



WATER-RIGHT DOCKET

Saratoga National Historical Park

Docket No: 1

HEADQUARTERS WATER SYSTEM

Land History

09-29-1943: land ownership record

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE	
State <u>New York</u>	Tract No. <u>Wilbur</u>
County <u>Saratoga</u>	Deed No. <u>4</u>
Civil Subdivision <u>Town of Stillwater</u>	Area <u>91.44</u> acres <u>Saratoga National Historical Park</u>
Name of Park or Area	
Area based on survey of <u>West and Davis</u>	Date <u>1927</u> Section of Park or Area <u>Northeast</u>
Legal Description: <u>Begin southwest corner of Frank B. Smith land and southeast corner of Lewis</u> <u>Lohmes farm (now U.S. property) thence south 72°28' east 244.33 ft.; thence</u> <u>south 53°38' east 711.48 ft. to west line of formerly Wm. Wilbur land; thence</u> <u>south 23°47' west 1146.82 ft. to the Pattinos property, thence</u> <u>north 48° 59' east 1,556.74 ft. to the center of the public road to Wilbur basin; thence</u> <u>south 72° 28' east 1,723.26 ft. to the point of beginning.</u>	
Method of Acquisition: <u>purchase</u> Appropriation or Source of funds: <u>reg. approp</u>	
Cost (if purchased) or estimated value: <u>\$8,850.00</u>	
Acquired from: <u>Daniel G. Wilbur, et al</u>	
Accepted by Secretary (☒)	Opinion of Att'y. Gen.--title in U. S. () date: <u>9/29/43</u>
Physical Characteristics: <u>Level farm land except for a steep ravine at either end of the tract</u> <u>on the east and west. Soil is a sandy loam. There are 75 acres of cleared land,</u> <u>50 under cultivation and 25 used for pasture. There is a 15-acre wood lot on the</u> <u>southwest corner of the tract.</u>	
Improvements on Land at time of Acquisition: <u>A two story dwelling, barn, wagon shed, work shop, ice</u> <u>house and other small outbuildings. The exterior boundaries are fenced and the</u> <u>various fields or pastures as well. There is a seven acre apple orchard on the area.</u> <u>A deposit of molding sand underlies 35 acres of the land.</u>	
Existing or outstanding special use permits, reservations, rights, or rights of way: <u>public road 1,967.59' long along</u> <u>north boundary of tract.</u>	
Report Based on: <u>Appraisal Sheet</u>	
Prepared by: <u>Olinus Smith,</u>	date: <u>10/16/43</u>
Map References: <u>Property sketch marked "D.E.W. 5-42" SAR-6005 scale 1" equals 800'</u>	
Remarks:	

Supporting Hydro Data

Form 10-174
(Rev. 8-56)UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
COMPLETION REPORT OF CONSTRUCTION PROJECT

REGION NE	AREA Saratoga National Historical Park	COUNTY Saratoga	STATE New York
PROJECT OR JOB TITLE Water Supply System			PCP NO. U-3
LOCATION IN AREA Wilbur Spring, Headquarters and Schuyler House areas		MASTER PLAN NO. NHP-SAR-3003B	BUILDING NO.
WORKING DRAWING NO. AND TITLE NHP-SAR-3019A, Water Supply System			
PRIATION TITLE AND SYMBOL Construction WPS 14X1035			WORK ORDER NO. B-4
CONTRACT NO. 14-10-0529-247		DATE WORK STARTED July 6, 1960	DATE WORK COMPLETED Aug. 2, 1962
NAME OF CONTRACTOR Howard A. LaRose		ADDRESS Lake George, New York	

COST ANALYSIS

CONSTRUCTION ITEMS	QTY.	UNIT COST IN PLACE	TOTAL COST IN PLACE
Contract Payments (see attached sheet)			46,141.90
P. S. & S.			7,382.70
NE Region FPO Clearance:			
<i>Ralph E. Walter, Budget Officer, 2/16/63</i> Signature, Title and Date		TOTAL	53,524.60

SUMMARY OF EXPENDITURES

PERSONAL SERVICES	EQUIPMENT	MATERIALS AND SUPPLIES	
OTHER			
\$53,524.60 includes \$7,382.70 for P.S. & S., etc. (\$46,141.90x16%)			
CHANGE ORDERS			
ORIGINAL CONTRACT AMOUNT	FIRST	SECOND	THIRD
\$ 43,383.00	\$ 1,315.60	\$ 420.00	\$ 575.00
FINAL CONTRACT AMOUNT	FOURTH	FIFTH	SIXTH
46,141.90	\$ 300.00		

THIS PROJECT OR JOB HAS BEEN COMPLETED IN ACCORDANCE WITH
APPROVED DRAWINGS, SPECIFICATIONS, AUTHORIZED CHANGES

SUBMITTED BY (Name and title) Leslie L. Fugedy, Civil Engineer	DATE Nov. 30, 1962
APPROVED BY (Name and title) S. J. Ellsworth, Superintendent (Sgt) I. J. ELLSWORTH	DATE Jan. 30, 1963

(ATTACH NARRATIVE STATEMENT, PHOTOGRAPHS, AND "AS-BUILT" DRAWINGS TO THIS FORM)

Contract No. 14-10-0529-247

Construction Items	Quantity	Unit Cost in Place	Total Cost in Place
1. 6" C.I.C.L. Pipe (Linear Feet)	915	3.60	3,294.00
2. 4" C.I.C.L. Pipe " "	10,196	2.90	29,568.40
3. 1" Type "K" Copper Pipe " "	259	2.00	518.00
4. 2" Type "K" Copper Pipe " "	43	3.00	129.00
5. 4" Gate Valve W/valve box	5	85.00	425.00
6. 2" Gate Valve W/valve box	1	70.00	70.00
7. 1" Gate Valve W/valve box	1	20.00	20.00
8. 3/4" Drain Box, Drain line	7	40.00	280.00
9. 3/4" Air Release Valve W/valve box	1	100.00	100.00
10. 4" Fire Hydrant	7	250.00	1,750.00
11. Underground Electric Service Entrance L.P.	730	3.75	2,737.50
12. 4" Water Well (Lump sum)	1	1,600.00	1,600.00
13. Pumping Station " "	1	2,740.00	2,740.00
14. Concrete Reference Markers	30	10.00	300.00
Change Order No. 1, Lump sum			1,315.60
Change Order No. 2, Lump sum			420.00
Change Order No. 3, Lump sum			575.00
Change Order No. 4, Lump sum			<u>300.00</u>
Final Contract Amount			46,141.90

CONTRACT SYNOPSIS**Contract No. 14-10-0529-247****Saratoga National Historical Park
Stillwater, New York****Base Contract:**

Invitation for Bids	March 30, 1960
Bids Opened	April 25, 1960
Number of Bids Received	Ten
Date of Contract	May 3, 1960
Notice to Proceed	August 2, 1960
Stop Order	December 18, 1960
Order to Resume Work	July 13, 1961
Stop Order	July 17, 1961
Order to Resume Work	December 21, 1961
Stop Order	December 22, 1961
Order to Resume Work	August 2, 1962
Completion Date	August 2, 1962
Final Inspection	August 2, 1962
Final Acceptance	August 23, 1962
Final Estimate Submitted	August 29, 1962

Contractor: Howard A. Lacombe
Lake George, New York

Sub-Contractors:

Amount of Work Order	\$43,585.00
Change Order No. 1, Sept. 13, 1960	\$ 1,315.60
This involved the installation of six (6) Control Switches for Fire Hydrants.	
Change Order No. 2, November 30, 1960	\$ 420.00
This involved the installation of a sump with pump and drain line - adaptors for three Fire Hydrants and in addition to the Automatic Pump Control.	
Change Order No. 3, July 25, 1961	\$ 575.00
This involved the enlarging of the hole-opening of pump-pit over well and installation of a water-tight hatch over the hole.	

CONTRACT SYNOPSIS (CONTINUED)

Change Order No. 4, October 18, 1961

\$ 300.00

This involved the raising of two (2)
 Fire Hydrants by 18 inches - raising two (2)
 Gate Valves, and installation of miscellaneous
 electric cables.

Total Cost of Contract

\$46,141.90

Total Base Bid

- \$43,585.00

Total Amount of Extra Work

\$ 2,556.90

Narrative Report

This project consisted of the construction of a Water Supply System for Saratoga National Historical Park as part of a large new development there.

The principle elements of the project are: a water-well, an automatically controlled pumping station that was built over a well drilled under this contract, about 11,000 linear feet of 4" & 6" cast iron water line, 730 linear feet of underground primary electric line to the pumping station and several other miscellaneous items pertaining to this type of construction.

The site of the well was located by previous Geological Survey. The well was drilled and developed to yield approximately 20 G.P.M. with about one foot drawdown. An underground power line was constructed to serve the pump house.

The 4" cast iron supply line was constructed from the well to the Visitor Center in which a large concrete reservoir was built under the Visitor Center contract.

The 6" cast iron supply line connects the reservoir to the maintenance and residence areas. From the 6" main line 1" and 2" copper lines connect to the maintenance building and to each residence.

Six fire hydrants with automatic controls were installed near the visitor center - residence - utility area.

The seventh fire hydrant was installed near the new residence at the Schayler house in Schaylerville. The residence and the fire hydrant were connected to the city water-system under this contract.

Leslie L. Fugedy

Additional Information - Water System Project

All items connected with the construction of this water system relate to distribution from the well source near the Burgoyne Spring. No elements relating to diversion of water are applicable. Under the laws of the State of New York no application, permit or license was required for development of this system. No capital items financed from water resources funds were incorporated into the system.

Water resources investigations and studies (Phase I) were performed by the U. S. Geological Survey, Ground Water Branch, from water resources funds in the amount of \$1,500 furnished by the National Park Service. Construction of test and observation wells conducted as Phase 2 of water resources investigations was supervised by the U. S. Geological Survey following specifications developed by that agency and advertised by General Services Administration. This work was estimated at \$2,500 to be financed from NPS water resources funds. Park records do not include information as to the actual cost of this investigation which preceded design of the system.

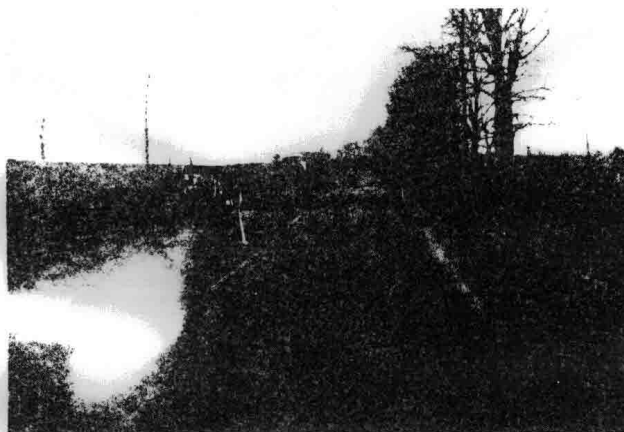
No land or water rights acquisitions were made in connection with this project.

Water of excellent taste and quality is being produced, far surpassing quality of water heretofore available.

I. J. Ellsworth
Superintendent

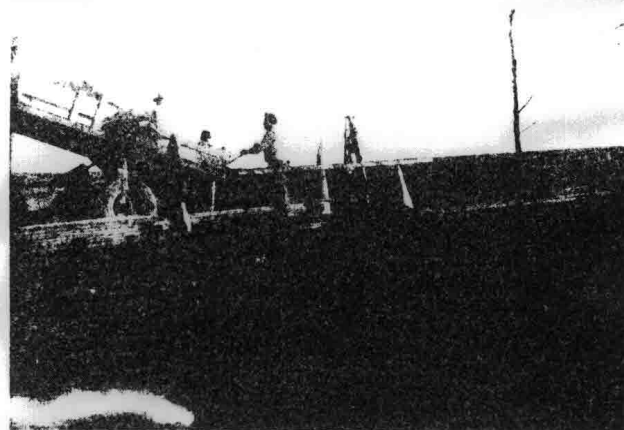
**Construction
Photo**

**Excavating
for pipe-
line crossing
of NY Route
#32**



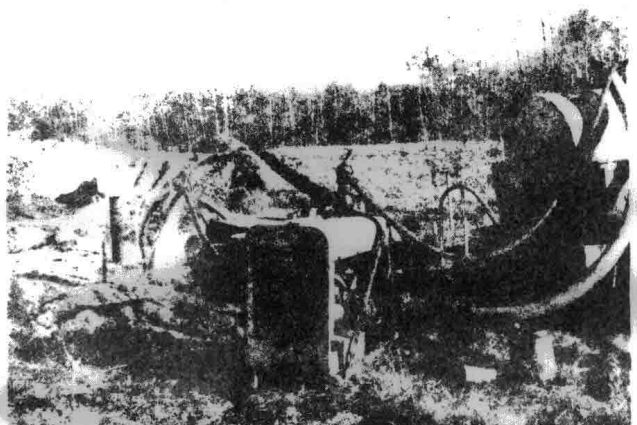
**Construction
Photo**

**Replacing
Fill
Pipeline
Crossing
of N.Y.
Route #32**



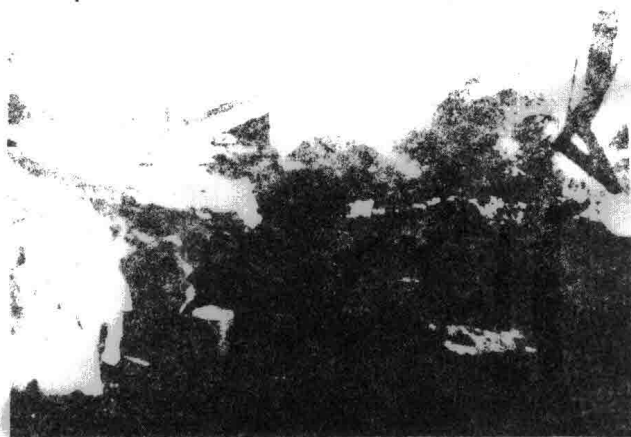
Construction
Photo

Machinery
used in
Well
Development



Construction
Photo

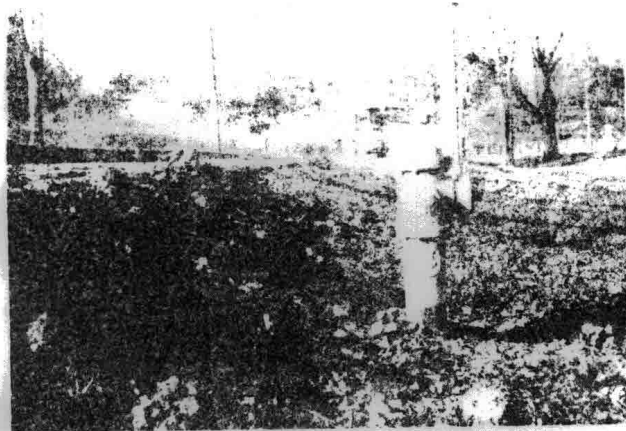
Pump House
Complete
(Center
background)
Line Valve
Box at grade
(foreground)



**Construction
Photo**

**Fire
Hydrant
Schuyler
Property**

**Before being
turned**

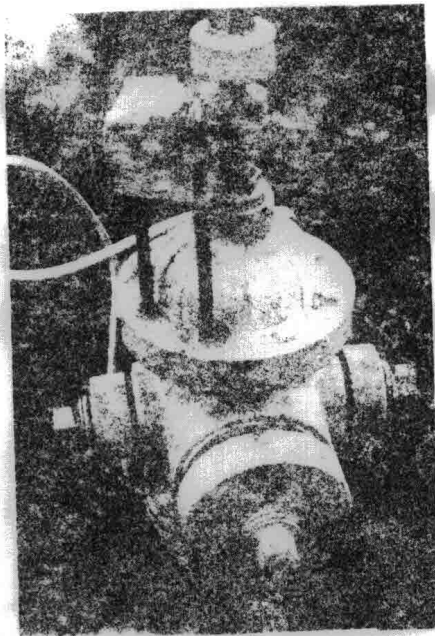


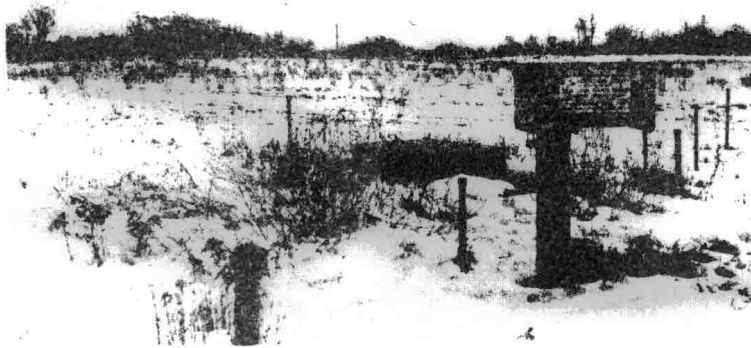
SPRINT

**Construction
Photo**

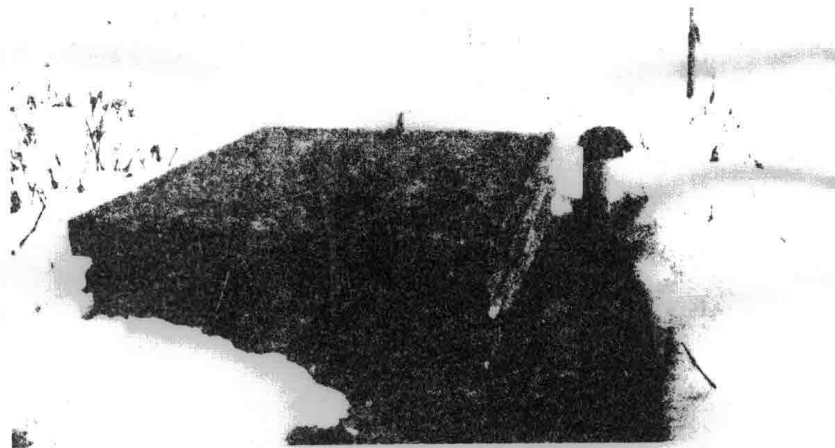
**Typical Fire
Hydrant with
Electrical
Control for
starting
Fire Pump
Booster**

Fraser Hill

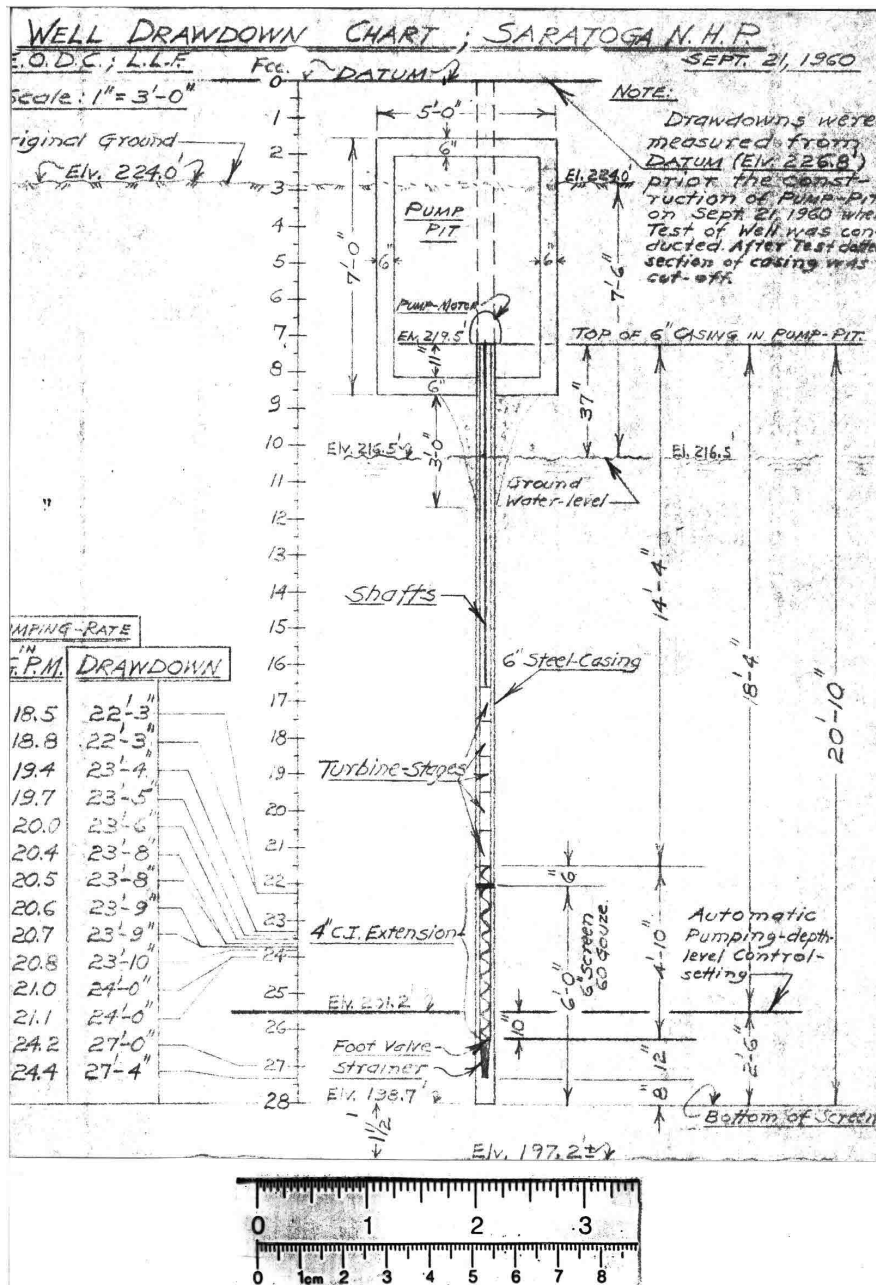




Test Wells at Pumping Station
Meter & Transformer Pole in background for
Power Supply



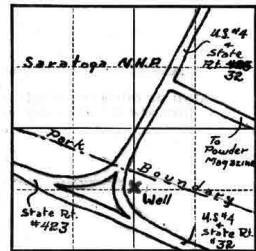
Overlapping Cover and Vent at Underground
Pumping Station



9-255
(Jan. 1927)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

RECORD OF WELL



Locate well on plat of section.
Scale 1" = 800 Feet

1. Location: State New York County Saratoga
Nearest P. O. Stillwater Direction from P. O. North
Distance from P. O. 3 miles; $\frac{1}{4}$ sec. , T. , R.
If in city, give street and number

2. Owner: Nelson & Sarah Arlin Address Stillwater, New York
Driller: Flynn Bros. Address Box 161, Mechanicville, N. Y.

3. Situation: Is well on upland, in valley, or on hillside? upland

4. Elevation of top of well: 280 ft. above the level of sea

5. Type of well: drilled (Above or below) ; kind of drilling rig used solid tool, keystone 50

6. Depth of well: approx. 200 ft.; year in which well was finished 1951

Does well enter rock? yes; if so, at what depth? 25 ft.; kind of rock Hudson Valley Shale

7. Diameter: At top 6 inches; at bottom 6 inches.

8. Principal water bed: rock - Hudson Valley Shale

(Gravel, sand, clay, or rock. If rock, state kind)
Depth to principal water bed 150 - 160 ft.; thickness of bed 10 ft.

If other water supplies were found, give depth to each None

9. Casings: Kind cheaper, dry pipe; size 6"; length 29 ft.; between depths of 0 and 29 ft.

Kind None below 29'; size -; length - ft.; between depths of - and - ft.

Kind -; size -; length - ft.; between depths of - and - ft.

Packers (if any): Depth at which packers were used None; kind -

Screen or Strainer: Was well finished with screen? None; kind of screen -

length of screen - ft.; diameter - inches; size of openings -

10. Head: Does well at present overflow without pumping? No; did it overflow when new? No

if flowing, give pressure - lb. per sq. inch; or height water will rise in a pipe - ft. above surface;

original pressure or head -; if not flowing, give water level in well 2 1/2 ft. below surface.

11. Pump: Is the well pumped? yes; kind of pump hand pump - 25'

size or capacity of pump -; kind of power -

12. Yield: Natural flow at present (if any) 1 gallons per minute; original flow 1 gallons per minute;

well has been pumped at - gallons per minute continuously for - hours;

quantity of water ordinarily obtained from well - gallons per day.

13. Use: For what purpose is the water used? Domestic

14. Quality of the water: -; is there an analysis? No

15. Cost of well, not including pump: - (Hard or soft, fresh or salty, etc.) Temperature of water - ° F.

Name of person filling blank Howard H. Chapman

Date July 30, 1951 Address Howard H. Chapman, Park Ranger

Saratoga Nat. Hist. Park, Stillwater, N. Y.

On the back of this sheet give the record of the beds through which the well passes and any other facts not given above.

Casing of this well will be pulled out when drilling of second well takes place.

6-0642

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Saratoga National Historical Park
Stillwater, New York

July 30, 1951

Memorandum

To: Regional Director, Region One
From: Superintendent, Saratoga NHP
Subject: Record of Well on private property owned by Nelson & Sarah
Armlin

Enclosed in duplicate is completed Geological Survey Form 9-255, Record of Well, for the well recently drilled on the Armlin Property in Saratoga National Historical Park as requested by Mr. O'Neil's memorandum of July 18.

The information on the form secured by Park Ranger Chapman was furnished by Francis J. Flynn from memory since Mr. Flynn stated that he kept no record of drilling operations and actually didn't know the depth of the well although he thought it was about 200 feet.

Mr. Armlin stated when I talked with him recently that another well was to be drilled and that Mr. Flynn had agreed to do the job for him without additional cost except for materials since the first attempt was unsuccessful. Mr. Flynn states that since a good well was not produced he has not collected for the work already done but will bill Mr. Armlin upon completion of the new well. Thus, cost of the well is not shown on the form. Mr. Flynn states that he plans to pull the casing from the present well and utilize it in the next well, thus abandoning the present hole. At the time Mr. Flynn started the present well he informed me that he was charging \$5.00 per foot for the job including cost of casing to extend from ground surface to solid rock. Present plans of Messrs. Armlin & Flynn call for beginning a new well sometime this week.

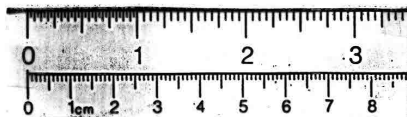
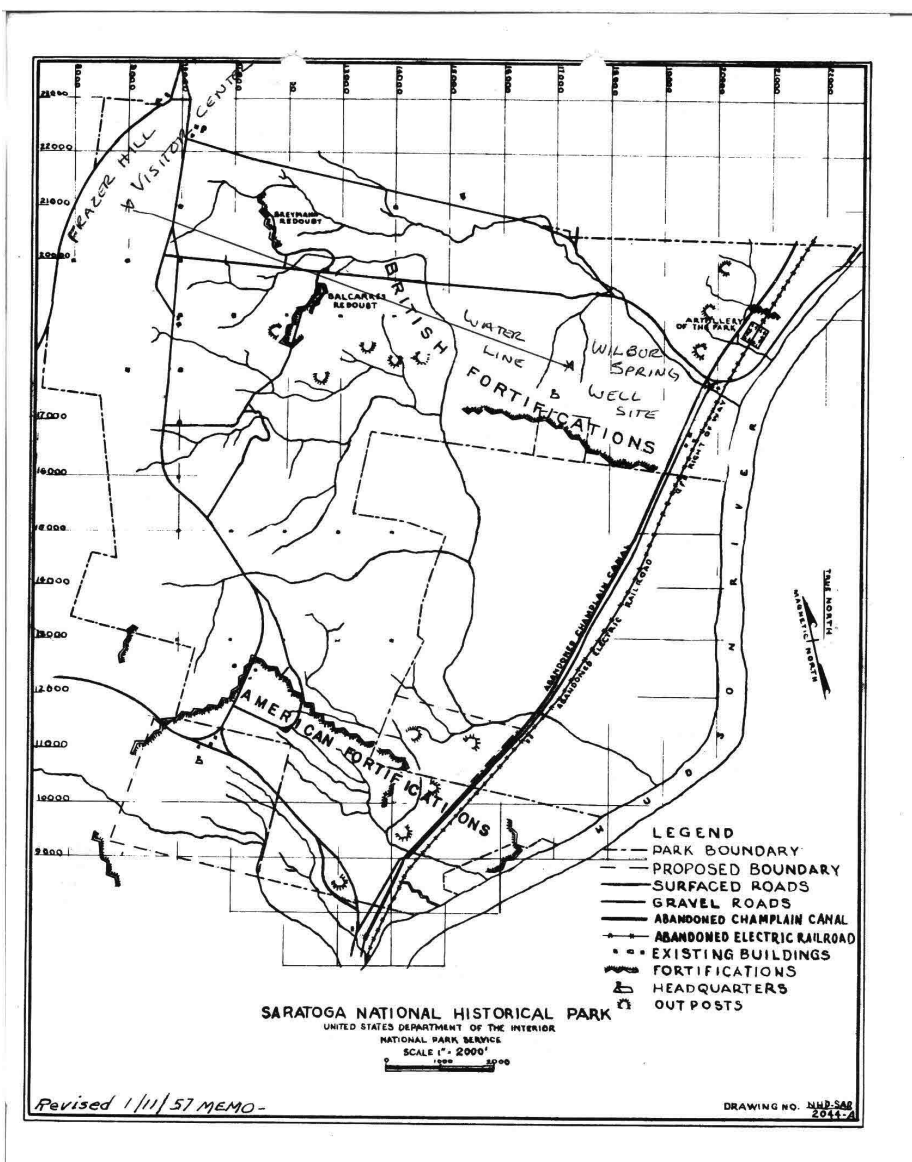
Mr. Flynn offered to keep a record on GS Form 9-255 when the new well is started so one of the forms provided with Mr. O'Neil's memorandum was furnished him for this use. In order that we may have sufficient forms to submit on the second well and record the information in our files, it will be appreciated if you would furnish four more of the Geological Survey Form 9-255.

(Sgd.) IVAN J. ELLSWORTH

I. J. Ellsworth
Superintendent

In triplicate
Enclosure

Maps and Miscellaneous Information



Docket Information

Number of Documents in Docket 16

Documents Dated from 9/29/1943 to 1/30/1963

Docket Compiled: 6/17/2011