Geographic Information System

Midterm GIS Project

5000 Evler Neighborhood - KARABUK

horizontal line

# Placeholder image

# Introduction

In this project we managed to follow four main steps:

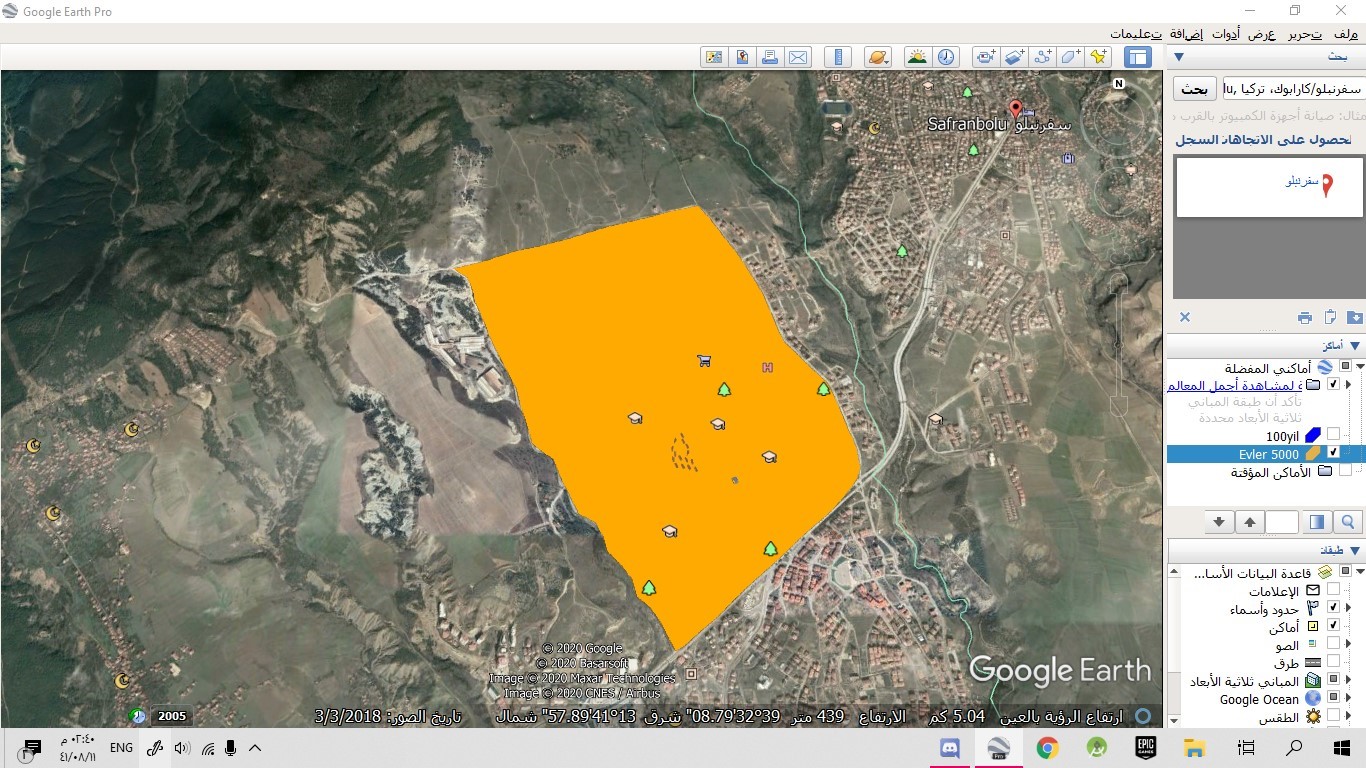
1. Define the objective
2. Data collection
3. Data analysis
4. Data presentation

## 

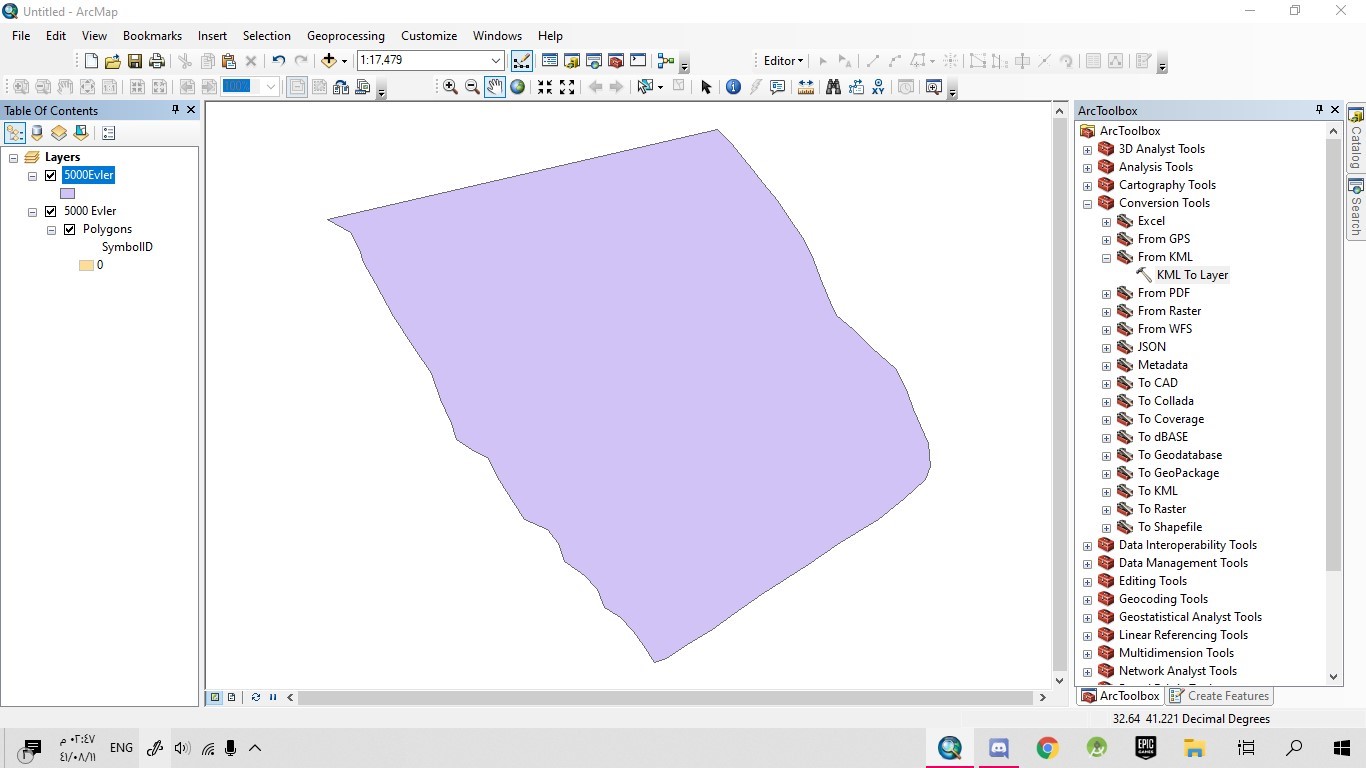
## Project report

In the first step after defining the objectives we started to collect the data as follows:

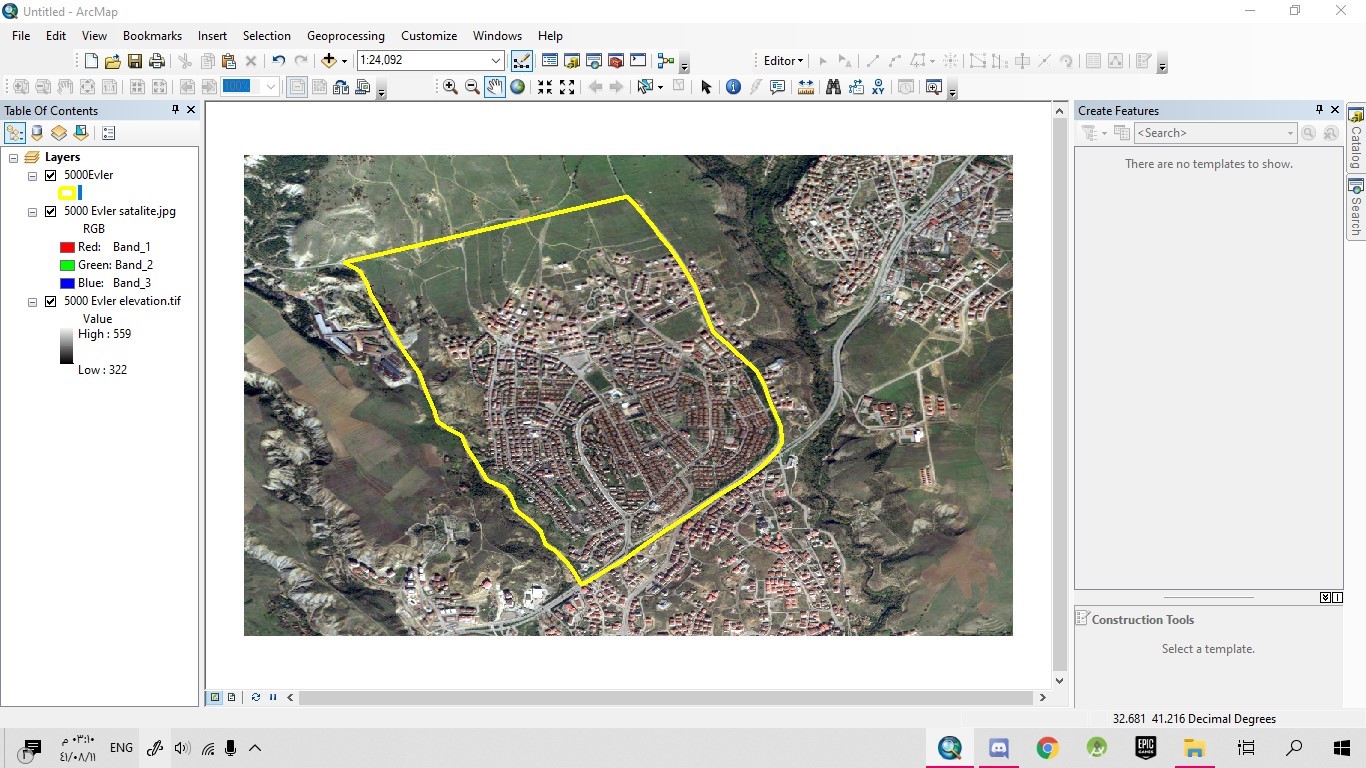
* Cutting the border for the working area that we need using **Google earth pro**

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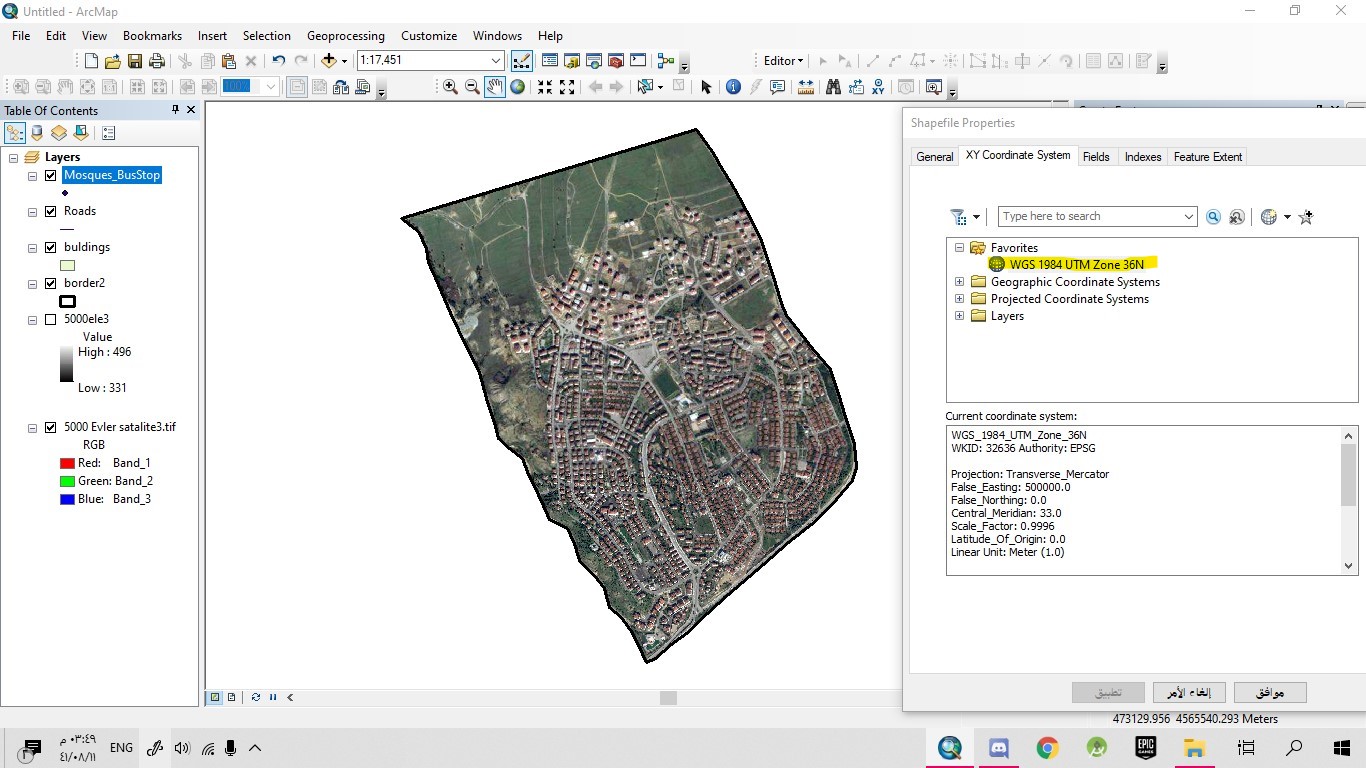
* Importing the data that we got into the **ArcMap** app



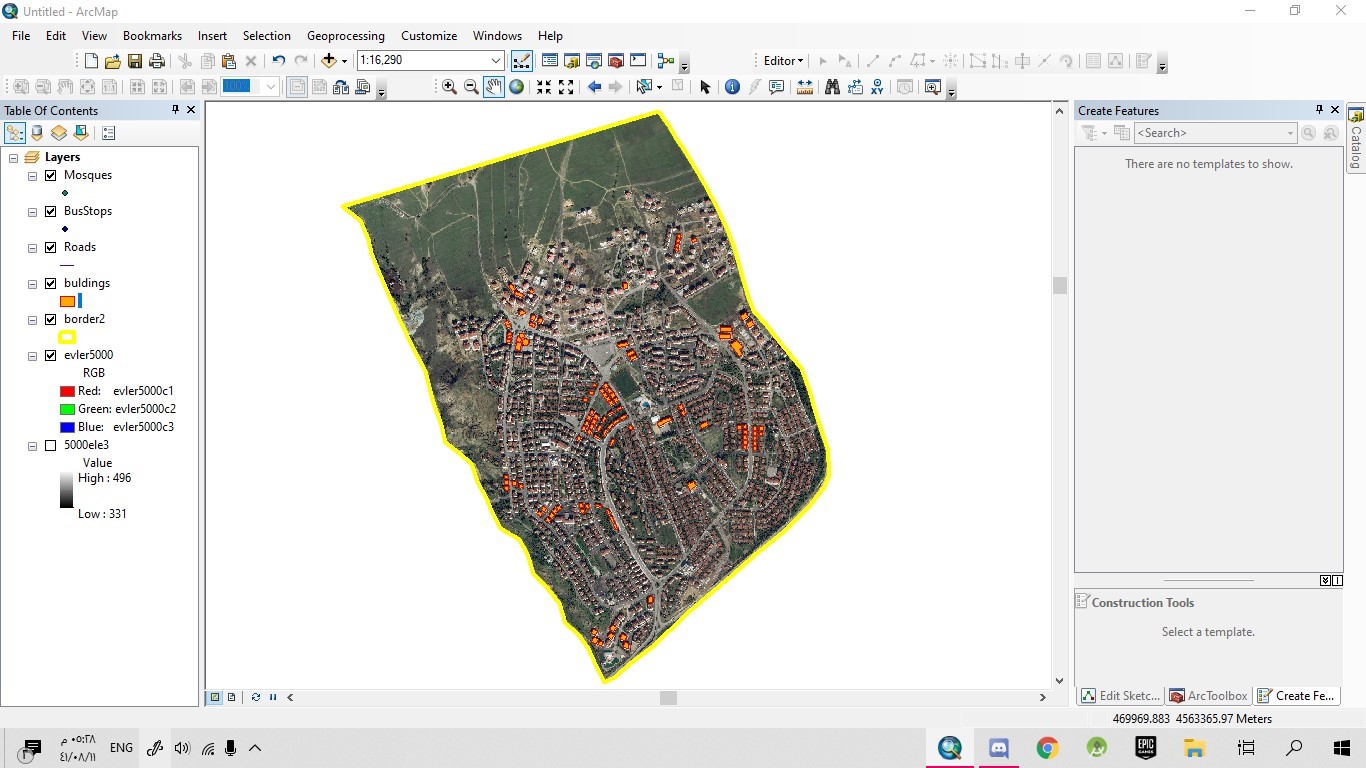
* Importing the satellite image into ArcGIS using SasPLanet

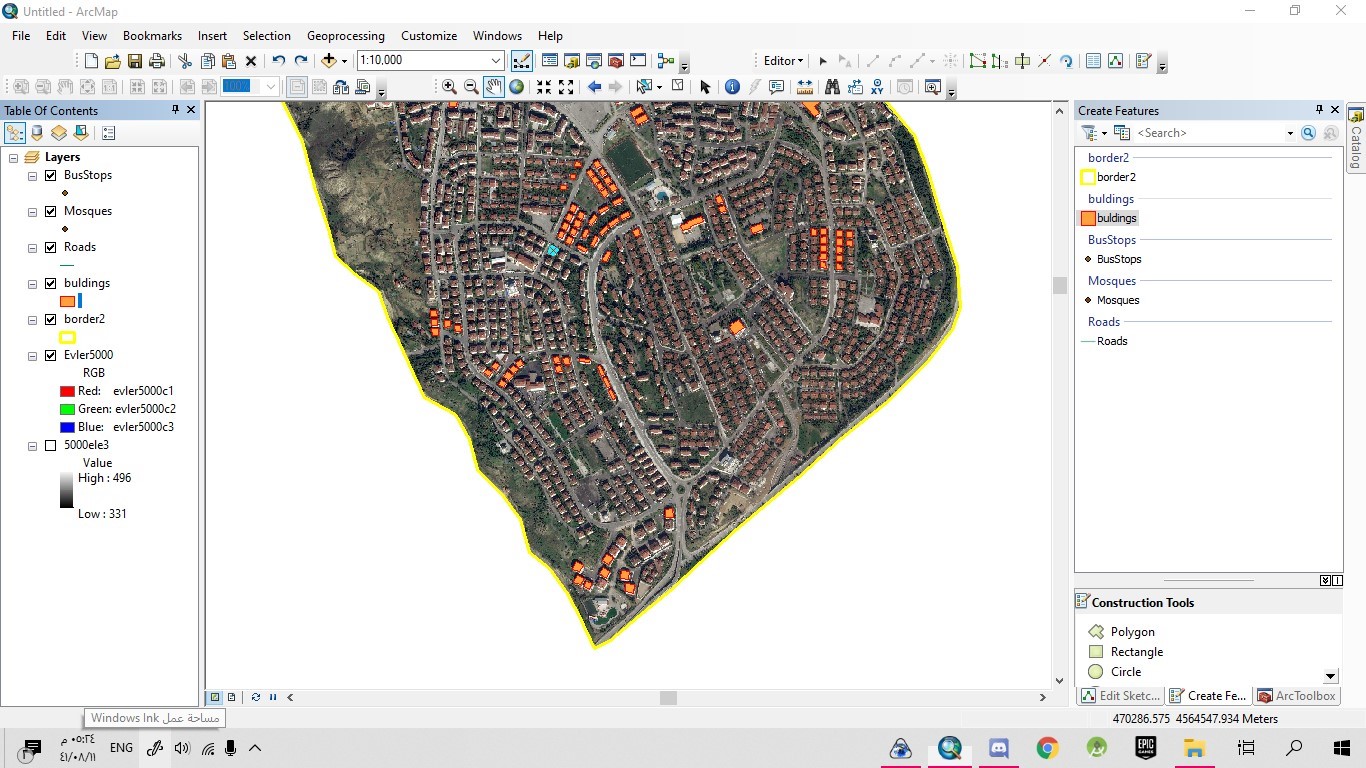


* Converting all layers to **WGS\_1984\_UTM\_Zone\_36N** coordinate system and creating the four demanded layers

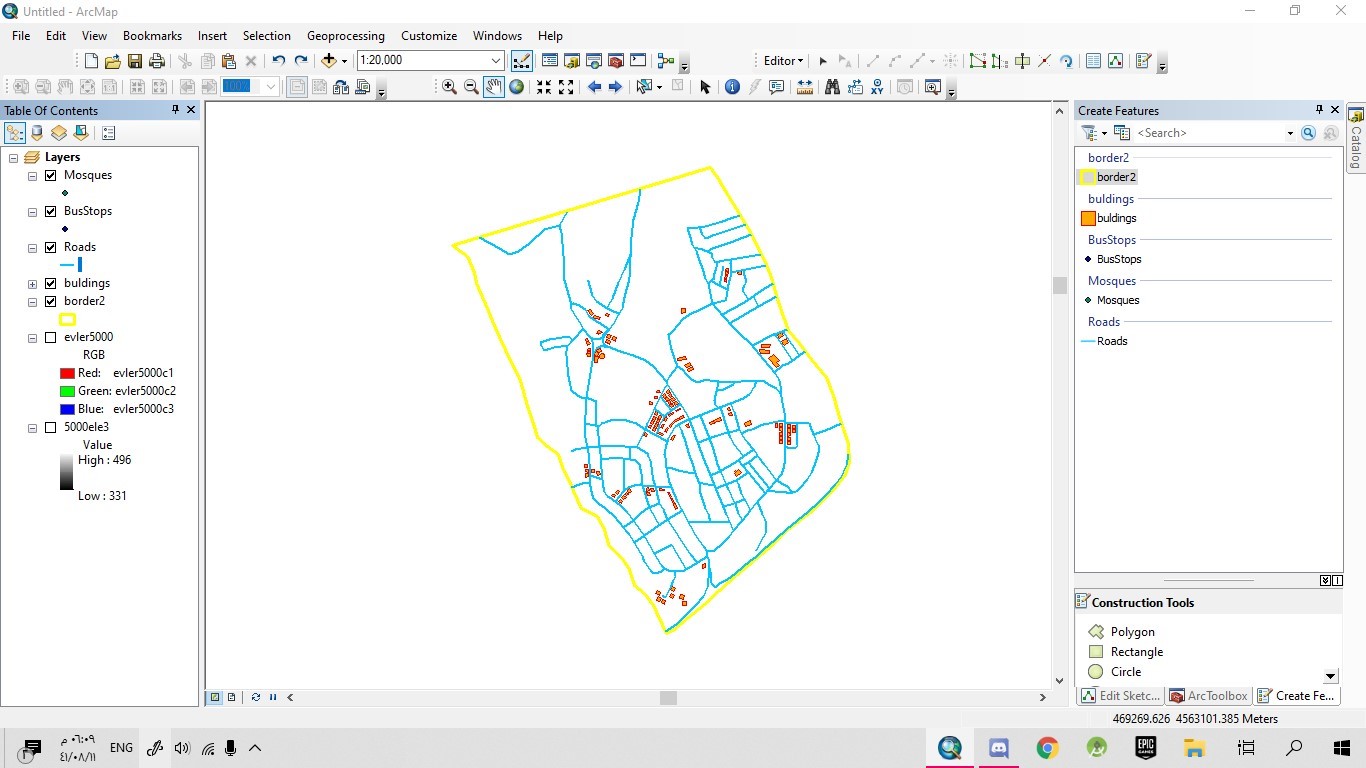


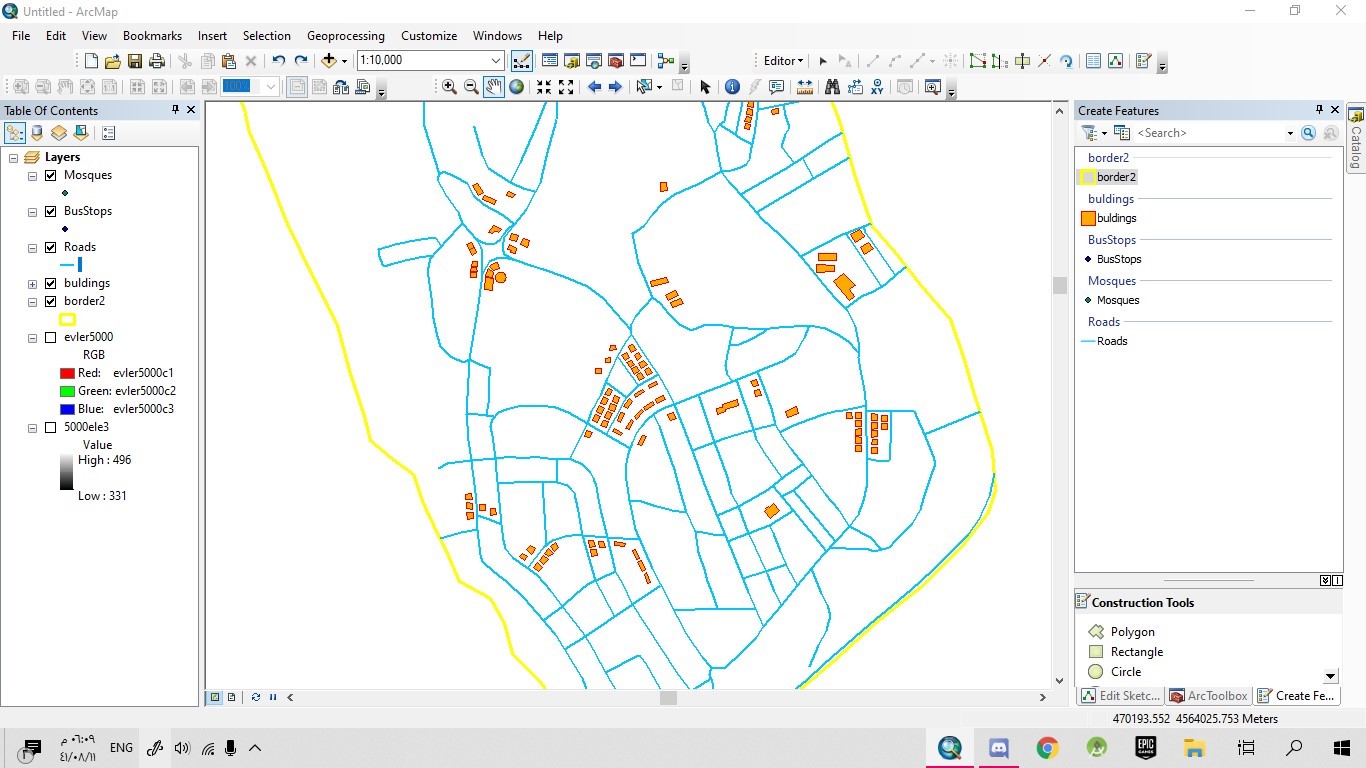
* Creating the building layer



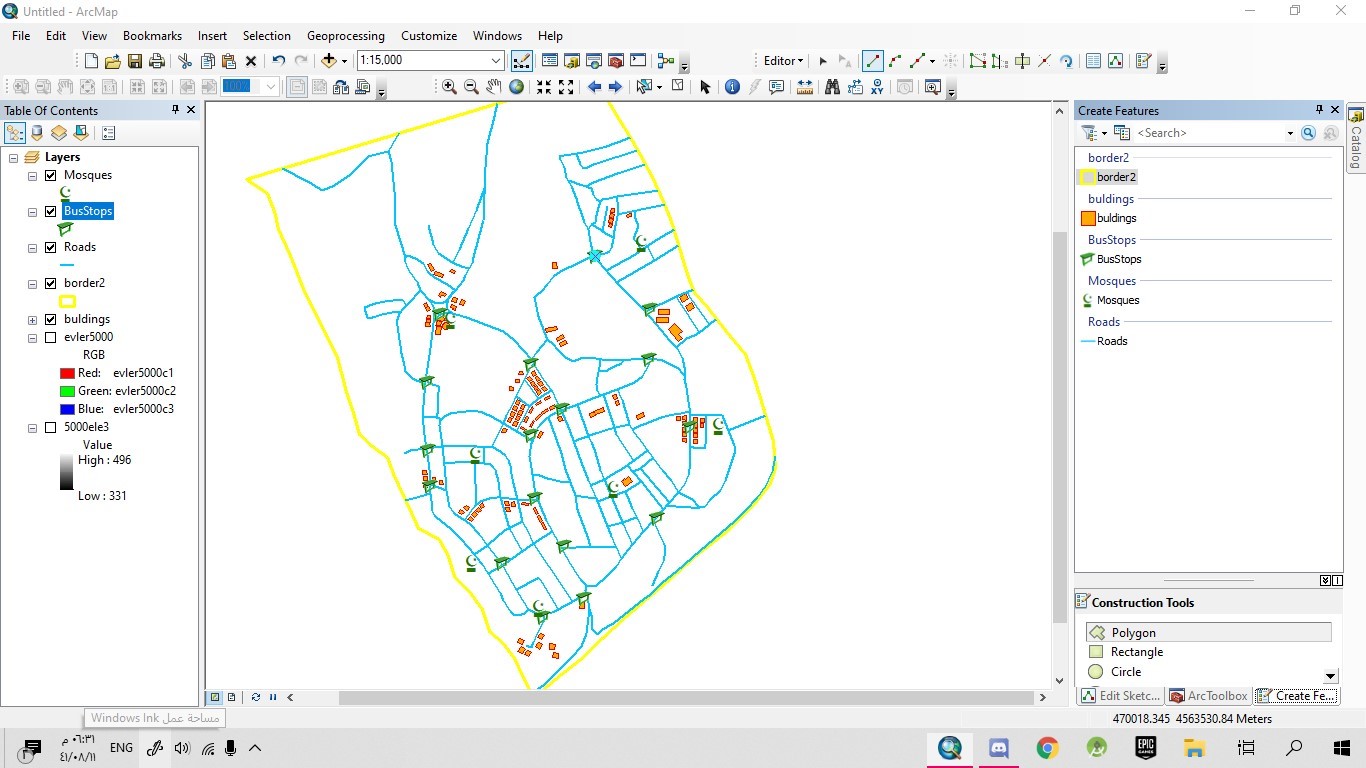


* Creating the Roads layer



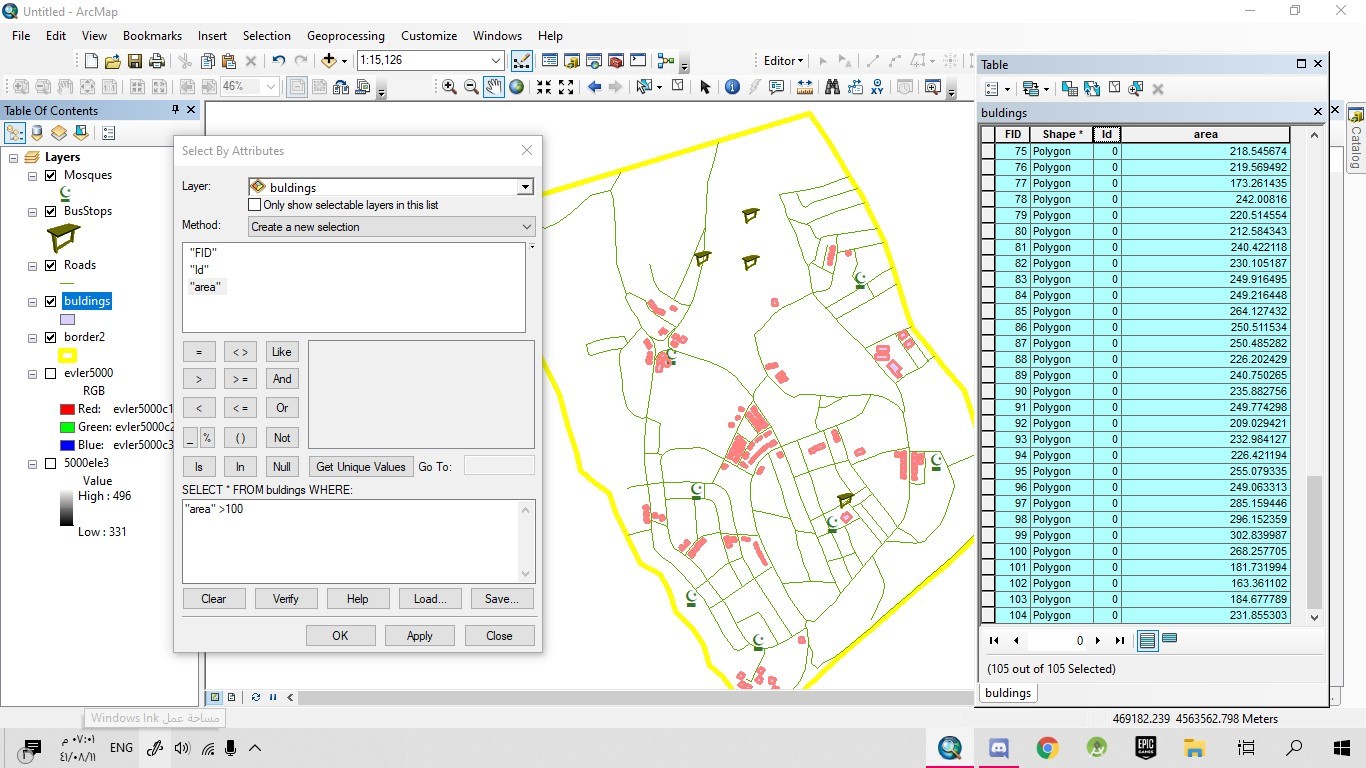


All the layers including mosques and bus stops



**5.a)** Number of buildings that their area is more than 100 m square

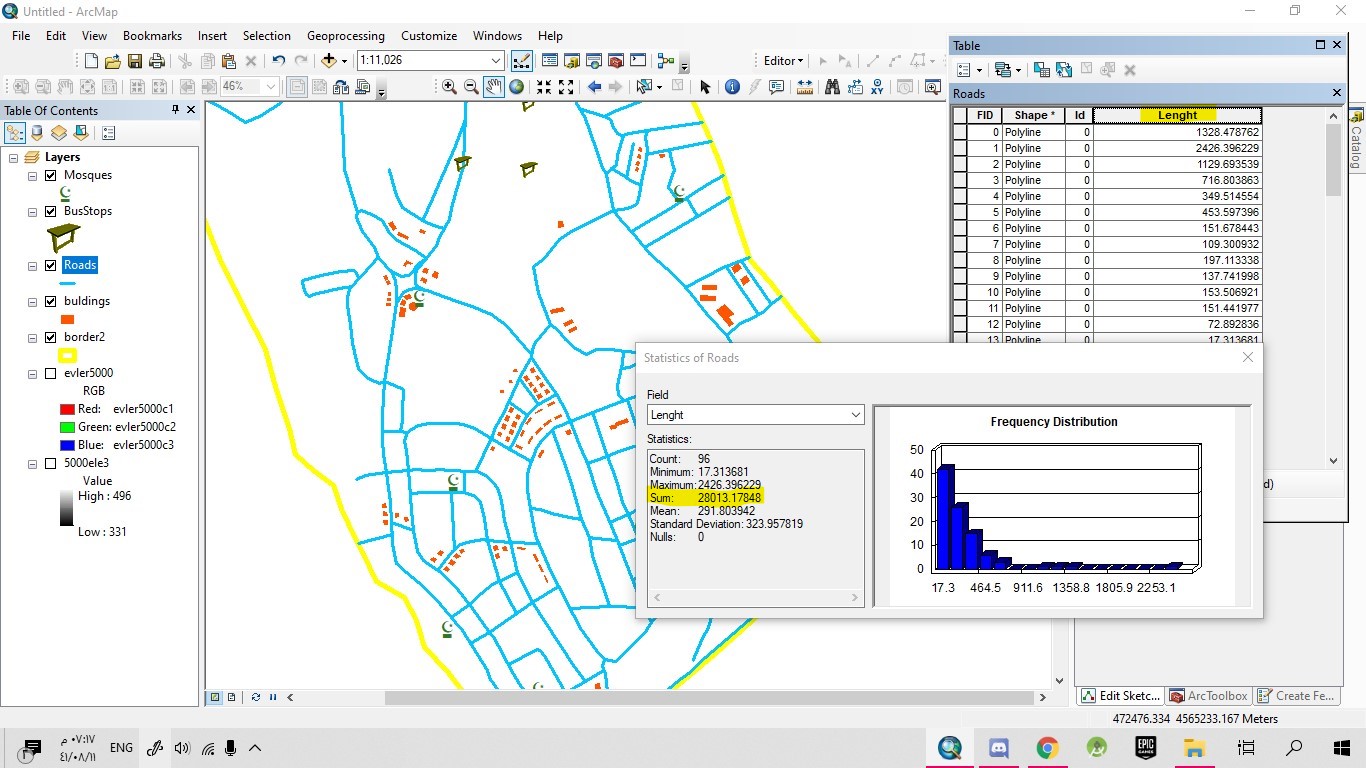
Note: all our buildings are more than 100m square as you can see



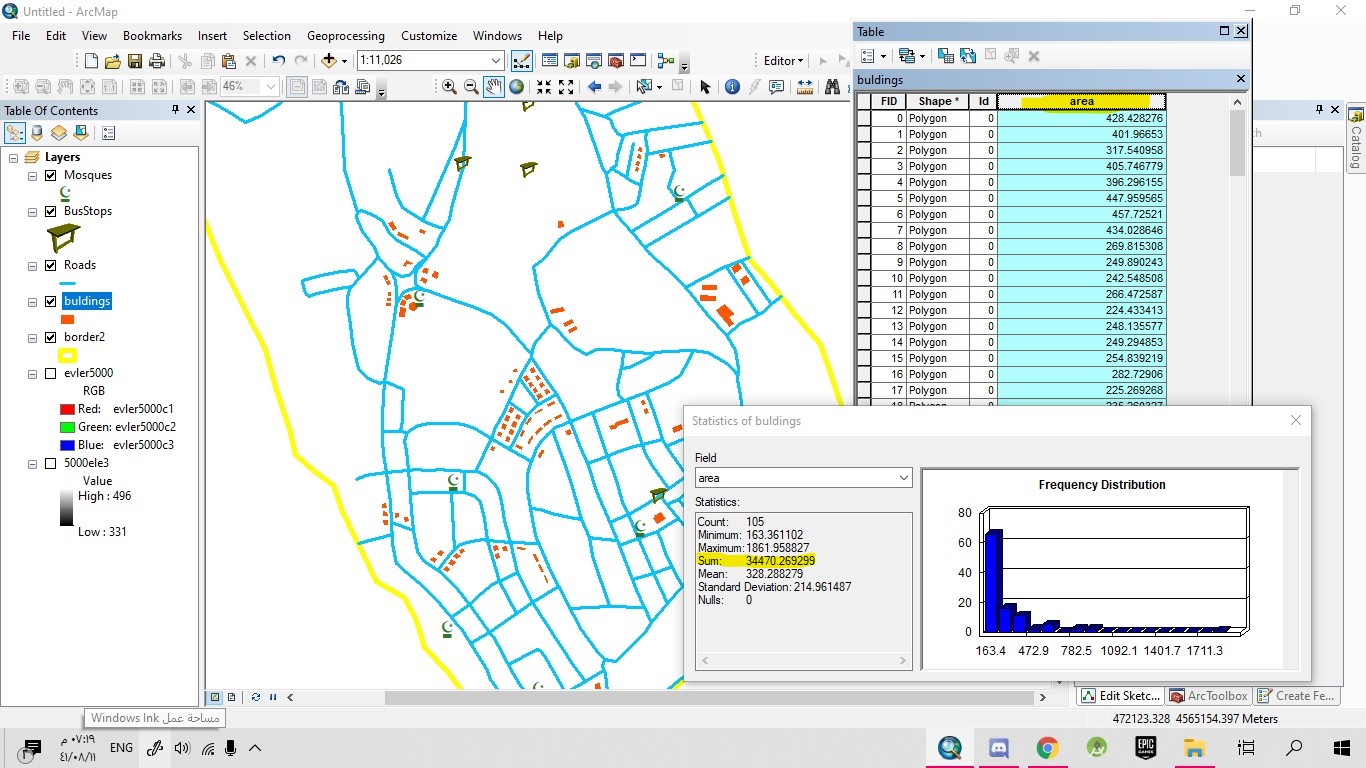
**5.b)** The area of the map project that we create



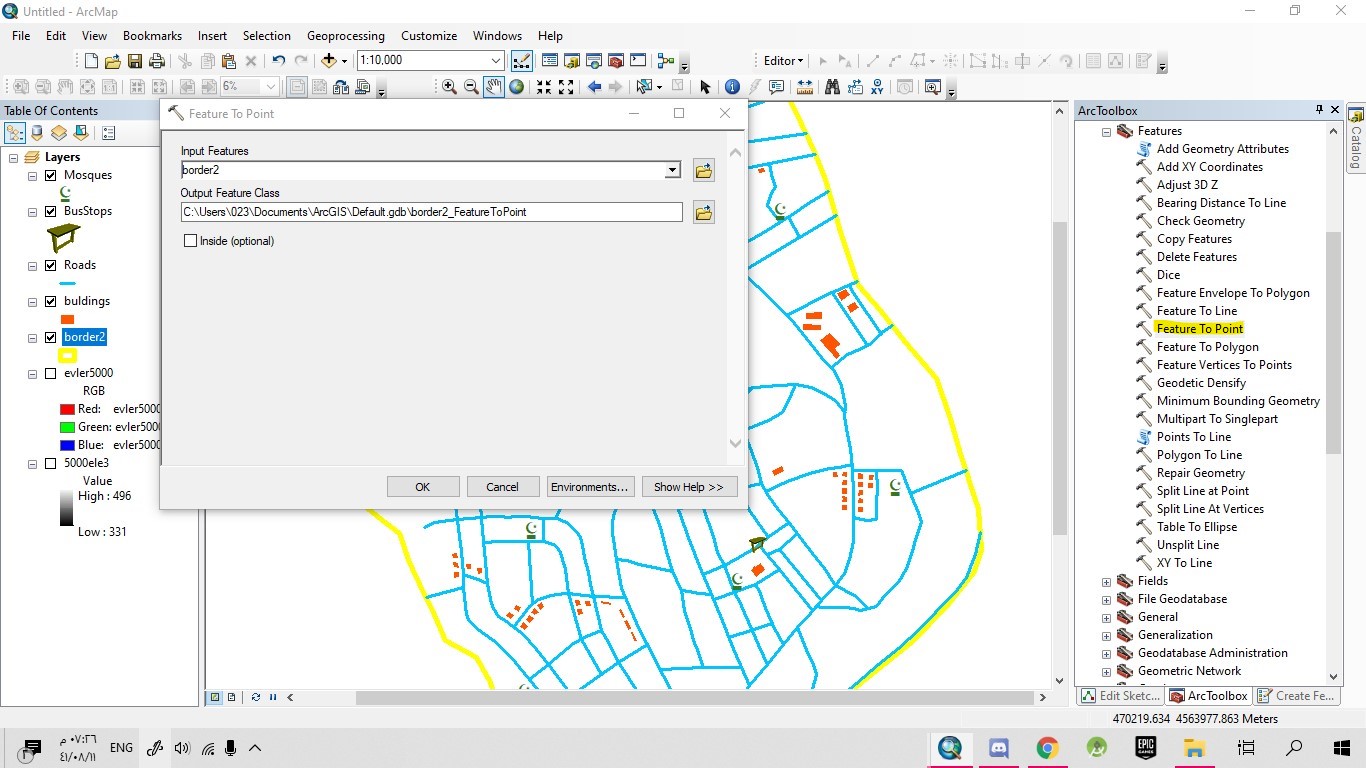
**5.c)** the total length of the roads

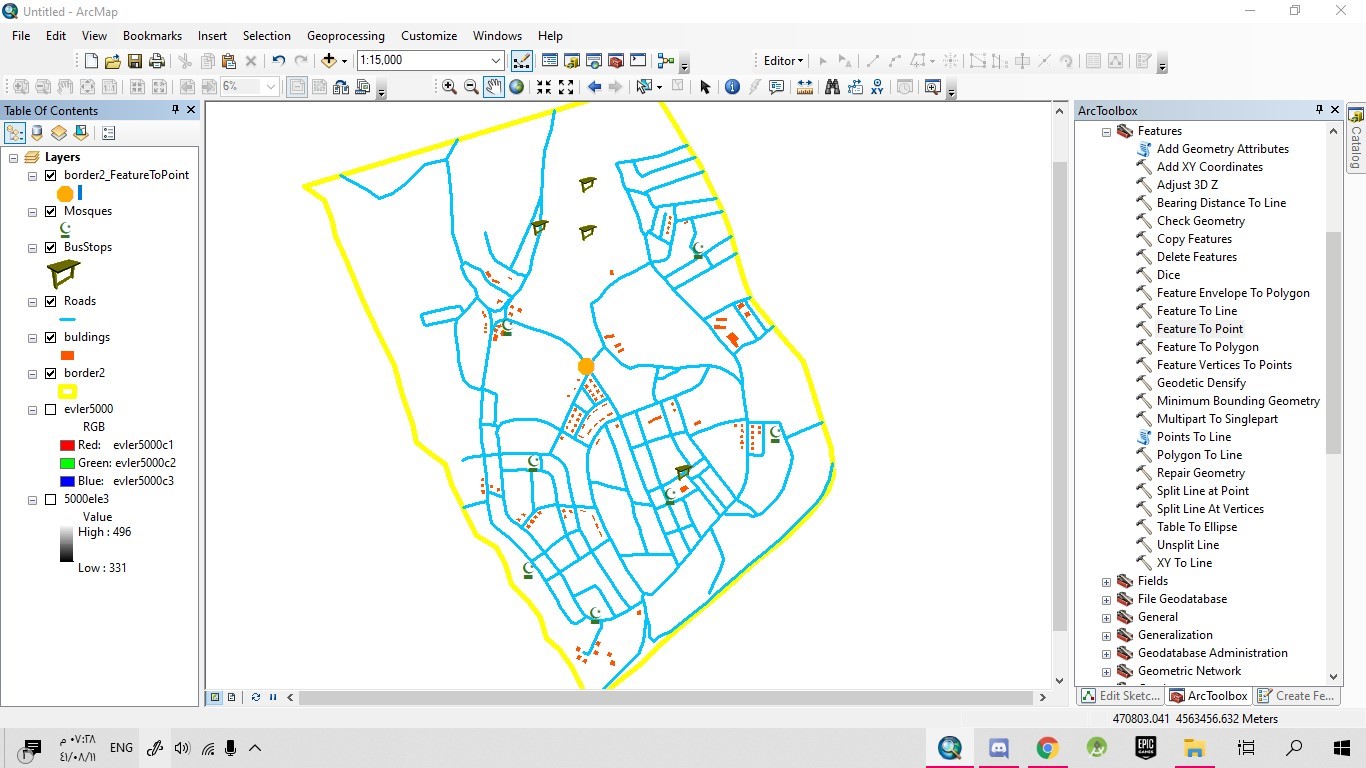


**5.d)** the total area of the buildings

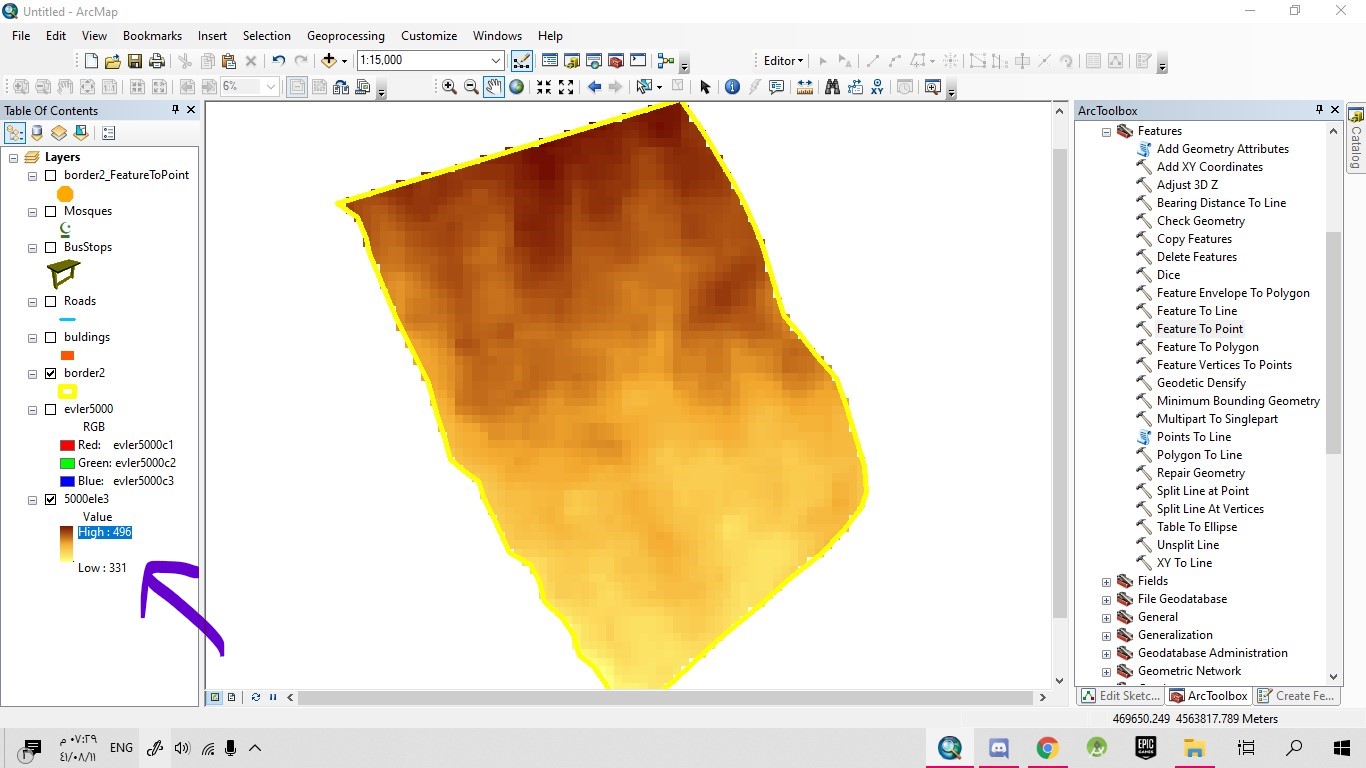


**5.e)** the centroid of the neighborhood

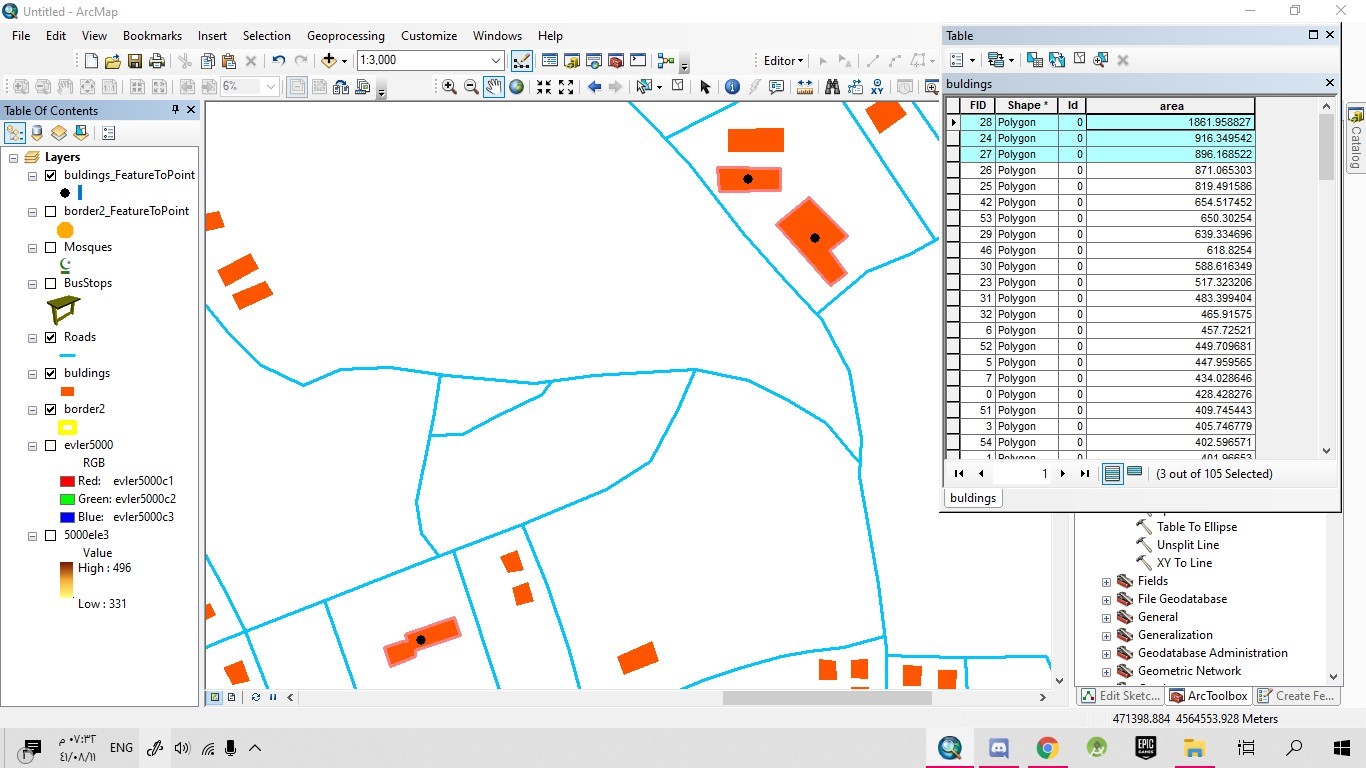




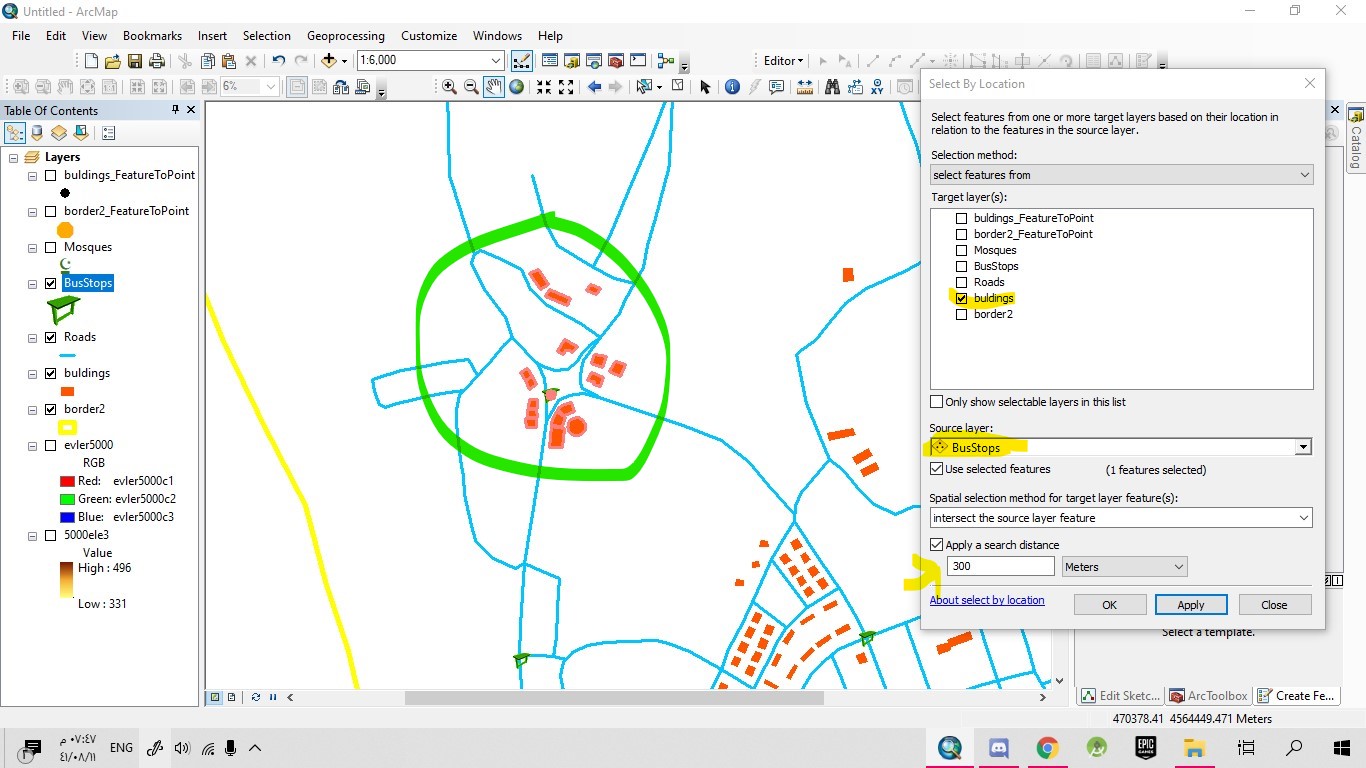
**5.f)** Highest and lowest elevation



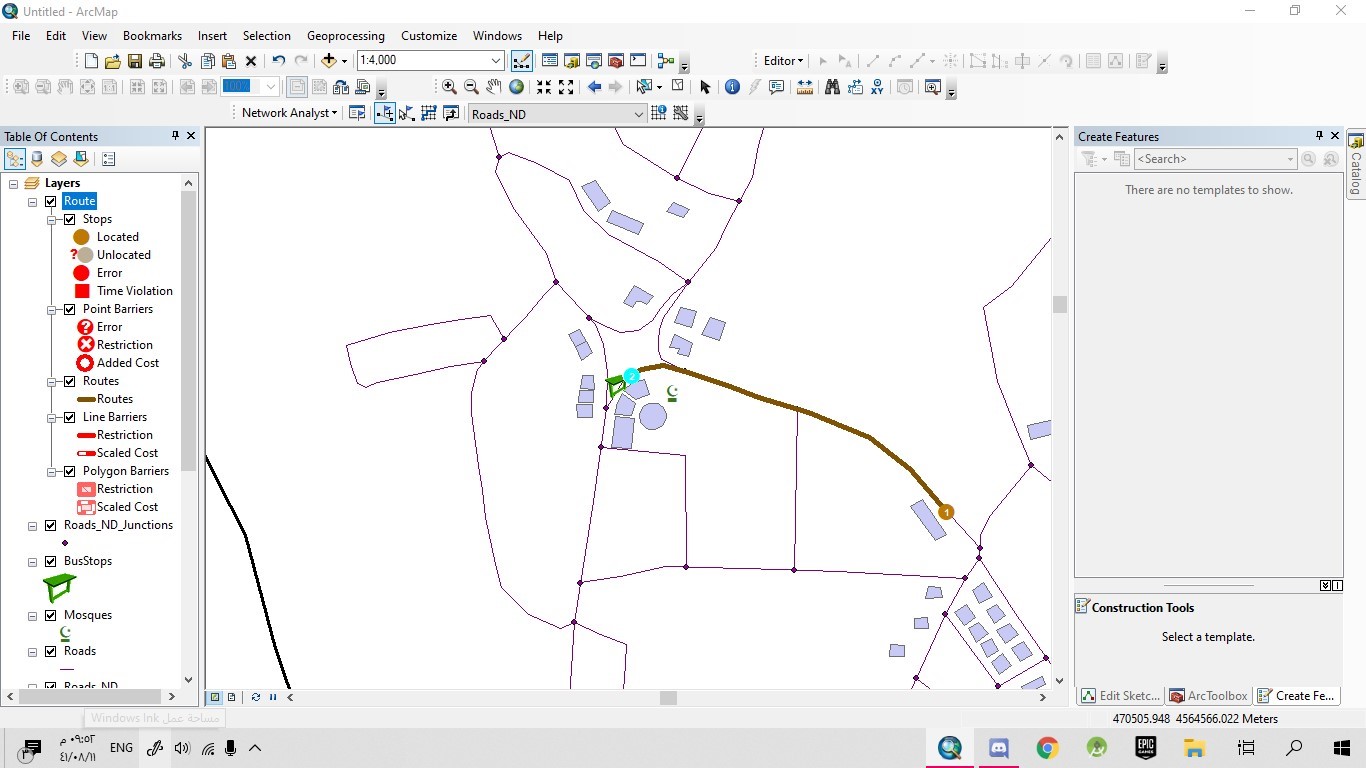
**5.g)** The centroid of the biggest three buildings



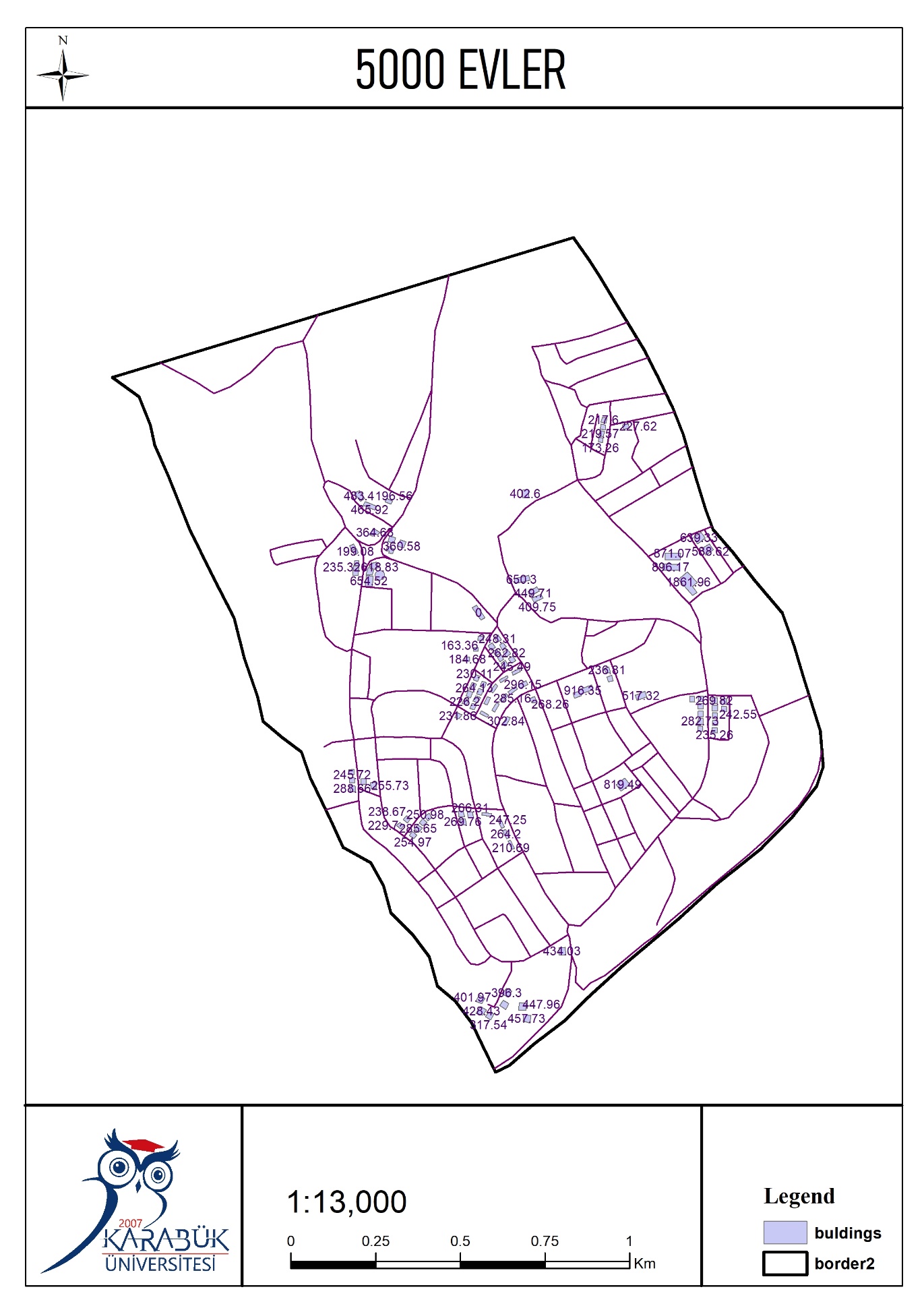
**5.h)** Building within 300 meters from the main bus stop



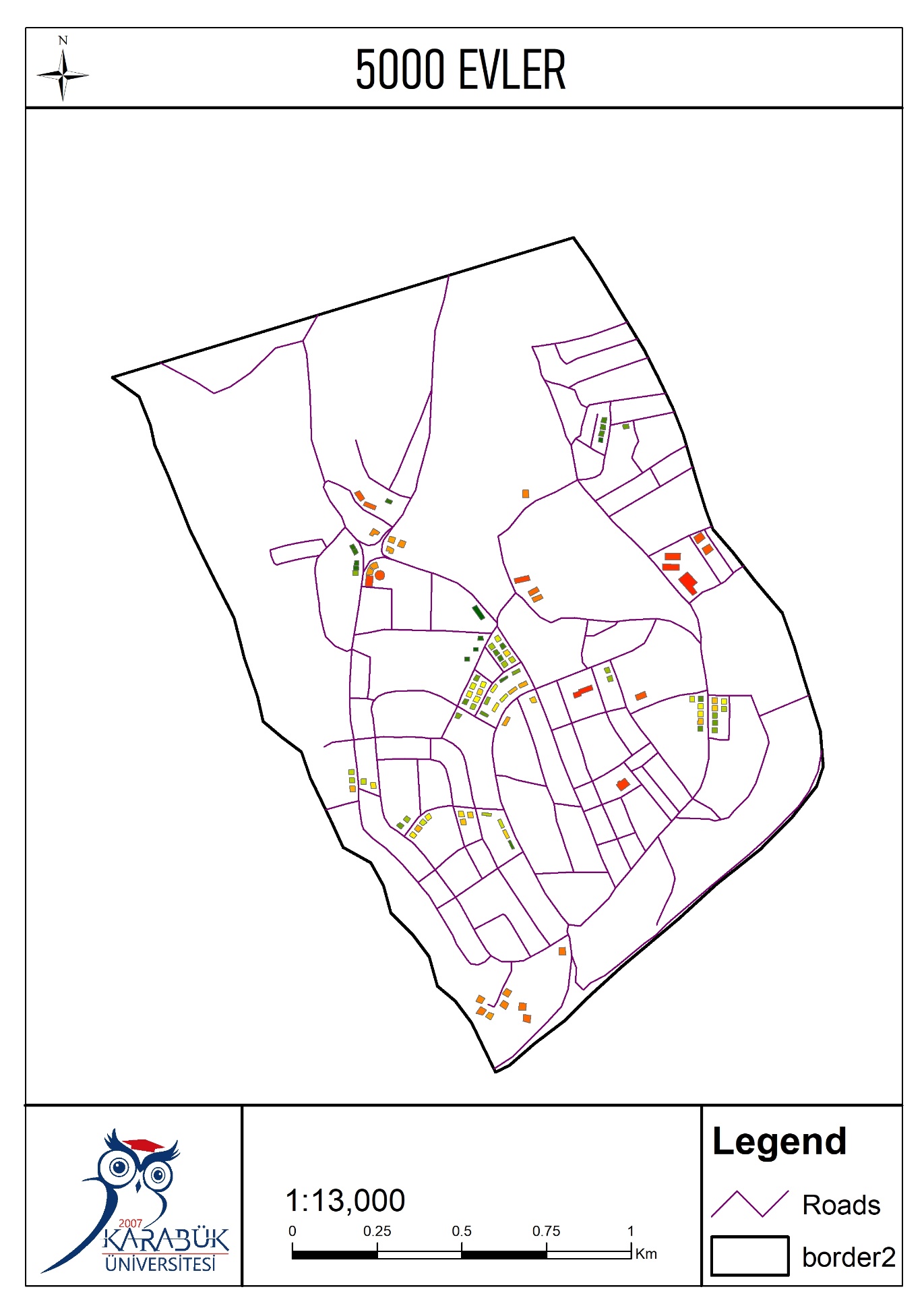
**5.i)** The shortest way between the main bus stop and any building



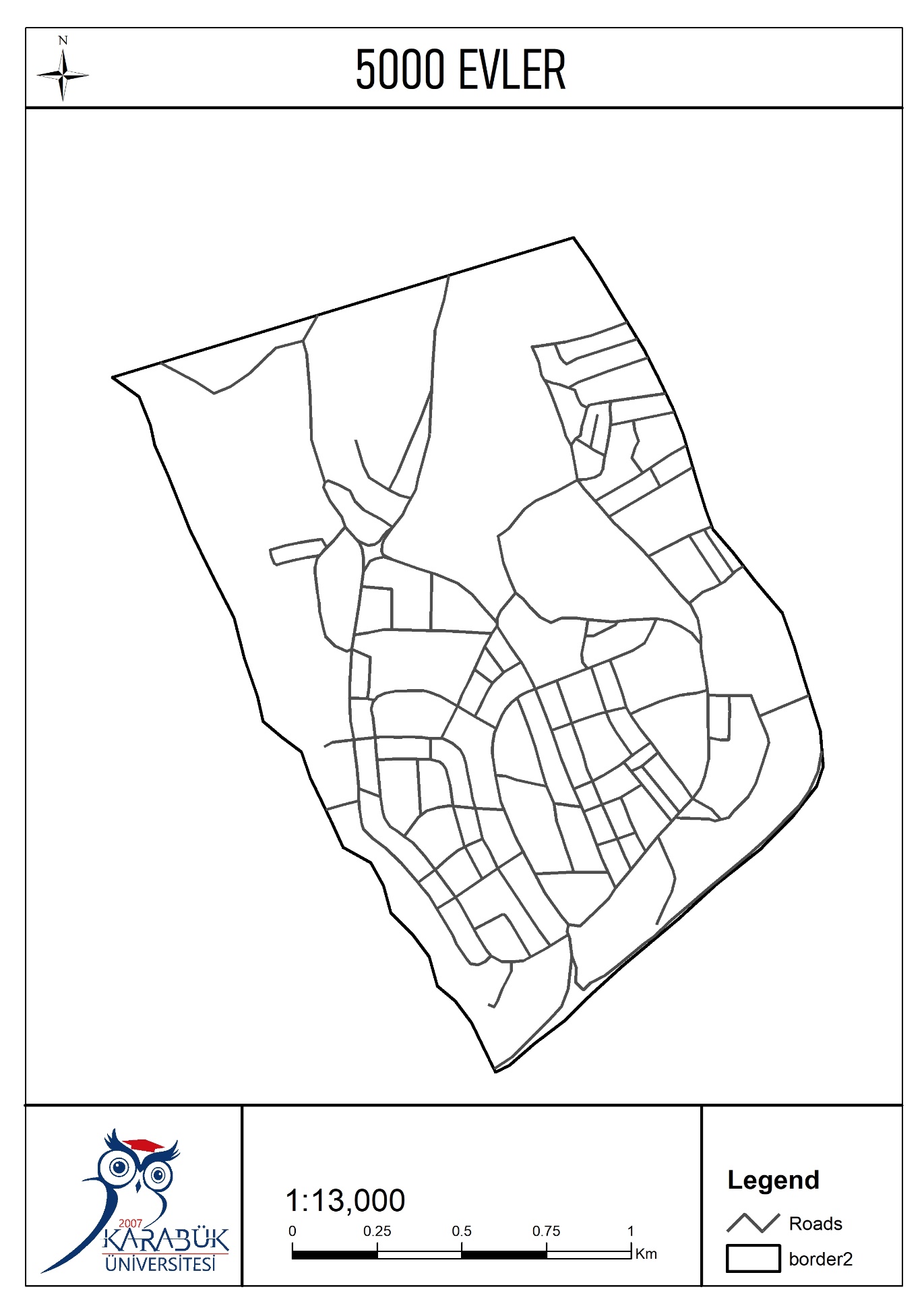
**6.a)** buildings with their label (area)



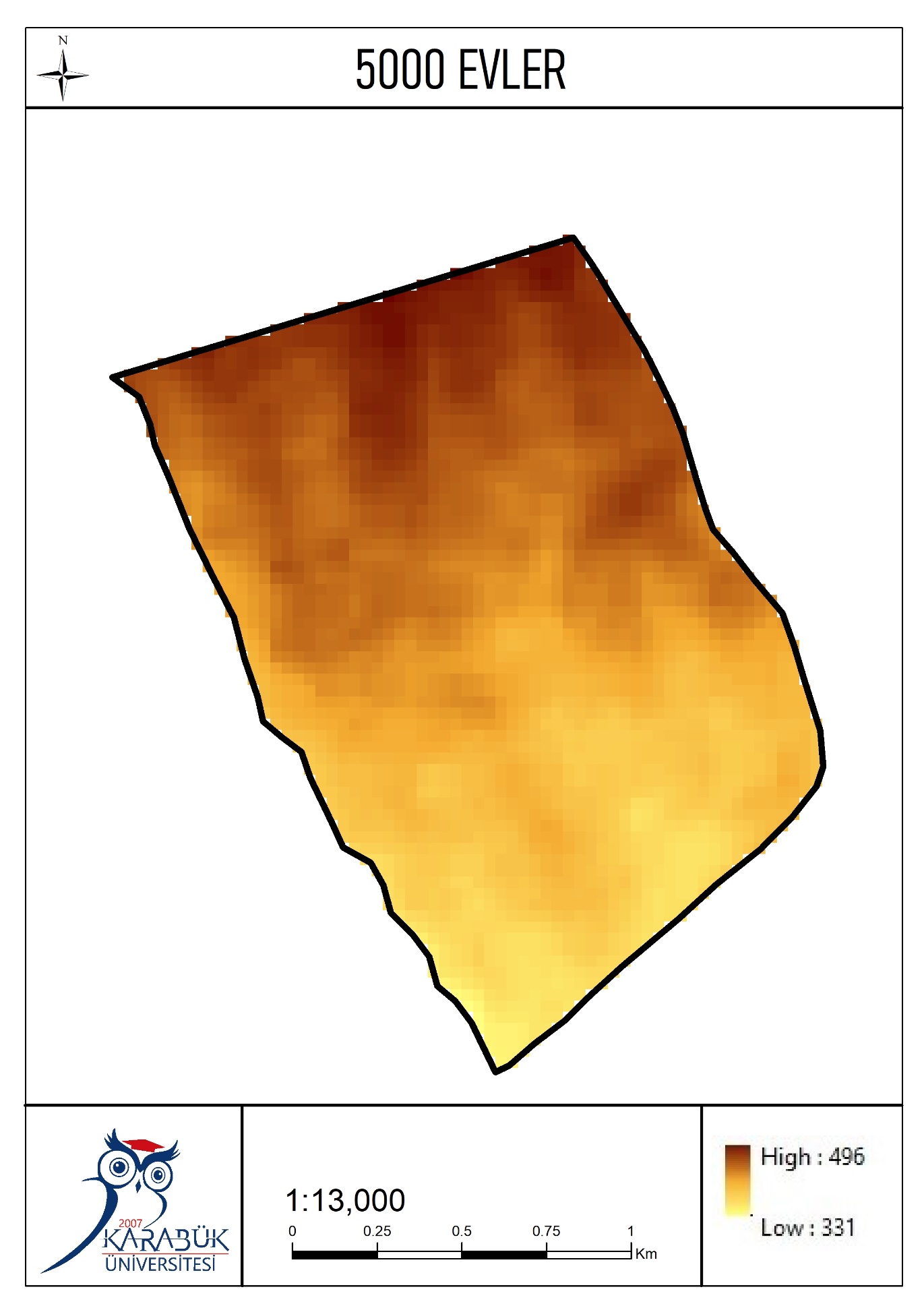
**6.b)** Coloring the buildings based on their area



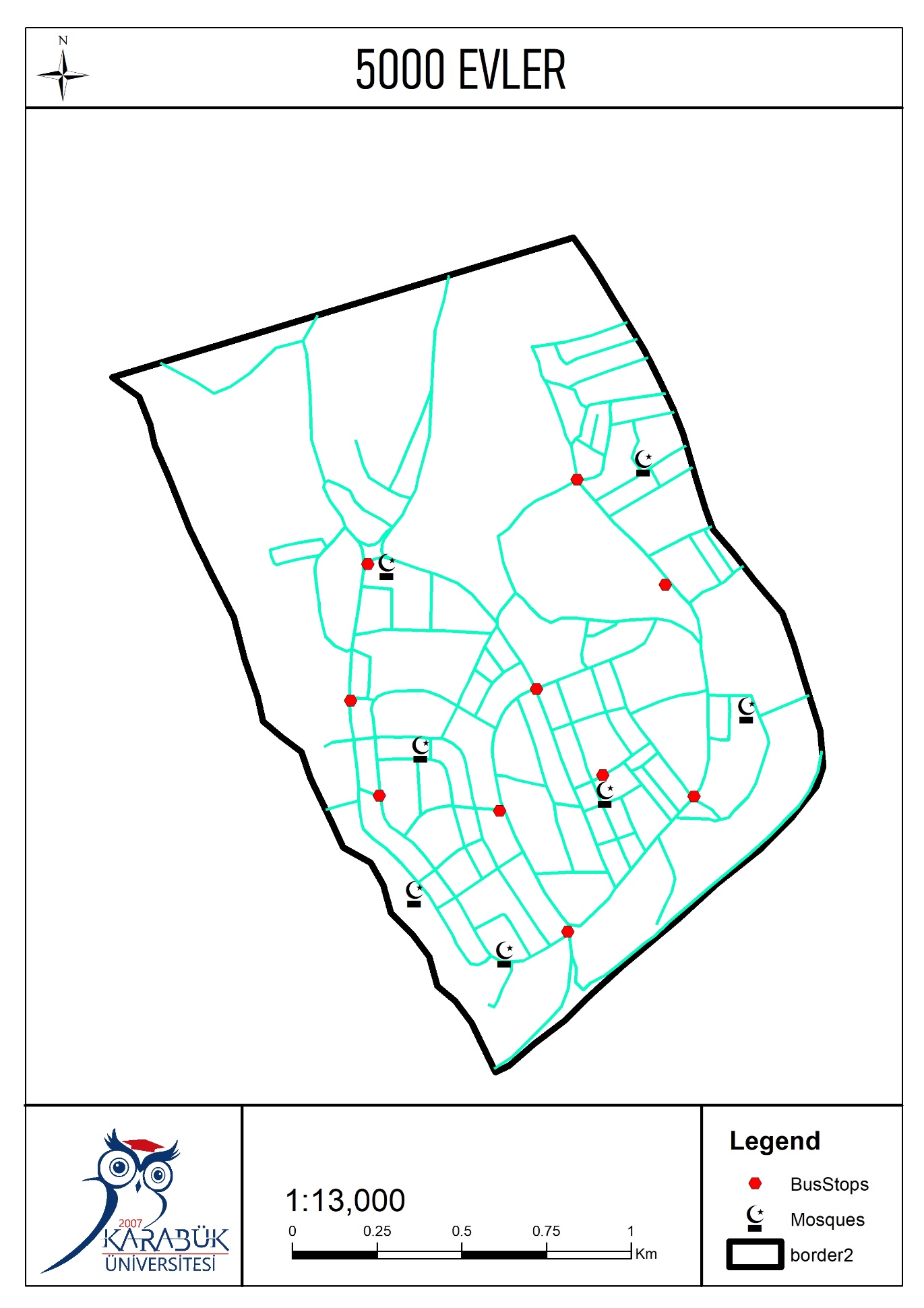
**6.c)** Roads layout



**6.d)** Elevation Layout



**6.e)** Bus Stops and Mosques layout



**6.f)** Satellite Image



KARABUK UNIVERSITY

Engineering Faculty

Computer Engineering Department

Geographic Information System Course

horizontal line

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