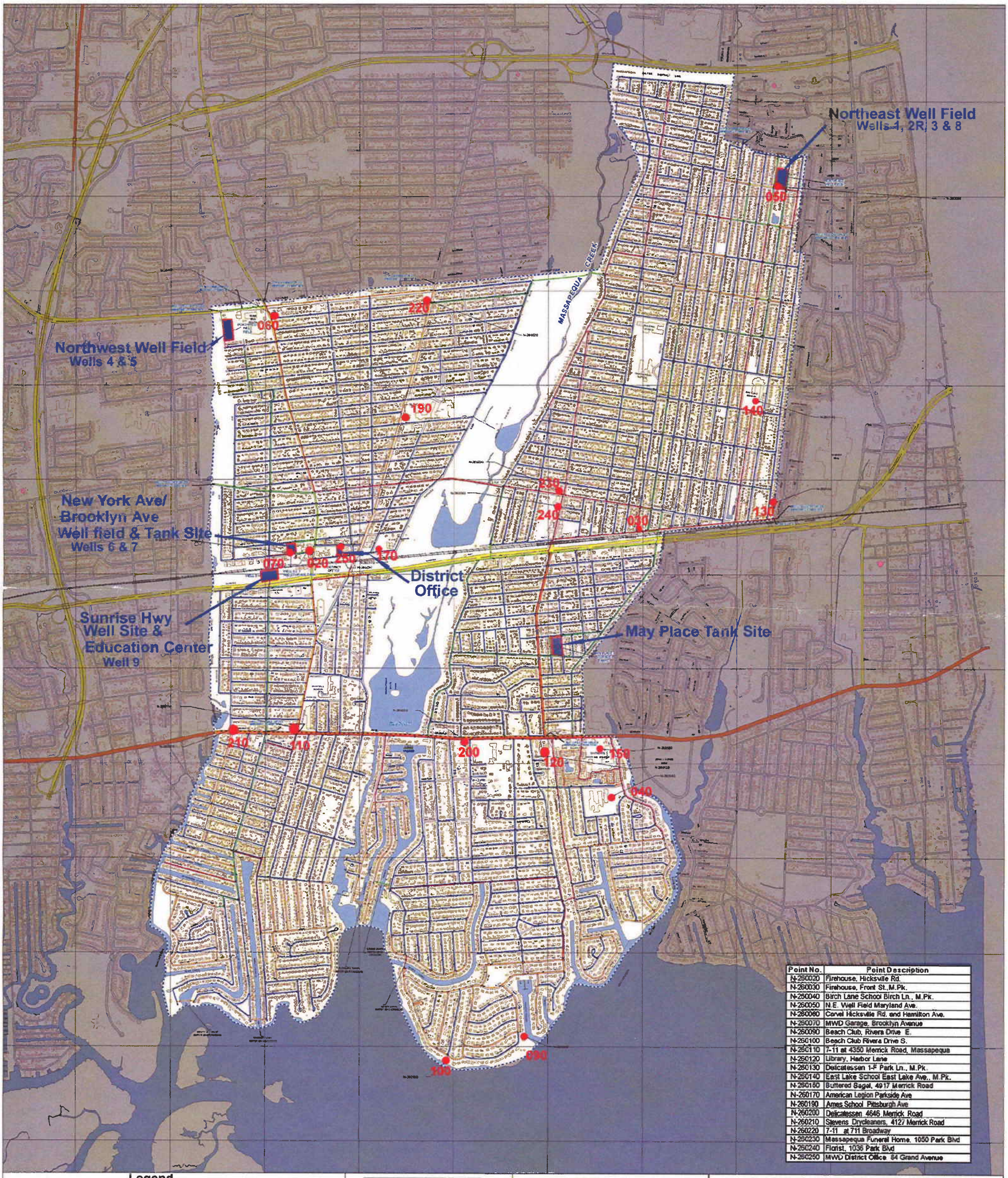


Point No.	Point Description
N-260020	Firehouse, Hicksville Rd.
N-260030	Firehouse, Front St.,M.Pk.
N-260040	Birch Lane School Birch Ln., M.Pk.
N-260050	N.E. Well Field Maryland Ave.
N-260060	Carvel Hicksville Rd. and Hamilton Ave.
N-260070	MWD Garage, Brooklyn Avenue
N-260090	Beach Club, Rivera Drive E.
N-260100	Beach Club Rivera Drive S.
N-260110	7-11 at 4350 Merrick Road, Massapequa
N-260120	Library, Harbor Lane
N-260130	Delicatessen 1-F Park Ln., M.Pk.
N-260140	East Lake School East Lake Ave., M.Pk.
N-260150	Buttered Sagel, 4917 Merrick Road
N-260170	American Legion Parkside Ave
N-260190	Ames School Pittsburgh Ave
N-260200	Delicatessen 4646 Merrick Road
N-260210	Stevens Drycleaners, 4127 Merrick Road
N-260220	7-11 at 711 Broadway
N-260230	Massapequa Funeral Home, 1050 Park Blvd
N-260240	Florist, 1036 Park Blvd
N-260250	MWD District Office 64 Grand Avenue

Legend

Water District
300 Scale Map Grid
Tank
Building
Shoreline
Inland Water

Roads: Local, County, State

Water Facilities: Valve, Hydrant, Chlorine Residual Sampling Point, Interconnection, NY-WATER

Pipe Diameter: 6 Inch, 8 Inch, 10 Inch, 12 Inch, 14 Inch, 16 Inch, 18 Inch

KEYMAP

Distribution System Sampling Points of Massapequa Water District

1" = 600'
0 600 1,200
Feet

MASSAPEQUA WATER DISTRICT

GEOGRAPHIC INFORMATION SYSTEM

Exhibit 1

JUNE 2006

Note; the three red digits on the map correspond to the last three digits of the sampling point I.D. number

NYSDEC Well No.	Local Well ID	Latitude	Longitude	Site Elevation	Authorized Capacity	Actual Capacity	Terminal Well Depth	Well Screen Diameter	Well Screen Length	Split Screen Intervals
-	-	*deg, min, sec*	*deg, min, sec*	*MSL*	*GPM*	*GPM*	*ft.*	*in.*	*ft.*	*ft.*
N-4602	1	40°41'54.45"	73°26'19.18"	42	1400	1352	451	8	65	-
N-9173	2R	40°41'54.37"	73°26'18.61"	42	2000	2205	845	12	82	-
N-5703	3	40°41'56.77"	73°26'18.51"	42	1400	1377	458	6	60	30 & 30
N-6442	4	40°41'23.61"	73°28'51.04"	33	1400	1438	618	12	67	40 & 27
N-6443	5	40°41'23.98"	73°28'51.10"	33	1400	1001	825	10	80	-
N-6866	6	40°40'39.33"	73°28'34.34"	29	1400	1375	626	12	60	-
N-6867	7	40°40'39.57"	73°28'34.37"	26	1400	1376	492	12	60	31, 14, & 15
N-8214	8	40°41'56.40"	73°26'17.78"	42	1400	1523	685	12	81	-
N-13338	9	40°40'33.45"	73°28'40.99"	23.58*	1400	1090	645	12	66	Yes see dwg

* Top of well casing

ORIGINAL—TO COMMISSION

County...Nassau.....

Well No...N-6443.....
(on preliminary report)

State of New York
Department of Conservation
Division of Water Power and Control

LOG

Ground Surf., El.....ft. above sea

COMPLETION REPORT—LONG ISLAND WELL
WELL #5

Owner ...Massapequa Water District.....

Address..84...Grand..Ave...,...Massapequa,...L..I.,...N...Y.....

Location of well .....Hancock Street.....

Depth of well below surface .....267'6".....feet

Depth to ground water from surface.....3'.....feet

CASINGS:

Diameter	18" in.	12" in.	..... in.	..... in.
Length	186'11" ft.	61'2-3/4" ft. (Inner casing plus riser)	..... ft.	..... ft.

Sealing ...12" Casing is welded to screen. Top of 12" casing

Casings removed ....is 128'6" below grade.....

SCREENS: Make Johnson Everdur Openings..#50 slot.....

Diameter	12" in.	..... in.	..... in.	..... in.
Length	67'5-1/4" ft.	..... ft.	..... ft.	..... ft.
Depth to top from top of casing	189'8-3/4" ft.			

PUMPING TEST: Date..6/11/58.....Test or permanent pump?..Test.

Duration of Test.....days.....4.....hours

Maximum Discharge....1725.....gallons per minute

Static level prior to test.....3...ft.....in. below top of casing

Level during Max. Pumping.....40'...ft.....in. below top of casing

Maximum Drawdown.....37'.....ft.

Approx. time of return to normal level after cessation of pumping.....hours.....minutes

Water temperature 52°.

PUMP INSTALLED:

Type..D..W..T.....Make.....Johnston.....Model No.12BC.....

Motive power..Diesel Eng.Make.....G..M.....H.P...100.....

Capacity.1400.....g.p.m. against } .....173.....ft. of discharge head

No. bowls or stages.....5..... } .....210.....ft. of total head

DROP LINE: SUCTION LINE:

Diameter	10" in.	10" in.
Length	60' ft.	10' ft.

Use of water.....Public Supply.....

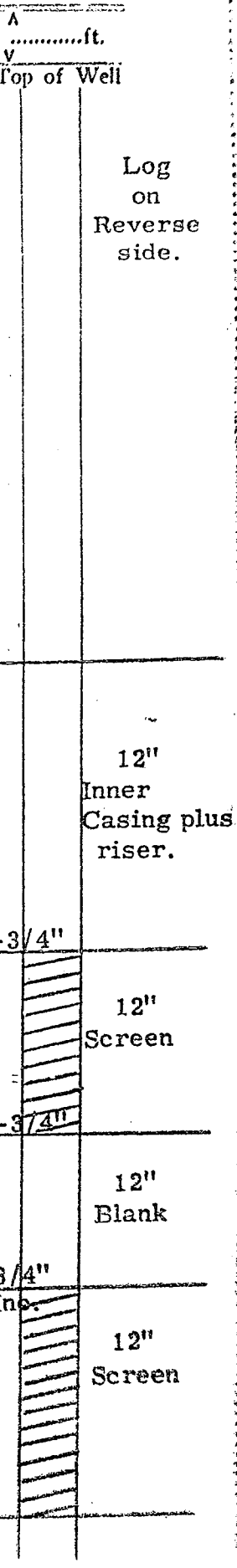
Work started.....4/24/1958..... Completed.....7/3/58.....

Date....7/9/58..... Driller C..W....Lauman..&..Co.., Inc.

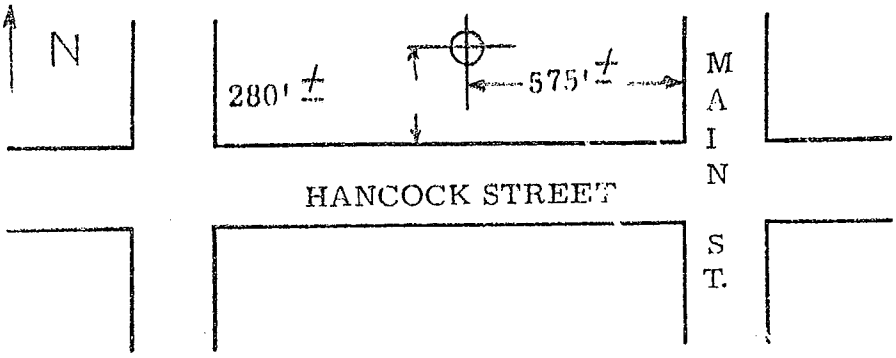
License No.....13.....

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp 5-7.



SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

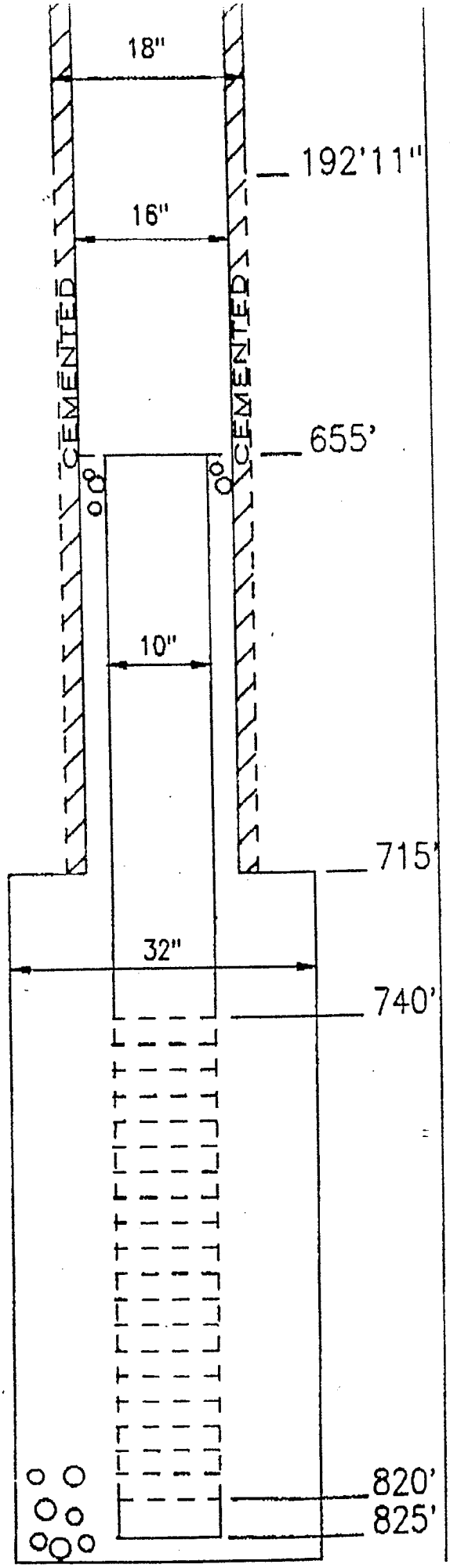
Show North Point

LOG:

0 - 6'	Fill
6' - 7'	Top soil and loam.
7' - 74'	Coarse brown sand, grits and gravel.
74' - 175'	Fine gray sand, sandy clay, streaks of clay and lignite.
175' - 226'	Med. coarse sand, streaks of clay, lignite.
226' - 233'	Gray clay, streaks of sand.
233' - 239'6"	Medium gray sand, mica and lignite.
239'6' - 241'	Gray clay and lignite.
241' - 268'	Med. gray sand, some clay and lignite.
268' - 271'	Med. gray sand, pyrite, lignite, streaks of clay.
271' - 273'6"	Clay and lignite.

Repair

11/17/77 Layne-N.Y. - Replaced Johnston bowl, column + shaft fins with Layne.



NO LOG NOT A LAYNE WELL

192'11" OF 18" DIA. (CASING)
715' of 16" DIA .375" WALL, STEEL, WELDED
51' of 10" DIA .365 WALL, STEEL WELDED
15'6" OF 10" DIA. USED S.S. WELDED
SCREEN
80' OF 10" DIA., 50 SLOT, JOHNSON WW, 316 ELC
PLUG 10" P.S. STEEL & SS PLATES WELDED IN BOTTOM OF SUMP
GRAVEL MIX #1 & #2 75% RETAINED ON U.S. # 16 SIEVE
SEAL

PUMP

SIZE	13"	NUMBER	104767
STAGES	4	TYPE	CL
SETTING	105'-2"	COLUMN	
TUBING		SHAFTING	
BOWLS		IMPELLERS	BR
IMP.SHAFT		SUCTION	10' OF 10"
STRAINER		PRESS B.P.	
HEAD	TF1018	AIR LINE	115'

MOTOR

MAKE	U.S.	TYPE	CFU
VOLTS	460	CYCLE	
PHASE	3	AMP.	
H.P.	100	RPM	1800
FRAME	504P	NON REV.	
MODEL		SERIAL #	
UPPER BRG.		LOWER BRG.	

GEAR DRIVE

MFG.	MODEL
RATIO	SERIAL #
HVY. THRUST	NON REV.

ENGINE

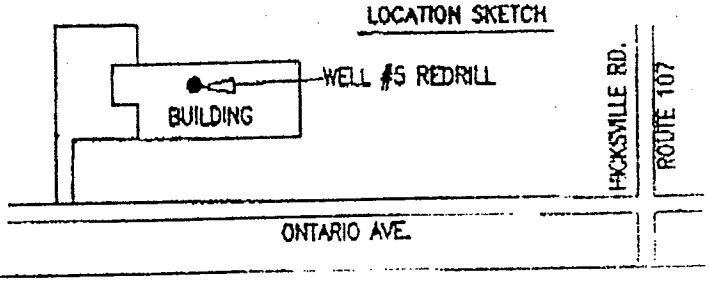
MFG.	MODEL
PRM	CONTINUOUS H.P.
FUEL	SERIAL #

WELL

STARTED	8-23-88	CLEAR DEPTH	
FIRST TEST		METHOD	REV. ROT.
FINAL TEST		GUAR. CAP.	
ACCEPTED		GUAR. PRESS	
B.P. ELEV		FORMATION	
DIST. TO G.W.		DRILLER	S.D. BARTOLO

DATE	9-19-89				
STATIC LEVEL	12'-6"				
PRODUCTION	1461				
PUMP LEVEL					
WATER TEMP.					

LOCATION SKETCH



HYDRO GROUP

MASSAPEQUA WATER DISTRICT
MASSAPEQUA, N.Y. WP-0

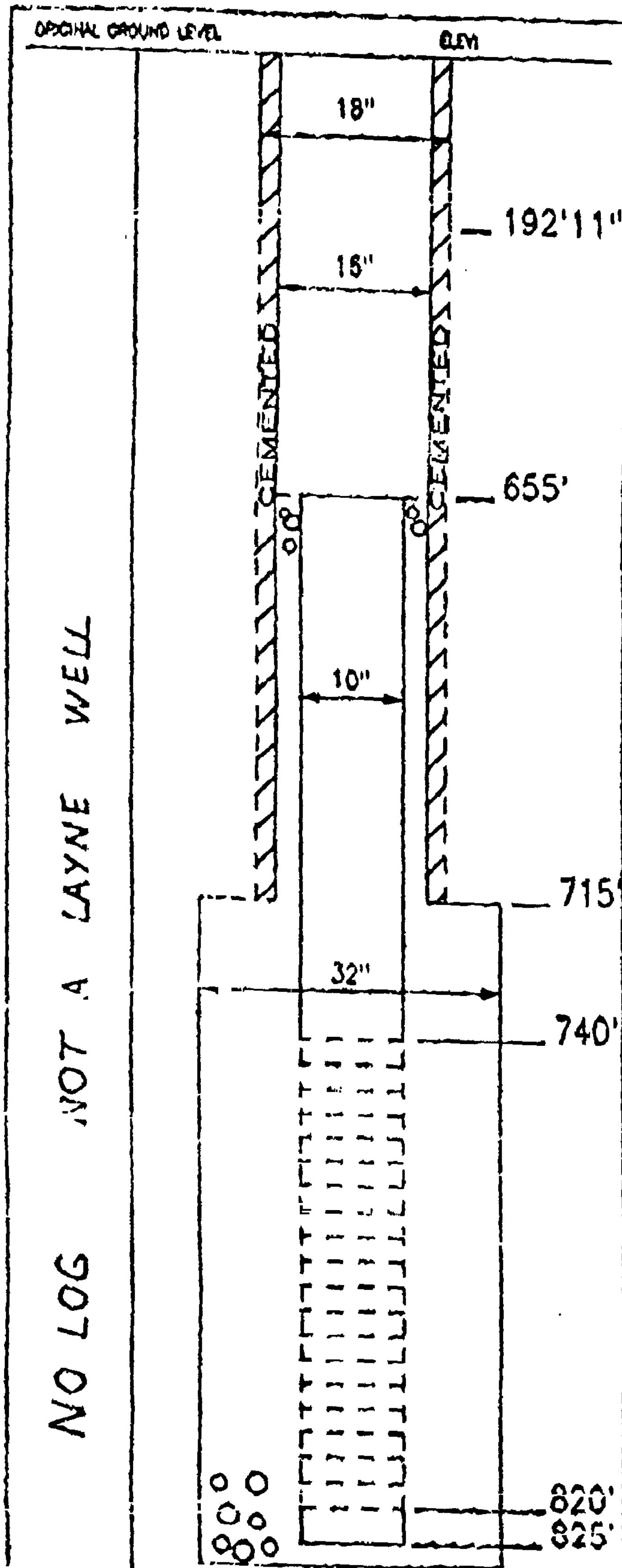
LAYNE WELL & PUMP DIVISON.

DRAWN BY: MAS
LAYNE WELL #

STATE # N-64423
CUSTOMER WELL # 5

Soil Boring data	Date Completed	As-Built Drawing
(y/n)		*(Y/N)*
Y	2002- redrill	Y
Y	1977 - redril	Y
Y	1956	Y
Y	1958	Y
Y	1989- redrill	Y
N	1960	Y
N	1961	Y
N	1968	N
Y	2004	Y

Mass WD #5 N-64423



PIPE

MATERIAL

192'11" OF 18" DIA. (EXISTING)
715' of 16" DIA. .375" WALL, STEEL, WELDED
51' of 10" DIA. .365 WALL, STEEL WELDED
15'6" OF 10" DIA. USED S.S. WELDED

SCREEN

80' OF 10" DIA. 50 SLOT JOHNSON WW, 316 O.G
PLUS 10" P.S. STEEL & SS PLATES WELDED IN BOTTOM OF SUMP
GRAVEL MIX #1 & #2 75% RETAINED ON U.S. # 18 SIEVE
SEAL

PUMP

SIZE	13"	NUMBER	104767
STAGES	4	TYPE	CL
SETTING	105'-2"	COLUMN	
TUBING		SHAFTING	
BOWLS		IMPELLERS	OR
IMP. SHAFT		SUCTION	10' OF 10"
STRAINER		PRESS B.P.	
HEAD	TF1018	AIR LINE	115'

MOTOR

MAKE	U.S.	TYPE	CFU
VOLTS	460	CYCLE	
PHASE	3	AMP.	
H.P.	100	RPM	1800
FRAME	504P	NON REV.	
MODEL		SERIAL #	
UPPER BRG.		LOWER BRG.	

GEAR DRIVE

MFG.		MODEL	
RATIO		SERIAL #	
HVY. THRUST		NON REV.	

ENGINE

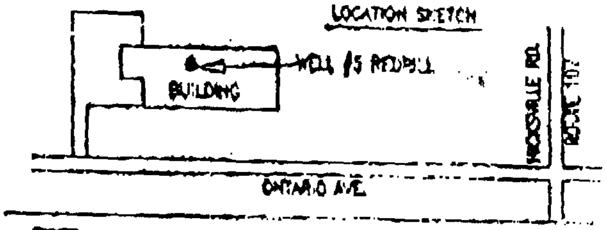
MFG.		MODEL	
PRM		CONTINUOUS H.P.	
FUEL		SERIAL #	

WELL

STARTED	8-23-88	CLEAR DEPTH	
FIRST TEST		METHOD	REV. ROT.
FINAL TEST		GUAR. CAP.	
ACCEPTED		GUAR. PRESS	
B.P. ELEV		FORMATION	
DIST. TO G.W.		DRILLER	S D. BARTOLO

DATE	8-19-89	4-20-??			
STATIC LEVEL	12'-6"	17.2			
PRODUCTION	1461	1461			
PUMP LEVEL		111'			
WATER TEMP.		9.1 '??		SC = 50.1	

LOCATION SKETCH

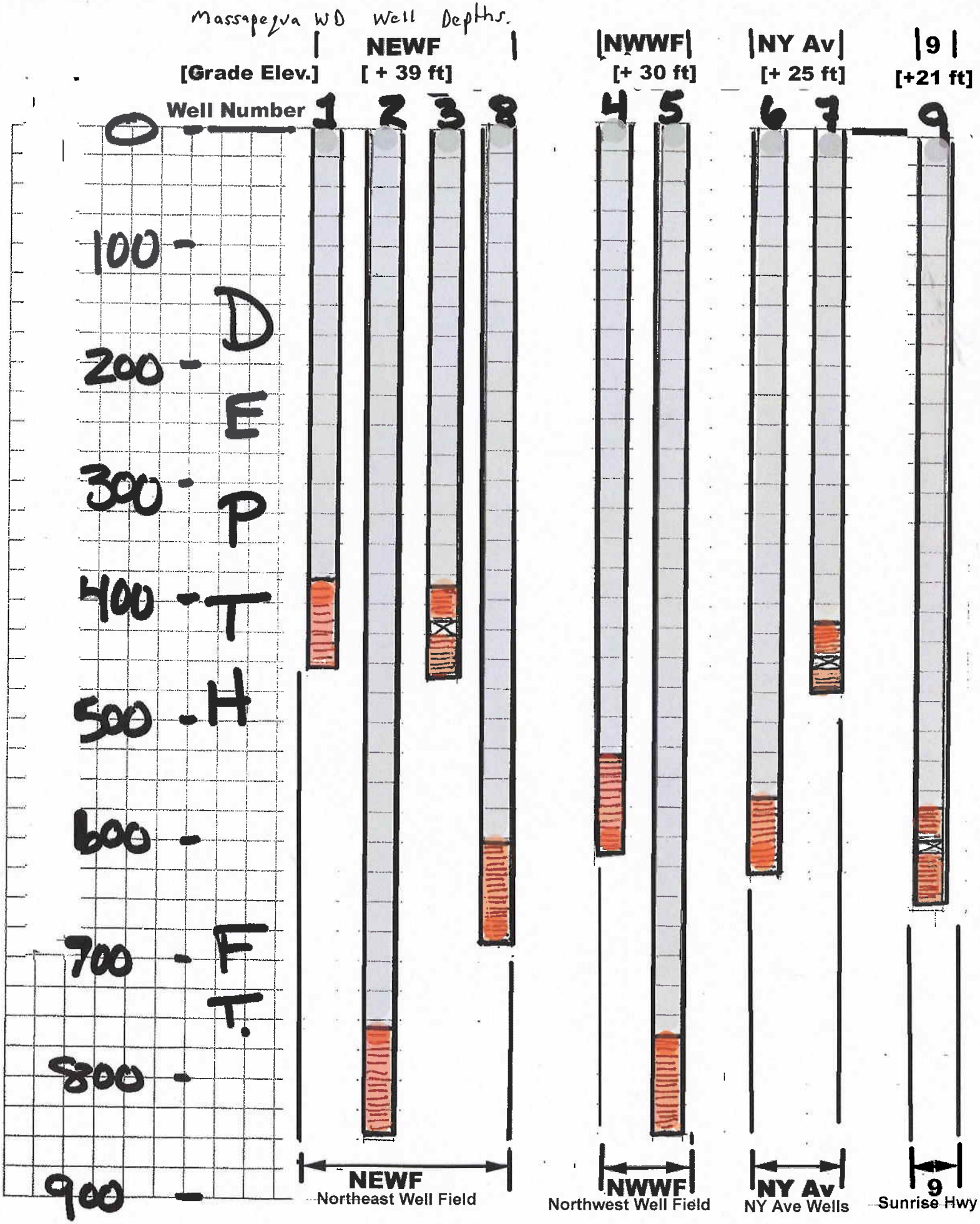


HYDRO GROUP

MASSAPEQUA WATER DISTRICT
MASSAPEQUA, N.Y.
WP-9

LAYNE WELL & PUMP DIVISON.

DRAWN BY:
LAYNE WELL #
STATE # N-64423
CUSTOMER WELL # 5


Massapequa WD Well Depths.
NEWF
[+ 39 ft]
NWWF
[+ 30 ft]
NY Av
[+ 25 ft]
9
[+21 ft]
[Grade Elev.]
Well Number
1
2
3
8
4
5
6
7
9
0
100
200
300
400
500
600
700
800
900
D
E
P
T
H
F
T.
NEWF
Northeast Well Field
NWWF
Northwest Well Field
NY Av
NY Ave Wells
9
Sunrise Hwy

APEQUA WATER DISTRICT WOULD LIKE TO RECEIVE QUOTES ON THE WORK
ARY TO PULL THE PUMP FROM WELL NO. 5. THE DETAILS ARE DESCRIBED
. THE DEADLINE FOR RECEIVING QUOTES IS January 19, 1993.

riginal records indicate:

WELL NO. 5 (N-6443)
Total depth 825'
16"dia casing x 715'

Authorized Yield 1400 GPM
Static Water Level 13'
10"dia. screen x 80'

Located at Ontario Ave. west of Hicksville Rd., Massapequa

PUMP

* Johnston Discharge Head & water lube stuffing box
* 105 ft. of 10 x 1-1/2" Layne flanged water lube column plasite coated assembly consisting of Layne & Bowler 12TLC-4 stage bronze bowl assembly (Serial # 104767) with flanged discharge and a 10" dia. x 10 ft. long steel threaded suction pipe.
* A performance test was conducted 9-10-92 and the results indicate a dramatic loss in capacity. It is suspected that there is a leak in the column pipe or possibly the pump has ingested the air line which is broken.

The objectives of proceeding with work outlined are to pull & disassemble the pump so that it can be inspected to determine the overall condition and then perform repairs required to restore the Original Performance. In addition, the condition of the well shall be confirmed through minimal investigation of the well casing and screen. The District would like to have well measured and bailed before proceeding with pump repair.

Based on the objectives, the Contractor shall provide a proposal to furnish Labor & Equipment to perform the following:

I. DISASSEMBLY & INSPECTION WORK

The pump shall be disconnected from piping and electric, removed from the well and completely disassembled and inspected.

a) A complete inspection of the pump shall be performed on site. The District representative in conjunction with the Contractor will inspect to determine whether repair or replacement of the pump is required. Prior to inspection, the pump shall be cleaned and disassembled as follows:
   1) Power wash and inspect outside of column pipe, lineshafting and bowl assembly.
   2) Disassemble bowl assembly including removal of suction & discharge nozzles, intermediate bowls and impellers. Power wash internal parts to allow for detailed inspection.
   3) Thoroughly clean flanged end of column pipe faces to allow inspection for pitting and leaking.
   4) Remove from Discharge Head and inspect stuffing box.

b) Results of inspection shall be documented in a written Field Report to the District form the Contractor.

/

WELL#5(N6443)ONTARIO