## Sonic Pit Description of Work

Sonic Pit is an existing 38.04 ha sand and gravel operation owned by Terus Construction, a Division of Colas Western Canada Inc. (Terus) near Mackenzie, BC. The pit functions on crown lands under File Number: 0292824 and under the *Mines Act* with the Ministry of Energy, Mines and Low Carbon Innovation (EMLI) permit G-9-65, Mine Number: 0900102. Terus wishes to continue operating the mine and is providing updated Mining and Reclamation Plans as part of an amendment application to extend the operational dates of the pit.

The Mining Development Plan (the "Mining Plan") outlines both the planned mining activities within the next 5-year period (Current Phase Mining Area) as well as mining activities beyond the Current Phase and over the life-of-mine (Future Phases of Mining Area). The intent is to continue mining within the central portion of the property into the northwestern "notch" of the southern mining area (1.42ha orange polygon) before mining the "notch" (5.98ha purple polygon) and the lands across Parsnip East Forest Development Road into the Future Phases of Mining (8.80ha purple polygon). The central area of the pit has been mined to create a flat Processing and Stockpile Area (5.82ha yellow polygon) at 720m elevation. Large sections of the property in the south and east, as well as a strip of land adjacent to the Processing and Stockpile Area in the west are currently under reclamation (13.50ha light green polygon). A twoway road (0.99ha grey polygon) runs from BC-39 into the southwestern portion of the Mine Area boundary providing access to the Processing and Stockpile Area. Topsoil and Overburden (1.53ha brown polygon) has been placed in the adjacent to the Current Phases of Mining Area for reclamation purposes. A small portion of land housing a concrete batch plant been carved out of the Mine Area adjacent to the area under reclamation and the Processing and Stockpile Area.

Mining methods at the Sonic Pit include excavation of pit run using wheel loaders and excavators. Activities consist of excavation, crushing, screening, washing, grading and stockpiling materials. As well, sometimes on site there is a mobile batch asphalt plant that is not included under this amended Mines Act Permit application as its operations are handled by WorkSafeBC. At this time the plant is not on site. Sand and gravel will continue to be extracted in 6m lifts with 2:1 final reclamation slopes to the 5-meter property boundary as described in the Final Reclamation Plan. Final reclamation of the pit will be undertaken progressively as final grades, setbacks and slopes are achieved followed by planting of seedlings and shrubs for Forestry and Wildlife purposes.

Washing of aggregate is ongoing and the location of the Ponds and Wash Plant are shown on the Mining Development Plan, within the Processing and Stockpile Area. Water for washing is sourced from an onsite groundwater well #124489 (Licence Number 504080) and pumped to Pond #1 where it is stored as reservoir to enable washing throughout the production season. The water circuit is a recirculating, closed loop system, where clean water to the wash plant from Pond #1 enters the plant and dirty water exiting the plant is pumped to Pond #2. Water in Pond #2 is given adequate time to settle out, after which clean water is returned to Pond #1 and the cycle is repeated as required. Some water is lost to evaporation and moisture in the material

shipped out. This deficit is supplemented with the water source. As Pond #2 fills with sediment from washing it will be periodically cleaned out with an excavator and the fines removed and mixed with the topsoil and overburden to enhance it as growing medium in final reclamation.

Operations will occur seasonally from March to November and supply aggregate to local construction projects. This is a small-scale operation with reserves of approximately 829,000m3. At an average annual production of 9,999m3 per year, the lifespan-of-mine is 83 years.