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# ANALYSIS OF COTTAGE BUILDING PERSPECTIVES

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# CONTENT

**01** The main goal of the project

**02** The lithology of soils

**03** Road network

**04** Recreational conditions

**05** Cottage building perspectives

# THE MAIN GOAL OF THE PROJECT

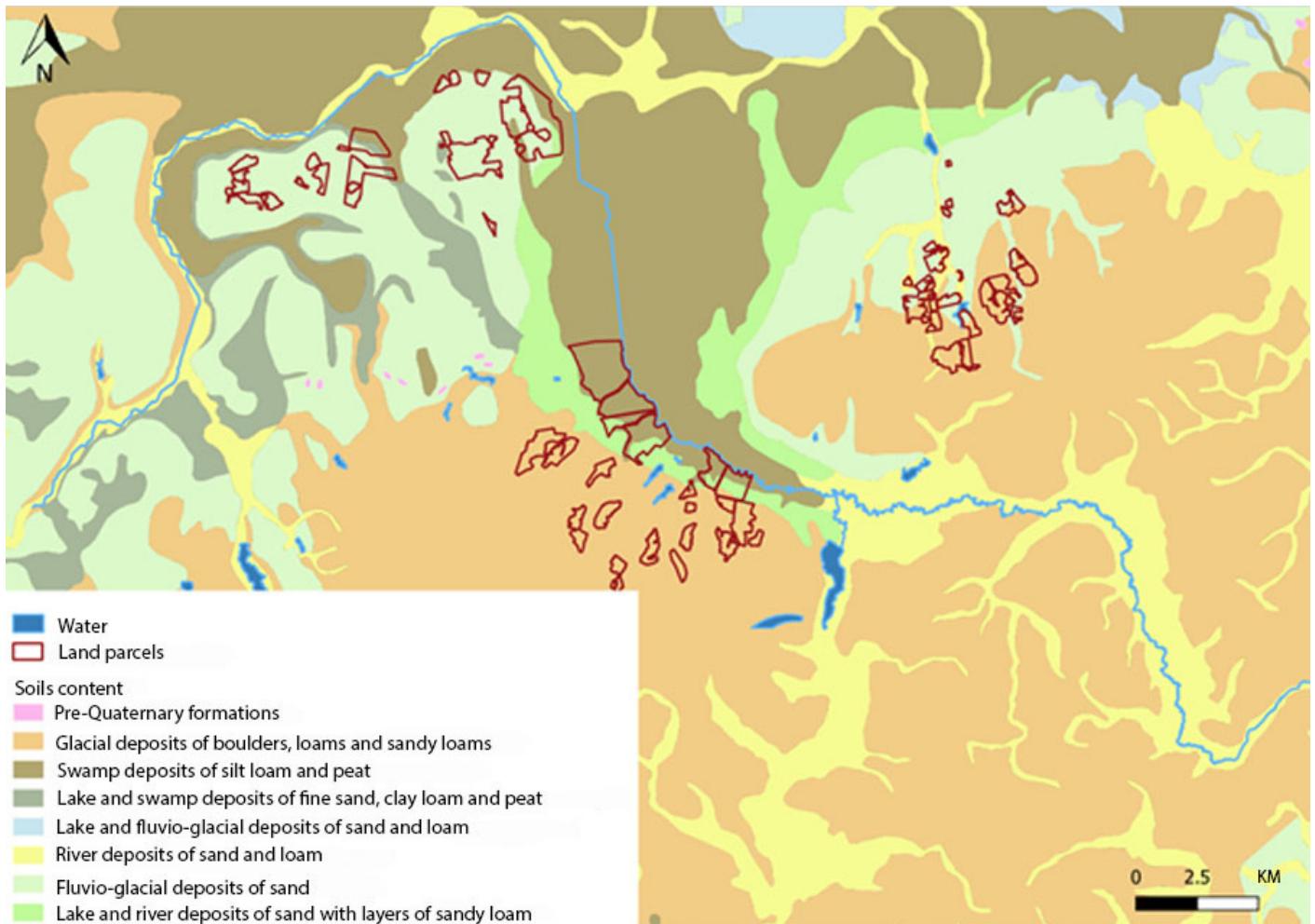
The work aim was analysis the client's land parcels perspectives for cottage building.

Criteria of analysis:

- **The lithology of soils.** This parameter is crucial for the construction of building foundations. Preference is given to loams, sandy loams and, if available, rocky soils, as the most stable and well-infiltrated.
- **Road network.** More promising are parcels located no further than 500 m from highways and roads with asphalt cover.
- **Distance from water.** Large ponds, lakes and rivers suitable for fishing, beach recreation and other activities were considered.
- **Distance from the forest.** Coniferous and mixed forests suitable for walking, for picking mushrooms and berries were considered.

# THE LITHOLOGY OF SOILS

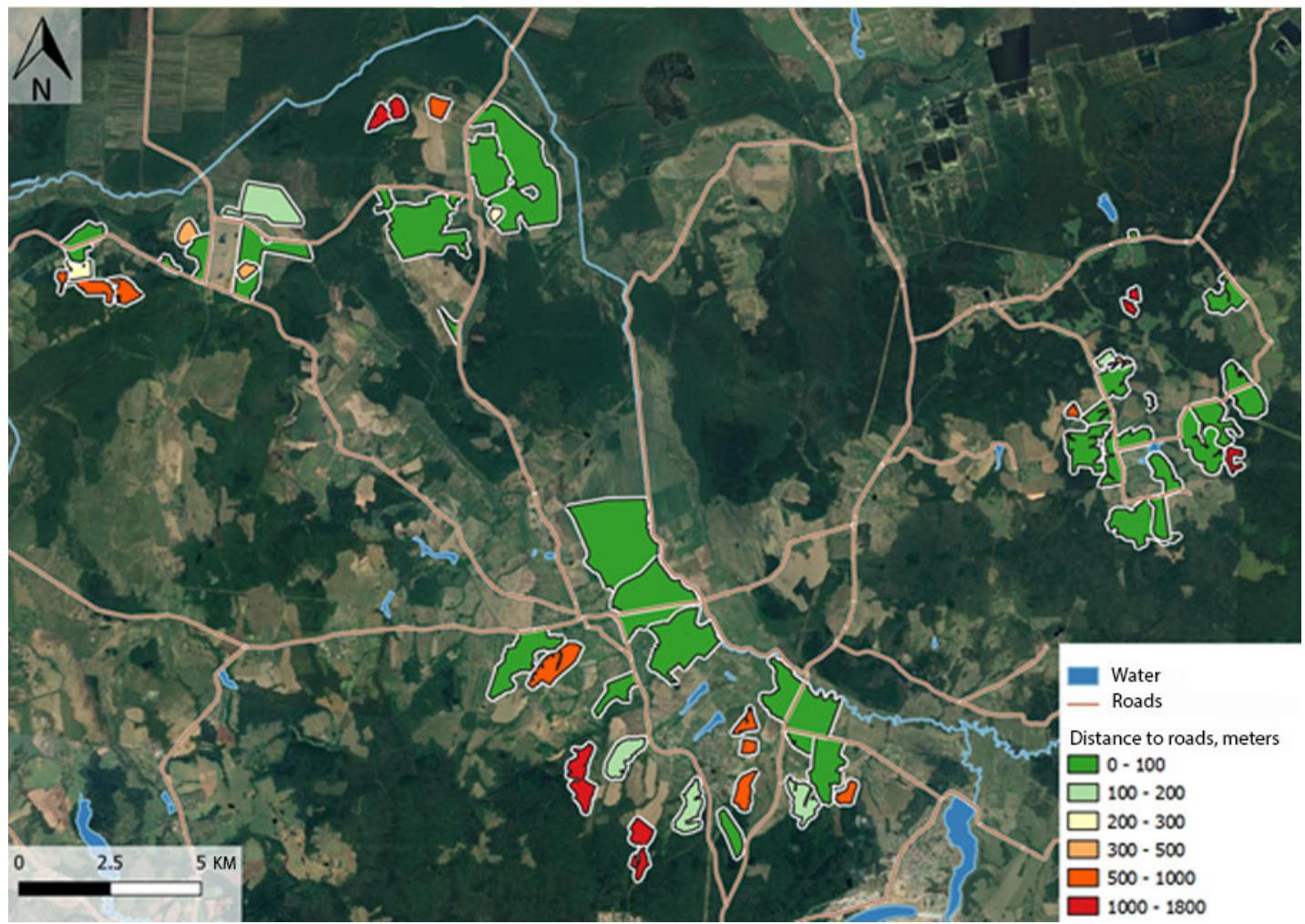
The map of quaternion sediments was used to evaluate the lithological properties on the territory of interest



- Parcels situated on the swamp deposits should be excluded because existing buildings on such deposits are infected by mould and impacted by high humidity and corrosion.
- Most prospective parcels are situated on glacial and fluvio-glacial loam and sand loam.

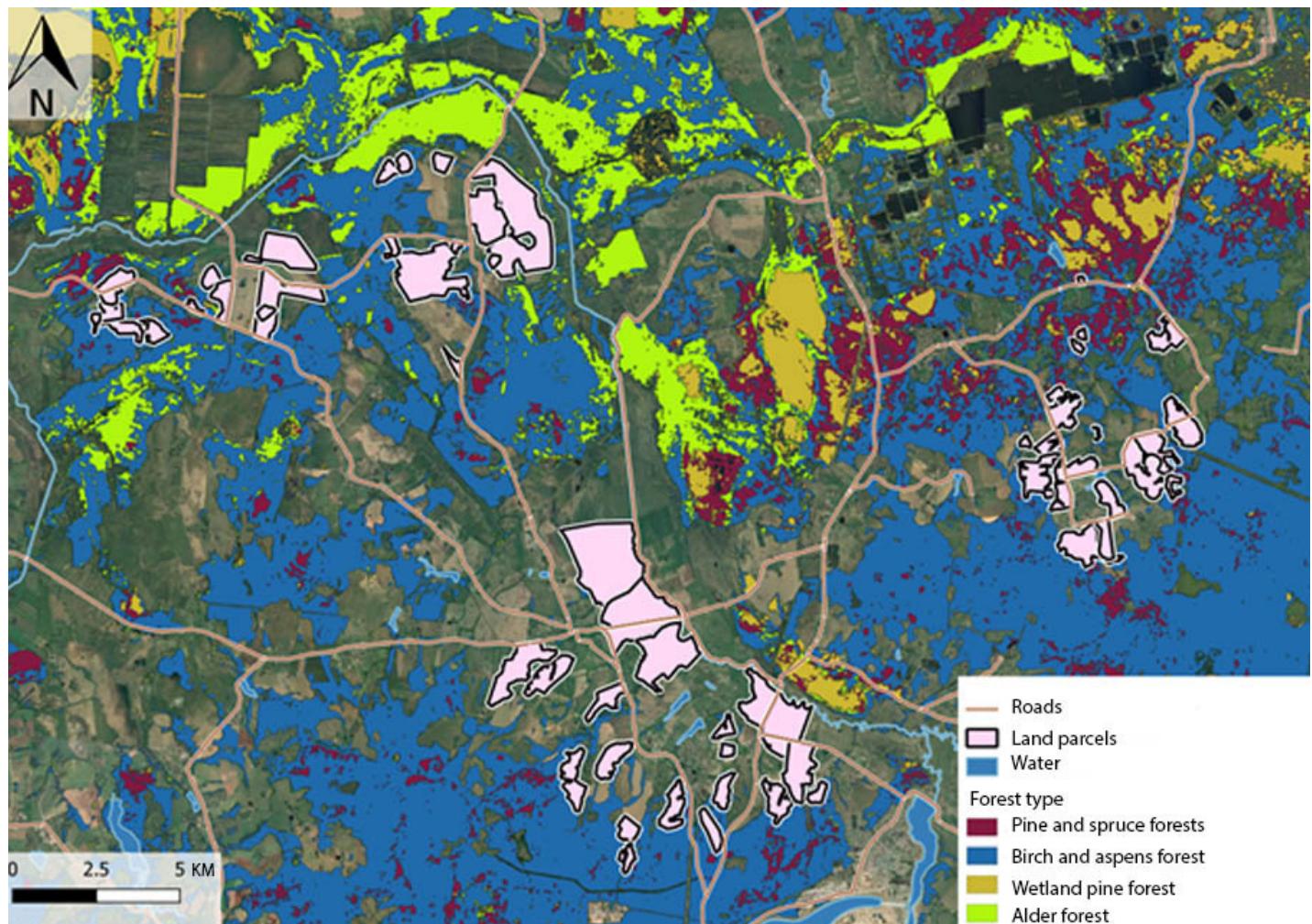
# ROAD NETWORK

The distance to roads with asphalt cover was estimated for each land parcel.



# RECREATIONAL CONDITIONS

The semi-automatic classification of satellite images was used to analyse forest.



# COTTAGE BUILDING PERSPECTIVES. THE APPROACH OF ESTIMATION

The range of marks for each parameter was created to easily understand the criteria for an estimation of land parcels. Figure lower is shown an example of the range of marks for the road network.

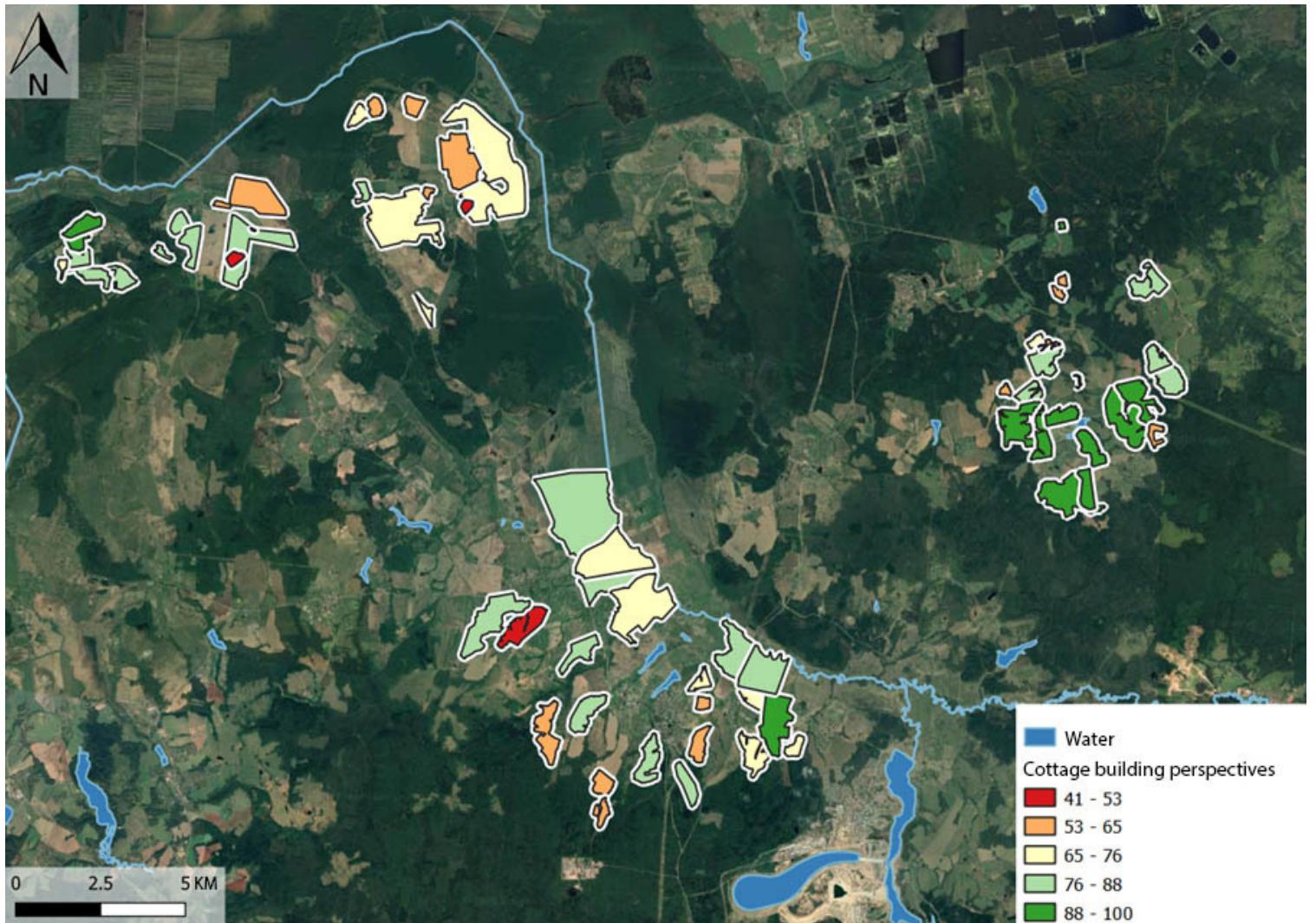
Range of marks in distance to road		
	distance	mark
	0 - 100 m	6
	100-200 m	5
	200-300 m	4
	300-500 m	3
	500-1000 m	2
	1000-1800 m	1

If the parcel has only the highest marks the sum of all parameters will be equal to 22 which will be considered 100%.

The sum of marks for each parcel should be calculated as a percent from 22. Like that, we will receive integrated marks of cottage building perspective.

Integrated marks of perspectivity	
	mark
	88-100
	76-88
	65-76
	53-65
	41-53

# COTTAGE BUILDING PERSPECTIVES. VISUALIZATION



An example of a land parcel with the highest mark.