

## MASSACHUSETTS TOOLBOX

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### ENGINEERING TASKS

### RESPONSIBLE PARTY

### PROJECT PHASE

#### Site Survey

#### Municipality

#### Pre-development

A comprehensive inspection of the property, including location of:

- trees
- other vegetation
- unusual or unnatural soil or ground conditions
- underground pipes
- soil and land discoloration

A historical assessment of the property going back 100 years, using information from:

- recorder of deeds
- title companies
- realtors
- local court records
- water regulatory agencies
- news reporting agencies
- environmental protection agencies

Answers to questions that affect site plan:

- Are there flood plain boundaries?
- Is the site in a Natural Environmental Heritage Area?
- What are the land dimensions and other measurements?

#### Phase I/21E

#### Developer

#### Pre-development

Examination for potential soil contamination, groundwater quality, surface water quality, and issues related to hazardous substances.

The examination of a site may include:

- finding chemical residues within structures
- identification of asbestos-containing building materials
- inventory of hazardous substances stored or used on site
- assessment of mold and mildew
- evaluation of other indoor air quality parameters

#### Site Engineering

#### Municipality

#### Pre-development

Tasks include testing of soil samples to provide information on soil erosion and soil-bearing strengths.

## HOUSING TOOLBOX

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### Structural Engineering

### Municipality

### Pre-development

Physical inspection of existing building(s) to identify:

- structural flaws
- pollutants (e.g., asbestos, lead-based paint, PCBs), which must be removed or encapsulated in accordance with federal laws and regulations

Structural flaws may include:

- crumbling sidewalks
  - tilted buildings
  - damaged block, bricks and mortar
  - bulges in the building structure
  - sagging roofs
  - evidence of water damage
  - signs of termite damage
  - problems with the operating system (e.g., electrical, plumbing, air conditioning)
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**Please Note** | Effort has been made by the author and sponsoring organizations to provide current and accurate information. However, readers should not rely on the information and are urged to review source material and consult with appropriate funding sources, practitioners and legal counsel before embarking on a particular course of action.