Pipeline Alignment Elevation using GoogleAPI

# Need – For Tim

When doing options assessment of very rudimentary/first pass analysis of pipeline data

* sometimes want to get the profile of the land that we want for pipeline alignment
* prelim assessment where GIS is costly and just want an idea
* current tools:
  + Google Maps
    - gives coordinates but very slowly
    - Has map view that helps us where densely vegetated
    - Has no elevation tool
  + Google Earth Pro
    - Need to install
    - Shows path and elevation but cannot export data
    - Aerial view so difficult to see under vegetation
    - Cannot get co-ordinates of path
  + GIS
    - Costly and takes time

This tools aims to make this process faster – 5-10 mins and extracts data

# Purpose

When doing options assessment of rudimentary/first pass of pipeline alignments, this tool aims to address the need for obtaining surface elevation profile.

# Disclaimer

* This elevation data is extracted from Google Maps API with an accuracy of approximately “xxx”.
* NOT SUITABLE FOR DETAILED DESIGN, PLEASE ASK GIS TEAM

# Features

* Provides elevation of single point if only one node selected
* Graphs elevation for 2 or more nodes
* Alignment can be edited and graph will plot the alignment shown:
* Delete any node
* Export the current alignment to a .csv file to obtain distance and elevation along 256 points
* Export a .pdf image of “xxx”
* Export a .shp file of the pipe alignment

# How to

This tool is a webpage with Google Maps, controls are the same as accessing Google Maps with plotting functionality.

Standard Google Maps features:

* Zoom
* Street View
* Map View (with/without terrain)
* Satellite View (with/without labels)
* Fullscreen Mode

1. Open the tool at S:… pipeline-alignment-elevelation-using-GoogleMapsAPI.html
2. Click on the map to create your alignment:
   1. If you’re only interested in one point, create a node and a window will show the elevation
   2. If you’ve made a mistake, right-click to delete the node or choose to clear
   3. Drag any node to adjust its position – undo button appears if unhappy
   4. Click and drag any translucent nodes to add an in-between node

Note: the graph and data rely on your entire line so whatever is displayed will be read

1. Once satisfied with alignment you can:

Options:

* 1. Export to csv
  2. Export snapshot to pdf for report appendices
  3. Export to a shp file

To bring this tool to client meetings/workshops, simply .zip the folder and extract to use as normal