

## IMPROVEMENT OF ANALYTICAL METHOD FOR LAND PARCEL BOUNDARIES CALCULATION

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The article offers the improved method of cadastral works related to earlier registered land parcels (ERLP), based on analytical calculation method of characteristic points of land parcels boundaries, which allows to significantly decrease the cost of expensive cadastral field works, to state the presence or absence of register errors, and in case of their appearance, to eliminate them. For this purpose the method provides the logical block for revealing register errors in cadastral information, which juxtaposes the declared square of earlier registered land parcel with the value of that square, calculated by stated coordinates.

The offered method eliminates the probability of boundaries overlapping, which will conveniently allow to update the ERLP boundary data in the Unified State Real Estate Register (USRER). Consequently disappears the reason of land disputes, being reviewed in court, the share of which constitutes significant part of cases under process.

The key aspect of the suggested method is the realized possibility to calculate the coordinates of the characteristic points, determining the boundaries of land parcels (LP) and located on them real property objects, in the coordinate system, accepted for USRER conduction in the territorial unit.

This is especially relevant for LP, located on the territories of gardening societies, registered instate register as earlier registered land parcels without the determination of boundaries coordinates on the pointed declared square.

The basis of the method is the vector transformation algorithm, determining the direction and length of line between characteristic points of the territory in the false coordinate system in location of earlier registered land parcel in local reference system adopted for conducting USRER.

**Key words:** earlier registered land parcel, characteristic point, false coordinate system, local coordinate system, cadastral works, register errors, algorithm, Unified State Real Estate Register, square of earlier registered land parcel.

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