

Name of Dam MUSKELLUNGE LAKE File No. 63.36 County VILAS
Location NE 1/4 NE 1/4 Section 17 T 40 N, R 9 P
Stream MUSKELLUNGE CREEK Name of Lake Held by Dam MUSKELLUNGE
Present Owner: MUSKELLUNGE LAKE ASSOCIATES

Existing Benchmarks:

BM 936-A, BM 981-A, BM 981-B, BM 981-C, BM 981-D
BM 981-E, BM 2048A, AND BM 2048B COULD NOT BE FOUND

ASSUMING THAT IT IS ACCURATE, THE 1 1/4" PIPE (ELEV. 91.84) IS
THE ONLY FEATURE REMAINING THAT IS TIED TO THE DATUM
FROM ORDERS 2-WP-643 AND 3-WP-741. THIS PIPE IS
THE CURRENT DATUM SOURCE AND WILL BE CALLED BM 981-F.

BASED ON BM 981-F, TWO NEW BM'S WERE SET
BM 981-G: FLAGGED NAIL NEAR BASE OF U/S PINE TREE
ON ONE SIDE OF EASEMENT PATH (ELEV. = 95.73)
BM 981-H: FLAGGED NAIL NEAR BASE OF D/S PIPE TREE ON
OTHER SIDE OF EASEMENT PATH (ELEV. = 96.525)

MUSKELLUNGE LAKE DAM

Lake or Stream

T40N R9E S17

VILAS CO.

Location

Date	Taken by	Field Book No.	Lake Level or Gage Reading	Remarks
1932	CRYSTAL LAKE CCC CAMP 74-5	—	92.10	
11/20/40	CRYSTAL LAKE CCC CAMP 74-5	—	91.30	
3/50	SIVLEY	919	87.82	NEW DAM
8/15/62	BLACK	962	87.42	
7/13/70	BROWN	1017	91.69	
8/10/73	BRUNS	1033	92.28	
8/11/79	T. Willett	1071	91.97	B.M. 936-A
9/22/76	R. Jones	1046	97.03	} Different B.M's 2048
11/7/78	O'Heefe	1059	97.20	
7/15/81	Bellows	1085	96.78	
7/6/83	Jack Smith	—	91.64	
8/22/89	M. Seymore J. Smith R. Sonsteg	—	91.91'	B.M. 981-E Set

Normal = 91.84

Muskellunge Lake 63.36

Lake or Stream

Sect. 9, 17, 16 T40N R9E Vilas Co.

Location

Lake levels adjusted to common datum (BM 436-A) on 11-17-82 by

Date	Taken by	Field Book No.	Lake Level or Gage Reading	Remarks
1932	CC		92.10	
1940	CC		91.30	
1950	Madison		91.36	
1962	Madison		90.96	
7-13-70	T. Brown	1017	91.69	
8-10-73	P. Brown	1033	92.28	
9-28-76	R. Jones	1046	91.96	
11-7-78	R. O'Keefe		92.13	
8-2-79	R. O'Keefe		91.97	
7-81	Madison		91.71	
11-17-82	J. Smith		92.38	
7-6-83	M. Seymore		91.64	
7-24-86	M. Seymore		92.01	gage reset

AUTHORIZATION - PERMIT 2-WP-741-48

COMM. ACTION

2-WP ^{643 45}~~741-48~~ - determination of

normal level - FOUND 97.84 ← Not same as PSC datum WCD datum - ARB

2WP 741-98 - application of to

construct dam (granted)

Memorandum

MUSKELLUNGE LAKE DAM
OWNED BY MUSKELLUNGE LAKE RIPARIAN OWNERS
FIELD BOOK 919

63.36

Submitted by J. R. Sivley
August 7, 1950

Bench marks were established in accordance with authority granted by the Chapter 31.02 of the Wisconsin Statutes at the dam across the outlet of Muskellunge Lake located in north east $\frac{1}{4}$, ^{North east} south-west $\frac{1}{4}$, section 17, township 40 north, range 9 east. Dam is located on the property of Gene Deku .

Bench mark 981-A is a lag screw in the base of a 16" crooked Norway pine tree, located 10' back from clearing. Bench mark is 10" above the ground on the south side of tree. The tree is 126.8' east of east end of dam. Elevation 100.00.

Bench mark 981-B is a square notch in cement block forming wingwall at right (west) end of dam. Bench mark is 1.6 ft., west from end of spillway. Elevation 88.37.

The following elevations taken on August 3, 1950, referred to datum of Bench marks 981-A and 981-B.

Pond level	87.82
Highwater mark, as per Mr. Deku	88.12
Water below dam	86.17
Crest of spillway, left end	87.64
Crest of spillway, right end	87.72
Sill of fishway	87.06
Left dike	89.41
Right dike	88.60

Dam was completed in October 1948.

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MUSKELLUNGE LAKE DAM
FIELD BOOK 962

Submitted by A. R. Black
August 28, 1962

Benchmarks 981-A and 981-B were located, benchmark 826-C was set and elevations taken on August 15, 1962.

Benchmark 981-C is a spike in the southwest side of a 12-inch pine tree located 48 feet northwest of the dam. Said tree is the nearest to the dam of the group. Elevation when referred to the datum of benchmark 826-B is 90.67 feet.

The datum of the PSC benchmarks is not the same as the datum in orders 2-WP-741 and 2-WP-643 which is the datum of the Wisconsin Conservation Department. The WCD benchmark described in orders could not be located.

The dam is in poor condition.

The following elevations refer to the datum of benchmarks 981-B and 981-C:

Water above dam	87.42 feet
Water below dam	85.81 "

$$936-A = 100.00$$

B/M's tied

$$2048-A = 94.93$$

together by various

$$B = 100.10$$

field crews.

$$981-A = 103.59$$

$$B = 92.91$$

$$C = 94.21$$

D = not valid w/ other datums - disregard

LAKE SURVEY REPORT

County No. 63.36

MUSKELLUNGE LAKE
Vilas
FIELD BOOK NO. 1017

Submitted by Terry Brown
July 13, 1970

Benchmark 936-A was checked and was found to be heavily washed by water around its base.

Elevations:

Water Level	91.69 feet
Benchmark No. 936-A	100.00 feet
High watermark observed	92.14 feet

LAKE SURVEY REPORT

County No. 63

LAKE Muskelonge Lake
LOCATION Sec. 9, T40N, R9E, NE $\frac{1}{4}$ of SW $\frac{1}{4}$, Vilas County
FIELD BOOK NO. 1046

Submitted by R. H. Jones
September 28, 1976

Benchmarks 2048-A and 2048-B were established and elevations taken on September 22, 1976.

Benchmark 2048-A is a railroad spike set 12 inches above ground on the south side of a 16-inch cedar tree, located at the public landing on the north side of the lake, 9 feet from the center line of boat ramp, 14' east from water's edge and 16' west from sign post.

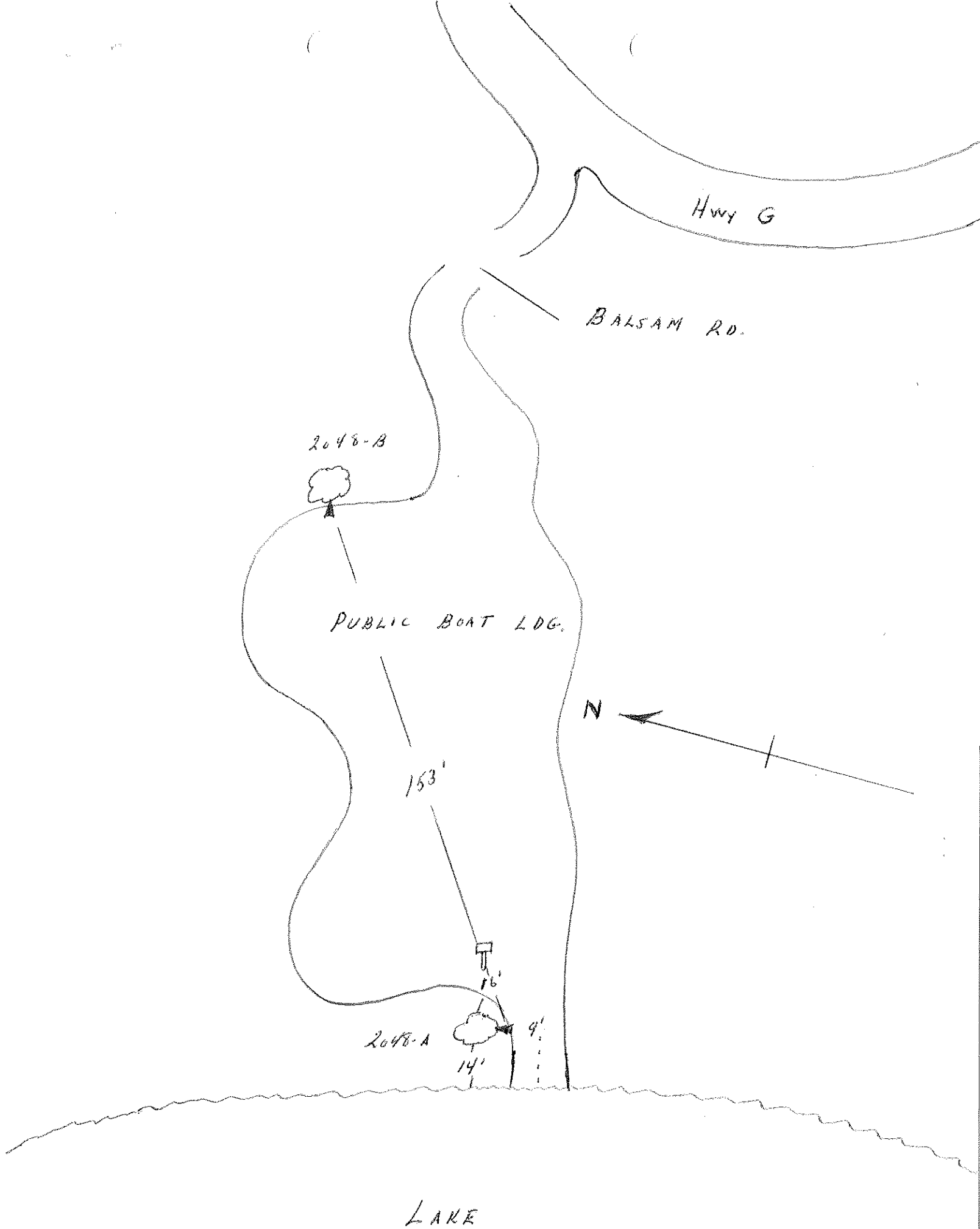
Benchmark 2048-B is a railroad spike set 12" above ground level on the west side of a 20" maple tree located next to parking area, 153' northeast from benchmark 2048-A.

Elevations:

Water level	91.96	-97.03 feet
Benchmark No. 2048-A, assumed	94.23	100.00 feet
Benchmark No. 2048-B	100.10	105.17 feet

92.13	97.20	11-7-78
91.71	96.78	7-81

R. O'Keefe
Madison



Hwy G

BALSAM RD.

2048-B

PUBLIC BOAT LDG.

153'

N

2048-A

16'

9'

14'

LAKE

November 19, 1982

D. K. Tyler

L. M. Andrews
by J. H. Smith

JHS
JHS

Muskellunge Lake (Vilas County) Water Level

The removal of a log barrier constructed on top of the existing dam at the outlet of Muskellunge Lake, Township 40 North, Range 9 East, Vilas County, was brought to the attention of the Department of Natural Resources by lake riparians. Action was taken on November 17, 1982, by Mr. Smith and Mr. Mastaglio to determine the present lake level following removal of this obstruction.

The Public Service Commission of Wisconsin on June 12, 1948 (2-WP-741) found the normal level of elevation to be 91.84 feet for this lake in its docket 2-WP-643 dated October 24, 1945. Referencing this established normal water level of 91.84 feet, the water level was again determined utilizing bench mark 936-A, which is a bronze tablet marked Wisconsin Conservation Department, Biology Division, set in a concrete post located about 60 feet east of the northeast corner of the John Domanek cottage at the southwest end of the lake and about 15 feet south of the edge of the lake.

Using a transit and Stadia rod the following information was obtained: From the top of the bronze tablet (bench mark 936-A) to the water surface the distance was 7.62 feet. With an assumed elevation of 100.00 feet, the water level is presently at 92.38 feet. This determination finds that on November 17, 1982, the water level of Muskellunge Lake was 0.54 feet above the Public Service Commission's established normal level of 91.84 feet.

Mr. Haas and Mr. Domanek, riparian owners, were present at the time this level was established.

JHS/cg

cc: C. Mastaglio
→ D. Lang

3530-7

WR 2/5
Eddy file in

63.36

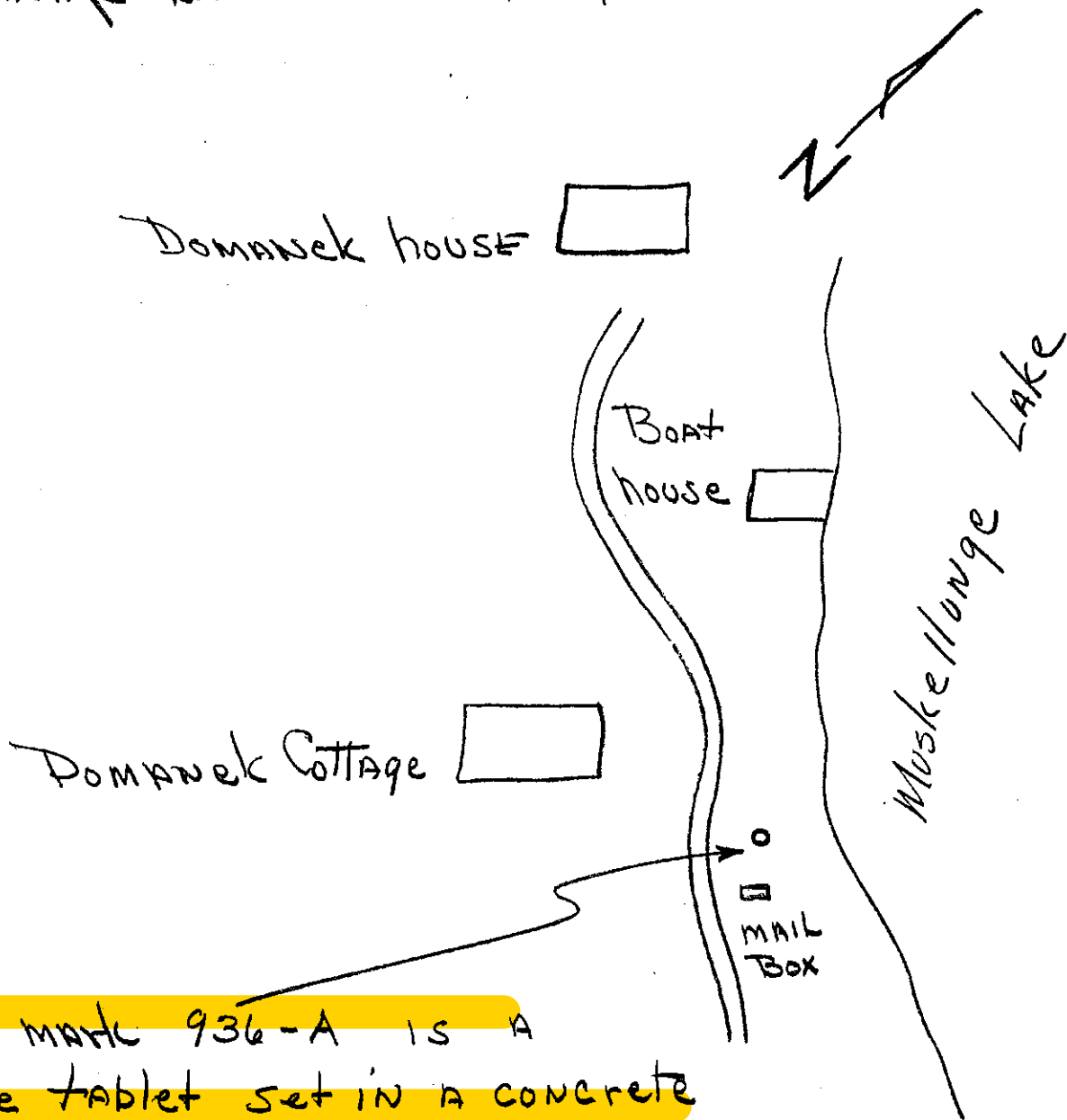
NOV 24 1982

RECEIVED
Wis. Dept. of Natural Resources

NOV 23 1982

N. C. Dist. Hdqtrs.
RHINELANDER, WI

Muskellunge Lake Twp 40 N, Rng 9 E, Sec 16 - Vilas Co.



Bench mark 936-A is a
 bronze tablet set in a concrete
 post about 60 feet east of the
 south east corner of the John
 Domanek cottage

J. Smith D.N.R.
 Woodruff
 12/9/82

LAKE SURVEY REPORT

County No. 64
 VILAS

LAKE MUSKELCUNGE

LOCATION TWN 40 N RNB 9E SEC 17

FIELD BOOK NO. -

Submitted by JACK SMITH

Date JULY 6, 1983

Benchmark 981-D was established and elevations taken on
7/6/83.

Benchmark 981-D is A TRAIL ROAD SPIKE SET IN A
8 INCH WHITE BIRCH (EAST SIDE 2 FEET ABOVE GROUND)
38 FEET SOUTH EAST OF THE DAM.

BM 936-A IS A BRONZE TABLET SET IN CONCRETE
POST ABOUT 60 FEET EAST OF THE SOUTHEAST CORNER
OF THE JOHN DOMANEK COTTAGE

Elevations:

Water level	<u>91.64</u> feet
Benchmark No. <u>936-A</u>	<u>100.00</u> " D.N.R. DATUM
Benchmark No. <u>981-D</u>	<u>95.87</u> " D.N.R. DATUM
High watermark observed	<u>—</u> "

THE PUBLIC SERVICE COMMISSION OF WISCONSIN ON JUNE
 12, 1948 (2-WP-741) FOUND THE NORMAL LEVEL OF
 ELEVATION TO BE 91.84 FEET.

LAKE (DAM) MUSKELLUNGE LAKE
FILE - 63.36

Location: NE 1/4 NE 1/4, Sec. 17, T 40 N, R 9 E
VILAS (64) COUNTY

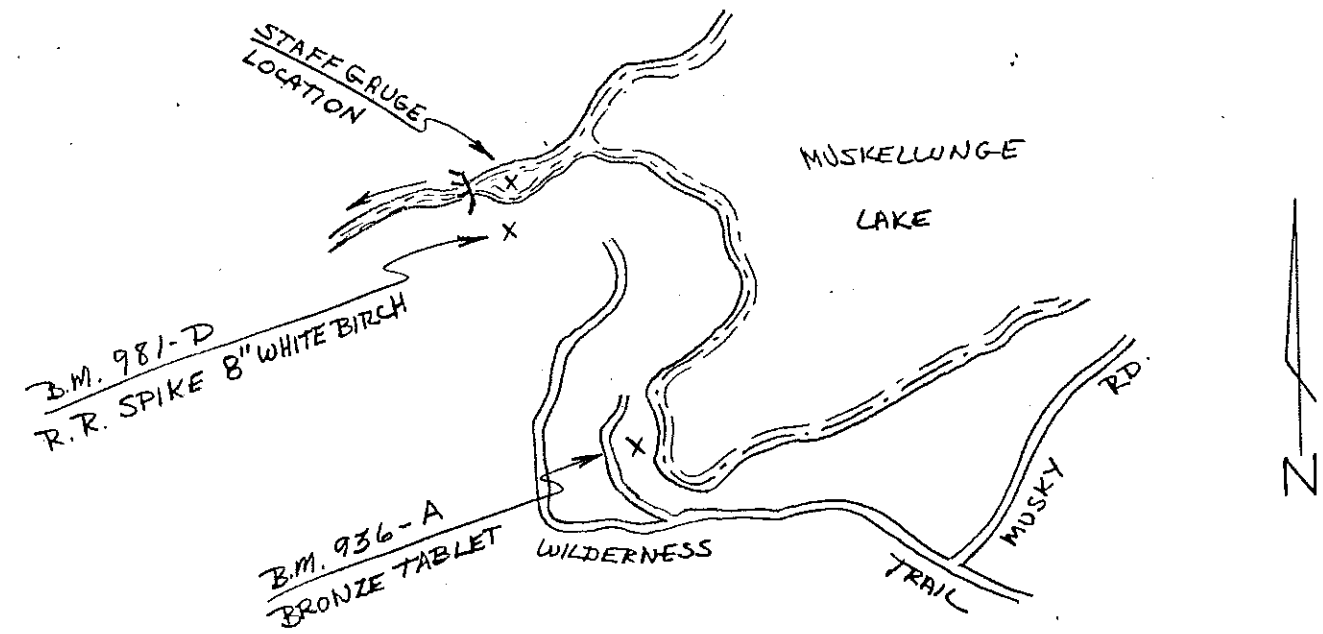
Benchmark No. NEW 981-D Elevation 91.64

Set By: M. SEYMORE (SURVEYOR - TROUT LAKE) J. SMITH

Vertical Datum: D.N.R. 95.87

Date of Survey: JULY 6, 1983

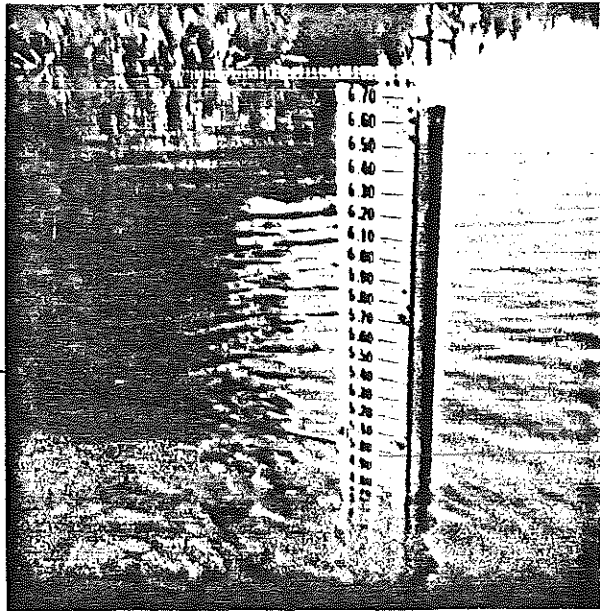
Location Sketch: (981-D) NE $\frac{1}{4}$ -NE $\frac{1}{4}$ SEC 17 T40N R9E CLOVERLAND



(936-A) NE $\frac{1}{4}$ -SE $\frac{1}{4}$ SEC 17 T40N R9E CLOVERLAND

Detailed Description: A RAILROAD SPIKE SET ON EAST SIDE OF A 8 INCH
WHITE BIRCH (APPROX 2 FEET ABOVE GROUND) 38 FEET SOUTH EAST OF THE DAM.
A STAFF GAUGE READING OF 5.00 FEET REPRESENTS THE NORMAL
ELEVATION OF 91.84 FEET ESTABLISHED BY THE WISCONSIN
PUBLIC SERVICE CORP.

91.84 FEET



5.00'

M

LAKE SURVEY REPORT

DEPARTMENT OF NATURAL RESOURCES

County No. 64 - ULLAS

LAKE MUSKELLUNGE LAKE

LOCATION NE-NE SEC 17 TOWN 40N R26 9E

FIELD BOOK NO. —

Submitted By JACK SMITH

Date 8-22-89

Benchmark 981-E was established and elevations taken on

8-22-89

Benchmark 981-E is A R.R. SPIKE SET IN

A 7" (IN.) RED PINE 27.6' SOUTH OF DAM.

Elevations:

Water Level	<u>91.91</u>	feet
Benchmark No. <u>936-A</u>	<u>100.00</u>	feet
Benchmark No. <u>981-E</u>	<u>96.59</u>	feet
High watermark observed	<u>—</u>	feet

63.36

LAKE (DAM) MUSKELLUNGE LAKE

Location: NE 1/4 NE 1/4, Sec. 17, T 40 N, R 9E

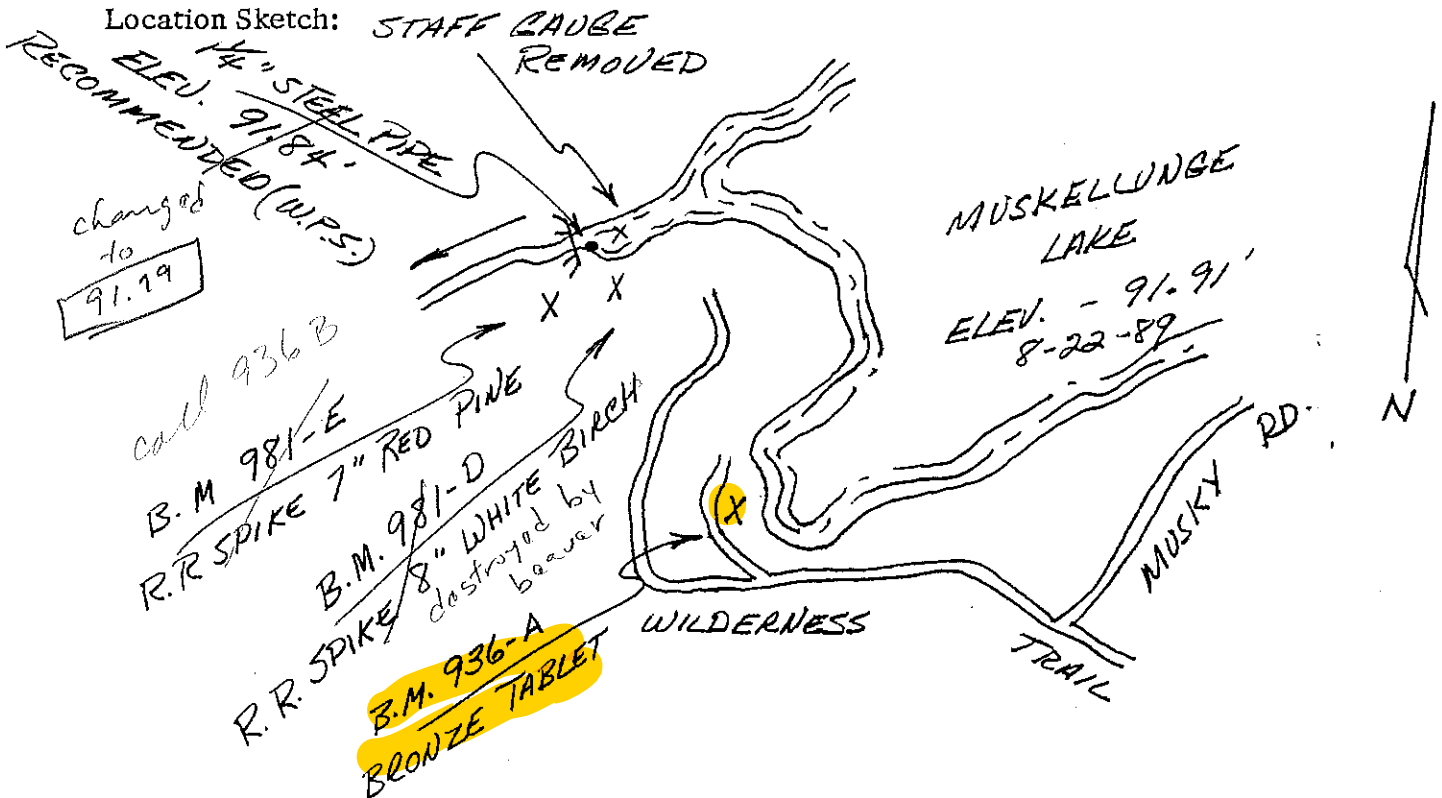
WILAS (64) COUNTY

Benchmark No. NEW 981-E Elevation 96.59'

Set By: M. SEYMORE (SURVEYOR - TROUT LAKE) J. SMITH & P. SONTAG

Vertical Datum: D.N.R. 96.59'

Date of Survey: 8/22/89



(936-A) NE 1/4 - SE 1/4 SEC 17 TWN 40 N. RNG 9 E CLOVERLAND
Detailed Description:

B.M. 981-E - R.R. SPIKE SET IN A 7" RED PINE
THAT IS 27.6' SOUTH OF DAM.
1/4" PIPE IS LOCATED 6 FEET INTO STREAM FROM
SOUTH SHORE AND 11 FEET UPSTREAM FROM THE DAM.
PIPE ELEV. IS 91.84' RECOMMENDED BY W.P.S.

BM 981-D 3.60 95.80
 99.40

Water level 7.49 91.91
8/22/89
 ↓
 below dam 7.68 91.72
need 91.84

Set 1/4" i.p. 6' into stream from
south shore and 11'
upstream from dam

read 7.56
to set elev. of i.p. at recommended
water level
(91.84)

Set RR spike in PN 7" (SE part)
that is 27.6' south of dam
 2.81

call it 981-E 96.59

T40N, R9E
Sec 16, 17

8/22/89

M. Seymour

Jack Smith

Bob Santag

STATION	B.S. +	H.I.	F.S. -	ELEV.	DIST.	REMARKS
1	8.23	100.07		91.84		Bm 981 F
2			4.34	95.73		Bm 981 G
3			3.545	96.525		Bm 981 H
4			8.55	91.52		MIDDLE OF U/S EDGE OF SPILLWAY
5			6.99	93.08		D/S SHORELINE CORNER OF PIER
6				91.94*		WATER SURFACE
7			8.23	91.84		Bm 981 F - CLOSE

Comments: **Bm 981 F - 1 1/4" PIPE PREVIOUSLY SET AT 91.84**
 Bm 981 G - FLAGGED NAIL IN U/S PINE ON EASEMENT
 Bm 981 H - FLAGGED NAIL IN D/S PINE ON EASEMENT
 *91.94 = 91.84 (TOP OF PIPE) + 0.10 (DEPTH COVERING PIPE)

Suggested Survey points:

HW	Sill	Low Embankment
TW	Crest	Lt. Groin
D/S Channel	Abutments	Rt. Groin
Aux. Crest LT	Aux. Crest RT	Outlet Pipe Invert