PRELIMINARY MATERIALS MAP, ASHLEY FALLS QUADRANGLE, MASSACHUSETTS-CONNECTICUT

BY

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U. S. Geological Survey;

REPORTS-OPEN FILE SERIES, no. 730: 1964.

Weld - Int. 2905

GEOLOGIC DIVISION
U.S. GEOLOGICAL SURVEY
Washington, D. C.

For release JUNE 5, 1964

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1. Preliminary geologic map and structure sections of the central York Mountains, Seward Peninsula, Alaska, by C. L. Sainsbury. 1 map. Alaska Div. of Mines and Minerals, State Capitol Bldg., Juneau, Alaska; U. S. Geological Survey, Brooks Memorial Bldg., College, Alaska; 516 E. 5th Ave., Anchorage, Alaska; South 157 Howard St., Spokane, Wash.; 232 Appraisers Bldg., San Francisco, Calif.; 1031 Bartlett Bldg., Los Angeles, Calif.; 468 New Custom House, Denver, Colo.; 602 Thomas Bldg., Dallas, Texas.

2. Geologic map of the Topopah Spring SW quadrangle, Nevada (TEI-846), by P. W. Lipman and E. J. McKay. 1 map, scale 1:24,000. 468 New Custom House, Denver, Colo.; 8102 Federal Office Bldg., Salt Lake City, Utah; 232 Appraisers Bldg., San Francisco, Calif.; 1031 Bartlett Bldg., Los Angeles, Calif.; Library, Mackay School of Mines, University of Nevada, Reno, Nev.

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.

4. Preliminary materials map, Massachusetts portion of the Egremont 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)

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)

* * * * *

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Field and megascopic observations:

Station number 1

Location: County Litchfield Town North Canaan Pit ___ Active X Inactive

Road location Intersect. Canaan Valley Road and Conn.-U.S. Rt. 44 Coordinates 42°01' 73°16'

Geologic unit or occurrence delta

Textural description pebble sand Eng. Soil Type SP

Dimensions of deposit: Areal extent 8500' x 3000' Estimated thickness 80'-100'

Dimensions of pit: Areal extent single wall 250' Exposed thickness 40'-50'

Lithologic composition (approximate %) ___

Grain size: Maximum 5" Mean .75" Est. % of sand 75 Est. % fines 2

Rounding subrounded to rounded Grading poor Sorting well sorted

Soil development ___ Color ___

Oxidation or staining ___ Leaching ___

Secondary deposition caliche (as pebble coatings and crusts) Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	76
Sandstone, conglomerate	1
Limestone, dolostone, marble	2
Igneous mafic felsic	2
Gneiss	6
Schists (chlorite, quartz, muscovite)	8
Free quartz	2
Miscellaneous includes goethite limonite, and ferruginous breccia or conglomerate	3

General Description: Pit wall is badly slumped. Textural description is of materials as they appear in slump debris: 4' exposure at top of wall shows coarse pebbly sand interbedded with sandy pebble gravel. Pit itself is at downstream edge of delta.

QUADRANGLE Ashley Falls

STATE Connecticut

GEOLOGIST J. Atherton

DATE 8/6/63

PROJECT Mass materials

Field and megascopic observations:

Station number 2

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Just north of Conn.-U.S. 42°01

Road location Rt. 44, 500' west of Canaan Valley Road Coordinates 73°16'

Geologic unit or occurrence delta

Textural description pebble sand Eng. Soil Type SP

Dimensions of deposit: Areal extent 8500' x 3000' Estimated thickness 80'-100'

Dimensions of pit: Areal extent 100' x 150' Exposed thickness 40'

Lithologic composition (approximate %) ___

Grain size: Maximum 8" Mean 0.25" Est. % of sand 80 Est. % fines 7

Rounding subrounded-rounded Grading poor Sorting well sorted

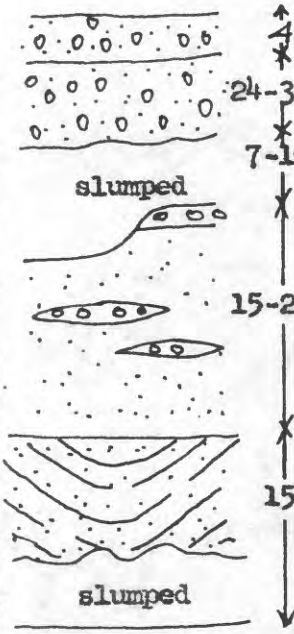
Soil development 4" A, after stripping; 24"-36" B Color see below

Oxidation or staining ___ Leaching ___

Secondary deposition caliche as coatings and crusts on pebbles Reactive matter $CaCO_3$

Rock type	Percent
Quartzite	76
Sandstone, conglomerate	2
Limestone, dolostone, marble	7
Igneous mafic felsic	4
Gneiss	3
Schists (chlorite, quartz muscovite)	3
Free quartz	8
Miscellaneous	2

Section:



A horizon: sandy gravel 10yr 4/4

B horizon: sandy gravel 10yr 4/2

Interbedded pebble gravel and sand 10yr 5/4

Sand; dipping foreset beds 10yr 5/4

General Description: Pit itself lies at southern edge of delta. Exposed materials consist of 15' to 20' of interbedded coarse pebble gravel and medium to coarse pebble sand, as topset beds, overlying 15' of well-stratified medium to coarse sandy foreset beds. Foresets dip steeply to southwest. No evidence of collapse. Nearly vertical sandy faces contain higher percent of silty fines.

QUADRANGLE Ashley Falls

STATE Connecticut

GEOLOGIST J. Atherton

DATE 8/6/63

PROJECT Mass materials

Field and megascopic observations:

Station number 3

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location Northwest side of Canaan Valley Road; 7 mi. north of Conn.-U.S. Rt. 44 Coordinates 42°01' 73°16'

Geologic unit or occurrence delta

Textural description sandy gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

Dimensions of pit: Areal extent 250' x 175' Exposed thickness 15'

Lithologic composition (approximate %) ___

Grain size: Maximum 8" Mean 1" Est. % of sand 40 Est. % fines 3

Rounding subrounded Grading well graded Sorting poor

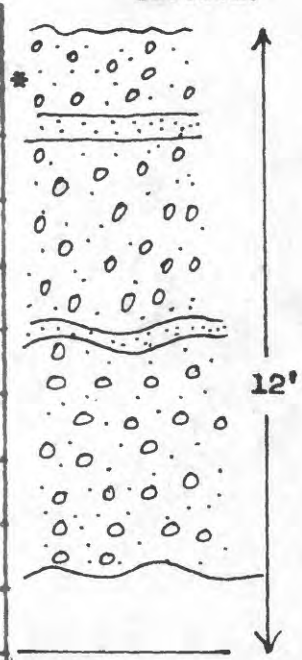
Soil development stripped Color B horizon: 10 yr 4/2 (moist)

Oxidation or staining 18"-30" B horizon Leaching ___

Secondary deposition caliche as coatings on pebbles Reactive matter $CaCO_3$

Rock type	Percent
Quartzite	69
Sandstone, conglomerate	7
Limestone, dolostone, marble	4
Gneiss	5
Schists (chlorite, quartz muscovite)	5
Igneous mafic felsic	6
Free quartz	
Miscellaneous	4

Section:



* B horizon

General Description: A broad, shallow pit exposing 5' to 15' of horizontally stratified interbedded coarse pebble gravel; fine to coarse sand; and silty sand.

Ashley Falls QUADRANGLE Connecticut STATE J. Atherton GEOLOGIST August 1963 DATE Mass materials PROJECT

Field and megascopic observations:

Station number 4

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location Northwest side of Canaan Valley Road; 7 mi. north of Conn.-Rt. 44 Coordinates 42°01' 73°16'

Geologic unit or occurrence Qd Delta deposit

Textural description pebbly sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

Dimensions of pit: Areal extent 200' x 300' Exposed thickness 25'

Lithologic composition (approximate %) ___

Grain size: Maximum 8" Mean .75" Est. % of sand 65 Est. % fines 8

Rounding rounded Grading well graded Sorting poor

Soil development stripped Color 1'-2' of B horizon remains:

Oxidation or staining Variable Fe_2O_3 staining to 2' 59 5' Leaching ___

Secondary deposition caliche as coatings Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	69
Sandstone, conglomerate	
Limestone, dolostone, marble	2
Gneiss	1
Schists	12
Igneous mafic / felsic	8
Free quartz	4
Miscellaneous	4

General Description: Walls of pit are badly slumped. One small exposure shows 2' to 5' of topset interbedded silty coarse sand and silty pebble gravel over 3' to 5' of medium to coarse-grained sandy foresets.

QUADRANGLE Ashley Falls STATE Connecticut GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Field and megascopic observations:

Station number 5

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location 1500' west of Canaan Valley Road; 1300' north of Conn.-U.S. Rt. 44 Coordinates 42°01' 73°17'

Geologic unit or occurrence delta

Textural description pebbly sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80-100'

Dimensions of pit: Areal extent 100' x 100' Exposed thickness 30'

Lithologic composition (approximate %) ___

Grain size: Maximum 6" Mean 0.25" Est. % of sand 75' Est. % fines 3-5

Rounding rounded Grading medium Sorting medium

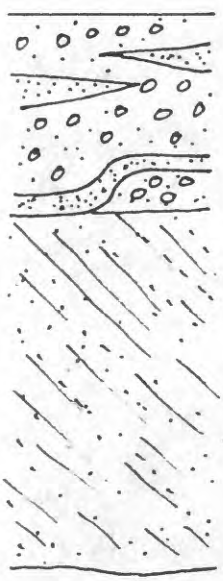
Soil development A stripped Color ___

Oxidation or staining Some Fe_2O_3 staining in sandy topset beds Leaching ___

Secondary deposition some caliche Reactive matter $CaCO_3$

Rock type	Percent
Quartzite	66
Sandstone, conglomerate*	6
Limestone, dolostone, marble	5
Igneous mafic / felsic	7
Gneiss	1
Schists**	10
Free quartz	2
Miscellaneous	3

Section:



General Description: 6' topsets of interbedded pebble gravel and coarse silty sand, overlying 15'-20' foresets of medium to coarse sand. Section described here and illustrated is exposed on south wall of pit. Elsewhere sandy foresets show ripple marks.

* some calcareous sandstone

** chlorite and quartz muscovite

QUADRANGLE Ashley Falls

STATE Connecticut

GEOLOGIST J. Atherton

DATE 8/9/61

PROJECT Mass materials

Field and megascopic observations:

Station number 6

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location 1000' north of Conn.-U.S. Rt. 44; 1000' east of Allyndale Road Coordinates 42°01' N. 73°17' W.

Geologic unit or occurrence delta

Textural description sandy gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

Dimensions of pit: Areal extent 400' x 500' Exposed thickness 20'

Lithologic composition (approximate %) ___

Grain size: Maximum 8" Mean 1" Est. % of sand 55 Est. % fines 3-5

Rounding rounded Grading well graded Sorting medium to poor

Soil development weak forest soil: 4" A, A_2; 24"-36" B Color ___

Oxidation or staining ___ Leaching ___

Secondary deposition occasional caliche Reactive matter $CaCO_3$

Section:

Rock type	Percent	
Quartzite	65	
Sandstone, conglomerate	3	
Limestone, dolostone, marble	6	
Gneiss		
Schists	11	chlorite and quartz muscovite
Igneous mafic felsic	5	
Free quartz	5	
Miscellaneous	5	some limonite-goethite

General Description: Textural description is of materials as they appear in slump debris. Much of floor area of this pit is presently used as drainage sump and settling basin for wash plant tailings (installment just east of Allyndale Road).

One small exposure on south wall of pit shows 15' to 20' of fine to coarse sandy foresets.

QUADRANGLE Ashley Falls STATE Connecticut GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Field and megascopic observations:

Station number 7

Location: County Litchfield Town North Canaan Pit ___ Active ___ Inactive X

Road location Northeast side of Allyndale Road; 1100' north of Conn.-U.S. Rt. 44 Coordinates 42°01' N. 73°17' W.

Geologic unit or occurrence delta

Textural description _____ Eng. Soil Type _____

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

Dimensions of pit: Areal extent _____ Exposed thickness _____

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:

Rock type	

General Description: This pit is at present the site of a wash plant. Walls and floor of pit are littered with loam and spoil piles.

QUADRANGLE Ashley Falls

STATE Connecticut

GEOLOGIST J. Atherton

DATE August 1963

PROJECT Mass materials

Field and megascopic observations:

Station number 8

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location 800' west of Allyndale Road, North side of Conn.-U.S. Rt. 44; Coordinates 42°01' N. 73°17'15"W.

Geologic unit or occurrence delta

Textural description silty sand Eng. Soil Type SM

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

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

Lithologic composition (approximate %) ___

Grain size: Maximum 5" Mean 0.25" Est. % of sand 90 Est. % fines 4-6

Rounding subrounded Grading poor Sorting well sorted

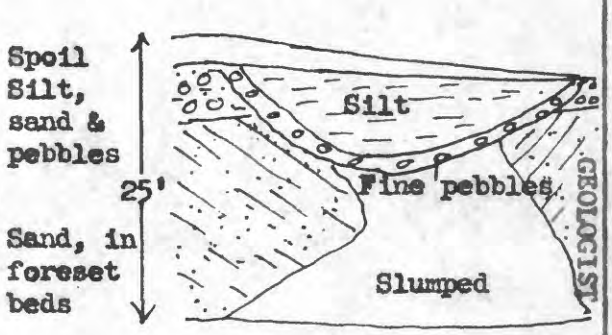
Soil development 4" A, 36" B Color ___

Oxidation or staining ___ Leaching ___

Secondary deposition some caliche Reactive matter $CaCO_3$

Rock type	Percent
Quartzite	68
Sandstone, conglomerate	2
Limestone, dolostone, marble	4
Gneiss	1
Schists *	12
Igneous mafic	6
Igneous felsic	2
Free quartz	3
Miscellaneous	2

Section:



General Description: Southeast wall of pit shows silty swale deposit (10' thick) overlying 12' of well stratified fine to medium grained sand showing ripple marks. Sand is in delta foresets. Elsewhere in pit sandy foresets are capped with topsets of interbedded fine to coarse sand and sandy pebble gravel (2' to 6' thick).

* chlorite and quartz muscovite

QUADRANGLE Ashley Falls

STATE Connecticut

GEOLOGIST J. Atherton

DATE 8/9/63

PROJECT Mass materials

Field and megascopic observations:

Station number 9

Location: County Litchfield Town North Canaan Pit X Active Inactive

Road location Southwest side of Allyndale Road; 1400' north of Conn.-U.S. Rt. 44 Coordinates 42°01'20" N. 73°17'15" W.

Geologic unit or occurrence delta

Textural description sandy gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

Dimensions of pit: Areal extent 400' x 500' Exposed thickness 40'

Lithologic composition (approximate %)

Grain size: Maximum 8" Mean 1" Est. % of sand 50 Est. % fines 0-3

Rounding subrounded Grading medium Sorting medium

Soil development Color

Oxidation or staining Leaching

Secondary deposition Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	71
Sandstone, conglomerate	4
Limestone, dolostone, marble	5
Gneiss	1
Schists	7
Igneous mafic / felsic	6
Free quartz	3
Miscellaneous	3

chlorite and quartz muscovite

General Description: Generally poor exposures show 20'-30' of fine to coarse sandy foresets capped with 10' of pebble gravel topsets (interbedded fine sand and silt).

QUADRANGLE Ashley Falls STATE Connecticut GEOLOGIST J. Atherton DATE 8/15/63 PROJECT Mass materials

Field and megascopic observations:

Station number 10

Location: County Litchfield Town North Canaan Pit ___ Active X Inactive

Road location West side of unnamed road connecting Allyndale Road and Conn.-U.S, Rt. 44; north of Rt. 44 Coordinates 42°01' N. 73°17' W.

Geologic unit or occurrence delta

Textural description pebbly sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 3000' x 8500' Estimated thickness 80'-100'

Dimensions of pit: Areal extent 300' x 300' Exposed thickness 35'

Lithologic composition (approximate %) ___

Grain size: Maximum 10" Mean .75" Est. % of sand 80 Est. % fines 3-5

Rounding rounded Grading medium Sorting medium

Soil development stripped Where remaining: 4" A, A_2; 36" B Color ___

Oxidation or staining ___ Leaching ___

Secondary deposition some caliche Reactive matter $CaCO_3$

Section:

Rock type	Percent	
Quartzites	82	
Sandstone, conglomerate	3	
Limestone, dolostone, marble	4	
Gneiss	1	
Schists	5	chlorite
Igneous mafic / felsic	4	
Free quartz		
Miscellaneous	1	limonite-goethite

General Description: 30' of fine to coarse sandy foresets capped with 5' interbedded pebbly sand and pebble gravel of topsets.

QUADRANGLE Ashley Falls

STATE Connecticut

GEOLOGIST J. Atherton

DATE August 1963

PROJECT Mass materials

Field and megascopic observations:

Station number 11

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location North side of Moses Meade Road; 800' west of College Road Coordinates 42°02' 73°16'

Geologic unit or occurrence outwash Stream terrace deposit

Textural description sandy gravel Eng. Soil Type GP

Dimensions of deposit: Areal extent 1500' x 3700' Estimated thickness 20'

Dimensions of pit: Areal extent 100' x 100' Exposed thickness 6'

Lithologic composition (approximate %) ___

Grain size: Maximum 6" Mean 0.4" Est. % of sand 50 Est. % fines 0-3

Rounding subrounded Grading poor Sorting well sorted

Soil development 7" A_0, A; 20" B Color See below

Oxidation or staining Fe_2O_3 staining throughout section Leaching ___

Secondary deposition ___ Reactive matter ___

Section:

Rock type	Percent
Quartzite	51
Sandstone, conglomerate	3
Limestone, dolostone, marble	
Gneiss	12
Schists	13
Igneous mafic / felsic	3
Free quartz	18
Miscellaneous	

General Description: Exposure shows 6' of fine pebble gravel (matrix of coarse, well-sorted sand); poorly stratified. Colors (moist):

A. forest litter 2.5yr 2/4
A sandy gravel 2.5yr 3/2
B sandy gravel 5yr 4/4
C sandy gravel 5yr 5/3

QUADRANGLE Ashley Falls STATE Connecticut GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Field and megascopic observations:

Station number 12

Location: County Litchfield Town North Canaan Pit X Active ___ Inactive

Road location Northeast side of Allyndale Road; 2000' south of Conn. State line Coordinates 42°02'30" 73°18'

Geologic unit or occurrence ice contact stratified drift in kame terrace

Textural description pebble gravel Eng. Soil Type GP

Dimensions of deposit: Areal extent (ca) 2500' x 16000' Estimated thickness 20'-40'

Dimensions of pit: Areal extent 200' x 400' Exposed thickness 15'

Lithologic composition (approximate %) ___

Grain size: Maximum 10" Mean 1.5" Est. % of sand 20 Est. % fines 0-2

Rounding rounded Grading poor Sorting well sorted

Soil development A stripped; 2" A remaining in places; 24"-32" B Color A: 10yr 4/4 moist B: 10yr 5/8

Oxidation or staining ___ Leaching ___

Secondary deposition ___ Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	81
Sandstone, conglomerate	2
Limestone, dolostone, marble	3
Gneiss	4
Schists	8
Igneous mafic / felsic	
Free quartz	2
Miscellaneous	

occasional pale green arkose

General Description: Shallow pit walls are badly slumped. Few exposures show poorly stratified, coarse pebble gravel.

QUADRANGLE Ashley Falls STATE Connecticut GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Field and megascopic observations:

Station number 13

Location: County Litchfield Town North Canaan Pit ___ Active ___ Inactive X

Road location South side of Clayton Road; just south of Conn. State line Coordinates 42°03' 73°17'40"

Geologic unit or occurrence Qo ~~ice contact stratified drift in kame terrace~~

Textural description sandy gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent (ca) 2500' x 16000' Estimated thickness 20'-40'

Dimensions of pit: Areal extent 50'-100' Exposed thickness 15'

Lithologic composition (approximate %) ___

Grain size: Maximum 14" Mean .75" Est. % of sand 40 Est. % fines 2

Rounding subrounded Grading medium Sorting medium

Soil development 10" AB plow zone 48" B Color see below

Oxidation or staining staining consistent through B horizon; mottled below Leaching ___

Secondary deposition ___ Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	72
Sandstone, conglomerate	3
Limestone, dolostone, marble	2
Gneiss	6
Schists	12
Igneous mafic felsic	
Free quartz	3
Miscellaneous	2

General Description: Shallow pit walls are badly slumped. 3'-4' of well-graded, poorly stratified sand over 12(?) feet of well-sorted sandy pebble gravel.

Colors: (moist)

AB: silty sand; 10yr 4/4
B: sand ; 10yr 5/6
C: pebble gravel; 10yr 7/3

13.

QUADRANGLE Ashley Falls
STATE Connecticut
GEOLOGIST J. Atherton
DATE August 1963
PROJECT Mass materials

Field and megascopic observations:

Station number 14

Location: County Berkshire Town Sheffield Pit X Active / Inactive

Road location 200' west of Polikoff Road; 1100' north of Mass. State line. Coordinates 42°3' 73°18'

Geologic unit or occurrence ice contact stratified drift in kame terrace

Textural description pebbly sand* Eng. Soil Type SW

Dimensions of deposit: Areal extent (ca) 2500' x 16000' Estimated thickness 20'-40'

Dimensions of pit: Areal extent 400' x 1500' Exposed thickness 20'

Lithologic composition (approximate %) _____

Grain size: Maximum 6" Mean 1" Est. % of sand 50 Est. % fines 1-3

Rounding rounded Grading well graded Sorting medium

Soil development 22" AB mixed; plow zone 10" B Color AB: 10yr 4/4 B: 10yr 5/6

Oxidation or staining color of sand in C horizon: 10yr 7/3 Leaching _____

Secondary deposition _____ Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	67
Sandstone, conglomerate	
Limestone, dolostone, marble	2
Gneiss	8
Schists	11
Igneous mafic / felsic	
Free quartz	9
Miscellaneous	3

* Textural description is of materials exposed on north wall of pit. To south materials are more coarse and better sorted.

General Description: Shallow pit walls badly slumped. 5' poorly stratified, well-graded pebbly sand exposed by clearing portion of pit wall. Exposures on south wall of pit show well-sorted, poorly stratified, pebble gravel. Pebble count made along south wall.

QUADRANGLE Ashley Falls STATE Massachusetts GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Field and megascopic observations:

Station number 15

Location: County Berkshire Town Sheffield Pit X Active ___ Inactive

900' east of relocated U.S. 42°02'45"

Road location Rt. 7; just north of Coordinates 73°19'

Mass. State line

Geologic unit or occurrence ~~ice-contact stratified drift in kame terrace~~ Qo

Textural description pebble gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 2000 x 8000' Estimated thickness 25'

Dimensions of pit: Areal extent 400' x 900' Exposed thickness 15'

Lithologic composition (approximate %) ___

Grain size: Maximum 5" Mean 0.75" Est. % of sand 35 Est. % fines 0-3

Rounding rounded Grading medium Sorting medium

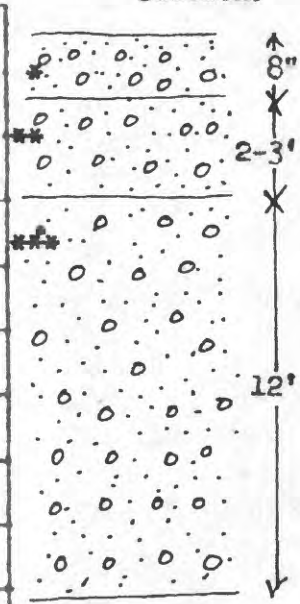
Soil development stripped along south side of pit. North wall: 8" AB plow zone; 24"-36" B. Color see below

Oxidation or staining slight staining throughout section Leaching ___

Secondary deposition some caliche Reactive matter $CaCO_3$

Rock type	Percent
Quartzite	50
Sandstone, conglomerate	7
Limestone, dolostone, marble	
Gneiss	9
Schists	19
Igneous mafic / felsic	1
Free quartz	11
Miscellaneous	3

Section:



* North wall 10yr 5/2

** 10yr 7/4

*** 10yr 8/4

General Description: Pit is very broad and shallow exposing 15' to 20' of well-sorted pebble gravel interbedded with sandy gravel and pebbly sand. Materials exposed on north wall are finer (sandy pebble gravel and sand).

QUADRANGLE Ashley Falls | STATE Massachusetts | GEOLOGIST J. Atherton | DATE August 1963 | PROJECT Mass materials

Field and megascopic observations:

Station number 16

Location: County Berkshire Town New Marlboro Pit X Active Inactive

Road location 400' east of intersection of Clayton and Shunpike Roads. Coordinates 42°05'20" N. 73°17'30" W.

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

Textural description pebble gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent (ca) 2500' x 16000' Estimated thickness 20'-40'

Dimensions of pit: Areal extent 200' x 200' Exposed thickness 10'-25'

Lithologic composition (approximate %)

Grain size: Maximum 20" Mean 1.75" Est. % of sand 25 Est. % fines 7-9

Rounding subrounded Grading medium Sorting medium

Soil development 4" A 10" B Color A 10yr 4/4 B 10yr 6/6 dry C 10yr 7/4

Oxidation or staining Leaching

Secondary deposition Reactive matter $CaCO_3$

Section:

Rock type	Percent
Quartzite	65
Sandstone, conglomerate	4
Limestone, dolostone, marble	1
Gneiss	11
Schists	15
Igneous mafic felsic	2
Free quartz	
Miscellaneous	2

Limonite-goethite and ferruginous conglomerate

General Description: Pit now occupied by auto scrap. Walls of pit are very badly slumped. 10'-25' of coarse pebble gravel; matrix of silty coarse sand and finer pebble gravel. Though predominantly pebble gravel, boulders and cobbles amount to about 10 percent of entire mass.

QUADRANGLE Ashley Falls STATE Massachusetts GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Field and megascopic observations:

Station number 17, 18

Location: County Berkshire Town Sheffield Pit ___ Active X Inactive

Road location Southwest side of relocated U.S. Rt. 7; just north of Bowman Hill Coordinates 42°05'30" N. 73°20' W.

Geologic unit or occurrence ~~outwash terrace~~ ~~Qst stream terrace deposit~~ Qo

Textural description sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 1.5 x 2.5 miles Estimated thickness 35'

Dimensions of pit: Areal extent 150' x 300' Exposed thickness 10'

Lithologic composition (approximate %) ___

Grain size: Maximum 0.5" Mean .01" Est. % of sand 90 Est. % fines 7-10 very slight cohesion

Rounding subrounded Grading well graded Sorting medium all sand sizes represented.

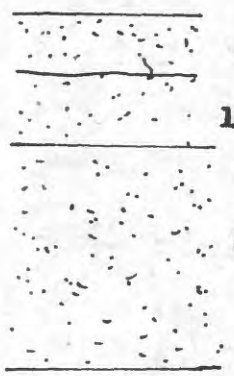
Soil development 8" A 10" B Color see below for soil profile and colors

Oxidation or staining Fe_2O_3 staining throughout section Leaching ___

Secondary deposition ___ Reactive matter $CaCO_3$

Rock type	

Section:



General Description: Shallow pit walls of which expose 10' of well graded, poorly stratified fine to coarse sand incorporating some silty fines. Standing water 10' below rim of pit. Sand "by the fistfull" is slightly cohesive. Pit 18 is a duplicate of pit 17.

QUADRANGLE Ashley Falls STATE Massachusetts GEOLOGIST J. Atherton DATE August 1963 PROJECT Mass materials

Estimated Engineering Characteristics of Major Deposits
of Unexploited Construction Materials

Geologist G. William Holmes Date August 1963 Project Mass. materials

Location: Quadrangle Ashley Falls State Mass. Town Sheffield

Identifying symbol A Lat 42°06' N. Long 72°22' W.

Road coordinates One-fourth mile west of Route 7 on Salisbury Road

Accessibility Adjacent to roads

Geologic unit Outwash

Topography Flat terrace

Water supply Schenob Brook flows around west and north side of deposit

Estimated texture Pebble-cobble gravel

Dimensions: Areal extent 4000x4000' Estimated thickness 20'

Present land use Agriculture

Local abundance of similar materials Gravel pits within 2 miles to west

General description: Evenly bedded, moderately well sorted pebble-cobble gravel, grading into pebble sand to the southeast, occurring as featureless terrace. Part of extensive gravel outwash deposits traceable for several miles into the quadrangles to the west and northwest.

Evaluation: Suitability, and potential utilization.

Very large quantity of good-quality gravel and sand, requiring little or no washing or grading. Except for present land use, may be an important and easily expolited and transported supply of construction materials. Recovery is probably limited by high water table, estimated to be 20' or less below the surface.

40765-64

Estimated Engineering Characteristics of Major Deposits
of Unexploited Construction Materials

Geologist G. William Holmes Date August 1963 Project Mass. materials

Location: Quadrangle Ashley Falls State Mass. Town Sheffield

Identifying symbol B Lat 42°06' Long 72°21'

Road coordinates About 1½ miles southeast of Sheffield center and west of Route 7

Accessibility Adjacent to highway and secondary roads

Geologic unit Outwash

Topography Flat terrace

Water supply Bounded on north and east by Housatonic River, which is polluted

Estimated texture Coarse sand and a few small pebbles

Dimensions: Areal extent 5000x5000' Estimated thickness 20'

Present land use Pasture

Local abundance of similar materials Shallow pits to the south

General description: Featureless terrace composed of stratified, current-bedded coarse to medium sand, with a few layers of small pebbles. Grades westward into pebble-cobble outwash deposits.

Evaluation: Suitability, and potential utilization.
Very large supply of good-quality sand, easily recovered and accessible. May have local lenses of silt and clay-size material, such as occurs northwest of Sheffield center.

40765-64

Estimated Engineering Characteristics of Major Deposits
of Unexploited Construction Materials

Geologist G. William Holmes Date August 1963 Project Mass. materials

Location: Quadrangle Ashley Falls State Mass. Town Sheffield

Identifying symbol C Lat 42°03' N. Long 73°18' W.

Road coordinates Between Stahl and Hewins Roads, 1 mile ENE. of Ashley Falls

Accessibility Near three secondary roads

Geologic unit Outwash

Topography Flat terrace

Water supply About 1 mile north of Konkapot River, a clear stream

Estimated texture Coarse sand and fine pebbles

Dimensions: Areal extent 8000x6000' Estimated thickness 15-20

Present land use Agriculture and forest

Local abundance of similar materials Major gravel pit to the south

General description: Evenly bedded coarse sand and pebbles, grading southeastward and southward into pebble-cobble gravel.

Evaluation: Suitability, and potential utilization.

Very large supply of coarse, clean sand, easily recovered and transported.

40765-64

Estimated Engineering Characteristics of Major Deposits
of Unexploited Construction Materials

Geologist G. William Holmes Date August 1963 Project Mass. materials

Location: Quadrangle Ashley Falls State Mass. Town New Marlborough

Identifying symbol D Lat 42°07' N. Long 73°16' W.

Road coordinates On Hartsville Road ½ mile north of Mill River

Accessibility Adjacent to hard-surfaced secondary road

Geologic unit Kame

Topography Hummocked hills with relief up to 100'

Water supply Adjacent to Konkapot River, a clear water stream

Estimated texture Cobble gravel with lenses of material ranging from sand to boulders

Dimensions: Areal extent 8000x2000' Estimated thickness 100

Present land use Forest. Gravel pits in southern end of kame group

Local abundance of similar materials (see above)

General description: Well-graded materials ranging from sand to boulder sizes, poorly or chaotically bedded.

Evaluation: Suitability, and potential utilization.

Good-quality and large quantity of clean sand and gravel offering a wide range of sizes; easily accessible.

40765-64

Estimated Engineering Characteristics of Major Deposits
of Unexploited Construction Materials

Geologist G. William Holmes Date August 1963 Project Mass. materials

Location: Quadrangle Ashley Falls State Conn. Town North Canaan

Identifying symbol E Lat 42°01' N. Long 73°16' W.

Road coordinates Along State road about ½ mile east of East Canaan

Accessibility (see above)

Geologic unit Outwash

Topography Nearly flat terrace trenched by Blackberry and Whiting Rivers

Water supply Blackberry and Whiting Rivers cross the deposit

Estimated texture Boulder to cobble gravel

Dimensions: Areal extent 6000x4000' Estimated thickness 15'

Present land use Agriculture

Local abundance of similar materials Boulder gravel not locally available elsewhere

General description:

Outwash deposit formed by meltwater streams with moderate to steep gradient, which was competent to move large cobbles and boulders. Poorly stratified and sorted.

Evaluation: Suitability, and potential utilization.

Good source of coarse, clean fill. Thickness probably limited by high water table.

40765-64