CITY OF PORT ALBERNI

REQUEST FOR EXPRESSIONS OF INTEREST
RFEOI #001-24

PUBLIC WORKS & FIRE SERVICES MASTER PLANNING

Issued: Tuesday February 27, 2024
Closes: 2:00:00 PM local time, Tuesday March 26, 2024

INFORMATION AND INSTRUCTIONS

Purpose

The purpose of this Request for Expressions of Interest (RFEOI) is for the City of Port Alberni (CPA) to pre-qualify professional service firms, to be invited to submit proposals and enter into agreements with CPA for provision of master planning professional services to the CPA Department of Engineering and Public Works (EPW), and/or the Port Alberni Fire Department (PAFD), during the *period of eligibility.*

Appendix A to this RFEOI, the Terms of Reference, provides relevant background information, a general description of the scope of services, and relevant areas of expertise for the requests for proposal (RFPs) that CPA intends to issue to pre-qualified respondents.

Definitions

"closing time" means the time specified on the cover page of this RFEOI, except as amended by issue of addendum.

"period of eligibility" means the period of time between April 1, 2024, and April 1, 2025.

"pre-qualification categories", for the purposes of this procurement process, means the following categories of professional services, as further described in Appendix A:

1. Municipal Fire Services Planning
2. Municipal Drinking Water Treatment and Distribution Infrastructure Planning
3. Watershed Protection Planning
4. Municipal Wastewater Collection and Treatment Infrastructure Planning
5. Municipal Stormwater Management and Combined Sewer Infrastructure Planning
6. Municipal Transportation Planning

"prime consultant" means a firm submitting an EOI or proposal on behalf of a team of two or more firms, and/or a firm under contract to CPA that sub-contracts a portion of the contracted work to one or more other firms.

"Respondent" and "proponent" mean a firm that submits an Expression of Interest to the City, in response to this RFEOI, in accordance with the instructions and conditions outlined herein.

"*RFEOI***"** and "*Request for Expressions of Interest*" mean this Request for Expressions of Interest document, including any attached appendices, schedules, and all addenda.

Conditions

1) *Respondents* may request pre-qualification for one, several, or all *pre-qualification categories.*

2) During the *period of eligibility*, where the value of the contract for services exceeds or is anticipated to exceed $15,000, only *proponents* pre-qualified through this RFEOI process will be eligible to submit proposals to CPA for one or more professional services described in Appendix A.

3) During the *period of eligibility*, where the anticipated value of the contract for services is lower than $50,000, the CPA may, at its discretion, invite only one prequalified *proponent* to submit a proposal for one or more professional services described in Appendix A.

4) During the *period of eligibility*, where the value of the contract for services exceeds or is anticipated to exceed $50,000, all *proponents* prequalified for all of the relevant *prequalification categories* will be invited to submit proposals for one or more professional services described in Appendix A.

5) Where a successful EOI submission is submitted by a *prime consultant* representing a team of two or more firms, only the *prime consultant* will receive invitations to submit proposals, and only the *prime consultant* is eligible to submit a proposal on behalf of the team.

6) A firm that is represented within a team led by another firm (primary consultant), may also independently submit an EOI for another *prequalification category*, and/or be included in another team submission led by another primary consultant, provided that the firm is not included in two submissions requesting qualification for the **same** *prequalification category*.

7) Respondents are solely responsible for any costs or expenses incurred related to the preparation of the submission.

8) If the project team in a proposal submitted by a prequalified proponent is substantially different than the team presented in the EOI submission, the City reserves the right to re-evaluate, and potentially disqualify, the proponent.

9) CPA retains the rights to:

   a) withdraw or cancel the RFEOI,

   b) revise the RFEOI and/or extend the closing date by issue of addendum,

   c) make public the names of *respondents*,

   d) clarify or verify, with the respondent or with third parties, information included in *respondent*'s submission,

   e) reject a submission by a respondent which has a claim or has instituted legal proceedings against CPA, or against whom CPA has a claim or instituted a legal proceeding,

   f) initiate a new RFEOI or other procurement process for services within the scope of a *pre-qualification category*, in the event that less than three *respondents* are prequalified through this process for that *prequalification category*,

   g) Combine services from two or more *pre-qualification categories* into the scope of a single RFP, and invite only *proponents* prequalified in all relevant *pre-qualification categories* to submit a proposal.

10) CPA has no obligation to prequalify any *respondents*, or to invite any pre-qualified *respondents* to submit proposals, or to enter into an agreement with any *respondents*.

11) Pre-qualified *respondents* have no obligation to respond to CPA requests for proposal.

12) As a public body, the CPA is subject to the *BC Freedom of Information and Protection of Privacy Act*. Applicable laws may require disclosure of information submitted to CPA. The information collected will be used by CPA solely for the purpose stated herein.

13) Questions regarding this RFEOI must be directed in writing, ***referencing the competition number*** to:

Dave Arsenault, P.Eng.
Project Manager
Fax: 250-723-1003
purchasing@portalberni.ca

14) Questions must be submitted by end of day, Friday March 15, 2024. Questions submitted after this date will not be answered.

15) No oral explanation or interpretation by City staff shall modify any requirements of the RFEOI.

Details on the scope of anticipated services covered by each *pre-qualification category* are provided in Appendix A.

Submission Instructions

1) The proposal must be in English.

2) Responses to this RFEOI must be submitted by email, in PDF format, to purchasing@portalberni.ca. File size must be less than 20 MB.

3) Addenda, if any, will be posted to the City of Port Alberni website. *Proponents* are responsible for checking if addenda have been posted.

4) Submissions received after the RFEOI *Closing Time* (see cover page) will not be accepted or considered.

5) If a submission is deemed not to contain sufficient information to allow City staff to evaluate the qualifications of the respondent, the submission will be disqualified.

Submission Contents

1) The main body (i.e. excluding appendices) of the EOI submission ***must*** contain the following, and ***only*** the following (except where noted as ***optional***):

   a) Cover page, including the CPA Reference # for this RFEOI,

   b) An introduction or cover letter (maximum 2 pages), that includes:

      i) Corporate names, addresses and phone numbers of all firms comprising the EOI submission team,

      ii) Where the *respondent* is a team consisting of more than one corporation / business, identification of the *prime consultant*,

iii) A list of the *pre-qualification categories* for which pre-qualification is requested.

c) For **<u>each</u>** *pre-qualification category* for which pre-qualification is being requested, a qualifications summary (maximum of five pages in length), that includes:

i) Names, employing firms, and proposed project roles for all staff that the *proponent* intends to include in key team roles (such as team management and technical specialists). This may include multiple staff options for the same role or area of expertise, but should not include any staff that the proponent knows would not be available or able to be included on a project team during the *period of eligibility*.

ii) A summary of the relevant qualifications of the team proposed for consideration in that *pre-qualification category*.

iii) two client references with contact information, from two previous or current projects relevant to the *pre-qualification category*.

iv) ***Optional:*** a proposed team organizational chart. If included, it will not be considered to count towards maximum page limits.

v) ***Optional:*** Photos and illustrative graphics, if included, will not be considered to count towards maximum page limits.

2) The EOI submission must also include, in an appendix, the resumes of all staff listed in the qualification summaries, either in alphabetical order by surname, or preceded by an index referencing the page numbers of each resume. It is not necessary to separate the resumes by applicable *prequalification category*.

3) ***Optional:*** In addition to the above mandatory requirements (main body plus resume appendix), the EOI submission may optionally contain additional material in an appendix. However, additional material will only be considered for the purposes of clarifying and confirming the expertise and experience that is explicitly identified in the required content listed above. [For example, an expanded project description of a project described briefly in the main body ***may*** be reviewed by an evaluator to confirm the relevance of that project. However, an evaluator will not consider projects described in the appendix that were not introduced in the qualifications summary.]

4) It is not necessary to identify or provide resumes for staff who will perform junior/ support/ administrative roles on the project team.

Evaluation of Submissions

City staff will review and evaluate the submitted EOIs according to the criteria and scoring system outlined below, for each *pre-qualification category* that the firm/team has expressed interest in.

#	Evaluation Element	Criteria	Points Available
1	Key staff expertise	Extent of demonstrated evidence of relevant expertise possessed by proposed project manager and subject matter experts.	25
2	Corporate-wide expertise	Extent of demonstrated evidence of relevant expertise possessed by the firm(s) staff, other than proposed key staff. These may be staff resources that are not proposed to be part of the project team, but who are available for consultation on specific issues.	10
3	Provincial knowledge	Extent of relevant project experience with municipal governments and regulatory framework in British Columbia	10
4	Team size and structure	Qualified staff are sufficient in number to adequately staff the project team and complete the work in a reasonable amount of time, but the proposed team is not overly large or complex in relation to the scope and scale of the assignment.	5
		Maximum Points	**50**

The general guide for scoring elements #1 to #3 will be:

Extensive experience in all relevant areas of expertise / subject matter	full points
Adequate experience demonstrated in the majority of the relevant areas of expertise / subject matter, however: • experience not demonstrated in one key area, or • limited evidence in several key areas.	half points
Little or no evidence of relevant experience in multiple key areas of expertise / subjects	no points

The guide for scoring element #4 will be:

Criterion	Yes	No
Team size is sufficient to realistically achieve City's schedule expectations?	1	0
Team size is not excessive, considering the scope and scale of the project?	1	0
Number of firms comprising the team is not excessive, considering the scope and scale of the project?	1	0
Composition / structure of team roles is logical, and not unnecessarily complicated?	1	0
Proponent has alternate staff qualified for each core role, who could fill team vacancies that could arise? [*Alternates could be team members in other roles, or substitutes available to join the project if needed*]	1	0

Where multiple possible staff are proposed for the same key role, the expertise scores will be based on a blended average of the expertise of staff proposed.

A minimum score of 26 will be required for prequalification in a *pre-qualification category*, **AND**, a maximum of five *respondents* will be prequalified for each *pre-qualification category*. In the event that more than five respondents score 26 or higher in a *pre-qualification category*, only the top five scoring *respondents* will prequalify.

ATTACHMENTS

Appendix A Terms of Reference
Appendix B Reference Information

End of RFEOI

APPENDIX A

TERMS OF REFERENCE

Background

The City of Port Alberni (CPA) has recognized a cross-departmental need for improved:

- strategic planning of long-term capital programming and capital budgeting, aligned with the Official Community Plan and City strategic priorities and values,
- documented level-of-service and scope-of-service policies, developed through consultation with ratepayers and other stakeholders, with due consideration of costs, benefits and risks to the community, and
- By-laws and procedure documents need to implement these improvements.

To this end, in 2023, City Council directed Staff to allocate approximately $1,050,000 in funds received from the Province's Growing Communities Fund (GCF) for the development of Master Plans for a number of key City program areas such as stormwater management, transportation, parks, facilities, and fire services. Additionally, the City's proposed Financial Plan for 2024-28 includes a recommended allocation of $450,000 from water and sewer capital reserve funds for the development of water and wastewater infrastructure Master Plans.

RFP procurements for individual master plan projects are planned to be conducted between April and September 2024 on a "staggered start", overlapping schedule.

The scope of the master planning projects includes programs within the responsibility of Engineering & Public Works Department and Port Alberni Fire Department. A separate procurement process has been initiated for Parks, Recreation, and Culture Department master planning services. An additional procurement process for updating the City's Climate Action plans (corporate-wide, inter-departmental) will be undertaken later in the year.

A number of issues (*e.g.* climate mitigation, active transportation networks, urban forest management) will involve more than one master plan. The City intends to take advantage of the overlapping project schedules by including focused multi-team collaboration meetings into the project scopes for these overlapping issues.

Overview of Master Plan Objectives

Generally, all of the master plans will be completed in several phases, each with an associated report:

1. **Procurement**: retain expert consultants via a competitive process.
2. **Background Study**: Summarize existing conditions, existing levels of service, and status of previous strategic plans.
3. **Immediate Needs Capital Plan:** Assist staff in development of an interim capital plan for any high priority projects that are recommended to be included in 2025-2026 capital programs, the need for which is not dependent on the outcome of master plan/OCP projects in progress (not dependent on policy or level of service decisions, growth strategy, *etc.*).
4. **Policies and Standards**: Assessment and recommendations for overarching policies, standards, by-laws, and levels of service.
5. **Knowledge Gap Assessment**: Identification of major unknowns hindering effective infrastructure planning, and development of scope and budget for proposed studies to address these knowledge gaps.
6. **Capital Planning:** Assess alternatives, and recommend 5-year (2025 to 2029) capital program (project scopes, schedules and budgets). Identify and prioritize major capital projects to be implemented beyond 2029.

Preliminary information on the anticipated project scope of each project is provided in subsequent sections. More detailed scope delineations and additional background information will be provided with the individual master planning RFPs.

Integration and Consultation

Public and stakeholder engagement will be an integral part of the master planning exercises. Integrated consultation incorporating all of the individual master plan projects will be coordinated and facilitated by City staff, with the consultant teams providing strategic planning support as well as content for public events, surveys, publications, social media and the City's website.

City staff will also be responsible for coordinating consultation and collaboration between individual Master Plan teams for those issues, policies and assets that have interconnections or multi-departmental interests.

Category #1: Municipal Fire Services Planning

Department Overview

Port Alberni Fire Department (PAFD) operates from a single fire hall and training facility at 3699 10th Avenue, and serves a City of approximately 18,500 residents, as well as surrounding communities with approximately 10,500 residents in total, including:

- Beaver Creek (reciprocal aid agreement with Beaver Creek Volunteer FD)
- Cherry Creek (reciprocal aid agreement with Cherry Creek Water District FD)
- Hupacasath First Nation (Ahahswinis 1 IR)
- Tseshaht First Nation (Tsahheh 1 IR and Alberni 2 [Tee-pis] IR)
- Sproat Lake (reciprocal aid agreement with Sproat Lake Volunteer FD)

PAFD is also part of the road rescue program managed by Emergency Management and Climate Readiness BC, responding to motor vehicle incidents across a large portion of Alberni Clayoquot Regional District. PAFD also provides occasional support-on-request to BC Wildfire Service.

PAFD responds to over 2,800 calls per year, with a sharply rising trend in recent years. The proportion of medical first responder calls is also sharply rising, now comprising over 65% of PAFD emergency responses.

PAFD conducts over 500 fire safety inspections per year, among 1000 inspectable properties.

The existing staff complement consists of:

- Four shifts of full-time firefighters, each with a crew of five (including shift captains), for a total of 20 personnel,
- A Fire Prevention Officer, and
- A Fire Chief and Deputy Fire Chief.

There are no administrative or support personnel assigned to PAFD. Building maintenance, human resources, IT, and financial services are provided by other City Departments.

The current fire services fleet includes one aerial ladder truck, three engines (including one reserve), and several light trucks.

Anticipated Scope of Services

A Fire Services Master Plan is proposed to be developed. The following are anticipated to be key elements of the master plan:

- Review of existing operations, assets and benchmark documentation of existing conditions.
- Comparison of recent performance and level of service to industry-recognized guidelines, and to other comparable communities.
- Establish or update Level of Service objectives.
- Review existing policies, by-laws, and engineering standards relevant to Fire Services. Develop recommendations for new and revised policies, by-laws and standards.

- Review current reciprocal aid agreements with other area fire services. Identify opportunities for cost efficiency and performance improvements.
- Assess the roles, resources and dispatch protocols of other first responder agencies in the Alberni area. Identify opportunities for cost efficiency and performance improvements.
- Review functionality and adequacy of existing Fire Hall spaces (such as living quarters, engine bay, storage areas, and washroom facilities) and emergency services equipment (such as breathing apparatus and other personal protective equipment, first aid and lifesaving equipment, and breathing air refill compressor system). Identify major deficiencies posing health and safety risk, impacting efficiency, or otherwise not meeting typical industry standards.
- Review adequacy or fleet maintenance resources.
- Review, and recommend improvements to, operating policies and procedures.
- Conduct a preliminary options evaluation for service capacity increase (e.g. expand existing fire hall and complement at current location, replace existing fire hall with larger facility at a new location, retain existing fire hall and add a second hall at another location, etc.)
- Estimate maximum capacity triggers (based on population, call-out statistics, etc., response times, etc.) that would require expansion of PAFD capacity in order to maintain level of service.
- Based on existing trends, estimate schedule for future capacity expansions.
- Develop capital budget estimates for future capacity expansions, and other capital needs to address gaps between level of service targets and capacity.
- Collaboration with the Parks, Recreation & Heritage Department Master Plan team on overlapping areas of concern, particularly urban forestry and trail planning (wildfire protection).
- Collaboration with the CPA EPW Dept. Water Master Plan team on overlapping areas of concern, such as fire flow availability, hydrant design standards, traffic safety, design vehicle standards for road widths and turns.
- Participation in a Climate Change Action Plan Working Group.

The following services are **not** expected to be included in the scope of assignment:

- Condition Assessments (Fire Hall condition assessment to be completed under a separate project),
- State of Good Repair (operating costs, maintenance and end-of-life replacement) of the Fire Hall and associated building systems. Facility maintenance and replacement capital planning are being addressed under a separate project.
- Fleet replacement planning.

Further details of project scope will be provided to pre-qualified proponents with the subsequent RFP documents.

Category #2: Municipal Drinking Water Treatment and Distribution Infrastructure Planning

Overview of Assets and Programs

The CPA EPW Department manages the municipal water storage, intakes, treatment, transmission and distribution infrastructure. There are three water sources:

- China Creek intake dam (primary supply, gravity fed), and associated upstream Lizard Lake dam and supply reservoir,
- Bainbridge Lake intake (alternate supply, pumped), and
- Somass River (emergency backup supply, pumped).

Under normal conditions, the China Creek intake is the source for all of the City's municipal water supply. The Bainbridge Lake supply is used in the event of an adverse raw water condition at China creek, such as elevated turbidity, and during maintenance shut-downs of the China Creek supply.

The Bainbridge Water Treatment Plant on Franklin River Road treats water from either China Creek or Bainbridge Lake with ultraviolet primary disinfection, and chlorine gas secondary disinfection. A single transmission main along Franklin River Road supplies water to the City network, which includes:

- Five treated water reservoirs (four at grade, one above ground tank),
- Three treated water pump stations,
- Eight pressure zones and associated valve stations, and
- Approximately 160 km of watermains. About 50% of the watermain network is asbestos cement pipe, and about 15% are cast iron mains at or beyond their expected service life.

The pumping energy expended in water distribution is relatively low, due to the high elevation of the primary source (China Creek intake).

The Somass River supply is maintained as an emergency backup source in the event of a failure of the Franklin River Road Transmission main.

CPA's municipal water system also supplies water to several surrounding communities by means of servicing agreements and bulk metered transmission:

- Hupacasath First Nation (Ahahswinis 1 IR),
- Tseshaht First Nation (Tsahheh 1 IR), and
- Beaver Creek.

A SCADA system monitors and records flow, pressure, reservoir level and turbidity at key system locations.

The City maintains a WaterCAD hydraulic model of the distribution system.

Additional background information on CPA's water system, including the most recent water master planning study (2015) has been provided (refer to Appendix B).

Anticipated Scope of Services

The City's 2015 Water Master Plan (see Appendix B) is proposed to be updated, with a broader scope and longer-term capital forecast. The following are anticipated to be key elements of this master plan:

- Review and summarize relevant reports, data, and completed capital projects since 2015; document status of 2015 capital infrastructure recommendations.
- Review of existing assets and benchmark existing conditions and level of performance.
- Review existing water policies and by-laws, and provide recommended revisions.
- Review and recommend updates, if needed, for level of service and performance targets such as:
    - Fire flow availability,
    - Minimum standards of performance for existing watermains,
    - Reliability of supply,
    - Storage capacity,
    - Watermain ages / break rates,
    - Aesthetic water quality,
    - Non-Revenue Water rate,
    - Residual chlorine concentrations / age of water.
- Review and update system design criteria for new or replacement distribution works, such as:
    - Design flow rates for different land uses, including fire flow,
    - Watermain sizing,
    - Service pressure,
    - Hydrant placement.
- Provide content for, and compile results of, public consultation to be implemented by City staff.
- Project long-term water quantity and infrastructure needs, based on 2024 Official Community Plan and climate forecasts.
- Use City's existing water model to identify system constraints under projected conditions.
- Review adequacy of existing sources to sustain long-term needs, with due consideration of climate change projections.
- Prioritize immediate needs, and develop scope and budget for high priority projects to be implemented within five years.
- Developing a long-term program of infrastructure projects to address gaps between existing and target levels of service, and to accommodate projected increases in demand.
- Conceptual-level capital project construction cost estimating.
- Develop a long-term annual capital budget for State of Good Repair.
- Provide recommendations for any additional studies that should be completed to inform the next Water Master Plan update.
- Collaboration with the PAFD Fire Services Plan team on overlapping areas of concern, such as fire flow availability and hydrant design standards.
- Participation in a Climate Change Action Plan Working Group.

The following services are ***not*** expected to be included in the scope of assignment:

- Bainbridge Water Treatment Plant, other than projecting when treatment capacity increase will be needed.

- Condition Assessment of facilities or structures.
- Revisions to hydraulic distribution model.
- Monitoring, testing, or other field investigations.
- Review of City's operating and maintenance costs, office facilities, maintenance facilities, internal procedures, staffing, or administration.
- Detailed design and construction standards.
- Asset Management system development.
- Preventative Maintenance programs.
- SCADA infrastructure or programming review.

Further details of project scope will be provided to pre-qualified proponents with the subsequent RFP documents.

Category #3: Watershed Protection Planning

Overview of Assets and Programs

The CPA EPW Department manages three surface water intakes and two supply reservoirs:

- Lizard Lake reservoir and dam, which discharges to China Creek via a tributary, Williams Creek,
- China Creek dam and intake (56 km^2 upstream watershed area),
- Bainbridge Lake reservoir, dam and intake (12 km^2 upstream watershed area), and
- Somass River Pump Station.

The latter is an emergency intake, which does not have treatment (other than coarse screening).

The Bainbridge Lake and China Creek raw water turbidity has historically been low enough that the City is able to provide safe drinking water without filtration. Should degradation of the typical raw water quality occur in future, it could create an adverse water condition, potentially resulting in Boil Water Advisories and necessitating costly municipal treatment upgrades.

The source watersheds are largely undeveloped timber land. The majority of the China Creek and Bainbridge watershed area is private land, owned by Island Timberlands and managed by Mosaic. Upstream activity in these watersheds includes tree harvesting, mineral exploration, a hydroelectric power generating station, and recreation, as well as road construction and maintenance to support these uses.

A number of studies and water sampling programs have been completed for these watersheds over the past forty years, including studies by CPA, ACRD, BC Ministry of Environment, Island Timberlands, and MacMillan Bloedel.

The City maintains turbidity meters at both intakes, monitored and recorded by SCADA.

Inspections and Dam Safety Reviews of the Lizard Lake and Bainbridge dams, were completed by the City in 2023.

The City completed a Preliminary Protection Plan for the watersheds in 2016 (refer to Appendix B).

Anticipated Scope of Services

A Watershed Protection Plan is proposed to be developed, based on the City's 2016 Preliminary Protection Plan, for the watersheds that are contributory to the China Creek intake and Bainbridge Lake. The following are anticipated to be key elements of this Protection Plan:

- Review and summary of previous studies, turbidity data, historical climate records, and climate projections.
- Review of recent and planned forest harvest plans, as available.
- Review, and incorporation into workplan, of latest guidelines from the BC Ministry of Water, Land and Resource Stewardship.

- Consultation with other land owners and land users within the watershed, including ACRD, Island Timberlands, Western Forest Products and Hupacasath First Nation.
- Provide content for, and compile results of, public consultation to be implemented by City staff.
- Science-based risk assessment.
- Develop and prioritize appropriate risk management actions, and an implementation plan.
- Make recommendations for any studies needed to address critical knowledge gaps.

The following services are not expected to be included in the scope of assignment:

- Somass River emergency supply.
- Water Treatment infrastructure.
- Inspections of dams or other infrastructure.

Further details of project scope will be provided to pre-qualified proponents with the subsequent RFP documents.

Category #4: Sanitary Wastewater Collection and Treatment Infrastructure Planning

Overview of Assets and Programs

The CPA EPW Department manages the City's wastewater collection and treatment infrastructure, including:

- Liquid waste treatment plant (commissioned in 2021), consisting of screens, aerated lagoons, UV disinfection, and treated discharge outfall to the Alberni inlet,
- Deactivated and partly decommissioned former treatment lagoon,
- Five sanitary pumping stations,
- Separated sanitary and combined sewer collection systems, and
- Wet weather combined sewer overflow (CSO) outfalls.

The treatment plant is designed for an average day flow rate of 10,000 m^3/d, and peak hydraulic flow rate of 79,000 m^3/d (~ 900 l/s). The City conducts a water quality monitoring program in the Alberni Inlet as a condition of the BC operating approval.

The plant was designed only to meet existing (2015) hydraulic capacity needs. Generally, the strategy for accommodating future growth is to reduce stormwater inflow to the plant sufficiently to offset sanitary wastewater flow increases from development, through system improvements such as combined sewer separation. The City has budgeted $1.3 million annually for sewer separation capital projects.

In addition to serving the City of Port Alberni, the City also collects and treats wastewater from:

- Hupacasath First Nation (Ahahswinis 1 IR),
- Tseshaht First Nation (Tsahheh 1 IR), and
- ACRD Alberni Valley landfill (leachate).

The City has developed hydraulic sewer models for some, but not all, of the City's separated sanitary collection areas.

Additional background information on CPA's wastewater infrastructure is available on the City's website, including the City's most recent wastewater master plan (Liquid Waste Management Plan, 2020); refer to Appendix B.

Anticipated Scope of Services

A Sanitary Wastewater Collection and Treatment Master Plan is proposed to be developed, building on the existing Liquid Waste Management Plan and other past planning studies for the collection system. The following are anticipated to be elements of this master plan:

- Existing and future separated sanitary collection, pump stations, forcemains, and treatment infrastructure.

- Review and summarize relevant reports, data, and completed capital projects since 2015; document status of 2015 capital infrastructure recommendations.
- Condition assessment and estimation of remaining service life of pump stations (based on visual inspection and review of existing documents).
- Review state of existing assets and document level of performance.
- Review existing sewer policies and by-laws, and provide recommended revisions.
- Estimate average age of sewer mains, assess City's recent replacement/rehabilitation rate, and forecast trend. Estimate the annual capital investment required for a sustainable State of Good Repair program.
- Review and update system design criteria for new or replacement collection infrastructure,
- Based on 2024 OCP and recent flow data, and combined sewer flow rate projection developed by the City's Stormwater Master Plan team, forecast the future flow rates to the treatment plant, pump stations, and major separated sanitary trunk sewers.
- Use City's existing hydraulic sewer model to identify system capacity constraints under projected conditions. Identify, and develop recommended solutions for, predicted capacity constraints.
- Develop a preferred strategy for decommissioning of the former lagoon treatment facility.
- Estimate remaining service life of pump stations, pumps, and their major building systems, and capital cost of replacement/ rehabilitation.
- Prioritize immediate capital needs, and develop scope and budget for high priority projects to be implemented within five years.
- Developing a long-term program of infrastructure projects to address existing problems and future constraints.
- Provide content for, and compile results of, public consultation to be implemented by City staff.
- Provide recommendations for any additional studies that should be completed to inform the next Sanitary Wastewater Master Plan update.
- Conceptual-level capital project construction cost estimating.
- Participation in a Climate Change Action Plan Working Group.

The following are not expected to be included in the scope of the sanitary master plan:

- Combined sewers, sewer separation, or combined sewer overflows (see Category #5),
- Monitoring, testing, or other field investigations.
- Review of City's operating and maintenance costs, office facilities, maintenance facilities, internal procedures, staffing, or administration.
- Revisions to hydraulic sewer model.
- SCADA infrastructure or programming review.
- Detailed design and construction standards.
- Asset Management system development.
- Preventative Maintenance programs.

Further details of project scope will be provided to pre-qualified proponents with the subsequent RFP documents.

Category #5: Municipal Stormwater Management and Combined Sewer Infrastructure Planning

Overview of Assets and Programs

CPA EPW Department manages the City's stormwater drainage assets. City-owned undeveloped flood plains and ravines are managed by CPA Parks, Recreation, and Heritage Department.

Significant natural waterways flowing through the City are:

- Somass River,
- Lugrin Creek,
- Kitsuksis Creek,
- Roger Creek,
- Owatchet Creek (Dry Creek), and
- Ship Creek.

Within the City limits, much of the floodplain and ravine areas of these creeks is owned and managed by the City. Portions of these waterways, in particular the Somass River and Kitsuksis Creek, are tidally influenced. The City owns and manages a system of flood protection dykes and an associated stormwater pumping station at Kitsuksis Creek.

A number of previously existing smaller streams in the City were enclosed in storm sewers as the City developed, such as Weaver Creek (Coal Creek).

There are few, if any, municipally-owned stormwater detention facilities. Currently, the City typically requires construction of private detention systems on larger developments.

With the exception of combined sewer overflow management programs, formal stormwater management planning, policies, and by-laws are limited, and in need of improvement.

A number of low-elevation areas within the City are prone to flooding during major rain events, particularly when the heavy rainfall coincides with high tide.

The City's sewer network includes service areas with separate sanitary and storm sewers as well as areas with combined or partially combined sewers.

The Liquid Waste Management Plan (LWMP) adopted by the City includes a strategy of gradual reduction of combined sewer overflows through sewer separation. The City's financial plan includes $1.3 million capital per year for an ongoing sewer separation program.

The City maintains hydraulic sewer models that include the combined sewer catchments, but only a few select areas in separated stormwater catchments.

Additional background information on CPA's stormwater and combined sewer infrastructure is available on the City's website; refer to Appendix B.

Anticipated Scope of Services

A Stormwater Master Plan is proposed to be developed, which will encompass stormwater management in both separated and combined sewer service areas, and management of untreated CSO discharges.

The following are anticipated to be scope elements of this master plan:

- Combined sewer collection, separated storm sewer collection, drainage ditches, culverts, dykes, stormwater control facilities, and Margaret Street stormwater pumping station.
- Using existing City drawings and reports, prepare updated service area boundary mapping, delineating areas which are fully separated, fully combined, partly combined, and full-separated but draining into a combined sewer.
- Delineate areas of the City where major system surface flow cannot be routed to an outlet via public right of ways or easement, due to topography and property line geometry.
- Review existing sewer policies and by-laws, and provide recommendations for new documents and revisions to existing, including:
    - On-site runoff control policies, design standards, and acceptable technologies for new development and redevelopment,
    - Mechanisms for ensuring ongoing maintenance of privately-operated stormwater management infrastructure,
    - Erosion and sediment control,
    - Pollution control,
    - Preferred strategies for stormwater management in urban expansion areas,
    - Roof downspout drainage.
- Review and update stormwater design criteria, such as:
    - Design storm intensity, duration and frequency, with consideration of climate change projections
    - Return period criteria for sizing of new sewers and other drainage infrastructure,
    - Runoff coefficients
    - Criteria for sizing detention and infiltration systems.
- Review state of sewer and outfall assets, and document level of performance.
- Review available information of CSO overflow structures, the Margaret Street Stormwater Pump Station, and the Kitsuksis dyke system. Assess existing performance and estimate remaining service life before major rehabilitation or replacement is required.
- Estimate average age of storm and combined sewer mains, assess City's recent replacement/rehabilitation rate, and forecast trend. Estimate the annual capital investment required for a sustainable State of Good Repair program.
- Review the 2024 OCP, and develop recommended stormwater infrastructure projects needed to accommodate the projected growth.
- Analyze historical rainfall and sewer flow data to estimate the impact of completed sewer separation projects.

- Establish quantity targets for CSO reduction, with consideration of projected increases in sanitary flow due to growth, which must be offset to maintain existing level of service.
- Provide content for, and compile results of, public consultation to be implemented by City staff.
- Identify sewer separation projects which would give best Return-on-Investment and best align with the City's other infrastructure plans, and develop a five-year capital program (high-level scope and budget) for priority projects.
- Using updated design storm parameters and the existing sewer hydraulic model, forecast stormwater flow rates to the combined system pump stations and CSOs.
- Provide recommendations for any additional studies that should be completed to inform a future Stormwater Master Plan update.
- Participation in a Climate Change Action Plan Working Group.

The following are not expected to be included in the scope of assignment:

- McLean Mill pond and dam.
- Somass River.
- Other natural waterway areas, except for assessment of potential impacts from municipal storm water discharges into those waterways.
- Shoreline protection.
- Monitoring, testing, or other field investigations.
- Review of City's operating and maintenance costs, office facilities, maintenance facilities, internal procedures, staffing, or administration.
- Revisions to hydraulic sewer model.
- SCADA infrastructure or programming review.
- Detailed design and construction standards.
- Asset Management system development.
- Preventative Maintenance programs.

Further details of project scope will be provided to pre-qualified proponents with the subsequent RFP documents.

Category #6: Municipal Transportation Planning

Overview of Assets and Programs

CPA EPW Department manages transportation assets that include:

- 150 km (approx.) of roadways.
- Six bridges (excluding pedestrian).
- Seven intersections with full traffic signal control.
- 1500 (approx.) light standards.
- Bus stops and shelters.

One provincially-managed highway, Highway 4 (locally Johnston Street and River Road), forms an arterial route through the City, passing through some of the city's main commercial areas. Highway 4 connects west shore communities such as Tofino and Ucluelet with the rest of Vancouver Island. The provincial Ministry of Transportation and Infrastructure (MoTI), in consultation with the City, is in the process of designing upgrades to the Highway 4 corridor, including a proposed roundabout at the intersection of Highway 4 and Beaver Creek Road.

Port Alberni has many streets with wide rights-of-way and wider paved widths, as compared to similarly classed roads in other BC opportunities. Angle parking is present on a number of these wide roads, which increases parking availability in commercial areas. However, the wide roads are likely to result in higher pavement maintenance costs, higher storm runoff, higher driving speeds, and greater challenges to pedestrians than would occur with more typical road cross-sections. The wide rights-of-way present opportunity and flexibility for future streetscaping, stormwater management, etc.

In recent years, Port Alberni's pedestrian fatality statistics have been higher than provincial averages.

The City has many "zebra" pedestrian crossings on collector and arterial roads that are unsignalized, the majority without pedestrian-activated beacons. The City is in the process of adding pedestrian-activated beacons to several crossings where pedestrians have been struck in recent years.

The City has previously evaluated the conversion of some intersections to roundabouts, but as yet none have been implemented.

Many older neighborhoods have mid-block alleys, which receive a lower level of maintenance than streets. Recent changes to provincial community planning legislation may drive development interest in housing unit densification options where units front onto alleyways rather than streets. The anticipated densification in single-detached neighbourhoods also has implications to parking availability, as many existing homes have on-street parking, without private driveway accesses, or with driveways connecting to alleyways rather than streets.

Active transportation routes within the City are not well connected in some areas, and have segments with inadequate space for bike lanes, and the City's hilly topography poses a challenge to providing connective routes that are suitable for all ages and ability levels.

ome steep segments not suited to people with However, the City's Quay-to-Quay multi-use trail project, currently under construction, will provide substantial improvement along the west (harbourfront / riverfront) side of the City.

A substantial amount of truck traffic passes through the City, both local and through traffic, much of it related to the forestry sector. Port Alberni is also a deep-water ocean port with commercial loading facilities and maritime engineering facilities, as well as several harbours housing a large fishing fleet and associated industry. These operations rely heavily on trucking, as Vancouver Island has not had an operational commercial railway for several decades.

The City's isolated valley location and limited use of street illumination on local residential roads results in a relatively low level of light pollution, and dark sky viewing opportunities valued by many area residents. However, other residents may favour increases in street illumination for reasons of safety and security.

Several past studies have been completed evaluating new options for truck routes, with the aim of bypassing commercial and residential areas.

Additional background information on CPA's transportation infrastructure is available on the City's website; refer to Appendix B.

Anticipated Scope of Services

A Transportation Master Plan is proposed to be developed, building on past strategic plans that focused on specific transportation elements (active transportation, intersection safety, etc.). The following are potential elements of the master plan project scope:

- Review of existing operations, assets and benchmark documentation of existing conditions.
- Assess degree of potential impact of through truck traffic on City road infrastructure and safety.
- Establish Level of Service standards.
- Develop policy and strategy for illumination, that balances safety versus light pollution, as informed by community engagement.
- Review the 2024 OCP, and assess the need for transportation network improvements resulting from the adopted growth strategy and other OCP policies.
- Develop a long-term program of infrastructure projects to address gaps.
- Conceptual-level capital project construction cost estimating.
- Develop a framework for assessing and prioritizing state-of-good repair (SOGR) projects for road assets, and estimate annual budget requirements to maintain existing SOGR service levels, or to achieve an improved level of service if adopted as a standard.
- Provide content for, and compile results of, public consultation to be implemented by City staff.
- Review, update and incorporate existing transportation plans such as the 2014 Active Transportation Plan and 2021 Network Screening Study.
- Collaboration and coordination with the City's Fire Services Master Planning Team on overlapping issues such as emergency routes and cul-de-sac design standards.

- Collaboration and coordination with the City's Stormwater Master Planning Team on overlapping issues such as control of street runoff.
- Collaboration and coordination with the City's Parks, Recreation, and Culture Master Planning team on overlapping issues such as trail network and active transportation.
- Participation in a Climate Change Action Plan Working Group.

The following services are not expected to be included in the scope of assignment:

- Off-street trail network planning, aside from collaboration and coordination as noted above.
- Field investigations, such as condition assessment of existing roads and bridges.
- Parking bylaws, parking enforcement, and parking availability (with the exception of impacts to residential parking needs that result from the 2024 OCP and related changes in density zoning in established residential neighbourhoods).
- Review of staffing complement, operations, organizational structure, or administrative functions.

Further details of project scope will be provided to pre-qualified proponents with the subsequent RFP documents.

- END OF APPENDIX A -

APPENDIX B

REFERENCE INFORMATION

Reference Documents

The City's ongoing Official Community Plan update project is expected to be completed later this year. Alternative growth strategies being considered, and community engagement materials can be found here:

https://www.letsconnectpa.ca/ocp

The e-documents listed in the table below are available to aid proponents with development of an EOI that is tailored to CPA's needs. These documents can be downloaded from either the Bid Opportunities page or the Document Library page of the City's website, as noted in the table:

https://www.portalberni.ca/bid-opportunities

https://www.portalberni.ca/document-library

Additional reference information will be included with subsequent RFPs.

Reports

Title	Date	Location
Network Screening (CPA & ICBC)	2021	Bid Opportunities
Together for Climate Project Report (CPA)	2020	Document Library
Stage 2/3 Liquid Waste Management Plan (CPA)	2020	Document Library
Corporate Strategic Plan, 2019-2023 (CPA)	2019	Document Library
Drinking Water Source Assessment and Preliminary Protection Plan Development (CPA)	2016	Bid Opportunities
Water Rate Review Update (CPA)	2015	Document Library
Water Study Update (CPA)	2015	Bid Opportunities
Active Transportation Plan (CPA)	2014	Document Library
Ring Road Connector Route Study (ACRD)	2014	Document Library
Accessible and Affordable Transportation Study (ACRD)	2014	Document Library
Water Quality Assessment and Objectives for the China Creek Community Watershed (BC MOE)	2011	Document Library
Fire Department Report (CPA)	2011	Document Library
Alberni Valley Regional Water Study Update (ACRD)	2010	Document Library
Climate Change Committee Report (CPA)	2008	Document Library
Sustainable Cities – Port Alberni Community Assessment (ICSC)	2008	Document Library
Harbour Road Pre-Design Study (CPA)	2004	Document Library

- END OF APPENDIX B -