

PROJECT STATUS REPORT

To:	Village of Lytton	Contact:	CAO – Michael Baker
Project:	Lytton Recovery	From:	Recovery Project Manager – James Heigh
Report Period:	December 2022	Date Issued:	January 11, 2022

1. Project Dashboard

Current Project Phase:



Status	Overall Status	Scope	Budget	Schedule
Last Period	High Risk	High Risk	High Risk	High Risk
This Period	High Risk	High Risk	High Risk	High Risk

Project Status Executive Summary

Matcon

Actions this month include:

- Sewer and water line capping completed on all properties.
- Concrete footings removal on all properties.
- Contaminated soil removal and disposal on all available properties.

As of December 19, all but 12 properties have undergone remedial excavation, 9 of which are awaiting Archeological approval, 1 is a high-risk environmental site, 1 needs geotechnical guidance on the retaining wall and the remaining 2 properties are in the process of remediation and plan to be complete by Dec 21.

A decision to shovel test the remediated properties for archaeological purposes has been approved by Council and will be further elaborated after the Province reviews the report by AEW on the findings thus far and their recommendations. This ongoing work will have impacts on the final remediation and backfill schedules.

IBI

Arcadis IBI Group has been concurrently completing the following activities in the VoL during the month of December:

- Issuing Notifications of Independent Remediation (NIR)
- Monitoring remedial contractor (Matcon Environmental) works
- Collection of samples of anthropogenic materials that have undergone combustion (debris samples) for laboratory analysis
- Collection of soil samples for laboratory analysis

A brief description of works completed for each activity by IBI group is presented below:

Notification of Independent Remediation (NIR)

Notifications of Independent Remediation (Initiation) have been issued to the BC Ministry of Environment and Climate Change Strategy (ENV) in accordance with the requirements of the Environmental Management Act (EMA) and Contaminated Sites Regulation (CSR) for properties throughout Zones 1 to 7 as follows:

- Zone 1 (18 properties in scope) – 14/14 NIRs submitted, 4 properties not contaminated
- Zone 2 (18 properties in scope) – 17/17 NIRs submitted (note: additional NIRs submitted for 125 & 145 Fraser, now on stop work order), 1 property not contaminated
- Zone 3 (17 properties in scope) – 15/15 NIRs submitted, 2 properties fully paved (soils not impacted by the wildfire)
- Zone 4 (18 properties in scope) – 18/18 NIRs submitted
- Zone 5 (20 properties in scope) – 17/18 NIRs submitted (note: additional NIRs submitted for IHA, 475 Main), 2 properties fully paved (soils not impacted by the wildfire)
- Zone 6 (16 properties in scope) – 16/16 NIRs submitted (note: additional NIRs submitted for IHA, 575 Main)
- Zone 7 (29 properties in scope) – 21/22 NIRs submitted, 7 properties not contaminated

Currently, there are only two properties remaining that require NIR submission:

- 441 Old Trans-Canada Highway
- 141 Seventh Street

NIR's for these two properties will be submitted when it is confirmed that they can be remediated within the required 90 days.

Remedial Works Monitoring

Debris removal works have been substantially completed by Matcon on all properties.

Arcadis IBI Group has been monitoring debris removal works at these properties which includes the following activities:

- Monitoring the segregation of metal from the waste debris for subsequent offsite recycling. Metal is transported to Lindsay Ventures located in Surrey, BC for recycling.
- Monitoring the segregation of other waste items from the debris fields such as vehicle batteries, computer boards, electronics, etc.

Arcadis IBI is in the process of collecting post treatment samples following implementation of Matcon's stabilization process at various properties to determine the efficacy of the stabilization program. These samples are analyzed for leachable metals (based on TCLP analysis) to determine subsequent waste classification.

Post remedial confirmatory soil samples are being collected by IBI field staff from completed remedial excavations in general accordance with the BC Ministry of Environment Technical Guidance 1.

Confirmatory soil samples are analyzed for contaminants of concern previously identified during the site investigation component.

Confirmatory soil samples have been collected from the following zones and submitted for analysis with the project laboratory:

- Zone 1 – 14/14 properties
- Zone 2 – 13/17 properties
- Zone 3 – 13/15 properties
- Zone 4 – 13/18 properties
- Zone 5 – 9/18 properties
- Zone 6 – 7/16 properties
- Zone 7 – 9/22 properties

Note: confirmatory samples can only be collected following removal of all burned debris, in-situ contaminated soils and ex-situ (stockpiled) contaminated soils.

AEW LP

Through December, A.E.W. conducted 9 days of monitoring contractor debris removal, screening/raking material for potential heritage artifacts, and testing material. There were zero unscheduled workdays. Currently, 151 lots have been approved for monitoring of which A.E.W. is actively monitoring work or has monitored on all these that have been clear for remediation. Around 89 potential archaeology sites have been uncovered on 92 lots.

A.E.W. was informed in December that the Archaeology Branch is starting regular, on-going, weekly in-person meetings in January 2023 regarding reporting. These in-person meetings will be attended by the A.E.W. Director of Archaeology.

The power screener was used throughout the month. Crew size in December remained constant from November (13.3 persons and 13.1 respectively). AEWs final day of work in 2022 was December 21 which was Matcon's planned final day. We will resume work when Matcon resumes work in January.

A.E.W. is awaiting a response on the proposed shovel testing program.

Primarily, Field Directors Brittany Lynas and Luke Kowalski are co-field directing the work in the village. In addition, Field Director Andrew Haugo has been on-site supporting since November 28th.

The weekly A.E.W. and Colliers project management call allows issues and concerns to be raised and dealt with.

A.E.W. crew size averaged: 3.3 people per day;

Number of properties being monitored: 151/151;

The number of potential arch sites uncovered: 89.

Infrastructure

Kevin Vilac is trouble shooting the communications error between well #2 and the water treatment plant, expected to be completed in January. The VFD kiosk will be investigated for ventilation and cooling over the winter for completion in the spring/summer.

DFA continues to review the additional funding requests for the Lytton Creek debris pond and intake pond, and various Water System related works. No timeline on approval is available, however an Engineer review is required by the DFA Engineering Team before approvals can be completed.

Phase 1 of the leak detection program was completed by Cloudburst Water. A major leak had been found in the Ponderosa area. Work is being completed to determine the scope required to repair this leak. Phase 2 leak detection will commence in the Village core on January 16th. At this time all services are capped and confirmed closed on remediated lots. There are no services outstanding to be capped.

BC Hydro is planning to work through the holidays in order to have their poles and hydro lines up for January. Once completed they will provide a timeline for the energization of the lines and when the remaining poles through the Village will be installed.

Staff are working to complete the Master Service Agreement with the Geotechnical Consultant in order to bring them on board and begin geotechnical assessments through the Village.

Staff continue to identify additional grant opportunities for future works, and Reports to Council will be provided for the approval to proceed with applications when eligibility is verified.

Engineering design reviews and recommendations have been provided with cost estimates to the VoL to get the villages fire flow to meet the fire flow demands. These reports are currently under review and in discussion to discuss the path forward. The only outstanding item is verification of capacity for fire requirements, which will then put the Village in a position to begin procurement of a designer for these upgrades. This is expected to go live in January.

An options analysis is being conducted exploring options that are available to get an interim Village office function as quickly as possible. The business report will be presented to Council at the January 25th council meeting. During this meeting the Village Council will decide on a path forward for an Interim Village office.

Colliers is working on developing several RFPs including Sanitary line works, water systems upgrades, alternative energy studies, and several more to have required work lined up as remediation works is beginning its final stages and the village get ready for infrastructure works. The sanitary line works will be to camera, flush, and identify issues with the sanitary pipes. For the water system procurements, Colliers is working on a design RFP for water system upgrade designs for the approved pipe resizing and for the fire flows.

2. Key Risk Changes

Risk Title	Impact on Scope / Schedule / Budget	Mitigation Strategy
Archeological Delays	Schedule and Budget	Increase Arch Crews and Machinery if possible, add winter frost fighting equipment to continue to work in the winter months
Backfilling Delays	Schedule and Budget	Acquire confirmatory soil samples asap and confirm strategy for compacting during winter conditions if required
Weather	Delay to schedule, increase in budget	If possible, bring in tents and ground heating equipment Pause work and wait out extreme bad weather
Shovel testing program	Schedule delay and / or cost increase	Review AEW recommendations and work closely with Regulator to move the program through priority properties. Focus on properties with Building Permit applications to reduce delays for residential rebuild.
Heritage Site identification	Increase in the budget. Increase in the number of monitoring days Increase in back-end reporting	Budget increase. Increase the number of monitoring days.

3. Budget Status

Three options for remediation and archaeological work continuing in 2023 have been presented to Village Council on Dec 14th. Council approved Option 2 for the additional subsurface investigation, and it is expected that the funding for this will be provided by the province in early January. At that time change orders will be developed for the Contractors to bring the budget and committed costs in line with the Forecast Costs at Completion. Currently, all work previously agreed upon is being completed, with contract extensions proposed for Matcon, AEW and IBI to continue with their work in the New Year.

Current Project Status	Cost	Comments
Baseline Budget	\$19,190,500	Planned Budget
Committed	\$19,480,750	
Approved Change Orders	\$17,044,036	Matcon, IBI, AEW CO's
Forecast Cost at Completion	\$ 27,318,982	Based on increased costs for Shovel Testing program and backfill of properties
Forecast Variance at Completion	\$8,128,482	

4. Schedule Status

We anticipate having 95% of the properties fully remediated within the Village by early February 2023. Remaining properties in Zone 7 will require additional coordination with A.E.W and the provincial archaeology branch due to the significance of the archaeology sites in these locations. This work will need to be completed in more favorable weather conditions.

We expect the work on site will materially slow until these properties are ready for final remediation. Matcon will begin demobilization of crews and equipment in the early New Year to support a reduced workforce. The work will resume once more favorable weather conditions exist for the final work in Zone 7 and the shovel testing program has been fully developed, approved and funded.

Row	Milestone	Planned Baseline	Current Plan	Actual/Forecast	Variance Current Plan – Actual/Forecast (weeks)
1	Procurement of Environmental QP	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	0
2	Procurement of Prime Contractor	Mar 01, 2022	Mar 01, 2022	Mar 01, 2022	0
3	Procurement of Archaeologist and Heritage Monitors	Apr 01, 2022	Apr 01, 2022	Apr 01, 2022	0
4	Construction mobilization	Mar 08, 2022	Mar 08, 2022	Mar 08, 2022	0
5	Completion of Work in Zone 1 and Hobo Hollow	May 19, 2022	March 30, 2023		6
6	Establish a safe corridor between Highway 12 and CN Rail bridge for public access	May 19, 2022	May 19, 2022	May 22, 2022	0.5
7	Completion of Work in Zone 2	June 6, 2022	March 30, 2023		0
8	Completion of Work in Zone 3	June 22, 2022	March 30, 2023		0
9	Procure Watershed Analysis Engineering Team	June 24, 2022	June 24, 2022	Feb, 2023	6
10	Completion of Work in Zone 4	July 8, 2022	March 30, 2023		0
11	UV System Repair and fully operational	July 8, 2022	July 8, 2022	July 11, 2022	0
12	Completion of Work in Zone 5	July 26, 2022	March 30, 2023		0
13	Completion of Work in Zone 6	August 11, 2022	March 30, 2023		0
14	Source Water Protection Plan Update	August 26, 2022	January 30, 2023		15
15	Completion of Work in Zone 7	August 29, 2022	March 30, 2023		0
16	Leak Detection Phase 1		September 16, 2022	Sept 16 th , 2022	0

17	Geotech Agreement signed	September 30, 2022	January 30, 2023	0
18	Leak Detection Phase 2		February, 2023	0
19	Substantial Performance	Sept 30, 2022	April 30, 2023	8
20	Water system online	April 1, 2023	April 1, 2023	

5. Project Photos



	
 <p>Figure 3 – 90% of metal debris removed from site, few loads remain.</p>	 <p>Figure 4 – Remaining Danger Trees logs. 100% of Danger trees removed</p>



Figure 5 – Site 90% Cleared of contaminated soils.



Figure 6 – Sites Prepared for Backfilling