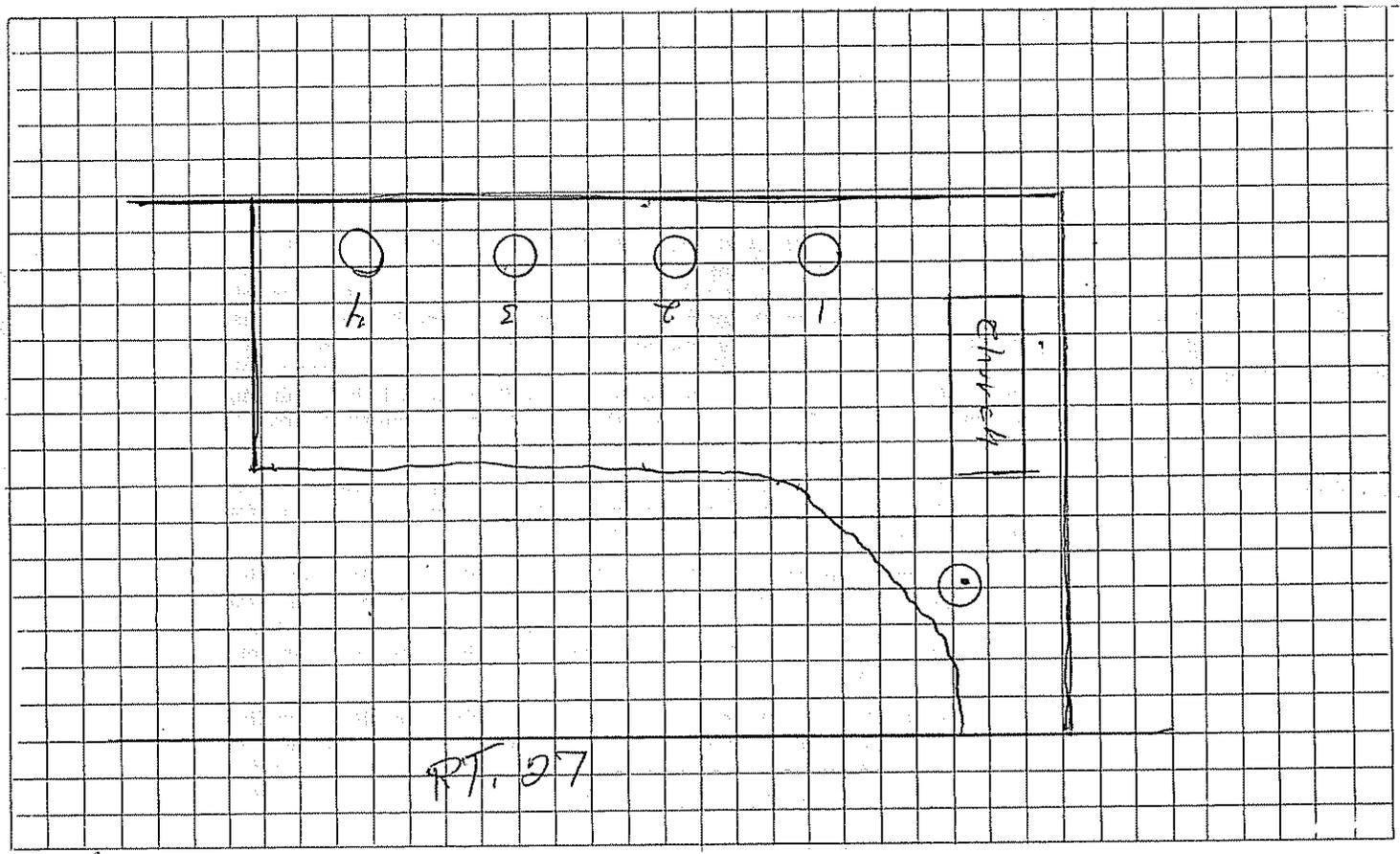


SUBMIT THE FOLLOWING COMPLETED FORM TO YOUR LOCAL PLUMBING INSPECTOR

DATE <u>3/29/73</u>	OWNER <u>United Pentecostal Church</u>
NUMBER OF BEDROOMS _____	STREET <u>R.F.D. 4</u>
SIZE OF SEPTIC TANK _____	CITY <u>Augusta</u> MAINE
TYPE OF SOIL <u>SAND + gravel</u>	TEL. NUMBER <u>622-4894</u>
Test Performed by <u>Rolfe P J H</u>	LOCATION OF PROPOSED INSTALLATION
Local Plumbing Inspector's Signature <u>George L. Smith</u>	STREET <u>RT 27</u>
	CITY <u>Augusta</u> MAINE
	TEL. NUMBER _____

SKETCH: LOCATION OF BUILDING DISPOSAL SYSTEM, TERRAIN FEATURES, PERCOLATION HOLES, WATER SUPPLIES, ETC.



NOT KNOWN Depth to Water Table
 NOT KNOWN Depth to Bedrock
 NOT KNOWN Depth to Clay or other impervious strata

REMARKS

HOLE	HOLE DEPTH	TIME		DEPTH OF WATER SURFACE		ELAPSED TIME	TOTAL DROP OF WATER	PERCOL. RATE	
		START	FINISH	START	FINISH			MINUTES/INCH	
#1	36 in.	9:55	10:55	32 in.	26 in.	60 min.	6 in.	10	min/in
#2	36 in.	9:57	10:57	30 in.	23 in.	60 min.	7 in.	8	min/in
#3	36 in.	9:59	10:59	32 in.	26 in.	60 min.	6 in.	10	min/in
#4	36 in.	10:05	11:05	34 in.	26 in.	60 min.	8 in.	7	min/in
AVERAGE RATE								9	min/in

H. Smith
6 Draw

METHOD OF MAKING PERCOLATION TESTS

1.—NUMBER AND LOCATION OF TESTS. A sufficient number of tests as determined from Section 122 (G) shall be made in separate test holes spaced uniformly over the proposed subsurface absorption area.

2.—TYPE OF TEST HOLE. Dig or bore a hole, with horizontal dimensions of from 4 to 12 inches and vertical sides to the depth of the proposed absorption trench. In order to save time, labor, and volume of water required per test, the holes can be bored with a 4-inch auger.

3.—PREPARATION OF TEST HOLE. Carefully scratch the bottom and sides of the hole with a knife blade or sharp-pointed instrument, in order to remove any smeared soil surfaces and to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2 inches of coarse sand or fine gravel to protect the bottom from scouring and sediment.

4.—SATURATION AND SWELLING OF THE SOIL. It is important to distinguish between saturation and swelling. Saturation means that the void spaces between soil particles are full of water. This can be accomplished in a short period of time. Swelling is caused by intrusion of water into the individual soil particle. This is a slow process, especially in clay-type soil, and is the reason for requiring a prolonged soaking period.

In the conduct of the test, carefully fill the hole with clear water to a minimum depth of 12 inches over the gravel. In most soils, it is necessary to refill the hole by supplying a surplus reservoir of water, possibly by means of an automatic syphon, to keep water in the hole for at least overnight. Determine the percolation rate 24 hours after water is first added to the hole. This procedure is to insure that the soil is given ample opportunity to swell and to approach the condition it will be in during the wettest season of the year. Thus, the test will give comparable results in the same soil, whether made in a dry or in a wet season.

5.—PERCOLATION, RATE MEASUREMENT. With the exception of sandy soils, percolation-rate measurements shall be made on the day following the procedure described under item 4, above.

- A. If water remains in the test hole after the overnight swelling period, adjust the depth to approximately 6 inches over the gravel. From a fixed reference point (a stick across the hole), carefully measure the time it takes for the water to drop four (4) inches.
- B. If no water remains in the hole after the overnight swelling period add clear water to bring the depth of water in the hole to approximately 6 inches over the gravel. From a fixed reference point (a stick across the hole) carefully measure the time it takes for the water to drop four (4) inches.

6.—Find the percolation rate in minutes required for the water to drop one inch.

SAMPLE CALCULATION:

It takes 40 minutes for the water to drop 4 inches, so the PERCOLATION RATE is 40 minutes divided by 4 inches equals 10 minutes per inch.

THE PERCOLATION RATE IS

$$\frac{10 \text{ minutes/inch}}{4 \text{ inches } 40 \text{ minutes}}$$

INVENTORY & EVALUATION

* { INDIVIDUAL
GROUP
UNIT OF GOVERNMENT

United Pentecostal Church
Jack R. Willhoite

REQUESTED BY RFD #4 LOCATION Augusta
Augusta, Maine 04330

ASSISTED BY Randall Roberts *Randall Roberts* DATE 3-14-73

SITUATION: One acre lot to be used for construction of church. The soil is mapped as Windsor Loamy Sand (51-B=3-8% slope). This soil is rated Fair for Septic Sewage Disposal. Soils ratings taken from "Soils Suitability Guide for Land Use Planning in Maine", Misc. Publication 667 (Rev.) Me. Agr. Exp. Sta. Feb. 1967. Soil rated Fair instead of Good because of rapid permeability.

SUGGESTED SOLUTION(S): Soils rated Fair are acceptable for Septic Sewage Disposal. Install septic system according to Maine State Plumbing Code.

Attached is a soils map tracing showing location of property.

* Circle appropriate category.

Septic Sewage Disposal SOIL SUITABILITY MAP

Prepared by USDA-Soil Conservation Service in cooperation with the University of Maine, Agricultural Experiment Station and the Maine Soil and Water Conservation Commission.

Name of Land Use Decision-maker(s) United Pentecostal Church

Soil and Water Conservation District Kennebec

Approximate Scale of Map 1" = 1320

Date Prepared 3-14-73

North Arrow 

COLORED SOIL SUITABILITY MAPS are developed based upon land use rating in the "Soil Suitability Guide for Land Use Planning in Maine." Present or past land uses are not considered in determining the suitability of the soil for a given use.

Areas colored GREEN are good for this land use.

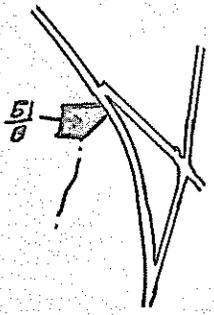
Areas colored YELLOW are fair for this land use.

Areas colored RED are poor for this land use. Land use development carried out on poorly suited soils will usually cause environmental degradation.

Areas colored BLUE are very poor for this land use. Development on very poorly suited soils results in pollution, environmental downgrading, high costs and objectives are seldom achieved.

Soil investigations, mapping, and interpretations ordinarily apply to the upper 3 or 6 feet of soil material. There should be an on-site investigation of any proposed use before a final decision is made. Soil properties do not function independently of each other. The influence of any one soil property depends upon the other soil properties present.

*****DISTRICT NO. 101*****



State: Maine Date: October 1968 Soil: Windsor loamy sand

TENTATIVE-Not coordinated and for limited local use only.

Map Symbol: 51

These are deep, excessively drained sandy soils developed on nearly level to steep glacial outwash terraces. Slopes range from 0 to 45 percent but most Windsor soils are on 3 to 15 percent slopes. Cultivated areas have about 8 inches of dark brown loamy fine sand surface underlain by a brownish loamy sand or sand subsoil. The substratum to 10 feet or more is loose sand. Gravel may be present below 40 inch depth. Bedrock is greater than 10 feet but in some areas a clay layer may be present at 5 to 7 feet. Seasonal high water table is below 5 feet. Water holding capacity is low to very low. Natural fertility is very low. Permeability is rapid to very rapid. Soil reaction ranges from very strongly to medium acid. Susceptibility to frost is low. Stability is poor in deep cuts and trench faces will slough. Windsor soils are non-sticky and non-plastic and easily workable under most conditions. Steep slopes are erodible. Bearing ratio is moderate. Grading is poor. Most Windsor soils have a unified classification of SM in the surface and SP in the subsoil and substratum.

ENGINEERING INTERPRETATIONS

Estimated Chemical and Physical Properties

General Soil Profile (Inches)	Classification			% of Material Passing			Permeability Inches per hr.	Available Water Capacity in/in	Soil Reaction (pH)	Shrink Swell Potential
	USDA Texture	Unified	AASHO	#4	#10	#200				
	0-18	loamy sand	SM SP-SM	A-2	90- 100	80- 100	5- 25	> 6.3	0.02-0.08	4.5- 5.5
18-40	sand	SM SP	A-2 A-3	90- 100	85- 100	2- 20	> 6.3	0.02-0.08	4.5- 6.0	Low

Suitability as a source of topsoil is poor; suitability as a source of sand is good but is poor for gravel; suitability as a source for roadfill is fair.

SOIL LIMITATIONS FOR COMMUNITY PLANNING

Use	Slope	Limitation	Major Factors Affecting Use
Septic Sewage Disposal	A,B,C D,E	Moderate Severe	Very rapid permeability; groundwater contamination. Slope; very rapid permeability; groundwater contamination.
Lagoon Sewage Disposal	A,B C,D,E	Very Severe Very Severe	Very permeable loose sandy substrata; compacts poorly Slope; very permeable substrata.
Dumps and Junk Yards	A,B C,D,E	Very Severe Very Severe	Very rapid permeability; groundwater contamination. Slope; very rapid permeability; groundwater contamination.
Sanitary Land Fill	A,B C,D,E	Very Severe Very Severe	Very rapid permeability; groundwater contamination. Very rapid permeability; slope; groundwater contamination.
Earth Covered Fallout Shelters	All	Slight	
House Bldg. with Septic Sewage Disposal (includes basement)	A,B,C D,E	Moderate Severe	Very rapid permeability; groundwater contamination. Slope; very rapid permeability; groundwater contamination.
House Bldg. with Public Sewage Disposal (includes basement)	A,B,C D,E	Slight Severe	Slope; erodibility.
Pipe & Sewer Lines - Const. & Maintenance	A,B,C D,E	Severe Severe	Unstable substrata; sloughing. Unstable substrata; sloughing; slope.
Cemeteries	A,B,C D,E	Moderate Severe	Droughty; loose sandy surface. Slope; droughty; loose sandy surface.
Excavations	A,B,C D,E	Severe Very Severe	Unstable substrata; sloughing. Slope; unstable substrata; sloughing.

UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, in cooperation with MAINE AGRICULTURAL EXPERIMENT STATION, UNIVERSITY OF MAINE and MAINE SOIL AND WATER CONSERVATION COMMITTEE -- National Cooperative Soil Survey - USA

SOIL LIMITATIONS FOR RECREATION DEVELOPMENT			
Use	Slope	Limitation	Major Factors Affecting Use
Wilderness Tent Sites	A,B	Slight	
	C,D,E	Very Severe	Slope.
Tenting & Picnic Areas (Intensive)	A,B	Moderate	Loose sandy surface; very rapid permeability; groundwater contamination.
	C,D,E	Severe	Slope; erodibility; droughtiness.
Trailer Park Sites	A,B	Moderate	Loose sandy surface; rapid permeability; groundwater contamination.
	C,D,E	Severe	Slope; erodibility; droughtiness.
Camp & Cottage Sites	A,B	Moderate	Loose sandy surface; groundwater contamination.
	C,D,E	Severe	Slope; erodibility; groundwater contamination.
Playing Fields	A,B	Severe	Loose sandy surface; subject to windblow; droughty.
	C,D,E	Very Severe	Slope; loose sandy surface; erodibility.
Shooting Ranges	A,B,C	Severe	Loose sandy surface; droughtiness.
	D,E	Very Severe	Slope; erodibility; droughtiness.
Golf Courses	A,B	Very Severe	Lacks sufficient slope.
	C,D,E	Very Severe	Short slopes.
SOIL LIMITATIONS FOR FARMING			
Use	Slope	Limitation	Major Factors Affecting Use
Cultivated Crops: Corn, peas, oats	A,B,C	Severe	Very low moisture; very low fertility; loose sandy surface.
	D,E	Very Severe	Slope; erodibility; very low moisture.
Potatoes	A,B,C	Very Severe	Very low moisture; very low fertility; loose sandy surface.
	D,E	Very Severe	Slope; erodibility; very low moisture.
Sugar Beets	A,B,C	Very Severe	Very low moisture; very low fertility; loose sandy surface.
	D,E	Very Severe	Slope; very low moisture; erodibility.
Group I-Forage Alfalfa-Brome	A,B,C	Severe	Very low moisture; very low fertility; loose sandy surface.
	D,E	Very Severe	Slope; erodibility; very low moisture.
Group II-Forage Red Clover-Timothy	A,B,C	Severe	Very low moisture; very low fertility; loose sandy surface.
	D,E	Very Severe	Slope; very low moisture; erodibility.
Orchards-Apples	All	Very Severe	Undesirable topographic location; very low moisture.
Land Use Capability	A,B	IIIs	Droughtiness.
	C	IVs	Slope; droughtiness; erodibility.
	D	VIs	Slope; droughtiness; erodibility.
	E	VIIIs	Slope; droughtiness; erodibility.
SOIL LIMITATIONS FOR WILDLIFE HABITAT			
Use	Slope	Limitation	Major Factors Affecting Use
Openland Wildlife	A,B,C	Severe	Low pH; loose sandy surface; very low fertility.
	D,E	Very Severe	Slope; low pH; loose sandy surface.
Woodland Wildlife	A,B,C	Severe	Droughty; low fertility.
	D,E	Severe	Steep slopes; low fertility; droughty.
Wetland Wildlife	All	Very Severe	Excessively drained-not adaptable to wetland plants.
SOIL LIMITATIONS FOR SELECTED FARM AND NON-FARM USES			
Use	Slope	Limitation	Major Factors Affecting Use
Highway Location	A,B	Moderate	Poorly graded; moderate bearing ratio.
	C,D,E	Severe	Steep slopes; erodibility; moderate bearing ratio.
Pond Reservoir Area	All	Very Severe	Rapidly permeable loose sandy substrata; pervious when compacted.
Pond Embankment	All	Very Severe	Poorly graded sands; poor compaction properties.
Agric. Drainage	All		Excessively drained; practice not applicable.
Terraces & Diversions	A,B	Very Severe	Very rapid permeability; very droughty; loose sands.
	C,D,E	Very Severe	Slope; erodibility; very droughty; very rapid permeability.
Waterways	A,B	Very Severe	Very rapid permeability; low moisture; loose sands.
	C,D,E	Very Severe	Slope; erodibility; very rapid permeability; loose sands.
Irrigation	A,B,C	Severe	Very low moisture holding; very frequent irrigation necessary.
	D,E	Very Severe	Steep slopes; erodibility; very low moisture.
Corrosivity			High for concrete; very low for steel.

M. R. WRIGHT & SONS CO.

Roofing-Painting-Building-Remodeling

CONTRACTORS

Augusta, Maine

622-2309

March, 16, 1973

APPRAISAL

on labor and materials for the United Pentecostal Church,
location: Belgrade Road, Augusta, Maine 04330
Structure size 42' X 80', with full basement.

A.	Two, 80' I Beams and ten jack posts	\$ 600.00
B.	140 pc. - 2"x10" x 16'	760.00
C.	14,000 sq. ft. of boards for floor, walls, roof, and platform.	2800.00
D.	26 pc. - 2" x 6" x 14'	72.80
E.	16 pc. - 2" x 8" x 16'	51.20
F.	190 pc. - 2" x 4" x 10'	280.00
G.	4,656 bd. ft. of 2" x 6" for trussed roof rafters. Length of rafters 22'.	1900.00
H.	Chimney	300.00
I.	37 sqs. shingles for roof.	444.00
J.	Finish lumber for eaves.	300.00
K.	3,000 sq. ft. of Masonite siding.	900.00
L.	14 windows 15" x 30", two over two.	740.00
M.	1 double door unit for front. 2 single exterior door units 2' x 8" X 6' x 8".	200.00
N.	12 9" x 12" cellar windows, 3 Lite.	200.00
O.	3200 sq. ft. of 6" ceiling insulation.	540.00
P.	2240 sq. ft. of 3½" insulation for walls.	762.00
Q.	3840 sq. ft. of Celotex ceiling tile	540.00
R.	3440 lin. ft. of 3½" strapping	175.00
S.	113 sheets of 4' x 8' paneling	678.00
T.	105 sheets of Flake board.	735.00
U.	3400 sq. ft. of indoor-outdoor carpeting	2200.00
V.	Labor charge after foundation is in.	9840.00
		<u>\$25,018.00</u>

Plus water well, sewerage, electrical, and hot air
heating system, including labor charge.

6800.00
\$31,818.00

M. R. Wright & Son Co

mw, jr.

mw, sr.

FLOOR PLAN

MURCH

A. M. PINE

VS CO.

SCALE - 1" = 8'

