

**Half full or half empty?**

**Current approaches to development-led archaeology in Hungary**



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**EAC2018 Sofia**

## Who is allowed to carry out archaeological excavations?

### **2010–2012**

Local Museums

### **2012–2014**

Hungarian National Museum National Heritage Protection Centre  
(Preliminary Archaeological Documentation from 2013)

### **2015–2016**

Forster Centre, Local Museums and accredited private companies

### **2017–present**

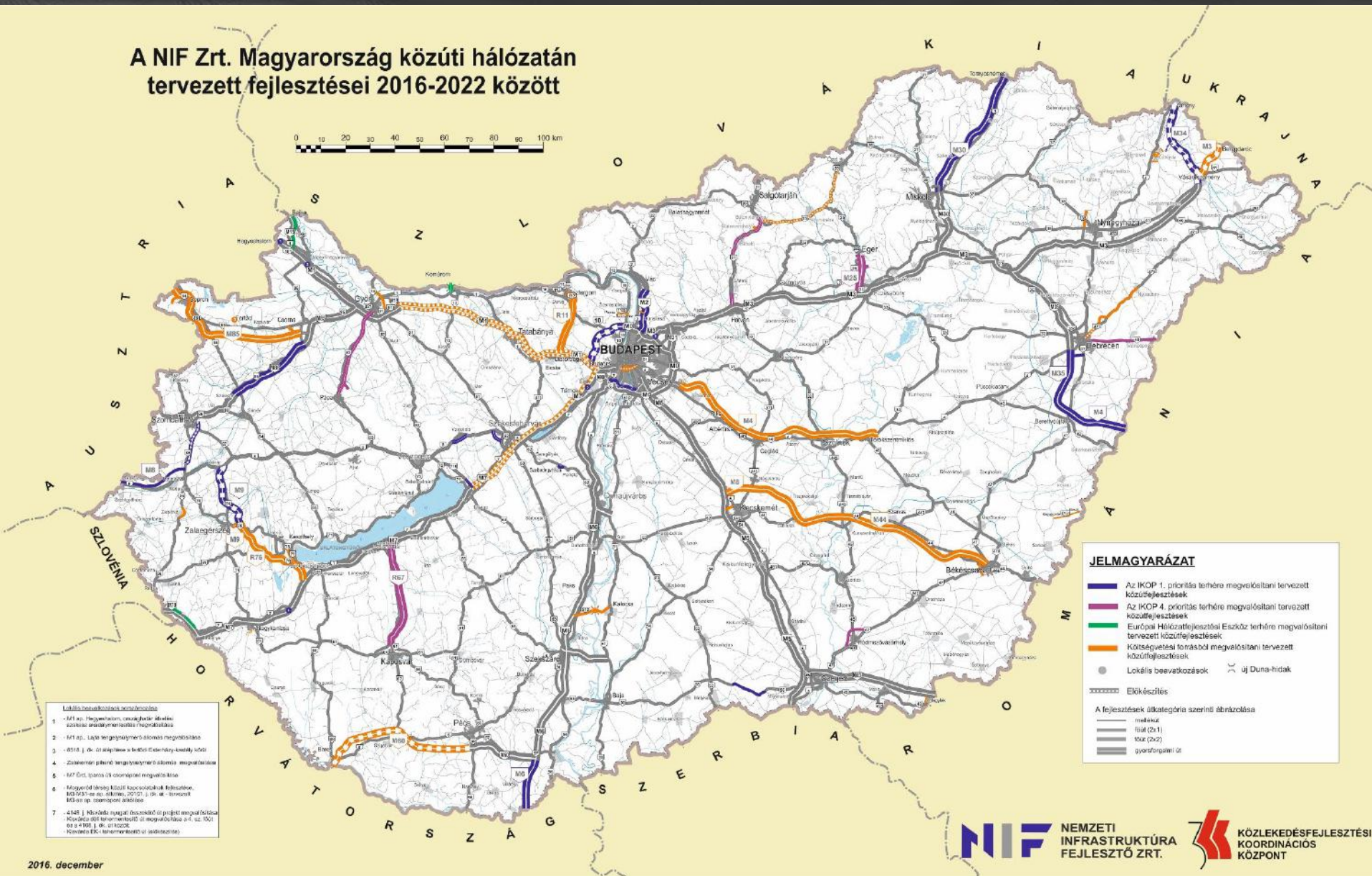
Budavári Kft.

- **From 2010 more than 400** contracts with the National Infrastructure Developer Company
- **More than 100 contract at present**
- **Nearly 40.000.000.000,- HUF** (125 000 000 EUR)



# MOTORWAY DEVELOPMENTS IN HUNGARY

A NIF Zrt. Magyarország közúti hálózatán  
tervezett fejlesztései 2016-2022 között



## PRELIMINARY ARCHAEOLOGICAL DOCUMENTATION (PAD)

- - mandatory assessment for every construction above 500 million HUF /1,6 million EUR
- - assessment's cost should not cost more than 0.35% of the overall construction budget
- - assessments should contain (if physically possible):
    - data collection,
    - field survey
    - geophysical survey
    - trial excavation
- - based on these data a project plan should be made with the exact cost and timescale for archaeological involvement







## NABUCCO field survey:

During initial intensive field survey

**339** archaeological sites were found

only **77** of those are previously known and scheduled



**77,8%**  
previously  
unknown

## Site identification and assessment for preventive archaeology of large-scale infrastructures for PAD

- Desktop study
- Field survey
  - systematic, GIS-based
- Geophysical survey
  - concentrating on areas highlighted with field survey
- Trial excavation
  - for validation and control

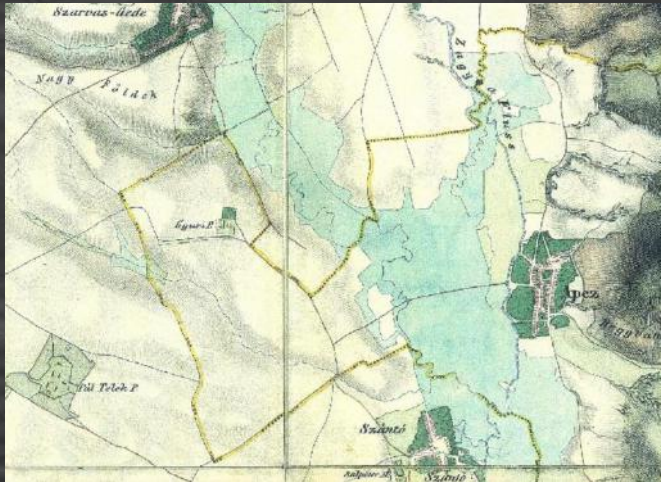
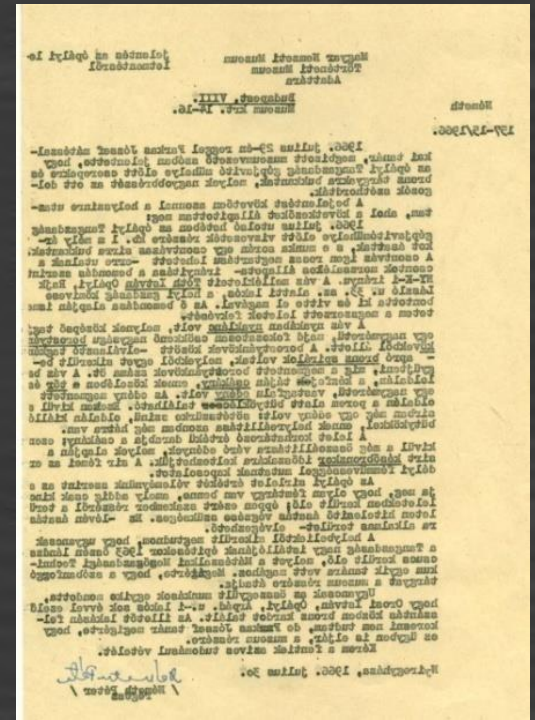
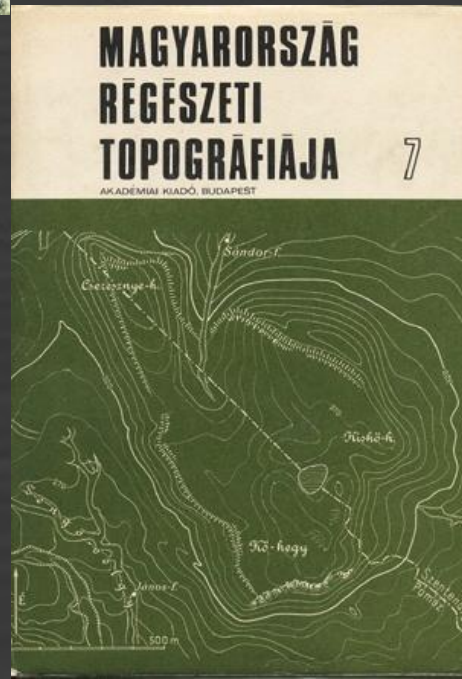
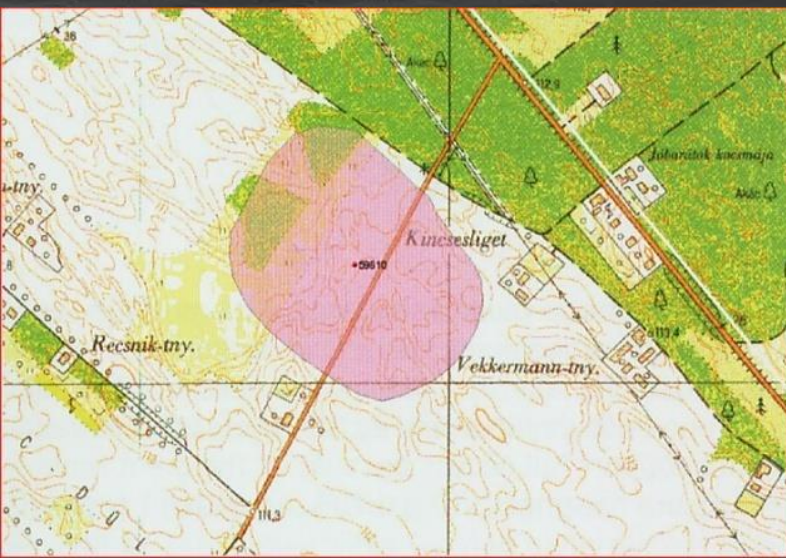






## 'PAD' METHODS

# Desktop studies

[illegible]





## Field walking method (plough walking)

Systematic and thorough examination of the investigated area. Archaeologists walk in parallel lines maintaining a representative distance, collecting surface data with hand-held GIS device.



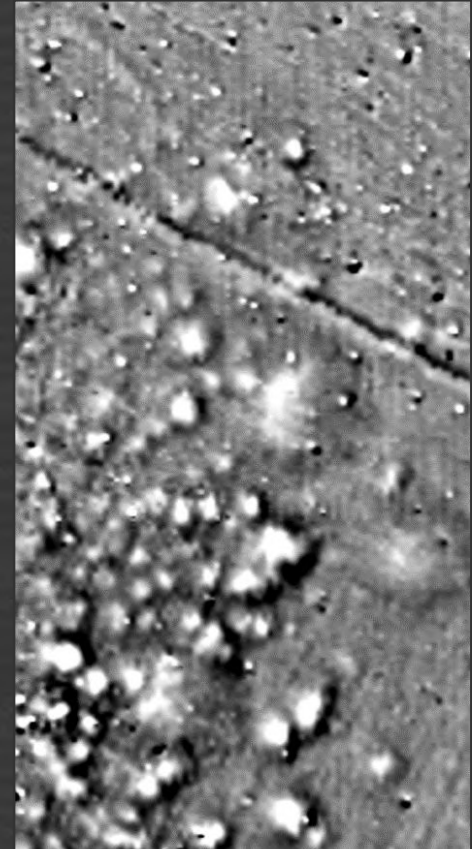






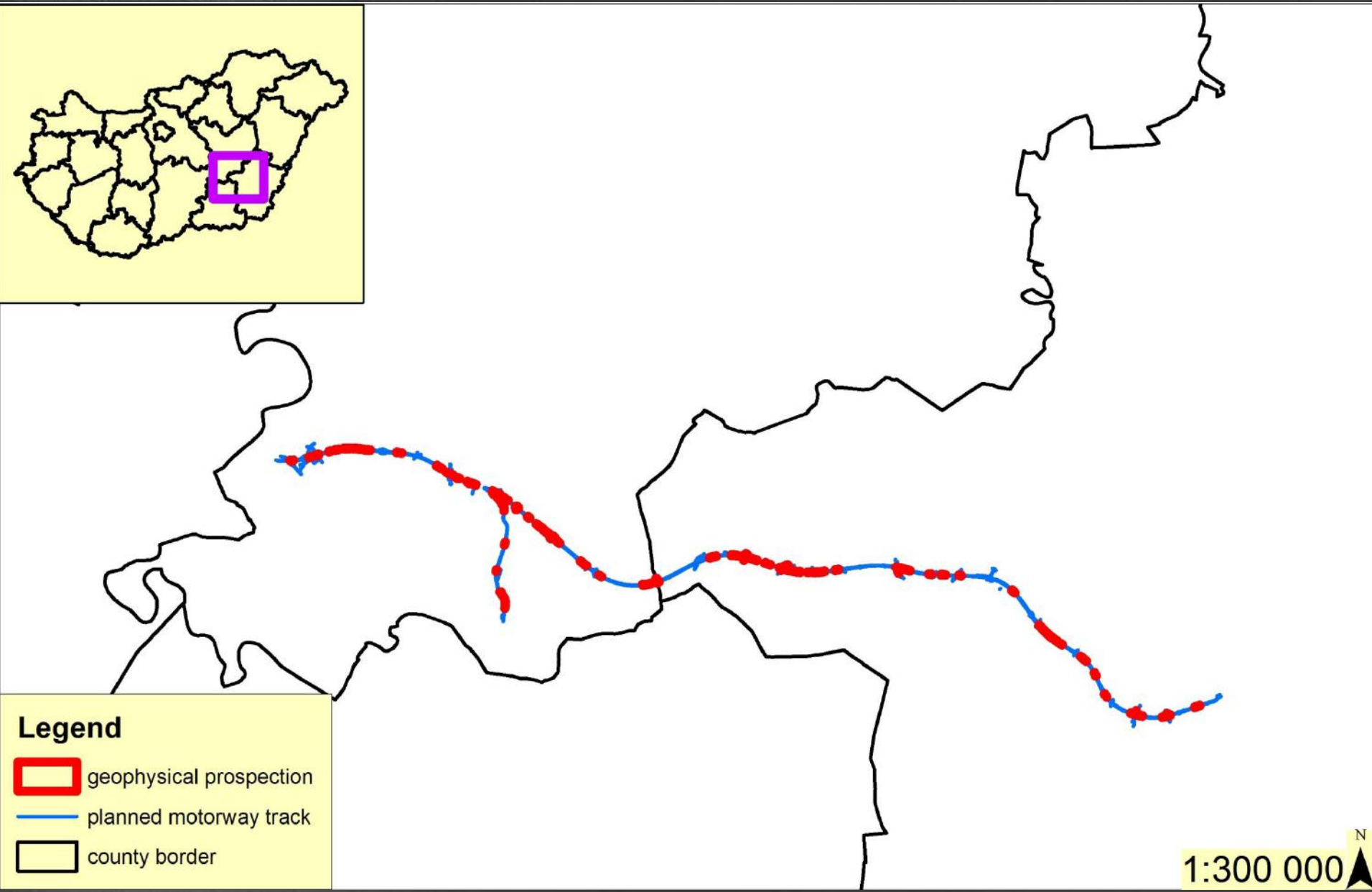
## Integrated geophysical survey

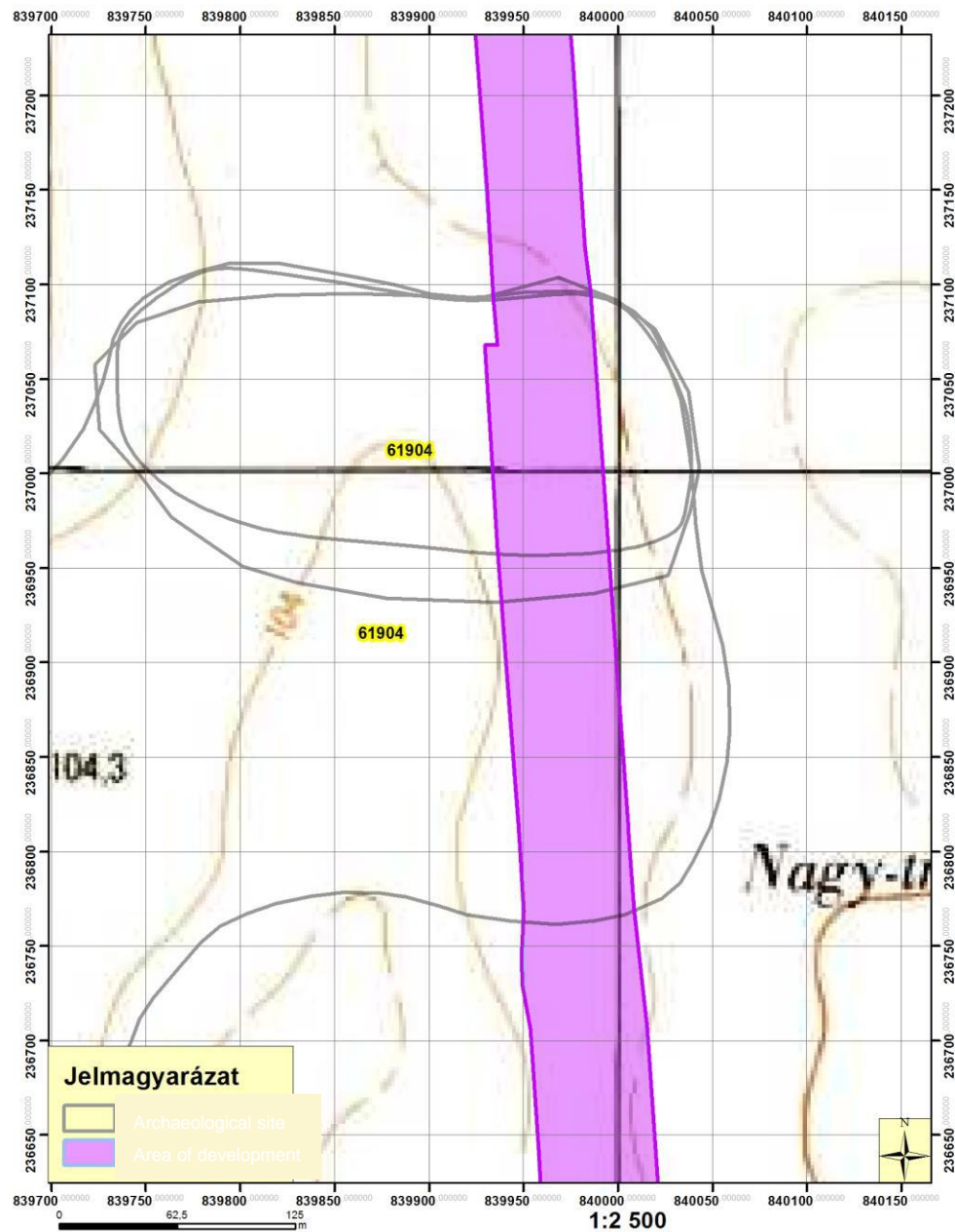
- Magnetometry -mostly – good clay soil types
- Integrated coring for topsoil depth measurement
- Surveying around 1/3 of overall involvement area, concentrating areas highlighted with field survey (not ideal)
- Surveys made in-shop employing geophysicists:
  - fast feedback and utilization





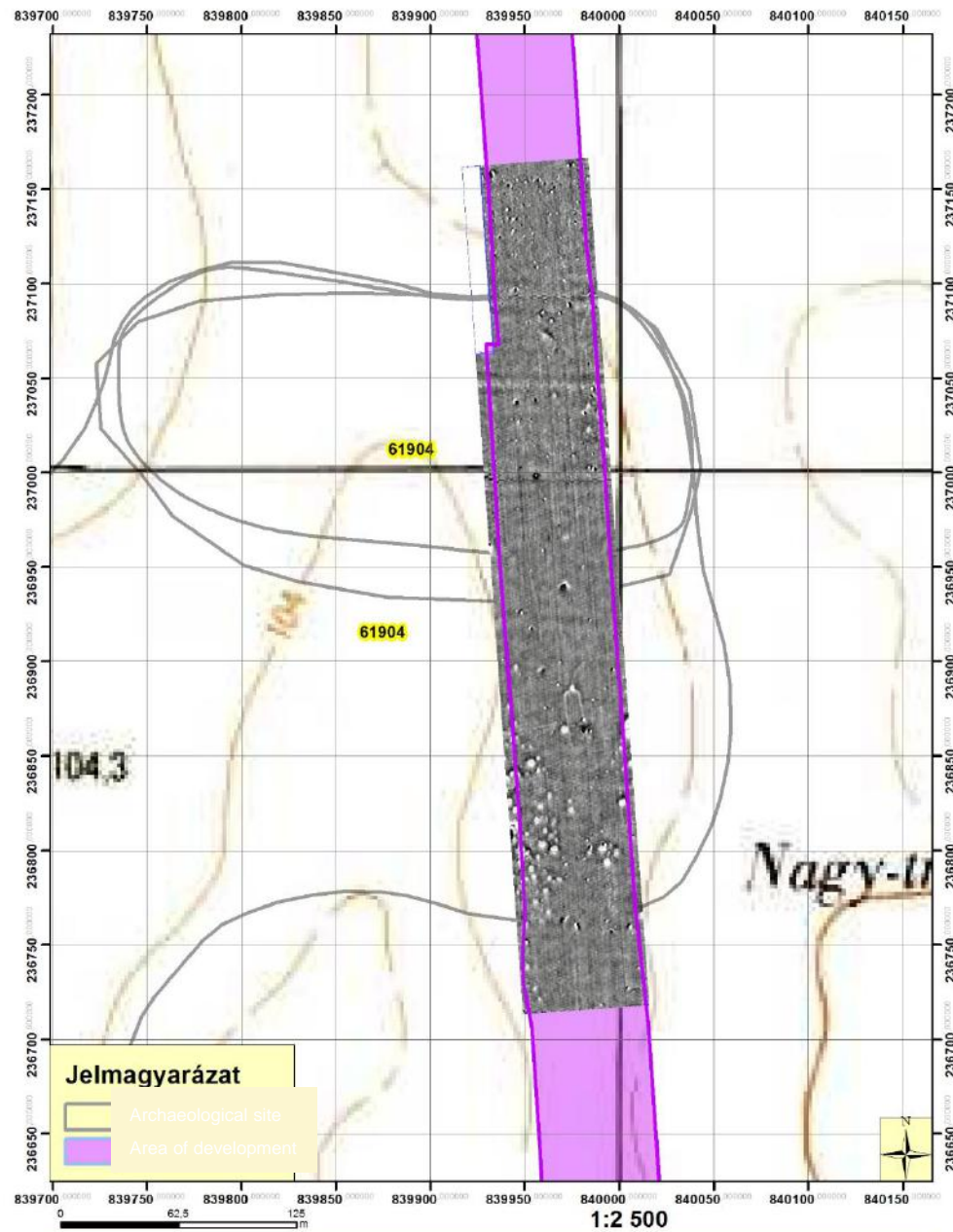
# Areas of geophysical survey in the planned M44 motorway track



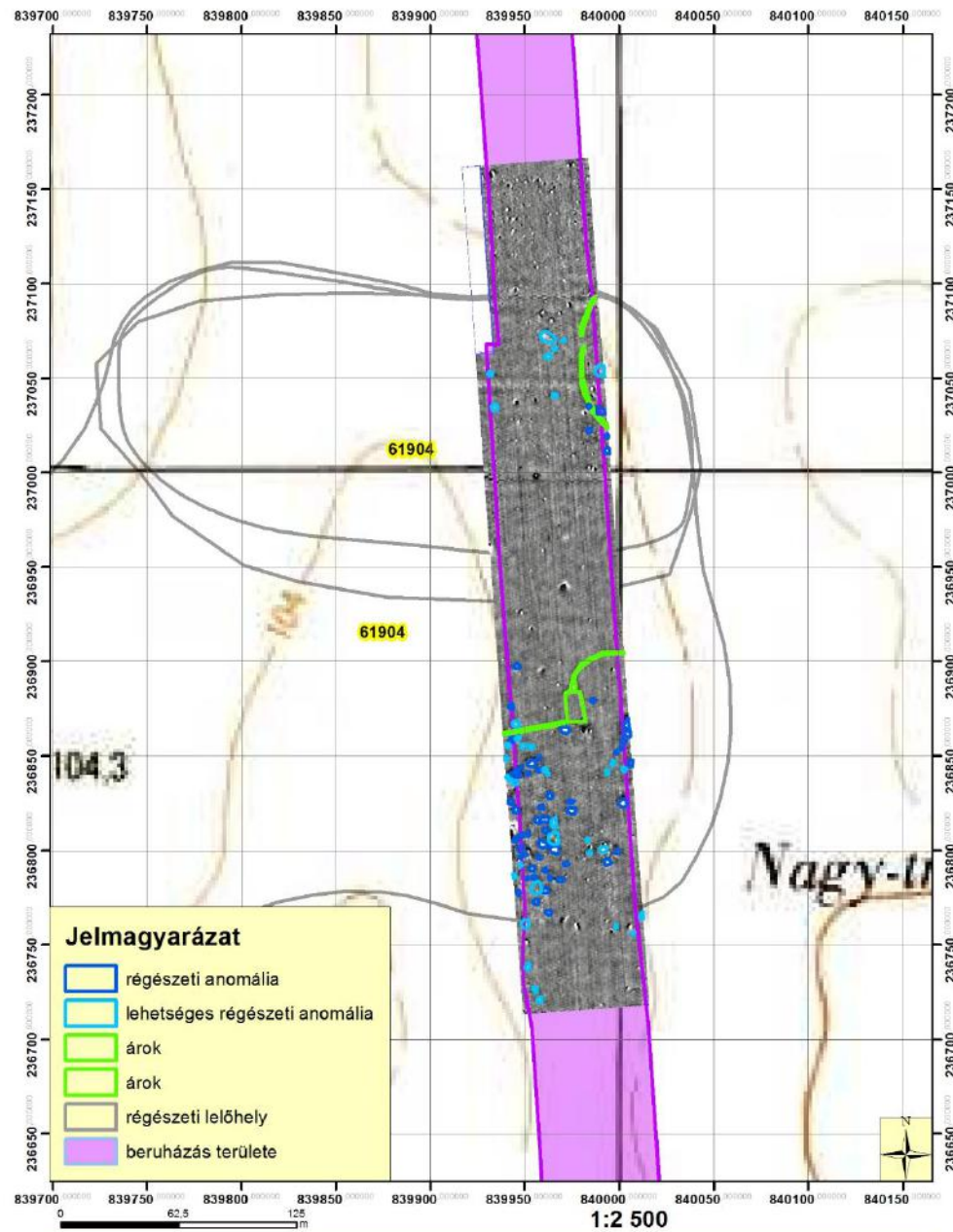


M35 gyorsforgalmi út Debrecen-Berettyóújfalu közötti szakasz (49+050 - 69+250 kmsz)  
Debrecen - Nagy-tanya (azon.: 61904)



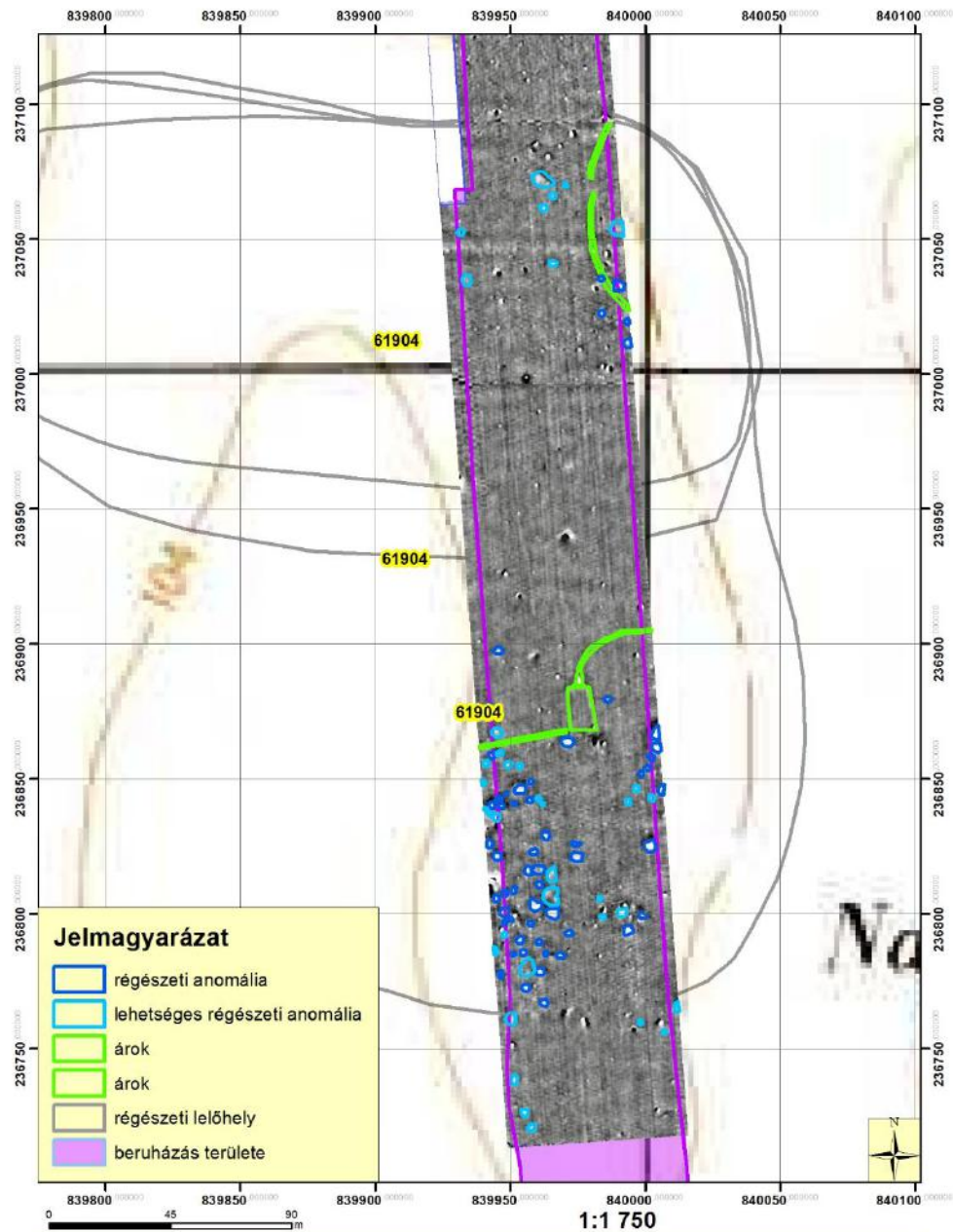


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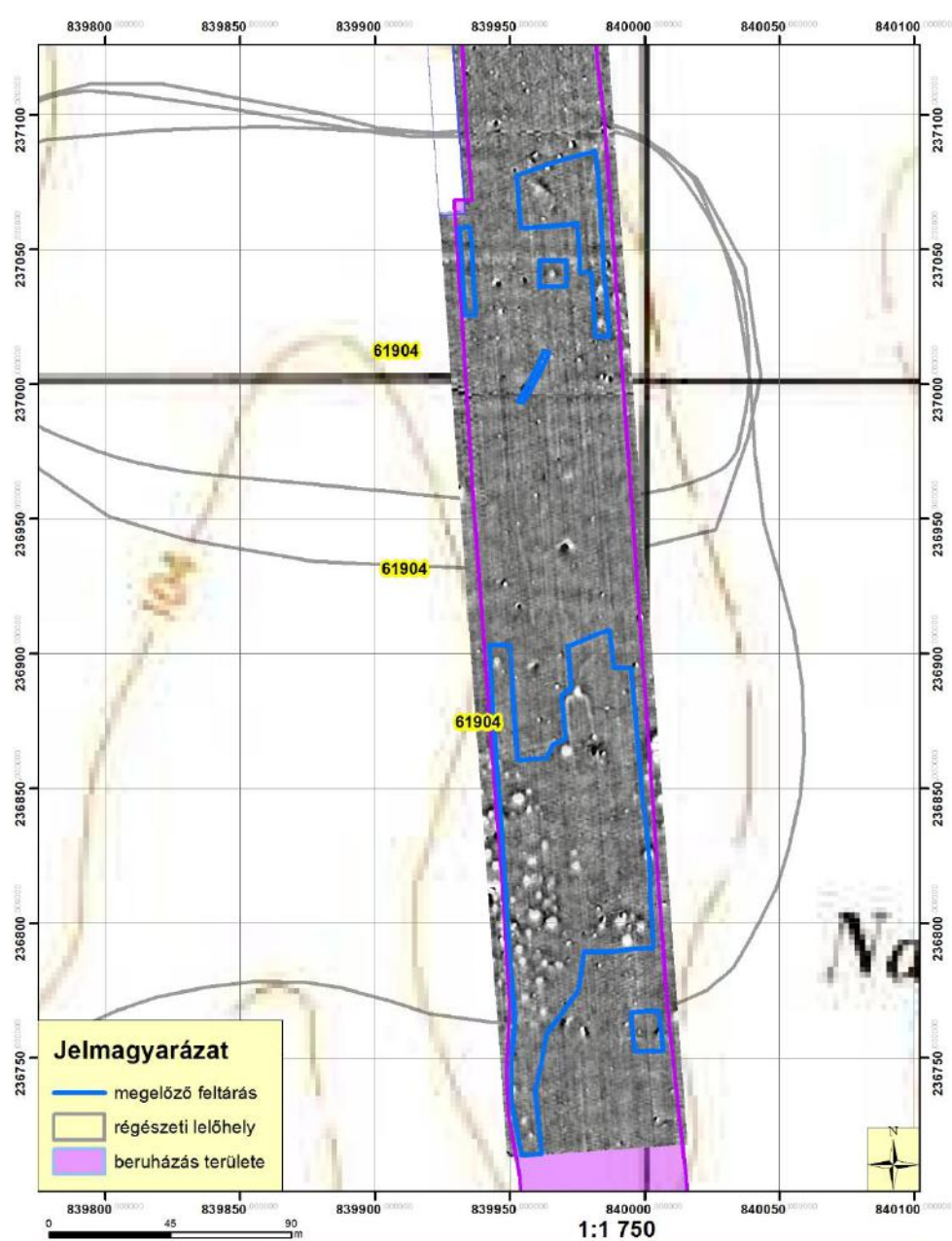


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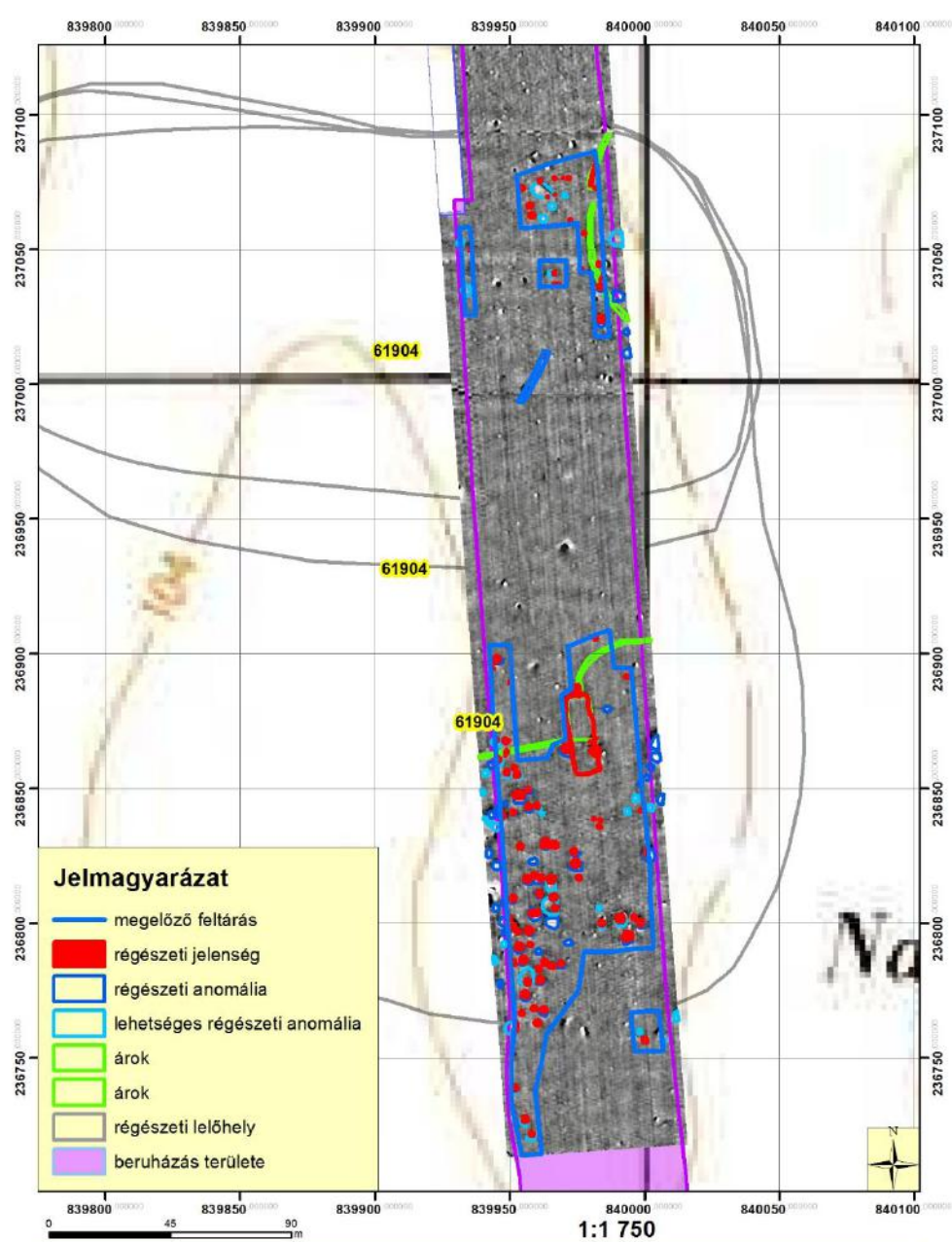


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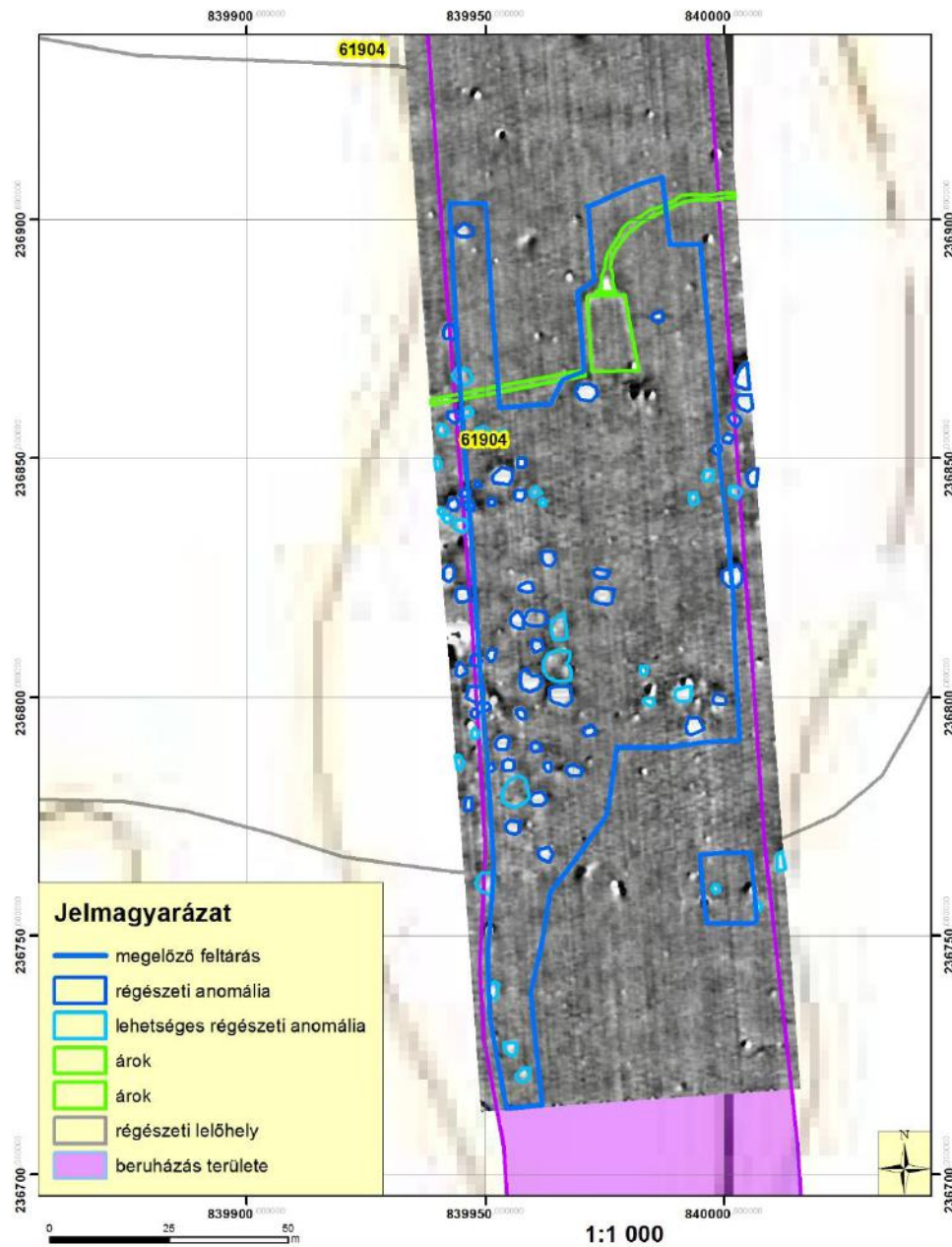


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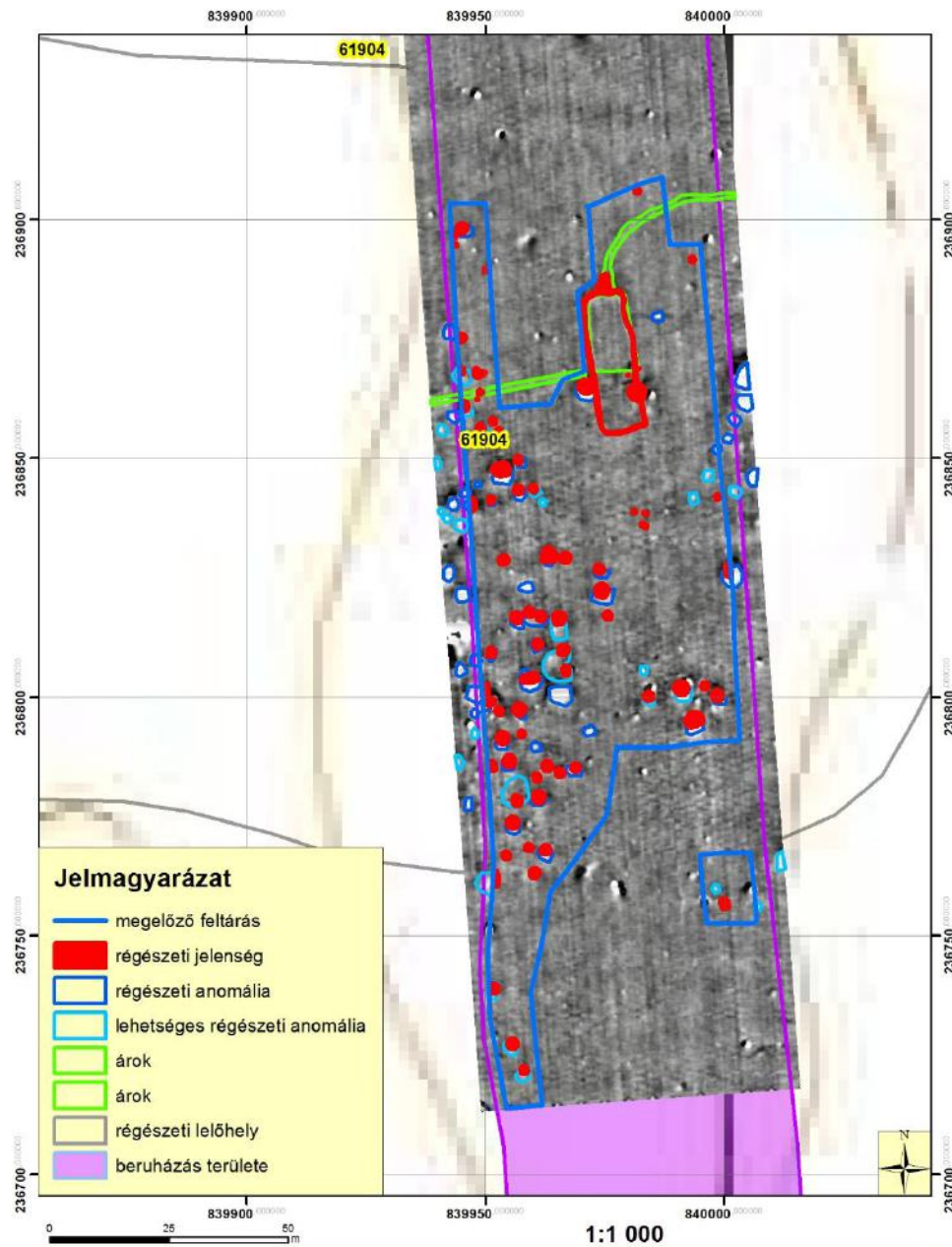


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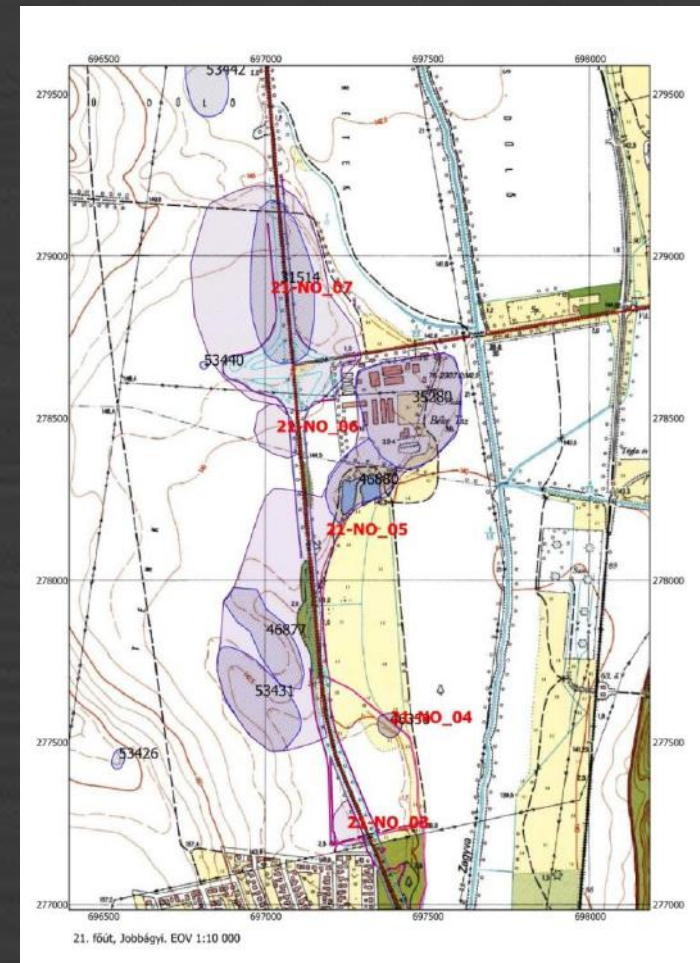
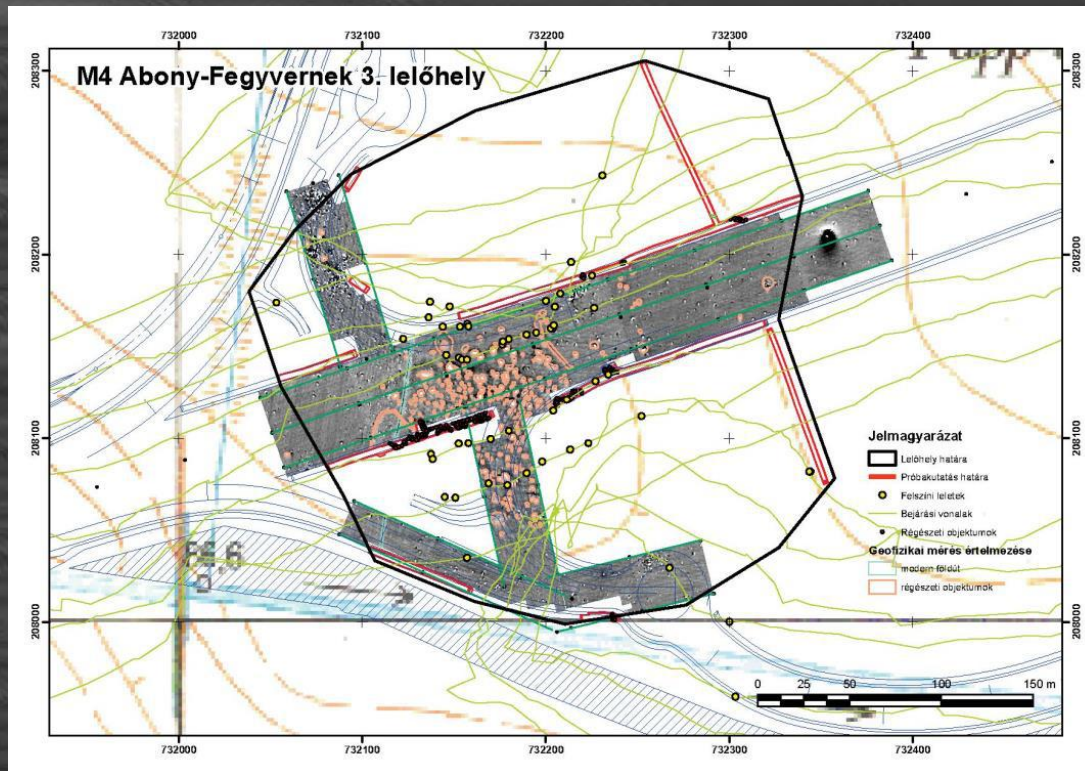
## Trial trenching

- For validation and control
  - Budavári Ltd. - part of the PAD
  - Local museums can be involved as subcontractors
  - app. 10% of the building sites – it can be reduced to 3-5 % if geophysical survey was conducted



## Summarising the results:

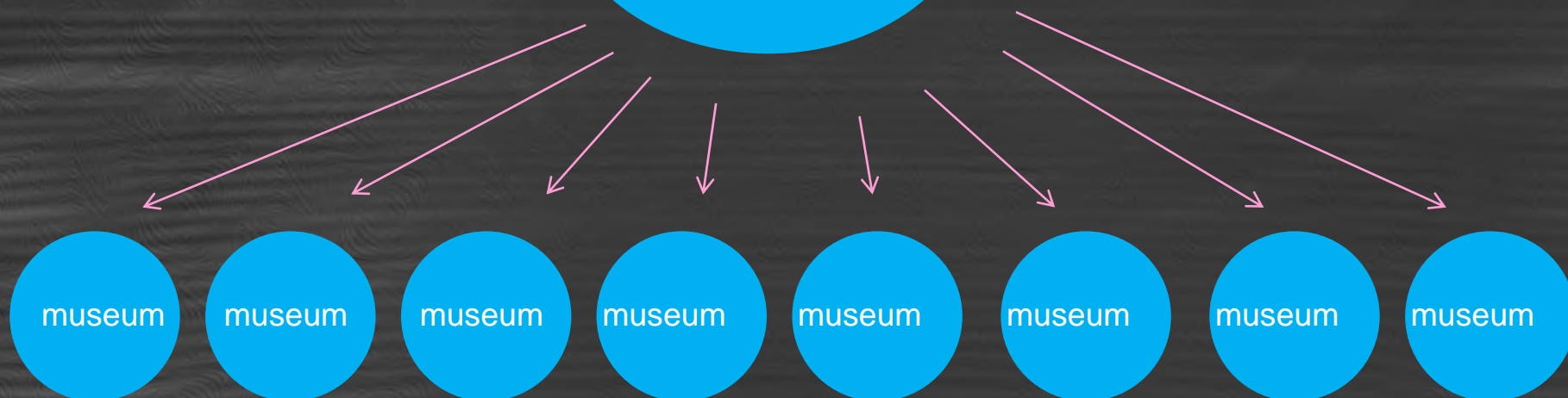
- Assessment and expert opinions
- Archaeological mitigation plan



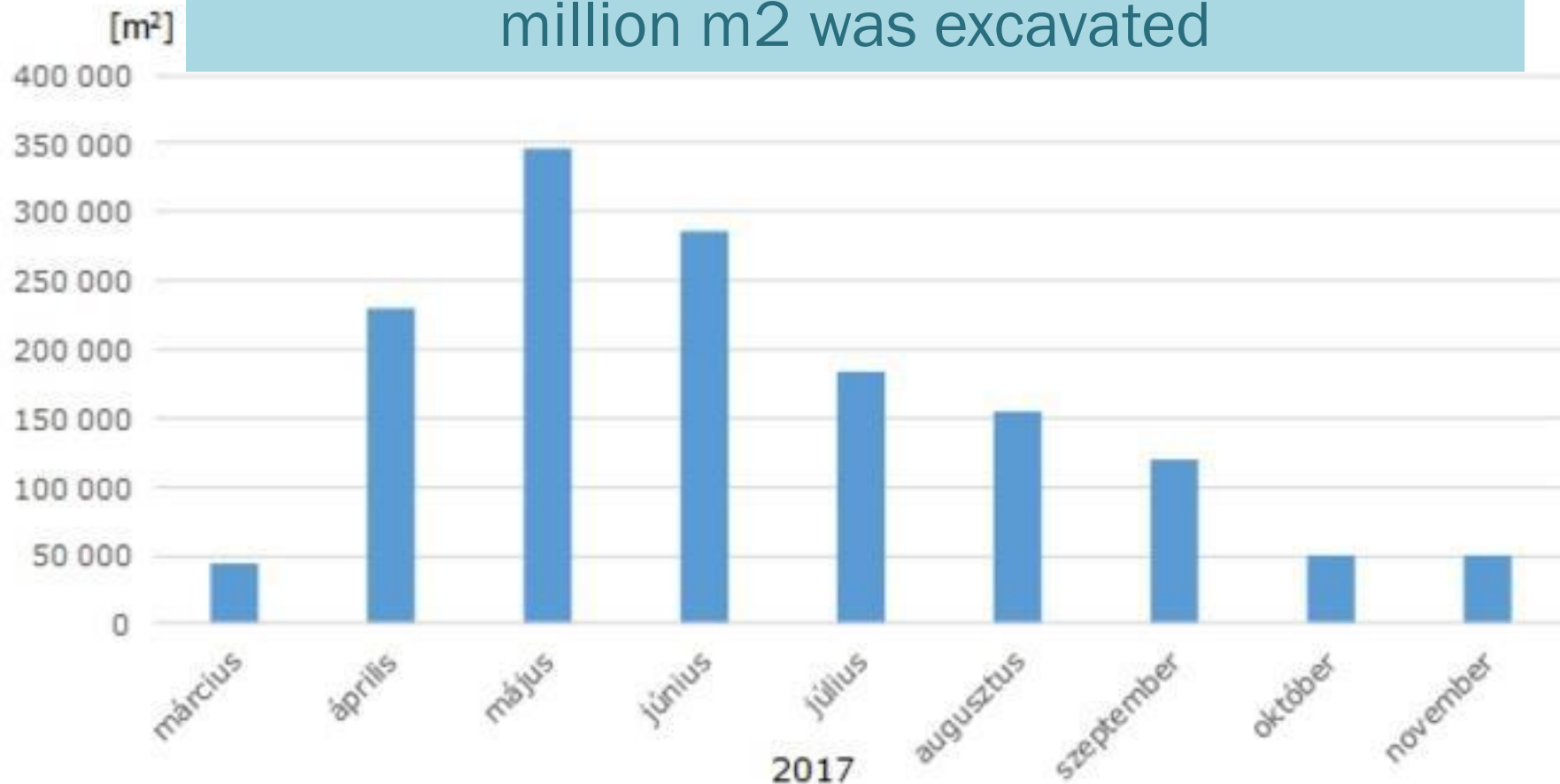




PDA +  
excavations



Motorway projects in 2017 -- more than 2 million m<sup>2</sup> was excavated



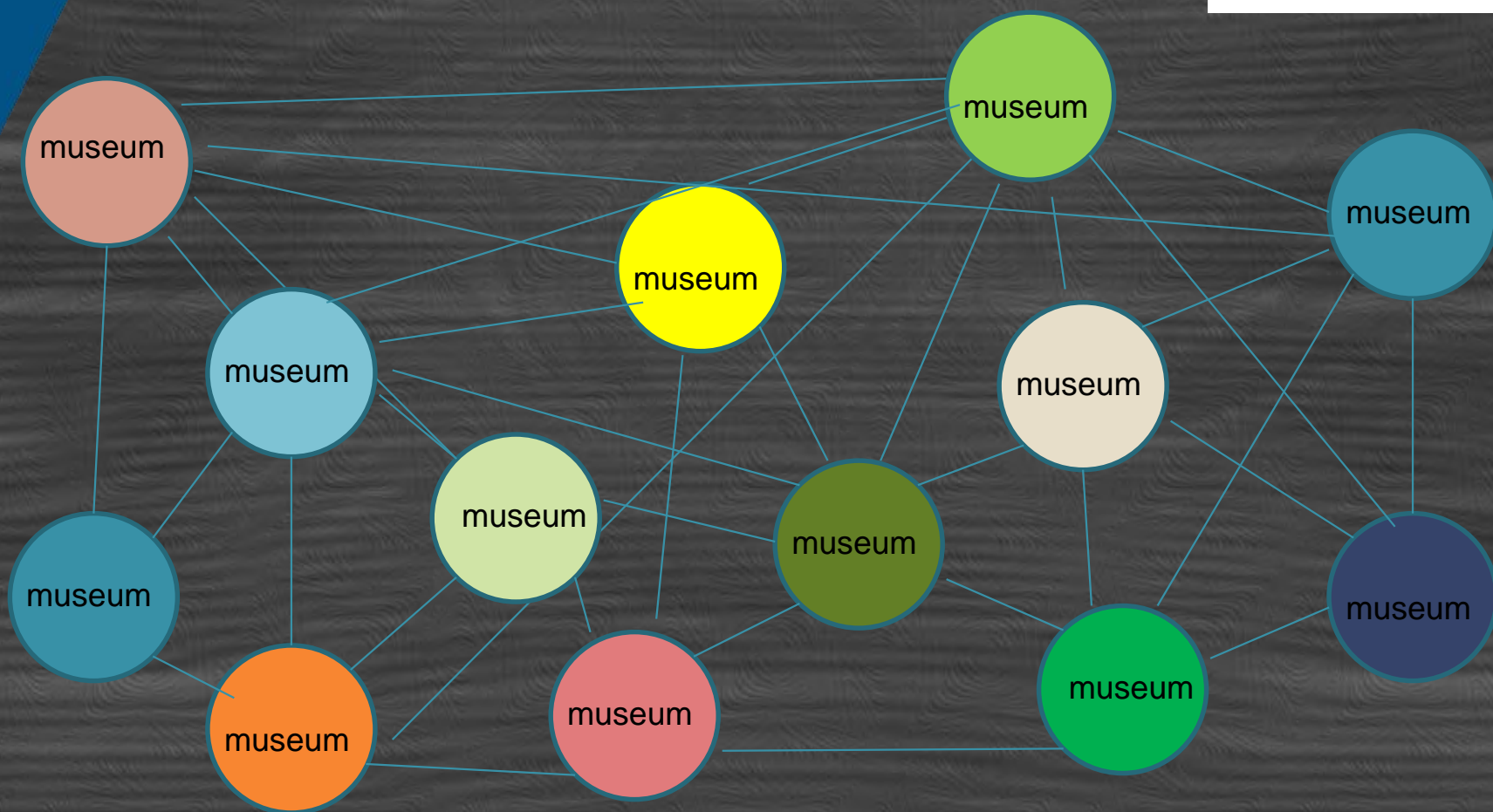
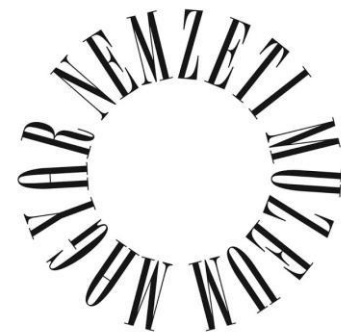


NIF

NEMZETI  
INFRASTRUKTÚRA  
FEJLESZTŐ ZRT.



BUDAVÁRI



## Fundamental problems in Hungarian heritage resources management:

- 1) lack of capacity
- 2) lack of storage space
- 3) 1% limit
- 4) results are hardly utilised and not available to public
- 5) no national research strategy
- 6) museums are underfinanced
- 7) Lack of site registering research, no access (online) to grey literature







THANK YOU FOR YOUR  
ATTENTION!

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