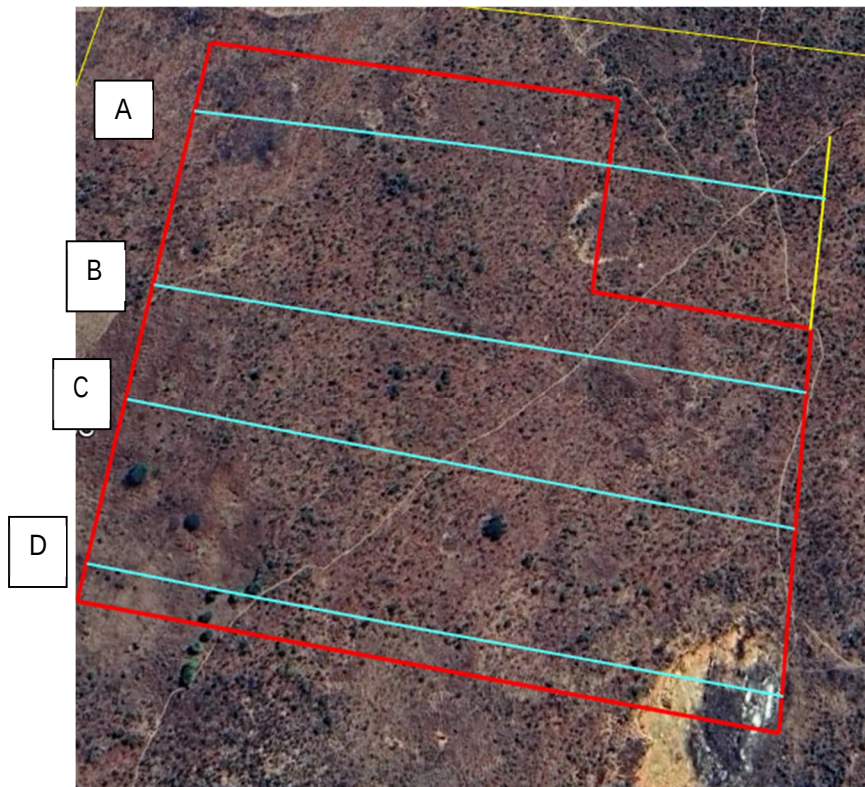


Planning of possible terracing of Nakonde S/S



Since the substation plot is in a slope with big elevation differences, it is proposed to build the substation at two levels. Otherwise, the approach of the 330kV lines will have to overcome a steep and high slope.

The land for the proposed substation possesses a steep grade which is unsuitable for construction without substantial earthworks. Therefore two options have been proposed;

(i) To construct a retaining wall to create two levels for the substation yard.

(ii) Cutting and filling the site to create a single level terrace/platform

Note that the price proposed under the Price Schedules shall be deemed inclusive of either of the options that the bidder shall opt for during construction

(i) To construct a retaining wall to create two levels for the substation yard

In this proposal, the idea is to place the 330kV equipment at the lower terrace and the 132kV equipment together with control building at the upper terrace.

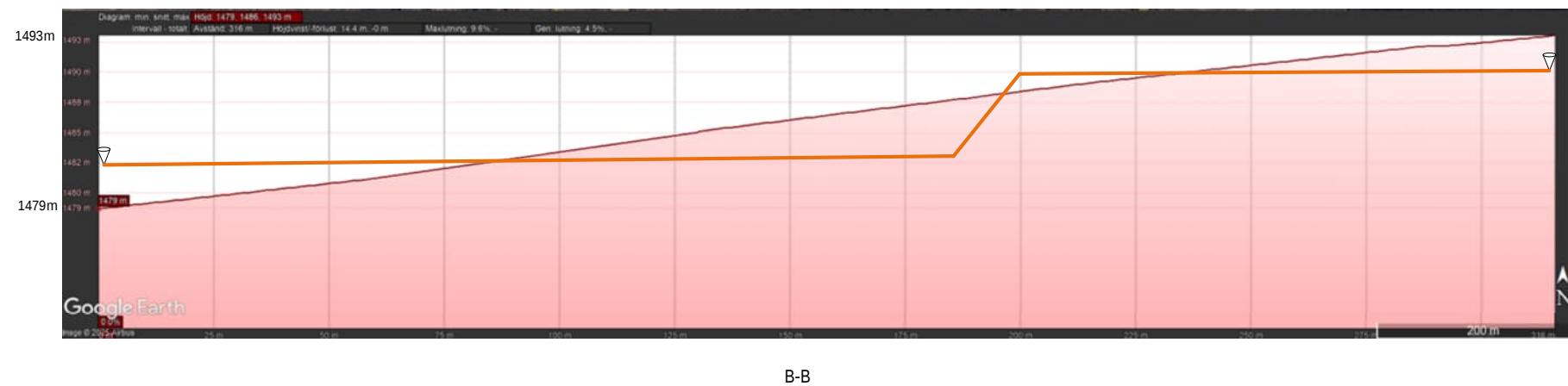
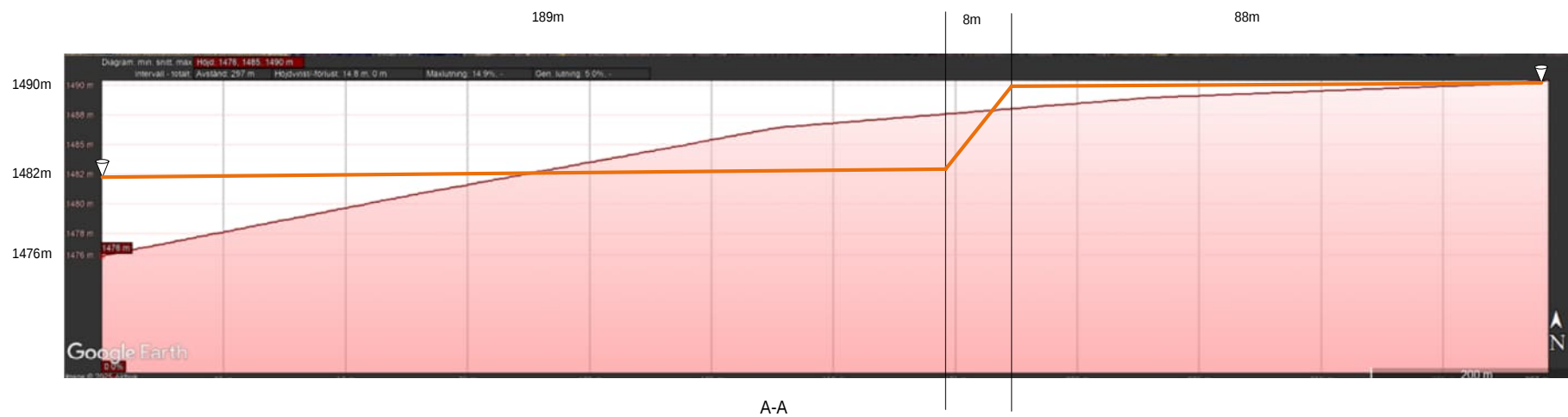
Further, it is proposed to place the DVSD at the northeast corner. That area requires less civil work than placing it at an extension of the plot to the south. And it also means that the 330kV lines will connect to the substation between profile B and D, with less height difference between the surrounding and the substation.

The height difference between the two terraces is about 8m and shall consist of a **concrete retaining wall** with built-in stairs.

The entrance road for the upper level is then proposed to connect in the northeast corner and to the lower level in southwest corner, where there is no level difference to surroundings. The entrance road at the southwest corner can be used for houses for the operators.

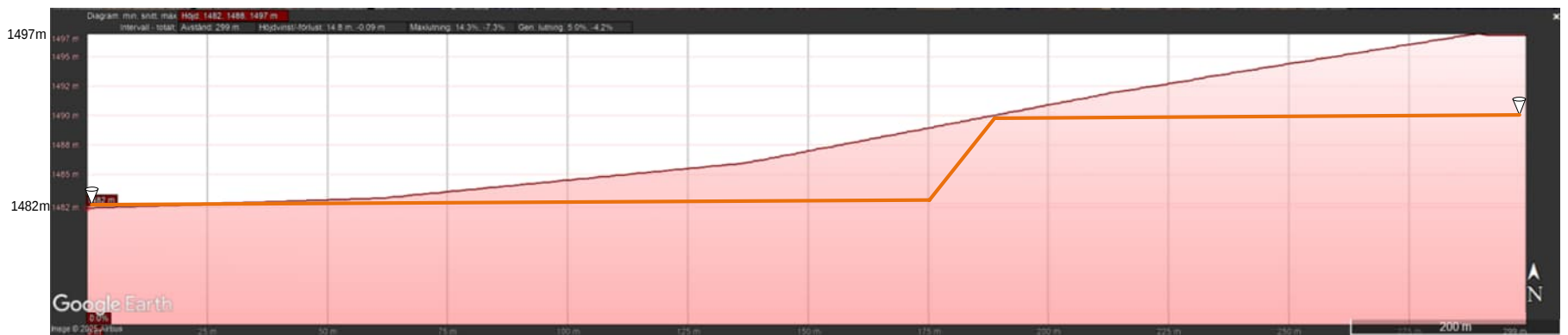
(ii) Cutting and filling the site to create a single level terrace/platform

Construct a single terrace platform (complete with geotextile, weepholes, storm water drainage channels, safety barriers and signage) comprising of slope protection on both the cut face and the embankment





C-C



D-D