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THE CITY OF GROTON CONNECTICUT

295 MERIDIAN STREET
06340

Department of Utilities

October 11, 1972

Power Facility Evaluation Council
State Office Building
165 Capitol Avenue
Hartford, Connecticut 06115

RECEIVED

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POWER FACILITY
EVALUATION COUNCIL

Attention: Mr. William C. Joram, Executive Director

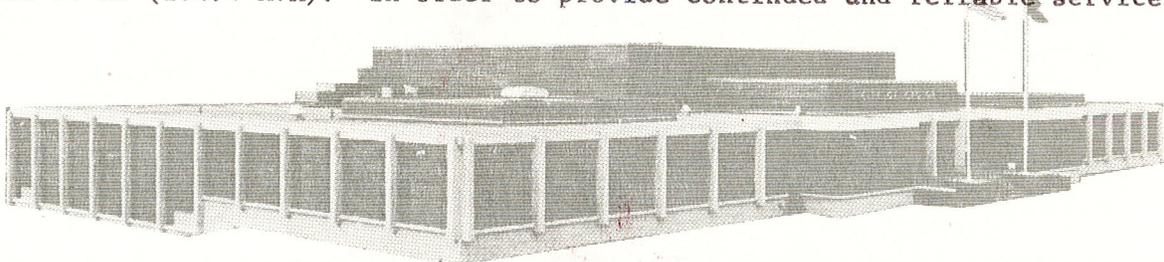
Re: City of Groton
Electric System Improvements

Gentlemen:

Our consultant, O'Brien & Gere Engineers, Inc. of Syracuse, New York, have discussed with you the anticipated expansion of the City of Groton Municipal Electric System. The purpose of this letter is to request an advisory ruling as to the applicability of the statutory provisions outlined in the Public Utility Environmental Standards Act, Substitute Senate Bill No. 1458, Public Act No. 75, for facilities described in sub-divisions 1 and 4 of Section 3A of this Act to the City of Groton electric system expansion.

The City owns and operates a municipal electric distribution system; the City is thus a retailer of electric service in a 20.8 square mile franchise area comprising the westerly half of the Town of Groton. Electric energy is supplied to the City system via dual circuit 69 KV transmission facilities which are owned, operated and maintained by the Connecticut Light and Power Company. The City of Groton owns the 69 KV facilities from the Groton/Ledyard town line to their existing receiving sub-station, a distance of approximately 1.78 miles. The remainder of the 69 KV transmission facilities are owned by the Connecticut Light and Power Company. In a letter dated October 8, 1965 to the City of Groton from the Connecticut Light and Power Company, the City was informed that the Company could supply the Groton system at 69 KV only up to a capacity of approximately 60 MVA and when this load was realized, the City would require additional transformation capacity designed for 115 KV delivery.

The City of Groton system demand reached a peak of 50,112 KW at 89% power factor in 1971 (56.2 MVA), and has peaked at 51,264 KW at 90% power factor in 1972 (56.9 MVA). The ten year projected load for the City of Groton system is expected to reach 94 MW (104.4 MVA). In order to provide continued and reliable service,



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the City of Groton must expand its present receiving sub-station. This expansion is intended to encompass the following:

- A) A new 115 KV overhead transmission line to extend from the area of Long Cove Road through an existing 200' right-of-way to the existing receiving sub-station. This right-of-way presently contains the two 69 KV overhead circuits that are now feeding the City of Groton electric system. The total length of this line is approximately 2.94 miles. As presently planned the City of Groton will own approximately 1.78 miles of this transmission line and the balance of the line, 1.16 miles, will be owned by the Connecticut Light and Power Company.
- B) A new 115/34 KV receiving sub-station which will be constructed adjacent to the existing City receiving sub-station located on the corner of Connecticut Route 184 and Buddington Road in the Town of Groton. This new station will initially consist of two 40 MVA transformers. The ultimate station configuration would consist of four 40 MVA transformers. All 69 KV facilities will be eventually phased out.

Attached are fifteen copies of a plot plan that shows the existing and proposed physical size of the Buddington sub-station as well as an area map which indicates the routes, widths of right-of-ways, the transmission circuits that are located in the Groton/Ledyard area and the anticipated tap point for the 115 KV supply to the City of Groton system. There is a public need for these facilities so that future load growth in the Groton service area can be adequately serviced. The location of this transmission line will not pose an undue hazard to persons or property along the area traversed by the line.

All correspondence relative to this advisory ruling should be directed to:

Mr. W. W. Clinton, General Manager
City of Groton, Department of Utilities
295 Meridian Street - P. O. Box 820
Groton, Connecticut 06340

Telephone No. 203-445-8571

The proposed transmission line and new sub-station must be in service in 1974 so that the City can supply its anticipated load at that time.

Your cooperation in expediting this request would be sincerely appreciated.

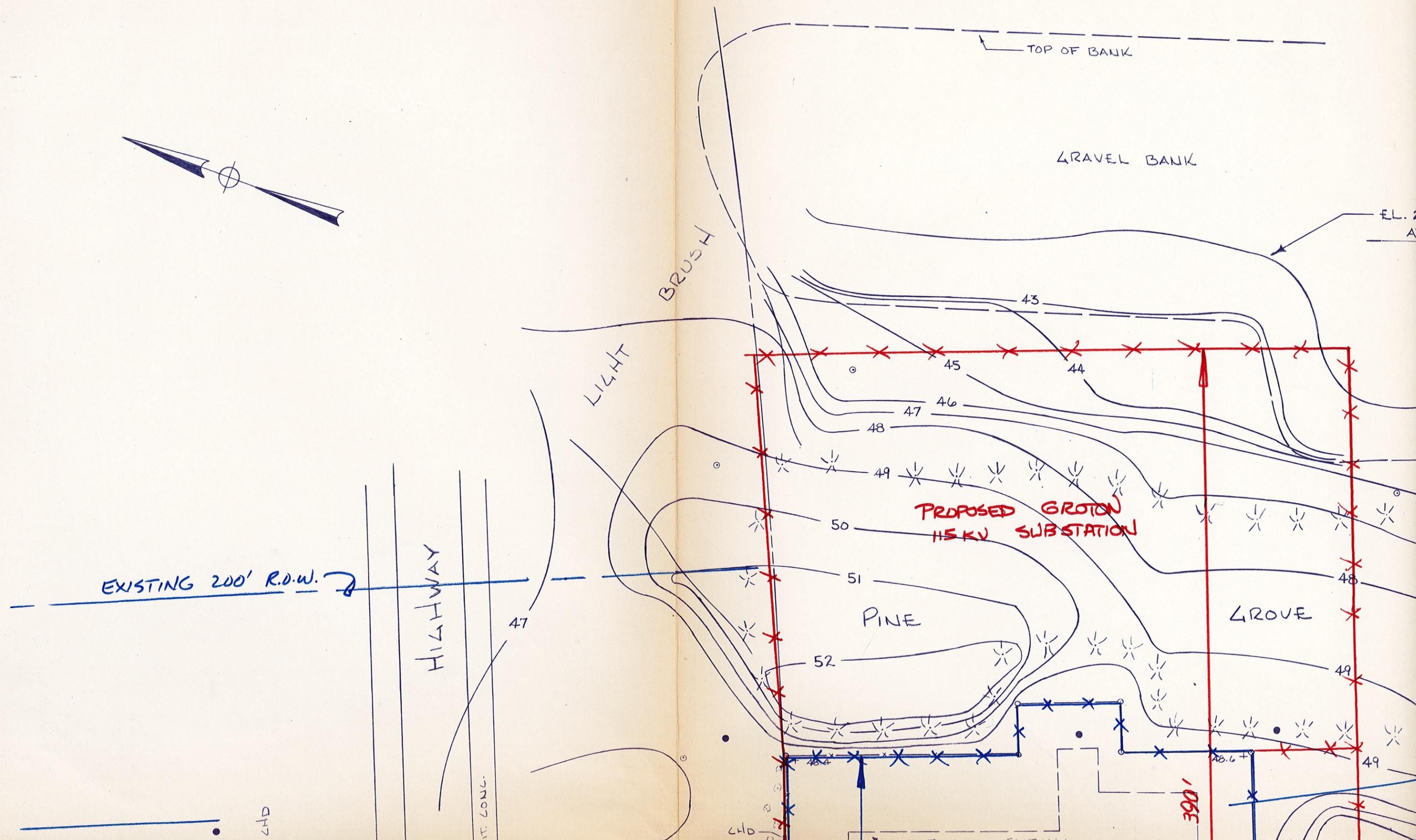
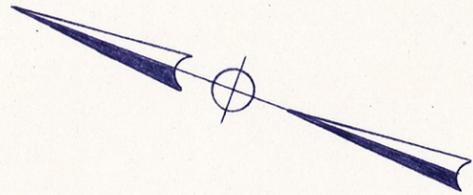
Very truly yours,

THE CITY OF GROTON
Department of Utilities


William W. Clinton
General Manager

WWC:m
encs.

cc: Mr. Leandri, Mr. Gangell, Mr. Burr ridge, Mr. Strazza, City Attorney James F. Brennan, Jr.
Mr. Ronald Francis, O'Brien & Gere Engineers, Inc.



TOP OF BANK

GRAVEL BANK

EL. 2
AT

BRUSH

LIGHT

PROPOSED GROTON
115 KV SUBSTATION

PINE

GROVE

EXISTING 200' R.O.W.

HIGHWAY

DIT. CONC.

390'

LIMIT OF BANK FOOTING

47

48.4

48.6

49

47

51

50

49

48

47

46

45

44

43

48

48

48

48

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48

EXISTING 69KV CKTS.
SUPPLYING CITY OF
GROTON MUNICIPAL SUB-
STATION

EXISTING 200' R.D.W.

STAR

BIT. CONC.

GOLD

CONC.
ROADWAY

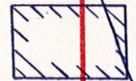
EXISTING GROTON
69/33 KV
SUBSTATION

178'

158'



CONTROL HOUSE



SHED

CHD

49.6

51

52

47

48

49

50

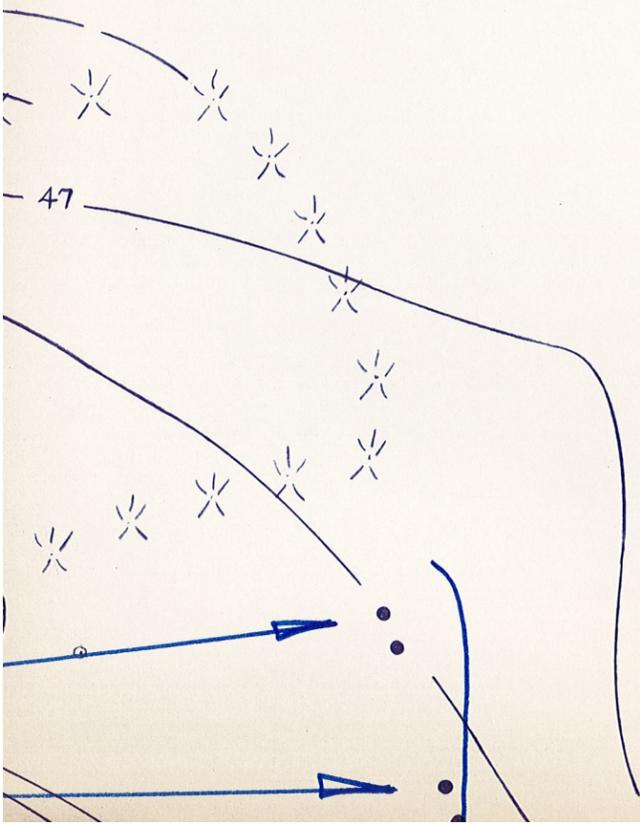
BIT. CONC.

CHD

HVD.

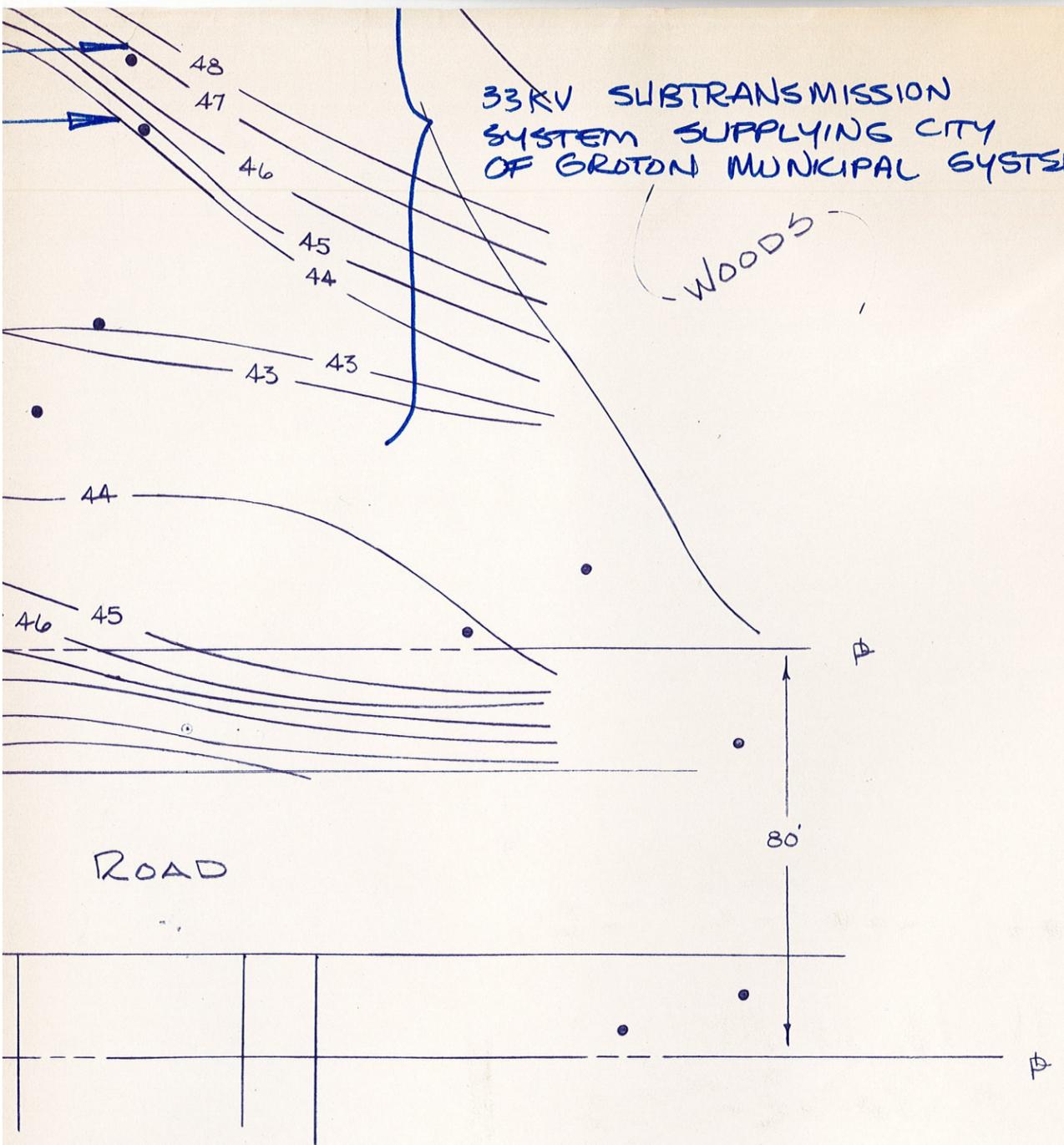
BUDDINGTON

BOTTOM OF BANK
WATER EDGE



33KV SUBTRANSMISSION
SYSTEM SUPPLYING CITY
OF GROTON MUNICIPAL SYSTEM

WOODS



DATE	BY	REVISION
CITY OF GROTON DEPT. OF UTILITIES		
BUDDINGTON SUBSTATION TOPOGRAPHY		
SURVEY BY: RAR		SCALE: 1" = 30'
		DATE: 2/6/71