Small brownfield sites

Yorkshire Contaminated Land Forum

28 November 2019

H Fraser
CONSULTING
CONTAMINATED LAND
AND HYDROGEOLOGY

Introduction

- Why is it needed?
- Who is it for?
- What's in it?

Team

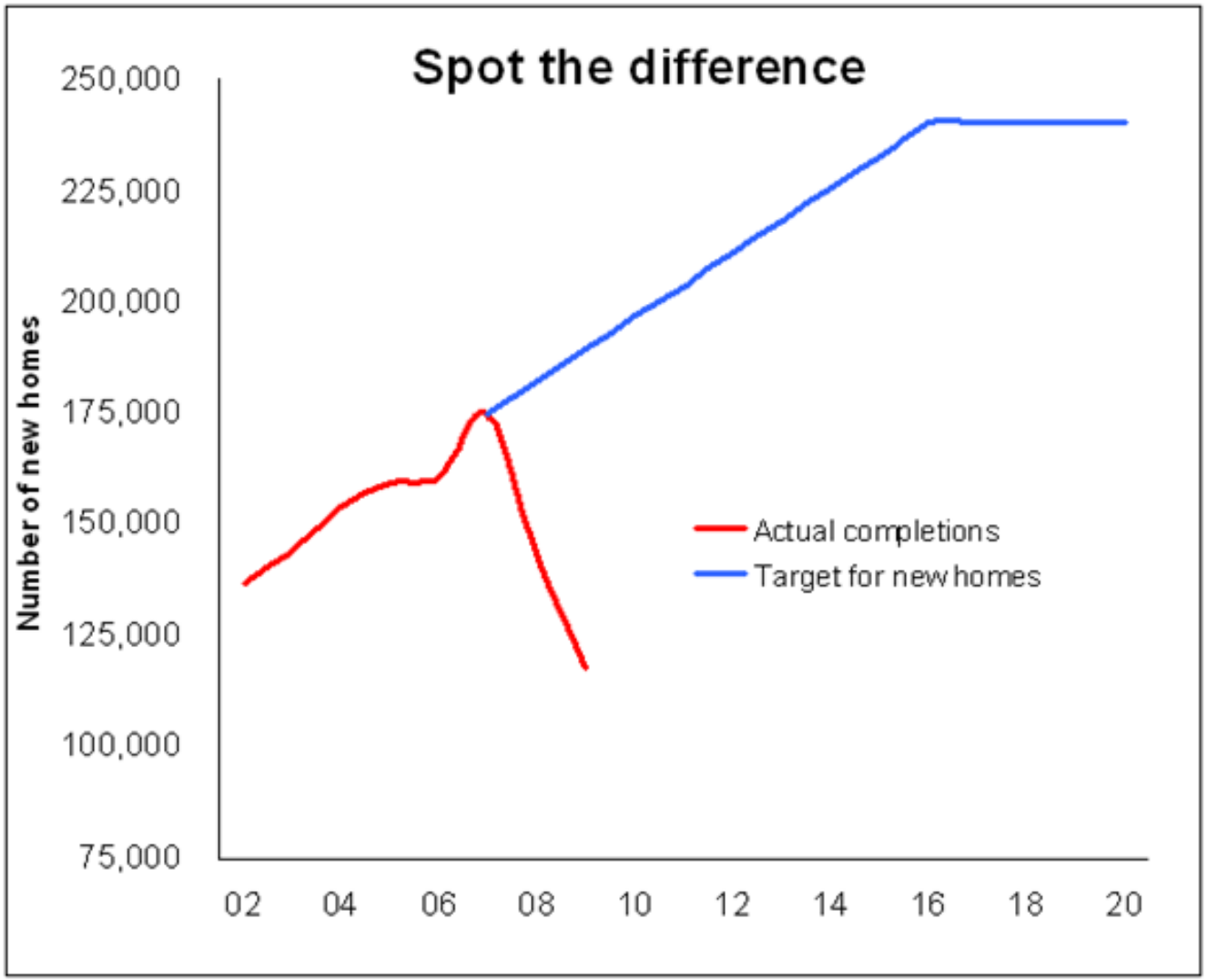
Hannah Fraser
Contaminated land, hydrogeology

Jon Smithson
Contaminated land, geotechnical

Jonathan Guppy
Property development

Nicole Roe
Planning

Why is the guidance needed?



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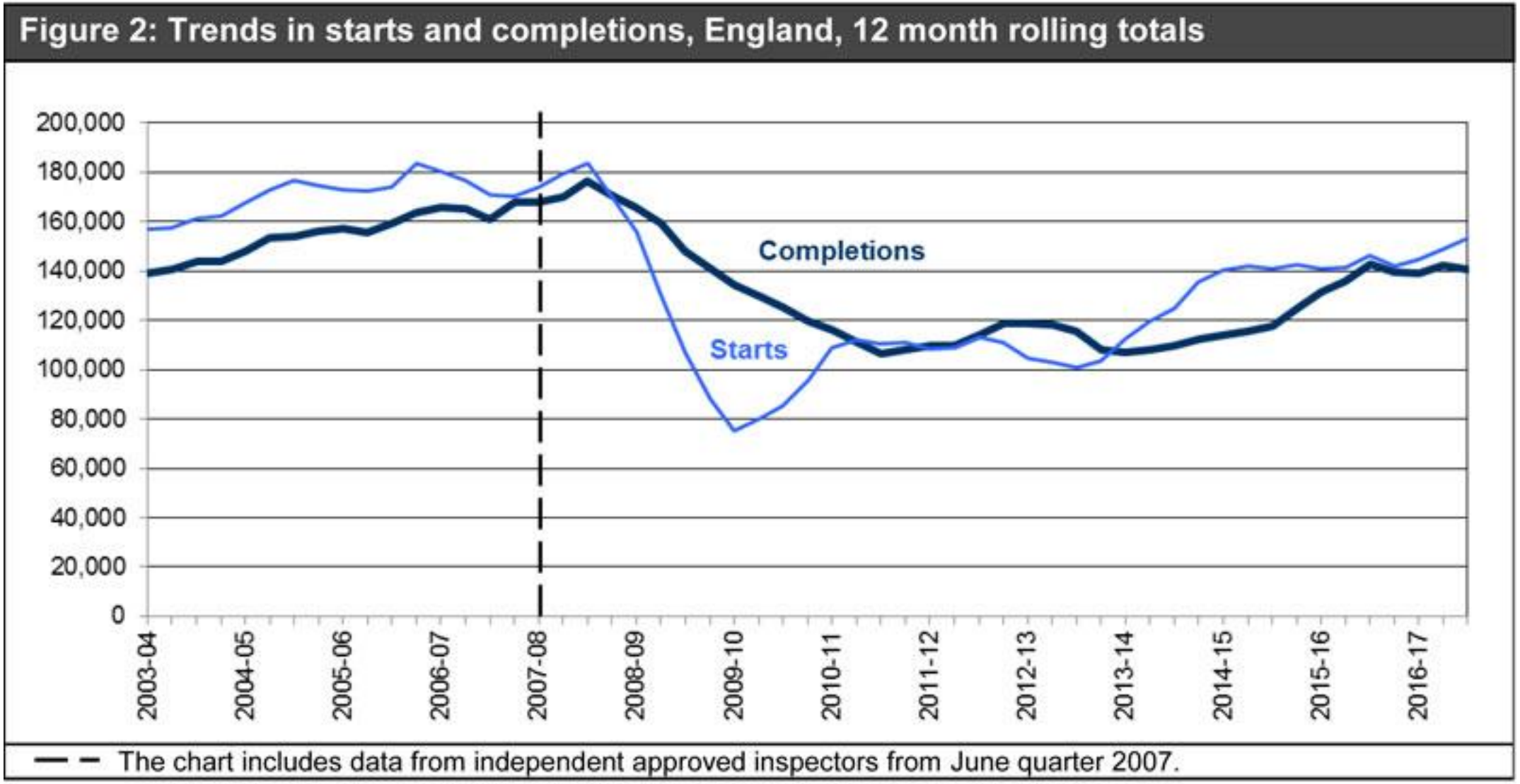


Role of brownfield

‘Brownfield land is an obvious location for new development. Building new homes on suitable brownfield land reduces the pressure for development on open countryside and farming land. We have an ambitious objective to ensure that local development orders granting planning permission for homes are in place on over 90% of suitable brownfield land by 2020.’

Local Development Orders for Housing Development on Brownfield Land - Invitation to bid, UK Government, 2015

Role of SMEs

- In the 1980s, 80% of homes were built by SMEs
- This has dropped to around 12%
- Shelter – ‘ the UK housing market is now the most concentrated and least diversified it has ever been’
- Sarah McMonagle of FMB ‘We are never going to get to 200,000 [a year] unless small housebuilders build a greater proportion of new homes’

David Blackman, 12 February 2015
https://www.building.co.uk/focus/sme-housebuilders-small-talk/5073602.article

Small brownfield sites - challenges

- Securing finance
- Negotiating planning system
- Managing risks associated with former use
- Boundary and party wall issues may be prominent
- Neighbours are closer and construction impacts are more likely to cause nuisance
- Securing access is critical
- Spatial constraints may limit what can be built

Small brownfield sites - benefits

- Less capital is locked up
- There is access to existing infrastructure (road, utilities)
- Close to employment, services, shops, schools, GPs
- Less likely to require financial contributions (e.g. for schools or highways provision)
- Less likely to be local opposition

Objectives

- Help SME builders to develop small brownfield sites
  - Encourage effective management
  - Improve confidence and return on investment
  - Help reach national housebuilding targets
  - Help the building industry to grow
- Provide guidance on dormant sites

Who is it for?

- Small scale developers new to brownfield or upscaling into small development sites
- Advisors – useful cross disciplinary overview
- Landowners – management of brownfield sites
- All kinds of projects – residential, commercial, industrial, self-build, extensions

What's in it? Three themes

Finance

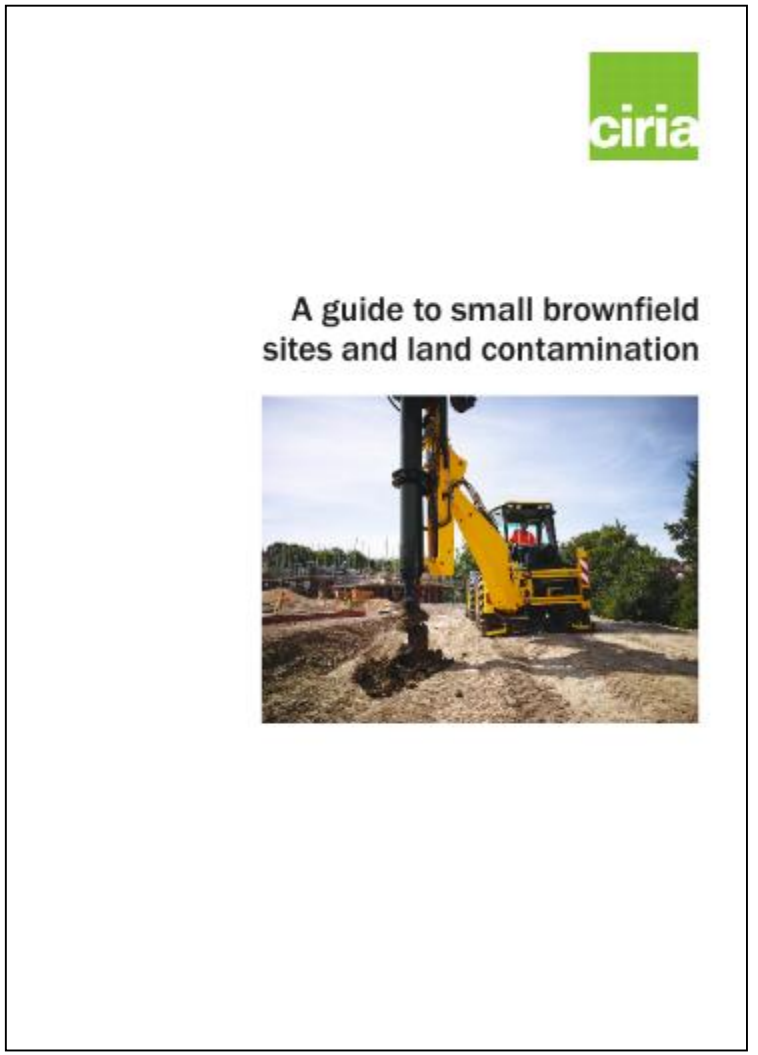
Planning

Technical

Interdependence of financial, planning and technical

Document structure - development phases

- Introduction
- The project team
- Before buying
- Planning applications
- Preparing for building works
- Construction
- Closeout
- Management of dormant brownfield sites

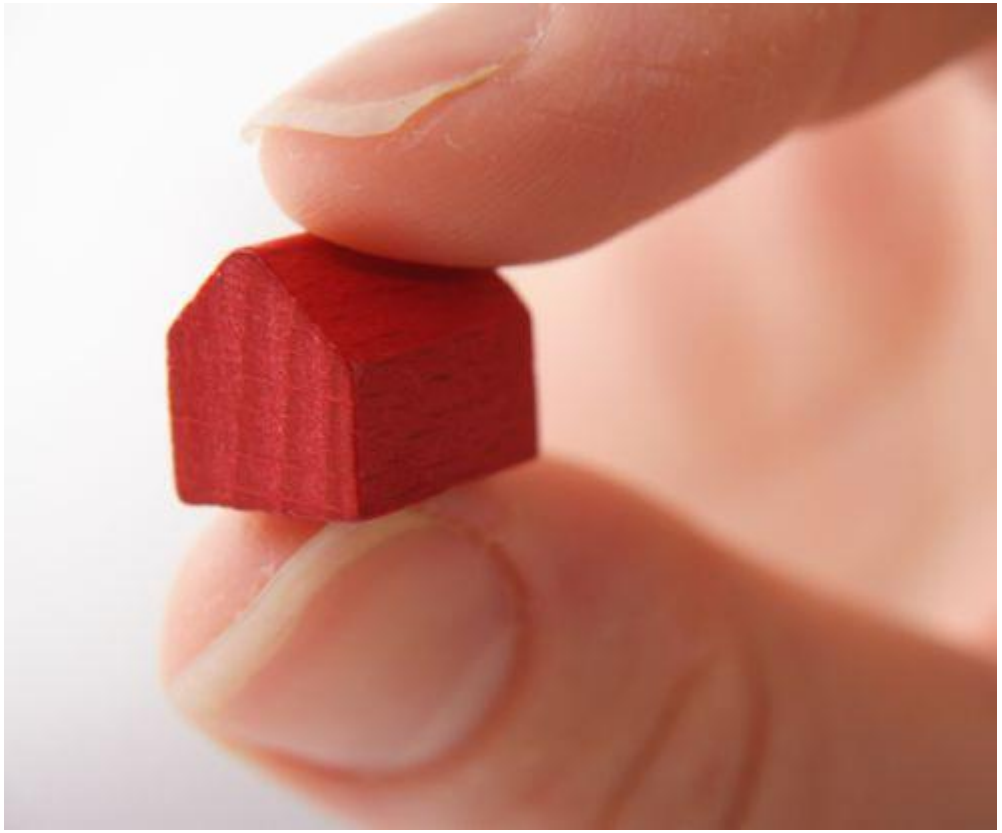


1.Introduction - small and brownfield

- **Small** – some examples

England and Wales	<10 houses, <0.5 ha, floor space <1000m^2, site area <1 ha
Scotland, NI	major development > 50 dwellings, site area >2ha

- **Brownfield** – any land that has previously been developed.
- The guide is also useful for sites that have not previously been used but are potentially affected by contamination



Phases	Pre-acquisition	Pre-planning	Planning submission	Post-planning	Construction	Close-out
Contamination	Due diligence (may require Phase 1 preliminary investigation report) **Section 3.2**	Phase 1 preliminary investigation report (planners may require a Phase 2 intrusive investigation) **Section 4.2.2**		Agree scope with EHO and undertake Phase 2 intrusive investigation. (May be cost-effectively combined with geotechnical investigation) **Section 5.3** *Note that gas monitoring can take between six weeks and 12 months.* Prepare remediation strategy and verification plan **Section 5.4**	Remediation works Maintain record of works and verification testing and monitoring Deal with any unexpected contamination **Section 6.1**	Verification testing and collation of all records in accordance with verification plan Prepare the verification report *Long-term monitoring may be required* **Section 6.1** **Section 7.2**
Planning	Planning context **Section 3.3**	Planning strategy Pre-application discussion with planners **Section 4.1**	Application Validation Consultation Determination	Identify pre-start and pre-occupation conditions and sequence	Submit minor or major amendments to scheme if changes are needed to plans **Section 6.5**	Submit verification report to discharge planning condition(s) **Section 7.5**
Warranty providers and building control surveyors		Engage with warranty providers **Section 4.4** Engage with building control body **Section 4.5**		Building control full plans submission	Building control site inspections **Section 6.7**	Final inspections **Section 7.1** Provision of warranties to purchasers **Section 7.1** Building control completion certificate
Finance	Obtain funding Allow contingency Plan funding mechanisms throughout the life of the project including exit strategy **Section 3.4**	Determine CiL and Section 106 contributions **Section 4.3**		Design contracts to achieve appropriate risk allocation Ensure draw-down of funds ties in with programme	Draw-down funds Site inspections by funders Assess whether contingency is still adequate	Implement exit strategy
Other technical and engineering	Due diligence. Prepare risk register considering contamination, geotechnical, archaeology, ecology, flooding, access etc **Section 3.2**	Commission reports required by planners to support the submission Update the risk register Use site designs to minimise waste soil generation		Ensure foundation, drainage, SuDS, ecology and landscape designs tie in with remediation strategy Update risk register	Waste management **Section 6.3** Update risk register	Waste management verification
Key decisions	Project viability assessment – will it make a profit? What is the right purchase price? **Section 3.1**	Select project team Review site layout/ use in light of technical information and constraints		Will a more detailed Phase 2 investigation lead to a more cost effective remedial solution? Should construction plans be changed due to new information?	Should construction plans be changed to accommodate site conditions?	

2.Project team

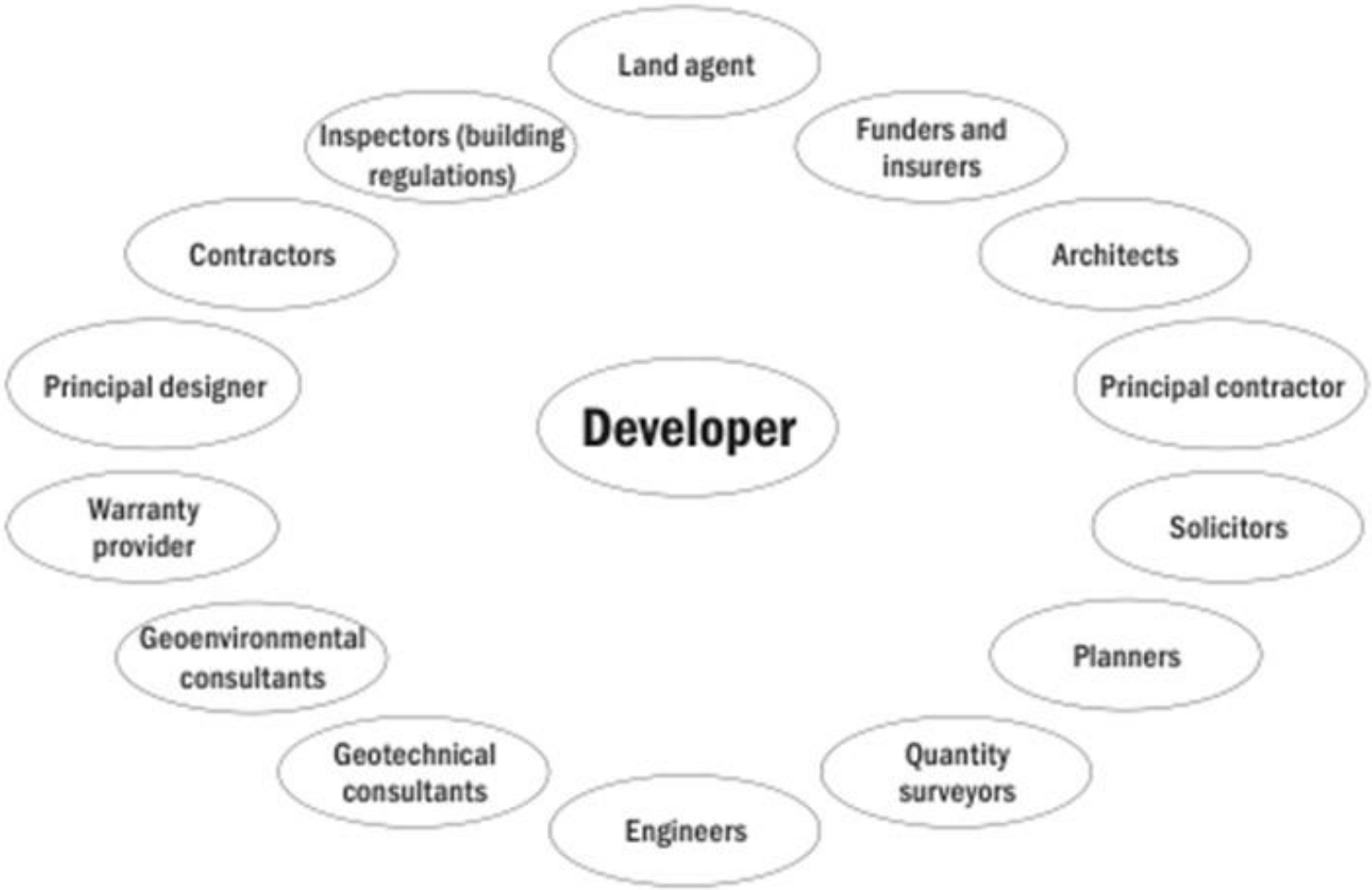


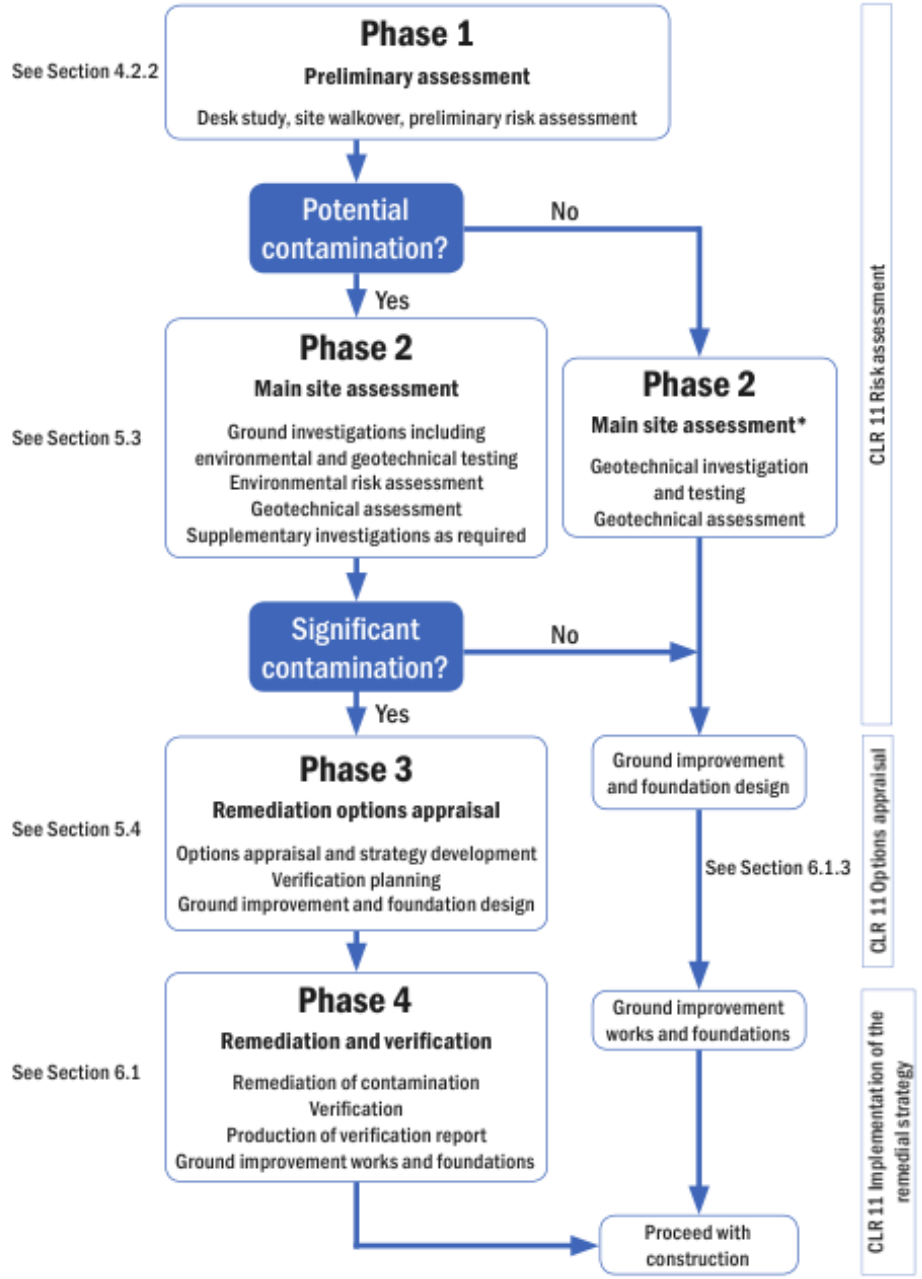
Figure 2.1 The project team for brownfield development

3.Before buying

- Viability
  - Residual value
- Environmental Due diligence
  - Simple screening assessment
- Planning context
- Funding
- Grants and government incentives
- Developing a risk register

4.The planning application

- Planning strategy
- Technical reports
  - Ecological surveys
  - Land contamination and geotechnical assessment
- CiL and Planning obligations
- Engaging with warranty providers
- Engaging with building control



5.Preparing for building works

- Building regulations approval application
- Discharge of planning conditions
- Phase 2 assessment
  - Top tips for ground investigations including GI on a tight budget
- Remediation strategy and verification plan
- Water supply infrastructure
- SUDS
- Archaeological mitigation
- Ecological mitigation
- Licences and permits

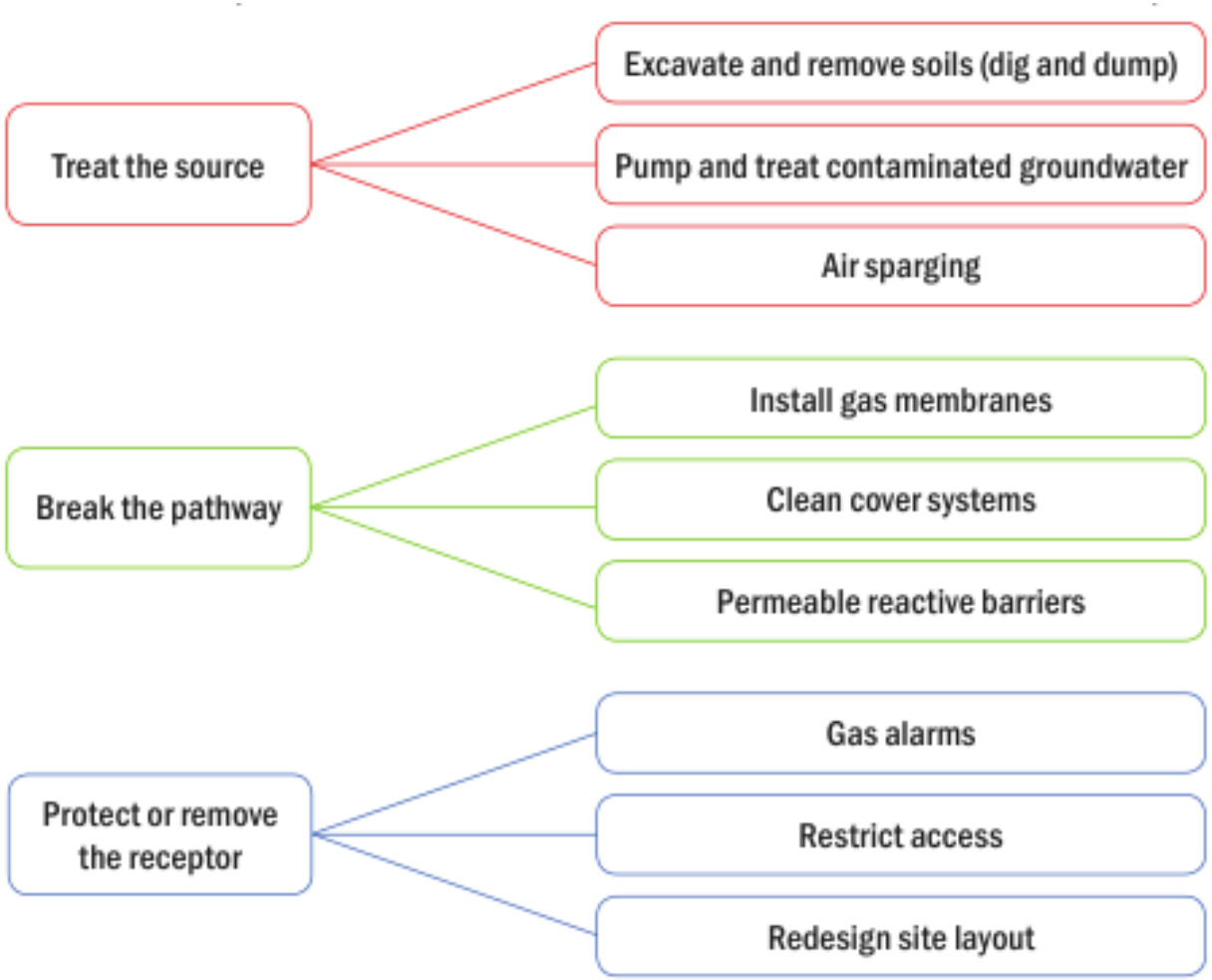


Figure 5.8 Common remediation methods

6.Construction phase

- Remediation and verification
- Ground improvement and foundation design and construction
- Managing waste
- Managing the effects of construction
- Changes to plans
- Managing construction phase financing
- Site inspections

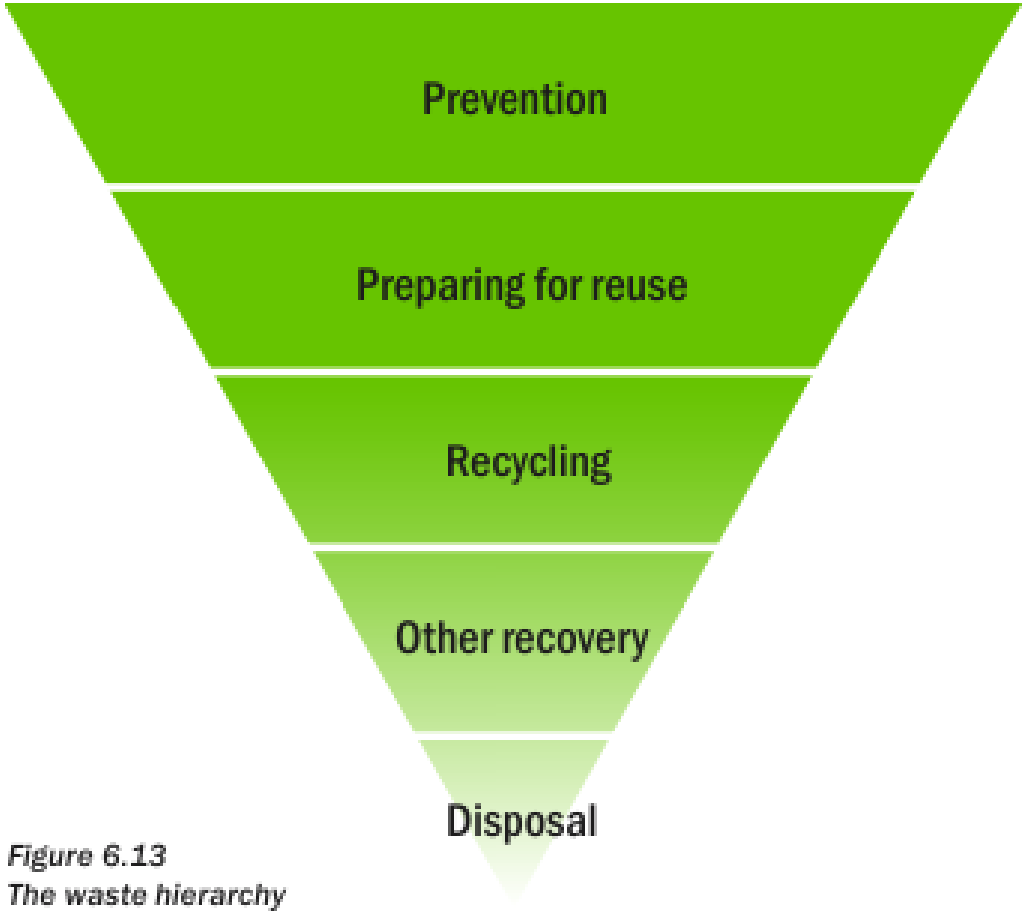


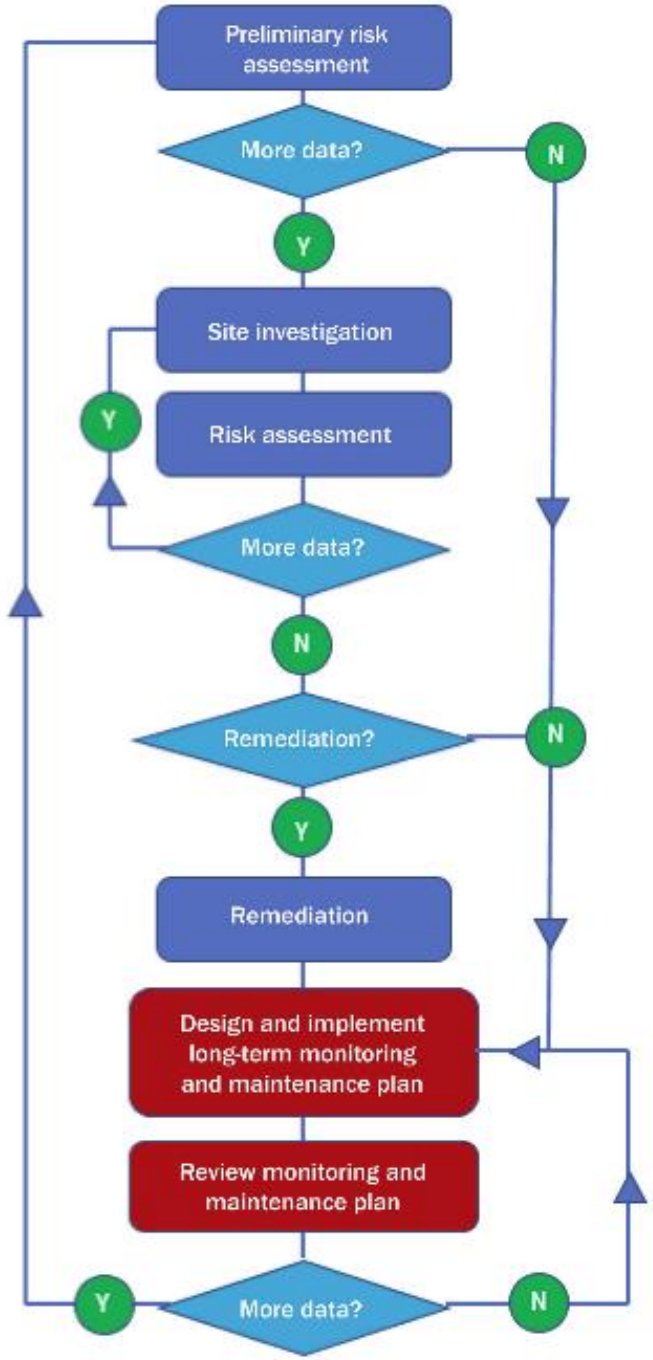
Figure 6.13
The waste hierarchy

7.Closeout

- Final inspections
- Verification reports
- Health and safety file
- Financial exit
- Discharge of planning conditions
- Waste records
- Asbestos register
- Homeowner packs

8.Managing dormant brownfield sites

- Reasons for dormancy
- Reasons for active site management
- Causes of deterioration in site condition
- Assessment of dormant sites
- Monitoring and maintenance plans
- Monitoring and maintenance activities
- Portfolio of sites



Case studies, graphics, signposting

Finance

Planning

Technical

Watchpoints

How to get hold of a copy

- CIRIA website – C773

  www.ciria.org

- pdf available at the nhbc foundation website

www.nhbcfoundation.org/publication/small-brownfield-sites-land-contamination