

Midway Park, Northampton

Laura Westoby Senior Geotechnical Engineer



Introduction

- Proposed development.
- Site setting and location.



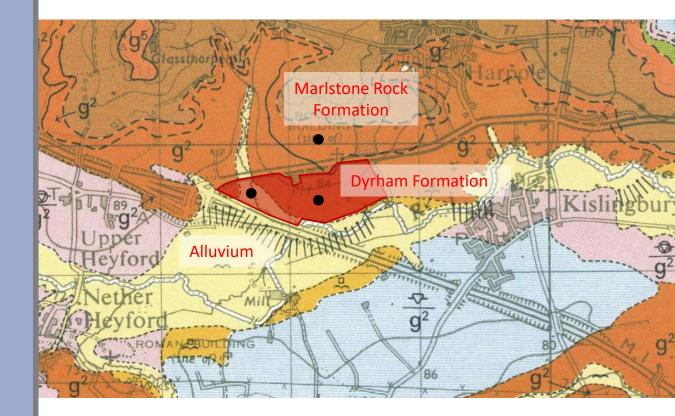
Historical Data

- Factual report.
- Preliminary GI cable percussive boreholes and trial pits.



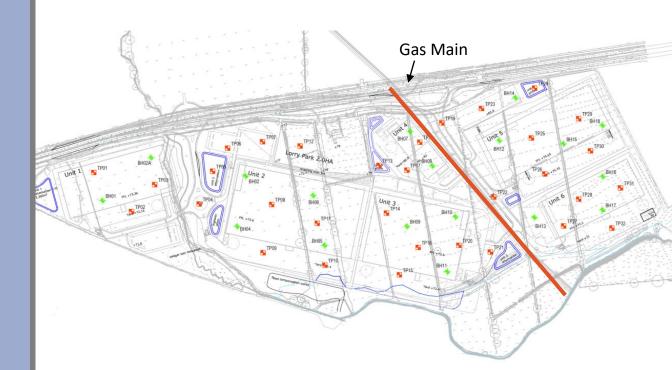
Desk Study

- British Geological Survey.
- MAGiC Map.
- Historical Maps.



Additional GI

- Targeted to development layout.
- Gap filling.
- Composed of trial pits and cable percussive boreholes.
- In-situ and laboratory testing.



Geology

- Review logs.
- Clarify Dyrham
 Formation / Marlstone
 Rock Formation
 boundary.
- Extents of Alluvium?



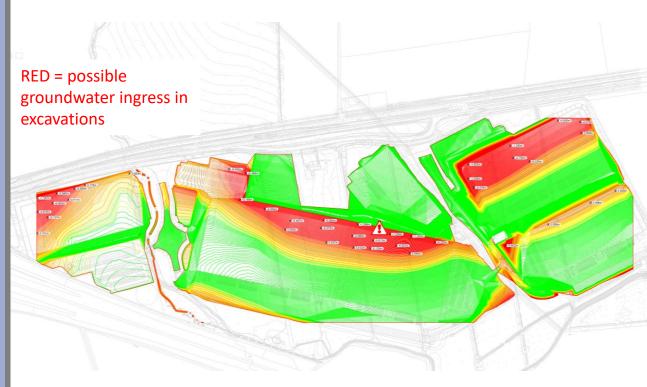
Interpretation

- 'Danger Areas' are we likely to encounter the Dyrham Formation?
- Relate the geology to the cut/fill model.
- Further confirmatory trial pits – pink circles on the sketch.



Interdisciplinary Collaboration

- Effect of the earthworks on groundwater?
- Potential groundwater ingress into excavations – red areas on sketch.
- Permanent drainage solution to manage the problem.



Earthworks Phase

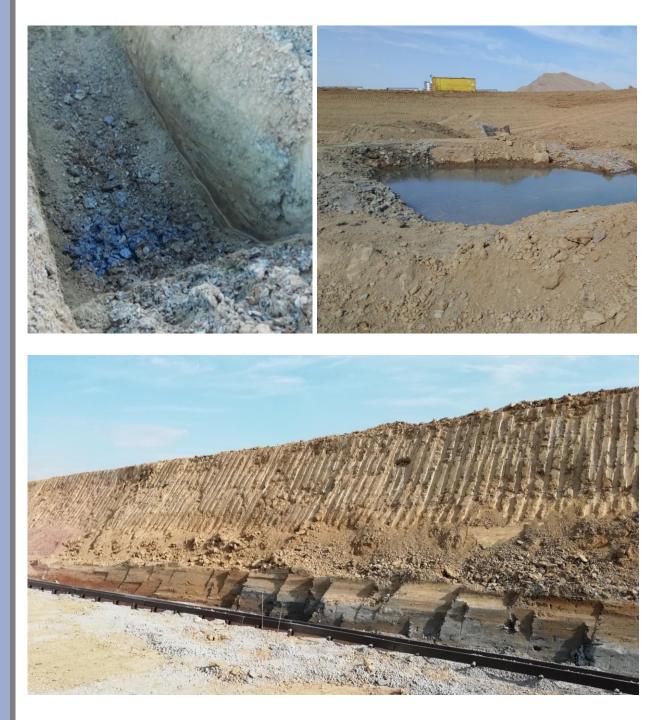
- End Product Specification.
- Test panels and swell testing.
- In-situ testing, including NDG and HSV.
- Lab testing, including MC, 2.5kg and 4.5kg compaction and sulphate.





Assessment

- Was the ground model correct?
- Were there any anomalies?
- Did we encounter the Dyrham Formation?
- Any unexpected ground conditions?



Conclusions and Reflections

- Use multiple data sources.
- Keep reassessing throughout the project.
- Effective communication with all parties, including the Client and the Contractor.



Questions?