

Building Site Development

General

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns, landscaping, and golf fairways.

Shallow Excavations

Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewerlines, telephone and power transmission lines, basements, open ditches, and cemeteries. The excavations are most commonly made by trenching machines or backhoes. The ratings are based on the soil properties that influence ease of digging and resistance to sloughing.

Dwellings With or Without Basements

These are single-family houses of three stories or less. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper, for houses without basements, or at a depth of 7 feet if a basement is constructed. The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs.

Small Commercial Buildings

Limitation ratings are given for undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

Local Roads and Streets

Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing, commonly of asphalt, gravel with binder in it, or concrete, and that are expected to carry automobile traffic all year. These roads and streets are graded to shed water, and conventional drainage measures are provided. With the probable exception of the hard surface, roads and streets are built mainly from the soil at hand.

Lawns, Landscaping, and Golf Fairways

The soils are rated for their use in establishing and maintaining turf for lawns and golf fairways and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criterion in rating. Traps, tees, roughs, and greens are not considered as part of the golf fairway. The properties considered are those that affect plant growth and trafficability after vegetation is established.

See the National Soil Survey Handbook, Part 620, for criteria used in rating specific uses.

BUILDING SITE DEVELOPMENT

Knox and Lincoln County

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
AdB ADAMS	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Slight:	Severe: droughty
AdC ADAMS	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
AdD ADAMS	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: droughty, slope
AgA ALLAGASH	Severe: cutbanks cave	Slight:	Slight:	Slight:	Moderate: frost action	Moderate: droughty
AgB ALLAGASH	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: droughty
AgC ALLAGASH	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: droughty, slope
Be BEACHES	Severe: cutbanks cave, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: droughty, excess salt, wetness

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Bg BIDDEFORD	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, low strength, ponding	Severe: excess humus, ponding
BoB BOOTHBAY	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness
BoC BOOTHBAY	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action	Moderate: slope, wetness
BoD2 BOOTHBAY	Severe: slope, wetness	Severe: slope, wetness	Severe: slope, wetness	Severe: slope, wetness	Severe: frost action, slope	Severe: slope
Bp BOROSAPRISTS	Severe: excess humus, ponding	Severe: low strength, ponding	Severe: low strength, ponding	Severe: low strength, ponding	Severe: frost action, ponding	Severe: excess humus, ponding
BsB BRAYTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
BtB BRAYTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness

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BuB BUXTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, low strength, wetness	Severe: wetness
BuC BUXTON	Severe: wetness	Moderate: shrink-swell, slope, wetness	Severe: wetness	Severe: slope	Severe: frost action, low strength	Moderate: slope, wetness
BuD2 BUXTON	Severe: slope, wetness	Severe: slope	Severe: slope, wetness	Severe: slope	Severe: frost action, low strength, slope	Severe: slope
Ch CHARLES	Severe: cutbanks cave, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, frost action, wetness	Severe: flooding, wetness
Dp DUMPS	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
PITS	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
EgB ELDRIDGE	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Moderate: frost action, wetness	Moderate: droughty, wetness

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
HeB HERMON	Severe: cutbanks cave	Moderate: large stones	Moderate: large stones	Moderate: large stones, slope	Moderate: large stones	Severe: droughty
HeC HERMON	Severe: cutbanks cave	Moderate: large stones, slope	Moderate: large stones, slope	Severe: slope	Moderate: large stones, slope	Severe: droughty
HtB HERMON	Severe: cutbanks cave	Moderate: large stones	Moderate: large stones	Moderate: large stones, slope	Moderate: large stones	Severe: droughty
HtC HERMON	Severe: cutbanks cave	Moderate: large stones, slope	Moderate: large stones, slope	Severe: slope	Moderate: large stones, slope	Severe: droughty
HtD HERMON	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: droughty, slope
HxB HERMON	Severe: cutbanks cave	Moderate: large stones	Moderate: large stones	Moderate: large stones, slope	Moderate: large stones	Severe: droughty, large stones
HxC HERMON	Severe: cutbanks cave	Moderate: large stones, slope	Moderate: large stones, slope	Severe: slope	Moderate: large stones, slope	Severe: droughty, large stones

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Le LOVEWELL	Severe: cutbanks cave, wetness	Severe: flooding	Severe: flooding, wetness	Severe: flooding	Severe: flooding, frost action	Moderate: flooding, wetness
LmB LYMAN	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
BRAYTON VARIANT	Severe: depth to rock, wetness	Severe: wetness	Severe: depth to rock, wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
ROCK OUTCROP	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
LrB LYMAN	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
ROCK OUTCROP	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
TUNBRIDGE	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: depth to rock, slope	Moderate: depth to rock, frost action	Moderate: droughty, large stones, small stones

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LrC LYMAN	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
ROCK OUTCROP	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
TUNBRIDGE	Severe: depth to rock	Moderate: depth to rock, slope	Severe: depth to rock	Severe: slope	Moderate: depth to rock, frost action, slope	Moderate: droughty, large stones, small stones
LrE LYMAN	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope
ROCK OUTCROP	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock
TUNBRIDGE	Severe: depth to rock, slope	Severe: slope	Severe: depth to rock, slope	Severe: slope	Severe: slope	Moderate: droughty, large stones, small stones
MaB MADAWASKA	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: frost action, wetness	Moderate: droughty, wetness

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
MrB MARLOW	Moderate: dense layer	Slight:	Moderate: wetness	Moderate: slope	Moderate: frost action	Slight:
MrC MARLOW	Moderate: dense layer, slope	Moderate: slope	Moderate: slope, wetness	Severe: slope	Moderate: frost action	Moderate: slope
MrD MARLOW	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
MsB MARLOW	Moderate: dense layer, wetness	Slight:	Moderate: wetness	Moderate: slope	Moderate: frost action	Moderate: large stones
MsC MARLOW	Moderate: dense layer, slope, wetness	Moderate: slope	Moderate: slope, wetness	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope
MsD MARLOW	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
MtB MARLOW	Moderate: dense layer	Slight:	Moderate: wetness	Moderate: slope	Moderate: frost action	Slight:

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MtB BERKSHIRE	Slight:	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones
MtC MARLOW	Moderate: dense layer, slope	Moderate: slope	Moderate: slope, wetness	Severe: slope	Moderate: frost action	Moderate: slope
BERKSHIRE	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope, small stones
MwB MARLOW	Moderate: dense layer, wetness	Slight:	Moderate: wetness	Moderate: slope	Moderate: frost action	Moderate: large stones
BERKSHIRE	Slight:	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones
MwC MARLOW	Moderate: dense layer, slope, wetness	Moderate: slope	Moderate: slope, wetness	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope
BERKSHIRE	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, small stones

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MwD MARLOW	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
BERKSHIRE	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
MxB MASARDIS	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Slight:	Severe: droughty
MxC MASARDIS	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
MxD MASARDIS	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: droughty, slope
My MEDOMAK	Severe: cutbanks cave, ponding	Severe: flooding, ponding	Severe: flooding, ponding	Severe: flooding, ponding	Severe: flooding, frost action, ponding	Severe: flooding, ponding
Na NAUMBURG	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness

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PaB PERU	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Severe: frost action	Moderate: wetness
PaC PERU	Severe: wetness	Moderate: slope, wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: slope, wetness
PbB PERU	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Severe: frost action	Moderate: large stones, wetness
PbC PERU	Severe: wetness	Moderate: slope, wetness	Severe: wetness	Severe: slope	Severe: frost action	Severe: large stones, slope, wetness
Pg PITS	Severe: cutbanks cave	Slight:	Slight:	Slight:	Slight:	Severe: droughty, small stones
Rc ROCK OUTCROP	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock
RmC ROCK OUTCROP	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock

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RmC LYMAN	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
RmE ROCK OUTCROP	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock
LYMAN	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope
Sc SCANTIC	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, low strength, wetness	Severe: wetness
Sp SEARSPORT	Severe: cutbanks cave, ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: droughty, excess humus, ponding
StB SHEEPSCOT	Severe: cutbanks cave, wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Moderate: wetness	Severe: droughty
Su SULFIHEMISTS	Severe: excess humus, ponding	Severe: flooding, low strength, ponding	Severe: flooding, ponding	Severe: flooding, low strength, ponding	Severe: flooding, ponding	Severe: excess salt, excess sulfur, ponding

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Su SULFAQUENTS	Severe: excess humus, ponding	Severe: flooding, low strength, ponding	Severe: flooding, low strength, ponding	Severe: flooding, low strength, ponding	Severe: flooding, low strength, ponding	Severe: excess salt, excess sulfur, ponding
Sw SWANVILLE	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
TrB TUNBRIDGE	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: depth to rock, slope	Moderate: depth to rock, frost action	Moderate: droughty
LYMAN	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
TrC TUNBRIDGE	Severe: depth to rock	Moderate: depth to rock, slope	Severe: depth to rock	Severe: slope	Moderate: depth to rock, frost action, slope	Moderate: droughty, slope
LYMAN	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock
TrD TUNBRIDGE	Severe: depth to rock, slope	Severe: slope	Severe: depth to rock, slope	Severe: slope	Severe: slope	Severe: slope

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TrD LYMAN	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope
Ud UDORTHENTS	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
 URBAN LAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable