

Joint SoBRA / RSC December 2017 Conference

NHBC Land Quality Endorsement

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Raising Standards. Protecting Homeowners

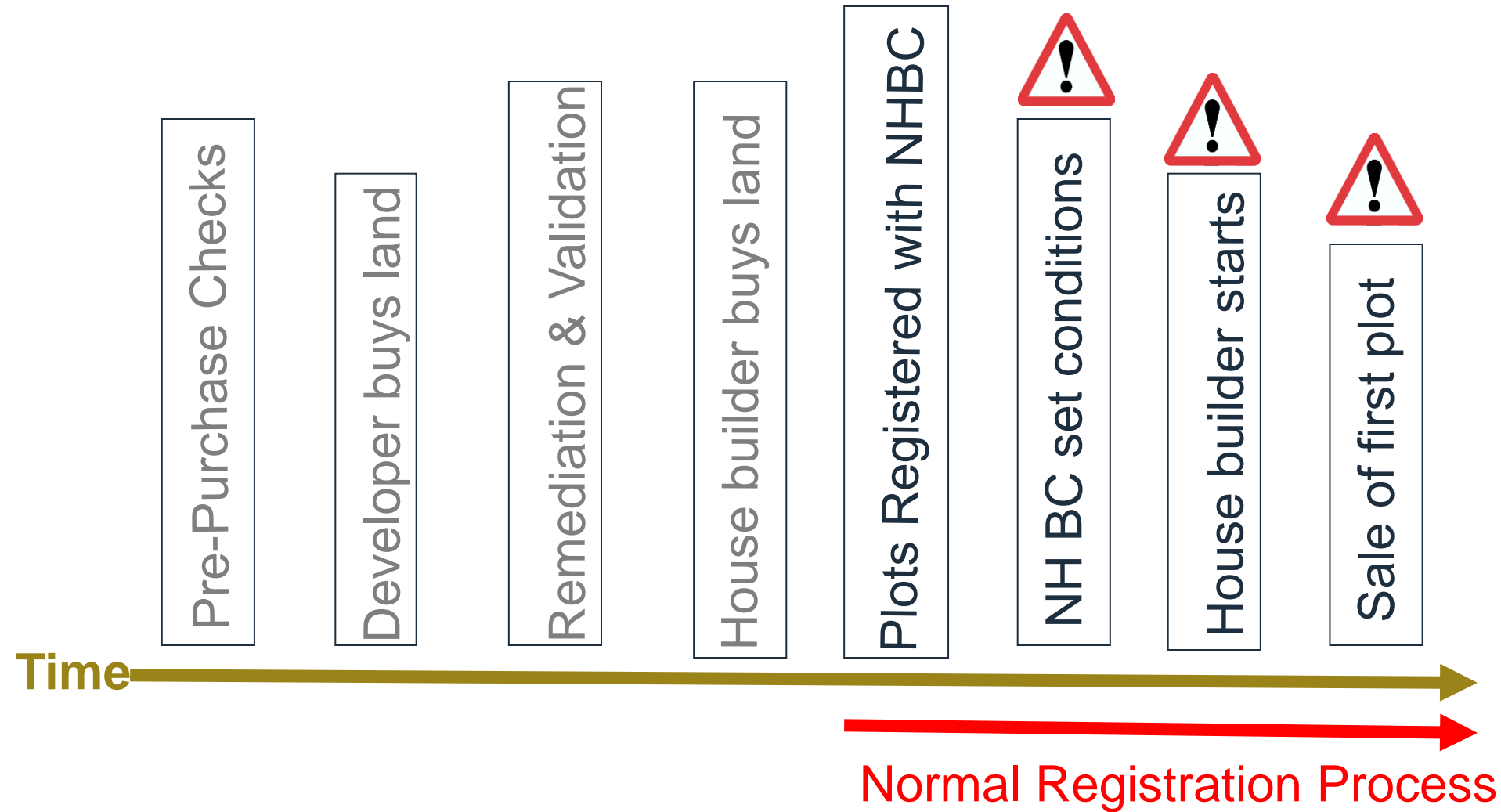
Land Quality & Land Quality Endorsement

- NHBC
- Land Quality Issues
- Land Quality Endorsement
- Case studies

NHBC – Introduction

- Not for profit insurance company
- Buildmark Warranty & Building Control
- 13 Environmental & 3 Geotechnical Engineers
- Participate & engage with industry
 - CIRIA, Land Forum, AGS, BSI, etc.
- NHBC Foundation

Land Quality - Timelines



Land Quality Concerns

Environmental

- Insufficient SI/GI
- Incomplete or poor Conceptual Site Models
- Variable interpretation and assessment of data
- Poor characterisation of ground gas regimes
- Use of In-house GACs
- Frequency & nature of testing
- Robustness of verification strategy
- Co-ordination with engineering issues

Land Quality

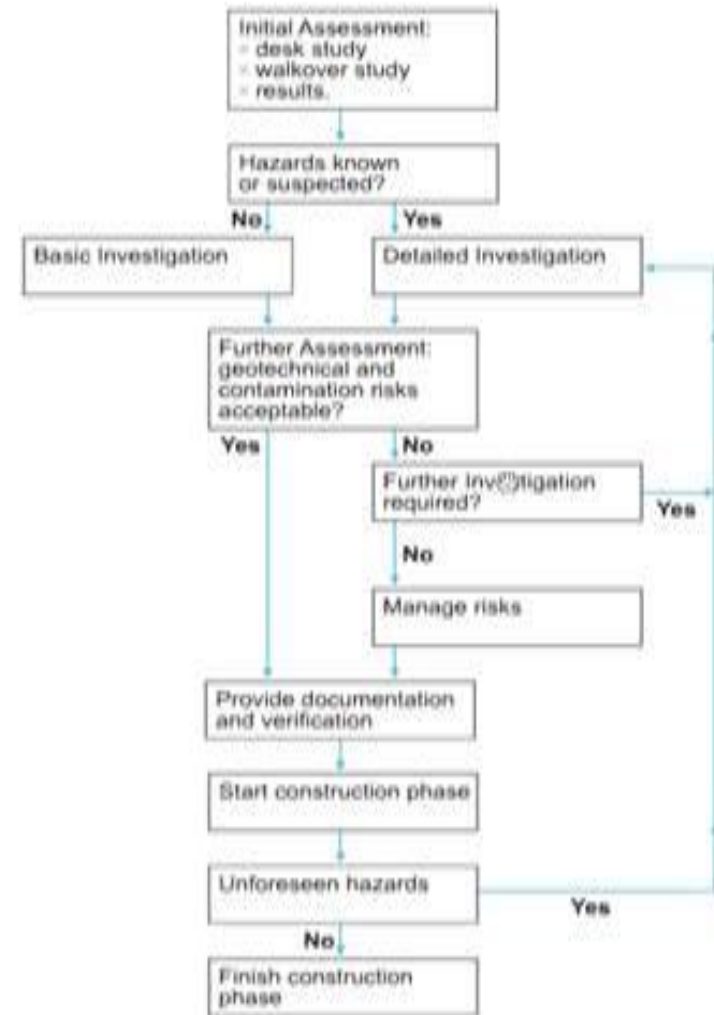
What do we all want to avoid on new developments

- Human health issues
- Environmental harm
- Damaged or defective buildings
- Homeowner dissatisfaction
- Significant claims costs
- Reputational damage

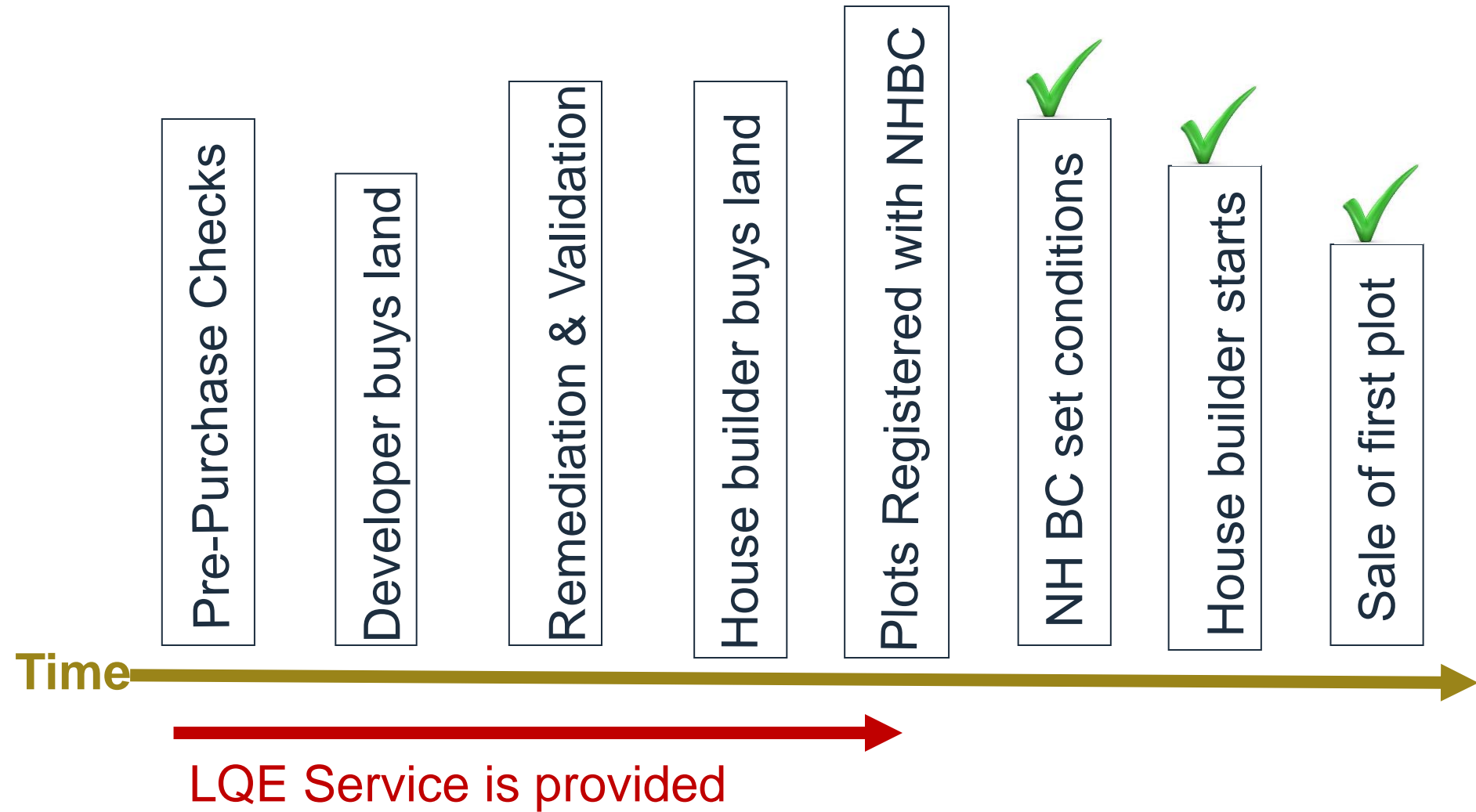
Land Quality

NHBC Standards

- Chapter 4.1 Land Quality – Managing Ground Conditions
- Framework of our expectations



Land Quality Endorsement



Land Quality Endorsement

What is it and who is it for?

- A consultancy service
- Remediation & sale of land for residential end-use
- Complex contamination and/or geotechnical issues
- Independent third-party review & assessment
- NHBC Standards Chapter 4.1: Land Quality
- Land Developers, Land Owners and Development Agencies
- House builders

Land Quality Endorsement

Why do we do it?

- Raising Standards
- Protecting Home owners
- Good risk management
- Earliest involvement in development timeline
- Wider industry awareness of NHBC Standards
- Ensure adequate investigation, characterisation & validation
- Determine compliance with Standards
- Bridges gap between land developers and house builders
- Integrates geotechnical and environmental assessments

Land Quality Endorsement

Full LQE & LQE Technical Assessment

- Appointed at project inception
- Feedback on previous/proposed site investigations
- Site visits and design team and/or site meetings
- Feedback on remediation strategy/method statements
- Review progress during works and validation on completion
- Prepare the Certificate of Land Quality Endorsement
- Advice compliance with NHBC Standards
- Identify outstanding issues

Certificate of Land Quality Endorsement

NHBC House, Davy Avenue, Knowlhill, Milton Keynes. MK5 8FP Tel: 0844 633 1000 www.nhbc.co.uk

Site X – Landowner Client

1.0 Preface

This *Certificate of Land Quality Endorsement* relates solely and only to the site identified in section 4 below.

The Certificate is based on the assessment of the information listed below in connection with the ground conditions at the site as submitted to NHBC Services Ltd and on periodic site inspections on behalf of NHBC Services Ltd. The assessment criteria used were solely those set out in the NHBC Standards current at the time of issue of this Certificate. Specifically the assessment is based on Part 4 (Foundations) and in particular *Chapter 4.1 – Land Quality: Managing Ground Conditions* which sets out the Technical and Performance Standards required by NHBC to permit the provision of NHBC Buildmark cover to registered Builders and Developers constructing homes on the site. The purpose of this Certificate is to provide a statement of findings against the assessment criteria for the remediated site. The Certificate forms part of the NHBC risk management process in connection with the registration of homes on the site for Buildmark cover to be constructed by NHBC Registered Builders or Developers. The assessment undertaken, and endorsement provided, by NHBC Services Ltd is for the purposes of Buildmark cover only and does not confirm compliance with any statutory requirements nor that the site is free from contaminants. In accordance with the NHBC Rules, it is the responsibility of the registered Builder/Developer at the time of construction of the homes to ensure full compliance, including any further detailed assessments required, with all statutory requirements and with NHBC's Technical/Performance Standards current at the time of development. Neither NHBC nor NHBC Services Ltd accepts any liability for errors or omissions resulting from the information submitted to either company.

2.0 Validation of Certificate

NHBC Services Ltd has undertaken technical assessment of the information listed below relating to the ground conditions at the site described in Section 5. Relying on that information NHBC Services Ltd considers, in relation to the matters covered by this Certificate, that the site would be acceptable for the provision of Buildmark cover. At the time of plot registrations on the site by an NHBC Registered Builder or Developer, Buildmark cover will still be subject to the resolution of any outstanding issues noted below, compliance with statutory requirements and NHBC's current Technical Requirements/ Performance Standards in respect of the construction of the homes in accordance with NHBC's Rules of Registration.

Note for Registered Builders – Please state on your NHBC site registration that this site has been subject to an LQE assessment

Prepared on behalf of NHBC Services by:

Marzena Gyckiewicz BSc (Hons) CGeol FGS

Position: Senior Land Quality Engineer

Checked by:

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Position: Principal Land Quality Engineer

Certificate No: NHBC/LQE/123456

Revision: 1

Date of Issue: 01 February 2010

Land Quality Endorsement – Concerns

Geotechnical

- Insufficient site investigation
- Soft alluvial soils – consolidation
- Raised ground levels - settlements
- Groundwater - infiltration
- Differential settlements – buildings & externals
- Deep engineered fills/partial depth treatments – quarries/landfills
- Engineered fill specifications – method spec vs end product
- Assessed in conjunction with the environmental assessments

Land Quality Endorsement – Benefits

Homeowner

Land Developers	House builders	NHBC
Raising standards	Raising standards	Raising standards
NHBC profile raised	Reduced uncertainty	Protecting homeowners
Increased confidence	Less info required post-registration	Good risk management
Reduces abnormals	Reduced delays post-registration	Right first time
Increased marketability	Endorsement of remediation for Buildmark warranty	Compliance with Standards
Attracts NHBC builders		Bridging gap

NHBC Land Quality Endorsement

Thank you

www.nhbc.co.uk/lqe

