical systems and the components of each system. Describe the operation of the mechanical systems.
- Explain what operating staff will be needed to operate the building systems and the expected functions of the operation staff.
- Describe the building systems control architecture. Provide preliminary energy management control system (EMCS) network architecture, mechanical control schematics and sequence of operation.
- Explain what acoustical and sound control measures are to be included in the design.

6.3.6 Electrical

- Provide drawings showing advanced development of all the systems.
- Provide the following data:
 - Total connected load.
 - Maximum demand and diversity factors.
 - Sizing of standby load.
 - Short-circuit requirements and calculations showing the ratings of equipment used.
- Electrical drawings with:
 - Floor elevations and room identification.
 - Legend of all symbols used.
 - Single line diagram of the power circuits with their metering and protection, including:
 - Complete rating of equipment.
 - Ratios and connections of current transformers (CTs) and potential transformers (PTs).
 - Description of relays when used.
 - Maximum short-circuit levels on which design is based.
 - Identification and size of services.
 - Connected load and estimated maximum demand on each load centre.
- Circuit numbers at outlets and control switching identified.
- All conduit and wire sizes except for minimum sizes which should be given in the specification.
- A panel schedule with loadings for each panel.
- Telephone conduits system layout for ceiling/floor distribution
- Riser diagrams for lighting, power, telephone and telecommunication cable systems, fire alarm,

- security and other systems.
- Elementary control diagrams for each system.
- Schedule for motor and controls.
- Complete lighting layout and fixture schedule clearly indicating methods of circuiting, switching and fixture mounting.
- Electric heating layout and schedule.
- Arc flashing protection.

6.3.7 Commissioning

- Define Commissioning and Operation Requirements and Commissioning Team.
- Provide preliminary Commissioning Plan.
- Prepare a Commissioning Brief describing major commissioning activities for mechanical, electrical and integrated system testing.
- Define and establish project specific archives.

6.3.8 Environmental

- Update Waste Management Plan.

6.3.9 Budget, Schedule and Risk Analysis

Prepare/update:

- Class C cost estimate.
- Project schedule modifications, including allowances for reviews and approvals for each stage of the project lifecycle.
- Risk implications and mitigation strategies.

6.4 Deliverables

Design Development Brief:

- Summary of key elements of the Design Development Report, for FNAC and stakeholder review.

Design Development Report:

- The Consultant shall prepare and submit a Draft Design Development Report for review by the Project Authority in coordination with the Experiential Design Content Package being drafted by the VE Design Firm.
- Revise as requested by the Project Authority and resubmit for formal acceptance.
- Present key outcomes of the design development report to the project team and key PCA staff.
- The Report will update the Schematic Design Report, consolidate the service requirements identified above and will continue to be utilized as the benchmark project-control document to monitor progress of the project. The Design Development Report shall be web-enabled.

Design Development Report Content shall include but is not limited to the following:

- Executive Summary – intended to provide an outline of any recommendations requiring Project Authority approval.
- Update of design approach and philosophy.
- Codes and Regulatory Analysis - update code analysis and regulations analysis.
- Architectural, structural, mechanical and electrical building systems descriptions.
- Material finishes and preliminary colour schemes
- Outline specifications.
- Site plans
- Floor plans
- Elevations
- Building Sections
- Discipline drawings

- Other Illustrative sketches, BIM model and renderings to convey the intent of the design. Models may be prepared using a software of the Consultant's choice but all files must be saved in a manner such that models may be viewed using Autodesk software suit and saved as an AutoCAD ver. 2010 file (*.DWG). Models will need to be rendered (overlaid) with semi-realistic tones, colours and textures to enable viewers to understand the different volumes, materials and treatments inherent in the existing condition and option(s) during screenshots and walk-through modes.
- Additional/updated fly-through and high quality renderings for public engagement purposes of the retained concept.
- Updated budget, Schedule and Risk Analysis, including Class C cost estimate.
- Sustainability requirements.
- Response to PCA Quality Assurance Report.
- Updated Commissioning Plan.

7. Construction Document Services

7.1 General Requirements

- The objective of the Construction Document stage is to prepare tender-ready construction drawings and specifications, setting forth in detail all the requirements for the construction of the project along with a Class B, then a Class A cost estimate.
- The Consultant must obtain written authorization from the Project Authority before proceeding with Construction Documents.

7.2 Role of PCA

- Organize Integrated Design Review Sessions at 33%, 66%, 99%, 100% stages through the construction documentation stage, as required.
- Review and comment on each Consultant submission.
- Respond to questions from the Consultant as required.
- Review revisions and Consultant response to the PCA quality assurance report.
- Review and accept the final the Construction Document progress at 33%, 66%, 99% and 100%.
- Formally accept documents ready for Tender and Construction.
- Liaise on all functional and technical areas with PCA staff.

7.3 Responsibilities of the Consultant

The Consultant Scope and activities shall include but are not limited to the following:

7.3.1 Regulatory

- Update code analysis by using all newly released all National Codes (currently in review and expected to be released in spring 2021). Complete detailed codes and regulations analysis.
- Provide Building Permit package review by the code and life safety consulting engineer with a review report, indicating the design complies with all the code requirements (National and Ontario Building Codes, National and Ontario Fire Codes, National and Ontario Plumbing Codes, National and Ontario Energy Codes, Canadian Electrical Code and all other related safety/construction codes).

7.3.2 Scope and Activities

- Submit drawings and specifications at 33%, 66%, 99% and 100% stages. Construction documents must incorporate the VE Design Firm's drawings and technical specifications that outline any structural components required for install of fabricated VE components.
- Obtain acceptance for each submission at 33%, 66%, 99% and 100% stages.

- Provide written response to all review comments and incorporate them into Construction Documents.
- Confirm format of drawings and specifications (National Master Specification).
- Clarify special procedures (i.e. phased construction).
- Advise as to the progress of cost estimates and submit updated cost estimates as the project develops.
- Update the project schedule.
- Prepare a Class B estimate at the 66% complete design stage and a Class A estimate at the 99% complete design stage.
- Submit all architectural and engineering calculations. Calculations submitted might not be reviewed. They are required for record purposes and in certain instances to assist in the understanding and interpretation of designs. Calculations shall be submitted in a format that is legible, neat and easily understandable.
- Review and approve materials, construction processes and specifications to meet sustainable development objectives.

7.3.3 Technical and Production Meetings

- Production of construction documents will be reviewed during the meetings arranged by the Project Authority and the Consultant.
- Representatives from PCA will be present as arranged by the Project Authority.
- Consultant shall ensure that their staff and any sub-consultant representatives attend the technical and production meetings.
- Consultant shall ensure all documents are coordinated with all sub-consultants and disciplines as applicable.
- Consultant shall arrange for all necessary progress prints, data, product information, etc.
- Consultant shall prepare minutes of the meetings and distribute copies to all participants.
- Prepare and submit a written response to the Project Authority, to all comments provided by PCA.

7.4 Deliverables

7.4.1 General

- Deliverables are similar at all three – 33%, 66% and 99% stages, though the level of detail presented is meant to increase as the project progresses through the stages while the level of uncertainty and items outstanding is meant to decrease.
- Deliverables at 100% stage are tender ready and issued for construction.

7.4.2 33%, 66%, 99% Submission Deliverables

- Completeness of the work should reflect the stage of each submission at 33%, 66% and 99%.
- Aspects to be included are identified below and are the same for each submission stage.
- For submission at each stage:
 - Submit written response to the Project Authority review comments made at previous submission.
 - Submit a final report on the application of Sustainable Development principles and strategies for the project to the current stage.
 - Submit one copy of updated Cost Plan, Class B cost estimate at 66% completion.
 - Submit one copy of updated Cost Plan, Class A cost estimate at 99% completion.
 - Submit one copy of updated Project Schedule.
 - Provide final code analysis. Information on drawings must fully comply with codes, federal standards, PCA requirements and all other requirements.
 - Drawings and Specifications:
 - All construction drawings and edited specifications - fully complete.
 - Complete set of coordinated construction drawings and specifications, including all details, suitable for final review.
 - Written contributions specific to the tender form and Invitation to Tender, as may

be required.

7.4.3 100% Submission Deliverables

- Written response to the Project Authority review comments made at 99% stage.
- All original reproducible drawings, tender documents and specifications for tendering purposes, 100% reviewed and coordinated, incorporating all PCA comments made at the 99% stage.
- All specification sections and an index of specifications. The specifications shall consist of typed and edited NMS sections.
- Updated project implementation schedule.
- Final Class A cost estimate.
- Provide six (6) hard duplicate copies of signed and sealed, digitized professional schedules A and B, specifications and drawing files, in both original and PDF (Portable Document Format), bookmarked by section to Project Authority for Building Permit, tender and construction.
- Plans and specifications reviewed and approved in a report format by the code and life safety consulting engineer before tender call. The approval report indicates the design complies with all the code requirements (National and Ontario Building Codes, National and Ontario Fire Codes and all other related safety codes).
- Assist Project Authority to apply for Building Permit, follow through with the Permit process and provide assistance until the Permit is issued. Update approved Permit submission and re-submit as required.

8. Tendering Services

8.1 General

- The Consultant's original Construction Documents (signed and sealed) are used to issue to the Government Electronic Tendering System (GETS) (Buyandsell.gc.ca).

8.2 Responsibilities of the Consultant

- Attend bidders' conference.
- Provide the Project Authority with all information required by bidders to fully interpret the Construction Documents, including sample boards, colour boards and other special reports.
- Respond to and address questions raised by bidders during the bid period.
- Prepare Addenda to Tender Documents as required and submit to the Project Authority for review and issue by the Contracting Authority.
- Pending notification from the Project Authority, be prepared to revise and amend the construction documents to bring the cost of the work within the stipulated limits of the Class A budget.
- Provide updated report on any construction cost and schedule impact created by the issue of tender/contract Addenda.
- If PCA decides to re-tender the project, provide advice and assistance to the Project Authority.
- Provide revised Construction Documents if the tender costs were too high (more than 10% over the accepted Class A budget). Consultant is not entitled to additional fee.

9. Construction Administration Services

9.1 General

- Monitor the progress of the Contractor's work, compliance with all drawings and specifications, time schedules, quality standards and prepare progress reports, through site reviews during the construction period.
- Review of all submittal documents required of the contractor as per the specifications.
- Review reports on Health and Safety strategies for construction stage of work.

- Notify the Project Authority immediately if Human Remains, Archaeological Remains and Items of Historical or Scientific Interest are discovered on the site and obtain further information on action to be taken.
- Review and process shop drawings.
- Prepare and provide to the Project Authority, detailed drawings, clarification advice, Site Instructions, Contemplated Change Orders and Change Orders and other related Consultant input documents.
- Reply to Requests for Information from the Contractor via the Project Authority.
- Observe quality assurance testing, review and accept test reports.
- Report on Contractors maintaining specified quality and schedules, ensuring that Contractors are monitoring delivery of critical materials and equipment.
- Review and make recommendations on progress claims.
- Issue interim and final deficiency reports.
- Finalize project documentation and accounts.
- Ensure compliance with Commissioning Plan.
- Recommend the release of holdback upon satisfactory completion.
- Issue interim and final certifications.
- Review and accept Operation and Maintenance Manuals, including review with PCA operations & maintenance staff.
- Facilitate on-site training on building systems and components with key RNUP staff.
- Follow-up on any problems identified during the warranty period.
- Prepare record drawings, and submit both digitized original and PDF formats. Also include full size hard copy in paper O&M Manual, and digital copy in digital O&M Manual.

9.2 Construction Safety

- All construction projects that are occupied by Federal employees during construction are subject to the Canada Occupational Health and Safety Act and Regulations and all non-Federal employees are subject to the Provincial/Territorial Occupational Health and Safety Act and Regulations – when there is a conflict, whichever is more restrictive will govern.
- Ensure the Contractor is mandated to provide all required coordination, isolation, protection and reinstatement of the fire protection and suppression systems throughout construction.

9.3 Project Meetings

- The Project Authority will arrange meetings every two weeks or as deemed suitable, throughout the entire construction period, for representatives from:
 - PCA in-house staff
 - Prime Consultant
 - Prime Consultant's Sub-Consultants and Specialist Consultants, as applicable as determined by the Project Authority
 - VE Design Firm
 - Contractor and their Consultants and Sub-Contractors, as applicable
- The Consultant shall include in the specifications and drawings, for provision by the Contractor, requirements for a climate controlled meeting room of sufficient size, appropriate furniture and equipment to hold Project Meetings.
- The Consultant shall record the issues and decisions and prepare and distribute minutes to all attendees within two (2) working days of the meeting.
- The Prime Consultant and any proposed Sub/Specialist Consultants should be personally available to attend all construction meetings and respond to enquiries within two (2) working days of the Project Authority's request, in the locality of the place of the work, from the date of the award of the Consultant agreement, until final inspection and turnover.
- Review and comment on meeting minutes prepared by the General Contractor for errors in fact, omissions or other discrepancies and report to the Project Authority.

9.4 Project Schedule

- Immediately upon receipt of the Project Schedule from the Contractor following the Contract award, review and verify whether the schedule is reasonable and has all detailed components of work shown separately.
- Coordinate with VE Design Firm to align construction schedule to the VE fabrication/installation timeline (installation to occur at the end of the construction phase).
- Provide review comments and advice to the Project Authority prior to the Consultant approving the Project Schedule.
- Use the Project Schedule as the basis for monitoring and evaluating the progress of the work.
- Assist the Contractor to avoid delays by providing timely reports and advice.
- Keep accurate records of delay causes.
- Record all discrepancies and recommend remedial measures to the Project Authority.
- Any request for Time Extensions shall be submitted to the Project Authority who will forward to the Contracting Authority. Only the Contracting Authority may approve any request for Time Extensions.

9.5 Budget/Forecast/Cash Flow

- Review the value of progress of work against the approved cost breakdown. When each trade is regularly reviewed against the Project Schedule and the cost breakdown, it quickly becomes apparent whether the Contractor is on budget and is generating the appropriate cash flow for the work.
- Record all discrepancies and agreed-upon remedial measures.
- Provide project financial planning/advice to the Project Authority, including funding commitment for the project according to government fiscal year (April 1 to March 31).

9.6 Shop Drawings

- Review and process shop drawings in a timely manner.
- Monitor and record the progress of shop drawing review. Record parties designated for action and follow up.
- Verify the required shop drawing copy numbers. Consider additional copies for others such as Fire Protection/Prevention Engineer's office and Permit Officer.
- Shop drawings shall be stamped: "Checked and Certified Correct for Construction" by the Contractor and stamped "reviewed" by the Consultant before return to the Contractor.
- On completion of the building, include final shop drawings in the Operating and Maintenance Manuals. Provide one package. Verify that shop drawings are recorded in sequence and clearly identify the project number, building number and building address.

9.7 Clarifications During Construction

- The Consultant must provide clarifications on Drawings and Specifications or site conditions, as required in order that the project not be delayed.
- Receive and respond to Requests for Information (RFIs)
- Prepare and issue Supplemental Instructions as required for clarification of the requirements of the Construction Documents
- Record Contractor's acknowledgment of receipt of all clarifications.
- Verify and record whether an impact on construction cost or schedule may be expected and advise the Project Authority.
- Provide to the Project Authority any additional detailed drawings, as and when required, to properly clarify or interpret the Contract documents, in a timely manner.

9.8 Work Measurement

- If work is based on unit prices, measure and record the quantities for verification of monthly progress claims and the Final Certificate of Measurement.
- When a Contemplated Change Notice is to be issued based on Unit Prices, keep accurate account of the work. Record relevant dimensions and quantities.

9.9 Inspections and Site Review

- Provide construction inspection services by qualified personnel to verify compliance with Contract

documents. These personnel must be fully knowledgeable of the project's technical and administrative requirements.

- It is required that fully qualified, experienced Inspection and site review personnel play a major role in the inspection and monitoring of the Work in detail.
- Establish a written understanding with Contractors as to what stages or aspects of the work are to be inspected prior to being covered up.
- Immediately after the Construction contract is awarded and before Work begins onsite, the Consultant shall attend, prepare an agenda, lead and take minutes of the pre-construction meeting.
- Assess quality of work and identify in writing to the Project Authority, all defects and deficiencies observed at time of inspections.
- Inspect materials and prefabricated assemblies and components at their source or assembly plant as necessary for the progress of the project.
- Any recommendations, clarifications or deficiency lists shall be issued in writing to the Project Authority with a copy to the Contractor.
- Keep the Project Authority informed of the progress and quality of the work and report any defects or deficiencies in the work observed during the course of the site reviews.
- The Contractor is responsible for recording any and all changes from the original Contract on a marked-up hard copy of drawings and then at the end of the project shall check and verify the changes with the Sub-Contractors and after that forward to the Consultant. The Consultant is responsible for updating the drawing and specification files and to provide electronic versions (original and PDF format) of the as-built Drawings and Specifications. Paper copies will be included in the paper O&M Manual. Digital copies will be included in the digital O&M Manual.
- In the case of emergency where safety of persons or property is concerned or Work is endangered by the actions of the Contractor or the elements, the Consultant shall safeguard the interests of PCA. The Consultant shall give immediate written notice to the Project Authority and to the Contractor of the possible hazard. The Consultant shall, if necessary, stop the work to protect the safety of the public, the workers or Crown property or give orders for remedial work and contact the Project Authority immediately for further instruction.
- The Consultant shall not authorize deviations from the Contract documents; enter into the area of the responsibility of the Contractor's Field Superintendent; stop the work unless convinced that an emergency exists as noted above; authorize any payments.

9.10 Construction Changes

- The Consultant does not have authority to change the scope of work or the price of the Contract. Approved Change Orders must be issued to cover all changes, including those not affecting the cost of the project, such as schedule, substitutions, etc.
- The Consultant must prepare Contemplated Change Notices (CCNs) with the required drawings and specifications and review quotations associated with Change Orders (COs). This includes monitoring and recording the progress of CCNs and COs. Where work must proceed pending issue of a Change Order, the Consultant must prepare a Change Directive (CD) and record time and materials expended.
- Proposed changes that affect cost or design or otherwise alter the terms of the Contract must be accepted and approved by the Project Authority to process. Upon approval from the Project Authority, quotations must be obtained from the Contractor in detail. Prices are then reviewed and recommendations forwarded to the Project Authority. The Project Authority will then forward the CCN to the Contracting Authority to issue the COs to the Contractor, with a copy to Consultant. The practice of 'trade-offs' is not allowed.

9.11 Contractor's Progress Payments

- Each month, the Contractor will submit a progress claim for work and materials delivered to site as required in the Contract. The claims are made by completing the following forms where applicable:
 - Request for Construction Payment with supporting invoices/documents in government format
 - Cost Breakdown for Unit and/or combined Price Contract
 - Cost Breakdown for Fixed Price Contract

- Statutory Declaration: Progress Claim
 - Workers' Compensation Board clearance letter
- The Consultant must determine the amounts owing to the Contractor based on the progress of the work and certify payments to the Contractor.
- The consultant must provide *General Review* of major components produced at off-site prefabrication or manufacturing facilities.
- The Consultant must review and sign designated government forms and promptly forward claims to the Project Authority for processing. Obtain the following information from the Contractor and submit with each progress claim:
 - Updated schedule of the progress of work.

9.12 Payment for Materials On Site

- The Contractor may claim for payment of material onsite, but not yet incorporated in the work.
- Material must be stored in a secure place and protected from weather as designated by the Project Authority.
- A detailed list, checked and verified by the Consultant, of materials with supplier's invoice showing price of each item must accompany each claim.
- Items must be listed separately on the Detail Sheet showing the breakdown and total.

9.13 Testing

- Prior to tender the Consultant must provide the Project Authority with a recommended list of tests to be undertaken, including onsite and factory testing. Specify all items to be tested and included in the specifications and provide a detailed breakdown of the types of testing and amount.
- The Consultant must provide assistance related to the inspection and testing of mock-ups, including witnessing testing of Project elements and systems.
- The Consultant must review all test reports and take necessary action with the Contractor when work fails to comply with contract requirements. The Project Authority must be immediately notified when tests fail to meet project requirements and when corrective work will affect the schedule.
- At the completion of construction coordinate with the Contractor, and if appropriate, Sub-Consultants to conduct systems demonstrations for PCA operations personnel.

9.14 Prototypes, Mock-ups and Sample Installations

- Specify explicitly the need for prototypes, mock-ups and sample installations to gain installation knowledge for specialized testing of technically advanced assemblies.
- Ensure that specifications are very clear on full requirements for such prototype work including:
 - Specifying timeframes and weather conditions under which this work will be carried out.
 - Noting area on site plan where this is to be done.
 - Bringing this item to the attention of the Contractor at construction start meeting and approve their methodologies and time frames for such work.
 - Involving all necessary consulting disciplines, trades, suppliers, product manufacturers, testing agencies, Authorities, for a comprehensive review of the requirements and scheduled installation.
 - Noting where necessary all requirements for submitting shop drawings, product information and samples well in advance, so as not to disrupt project work schedule.
- Ensure sufficient observation reports, photos or videos of work undertaken are available to avoid misunderstandings at a later stage.

9.15 Interim Completion

- The Contractor shall propose the site review when the project is at Interim Completion stage and provide a list of deficiencies prior to the site review. Commissioning must be completed and the Commissioning Report reviewed and accepted by the Consultant and Project Authority.
- The Contractor shall arrange for an Interim (substantial) Site Review with the Project Authority, PCA representatives, stakeholders, Consultants and major sub-Contractors for the site review.
- Consultants will prepare an Interim Completion report and a list of deficiencies. Upon reviewing the report, confirm that the work complies with Contract requirements and confirm the value of

remaining work. Consultants will recommend the acceptance of Interim Completion by signing the Interim Certificate.

- Consultants will submit Professional Schedule C.
- When PCA is also satisfied that the construction work is substantially complete and the project is fit for use as intended, the Project Authority will also co-sign and issue the Interim Certificate of Completion to the Contractor, provided that the work remaining to be done under the contract is, in the opinion of the Project Authority, possible to complete or correct at a cost of not more than:
 - 3% of the first \$500,000, and
 - 2% of the next \$500,000, and
 - 1% of the balance of the value of the contract at the time this cost is calculated.
- Payment to Contractor requires that all concerned parties complete and sign the following documents:
 - Interim Certificate of Completion (Government form)
 - Interim Site Review report and Acceptance
 - Progress Claim including holdback amount to be released
 - Cost Breakdown for the Fixed Price Contract and the cost for the remaining work
 - Cost Breakdown for Unit and/or Combined Price Contract
 - Project Schedule for the remaining work
 - Statutory Declaration for Interim Certificate of Completion
 - Workers' Compensation Board Clearance Certificate
- The Consultant must verify that all items are correctly stated and ensure that completed documents and any supporting invoices/documents are given to the Project Authority for processing.

9.16 Final Completion

- The Contractor shall inform the Project Authority when satisfied that all work under the Contract has been completed, including all deficiency items listed during the Interim Inspection.
- Contractor shall apply for and obtain Occupancy Permit issued by the Authority Having Jurisdiction prior to the Final Site Review.
- The Contractor shall arrange for the Final Site Review with the Project Authority, PCA Representatives, stakeholders, Consultants and major sub-Contractors.
- If the Work complies with Contract requirements and is satisfactory, upon recommendation from the Consultant, the PCA Acceptance Board will accept completion of the project.
- Final payment to Contractor requires that all concerned parties complete and sign the following documents:
 - Final Certificate of Completion (Government form)
 - Final Site Review report and Acceptance
 - Progress Claim including holdback amount to be released
 - Cost Breakdown for Fixed Price Contract
 - Cost Breakdown for Unit and/or Combined Price Contract
 - Statutory Declaration for Final Certificate of Completion
 - Worker's Compensation Clearance Certificate
 - Trades' Certificates as appropriate
 - Occupancy permit
- The Consultant must verify that all items are correctly stated and ensure that completed documents and any supporting invoices/documents are given to the Project Authority for processing.
- The Consultant shall continue to monitor the situation and communicate with the Project Authority to ensure that they are aware of any deficiency work being delayed beyond reasonable timeframes.
- The Consultant shall submit the required documents and obtain the LEED certificate and/or all required sustainable development certifications that were sought, when applicable.

9.17 Pre-opening Tours for Key Stakeholders

- The Consultant must complete up to five (5) one-hour site walkthrough tours with PCA staff, Indigenous partners, and key stakeholders prior to the public opening of the project.

9.18 Record (As-Built) Drawings and Specifications

- The Consultant must produce for all parts of the construction as-built drawings of areas that show deviations in construction from the original Contract drawings, including as-built information (marked up prints) and other data submitted by the contractor, changes shown on Post-Contract Drawings, changes resulting from Change Orders or from onsite instructions.
- Include final survey drawing and Real Property Report in the as-built record.
- Check and verify all as-built records for completeness and accuracy prior to submitting to the Project Authority.
- Submit Record Drawings and Specifications for each building within three (3) weeks of Final Completion acceptance. Electronic versions are required for both Drawings and Specifications and also in both original editable formats and PDF formats.

9.19 Operation and Maintenance Manuals

- Review and submit Operation and Maintenance Manuals for the construction to the Project Authority for review and acceptance prior to Interim Completion, with the exception of scheduled work.
- For the construction, the Contractor shall submit four (4) duplicate hard copies and two (2) duplicate digital copies of the Operation and Maintenance Manuals to the Project Authority within three (3) weeks of Final Completion acceptance. The Operation and Maintenance Manuals shall be presented as follows:
 - Print project name, project number, project address, building number, Contractor's name and contact information on all pages.
 - Organize by 3-ring binders and separate by color dividers by specification sections.
 - Include a complete set of as-built Drawings (full size) and Specifications.
 - Include a copy of the Real Property Report, signed and sealed by the Canadian Surveyor.
 - Include a copy of Commissioning Report.
 - Include a copy of all products, materials, equipment and fixtures - product information (name and contact information of sub-trade, supplier and manufacturer, etc.), test/approval information, operating instructions and maintenance information/schedule, spare parts, certificates, warranty and site-specific final shop drawings etc.

10. Post-Construction Services

10.1 General

- All work under the Construction Contract carries a standard twelve (12) month warranty commencing on the effective date of the issuing of Interim Certificate of Completion. Certain parts of the work, such as roofing, structure, joints and bearings, window and exterior door(s), building envelope, landscaping and distribution systems may have extended warranties as specified.
- Roofing warranty is minimum 30 years and extended to the same warranty period as the specified roofing product being used.
- Window and exterior door warranties are minimum 10 years and extended to the same warranty period as the specified product being used.
- Building structure, joints and bearings warranties are minimum 10 years.
- Other than roofing, window and exterior door(s) as specified, remaining building envelope components warranties are minimum 5 years.
- Landscaping warranty is extended to 2 full growing seasons.
- Distribution systems (mechanical and electrical systems) warranties are minimum 2 years.
- New buildings shall meet and exceed all the requirements to satisfy the warranty program and coverage.
- The Contractor is responsible for correcting and/or replacing all defects in the work during the warranty period, except for damage caused by misuse, abuse or neglect by others.
- The Project Authority will promptly notify the Consultant in the event that defects or alleged defects

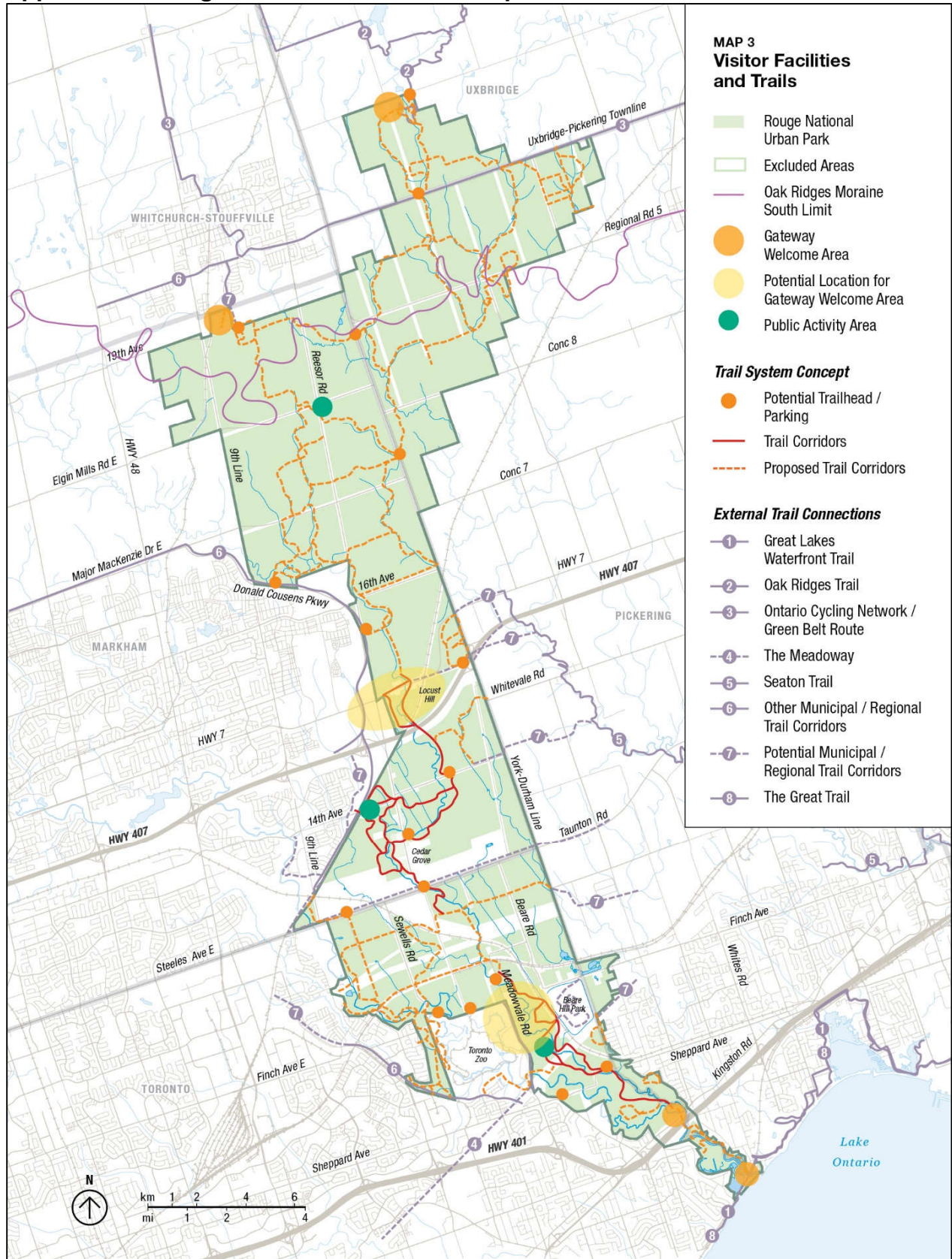
- appear in the work of the Contractor.
- The Consultant shall investigate all defects and alleged defects in the work promptly and issue appropriate information and advice to the Project Authority.
- The Consultant shall arrange a lesson-learned meeting with the Contractor, Project Authority and stakeholders within four (4) weeks of Final Completion. Consultant shall provide information, advice, improvement, suggestions, constructive inputs and lessons learned for the benefit of future projects.

10.2 Ten-Month Warranty Inspection

Nine months after Interim Completion acceptance, the Consultant shall:

- Arrange a ten-month warranty site review with the Project Authority, Consultant and any sub-Consultants, Contractor, mechanical and electrical sub-Contractors, stakeholders and PCA maintenance staff.
- Prepare deficiency list with the Project Authority for the Contractor's correction/adjustment prior to the site review and distribute to the site review participants.
- Update the deficiency list during the site review and distribute to the site review participants.
- Inform the Project Authority in writing when all items listed on the ten-month Warranty Inspection report have been completed satisfactorily.

Appendix A: Rouge National Urban Park Map



Appendix B: Rouge Gateway Site Map



Appendix C: Coordinated Consultant Work

PROJECT PHASE	VE Design Services	A&E Design Services	Associated Work (by PCA)
	Turnkey Design-Build	Design-Bid-Build	Separate contracts managed by Parks Canada to provide essential information to both consultants
INITIATION	Project Implementation Strategy and Schedule JOINT		Completed prior to Initiation: <ul style="list-style-type: none"> • Site Analysis Report • Tourism Market Assessment Report
CONCEPT/SCHEMATIC DESIGN	VE Pre-Design Report	A&E Pre-Design Report	<ul style="list-style-type: none"> • Food Service Feasibility Market Assessment and RFI • In-person and online engagement facilitated by third party Public Engagement Firm
	Integrated Design Workshops and Indigenous Engagement Sessions JOINT		
	VE Concept Design packages <ul style="list-style-type: none"> • Mood board, draft interpretive site plan & storylines, design language 	Schematic Design Report <ul style="list-style-type: none"> • Overall building and site plan (informed by VE Concept) 	
	VE Concept Design Brief	Schematic Design Brief	
	Two Concept Options for Review and Public Engagement JOINT		
DESIGN DEVELOPMENT	Draft Experiential Design Content Package & Draft Design Development Report JOINT		<ul style="list-style-type: none"> • Food Service RFP
	Design Review Meetings	Design Review Meetings	
	Design Briefs for FNAC and stakeholder review		
	Final Design Content Package & Design Development Report JOINT		
DETAILED DESIGN	Detailed Design Package (33%, 66%, 99%)	Construction Documents (33%, 66%, 99%)	<ul style="list-style-type: none"> • Retail Design Services
	Design Review Meetings	Design Review Meetings	
	Final Detailed Design Package With fabrication specifications		
	Tender-Ready Construction Documents (to include any VE component specifications to be constructed by General Contractor)		
TENDER	Tendering Services		

EXECUTION	Fabrication and Installation of Visitor Experience components/layers	Construction Administration Services	<ul style="list-style-type: none"> • Indigenous Procurement opportunities • Retail Space Fit-up • PCA IT fit up (office equipment, POS system, security, etc.)
CLOSE-OUT	Close-out Package	Operation and Maintenance Manuals	
	Site Inspection	Site Review (Interim and Final Completion)	
	RNUP Staff Training	RNUP Staff Training	
	Support Stakeholder Priority Site Visits and Public Opening JOINT		
	3–Month Follow-up Assessment	Ten-Month Warranty Inspection	

Appendix D: Distribution of Work Between Parallel Contracts

This Appendix is complementary to the scope of work described in the Statement of Work for this project. It is intended to provide further details on the separation and complementarity of the scope of work which is under the responsibility of the Architect (A&E Consultant) and the Visitor Experience Design Firm (VE Design Firm). Both will be hired by Parks Canada Agency (PCA) through separate but parallel Requests for Proposals.

This list is not restrictive as all the project components and requirements are still to be developed and defined as part of the project, however this Appendix should provide the general idea and some guiding principles on the way the potentially overlapping roles and responsibilities between the A&E Consultant and VE Design Firm are to be split and shared. These will be clarified in more detail jointly and collaboratively with both firms during the initiation phase of the project and as needed along the way. In case of disagreement PCA will make the required determination.

The following guiding principles have been developed to illustrate the general idea.

Guiding Principles for determining the distribution of the work

- Considering initial workshops, discussions and information provided by the RNUP project team, the Rouge Gateway concepts will be developed in collaboration by the VE Design Firm and the A&E Consultant. Both firms will need to coordinate their work and ensure they develop the same language throughout all the various project components (building, site, exterior structures, landscape, Visitor Experience elements, etc.) and that they integrate seamlessly.
- In general, the following elements are included in the A&E Scope of Work to become part of the general contractor delivery:
 - o Any elements that will be built by the general contractor as part of the construction tender;
 - o Any constructed elements which are typically built or installed by the general contractor's tradesman;
 - o Any items which can be ordered from a supplier catalogue, via data sheets, or standard specification for which it would be practical to get installed by the general contractor; and,
 - o Any infrastructure, structure, civil or foundation work that would need to be constructed prior or for the integration of the Visitor Experience Elements.
- In general, the following elements are included in the VE Design Firm scope of work to be design, fabricated and installed by the VE Design Firm:
 - o Any element which is meant to create an interactive experience for the visitor; and,
 - o Any element that is a more sculptural, custom creative piece (ex. public art pieces, custom or unique public-facing furnishings/fixtures, etc.)
- Fabrication and installation will be negotiated/decided based on industry standard practice and considering which firm possesses the capacity needed for implementation, keeping in mind project efficiency, sequencing constraints, quality and success.

The Service table below is meant to help firms clarify their respective roles and responsibilities for some shared or common services. Please note that this table is not exhaustive nor restrictive and only strives to illustrate the overall intention.

A&E Indicates the service is the responsibility of the *Prime Consultant (A&E Consultant)*

VE Indicates the service is the responsibility of the *Visitor Experience Design Firm (VE Design Firm)*

ITEM	SERVICE – ALL PROJECT PHASES	
1	Acoustic Consulting Services	
	A+E	Include expertise in this field when it relates to the Building and interior permanent partitions such as acoustic walls, ceilings or floors.
	VE	Include expertise in this field as it relates to acoustic management specific to exhibit design elements and features created by the VE Design Firm.
2	Audio Visual Consulting Services	
	A+E	Infrastructure design, specification and integration by A&E Consultant. High coordination with VE Design Firm.
	VE	Design, select, provide and install all AV Production, Digital Display, and AV Equipment. Provide all requirements and support to the A&E Consultant in the design and coordination of the infrastructure.
3	Food Services Consulting Services	
	A+E	Equipment selection, operation and functionality of the commercial kitchen and other food service space. Once a food service operator is identified they will provide input on the design of the commercial kitchen.
	VE	Public facing interior design aspects of the food service & dining area, including integration of interpretive elements.
4	Interior Design Consulting Services	
	A+E	The A&E consultant is responsible to design and coordinate all the interior public facing space in conjunction with the Visitor Experience Design Firm, including reception desk, integrated elements, seating, millwork and built-ins. Excludes retail space fit-up. Also provide interior design services for non-public space such as office space.
	VE	The Visitor Experience Design firm is responsible for the design and coordination of all the interior, public-facing spaces (ie. color selection, material selection, texture, and furnishing) but to be coordinated and integrated in A&E Construction documents. Includes interior design of dining area fit-up as a part of the visitor experience. Excludes retail space fit-up.
5	Landscape Architect Consulting Services	
	A+E	The landscape architecture must be coordinated with the VE Design Firm which will highly influence the design, the shape and the circulation flow to create a unique visitor experience. The site design and landscaping aspect remains in the A&E Consultant's mandate, including plant selection, soft and hard landscape, urban furniture, ponds, trails, shelters, viewing platforms, etc. Also includes foundation or structure design to support VE Design Firm's supplied interpretation, creative and art element as well as integration of Indigenous supplied creations as needed.
	VE	The VE Design Firm will influence landscape architecture design to create a unique visitor experience that aligns with the developed concepts and integrates input from Indigenous partners. In general, custom, unique, highly creative or interpretive elements of the exterior landscape will be developed, supplied and installed by the VE Design Firm.
6	Lighting Design Consulting Services	
	A+E	For all general ambiance, building & site lighting, emergency lighting including specific lighting for common space, staff & operation spaces, etc. Also include the design and specification of all infrastructure to support the specialized lighting provided by the VE Design Firm.
	VE	For any specialized lighting such as wall projection, dropped track-lighting grid or lighting within a vitrine or display case.

ITEM	SERVICE – ALL PROJECT PHASES	
7	Graphic Design and Signage	
	A+E	Provide services for design and procurement of corporate signage, occupancy, egress, safety, operation signage and standard washroom signs (using national standards), in both official languages.
	VE	Provide services for design, selection, fabrication and installation of graphics, interpretive signage, creative wayfinding and similar elements for interior and exterior application, in both official languages.
8	Coordinating with Client's Own Forces	
	A+E	Including but not limited to the Visitor Experience Design Firm contract, Retail Space contract, Indigenous procurement, commissioned art, General Contractor Contract, PCA purchased Equipment and Furniture, etc.
	VE	Including but not limited to the A&E Consultant Contract, Coordination and integration of Indigenous components, commissioned art, audiovisual production, General Contractor Contract, etc.
9	Cost Estimating Consulting Services	
	A+E	For all elements designed by the A&E Consultant and/or integrated in the plans and specifications at all project stages per the Statement of Work. Also includes costing of all VE elements which are integrated in the Construction documents.
	VE	For all elements designed by the VE Design Firm, and which are supplied and installed by said firm or by their subcontractors at all project stages per the Statement of Work.