



WATER-RIGHT DOCKET

Blue Ridge Parkway

Docket No: 1

MAYBRY MILL.

Administrative Agreements

07-02-1953: memorandum re: water diversion at mabry mill, blue ridge parkway; july 02, 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
REGION ONE
RICHMOND, VIRGINIA

WRB
In reply refer to:
D1815-D

JUL 2 1953

Memorandum

To: The Director
From: Regional Engineer, Region One
Subject: Water diversion at Mabry Mill,
Blue Ridge Parkway

I enclose a copy of Acting Superintendent Crouch's memorandum of June 30 which clarifies the point raised by Mr. Dunn in connection with water diverted by a private landowner adjoining the parkway.

(SIGNATURE)

Regional Engineer

Attachment

C O P Y

File Reference:
D1815-D

June 30, 1953

Memorandum

To: Regional Director, Region One
From: Acting Superintendent, Blue Ridge Parkway
Subject: Water diversion at Mabry Mill - Blue Ridge Parkway

In reply to Mr. Kiener's request of June 26 regarding a question raised by Mr. Langley, this is to advise that the private landowner on the west side of the Parkway does not divert water from either branch of the fork. In fact, the two branches meet approximately 50 feet beyond the Parkway boundary and the terrain in that immediate vicinity is such that the two branches could be made to fork at the property line.

The water collection and diversion system now in use to operate Mabry Mill was constructed by Mr. Mabry when he built his mill. We have, of course, had to make repairs to the ditches and timber flumes, but we have not added to or subtracted from the original system.

Signed
J. Carlisle Crouch
Acting Superintendent

Other Supporting Information

SUMMARY OF TEST DRILLING ON THE BLUE RIDGE PARKWAY
NORTH CAROLINA AND VIRGINIA

The following is a summary of the test drilling and production well construction program for Park sites along the Blue Ridge Parkway. This drilling program was conducted during the period July - October, 1963 by the National Park Service.

Tomkins Knob

One test well was drilled to a depth of 200 feet at this site in banded amphibolite gneiss. Fracture zones at this site proved to be small and the zone had low permeability. Because of the small yield of ground water (2 gpm) no pumping test was performed. The alternate test site at Tomkins Knob was not drilled, at the discretion of the Blue Ridge Parkway personnel.

Mabry Mill

One test well was drilled at this site to a depth of 200 feet, and completed August 28, 1963. The 6-inch well casing was set at 47 feet below land surface and the well was finished as an open-end well from 47 feet to 200 feet in mica gneiss. Ground water was obtained from permeable zones at 50 feet and at 185 feet. Static water level in the well was 3.6 feet below land surface at its completion. The well was test pumped for yield. Yield of the well was 25 gpm after 3 hours of pumping. The pumping level was 100 feet below land surface. A hydrograph of the test is included. The chemical quality of water from this well is acceptable for general use without treatment. A complete chemical analysis of the water is attached.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
WATER ANALYSIS

W.R. Lab. No. NC 39520

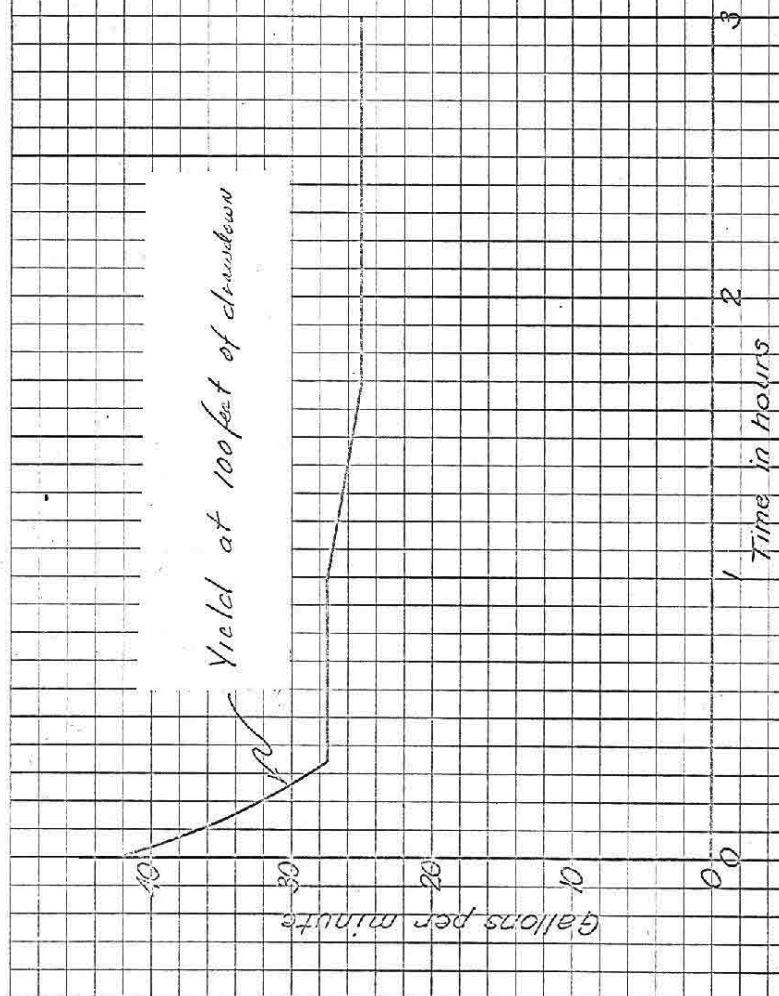
Location Mabry Mill, Virginia			
Source Blue Ridge Parkway, well. Depth: 200 ft. Yield: 25 gpm.			
Date of collection Aug. 28, 1963			
Gage height(ft.)		Discharge(sec.ft.)	
		Temp.(°F) 53	
(Parts per million)			
Silica (SiO ₂).....	20	Carbonate (CO ₃).....	0
Aluminum (Al).....	.0	Bicarbonate (HCO ₃).....	24
Iron (Fe).....	.07	Sulfate (SO ₄).....	3.6
Manganese (Mn).....	.01	Chloride (Cl).....	1.0
Calcium (Ca).....	4.1	Fluoride (F).....	.1
Magnesium (Mg).....	2.3	Nitrate (NO ₃).....	3.4
Sodium (Na).....	2.8	Phosphate (PO ₄).....	.0
Potassium (K).....	1.2		
Lithium (Li).....	.0		
(Parts per million)			
Dissolved solids:		ABS.....	
Sum.....	51	Color.....	3
Residue upon evapo- ration @ 180°C.....	83		
Hardness as CaCO ₃	20 ^{1/}		
Noncarbonate.....	0		
			
pH.....	6.7	Specific conductance (micromhos at 25°C).....	63

^{1/} Includes hardness of all polyvalent cations reported.

Unpublished records subject to revision

5 x 5 PER INCH

MADE IN U.S.A.



Mahry Mill, August 28, 1963

Mabry Mill

Topography is gentle to moderate in the vicinity of the Mabry Mill recreation area. The locality is underlain by well foliated mica gneiss which strikes N 60°-70° E and dips steeply to the southeast.

A proposed test-well site was located about 200 feet south of the Mabry Mill parking area along the right bank of a small, perennial stream that is aligned along an underlying fracture zone. Required yield of the well is 25 gpm, and estimated drilling depth is less than 200 feet, in mica gneiss. If an alternate site is desired, it may be located at the most accessible place northeast of the mill-pond and south of the storage reservoir. A suggested alternate site is shown on the accompanying map of the Mabry Mill recreational area (figure 6).

BLUE RIDGE PARKWAY

WATER SYSTEM DATA

- AREA Blue Ridge Parkway DATE COLLECTED _____ COLLECTED BY _____
- Name of System: Nabry Mill
 - Location: State Virginia County Patrick General Area MP 176.2
Reference to permanent landmark _____
 - Source of Supply: Well Capacity 25 gpm
(Well, spring, stream, impoundment, etc.)
 - Type of System: Pumped to storage - Gravity distribution
(Pumped, gravity, etc.)
 - Treatment: None
(Filtration, Chlorination, Airation, etc.)
 - Distribution Mains: Size 3" Length 400'; Size _____ Length _____
Size 2" Length 400'; Size _____ Length _____
Size 1" Length 65'; Size _____ Length _____
 - Pump Unit: Make Jacuzzi; Type Submersible; Model No. 1540-52
Serial No. 371 2740; Outlet 2 in.; Inlet 2-1/2 in.
(Size) (Size)
 - Power Source: Electric Motor: Make Franklin; HP 1.5
(Elec., gas, generator)
Serial No. C10418179; Voltage 230; Amps 9.5
RPM 3450; Type _____; Phase Single
Cycles 60; Others _____; Stages _____
 - Control: Automatic Float; Manual _____
(Float, Electrode, Pressure, Time)
Other _____
(Explain)

Handwritten note: Handwritten note: see to Chas, BWR - dated 7-17-68 #1

10. Pump Design: Capacity _____ gpm _____ gpm
(Actual) (Design)
Head _____ ft. _____ ft.
(Actual) (Design)

11. Pump Housing: Type Const. Monitor Pitless _____; Size _____
(Walls) (Roof)

12. Storage: Underground _____; Type Const. Concrete _____
(Pneumatic, elevated, underground, etc.) (concrete, wood, steel)
Size _____; Capacity 15,000 gal.; Inlet 2910 ft. 2 in.
(Elev.) (Size)
Outlet 2904.5 ft. 3 in.; Pressure Setting _____
(Elev.) (Size) (if pneumatic)

13. Distribution: Water Closets 8; Lavatory 4; Urinal 2;
Drinking Fountain 1; Hose Bibs 3; Residences _____;
Other _____; _____

14. Metered or nonmetered: Metered _____; No. 1; Size 1-1/2"
No. _____; Size _____
No. _____; Size _____

15. Fire Protection: Fire Hydrants _____; Yard Hydrants _____

16. Water Analysis: _____

17. Condition of System: Fair. More storage capacity and fire
(Repairs needed itemize)
hydrants needed.

Form 28-174
(Rev. 1/55)UNIT STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

REPORT 7 SPL

COMPLETION REPORT OF CONSTRUCTION PROJECT

D-2621

REGION One	AREA BLUE RIDGE PARKWAY	COUNTY Floyd	STATE Virginia
PROJECT OR JOB TITLE Mabry Mill Water System		PCP NO. U-133	
LOCATION IN AREA Mabry Mill Section 1-T		MASTER PLAN NO. PKY-BR-GEN-2298A	BUILDING NO. --
WORKING DRAWING NO. AND TITLE 1T-2063 Utilities - Concession Building & Comfort Station Building No. 262			
APPROPRIATION TITLE AND SYMBOL 14X1035 Construction, C. A.		7,430.68 (35)	ACCOUNT NO. 313.14
14X1037 Construction, Idq.C.A.		1,387.21 (37)	514.14
CONTRACT NO.		DATE WORK STARTED August 1954	DATE WORK COMPLETED August 1956
NAME OF CONTRACTOR		ADDRESS	

COST ANALYSIS

CONSTRUCTION ITEMS	QTY	UNIT COST IN PLACE	TOTAL COST IN PLACE
Water System including spring development, collection system, storage and distribution system to serve Mabry Mill Concessions and Comfort Station Building No. 262.	1	8,817.89	8,817.89
TOTAL			8,817.89

SUMMARY OF EXPENDITURES

PERSONAL SERVICES	4,397.44 (35)	EQUIPMENT operation	504.58 (35)	MATERIALS AND SUPPLIES	2,528.66 (35)
	1,116.69 (37)		184.17 (37)		86.35 (37)

OTHER

Certified: *Henry Svec*
Henry Svec, Supervisory Accountant

CHANGE ORDERS			
ORIGINAL CONTRACT AMOUNT	FIRST	SECOND	THIRD
FINAL CONTRACT AMOUNT	FOURTH	FIFTH	SIXTH

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

SUBMITTED BY (Name and title) <i>Ryanon Clement</i> Ryanon Clement, Parkway Engineer	DATE APR 11 1958
APPROVED BY (Name and title) <i>Howard B. Stricklin</i> Howard B. Stricklin, Acting Superintendent	DATE APR 11 1958

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

GPO: 811643

Narrative Report:

This complete usable water system, serving Concession and Comfort Station Bldg. No. 262 was constructed between August 1954 and August 1956 by N.P.S. day labor. Developed two springs and constructed two spring boxes; installed 3185 ft. of 1 1/2" plastic pipe collection line; constructed 15,000 gal. two compartment, underground reinforced concrete water storage tank; installed 533 ft. of 3" plastic pipe distribution line; necessary valves and fittings.

"As Built" Drawing No. PKY-BR-IT-2063A attached.

Docket Information

Number of Documents in Docket 11
Documents Dated from 6/30/1953 to 7/17/1968
Docket Compiled: 1/31/2011