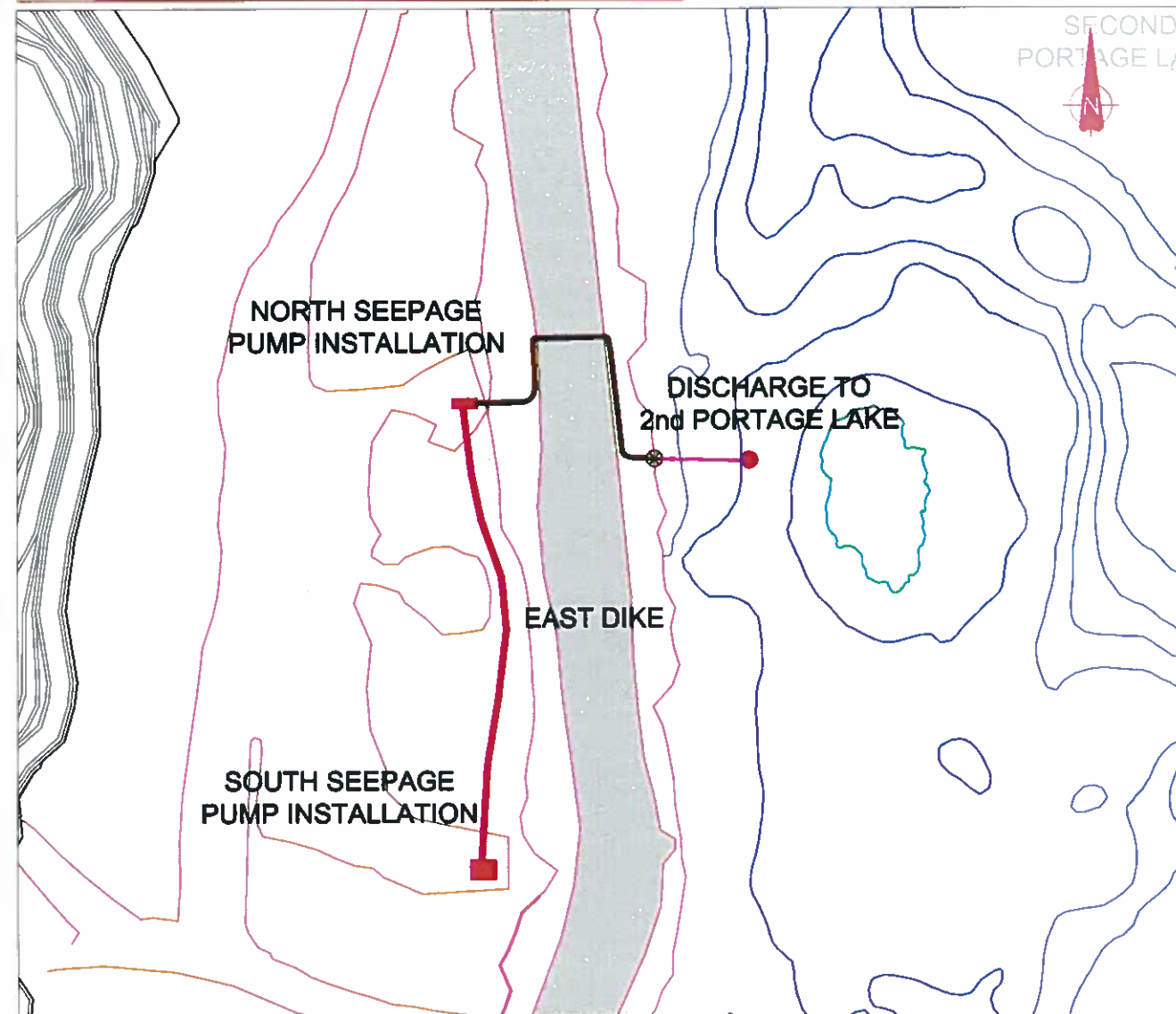


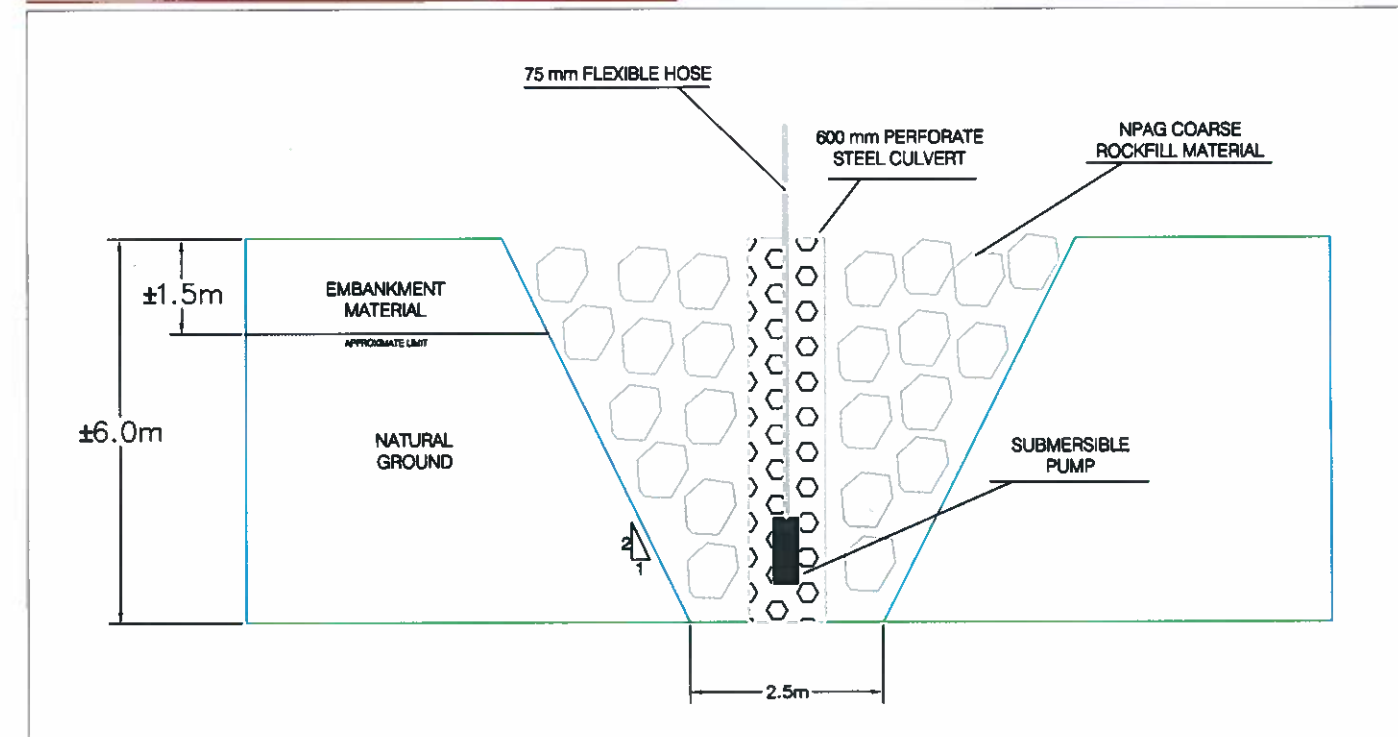
Appendix B3

**Document: *As-built: Seepage collection system
downstream of East Dike***

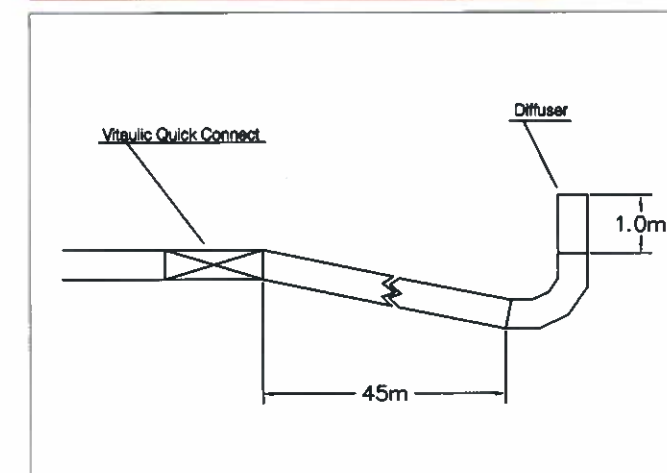
EAST DIKE SEEPAGE PUMP INSTALLATION - PLAN VIEW



PUMP INSTALLATION - TYPICAL CROSS SECTION



DISCHARGE - TYPICAL CROSS SECTION



Technical specifications

- Diffuser to be installed at the end of discharge to avoid washing the bottom of the lake.
- Diffuser composed of a 90 degree elbow pipe with a 1m long 4" pipe. The water must be discharged vertically.
- At this location the discharge is 5m deep and the ice cover 2 m thick.
- Settle down the diffuser at the bottom of the lake.
- Boulder to be used to anchor diffuser on lake bed.
- Victaulic Quick Connect fitting to be installed at the end of the heat traced pipe section to ensure easy change of discharge system in case of failure.
- Discharge pipe to be anchored on the shore to prevent the pipe from moving by wave action.
- Discharge location to be adapted to field condition.
- 80 kW generator set at the south seepage pump installation is needed to power up heat traced cable and pump.


LEGEND

- | | |
|---|---------------------------------|
|  | EXISTING ROADS/ INFRASTRUCTURES |
|  | WATER LAKE SHORE |
|  | BATHYMETRY |
|  | PORTAGE PIT FOOTPRINT |
|  | HEAT TRACED CABLE |
|  | 4" HDPE PIPE DR17 |
|  | 4" HDPE PIPE DR17 INSULATED |
|  | PUMPING STATION |
|  | DIKE |
|  | QUICK CONNECT VICTAULIC |
|  | DISCHARGE - DIFFUSER |

PUMP STATION LOCATION AND FLOW RATE

	SOUTH SEEPAGE	NORTH SEEPAGE	DISCHARGE
EASTING	639318.4875	639309.4118	639450.7460
NORTHING	7213938.2632	7214183.4241	7214156.3482
FLOW RATE	4 L/s	8 L/s	12 L/s

* Flow estimated by field measurement.

																				EAST DIKE SEEPAGE DIRECT DISCHARGE TO 2nd PORTAGE LAKE									
										PROJECT No. 12-1221-0010-3100 FILE No. EAST DIKE SEEPAGE										DESIGN MG 6OCT12 SCALE REV. A									
										CADD MG 6OCT12										EDS-01									
										CHECK EV 6OCT12																			
DRAWING NO.										REFERENCES										REV DATE DES REVISION DESCRIPTION CADD CHK RWN									