

**Mandatory Bidder's Meeting
for
Wonowon Maintenance Camp Remediation of
Contaminated Soil
and
Sikanni Soil Treatment Facility Operation**

Client: Public Services and Procurement Canada

Consultant: SLR Consulting (Canada) Ltd.

Project No: R.018385.016/.017 and

R.018391.014/.015

Date: July 16, 2020

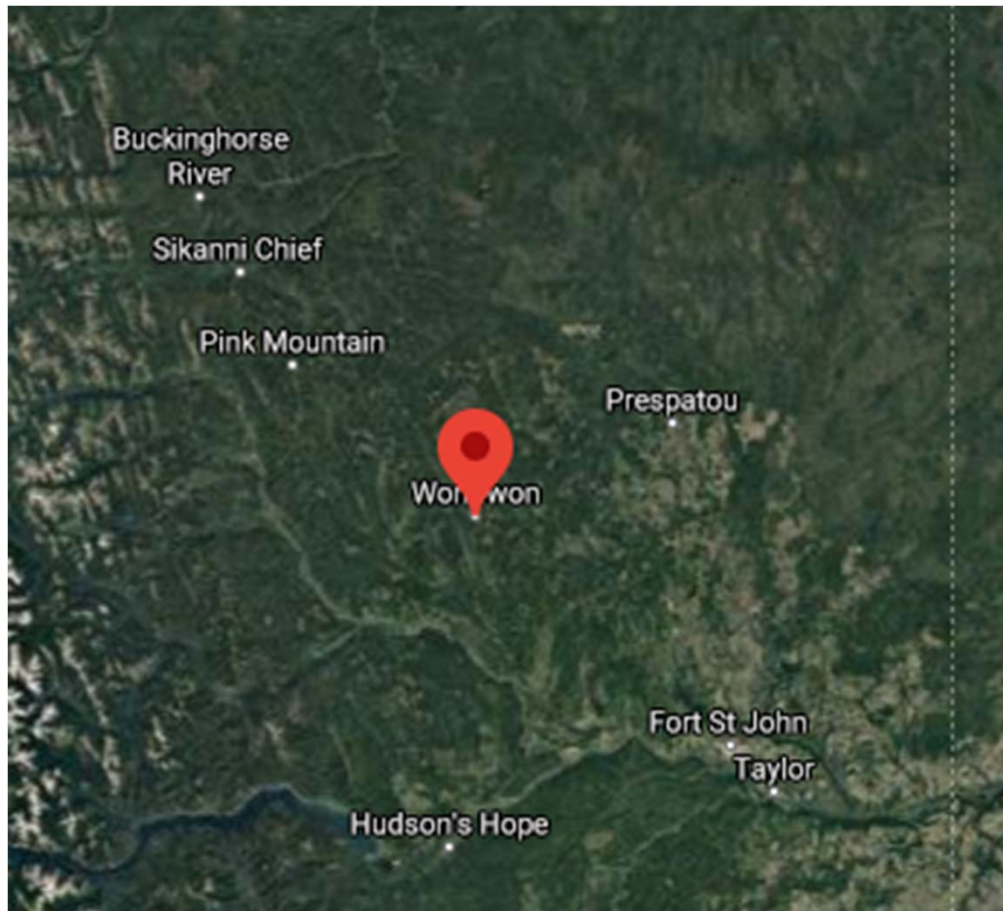
Time: 11:00 AM PST

Presentation Summary

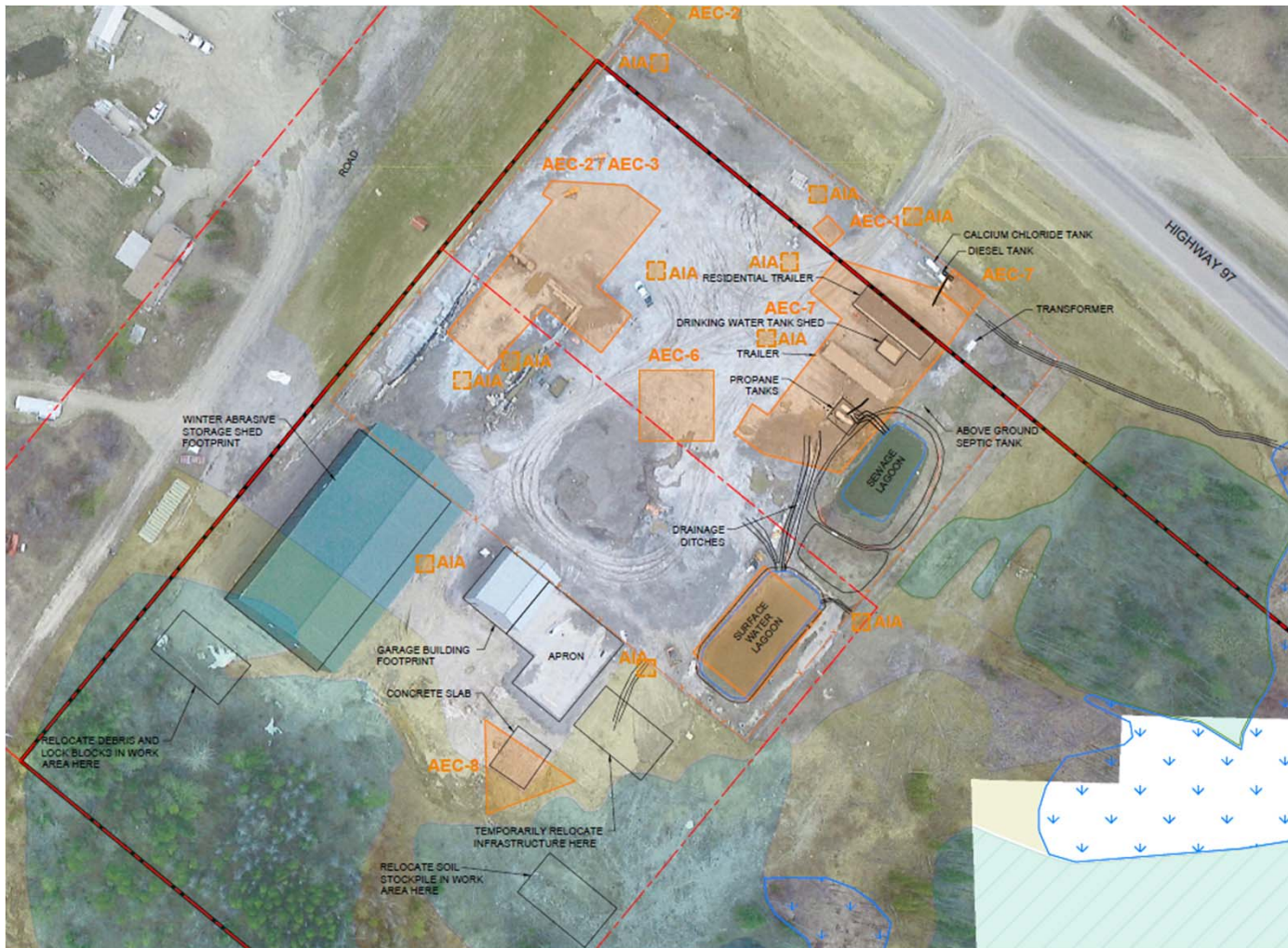
- Base Work (A) – Wonowon Maintenance Camp Remediation
 - Site Location and Layout
 - Site Maps
 - Photographs and Videos
 - Scope of Work and Unit Price Table
- Optional Work (B) – Sikanni STF Operation
 - Site Location and Layout
 - Site Maps
 - Photographs and Video
 - Scope of Work and Unit Price Table

Wonowon Maintenance Camp

- Located along Highway 97 in Wonowon, BC
 - Approximately 90 km / 1 hour north of Fort St. John



Wonowon Maintenance Camp



Wonowon Maintenance Camp



Photo: View from the site entrance, facing south west

Wonowon Maintenance Camp



Video: View from the site entrance, starting facing east and ending facing west

Wonowon Maintenance Camp



Photo: View from north of Winter Abrasive Storage Shed, facing north east

Wonowon Maintenance Camp



Video: View from north of Winter Abrasive Storage Shed, starting facing north and ending facing west.

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Wonowon Maintenance Camp

- Scope of Work
 - Excavation of contaminated soil
 - Contaminated water treatment offsite – Provision and Transport and Disposal
 - Transportation and disposal of contaminated soil
 - Excavation backfilling
 - Site restoration, including surface restoration area
 - Surface restoration area, excavate top 30 cm of material, place Owner supplied geofabric, backfill with imported material, compact and grade

Wonowon Maintenance Camp

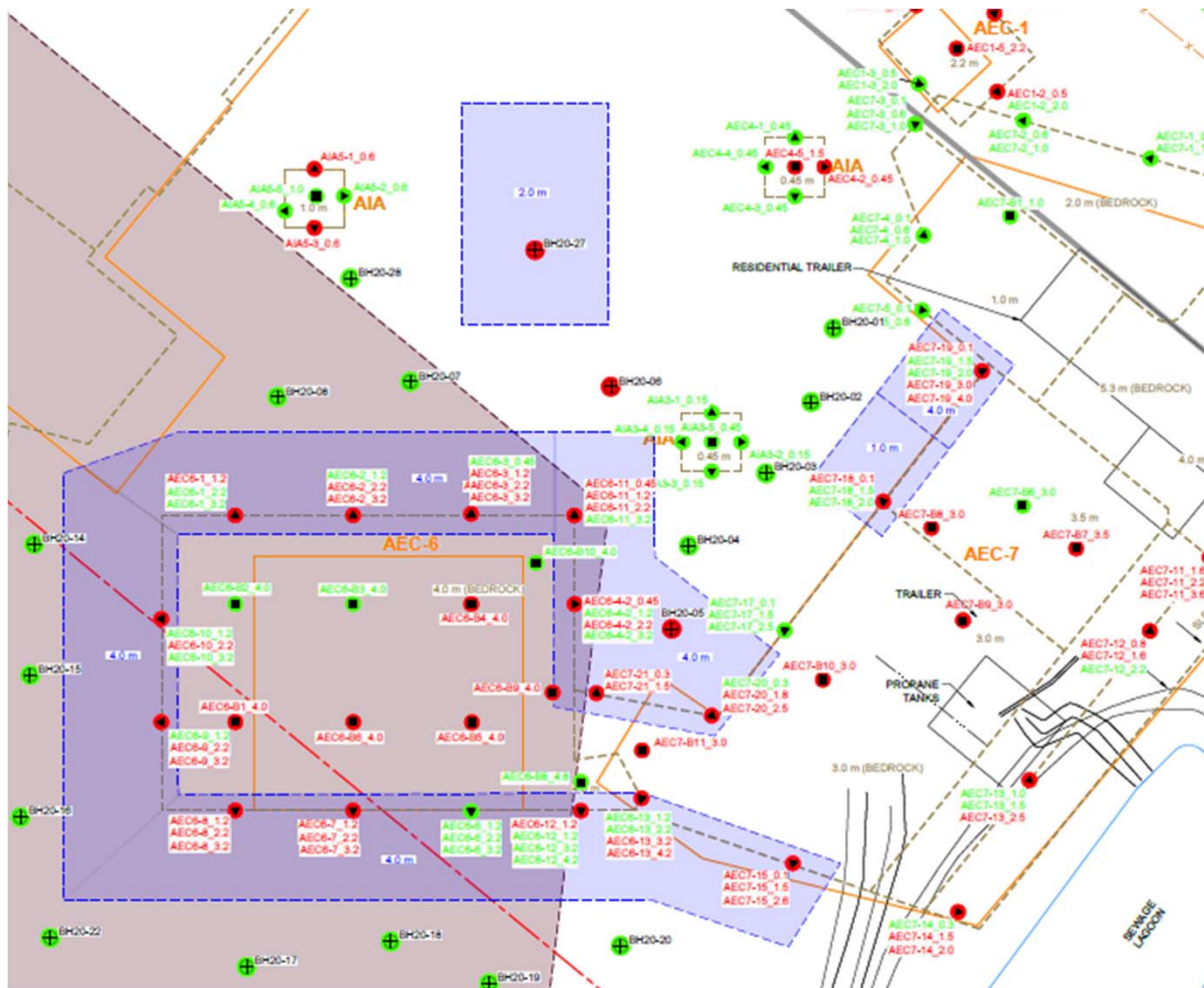
- UPT Base Work (A)

Line Item	Class of Labour, Plant or Material	Specification Section	Unit of Measure
1	Pre-Mobilization Submittals	012520 - 1.1.1	Lump Sum
2	Mobilization	012520 - 1.1.2	Lump Sum
3	Site Preparation	012520 - 1.1.3	Lump Sum
4	Standby Time	012520 - 1.1.4	Days
5	Site Restoration	012520 - 1.1.5	Lump Sum
6	Demobilization	012520 - 1.1.6	Lump Sum
7	Closeout Submittals	012520 - 1.1.7	Lump Sum
8	Non-Contaminated Quality Material Transport and Disposal	013543 – 1.1.1	Tonnes
9	Site Facilities – Provision	015200 – 1.1.1	Lump Sum
10	Site Facilities - Operation	015200 – 1.1.2	Lump Sum

Wonowon Maintenance Camp

- Contaminated Water Treatment Offsite - Provision and Transport and Disposal
 - Sections 026100.02 – 1.1.1 and 026100.02 – 1.1.2 and UPT line items 11 and 12
 - Includes ancillary tanks, storage containers, equipment and piping to collect, store, and sample contaminated or potentially Contaminated Water
 - Includes volume of water transported off-site for treatment and disposal
- Test Pitting
 - Section 026100.03 – 1.1.1 and UPT line item 13
 - Time to excavate a test pit, temporarily stockpile excavated material adjacent to test pit, and backfill with excavated material using machine tamping
 - Provide assistance for collection of Samples
- Oversize Debris Removal
 - Section 026100.03 – 1.1.2 and UPT line item 14
 - Time to remove oversize material from excavation
- Excavation
 - Section 026100.03 – 1.1.3 and UPT line item 15
 - Volume of material removed to excavate to Contaminated Soil Extents. This includes the surface restoration area
 - Provide assistance for collection of Confirmatory Soil Samples
 - No work in / around Sewage Lagoon

Wonowon Maintenance Camp – Contaminated Soil Extents



BH20-27 excavation - no adjacent previous remedial excavation.

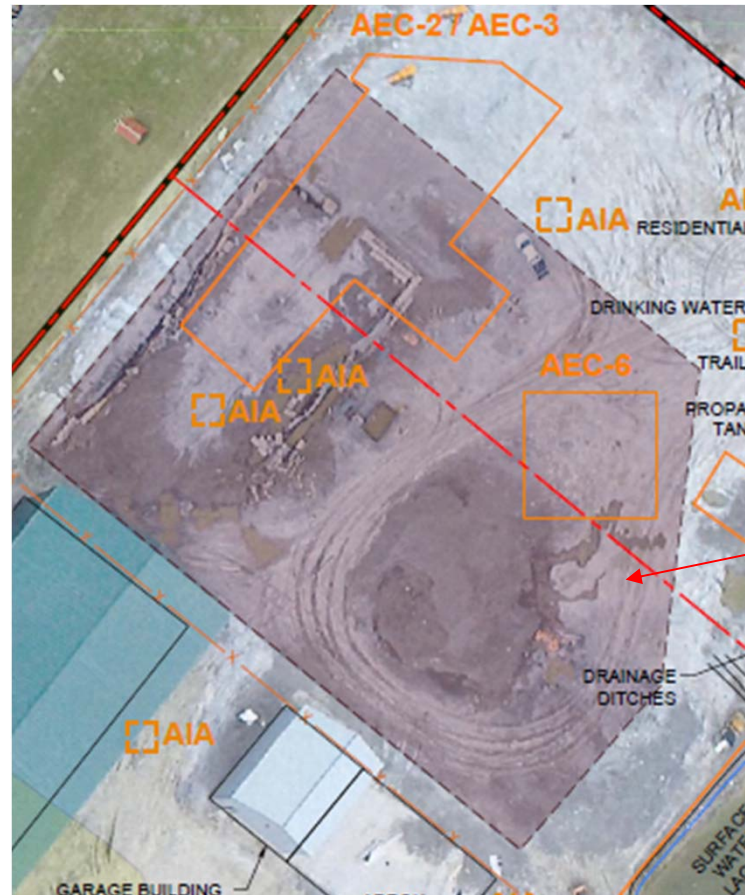
AEC 6 and AEC 7 excavations - adjacent to previous remedial excavations. Requires excavation into previous remediation backfill (uncontaminated overburden) and reuse the material as backfill.

Wonowon Maintenance Camp



Photo: AEC 6 (left) and AEC 7 (right) previous remedial excavations in progress

Wonowon – Surface Restoration



Surface restoration area shaded

Section 02 61 00.03, Part 1.1.3.1: Excavate top 30 cm of surface restoration area and move soil to the Soil Stockpile Area within 500 m of excavation. Place Owner supplied geotextile prior to backfilling with imported material.

Wonowon – Surface Restoration



Photo: Surface restoration area north of Garage and Winter Abrasive Storage Shed, facing south east

Wonowon – Surface Restoration



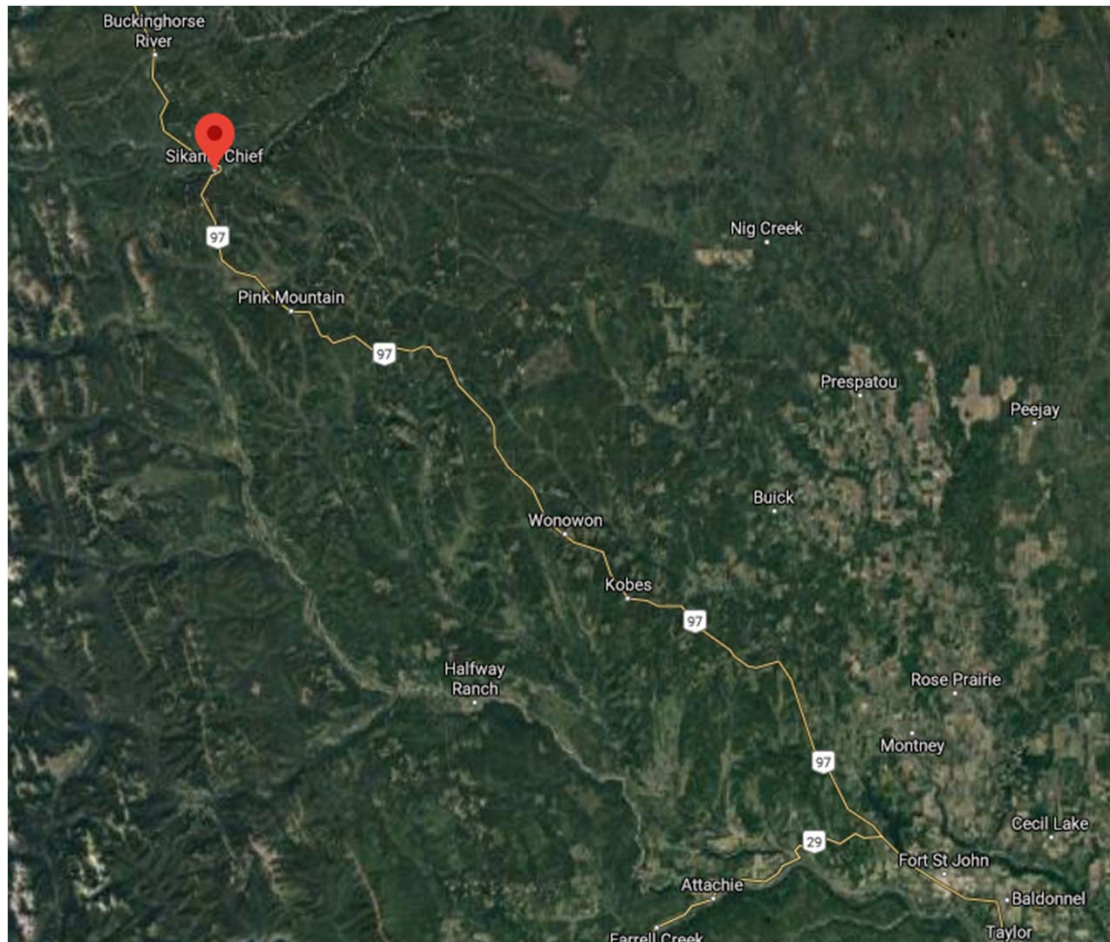
Photo: Surface restoration area north of Garage and Winter Abrasive Storage Shed, facing north east.

Wonowon Maintenance Camp

- Backfill – Imported
 - Section 026100.03 – 1.1.5 and UPT line item 16a
 - Material imported for Backfill of the Excavation and includes surface restoration area
 - Includes geotechnical and environmental testing to verify material is acceptable for import and intended use
- Backfill – Overburden
 - Section 026100.03 – 1.1.6 and UPT line item 16b
 - Volume of Overburden material suitable for reuse as Backfill for Excavation
 - Includes material excavated during sloping towards previously backfilled remedial excavations
- Contaminated Material Transport and Disposal – Waste Quality
 - Sections 026100.04 – 1.1.1 and 026100.06 – 1.1.1 and UPT line items 17 and 18
 - Includes weight of material transported and weight of material disposed

Sikanni STF

- Located along Highway 97 at Kilometre 254 of the Alaska Highway, Sikanni, BC
 - Approximately 185 km / 2 hours north of Fort St John



Sikanni STF



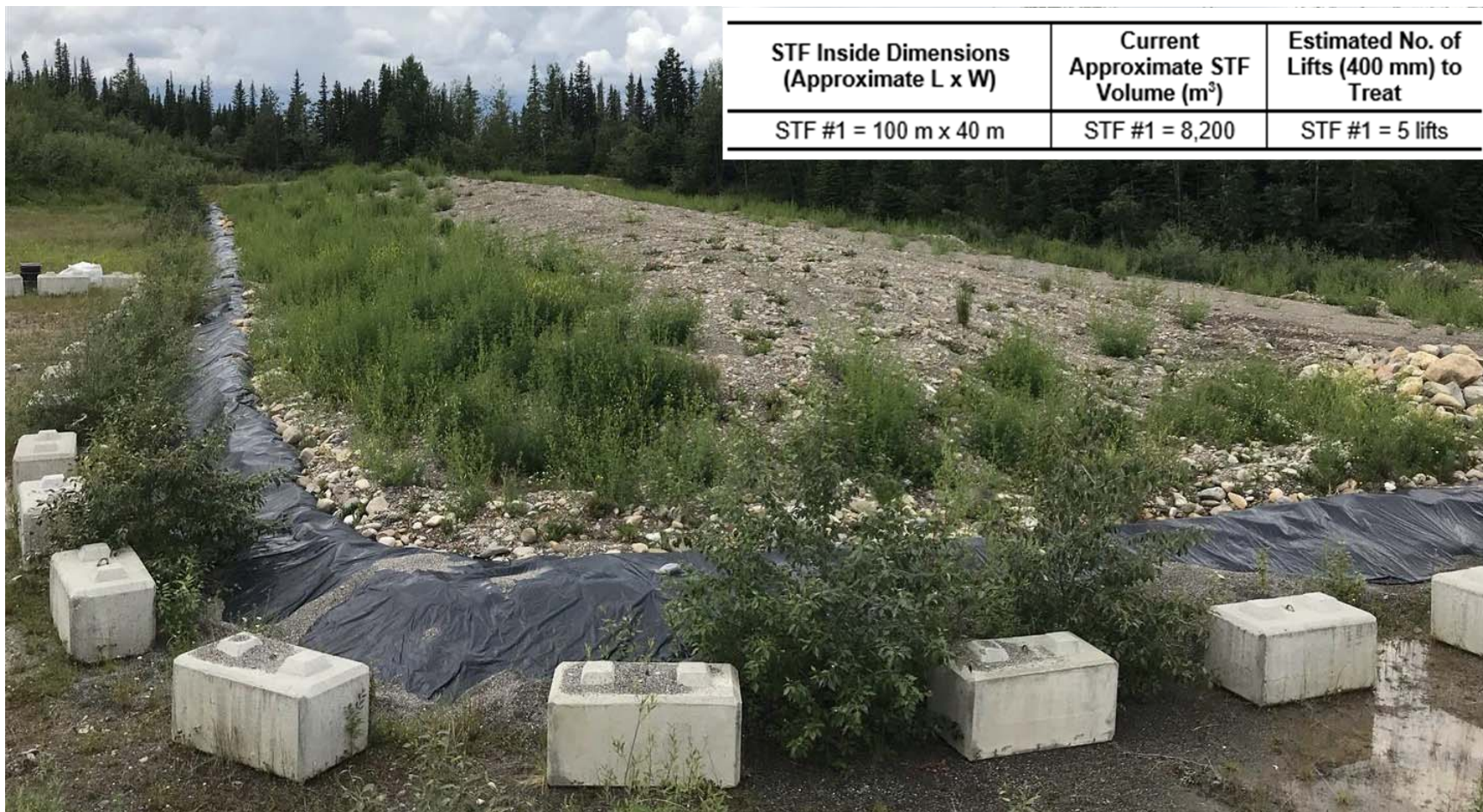
Third Bench –
STF's

Second Bench –
Winter Abrasive Storage

First Bench –
Maintenance Garage
and Residences

Site
Entrance

Sikanni STF #1



STF Inside Dimensions (Approximate L x W)	Current Approximate STF Volume (m ³)	Estimated No. of Lifts (400 mm) to Treat
STF #1 = 100 m x 40 m	STF #1 = 8,200	STF #1 = 5 lifts

Photo: View of STF #1 facing west

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Sikanni STF #2



STF Inside Dimensions (Approximate L x W)	Current Approximate STF Volume (m ³)	Estimated No. of Lifts (400 mm) to Treat
STF #2 = 55 m x 45 m	STF #2 = 5,990	STF #2 = 6 lifts

Photo: View of STF #2 facing north

Sikanni STF



Video: View starting at third bench entrance (south east) showing STF #1 then STF #2

Sikanni STF

- Scope of Work including Annex C Memo – FY 2020/2021 Soil Treatment Data and Proposed Sequencing of Operations
 - Turn soil while adding fertilizer and water
 - Contaminated water treatment offsite – Provision and Transport and Disposal
 - Assist with soil sampling
 - Compliant soil relocation from STF to stockpile area within 500 m of the STF
 - Grade STF, provide covers and hold downs and secure STF covers

Sikanni STF

- UPT Optional Work (B)

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Sikanni STF

- Contaminated Water Treatment Offsite - Provision and Transport and Disposal
 - Sections 026100.02 – 1.1.1 and 026100.02 – 1.1.2 and UPT line items 11 and 12
 - Includes ancillary tanks, storage containers, equipment and piping to collect, store, and sample contaminated or potentially Contaminated Water
 - Volume of water transported off-site for treatment and disposal

Sikanni STF – Water Treatment



Photo: Water in STF #1, from northwestern corner, facing northeast.

Sikanni STF – Water Treatment



Photo: Water in STF #1, from northeastern corner, facing northwest.

Sikanni STF – Water Treatment



Photo: Water in STF #2, from northwestern corner, facing east.

Sikanni STF – Water Treatment



Photo: Water (red arrow) in STF #2, from southeastern corner, facing west.

Sikanni STF

- Soil Turning
 - Section 026100.08 – 1.1.1 and UPT line item 13
 - Time of excavator to access the STF's and turn / flip the soil
 - Turn / flip soil in 400 mm lifts



Sikanni STF

- Fertilizer Supply and Application
 - Section 026100.08 – 1.1.2 and UPT line item 14
 - High nitrogen water soluble fertilizer supplied and applied to the STF Cells to assist with bioremediation



Sikanni STF

- Water Application
 - Section 026100.08 – 1.1.3 and UPT line item 15
 - Water supplied and applied to the STF Cells to assist with bioremediation at the discretion of the Departmental Representative
- Soil Sampling Assistance
 - Section 026100.08 – 1.1.6 and UPT line item 16
 - Time of backhoe or excavator to access the STF Cells to excavate soil sampling locations
 - Provide assistance for collection of Soil Samples

Sikanni STF

- Compliant Soil Relocation
 - Section 026100.08 – 1.1.7 and UPT line item 17
 - Volume of soil moved from the STF to Soil Stockpile Area, within 500 m of the STF



Sikanni STF

- STF Liner Repairs
 - Section 012520 – 1.8.1.5 and UPT line item 18
 - Repairs of any pre-existing damage to liner, both berms and base
 - Be prepared to repair a minimum of 10 square meters of liner



Photo: Example of liner damage

Sikanni STF

- Facility Closure and Place and Secure STF Covers
 - Section 026100.08 – 3.2.1.2 and UPT line item 19
 - Grade soil for drainage to prevent ponding within STF
 - Cover soil and secure cover with hold downs after grading soil for drainage. Provide and install cover and hold downs



End of Presentation