

Our ref: 044985

April 13, 2022

Michael Parker
Vice-President, Canadian Environmental Compliance
Clean Harbors Canada Inc.
4090 Telfer Road RR #1
Corunna, Ontario
N0N 1G0

Cell 20-1 – Waste Fill Plan

Dear Michael Parker,

This letter outlines the proposed waste fill plan for Cell 20-1.

The proposed fill plan for Cell 20-1 is divided into 5 phases and are presented on Figures 1 and 2. Once Clean Harbors has had time to review, a site meeting should be scheduled to discuss and amend the fill plans. Phase notes should be installed on the figures and the figures finalized and approved for use.

Phase 1 represents the current fill plan that is being used by Clean Harbors to fill the western section of Cell 20-1 to grade. Phase 1 has approximately 100,000 cubic metres of waste capacity. The plateau area is proposed to be used for waste haulage and unloading. As such the surface will be waste materials and rig mats will be used for the haulage road used by highway vehicles. The eastern slope will have interim cover since the stormwater will drain into the eastern section of Cell 20-1.

Phase 2 is an interim phase that will allow additional area of final cover to be placed. The estimated waste disposal capacity is 25,000 cubic metres. Phase 2 will not increase the leachate generation area. As such, Phase 1 and 2 may be combined with a focus on the slopes and areas that would receive interim cover. Prior to the construction of Phase 2, the perimeter leachate collection system would be required to be installed. PTS-06 would be installed and the operating level of the pump station should be set to the 192 m ASL zone to ensure that the waste is relative drained in the area and suitable for vehicle traffic. PTS-06 should commence operation when the waste disposal operation moves to Phase 3.

Phase 3 represents the movement into the eastern portion of Cell 20-1. Phase 3 has approximately 109,000 cubic metres of capacity. Prior to the placement of waste in Phase 3, the southern portion of the cell would be required to be dewatered and surface water pumping system shifted to the northern section of the berm. The current temporary leachate pumping station would be moved to the previous surface water pump area south of the berm. The revised leachate pumping station would be set to maintain the maximum leachate level at 2 metres below the top of the berm once waste has been placed to an elevation of 185 m ASL. The central berm that is located along the buttress could be partially removed. The perimeter leachate collection system installed including PTS-07. The bottom portion of the access ramp could be partially removed at this time. Phase 3 would allow the south portion of Cell 20-1 to be completed to final grade and interim cover placed.

Phase 4 has a waste disposal capacity of 171,000 cubic metres. The perimeter leachate collection system is extended and a significant portion of Cell 20-1 is completed to final grade. The temporary mid-berm could be removed and the maximum leachate elevation in the cell could be raised to 187 m ASL (about 1 metre below the northern buttress (188.3 m ASL)).

Phase 5 is the final fill stage for Cell 20-1 and has an estimated waste disposal capacity of 140,000 cubic metres. The final section of the leachate collection system is installed and the PTS-08 is installed. Once the waste reaches an elevation of 296 m ASL, the leachate pumping levels for PTS-06, PTS-07, and PTS-08 could be set to the long-term leachate operating level of a maximum of 196 m ASL.

Once waste placement has commenced in Phase 5, Cell 20-2 planning and construction should commence.

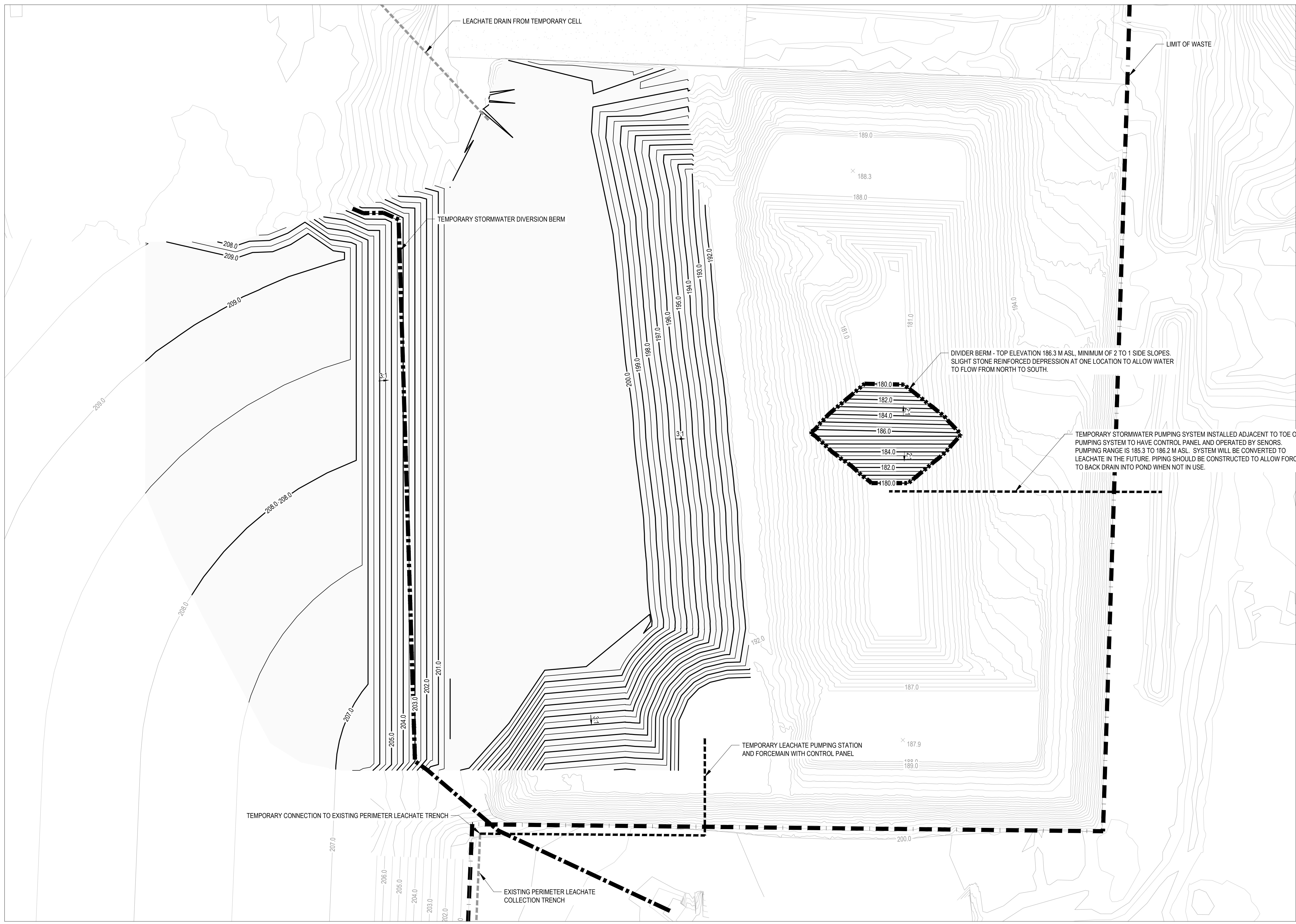
Regards



James R. Yardley
Senior Engineer

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Copy to: Mackenzie Costello, Clean Harbors
Larry Core, Clean Harbors
Tom Weir, Clean Harbors
Pierre Brunelle, Murphy Contracting
Brian Dermody, GHD

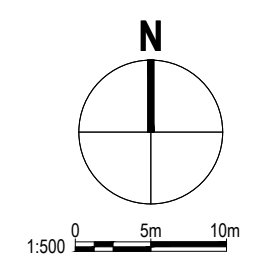


PHASE 1 - 101,000m³



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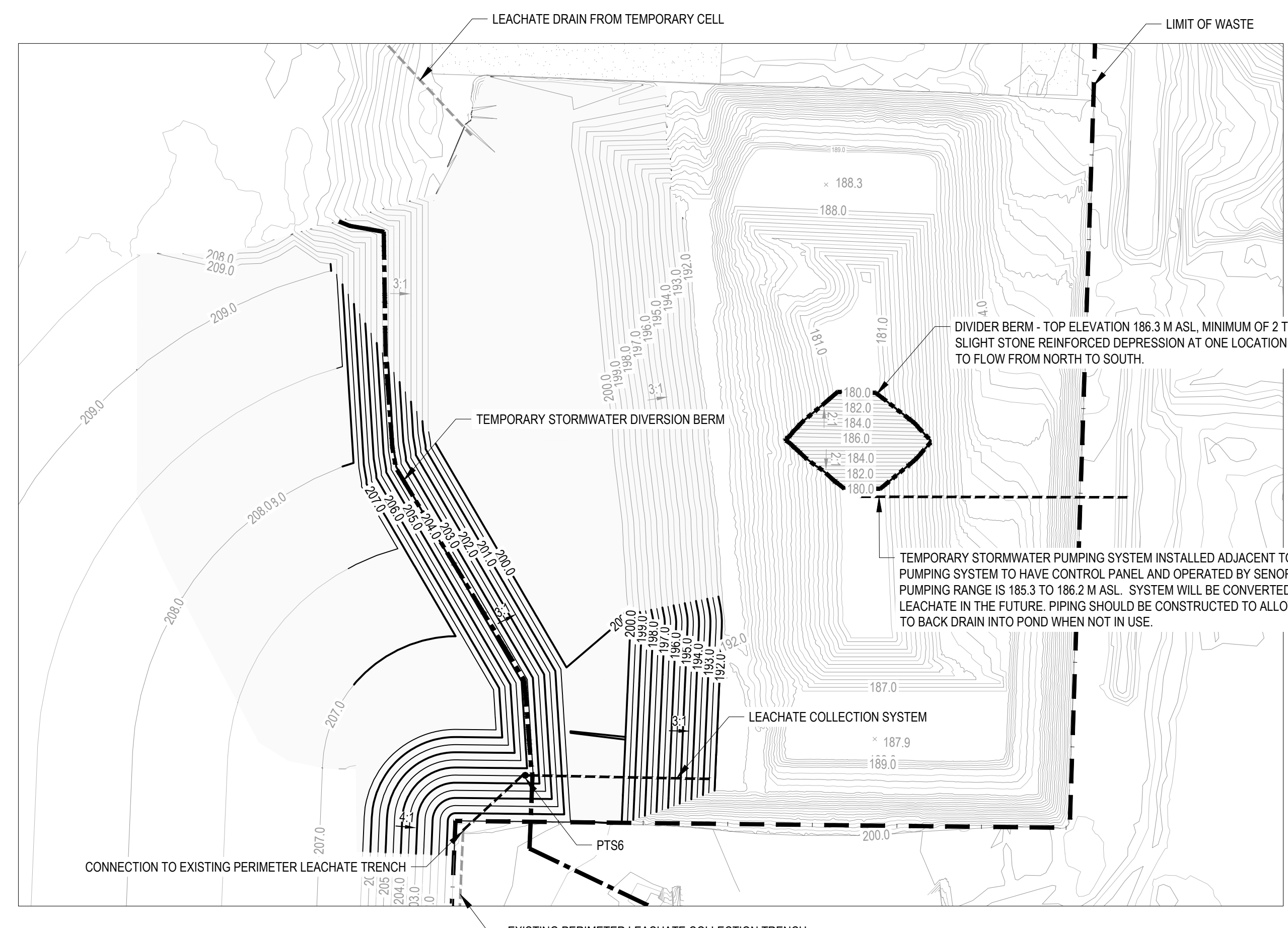
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**LAMBTON LANDFILL
 CELL 20-1**

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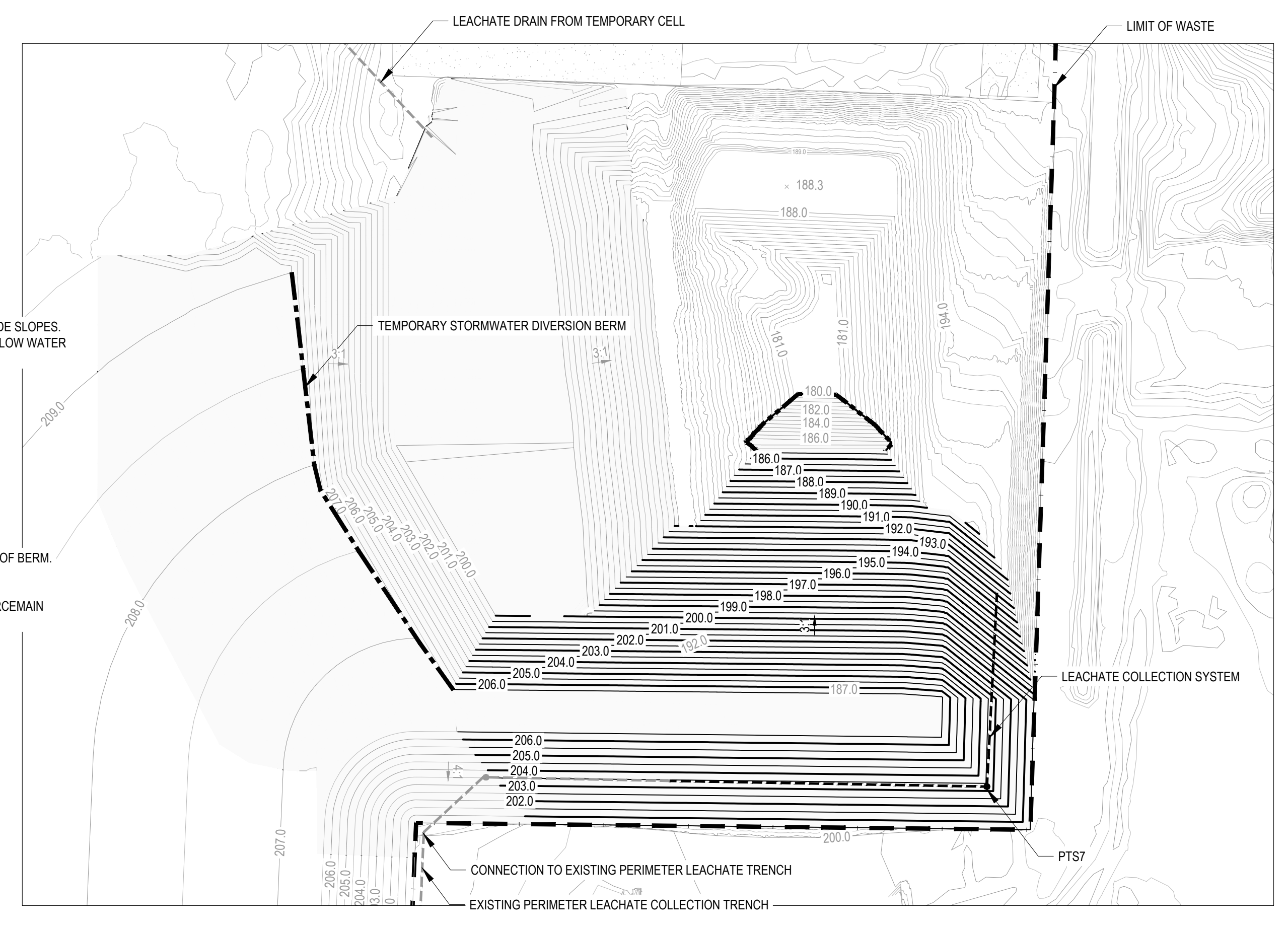
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**CELL 20-1 WASTE
 PLACEMENT PLAN
 PHASE 1**

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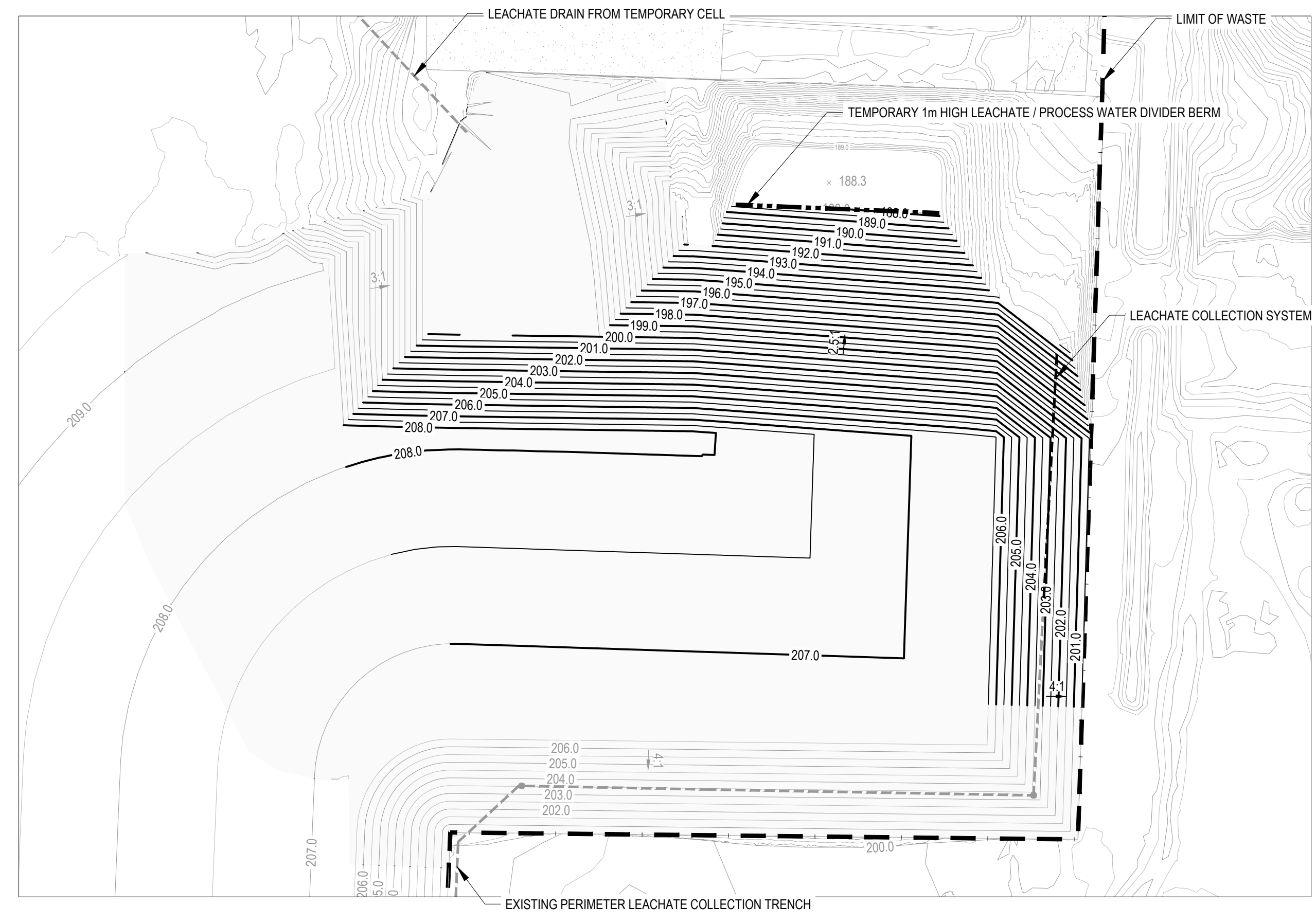
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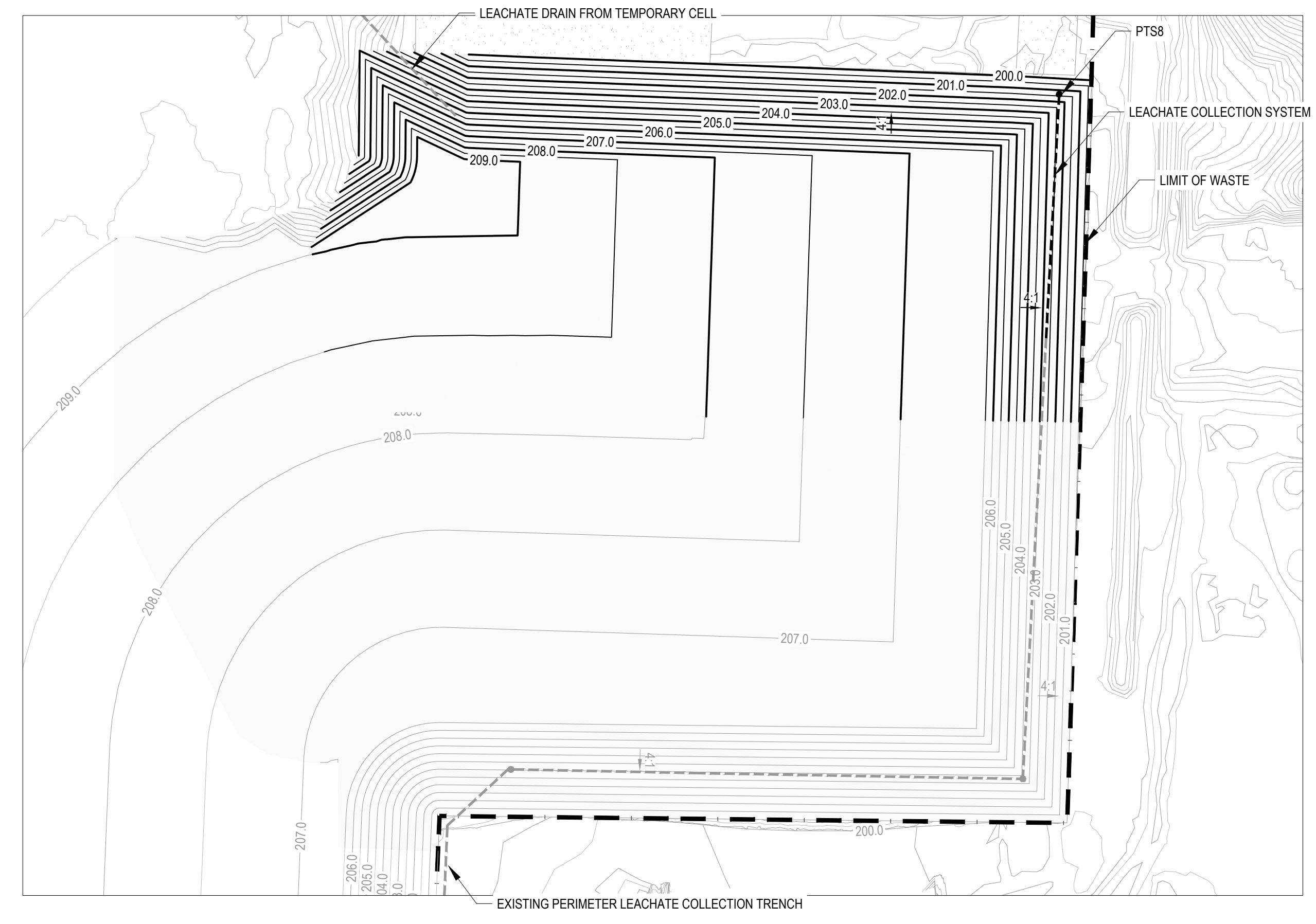
PHASE 2 - 25,000m³



PHASE 3 - 108,900m³



PHASE 4 - 171,000m³



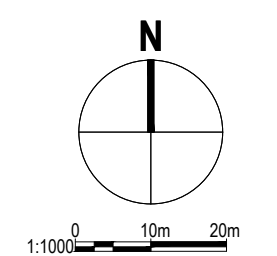
PHASE 5 - 140,000m³



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Client
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Project
LAMBTON LANDFILL CELL 20-1

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Title
CELL 20-1 WASTE PLACEMENT PLAN PHASE 2,3,4 AND 5

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