PRELIMINARY MATERIALS MAP, MASSACHUSETTS
PORTION OF THE STATE LINE QUADRANGLE, MASSACHUSETTS—
NEW YORK,

BY
C. WILLIAM HOLMES

U. S. Geological Survey:


64-84
Field and macroscopic observations:

<table>
<thead>
<tr>
<th>Location: County Berkshire</th>
<th>Town Stockbridge</th>
<th>Pit X 500' north of Wilson Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road location just south of Silver</td>
<td>Coordinates 73°24'30&quot; W.</td>
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</tbody>
</table>

Geologic unit or occurrence: Ice contact stratified drift in kame

Textural description: Sandy gravel

Eng. Soil Type: GW

Dimensions of deposit: Areal extent 200' x 300' Estimated thickness 25'

Dimensions of pit: Areal extent 100' x 200' Exposed thickness 15'

Lithologic composition (approximate %): 55% schist, 20% limestone

Grain size: Maximum 12" Mean 0.5" Est. % of sand Est. % fines

Rounding: Subrounded Grading: Well Sorting: Medium

Soil development: 28" B 10yr 5/6 Color: C horizon 10yr 6/4 (moist)

Oxidation or staining: Little or none Leaching: Secondary deposition: Reactive matter: CaCO₃

General Description: Pit walls very badly slumped. Greater part of area has been graded. One exposure remains on west side.
The Geological Survey is releasing in open files the following reports. Copies are available for consultation in the Geological Survey libraries, 1033 GSA Bldg., Washington, D. C.; Bldg. 25, Federal Center, Denver, Colo.; 345 Middlefield Rd., Menlo Park, Calif.; and in other offices as listed:


3. Preliminary materials map, Ashley Falls quadrangle, Massachusetts-Connecticut, by G. William Holmes. 1 map, scale 1:24,000; 22 data sheets. Room 1, 270 Dartmouth St., Boston, Mass.; Massachusetts Dept. of Public Works, 100 Nashua St., Boston, Mass.; U. S. Bureau of Public Roads, 31 St. James Ave., Boston, Mass. Copies from which reproductions can be made at private expense are available for this and the following 3 reports at the 270 Dartmouth St. address.


5. Preliminary materials map, Massachusetts portion of the State Line quadrangle, Massachusetts-New York, by G. William Holmes. 1 map, scale 1:24,000; 11 data sheets. Room 1, 270 Dartmouth St., Boston, Mass.; Massachusetts Dept. of Public Works, 100 Nashua St., Boston, Mass.; U. S. Bureau of Public Roads, 31 St. James Ave., Boston, Mass. (See note beneath Item 3 above)

6. Preliminary materials map, Stockbridge quadrangle, Massachusetts, by G. William Holmes. 1 map, scale 1:24,000; 7 data sheets. Room 1, 270 Dartmouth St., Boston, Mass.; Massachusetts Dept. of Public Works, 100 Nashua St., Boston, Mass.; U. S. Bureau of Public Roads, 31 St. James Ave., Boston, Mass. (See note beneath Item 3 above)
Field and megascopic observations:

Station number 2

West

Active

Inactive

Location: County Berkshire Town Stockbridge Pit X

Lea msftber 2 West side of Baker Road,
Road location just south of railroad Coordinates 42°20'30" N.

73°23'30" W.

Grade

Geologic unit or occurrence: ice contact stratified drift in kame terrace

Textural description: sandy gravel

Eng. Soil Type GW

Dimensions of deposit: Areal extent 2000' x 4000' Estimated thickness 25'

Dimensions of pit: Areal extent 200' x 350' Exposed thickness 8'

Lithologic composition (approximate %)

Grain size: Maximum _____ Mean _____ Est. % of sand _____ Est. % fines _____

Rounding _________ Grading _________ Sorting _________

Soil development _________ Color _________

Oxidation or staining _________ Leaching _________

Secondary deposition _________ Reactive matter _________

Section:

<table>
<thead>
<tr>
<th>Rock type</th>
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General Description: Exposure on north wall shows sandy gravel in slump debris; otherwise pit walls are completely vegetated.
General Description: Just east of pit is till and bedrock borrow pit. Rock type is weathered phyllite (quartz veins and lenses--some pyrite). Bedrock and till here are overlain by thin (2' to 3') veneer of poorly graded cobble and boulder gravel. Materials of pit are poorly sorted, and include silt, sand, pebble gravel, and a few cobbles. Material is very compact.
Field and macroscopic observations:

Station number 5

Location: County Berkshire Town Stockbridge Pit X Inactive

West side of Baker Road; 42°21' N.
Road location south of railroad grade Coordinates 73°23'30" W.

Geologic unit or occurrence ice contact stratified drift in kame

Textural description sandy gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 1000' x 5000' Estimated thickness 25'

Dimensions of pit: Areal extent 50' x 75' Exposed thickness 25'

Lithologic composition (approximate %) schist; 35% sandstone and

Grain size: Maximum 16" Mean 5" Est. % of sand 30 Est. % fines 10

Rounding subrounded Grading well Sorting poor

Soil development topsoil stripped Color 10yr 7/4 (C horizon)

Oxidation or staining nil Leaching

Secondary deposition some caliche Reactive matter CaCO3

Section:

<table>
<thead>
<tr>
<th>Rock type</th>
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</table>

General Description: Pit walls badly slumped; 25' interbedded fine silty sand, poorly stratified pebble gravel and coarse sand.
Field and megascopic observations:

Station number 5
West I Active

Location: County Berkshire Town Stockbridge Pit
42°21' N.
Road location East side of Baker Road Coordinates 73°23'30" W.

Geologic unit or occurrence ice contact stratified drift in kame

Textural description sandy gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 1000' x 5000' Estimated thickness 15'

Dimensions of pit: Areal extent 75' x 200' Exposed thickness 25

Lithologic composition (approximate %) schist; 35% sandstone and

Grain size: Maximum 4" Mean 0.5" Est. % of sand 40 Est. % fines 10

Rounding subrounded Grading well Sorting medium

Soil development topsoil stripped Color 10yr 6/6 (C horizon)

Oxidation or staining stained Leaching

Secondary deposition some caliche Reactive matter CaCO₃

Section:

General Description: 25' of poorly stratified fine pebble gravel interbedded with coarse pebble sand. Some sand and silt. Exposure on north end of pit shows pebble till or pebble silt (nonstratified).
Field and megascopic observations:

Location: County Berkshire
Road location SW side of Rt. 41

Geologic unit or occurrence delta
sandy gravel or fine pebble

Textural description gravel

Dimensions of deposit: Areal extent 1500' x 3300' Estimated thickness 50'

Dimensions of pit: Areal extent 300' x 800' Exposed thickness 30'

Lithologic composition (approximate %) ________________

Grain size: Maximum 7'' Mean 0.5'' Rounding subrounded

Grading well graded Sorting sorted

Soil development 24-32'' B Color

Oxidation or staining very little

Secondary deposition Reactive matter CaCO₃

<table>
<thead>
<tr>
<th>Rock type</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Quartzite</td>
<td>6</td>
</tr>
<tr>
<td>sandstone, conglomerate</td>
<td>26</td>
</tr>
<tr>
<td>Limestone, dolostone, marble</td>
<td>7</td>
</tr>
<tr>
<td>Gneiss</td>
<td></td>
</tr>
<tr>
<td>Phyllites, schists</td>
<td>28</td>
</tr>
<tr>
<td>Igneous</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>26</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>7</td>
</tr>
</tbody>
</table>

General Description: East end of pit active. 30' of well-defined deltaic structure. Topsets: poorly stratified, well-graded pebble gravel; foresets; well stratified, interbedded fine pebble gravel, very coarse pebble sand, and medium to coarse sand.
Field and macroscopic observations:

Station number 7

West

Location: County Berkshire Town Stockbridge Pit x Active

Inactive

Road location SW side of Rt. 41 Coordinates 42°21'N.

Coordinates 73°23'W.

Geologic unit or occurrence outwash

Textural description pebble gravel

Eng. Soil Type GW

Dimensions of deposit: Areal extent 1500' x 3300' Estimated thickness 50'

Dimensions of pit: Areal extent 300' x 300' Exposed thickness 30'

Lithologic composition (approximate %)

Grain size: Maximum 4'' Mean 0.5'' Est. % of sand 25 Est. % fines 9-12

Rounding subrounded Grading well Sorting poor

6''-12'' Depth 10yr 4/4

Soil development 10''-15'' B 10yr 6/6 Color

some Fe2O3 stain on

Oxidation or staining pebbles Leaching

Secondary deposition some caliche Reactive matter CaCO3

Section:

<table>
<thead>
<tr>
<th>Rock type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartzite</td>
<td>10</td>
</tr>
<tr>
<td>sandstone, conglomerate</td>
<td>23</td>
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<tr>
<td>Limestone, dolostone, marble</td>
<td>11</td>
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<tr>
<td>Gneiss</td>
<td></td>
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<tr>
<td>Schists</td>
<td>33</td>
</tr>
<tr>
<td>Igneous mafic felsie</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>20</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3</td>
</tr>
</tbody>
</table>

General Description: Only the east end of pit is active. West end of pit has been graded and loaned as part of housing development (recreational). 20' of interbedded fine and medium pebble gravel and fine sand, sandy gravel, silty gravel, and pebble silt. Well stratified.
Field and macroscopic observations:

Station number 8

Location: County *Berkshire* Town Richmond Pit \( X \) Active Inactive
on town line (Richmond-West Stockbridge) 200' Coordinates 73°23' W.
Road location east of rt. 41.

Geologic unit or occurrence ice contact stratified drift as kame

Textural description pebble gravel

Dimensions of deposit: Areal extent 600' x 1400' Estimated thickness 40'

Dimensions of pit: Areal extent 30' x 60' Exposed thickness 35'

Lithologic composition (approximate %)

<table>
<thead>
<tr>
<th>Rock type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartzite</td>
<td>15</td>
</tr>
<tr>
<td>sandstone, conglomerate</td>
<td>12</td>
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<tr>
<td>Gneiss</td>
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<td>Schists</td>
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<td>Limestone, dolostone, marble</td>
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<td>Felsic</td>
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</tr>
<tr>
<td>Quartz</td>
<td>5</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3</td>
</tr>
</tbody>
</table>

Secondary deposition Reactive matter CaCO

General Description: 3 small pits, each about 30' x 60'. A few boulders litter the surface of deposit and floor of pits. Boulder rock types include limestone-dolostone, calcareous siltstone and sandstone, grey-green arkose, and amphibolite.

Pit walls are badly slumped. Debris everywhere shows pebble gravel or sandy pebble gravel.
Estimated Engineering Characteristics of Major Deposits of Unexploited Construction Materials


Location: Quadrangle: State Line  State: Mass.-N. Y.  Town: Great Barrington

Identifying symbol: A  Lat 42°15' N.  Long 73°23' W.

Road coordinates: On Plain Road, south of Harts Pond

Accessibility: On main and secondary roads

Geologic unit: Outwash

Topography: Nearly flat terrace

Water supply: Adjacent to Williams River and Harts Pond

Estimated texture: Pebble-cobble gravel

Dimensions: Areal extent 1800 x 2200  Estimated thickness: 20'

Present land use: Residential and pasture

Local abundance of similar materials quadrangle to the south: Not abundant, except in the

General description:

Evenly-bedded, clean, moderately well-sorted gravel

Evaluation: Suitability, and potential utilization.

A large supply of good quality clean gravel, accessible and near a moderately clean water supply. Land use restricts the practical exploitation of this deposit.
Estimated Engineering Characteristics of Major Deposits of Unexploited Construction Materials


Great Barrington

Location: Quadrangle State Line State Mass.-N. Y. Town: West Stockbridge

Identifying symbol: E  Lat: 42°15' N.  Long: 73°23' W.

Read coordinates: Near intersection of Pixley and Plain Roads

Accessibility: On main and secondary roads

Geologic unit: Ice-contact stratified drift; kame terrace

Topography: Slightly rolling pitted terrace

Water supply: Williams River and Harts Pond

Estimated texture: Pebble-cobble gravel

Dimensions: Areal extent: 200 x 2500'  Estimated thickness: 20'

Present land use: Agriculture and residential

Local abundance of similar materials: Not generally abundant in this area

General description:

Unevenly bedded, well-graded clean sand and gravel, probably with some collapse structures.

Evaluation: Suitability, and potential utilization.

Large supply of well-graded construction materials. Land use restricts its exploitation.
Estimated Engineering Characteristics of Major Deposits of Unexploited Construction Materials

Geologist G. William Holmes  Date November 1963  Project Mass. Materials

Location: Quadrangle State Line State Mass.-N. Y. Town West Stockbridge

Identifying symbol C  Lat 42°10' N.  Long 73°23' W.
On secondary road near intersection with Ct.

Road coordinates Barrington Road

Accessibility On road and railroad

Geologic unit kame terrace

Topography Slightly rolling pitted terrace, and long narrow ridge

Water supply Adjacent to Williams River

Estimated texture Pebble-cobble gravel

Dimensions: Areal extent 1400x2400'  Estimated thickness 30-40'

Present land use Agricultural and residential

Local abundance of similar materials No large supplies in immediate area

General description:
Well-graded, unevenly bedded clean sand and gravel probably with some collapse structures.

Evaluation: Suitability, and potential utilization.

Very large supply of good quality gravel and sand, easily recovered, accessible to rail line and roads, and to a good supply of water. Only a part of the deposit is occupied by dwellings and small farms.