



**SUNSHINE COAST REGIONAL DISTRICT
COMMITTEE OF THE WHOLE
AGENDA**

Thursday, January 23, 2025, 9:30 a.m.
IN THE BOARDROOM OF THE SUNSHINE COAST
REGIONAL DISTRICT OFFICES AT 1975 FIELD ROAD, SECHELT, B.C.

	Pages
1. CALL TO ORDER	
2. AGENDA	
2.1 Adoption of Agenda	
3. PRESENTATIONS AND DELEGATIONS	
4. REPORTS	
4.1 Hopkins Landing Waterworks District Conversion Options Assistant Manager, Capital Projects General Manager, Infrastructure Services (Voting - All Directors)	3
4.2 Chaster Well Maintenance and Upgrade - Budget Amendment Manager, Capital Projects (Voting - A, B, D, E, F, Sechelt)	78
4.3 2024 Preliminary Surpluses and Deficits - Report to Follow Manager, Financial Services (Voting - All Directors)	
4.4 Constituency Expenses and Reimbursement of Directors' Travel and Other Expenses Policies Chief Administrative Officer / Chief Financial Officer (Voting - All Directors)	81
4.5 Contracts Between \$50,000 and \$100,000 (October to December) Manager, Purchasing and Risk Management (Voting - All Directors)	91
4.6 Sunshine Coast Regional Accessibility Advisory Committee Meeting Minutes of December 9, 2024 (Voting - All Directors)	93
4.7 Ports Monitoring Committee Meeting Minutes of December 10, 2024 (Voting - B, D, E, F)	97
5. COMMUNICATIONS	
6. NEW BUSINESS	
7. IN CAMERA	

8. ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Committee of the Whole – January 23, 2025

AUTHOR: Rebecca Porte, Assistant Manager, Capital Projects
Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: HOPKINS LANDING WATERWORKS DISTRICT CONVERSION OPTIONS

RECOMMENDATION(S)

- 1) **THAT the report titled Hopkins Landing Waterworks District Conversion Options be received for information;**
 - 2) **AND THAT further direction be provided to pursue Option 1, Option 2 or an alternative action, with respect to next steps in response to the Conditions Assessment and Feasibility Study of the Hopkins Landing Waterworks District.**
-

BACKGROUND

On Feb 24, 2023, the Sunshine Coast Regional District (SCRD) received a letter from Hopkins Landing Waterworks District (HLWD) requesting that the SCRD take over operation and management of HLWD's water system through a process called "conversion", specific to Improvement Districts. In addition to transferring operation and management, conversion would also include the transfer of HLWD land, assets, liabilities, and agreements, through a Cabinet Order by the Province.

On May 11, 2023, a report was presented to the SCRD Board outlining the role of the HLWD and recommending that a grant application be submitted on behalf of the SCRD for a conditions assessment and feasibility study of the HLWD water system. The SCRD Board supported this direction.

Onsite Engineering Services were contracted to complete a conditions assessment of the existing HLWD assets, as well as an exploration of the feasibility of transferring HLWD to the SCRD. The Conditions Assessment (Attachment A) and Feasibility Study (Attachment B) are now complete. This concludes the feasibility work committed to-date by the SCRD.

The purpose of this report is to share the Conditions Assessment and Feasibility Study for informational purposes, and to provide options for further consideration.

DISCUSSION

Hopkins Landing Waterworks District

Hopkins Landing Waterworks District was established in 1968 as a volunteer-run organization that provides drinking water services to approximately 170 properties. The water system

includes two production wells, two storage tanks with total reservoir capacity of 375,000 litres, and a distribution network. The water system is unchlorinated. The mains for the distribution system are primarily asbestos concrete (AC) piping, with replacement segments made up of PVC or steel piping. There are 11 fire hydrants connected to the system. The SCR D owns and operates the surrounding Langdale and Chapman Water Systems which are connected to HLWD with closed valves. This allows the water systems to share drinking water during maintenance or emergency shutdowns. There is no active servicing agreement in place to support such supply to be provided.

Subdivision Servicing Bylaw No. 320

As the HLWD is located within Electoral Area F (West Howe Sound), the *Subdivision Servicing Bylaw No. 320* regulates any upgrades to the system undertaken, regardless of who owns or operates the system.

This bylaw also reserves the right for the SCR D “to acquire any existing or newly constructed community sewer system under this bylaw that has been designed, constructed, and maintained to the standards of the Regional District, for which the relevant plans to ensure a sustainable service delivery have been approved by the SCR D”. Currently the HLWD does not meet the SCR D standards, including those set out in Bylaw No. 320.

Conditions Assessment

The Conditions Assessment undertaken by Onsite Engineering Services is included in Attachment A and reviewed the current condition of the Hopkins water system. Through the assessment it was determined that, overall, the system is in good condition with ample supply. The major assets (two wells and two tanks) were found to be performing as required and not needing major upgrades for 5 - 10 years. However, there are several significant issues needing to be addressed within the system. These include watermain replacement, new hydrant requirements, unresolved land tenures in key areas, absence of water treatment, proximity of the north well site to septic, and new water licences for additional volume to meet current standards.

A summary of watermain upgrades required within the system was provided in the assessment. A full replacement of the AC mains to upsized ductile iron piping is needed to meet the requirements of Bylaw No. 320 and to address the aging nature of the system. Four new fire hydrants are also necessary to meet the bylaw requirements.

There are several components of the HLWD infrastructure that are known or suspected to be on private property without a Right of Way (ROW) agreement in place, including some sections of watermains. The most significant unresolved issue is the location of the south well house. Potential solutions have been discussed between HLWD and the landowner, including a lease/rental agreement or purchase of the site, however no solution has been secured. The north well has a separate issue of proximity to septic field.

In 2021, Vancouver Coastal Health Authority (VCH) tested the Hopkins water system. 98 samples were collected. The samples met regulation standard, but VCH strongly recommended that a chlorine residual distribution system would benefit the overall water system. This would provide another barrier to potential contaminants introduced to storage or distribution systems. Such a water treatment system has not yet been implemented. Ongoing delays in the

installation of a water treatment system could result in VCH ordering the HLWD to install such a system.

Both the north and south well have not yet received Water Licences. Groundwater Water Licence applications were submitted in 2017 by HLWD for their historical water use, satisfying the legal requirements to proceed with groundwater use while the application is in process. The application volume is set at 50 million litres per year, or 1.59 l/s. Any increase in water licence volume would require a new application as well as additional testing to determine if increased withdrawals could promote saltwater intrusion or impact the sustainability of the aquifer.

Feasibility Study

Based on the information from the Conditions Assessment and an analysis was completed on various avenues of operationalizing the conversion of the Hopkins system to the SCRD. This Feasibility Study also confirmed high level cost estimates for the infrastructure upgrades required to meet the requirements of Bylaw No. 320, which range from approximately \$7.8 million - \$10 million. The associated report is expected to be finalized shortly and the initial results are included the presentation to the residents on November 28, 2024 which is included in Attachment B.

Options and Analyses

Staff have developed several options for the Board's consideration to respond to HLWD's request to support the conversion of the water system to the SCRD.

OPTION 1 – No Conversion: Emergency water supply only to HLWD users

With this option the HLWD will continue to be responsible for the provision of water for their community. HLWD and SCRD could enter into a long-term emergency water supply servicing agreement.

The benefit would be that the SCRD can continue to focus on water projects currently on its docket. It would also avoid the SCRD to be exposed from additional unknowns/risks associated with undertaking conversion.

It should be noted that SCRD has taken over improvement districts in the past including North and South Pender and Granthams.

Given the substantial workload associated with addressing challenges with the current SCRD water systems, this is one of the options that staff suggest the Board consider advancing. Should the Committee choose to recommend **Option 1** to the Board, a recommendation stating the following could be considered:

THAT staff develop an Emergency Water Supply Agreement with the Hopkins Landing Waterworks District.

OPTION 2 – Proceed with exploring service arrangement for SCRD to take on water supply to Hopkins residents.

There are several options for the SCRD to take on the responsibilities for the water supply to the Hopkins residents, both at a water service area and water system level.

A) Establish New Hopkins Water Service Area, utilizing water from Langdale or Chapman system

Service Area Overview	Hopkins Water Service Area would be established for residents of Hopkins Landing.
System Overview	Water from the excess capacity at the current water supply sources with the RWS would be used. The water system would utilize pre-established connections to deliver water from the Langdale or Chapman system to Hopkins residents. Use of Langdale vs. Chapman tie-in would be determined based on further cost and logistics exploration. Current wells in Hopkins would be decommissioned.
Capital Upgrades Required	Baseline upgrades include watermain replacement, fire hydrants, water meters, and pavement restoration. Additional capital upgrades would include decommissioning of current wells.
Water Supply Considerations	<ul style="list-style-type: none"> • Chlorination of water as required by VCH. • Minimal impact to Chapman or Langdale water system due to current excess capacity from Langdale Well and Soames Well.
Benefits	<ul style="list-style-type: none"> • Water supply from RWS could happen at any time as initial technical system integration is in place. • Bypasses the need to resolve water licence, ROW for well, and water treatment issues inherent to the current Hopkins system.
Risks	<ul style="list-style-type: none"> • Additional workload for SCRD associated with conversion, capital improvement, and operations of water system.

B) Establish New Hopkins Water Service Area, utilizing water from the current Hopkins water system

Service Area Overview	Hopkins Water Service Area would be established for residents of Hopkins Landing.
System Overview	This option would include the continued use of Hopkins own water supply sources. This would require upgrades or full replacement of the current wells , and securing water license for additional volume. Chlorination of the water would be implemented.
Capital Upgrades Required	Baseline upgrades include watermain replacement, fire hydrants, water meters, and pavement restoration. Additional capital upgrades, would include well upgrade/replacement and implementation of water chlorination.
Water Supply Considerations	<ul style="list-style-type: none"> • Chlorination of water as required by VCH. • Unsustainable water supply sources
Risks	<ul style="list-style-type: none"> • Requires the additional resolution of water license, well ROW • Additional workload for SCRD associated with conversion, capital improvement, and operations of water system.

C) Hopkins Joins Regional Water Service Area

Service Area Overview	Hopkins Landing would join the Regional Water Service Area (RWSA).
System Overview	The water system would utilize pre-established connections to deliver water from the Langdale or Chapman system to Hopkins residents. Use of Langdale vs. Chapman tie-in would be determined based on further cost and logistics exploration. Current wells in Hopkins would be decommissioned.
Capital Upgrades Required	Baseline upgrades include watermain replacement, fire hydrants, water meters, and pavement restoration. Additional capital upgrades include decommissioning of current wells.
Water Supply Considerations	<ul style="list-style-type: none"> • Chlorination of water as required by VCH. • Water supply from RWSA could happen at any time as technical system integration is already in place. This option is relatively easy from a service continuity standpoint. • Minimal impact to Chapman or Langdale water system due to current excess capacity from Langdale Well and Soames Well.
Benefits	<ul style="list-style-type: none"> • No new service area required.
Risks	<ul style="list-style-type: none"> • Additional workload for SCRWD associated with conversion, capital improvement, and operations of water system.

The financial and legal implications of all three options are still to be assessed including but not limited to:

- the type of service arrangement (e.g. service area establishment, service agreement) and associated benefits and risks
- the legal process required to implement such service agreements
- the financial implication for the Hopkins residents
- the financial implication for the existing service participants of the RWSA for the options with a connection to the Chapman Water System or the Langdale Water System.

Should the Committee choose to recommend **Option 2** to the Board, a recommendation stating the following could be considered:

THAT Staff further assesses the implications of entering into a service arrangement for the water supply to the Hopkins residents and report back to the Board in Q3 2025;

AND THAT the budget for the HLWD Conversion Feasibility Study project be increased by \$43,000 from \$40,000 to \$83,000, and the additional amount be funded from [155] Feasibility Studies – Area F taxation, including 0.08 additional FTE for 2025;

AND THAT the draft 2025-2029 Financial Plan be amended accordingly;

AND FURTHER THAT this recommendation be forwarded to the January 23, 2025 Board.

Organization and Intergovernmental Implications

Based on the SCRD's experience, the establishment of any form of service arrangement requires a substantial amount of staff resources, including public engagement with the community, legislative and administrative processes, and financial and technical analyses.

To advance Option 2, an additional 0.08 FTE is required to retain a project manager for this project.

The required capital improvements to the Hopkins water system would further increase the already substantial capital project workload for the Infrastructure Services Department for the upcoming years.

The benefits for the SCRD of a full integration of the HLWD water system with the RWS includes an increased operational redundancy in the water systems for the neighbouring parts of the Chapman and Langdale water systems. Given the confirmed potential of the water aquifer in this area, the SCRD could also explore developing a new production well in this area at some point in the future.

Financial Implications

At the November 9, 2023 Board meeting a budget of \$40,000 was approved for the Hopkins Landing Waterworks District Conversion Feasibility Study. With the work completed to date, this budget has been fully allocated.

The establishment of an emergency water supply agreement for the HLWD users (Option 1), would have no further financial implications for the SCRD other than the payment related to the actual emergency water supply. The cost of developing an emergency water supply agreement could be absorbed within the base budget of the RWSA.

In order to better understand the implications of the different options to advance the establishment of a type of service arrangement listed in Option 2, additional financial, legal and engineering assessments have to be completed. Additional engagement with the community is also suggested before the results of these assessments are presented to the Board. An additional budget of \$43,000 would be required to complete this work. This would result in the budget for the HLWD Conversion Feasibility Study project to be increased by \$43,000 from \$40,000 to \$83,000. This budget increase would need to be funded from [155] Feasibility Studies – Area F taxation.

Timeline for next steps

If the Board were to select Option 1a - Emergency water supply only to HLWD users - staff would inform HLWD immediately of the decision and would initiate negotiations for an Emergency Water Supply Servicing Agreement, with a draft agreement to be presented for the Board's consideration sometime in 2025.

If the Board were to decide to advance exploring a service arrangement, staff would report back to the Board by Q3 2025 with a detailed analyses of the financial, operational and legal implications of these options as well as the results of the community engagement. This would allow the Board to make a decision as to whether to advance any service arrangement prior to the 2026 budget process.

Given the nature and magnitude of the current workload associated with the SCRDS water services and the complexity of the process to be followed, staff expect the full conversion process to take at least two years to complete.

Communications Strategy

A community meeting was coordinated by the SCRCD and held on November 28, 2024, at the Gibsons and Area Community Center (GACC). During this meeting, the Onsite Engineering consultant provided a presentation outlining key findings. SCRCD staff provided a presentation about the current RWS and service areas (Attachment C). There was an opportunity for questions and answers, as well as an open house format where participants could ask questions informally and share their perspectives. The meeting was well attended with over 50 members of the Hopkins community, and two SCRCD directors present.

It was evident that many participants were unaware of the magnitude of infrastructure upgrades required within their water system. It was also evident that some had limited understanding that the current HLWD Board no longer has capacity to manage the water system, and that HLWD had initiated the request for the SCRCD to take over the system.

If the Board decides to proceed with the conversion process, the SCRCD will launch a Let's Talk Page to share information, including background, presentation materials, and relevant reports with the public.

The Board direction regarding the options included in this report will determine next steps for communications. If the Board chooses not to pursue conversion, HLWD will be notified. If the Board chooses to pursue conversion HLWD will be notified, and the public engagement will follow process requirements.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

Based on the condition assessment completed and the further feasibility analyzes completed, this report provides a summary of key findings to date as well as a high-level overview of directions the Board may choose to take in regard to the request by HLWD for conversion.

If the SCRCD Board does not want to pursue any service arrangement for the water supply to the Hopkins residents, staff recommend Option 1 – Emergency water supply only to HLWD users. If the SCRCD Board does want to pursue conversion, staff recommend Option 2. Staff would then report back to the Board by Q3 2025 with a detailed analyses of the financial, operational and legal implications of these options as well as the results of the community engagement. This would allow the Board to make a decision if it wants to advance any service arrangement prior to the 2026 budget process.

Attachments

Attachment A – Hopkins Landing Conditions Assessment

Attachment B – Presentation Onsite Engineering Ltd. November 28, 2024 - Condition Assessment and Feasibility Study

Attachment C – Presentation SCRD November 28, 2024 – Water Systems vs Water Service

Reviewed by:			
Manager		Finance	X- A. Taylor
GM		Legislative	
CAO	X – T. Perreault	Other	

ONSITE
Engineering Ltd.



**Hopkins Landing Waterworks District
Water System Condition Assessment**

Prepared for:

Sunshine Coast Regional District

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OEL File # 723-12
Permit to Practice No.: 1002678

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Table of Contents

1.0	Introduction	1-1
1.1	Document Review	1-1
1.2	Site Review	1-2
1.3	Evaluation Criteria.....	1-2
2.0	Existing System.....	2-1
2.1	Overview	2-1
2.2	System Conditions.....	2-2
2.2.1	North Well.....	2-2
2.2.2	South Well.....	2-4
2.2.3	Treatment	2-6
2.2.4	Storage	2-6
2.3	Distribution System & Repair Records.....	2-7
3.0	Condition Assessment.....	3-1
3.1	North Well.....	3-1
3.2	South Well.....	3-1
3.3	North Tank	3-2
3.4	South Tank	3-2
4.0	Cost Estimate	4-1
5.0	Land Tenure Issues.....	5-1
6.0	Recommendations	6-1

Appendices

Appendix A – Condition Assessment Forms

Appendix B – Condition Assessment Photos

1.0 Introduction

Onsite Engineering Ltd. (OEL) has been retained by the Sunshine Coast Regional District (SCRD) to provide engineering consulting services to assess the condition of the Hopkins Landing Waterworks District (HLWD). HLWD is an independent waterwork district servicing 170 properties on the Sunshine Coast. The SCRCD owns and operates the surrounding water systems in Langdale and Soames Point, which are connected to HLWD with closed valves. This allows the water systems to share drinking water during maintenance or emergency shutdowns.

In 2023, HLWD requested that the ownership and operation of the HLWD be transferred to the SCRCD. The SCRCD has procured engineering consulting services to complete a condition assessment of the existing HLWD assets, and to assess the feasibility of transferring ownership of the HLWD to the SCRCD.

The scope of this project is to review the existing Hopkin's Landing assets to determine general condition, develop concepts for required upgrades to meet current regulations and standards, and to prepare a Class D cost estimate for the recommended scope of work.

1.1 Document Review

The following documents were provided by the SCRCD and reviewed by OEL and were used as reference documents in the preparation of this report:

- Hopkins Landing Shut Off Valves Map, HLWD, April 1993
- Well Inspection Form, MFLNRO, February 2019
- North Well Log & Construction Record, Rural Well Drillers Ltd., June 11, 1968
- Hopkins Landing Well Log – South Well, Nor-West Water Well Drilling Ltd., February 27, 1995
- Hopkins Landing Well Logs – North Well, HLWD, 2010-2022
- Hopkins Landing Well Logs – South Well, HLWD, 2009-2023
- Water Facility Evaluation Report, Vancouver Coastal Health (VCH), March 23, 2022
- Drinking Water System Annual Report, VCH, June 6, 2022
- Hopkins Landing Waterworks District Financial Statements 2021, HLWD, May 27, 2022
- Hopkins Landing Drinking Water Lab Analysis, ALS, November 26, 2019
- Existing Use Groundwater Application Form, HLWD, June 19, 2017
- Water Supply and Distribution System Capacity Analysis, GeoAdvice Engineering Inc., February 29, 2024

In addition, the HLWD Operation Staff provided OEL with hard copies of archived documents from the Hopkins Landing water system, dating back to the 1970's. OEL reviewed these documents and provided them to the SCRCD in digital form.

1.2 Site Review

On June 5, 2024, Joel McAllister, P.Eng. and Laura McPhedran, P.Eng. from OEL visited the Sunshine Coast to complete a site review, with Ineke Kalwij, P.Eng., Ph.D. of Kalwij Water Dynamics Inc. SCRD Operations staff were present along with the Hopkins Landing Operations staff. These representatives were Ian Thompson of Hopkins Landing, and Matt O'Rourke, Jeremy Maerkl, and Rui Lin from the SCRD.

1.3 Evaluation Criteria

The approach for completing this condition assessment begins with a site evaluation. This site review was an opportunity to talk to the operators of HLWD, and to hear firsthand of any issues or items of note, which is especially important for small systems like this. A visual evaluation of the major and minor system components was done, and a field assessment was completed in a table format. These tables are included in Appendix A of this report. Photos were also taken; these are included as Appendix B.

Each major asset was broken down into disciplines, and evaluated for which equipment was present and a part of the overall system. Any minor assets within the system were noted and evaluated based on relevant criteria (i.e. if it was operable, if the equipment showed signs of leaking or corrosion, if the asset was obsolete or required repair, or if it appeared in good condition). It is important to note that the condition assessment is assessing the condition of the asset to its original constructed condition. It does not take into account if the original condition met the SCRD standards. Based on this inspection a condition rating was given to each asset and is described in Section 3.0.

The condition was scored based on the following:

Table 1-1: Condition Rating Matrix

Condition Rating	Definition
1	Excellent Condition
2	Good Condition
3	Fair Condition
4	Poor Condition
5	Needs Repair/Replacement

These condition ratings can be interpreted in further detail:

1 - Excellent Condition: This asset for all intents and purposes is brand new. There are no signs of damage or wear, there may be a warranty on the item if applicable, and it has a full remaining lifespan typical to the asset.

2 – Good Condition: This asset, while not brand new, is in good working order. There is no apparent damage to the asset, and any signs of wear are minor and do not inhibit the function of the asset. As good practice this asset may be re-evaluated in five years but is not expected to require any improvements in the short term.

3 – Fair Condition: This asset, while older, is still serviceable. Any signs of age such as rust or damage are all minor and do not impact performance. Equipment that is obsolete may fall under this category if it is still in good working order and has life left, but it may need replacing in order to fit into a more modern, upgraded system. Assets that fall under this category should be inspected every 2-5 years for signs of declining performance, or minor repairs.

4 – Poor Condition: This asset is showing signs of age. Equipment with rust, corrosion, minor leaking, declining performance, or damage to the asset that does not yet inhibit performance but may lead to problems in the near future all fall under this rating. This asset is to be evaluated every two years and can expect to need repair or replacement in the next 5-10 years as necessary. It may also be that this asset needs replacement but isn't necessary to the basic function of the service, so if there are budgetary issues, this repair or replacement can be deferred to the next year.

5 – Needs Repair/Replacement: This asset requires immediate attention. It has either failed or can no longer operate at an acceptable performance level. This asset is the most critical for repair, if possible, otherwise it needs to be replaced.

2.0 Existing System

2.1 Overview

The HLWD is an improvement district that was established in 1968 to provide drinking water services to approximately 170 properties in Hopkins Landing. The system is comprised of two production wells, North Well and South Well, two storage tanks, North Tank and South Tank, and a distribution network. Figure 2-1 shows the general location of the assets, with the two well houses located along Burns Road, and the two storage tanks located on North Road.

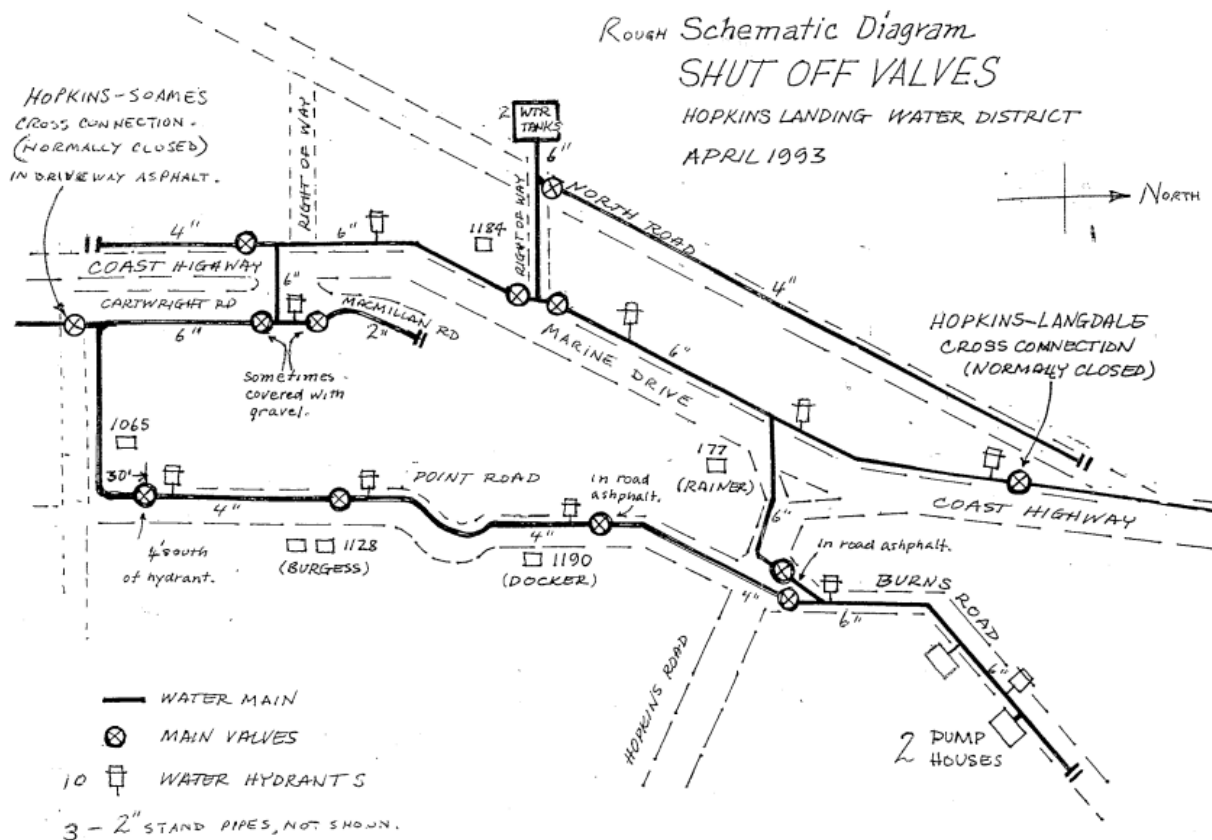


Figure 2-1: Hopkins Landing Water System

Water is supplied from two production wells, the North Well and the South Well. The North well is located at 1370 Burns Road, and the South Well is located at 1298 Burns Road. Water from these wells is pumped directly into the distribution system, which runs along Burns Road, Point Road, Cartwright Road, MacMillan Road, Marine Drive, North Road, and the Coast Highway. There is no designated supply main, instead water is fed from the distribution main to the two above ground steel reservoirs located on North Road. There is no water treatment in the system, and the pumps are currently run manually, although they had run based on reservoir levels until a fallen tree severed the Telus connection that provided communications in spring 2024.

The distribution system consists of 50 mm ϕ , 100 mm ϕ , and 150 mm ϕ mains. Most of the mains are believed to be the original asbestos concrete (AC) piping, with replacement segments consisting of polyvinyl chloride (PVC) piping. The system is comprised of one loop, however there are six dead ends, which may lead to challenges with water quality and flow capacity.

One segment of the distribution system extends north along the Coast Highway, and dead ends at a normally closed valve which serves as a cross connection to the Langdale Water System (LWS). Similarly, another dead end on the south end of the HLWS terminates at a normally-closed valve, serving as a second cross-connection, this time into the Soames Water System (SWS).

Eleven fire hydrants connect to the system, spaced along the distribution network to provide fire protection to the system. It appears approximately 27 valves and 170 water services are the only other appurtenances included in the existing system.

2.2 System Conditions

Notes from the site visit and documents review have all been compiled for each asset, and are detailed further in this section.

2.2.1 North Well

The North Well is located at 1370 Burns Road. It consists of a wood framed and clad well house with a concrete foundation slab and asphalt shingled roof, housing a concrete-encased well head fitted with a vertical turbine pump and associated valving and piping. Little is known about the design and construction of the North Well House.

2.2.1.1 Well Construction & Maintenance

Based on well records received from the SCRD, North Well was constructed June 11, 1968, by Rural Well Drillers Ltd. They drilled to a depth of 83 feet (25.3 m) and installed an 8" (200 mm ϕ) casing to a depth of 73 feet (22.2 m), with a 10-foot Johnson SS #60 screen. The initial pumping test produced a yield of 200 gallons per minute, or approximately 12.6 L/s.

Well #1 began to distribute water in 1970, providing approximately 137 m³/day for distribution to Hopkins Landing residents. On November 3, 2017, the 8" casing was replaced with a 4" (100 mm ϕ) casing, and the four-stage pump was rebuilt, with 50 feet of 3/4" drive shaft straightened, 9 new couplings and spider bearings installed, new packing placed in the stuffing box, and 2 new motor bearings were installed. The well was chlorinated and flushed for 12 minutes.

Records indicate that the well was rehabilitated in 1984 and rehabilitated a second time in 1999. The first rehabilitation was to address a decline in the performance of the well, and a failure of the pump the summer before. They identified mechanical clogging as the issue and recommended surging the well while pumping with a contractor's pump to redevelop the well. In 1987 the well was redeveloped, with 1 to 2 yards of sand removed from the well during the development session. After this the pump was

reset and operated successfully until around 1999. The second rehabilitation in 1999 was to address the issue of the pump breaking suction, by redeveloping the well a second time. During this redevelopment less than a five gallon pail of sand was removed, and improvements were seen in the well's capacity, though it was still noted to be about 65% of its initial capacity.

2.2.1.2 Well House

The well house itself is in fair condition, with the original building standing with no signs of replacement. The well house is a concrete foundation surrounded by mulch, with a grate at the entrance. This is shown in Figure 2-2. It is set back from Burns Road, which is a single lane local road, with a narrow shoulder of mulch. Trees surround the well house, and with a fire hydrant installed outside the well house the site is restricted for space for maintenance vehicles. Approximately one maintenance vehicle would be able to be parked at site at a time, without hindering traffic and the surrounding houses. There is no outdoor lighting on site. There is no fence protecting the well house, but the door is kept locked, providing a measure of site security. The well house is a dropped floor single room consisting of the well head, vertical turbine, electrical controls, a gate valve, a check valve, and associated piping and appurtenances. The roof is comprised of asphalt shingles and is designed to be able to be lifted off for pump maintenance and removal. There is a base board heater installed, and one passive air vent that is sealed off. The room is insulated and does not appear to overheat in the summertime.

2.2.1.3 Well Head

The well head is inside the well house, encased in concrete. It is unknown if the surface seal is intact, and no well identification plate could be found. The concrete encasement of the well head is raised, meaning any water pooling is directed away from the well head, though the building itself has no floor drain, leaving the water to pool on the floor. The well head is equipped with a vertical turbine pump.

2.2.1.4 Mechanical

The well discharge piping consists of a 100 mm \emptyset steel discharge pipe with pressure gauge connections and an air release valve, which has a flange fitting connecting to a check valve. The check valve is a Valmatic Swing-Flex check valve, Model No. 504A. The check valve is flange connected to a Clow Gate Valve, also sized 100 mm \emptyset . The gate valve can be opened and closed with no sign of stress or resistance, and the pump was turned on to run during the condition assessment. The check valve appeared to operate as required, with no cavitation noises or vibrations apparent during the pump run. The gate valve is flanged to a welded steel reducer, upsizing the pipe into a 150 mm \emptyset bend, directing the discharge piping below ground. There are no signs of corrosion on any of the piping and equipment, and while the system is dated, it is all in good condition.

2.2.1.5 Electrical

The North Well House is serviced by overhead power lines, providing 3-phase electricity at 480 Volts from a pole-mounted transformer. The electrical service size was not listed. The main disconnect is a switch within the building.

The system contains a Cross the Line starter and is normally controlled by floats in the reservoir. There is no standby generator on site, and no backup power is available. All electrical equipment appears to be original, and while there are no signs of corrosion or obvious code violations, the equipment appears obsolete.

2.2.1.6 Operations

Recently, a storm damaged the overhead Telus cable that fed into the well house, when a tree broke and fell on top of the overhead lines. Telus has been notified but has yet to make repairs. This means that the well house is manually operated, with the Hopkins Landing volunteers turning on the pumps and running them. The system is set on a timer to run for 1.8 hours before turning off automatically.

There is no history of the pump being routinely serviced other than repairs that were made in 1984, 1999, and 2017. It is assumed that the pumps are designed to handle capacity of the Hopkins Landing community, and a record of pump hours is kept by hand. There appears to be no corrosion or moisture present in operating equipment, with alarm lights and light bulbs working.

2.2.2 South Well

The South Well is located at 1298 Burns Road. It consists of a wood framed and clad well house with a concrete foundation slab and asphalt shingled roof, housing a concrete-encased well head fitted with a vertical turbine pump and associated valving and piping. It should be noted that the 2021 Drinking Water System Annual Report notes that the supply pipe from the South Well to Burns Road main broke, and the existing plastic pipe was replaced. No other information is given about the replacement pipe.

2.2.2.1 Well Construction & Maintenance

Based on well records received from the SCRD, the South Well was constructed February 25, 1995, by Nor-West Water Well Drilling Ltd. They drilled to a depth of 64 feet (19.5 m) and installed an 8" (200 mm \varnothing) casing to a depth of 54 feet 6 inches (16.6 m), with a 10-foot #150 screen. The well was found to have a yield of greater than 100 gallons per minute or approximately 6.3 L/s, with a Goulds pump in operation. In August 2011, the 200 mm \varnothing casing was replaced with a 100 mm \varnothing casing and a 4-stage 15 hp rebuilt SIMFLO pump was installed.

In 2017, the well was estimated to provide approximately 27.6 m³/hour for distribution to Hopkins Landing residents, or 7.7 L/s.

2.2.2.2 Well House

The South Well House is in good condition and is designed similarly to Well House #1, appearing to not require any replacement or repair. It is situated on a concrete foundation pad surrounded by vegetation and trees with a gravel parking pad in the front. Approximately one maintenance vehicle can be parked at the front of the well house. There is no available outdoor lighting on site. The surface grading is sloped to pool water away from the well head. There is no fence protecting the well house, but the door is kept locked, providing a measure of site security.

2.2.2.3 Well Head

The well head appears to be in good condition and is encased in concrete. The encasement is in good condition and is raised above grade to direct water pooling away from the well head. The well head is sealed and equipped with a SIMFLO vertical turbine pump, Model No. SM6C-4 (Serial No. 104988).

2.2.2.4 Mechanical

The well discharge piping consists of a 100 mm \varnothing steel discharge pipe with pressure gauge connections and an air release valve, which has a flange fitting connecting to a check valve. The check valve is a Valmatic Swing-Flex check valve, Model No. 504A. While the check valve wasn't tested, the pump ran smoothly and no comments were given by the operators on its performance. The check valve is flange connected to a Clow Gate Valve, also sized 100 mm \varnothing . The gate valve can be opened and closed with no sign of stress or resistance.

No cavitation noises were made apparent during the pump run. A slight bend is visible in the aboveground piping however it is within tolerance. There are no signs of corrosion on any of the piping and equipment, and while the system is dated, it is all in good condition.

2.2.2.5 Electrical

The South Well House is serviced by overhead power lines, providing 3-phase electricity at 600 volts from a pole-mounted transformer. There is a 40-amp service on site. Electricity is distributed through a metal conduit with a switch to serve as a main disconnect. The system contains a Cross the Line Start and is controlled by floats. There is no standby generator on site, and no backup power is available.

The motor and power cables are not continuous from within well to within the kiosk, the receptacles are not ground fault interrupters (GFI), and the pump is not equipped with an amp meter. However, there seems to be no obvious code violations. The pump is equipped with an hour runtime meter. Like the North Well House, there appears to be no signs of corrosion, just obsolete electrical equipment.

2.2.2.6 Operations

The storm damage to the Telus cables also affects the South Well House, consequently it is manually operated. The South Well House has no records of routine servicing. Pumps are designed to handle capacity of the Hopkins Landing community, and a record of pump hours is kept by hand. There appears

to be no corrosion or moisture present in operating equipment, with alarm lights and light bulbs in working order.

2.2.3 Treatment

The HLWD system is not chlorinated. In 2021, the VCH tested the Hopkin's Landing water system, completing a Bacteriological Assessment of the South Well and distribution system. 98 samples were collected in total, with three water samples taken from the distribution system detecting total coliform. This met the regulation standard, but it was recommended that a chlorine residual distribution system would benefit the overall water system with another barrier to potential contaminants introduced to the storage or distribution system.

2.2.4 Storage

Water is stored in two storage tanks located on North Road. The site is secured by a barb-wired fence and dense blackberry bushes, with adequate lighting throughout the site. There is one service vehicle access point from the road, allowing for one vehicle to park beside both tanks. The vehicle entryway is height restricted.

Each tank has a valve chamber located to the south, where the pipes enter & exit the tanks. These valve chambers are each equipped with a 100 mm \varnothing inlet line fitted with a check valve and a gate valve, and a 150 mm \varnothing outlet line fitted with a check valve and a gate valve. A 100 mm \varnothing equalizing line connects the outlet line of each tank, with a gate valve installed on each tee. These chambers are concrete, with wooden planks fitted to the top to act as a cover. To enter the tank, operates lift up individual wooden slats.

The two tanks provide the HLWD with a reservoir capacity of approximately 375,000 L. The two tanks are connected by an equalization line and isolation valves. Both tanks have a 100 mm \varnothing overflow. The tank water level is monitored and controlled by floats and level switches.

2.2.4.1 North Tank

The north tank, manufactured by Columbian TecTank, was installed by Western Tank and Lining Ltd. in 2009. The north tank is 9.96 m in diameter and 3.05 m in height which includes 0.3 m of freeboard. A 600 mm x 600 mm roof hatch and internal ladder is used to access the tank. The north tank can hold a maximum volume of approximately 185,000 L.

The exterior of the tank is in good condition, with no visible signs of paint flaking or corrosion on the bolts. There is minor moss growth on the exterior, and small debris on the roof of the tank, but overall there is nothing concerning from a visual perspective. The valve chamber is in good repair, however a visual inspection of the chamber itself proves that moisture and organic material are freely entering the chamber, and the wooden cover is showing signs of rot due to the high presence of moisture.

2.2.4.2 South Tank

The south tank, constructed in 1992, is 9.1 m in diameter and 3.0 m in height. There is less known about the south reservoir, other than its capacity of approximately 190,000 L. Records indicate that in the past there were some replacements done to the South Tank, in the amount of \$100,000. The South tank has a similar layout to that of the North Tank, where a 600 mm x 600 mm roof hatch and internal ladder is used to access the tank. A portable stepladder is used to access the roof of the tank, where the float levels can be accessed from a locked kiosk.

The exterior of the tank shows signs of age and corrosion, with moss forming over the steel exterior. All bolts appear in good condition, with no signs of failure. The valve chamber is in good repair, however a visual inspection of the chamber itself proves that moisture and organic material are freely entering the chamber, and the wooden cover is showing signs of rot due to the high presence of moisture. The act of opening the tank is not easily done by one person, and the process of removing each individual plank of wood to access the chamber, then fitting them back may prove to be inefficient and potentially a safety issue if not correctly placed back.

2.3 Distribution System & Repair Records

The HLWD distribution system consists of AC piping varying in size from 50 mm \varnothing to 150 mm \varnothing . Burns Road, Marine Drive, Cartwright Road, the Coast Highway, and the piping connecting the Coast Highway to the water tank and to Cartwright Road are all 150 mm \varnothing AC pipe. North Road, Point Road, and the dead end on the South side of the Coast Highway are all 100 mm \varnothing AC pipe. MacMillan Road has a dead end pipe that is 50 mm \varnothing AC.

According to the HLWD, the current piping is starting to fail and portions of it have had to be replaced throughout the preceding years. According to annual reports from 2014 to 2016, and 2021, the HLWD experienced 13 instances of operational problems. Between 2014 and 2016, five line breaks occurred along Point Road. In all instances the existing asbestos cement pipe had failed and was replaced with polyvinyl chloride (PVC) piping. In December of 2016, the float controls froze so the control box had to be insulated. 2021 proved to be the most problematic for the Hopkins Landing Water District. Five main breaks occurred and the supply pipe from the South Well to Burns Road main ruptured; all were replaced with PVC pipes.

Repair records are not kept in an official log but were rather found on written notes in the HLWD records. No photos of repairs or construction logs were found. Prior to 2014, there is no record of any pipe breaks or failures.

3.0 Condition Assessment

All the assets of Hopkins Landing Waterworks District have been itemized based on major asset, discipline, and minor assets. Using the condition rating explained in Section 1.3, the items have been rated on their condition with a score from 1 to 5. Appurtenances along the distribution network, such as hydrants, valves, and service connections have not been included in this assessment, though recommendations on the distribution pipe network are made in Section 6.

3.1 North Well

Discipline	Minor Asset	Condition	Comment
Structural	Well House	3	While it is in fair condition, the well house will need to be inspected every 2-5 years for signs of deterioration. May require minor touch ups to paint siding, clearing of roof, etc. Showing signs of age, but still serviceable.
Mechanical	Pump	4	Pump was recently rebuilt in 2017. Evaluate condition every 2-5 years. As pump has been in operation since 1968 expect pump replacement in next 10-15 years.
	Check Valve	2	Works smoothly, good condition, re-evaluate in 5 years.
	Gate Valve	2	Works smoothly, good condition, re-evaluate in 5 years.
	Piping	2	No signs of corrosion, re-evaluate condition in 5 years.
Electrical	Service	3	Fair condition.
	Control Panel	3	Obsolete equipment but no code violations. Inspect every 5 years.

3.2 South Well

Discipline	Minor Asset	Condition	Comment
Structural	Well House	2	Good Condition. Routine inspection for debris on roof recommended for adjacent trees.
Mechanical	Pump	3	Pump was installed in 2011. Appears to still be in good condition with minor signs of corrosion and wear around the base. Moisture shown at base. Evaluate condition every 2-5 years.
	Check Valve	2	Works smoothly, good condition, re-evaluate in 5 years.
	Gate Valve	2	Works smoothly, good condition, re-evaluate in 5 years.
	Piping	2	Good Condition with no signs of corrosion, slight bend in pipe but will not affect performance. Re-evaluate condition in 5 years.
Electrical	Service	2	Good condition.
	Control Panel	3	Obsolete equipment but no code violations. Inspect every 5 years.

3.3 North Tank

Discipline	Minor Asset	Condition	Comment
Structural	Concrete Base	2	Good Condition, no signs of cracking, some moss growth but very minor, no stress fractures.
	Steel Tank	2	Good Condition, organic growth on steel walls but exterior seal still intact, no signs of rust or corrosion.
	Bolts	2	Bolts in good condition, no visible signs of rust.
	Hatches	2	Good condition, no signs of stress or leakage, seal is intact.
	Roof	2	Slight build up of organic debris on roof but still in good condition. Locks are intact on roof hatch and no signs of rust or corrosion.
	Kiosk	2	Good Condition, locked with no signs of rust, paint seal still intact.
	Mechanical	Float Switch	2
Valve Chamber		4	Valve chamber lid consists of wooden planks that are showing early signs of rot. Moisture and organic debris are found in valve chamber. Difficult to open and may potentially become a safety hazard if operators stand on chamber lid.
Inlet Gate Valve		2	Good Condition. Operates as required.
Inlet Check Valve		2	Good Condition. Operates as required.
Outlet Gate Valve		2	Good Condition. Operates as required.
Equalizing Line Valve		2	Good condition.
Outlet Check Valve		2	Good Condition. Operates as required.
Electrical		Control Panel	2

3.4 South Tank

Discipline	Minor Asset	Condition	Comment
Structural	Concrete Base	2	Good Condition, no signs of cracking, some moss growth but very minor, no stress fractures.
	Steel Tank	2	Good Condition, organic growth on steel walls but exterior seal still intact, no signs of rust or corrosion.
	Bolts	2	Bolts in good condition, no visible signs of rust.
	Hatches	2	Good condition, no signs of stress or leakage, seal is intact.

	Roof	2	Slight build up of organic debris on roof but still in good condition. Locks are intact on roof hatch and no signs of rust or corrosion.
	Kiosk	2	Good Condition, locked with no signs of rust, paint seal still intact.
Mechanical	Valve Chamber	4	Valve chamber lid consists of wooden planks that are showing beginning signs of rot. Moisture and organic debris are found in valve chamber. Separate planks make it difficult to open. May potentially become a safety hazard if operators stand on chamber lid.
	Inlet Gate Valve	2	Good Condition. Operates as required.
	Inlet Check Valve	2	Good Condition. Operates as required.
	Outlet Gate Valve	2	Good Condition. Operates as required.
	Equalizing Line Valve	2	Good condition.
	Outlet Check Valve	2	Good Condition. Operates as required.
Electrical	Control Panel	2	Good condition.

4.0 Cost Estimate

The field condition assessment determined that there were no major assets that were in immediate need of repair or replacement. Upon review of the HLWD records, it became immediately apparent that there was a trend in AC main failures, and that the approximately 2 km of watermain was coming to the end of its lifespan. This is especially important to note that should the SCR D choose to take over the system, there is a possibility of the HLWD being integrated into an adjacent water system that may run at a higher pressure, putting even more strain on the existing pipes resulting in more breakages. The largest cost that the SCR D would need to prepare for would be the replacing of the AC watermain making up the pipe network of the HLWD.

An overall Class D cost estimate for the replacement of the entire AC watermain is shown in the table below:

AC Watermain Replacement Costs	Unit	Quantity	Unit Rate	Amount
Permanent Pavement Restoration	Square Meter	10,640	80	852,000
Watermain DI Imported Backfill	Lineal Metres	2,260	650	1,469,000
Valves	Each	17	2,500	43,000
Fittings	Each	17	1,500	26,000
Replacement of Fire Hydrants	Each	11	12,000	132,000
Water Service Connections	Each	170	2,500	425,000
Watermain Tie-In - Cross Connections	Lump Sum	2	8,000	16,000
			SubTotal	\$2,963,000
			Contingency (30%)	\$889,000
			GST (5%)	\$148,000
			Total	\$4,000,000

This amounts to a per metre cost of approximately \$1,800, to install new ductile iron (DI) pipe, install all fittings and reconnect existing services, backfill, and pave.

Priority for this work would be based on the history of failures within the water system. Point Road would have the highest priority, as that is the section with the highest number of failures. Phasing of work and its expected costs could be broken down as such:

Phase I – Point Road: \$1,168,000

- Approximately 660 m of AC watermain replacement
- Point Road from Hopkins Road to Cartwright Road

Phase II – Burns Road & North Road: \$2,035,000

- Approximately 1,150 m of watermain replacement
- Entirety of Burns Road and North Road, up to Marine Drive connections

Phase III – Marine Drive & Coast Highway: \$1,504,000

- Approximately 850 m of watermain replacement
- Entirety of Coast Highway and Marine Drive, including cross connection points

By phasing the works in this way the SCRD can manage the costs over a number of years, and complete the work by grouping neighbourhoods to cause less of a strain on traffic and residents.

5.0 Land Tenure Issues

The North Well House is located on 1370 Burns Road. According to a recent title search, there is a Right-of-Way in place for the HLWD, registered December 17, 1970. The owners are familiar with the legal agreement in place and are happy to have the well stay where it is.

The South Well House is located on 1298 Burns Road. A land title search shows that there is no Right-Of-Way in place on this property. The owners of the property have been approached by the HLWD in previous years to discuss the sale of the land the well house sits on but were advised by a third party that selling the land was not a good idea, so they did not go through with the sale. The HLWD is currently in talks with the owners to reconsider selling the land for approximately \$35,000. The owners have shown a preference to setting up a lease arrangement or rental agreement between themselves and the HLWD.

Not having a legal easement on 1298 Burns Road is an important consideration that the SCRCD will need to factor into their decision to take over Hopkin's Landing. Having a formal rental agreement in place if land ownership is not an option would be a suitable alternative.

6.0 Recommendations

Overall, the Hopkins Landing Water System is in good condition when considering the major assets (North Well, South Well, North Tank, South Tank). These assets perform as required and still have enough lifespan in them that the SCRD should not be expecting any capital works from them in the next 5-10 years. Since the system is unchlorinated, it would be recommended to complete an internal reservoir inspection, to see the shape of the interior of the tank, and the potential sludge buildup. It is also recommended to implement a structured water testing program. As testing and reporting is crucial to the operation of the water system, these testing methods can be improved upon and properly documented to allow for seamless reporting.

The main items of concern in this system would be the Asbestos Concrete piping. Lack of record keeping does not allow the SCRD to know where past main breaks have occurred, and which lengths of pipe have already been repaired with PVC pipe. It is recommended that if the SCRD were to take over the HLWD, they would implement a watermain replacement program, replacing the AC pipe with either PVC or DI pipe.

As there is a limited record of watermains in the HLWD system, the first step would be to identify and map all AC water mains in the system, including their locations, lengths, and condition. The condition of each AC main would be assessed, considering factors such as age, current performance, and the likelihood of failure. Prioritize Replacements would then be prioritized based on risk to public health and system reliability. As this system was all built in 1968 and is continuously failing via repeated breaks, it has been assumed that the entire system has reached the end of its life expectancy and should be replaced. It may be a good idea to assess if there are recurring issues with water pressure or flow rates. Problems in these areas can signal underlying issues with the mains.

It is also recommended to put into place a method of recording any repairs or maintenance that has been done on the system. Accurate records provide a comprehensive history of all repairs and maintenance activities, helping to identify recurring issues and assess the overall condition of the water system. This historical data is crucial for understanding how different components are aging and predicting potential future problems. It is also important as records help in planning and scheduling preventive maintenance by highlighting past repair patterns and identifying parts that may require more frequent attention. This proactive approach can minimize downtime and extend the lifespan of system components. It can be especially important in the cases of well rehabilitation, where it may be a recurring problem with the pump or the well itself. When issues arise, having a record of past repairs can expedite troubleshooting and problem-solving by providing insights into previous interventions and their outcomes.

OEL proposes the following recommendations to the SCRD, which will be examined further in the feasibility study that will follow.

1. Implement repair & maintenance record keeping.
2. Implement testing program for water quality.

3. Replace AC watermain along Point Road and associated piping offshoots.
4. Upgrade tank valve chambers.
5. Replace AC watermain along Burns Road and North Road, including well connections and associated piping offshoots.
6. Replace AC watermain along Marine Drive and Coastal Highway and associated piping offshoots.

Once this condition assessment has been reviewed by the SCRD, OEL will proceed with the feasibility study of integrating the HLWD into the SCRD's system.

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**Hopkins Landing Waterworks District
Water System Condition Assessment**

Appendix A – Condition Assessment Forms

Hopkins Landing	South Well
Notes:	
Generic Station Type:	
General Arrangement:	Well House, pump House, kiosk, etc
	Well head location, valve arrangement

Site Works	Access (ped only?, stairs, private prop?)	Pad & step down		
	Traffic Issues (reserved utility parking?)	One gravel parking pad in front		
	Safety (Site hazards)	Trees & traffic		
Well	Well Type (monitoring, production)	Production		
	Well dimensions, incl. depth	See well log		
	Well Screen (material, depth)	See well log		
	Well casing diameter, material	See well log		
	Drawdown depth	See well log		
	Pitless Adaptor?	no		
	Well head condition	good		
Surface Seal (sloped well head?)	good, encased in concrete			
Pumps	Pump Type (Submersible, dry pit, immersible)			
	Pump Model / Serial No.	P1: 5K6227XM3A	P2:	P3:
	Year Installed	P1:	P2:	P3:
	Impeller #	P1:	P2:	P3:
	HP Rating / Speed	3510 rpm 15 HP 230/460 V Phase 3		
	Production Yield			
Mechanical	Well Outlet Diameter / Pipe Material			
	Valve Chamber Piping Dia and Material			
	Location of Valves			
	Check Valve: type, model, mfr	Volmatic 4" Swing Flex		Model No. 504A
	Isolation Valve: type, model, mfr	Gate avrg 4"		
	Ventilation: type, mfr & capacity	two passive intake		
	Water Treatment (Gas Chlorine, liquid hypochlorite injection)	none		
Electrical	Electrical Arrangement (kiosk, building)	Wall panel		
	Service Entrance (Location)	Well house		
	Service Size			
	MCC (mfr, photo)	photo		
	Pump Control Panel (Mfr, photo)	photo		
	Starter Type VFD, Soft Start, Cross the line	Cross the line		
	ETM Readings	P1: n/a	P2:	P3:
	Level Control System / Mfr	Floats		
	Controller Type / Mfr	Floats		
	SCADA: Type / Communication / Mfr	n/a		
	SCADA I/O Modules	n/a		
	Antenna Details	n/a		
	Standby Generator: Fuel Type / Arrangement	none		
	Standby Generator: Mfr / Rating (KW)	none		
	Generator Transfer Switch: Type / Mfr	none		

	Yes	No	N/A	Comments
Site Works	Is the area around the station or building asphalt?		N	Gravel
	Is the available work area adequate for maintenance vehicles?		N	One vehicle, single lane wide
	Is the general public adequately protected during normal operations?	Y		
	Is the well head protected from vehicle loading?	Y		
	Is the area fenced?		N	
	Is there outdoor lighting?		N	
	Does the surface grading slope away from the well head?	Y		
Well	Is the well interior or exterior?	Interior		
	Is the well surface seal adequate?			unknown, encased in cement
	Is the well equipped with a suitable lock?	Y		Well house is locked
	Is the well equipped with a label?		N	
	Diameter of well? Well casing?			Check well log
	Is the well screen free of debris?			unknown
	What kind of well pump (pitless adaptor, submersible turbine) is installed?	Vertical turbine		
	Is there pump lifting equipment present (rails, hoist, other)?		N	Roof detaches, eye hooks on pump
	What is the condition of the pump lifting equipment?		n/a	
	What is the material of the pump lifting equipment?		n/a	
Grit buildup in wet well?				
Emergency	Does the pump house include an automatic generator for standby power?		N	
	Does the pump house have provision for standby pumping from an external source?		N	
	Does the pump house have an emergency bypass pipe?		N	
	Is there a standby pump to replace an existing pump?		N	
	Reliability Score			
Structural	What material is the well?			
	What condition are the well materials in?			
	What condition is the pump house in?	Good Condition		
	Is the well house properly insulated?		Yes	Two passive intake ventilation
	Does the well house overheat in the summer?			
	What is the condition of the material of the roof?	Good Condition		
moss/branches				
Instrumentation	Is there a copy of the control drawings onsite?		N	
	Are the controls powered by an UPS?		N	
	Is the station equipped with a modem/radio/fibre?		N	
	Are the pumps controlled with a PLC?		N	
	Is the station equipped with a magnetic flow meter?		N	
Electrical	Service Type?	Overhead power lines		
	Station distribution transformer? kVA?	Pole-mounted transformer		
	Service information? Volts/Amps/Phase	600V, 3 phase, 40 amps		
	Assess equipment corrosion?	no corrosion		
	Age and obsolescence of equipment?	Less obsolete than north well but similar design		
	What is the main disconnect?	Switch		
	How is the electricity distributed?	Metal conduit		
	Transfer switch type?	none		
	Kiosk paint? Flaking? Rusting?	none		
	Is there a copy of the single line drawing onsite?		N	
	Is the electrical single line drawing current? (time permitting)			x
	Is the wiring in the well Class1, Division 2? CABTIRE CABLES			x
	Is the pump house equipped with an explosion proof light? Is it functioning?			x
	Are motor and power cables continuous from within well to within the kiosk?		N	Junction box, unknown
	Is 600V mixed with lower voltage in same panel? Arc-Flash		N	
	Are receptacles GFI?		N	
	Any obvious code violations?		N	
Are pumps equipped with runtime meters?	Y		Hour meter	
Are pumps equipped with amp meters?		N		
Are there EYSs between the equipment and the electrical panels?			x	
Efficiency / Obsolescence				
Mechanical	How many pumps are installed?	1		
	What type of pump(s) are installed?	Vertical turbine		
	Is there a pressure gauge connection point on the discharge piping?	Y		by check valve
	What is the condition of the piping?			
	Is there a gate valve on the influent side of the station?	Y		
	Is there a check valve on each pump discharge?	Y		
	Does the check valve operate properly as the pump starts and shut downs?			unknown
	Does plug or gate valve open and close freely?	Y		
	Do valves have proper indication and/or lockout? Checking required operational force is reasonable for valve size.			x
	Are the bracket and support rails securely installed?			x
	What material are the brackets/support rails?			x
	What condition are the brackets/support rails in?			x
	What condition is the pump lifting chains in?			x
	Are the pumps easily removed for maintenance purposes?		N	
Are the valves easily accessible from the working platform?			x	
Is there a significant vibration during pump operation?				
Is there a cavitation noise during pump operation?		N		
Are there backup pumps available in the Workyard?		N		
What issues are there with the piping if any?			slight bend in pipe, within tolerance	
Operational	Pumps are routinely serviced and have been recently serviced?		N	original
	Pumps can handle the capacity?	Y		
	Pump hour records kept?	Y		
	Recorded pump hours routinely converted to flows (m3/day)?		N	
	Pump hours between pumps are consistent?			x
	Corrosion/moisture in control panel?		N	
	Auto and manual controls both operational?			Manual, Auto when Telyus line fixed
	Amperage draw for pump while running is similar when compared to name plate rating or O&M manual info?			unknown
	Alarm and light bulbs both work? (look for burnt out bulbs)	Y		

Hopkins Landing	North Well
Notes:	
Generic Station Type:	
General Arrangement:	Well House, pump House, kiosk, etc Well head location, valve arrangement

Site Works	Access (ped only?, stairs, private prop?)	Pad & step up		
	Traffic Issues (reserved utility parking?)	No reserved parking, single lane access road with shoulder		
	Safety (Site hazards)	Trees & one-lane road		
Well	Well Type (monitoring, production)	Production		
	Well dimensions, incl. depth	See well log		
	Well Screen (material, depth)	See well log		
	Well casing diameter, material	See well log		
	Drawdown depth	See well log		
	Pitless Adaptor?	No reserved parking, single lane access road with shoulder		
	Well head condition	Outside looks acceptable		
Pumps	Surface Seal (sloped well head?)	Unknown, surrounded by concrete		
	Pump Type (Submersible, dry pit, immersible)	Vertical Turbine		
	Pump Model / Serial No.	P1:	P2:	P3:
	Year Installed	P1: 1968	P2:	P3:
	Impeller #	P1:	P2:	P3:
	HP Rating / Speed	15 HP / 3470 rpm		
	Production Yield			
Mechanical	Well Outlet Diameter / Pipe Material	4" steel		
	Valve Chamber Piping Dia and Material	4" to 6" reducer after gate valve steel		
	Location of Valves	check valve & gate valve in house		
	Check Valve: type, model, mfr	Volmatic Swing Flex 504A 4" 200psi		
	Isolation Valve: type, model, mfr	Clow 4" Gate Valve		
	Ventilation: type, mfr & capacity	None. Air intake blocked off		
	Water Treatment (Gas Chlorine, liquid hypochlorite injection)	No treatment		
Electrical	Electrical Arrangement (kiosk, building)	In well house on control panel wall, mounted		
	Service Entrance (Location)	Well house		
	Service Size	200A		
	MCC (mfr, photo)	Photo		
	Pump Control Panel (Mfr, photo)			
	Starter Type VFD, Soft Start, Cross the line	Cross the line		
	ETM Readings	P1: n/a	P2:	P3:
	Level Control System / Mfr	Floats		
	Controller Type / Mfr	Floats		
	SCADA: Type / Communication / Mfr	n/a		
	SCADA I/O Modules	n/a		
	Antenna Details	n/a		
	Standby Generator: Fuel Type / Arrangement	None		
Standby Generator: Mfr / Rating (KW)	None			
Generator Transfer Switch: Type / Mfr	None			

	Yes	No	N/A	Comments
Site Works	Is the area around the station or building asphalt?		N	Mulch ground, asphalt road
	Is the available work area adequate for maintenance vehicles?	Y	N	tight road, lots of trees, one shoulder, one vehicle
	Is the general public adequately protected during normal operations?	Y		
	Is the well head protected from vehicle loading?	Y		
	Is the area fenced?		N	
	Is there outdoor lighting?		N	
	Does the surface grading slope away from the well head?	Y		
Well	Is the well interior or exterior?	Interior		
	Is the well surface seal adequate?			Unknown - check well log
	Is the well equipped with a suitable lock?	Y		
	Is the well equipped with a label?		N	
	Diameter of well? Well casing?		6"	
	Is the well screen free of debris?			Can't check
	What kind of well pump (pitless adaptor, submersible turbine) is installed?		Vertical Turbine	480V
	Is there pump lifting equipment present (rails, hoist, other) ?			Roof detaches, pump has eyes
	What is the condition of the pump lifting equipment?			x
	What is the material of the pump lifting equipment?			x
	Grit buildup in wet well?			x
Emergency	Does the pump house include an automatic generator for standby power?		N	
	Does the pump house have provision for standby pumping from an external source?		N	
	Does the pump house have an emergency bypass pipe?		N	
	Is there a standby pump to replace an existing pump?		N	
	Reliability Score			
Structural	What material is the well?			
	What condition are the well materials in?			
	What condition is the pump house in?		Dated but decent	
	Is the well house properly insulated?		Plywood with insulation	No ventilation
	Does the well house overheat in the summer?		No, shaded	
	What is the condition of the material of the roof?		Fair	Asphalt shingles
Instrumentation	Is there a copy of the control drawings onsite?		N	
	Are the controls powered by an UPS?		N	
	Is the station equipped with a modem/radio/fibre?		N	
	Are the pumps controlled with a PLC?		N	
	Is the station equipped with a magnetic flow meter?		N	
Electrical	Service Type?	Overhead		
	Station distribution transformer? kVA?		Pole mounted	480V
	Service information? Volts/Amps/Phase		480V 3-phase	200 amp service
	Assess equipment corrosion?		none	
	Age and obsolescence of equipment?		All original	Pump has been rebuilt
	What is the main disconnect?		Switch in building	
	How is the electricity distributed?		Metallic conduit	
	Transfer switch type?			
	Kiosk paint? Flaking? Rusting?		n/a	
	Is there a copy of the single line drawing onsite?		N	
	Is the electrical single line drawing current? (time permitting)			x
	Is the wiring in the well Class1, Division 2? CABTIRE CABLES			x
	Is the pump house equipped with an explosion proof light? Is it functioning?			x
	Are motor and power cables continuous from within well to within the kiosk?	Y		Not sure, junction box, as far as we know
	Is 600V mized with lower voltage in same panel? Arc-Flash		N	120 & 240 V
Are receptacles GFI?		N		
Any obvious code violations?		N	Obsolete but not a violation	
Are pumps equipped with runtime meters?	Y		Hour meter	
Are pumps equipped with amp meters?		N		
Are there EYSs between the equipment and the electrical panels?			x	
Efficiency / Obsolescence				
Mechanical	How many pumps are installed?	1		
	What type of pump(s) are installed?	Vertical turbine		
	Is there a pressure gauge connection point on the discharge piping?	Y		Huge
	What is the condition of the piping?	Good		
	Is there a gate valve on the influent side of the station?			x
	Is there a check valve on each pump discharge?	Y		
	Does the check valve operate properly as the pump starts and shut downs?			
	Does plug or gate valve open and close freely?	Y		
	Do valves have proper indication and/or lockout? Checking required operational force is reasonable for valve size.		N	No indicator on check valve or gate valve. Opened well
	Are the bracket and support rails securely installed?			x
	What material are the brackets/support rails?	n/a		
	What condition are the brackets/support rails in?	n/a		
	What condition is the pump lifting chains in?	n/a		
	Are the pumps easily removed for maintenance purposes?		N	Pull nut off
Are the valves easily accessible from the working platform?	Y			
Is there a significant vibration during pump operation?				
Is there a cavitation noise during pump operation?				
Are there backup pumps available in the Workyard?	no			
What issues are there with the piping if any?	no issues			
Operational	Pumps are routinely serviced and have been recently serviced?	Y	N	Rewound once
	Pumps can handle the capacity?	Y		
	Pump hour records kept?	Y		
	Recorded pump hours routinely converted to flows (m3/day)?		N	
	Pump hours between pumps are consistent?			x
	Corrosion/moisture in control panel?		N	
	Auto and manual controls both operational?		N	Manual operation
	Amperage draw for pump while running is similar when compared to name plate rating or O&M manual info?			Unavailable
	Alarm and light bulbs both work? (look for burnt out bulbs)	Y		No burnt bulbs

Hopkins Landing	
Notes:	
Generic Station Type:	Reservoir Type (fibreglass, concrete, steel)
General Arrangement:	Valve locations (kiosk, pump house, valve chamber)

Epoxy-lined coated steel resevoir

Site Works	Access (ped only?, stairs, private prop?)	Walk up		
	Traffic Issues (reserved utility parking?)	Reserved gated parking, overhead restriction of truck gate		
	Safety (Site hazards)	Blackberry bushes on peripheral		
Reservoir	Reservoir Type	Bolted steel		
	Reservoir dimensions, incl. TWL and Pressure Zone			
	Reservoir Material (Steel, Precast, Struct Concrete)			
	Reservoir corrosion protection (if any)			
Pumps	Pump Type (Submersible, dry pit, immersible)			
	Pump Model / Serial No.	P1:	P2:	P3:
	Year Installed	P1:	P2:	P3:
	Impeller #	P1:	P2:	P3:
	HP Rating / Speed			
	Stop level / 1st start / 2nd (high) start from bottom of well (m)			
Mechanical	Inlet Diameter / Pipe Material	4" welded steel		
	Outlet Diameter / Pipe Material	6" welded stell		
	Valve Chamber Piping Dia and Material	4" welded steel		
	Location of Valves	GV & CV on inlet & outlet		
	Check Valve: type, model, mfr	Volmatic Swing Flex		
	Isolation Valve: type, model, mfr	Clow gate valve		
	Ventilation: type, mfr & capacity	none		
	Mixing System: Type, model	none		
Electrical	Electrical Arrangement (kiosk, building)	Panel float kiosk, electrical kiosk between resevoirs		
	Service Entrance (Location)	On top of resevoir, in sea can		
	Service Size	single phase 120/240 V boa		
	MCC (mfr, photo)			
	Pump Control Panel (Mfr, photo)			
	Starter Type VFD, Soft Start, Cross the line			
	ETM Readings	P1:	P2:	P3:
	Level Control System / Mfr	Float		
	Controller Type / Mfr	Float		
	SCADA: Type / Communication / Mfr	none		
	SCADA I/O Modules	none		
	Antenna Details	none		
	Standby Generator: Fuel Type / Arrangement	no		
	Standby Generator: Mfr / Rating (KW)	no		
Generator Transfer Switch: Type / Mfr	no			

n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a
n/a

	Yes	No	N/A	Comments
Site Works	Is the area around the reservoir or building asphalt?		N	Grass, Cement Pad
	Is the available work area adequate for maintenance vehicles?	Y		Vehicle gate, restricted overhead clearance
	Is the general public adequately protected during normal operations?	Y		
	Is the area fenced?	Y		blackberry bushes and fence with barb wire
	Is the area secured?	Y		
	Is there outdoor lighting?	Y		Two switch operated flood lights behind resevoirs
	Does site grading direct surface water away from the reservoir?	Y		
Reservoir	Reservoir Capacity			
	Reservoir TWL			Check drawings
	Reservoir diameter			
	Is the reservoir equipped with a suitable lock?	Y		Locked gate, bolted hatching, locked float box, locked hatch
	Is the reservoir equipped with a ladder? Safety?		N	Utility ladder placed at reservoir
	Access hatch?	Y		
	Is there a railing around the access hatch?		N	
	Is there a working platform above the TWL?			x
	Is there forced ventilation for air exchange?	Y	N	Passive tube screen air vent
	Mixing promoted within reservoir?		N	
	First In First Out System?	?		Confirm
	Single pipe or separate inlet/outlet? What is the relative location of the inlet and outlet?			Separate
	Is there overflow piping?	Y		4" PVC from both takes
	Does the overflow piping have a protective screen installed?			Couldn't see
	Grit buildup in reservoir?			Couldn't see
Is there a floor drain?	Y			
Has the reservoir been subject to overflow? Is there a marked overflow path?	Y		4" PVC overflow to ditch	
Will overflow cause major economical damages?		N		
Will overflow cause major environmental damages?		N		
Will overflow cause major social health damages?		N		
Emergency	Does the reservoir include an automatic generator for standby power?		N	
	Does the reservoir have provision for standby pumping from an external source?		N	
	Does the reservoir have an emergency overflow pipe?	Y		
	Does the reservoir have high and low level float balls?	Y		
	Is there a standby pump to replace an existing pump?		N	x
	Reliability Score			
Structural	What material is the reservoir?			Bolted Steel
	What condition are the reservoir materials in?			Corrosion on bolts, mold, fair condition
	What is the material of the access ladders?		n/a	
	What is the condition of the access ladder material?		n/a	
	What is the material of the reservoir hatches?		steel	
What is the condition of the material of the reservoir hatches?		fair		
Instrumentation	Is there a copy of the control drawings onsite?			x
	Are the controls powered by an UPS?			x
	Is the station equipped with a modem/radio/fibre?		N	Hard line Telus wire
	Are the pumps controlled with a PLC and level transmitter with high and low level switches?			x
	Is the station equipped with a magnetic flow meter?		N	
Electrical	Service Type?			Overhead wiring telephone lines
	Station distribution transformer? kVA?			breaker panel in sea can
	Service information? Volts/Amps/Phase			120/240 breaker panel input
	Assess equipment corrosion?			60 amp breaker, single phase
	Age and obsolescence of equipment?			none
	What is the main disconnect?			"New"er
	How is the electricity distributed?			Switch in panel
	Transfer switch type?		N	
	Kiosk paint? Flaking? Rusting?		N	sea can
	Is there a copy of the single line drawing onsite?			x
	Is the electrical single line drawing current? (time permitting)			x
	Is the wiring in the wetwell Class 1, Division 2? CABTIRE CABLES			x
	Is the station equipped with an explosion proof light? is it functioning?			x
	Are motor and power cables continuous from within wetwell to within the kiosk?			x
	Is 600V mixed with lower voltage in same panel? Arc-Flash			x
Are receptacles GFI?			x	
Any obvious code violations?		N		
Are pumps equipped with runtime meters?			x	
Are pumps equipped with amp meters?			x	
Are there EYS between the equipment and the electrical panels?			x	
Efficiency / Obsolescence				
Mechanical	How many pumps are installed?		n/a	
	What type of pump(s) are installed?		n/a	
	Is there a pressure gauge connection point on the discharge piping?			n/a
	What is the condition of the piping?			✓
	Is there a gate valve on the inlet piping side of the reservoir?	Y		
	Is there a gate valve on the outlet piping side of the reservoir?	Y		
	Is there a check valve on each pump discharge?	Y		Check valve in inlet/outlet
	Does the check valve operate properly as the pump starts and shut downs?			x
	Does plug or gate valve open and close freely?			x
	Do valves have proper indication and/or lockout? Checking required operational force is reasonable for valve size.			No (typ.)
	Is there a valve chamber outside of the reservoir?	Y		Rotating wood slot lid with valve lids
	Are the bracket and support rails securely installed?			x
	What material are the brackets/support rails?			x
	What condition are the brackets/support rails in?			x
	What condition is the pump lifting chains in?			x
	Are the pumps easily removed for maintenance purposes?			x
	Can the level controls be accessed on the ground level without entering the reservoir?	Y		On top of resevoir, or inside
Are the valves easily accessible?	Y			
Is there a significant vibration during pump operation?			x	
Is there a cavitation noise during pump operation?			x	
Are there backup pumps available in the Workyard?			x	
What issues are there with the piping if any?			x	
Operational	Reservoir is routinely cleaned and have been recently cleaned?		N	10-12 years ago cleaned installed in 2010
	Capacity is suitable for fire flows?	Y		
	Is temperature monitored in summer?		N	
	What is the ADD/MDD of system?			30k/60k G/d
	Are the valves regularly exercised?		N	



**Hopkins Landing Waterworks District
Water System Condition Assessment**

Appendix B – Site Photos



Figure 1 North Well House



Figure 2 North Well House Interior



Figure 3 North Well House Piping Configuration



Figure 4 North Well House Interior



Figure 5 South Well House

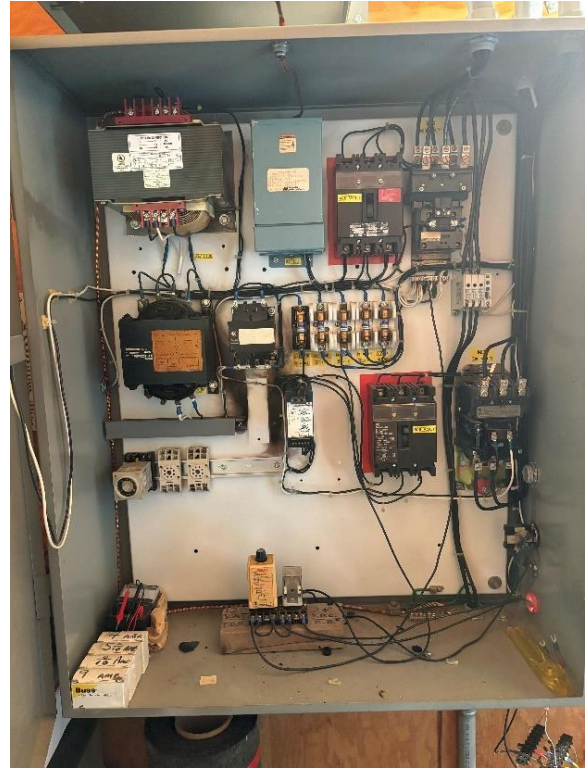


Figure 6 South Well House Control Panel



Figure 7 South Well House Site Access



Figure 8 South Well House Electrical



Figure 9 South Well House Piping



Figure 10 South Well House Piping Configuration



Figure 11 South Well House Interior



Figure 12 South Well House Pump



Figure 13 North Tank



Figure 14 South Tank



Figure 15 South Tank Roof Access



Figure 16 North Tank Roof Access



Figure 17 Tank Access Vehicle Gate



Figure 18 North Tank Flat Levels Electrical



Figure 19 North Tank Float Controls



Figure 20 North Tank Valve Chamber



Figure 21 Site Electricals & Controls



Figure 22 Site Controls



Figure 23 Structure Housing Controls and Electrical Onsite



Figure 24 Future Electrical Expansion

Attachment B

Hopkins Landing Waterworks District

Condition Assessment & Feasibility Study

Presented by:

Onsite Engineering Ltd.

November 28, 2024

ONSITE
Engineering Ltd.

Overview of Water System



Established in 1968

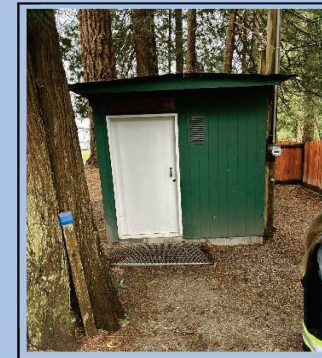


Services approximately 170 properties



Comprised of:

Two Wells
Two Reservoirs
3.5 km Watermains



LEGEND

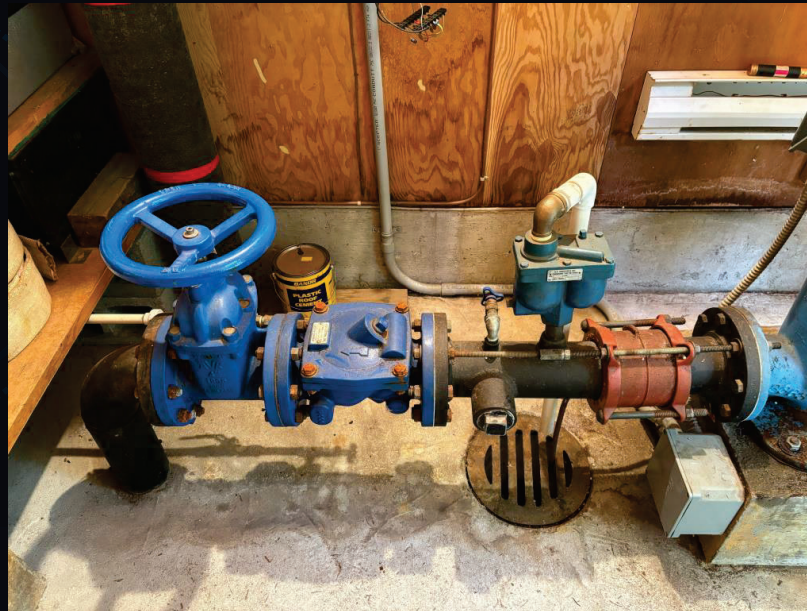
- 50mm WATERMAIN
- 100mm WATERMAIN
- 150mm WATERMAIN
- WATERMANS OUTSIDE OF HOPKINS SYSTEM
- RESERVOIR
- PUMPHOUSE
- VALVE
- HYDRANT
- EXTENTS OF HOPKINS LANDING WATER SYSTEM

Well House Overview



North Well Mechanics

- Water quality meets Canadian Water Drinking Guidelines
- Can supply about 24.6 L/s
- Aging infrastructure does not currently meet Groundwater Protection Regulations



South Well Mechanics



Reservoir Overview

- 375,000 L storage
- North Tank built in 2009
- South Tank built in 1992

Demands

Unmetered System Demands:	Demand
Maximum Day Demand (MDD):	6.2 L/s
Average Day Demand (ADD)	2.75 L/s
Peak Hour Demand (PHD)	9.3 L/s

Demands (Cont'd)

Required Storage Capacity:	Storage Required
Fire Storage	291,600 L
Equalization Storage	134,000 L
Emergency Storage	106,400 L
Total	532,000 L
Existing Storage	375,000 L
Deficit	157,000 L

Right of Way Review

Property	Asset	ROW Status
(No Civic Address)	Reservoirs	Owned by HLWD.
1370 Burns Road	Well House	ROW in place.
1298 Burns Road	Well House	No ROW in place.
1084 Marine Drive	Watermain	No ROW in place; watermain suspected to cross private property. Verbal agreement in place.
1154 Marine Drive	Watermain	Property lines appear to be shifted to accommodate road widening; location of watermain is unknown.
1146B Marine Drive	Watermain	Property lines appear to be shifted to accommodate road widening; location of watermain is unknown.
1136 Cartwright Road	Watermain	Property lines appear to be shifted to accommodate road widening; location of watermain is unknown.
1175 Marine Drive	Watermain & Overhead Communications	No ROW in place. Verbal agreement with residents to provide access to watermain. No agreement in place for overhead wiring. Service connection suspected to be connected on private property.
1181 Marine Drive	Watermain & Overhead Communications	No ROW in place. Verbal agreement with residents to provide access to watermain. No agreement in place for overhead wiring. Service connection suspected to be connected on private property.

Water License Review



Existing Groundwater Use
Application:
50,005 m³ yearly



SCRD bylaws: ability to
provide each parcel with
2,500 L/day (155,125 m³
yearly)



New Groundwater Use
Application may be
required to increase
volume

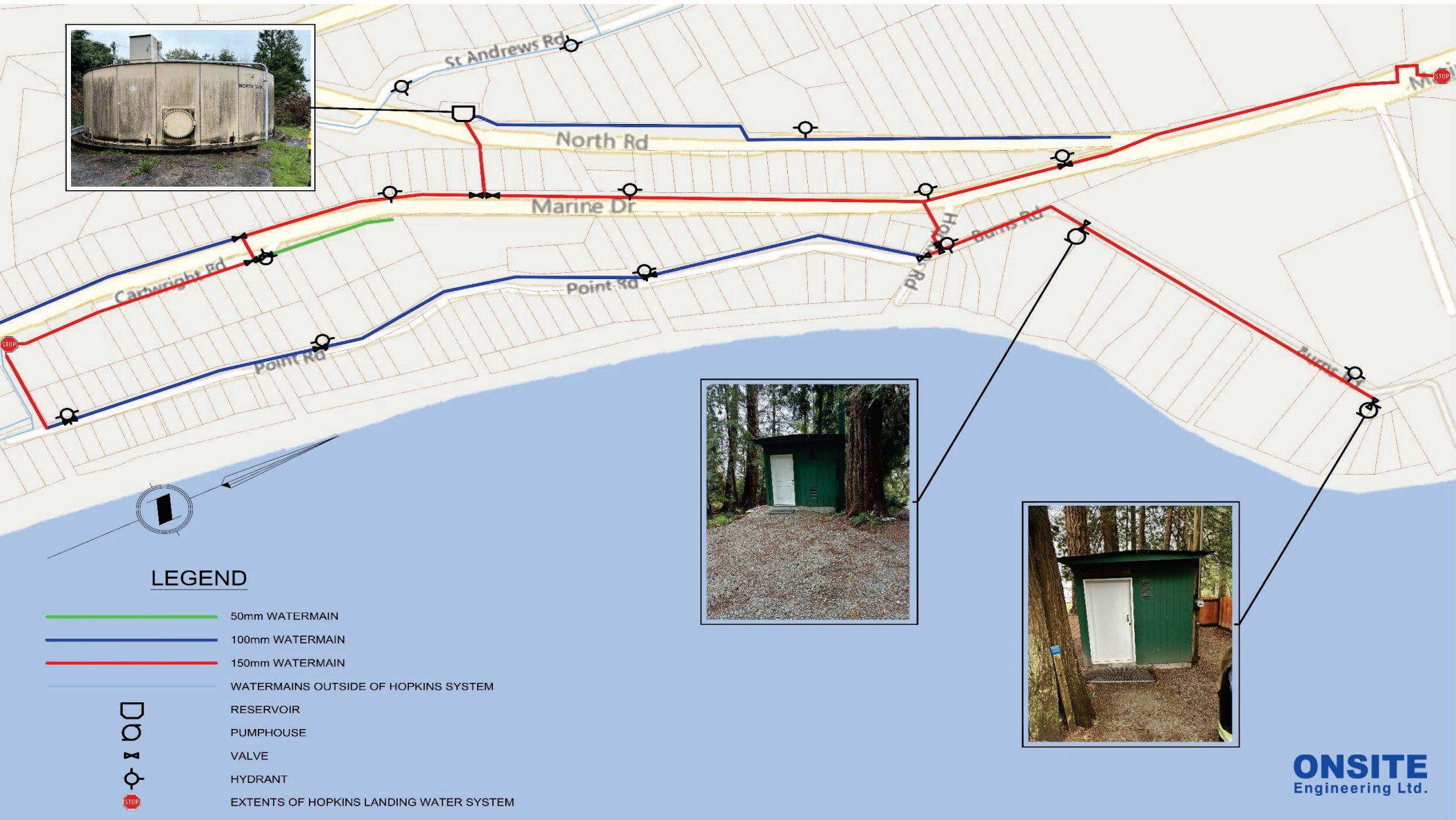
Hopkins Landing Improvements

Existing Distribution System

Material	Diameter (mm)	Length (m)
Asbestos Cement	50	115
	100	1,125
	150	1,930
PVC	100	170
Steel	150	132
Ductile Iron	100	80
Total		3,552

Recommended System Upgrades

Material	Diameter (mm)	Length (m)
Ductile Iron	150	352
	200	3,200
System Looping	200	128
Total		3,680



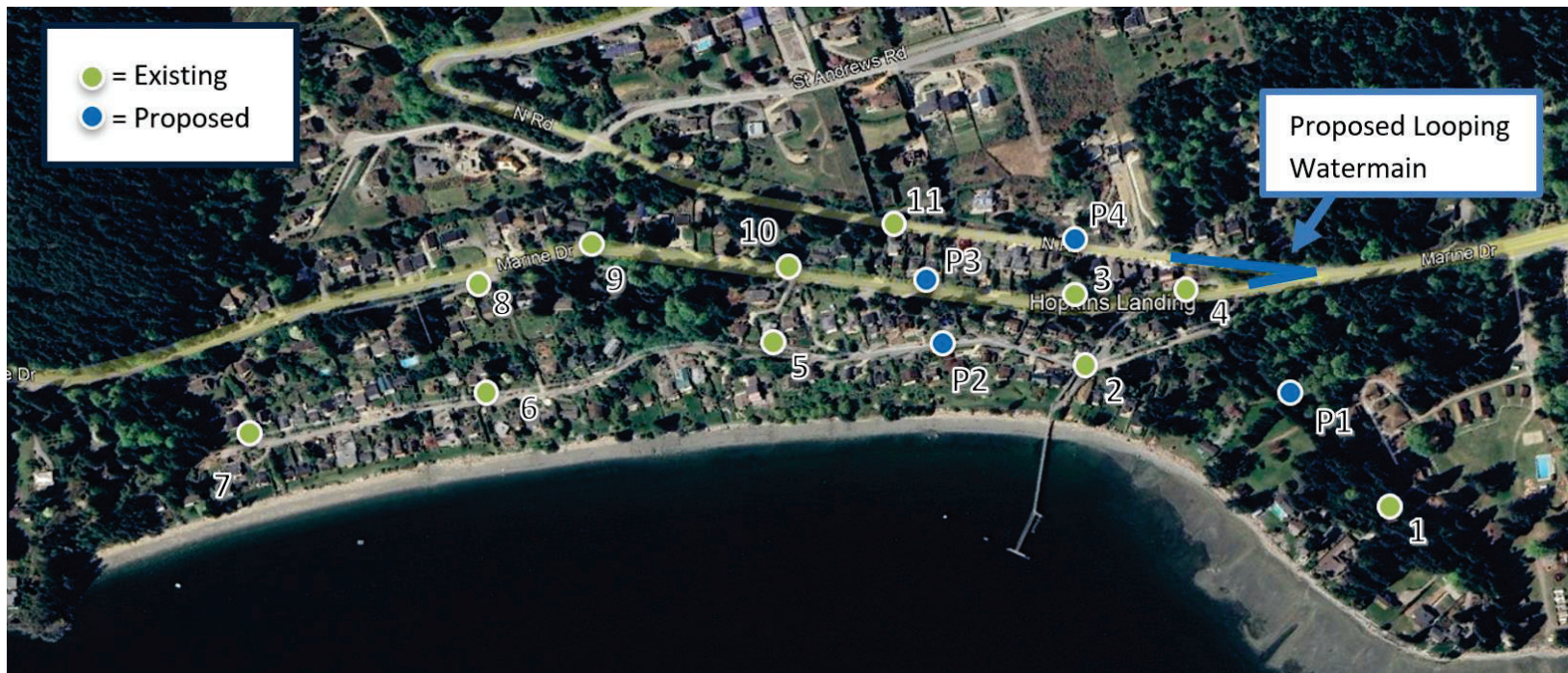
Hopkins Landing Improvements

Existing Fire Flows & Hydrants



Hopkins Landing Improvements

Proposed Fire Flows & Hydrants



Options to Integrate into SCRD

01

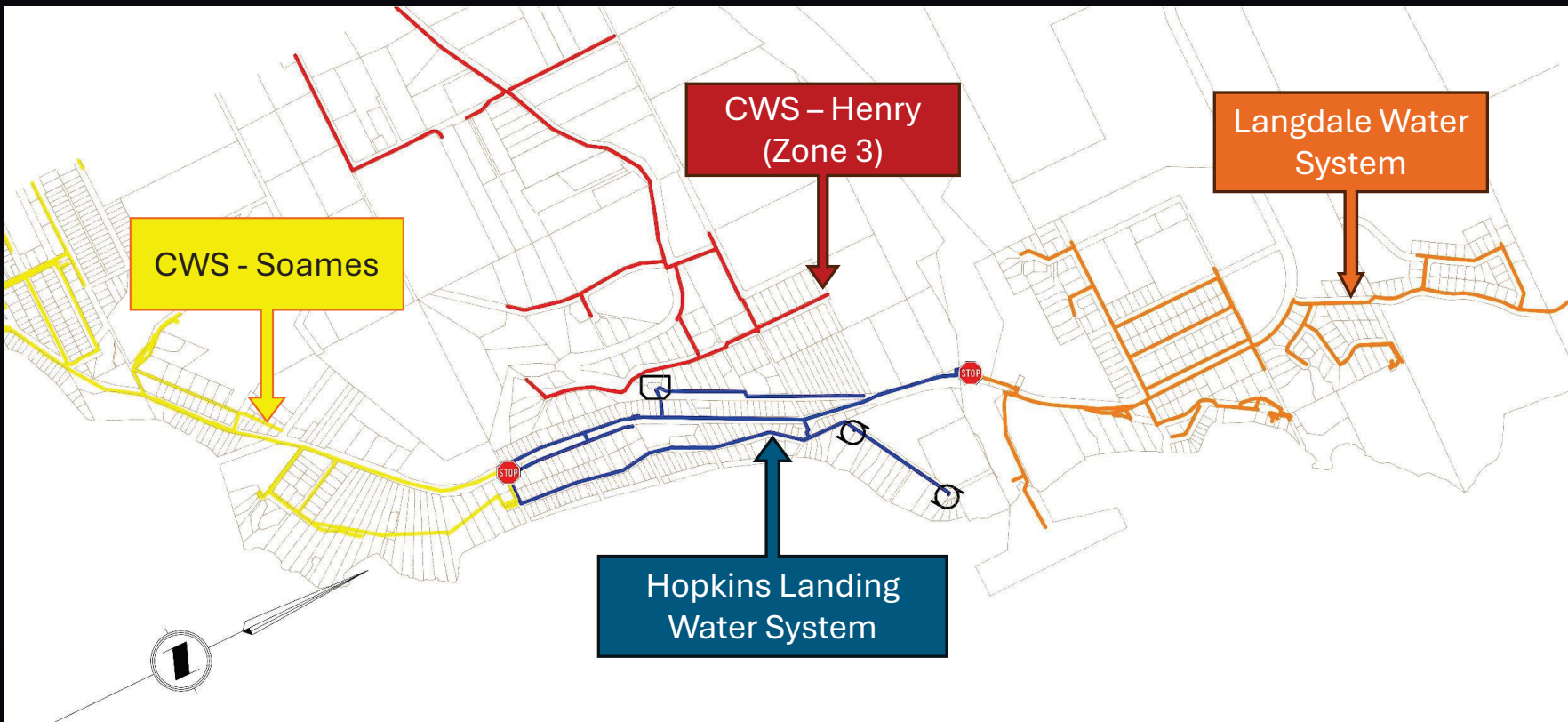
Operate as an independent water system

02








Connect to Chapman Water System via Soames

03

Connect to Chapman Water Systems via Henry (Zone 3)



LEGEND

-  HOPKINS WATERMANS
-  SOAMES WATERMANS
-  HENRY WATERMANS
-  LANGDALE WATERMANS
-  RESERVOIR
-  PUMPHOUSE
-  EXTENTS OF HOPKINS WATER SYSTEM

Option One

- Remain as an Independent System
- Water Treatment Required
 - Option 1-1: Treat at Both Wells
 - Option 1-2: Treat at One Well
 - Option 1-3: Treat at Reservoir

Option Two

- Connect to Chapman Water System via Soames
- Pros:
 - Similar elevation (no PRV required)
 - Pre-existing Connection
 - Soames well has capacity to provide water to Hopkins without impacting overall water supply in Chapman water system
 - No treatment is required
 - Increases available water storage to both Hopkins and Soames
- Cons:
 - Puts additional demand on Chapman water system if Hopkins wells not upgraded and connected to Chapman system.
 - Currently difficult to connect Hopkins to Chapman without a new supply main from Hopkins.

Option Three

- Connect to Chapman Water System via Henry (Zone 3)
- Pros
 - Improve system pressure for residents in St. Andrews area
- Cons
 - PRV Required
 - No existing connection
 - Under drought conditions, less water availability
 - Adding additional demand to Chapman system
 - Currently difficult to connect Hopkins to Chapman without a new supply main from Hopkins.



Financial Analysis

Base Upgrade Costs

Hopkins Landing Base Upgrade Costs	Unit	Quantity	Unit Rate	Amount
Permanent Pavement Restoration	Square Meter	10,656	\$80	\$852,480
Watermain DI Imported Backfill	Lineal Metres	3,680	\$650	\$2,392,000
Valve Chambers	Each	2	\$5,000	\$10,000
Valves	Each	29	\$2,500	\$72,500
Fittings	Each	17	\$1,500	\$25,500
Replacement of Fire Hydrants	Each	11	\$12,000	\$132,000
Installation of New Hydrants	Each	4	\$10,000	\$40,000
Water Service Connections	Each	170	\$2,500	\$425,000
Water Meters	Each	170	\$2,500	\$425,000
Watermain Tie-In	Lump Sum	3	\$8,000	\$24,000
New Well	Each	2	\$150,000	\$300,000
Decommission Existing Well	Each	2	\$40,000	\$80,000
New Well House	Lump Sum	2	\$600,000	\$1,200,000
			SubTotal	\$5,978,480
			Contingency (50%)	\$2,989,240
			GST (5%)	\$298,924
			Total	\$9,266,644

Option One Costs

Option 1-1

Option 1 Base Upgrade Costs				\$5,978,480
Pre-Packaged Water Treatment System	Each	2	\$90,000	\$180,000
SubTotal				\$6,158,480
Contingency (50%)				\$3,079,240
GST (5%)				\$307,924
Total				\$9,545,644

Option One Costs (Cont'd)

Option 1-2

Option 1 Base Upgrade Costs				\$5,978,480
Pre-Packaged Water Treatment System	Lump Sum	1	\$110,000	\$110,000
Supply Main	Lineal Metres	320	\$650	\$208,000
SubTotal				\$6,296,480
Contingency (50%)				\$3,148,240
GST (5%)				\$314,824
Total				\$9,759,544

Option One Costs (Cont'd)

Option 1-3

Option 1 Base Upgrade Costs				\$5,978,480
Pre-Packaged Water Treatment System	Lump Sum	1	\$110,000	\$110,000
Seacan	Lump Sum	1	\$65,000	\$65,000
Supply Main	Lineal Metres	1050	\$650	\$682,500
SubTotal				\$6,835,980
Contingency (50%)				\$3,417,990
GST (5%)				\$341,799
Total				\$10,595,769

Option Two Costs

Option 2

Permanent Pavement Restoration	Square Meter	10,656	\$80	\$852,480
Watermain DI Imported Backfill	Lineal Metres	3,680	\$650	\$2,392,000
Valve Chambers	Each	2	\$5,000	\$10,000
Valves	Each	29	\$2,500	\$72,500
Fittings	Each	17	\$1,500	\$25,500
Replacement of Fire Hydrants	Each	11	\$12,000	\$132,000
Installation of New Hydrants	Each	4	\$10,000	\$40,000
Water Service Connections	Each	170	\$2,500	\$425,000
Water Meters	Each	170	\$2,500	\$425,000
Watermain Tie-In	Lump Sum	3	\$8,000	\$24,000
New Well	Each	2	\$150,000	\$300,000
Decommission Existing Well	Each	2	\$40,000	\$80,000
New Well House	Lump Sum	2	\$600,000	\$1,200,000
			SubTotal	\$5,978,480
			Contingency (50%)	\$2,989,240
			GST (5%)	\$298,924
			Total	\$9,266,644

Option Three Costs

Option 3

Hopkins Landing Base Upgrade Costs				\$5,978,480
PRV Station	Lump Sum	1	\$300,000	\$300,000
Additional Connection to Henry (Zone 3)	Lump Sum	2	\$8,000	\$16,000
Permanent Pavement Restoration	Square Meter	240	\$80	\$19,200
Watermain DI Imported Backfill	Lineal Metres	80	\$650	\$52,000
			SubTotal	\$6,365,680
			Contingency (50%)	\$3,182,840
			GST (5%)	\$318,284
			Total	\$9,866,804



Water Service vs Water System

Water Service:

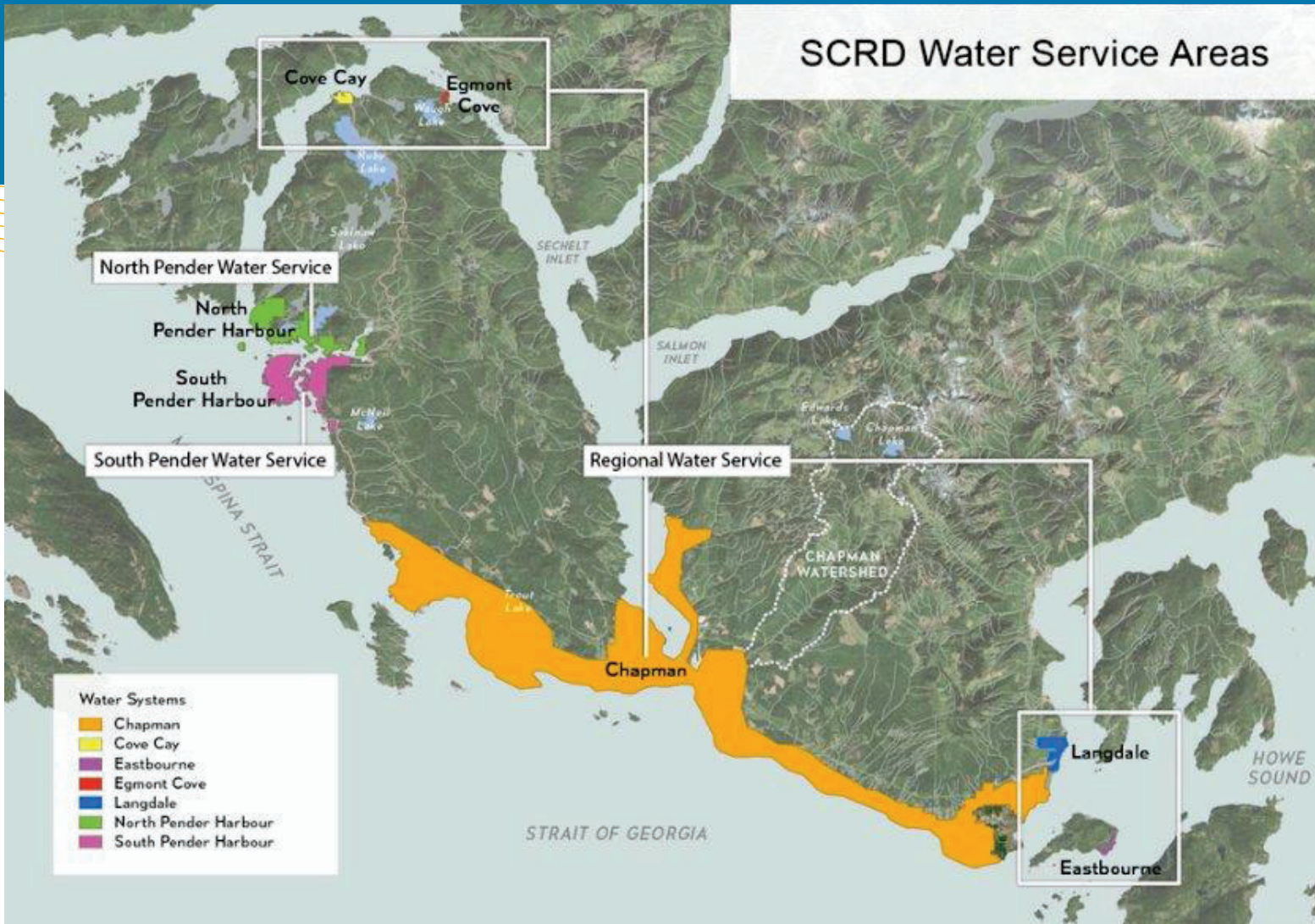
- A defined service is provided to residents within a defined area.
- Each service is 100% funded by the users or/or landowners of a service area.

Water system:

- An area to which water is provided by one or more water sources.



SCRD Water Service Areas



Service funding



- Annual operating costs are funded from:
 - User Fees (Regional Water Service 2024: \$715)
 - Reserves

**Volumetric Billing implemented as of January 1, 2027
- Capital improvements are funded from:
 - Parcel Tax (Regional Water Service 2024: \$449.90)
 - Reserves
 - Loans
 - Potentially grants

Preliminary Options Water Service / Water system

	Regional Water Service (RWS)	Hopkins Landing Water Service
Chapman Water System	Operational and capital cost Hopkins Landing are combined with other water systems users/landowners within RWS	Operational cost Hopkins Landing are combined with those of other water systems within Regional Water Service. Funding of capital upgrades Hopkins Landing could be by Hopkins Landing residents only, in addition to contributing to capital costs RWS.
Hopkins Landing Water System	Operational and capital cost Hopkins Landing are combined with other water systems users/landowners within RWS	Operating and capital costs for Hopkins water system are 100% funded by Hopkins Landing residents

Conversion Process

Hopkins Landing Waterworks District

Guided by Provincial guideline:

- Improvement District Conversion Guide

Key decisions:

- Dissolution of Improvement District (Province)
- Establishment of new service or integration in Regional Water Service (SCRD Board)
- Integration into Chapman Water system or keep as independent water system (SCRD Board)

What could be next in 2025-2027

- Report currently scheduled for the SCRD Board on January 23, 2025:
 - Technical feasibility study
 - Comments received from you
 - Staff's assessment of options
 - Outcome: Potentially a decision about if the SCRD is interested in pursuing conversion and the option on how to do so.
- Further financial, legal and technical analyses is be required.
- Legal conversion process with Province (start January 1, 2026, at the earliest).
- Secure funding for required capital improvements (e.g. grant or long-term loan).
- Develop and construct infrastructure upgrades.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Committee of the Whole – January 23, 2025

AUTHOR: Jesse Waldorf, Manager, Capital Projects

SUBJECT: CHASTER WELL MAINTENANCE AND UPGRADE – BUDGET AMENDMENT

RECOMMENDATION(S)

- (1) THAT the report titled Chaster Well Maintenance and Upgrade – Budget Amendment be received for information;**
 - (2) AND THAT the budget for the Chaster Well Maintenance and Upgrade Project be increased by \$329,000 funded from [370] Regional Water Service Capital Reserves;**
 - (3) AND THAT the increase to the budget be included in the draft 2025-2029 Financial Plan;**
 - (4) AND FURTHER THAT this recommendation be forwarded to the January 23, 2025 Board meeting.**
-

BACKGROUND

The Chaster Road Well, originally constructed in 1970 and one of the water supply sources for the Chapman Waster System, experienced critical failure in August 2024; the submersible pump failed beyond repair. As this well provides about 10-12% of the summer water supply for this water system this failure would need to be addressed urgently.

The current budget, totalling \$128,500 with \$50,000 allocated in 2018 and an additional \$78,500 in 2023, was intended to address several non-compliances of the well with the Groundwater Protection Regulation and some upgrades to the instrumentation. Some of these upgrades have been completed and some still to be completed.

The purpose of this report is to seek Board approval for additional project budget to address the recent pump failure.

DISCUSSION

The remaining Scope of Work related to the original budget combined with the work to address the pump failure includes:

1. Revised engineering design and tendering to address the pump and motor failure.
2. Restoration of the well to optimal capacity and performance.

3. Replacement of the failed pump with a high-efficiency pump and motor system, including a variable frequency drive (VFD), to improve reliability and integrate with the Regional District’s SCADA system.
4. Complete design and integration of electrical and control systems for seamless operation.,

As Chaster Well is a critical part of water supply for the Chapman Water System during an extended drought, time is of the essence to complete this project in a timely manner.

It is very likely that Chaster Well will not be able to be activated when Stage 2 Water Conservation Regulations come into effect. If that is the case, on a temporary basis, the Church Road Wellfield would most likely be able to produce the sufficient additional water to offset the amount of water not produced by Chaster Well, or alternatively additional volume could be diverted from Chapman Lake.

Financial Implications

The previously approved budget for this project was \$128,500, allocated for rehabilitating the pump station for the Chaster Well. The original scope included moving the well head, installing new ductile iron piping, and upgrading connections for watermains, chlorination, and controls.

Due to the pump/motor failure, and the need for upgraded electrical and SCADA systems, an additional \$329,000 is required. This includes a 20% contingency to cover any unforeseen costs.

The breakdown is as follows:

Existing Budget	Value	Total
Budget Allocation 2018	\$ 50,000	
Budget Allocation 2023	\$ 78,500	
Expenditures to Date (2018-2024)	(\$ 17,500)	
Existing Budget Available		\$ 111,000
Amended Budget		
Complete remaining original work	\$ 111,000	
Well Redevelopment	\$ 75,000	
Pump and Motor Replacement	\$ 150,000	
Electrical Upgrades	\$ 30,000	
Contingency (20%)	\$ 74,000	
Proposed Amended Budget		\$ 440,000
Total Shortfall		(\$ 329,000)

Timeline for next steps or estimated completion date

Pending Board support for the additional project budget and the adoption of the 2025-2029 Financial plan, staff will present the Board with a contract award report at a future Board meeting.

The timelines for project completion are dependent on the successful contractor’s abilities to complete the work in an expedited manner and will be confirmed in the contract award report presented to the Board.

Communications Strategy

Information on this project will be shared broadly via local media, corporate newsletters, social media, and the Sunshine Coast Regional District website. Additional information will be provided to property owners in the vicinity of the wellfield.

STRATEGIC PLAN AND RELATED POLICIES

This staff report is aligned with the Board’s Service Delivery Focus Area of Water Stewardship: Continue to explore, enhance and develop groundwater and surface water sources.

CONCLUSION

Failure to meet the May 2025 operational deadline for the Chaster Well would risk significant disruptions to the Chapman Water System during peak demand periods. Approving the Financial Plan Amendment ensures that these critical upgrades are completed in the most timely manner possible, prioritizing reliable water supply for the community.

The Chaster Well Maintenance and Upgrade Project is critical to maintaining the operational integrity of the Regional Water System. The pump and motor failure necessitate urgent repairs and upgrades to prevent future service disruptions.

Staff recommend that the budget for the Chaster Well Maintenance and Upgrade Project be increased by \$329,000 for engineering, design, and construction, and to be funded from [370] Regional Water Service Capital Reserves along with an associated amendment to the draft 2025-2029 Financial Plan.

Reviewed by:			
Manager		Finance	X - A. Taylor
GM	X – R. Rosenboom	Legislative	
CAO/CFO	X - T. Perreault	Purchasing and Risk	X - V. Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Committee of the Whole – January 23, 2025

AUTHOR: Tina Perrault, Chief Administrative Officer / Chief Financial Officer

SUBJECT: CONSTITUENCY EXPENSES AND REIMBURSEMENT OF DIRECTORS' TRAVEL AND OTHER EXPENSES POLICIES

RECOMMENDATIONS

THAT the report titled Constituency Expenses and Reimbursement of Directors' Travel and Other Expenses Policies be received for information;

AND THAT the Committee review and approve the Constituency Expenses and Reimbursement of Directors' Travel and Other Expenses policies as amended.

BACKGROUND

At the December 12, 2024, Regular Board meeting, the following resolution was passed:

350/24 It was moved and seconded

That the Constituency Expenses policy (BRD-0340-50-010) be amended to incorporate the following changes:

- a) Clarification that "Constituency Business" relates to SCR D related political activities only, and should further the business of the organization;
- b) Clarification that invoiced receipts submitted should be in the Director's name;
- c) Amend the \$100 home internet and phone related expenses to include incidental supportive items such as cables and chargers;
- d) Amend constituency events to add "public" and indicate examples (snacks for a meet and greet, coffee at a coffee chat, community faire booth rental, etc);
- e) Replace "Constituency office expenses" with "Office supplies supporting SCR D Business" and provide examples such as paper, ink, and other consumables;
- f) Add a clause that expenses must not be submitted for reimbursement to any other organization or agency (no "double dipping");
- g) Add a clause for all expense forms submitted to be published quarterly either on the SCR D website or as part of a committee agenda;
- h) Change the approval of Directors Expenses from CAO to Board Chair and CAO, with the exception that the Chair expenses be approved by the Vice-Chair and CAO;

- i) Add a clause that any expenses denied by the Board Chair or CAO may be approved through a vote of the Board.

AND FURTHER THAT the Reimbursement of Directors’ Travel and Other Expenses policy (BRD-0340-50005) be amended to incorporate the following changes:

- a) Clarification that meal expenses may be claimed when attending a conference out of region, as part of the function of an appointed SCRD liaison (or their alternate) to an outside agency, or as part of a business meeting with constituents or constituency groups;
- b) Add a definition for business meeting as “a meeting related to a SCRD services between SCRD elected officials, with community group, or member of the public on SCRD matters”;
- c) Clarification that additional meal expenses during travel are only to be claimed when out of SCRD boundaries, either travelling to or from a previously approved conference or meeting;
- d) Add a clause that approval for meal or travel expenses may be denied by the Board Chair or CAO if not for SCRD related business;
- e) Add a clause that when Director’s travel is primarily by public transit, a monthly transit pass is an eligible expense;
- f) Add a clause for e-bikes to match the employee policy such as “Travel Allowance payable for kilometres travelled by bicycle (or e-bike), (excluding distance covered by ferry crossing) will be paid at 50% of the equivalent vehicle rate and Directors must follow all provincial and associated safety regulations”;
- g) Clarification that expenses must not be submitted for reimbursement to any other organization or agency (no “double dipping”). This affirmation should also be added directly to the expense form, to align with other local government practices;
- h) Add a clause for all expense forms submitted to be published quarterly either on the website or as part of a committee agenda;
- i) Change the approval of Directors Expenses from CAO to Board Chair and CAO, with the exception that the Chair expenses be approved by the Vice-Chair and CAO;
- j) Add a clause that any expenses denied by the Board Chair or CAO may be approved through a vote of the Board. And that both amended policies be brought to a January Board meeting for consideration of adoption.

DISCUSSION

The following proposed amendments are already covered in the current policy and as such, staff have not incorporated the changes into the amended Constituency Expenses policy:

- a) Clarification that “Constituency Business” relates to SCRD related political activities only, and should further the business of the organization;

Constituency expenses are for the political business of the Directors and are not related to SCRD business therefore no further clarification is needed for the definition of Constituency Business.

b) Clarification that invoiced receipts submitted should be in the Director’s name;

The policy scope states that this policy applies to “Directors of the SCRD” and defines Director as “an Electoral Area Director or Municipal Director”, therefore no further clarification is needed regarding the name on receipts.

e) Replace “Constituency office expenses” with “Office supplies supporting SCRD Business” and provide examples such as paper, ink, and other consumables;

Constituency expenses are for the political business of the Directors and are not related to SCRD business therefore staff have left the Constituency Office Expenses as is and added the examples listed above.

The following proposed amendments are already covered in the current policy and as such, staff have not incorporated the changes into the amended Reimbursement of Directors’ Travel and Other Expenses policy:

a) Clarification that meal expenses may be claimed when attending a conference out of region, as part of the function of an appointed SCRD liaison (or their alternate) to an outside agency, or as part of a business meeting with constituents or constituency groups;

The last part of the above clause “or as part of a business meeting with constituents or constituency groups” is covered by the Constituency Expenses policy and not eligible for reimbursement under this policy.

b) Add a definition for business meeting as “a meeting related to a SCRD services between SCRD elected officials, with community group, or member of the public on SCRD matters”;

This is already covered by the current definition of “SCRD Business” and that an additional definition specific to meetings is not necessary.

d) Add a clause that approval for meal or travel expenses may be denied by the Board Chair or CAO if not for SCRD related business;

The scope of the policy and definition of “SCRD Business” is clear and will be covered by the new clause about expenses that are denied by the CAO and/or Chair.

Staff have updated the Constituency Expenses and Reimbursement of Directors’ Travel and Other Expenses policies to address all other proposed amendments.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

Staff recommend the Board adopt the Constituency Expenses and Reimbursement of Directors’ Travel and Other Expenses policies as amended or suggest further amendments as they see fit.

ATTACHMENTS

Attachment A - BRD-0340-50-010 Constituency Expenses policy – Amended

Attachment B - BRD-0340-50-005 Reimbursement of Travel and Other Expenses – Amended

Reviewed by:			
Manager		Finance	
GM		Legislative	X – S. Reid
CAO		Other	



Division:	Financial Services	BRD-0340-50
Title:	Constituency Expenses	010

1. PURPOSE

1.1 To provide clarification regarding allowable constituency expenses.

2. SCOPE

2.1 ~~This policy~~ Applies to all Directors ~~of the Sunshine Coast Regional District (SCRD) who incur expenses while engaged in constituency business.~~

3. DEFINITIONS

3.1 "Device" means electronic, or technology equipment as described within this policy.

3.2 "Director" means an Electoral Area Director or Municipal Director.

3.3 "Constituency Business" means business that pertains to political activities of a Director including acting on behalf of constituent interests.

3.4 "Constituency Expenses" means costs incurred by a Director to conduct constituency business.

~~3.5 "SCRD Business" means the business of the Regional District and requires an operational decision or Board consideration for action or decision.~~

4. POLICY

4.1 Directors may be reimbursed up to a maximum of \$2,500 for constituency expenses per year. If required, and only after the \$2,500 has been depleted, each Electoral Area Director may be reimbursed up to an additional \$1,000, funded by electoral areas only.

4.2 Devices must be purchased within the first two years of the Director's term. The Director retains ownership of the device at the end of the term; therefore, it is a taxable benefit.

4.3 Constituency expenses include:

4.3.1 Devices including cell phones, computers ~~(PC or laptop)~~, printers, tablets, computer monitors, headphones (not supported by SCR D).

4.3.2 Postage.

4.3.3 Constituency office expenses ~~— such as paper, ink, and other consumables.~~

~~4.3.4 Printing supplies.~~

~~4.3.5~~ 4.3.4 Advertising costs.

~~4.3.6~~ 4.3.5 Constituency newsletters.

~~4.3.7~~ 4.3.6 Travel expenses in support of constituency issues.

~~4.3.8~~ 4.3.7 Constituency events, excluding alcohol. ~~Public constituency events (including snacks for a meet and greet, coffee at a coffee chat, community fair booth rental, etc.).~~

~~4.3.9~~ 4.3.8 Websites.

~~4.3.10~~ 4.3.9 Monthly stipend of up to \$100 to reimburse home related internet and phone ~~(handline or cellular)~~ charges or technical support, ~~and incidental supportive items such as cables and chargers.~~ This is a taxable benefit.

4.4 Alternatively, upon request the SCR D will supply Directors with a tablet and a cell phone ~~complete with plan~~ at the beginning of the term. These devices will remain the property of the SCR D; however, Directors may purchase the devices at a depreciated cost at the end of their term. Devices not purchased must be returned to the SCR D at the end of the Director's term.

4.5 Devices provided by the SCR D will receive SCR D IT support; devices purchased using constituency funds must be maintained and supported by the Director.

4.6 Claims for constituency expenses must be submitted within 60 days of the earliest expense incurred. Directors must provide a detailed accounting complete with receipts for each claim (other



BOARD Policy

than for mileage). Finance will ensure that all constituency expense claims are processed within a two-week period.

4.7 Constituency expenses for the previous calendar year must be submitted no later than January 10 of the following year. Constituency expenses submitted after this date will not be eligible for reimbursement.

4.8 In an election year, constituency expenses must be submitted prior to the campaign period, which is generally established 28 days prior to the election.

4.84.9 Expense forms submitted to the SCRD may be published quarterly, either on the SCRD's website or as part of a committee agenda.

5. EXCEPTIONS

5.1 Expenses incurred while engaged in SCRD business are exempt from this policy as they are covered under the Reimbursement of Travel and Other Expenses policy.

5.2 Constituency expenses submitted for reimbursement to any other organization or agency will not be reimbursed.

5.6. AUTHORITY TO ACT

5.16.1 Board

~~5.1.16.1.1~~ To be familiar with this policy and ~~to utilize it as a lens to provide focus~~ use it as a guide for determining eligible constituency expenses.

5.26.2 Chief Administrative Officer (CAO) and Board Chair

~~6.2.1~~ To review and approve Directors' expense claims with the Board Chair prior to payment.

~~a)~~ Board Chair expenses will be reviewed and approved by the CAO and Vice-Chair.

~~a)~~ Expenses denied by the Board Chair or CAO may be approved through a vote of the Board at the request of the Director.

~~b)~~

~~5.2.26.2.2~~ To determine the depreciation rate used to calculate buyout price, consistent with asset management practices within the SCRD.

~~5.2.36.2.3~~ To make write off decisions on items of low residual value.

5.36.3 General Manager, Corporate Services/~~Chief Financial Officer~~

~~5.3.16.3.1~~ To provide advice and clarification regarding this policy.

~~5.3.26.3.2~~ To ensure that constituency expense claims are processed within a two-week period.

6.7. REFERENCES (Bylaws, Procedures, Guiding documents)

7.1 BRD-0340-50-005 Reimbursement of Directors' Travel and Other Expenses

Approval Date:	April 4, 2004	Resolution No.	288/04
Amendment Date:	February 12, 2009	Resolution No.	045/09, Rec. No. 17
Amendment Date:	February 10, 2011	Resolution No.	060/11, Rec. No. 2
Amendment Date:	December 11, 2014	Resolution No.	579/14, Rec. No. 4
Amendment Date:	February 9, 2023	Resolution No.	031/23, Rec. No. 7
Amendment Date:		Resolution No.	



Division:	Financial Services	BRD-0340-50
Title:	Reimbursement of Directors' Travel and Other Expenses	005

1. PURPOSE

1.1 To ~~clarify how various provisions provide clarification regarding with respect to~~ reimbursement of travel and other expenses ~~will be administered.~~

2. SCOPE

2.1 This ~~procedure policy~~ applies to all Directors and Alternate Directors who incur expenses while engaged in Sunshine Coast Regional District (SCRD) business, ~~unless otherwise stated.~~

3. DEFINITIONS

~~3.1 "SCRD Business" means activity that furthers the business of the SCRD and may require Board consideration or decision, including~~ attendance at conferences, conventions, meetings, and seminars.

~~3.1~~

4. POLICY

4.1 The SCRD will reimburse Directors and Alternate Directors for reasonable food, accommodation, and travel expenses in accordance with the attached Schedule of Allowable Expenses.

4.2 ~~Those Directors~~ claiming expenses in accordance with this policy should be aware of the following general guidelines:

- 4.2.1 The most economical mode of transportation is to be used, unless there is a specific reason to choose otherwise, ~~e.g., (flying may be preferable to driving more than 3 hours, one way).~~
- 4.2.2 The "per diem" rate may not be claimed when meals are provided as part of the registration for a conference, convention, meeting, or seminar.
- 4.2.3 When some but not all meals are included, expenses may be claimed for the additional meal(s) when travelling. The amount payable for the additional meal(s) will be the actual cost of the meal, or the amount outlined in ~~Section 11 of~~ the attached Schedule of Allowable Expenses. If the actual expense is greater than the ~~standard~~ amount ~~outlined in the attached Schedule of Allowable Expenses~~, the receipt must be attached to the claim.
- 4.2.4 ~~The "per diem" rate may be claimed for travel days when these involve being away from the office travelling~~ for more than half a day, subject to the above limitation.

~~4.3 Expense Report Forms submitted to the SCRD may be published quarterly, either on the SCR D's website or as part of a committee agenda.~~

5. EXCEPTIONS

~~5.1 Meal expenses incurred within the SCR D will not be covered under this policy.~~

~~5.1 Expenses incurred while engaged in Constituency business are exempt from this policy as they are covered under the Constituency Expenses policy.~~

~~5.2 Expenses submitted for reimbursement to any other organization or agency will not be reimbursed.~~

5.6. AUTHORITY TO ACT

~~5.1 Chief Administrative Officer (CAO)/Board Chair/Vice Chair~~

~~6.1 To review and approve expense claims in a manner consistent with this policy and attached Schedule of Allowable Expenses. Chief Administrative Officer (CAO) and Board Chair~~



BOARD Policy

- 6.1.1 To review and approve Directors' expense claims with the Board Chair in a manner consistent with this policy and attached Schedule of Allowable Expenses prior to payment.
 - a) Board Chair expenses will be reviewed and approved by the CAO and Vice-Chair.
 - b) Expenses denied by the Board Chair or CAO may be approved through a vote of the Board at the request of the Director.

5.26.2 Directors and Alternate Directors

- ~~5.2.16.2.1~~ To submit expense claims in a manner consistent with this policy using the Expense Report Form.
- ~~5.2.26.2.2~~ The Expense Report Form is the only form used for claiming travel and related expenses. Expenses for more than one trip can be claimed on one form, but the claim must be approved and submitted ~~to Accounts Payable~~ within 60 days of the earliest expense incurred.
- ~~5.2.36.2.3~~ Complete the Expense Report Form ~~form~~ under each heading and review for accuracy. Attach receipts, unless the "per diem" rate is being claimed (which does not require receipts). The "per diem" rate may not be claimed when meals are provided as part of the function and paid for as part of the registration.
- ~~5.2.4~~ ~~On completion, the form must be approved by the CAO and forwarded to Accounts Payable for processing.~~

6.7. REFERENCES (Bylaws, Procedures, Guiding documents)

- 7.1 BRD-0340-50-010 Constituency Expenses
- 7.2 Sunshine Coast Regional District Directors' Remuneration Bylaw No. 732, 2021
- 7.3 Expense Report form

Approval Date:	September 14, 2000	Resolution No.	409/00
Amendment Date:	October 14, 2021	Resolution No.	273/21
Amendment Date:	June 8, 2023	Resolution No.	141/23 Rec. No. 12
Amendment Date:	July 11, 2024	Resolution No.	209/24 Rec. No. 3
<u>Amendment Date:</u>		<u>Resolution No.</u>	



BOARD Policy

SCHEDULE OF ALLOWABLE EXPENSES

1.	Commercial accommodation	Actual cost	
2.	Non-commercial accommodation	\$35.00 per night	
3.	FCM Annual conference and accommodation (Chair, Electoral Area or Municipal Directors only)	Actual cost	
43.	UBCM Annual conference and accommodation (Chair, Electoral Area or Municipal Directors only)	Actual cost	
54.	AVICC conference and accommodation (Chair, Electoral Area or Municipal Directors only)	Actual cost	
56.	Course or conference registration fees	Actual cost	
76.	Required course material	Actual cost	
87.	Private Motor Vehicle use	Amount equal to Provincial reimbursement	
98.	Ferry transportation	Actual cost	
109.	Air transportation	Actual cost of regular economy fare	
<u>10</u>	<u>Public Transit</u>	<u>Actual cost of fare or monthly pass</u>	
<u>11</u>	<u>Bicycle or e-bike</u>	<u>50% of the equivalent private motor vehicle use rate</u>	
112.	Telephone or facsimile charges	Actual cost	
123.	Meal charges including gratuities (no receipts required)	Breakfast	\$21.35
		Lunch	\$21.60
		Dinner	\$53.00
Group 134.	Provincial and Federal taxes applicable to allowable expenses	Actual cost	
<u>145.</u>	<u>Incidentals (drycleaning/laundry, photocopying/business related fees, portage, internet fees.</u>	<u>\$17.30</u>	<u>\$17.30</u>



BOARD Policy

(No receipts required, overnight travel only)

156.	"Per Diem" rate (no receipts required, overnight travel only)	\$113.25 per day (in lieu of meals charges) exclusive of accommodation
167.	Parking	Actual cost
178.	Taxis	Actual cost

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Committee of the Whole – January 23, 2025

AUTHOR: Valerie Cropp – Manager, Purchasing and Risk Management

SUBJECT: **CONTRACTS BETWEEN \$50,000 AND \$100,000 FROM OCTOBER 1, 2024 TO DECEMBER 31, 2024.**

RECOMMENDATION(S)

THAT the report titled Contracts between \$50,000 and \$100,000 from October 1, 2024 to December 31, 2024, be received for information.

BACKGROUND

The Sunshine Coast Regional District's (SCRD) Delegation Bylaw No. 710 directs staff to provide the Committee with a quarterly report of all new contracts entered into that fall between \$50,000 and \$100,000.

This report includes vendor, purpose, function, amount and the authoritative budget.

DISCUSSION

A total of 110 contracts/purchase orders were issued during the time period October 1, 2024 to December 31, 2024, with 3 valued between \$50,000 and \$100,000.

Item No.	Supplier	Division	Amount	Expenditure
1.	Western Scale Co Ltd. Truck Scale Replacement	352 / Sechelt Landfill	\$58,595.00	Capital
2.	Alumichem Canada Inc. ISOPAC Water Treatment Chemicals	370 / Regional Water Services	\$64,000.00	Operating
3.	Subsurface Sales Ltd Pneumatic Boring Tool	370 / Regional Water Services	\$73,567.95	Capital

STRATEGIC PLAN AND RELATED POLICIES

The disclosure of Contract Awards aligns with the Board's Procurement Policy and Delegation Bylaw.

CONCLUSION

SCRD Delegation Bylaw No. 710 requires that a report be provided quarterly to the Committee on contracts between \$50,000 and \$100,000.

Reviewed by:			
Manager		Finance	
GM		Legislative	
CAO	X - T. Perreault	Other	



SUNSHINE COAST REGIONAL ACCESSIBILITY ADVISORY COMMITTEE MEETING

December 9, 2024

RECOMMENDATIONS FROM THE SUNSHINE COAST REGIONAL ACCESSIBILITY ADVISORY
COMMITTEE MEETING HELD AT THE GIBSONS AND AREA COMMUNITY CENTRE AT 700
PARK ROAD, GIBSONS, B.C. AND VIA ZOOM

PRESENT:

(Voting Members)	Chair	B. Conway
	Committee members	E. Eaton
		L. Forrest
		R. Kiewitz
		A. Lattanzi
		B. Straw
		S. Tompkins

ALSO PRESENT:

(Non-Voting)	Councillor, TOG	D. Croal
	Director, SCRD	D. McMahon
	Staff, DOS	M. Stjepovic
	Youth Representative	M. Vanhoeven
	SCRD, Corporate Officer	S. Reid
	Staff, SCRD	R. Porte
	Staff, TOG	K. Thomas
	Recorder, SCRD	K. Gower

REGRETS:	Committee Member	A. Gursche
	Councillor, DOS	D. Inkster

CALL TO ORDER Chair Conway called the meeting to order at 11:10 am

AGENDA The agenda was adopted as amended.

MINUTES

The Sunshine Coast Regional Accessibility Advisory Committee (SCRAAC) minutes of October 21, 2024 were accepted as presented.

REPORTS

Where are we in the process - Update

- Environmental Scans were conducted in all three local governments
- Committee members should continue to send barriers & opportunities to legislative@scrd.ca
- Selection of a consultant is in progress, still to be determined whether Sechelt or Gibsons will administer the grant funds on behalf of the committee
- Ongoing feedback program – “Let’s Talk” page to be initiated

Environmental Scan

Each local government provided an update on the results of the environmental scan conducted within their respective local government.

Marina Stjepovic, Staff, District of Sechelt, highlighted the following:

- Office accessibility is a challenge, including the elevator, telephone system and access to different facilities

Rebecca Porte, Staff, Sunshine Coast Regional District highlighted the following:

- No specific standard for accessibility was identified
- Positive changes included options for residents to pay bills, attend meetings, or get information remotely or online
- Transportation was an issue of note – in particular, the demand for handyDart service exceeds the existing level of service available

Katie Thomas, staff, Town of Gibsons, highlighted the following:

- The Town of Gibsons building is not accessible and requires a building audit
- The Town’s Parks masterplan is being reviewed with an aim to developing one or two accessible trails from lower to upper Gibsons

Chair Conway addressed the committee highlighting the need to focus on prioritization of the opportunities and barriers as the committee's work continues.

Working Groups

- The Transportation working group meetings took place on November 18 and December 4, 2024
- The working group would like to see a member of SCRAAC participate on the new BC Ferries Advisory Committee
- In addition to advocacy, the Committee would like to actually work with BC Ferries and BC Transit to ensure support for accessibility improvements

Accessibility Barriers and Opportunities on the Sunshine Coast

- Committee members were encouraged to continue identifying opportunities and barriers to add to the tracking spreadsheet
- Creating the priorities list of opportunities and barriers will be ongoing and can be added to once engagement with the public begins

Consultant Update

- A list of consultants through the Disability Alliance has been made available
- Decision needs to be made amongst staff which local government will administer the grant and then interviews with consultants will follow
- The aim is to have a consultant in place before the next Committee meeting

Update on Let's Talk Page

The committee discussed the following with respect to public engagement:

- Consultants may have advice on how best to engage public and when an online public engagement page will be developed on the SCRD's *Let's Talk* website that will provide a place where the public can submit feedback, ask questions, and get information including background, goals, key milestones, and document links related to the work on the Regional Accessibility Plan
- The Let's Talk page will be developed once a consultant has been selected
- Other methods of public information and engagement will also be contemplated

- Informing the community, especially those with accessibility issues, of the committee's work to create a Regional Plan is an important priority
- A letter or article submitted to the Coast Reporter newspaper was suggested

COMMUNICATIONS

- Correspondence from Kate Turner, Assistant to the Director of Instruction for Inclusive Education, School District 46, regarding School District 46 Accessibility Planning, was received for information

NEW BUSINESS

- **Terms of Reference and Appointment of Committee Members**
The SCRD Corporate Officer addressed the committee regarding a proposed amendment to extend committee appointments to two years. Committee members present at the meeting were supportive of their terms being extended.

Next Meeting

- District of Sechelt to host next meeting. Date to be confirmed.

ADJOURNMENT

The meeting was adjourned at 12:55 pm

SUNSHINE COAST REGIONAL DISTRICT

PORTS MONITORS (POMO) COMMITTEE

December 10, 2024

MEETING NOTES OF THE PORTS MONITORS (POMO) COMMITTEE HELD IN THE CEDAR ROOM AT THE SUNSHINE COAST REGIONAL DISTRICT OFFICE AT 1975 FIELD ROAD, SECHELT, BC

PRESENT:	POMO Committee Member (Eastbourne)	Trish Cowley
	POMO Committee Member (Halfmoon Bay)	Rod Smith
	POMO Committee Member (Halkett Bay)	Rob Cocquyt
	POMO Committee Member (Hopkins Landing)	John Rogers
	POMO Committee Member (West Bay)	Eric Berger
ALSO PRESENT:	SCRD Director, Electoral Area F	K. Stamford (Liaison)
	SCRD GM, Community Services	S. Gagnon
	SCRD Administrative Assistant/Recorder	A. Adam
	Public	0
REGRETS:	POMO Committee Member (Gambier Harbour)	Bruce Pollock (Chair)
	POMO Committee Member (Keats Landing)	John Richardson
	POMO Committee Member (Port Graves)	Andrew Kennedy
	SCRD Director, Electoral Area B	J. Gabias (Alt. Liaison)

CALL TO ORDER 1:02 p.m.

Given the Chairs absence, the group agreed that Shelley Gagnon, General Manager, Community Services, would Chair for the December 10, 2024 Ports Monitors Committee meeting.

ACKNOWLEDGMENT

It was acknowledged that the Ports Monitors (POMO) Committee meeting was held within the traditional territory of the shíshálh and Skwxwú7mesh Nations.

WELCOME AND INTRODUCTIONS

Roundtable introductions of Ports Monitors (POMO) Committee members, Elected Official Liaisons, and SCR D staff members in attendance.

AGENDA

The agenda was adopted as presented.

MEETING NOTES

The Ports Monitors (POMO) Committee Meeting Notes of May 27, 2024 were received and accepted as presented.

PORTS DIVISION UPDATE

The General Manager, Community Services reviewed the staff report included in the meeting agenda package as Annex B and provided an update on the status of the vacant Ports Coordinator position.

Discussion included:

- Hopkins dock construction (like for like) was awarded on November 28. Updates will be provided on the Let's Talk Page.
- Fall 2024 maintenance and repairs requiring timber are delayed until 2025.
- Capital projects at Keats Landing, Eastbourne, Gambier Harbour, West Bay, and Halkett Bay will resume when staff are in place.

PORTS MONITORS COMMITTEE MEMBERSHIP UPDATE

Two POMO members (Trish Cowley and Rob Cocquyt) terms expire before the next meeting. Both members agreed to allow their names to stand for another term.

Staff will bring a report to the Board for re-appointment of Trish Cowley and Rob Cocquyt to the POMO Committee for an additional two-year term.

ROUNDTABLE

Kate-Lousie Stamford, SCRD Director, Electoral Area F

- Has been working with BC Ferries on tire replacement at the Langdale Float.
- SCRD is looking for photos of the upcoming King Tides.
- Surveyed Gambier Harbour POMO Representatives on the recent Sea Lion population re damage to private docks in the area.

Rod Smith, POMO Committee Member (Halfmoon Bay)

- Noted the small items to be repaired as part of preventative maintenance and recommended repairs but no other concerns.

Trish Cowley, POMO Committee Member (Eastbourne)

- Appreciative when the crews are on site to fix things after the storm damage and for the light repairs.
- The best swim ladder has been installed at Eastbourne.
- Keats Landing – Community is still upset about the vehicular restrictions on the dock but have found new ways to make things work.

Eric Berger, POMO Committee Member (West Bay)

- Aware of the delay for the float repair.
- Happy to see crews out several times this year for maintenance work.

John Rogers, POMO Committee Member (Hopkins Landing)

- Mooring blocks – will these need to be moved in preparation for construction?

The SCRD Ports Division reported that more information on the construction project will be soon and will be shared on the Let's Talk page. If the mooring blocks will impact construction, the project manager will be in touch with the POMO representative to help inform the community.

Rob Cocquyt, POMO Committee Member (Halkett Bay)

- The rub rail that is missing is tucked behind the shed.
- Wear guards between dolphins and float- one has come off recently and one is off.
- Placement for the new ladder was discussed.

The SCRD Ports Division will ensure this information is provided to the contractor.

NEXT MEETING May 2025

ADJOURNMENT 1:35 p.m.