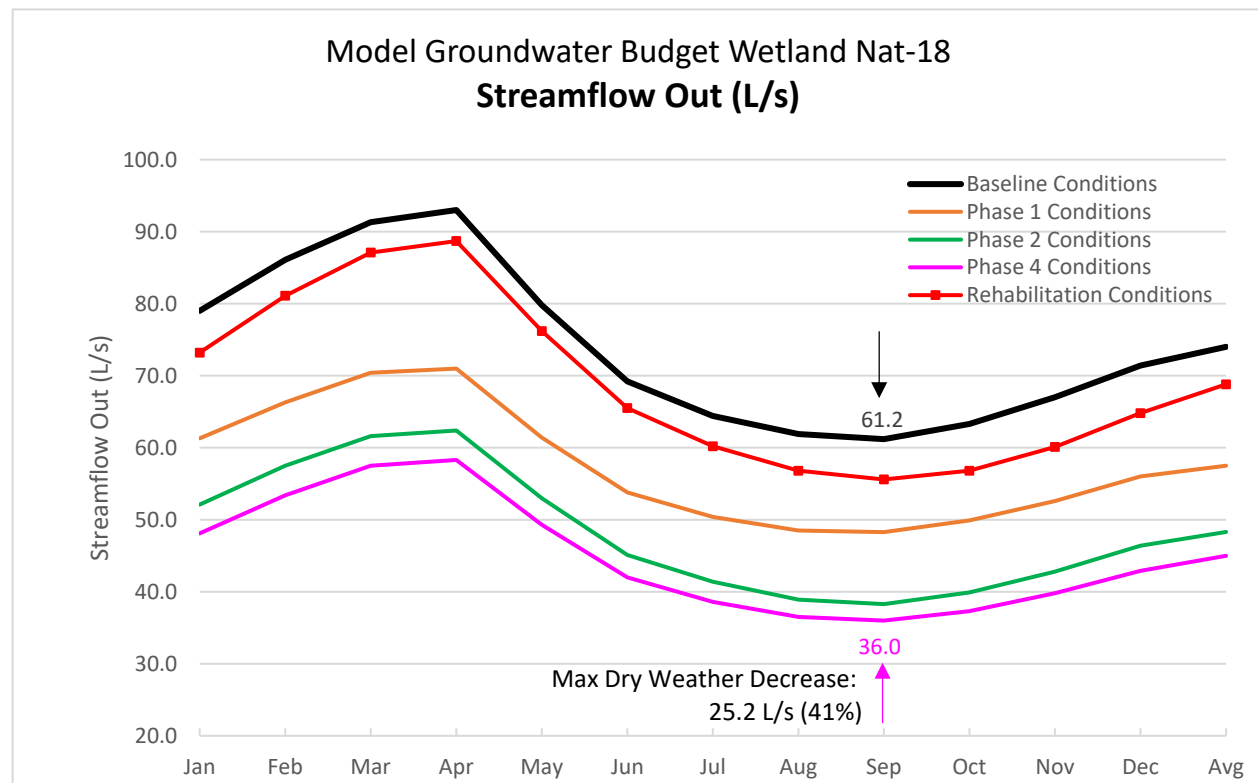
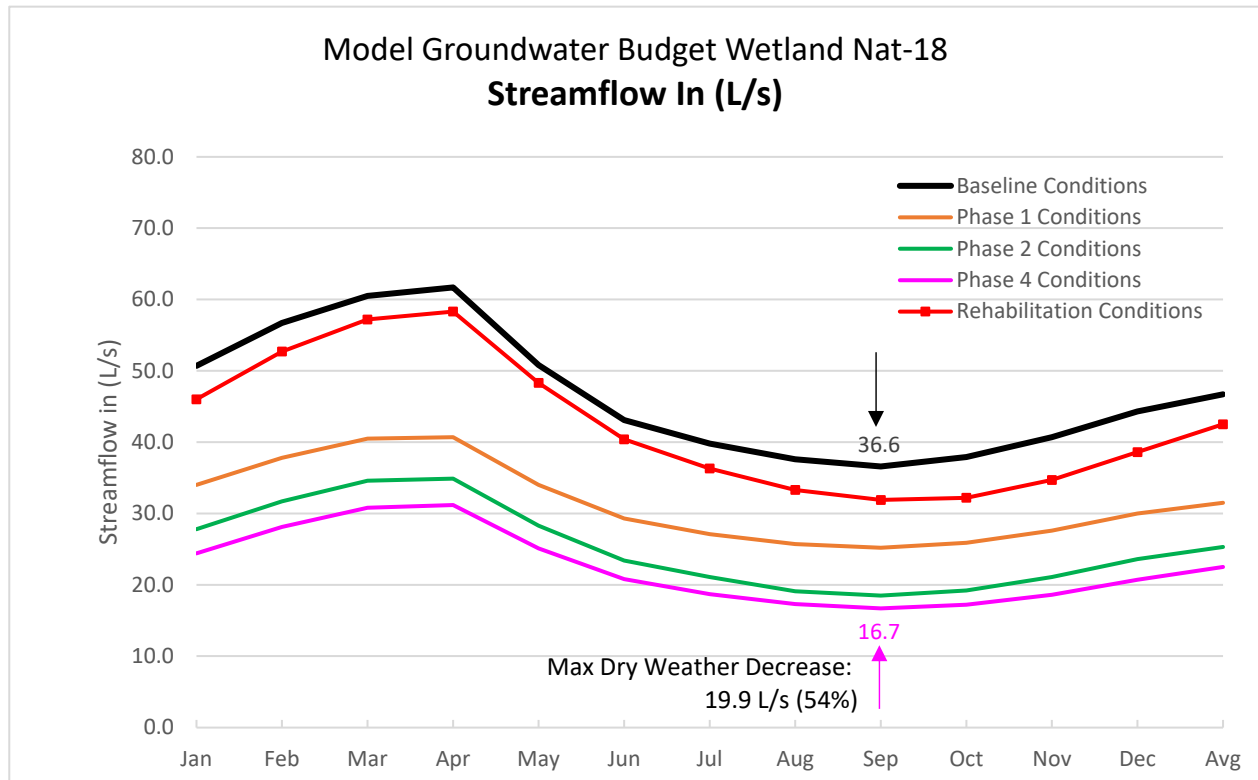




Source: Draft Impact Assessment Report, Strada Aggregates, Proposed Strada Pit/Quarry, by Earthfx, Aug 14, 2024
(See enclosed data Table)

Streamflow In and Out Impacts
Proposed Strada Quarry Operation Conditions
Horning's Mills Lake Between County Rd 124 (In) and Main Street (Out)

Page 46

Table 3.2: Monthly groundwater budget under **Baseline Conditions** Wetland NAT-18

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Streamflow In (L/s)	50.7	56.7	60.5	61.7	50.8	43.1	39.8	37.6	36.6	37.9	40.7	44.3	46.7
Streamflow Out (L/s)	79.0	86.1	91.3	93.0	79.8	69.2	64.4	61.9	61.2	63.3	67.0	71.4	74.0
Avg Lake Stage (masl)	450.8	450.8	450.8	450.8	450.8	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.8

Page 70

Table 4.5: Monthly groundwater budget under **Phase 1 Conditions** Wetland NAT-18

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Streamflow In (L/s)	34.0	37.8	40.5	40.7	34.0	29.3	27.1	25.7	25.2	25.9	27.6	30.0	31.5
Streamflow Ou (L/s)t	61.3	66.3	70.4	71.0	61.4	53.8	50.4	48.5	48.3	49.9	52.6	56.0	57.5
Avg. Lake Stage (masl)	450.8	450.8	450.8	450.8	450.8	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.8

Page 90

Table 4.13: Monthly groundwater budget under **Phase 2 Conditions** Wetland NAT-18

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Streamflow In (L/s)	27.8	31.7	34.6	34.9	28.3	23.4	21.1	19.1	18.5	19.2	21.1	23.6	25.3
Streamflow Out (L/s)	52.1	57.5	61.6	62.4	53.0	45.1	41.4	38.9	38.3	39.9	42.8	46.4	48.3
Avg Lake Stage (masl)	450.7	450.7	450.7	450.7	450.7	450.6	450.6	450.6	450.6	450.6	450.6	450.6	450.6

Page 110

Table 4.21: Monthly groundwater budget under **Phase 4 Conditions** Wetland NAT-18

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Streamflow In (L/s)	24.4	28.1	30.8	31.2	25.1	20.8	18.7	17.3	16.7	17.2	18.6	20.7	22.5
Streamflow Out (L/s)	48.1	53.4	57.5	58.3	49.3	42.0	38.6	36.5	36.0	37.3	39.8	42.9	45.0
Avg. Lake Stage (masl)	450.6	450.7	450.7	450.7	450.7	450.6	450.6	450.6	450.6	450.6	450.6	450.6	450.6

Page 130

Table 4.29: Monthly groundwater budget under **Rehabilitation Conditions** Wetland NAT-18

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Streamflow In (L/s)	46.0	52.7	57.2	58.3	48.3	40.4	36.3	33.3	31.9	32.2	34.7	38.6	42.5
Streamflow Out (L/s)	73.2	81.1	87.1	88.7	76.2	65.5	60.2	56.8	55.6	56.8	60.1	64.8	68.8
Avg. Lake Stage (masl)	450.8	450.8	450.8	450.8	450.8	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7

Source: Draft Impact Assessment Report, Strada Aggregates, Proposed Strada Pit/Quarry, by Earthfx, Aug 14, 2024

Notes: 1) Assumed CGVD2013 m asl

2) Quarry Phase 1, 2 and 4 Conditions Unknown.

DRAFT

Fig H.6

Model Baseline Water Table Condition for County Roads ()

Model Adverse Water Table Rise (Phase 4 Layer 1) by County Roads ()

NDACT DRAFT Impact Assessment Report

August, 2024

NDACT DRAFT Impact Assessment Report

August, 2024

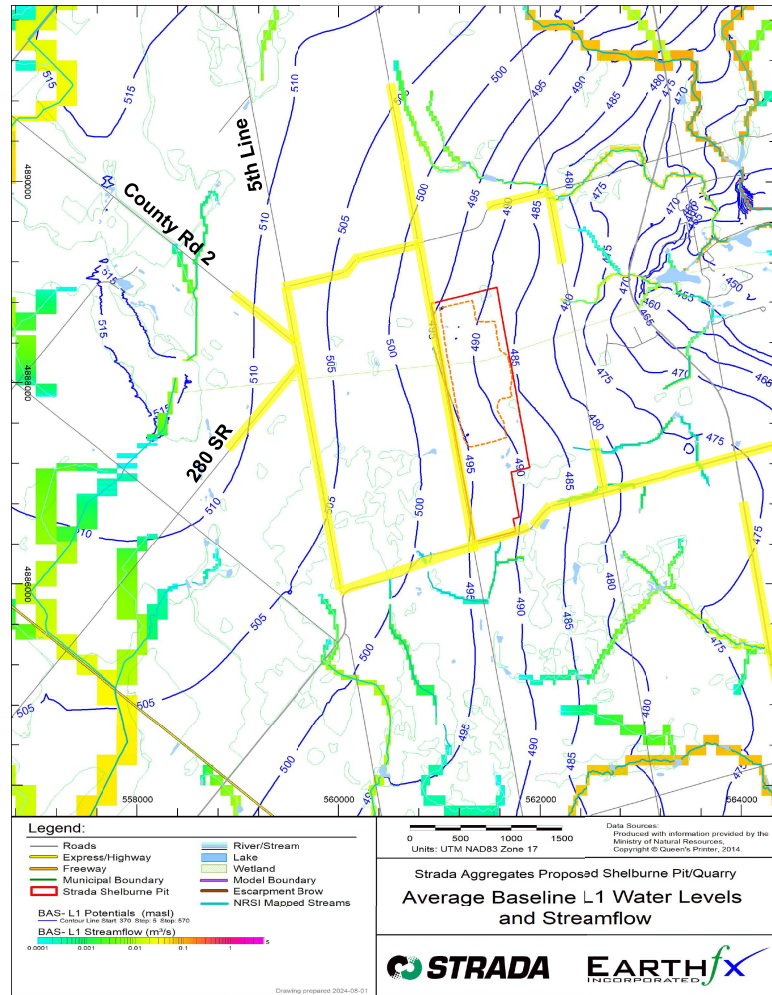


Figure 3.3: Average Baseline Layer 1 Water Table and Streamflow

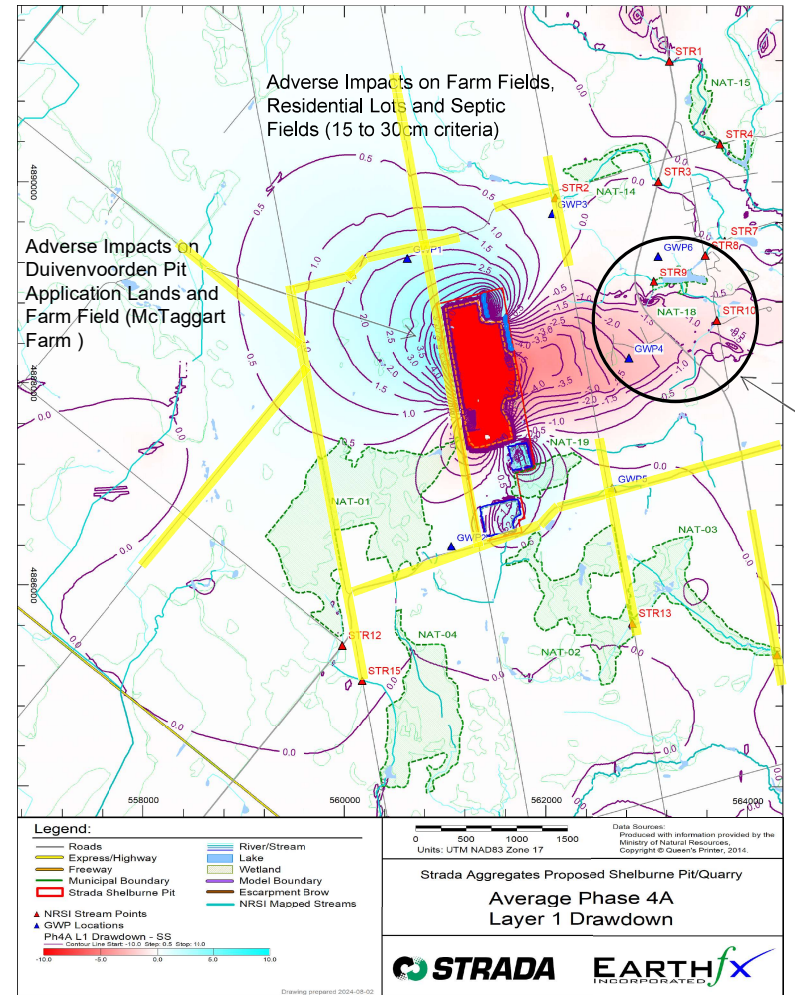


Figure 4.35: Average Phase 4 Layer 1 Drawdown

Adverse Impacts on Farm Fields, Residential Lots and Septic Fields (15 to 30cm criteria)

Adverse Impacts on Duivenvoorden Pit Application Lands and Farm Field (McTaggart Farm)

Adverse Reduction of Spring Flow, Pond Flowthrough and Streamflow in Pine River Headwaters.

Model Water Level Potential (Baseline)

NDACT DRAFT Impact Assessment Report

August, 2024

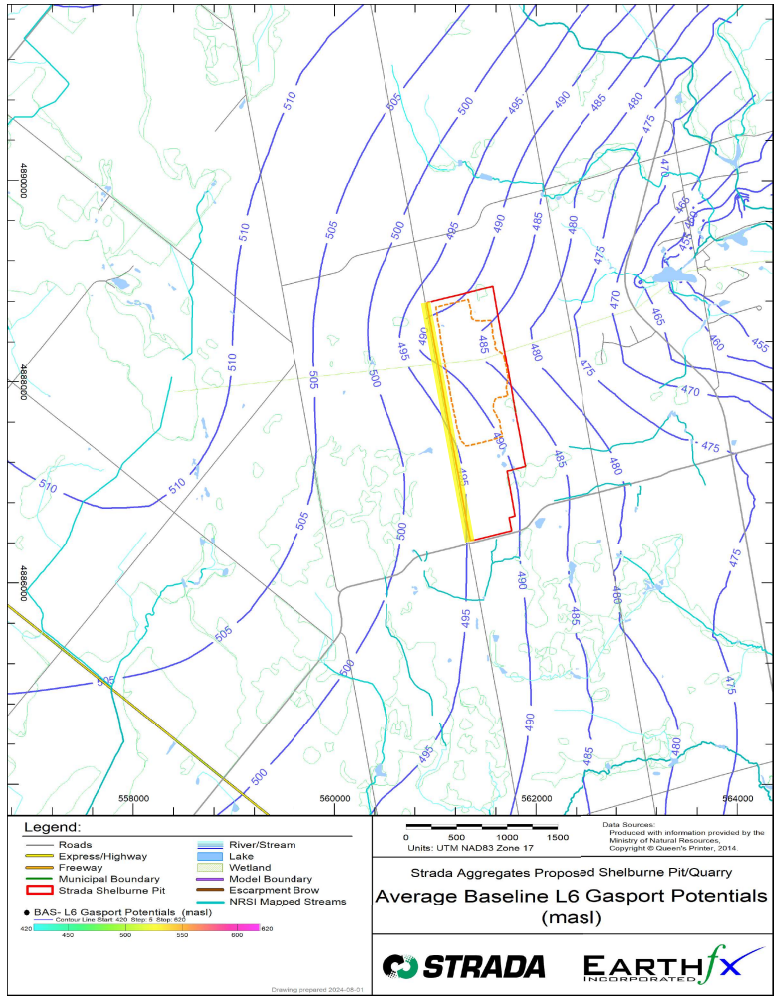


Figure 3.5: Average Gasport Formation Water Levels

Increase in Water Level Potential - Phase 4 Layer 6 West of Prince Pit

NDACT DRAFT Impact Assessment Report

August, 2024

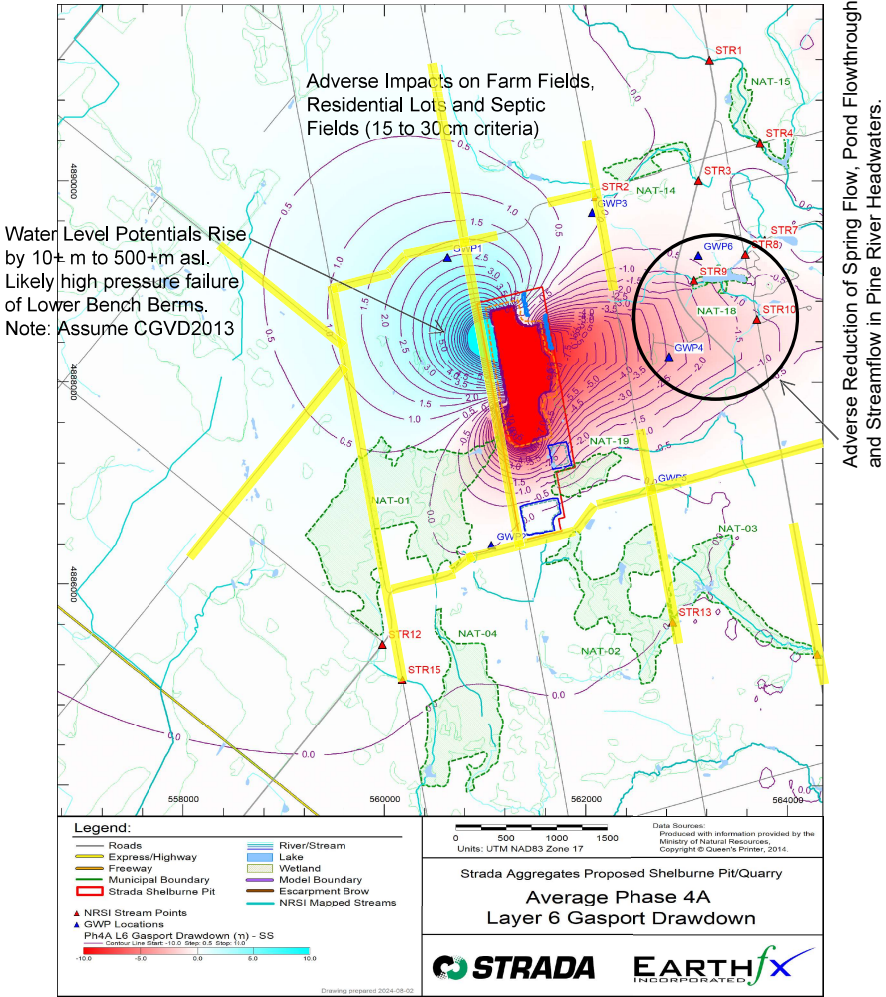
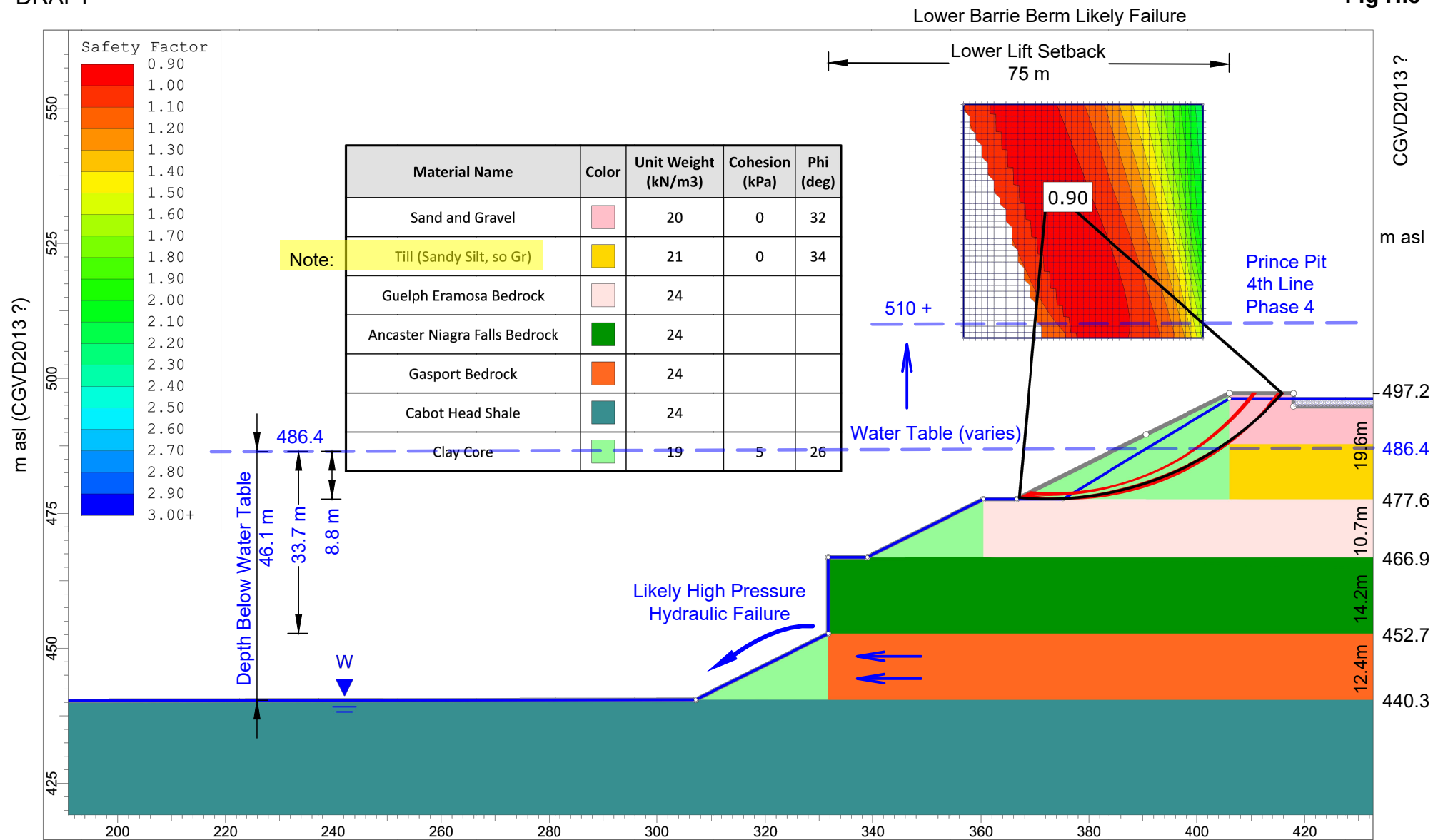


Figure 4.37: Average Phase 4 Layer 6 Gasport Drawdown





GEMTEC
CONSULTING ENGINEERS
AND SCIENTISTS

SLIDEINTERPRET 8.032

Project			
10876.086 Melancthon Quarry Slope Stability			
Analysis Description			
Slope Stability - Section C-C' Upper Berm			
Drawn By	Connor McCormick	Scale	1:950
Company		GEMTEC Consulting Engineers and Scientists	
Date	2024-05-28	File Name	100876.086 Berm Stability.slmd