



WATER-RIGHT DOCKET

Booker T. Washington National Monument

Docket No: 1

HEADQUARTERS AND SPRINGS WELLS.

State Water Rights Documentation

03-21-1979: letter to superintendent hutzky



COMMONWEALTH of VIRGINIA

JAMES B. KENLEY, M.D.
COMMISSIONER

Department of Health
1347 Piney Forest Road
Danville, Virginia 24541

CERTIFIED MAIL - RETURN
RECEIPT REQUESTED

SUBJECT: FRANKLIN COUNTY
Water - Booker T. Washington National Monument

21 March 1979

Mr. John Hutzky, Superintendent
Booker T. Washington National Monument
Route 1, Box 195
Hardy, Virginia 24101

Dear Mr. Hutzky:

Enclosed you will find Commonwealth of Virginia Department of Health Waterworks Operation Permit No. 5067040 with an effective date of 28 February 1979. This permit is your authorization from the State Health Commissioner to operate the public water supply at Booker T. Washington National Monument located in Franklin County in accordance with Part 2 of the Waterworks Regulations. You will note that the permit indicates that this water supply has a design capacity of 59,040 gallons per day. This permitted design capacity is the existing system usage and shall not be exceeded.

Attached to the permit is an Operation Variance to Sections 5.08.02 and 6.00 of the Regulations. The variance has an expiration date of 28 February 1980 for Sections 5.08.02 and 6.00. At the expiration of the variance, Booker T. Washington National Monument must be in compliance with the above sections.

We look forward to your continued cooperation in the maintenance and operation of this public water supply.

Sincerely,

M. J. Haley, P.E.
Regional Director
Division of Water Programs

Enclosures

cc: Franklin County Health Department
SHD - Central



COMMONWEALTH of VIRGINIA

AMES B. KENLEY, M.D.
COMMISSIONER

Department of Health
Richmond, Va. 23219

VARIANCE

Permit No. 5067040

This variance is issued in accordance with Section 3.09 of the Waterworks Regulations of the Virginia Department of Health. This variance is to Sections 3.08.02 and 6.00 of the Waterworks Regulations and allows the National Park Service to operate a public water supply serving Booker T. Washington National Monument. This variance is issued with the following conditions:

1. Section 5.08.02 - Metering of Total Water Production: Within one year from the effective date of the permit, or no later than 28 February 1980, the National Park Service must provide metering of total water production.
2. Section 6.00 - Cross-Connection and Backflow Prevention Control in Waterworks: Within one year from the effective date of this permit, or no later than 28 February 1980, the National Park Service must establish or cause to be established and have in operation a cross-connection and backflow prevention program consistent with the extent of the system and the type of consumer served.
3. This variance is a nontransferable part of Permit No. 5067040 and must be attached to Permit No. 5067040.
4. This variance is a condition of Permit No. 5067040 and is revoked or superseded whenever Permit No. 5067040 is revoked or superseded.

Recommended

Allen E. Hammer
Director, Bureau of Water Supply Engineering

Recommended

Eric H. Bartch
Director, Division of Engineering

Approved

Ames B. Kenley M.D.
State Health Commissioner

WATER DESCRIPTION SHEET

DATE: 28 February 1979

INSTALLATION: Booker T. Washington National Monument - Noncommunity
COUNTY: Franklin
LOCATION: Sixteen miles northeast of Rocky Mount on the southside of Route 122
OWNER: U. S. Department of the Interior, National Park Service
OPERATOR: Mr. Sidney Wright
PERMIT NO. 5067040
DATE ISSUED: 28 February 1979
TYPE OF TREATMENT: None
SOURCE: Two drilled wells
DESIGN BASIS: 59,040 gallons per day
DESCRIPTION OF SYSTEM:

Rock 2
The source of water for this system is two drilled wells. One well is located approximately 1000 feet south of the Visitor's Center. This well is 126 feet deep and static water level is within 20 feet of the surface. This well is equipped with a submersible pump driven by a 5-HP motor with a reported yield of 26 gallons per minute. This well pumps to a 500-gallon hydropneumatic storage tank housed in the Visitor's Center and then to the distribution system.

Rock 1
The second well is housed in the old Booker T. Washington Elementary School building due west of the Visitor's Center. The well is equipped with a submersible pump driven by a 1½-HP motor with a reported yield of 15 gallons per minute. The pump discharges into a 1500-gallon hydropneumatic storage tank located immediately adjacent to the well head thence into the system.

DESIGN BASIS:

Existing System Usage: No metering/not available

Source Capacity: 26 gpm + 15 gpm = 41 gallons/minute

$$41 \text{ gpm} \times 1440 \text{ min/day} = 59,040 \text{ gals/day}$$

The Booker T. Washington National Monument water supply is therefore limited to its source capacity of 59,040 gallons/day.

SGV:gg



COMMONWEALTH of VIRGINIA

DEPARTMENT OF HEALTH BUREAU OF WATER SUPPLY ENGINEERING WATERWORKS OPERATION PERMIT

United States Department of the Interior - National Park Service Is Hereby Granted Permission
to Operate a noncommunity Waterworks Having a Design Capacity of 59,040 gallons per day at Booker T. Washington
National Monument Located In Franklin County In Accordance With the Provisions of
(City, Town and/or County)
Article 62.1, Chapter 4, Section(s) 62.1 - 50 Code of Virginia As Amended and
Section(s) 3.14 Of the Waterworks Regulations of the Virginia Department of Health As Amended
This Permit Is Issued In Accordance with Previously Issued Permits None Issued (see attached description sheet dated 28 February 1979)

and With The Understanding That The National Park Service Will
Operate the Waterworks in Accordance with Part 2 "Operation Regulations for Waterworks" of the Waterworks Regulations of the Virginia Department
of Health and any Variances and/or Exemptions Noted Below.

Variances and/or Exemptions Granted () None (x) See Attached.

PERMIT NO. 5067040

EFFECTIVE DATE 28 February 1979

RECOMMENDED Allen R. Hammon
Director, Bureau of Water Supply Engineering

RECOMMENDED Eric H. Bartel
Director, Division of Water Programs

APPROVED John H. Kenley, M.D.
State Health Commissioner

Land History

Form NS-1

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICEState Virginia

LAND OWNERSHIP RECORD

Tract No. BirthplaceCounty FranklinDeed No. 1Civil Subdivision Gills Creek Magisterial DistrictArea 164.60

acres

Booker T. Washington NationalName of Park or Area MonumentArea based on survey of A. C. FralinDate 1955Booker T. Washington Birthplace site

Section of Park or Area

Legal Description: All that certain tract or parcel of land containing One Hundred Sixty-four and Six-Tenths (164.6) Acres, more or less, situate, lying and being in Gills Creek Magisterial District, Franklin County, Virginia, and lying about sixteen miles east of Rocky Mount, adjoining the lands of John William Booth and Nellie Plybon Booth (formerly the Pacey Plybon farm), Ruth Jane Saunders and Thomas R. Saunders (formerly the Albert Saunders farm); J. P. Harshbarger and others, and more particularly described as follows: Beginning at a concrete right of way marker on the north side of State Highway No. 122 and on the south side of the old Turnpike, being a corner to Albert Saunders, and with Saunders' line S. 0° 10' W., crossing the centerline of the highway at 116.7 feet, all
(continued on back of sheet)

Method of Acquisition: Donation pursuant to act of April 2, 1956 (70 Stat. 66)

Appropriation or Source of funds:

Cost of purchase(s) or estimated value:

State of Virginia paid a \$17,000 mortgage to remove indebtedness on property and acquire title.

Acquired from: Booker T. Washington National Monument Foundation by Deed dated October 29, 1956, recorded March 15, 1957, in Deed Book 118, page 617.

Accepted by James H. Tindal Assistant Director Opinion of Atty. Gen., title in U. S. (X) date: June 18, 1957

Physical Characteristics: The natural contour of the property is gently rolling, rounding into slightly steeper but not precipitous slopes along the streams. Approximately 70% of the area has been cultivated and the balance is predominantly second growth hardwood.

Improvements on Land at time of Acquisition: A "reconstructed" birthplace cabin; one modern brick, two-story building serving as post office and administration center; the foundation of another; a converted old barn (Tuck Industrial Hall); a two-story, nine-room frame dwelling and another two-story, five-room dwelling; also a 145-foot deep well with pressure tank.

Existing or outstanding special use permits, reservations, rights, or rights of way: See legal description.

Report Based on: Deed and related papersPrepared by: L. Tindal (in part)date: July 1957

Map References: Booker T. Washington Birthplace Memorial Property by A. C. Fralin, C.L.S., March 26, 1955, Map Book 2, page 13, cited in deed and made a part thereof.

Remarks:

Legal Description (continued)

511.5 feet to a stake; S. 64° 19' E., 519.3 feet to a stake; S. 7° 17' W., 192.5 feet to a 7-inch cedar; S. 64° 55' E., 137.4 feet to a 30-inch red oak; S. 19° 5' W., 752.4 feet to a stake; S. 79° 20' W., 610.8 feet to a stake on a branch; thence down the meanders of said branch, S. 80° 20' E., 204.8 feet; S. 17° 25' E., 184.7 feet; S. 28° 55' E., 37.1 feet; S. 18° 25' E., 214.4 feet; S. 43° 5' E., 40.5 feet; S. 11° E., 117.5 feet; S. 20° 50' E., 195.8 feet; S. 9° 55' E., 34.8 feet to a point on a branch (a corner to Rufus Holland); thence with Holland's line, S. 82° W., 79.6 feet; S. 52° W., 97.5 feet; S. 3° 55' E., 206.5 feet; S. 42° 10' W., 68.2 feet; S. 13° 30' W., 182.5 feet; S. 43° 35' E., 114 feet; S. 39° W., 220 feet; S. 12° 50' E., 99 feet; S. 16° 40' W., 64.5 feet; S. 51° W., 84.8 feet; S. 11° 55' W., 121 feet; S. 7° 55' W., 164 feet; S. 1° 30' E., 143.3 feet; S. 14° 15' W., 91.3 feet; S. 22° E., 111.7 feet; S. 40° 5' W., 99 feet; S. 2° 20' W., 70.4 feet; S. 64° 5' W., 81 feet; S. 22° 30' E., 139.5 feet; S. 49° 55' W., 129.5 feet; S. 50° 25' E., 54 feet; S. 32° 45' W., 53.6 feet; S. 47° 30' E., 69.6 feet; S. 57° 15' W., 74 feet; S. 28° W., 89.8 feet; N. 40° 45' W., 48.5 feet; S. 78° 25' W., 120 feet, crossing Gills Creek to a point on the west side, and thence up the creek, N. 5° E., 240 feet and thence with the tangent, N. 38° 5' W., 600 feet, plus or minus (See blueprint for offsets to creek, which is the line); N. 88° 35' W., 100 feet; N. 53° 25' W., 77.5 feet to a point on the west side of the creek in Harshbarger's line; thence with his line, leaving the creek, S. 62° W., 913.7 feet to a set stone; N. 32° 25' W., 195 feet to a stake located 1.5 feet west of a 16-inch poplar; thence with Robertson's line, N. 00° 10' W., 1485 feet to a point on the northeast bank of Gills Creek; N. 2° E., 1083 feet to a 30-inch white oak, being a corner to the Flybon tract; and with the line of said property, N. 35° E., 559.8 feet to an iron pin, being a corner to the property of the Franklin County School Board; S. 52° 25' E., 348 feet to an iron pin; N. 30° 15' E., 907.4 feet to an iron pin; N. 52° 25' W., 232 feet; N. 8° 15' W., 535.55 feet; N. 56° 15' W., 291.8 feet, crossing a road to a stake and pine that is marked; N. 19° 15' W., 130 feet to a set stone; thence with the "Manda Harris" property, N. 84° 15' E., 831 feet to a set stone; N. 26° 56' E., 250.1 feet, crossing the highway to a point on the south side of the old pine; S. 73° 15' E., 538.22 feet to the point of beginning.



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Booker T. Washington National Monument
Route 1, Box 195
Hardy, Virginia 24101

IN REPLY REFER TO:

154-WSC (Water Rights)

April 26, 1967

AKK
MOORE
ROBERTSON

Memorandum

To: Chief, Office of Land and Water Rights

From: Acting Superintendent, Booker T. Washington

Subject: Chemical Analysis of Well Water

Enclosed is a copy of the chemical analysis of well water at Booker T. Washington National Monument.

Please include this in Water Right Docket 2.

H. Gilbert Lusk
H. Gilbert Lusk

Enclosure

cc: Director (Enclosure)
Regional Director, SERO (Enclosure)
Philadelphia S. C. (Enclosure)



City of Roanoke, Virginia.

WATER DEPARTMENT

XXXXXXXXXXXXXXXXXXXXX
T. DUNN, ASSISTANT MANAGER
ALAN C. YOUNG, OFFICE MANAGER

April 24, 1967

Booker T. Washington National Monument
Route 1, Box 195
Hardy, Virginia 24101

Dear Sir:

The following tests were made on sample brought April 21, 1967. The results of lab. analyses are self-explanatory. If you should have any questions or wish further testing, do not hesitate to contact me.

ph	6.5
Alk.P	0.0
Alk.MO	34.0 ppm
Hard.	38.0 ppm
Fe	2.5 ppm (high)
Mn	0.1 ppm
Turb.	1.5 ppm
Color	0.0 ppm
Fl	0.2 ppm (natural fluoride)
Cl ₂	0.0 ppm
Ca	no reading

Most sincerely,

Mrs. Kathleen C. Goodwin

Copies: T.W. Dunn, Carvens Cove files

*Rec'd w/ act. Supt's memo to chief, Office of W.R. WSC
4-26-67.*

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

IN REPLY REFER TO:

154-WSC (Water Rights)

Booker T. Washington National Monument
Route 1, Box 195
Hardy, Virginia 24101

April 13, 1967

17 APR 1967

Chief
Asst. Chief
Realty
Appraisal
~~Water Rights~~
Cartographic

File

Memorandum

To: Chief, Office of Land and Water Rights
Attention: Garland Moore, Hydraulic Engineer

From: Acting Superintendent, Booker T. Washington

Subject: Additions to Water Right Dockets 1 and 2

Enclosed are the following: Water System Data Report; Spring location map; photograph of well housing; Goulds Series UEM Data Sheet; diagram showing the interior of the well house and proposed connection between pump and existing waterline. Please make copies of the Spring location map and the latter two documents for your files, and forward copies to the Director, Regional Director SERO, PSC, and return the originals for our files. *Pl. Testet*

Quantity of water used in FY 1966 - approximately 401,000 gallons.
Estimated quantity needed by 1977 should be 650,000 gallons, and by the year 2000 should reach 825,000 gallons. Current well output should meet all future needs.

H. Gilbert Lusk
H. Gilbert Lusk

Enclosures (5)

cc: Director (Enclosures - 2)
Regional Director, SERO (Enclosures - 2)
Philadelphia S. C. (Enclosures - 2)



WATER SYSTEM DATA

DATE

AREA Booker T. Washington Nat. Mon. COLLECTED 13 April 1967 COLLECTED BY HGL

1. Name of System: Booker T. Washington National Monument Water System
2. Location: State Virginia County Franklin General Area Rocky Mount, Bedford
Reference to permanent landmark 5 miles SW of Hales Ford Bridge-Smith Mtn. Lake
3. Source of Supply: Deep Well * Capacity 1000
gph
4. Type of System: Pumped (Pneumatic)
5. Treatment None
6. Distribution Mains: Size 2" ** Length 1360'
Size 2" *** Length 303'
7. Pump Unit: Make Goulds ****, Type - -, Model No. UEM 20412
Serial No. - -; Outlet 1 1/4", Inlet - -
(Size) (Size)
8. Power Source: Electric Motor: Make Goulds, HP 2
Serial No. CBC 1028Y4D1; Voltage 230; Amps 11.0
RPM 3450; Type - -; Phase one
Cycles 60; Others - -; Stages 20
9. Control: Automatic Pressure *****, Manual

* Drilled in 1950 by Ledbetter Pump and Well to a depth of 128 feet below ground surface. Casing 6 inch steel, 60 feet long.

** Visitor Center distribution 1 inch copper.

*** House distribution 1 inch galvanized steel.

**** Submersible.

***** Square D. Class 9013 closes @ 20# opens @ 40#, Type FSG-2, No. 465.

*Rec'd w/ act chrg, Office of L & W. WSC memo to Dept.
dated Apr 24, 1967*

10. Pump Design: Capacity 20 gpm 23 gpm
(Actual) (Design)
Head 128 ft. 490 ft.
11. Pump Housing: N/A
12. Storage: Pneumatic Tank; Type Const. Steel (Galv.)
Size 30" x 120"; Capacity 300 gal.; Inlet ft. in.;
Outlet ft. in.; Pressure Setting 20 - 40 lbs.
(Elev) (Size)
13. Distribution: Water Closets 6; Lavatory 8; Urinal 1
Drinking Fountain 3; Hose Bibs 4, Residences 1
14. Non-metered.
15. N/A
16. Water Analysis: None *****
17. Condition of System: New pump installed November 12, 1964. New piping system
to visitor center and new residence area installed in 1965. System to old
residence installed in 1950.

***** Chemical analysis will follow upon completion.

Goulds Series UEM

Silent-Flow Submersible Water Systems for 4" and larger wells

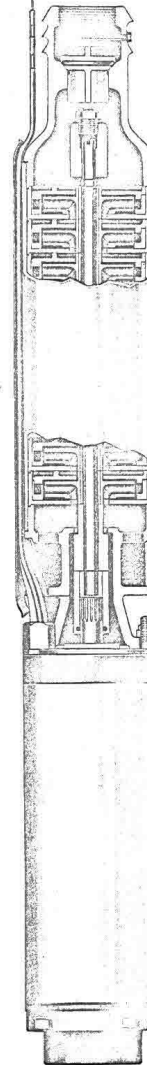
The Series UEM offers these famous Goulds features:

- Byrite Components
- Modern Design—Simplified Construction—Field Serviceability
- Franklin Water-Lubricated Motors
- Power for Continuous Operation
- Bowls that rabbit lock and contain pressures without use of gaskets
- Hex-a-Drive Shaft Design
- Special Resistance to Corrosion and Abrasion Damage
- Seamless Drawn Brass Casing

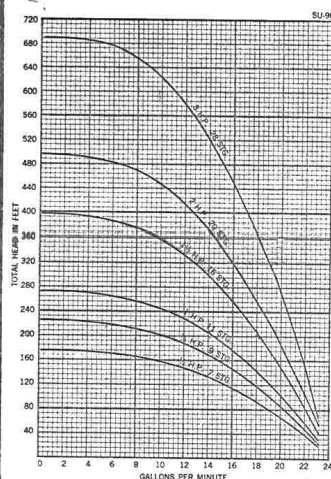
Series UEM—Capacities in Gallons Per Hour

SINGLE PHASE 115V. 230V.	UEM05411 UEM05412							UEM07412							UEM10412						
	1/2 * 7							3/4 * 9							1 * 11						
	0	20	30	40	50	Max. Shut-off in Lbs.		0	20	30	40	50	Max. Shut-off in Lbs.		0	20	30	40	50	Max. Shut-off in Lbs.	
DEPTH TO WATER IN FEET	0	1350	1140	1030	880	720	61	1360	1220	1140	1050	950	82	1380	1270	1200	1130	1060	104		
	20	1300	1090	960	810	600	57	1330	1180	1100	1000	900	78	1360	1240	1170	1100	1030	99		
	40	1260	1050	910	790	440	52	1300	1150	1060	960	850	74	1330	1210	1140	1070	1000	95		
	60	1210	980	840	630		48	1270	1110	1020	920	790	70	1310	1190	1110	1040	960	91		
	80	1160	920	770	500		44	1240	1070	980	860	720	65	1280	1150	1080	1000	920	86		
	100	1120	870	680			39	1200	1030	930	810	640	61	1250	1110	1050	960	870	82		
	120	1070	820	700	360		31	1140	950	830	660	360	52	1200	1060	980	880	780	73		
	140	900	450				22	1060	840	690	420		44	1140	990	900	790	660	65		
	160	760					14	980	720	480			35	1080	910	810	680	480	56		
	180	540					5	880	510				27	1010	820	710	510		48		
	200							760					18	940	720	560			39		
	220							590					9	850	570	240			30		
	240													760	300				22		
	260													620					13		
	280													420					5		

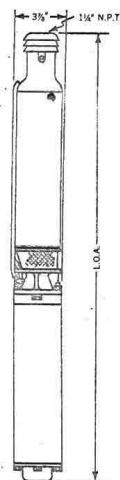
1 PHASE 230V. 3 PHASE 220V.	UEM15412							UEM20412							UEM30412						
	UEM15432							UEM20432							UEM30432						
	1 1/2 * 16							2 * 20							3 * 28						
DEPTH TO WATER IN FEET	0	20	30	40	50	Max. Shut-off in Lbs.		0	20	30	40	50	Max. Shut-off in Lbs.		0	20	30	40	50	Max. Shut-off in Lbs.	
	0	1380	1320	1280	1240	1210	157	1380	1360	1320	1290	1250	200	1380	1370	1360	1340	1320	283		
	20	1380	1300	1270	1220	1180	153	1380	1350	1310	1270	1240	196	1380	1360	1350	1330	1310	279		
	40	1370	1290	1250	1200	1160	148	1380	1330	1300	1250	1230	191	1380	1350	1340	1320	1300	275		
	60	1360	1270	1230	1180	1140	144	1380	1310	1280	1240	1220	187	1380	1340	1330	1310	1290	270		
	80	1330	1250	1210	1160	1120	140	1360	1290	1270	1230	1200	183	1380	1330	1320	1300	1280	266		
	100	1310	1230	1190	1140	1100	135	1340	1270	1250	1220	1180	178	1370	1320	1310	1290	1270	262		
	120	1280	1190	1150	1100	1050	127	1320	1250	1220	1180	1150	170	1360	1310	1300	1270	1250	253		
	140	1240	1160	1110	1060	1000	118	1300	1220	1190	1150	1110	161	1340	1300	1280	1250	1230	245		
	160	1210	1120	1060	1010	950	110	1270	1190	1160	1120	1080	153	1320	1280	1260	1230	1210	236		
	180	1170	1070	1020	950	900	101	1240	1160	1130	1080	1050	144	1300	1260	1240	1210	1190	227		
	200	1130	1030	970	880	840	92	1200	1130	1090	1040	1010	135	1280	1240	1220	1190	1170	219		
	220	1080	970	910	840	770	84	1170	1090	1060	1000	960	127	1260	1220	1200	1170	1140	210		
	240	1040	920	860	780	700	75	1140	1060	1010	960	910	118	1240	1200	1170	1140	1110	202		
	260	990	860	790	710	600	67	1100	1020	970	920	870	110	1220	1180	1150	1120	1080	193		
	280	940	800	720	610	470	58	1050	980	930	880	820	101	1200	1160	1120	1100	1060	184		
	300	880	730	630	480		49	1030	930	880	820	760	92	1180	1130	1100	1070	1030	176		
	320	820	640	510	180		41	990	890	830	770	700	84	1160	1100	1070	1030	1000	167		
	340	680	320				24	900	790	720	640	550	67	1110	1040	1010	980	940	150		
	360	410					6	800	670	580	420	180	50	1050	980	950	920	880	133		
	380							690	480	250			32	1000	920	890	850	800	116		
	400							520					15	930	860	820	720	680	98		
	420													870	780	730	620	560	81		
	440													800	700	630	480	380	64		
	460													700	580	500	390		47		
	480													600	420				30		
	500													450					12		



Series UEM Composite Performance Curves



Dimensions/Weights



Unit	L.O.A.	Wgt.
UEM05411,12	26 1/4	37
UEM07412	30 1/8	43
UEM10412	33 7/16	46
UEM15412	41 1/16	58
UEM15432	39 1/16	58
UEM20412	52 1/16	92
UEM20432	49 3/16	85
UEM30412,32	66 3/16	103

System Components

Basic System Includes:

1. Pump-Motor Unit
2. Motor Control Box with Single Phase Units
3. Magnetic Starter with Three Phase Units
4. Electrical Tape
5. Motor lead assembly and splicing material furnished with all units 1 1/2 H.P. and larger.
Smaller units, in most cases, can be installed with AW28 packaged cable.

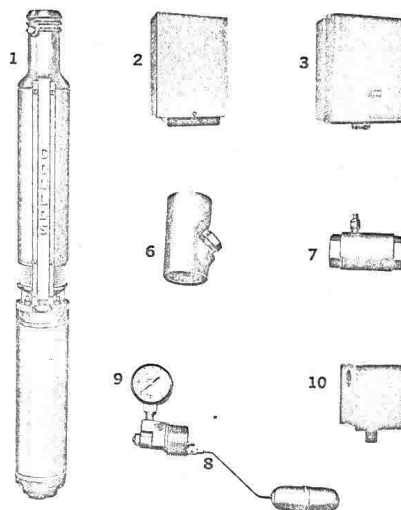
Box of Fittings Includes:

6. Drain and "Y" Fitting
 7. Check Valve with Snifter Valve
 8. Air Volume Control
 9. Pressure Gauge
 10. Pressure Switch (On 3-phase systems this is included only when complete system is ordered.)
- No. FUE1 Box of Fittings is used with 1/2 through 1 H.P. single phase systems. Weight 14 pounds.
No. FUA4 Box of Fittings is used with 1 1/2 through 3 H.P. single phase systems. Weight 15 pounds.
No. FUA5 Box of Fittings is used with all three phase systems. Weight 13 pounds.

To get a complete system which includes Box of Fittings, add "F" to Basic System number when ordering.

Motor: Franklin 60 Cycle A.C., app. 3500 RPM.

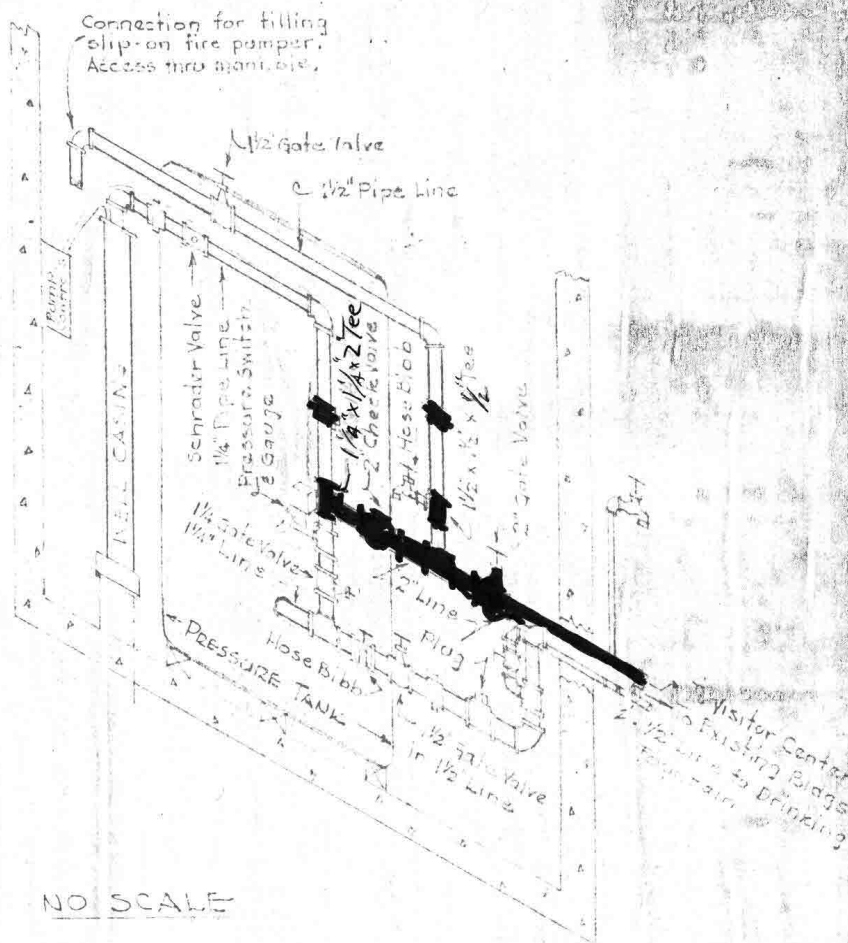
Standard pressure switch setting at factory is 20-40 pounds.



For 1 H.P. and smaller units, Goulds also has available a special box of fittings for use with pressure tanks which feature a "floating disc" air separation principle. See Section 2 accessories.

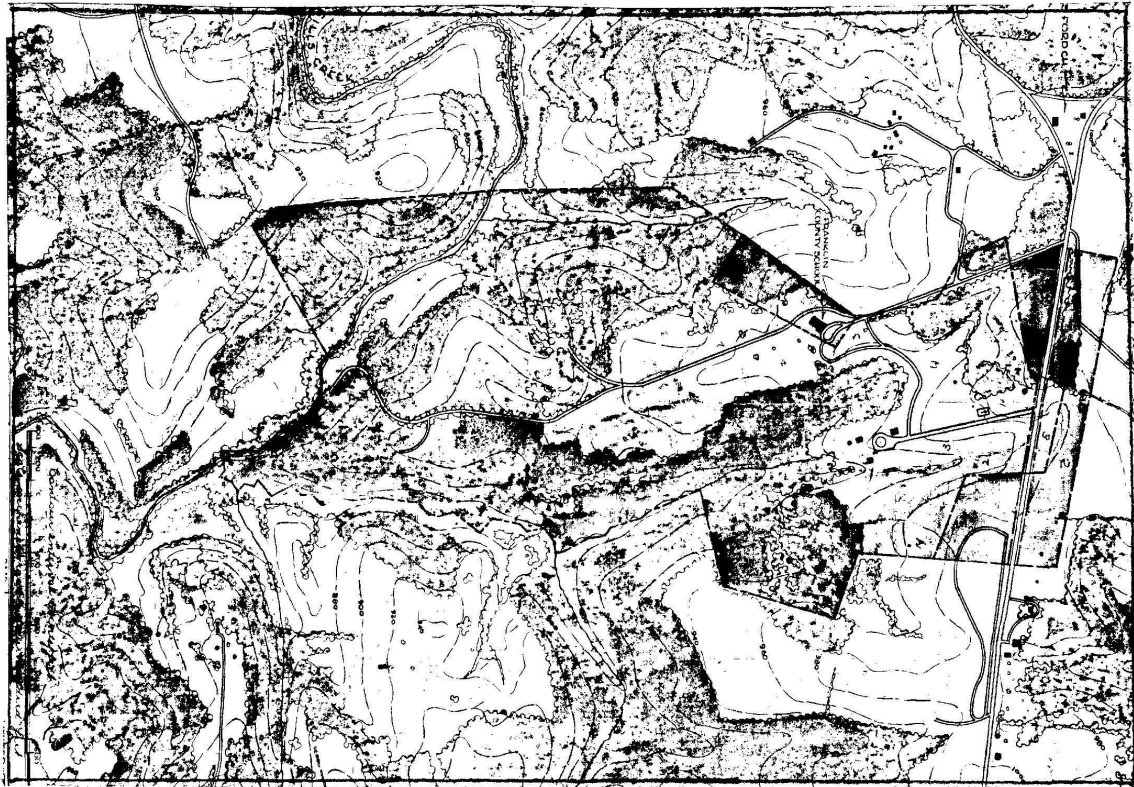
7656-UEM Sup. 7336-UEM

GOULDS PUMPS, INCORPORATED  SENECA FALLS, NEW YORK



SCHEMATIC SKETCH SHOWING
PROPOSED CONNECTION
TO EXISTING WATER LINE
BOOKER T. WASHINGTON NATL MONUMENT

WEL 12/ 1st





UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Post Office Box 2857
Raleigh, North Carolina

IN REPLY REFER TO:

November 19, 1964

Mr. Alfred W. Vick
Hydraulic Engineer
National Park Service
Southern Region
Post Office Box 10008
Richmond, Virginia

Dear Mr. Vick:

The U. S. Geological Survey, at the request of National Park Service, conducted a pumping test on the well at Booker T. Washington National Monument, Virginia on November 10, 1964. This well was drilled, in 1950 to a depth of 128 feet. It penetrates gneiss, schist, and quartzite of the metamorphic complex. The upper 60 feet of the well is cased with nominal 6-inch diameter steel casing. The lower 68 feet of the well is open to fractures in the rock.

The pumping test was conducted with a 5 hp submersible pump which was set 121 feet below the top of the casing. Static water level, prior to pumping, stood at 8 feet below the top of the casing. Drawdown of water level during the test was measured by the air-line method. The well was pumped four hours at a rate of 23 gpm. At the end of the first hour, the pumping level was at about 17 feet below the top of the casing, and at the end of four hours, the pumping level was at a depth of 20 feet. At this time the discharge was increased to the maximum capacity of the pump which was 25 gpm. After two hours of pumping at the increased rate, the pumping level was at 20.9 feet, and the test was terminated at this time.

Mr. Alfred Vick, III

- 2 -

November 19, 1964

The attached graph illustrates the change in water level due to pumping during the test. According to the graph, the tested pumping rate of 23 gpm would produce a pumping level of 24 feet at the end of 24 hours, and a level of 25.5 feet after 48 hours of continuous pumping. Accordingly, the planned 20 gpm demand should produce respective pumping levels of 21 feet and 22 feet after 24 hours and 48 hours of continuous pumping.

Sincerely yours,

Carlton T. Sumsion

Carlton T. Sumsion
Geologist

For *Charles G. Wyrick*
District Geologist

Attachment

P. S. C. - D. & C.

JUN 3 1966

Chief	
Adm. Asst.	
Chief, Planning	
Site Dev.	
Estimators	
Eng. Contr.	
Chief, Design	
L.A. ARCH. ENG.	
Chief, Const.	
Chief, Adm. Compt. Safety	
Assoc. L.A. ARCH. ENG.	
Chief, Engrs.	
L.A. ARCH. ENG.	

L54-WSC (Water Rights) June 2, 1966

Memorandum

To: Superintendent, Booker T. Washington National Monument

From: Chief, Office of Land and Water Rights

Subject: Transmittal of Water Right Dockets 1 and 2

There is enclosed a water right docket folder for each of the subject dockets which comprise the complete documentation relating to water sources, rights to their use, and system constructed to date except for any items you can add as time permits to complete the information known and to keep the docket folders current.

Regarding Docket 1, there is little or no information included therein about the subject spring. Mr. Vick of the Southeast region set this docket up and apparently based its initiation on knowledge of an existing spring without benefit of any details. Its location on a sketch if possible, the extent of any past or present use (which may tend to alter the priority date shown on the folder) and its potential in output and quality should be added to the docket when such data can be obtained.

Docket 2 has had a 1964 USGS pump test report added to it and it is assumed that reference is to the only well on the monument. The depth stated therein is probably the correct one and the priority date has been changed to agree with the drilling date given.

Any changes or additions to either docket should be sent to this service center with copies to the Director's docket files and to the Philadelphia Service Center so that all four eastern docket file folders will be identical.

WET Clifford J. Harriman

Clifford J. Harriman

cc:

Mr. Reed, WASO w/c encl.

Philadelphia S. C. w/c encl.

Regional Director, Southeast region

Volume III, Section I
Utilities Inventory
Page 1

*Shiel: file
in Book T
Water Rights
Docket # 2*

MASTER PLAN
FOR THE PRESERVATION AND USE
OF
BOOKER T. WASHINGTON NATIONAL MONUMENT

* * * * *

Volume III, General Park Information
Section I. Utilities Inventory

* * * * *

Prepared by: /s/ James J. Kirkwood Date 4/29/60
Historian

* * * * *

Accepted by: /s/ Roscoe Reeves Date 4/29/60
Superintendent

June 1962

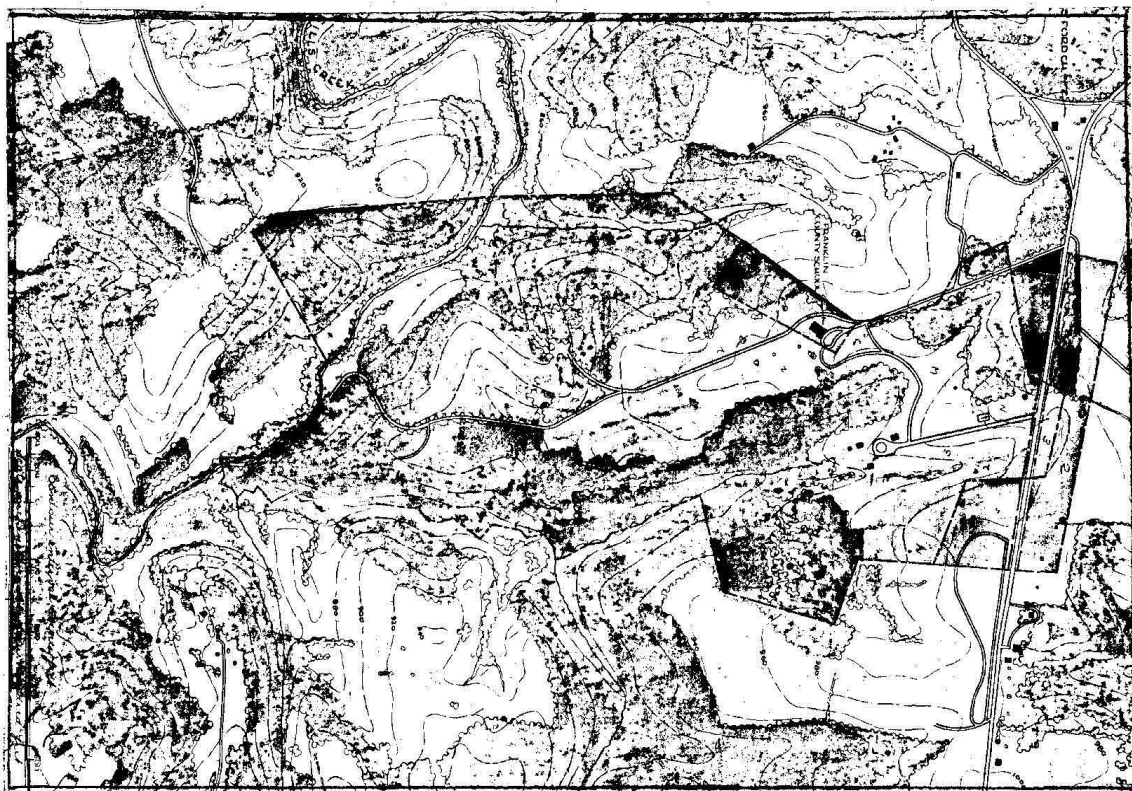
Utilities Inventory

Since the Park Service inherited all the facilities now used at the Monument, full information on them is not available.

1. Water System - The water source is a Government-owned 147 foot deep well with a 2 h.p. Jacuzzi pump and 400 gallon pressure tank.

Distribution lines consist of 87 feet of 1-1/2" pipe and 216 feet of 1" pipe. Annual consumption is 220 M gallons. Rate of flow is not known.
2. Sewage System - There are two Government-owned waterborne sediment treatment systems at the Monument. No breakdown in footage of pipe by different sizes is available, but there are 878.6 feet in all. Total gallons of sewage for both systems is 187 M gallons.
3. Garbage and Refuse Disposal - A total of 312 cans of refuse is collected per year. Approximately 100 cans is disposed of in a simple incinerator at the Monument and the remainder by landfill.
4. Power Systems - Electric power is furnished by Appalachian Power Company.
5. Communication Systems - Telephone service is provided by the Lee Telephone Company.
6. Fuel Systems - Oil is used for heating and is obtained from Gulf Oil Company, Rocky Mount, Virginia. Two 275-gallon, and one 500-gallon underground tanks are used for storage.

June 1962



Docket Information

Number of Documents in Docket 24

Documents Dated from 6/15/1957 to 3/21/1979

Docket Compiled: 2/8/2011