



FIGURE 7. SAMPLE POINTS SHOWN AS YELLOW DOTS WITH THE CORRESPONDING CROSS-SECTION LINES. POSSIBLE FLOW VISUALISED IN PINK ON THE DEM MADE FROM THE LAS DATA AVAILABLE FOR THE BARUTH ICE-MARGINAL VALLEY (KONING, 2017).

Drone images

In addition to the data that was available for the thesis of Koning (2017), it was now made possible to fly a drone over the research area during the fieldwork. The drone has taken photos, which could later be analysed for relevant information about the paleo channel, in addition to the already existing information. The drone that was used is a DJI Phantom 3 Advanced drone provided by the University of Amsterdam. With the apps DJI Go and Drone Deploy a flight plan was set out. The images were stored in a memory chip installed in the drone and have been processed afterwards with the software program Agisoft Photoscan Professional. This is a program that delivers high resolution products such as DEM's made with drone cameras. These cameras that have low consumer costs, and this technique of deriving data has a potential in saving time when it comes to the quick availability of the images instead of the time that is spent on transporting heavy equipment (Javernick, Brasington & Caruso, 2014). With the program, a DEM and a orthomosaic was made which will be presented in the results section.

Cross-sections

With the DEM derived from the las data set that belongs to the research area of the Baruth Ice-Marginal Valley, also used by Koning (2017), several cross sections were made in ArcGIS before the fieldwork with the 3D-Analyst tool to get a better understanding of the presence of the old channel in the landscape. In figure 7, the numbered black lines correspond with the cross-sections that have been taken.