

MAINSTEM POTOMAC RIVER
SELECTED CHANNEL SURVEY AND DATA REPORT
PAW PAW, WV TO HANCOCK, MD

Prepared by
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for the
U. S. Department of the Interior
National Park Service

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Interstate Commission on the Potomac River Basin
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ACKNOWLEDGMENTS

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INTRODUCTION

To provide enhanced capability for flood routing to Hancock, Md. the Interstate Commission on the Potomac River Basin (ICPRB) is developing a hydraulic model of the mainstem Potomac River from Paw Paw, W.V. to Hancock, Md. This report describes channel conditions at select locations along the mainstem.

Vertical and horizontal control information was obtained from the U.S. Geological Survey (USGS) and the National Geodetic Survey, formerly the U.S. Coast and Geodetic Survey (USCGS). Floodplain management studies from the Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers (ACE) contained useful information on both elevations in the Town of Hancock as well as channel cross sections for the Potomac River. The hydraulic analysis for the route 51 bridge at Paw Paw, W.V., prepared for the Maryland State Highway Administration, was also a valuable source of information. This information has been reviewed and integrated with field surveys of the main channel of the Potomac River performed by ICPRB.

VERTICAL AND HORIZONTAL CONTROLS

Coast and Geodetic Survey

Vertical control data was obtained for Coast and Geodetic Survey benchmarks for the 30 minute quadrangle covering Paw Paw, W.V. from latitude $39^{\circ}30'$ to $40^{\circ}00'$ N and longitude $78^{\circ}00'$ to $78^{\circ}30'$ W. All elevations are referenced to the sea-level datum of 1929. The complete set of benchmark descriptions is contained in appendix A.1

U.S. Geological Survey

Vertical and horizontal control data was obtained from the U.S. Geological Survey for the Paw Paw, Hancock, and Williamsport 15 minute quadrangles. All elevations are third-order levelings referenced to the sea-level datum of 1929. The complete sets of vertical and horizontal benchmark descriptions for each 15 minute quadrangle are contained in appendices A.2 through A.4.

Federal Emergency Management Agency

The FEMA floodplain map for Hancock, Md. was reviewed for flood heights and elevation reference markers (RM). Elevation marks were field verified where possible.

Benchmarks

Using Coast and Geodetic Survey descriptions, a number of key elevation markers were located and identified. USCGS Benchmark A 43 was located as described on the fourth pier of the U.S. Highway 522 bridge in Hancock, Md. The benchmark was found in good condition as shown in photo plate (PP) 1. USCGS benchmark C 448, shown in PP 2, was located in the second step of the Hancock Bank on main street as described. USGS benchmark C 459 on the C&O Canal Aqueduct over Fifteen Mile Creek was located and found badly damaged as shown in PP 3.

In addition to these benchmarks U.S.G.S. stream gage number 01613000 contains an elevation marker corresponding to the maximum height of the 1936 flood. This marker, shown in PP 4, was located and determined to have an approximate elevation of 431.23 feet msl based on the maximum stage of 47.6 feet and the gage datum of 383.68 feet msl.

The FEMA floodplain map for the town of Hancock contained the location and description of 9 reference marks including USGS benchmark C 448 described above as well as Maryland Geodetic Survey benchmark WA 2. This benchmark was found to be in poor condition in 1960. At that time it was noted that the benchmark had apparently been moved due to road construction. Benchmark WA 2 could not be located. Similarly U.S. benchmark Z 42 at the east end of the Town of Hancock could not be located. FEMA RM 4, a chiseled square on the State Rt. 144 bridge was located as described, and is shown in PP 5. With the exception of benchmark C 448 and FEMA RM 4, the location of most of the FEMA reference marks could not be verified, as summarized in Table 1.

The U.S.G.S. 7.5 minute quadrangle maps indicated the presence of surveyed vertical controls every 0.5 to 1.0 mile along the Potomac mainstem. These markers were placed in association with the Western Maryland Railroad and B&O Railroad rights of way on either shore of the river. From the river the B&O right of way is mainly inaccessible, although an actively used gravel access road exists beside the active road bed. Repeated searches for vertical controls on the accessible bridges and trestles of the Western Maryland right of way were unsuccessful. A possible explanation was discovered while searching for marker Z 42 at the eastern end of the Town of Hancock. At that time a track reclamation train (PP 6) was found removing the rails from the road bed. The conditions of the bed after reclamation (PP 7) may well explain ICPRB's inability to locate any benchmarks along the right of way.

The verified elevation markers used in ICPRB's survey are summarized in Table 2.

CROSS SECTIONS

Three sets of cross sections of the mainstem Potomac River are described. Eight channel profiles surveyed at low water are described in the vicinity of Paw Paw and Fifteen Mile Creek. These cross

sections are designated X1 through X8. The locations of cross sections X1 through X6 are indicated on Paw Paw map 1.

A more extensive set of cross sections associated with the design of the Rt. 51 bridge at Paw Paw, W.V. are also included in this report. These transects concentrate on the valley and floodplain cross section under high flow conditions, providing little resolution of the channel bottom. These cross sections were prepared by Bernard Johnson Inc. and are designated sections 100 through 800, and sections 8.5 through 12.91. Paw Paw map 2 shows the location of these sections.

Full river cross sections at Hancock, Md. are also included in this report. Designated cross sections 18 through 23, these surveys include transects at the C&O Canal Maintenance yard at Hancock, as well as the U.S.G.S. stream gage at Hancock. These cross sections were surveyed for the Baltimore District of the U.S. Army Corps of Engineers as part of the floodplain information study for Washington County. Over 300 surveyed cross sections were produced for this study. These have been obtained from the ACE and are under loan to National Capital Region for archival microfilming.

The cross section location maps along with individual plotted transects are presented in the following three sections.

TABLE 1
FEMA REFERENCE MARKS FROM THE FLOODPLAIN MAP OF HANCOCK MARYLAND.

RM1	RM1 is located on private property. No attempt was made to verify its location
RM2	could not be located as described
RM3	could not be located as described
RM4	located as described (see PP 5)
RM5	due to conditions on the Chessie System headwall the location of RM5 could not be verified
RM6	located and verified (see PP 2). The location of RM6 on the FEMA floodplain map for Hancock, Md. is in error. The USCGS description of C 448 is accurate.
RM7	could not be located as described
RM8	could not be located as described

TABLE 2
VERIFIED ELEVATION MARKERS

MARK	ELEVATION	DESCRIPTION
A 43	431.636	0.5 miles west of Hancock along the Western Maryland railroad from the station at Hancock, 49 feet north of mile-post No. 116, set in the northeast end of the corner of the 4th pier base from the northwest end of the U.S. Highway No. 522, 8.5 feet southeast of the southeast rail of the track, 5 feet above the ground level. A standard disk stamped "A-43 1941" and set vertically.
C 448	448.241	At Hancock, at the Hancock Bank, set vertically in the front of the north face of the bank, 13.8 feet south of the south curb of Main Street, 1.7 feet west of the west edge of the front door, 1.2 feet above the sidewalk level. A standard disk stamped "Maryland C-448"
C 459	459.394	(USGS) Little Orleans; at Chesapeake and Ohio Canal aqueduct over Fifteenmile Creek; in N. end of E. coping; standard tablet stamped "C 459".
	431.23	1936 high water mark at USGS gage 01613000 at Hancock, Md on north face of the west end of the gage walkway a vertical disk stamped "FLOOD MARK".
	487.88	Datum of USGS gage 01610000 at Paw Paw, W.V., a horizontal disk placed at the northeast corner of the base of the gage house.
	417.45	FEMA RM 4; a chiseled square on top of the northeast corner of State Route 144 bridge on top of concrete rails over Little Tonoloway Creek.

Cross Sections X1 through X8

The locations of cross sections X1 through X6 are shown on Paw Paw location map 1. Benchmarks along the Western Maryland Railroad bridges on either side of Bevan bend could not be located. All elevations are based on the datum of the USGS streamgage at Paw Paw, WV. All cross sections are plotted looking downstream. The emphasis in this survey was to accurately identify the bottom profile under relatively low flow conditions.

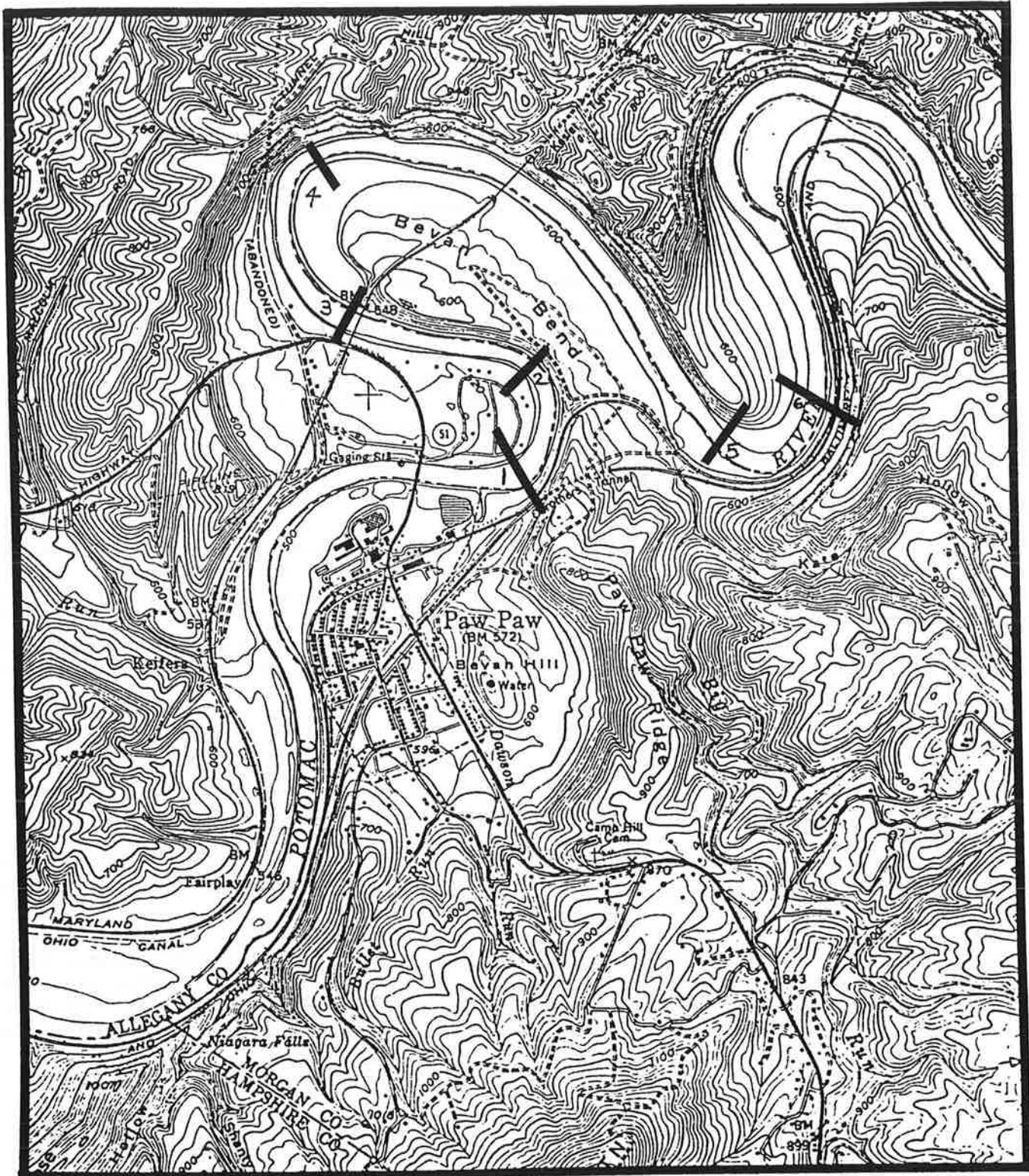
Cross sections X1 and X2 were taken at the entrance and exit of the first meander downstream from the Rt. 51 Bridge. The locaton of the deeper portion of the channel reflects the higher velocities found in the outside of meander bends. Throughout the Paw Paw bends the outer bank of the channel tends to be controlled by steep bedrock walls, with gently sloped alluvial deposits on the inner bank. The bedrock exposures are frequently associated with riffle-pool sequences in bedrock controlled channels. Cross section X3 is taken at the C&O Canal boat ramp at Paw Paw just downstream from the Western Maryland railroad bridge. At this location a calm pool is formed by bedrock outcrops crossing the river both upstream and downstream of the boat ramp. Section X4 at Bevan Bend had an unusual bottom profile with greatest depths closer to the W.Va. shore. The gravelly point forming the inner bank of Bevan Bend corresponds to another bedrock outcrop crossing the river at this point.

Downstream of Bevan Bend a long bedrock controlled riffle sequence was encountered with a deeper channel on the W.Va. side of the reach. The riffle sequence ends at the location of another steep outcrop forming a constriction on the Md. shore. This is the location of cross sectioin X5. The transect was carried to the top of the floodplain on the W.Va. shore. Cross section X6 was continued to the top of a concrete trestle of the B&O railroad right of way. The inner bend of this meander is a broad gravel bar. Vegetation growing above the bar on the flood plain shows clear evidence of recent submergence during high past flow events.

Fifteen Mile Creek

Cross Section X7 was surveyed from Benchmark C 459 on the C&O Canal Aqueduct. At this point in the River a broad pool is formed by a downstream bedrock outcrop. The banks and shore are muddy indicating a relatively calm depositional environment under receding flow conditions. The transect was carried to the large island on the W.Va. shore. Thick vegetation did not allow the transect to be carried over the island at this time.

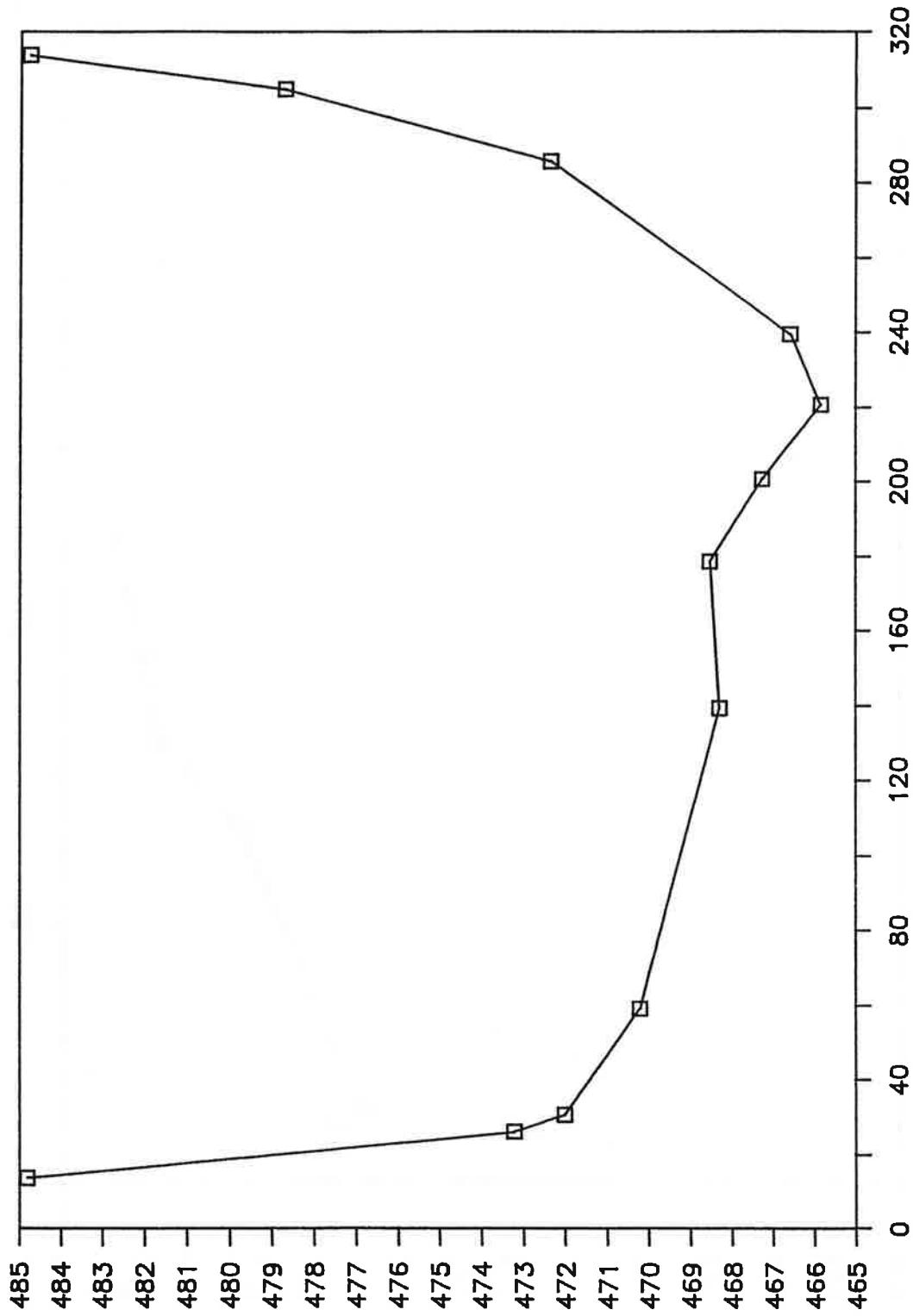
Cross section X8a is the bottom profile of the first meander downstream from Fifteenmile Creek. The meander has a vegetated gravel bar on its inner bank and a steep bedrock controlled slope on the outer bank. Cross section X8 is a continuation of section X8a up the steep outer bank. This section demonstrates the vertical extent to which the meander has become entrenched on its outer bank in response to bedrock control.



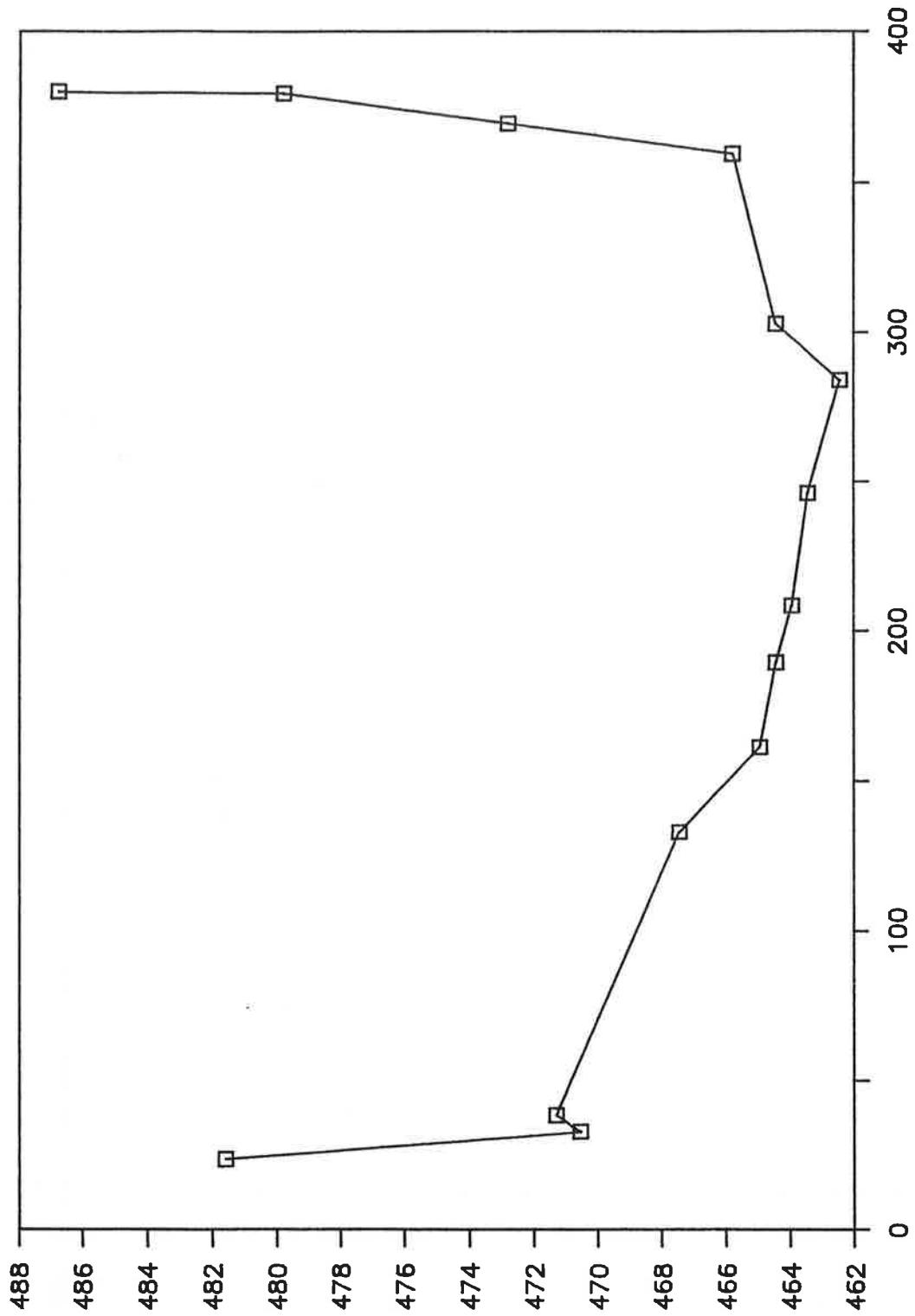
Location Map Paw Paw W.V.

Map 1

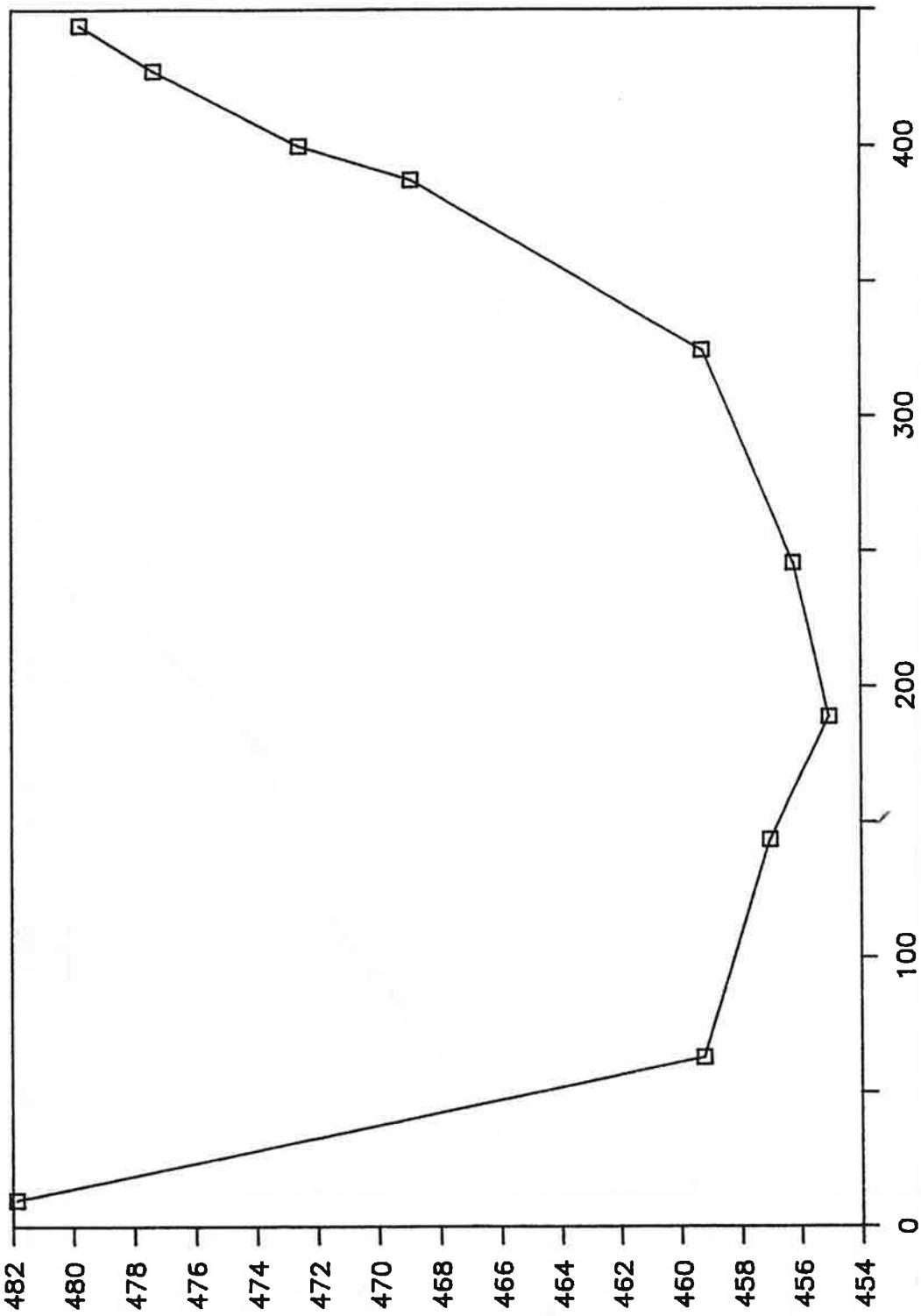
Cross Section X1



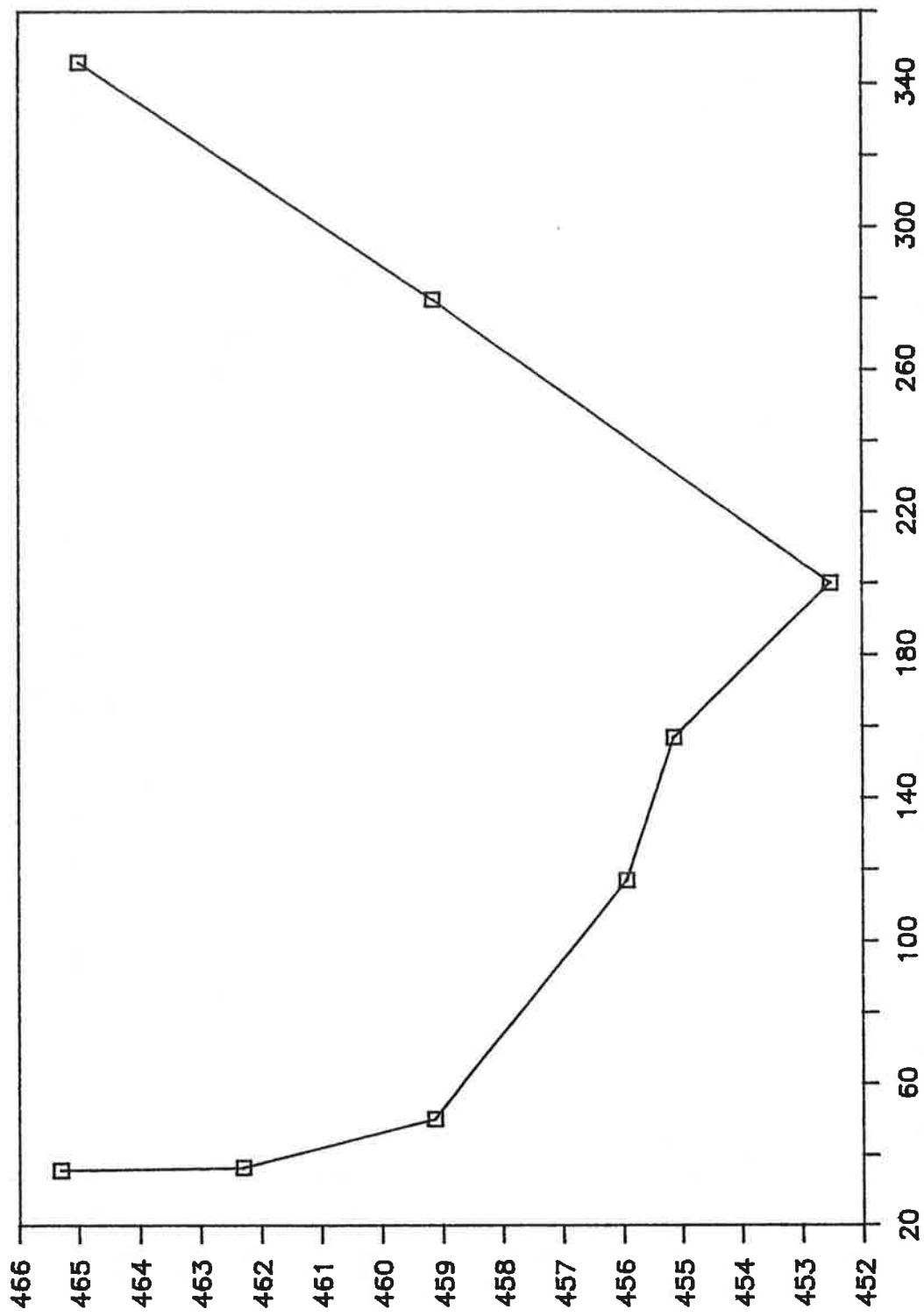
Cross Section X2



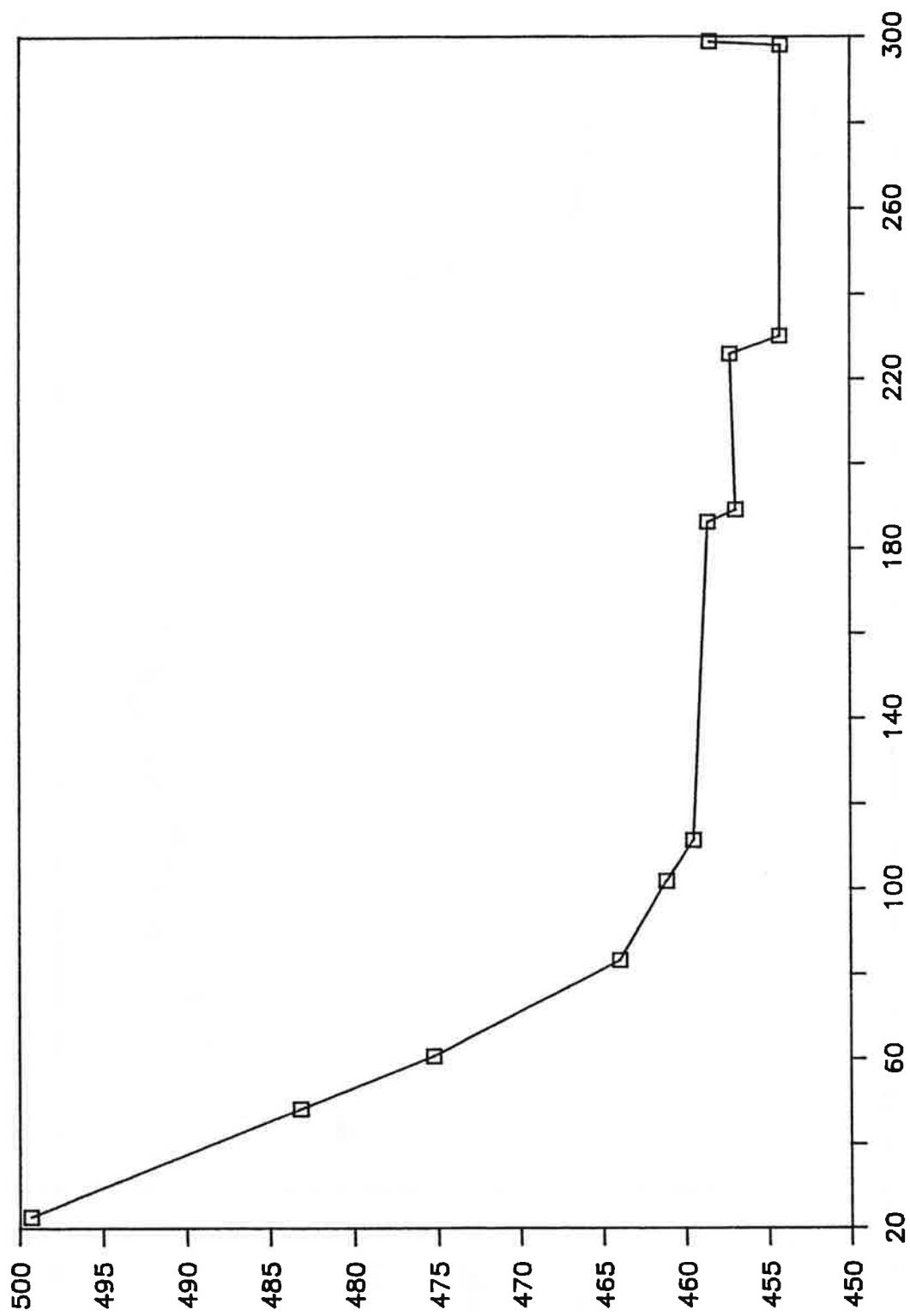
Cross Section X3
Paw Paw Boat Ramp



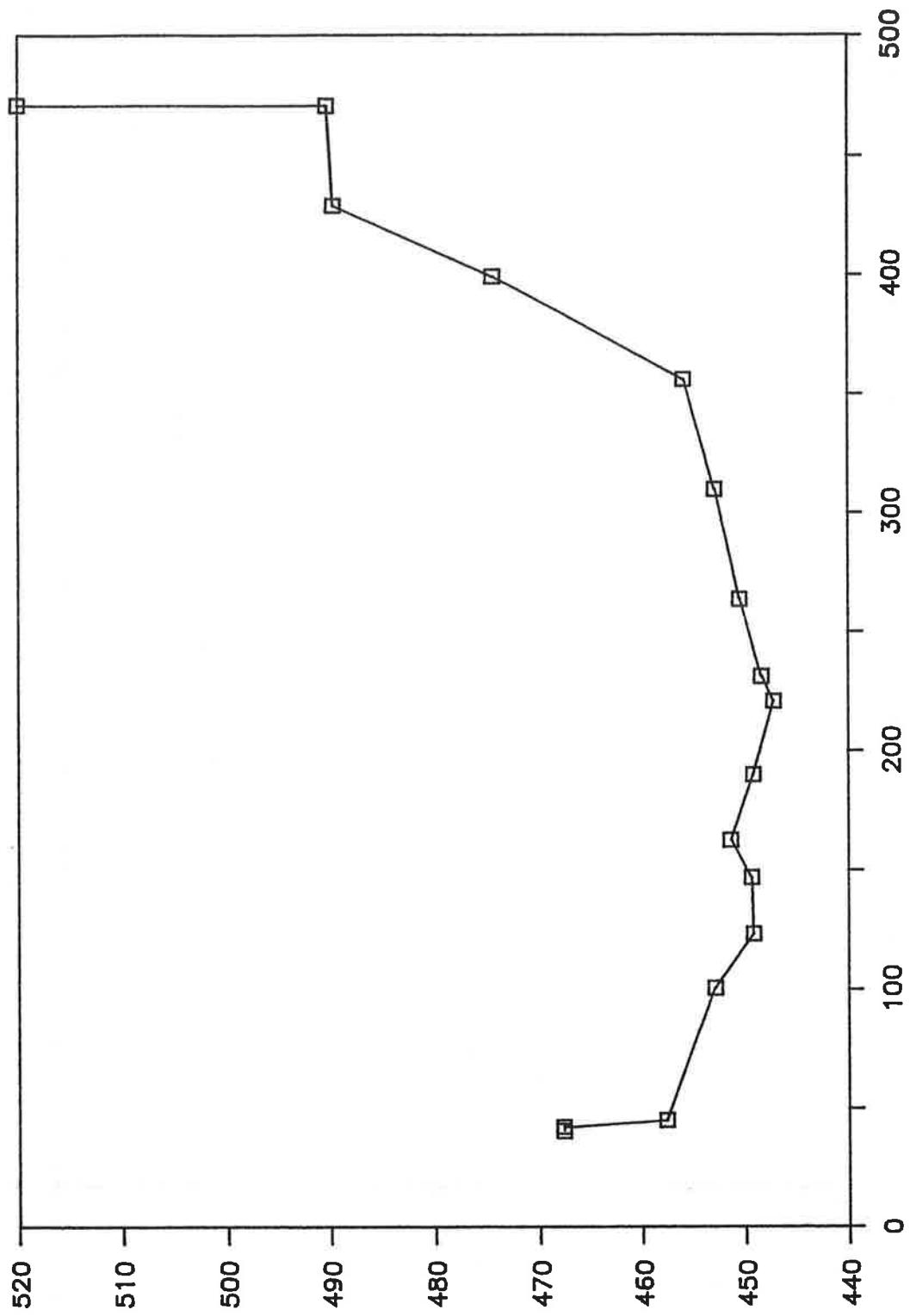
Cross Section X4



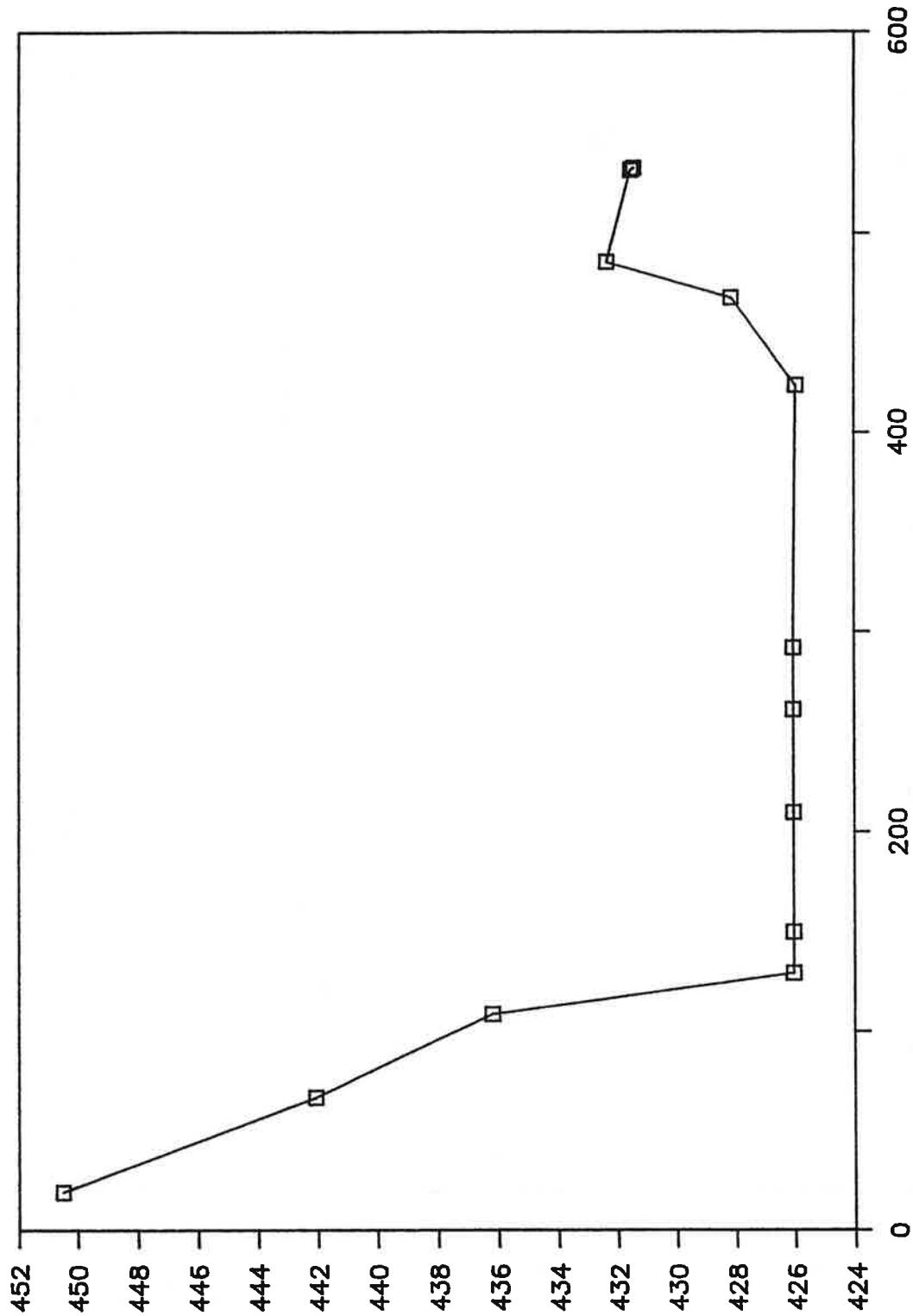
Cross Section X5



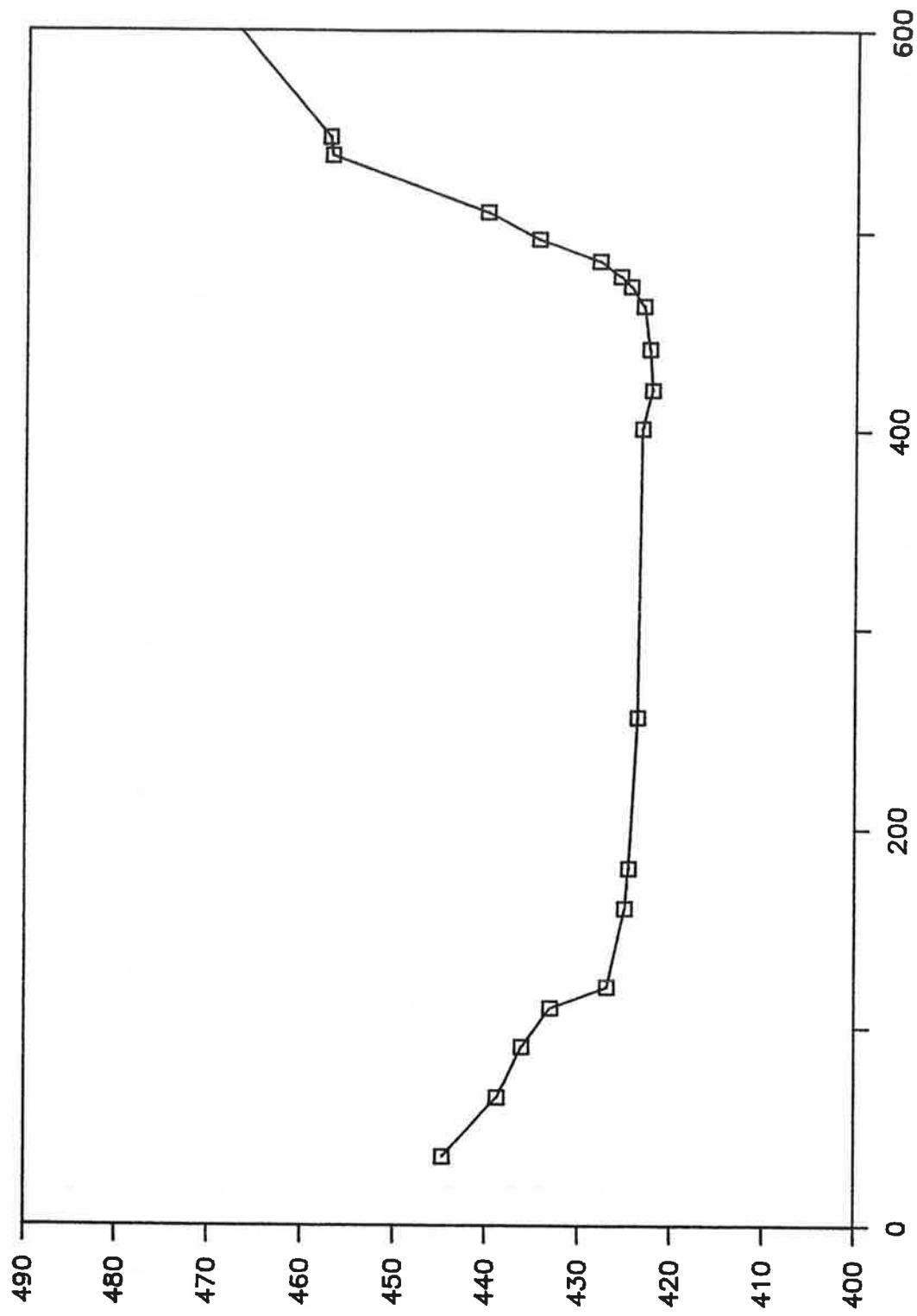
Cross Section X6



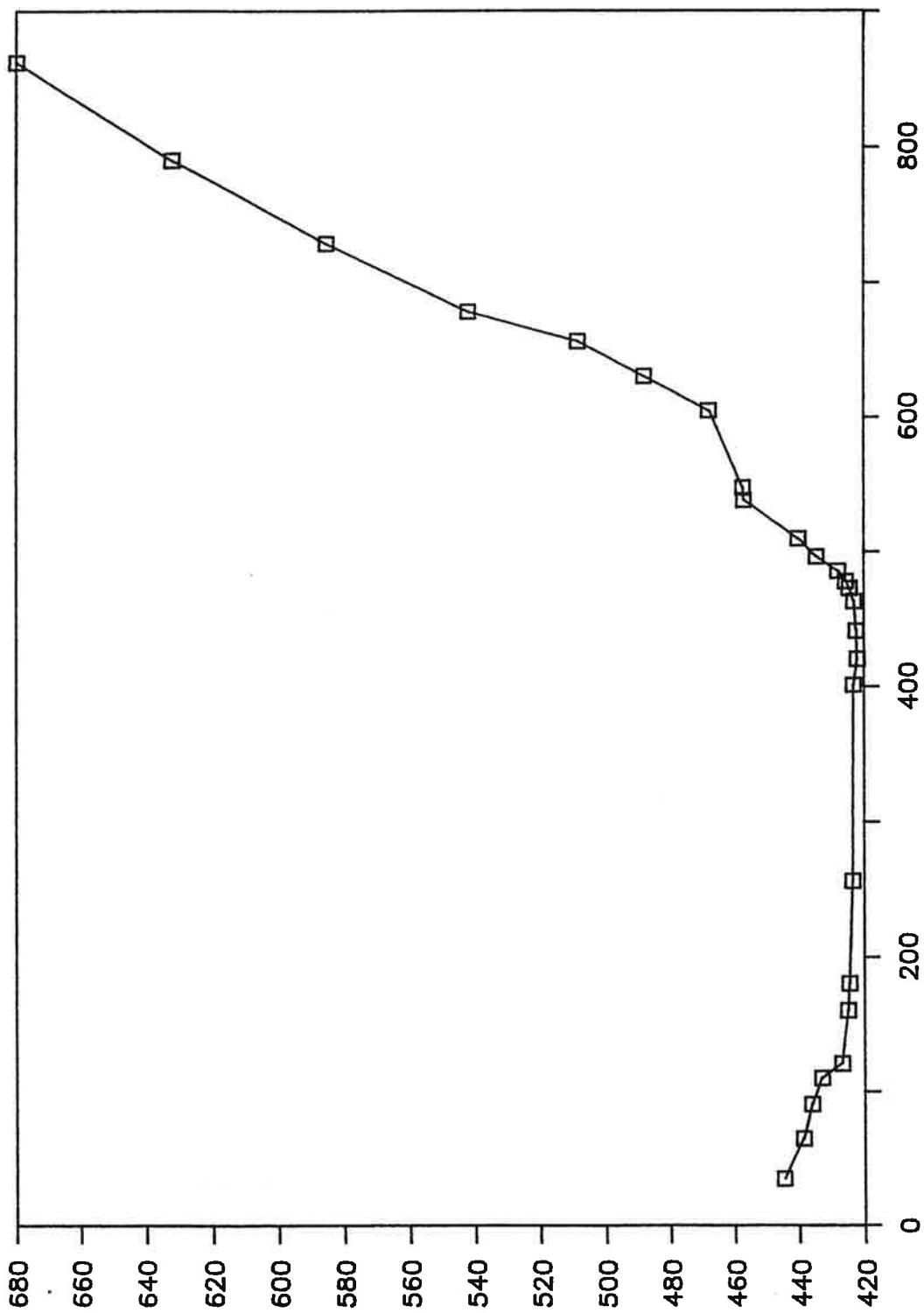
Cross Section X7



Cross Section X8a



Cross Section X8



Cross Sections 100 through 800 and 8.50 through 12.91

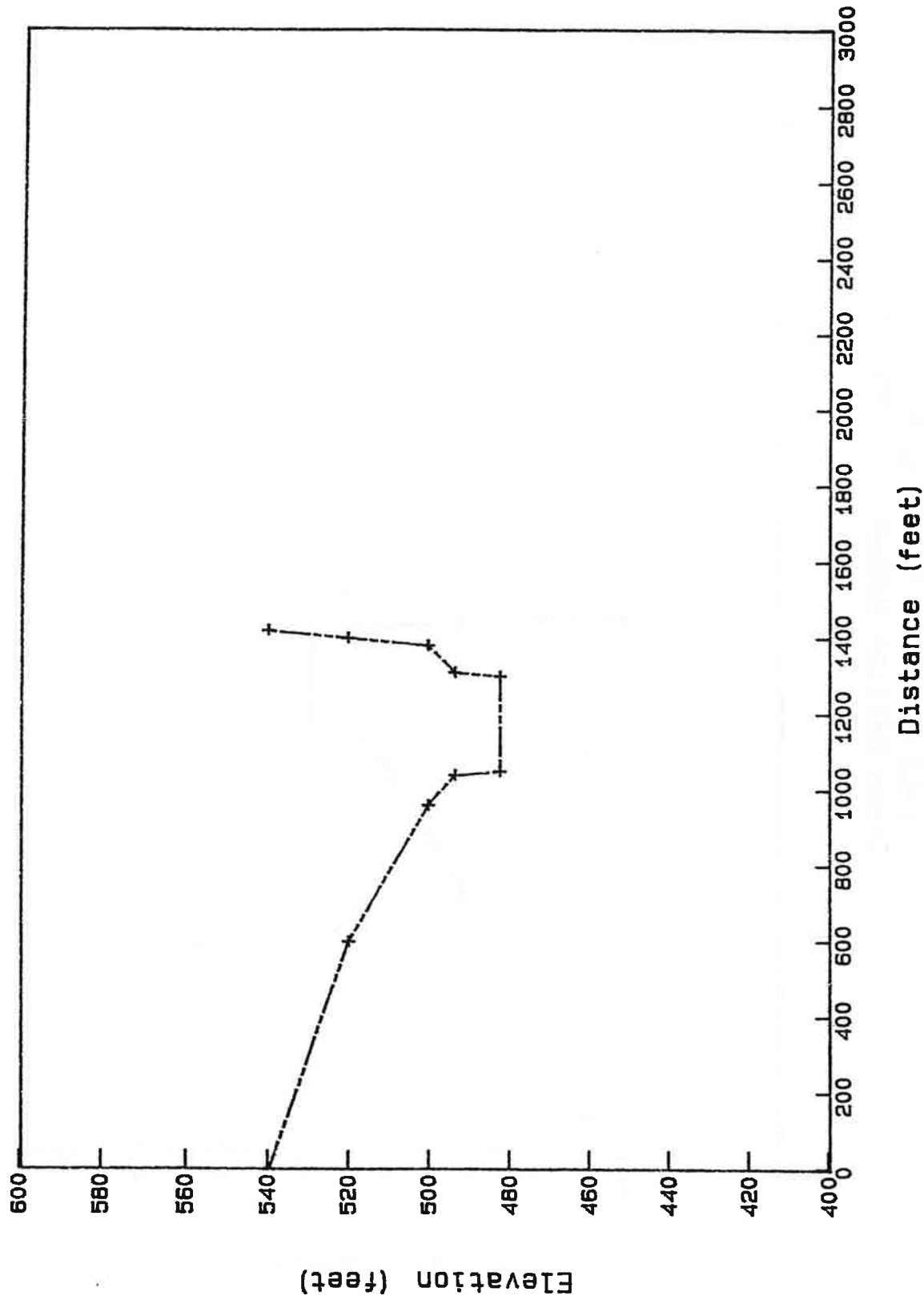
These transects, prepared by Bernard Johnson Inc., were used in the hydraulic evaluation to the redesigned Rt. 51 bridge. Cross sections 100 through 800 do not include detailed channel surveys, but are restricted to the floodplain and river valley. Cross sections 8.5 through 12.91 are detailed transects of both the flood plain and the channel in the immediate vicinity of the Rt. 51 bridge. The locations of these transects is shown on Paw Paw location map 2.



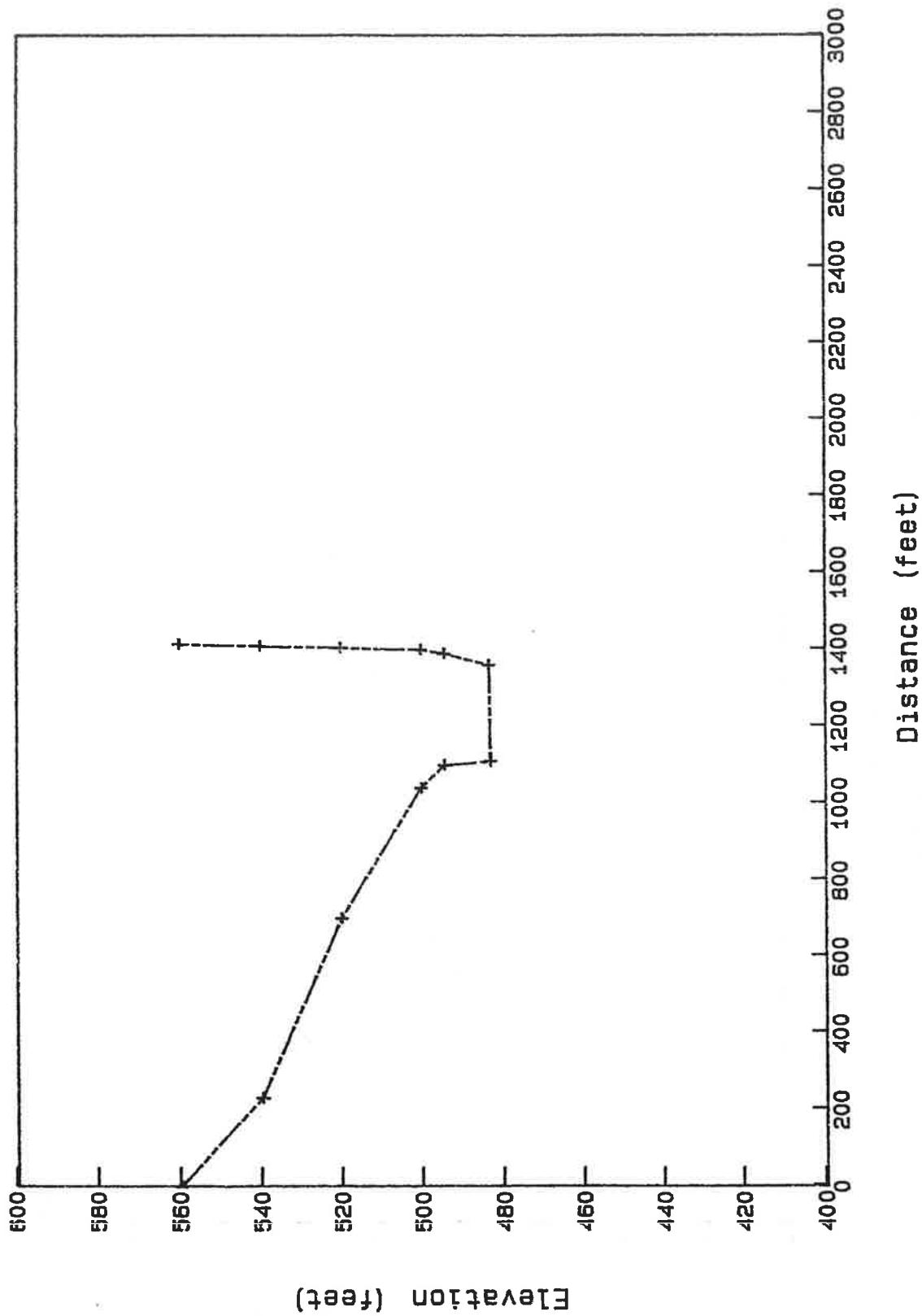
Location Map Paw Paw W.V.

Map 2

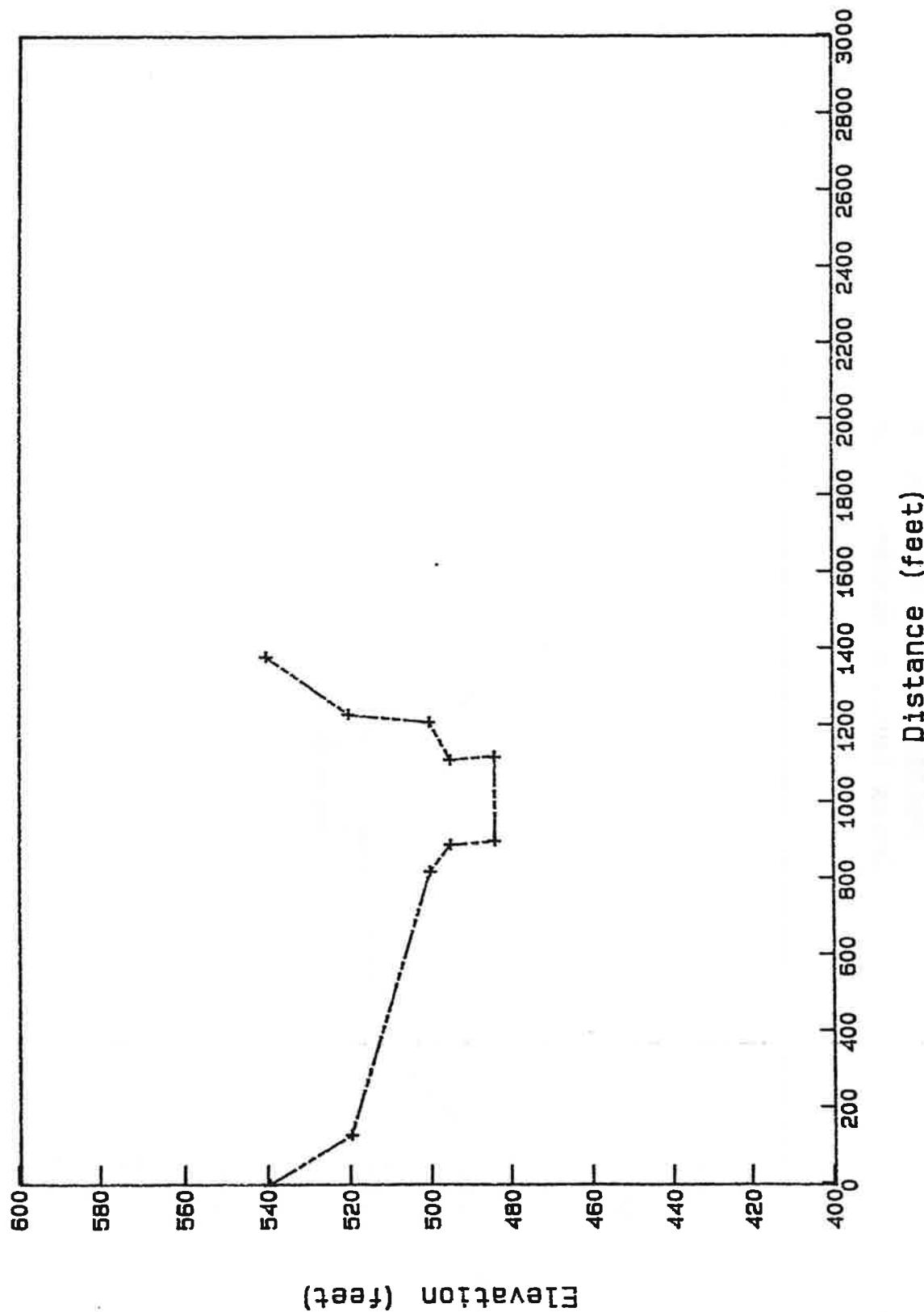
Potomac River Paw Paw, W.V.
Cross Section Number 100.00



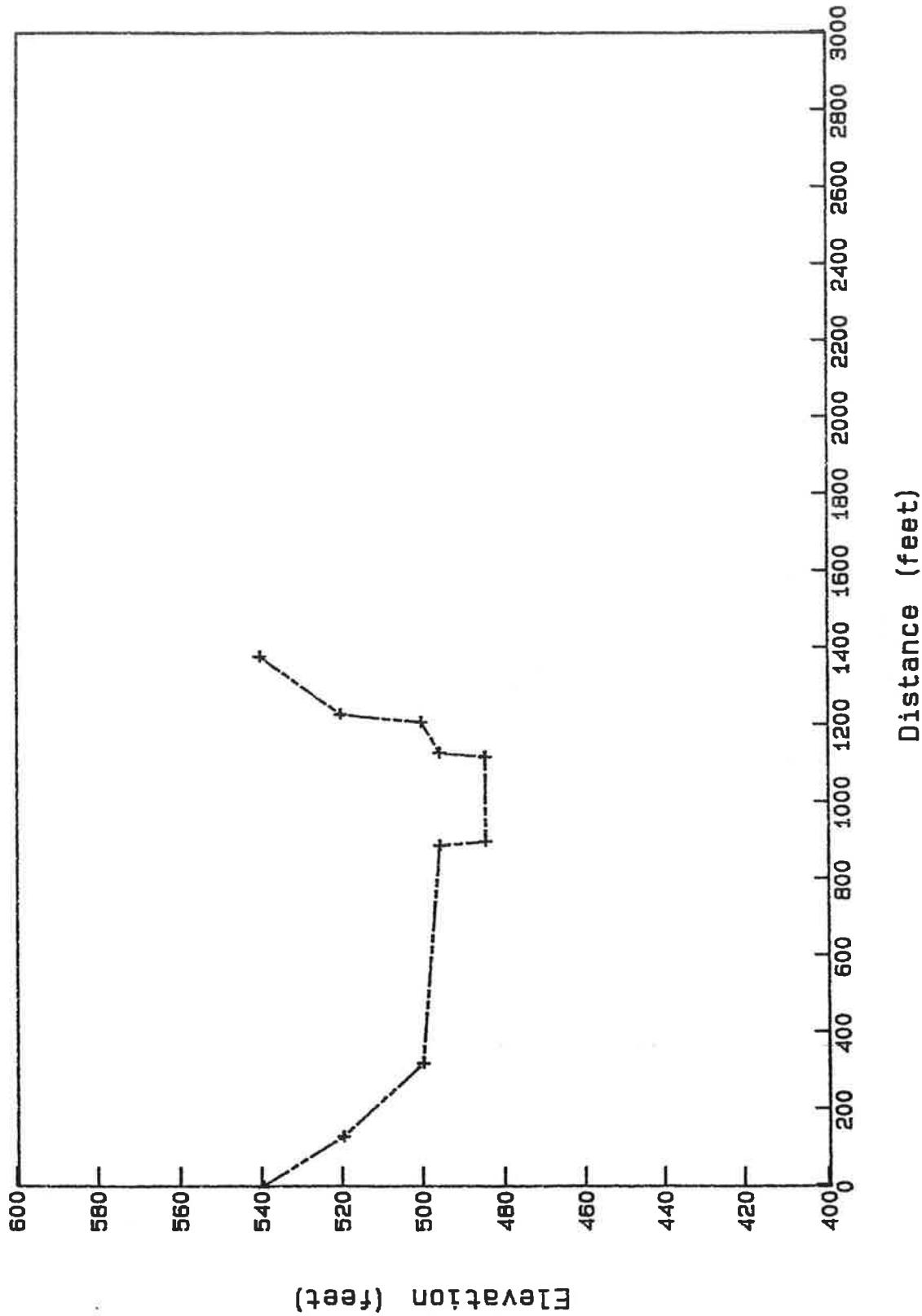
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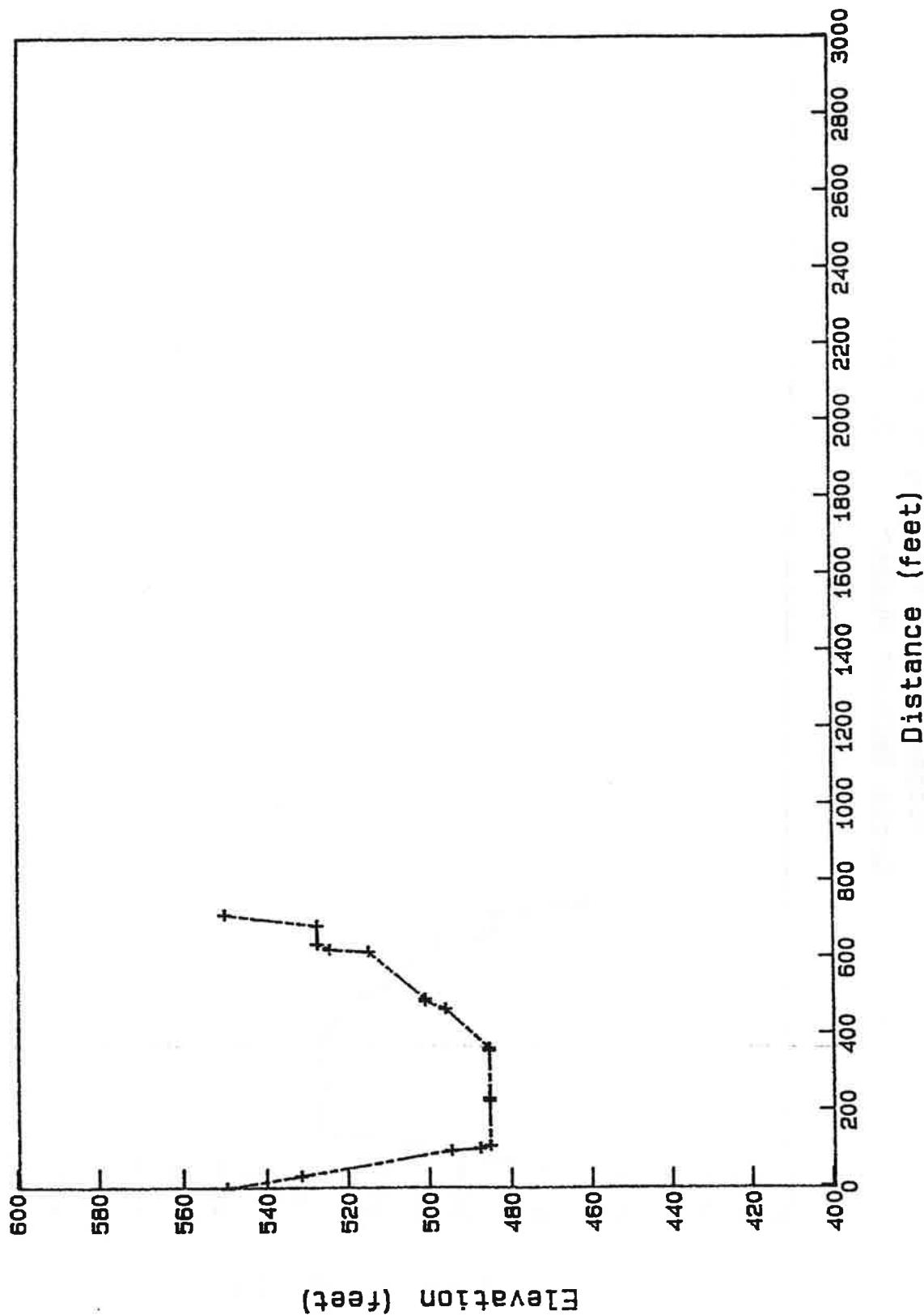
Potomac River Paw Paw, W.V.
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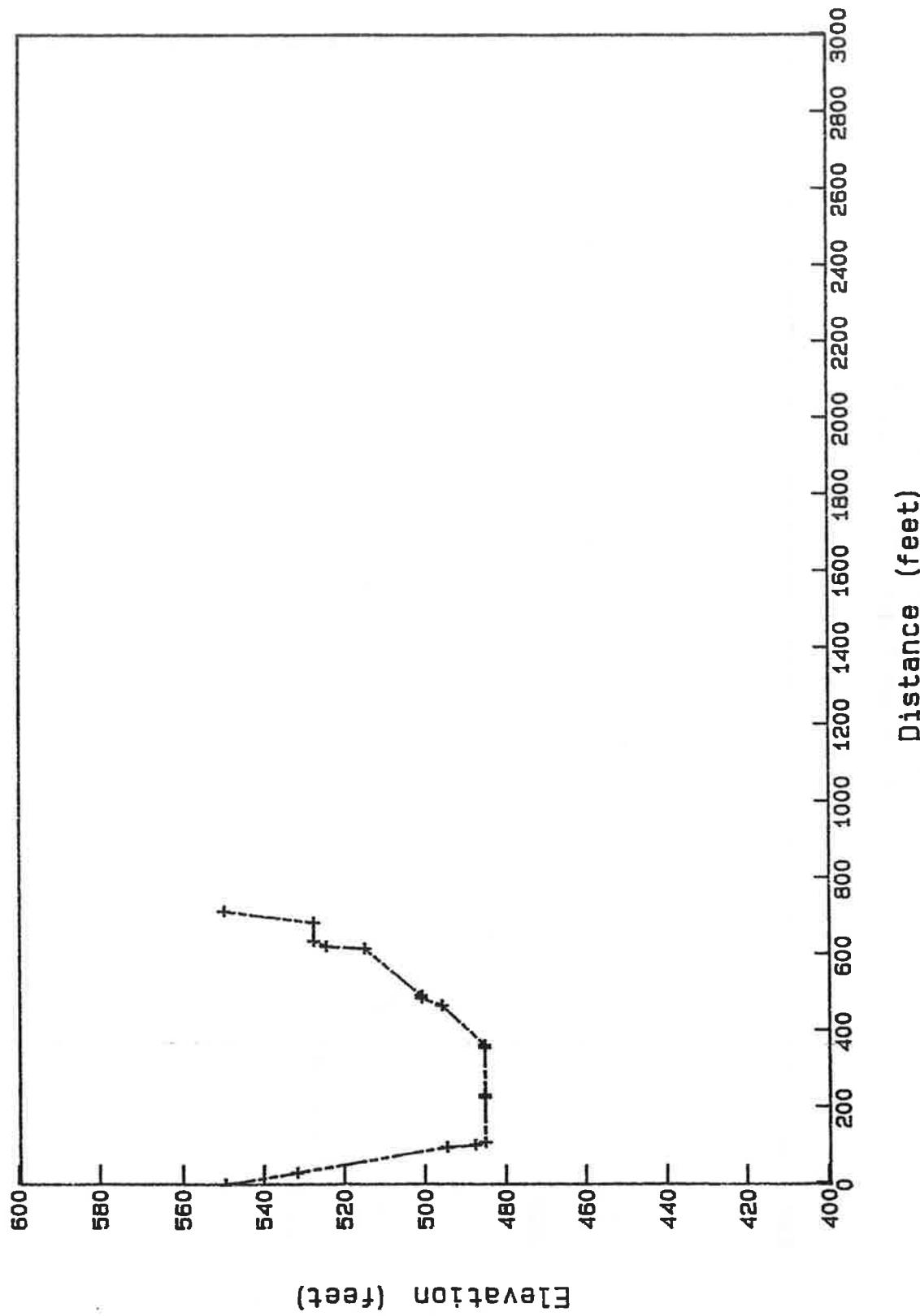
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Cross Section Number 250.00



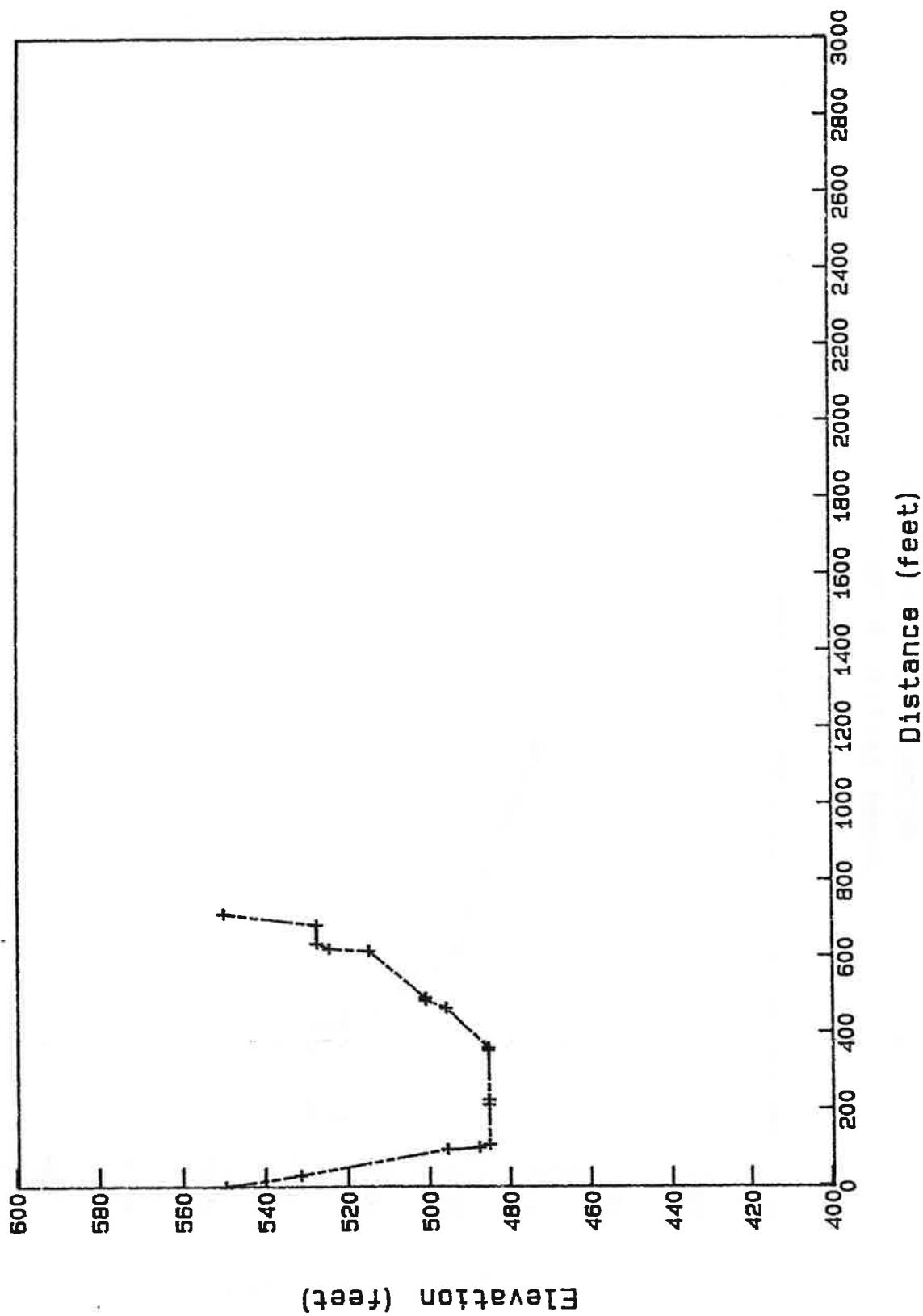
Potomac River Paw Paw, W.V.
Cross Section Number 300.01



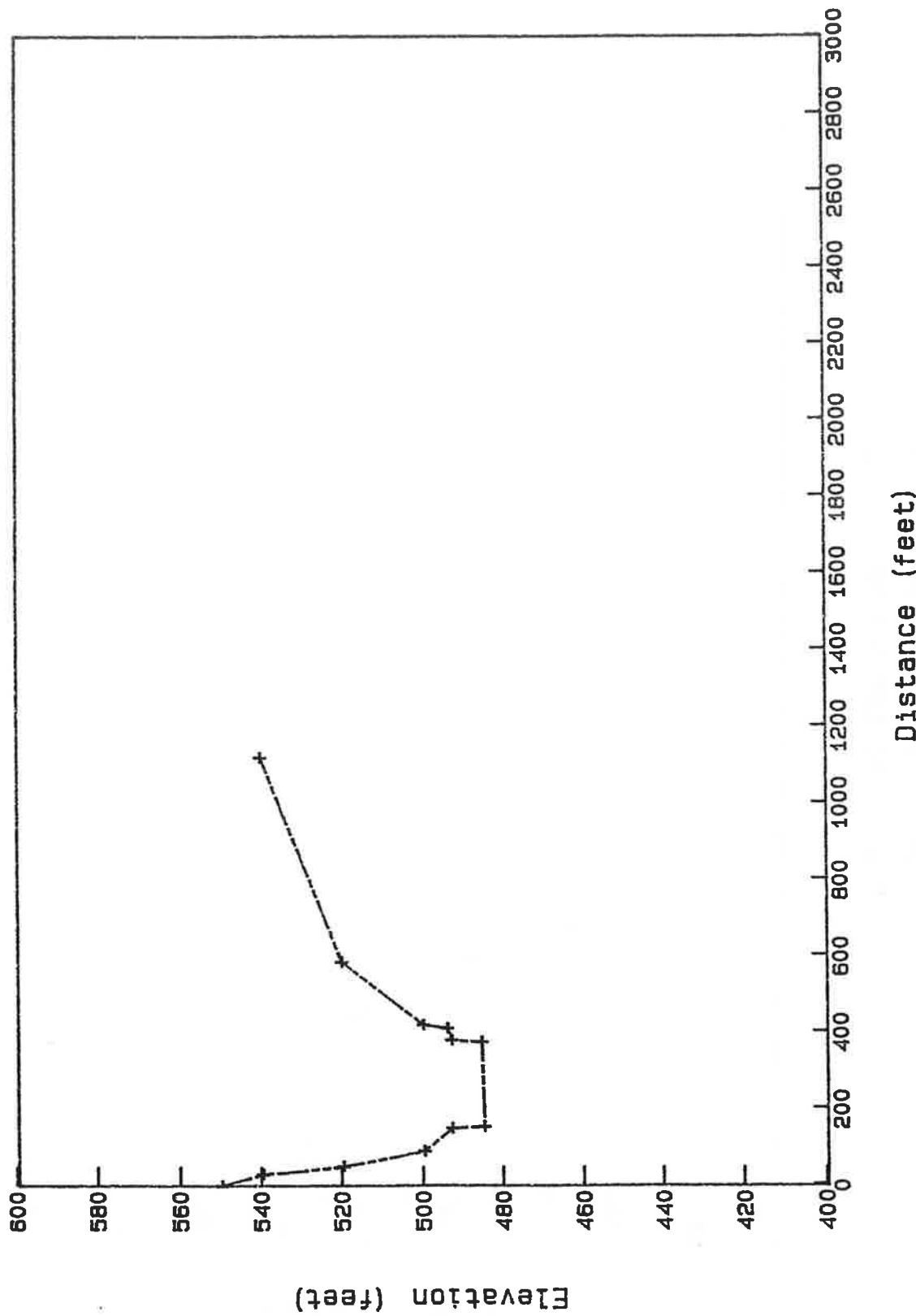
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Cross Section Number 300.02



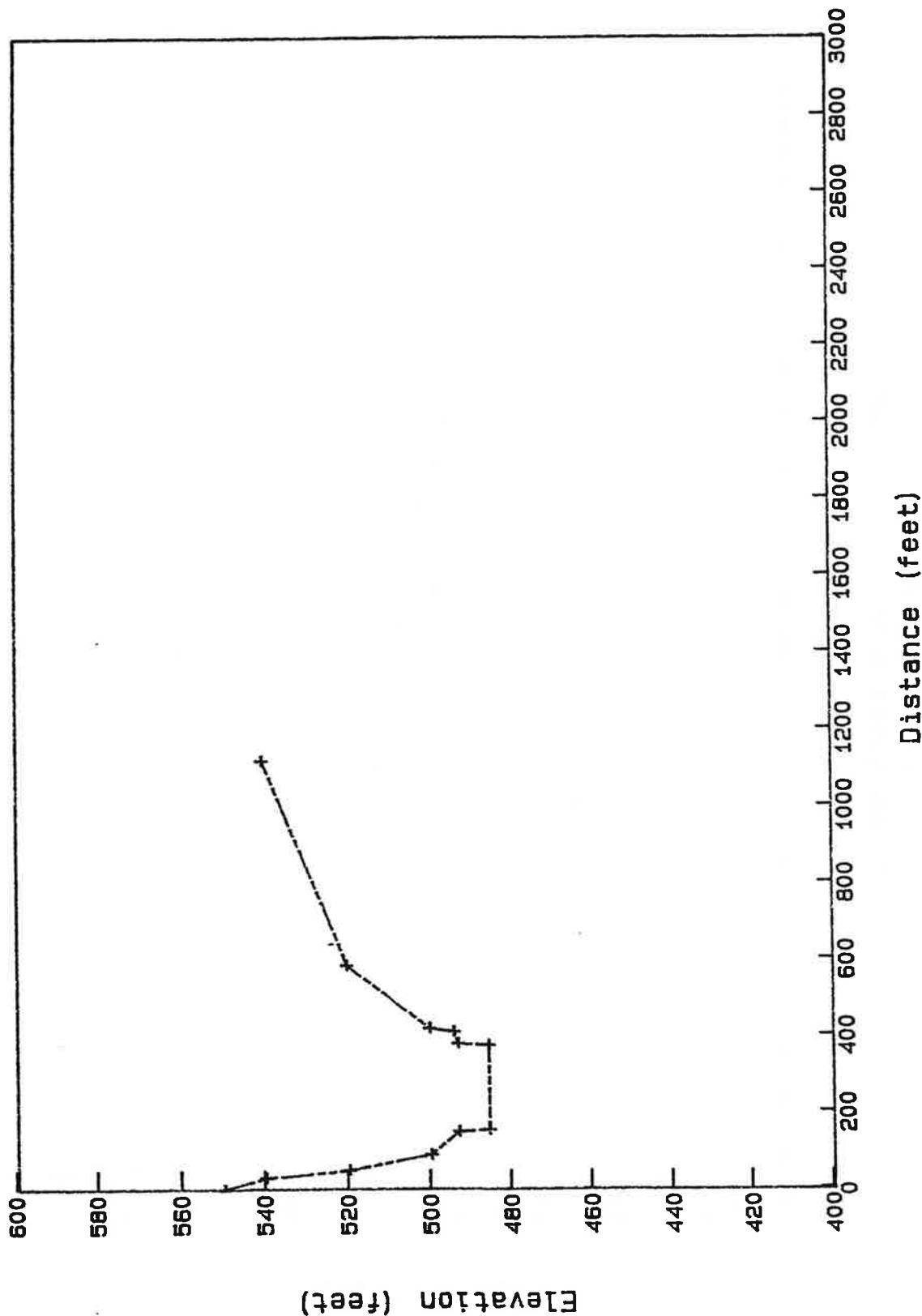
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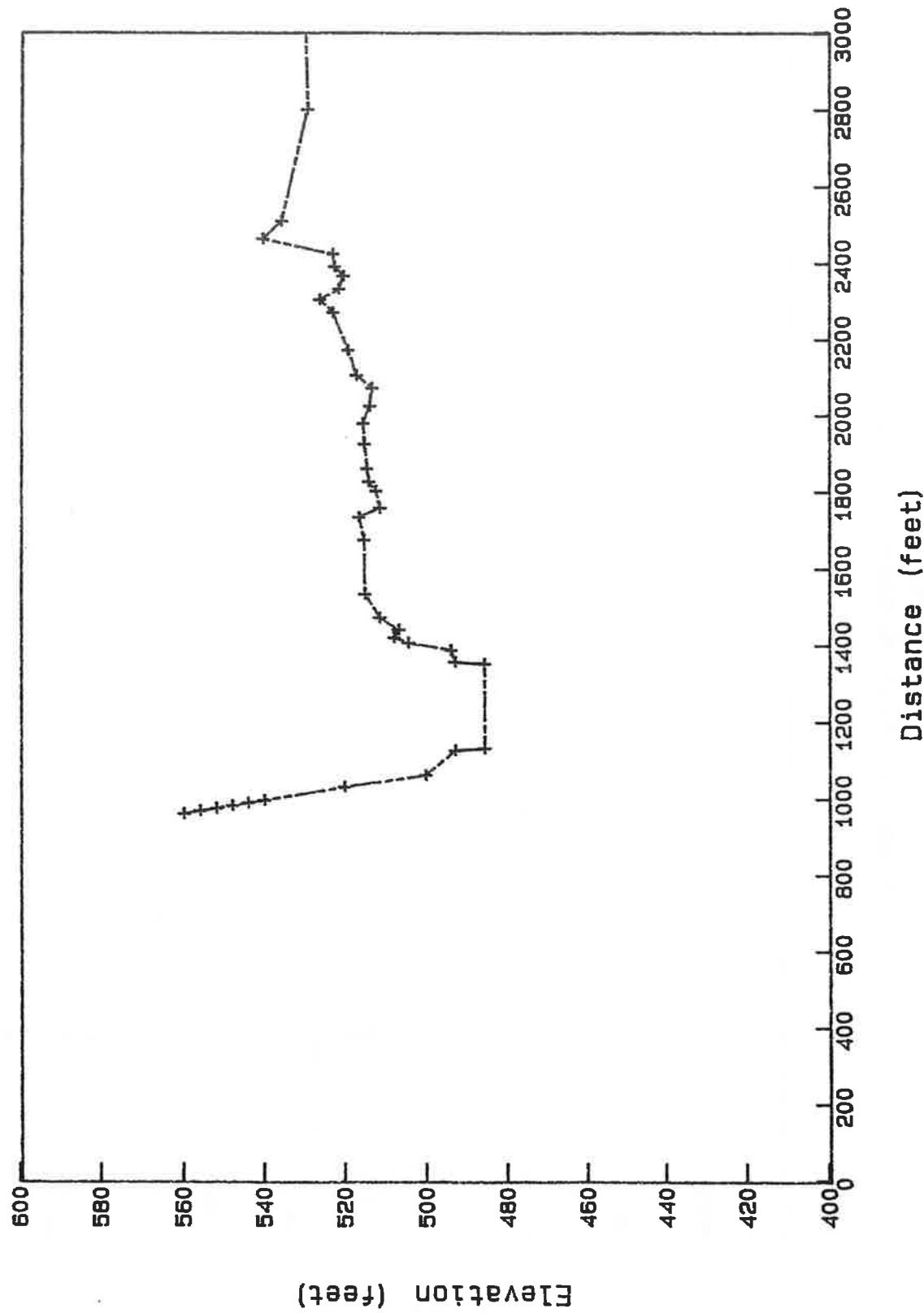
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Cross Section Number 325.00



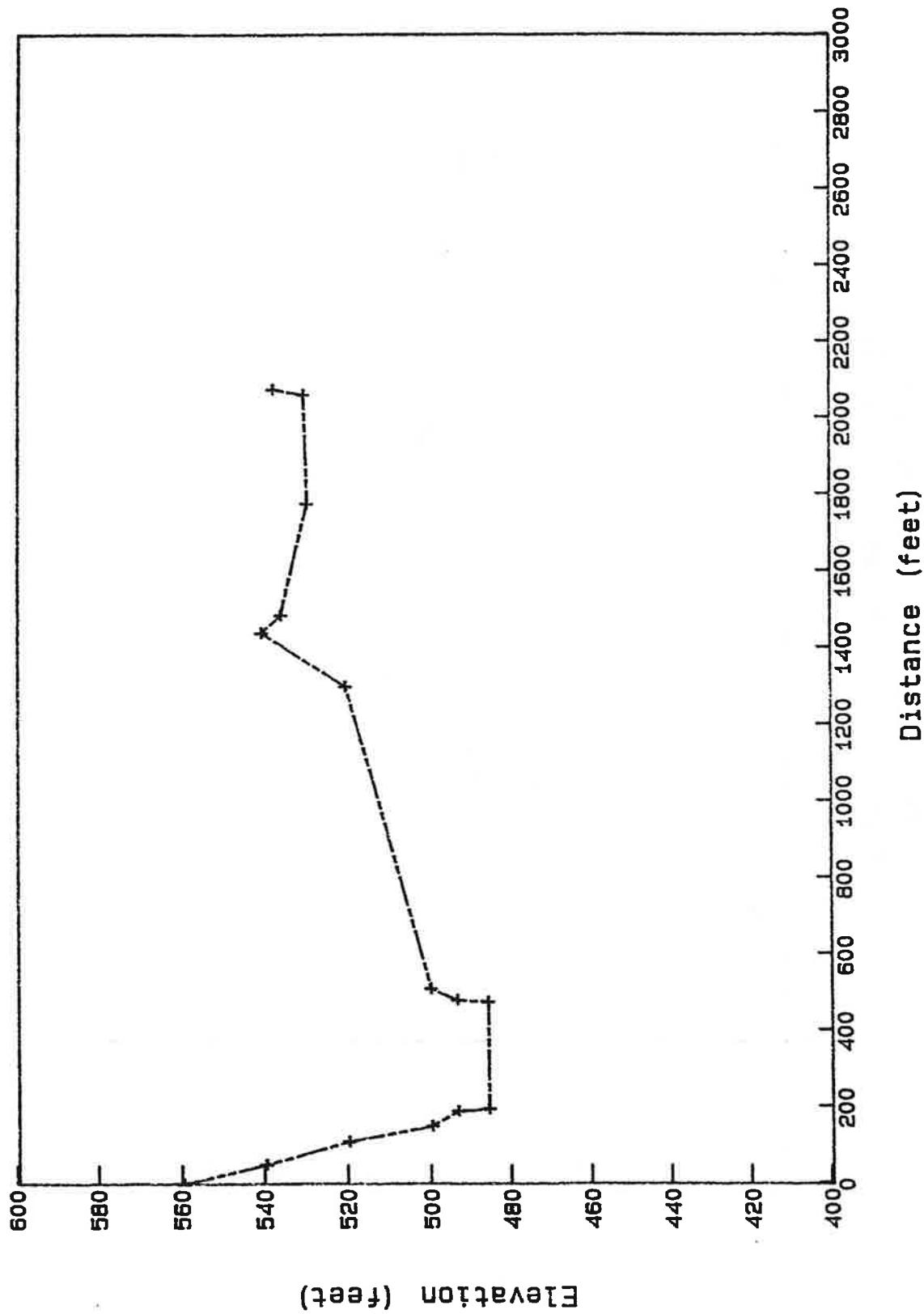
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Cross Section Number 350.00



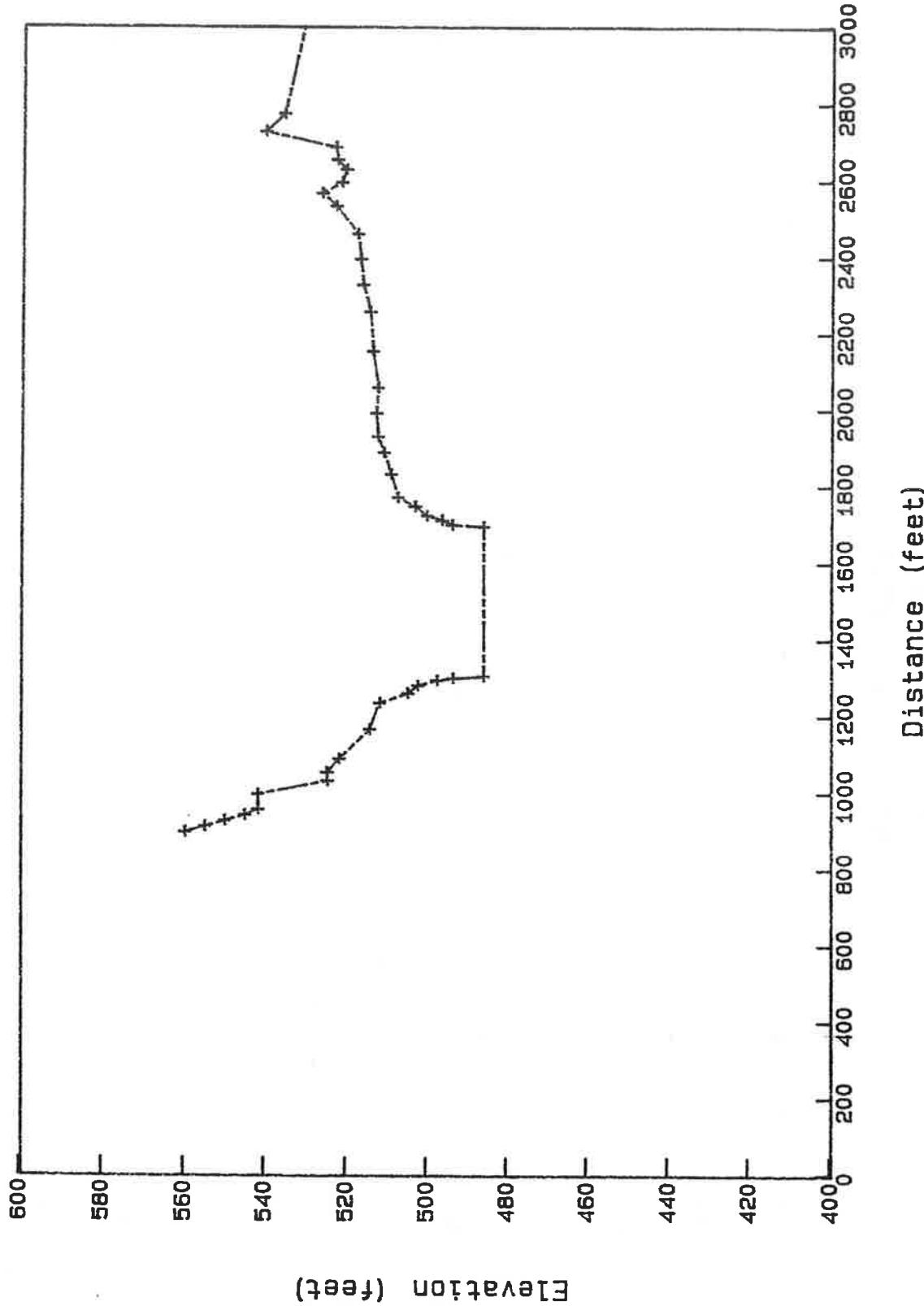
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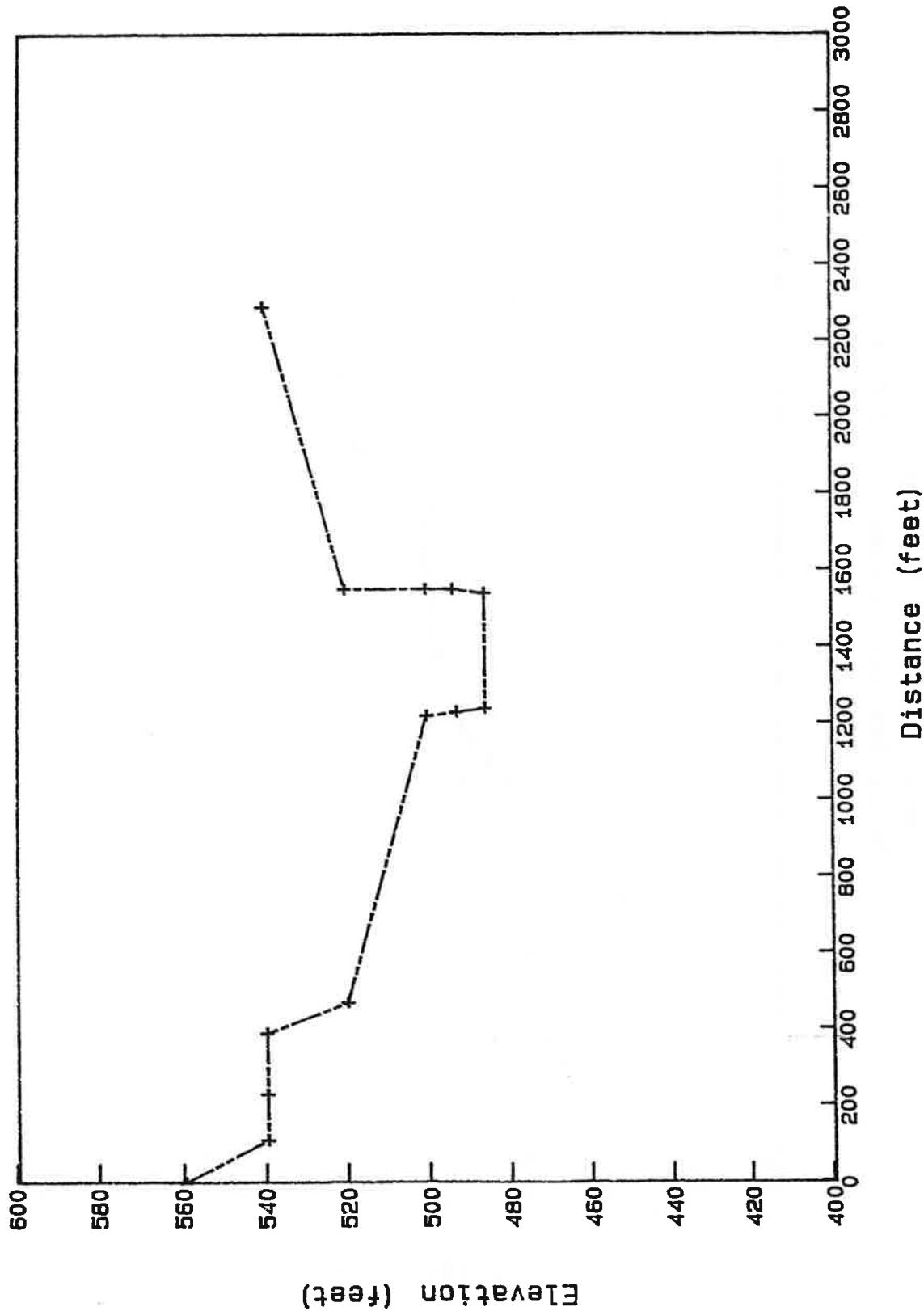
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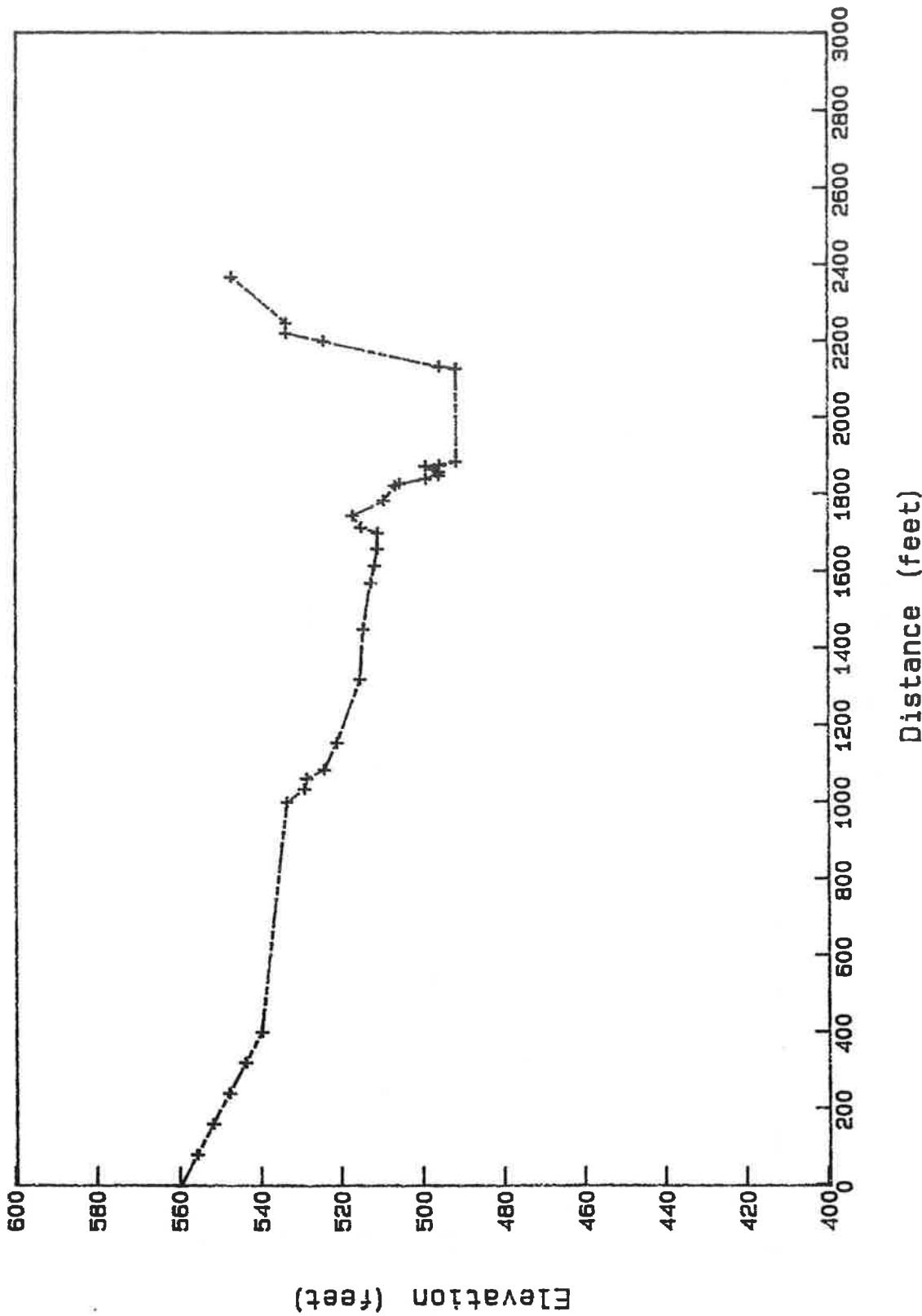
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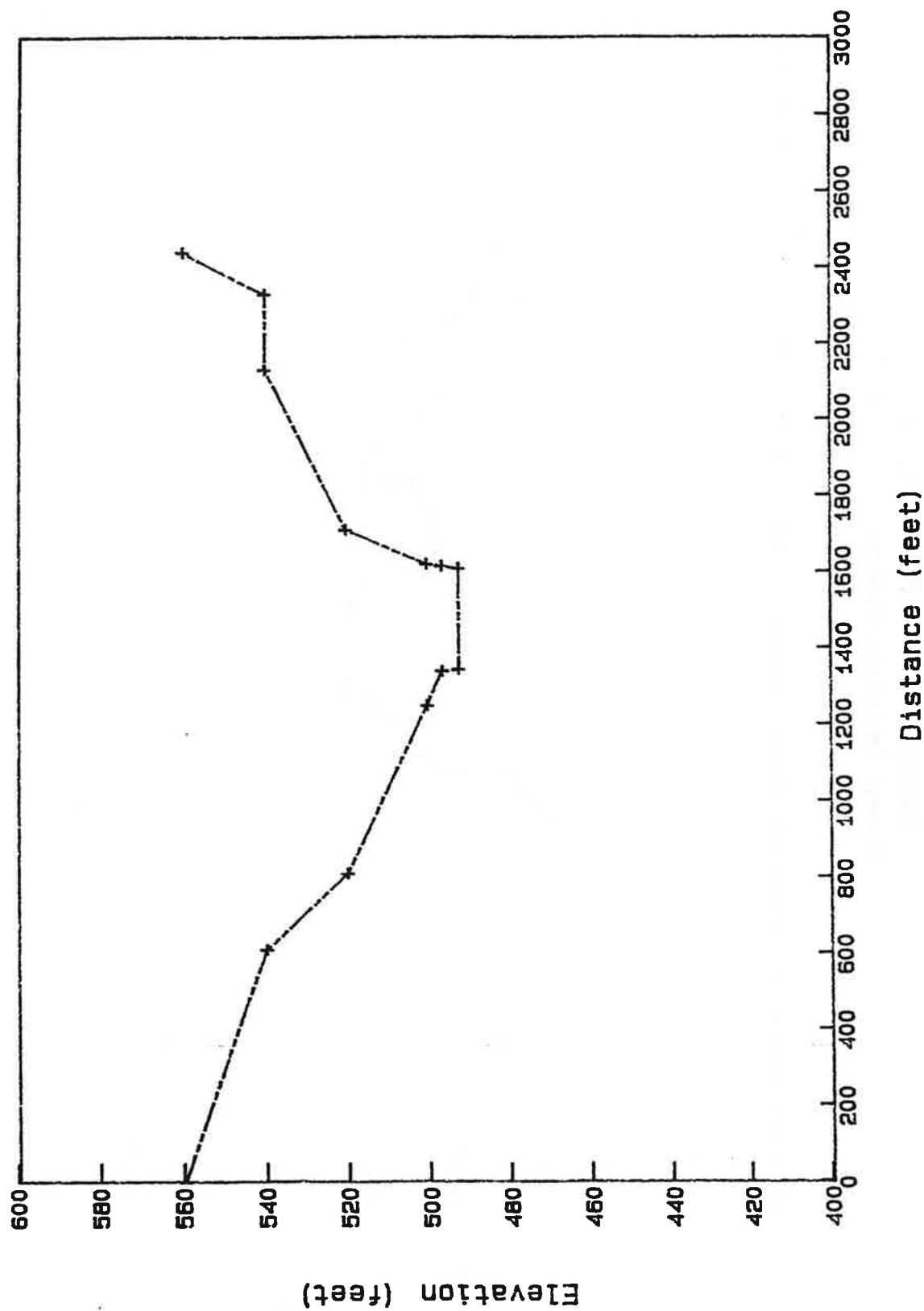
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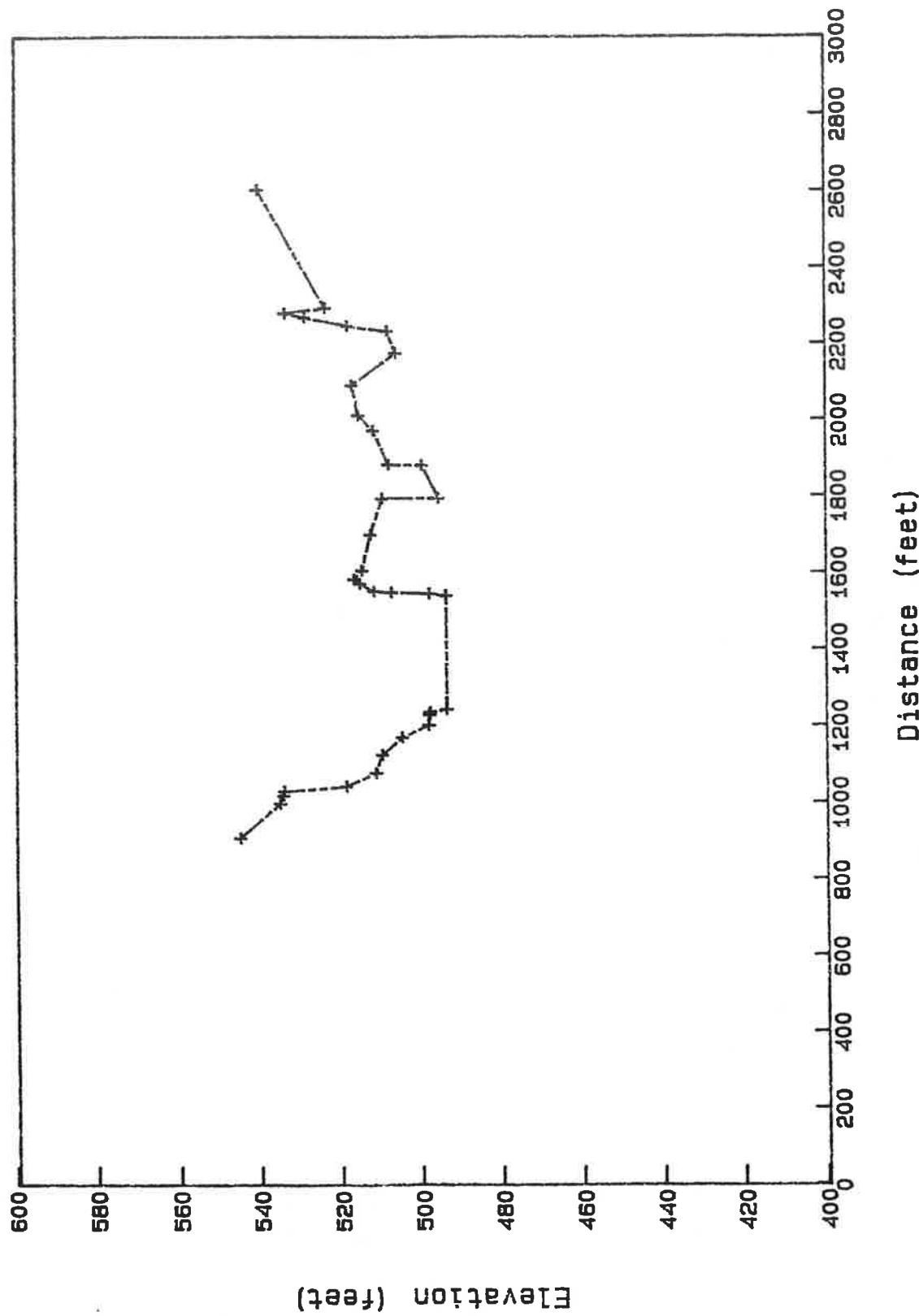
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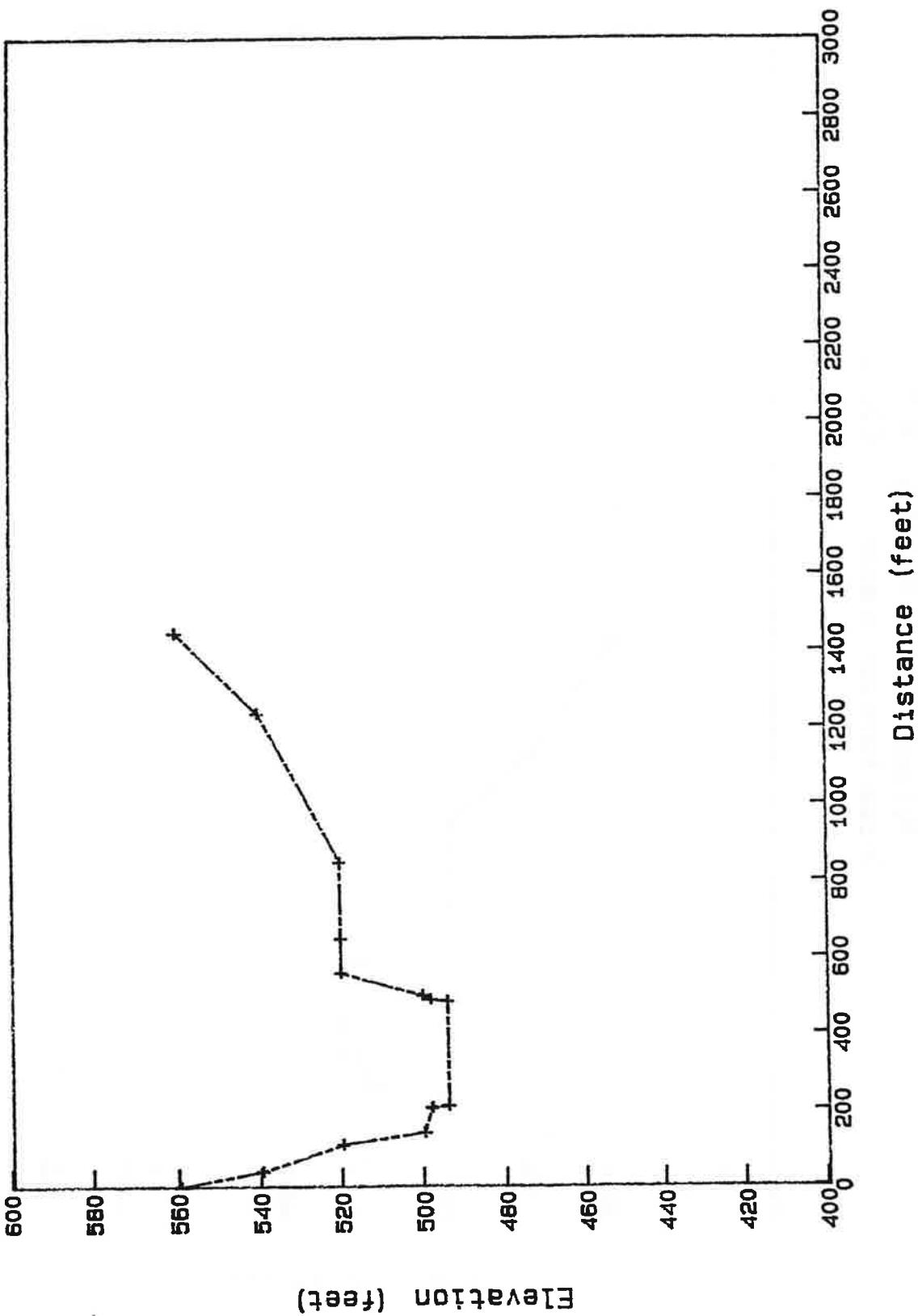
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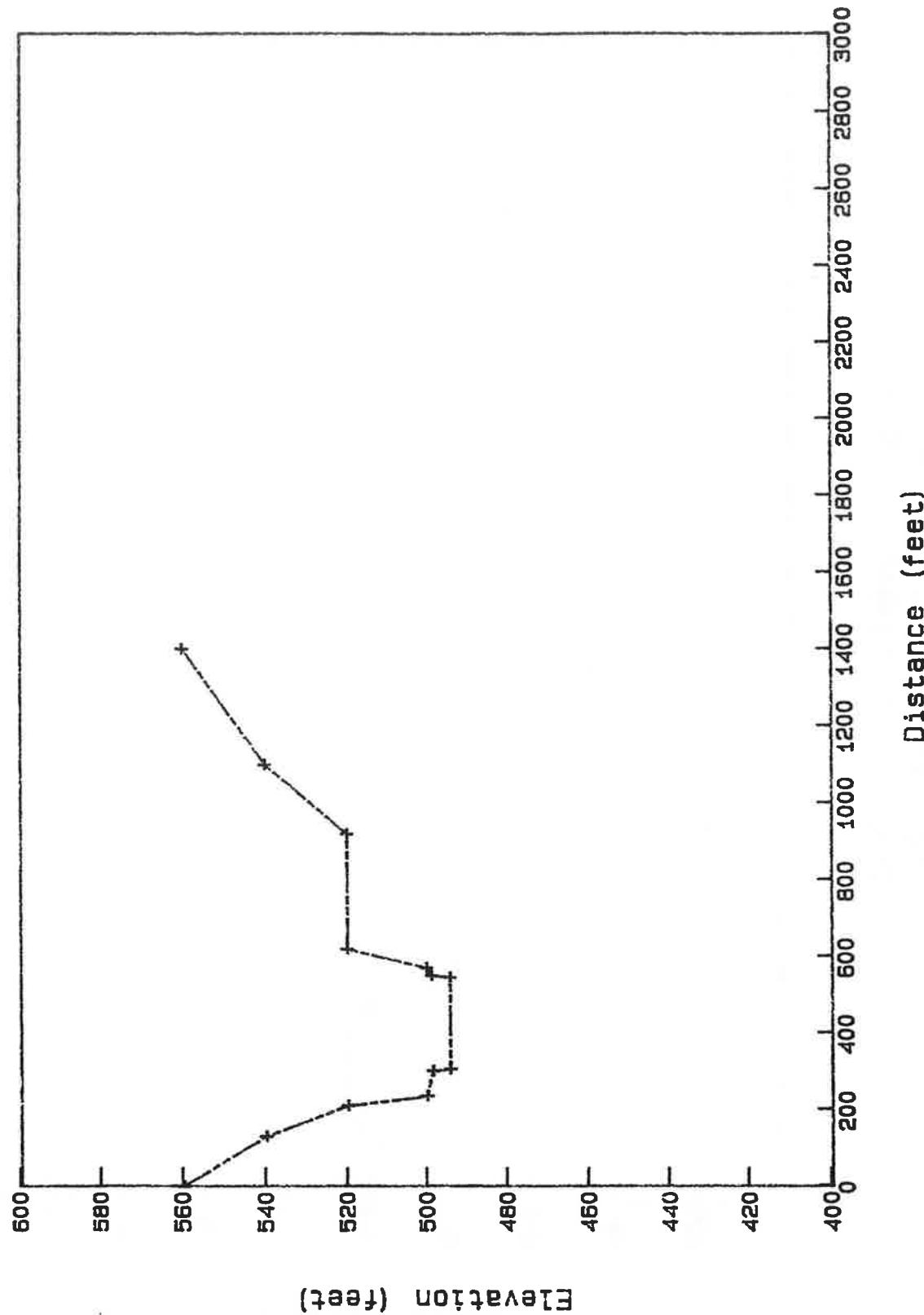
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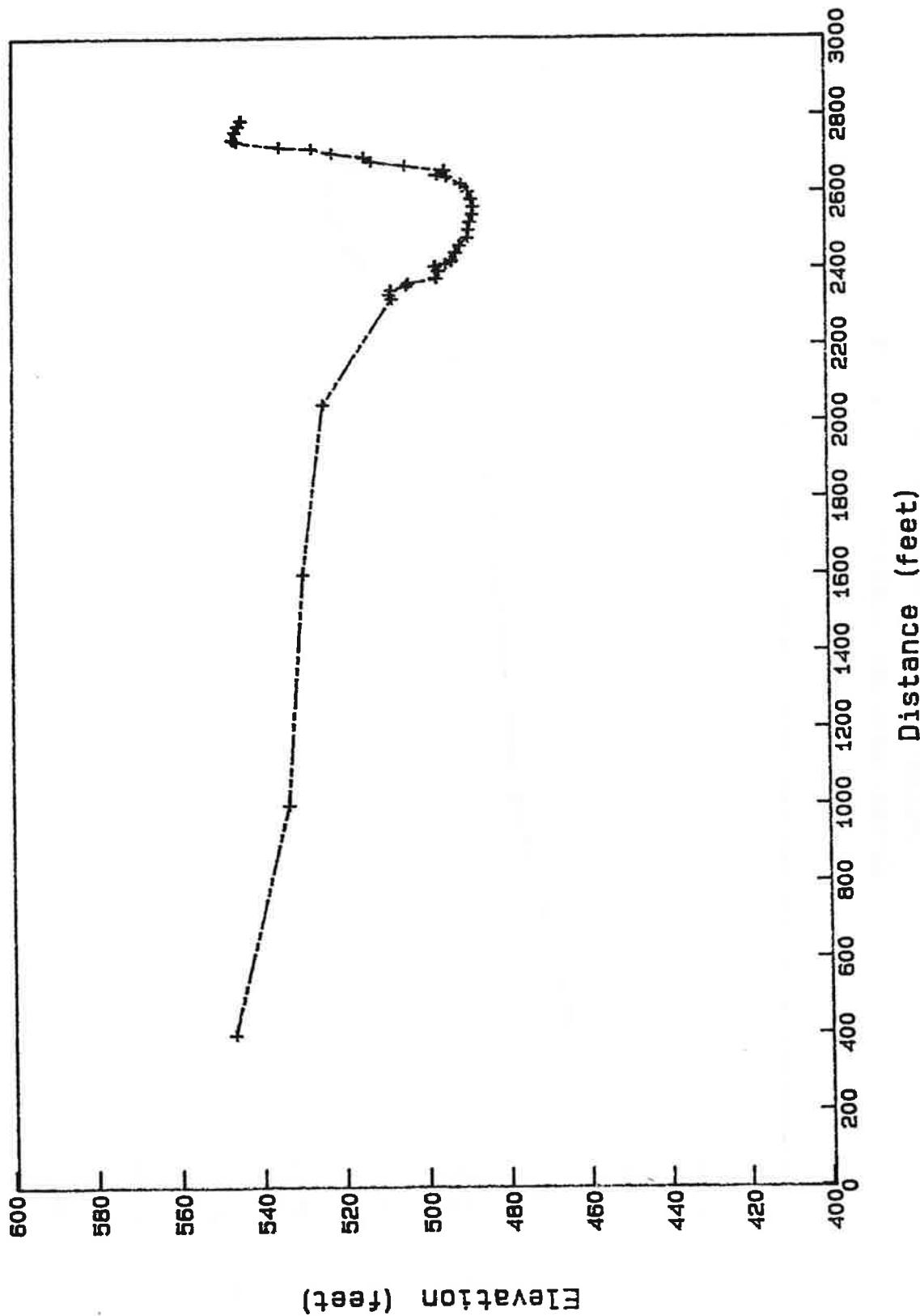
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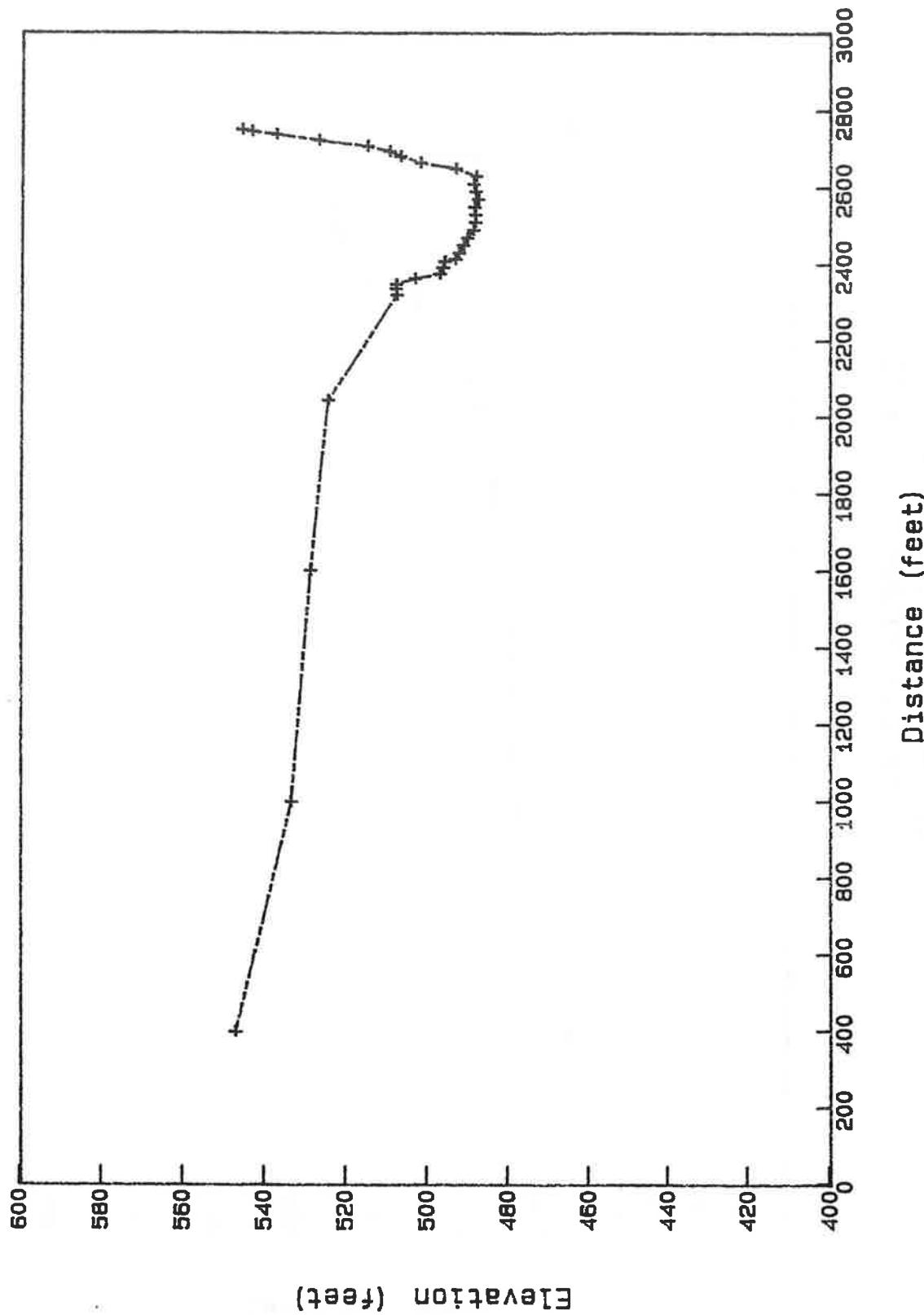
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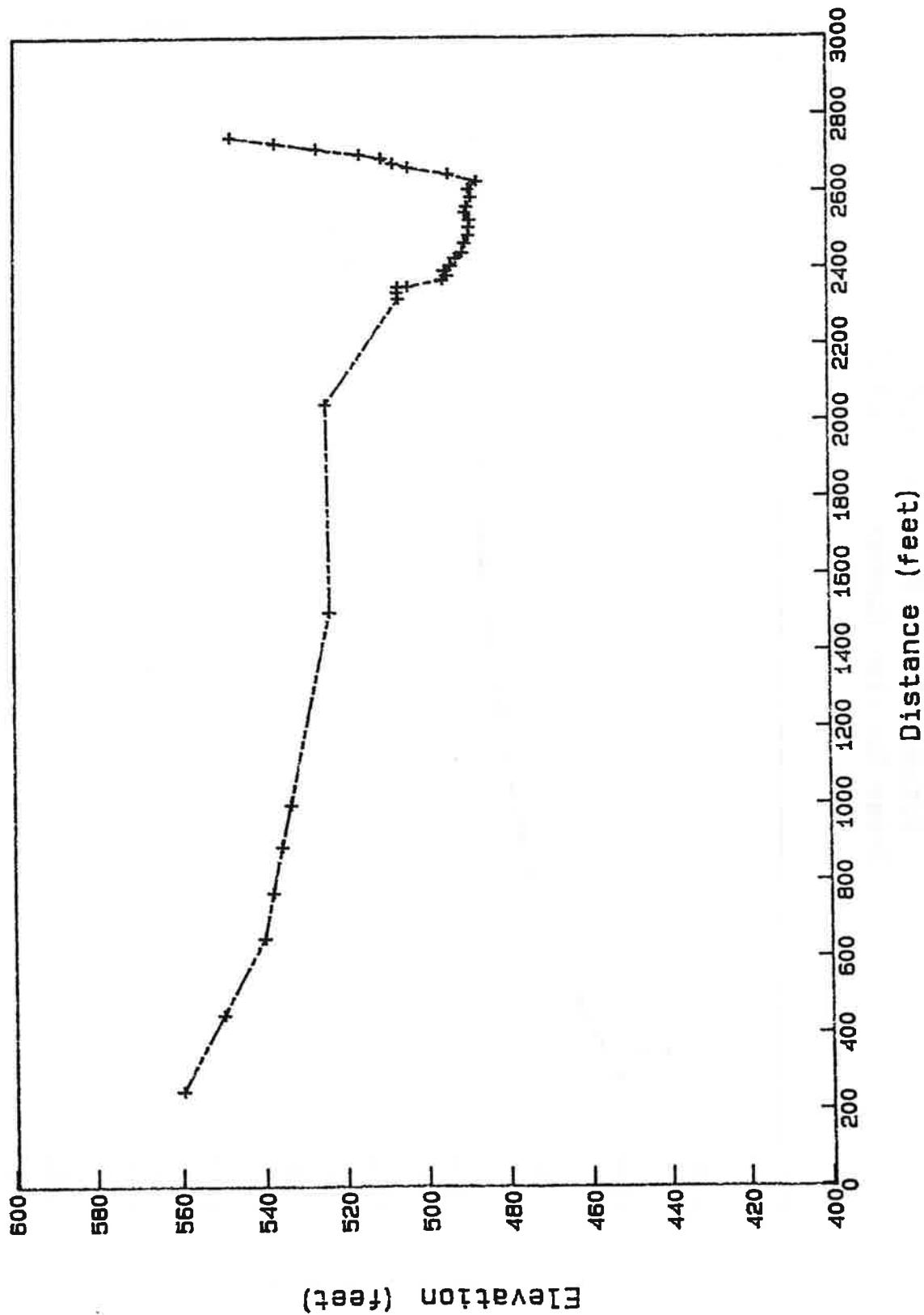
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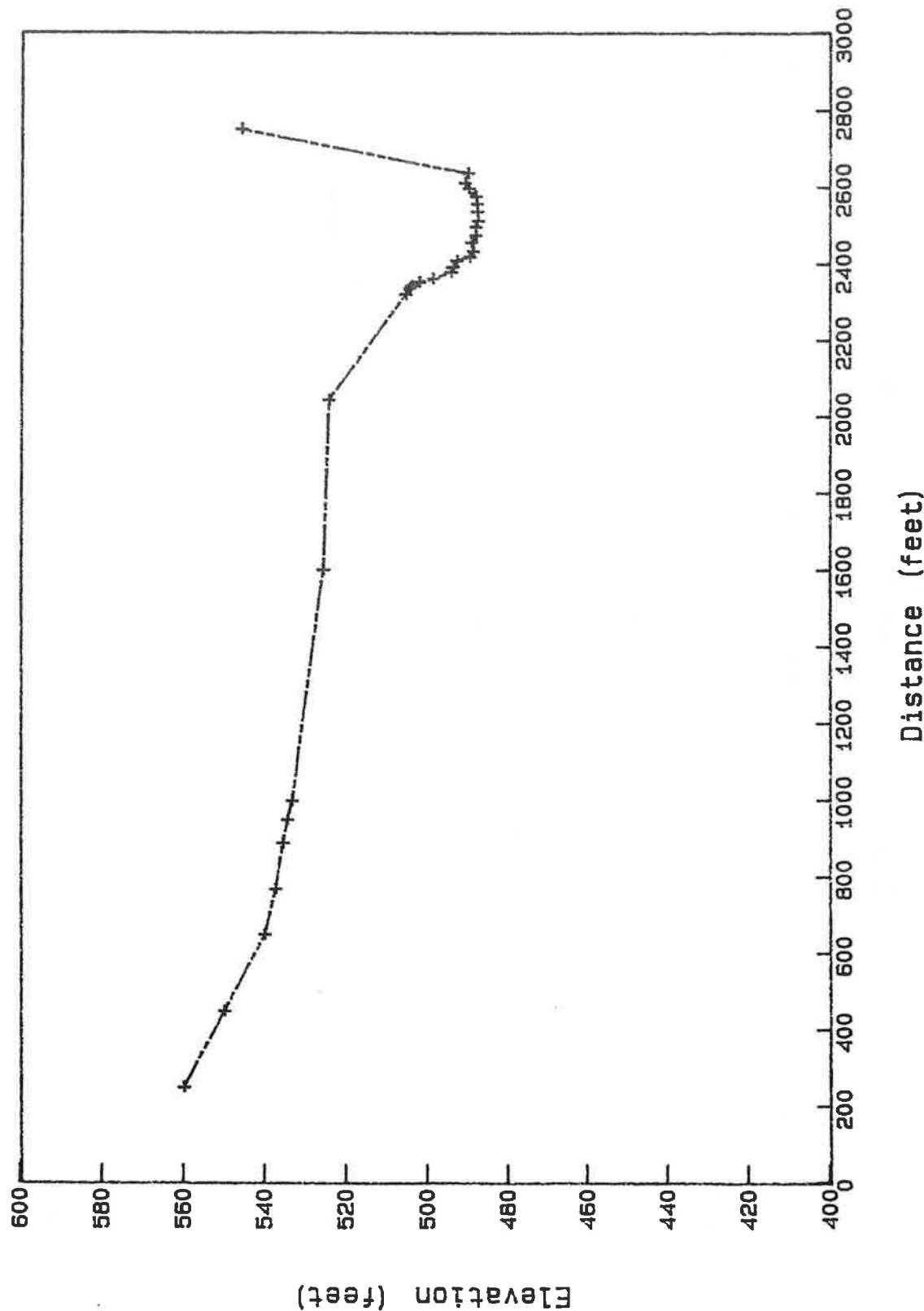
Potomac River Paw Paw, W.V.
Cross Section Number 9.00



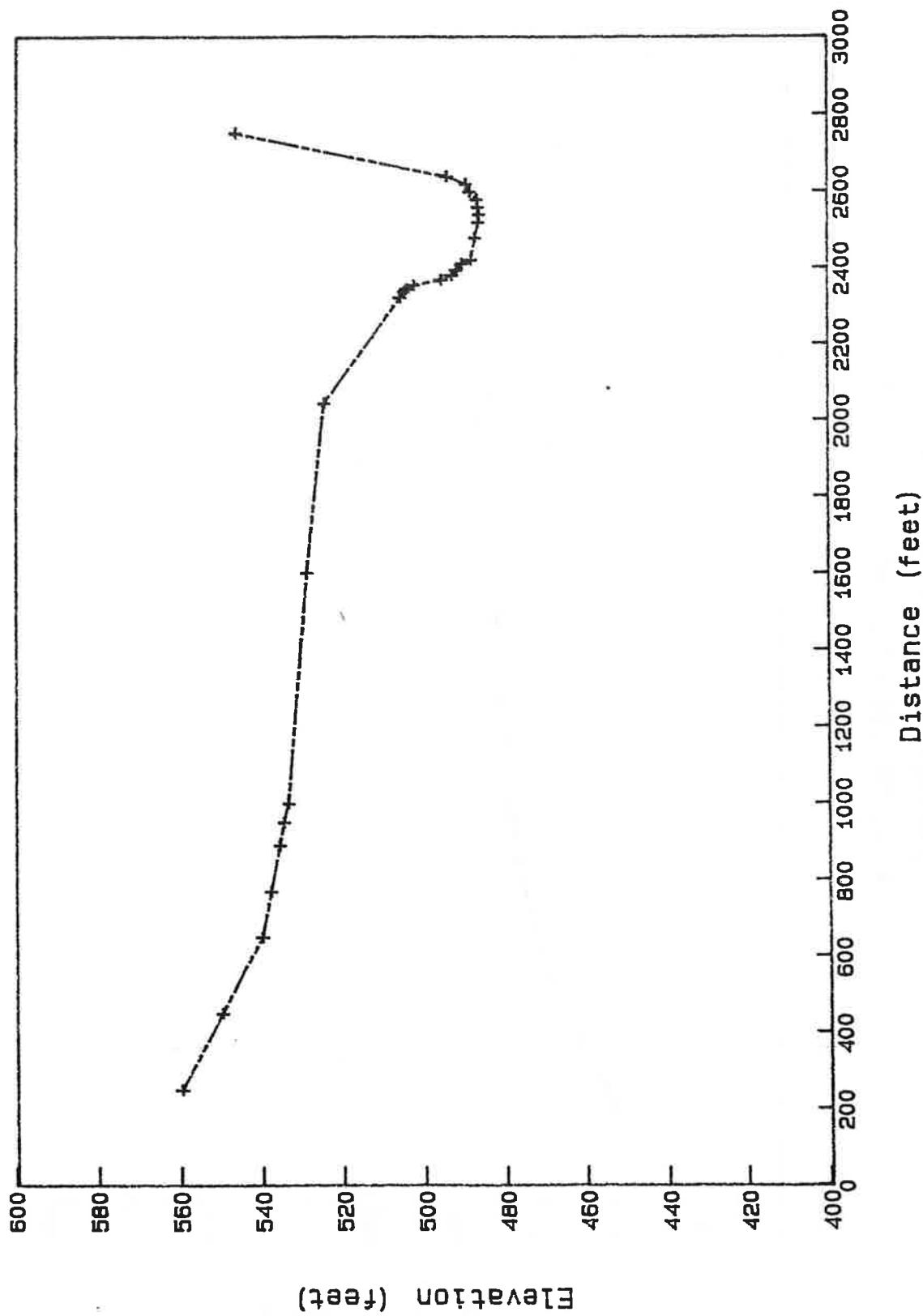
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Cross Section Number 9.50



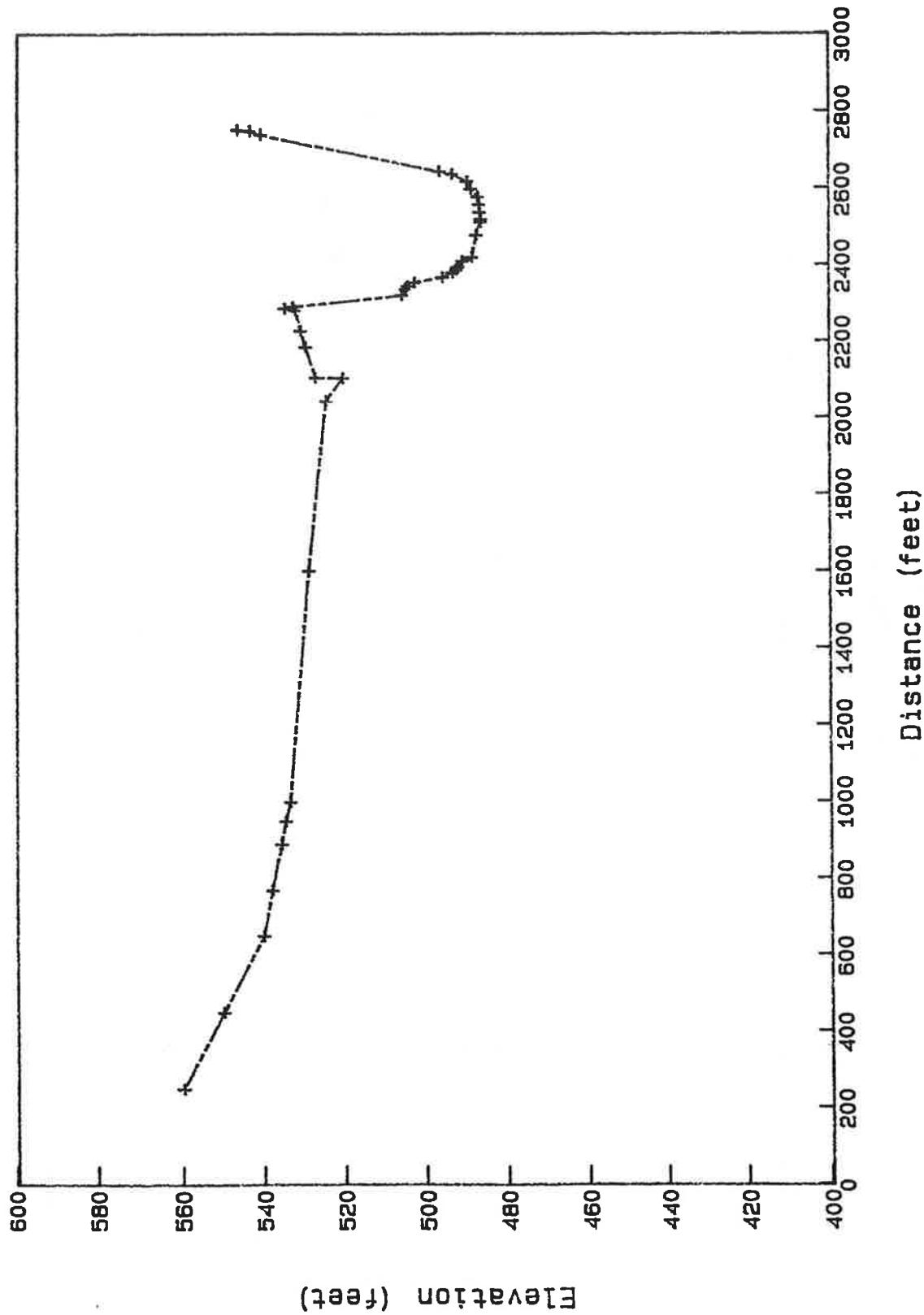
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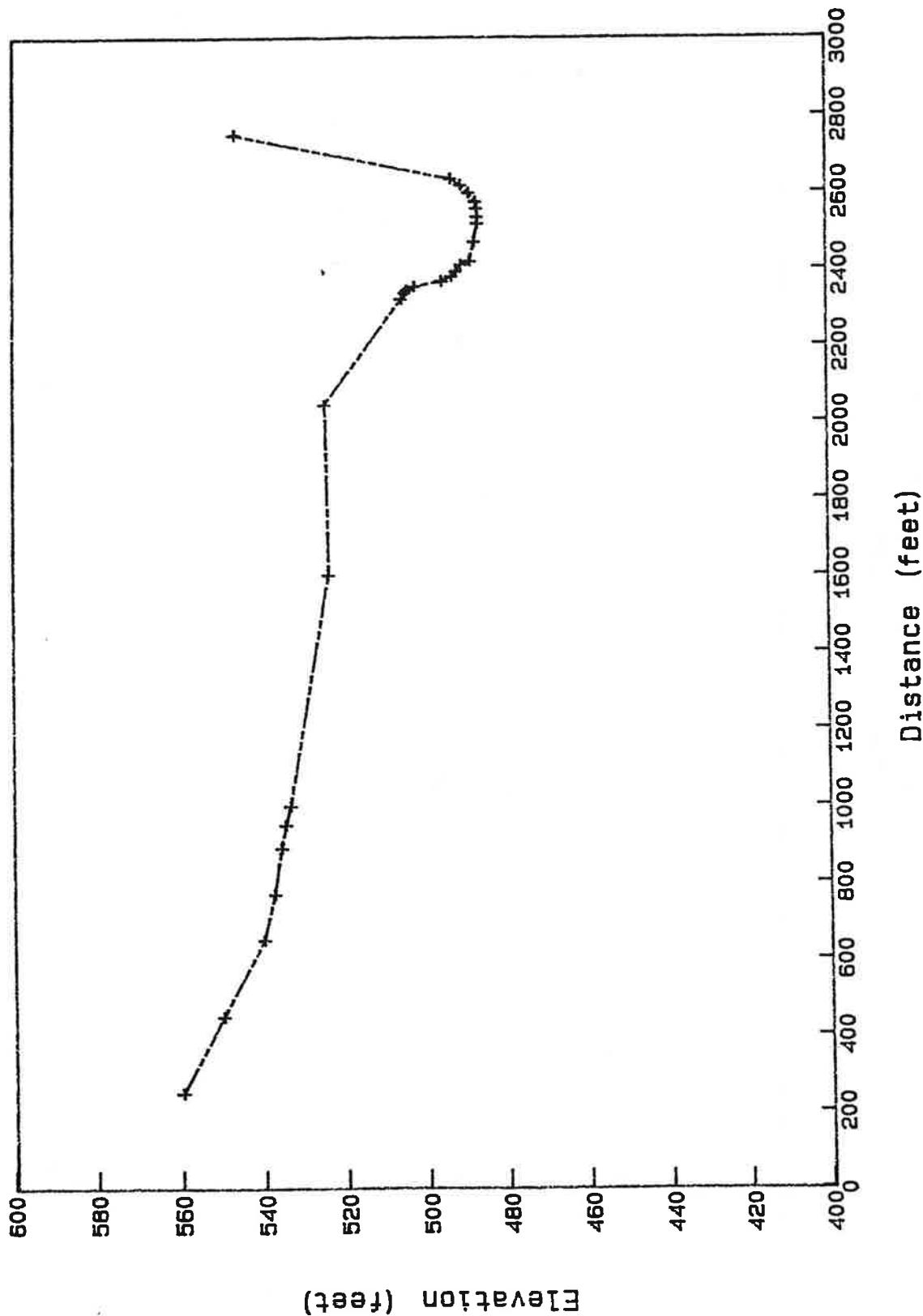
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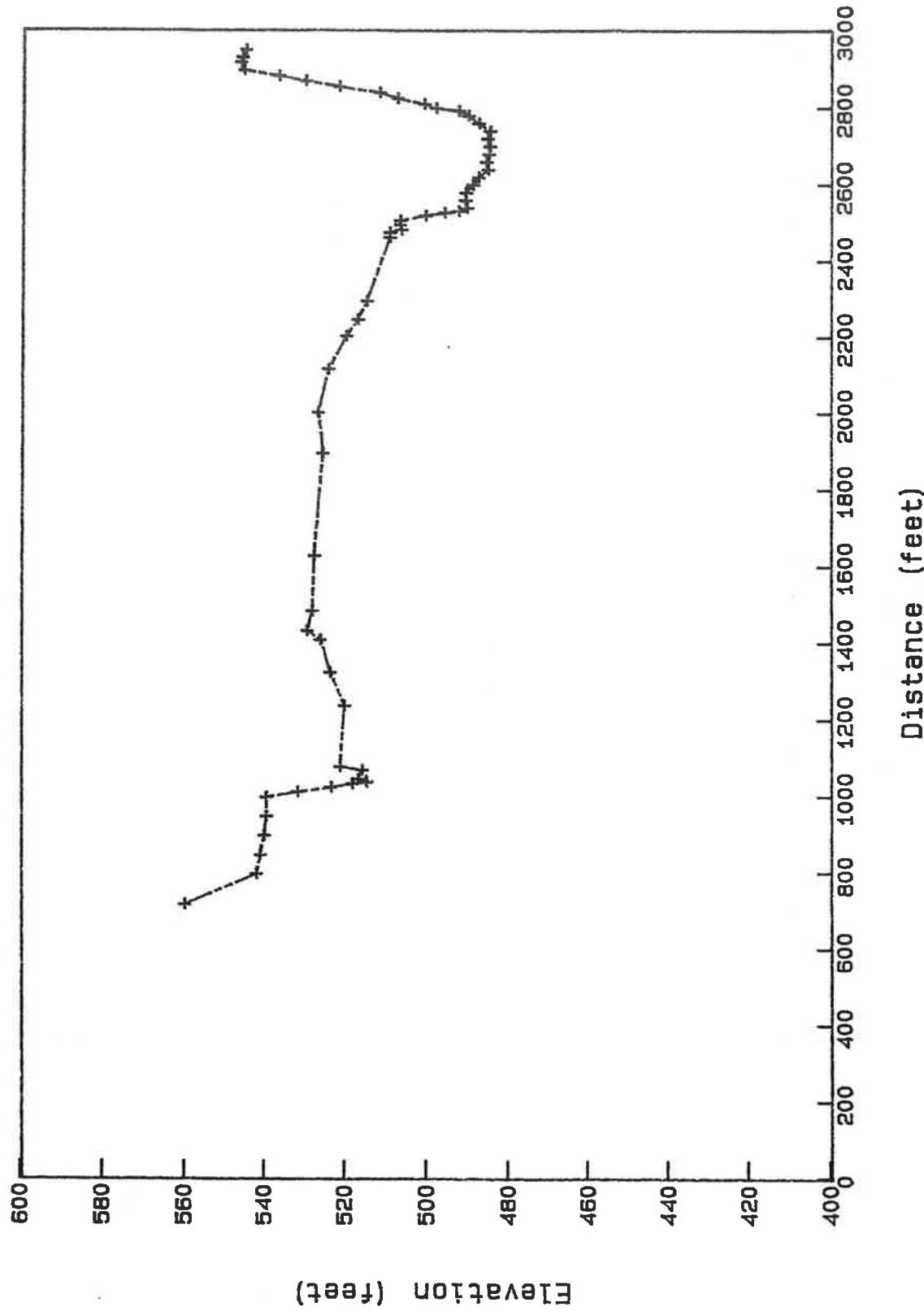
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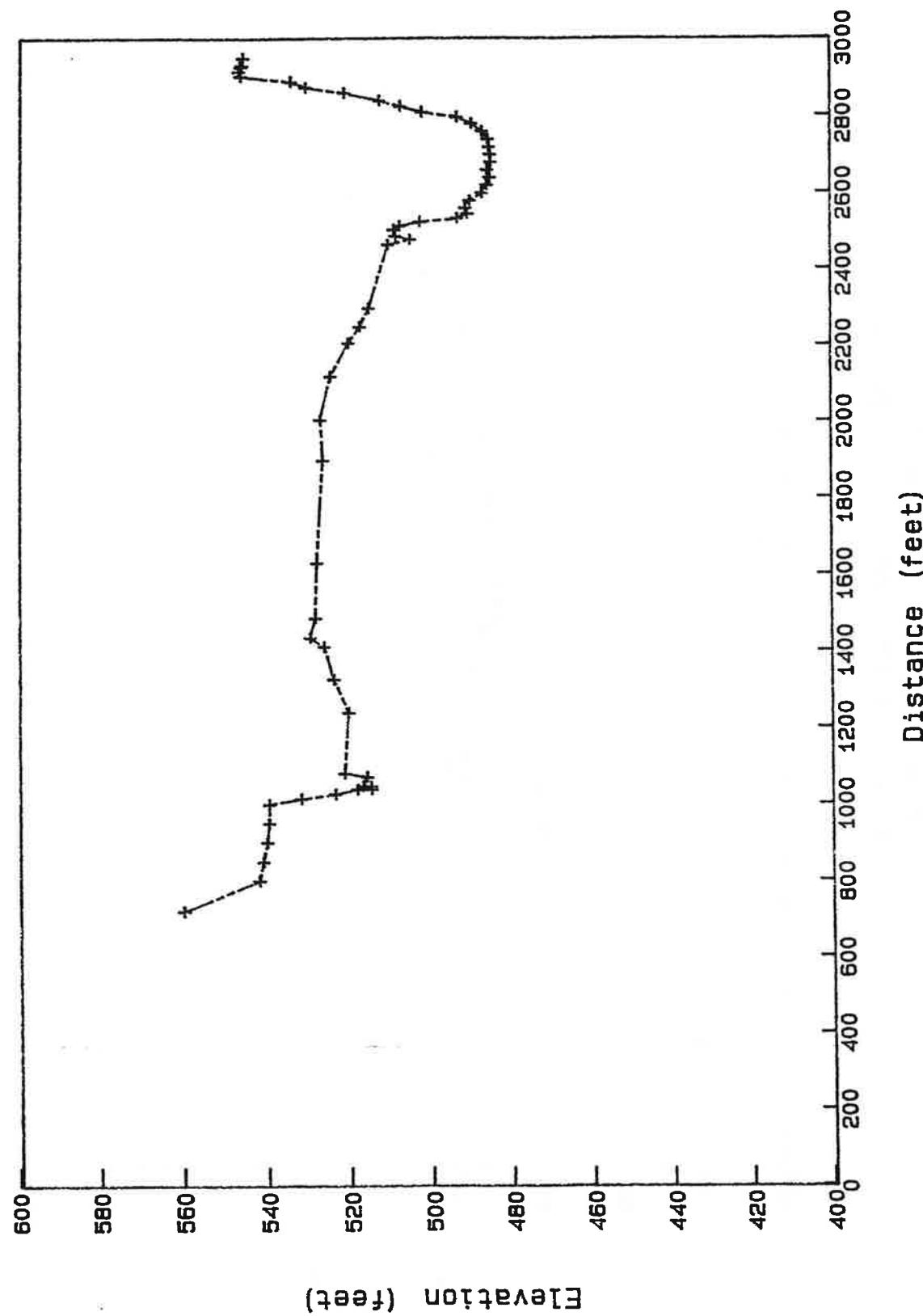
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Cross Section Number 10.54



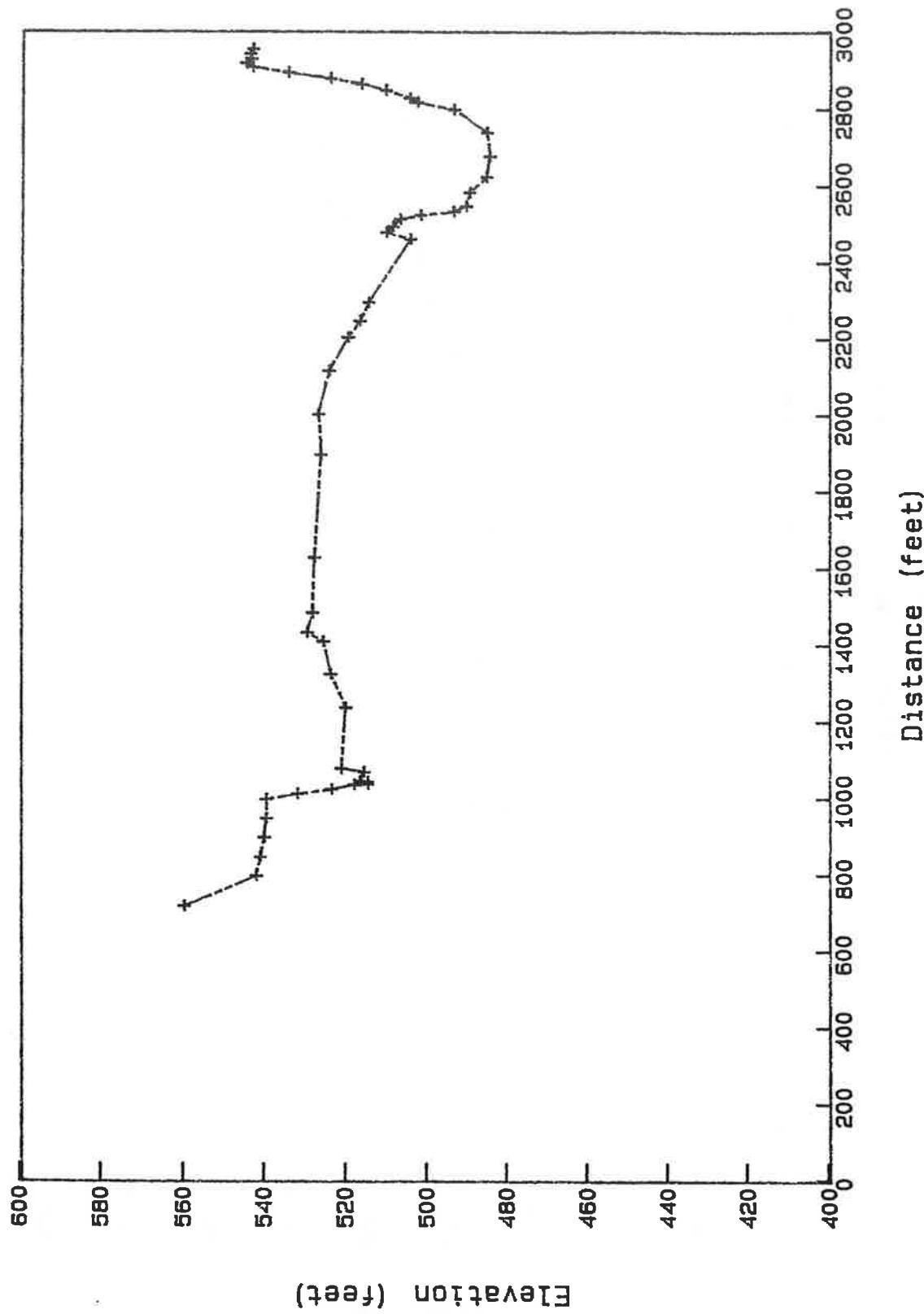
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Cross Section Number 11.00



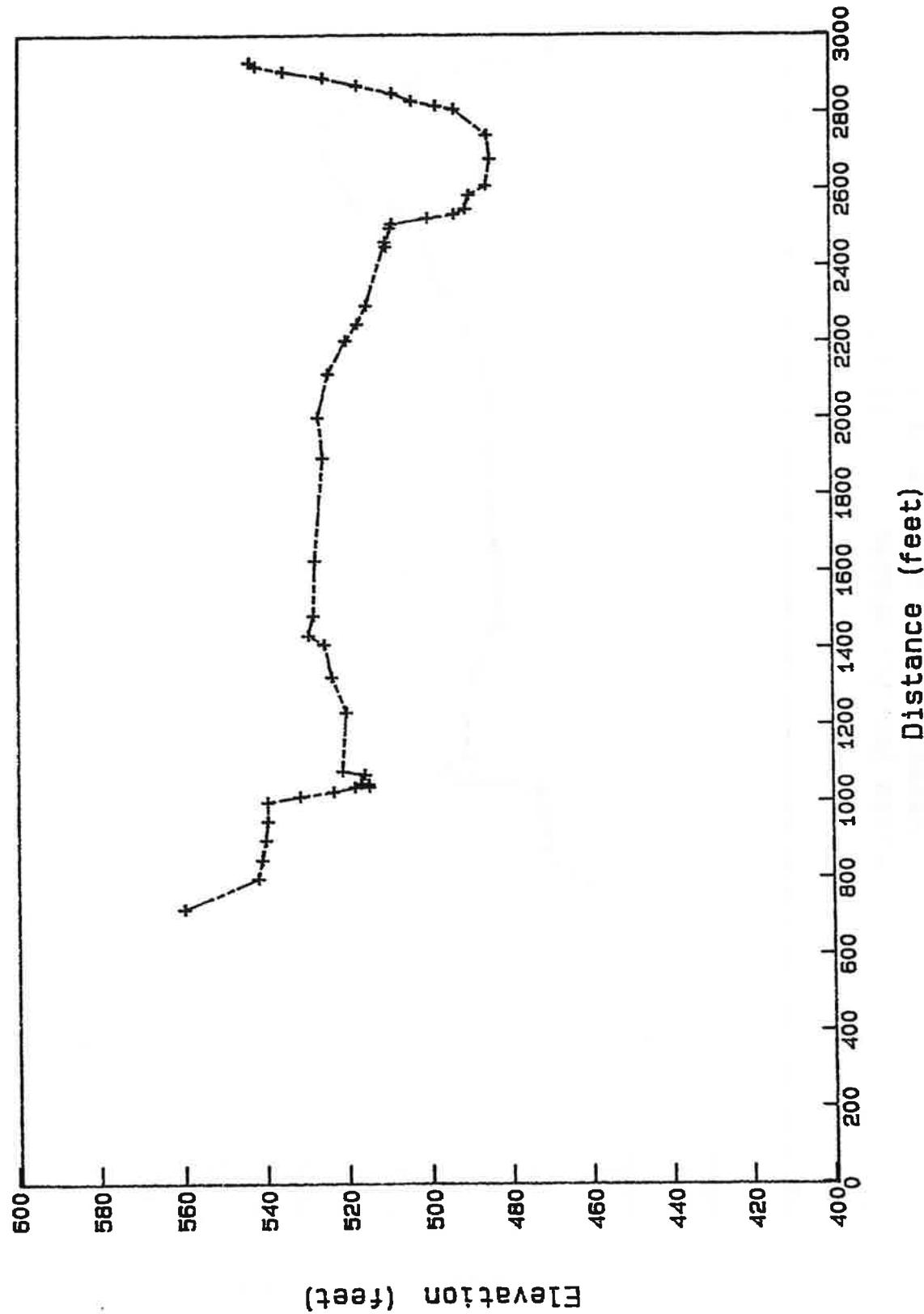
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Cross Section Number 11.50



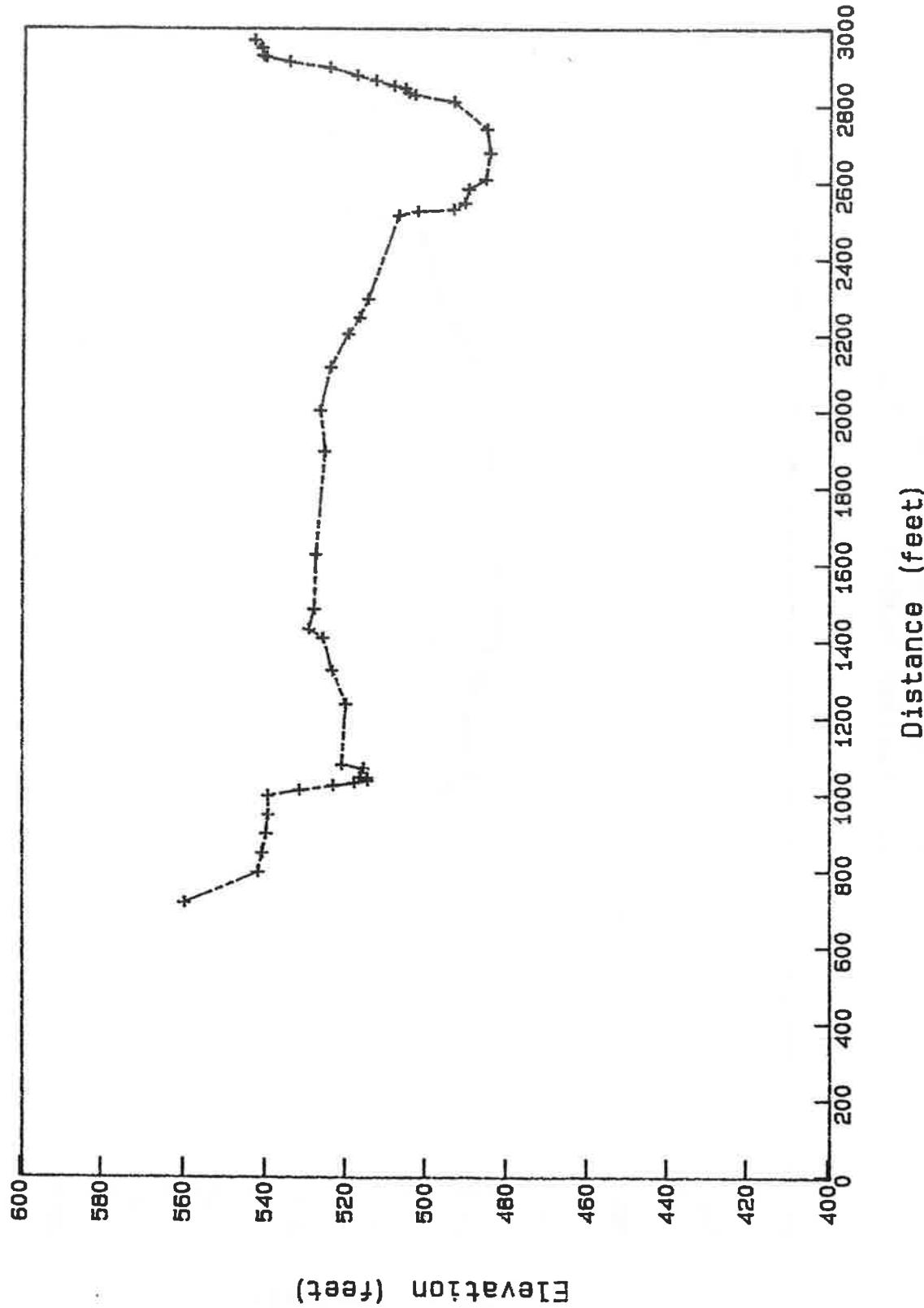
Potomac River Paw Paw W.V.
Cross Section Number 12.00



Potomac River Paw Paw, W.V.
Cross Section Number 12.50



Potomac River Paw Paw, W.V.
Cross Section Number 12.91



Cross Sections 18 through 23

These transects were prepared for the Baltimore District of the ACE's floodplain information study of Washington County. Cross section 18 is taken at the current location of the Hancock maintenance yard. Cross section 21 is located at the USGS stream gage at Hancock, providing a rated control section. Section 22 as well as sections at the 522 bridge are not included in this data report. In each of these cross sections the C&O Canal prism is easily identified at elevation 415 msl.

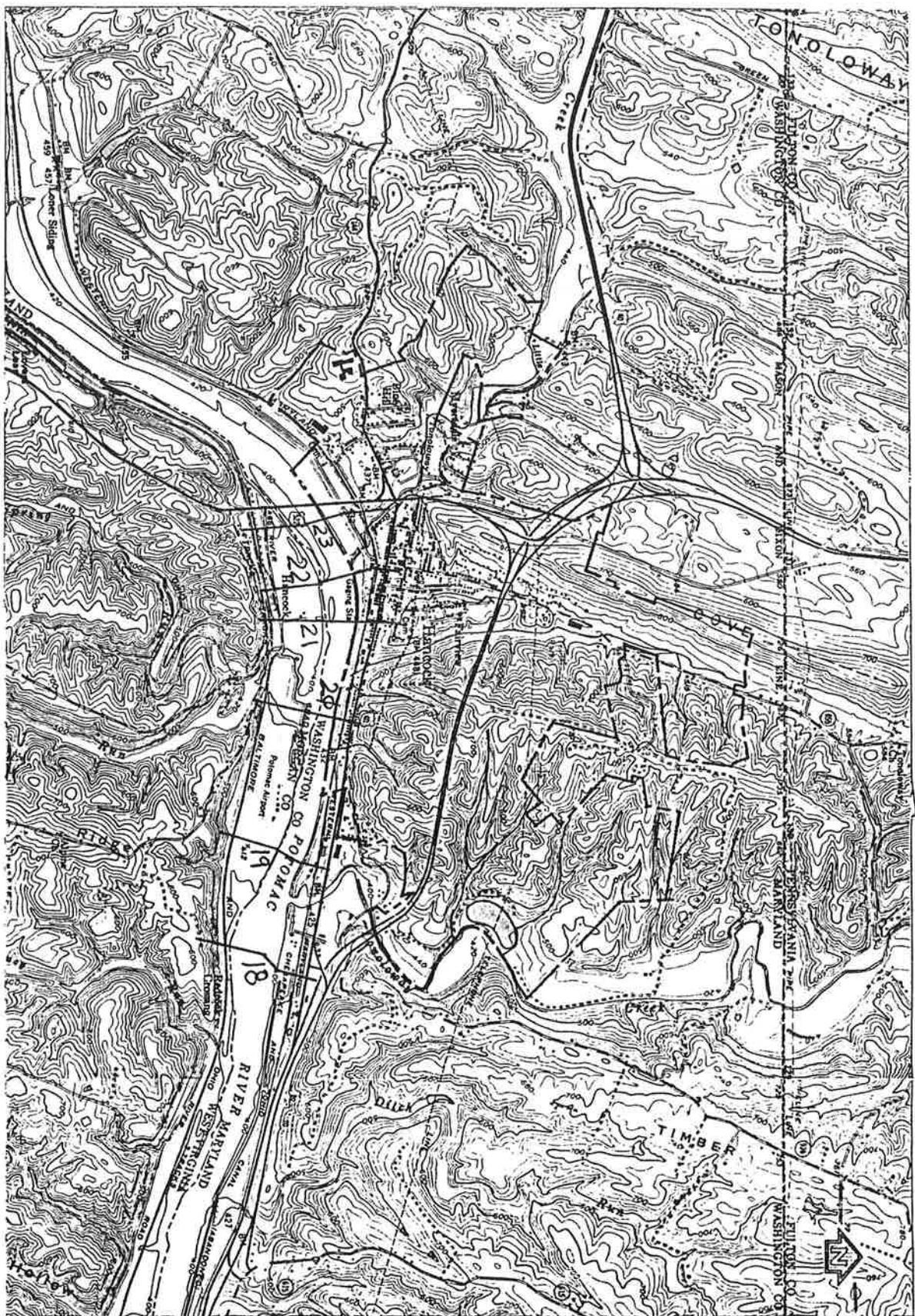


FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

**TOWN OF HANCOCK, MD
(WASHINGTON CO.)**

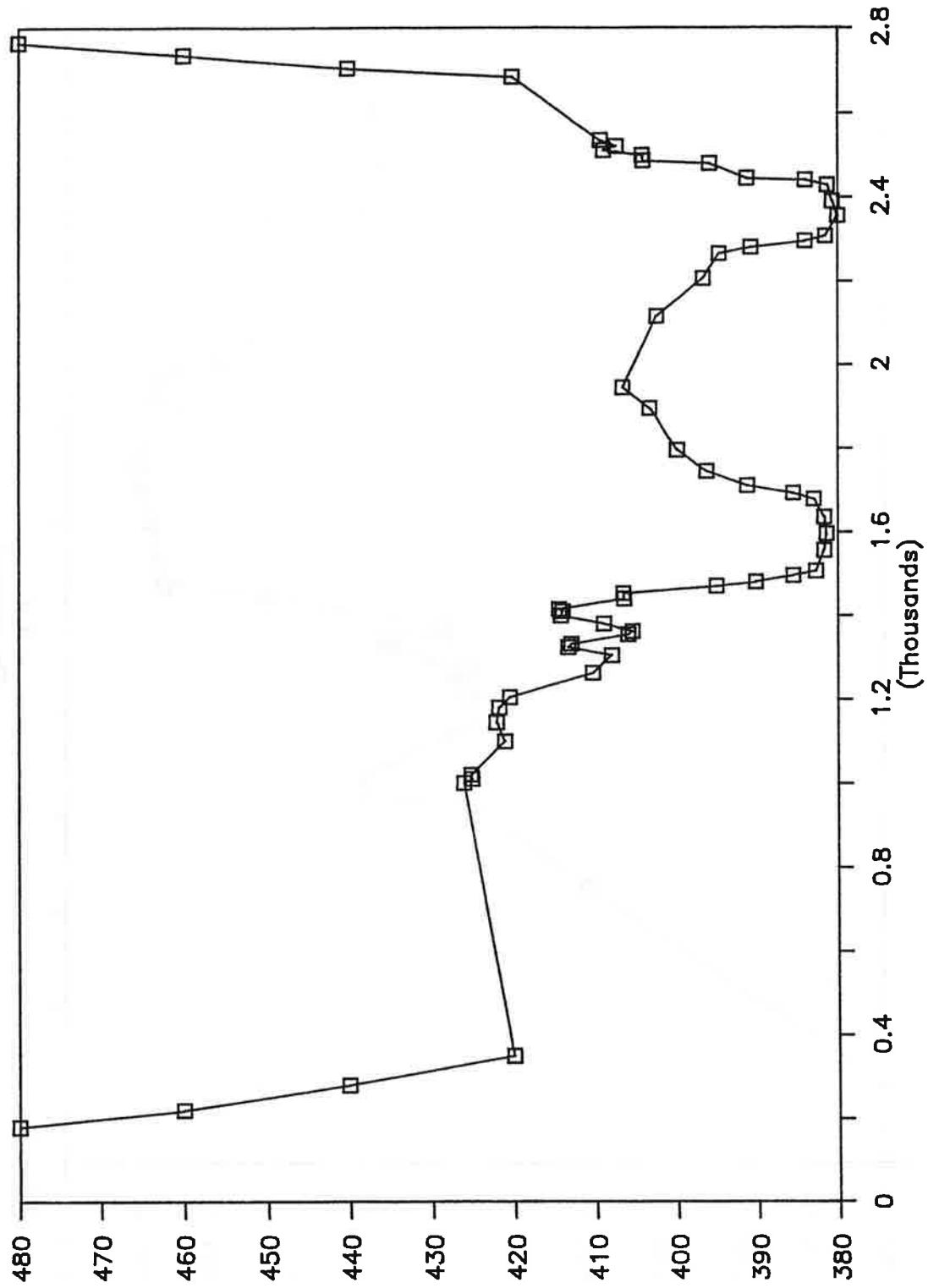
APPROXIMATE SCALE

2000 0 2000 4000 6000 FEET

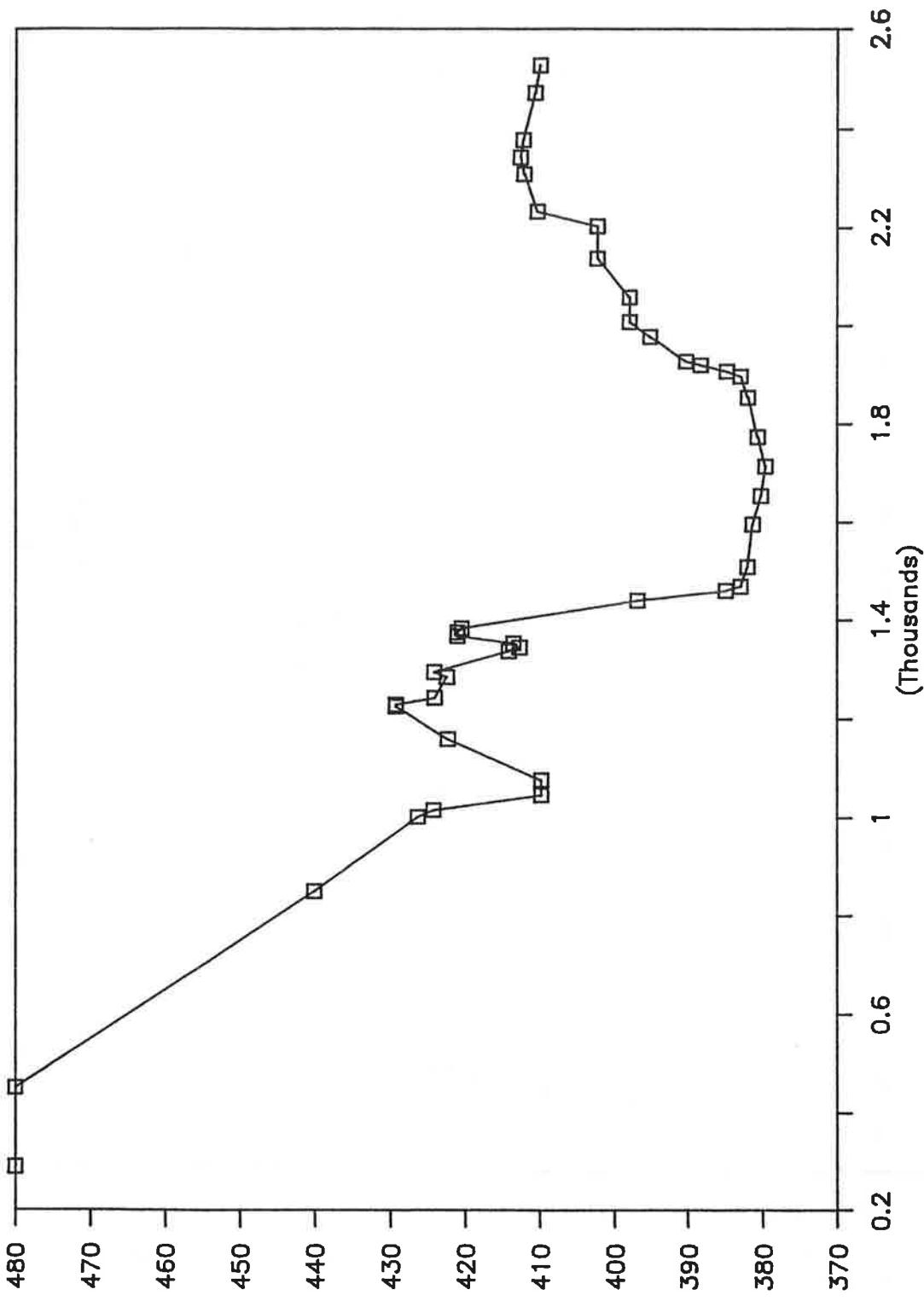
VICINITY MAP

Map 3

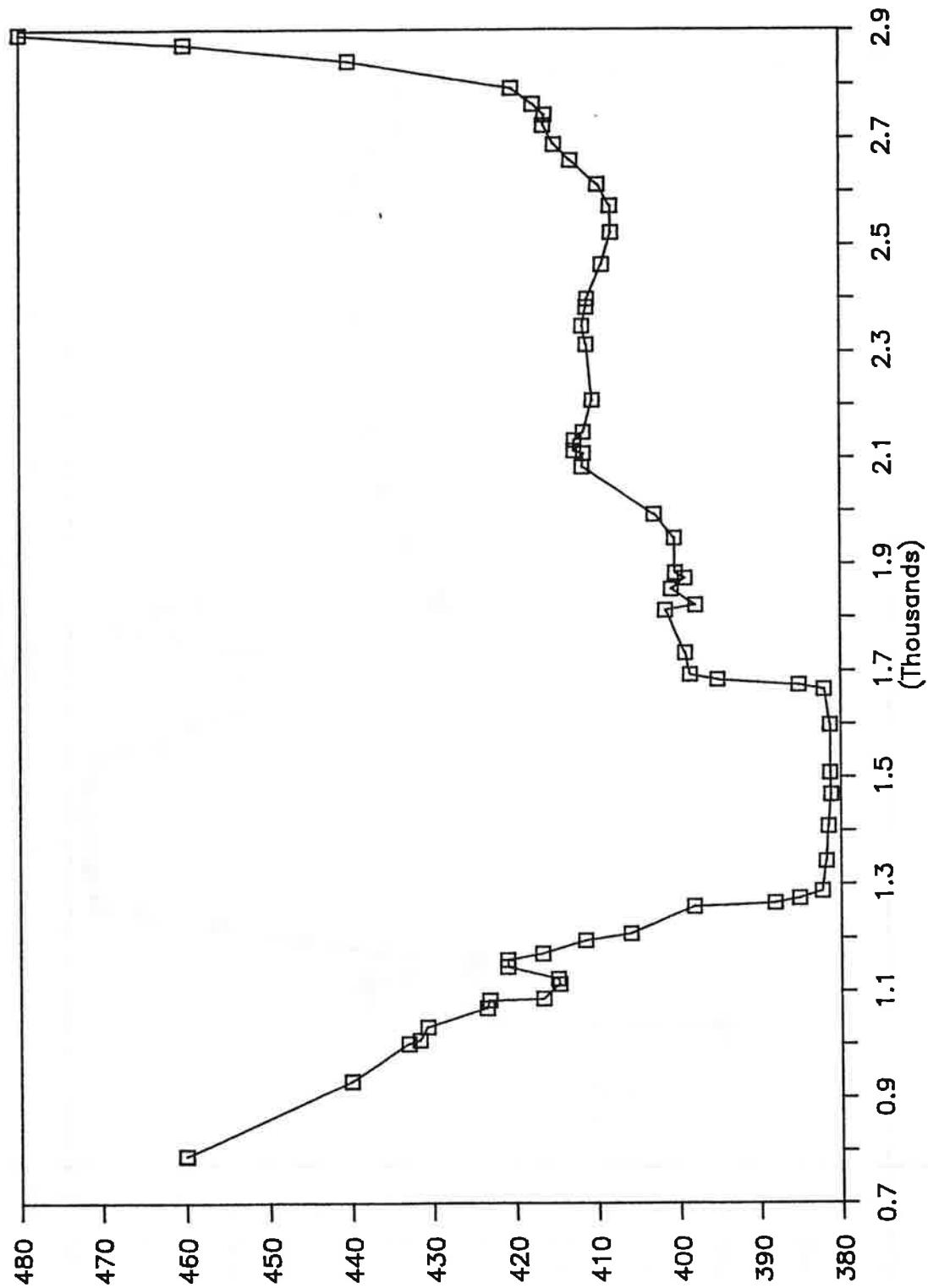
Cross Section X18



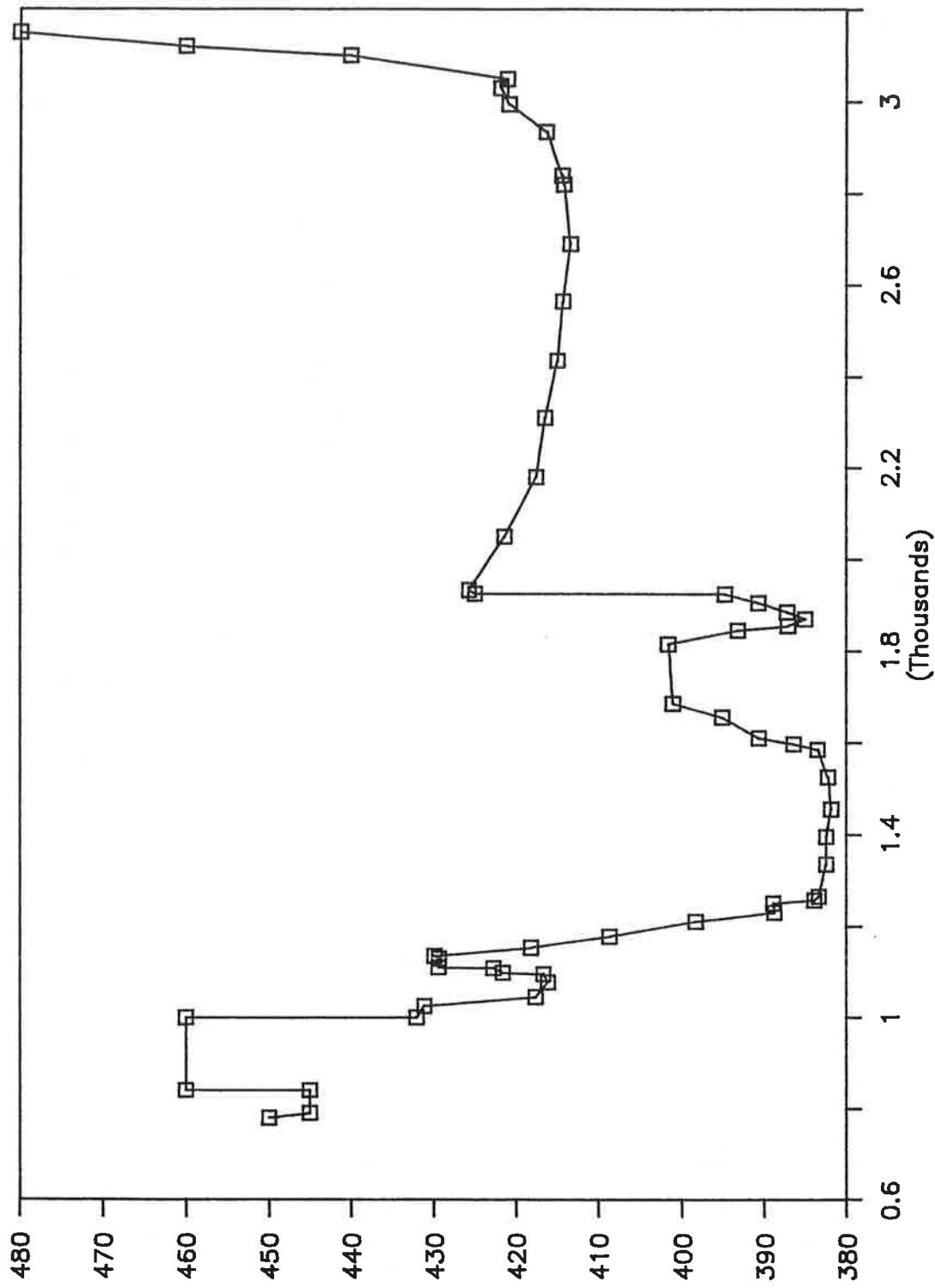
Cross Section X19



Cross Section X20



Cross Section X21



Cross Section X23

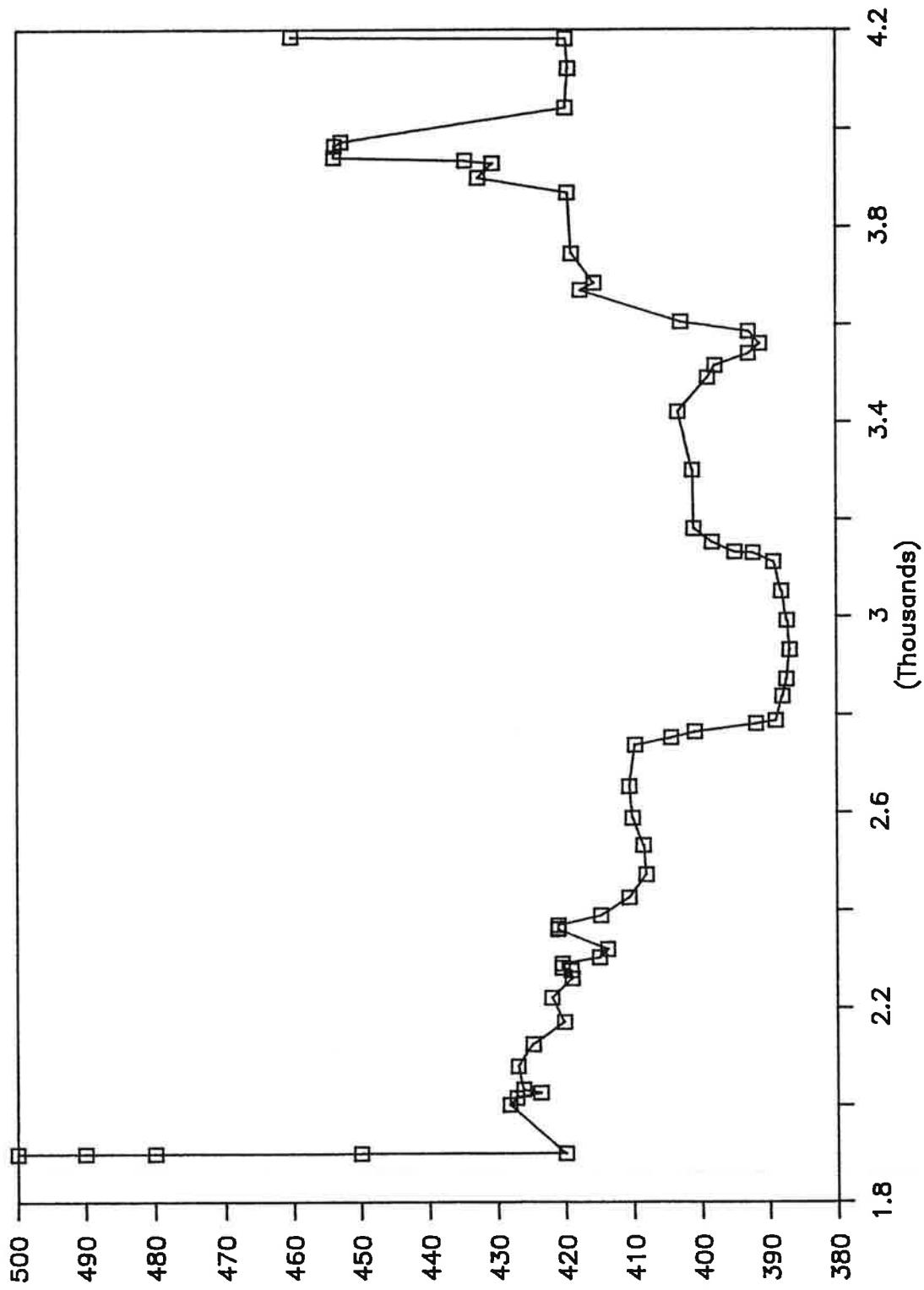


PHOTO PLATE 1
USCGS BENCHMARK A 43, RT. 522 BRIDGE, HANCOCK, MD.

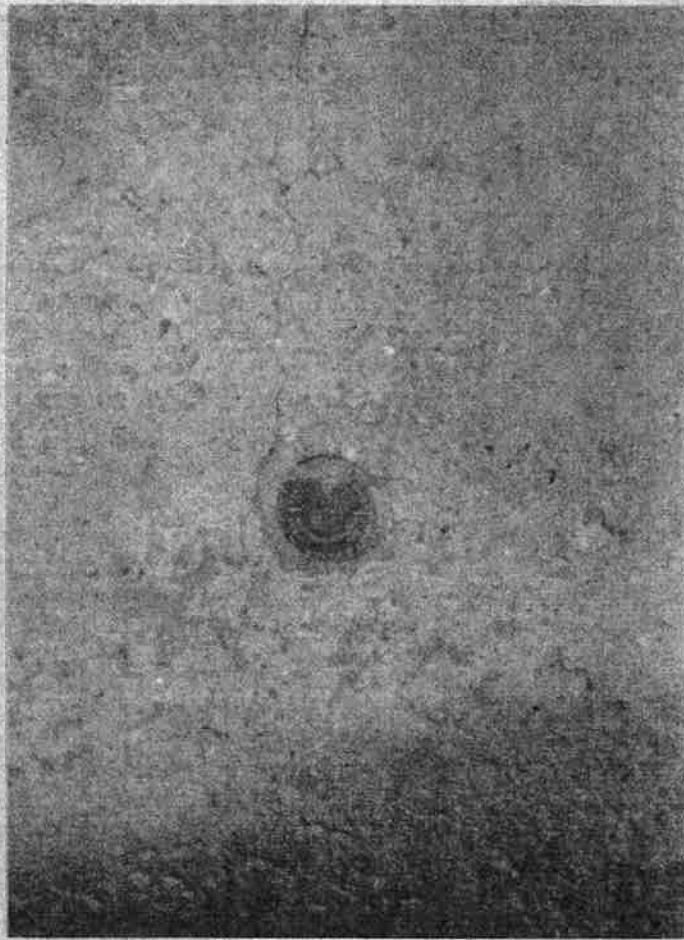


PHOTO PLATE 2
USCGS BENCHMARK C 448, HANCOCK BANK, HANCOCK, MD.

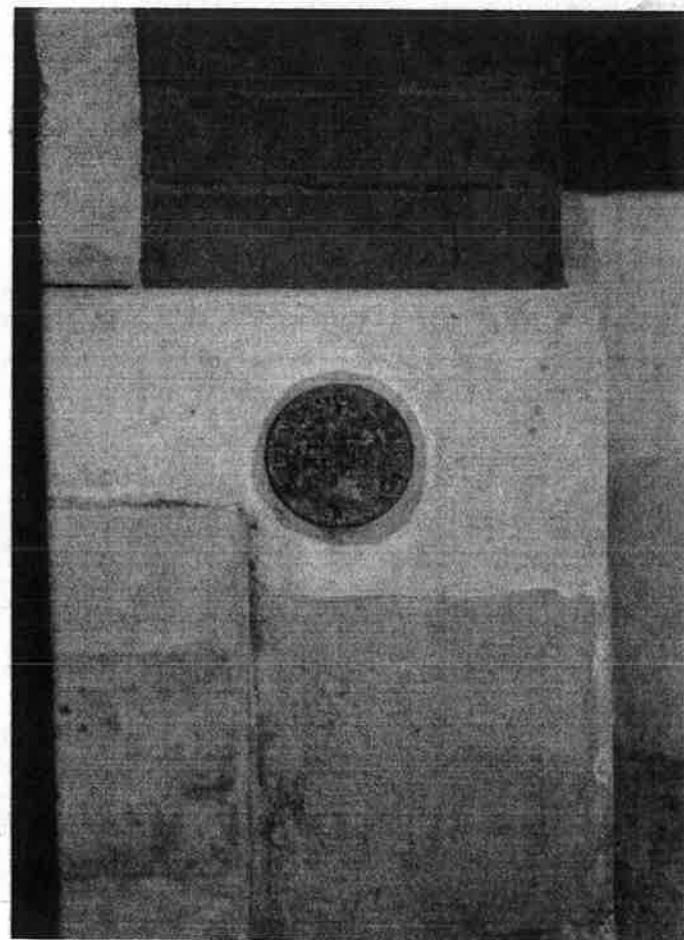


PHOTO PLATE 3
USGS BENCHMARK C459, C&O CANAL AQUEDUCT, FIFTEEN MILE CREEK

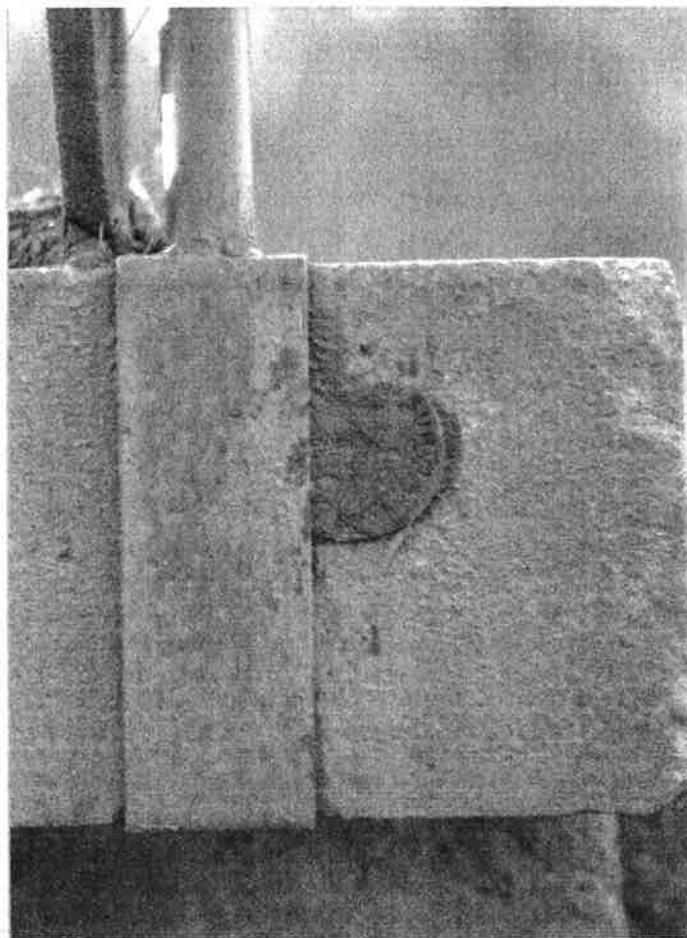


PHOTO PLATE 4
1936 HIGH WATER MARK, USGS GAGE 01613000, HANCOCK, MD.

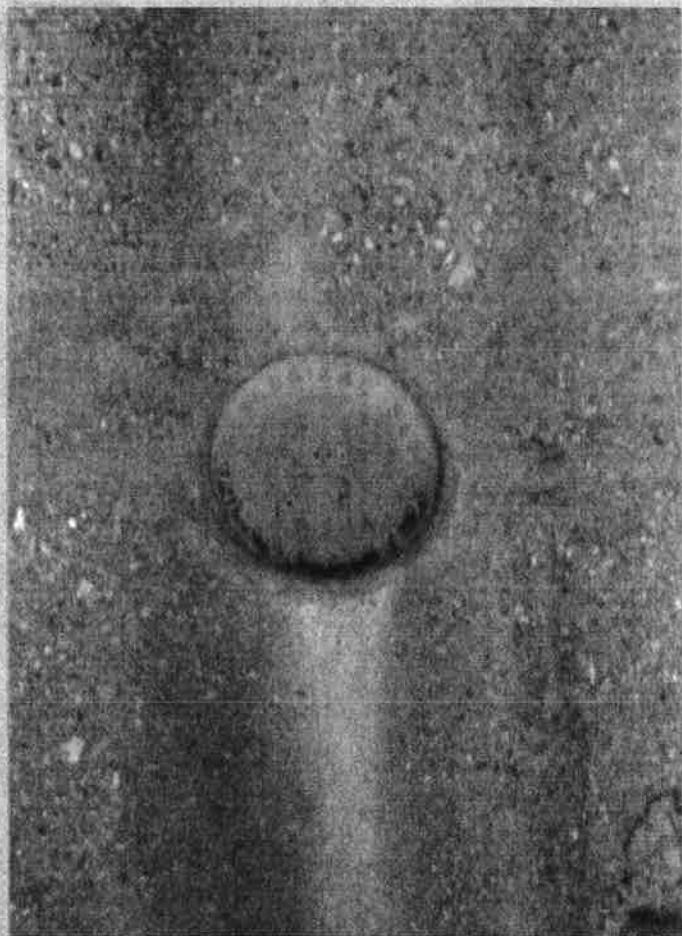


PHOTO PLATE 5
FEMA REFERENCE MARK RM 4, RT. 144 BRIDGE, HANCOCK, MD.



PHOTO PLATE 6
RAIL SALVAGE TRAIN IN OPERATION



PHOTO PLATE 7
ROAD BED AFTER RAIL SALVAGING



APPENDIX A

USCGS vertical controls for Paw Paw, WV. 30 minute Quadrangle

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

VERTICAL CONTROL DATA

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

QUAD 390781 PAGE NO. 2
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

DESCRIPTION OF BENCH MARK

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

DESCRIPTION OF BENCH MARK

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

Designation of bench mark ... **V-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington

Designation of bench mark ... **V-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington

Designation of bench mark ... **V-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington

Distance and direction from nearest town **.3 miles southeast of** along Western Maryland R.R.
Detailed description of location **In .3 miles southeast along the Western Maryland Railroad from the station at Hancock, .3 miles northwest of mile-post No. 111, at a public road crossing, set in the center of an old signal tower base 1/2 feet northeast of the 2nd telegraph pole west of the crossing, 9.5 feet north of the north rail of the track, 34 feet "W-12 1911".**

Distance and direction from nearest town **.1.2 miles southeast of** along Western Maryland R.R.
Detailed description of location **From the station at Hancock, .6 miles northwest of mile-post No. 111, set in the southwest corner of the southeast headwall of the concrete railroad bridge 37 feet north of the 6 telegraph pole northwest of a private road crossing, 6.1 feet southwest of the southwest rail of the track. A standard disk stamped "V-12 1911".**

Distance and direction from nearest town **.3.5 miles southeast of** along Western Maryland R.R.
Detailed description of location **From the station at Hancock, 123 feet northwest of mile-post No. 112, 19 feet north of the north rail of the track, 9 feet south of the center-line of an old wagon road, 74 feet south of the center-line of U.S. Highway No. 10, 1 foot south of a white marker post stenciled U.S.B.M. A standard disk stamped "W-12 1911", and set in top of a pre-set concrete post.**

Distance and direction from nearest town **.3.5 miles southeast of** along Western Maryland R.R.
Detailed description of location **From the station at Hancock, 51.2 feet north of mile-post No. 115, 33.8 feet north of the north rail of the main track, 67.2 feet east of the southwest corner of a school building, 23.2 feet west of the corner fence post, between the tracks and the highway No. 10. A standard disk stamped "V-12 1911", and set in the top of a pre-set concrete post 1 foot south of a white marker post stenciled U.S.B.M.**

Recovered as described - 1942

Recovered as described - 1942

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

Designation of bench mark ... **V-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington
Distance and direction from nearest town **.245 miles southeast of** along Western Maryland R.R.
Detailed description of location **At Hancock, at the Hancock Bank, set vertically in the front or the north face of the bank, 13.0 feet south of the south curb of Main Street, 1.7 feet west of the west edge of the front door, 1.2 feet above the sidewalk level. A standard disk stamped "W-12 1911".**

Designation of bench mark ... **V-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington
Distance and direction from nearest town **.245 miles southeast of** along Western Maryland R.R.
Detailed description of location **At Hancock, at the Hancock Bank, set vertically in the front or the north face of the bank, 13.0 feet south of the south curb of Main Street, 1.7 feet west of the west edge of the front door, 1.2 feet above the sidewalk level. A standard disk stamped "W-12 1911".**

Designation of bench mark ... **V-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington
Distance and direction from nearest town **.245 miles southeast of** along Western Maryland R.R.
Detailed description of location **At Hancock, at the Hancock Bank, set vertically in the front or the north face of the bank, 13.0 feet south of the south curb of Main Street, 1.7 feet west of the west edge of the front door, 1.2 feet above the sidewalk level. A standard disk stamped "W-12 1911".**

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

DESCRIPTION OF BENCH MARK

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED. OCT. 1967

Designation of bench mark ... **X-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington
Distance and direction from nearest town **.245 miles southeast of** along Western Maryland R.R.
Detailed description of location **2.5 miles southeast along the Western Maryland Railroad from the station at Hancock, at a road crossing, 10 1/2 rods southeast of mile-post No. 113, set in the center of an old signal tower base, 9.1 feet northeast of the northeast rail of the track, .31 feet northwest of the road crossing, 73 feet north or telephone pole No. E-32, about 1 foot below track level, between the track and U.S. Highway No. 10. A standard disk stamped "X-12 1911".**

Designation of bench mark ... **X-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington
Distance and direction from nearest town **.245 miles southeast of** along Western Maryland R.R.
Detailed description of location **2.5 miles southeast along the Western Maryland Railroad from the station at Hancock, at a road crossing, 10 1/2 rods southeast of mile-post No. 113, set in the center of an old signal tower base, 9.1 feet northeast of the northeast rail of the track, .31 feet northwest of the road crossing, 73 feet north or telephone pole No. E-32, about 1 foot below track level, between the track and U.S. Highway No. 10. A standard disk stamped "X-12 1911".**

Designation of bench mark ... **X-12** State ... Maryland County ... Washington
Nearest town ... HANCOCK County ... Washington
Distance and direction from nearest town **.245 miles southeast of** along Western Maryland R.R.
Detailed description of location **2.5 miles southeast along the Western Maryland Railroad from the station at Hancock, at a road crossing, 10 1/2 rods southeast of mile-post No. 113, set in the center of an old signal tower base, 9.1 feet northeast of the northeast rail of the track, .31 feet northwest of the road crossing, 73 feet north or telephone pole No. E-32, about 1 foot below track level, between the track and U.S. Highway No. 10. A standard disk stamped "X-12 1911".**

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

R

Designation **V** State ... Maryland County ... Washington
Nearest town HANCOCK Determined in
Character of mark A choicelet square Chief of Party J.C.CHILLES
Detailed report Present condition FAIR
Stamping Recovery Date OCTOBER 1960

Designation **V** State ... Maryland County ... Washington
Nearest town HANCOCK Determined in
Character of mark A choicelet square Chief of Party J.C.CHILLES
Detailed report Present condition FAIR
Stamping Recovery Date OCTOBER 1960

Designation **V** State ... Maryland County ... Washington
Nearest town HANCOCK Determined in
Character of mark A choicelet square Chief of Party J.C.CHILLES
Detailed report Present condition FAIR
Stamping Recovery Date OCTOBER 1960

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

R

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

R

RECOVERY NOTE, BENCH MARK

RECOVERY NOTE, BENCH MARK

R

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
STANFORD, CALIFORNIA

J. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

The original field work [3] was done from 1903 to 1907. In May 1935 second-order releveling (L-5524) was done from Hancock to 5.7 miles west of Hancock by a party supervised by G.J. Oliver. The entire line was re-leveled (L-9848) first-order in the summer of 1936 by a party supervised by K. D. Jefferin.

These elevations are derived from the latest leveling and are based on a supplementary adjustment.

卷之三

129.621
130.211
121.21
125.27

442 448 (USGS)

2
43

43
14

143, 211 169, 85

136.717 136.811 136.915 136.948.64 136.948.76

139.566 157.89

43 X
139. 978
139. 108
459. 24
456. 39

卷之三

43
1
150.491 1493.62
140.192 1459.81

卷之三

OCTOBER 1967

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390181 PAGE NO. 2
PA-AUD-W VA 39°30' to 40°00'
LATITUDE 78°00' to 78°30'
LONGITUDE YAGRAM NJ 17-3 CUMBERLAND

(LINE 105)
(Continued)

BENCH MARK	ADJUSTED ELEVATION (Meters)	BENCH MARK	ADJUSTED ELEVATION (Meters)
STATE LINE NO 2	169.303	OAKLAND NO 2	1269.738
ZZ 99	555.455	OAKLAND NO 1	1269.861
STATE LINE MON	178.966	F 265 (PDH)	1266.861
	158	E 265	1202.872
	550.186	D 265	1202.872
<u>THE LINE ENTERS MARYLAND</u>			

(LINE 106)
(Second-order)

P 14 145.788 478.306

JO 1 175.236 574.920

SPRUITT STATION
SPRUITT NO 2
SPRUITT NO 1B 265 (PDH)
C 18 (USGS)
WILT STATION
Destroyed
Destroyed95 (B&ORR)
96 (B&ORR)
97 (B&ORR)(LINE 107)
(Second-order)THE LINE ENTERS MARYLAND

The field work (L-18133) was done in the fall of 1960 by a party supervised by J. C. Childs and in cooperation with the Pennsylvania State Highway Department.

These elevations are based on a supplementary adjustment of 1961.

BENCH MARK

BENCH MARK	ADJUSTED ELEVATION (Meters)	BENCH MARK	ADJUSTED ELEVATION (Meters)
W 265	157.089	515.383	87 (B&ORR)
V 265	180.129	590.973	117.351
U 265	176.474	578.982	381.009
T 265	202.904	665.694	122.361
S 265	196.305	644.644	101.446
DENEEN NO 1	235.025	771.078	405.265
DENEEN STATION	231.820	770.405	124.752
DENEEN NO 2	235.099	771.321	109.291
DENEEN AZI	220.213	722.482	
TT 45 (USGS)	307.417	1008.584	
POINT VIEW STATION	307.272	1008.108	
POINT VIEW NO 1	307.458	1008.718	
R 265	312.120	1024.014	
Q 265	321.780	1075.392	
P 265	377.853	1239.673	
<u>THE LINE LEAVES AND RE-ENTERS</u>			

BENCH MARK

ADJUSTED ELEVATION
(Meters)

THE QUADRANGLE

BENCH MARK	ADJUSTED ELEVATION (Meters)	BENCH MARK	ADJUSTED ELEVATION (Meters)
N 265	415.404	1362.871	304.577
M 265	456.932	R 95 (PDH)	992.266
L 265	490.450	K 95	389.499
K 265	530.720	TTS 56 J (USGS)	1277.881
J 265 (PDH)	428.615	S 95 (PDH)	415.162
H 265 (PDH)	372.839	T 95 (PDH)	238.932
C 16 (USGS)	399.890	U 95	783.896
G 265	391.334	V 95	
GARLAND AZI	1283.902		
GARLAND STATION	392.373		
	1287.310		
	386.717		
	1268.754		
<u>THE LINE ENTERS MARYLAND</u>			

(LINE 108)
(First-order)

BENCH MARK	ADJUSTED ELEVATION (Meters)	BENCH MARK	ADJUSTED ELEVATION (Meters)
			1902 by a party supervised by O. F. Carr (or the Baltimore & Ohio Rail-
			road Company).
			These elevations are based on a supplementary adjustment of 1944.

BENCH MARK

ADJUSTED ELEVATION
(Meters)

THE LINE ENTERS MARYLAND

95 (B&ORR)

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

Form 655A
(1-6-59)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
RECOVERY NOTE, BENCH MARK

Designation WA-2 (Md. Geod. S.) State MARYLAND
Nearest town AT HANCOCK County WASHINGTON
Distance and direction from nearest town AT HANCOCK
Character of mark SURVEY DISK
Established by MARYLAND GEODETIC SURVEY
Present condition POOR
Detailed report FOUND AS DESCRIBED BUT DUE TO CONSTRUCTION OF A NEW SIDEWALK THIS BM
APPEARS TO HAVE BEEN MOVED.

At Hancock, at the High School, 17 feet east of the center-line of the drive leading to the southwest side of the school, 28.7 feet southeast along the sidewalk from a point in line with the southwest side of the school, 26.3 feet north of the center-line of U.S. Highway No. 10, set in a square hole in the walk near the edge. The mark is covered with a large stone placed in the hole. A standard disk stamped "WA-2", and set in the top of a concrete post.

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Form 655A
Ed. Oct. 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark ... A-13 State Maryland County Washington
Nearest town Hancock County Washington
Distance and direction from nearest town 0.5 mile west of along Western Maryland R.R.
Detailed description of location

the station at Hancock, 19 feet north of mile-post No. 116, set in the northeast end of the corner of the 7th. Pier base from the northeast end of the U.S. Highway No. 522, 8.5 feet southeast of the northeast rail of the track, 5 feet above the ground level. A standard disk stamped "A-13 1911" and set vertically.
Recovered as Descrip 21 - 190.

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Form 655A
Ed. Oct. 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark ... B-13 State Maryland County Washington
Nearest town Hancock County Washington
Distance and direction from nearest town 1.5 miles southeast of along Western Maryland R.R.
Detailed description of location

1.5 miles southeast along the Western Maryland Railroad from the station at Hancock, 21 rails southwest of mile-post No. 117, at a private road crossing, about 6 feet above the track level, 75 feet northwest of the northeast rail of the track, 10 feet southwest of the center-line of the private road, 36.1 feet south of the southwest corner of the house, 16 feet east of a 6-inch walnut tree, 0.2 foot south of a white marker post stenciled U.S.B.M. A standard disk stamped "B-13 1911" and set in the top of a pre-set concrete post.

17 NE (1)

R

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Form 655A
Ed. April 1959

REPORT ON CONDITION OF BENCH MARK

Designation of mark ... BB-11 State Maryland County Washington
Nearest town Hancock Distance and direction from nearest town 2.5 miles southwest of along Western Maryland R.R.
Mark searched for or recovered by - (Name) J. C. Chambers
Date ... May 1911. (Occupation) Bench Mark Setter
(Address) ... Washington, D. C.

Present condition of the mark Good
Letter or number found stamped on (not cast in) the mark ... BB-11 1935.
Use the following space for reporting upon the thoroughness of the search. If case mark was not recovered,
or for suggesting needed changes in the published description, if the mark was recovered
2.5 miles southwest along the Western Maryland Railroad from the station at Hancock,
13 rails east of mile-post No. 118, 108.5 feet southwest of lower signal post, 26.8
feet south of the south rail, 200 feet east of B.M. "C-13 1911", 35.5 feet northeast
of the 3rd. telegraph pole east of the crossing, a standard disk stamped "BB-11 1935"
and set in a rock boulder about 5 feet below track level, 3.7 feet north of a white
marker post stenciled U.S.B.M.

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Form 655A
Ed. Oct. 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark ... C-13 State Maryland County Washington
Nearest town Hancock County Washington
Distance and direction from nearest town 2.5 miles southeast of along Western Maryland R.R.
Detailed description of location

2.5 miles southwest along the Western Maryland Railroad from the station at Hancock, at a public road crossing, 8 rails east of mile-post No. 118, 38 feet south of the south rail or the track, 68 feet east of the center-line of the road, 115 feet southwest of the northeast corner of a packing shed, 3.5 feet west of a telegraph pole, 1 foot east of a white marker post stenciled U.S.B.M. A standard disk stamped "C-13 1911" and set in the top of a pre-set concrete post.

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Form 655A
Ed. April 1959

REPORT ON CONDITION OF BENCH MARK

Designation of mark ... M-11 State Maryland County Washington
Nearest town Hancock Distance and direction from nearest town 3.6 miles southwest of along Western Maryland R.R.
Mark searched for or recovered by - (Name) J. C. Chambers
Date ... May 1911. (Occupation) Bench Mark Setter
(Address) ... Washington, D. C.

Present condition of the mark Good
Letter or number found stamped on (not cast in) the mark ... M-11 1935.
Use the following space for reporting upon the thoroughness of the search. If case mark was not recovered,
or for suggesting needed changes in the published description, if the mark was recovered
3.6 miles southwest along the Western Maryland Railroad from the station at Hancock,
19 rails southwest of mile-post No. 119, 27 rails northeast of signal tower No. 13, 1911, 82 feet southwest of the 7th. telegraph pole southeast of the mile-post, 5.8 feet
northeast of the southeast rail of the track, set in the concrete retaining wall.
The mark was found to be under about 1 1/2 foot of right-of-way ballast.

R

OCTOBER 1957

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark D-143 State Maryland County Washington

Nearest town Hancock Distance and direction from nearest town 1.5 miles southwest of, along Western Maryland R.R.

Detailed description of location 1.5 miles southwest along the Western Maryland Railroad from the station at Hancock, at a road crossing, 65.4 feet southeast of mile-post No. 120, 18 feet east of the east rail of the main track, 36 feet northeast of the center-line of the road, 6.6 feet south of a telegraph pole, about 1 foot above the track level, 1 foot west of a white marker post stonewalled U.S.B.M. A standard disk stepped "D-143 1911" and set in the top of a pre-cast concrete post.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark B-143 State Maryland County Washington

Nearest town Hancock Distance and direction from nearest town 5.7 miles southwest of, along Western Maryland R.R.

Detailed description of location 5.7 miles southwest along the Western Maryland Railroad from the station at Hancock, at a public road crossing, 35.7 miles southwest of mile-post No. 121, set in a rock boulder about 1 foot lower than the trees, and at the top of a hill where the road crosses the track, 13.5 feet northwest of the north rail of the track, 12 feet southeast of the center-line of the road, 16 feet northwest of the northeast rail of the track, 12 feet southeast of the center-line of the road, 15.7 feet northeast of the crossing sign post. A standard disk stamped "B-143 1911".

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark J-143 State Maryland County Washington

Nearest town Hancock Distance and direction from nearest town 9.8 miles southwest of, along Western Maryland R.R.

Detailed description of location 9.8 miles southwest along the Western Maryland Railroad from the station at Hancock, 11 1/2 miles northeast of mile-post No. 125, 25.4 feet southeast of the east corner of a flagmen shelter, 10.5 feet east of the 1st telegraph pole southeast of the shelter, 7.7 feet southwest of the southwest rail of the track, A standard disk stepped "J-143 1911" set in a rock boulder about 1 foot below track level and at the northeast end of a deep cut.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark K-143 State Maryland County Washington

Nearest town Hancock Distance and direction from nearest town 10.8 miles southwest of, along Western Maryland R.R.

Detailed description of location 10.8 miles southwest along the Western Maryland Railroad from the station at Hancock, 16 1/2 rails northeast of mile-post No. 126, 200 feet northwest of a side road leading northeast to the Maryland State Game Refuge, 19 feet northeast of the northeast rail of the track, 31 feet southwest of the center-line of the road, set in the center of a 12-inch concrete culvert in the southwest head-wall. A standard disk stamped "K-143 1911".

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark L-143 State Maryland County Washington

Nearest town Hancock Distance and direction from nearest town 11.7 miles southwest of, along Western Maryland R.R.

Detailed description of location 11.7 miles southwest along the Western Maryland Railroad from the station at Hancock, 5 miles west of mile-post No. 127, set in the southwest corner of the signal tower base in front of the station at Pooles, 5 feet southwest of the southeast corner of the telegraph office, 6.9 feet north of the north rail of the main track, A standard disk stamped "L-143 1911".

Detailed description of location 7.7 miles southwest along the Western Maryland Railroad from the station at Hancock, 83.8 feet west of mile-post No. 123, set in a rock boulder, 9.1 feet northeast of the northeast rail of the track, 23 rails northeast of a road crossing, 59 feet northeast of a small water stream on the northwest side of the track. A standard disk stamped "D-143 1911".

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
ED-11, 1959

DESCRIPTION OF BENCH MARK

Designation of bench mark G-143 State Maryland County Washington

Nearest town Hancock Distance and direction from nearest town 7.7 miles southwest of, along Eastern Maryland R.R.

Detailed description of location 7.7 miles southwest along the Western Maryland Railroad from the station at Hancock, 5 miles west of mile-post No. 127, set in the southwest corner of the signal tower base in front of the station at Pooles, 5 feet southwest of the southeast corner of the telegraph office, 6.9 feet north of the north rail of the main track, A standard disk stamped "G-143 1911".

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781 PAGE NO.5
PA-ND-W VA LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

LINE 101

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

DESCRIPTION OF BENCH MARK

Designation of bench mark M-43 State Maryland County Allegany
Nearest town Pearce Distance and direction from nearest town About 1.6 Mi. N.W. of Pearce
Detailed description of location T.B.M. Y is located in the ~~WILSON~~ west side of the south abutment of bridge (ly) over Sidelining hill Creek about 6.5 feet below road level, a half inch piece of re-inforcing steel which protrudes about One quarter of an inch above the concrete.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

DESCRIPTION OF BENCH MARK

Designation of bench mark M-43 State Maryland County Allegany
Nearest town Pearce Distance and direction from nearest town About 2.6 Mi. N.W. of Pearce
Detailed description of location M-43 is located about 2.6 Mi. N.W. of Pearce along "Old Town road" 14.5 feet N of center line of road, 18 feet W of 10 in. pine tree in headwall of catch basin, About 1 Mi. W of bridge over Sidelining Hill Creek

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

DESCRIPTION OF BENCH MARK

Designation of bench mark M-43 State Maryland County Allegany
Nearest town Hancock Distance and direction from nearest town 11.0 miles southwest of Hancock
Detailed description of location 11.0 miles southwest along the Spring Lick Road from the station at Hancock, at the intersection of the Spring Lick Road and a side road leading west, 22 feet southeast of the center-line of the Spring Lick Road, 22 feet north of the center-line of the side road, set in the "T" formed by the intersection, 6.7 feet northeast of the southwest edge of the "T", 17.6 feet southwest of the 8-inch twin oak tree, 0.1 foot southward of a white marker post stanchiled U.S.B.M. A standard disk stamped "P-13 1941" and set in the top of a pre-set concrete post.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

DESCRIPTION OF BENCH MARK

Designation of bench mark M-43 State Maryland County Allegany
Nearest town Hancock Distance and direction from nearest town 16.1 miles southwest of Hancock
Detailed description of location from the station at Hancock, 21 rails northeast of mile-post No. 131, set in the west corner of a large concrete bridge, 17 feet northeast of the east corner of the station at Little Orleans, 17.6 feet northeast of the northeast rail of the track, 11.3 feet northeast of the southwest end guard rail post. A standard disk stamped "P-13 1941".

RECOVERY NOTE, BENCH MARK

Designation X11 State Maryland County Allegany
Nearest town Little Orleans Described in Chief of Party Recovery date 1941
Distance and direction from nearest town At Little Orleans
Character of mark Chiseled square Established by Stamping
Also horizontal control point Present condition P.R.I.R.
Detailed report:

New Description At Little Orleans, along the Chesapeake & Ohio Canal, out in the west corner of the south side of the aqueduct, 7.2 feet north of the south edge, 3.2 feet east of the west edge, 2.8 feet west of the east edge, 29 feet west of the center-line of the road on the east side of the Canal. A chiseled square 0.05 of a foot square.

THE LINE ENTERS WEST VIRGINIA

DESCRIPTION OF BENCH MARK

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

Designation of bench mark P-77 State West Virginia County Morgan
Nearest town Blacksburg (Maryland) County Washington
Distance and direction from nearest town 17.2 miles southwest of along Western Maryland R.R.
Detailed description of location 17.2 miles southwest along the Western Maryland Railroad from the station at Hancock, 9 rails west of mile-post No. 132, 33.6 feet southeast of a switch stand, 16.1 feet from the corner of signal tower No. A-1321, 6.9 feet south of the flagman's shanty, 6.9 feet south of the northwest of the northeast corner of the flagman's shanty, 6.9 feet south of the south rail of the track. A standard disk stamped "P-77 1941".

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

DESCRIPTION OF BENCH MARK

Designation of bench mark P-77 State West Virginia County Morgan
Nearest town Blacksburg (Maryland) County Washington
Distance and direction from nearest town 18.0 miles southwest of along Western Maryland R.R.
Detailed description of location 18.0 miles northeast along the Western Maryland Railroad from the station at Oldtown, 13 rails northeast of mile-post No. 133, set in the east corner of signal tower No. A-1331, 65 feet east of the gull signal post, 11.2 feet northeast of the north corner of the flagman's shanty, 7.2 feet southwest of the southwest rail of the track. A standard disk stamped "P-77 1941".

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 100
Ed. Oct., 1958

DESCRIPTION OF BENCH MARK

Designation of bench mark P-77 State West Virginia County Morgan
Nearest town Blacksburg (Maryland) County Washington
Distance and direction from nearest town 17.0 miles northeast of along Western Maryland R.R.
Detailed description of location 17.0 miles northeast along the Western Maryland Railroad from the station at Oldtown, set in the north corner of signal tower No. A-1310, 12 feet east of mile-post No. 131, 33.6 feet southwest of the southwest rail of the track, southwest of a large gully between deep cuts. A standard disk stamped "P-77 1941".

OCTOBER 1967

VERTICAL CONTROL DATA

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

THE LINE RE-ENTERS WEST VIRGINIA

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark — Y-77 State — West Virginia —
Nearest town — Oldtown, Maryland County — Allegany
Distance and direction from nearest town 9.7 miles, east of Oldtown
Detailed description of location
station at Oldtown, 38 rails south of mile-post No. 111, set in
the east headwall of the North end of bridge No. 113, 40 feet
from the track. A standard disk stamped "Y-77 1921".

THE LINE RE-BENTER MARYLAND

from the station a
distance of 5th. telegraph
line of a large 2-story
brick building set northeast of
the station. A post
of concrete posts.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
PRINTED IN U. S. A.

DESCRIPTION OF BENCH MARK

Station at Oldtown, 17 miles north of mile-post No. 113, set in the center of the main track, on the west side of the road; distance and direction from nearest town—8.1 miles east of Oldtown, Maryland.

126 (B.& O.R.R.).—About 2 miles south along the Baltimore & Ohio Railroad from Magnolia, Morgan County, opposite milepost B 151, and in rock. A copper bolt.

127 (B.& O.R.R.).—About 1 mile northeast, along the Baltimore & Ohio Railroad from Paw Paw, Morgan County, opposite milepost B 152, and in the top of a rock southeast of the tracks. A copper bolt.

132 (B.& O.R.R.).—Near Little Garapon, Hampshire County, on the Baltimore & Ohio Railroad, about $\frac{500}{7}$ feet east of milepost B 157, north of the tracks, at the site of old bridge 59, in the bridge seat or west abutment, and between the anchor lines of the old tracks. A copper bolt.

QUAD 390781 PAGE NO. 7
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

QUAD 390781 PAGE NO. 7
PA-MD-W VA 39°30' to 40°00'
LATITUDE 78°00' to 78°30'
LONGITUDE PLACER NJ 17-3 CUMBERLAND

DEPARTMENT OF COMMERCE
U. S. COUNT AND GEODETIC SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark — W-13 — State — Maryland — County — Allegany
Name of town Oldtown — County — Allegany

Distance and direction from nearest town -- 7.2 miles east of along Western Maryland R.R.
County -- Allegany
Town -- MARYLAND

Detailed description of location
from the station at Oldtown, set in the northeast corner of signal tower No. A-11139, 35 rails east of mile-post No. 146, 5.5 feet east of the "Fairplay" sign post, at the west end of a siding, 7 feet north of the north rail of the track. A standard dial stamped "W-13 1911".

LINE 102

102 (B&O.R.R.) -- About 1 mile southeast along the Baltimore & Ohio Railroad from Round Top, Morgan County, about 150 feet above millepost B 127, north of the tracks, and in a rock crevace. A copper bolt.

105(B & O.R.R.)—About 1/2 mile south along the Baltimore & Ohio Railroad from Sir Johns Run, Morgan County, about 400 feet west of milepost B 130, at a culvert, and in the top of the south coping. copper bolt.

106 (B & O.R.R.)—About 1 mile east of Great Cacapon, Morgan County, about 200 feet east of milepost B 131. And in a large rock north

110 (B & O.R.R.) -- About 0.8 miles east along the Baltimore & Ohio railroad from Lineburg, Morgan County, opposite pole 135 $\frac{1}{4}$, and in a rock south of the tracks. A copper bolt.

111 (B & O.R.R.) -- About 0.2 mile west along the Baltimore & Ohio railroad from Lineburg, Morgan County, opposite milpost B 136. The track is set vertically between the tracks on one of a series of short posts.

112 (B.& O.R.R.) -- About 1-1/4 miles west along the Baltimore & Ohio Railroad from Linneburg, Morgan County, 25 feet north of milepost 137, and in a rock east of the tracks. A copper bolt.

126 (B.& O.R.R.)—About 2 miles south along the Baltimore & Ohio Railroad from Magnolia, Morgan County, opposite milepost B 151, and in rock. A copper boil.

127 (B.& O.R.R.)--About 1 mile northeast along the Baltimore & Ohio Railroad from Paw Paw, Morgan County, opposite milepost B 152, and in the top of a rock southeast of the tracks. A copper bolt.

132 (H. & O.R.R.)--Near Little Cargan, Hampshire County, on the Baltimore & Ohio Railroad, about 600 feet east of milepost B 157: south of the tracks, at the site of old bridge 59, in the bridge seat of the first abutment, and between the embankment lines of the old track. A

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

VERTICAL CONTROL DATA

by the

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

QUAD 390781 PAGE NO. 8
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 70°00' to 78°30'
DIAGRAM NJ 17-3 CUMMENLAND

LINE 103

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark **P-152** State **Pennsylvania** County **Franklin**
Nearest town **Hancock** (Md.) County **Washington**
Distance and direction from nearest town **9.0 miles northeast of**, along County road.
Detailed description of location **[In] 3 miles southeast along the Western Maryland Railroad from the station at Hancock, thence [in] 3 miles northeast along County road, thence 1.2 miles northwest along County road, set at the intersection of the main road and a private road leading northward to farm house, 23 feet north of the center-line of the main road, 18 feet east of center-line of private road, 1.2 feet south of a white marker post. A standard disk set in top of a concrete post, stamped "P-152 1942".**

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark **Q-152** State **Pennsylvania** County **Fulton**
Nearest town **Hancock** (Md.) County **Washington**
Distance and direction from nearest town **11.2 miles northeast of**, along old road.
Detailed description of location **[In] 3 miles southeast along the Western Maryland Railroad from the station at Hancock, thence [in] 3 miles northeast along County road, thence 2.6 miles northeast along old roads set in the top of rock boulder on the southwest bank of Lickin Creek, 15 feet east of the center-line of the old Ford road, 29 feet northeast of a 12-inch tree with a triangular blaze on the south side, 7 feet south of a 12-inch tree with a triangular blaze on the south side of trees, [in] 3 feet southeast of the southwest edge of creek. A standard disk, stamped "Q 152 1942".**

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark **T-148** State **Pennsylvania** County **Fulton**
Nearest town **Hancock** (Md.) County **Washington**
Distance and direction from nearest town **12.7 miles northeast of**, along County road.
Detailed description of location **[In] 3 miles southeast along the Western Maryland Railroad from the station at Hancock, thence [in] 3 miles northeast along County road, thence [in] 1.2 miles northwest along old country road, set at the intersection of the old road leading east to the ford and the paved country road, 27 feet east of the center-line of the paved road, 11 feet south of center-line of the old road, 7 feet east of a forked tree with a triangular blaze on the north side of the tree near the base. A standard disk set in top of a concrete post. Stamped "T 148 1942".**

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark **V-148** State **Pennsylvania** County **Fulton**
Nearest town **McGinnellsburg** County **Fulton**
Distance and direction from nearest town **13.5 miles southeast of**, along State Highway No. 928.
Detailed description of location **County National Bank at McGinnellsburg, thence 7 miles south along State Highway No. 928, set along fence line and at a gate entrance into field, 21 feet northwest of center-line of highway, 7 feet northeast of northeast post, 0.1 mile southeast of a 2-story tan farm house, 1.2 feet northeast of the right-of-way fence, 23 feet southeast of highway marker "No. 2-20. A standard disk set in top of a corner post, stamped "V-148 1942".**

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark **W-148** State **Pennsylvania** County **Fulton**
Nearest town **McGinnellsburg** County **Fulton**
Distance and direction from nearest town **12.5 miles southeast of**, along State Highway No. 928.
Detailed description of location **6.5 miles southeast along U. S. Highway No. 222 from the Fulton County National Bank at McGinnellsburg, thence 6 miles south along State Highway No. 928, set in the northeast corner of the southeast abutment of the large steel bridge over Lickin Creek, 8 feet northeast of the center-line of the highway.**

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY
FEDERAL LAND SURVEY

DESCRIPTION OF BENCH MARK

Designation of bench mark **1950 Report** - Mark in fair condition. Stamping not legible.
APR. 1963 Report - To be reset.

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781 PAGE NO. 9
PA 44D-W VA 40°00'
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND
LINES 103, 104

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FEDERAL BUREAU OF LAND MANAGEMENT
FD PMR 101

DESCRIPTION OF BENCH MARK

Designation of bench mark **Z-118** State ... Pennsylvania County ... Fulton
Nearest town McConnellsburg County Fulton
Distance and direction from nearest town **11.3 miles southeast of, along State Highway No. 928.**
Detailed description of location

6.5 miles southwest along U. S. Highway No. 922 from the Fulton
County National Bank at McConnellsburg, thence 1.6 miles south along State Highway
No. 928, set in a rock boulder on the west slope of mountain, 71.5 feet east
of the southeast corner of the 2-story farm house, 20 feet northeast of the
center-line of the east end of the pipe culvert under highway, 33 feet east of
center-line of highway. A standard disk set about 1/4 feet above road level.
Stamped "V 148 1942"

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FD PMR 101

DESCRIPTION OF BENCH MARK

Designation of bench mark **Z-118** State ... Pennsylvania County ... Fulton
Nearest town McConnellsburg County Fulton
Distance and direction from nearest town **9.9 miles southeast of, along State Highway No. 928.**
Detailed description of location

6.5 miles southwest along U. S. Highway No. 922 from the Fulton
County National Bank at McConnellsburg, thence 1.6 miles south along State Highway
No. 928, set at the summit of a small hill, on the east edge of a cultivated
field, 25 feet west of center-line of the highway, 12 feet south of the center-line
of an old wagon road leading west into field, 10 feet northeast of a 10-inch tree
with a triangular blaze on the east side of tree facing highway. A standard disk
set in top of a concrete post stamped "V 148 1942"

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FD PMR 101

DESCRIPTION OF BENCH MARK

Designation of bench mark **Z-118** State ... Pennsylvania County ... Fulton
Nearest town McConnellsburg County Fulton
Distance and direction from nearest town **8.8 miles southeast of, along State Highway No. 928.**
Detailed description of location

6.5 miles southwest along U. S. Highway No. 922 from the Fulton
County National Bank at McConnellsburg, thence 2.1 miles south along State
Highway No. 928, set at the southeast corner of the southwest guard rail wall
of the large concrete bridge over Dove Creek, 20 feet northeast of center-line
of the highway, 7 feet southeast of center-line of side road leading northward,
3 feet above road level. A standard disk stamped "X 148 1942"
Recovered as Described - 1954.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FD PMR 101

DESCRIPTION OF BENCH MARK

Designation of bench mark **Z-118** State ... Pennsylvania County ... Fulton
Nearest town McConnellsburg County Fulton
Distance and direction from nearest town **7.7 miles southwest of, along State Highway No. 928.**
Detailed description of location

6.5 miles southwest along U. S. Highway No. 922 from the Fulton
County National Bank at McConnellsburg, thence 1.2 miles south along State
Highway No. 928, set in the southeast corner of the southwest abutment of the
wooden bridge at the intersection of the highway and a side road leading
northeast, where the two roads meet, 13 feet southeast of center-line of
the highway, 28 feet north of center-line of the side road. A standard disk
stamped "Y 148 1942".
Detailed description of location

LINE 104

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FD PMR 101

DESCRIPTION OF BENCH MARK

Designation of bench mark **B-55** State ... Maryland County ... Washington
Nearest town Hancock County Washington
Distance and direction from nearest town **5.3 miles northeast of, along County road.**
Detailed description of location

6.5 miles southeast along the Western Maryland Railroad from the
station at Hancock, thence 1 mile northeast along County road, at the intersection
of the main road and a private road leading north to a 2-acre green farm
house, 20 feet northeast of the center-line of the main road, 1/2 foot east of
the center-line of the private road, 10 feet north of the north corner of the
northeast headwall of a twin pipe culvert under main road, in a rock cut-drop, finish with the ground, stamped "B 55 1917".
Detailed description of location

LINE 104

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FD PMR 101

DESCRIPTION OF BENCH MARK

Designation of bench mark **A-55** State ... Maryland County ... Washington
Nearest town Hancock County Washington
Distance and direction from nearest town **6.3 miles northeast of, along County road.**
Detailed description of location

6.5 miles southeast along the Western Maryland Railroad from the
station at Hancock, thence 2.0 miles northeast along County road, set in the
north corner of the east abutment of a large concrete and stone bridge in a
small valley, about 0.7 mile southwest of the center-line of a grassy road, 18 feet south of the
center-line of the road. A standard disk stamped "A 55 1917".
Detailed description of location

LINE 104

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEALEVEL DATUM OF 1929

QUAD 390701 PAGE NO. 10
PA-MD-W VA LATITUDE $39^{\circ}30'$ to $40^{\circ}00'$
LONGITUDE $78^{\circ}00'$ to $78^{\circ}30'$
DIAMON NJ 17-3 CUMBERLAND

THE LINE ENTERS PENNSYLVANIA

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

DESCRIPTION OF BENCH MARK

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

Designation of bench mark **L-152** State **Pennsylvania** County **Franklin**

Nearest town **Hancock** (Md.) County **Washington**

Detailed description of location

Distance and direction from nearest town **10.4 miles southeast of, along State Highway No. 156.**
Detailed description of location

4.3 miles southeast along the Western Maryland Railroad from the station at Hancock, thence .45 miles northeast along State Highway (Md.) No. 156, set in the north corner of the east retaining wall of the steel bridge over Little Creek, at the later portion of Md. 156 and a side road leading west, 18 feet east of center-line of highway, 2.5 feet above road level. A standard disk stamped "N 152 1942"

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

Designation of bench mark **L-152** State **Pennsylvania** County **Franklin**

Nearest town **Hancock** (Md.) County **Washington**

Detailed description of location

Distance and direction from nearest town **9.9 miles northeast of, along State Highway No. 156.**
Detailed description of location

4.3 miles southeast along the Western Maryland Railroad from the station at Hancock, thence .56 miles northeast along State Highway No. 156, set at the summit of a hill, in the south corner of a cultivated field, 0.3 mile, southwest of intersection from nearest town. 9.9 miles northeast of, along State Highway No. 156.

Distance and direction from nearest town **9.9 miles northeast of, along State Highway No. 156.**
Detailed description of location

4.3 miles southeast along the Western Maryland Railroad from the station at Hancock, thence .56 miles northeast along State Highway No. 156, set at the summit of a hill, in the south corner of a cultivated field, 0.3 mile, southwest of intersection from nearest town. 9.9 miles northeast of, along State Highway No. 156.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

Designation of bench mark **L-152** State **Pennsylvania** County **Franklin**

Nearest town **Hancock** (Md.) County **Washington**

Detailed description of location

Distance and direction from nearest town **9.2 miles southeast of, along State Highway No. 156.**
Detailed description of location

Office at Neweshurst, set in a rock ledge near a private cross roads, 92 feet southeast of the center-line of the road leading northeast to farm house, 117.7 feet southeast of center-line of the highway, 11 feet northwest of the right-of-way fence, about 1 foot above road level. A standard disk, stamped "K 152 1942"

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

DESCRIPTION OF BENCH MARK

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
PA. DIV. OF
PA. DIV. OF

Designation of bench mark **TT-3-D USGS** State **Pennsylvania** County **Franklin**

Nearest town **Bearfoot** (Md.) County **Washington**

Detailed description of location

Distance and direction from nearest town **10.0 miles northeast of, along State Highway No. 156.**
Detailed description of location

4.2 miles southeast along the Western Maryland Railroad from the station at Bearfoot, thence .65 miles northeast along State Highway No. 156, set in the south corner of the middle or second concrete step at the southwest entrance to the Methodist Church, 40.3 feet northwest of the center-line of the highway, 7.5 feet east of the south corner of the building, 3.6 feet southeast of the southwest edge of the southwest entrance. A standard U.S. Geological Survey disk set vertically, stamped "TT 3 D 1934". A standard U.S. Geological Survey disk set vertically, stamped "TT 3 D USGS 1934".

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
EL PASO TEX

DESCRIPTION OF BENCH MARK

Designation of bench mark J-152

State Pennsylvania

County Franklin

Distance and direction from nearest town 7.1 miles southwest of along State Highway No. 156.

Detailed description of location

7.1 miles southwest along State Highway No. 156 from the Post Office at New Oxford, set in the west corner of an old concrete foundation at the north corner of a field, near the old stone foundation of a house, 27 feet southwest of the center-line of the highway, 6.8 feet southeast of the eight-foot fence, about 0.15 mile east of a stone 2-story farm house. A standard disk, stamped "J 152 1942". Recovered as described . 194-2.

LINE 105

H 99 (P.D.H.)--0.7 mile south along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, at the west abutment of a concrete bridge, in the top of the north end, and 12 feet west of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "H 99 1935". Recovered as described . 194-2.

J 99--1.8 miles south along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 153 feet south of light-wire pole 11+65 and 15 feet west of the center line of the highway. A standard disk, stamped "J 99 1935" and set in the top of a concrete post.

K 99--3.7 miles south along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 1372 feet southeast of the main entrance gate of Union Cemetery, 15 feet west of the center line of the highway, and 8 feet south of a light-wire pole. A standard disk, stamped "K 99 1935" and set in the top of a concrete post.

L 99--5.5 miles south along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 171 feet west of the northeast corner of the Hobister Mills post office, and 18 feet south of the center line of the highway. A standard disk, stamped "L 99 1935" and set in the top of a concrete post.

M 99 (P.D.H.)--6.0 miles southwest along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, at a concrete bridge over Big Cove Creek, in the top of the west end of the north wing wall, and 15 feet west of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "M 99 1935". Recovered as described . 194-2.

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781 PAGE NO. 11
PA-MD-W VA 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

LINES 101, 101,

P 99 (P.D.H.)--6.3 miles southwest along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 246 feet northeast of the northeast corner of Ali's service station and lunch room, and 27 feet east of the center line of the highway. A standard disk, stamped "Q 99 1935" and set in the top of a concrete post.

Q 99--8.1 miles southwest along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 60 feet northwest of the center line of the highway. A standard disk, stamped "R 99 1935" and set in the top of a concrete post.

R 99 (P.D.H.)--10.2 miles southwest along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, at a concrete bridge over Licking Creek, in the top of the north end of the northeast wing wall, and 15 feet northeast of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "R 99 1935".

S 99--10.9 miles southwest along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 90 feet southwest of the Truxax service station, and 60 feet northwest of the center line of the highway. A standard disk, stamped "S 99 1935" and set in the top of a concrete post.

T 99 (P.D.H.)--12.4 miles southwest along U.S. Highway 522 from the Fulton County National Bank at McConnellsburg, Fulton County, 156 feet west of the southwest corner of the Mallott Service station, at the north end of a bridge, in the top of the east wing wall, and 15 feet north of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "T 99 1935".

U 99 (P.D.H.)--In Fulton County, Pennsylvania, 12.4 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, at the north end of a concrete bridge, in the top of the northeast wing wall, and 15 feet north of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "U 99 1935".

V 99 (P.D.H.)--In Fulton County, Pennsylvania, 9.3 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, 21 feet northwest of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "V 99 1935".

W 99--In Fulton County, Pennsylvania, 11.4 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, 21 feet south of the center line of the highway and 1 foot southeast of a fence. A standard disk, stamped "W 99 1935".

X 99--In Fulton County, Pennsylvania, 9.3 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, 21 feet south of the center line of the highway and 6 feet south of a south guard rail. A standard disk, stamped "X 99 1935" and set in the top of a concrete post.

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEALEVEL DATUM of 1929

QUAD 390781 PAGE NO.12
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 76°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

Y 99--In Fulton County, Pennsylvania, 7.4 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, 142 feet southwest of the junction of a private farm drive leading east, and 22 feet west of the center line of the highway. A standard disk, stamped "Y 99 1935" and set in the top of a concrete post.

C 11 (U.S.G.S.)--In Fulton County, Pennsylvania, 6.9 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, 2.5 miles north of Warfordsburg, and $\frac{1}{4}$ mile east of the center line of the highway. A United States Geological Survey standard disk, stamped "C 11 1925" and set in the top of a concrete post.

(Form 465A
11-8-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, BENCH MARK

R

Designation Z 99 (PMH)
Nearest town WARFORDSBURG
Distance and direction from nearest town AT WARFORDSBURG
Character of mark STANDARD MARK DISK
Established by PENNSYLVANIA DEPARTMENT OF HIGHWAY
Present condition GOOD
Detailed report FOUND AS DESCRIBED

In Fulton County, Pennsylvania, 4.8 miles north along U.S. Highway 522 from the Hancock Bank building at Hancock, Washington County, Maryland, at the north end of a bridge over Tonolowy Creek, in the top of the west wing wall of the north abutment, and 15 feet west of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "Z 99 1935".

This mark has been secured, condition good.

NOTE: It was reported in October 1960 that this mark had been moved from the step as described below and is now in the retaining wall about $\frac{1}{4}$ foot above the blacktop parking area.

DESCRIPTION OF BENCH MARK

Designation X 265
Nearest town WARFORDSBURG
Distance and direction from nearest town AT WARFORDSBURG
Character of mark BENCH MARK DISK

Detailed description About 0.7 mile south along State Ry. 126 from the junction of State Ry. 126 and U.S. 522(overhead bridge) in the north east edge of overhead bridge, 10 feet west of the west edge of west lane of Ry. 126, 32 feet north of concrete drain culvert, about 2 feet above the level of the ground.

DESCRIPTION OF BENCH MARK

Designation SCOTT AZI
Nearest town WARFORDSBURG
Distance and direction from nearest town AT WARFORDSBURG
Character of mark TRIANGULATION AZIMUTH DISK
Established by COAST & GEODETIC SURVEY

Detailed description At Warfordsburg in the north edge of the city. At the overpass of Highway 522 over the Interstate highway. Set in top at the west end of the north bungalow of the overpass. This disk is now under the rail in the top of the bannister on later of the overpass. This disk is now under the rail in the top of the bannister on the bridge. Set in horizontal and about 3 feet above the floor of the bridge.

DESCRIPTION OF BENCH MARK

Designation BANK NO. 2
Nearest town WARFORDSBURG
Distance and direction from nearest town 1.8 mile south of
Character of mark REFERENCE MARK DISK
Established by CGCS

Detailed description About 1.8 mile south along State Ry. 126 from the junction of State Ry. 126 and U.S. 522(overhead bridge) in the north east edge of Warfordsburg, STANDARD TRIANGULATION REFERENCE MARK DISK SET IN TOP OF CONCRETE POST on the embankment which separates the access road an highway.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
State PENNSYLVANIA
County FULTON
Chief of Party J.C.CHILDS
Recovery Date FEBRUARY 1960
Stamping C 10 1925

Designation C 10 (USGS)
Nearest town WARFORDSBURG
Distance and direction from nearest town AT WARFORDSBURG
Character of mark Standard disk set in horizontal
Established by U.S. Geological Survey
Present condition Good
Detailed report Set in top and 8 inches south-south east of the north-north west end of the retaining wall for the yard and cemetery of the Presbyterian Church of Warfordsburg, 5 feet south-south east of the center of the steps to the church yard, 39 feet east-north east of the front entrance to the church, 1 foot east north east of a lamp post for the steps to the yard, 30 feet west-south west of the centerline of Highway 126.

R

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781 PAGE NO. 13
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND
LINE 105

DESCRIPTION OF BENCH MARK

Destination BANK NO. 1 State PENNSYLVANIA County FULTON Chief of party J.C.CHILDS
Nearest town WARFORDSBURG County FULTON Level date OCT. 1960
Distance and direction from nearest town 1.8 mile south of Stampine BANK NO. 1 1960
Character of earth REFERENCE MARK DISK
Established by CGCS
Detailed description About 1.8 mile south along State Hr. 126 from the junction of state Hr. 126 and U.S. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD TRIANGULATION REFERENCE MARK DISK SET IN TOP OF CONCRETE POST on high knoll on the east side of Hr. 126 and to the east of the access road which parallels the highway.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FED. REG. NO. 22 OCT. 1967

DESCRIPTION OF BENCH MARK

Destination STATE LINE NO. 2 State MARYLAND County FULTON Chief of party J.C.CHILDS
Nearest town WARFORDSBURG County FULTON Level date OCT. 1960
Distance and direction from nearest town 2.6 mile south of Stampine STATE LINE NO. 2 1960
Character of earth BENCH MARK DISK
Established by CGCS
Detailed description About 2.6 mile south along State Hr. 126 from the junction of state Hr. 126 and U.S. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD TRIANGULATION REFERENCE MARK DISK SET IN TOP OF CONCRETE POST on the Pennsylvania side west of the Hr. 126.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FED. REG. NO. 22 OCT. 1967

DESCRIPTION OF BENCH MARK

Destination STATE LINE NO. 2 State MARYLAND County WASHINGTON Chief of party J.C.CHILDS
Nearest town WARFORDSBURG County FULTON Level date OCT. 1960
Distance and direction from nearest town 2.6 mile south of Stampine STATE LINE NO. 2 1960
Character of earth BENCH MARK DISK
Established by CGCS
Detailed description About 2.6 mile south along State Hr. 126 from the junction of state Hr. 126 and U.S. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD TRIANGULATION REFERENCE MARK DISK SET IN TOP OF CONCRETE POST on the Maryland side.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FED. REG. NO. 22 OCT. 1967

DESCRIPTION OF BENCH MARK

Destination STATE LINE NO. 2 State MARYLAND County WASHINGTON Chief of party J.C.CHILDS
Nearest town WARFORDSBURG County FULTON Level date OCT. 1960
Distance and direction from nearest town 2.6 miles north of Stampine STATE LINE NO. 2 1960
Character of earth BENCH MARK DISK
Established by CGCS
Detailed description About 2.6 miles north along U.S. Highway 522 from the city limits of Hancock, Maryland to the Maryland-Pennsylvania State line. One of two monuments on the east side of the highway, a square rock monument which is projecting about 3 feet and comes to a point on the top. This monument is not good for leveling but was leveled to due to a traverse line ran by Triangulation, the other monument mentioned is about 5 feet west of monument described and about 8 feet tall.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FED. REG. NO. 22 OCT. 1967

THE LINE ENTERS MARYLAND

Destination STATE LINE NO. 2 State MARYLAND County WASHINGTON Chief of party J.C.CHILDS
Nearest town WARFORDSBURG County FULTON Level date OCT. 1960
Distance and direction from nearest town 1.3 mile north of Stampine STATE LINE NO. 2 1960
Character of earth ROCK MONUMENT
Established by CGCS
Detailed description About 1.3 mile north along U.S. Highway 522 from the city limits of Hancock, Maryland to the Maryland-Pennsylvania State line. One of two monuments on the east side of the highway, a square rock monument which is projecting about 3 feet and comes to a point on the top. This monument is not good for leveling but was leveled to due to a traverse line ran by Triangulation, the other monument mentioned is about 5 feet west of monument described and about 8 feet tall.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
FED. REG. NO. 22 OCT. 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781 PAGE NO. 14
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

DESCRIPTION OF BENCH MARK

Designation **J01**
Nearest town **HANCOCK**
Distance and direction from nearest town **ABOUT 0.4 MILE NORTH**
Character of mark **BENCH MARK DISK**
Established by **COAST & GEODETIC SURVEY**
Detailed description **About 0.4 mile north of the city limits of Hancock, also about 0.9 of a mile south along U.S. Highway 522 from the Maryland-Pennsylvania State line, set in the top center of the headwall for a 1½ foot pipe culvert, with wingwall, 20 feet east of the centerline and about level with the highway drilled in horizontal.**

LINE 106

DESCRIPTION OF BENCH MARK

Designation **T 265**
Nearest town **WARFORDSBURG**
Distance and direction from nearest town **3.6 MILE NORTH OF**
Character of mark **BENCH MARK DISK**
Established by **CAGS**
Detailed description **About 3.6 miles north along State Ry. 126 from the junction of State Ry. 126 and U.S. Ry. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL. In south west wingwall of concrete bank drain, south south west of the south edge of south lane of Ry. 126, 6 feet above concrete bank drain.**

DESCRIPTION OF BENCH MARK

DESCRIPTION OF BENCH MARK

Designation **V 265**
Nearest town **WARFORDSBURG**
Distance and direction from nearest town **1.7 MILE NORTH OF**
Character of mark **BENCH MARK DISK**
Established by **CAGS**
Detailed description **About 1.7 mile north along State Ry. 126 from the junction of State Ry. 126 and U.S.Ry. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL. In north west wingwall of concrete bridge, 12 feet west of the west edge of west lane of Ry. 126.**

DESCRIPTION OF BENCH MARK

DESCRIPTION OF BENCH MARK

Designation **V 265**
Nearest town **WARFORDSBURG**
Distance and direction from nearest town **1.7 MILE NORTH OF**
Character of mark **BENCH MARK DISK**
Established by **CAGS**
Detailed description **About 1.7 mile north along State Ry. 126 from the junction of State Ry. 126 and U.S.Ry. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL. In north west wingwall of concrete bridge, 12 feet west of the west edge of west lane of Ry. 126.**

DESCRIPTION OF BENCH MARK

DESCRIPTION OF BENCH MARK

Designation **WENKEN NO. 1**
Nearest town **WARFORDSBURG**
Distance and direction from nearest town **5.3 MILE NORTH WEST OF**
Character of mark **REFERENCE MARK DISK**
Established by **CAGS**
Detailed description **About 5.0 miles north west along the Interstate Ry. from the interchange for U.S. 522 and Interstate Ry. at WARFORDSBURG to an overpass thence about 100 yards north across strip separating the highway and blacktop farm road paralleling the highway thence 0.3 mile east on blacktop road to crest of hill and R.M., STANDARD TRIANGULATION REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.**

DESCRIPTION OF BENCH MARK

DESCRIPTION OF BENCH MARK

Designation **W 265**
Nearest town **WARFORDSBURG**
Distance and direction from nearest town **2.8 MILE NORTH OF**
Character of mark **BENCH MARK DISK**
Established by **CAGS**
Detailed description **About 2.8 mile north along State Ry. 126 from the junction of State Ry. 126 and U.S. 522 (overhead bridge) in the north east edge of WARFORDSBURG, STANDARD BENCH MARK DISK DRILLED IN VERTICAL. In north west pier of overhead bridge, 18 inches above the ground, 11 feet north west of the north wall edge of north west lane of State Ry. 126.**

DESCRIPTION OF BENCH MARK

DESCRIPTION OF BENCH MARK

Designation **LENKEN STATION**
Nearest town **WARFORDSBURG**
Distance and direction from nearest town **5.3 MILE NORTH WEST OF**
Character of mark **STATION DISK**
Established by **CAGS**
Detailed description **About 5.0 mile north west along Interstate Ry. from the interchange for U.S. 522 and Interstate Ry. at WARFORDSBURG to an overpass thence about 100 yards north across strip separating the highway and blacktop farm road paralleling the highway thence 0.3 mile east on blacktop farm road to crest of hill and station, STANDARD TRIANGULATION STATION DISK SET IN TOP OF CONCRETE POST.**

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

VERTICAL CONTROL DATA

by the

Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND
LINE 106

DESCRIPTION OF BENCH MARK

Designation DENEN NO. 2
Nearest town WARFORDSBURG
Distance and direction from nearest town 5.3 miles north west of
Character of mark REFERENCE MARK DISK
Established by CGCS
Detailed description About 5.0 miles north west along Interstate Hy. from the interchange
for U.S. 522 and Interstate Hy. at WARFORDSBURG to an overpass thence about 100
yards north across strip separating the highway and blacktop farm road paralleling
the highway thence 0.3 miles east on blacktop farm road to crest of hill and R.M.
STANDARD TRIANGULATION REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation POINT VIEW NO. 1
Nearest town WARFORDSBURG
Distance and direction from nearest town 7.85 miles north west of
Character of mark REFERENCE MARK DISK
Established by CGCS
Detailed description About 7.2 miles north west along State Hy. 126 from the junction of
State Hy. 126 and U.S. 522 (overhead bridge) in the north east edge of WARFORDSBURG,
to gravel road right and HOWARD JOHNSON'S sign on left at a crossroad, thence 0.05
miles south east on dirt road to "T" intersection thence continue south east on dirt
road for 0.6 miles to blacktop road junction and R.M. STANDARD TRIANGULATION
REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation DENEN AZIMUTH
Nearest town WARFORDSBURG
Distance and direction from nearest town About 5.4 miles north west of
Character of mark AZIMUTH DISK
Established by CGCS
Detailed description About 5.0 miles north west along Interstate Hy. from the interchange
for U.S. 522 and Interstate Hy. at WARFORDSBURG to an overpass thence continue
for 0.3 miles thence go south 0.1 to OLD Hy. 126 and azimuth mark STANDARD AZIMUTH
MARK DISK DRILLED IN HORIZONTAL IN CLEFT ON THE south side of the highway, about
flush with the highway, about 22 feet south of the centerline of the road.

DESCRIPTION OF BENCH MARK

Designation R 265/
Nearest town BREEZWOOD
Distance and direction from nearest town 14.0 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 14.0 miles south along State Hy. 126 from the junction of State
Hy. 126 and U.S. Hy. 30 in BREEZWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL
in top of concrete culvert, 28 feet west of the centerline of Hy. 126, 22 feet south
of the center of field road for reason of culvert, 4 feet east of STANDARD METAL
WITNESS POST.

DESCRIPTION OF BENCH MARK

Designation Q 265/
Nearest town BREEZWOOD
Distance and direction from nearest town 13.1 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 13.1 miles south along State Hy. 126 from the junction of State
Hy. 126 and U.S. Hy. 30 in BREEZWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL
in north end of concrete drain culvert, 21 feet west-north west of the centerline of
Hy. 126, 28 paces north-north east of the north east corner of ATLANTIC SERVICE STA.
(BOB'S MOTOR HAVEN).

DESCRIPTION OF BENCH MARK

Designation Q 265/
Nearest town BREEZWOOD
Distance and direction from nearest town 12.1 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 12.1 miles south along State Hy. 126 from the junction of State
Hy. 126 and U.S. Hy. 30 in BREEZWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL
in north end of concrete drain culvert, 21 feet north west of the centerline of the
highway, 39 paces north-north east of SIMILAR SERVICE STATION and RESTAURANT,
NOTE: Located at the foot of an 8 foot road bank.

DESCRIPTION OF BENCH MARK

Designation P 265/
Nearest town BREEZWOOD
Distance and direction from nearest town 12.1 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 12.1 miles south along State Hy. 126 from the junction of State
Hy. 126 and U.S. Hy. 30 in BREEZWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL
in north end of concrete drain culvert, 21 feet north west of the centerline of the
highway, 39 paces north-north east of SIMILAR SERVICE STATION and RESTAURANT
NOTE: Located at the foot of an 8 foot road bank.

DESCRIPTION OF BENCH MARK

Designation P 265/
Nearest town BREEZWOOD
Distance and direction from nearest town 12.1 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 12.1 miles south along State Hy. 126 from the junction of State
Hy. 126 and U.S. Hy. 30 in BREEZWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL
in north end of concrete drain culvert, 21 feet north west of the centerline of the
highway, 39 paces north-north east of SIMILAR SERVICE STATION and RESTAURANT,
NOTE: Located at the foot of an 8 foot road bank.

VERTICAL CONTROL DATA

by the

Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND
LINE 106

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEALEVEL DATUM OF 1929

QUAD 390781 PAGE NO. 16
PA-N-D-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIORAM NJ 17-3 CUMBERLAND

DESCRIPTION OF BENCH MARK

Designation M 265
Nearest town BRECKWOOD
Distance and direction from nearest town 11.35 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 11.35 mile south along State Ry. 126 from the junction of State Ry. 126 and U.S. Ry. 30 in BRECKWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL in north end of concrete culvert, 21 feet north west of the centerline of Ry. 126 40 paces west-south west from the south end of guard rail on south east side of road,
NOTE: located at the foot of 18 foot road bank.

DESCRIPTION OF BENCH MARK

Designation M 265
Nearest town BRECKWOOD
Distance and direction from nearest town 10.5 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 10.5 miles south along State Ry. 126 from the junction of State Ry. 126 and U.S. 30 in BRECKWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL in the north end of concrete drain culvert, 22 feet north west of the centerline of State Ry. 126, 68 paces south west of the south end of guard rail on south east side of Ry. 126, BM is located at the foot of 15 foot rock road bank.

DESCRIPTION OF BENCH MARK

Designation L 265
Nearest town BRECKWOOD
Distance and direction from nearest town 9.65 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 9.65 mile south along State Ry. 126 from the junction of U.S. Ry. 30 and State Ry. 126 in BRECKWOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL in the north end of concrete drain culvert, 22 feet north west of the centerline of Ry. 126, (NOTE: culvert is at bottom of 18 foot road bank south east),

DESCRIPTION OF BENCH MARK

Designation H 265 (PBM)
Nearest town CRYSTAL SPRING
Distance and direction from nearest town 2.9 miles south of
Character of mark BENCH MARK DISK
Established by PENNSYLVANIA DEPARTMENT OF HIGHWAYS
Detailed description About 2.9 miles south west along OLD State Ry. 126 from the CRYSTAL SPRING POST OFFICE in CRYSTAL SPRING, to bridge over small creek, STANDARD BENCH MARK P.D.H. DRILLED IN HORIZONTAL in north west wingwall of bridge No. 770, road 14 feet from the center of the highway, 37 feet south west of the center of rd., road.

DESCRIPTION OF BENCH MARK

Designation C 16 (USGS)
Nearest town CRYSTAL SPRING
Distance and direction from nearest town ABOUT 2.35 MILE SOUTH
Character of mark DISK
Established by U.S.G.S.
Detailed description About 2.35 mile south along old Highway 126 from the CRYSTAL SPRING POST OFFICE to the McEndries Church, set vertical in the north face at the north-east corner of the foundation for the church, about 2.3 feet above the ground, 72 feet west of the centerline and about 7 feet above the highway.

DESCRIPTION OF BENCH MARK

Designation G 265
Nearest town CRYSTAL SPRING
Distance and direction from nearest town 1.8 miles south of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 1.8 miles south west along OLD State Ry. 126 from the POST OFFICE in CRYSTAL SPRING, BM is located on the property of MR. EARL W. ANERS, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL in large rock (approximately 0.1 mile south of two-story frame house), 68 feet north west of the center of the road, 18 feet north east of a 26 inch Maple tree, 58 feet north west of telephone pole No. 186.

NOTE : This BM is located at the crest of TOWN HILL MOUNTAIN.

DESCRIPTION OF BENCH MARK

Designation J 265 (PBM)
Nearest town CRYSTAL SPRING
Distance and direction from nearest town 3.8 miles south west of
Character of mark BENCH MARK DISK
Established by CGCS
Detailed description About 3.8 miles south west along OLD State Ry. 126 from the POST OFFICE in CRYSTAL SPRING, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL in north west wingwall of concrete culvert over small creek, 24 feet south west of the centerline of OLD State Ry. 126, 28 feet south west of the north west end of the highway guard rail.

NOTE: BM is approximately 250 feet south west of a two-story frame house.

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781 PAGE NO. 17
PA-MD-W VA LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NO 17-3 CUMBERLAND
LINE 10;

DESCRIPTION OF BENCH MARK

Designation GARLAND AZIMUTH
Nearest town CRYSTAL SPRINGS
Distance and direction from nearest town 0.75 mile south of
Character of mark AZIMUTH MARK DISK
Established by CGCS
Detailed description About 0.75 mile south along OLD State Ry. 126 from the POST OFFICE in
CRYSTAL SPRINGS to the azimuth on the east side of the highway, STANDARD AZIMUTH DISK
SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation F 265 (PTH)
Nearest town BREEZWOOD
Character of party J.C.CHILDS
Leveling date OCT. 1960
Stamping GARLAND 1960
Established by PENNSYLVANIA DEPARTMENT OF HIGHWAYS
Detailed description About 1.0 mile south along State Ry. 126 from the junction of U.S. Ry. 30
and State Ry. 126 in BREEZWOOD to side road right (old Ry 126 at Crystal Springs)
then turn right and go 0.05 mile south east * STANDARD P.D.M. DISK DRILLED IN
HORIZONTAL. In the south end of bridge No. 926-48, 5 feet north west of sign RUSH
CREEK, 14 feet east of the centerline of the road.

DESCRIPTION OF BENCH MARK

Designation GARLAND STATION
Nearest town CRYSTAL SPRINGS
Distance and direction from nearest town 0.5 mile south of
Character of mark STATION DISK
Established by CGCS
Detailed description About 0.5 mile south along OLD State Ry. 126 from the POST OFFICE in
CRYSTAL SPRINGS to hedge fence row on the west side of the highway and station right,
STANDARD TRIANGULATION STATION DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation F 265 (P)
Nearest town BREEZWOOD
Character of party J.C.CHILDS
Leveling date OCT. 1960
Stamping GARLAND 1960
Established by CGCS
Detailed description About 3.4 mile south along State Ry. 126 from the junction of U.S. Ry. 30
and State Ry. 126 in BREEZWOOD, STANDARD BRANCH MARK DISK DRILLED IN HORIZONTAL in
south edge of "W" shaped concrete culvert, 23 feet north east of the center-line of
the highway, 51 feet south of highway guard rail.

DESCRIPTION OF BENCH MARK

Designation GARLAND NO. 2
Nearest town CRYSTAL SPRINGS
Distance and direction from nearest town 0.5 mile south of
Character of mark REFERENCE MARK DISK
Established by CGCS
Detailed description About 0.5 mile south along OLD State Ry. 126 from the POST OFFICE in
CRYSTAL SPRINGS to hedge fence row on the west side of the highway and Ry., STANDARD
REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation D 265
Nearest town BREEZWOOD
Character of party J.C.CHILDS
Leveling date OCT. 1960
Stamping D 265 1960
Established by CGCS
Detailed description About 2.65 miles south along State Ry. 126 from the junction of U.S. Ry. 30
and State Ry. 126 in BREEZWOOD, STANDARD BRANCH MARK DISK DRILLED IN HORIZONTAL in
the north end of concrete culvert (drain), 21 feet north east of the center-line of
Ry. 126, approximately 10 feet south west of high rock cut bank.

DESCRIPTION OF BENCH MARK

Designation GARLAND NO. 1
Nearest town CRYSTAL SPRINGS
Distance and direction from nearest town 0.5 mile south of
Character of mark REFERENCE MARK DISK
Established by CGCS
Detailed description About 0.5 mile south along OLD State Ry. 126 from the POST OFFICE in
CRYSTAL SPRINGS to hedge fence row on the west side of the highway and Ry., STANDARD
REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation S.P.POULL
Nearest town BREEZWOOD
Character of party J.C.CHILDS
Leveling date OCT. 1960
Stamping S.P.POULL
Established by CGCS
Detailed description About 1.75 miles south along state Ry. 126 from the junction of OLD and NEW State Ry. 126 thence about
50 yards south west on OLD Ry. 126 thence about 50 yards west to edge of field and
lone Oak tree and station right, STANDARD TRIANGULATION STATION DISK SET IN TOP OF
CONCRETE POST.

Recovered as described - 1965 .

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

Coast and Geodetic Survey
Sea Level Datum of 1929

VERTICAL CONTROL DATA

by the

QUAD 390781 PAOE NO.18
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

DESCRIPTION OF BENCH MARK

Designation SPRUIT, NO. 2 State PENNSYLVANIA County BEDFORD
Nearest town BREZEMOOD County BEDFORD Chief of party J.C.CHILDS
Distance and direction from nearest town 1.75 miles south of Leveling date OCT. 1960
Character of mark REFERENCE MARK DISK Stamp SPRUIT, NO. 2 1960
Established by CGS
Detailed description About 1.75 mile south along State Ry. 126 from the junction of State Ry. 126 and U.S. 30 in BREZEMOOD to a road between OLD and NEW State 126 thence about 50 yards south west on OLD Ry. 126 thence about 50 yards west to edge of field and lone Oak tree and the STANDARD REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation C 18 (USGS) State PENNSYLVANIA County BEDFORD
Nearest town BREZEMOOD County BEDFORD Chief of party J.C.CHILDS
Distance and direction from nearest town AT BREZEMOOD Leveling date OCT. 1960
Character of mark DISK Stamp C 18 1965
Established by U.S.G.S.
Detailed description At Brezewood, at the Brezewood Methodist Church, set vertical in the step to the entrance on the west side of the steps at the south side of the church building. About 1 foot above the ground.

1905 USGS Report - DESTROYED by construction.

DESCRIPTION OF BENCH MARK

Designation SPRUIT, NO. 1 State PENNSYLVANIA County BEDFORD
Nearest town BREZEMOOD County BEDFORD Chief of party J.C.CHILDS
Distance and direction from nearest town 1.75 miles south of Leveling date OCT. 1960
Character of mark REFERENCE MARK DISK Stamp SPRUIT, NO. 1 1960
Established by CGS
Detailed description About 1.75 mile south along State Ry. 126 from the junction of State Ry. 126 and U.S. 30 in BREZEMOOD to a road between OLD and NEW State 126 thence about 50 yards south west on OLD Ry. 126 thence about 50 yards west to edge of field and lone Oak tree and the STANDARD REFERENCE MARK DISK SET IN TOP OF CONCRETE POST.

DESCRIPTION OF BENCH MARK

Designation WLT STATION State PENNSYLVANIA County BEDFORD
Nearest town BREZEMOOD County BEDFORD Chief of party J.C.CHILDS
Distance and direction from nearest town AT BREZEMOOD Leveling date OCTOBER 1960
Character of mark TRIANGULATION STATION DISK Stamp WLT 1960
Established by COAST & GEODETIC SURVEY
Detailed description At Brezewood, about 50 yards east of the east end of the Brezewood Methodist Church, to reach from the street in the front of the church go east along an alley which runs along the north side of the church to the end of the alley and a garage, also a power pole with a transformer, the station is about 2 feet south east of this transformer, this point is also in the center of a triangle which is made by cars entering the garage. Both RMs were covered at this time by the owner of the property, one by a stand and the other by vegetables and were not leveled to.

1905 Report - Destroyed by construction.

DESCRIPTION OF BENCH MARK

Designation C 265 (P.D.H.) State PENNSYLVANIA County BEDFORD
Nearest town BREZEMOOD County BEDFORD Chief of party J.C.CHILDS
Distance and direction from nearest town 1.7 miles south of Leveling date OCT. 1960
Character of mark BENCH MARK DISK Stamp C 265 1960
Established by CGS
Detailed description About 1.7 mile south along State Ry. 126 from the junction of U.S. Ry. 30 and State Ry. 126 in BREZEMOOD, STANDARD BENCH MARK DISK DRILLED IN HORIZONTAL CONCRETE CURB, 32 feet north east of the centerline of Ry. 126, 20 feet south of the centerline of driveway, 54 feet west of the north west corner of two-story frame house.

(from 685A)
(11-R-48)

RECOVERY NOTE, BENCH MARK

Designation J 95 (P.D.H.) State PENNSYLVANIA County Bedford
Nearest town Everett County Bedford Chief of Party J.C.B.
Distance and direction from nearest town 6.5 miles east Recovery Date 4/6/66
Character of mark A Pa. Highway Dept. disk Stamp J 95 1965
Established by Pa. Highway Dept.
Present condition Searched for but not recovered. The bridge has been replaced by a new bridge.

Designation B 265 (P.D.H.) State PENNSYLVANIA County BEDFORD
Nearest town BREZEMOOD County BEDFORD Chief of party J.C.CHILDS
Distance and direction from nearest town 0.65 mile south of Leveling date OCT. 1960
Character of mark BENCH MARK DISK Stamp B 265 1960
Established by PENNSYLVANIA DEPARTMENT OF HIGHWAYS
Detailed description About 0.65 mile south along State Ry. 126 from the junction of U.S. Ry. 30 and State Ry. 126 in BREZEMOOD, STANDARD P.D.H. MARK DRILLED IN HORIZONTAL CONCRETE COPING, 27 feet south of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "J 95 1956."

6.5 miles east along U.S. Highway 30 from the Union Hotel at Everett, Bedford County, at a bridge over the Juniata River, in the top of the southeast corner of the concrete coping, and 27 feet south of the center line of the highway. A Pennsylvania Department of Highways standard disk,

R

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEA LEVEL DATUM OF 1929

QUAD 390781
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

L.I.N.F. 167

Form 685A
(1-6-56)

RECOVERY NOTE, BENCH MARK

Designation **K 95**
Nearest town Everett
Distance and direction from nearest town 8.4 miles east
Character of mark a disk
Established by CGS
Present condition good
Detailed report Searched for but not recovered—1960

8.4 miles east along U.S. Highway 30 from the center line of the highway, 12 feet west of the center line of a north-and-south road, near a farm gate, and 2 feet east of the fence. A standard disk, stamped "K 95 1935" and set in the top of a concrete post.

DESCRIPTION OF BENCH MARK

Designation A 265
Nearest town BRECKWOOD
Distance and direction from nearest town 0.75 mile east of Character of mark BENCH MARK DISK
Established by CGS
Detailed description About 0.75 mile east along U.S. Hwy 30 from the junction of U.S. 30 and State Rr. 126 in BRECKWOOD to overhead turnpike bridge, STANDARD BENCH MARK DISK DRILLED IN VERTICAL in the north west wall approximately 2 feet above the ground, 16 feet north east of the centerline of U.S. 30.

THE LINE LEAVES AND RE-ENTERS THE QUADRANGLE

Form 685A
(1-6-56)

RECOVERY NOTE, BENCH MARK

Designation **R 95**
Nearest town McConnellsburg
Distance and direction from nearest town 8.2 miles northwest
Character of mark a disk
Established by CGS
Present condition good
Detailed report Searched for but not recovered.

8.2 miles northwest along U.S. Highway 30 from about 100 yards east of an old concrete hotel, and 18 feet north of the center line of the highway. A standard disk, stamped "R 95 1935" and set in the top of a concrete post.

Form 685A
(1-6-56)

RECOVERY NOTE, BENCH MARK

Designation **T.P.S. 56 J**
Nearest town McConnellsburg
Distance and direction from nearest town 8.1 miles northwest
Character of mark a disk
Established by USGS
Present condition good
Detailed report Recovered as described.

Highway 30 from the Fulton National Bank at McConnellsburg, Fulton County, in the top of the southeast corner of a concrete bridge, and 12 feet south of the center line of the highway. A United States Geological Survey standard disk, stamped "TP 56 J 1926."

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, BENCH MARK

Designation **782 (U.S.G.S.)**
Nearest town McConnellsburg
Distance and direction from nearest town 6.2 miles northwest
Character of mark a disk
Established by USGS
Present condition good
Detailed report Recovered as described but a porch has been built which makes mark inaccessible.

6.2 miles northwest along U.S. Highway 30 from the Fulton National Bank at McConnellsburg, Fulton County, 39 feet west of the Harrisonville post office, at the W.H. Hollinshead house, in the northwest corner of the foundation, about 66 feet south of the center line of the highway, and 30 feet east of the center of a road leading to Meechore. A United States Geological Survey standard disk, stamped "782" and set vertically.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, BENCH MARK

Designation **S 95 (P.D.H.)**
Nearest town McConnellsburg
Distance and direction from nearest town 6.2 miles northwest
Character of mark a Pa. Dept. of Highways disk
Established by Pa. Highway Dept.
Present condition good
Detailed report Recovered as described.

6.2 miles northwest along U.S. Highway 30 from the Fulton National Bank at McConnellsburg, Fulton County, about 126 feet east of the Harrisonville post office door, at a concrete bridge over Licking Creek, in the top of the southwest corner, and 12 feet south of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "S 95 1935."

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

R

R

R

OCTOBER 1967

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

VERTICAL CONTROL DATA
by the
Coast and Geodetic Survey
SEALEVEL DATUM of 1929

QUAD 390781 PAGE NO. 20
PA-MD-W VA
LATITUDE 39°30' to 40°00'
LONGITUDE 78°00' to 78°30'
DIAGRAM NJ 17-3 CUMBERLAND

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, BENCH MARK

R

LINE 108

Designation **T 95 (P.H.D.)** State **Pennsylvania** County **Fulton**
Nearest town **McConnellsburg** County **Fulton** Chief of Party **J.O.B.**
Distance and direction from nearest town **5.0 miles northwest** Recovery Date **4/66**
Character of mark **a Pa. Dept. of Highways disk** Stamping **T 95 1935**
Established by **Pa. Dept. of Highways**
Present condition **good**
Detailed report **Recovered as described.**

5.0 miles northwest along U.S. Highway 30 from the Fulton National Bank at McConnellsburg, Fulton County,

in the top of the southwest end of a bridge over Patterson Run, and 12 feet south of the center line of the highway. A Pennsylvania Department of Highways standard disk, stamped "T 95 1935,"

was recovered from the bridge seat of the northeast abutment. The top of a copper bolt.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

R

LINE 108

Designation **U 95** State **Pennsylvania** County **Fulton**
Nearest town **McConnellsburg** County **Fulton** Chief of Party **J.O.B.**
Distance and direction from nearest town **3.5 miles northwest** Recovery Date **4/66**
Character of mark **B disk** Stamping **U 95 1935**
Established by **OG&S**
Present condition **good**
Detailed report **Recovered as described except sign board is gone and mark**

18 4 feet south of utility pole 79.

3.5 miles northwest along U.S. Highway 30 from the Fulton National Bank at McConnellsburg, Fulton County, 9 feet west of the "Scrub Ridge Summit" signboard, about 117 feet south of Long View Lodge and 33 feet north of the center line of the highway. A standard disk, stamped "U 95 1935" and set in the top of a concrete post.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, BENCH MARK

R

THE LINE ENTERS MARYLAND

Designation **V 95** State **Pennsylvania** County **Fulton**
Nearest town **McConnellsburg** County **Fulton** Chief of Party **J.O.B.**
Distance and direction from nearest town **1.8 miles northwest** Recovery Date **4/66**
Character of mark **A disk** Stamping **V 95**
Established by **OG&S**
Present condition **searched for but not recovered.**
Detailed report **Recovered as described.**

1.8 miles northwest along U.S. Highway 30 from the Fulton National Bank at McConnellsburg, Fulton County, about 0.1 mile west of the Conestoga Inn entrance, and 27 feet north of the center line of the highway. A standard disk, stamped "V 95" and set in the top of a concrete post.

APPENDIX B

USGS vertical and horizontal controls for Paw Paw, WV. 15 minute quadrangle

39-078-13
PAW PAW QUADRANGLE
70 MD -11 PA.-124 W.VA.
N3930-W7815/15
DIAGRAM NJ 17-3
CUMBERLAND

30TH ENGINEER TOPOGRAPHIC BATTALION

THIRD-ORDER LEVELING

ADJUSTED FIELD ELEVATIONS

DISTRIBUTED BY

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

70 MD.-11 PA.-124 W.VA.
PAW PAW QUADRANGLE

39-078-13
N3930-W7815/15

INDEX OF PERMANENT MARKS

<u>MARK (USGS)</u>	<u>PAGE NO.</u>	<u>MARK (NGS)</u>	<u>PAGE NO.</u>
LL26 2 30TH ENGRS 1962 522	1	X 43 1941	1
LL26 3 30TH ENGRS 1962 531	1	Y 43 1941	1

LL26 3
BY PAY PERMANCE

COUNTRY	USA	TYPE OF MARK	Std. tablet	DESIGNATION OF MARK
PROVINCE OR STATE		ESTABLISHED BY (AGENCY)		ELEVATION
West Virginia		30th Engg Bn (Topo.)		922.047 ft.
MUNICIPALITY		AGENCY (CAST IN MARK)		ORDER
Paw Paw		U. S. Geological Survey		Third
LINE		MARK IS STAMPED		DATUM
		LL26 3 30TH ENGRS 1962 322		1929 S.L.D.

DESCRIPTION
 Woods Run, 1.8 mi N, w, along State Highway 2; 0.1 mi N, E.
 Little Cacapon to R.; thence 0.1 mi W, by trail to
 junction of Potomac and Little Cacapon Rivers; 113 ft
 abv. of junction of rivers; 75 ft abv. of bank at
 junction of rivers; 14 ft W. of 40-ft. tree; 20 ft
 above water surface; in concrete post; standard
 tablet stamped "LL26 3 30TH ENGRS 1962 322"



DESCRIBED OR RECOVERED BY	AGENCY	DATE

COUNTRY	USA	TYPE OF MARK	NCS Std. disk	DESIGNATION OF MARK
PROVINCE OR STATE		ESTABLISHED BY (AGENCY)		ELEVATION
West Virginia		NCS		843.107 ft
MUNICIPALITY		AGENCY (CAST IN MARK)		ORDER
		NCS		
LINE		MARK IS STAMPED		DATUM
		Y 43 1941		

DESCRIPTION
 "Y 43 1941" (NCS)

DESCRIBED OR RECOVERED BY	AGENCY	DATE

COUNTRY	USA	TYPE OF MARK	Std. tablet	DESIGNATION OF MARK
PROVINCE OR STATE		ESTABLISHED BY (AGENCY)		ELEVATION
West Virginia		30th Engg Bn (Topo.)		920.916 ft
MUNICIPALITY		AGENCY (CAST IN MARK)		ORDER
Paw Paw		U. S. Geological Survey		Third
LINE		MARK IS STAMPED		DATUM
		LL26 3 30TH ENGRS 1962 331		1929 S.L.D.

DESCRIPTION
 Paw Paw, 1.9 mi N, and W, of, along State Highway 9 (W.Va.)-
 31 (Md.), thence 0.7 mi SE, along gravelled rd.
 across Western Maryland Railroad to abandoned
 Chesapeake and Ohio Canal, thence S. and W. on rd.
 along canal; Bed junction of Potomac and Little
 Cacapon Rivers; 30 ft S. of centerline of dirt
 rd.; 10 ft E. of trail to river; 30 ft N. of
 30-in. blazed oak tree; in concrete post; standard
 tablet stamped "LL26 3 30TH ENGRS 1962 331"



DESCRIBED OR RECOVERED BY	AGENCY	DATE

COUNTRY	USA	TYPE OF MARK	NCS Std. disk	DESIGNATION OF MARK
PROVINCE OR STATE		ESTABLISHED BY (AGENCY)		ELEVATION
West Virginia		NCS		846.905 ft
MUNICIPALITY		AGENCY (CAST IN MARK)		ORDER
		NCS		
LINE		MARK IS STAMPED		DATUM
		Y 43 1941		

DESCRIPTION
 "Y 43 1941" (NCS)

DESCRIBED OR RECOVERED BY	AGENCY	DATE

QD. 70 MD - 124 WVA 11 PA

Station: SIDELING County: Washington State: Maryland
Observer: G. T. Hawkins Year: 1897 Datum: 1927 N.A.D. by graph
Description: 1898
20th Annual

Station is located about 10.0 mi W. of Hancock and 3.0 mi N. of Orleans, on high point on Sideling Ridge, about 1.0 mi from residence of George Morris, which is 3.0 mi S. of National Turnpike. The timber was cleared from the summit of the knob, except 1 tree, which was trimmed and left standing for signal.

Station mark: Signal tree.

Reference mark: Copper bolt cemented in solid rock, distant from tree, 16.3 ft, azimuth of which is $265^{\circ}39'$.

(NOTE: Vandals have removed copper bolt. Remains of drill hole found in large loose slab of sandstone. Bearing and distance to black oak signal tree check with original. A small mound of stones was built over bolt hole by party of Frank M. Lambert, 1939)

[Latitude 39 39 13.07' Longitude 78 19 32.33']

To Station—	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log. Meters	Miles
Fairview	269	23	31	89	37	08	4.484975
Sleepy	281	44	25	101	52	23	4.261462
Capon (2)	355	42	34	175	43	02	4.138253
Warrior	81	56	28	261	45	11	4.407862
Evitts	102	59	58	282	46	59	4.474890

THIRD-ORDER LEVELING
SEA LEVEL DATUM OF 1929

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

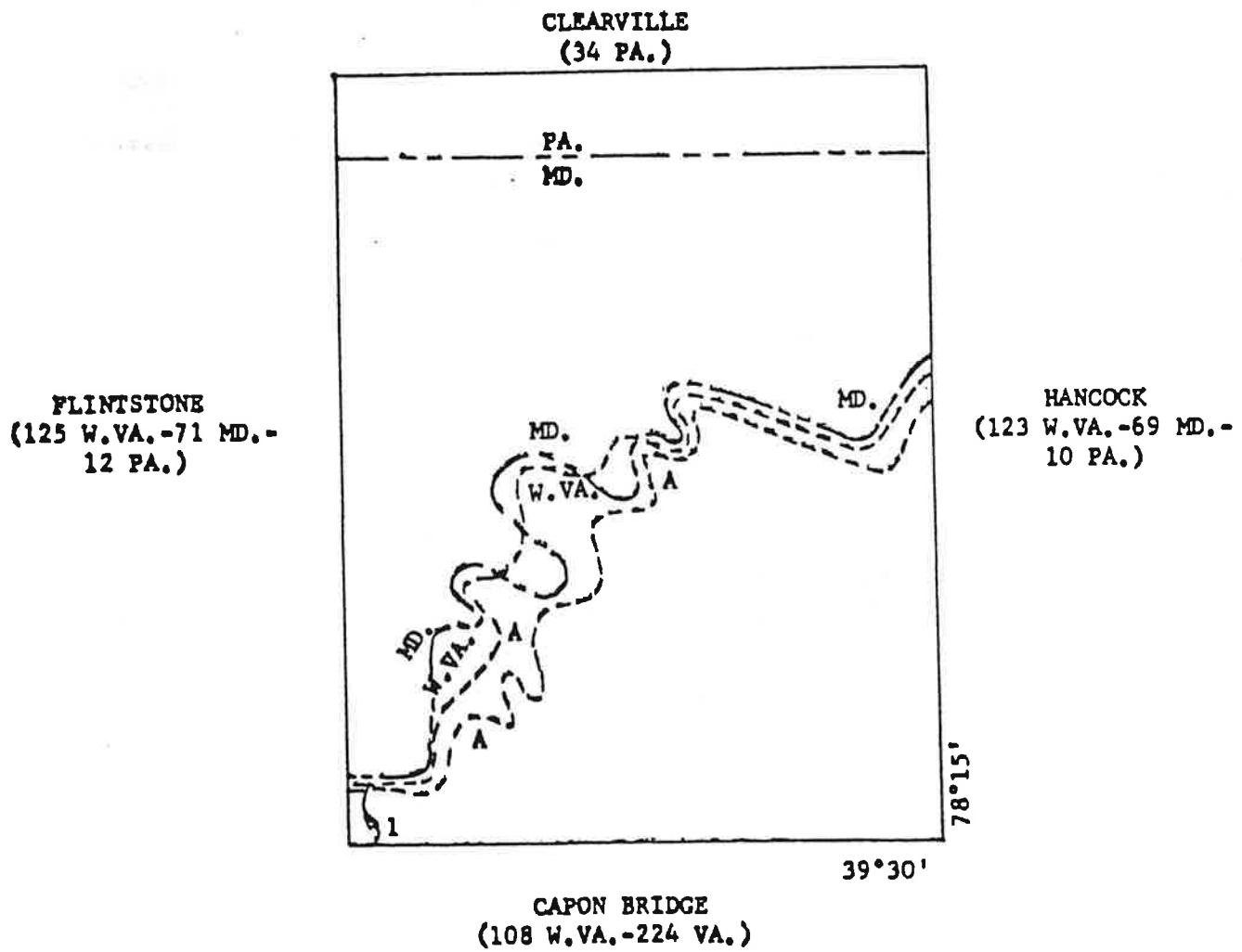
39-078-13
PAW PAW QUADRANGLE
70 MD.-11 PA.-124 W.VA.
N3930-W7815/15
DIAGRAM NJ 17-3
CUMBERLAND

Allegany and Washington Counties, Maryland;
Bedford and Fulton Counties, Pennsylvania;
Hampshire and Morgan Counties, West Virginia

Adjustment of 1973

Edition of 1973

PR: MCF



A. Quadrangle 390783

THIRD-ORDER LEVELING
SEA LEVEL DATUM OF 1929

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PAW PAW QUADRANGLE
70 MD.-124 W.VA.-11 PA.
N3930-W7815/15
DIAGRAM NJ 17-3
CUMBERLAND

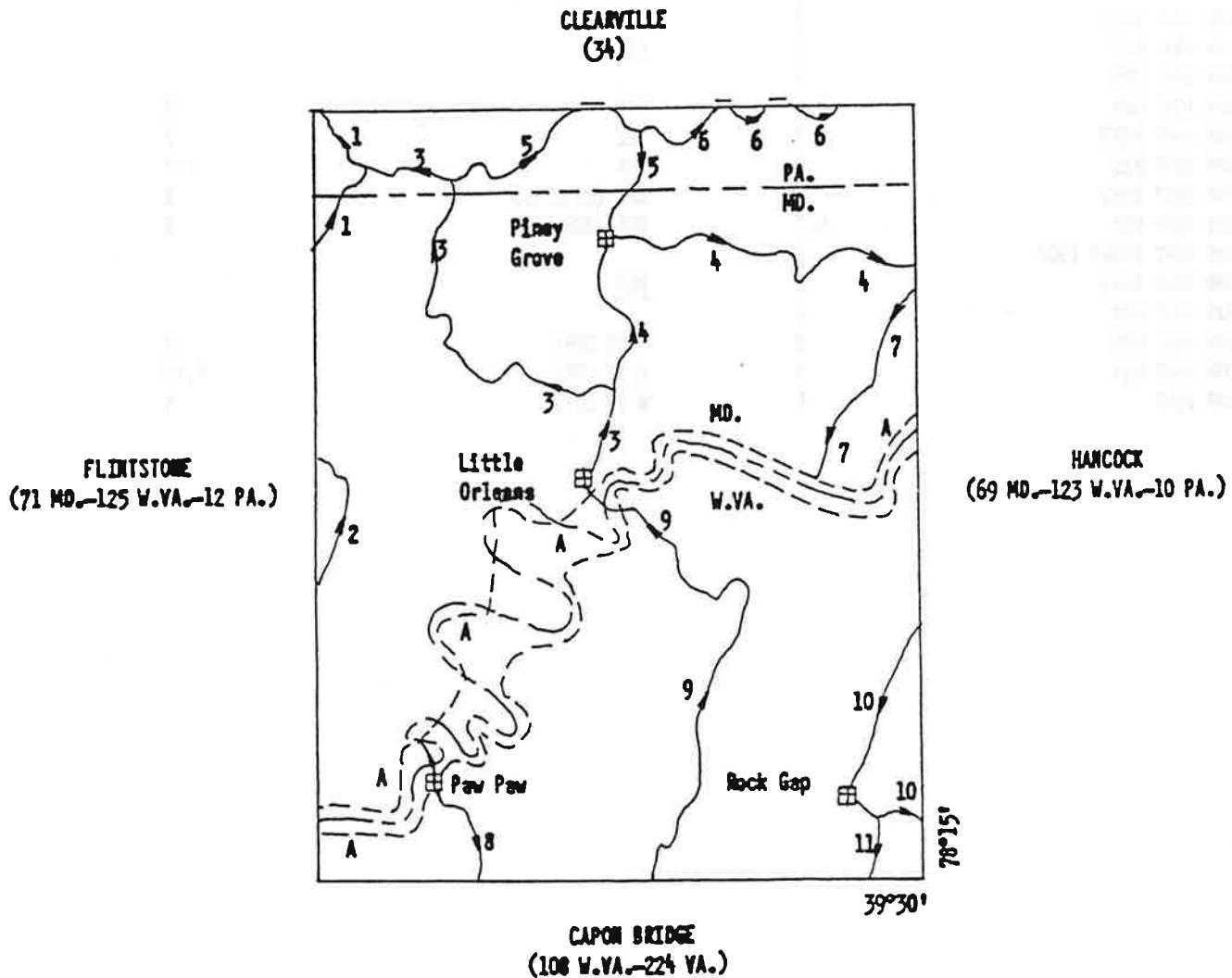
Allegany and Washington Counties, Md.; Hampshire
and Morgan Counties, W.Va.; Bedford and Fulton
Counties, Pa.

Only the permanent marks
are listed for lines
run more than 25 years
before edition date

Final adjustment of 1949

Edition of 10/20/72

PR: LFB/jyk



NGS (USGS) VERTICAL CONTROL DATA

A. Quadrangle 390781

PAW PAW QUADRANGLE

N3930-W7815/15
70 MD.-124 W.VA.-11 PA.

INDEX OF PERMANENT MARKS

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C 459	3	31 JMM 1947	9
MARYLAND 543 C	3	35 JMM 1947 525	9
C 946	3	36 JMM 1947 601	9
761 C	3	37 JMM 1947 753	9
C 1204	3	38 JMM 1947 550	10
20 EOM 1947 1238	3	39 JMM 1947 1066	10
21 EOM 1947 1027	3,5	40 JMM 1947 508	10
22 EOM 1947 1262	3	48 JMM 1947 777	10
24 EOM 1947 865	5,7	49 JMM 1947 892	10
25 EOM 1947 792	5	50 JMM 1947 712	11,11
26 EOM 1947 1195	5		
27 EOM 1947 629	5		
28 EOM 1947 529	4		
29 EOM 1947 864	4,5	718	8
33 EOM 1947 1073	7	722	7
35 EOM 1947 816	7	734	7,7
36 EOM 1947 1067	6	886 (885.735)	8
37 EOM 1947 957	6,7	886 (886.407)	8
38 EOM 1947 RESET 1962	6		
39 EOM 1947 1113	6		
40 EOM 1947 882	6		
44 EOM 1947 609	8	J 43 1941	8
45 EOM 1947 694	8	O 43 1941	4,10
23 JMM 1947	4	W 77 1941	8

ISOLATED BENCH MARKS (By C. B. Bailey and C. M. Smith, 1898-99; Book 7222, J. H. Jennings, 1898; Book 7225)	<u>Feet</u>
Piney Grove, 4.7 mi SW. of, along turnpike; at summit of Green Ridge; on S. side of pike; on W. side of rd. to Little Orleans; in small ledge of rock; standard tablet stamped "C 1204"	1204.281
✓ Little Orleans; at Chesapeake and Ohio Canal aqueduct over Fifteenmile Creek; in N. end of E. coping; standard tablet stamped "C 459"	459.394
Harvey; 100 ft W. of forks of rd. SW. to Woodmont; on S. side of turnpike; in solid rock; standard tablet stamped "C 946" (Reported destroyed, 1947)	945.710
Rock Gap; 0.13 mi W. of Mr. Fearnow's house; 10 ft N. of rd.; on knoll; in rock; standard tablet stamped "761 C" (NOTE: Drill hole with only a portion of stem recovered in 1914)	760.855
✓ Chesapeake and Ohio Canal; at Lock No. 55; at Great Cacapon, W. Va.; on coping stone; standard tablet not stamped	443.975
Fisher Ford; in SE. corner of rd. forks; in large boulder; standard tablet stamped "MARYLAND 543 C"	543.495

LINe 1.

E. O. Miner, 1947; Book AV 16

Pratt, 0.6 mi N. of, thence 0.7 mi NE., along graveled rd.; midway between junction with rd. SE. and junction with rd. N.; 75 ft NW. of center of rd.; 10 ft NW. of 48-in. oak tree; in top of 3- by 3- by 1-ft boulder; standard tablet stamped "20 EOM 1947 1238"	1238.022
Reference mark; 27 ft SE. of tablet; on top of 6- by 36-in. boulder; chiseled square	1233.63
U.E., Pratt, 0.6 mi N. of, thence 1.7 mi NE., along graveled rd.; 50 ft NE. of SW. corner of woods; 40 ft NW. of center of rd.; on top of 2- by 2- by 3-ft boulder; chiseled square	1293.58
Prosperity Christian Church, 3.7 mi SE. of; 100 ft E. of bridge over Bear Camp Branch; 50 ft N. of wye-junction of graveled rds.; in top of 5- by 3- by 8-ft boulder; standard tablet stamped "21 EOM 1947 1027"	1026.717
Reference mark; 50 ft E. and across rd. from tablet; on top of 3- by 3- by 8-ft boulder; chiseled square	1035.87
U.E., Prosperity Christian Church, 2.6 mi SE. of; about 200 ft W. of Bear Camp Branch; 110 ft N. of culvert which is at wye-junction of graveled rds.; on top of 2- by 4- by 1-ft boulder which is 12 ft higher than rd.; chiseled square	1243.66
Prosperity Christian Church, 1.8 mi SE. of; about halfway up W. slope of Polish Mountain; 20 ft N. of center of, and 5 ft higher than rd.; in top of 4- by 4- by 1-ft boulder; standard tablet stamped "22 EOM 1947 1262"	1261.426

PAW PAW Book AV 16	MD-W.VA-PA.	E. O. Miner
	1947	Feet
<u>LINE 1 (Cont'd.)</u>		
Reference mark; 40 ft S. of tablet; on top of 1- by 2- by 2-ft boulder; chiseled square	1260.53	
<u>LINE 2.</u>		
J. W. McLaughlin, 1947; Book AV 18		
Oldtown, 10.2 mi NE. of, along Green Ridge Road; 30 ft SE. of center of Y-junction of rd. N.; in edge of woods; in top of sandstone rock; standard tablet stamped "23 JMM 1947"	1381.389	
Reference mark; 120 ft N. of tablet; 25 ft NE. of center of rd.; in base on W. side of 6-in. pine tree; nail spike	1379.97	
<u>LINE 3.</u>		
E. O. Miner, 1947; Book AV 16		
"Q 43 1941" (NGS)	493.756	
U.E., Little Orleans, 1.4 mi N. of, along graveled rd.; 25 ft N. of iron pipe culvert; on E. bank of, and 5 ft higher than rd.; on top at end of rock ledge 1 ft thick; chiseled square	644.17	
Little Orleans, 2.4 mi N. of; 300 ft NW. of crossing of main rds.; 90 ft NE. of crossing of second class rds.; in abandoned camp of Civilian Conservation Corps; in top at SE. corner of 5- by 12-ft concrete cooling tank; 4 ft above ground; standard tablet stamped "29 EOM 1947 864"	863.972	
Reference mark; 75 ft NW. of tablet; on top of S. edge of higher one of two concrete platforms; chiseled square	874.81	
U.E., Little Orleans, 2.4 mi N. of, thence 0.7 mi W.; 10 ft SW. of center of rd.; on top of masonry catch basin; chiseled square	937.25	
Little Orleans, 3.8 mi NW. of; 0.13 mi SE. of stone quarry; 100 ft N. of Fifteenmile Creek; on W. bank of stream; 15 ft NE. of, and 3 ft lower than center of rd.; standard tablet stamped "28 EOM 1947 529"	529.113	
Reference mark; 22 ft SW. of tablet; at W. corner of bridge; on top of concrete abutment; chiseled square	529.57	
U.E., Little Orleans, 4.5 mi NW. of; 80 ft E. of junction with unimproved rd. SW.; 100 ft S. of large sawdust pile; on top of S. headwall of masonry catch basin; chiseled square	828.58	
U.E., Little Orleans, 6.0 mi NW. of; 60 ft NE. of junction with unimproved rd. SE.; on top of N. headwall of masonry catch basin; chiseled square	964.58	

5

PAW PAW
Book AV 16

MD.-W.VA.-PA.

E. O. Miner

1947

LINE 3 (Cont'd.)Feet

Little Orleans, 6.8 mi NW. of; 3.0 mi SE. of Shipway Restaurant, located on U. S. Highway 40 at top of Green Ridge; at confluence of Fifteenmile Creek and Piney Ridge Run; in Billmyer Game Refuge; 60 ft E. of T-rd. junction; 18 ft N. of center of rd.; in side of rock ledge; standard tablet stamped "27 EOM 1947 629"	628.892
Reference mark; 18 ft S. of tablet; in center of rd.; on rock ledge; chiseled square	630.09
U.E., Shipway Restaurant on U. S. Highway 40; 1.0 mi SW. of; 150 ft S. of wye-junction of rds.; 25 ft W. of center of rd.; on top of 2- by 2- by 1-ft boulder; chiseled square	1197.25
Shipway Restaurant on U. S. Highway 40, at top of Green Ridge; 300 ft E. of hotel; 150 ft E. of Y-junction with macadam rd. NE.; in top of W. end of foundation of abandoned gasoline pump; standard tablet stamped "26 EOM 1947 1195"	1194.800
Reference mark; 100 ft N. of tablet; 27 ft N. of center of northern rd.; on top of 1- by 4-ft boulder; chiseled square	1195.39
U.E., Shipway Restaurant, 1.1 mi W. of, along U. S. Highway 40, thence 0.6 mi N. along graveled rd. which is parallel to Fifteenmile Creek; 8 ft NW. of center of rd.; on top of W. wall of masonry catch basin; chiseled square	755.18
Shipway Restaurant, 1.1 mi W. of, along U. S. Highway 40, thence 1.5 mi N. along graveled rd. which is parallel to Fifteenmile Creek; 25 ft SW. of iron pipe culvert; 20 ft W. of, and 8 ft higher than center of rd.; in top of 1p by 2- by 3-ft boulder; standard tablet stamped "25 EOM 1947 792"	792.206
Reference mark; 40 ft S. of tablet; 20 ft W. of, and 8 ft higher than center of rd.; in root on NE. side of 6-in. white oak tree; copper nail and washer	790.12
Artemas, 1.7 mi S. of; 0.1 mi N. of Maryland-Pennsylvania-State line; 20 ft S. of wye-junction with rd. E.; 8 ft higher than rd.; in 2- by 2- by 4-ft outcrop of red rock; standard tablet stamped "24 EOM 1947 865"	865.372
Reference mark; 30 ft NW. of tablet; on top of W. concrete headwall of culvert; chiseled square	859.46
U.E., Crossing of Maryland-Pennsylvania State line and Fifteenmile Creek, 1.0 mi NW. of, along graveled rd.; 25 ft SE. of woods line; 10 ft NE. of center of rd.; on top of SE. end of masonry headwall of culvert; chiseled square	1019.51
"21 EOM 1947 1027" (Described in line 1)	1026.717

LINE 4.

E. O. Miner, 1947; Book AV 16

"29 EOM 1947 864" (Described in line 3)

863.972

PAW PAW
Book AV 16

MD.-W.VA.-PA.

E. O. Miner

1947

LINE 4 (Cont'd.)Feet

U.E., Little Orleans, 3.4 mi NE. of; about 0.1 mi SW. of farmhouse; 90 ft SW. of wye-junction with unimproved rd. W.; 40 ft NW. of center of improved rd.; on top of 6- by 12-in. boulder; chiseled square	1112.83
Little Orleans, 4.4 mi NE. of; 120 ft NW. of crossroad; 30 ft NE. of center of rd.; in top of stone post; standard tablet stamped "36 EOM 1947 1067"	1066.614
Reference mark; 35 ft NE. of tablet; in root on W. side of 12-in. hickory tree; copper nail and washer	1065.97
U.E., Little Orleans, 4.5 mi NE. of; 0.9 mi SW. of Piney Grove; at N. end of brick schoolhouse; on top of uppermost one of basement steps; chiseled square	1103.56
Piney Grove, on U. S. Highway 40; 125 ft W. of bridge; 32 ft W. of W. edge of house; 6 ft N. of and 5 ft higher than N. edge of pavement; in top of rock outcrop; standard tablet stamped "37 EOM 1947 957"	956.595
Reference mark; 210 ft E. of tablet; on top of E. end of foundation of abandoned gasoline pump; chiseled square	939.99
U.E., Piney Grove, 1.0 mi E. of, along U. S. Highway 40; 25 ft NE. of center of hwy.; at concrete bridge; on top of NE. end of E. wingwall; chiseled square	790.66
Piney Grove, 2.2 mi E. of, along U. S. Highway 40; 1.5 mi W. of Sideling Hill Creek; 41 ft N. of new relocation of U. S. Highway 40; in NE. wingwall of concrete culvert; standard tablet stamped "38 EOM 1947 RESET 1962" (Tablet was reset by Md. State Road Commission)	696.901
U.E., Piney Grove, 3.2 mi E. of, along U. S. Highway 40; 0.5 mi W. of Sideling Hill Creek; at Joy's Garage; 30 ft W. of wye-junction with graveled rd. S.; on top of S. headwall of culvert; chiseled square	633.37
U.E., Piney Grove, 3.7 mi E. of, along U. S. Highway 40; at Sideling Hill Creek; 11 ft S. of S. edge of bridge; on top of E. retaining wall; between two iron bolts; chiseled square	623.88
Piney Grove, 4.8 mi E. of, along U. S. Highway 40; at Forest Park Camp; 75 ft E. of wye-junction with graveled rd. N.; 25 ft S. of center of hwy.; in top of S. end of 3- by 6- by 12-ft boulder; standard tablet stamped "39 EOM 1947 1113"	1112.676
Reference mark; 50 ft NW. and across rd. from tablet; on top of 2- by 3- by 7-ft boulder; chiseled square	1112.81
U.E., Piney Grove, 5.9 mi E. of, along U. S. Highway 40; top of Sideling Hill; 80 ft SW. of center of hwy.; 1 ft NE. of concrete well cover; on top of 1- by 4-ft boulder; chiseled square	1592.72
U.E., Piney Grove, 6.8 mi E. of, along U. S. Highway 40; 30 ft NW. of center of hwy.; on top of concrete headwall of culvert; chiseled square	1273.81
Piney Grove, 7.7 mi E. of; 5.6 mi W. of Hancock, along U. S. Highway 40; 135 ft N. of wye-junction with State Highway 628; 27 ft N. of E. end of iron pipe culvert; in E. bank of, and 5 ft higher than State Highway 628; in top of 1- by 2- by 2-ft rock outcrop; standard tablet stamped "40 EOM 1947 882"	882.363

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PAW PAW	MD.-W.VA.-PA.	E. O. Miner	
Book AV 16		1947	
<u>LINE 4 (Cont'd.)</u>			<u>Feet</u>
Reference mark; 50 ft SW. of tablet; at end of culvert under U. S. Highway 40; on top of concrete slab; chiseled square			883.68
<u>LINE 5.</u>			
E. O. Miner, 1947; Book AV 16			
"24 EOM 1947 865" (Described in line 3)			865.372
U.E., Artemas, 1.7 mi S. of, thence 0.7 mi NE.; at top of hill; at curve in rd.; 10 ft W. of intersection of tangents of rd.; 3 ft E. of four-trunked oak tree; on top of 6- by 12-in. boulder; chiseled square			1126.88
Artemas, 1.7 mi S. of, thence 1.5 mi NE.; 3.1 mi SW. of Inglesmith; 20 ft W. of crossroad; in top of stone post; standard tablet stamped "33 EOM 1947 1073"			1072.767
U.E., Inglesmith, 2.0 mi SW. of; 105 ft E. of wye-junction with graveled rd. NW.; in N. cutbank of rd.; on top of rock ledge; 3 ft higher than ground; chiseled square			927.62
<u>Jogs into Clearville quadrangle</u>			
Fairview Church and Cemetery, 1.5 mi E. of, along State Highway 26; at Bedford-Fulton County line; at concrete bridge over Crooked Run; in top of W. wingwall; Pennsylvania Department of Highways standard disk stamped "734"			733.567
Fairview Church and Cemetery, 2.3 mi SE. of, along hwy.; 0.6 mi N. of Maryland-Pennsylvania State line; at W. end of bridge; in concrete wingwall; standard tablet stamped "35 EOM 1947 816"			815.931
Reference mark; 60 ft NE. of tablet; on top of concrete headwall of bridge; chiseled square			813.91
U.E., Maryland-Pennsylvania State line at State Highway 26; 1.4 mi NE. of Piney Grove; on top of square stone post; highest point in chiseled diamond			1026.05
"37 EOM 1947 957" (Described in line 4)			956.595
<u>LINE 6.</u>			
E. O. Miner, 1947; Book AV 16			
"734" (PDH) (Described in line 5)			733.567
Fairview Church and Cemetery, 1.7 mi SW. of; at S. corner of concrete bridge over Sideling Hill Creek; in top of wingwall; PDH standard disk stamped "722"			722.292

PAW PAW
Book AV 16

MD.-W.VA.-PA.

E. O. Miner

1947

LINE 6 (Cont'd.)

Feet

Fairview Church and Cemetery; 2.5 mi SE. of, along macadam rd.; 240 ft W. of wye-junction with graveled rd.; at NE. corner of concrete bridge; in top of wingwall; PDH standard disk stamped "718"

718.288

U.E., Fairview Church and Cemetery, 3.2 mi SE. of, along macadam rd.; 150 ft SW. of wye-junction with driveway S.; 15 ft SE. of center of macadam rd.; on top of concrete headwall of culvert; chiseled square

953.48

Jogs into Clearville quadrangle

Buck Valley Christian Church and Cemetery, 0.3 mi SW. of; at S. corner of bridge over Bear Creek; in top of S. wingwall; PDH standard disk stamped "886"

885.735

Buck Valley Christian Church and Cemetery, 0.2 mi SW. of; at SW. corner of concrete bridge over Stahle Run; in top of wingwall; PDH standard disk stamped "886"

886.407

LINE 7.

E. O. Miner, 1947; Book AV 16

U.E., Hancock, 3.7 mi W. of, along U. S. Highway 40, thence 0.9 mi SW. along State Highway 453; 115 ft SW. of junction with graveled rd. NW.; on top of NW. headwall of concrete culvert; chiseled square

562.22

Hancock, 3.7 mi W. of, along U. S. Highway 40, thence 1.8 mi SW. along State Highway 453; 20 ft S. of wye-junction with graveled rd. SW.; in top of 3- by 3-ft boulder; standard tablet stamped "44 EOM 1947 609"

608.902

Reference mark; 35 ft SW. of tablet; on top of S. wingwall of concrete bridge; chiseled square

609.11

Hancock, 3.7 mi W. of, along U. S. Highway 40, thence 1.8 mi SW. along State Highway 453, thence 1.2 mi SW. along graveled rd.; 210 ft NE. of fence corner; 100 ft SW. of culvert; 30 ft SE. of center of rd.; in top of 3- by 3- by 6-ft boulder; standard tablet stamped "45 EOM 1947 694"

694.075

Reference mark; 105 ft N. of tablet; 25 ft NW. of center of rd.; on top of 1- by 2- by 5-ft boulder; chiseled square

687.18

U.E., Pearre, 1.5 mi SE. of, thence 1.1 mi NE.; at log clubhouse of Tonelaway Rod and Gun Club; 40 ft NW. of stream; at W. edge of driveway; on top of 6- by 12-in. boulder; chiseled square

487.66

"J 43 1941" (NGS)

457.893

LINE 8.

J. W. McLaughlin, 1947; Book AV 18

"W 77 1941" (NGS)

548.171

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PAW PAW

Book AV 18

MD.-W.VA.-PA.

J. W. McLaughlin

1947

FeetLINE 8 (Cont'd.)

Paw Paw; at SE. end of overhead bridge over B. & O. RR.; in SE. headwall of bridge; standard tablet stamped "30 JWM 1947"	572.402
Reference mark; 90 ft NW. of tablet; on NW. end of overhead bridge over B. & O. RR.; on concrete headwall of bridge; chiseled square	571.98
U.E., Paw Paw, 1.0 mi SE. of, along hwy.; at Y-rd. NW. to cemetery; 30 ft N. of center of hwy.; on SW. headwall of concrete culvert; chiseled square	869.85
U.E., Paw Paw, 1.6 mi SE. of; at forks of Y-rd. N. to Magnolia; 25 ft SW. of center of hwy.; on rock outcrop; chiseled square	843.03
Paw Paw, 2.0 mi SE. of; 180 ft N. of yellow house standing on W. side of hwy.; 70 ft W. of center of hwy.; in rock ledge; standard tablet stamped "31 JWM 1947"	899.419
Reference mark; 430 ft S. of tablet; 20 ft W. of hwy.; on S. headwall of concrete culvert; chiseled square	887.71

LINE 9.

J. W. McLaughlin, 1947; Book AV 18

U.E., Largent, 2.2 mi NE. of; 20 ft E. of centerline and 3 ft lower than hwy.; on N. headwall of concrete culvert; chiseled square	588.74
Largent, 3.8 mi NE. of; 35 ft E. of Cacapon River; 25 ft W. of center of hwy.; in top of large boulder; standard tablet stamped "35 JWM 1947 525" (Reported not found, 1958)	525.233
Reference mark; 0.11 mi W. of tablet; 20 ft E. of hwy.; on N. headwall of concrete culvert; chiseled square	531.31
U.E., Largent, 5.1 mi NE. of; on S. wingwall of bridge over Cacapon River; chiseled square	531.10
Largent, 5.8 mi NE. of; 60 ft E. of Seven Oaks Cafe; 25 ft E. of centerline and 6 ft higher than hwy.; in top of large boulder; standard tablet stamped "36 JWM 1947 601"	600.685
Reference mark; 330 ft N. of tablet; 25 ft E. of center of hwy.; on S. headwall of concrete culvert; chiseled square	601.76
Largent, 7.8 mi NE. of; 80 ft SE. of center of junction of hwy. and I-rd. E.; 25 ft S. of gravelled rd.; in top of rock; standard tablet stamped "37 JWM 1947 753"	752.813
Reference mark; 100 ft NW. of tablet; 15 ft W. of center of hwy.; on S. headwall of concrete culvert; chiseled square	750.23

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PAW PAW
Book AV 18

MD.-W.VA.-PA.

J. W. McLaughlin

1947

LINE 9 (Cont'd.)

	<u>Feet</u>
U.E., Largent, 9.0 mi NE. of; 20 ft E. of center of hwy.; on S. headwall of concrete culvert; chiseled square	616.98
Largent, 10.1 mi NE. of; 4.7 mi SE. of Orleans Crossroads; at junction of State Highway 9 and Orleans Road; 25 ft E. of center of hwy.; in top of N. headwall of large concrete culvert; standard tablet stamped "38 JMM 1947 550"	549.720
Reference mark; 140 ft N. of tablet; in center of large triangle formed by rd. junction; in base on E. side of 18-in. maple tree; nail spike	547.50
Orleans Crossroads, 2.6 mi SE. of; 0.4 mi W. of crossroads; at sharp curve N.; 35 ft N. of center of rd.; in top of boulder; standard tablet stamped "39 JMM 1947 1066"	1066.379
Reference mark; 60 ft W. of tablet; 35 ft E. of center of rd.; in root on E. side of 12-in. oak tree; copper nail and washer	1075.62
U.E., Orleans Crossroads, 1.6 mi SE. of; 25 ft E. of center of rd.; on top of large boulder; chiseled square	1401.56
Orleans Crossroads, in village of; 30 ft SW. of center of rd.; 20 ft NE. of B. & O. RR. track; in SE. concrete foundation of block signal; standard tablet stamped "40 JMM 1947 508"	507.712
Reference mark; 60 ft SW. of tablet; on NW. concrete foundation of block signal; chiseled square	507.80
"Q 43 1941" (MGS) (Also inline 3)	493.756

LINE 10.

J. W. McLaughlin, 1947; Book AV 18

Berkley Springs, 3.8 mi SW. of; 35 ft SE. of center of junction of hwy. and T-rd. E.; 2 ft N. of shed at school bus stop; in top of rock; standard tablet stamped "48 JMM 1947 777" (Reported destroyed, 1958)	777.118
Reference mark; 480 ft S. of tablet; on NE. headwall of concrete culvert; chiseled square	782.90
U.E., Berkley Springs, 5.1 mi SW. of; about 120 ft S. of stone tavern; on SW. headwall of concrete culvert; chiseled square	857.72
Berkley Springs, 6.2 mi SW. of; 30 ft SW. of center of junction of hwy. and private driveway E.; 1 ft E. of fence; in top of rock; standard tablet stamped "49 JMM 1947 892"	891.877
Reference mark; 0.18 mi S. of tablet; 60 ft SE. of center of junction of hwy. and T-rd. E.; in root on W. side of 14-in. oak tree; copper nail and washer	870.31

11

PAN PAN

Book # 18

70.-V.VL-PL

J. V. McLaughlin

LINe 10 (Cont'd.)

1947

feet

S.E., Bentley Springs, 7.5 mi along bay. S.W. of; 4.8 mi along rd. W. of Starters Crossroads;
35 ft W. of center of junction of bay. and rd. E.; on top of rock; chiseled square

75.06

Starters Crossroads, 3.7 mi W. of, along graded rd.; 30 ft W. of center of junction of rd. E.;
8 ft S.W. of 12-in. locust tree; in top of rock; standard tablet stamped "50 JUN 1947 712"
(Reported not found, 1958)

712.442

Reference mark; 200 ft SE. of tablet; 10 ft S.W. of center of rd.; in base on E. side of 6-in.
pine tree; nail spike

712.54

LINe 11.

J. A. Packman, 1970; Book # 1578

"50 JUN 1947 712" (Described in line 10)

712.442

70 MD. - 11 PA. - 124 W. VA.
PAW PAW QUADRANGLE

N3930-W7815/15
MD.-PA.-W.VA.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

TRANSIT TRAVERSE

Bks. C7750-56
By Oscar Jones, 1926

1927 N.A.D.

Latitude Longitude

ALONG HIGHWAY NEAR NORTH BORDER OF QUADRANGLE.

S. end of bridge over Sidelings Hill Creek	39 44 34.51	78 21 34.27
Rd. fork N.	39 44 17.55	78 21 11.87
Rd. fork E.	39 44 03.85	78 20 56.57

ALONG HIGHWAY NEAR NORTH BORDER OF QUADRANGLE
(CHECKED SPUR LINE)

Piney Creek, in SW. corner of S. abutment of concrete bridge;
along Highway 329; Pennsylvania State Highway Department tablet

	39 44 28.25	78 21 48.64
Rd. fork SE.	39 44 06.95	78 21 51.89
Pennsylvania-Maryland State line stone monument, on E. side of hwy.	39 43 20.93	78 22 01.81

Bks. AH 45 f {fld.}
AH 46 a {cmp.}
By C. W. Haas, 1947

1927 N.A.D.

14 1126+. Photo point 3-136 C; center-
line of rd. at trail NE. (PP changed
from original bend in rd. to trail
NE.)

39 30 12.87 78 15 19.54 ✓

Bks. AH 45 h {fld.}
AH 46 a {cmp.}

1927 N.A.D.

1296+. Centerline of rd. at field
rd. SW.

39 31 08.08 78 15 11.97

1303+. Centerline of rd. at
fenceline SW.

39 31 14.59 78 15 37.97

70 MD. - 11 PA. - 124 W. VA.
PAW PAW QUADRANGLE
Bks. AH 45 h (fld.)
AH 46 a (cmp.)
By C. W. Haas, 1947

(Cont'd. P. 2) 1927 N.A.D.

MD. - PA. - W. VA.

1310A. Stotlers Crossroads, 3.7 mi E. of, along graded rd.; 30 ft W. of centerline of T-rd. SE.; 8 ft SW. of 12-in. locust tree; in top of rock; standard tablet stamped "TT 50 JWM 1947" (Reported not found, 1958)	39 31 19.92	78 15 58.92
1310+. P.P. 3-136 B; centerline of rd. at small stream crossing	39 31 22.84	78 15 59.00
1319+. Centerline of rd. at fence-line W.	39 31 42.73	78 15 59.57
1326+. Centerline of rd. at woods rd. E.	39 32 05.65	78 15 54.60
1337+. Centerline of rd. at fence-line N.	39 32 25.88	78 15 55.91
1342a. P.P. 3-136 A; junction of E.-W. rd. and Highway 522	39 32 32.54	78 16 21.11
1344. Berkeley Springs, 6.2 mi SE. of, along Highway 522; 30 ft SW. of centerline of hwy. and private drive E.; 1 ft E. of fence; in top of rock; standard tablet stamped "49 JWM 1947 892"	39 32 41.08	78 16 17.36
1347+. Centerline of hwy. at rd. W.	39 32 58.44	78 16 10.15
1350+. P.P. 3-186 A; centerline of hwy. at rd. SE.	39 33 31.10	78 15 58.25
1352+. Centerline of hwy. at rd. SE.	39 33 51.84	78 15 46.21
1354+. P.P. 3-209 A; centerline of hwy. at private rd. SE.	39 34 23.61	78 15 27.36
1357. Berkeley Springs, 3.8 mi SE. of, along Highway 522; 35 ft SE. of centerline of hwy.; 2 ft N. of school bus stop shed; in top of rock; standard tablet stamped "48 JWM 1947 777" (Reported destroyed, 1958)	39 34 37.77	78 15 18.60
1357+. Centerline of hwy. at rd. NW.	39 34 40.72	78 15 17.21
1359+. Centerline of rd. at rd. NW.	39 35 04.86	78 15 02.90

70 MD. - 11 PA. - 124 W. VA.
PAW PAW QUADRANGLE
Bks. AH 45 h {fld.}
AH 46 a {cmp.}
By C. W. Haas, 1947

MD. - PA. - W. VA.

(Cont'd. P. 3)

1927 N.A.D.

1452a. Junction of NE.-SW. rd. and rd. SE.	39 39 57.46	78 15 04.07
1455+. P.P. 4-124 C; centerline of rd. at rd. E.	39 40 13.31	78 15 02.95
Bks. AH 45 i {fld.} AH 46 a {cmp.} By C. W. Haas, 1947		1927 N.A.D.
1546+. Centerline of rd. at fenceline S.	39 43 51.57	78 15 24.11
1552a. P.P. 5-69 B; junction of E.-W. rd. and rd. SW.	39 43 58.71	78 15 44.93
1552. Hancock, Md., 7.7 mi NW. of post office; 3.5 mi W. along Highway 40, thence 1.8 mi N. to rd. fork, thence 2.4 mi NW. along southerly fork; 19 ft N. and 17 ft W. of, and 2 ft higher than junction of rds.; 57 ft NW. of group of mailboxes; in concrete post; standard tablet stamped "TT 36 CWH 1947"	39 43 58.90	78 15 45.15
1589a. P.P. 5-69 A; rd. fork	39 44 37.25	78 16 13.17
Bks. AH 45 j {fld.} AH 46 a {cmp.} By C. W. Haas, 1947		1927 N.A.D.
1738+. Centerline of rd. on straight line between hemlock tree on E. side of rd. and southerly one of two pines on W. side of rd.	39 30 12.10	78 21 42.66
1747+. P.P. 3-139 A; centerline of rd. over culvert	39 30 31.48	78 21 40.73
1755. Largent, 3.8 mi NE. of, along Highway 9; 35 ft E. of Cacapon River; 25 ft W. of centerline of hwy.; in top of large boulder; standard tablet stamped "35 JWM 1947 525" (Reported not found, 1958)	39 30 46.53	78 21 18.52
1758+. Centerline of rd. at fence-line W.	39 31 04.86	78 21 12.35
1765+. P.P. 3-183 B; centerline of bridge over middle of Cacapon River	39 31 41.06	78 20 47.72

70 MD. - 11 PA. - 124 W. VA.
PAW PAW QUADRANGLE
Bks. AH 45 J {fld.
AH 46 a {cmp.
By C. W. Haas, 1947

MD. - PA. - W. VA.

(Cont'd. P. 4)

1927 N.A.D.

1769a. Centerline of rd. at rd. SSW.	39 32 03.36	78 20 47.42
1771A. Largent, 5.8 mi NE. of, along Highway 9; 60 ft E. of Seven Oaks Cafe; 25 ft E. of centerline of hwy.; 6 ft higher than hwy.; in top of large boulder; standard tablet stamped "36 JWM 1947 601"	39 32 18.96	78 20 43.86
1771+. Centerline of rd. at fence-line W.	39 32 20.06	78 20 43.99
1775a. Centerline of rd. over culvert and opposite pine tree on W. side of rd.	39 32 52.09	78 20 45.07
1776+. P.P. 3-183 A; centerline of rd. at rd. NW.	39 33 11.20	78 20 44.68
1782+. Centerline of rd. at rd. W.	39 33 41.73	78 20 23.67
1784A. Largent, 7.8 mi NE. of, along Highway 9; 80 ft SE. of centerline of hwy. and T-rd, E.; 25 ft S. of graveled rd.; in top of rock; standard tablet stamped "37 JWM 1947 753"	39 33 52.69	78 20 15.57
1785+. Centerline of rd. at rd. SE.	39 34 05.21	78 20 10.97
1788+. Centerline of rd. at rd. E.	39 34 25.62	78 19 52.18
1789+. P.P. 4-06 B; centerline of rd. at rd. W.	39 34 39.01	78 19 43.01
1792+. Centerline of rd. at woods rd. SW.	39 35 04.98	78 19 32.17
1794a. Centerline of rd. at fence-line W.	39 35 24.37	78 19 15.98
1796A. Largent, 10.1 mi NE. of, along Highway 9; at junction of Orleans Road and hwy.; 25 ft E. of centerline of hwy.; in top of N. concrete headwall of large culvert; standard tablet stamped "38 JWM 1947 550"	39 35 39.76	78 19 05.54
1797a. P.P. 4-06 A; junction of NE.-SW. rd. at tangent of curve of rd. NW.	39 35 41.92	78 19 04.05

70 MD. - 11 PA. - 124 W. VA.
 PAW PAW QUADRANGLE
 Bks. AH 45 j { f1d.
 AH 46 a { cmp.
 By C. W. Haas, 1947

MD. - PA. - W. VA.

(Cont'd. P. 5) 1927 N.A.D.

1804a. Centerline of rd. at easterly one of two rds. N.	39 35 52.64	78 19 31.82
1810+. Centerline of rd. at fence-line SE.	39 35 39.16	78 19 52.02
1816+. Centerline of rd. over culvert and small creek	39 35 38.21	78 20 13.27
1823a. P.P. 4-50 C, centerline of rd. at rd. NE.	39 35 42.01	78 20 39.11
1825+. Centerline of rd. at trail SW.	39 35 45.64	78 20 59.52
1828. Junction of Orleans Road and Highway 9, 2.1 mi NW. of, along Orleans Road; 0.4 mi W. of crossroads; at sharp curve to N.; 35 ft N. of centerline of rd.; in top of boulder; standard tablet stamped "39 JWM 1947 1066"	39 35 46.15	78 21 01.07
1840+. Centerline of rd. at powerline crossing	39 36 19.79	78 21 01.01
1847+. P.P. 4-50 B; centerline of rd. at long tangent at woods rd. N.	39 36 37.24	78 21 08.99
1864+. Centerline of rd. at fenceline S.	39 36 55.78	78 21 41.03
1883A. P.P. 4-50 A; centerline of rd. at fenceline NE.	39 37 06.39	78 22 30.91
1886A. Orleans Crossroads, 30 ft SW. of centerline of rd.; 20 ft NE. of Baltimore & Ohio Railroad; set in SE. concrete foundation of block signal; standard tablet stamped "40 JWM 1947 508"	39 37 12.24	78 22 40.09
1892+. Intersection of rd. and RR. track	39 37 29.12	78 22 45.94
1896.=1265. Line ties to A. B. Martini's line, Book 8, AH 47 r, p. 25	39 37 30.40	78 22 59.05

70 - MD. - 11 PA. - 124 W. VA.
 PAW PAW QUADRANGLE
 Bks. AH 47 m {fld.}
 AH 48 a {cmp.}
 By J. D. Nikolaus, 1947

(Cont'd. P. 6)

MD. - PA. - W. VA.

1927 N.A.D.

400. USC&GS triangulation station RAGGED	39 43 21.409	78 29 37.878
407.=499. Yonkers, ___ mi NE. of, (by way of State Highway 40 ___ mi E. of Y-rd. N., thence N. ___ mi to station on Mason and Dixon Line); 20 ft S. of centerline of rd.; 15 ft SE. of iron pipe marker painted orange and white located on N. side of pipeline right-of-way; standard tablet stamped "TT 7 JDN 1947"	39 43 22.06	78 29 15.84
412+. Intersection of centerlines of rd. forks	39 43 31.53	78 29 01.78
420+. Y-rd. NE.	39 43 48.93	78 28 53.25
424+. Center of small wooden bridge over small stream	39 43 58.52	78 29 13.12
430+. Woods rd. SW.	39 44 17.74	78 29 27.77
435a. Center of grass triangle at rd. forks	39 44 29.16	78 29 28.10
442a. Intersection of three-way rd. forks	39 44 32.95	78 29 44.44
454. Prosperity Christian Church, 1.8 mi SE. of; about halfway up W. slope of Polish Mountain; 20 ft N. of centerline of rd.; 5 ft higher than rd.; in 4- by 4- by 1-ft boulder; standard tablet stamped "22 EOM 1947 1262"	39 44 59.64	78 29 50.52
Bks. AH 47 n {fld.} AH 48 a {cmp.} By J. D. Nikolaus, 1947		1927 N.A.D.
499.=407. "TT 7 JDN 1947" (previously described)	39 43 22.06	78 29 15.84
510+. Woods rd. S.	39 42 57.50	78 29 36.64
523A. Yonkers, 1.3 mi E. of, along U. S. Highway 40, thence 1.5 mi NE. along graveled rd.; midway between junction of T-rd. SE. and Y-rd. N.; 75 ft NW. of centerline of rd.; 10 ft NW. of 48-in. oak tree; in 3- by 3- by 1-ft boulder; standard tablet stamped "20 EOM 1947"	39 42 24.47	78 29 56.30
523+. T-rd. SE.	39 42 22.24	78 29 57.18

70 MD. - 11 PA. - 124 W. VA.
PAW PAW QUADRANGLE
Bks. AH 47 p {fld.
AH 48 a {cmp.
By J. D. Nikolaus, 1947

MD. - PA. - W. VA.

(Cont'd. P. 7) 1927 N.A.D.

947. Pawpaw, 2.3 mi NW. of, along Highway 51 to junction of T-rd. N. and station; 16 ft S. of junction of T-rd. N. with hwy.; 8 ft S. of edge of rd.; 3 ft N. of wire fence; in concrete post; standard tablet stamped "TT 12 JDN 1947"

39 32 30.44 78 29 35.42

947a. Centerline of Highway 51 and Y-rd. N.

39 32 30.59 78 29 35.39

956+. Dim woods rd. NE.

39 32 58.21 78 29 32.40

964a. Dim woods rd. NE.

39 33 28.98 78 29 36.84

968+. Dim woods rd. S.

39 33 38.04 78 29 34.04

972. Pawpaw, 4.3 mi NW. of, (by way of Highway 51, 2.3 mi NW. to T-rd. N., thence 2.0 mi N. to station); 310 ft S. of Y-rd.; 18 ft E. of centerline of rd.; 12 ft SE. of stone culvert; in concrete post; standard tablet stamped "TT 13 JDN 1947"

39 33 57.88 78 29 18.48

973a. Y-rd.

39 34 01.20 78 29 19.72

980+. T-rd. SE.

39 34 18.86 78 29 04.43

992a. P.P. 4-11-B; center of stone culvert

39 34 54.43 78 28 45.20

1000a. Dim T-rd. E.

39 35 17.49 78 28 29.49

1004. Pawpaw, 6.6 mi NW. of (by way of Highway 51, 2.3 mi NW. to T-rd. N., thence 4.3 mi N. to station on right); 15 ft S. of centerline of rd. and T-rd. N.; in clearing on S. side of rd.; 6 ft S. of edge of bank; in concrete post; standard tablet stamped "TT 14 JDN 1947"

39 35 33.67 78 28 19.64

1004a. T-rd. NW.

39 35 33.79 78 28 19.76

1016. Comp. point

39 36 01.20 78 27 51.28

1016a. P.P. 4-11-A; crossroads

39 36 01.16 78 27 51.17

1020+. Powerline E.-W.

39 36 10.08 78 27 46.64

1021. Comp. point

39 36 14.19 78 27 43.72

70 MD. - 11 PA. - 124 W. VA.

PAW PAW QUADRANGLE

Bks. AH 47 p {fld.}

AH 48 a {cmp.}

By J. D. Nikolaus, 1947

(Cont'd. P. 8)

MD. - PA. - W. VA.

1927 N.A.D.

1026. Comp. point	39 35 28.72	78 27 35.36
1026A. Airway Beacon #9	39 36 09.568	78 28 24.239
1031+. T-rd. E.	39 36 46.28	78 27 25.50
1038. Pawpaw, 9.2 mi NW. of, along Highway 51 W. from Pawpaw 2.3 mi to T-rd. N., thence 6.9 mi N. to station; across rd. from abandoned apple orchard; 20 ft S. of centerline of rd.; 60 ft E. of orange and white marker post; in concrete post; standard tablet stamped "TT 15 JDN 1947"	39 37 03.27	78 27 15.11
1051+. Dim trail NW.	39 37 30.80	78 26 55.61
1061a. P.P. 4-47-A; Y-rd. SE.	39 37 52.92	78 26 37.58
1068+. Dim woods rd. N.	39 37 53.76	78 26 11.66
1081. Pawpaw, 11.4 mi NW. of; 2.5 mi SE. of Little Orleans; (by way of Highway 51 W. 2.3 mi to T-rd. N., thence 7.6 mi N. to Y-rd. E., thence 1.5 mi E. to station); 27 ft E. of centerline of rd.; 9 ft W. of group of trees; in concrete post; standard tablet stamped "TT 16 JDN 1947"	39 37 56.89	78 25 26.69
1094+. Dim woods rd. N.	39 37 59.64	78 24 34.63
1103+. Y-rd. NW.	39 38 01.36	78 24 00.81
1115a. Center of rd. at E. of concrete low water bridge	39 37 40.62	78 23 23.51
1119a.=1252a. Junction point	39 37 36.35	78 23 16.40
Bks. AH 47 r {fld.} AH 48 a {cmp.}	1927 N.A.D.	
By A. B. Martini, 1947		
USC&GS triangulation station MARPEN 1941	39 43 20.972	78 22 53.423
Marpen Ecc. Signal (no description)	39 43 21.02	78 22 52.46
Marpen A. Baseline (no description)	39 43 21.35	78 22 01.70

70 MD. - 11 PA. - 124 W. VA.

PAW PAW QUADRANGLE

Bks. AH 47 r {fld.}

AH 48 a {cmp.}

By A. B. Martini, 1947

(Cont'd. P. 9)

MD. - PA. - W. VA.

1927 N.A.D.

Marpen X. Mason and Dixon Line

Monument about 1.5 mi NNE. of Piney
Grove; 13 ft E. of centerline of rd.;
12-in. square stone post projecting
2 ft

39 43 20.93 78 22 01.81

Marpen E+. Centerline of hwy. and
T-rd. NW.

39 43 00.46 78 22 25.51

Marpen K.-1160. End of baseline
(no description)

39 42 40.33 78 22 38.31

1160.=Marpen K. End of baseline
(previously described)

39 42 40.33 78 22 38.31

1167A. Piney Grove, along U. S. Highway 40; 125 ft W. of
bridge; 32 ft W. of W. edge of house; 6 ft N. of and 5 ft
higher than N. edge of pavement; in top of rock outcrop;
standard tablet stamped "37 EOM 1947"

39 42 21.30 78 22 39.66

1167a. P.P. 5-17; center of Highway
40 and rd. WSW.

39 42 20.75 78 22 37.97

1177+. P.P. 4-119-A; T-rd. E.

39 41 36.40 78 22 56.79

1186. Little Orleans, 4.4 mi NE. of; 120 ft NW. of crossroads;
30 ft NE. of centerline of rd.; in top of stone post;
standard tablet stamped "36 EOM 1947"

39 41 00.59 78 22 25.10

1186+. P.P. 4-119-B; T-rd. E.

39 40 59.42 78 22 24.47

1188+. Center of rd. and short
tangent of T-rd. ESE.

39 40 51.52 78 22 17.30

1193+. Y-rd. NE.

39 40 29.30 78 22 16.09

1197+. P.P. 4-119-C; Y-rd. WSW.

39 40 10.74 78 22 22.81

1216+. Centerline of rd. and C.C.C.
rd. S.

39 39 24.85 78 22 38.31

1217A. Little Orleans, 2.4 mi N. of; 300 ft NW. of crossing of
main rds.; 90 ft NE. of crossing of second-class rd.; in
abandoned camp of Civilian Conservation Corps; in top at SE.
corner of 5- by 12-ft concrete cooling tank; 4 ft above ground;
standard tablet stamped "29 EOM 1947"

39 39 23.87 78 22 39.33

70 MD. - 11 PA. - 124 W. VA.

PAW PAW QUADRANGLE

Bks. AH 47 r { fld. }

AH 48 a { cmp. }

By A. B. Martini, 1947

(Cont'd. P. 10)

MD. - PA. - W. VA.

1927 N.A.D.

1219+. P.P. 4-81-A; rd. intersection

39 39 20.86 78 22 36.62

1236+. P.P. 4-81-B; center of culvert

39 38 12.94 78 22 56.56

1241+. Center of galvanized culvert

39 38 00.73 78 33 01.84

1252a. Rd. intersection

39 37 36.35 78 23 16.40

1265.=1896. Line ties to C. W.

Haas' line, Bk. 10, p. 30, 1947

39 37 30.40 78 22 59.05

APPENDIX C

USGS vertical and horizontal controls for Hancock, Md. 15 minute quadrangle

39-078-12

THIRD-ORDER LEVELING
NATIONAL GEODETIC VERTICAL DATUM OF 1929

HANCOCK QUADRANGLE
123 W.VA.-69 MD.-10 PA.
N3930-W7800/15
DIAGRAM NJ 17-3
CUMBERLAND

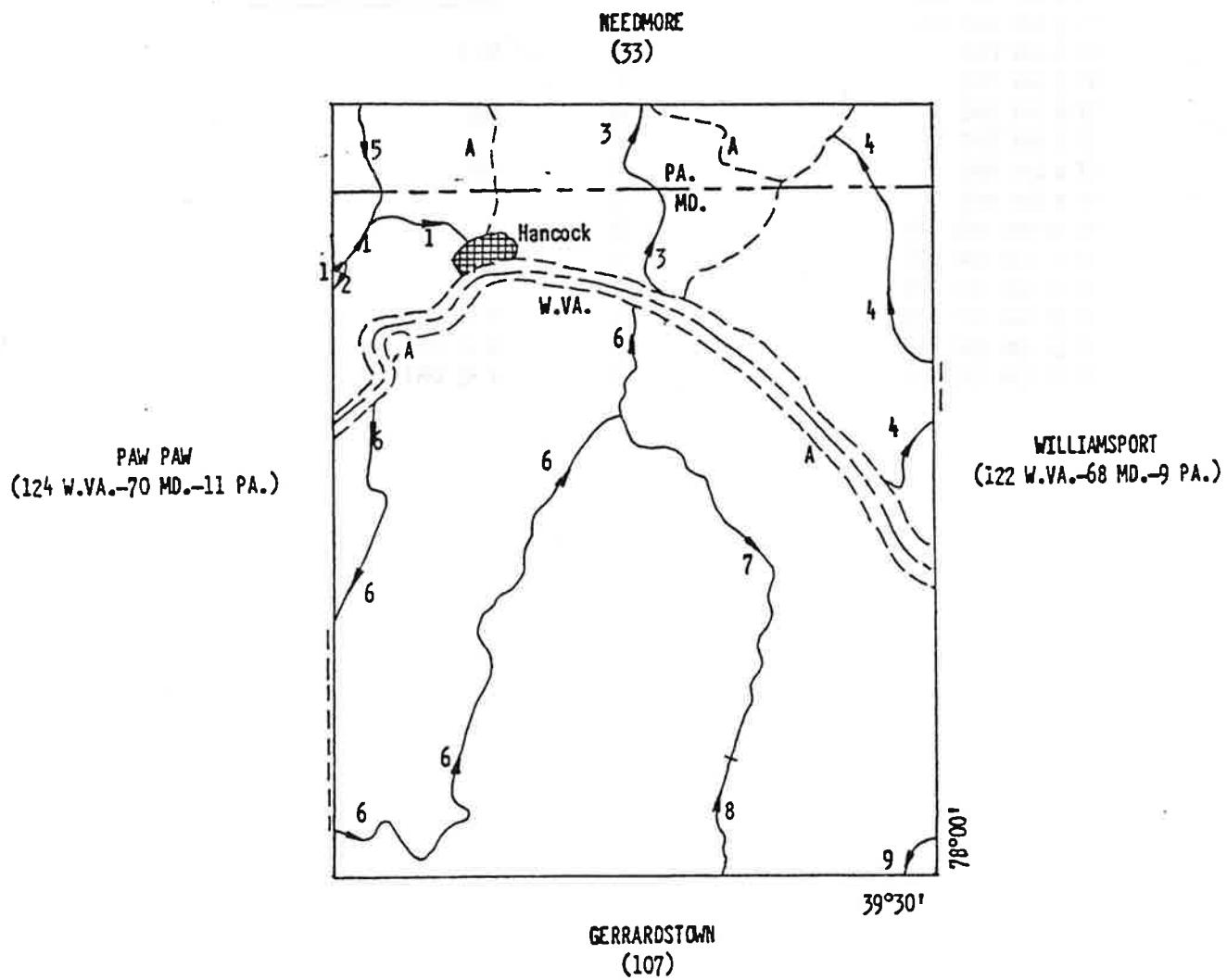
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Berkeley and Morgan Counties, W.Va.; Washington
County, Md.; Franklin and Fulton Counties, Pa.

Final adjustment of 1972

Edition of 10/23/79

PR: GWK/jyk



NGS (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle 390781

39-078-12

HANCOCK QUADRANGLE

N3930-W7800/15
123 W.VA.-69 MD.-10 PA.

INDEX OF PERMANENT MARKS

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MARYLAND C 402	3	TT 27 CWH 1947 548	5
MARYLAND C 448	3	45 JMM 1947 442	6
466 C	3	46 JMM 1947 612	6
612 C	3	47 JMM 1947 685	7
662 C	3	51 JMM 1947 RESET 1979	7
C 9 1925	3	52 JMM 1947 877	7
TT 4 D 1934	6	53 JMM 1947 956	7
41 EOM 1947 529	3	54 JMM 1947 896	7
42 EOM 1947 461	3,6	55 JMM 1947 589	7
43 EOM 1947 443	4	56 JMM 1947 579	7
49 EOM 1947 760	6	57 JMM 1947 688	7
TT 1 CWH 1947 816	4		
TT 2 CWH 1947 709	4		
TT 3 CWH 1947 778	4		
TT 4 CWH 1947	8	✓ WA 1	4
TT 5 CWH 1947	7		
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TT 8 CWH 1947	8	498	6
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TT 10 CWH 1947 514	9		
TT 11 CWH 1947 746	9	NGS	
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3

HANCOCK

Books 7225, 7222, B 2173 and Bulletin 563

W.VA.-MD.-PA.

Hargraves Wood and others

ISOLATED BENCH MARKS (By Hargraves Wood, 1898; Book 7225 and Bulletin 563 corrected,
C. B. Bailey, 1898; Book 7222, R. G. Clinite, 1925; Book B 2173)

feet

Hancock; at Hancock Bank building; 14 ft S. of S. curb of Main Street; 1.2 ft higher than
level of sidewalk; 1.7 ft W. of W. edge of front door; in stone doorsill; standard tablet
stamped "MARYLAND C 448" (Tied by NGS, 1941) 448.241

Pectonville, 1.6 mi S. of; 0.5 mi NE. along rd., thence 1.7 mi NW. along Chesapeake and Ohio
Canal from Cherry Run; at canal viaduct over Licking Creek; in S. side at SW. corner of
wingwall; 4 ft from W. end of wall; about 2 ft below top of coping; in second tier
of masonry; standard tablet stamped "MARYLAND C 402" (Reported destroyed, 1951) 402.279

Berkeley Springs; in W. face of SW. cornerstone of Morgan County Courthouse; standard tablet
stamped "612 C" (Reported destroyed) 611.989

Stotlers Crossroad, 0.5 mi N. of; at first ford of Sleepy Creek; about 25 ft N. of N. entrance
to ford; on E. side of rd.; in cleft of rock about 4 ft above roadway; standard tablet
stamped "662 C" (Reported destroyed prior to 1914) 662.164

Tomahawk; at barn of W. W. Hedges; in NE. corner of foundation stone; standard tablet
stamped "466 C" 466.616

Needmore, 7.3 mi S. of, along rd. to Hancock; 40 ft SW. of rd. forks; on W. side of rd.; 10 ft
inside fence; in wooded ground; in concrete post; standard tablet stamped "C 9 1925"
(Reported destroyed, 1957) 540.664

LINE 1.

E. O. Miner, 1947; Book AV 16.

Hancock; 3.7 mi W. of post office, along U. S. Highway 40; 60 ft SE. of T-junction with State
Highway 453; at abandoned house; in top of NW. corner of foundation; standard tablet stamped
"41 EOM 1947 529" 529.404

Reference mark; 0.12 mi S. of tablet; at N. one of two concrete bridges; on top of N. end of
NW. wingwall; chiseled square 515.50

U.E., Hancock, 3.4 mi W. of, along U. S. Highway 40, thence 0.6 mi NE. along macadam rd.; 200 ft
NE. of farmhouse; at high point in rd.; 30 ft SE. of center of, and 9 ft higher than rd.;
on top of 2- by 3- ft 5-ft boulder; chiseled square 524.14

Hancock, 3.0 mi W. of, along Tonoloway Creek Road (macadam); 130 ft NW. of crossroad; in NW.
wingwall of concrete bridge; in step 7 ft lower than rd.; standard tablet stamped
"42 EOM 1947 461" 461.297

HANCOCK
Book AV 16

W.VA.-MD.-PA.

E. O. Miner

1947

FeetLINE 2 (Cont'd.)

Reference mark; 170 ft S. of tablet; on top of SW. corner of wooden-floored bridge over Tonoloway Creek; chiseled square	464.70
U.E., Hancock, 2.1 mi W. of, along Tonoloway Creek Road; 310 ft W. of Y-junction with graveled rd.; 25 ft S. of and 4 ft higher than rd.; on top of E. end of rock outcrop; chiseled square	472.22
Hancock; 1.2 mi W. of post office, along Tonoloway Creek Road; 55 ft E. of T-junction with unimproved rd. N.; 20 ft N. of center of rd.; in top of 2- by 1- by 5-ft boulder; standard tablet stamped "43 EQM 1947 443"	443.301
Reference mark; 50 ft E. of tablet; on top of 3- by 3- by 4-ft projection of cutbank; chiseled square	447.89
Maryland Geodetic Survey standard disk stamped "WA 1" (Elevation by NGS)	414.560

LINE 2.

E. O. Miner, 1947; Book AV 16

Reference mark to "41 EQM 1947 529" (Described in line 1)

515.50

LINE 3.

E. O. Miner, 1947; Book AV 16

"W 42 1941" (NGS)

429.126

Hancock, 3.0 mi SE. of, along U. S. Highway 40, thence 1.5 mi NE. along dirt rd.; 64.5 ft SW. of SW. corner of white house; 46.5 ft SE. of powerline pole; 34.5 ft SW. of black-cherry tree; 22 ft SE. of center of junction of rd. W.; in concrete post projecting 0.5 ft above ground; standard tablet stamped "TT 3 CWH 1947 778"

777.932

Rehoboth Church, 2.2 mi SE. of; 4.7 mi NE. of Western Maryland Railway station at Hancock; 150 ft SW. of white house; 100 ft SE. of red barn; 32 ft N. of center of rd.; 23 ft W. of SW. fence corner; 18 ft E. of center of rd. to house; in concrete post projecting 0.2 ft above ground; standard tablet stamped "TT 2 CWH 1947 709"

709.221

Reference mark; 0.14 mi E. of tablet; at ford across Ditch Run; at S. edge of rd.; 1 ft higher than creek; on top of rock ledge; chiseled square

632.26

Rehoboth Church, 0.2 mi S. of, along Pennsylvania Highway 928; 150 ft N. of red barn; 100 ft NW. of yellow house; 29.5 ft W. of powerline pole; 13.5 ft NW. of center of hwy.; 5 ft NE. of NE. corner of unpainted shed; 2 ft E. of fence; in concrete post; standard tablet stamped "TT 1 CWH 1947 816"

815.941

Reference mark; 0.2 mi N. of tablet; in front of Rehoboth Church; on top of S. end of concrete retaining wall; chiseled square

825.20

LINE 4.

E. O. Miner, 1947; Book AV 16

"W 42 1941" (NGS) Report dated 1974

421.653

5
 HANCOCK
 Book AV 16
LINE 4 (Cont'd.)

W.VA.-MD.-PA.

E. O. Miner

1947

Feet

Big Pool; at right-angle turn in State Highway 56; 8 ft S., thence 22 ft W. from junction of hwy. and rd. NW.; 2 ft higher than junction; 7 ft S. of powerline pole; 3 ft N. of signpost; 2 ft E. of concrete wall; in 7- by 7-in. concrete post; standard tablet stamped "TT 23 CWH 1947 435" (Not found, 1974)	435.089
U.E., Big Pool, 0.8 mi NE. of, along State Highway 56; 1.0 mi SW. of Indian Springs; 45 ft NW. of woods line SE.; on top of concrete headwall of culvert; chiseled square	522.19
Indian Springs, 36 ft N. of, thence 57 ft E. from junction of U. S. Highway 40 and rd. NE. and at same elevation; 43 ft SE. of SE. corner of Indian Springs Store; 5 ft E. of "Stop" sign; 2 ft NW. of SW. fence corner; in 7- by 7-in. concrete post; standard tablet stamped "TT 24 CWH 1947 545"	545.420
Reference mark; 0.14 mi W. of tablet; 50 ft SE. of T-junction of U. S. Highway 40 and State Highway 56; on top of 2- by 3- by 4-ft boulder; chiseled square	536.69
<u>Jogs into Williamsport quadrangle</u>	
U.E., Indian Springs; 1.4 mi NE. of store, along macadam rd.; at SW. corner of hwy. bridge over Lanes Run; on top of corner of concrete base of retaining wall; 5 ft lower than rd.; chiseled square	507.93
Indian Springs; 2.2 mi N. of store, along macadam rd.; 5 ft S. and 30 ft E. of, and 3 ft higher than junction of dirt rd. NE.; 41 ft NE. of mailbox; in 7- by 7-in. concrete post; standard tablet stamped "TT 25 CWH 1947 554"	554.182
U.E., Indian Springs; 3.9 mi N. of store, along macadam rd.; 50 ft E. of S. corner of triangle formed by Y-junction of macadam rds.; on top of 1- by 3- by 5-ft boulder; chiseled square	547.94
Indian Springs; 4.2 mi N. of store; 17 ft N. and 8 ft E. of point at center of rd. in line with NE.-SW. fence separating field and woods; 17 ft NE. of, and level with center of rd.; in 7- by 7-in. concrete post; standard tablet stamped "TT 26 CWH 1947 595"	595.147
U.E., Indian Springs, 5.2 mi N. of; 1.1 mi S. of Maryland-Pennsylvania State line, along macadam rd.; 60 ft S. of fenceline W.; 20 ft W. of center of rd.; on top of 1- by 2-ft boulder; chiseled square	730.21
Sylvan, 2.5 mi S. of; 6.4 mi NW. of Indian Springs; about 300 ft N. of Maryland-Pennsylvania State line; 61 ft S. and 7 ft E. of, and 1 ft higher than junction of dirt rd. N.; 18 ft SW. of center of rd.; 6 ft NE. of fence; in 7- by 7-in. concrete post; standard tablet stamped "TT 27 CWH 1947 548"	548.507
Reference mark; 240 ft NW. of tablet; on top of NE. headwall of masonry culvert; chiseled square	542.42
Sylvan, at S. side of Yeakle Mill, near SW. corner; 5 ft above ground; in foundation stone; standard tablet stamped "C 467"	467.240

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HANCOCK
Book AV 16

W.VA.-MD.-PA.

E. O. Miner

1947

FeetLINE 4 (Cont'd.)

Sylvan, 0.8 mi S. of; on Pennsylvania Highway 456; Little Cove Road; at S. entrance to Little Cove Creek Methodist Episcopal Church; in SE. corner of second concrete step; standard tablet stamped "TT 4 D 1934" (Tied by NGS, 1942)

516.452

LINE 5.

E. O. Miner, 1947; Book AV 16

U.E., Stonybreak, 1.9 mi S. of; 43 ft NE. of NW. corner of Blackoak Ridge Methodist Episcopal Church; on top of 1- by 1-ft boulder; chiseled square

897.70

Blackoak Ridge Methodist Episcopal Church, 0.8 mi S. of; 5.4 mi NW. of Hancock; 35 ft SW. of T-junction with driveway E.; in top of stone post; standard tablet stamped "49 EOM 1947 760"

759.558

Blackoak Ridge Church, 2.1 mi SE. of, along Tonoloway Creek Road; 200 ft NW. of Maryland-Pennsylvania State line; 50 ft SE. of four-way rd. intersection; at E. corner of concrete bridge over Minnow Run; in top of wingwall; Pennsylvania Department of Highways standard disk stamped "498"

497.831

"42 EOM 1947 461" (Described in line 2)

461.297

LINE 6.

J. W. McLaughlin, 1947; Book AV 18

"E 43 1941" (NGS)

469.851

Hancock, 6.7 mi SW. of; in village of Sir Johns Run; on S. step of schoolhouse; in SE. corner of first step; standard tablet stamped "45 JMM 1947 442" (Reported disturbed, 1951)

441.806

Reference mark; 0.16 mi SW. of tablet; on N. curbing of small bridge over creek; chiseled square

456.92

U.E., Berkeley Springs; 0.9 mi N. of Morgan County Courthouse; at junction of West Virginia Highway 9 and rd. to Sir Johns Run; 30 ft N. of centerline of hwy.; 15 ft SE. of 10-in. maple tree; on top of large boulder; chiseled square

805.59

Berkeley Springs; at S. entrance to courthouse; in first step 9 in. S. of building; standard tablet stamped "46 JMM 1947 612"

611.832

Reference mark; 0.28 mi S. of tablet; on SE. wingwall of culvert over small creek; chiseled square

618.38

U.E., Berkeley Springs, 1.3 mi SW. of, along U. S. Highway 522; 45 ft S. of junction of hwy. and rd. E.; on N. headwall of concrete culvert; chiseled square

656.91

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HANCOCK
Book AV 18

W.VA.-MD.-PA.

J. W. McLaughlin

1947

LINE 6 (Cont'd.)Feet

Berkeley Springs, 2.2 mi SW. of, along hwy.; 95 ft S. of centerline of T-rd. E. to Stotlers Crossroad; 40 ft E. of centerline of hwy.; in top of rock; standard tablet stamped "47 JMM 1947 685"	684.560
Reference mark; 40 ft S. of tablet; on S. headwall of concrete culvert; chiseled square <u>Jogs into Paw Paw quadrangle</u>	683.49
U.E., Berkeley Springs, 3.1 mi SW. of, along U. S. Highway 522; about 150 ft E. of brick house standing on W. side of rd.; in NE. headwall of concrete culvert; chiseled square	725.37
Stotlers Crossroad, 0.7 mi W. of; 440 ft N. of T-rd. W.; on S. end of concrete bridge over Middle Fork Creek; in W. wingwall of bridge; standard tablet stamped "51 JMM 1947 RESET 1979"	666.659
U.E., Stotlers Crossroad, in village of; 30 ft NE. of center of crossroad; 10 ft W. of red barn; on S. end of stone retaining wall; chiseled square	752.20
U.E., Stotlers Crossroad, 0.6 mi N. of; 3.2 mi S. of Highland Church; 100 ft NW. of T-rd. NE.; at SE. end of concrete bridge over creek; on SW. wingwall of bridge; chiseled square	714.94
Highland Church, 2.0 mi S. of; at NE. end of concrete culvert over small creek; in NW. wingwall; standard tablet stamped "52 JMM 1947 877"	876.531
Highland Church; at E. entrance to church; in N. corner of first concrete step; standard tablet stamped "53 JMM 1947 956"	956.234
Highland Church, 1.3 mi W. of; 0.8 mi S. of Duckwall School; 80 ft S. of red house standing on E. side of rd.; 15 ft E. of centerline of rd.; in top of rock; standard tablet stamped "54 JMM 1947 896"	896.237
Duckwall School, 1.2 mi N. of; on NW. end of steel bridge over Sleepy Creek; in NE. wingwall of bridge; standard tablet stamped "55 JMM 1947 589"	588.451
Reference mark; 140 ft SE. of tablet; on SW. wingwall of bridge; chiseled square	588.40
New Hope, in village of; 40 ft SE. of Y-rd. E.; in top of E. headwall of concrete culvert; standard tablet stamped "56 JMM 1947 579" (Reported destroyed, 1958)	578.634
Reference mark; 0.14 mi NE. of tablet; 120 ft S. of T-rd. S.; on W. wingwall of concrete bridge; chiseled square	565.76
Spohrs Crossroad, in village of; at NE. entrance to Stohrs Crossroad Morgan County School; in SE. end of concrete step of school; standard tablet stamped "57 JMM 1947 688" (Not found, 1947)	687.845
Spohrs Crossroad, 1.9 mi NE. of; 7.6 mi NE. of town square at Berkeley Springs; 25 ft E. of white house; 15 ft NW. of centerline of rd.; 11 ft NE. of 18-in. walnut tree; 6 ft N. of mailbox; 1.5 ft SE. of yard fence; in concrete post projecting 0.2 ft above ground; standard tablet stamped "58 JMM 1947 535"	505.335

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HANCOCK
Book AV 18

W.VA.-MD.-PA.

J. W. McLaughlin

1947

FeetLINE 6 (Cont'd.)

Hancock; 3.9 mi SE. of Baltimore and Ohio Railroad station; (0.15 mi E. to rd. forks, thence 3.25 mi E. along airport rd. to rd. S., thence 0.5 mi S.) at right-angle bend in rd.; 23 ft NW. of end post of NW.-SE. fence; 11 ft NW. of centerline of rd.; 4.5 ft SE. of 15-in. white oak tree; in concrete post projecting 0.2 ft above ground; standard tablet stamped "TT 4 CWH 1947" 660.99

"W 42 1941" (NGS) (Also in line 3) 429.12

LINE 7.

J. W. McLaughlin, 1947; Book AV 18

Spohrs Crossroad, 1.5 mi NE. of, thence 1.7 mi SE., along West Virginia Highway 9; 0.3 mi NE. of West Virginia Highway 9; 50 ft NE. of powerline pole; 15 ft N. of E.-W. rd. and rd. S.; 2 ft S. of fence; in concrete post projecting 0.3 ft above ground; standard tablet stamped "TT 6 CWH 1947" 640.34

Spohrs Crossroad, 4.1 mi SE. of, along West Virginia Highway 9; 350 ft S. of powerline crossing; 24 ft W. of centerline of hwy.; 8 ft NW. of 17-in. white oak tree; 5 ft E. of 22-in. black oak tree; in concrete post projecting 0.3 ft above ground; standard tablet stamped "TT 7 CWH 1947" 748.42

Providence United Brethren Church, 3.1 mi N. of; 150 ft NW. of red brick house; 20 ft E. of centerline of hwy.; 8 ft SE. of S. end of guardrail; in concrete post projecting 0.3 ft above ground; standard tablet stamped "TT 8 CWH 1947". 493.58

Reference mark; 230 ft N. of tablet; at concrete culvert over Cherry Run; on SE. headwall; chiseled square 492.34

Providence United Brethren Church, 1.1 mi N. of; on projection of centerline of NE.-SW. rd.; 21 ft SE. of mailbox; 11 ft SW. of centerline of NW.-SE. rd.; 2 ft N. of fence; in concrete post projecting 0.3 ft above ground; standard tablet stamped "TT 9 CWH 1947" (Reported destroyed, 1958) 592.283

U.E., Providence United Brethren Church, at NE. entrance; on W. concrete step; chiseled square 589.29

LINE 8.

E. O. Miner, 1947; Book AV 16

Jones Springs; 0.9 mi NW. of Methodist Church (0.6 mi N. along hwy., thence 0.3 mi NW. along dirt rd.); 30 ft WSW. of center of rd.; 12 ft ESE. of 15-in. black walnut tree; in concrete post projecting 0.3 ft above ground; standard tablet stamped "TT 12 CWH 1947 629" 629.557

Reference mark; 158 ft S. of tablet; 60 ft W. of Y-junction of macadam rd. and graveled rd. N.; in orchard; on top of 3- by 2- by 7-ft boulder; chiseled square 722.04

9

HANCOCK
Book AV 16

W.VA.-MD.-PA.

E. O. Miner

1947

FeetLINE 8 (Cont'd.)

Jones Springs; 3.0 mi NW. of Methodist Church (0.6 mi N. along hwy., thence 1.3 mi NW. along dirt rd. to rd. junction, thence 1.1 mi N.); on projected line of N. edge of apple orchard; 18 ft W. of center of rd.; 14 ft NW. of 15-in. hickory tree; in concrete post; standard tablet stamped "TT 11 CWH 1947 746"

746.145

Berkeley Springs; 19.5 ft SE. of town square (0.2 mi S. along U. S. Highway 522, thence 15.5 mi SE. along West Virginia Highway 9, thence 2.5 mi NW. along paved rd. to rd. forks, thence 1.3 mi NW. along dirt rd.); 1.0 mi S. of Providence United Brethren Church; 100 ft SE. of white house; 53 ft NW. of telephone pole; 43 ft NE. of rd. junction; 9 ft SW. of two-trunked tree; in concrete post projecting 0.3 ft above ground; standard tablet stamped "TT 10 CWH 1947 514" (Reported destroyed, 1958)

514.003

U.E., chiseled square (Described in line 7)

589.39

LINE 9.

E. O. Miner, 1947; Book AV 16

There are no permanent marks on this line in this quadrangle.

Photostat neg. available in Md 69

69nd Pa 10 123 W. 4th
HANCOCK QUADRANGLE
Eks. A H₁45a (fld.)
" A H₁6a (cmp.)
By C. W. Haas, 1947
4/1/48 msf

master
WEST VIRGINIA-MARYLAND-
PENNSYLVANIA
Mag. decl. 6°25' W.
FULTON AND FRANKLIN COUNTIES
PENNSYLVANIA
WASHINGTON COUNTY, MARYLAND
MORGAN, BERKELEY COUNTIES
WEST VIRGINIA

-1-

0.: Hancock, 8.7 mi. NE. of Western Maryland R.R. sta., 2.7 mi.
E. along U. S. Highway 40, thence 5.6 mi. N. along State
Highway 65 to junction with State Highway 928, thence 0.3 mi.
NE. along State Highway 928, thence 0.1 mi. E. on dirt rd.;
set in SW. corner of Boardyard county school building porch,
8 ft. SW. of W. edge of front or S. entrance, 3 ft. NE. of SW.
corner of porch; standard tablet stamped "T T 6 D 1934"
(Also on Needmore quadrangle, Pa.)

- 39 45 54.29 78 05 55.76
24. Hancock, 6.0 mi. NE. of Western Maryland R.R. sta., 0.7 mi.
E. along U. S. Highway 40, thence 0.9 mi. NE, along paved rd.
to rd. fork, thence 4.4 mi. N. along northerly rd., 150 ft. N.
of red barn, 100' ft. WNW. of yellow house, 29.5 ft. W. of
power pole, 13.5 ft. WNW. of center line of rd., 5 ft. NE. of
NE. corner of unpainted shed, 2 ft. E. of fence, in concrete
post projecting 6 in. above ground; standard tablet stamped
"T T 1 CWH 1947" (9278) 39 44 53.21 78 07 24.36
- 28+. Photo point 5-74 A,
center line of rd. at long
tangent of rd. E. 2485 39 44 28.73 78 07 26.81
- 40a. P. P. 5-74 B,
center line of E.-W. rd. at
rd. N. through orchard 6008 39 43 32.69 78 07 52.19

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVAN

Bks. A H₄5a (fld.)
 " A H₄6a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

(Cont'd. p. 2)

47. Hancock, 4.7 mi. NE. of W. M. R.R. sta., 0.7 mi. E. along U. S. Highway 40, thence 0.9 mi. NE. along paved rd. to rd. fork, thence 2.35 mi. N. along northerly rd., thence 0.75 mi. E. along dirt rd., 150 ft. SW. of white house, 100 ft. SE. red barn, 35 ft. N. and 34 ft. E. of center line of rd. at driveway to house N., 23 ft. W. of SW. fence corner, in concrete post; standard tablet stamped

"T T 2 CWH 1947" 2203 39 43 37.53 78 07 24.

65a. P. P. 5-08 A, center line of NE.-SW. rd. at Pa.-

Md. State line crossing 3280 39 43 20.63 78 06 48.90

75. Hancock, 4.5 mi. NE. of W. M. R.R. sta., 3.0 mi. E. along U. S. Highway 40, thence 1.5 mi. N. along dirt rd., 64.5 ft. SW. of SW. corner of white house, 46.5 ft. SE. of power pole, 34.5 ft. WSW. of wild black-cherry tree, 22 ft. ESE. of center line of rd. and junction of rd. W., in concrete post projecting 4 in. above ground; standard tablet stamped

"T T 3 CWH 1947" 5245 39 42 28.81 78 06 48.19

77+. P. P. 5-08 B, center line

of rd. at rd. W. 1486 39 42 15.48 78 06 55.14

91+. P. P. 4-127 A, center line
of hwy. at rd. N. 6054 39 41 20.21 78 07 23.78

107a. P. P. 4-127 B, center
line of rd. at sharp bend at
projection of NW.-SE. fence
line 3881 39 40 41.95 78 07 29.12

HANCOCK QUADPANGLE

WEST VIRGINIA-MARYLAND-
PENNSYLVANIA

Bks. A H45a (fld.)

" A H46a (cmp.)

By C. W. Haas, 1947

4/1/48 msf

(Cont'd. p. 3)

107. Hancock, 3.9 mi. SE. of Baltimore and Ohio R.R. sta., 0.15 mi. E. to rd. fork, thence 3.25 mi. E, along Airport rd. to rd. S., thence 0.5 mi. S., at right-angled bend in rd., 23 ft. NW. of end post of NW.-SE. fence, 11 ft. NW. of center line of rd., 4.5 ft. SE. of 15-in. white-oak tree, in concrete post projecting 3 in. above ground; standard tablet stamped "T T 4 CWH 1947" 13 39 40 42.01 78 07 29.27

133a. P. P. 4-72 A, center line
of NE.-SW. rd. at junction of
rd. NW. (position doubtful)

5427 39 39 49.23 78 07 16.98

143. Berkley Springs, 7.6 mi. E. of Town Square, 0.2 mi. S. along Highway 522, thence 5.5 mi. E. along State Highway 9. to Stohr's Crossroads, thence 1.6 mi. NE. along dirt rd. to junction, thence 0.1 mi. NW. to rd. fork, thence 0.2 mi. N., 25 ft. E. of white house, 15 ft. NW. of center line of rd., 11 ft. NE. of 18-in. walnut tree, 6 ft. N. of a mail box, 1.5 ft. SE. of yard fence, in concrete post projecting 3 in. above ground; standard tablet stamped

"T T 5 WCH 1947" 4233 39 39 15.64 78 07 49.24

148+,=838+. P. P. 4-72 B,

center of concrete bridge

over creek 1346 39 39 02.35 78 07 49.86

180a. P. P. 4-71 A, center line
of E.-W. rd. at tangent of
curve of rd. S.

6956 39 38 24.17 78 06 35.93

HANCOCK QUADRANGLE

Bks. A H₄5a {fld.}" A H₄6a {cmp.}

By C. W. Haas, 1947

4/1/48 msf

WEST VIRGINIA-MARYLAND-
PENNSYLVANIA

(Cont'd. p. 4)

180. Berkeley Springs, 8.4 mi. E. of Town Square, 0.2 mi. S. along Highway 522, thence 7.9 mi. E. along State Highway 9, thence 0.3 mi. E. along dirt rd., 50 ft. NE. of power pole, 13 ft. N. of center line of E.-W. rd. and junction of rd. S., 2 ft. S. of fence, in concrete post projecting 4 in. above ground; standard tablet stamped

"T T 6 CWH 1947" 34 39 38 24.32 78 06 36.3

193+. P. P. 4-71 E, center line

of rd. at dirt rd. NE. 3503 39 37 54.89 78 06 12.7

204. Berkeley Springs, 9.9 mi. E. of Town Square, 0.2 mi. S.

along Highway 522, thence 9.7 mi. E. along State Highway 9, 350 ft. S. of power line crossing, 24 ft. W. of center line of Highway , 8 ft. NNW. of 17-in. white-oak tree, 5 ft. E. of 22-in. black-oak tree, in concrete post projecting 4 in. above ground; standard tablet stamped

"T T 7 CWH 1947" 4980 39 37 18.32 78 05 30.18

205+. P. P. 4-71 C, inter-

section of State Highway 9,

and dirt cross road 1136 39 37 08.18 78 05 23.97

210+. P. P. 3-203 C, center

line of hwy. at dirt rd. NE.

4268 39 36 35.08 78 04 50.18

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Bks. A H45a (fld.)

" A H46a (cmp.)

By C. W. Haas, 1947

4/1/48 msf

(Cont'd. p. 5)

219. Berkeley Springs, 12.0 mi. SE. of Town Square, 0.2 mi.

S. along Highway 522, thence, 11.8 mi. SE. along State Highway 9, 150 ft. NW. of red brick house, 20 ft. E. of center line of hwy., 8 ft. SE. of S. end of guard rail, in concrete post projecting 4 in. above ground; standard tablet stamped

"T T 8 CWH 1947" 5352 39 35 55.69 78 04 04 56

222a. P. P. 3-203 A, center

line of hwy. at short tangent

of dirt rd. WSW. 1553 39 35 40.38 78 04 02 31

Bks. A H45b (fld.)

" A H46a (cmp.)

257a. P. P. 3-203 E, junction

of NW.-SE. rd. and rd. NE. (7142) 39 34 34.92 78 04 36.54

257. Berkeley Springs, 14.0 mi. SE. of Town Square, 0.2 mi.

S. along Highway 522, thence 12.5 mi. SE. along State Highway 9, thence 1.3 mi. SW. along dirt rd., on projection of center line of NE.-SW. rd., 21 ft. SE. of mail box, 11 ft. SW. of center line of NW.-SE. rd., 2 ft. N. of fence, in concrete post projecting 4 in. above ground; standard tablet stamped

"T T 9 CWH 1947" *Dest 1958* 11 39 34 34.86 78 04 36.66

286+. P. P. 3-192 A, center line

of rd. at fence line E. 4665 39 33 48.87 78 04 40.79

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Bks. A H45b (fld.)
 " A H46a (cmp.)
 Fy C, W. Haas, 1947
 1/148 msf

(Cont'd. p. 6)

307. Berkeley Springs, 19.5 mi. SE. of Town Square, 0.2 mi. S. along Highway 522, thence 15.5 mi. SE. along State Highway 9, thence 2.5 mi. NW. along paved rd. to rd. fork, thence 1.3 mi. NW. along dirt rd., 100 ft. SE. of white-house, 53 ft. NW. of telephone pole, 42 ft. N. and 7 ft. E. of rd. junction, 9 ft. SW. of double-trunked willow tree, in concrete post projecting 4 in. above ground; standard tablet stamped "T T 10 C.M.H 1947" *Dest 1958* 4013 39 33 10.73 78 04 26.1.
- 310a. P. P. 3-192 B, center line of E.-W. rd. at rd. S. 1221 39 33 08.35 78 04 42.07
- 327+. P. P. 3-192 C, center line of rd. at rd. E. 6015 39 32 11.83 78 05 07.10
- 8* 340. Jones Springs, 3.0 mi. NW. of Methodist Church, 0.6 mi. N. along hwy., thence 1.3 mi. NW. along dirt rd. to rd. junction, thence 1.1 mi. N., on projected line of N. edge of apple orchard, 18 ft. W. of center line of rd., 14 ft. NW. of 15-in. hickory tree, in concrete post projecting 4 in. above ground; standard tablet stamped "T T 11 C.M.H 1947" 3167 39 31 42.82 78 05 22.25
- 344+. P. P. 3-130 A, center line of rd. at rd. W. 940 39 31 33.75 78 05 24.81
- 358a. P. P. 3-130 E, center line of rd. at field rd. SE. 4986 39 30 44.80 78 05 32.04

H. COCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Eks. A H₄5b (fld.)
 " A H₄6a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

(Cont'd. p. 7)

366. Jones Springs, 0.9 mi. NW. of Methodist Church, 0.6 mi. N. along hwy., thence 0.3 mi. NW. along dirt rd., 30 ft. WSW of center line of rd., 12 ft. ESE. of 15-in. black-walnut tree, in concrete post projecting 4 in. above ground; standard tablet stamped "T T 12 CWH 1947" 2856 39 30 16.97 78 05 38.83 (86)

372a. P. P. 3-130 C, center line of State Highway 9, at dirt rd. N.

1656 39 30 02.28 78 05 29.51 (57)

EKS. A H₄5d (fld.)
 " A H₄6a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

730+. P. P. 4-67 B, center line of rd. at rd. to barn N. (2294) 39 39 49.92 78 00 06.85

740a. Center line of rd. at fence line N.

2340 39 39 55.76 78 00 35.80

748. Indian Springs, 2.2 mi. N. of Indian Springs store, along macadam rd., 5 ft. S. and 30 ft. E. of junction of dirt rd. NE., and 3 ft. higher in clov., 41 ft. NNE. of mail box, in concrete post; standard tablet stamped "T T 25 CWH 1947"

1915 39 40 13.49 78 00 44.34

750+. P. P. 4-67 A, center line of rd. at fence line

ENE. 1033 39 40 20.60 78 00 53.81

753a. Center line of rd. at dirt rd. SW. 1480 39 40 34.34 78 01 00.32

HANCOCK QUADRANGLE

Bks. A H45c (fld.)
 " A H46a (emp.)
 By C. W. Haas, 1947
 4/2/48 maf

WEST VIRGINIA-MARYLAND-

PENNSYLVANIA
 FULTON and FRANKLIN COUNTY, Pa.
 WASHINGTON COUNTY, Md.
 BERKELEY and MORGAN COUNTY
 WEST VIRGINIA

(Cont'd., p. 7a)

526+. P. P. 3-127 E, center

line of rd. at tangent of
 curve of dirt rd. WNW. (3383) 39 30 06.92 78 00 10.59 (.59)

528+. Center line of rd. at
 fence line WNW.

1881 39 30 24.50 78 00 02.12 (.79)

550a. P. P. 3-127 A, center line
 of N.-S. rd. at rd. ESE. (1807) 39 31 30.49 78 00 18.82 (27)553a. Center line of rd. at
 field rd. ESE.

1977 39 31 47.78 78 00 07.13

687+. Center line of Highway.

56 at old dirt rd. SW. (1819) 39 37 03.79 78 00 02.52

692+. Center line of Highway

56 at dirt rd. to farm NE. 2758 39 37 08.57 78 00 37.23

695a. Center of concrete bridge

over creek 1823 39 37 20.76 78 00 54.38

699. Big Pool, at right-angle turn in Highway 56, 8 ft.

S. and 22 ft. W. of junction of hwy. and rd. NW., and 2 ft.,
 higher in elev., 7 ft. S. of power pole, 3 ft. N. of signpost,
 2 ft. E. of concrete wall, in concrete post; standard tablet
 stamped "T T 23 CWH 1947" 1816 39 37 34.32 78 01 09.58

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-
PENNSYLVANIABks. A H45d {fld.
A H46a {cmp.}By C. W. Haas, 1947
4/1/48 msf

(Cont'd. p. 8)

762+. Centerline of rd at

field rd W. 2461 39 40 58.28 78 01 05.64

766+, P. P. 4-130 A, center of
concrete bridge over creek 1139 39 41 08.80 78 01 11.01

773a. Center line of rd at

Y-rd. NW. 1789 39 41 25.91 78 01 16.69

782. Indian Springs, 4.2 mi N. of, 3.2 mi N. along macadam rd.
from Indian Springs store to rd fork, thence 1.0 mi N. along
easterly fork, 17 ft N. and 8 ft E. of centerline of rd. at
projection of NE.-SW. fence line between field and woods, and
at same elev., 17 ft NE. of centerline of rd., in concrete
post, standard tablet stamped "TT 26 CWH 1947"

2063 39 41 45.86 78 01 11.20

785a. Centerline of rd. at

field rd NE. 954 39 41 55.25 78 01 12.28

791a. P. P. 5-05 B, center-

line of rd. woods rd. SE. 3279 39 42 27.33 78 01 06.36

795+. Centerline of rd at

fence line W. 2379 39 42 50.80 78 01 08.05

803a. Centerline of rd at

fence line SW. 1952 39 43 08.25 78 01 18.68

807a. P. P. 5-05 A, junction

of NW.-SE. rd and dirt rd N.

2170 39 43 25.26 78 01 35.59

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Eks. A H45c (11a.)

" A H46a (emp.)

By C. W. Haas, 1947

4/2/48 msf

(Cont'd. p. 8a)

699a. P. P. 4-61 A, junction

av. Highway 56, and rd.

NW. 23 39 37 34.39 78 01 09.23

701+. Center line of Highway

56 at concrete walk to house

SE. 1879 39 37 48.89 78 00 54.28

704+. Center line of Highway

56 at fence line ESE. 2013 39 38 05.67 78 00 40.41

708+. Center line of Highway

56 at driveway SSE. 1741 39 38 18.78 78 00 26.05

715a. P. P. 4-67 C, junction

of Highway 56 and

Highway 40 2868 39 38 45.77 78 00 14.88

717. Indian Springs, 57 ft. E. and 36 ft. N. of junction of

Highway 40 and rd. NE., and at same elev., 43 ft. SE. of SE.

corner of Indian Springs store building, 5 ft. E. of "Stop"

sign, 2 ft. NW. of SW. fence corner, in concrete post;

standard tablet stamped "T T 24 CWK 1947"

697 39 38 47.18 78 00 06.15

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Bks. A H₄5d (fld.)" A H₄6a (cmp.)

By C. W. Haas, 1947

1/148 msf

(Cont'd. p. 9)

807. Indian Springs, 6.4 mi. N. of, 3.2 mi. N. along macadam rd. from Indian Springs store to rd. fork, thence 3.2 mi. N. along easterly fork, 61 ft. S. and 7 ft. E. of junction of dirt rd. N. and 1 ft. higher in elev., 18 ft. WSW. of center line of rd., 6 ft. NE. of fence, in concrete post; standard tablet stamped "T T 27 CMMI 1947" 61 39 43 24.65 78 01 35.49

815+. Center line of rd. at

field rd. NW. 2501 39 43 49.13 78 01 31.01

821+. Center line of rd. at

fence line SW. 2053 39 44 09.41 78 01 30.46

830+. P. P. 5-76 C, middle of

creek (ford) across rd. 1550 39 44 18.57 78 01 46.35

837. Hancock, 4.3 mi. SE. along W. M. R.R. from sta., thence 6.5 mi. NE. along State Highway 456, set in S. corner of the middle or second concrete step at SW. entrance to Methodist Church, 46.3 ft. NW. of center line of hwy., 7.5 ft. E. of S. corner of building, 3.6 ft. SE. of SW. edge of SW. entrance; standard tablet stamped "T T 4 D 1934"

2356 39 44 33.10 78 02 02.76

BKS. A H₄5f (fld.)" A H₄6a (cmp.)

838.-143+. P. P. 4-72 B,
center of concrete bridge
over creek

(described in line) 39 39 02.35 78 07 49.86

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Bks. A H₄5f (fld.)
 " A H₄6a (cmp.)
 By C. W. Bras, 1st
 4/1/48 ms? (Cont'd. p. 10)

861a. P. P. 4-56 A, center line

of State Highway 9, at rd.

SW. at irregular crossroads 7872 39 38 00.11 78 08 50.22

861A. Spohrs Crossroads, in village of, at NE. entrance to
 Spohrs Crossroads, Morgan Co. School, set in SE. end of
 concrete step of school; standard tablet stamped

"57 JWM 1947 688" 74 39 38 00.52 78 08 51.0

874+. Center line of rd. at

fence line SE. 3961 39 37 25.53 78 09 13.70

883a. P. P. 4-56 B, center line

of rd. at rd. SE. 1550 39 37 18.34 78 09 31.19

893+. Center of small concrete
 bridge over creek 2463 39 37 00.07 78 09 51.99

899+. Center line of rd. at

rd. to farm NE. 1740 39 36 43.77 78 09 59.01

901+. P. P. 3-206 A, center
 line of rd. at long tangent
 of rd. W. 1261 39 36 32.91 78 10 06.90

906+. Center line of rd. at

fence line E. 2264 39 36 11.99 78 10 17.17

914a. Center line of rd. at
 rd. ENE. 2110 39 35 51.51 78 10 20.55

914A. New Hope, in village of, 40 ft. SE. of Y-rd. E., set in
 top of E. head wall of concrete culvert, standard tablet stamped
 "56 JWM 1947 579" 54 39 35 51.10 78 10 19.92

Dec + 1958

HANCOCK QUADRANGLE

Bks. A H45f (fld.)
 " A H46a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

(Cont'd. p. 11)

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

921a. P. P. 3-206 B, center					
line of rd. at rd. SE.	1846	39 35 35.41	78 10 31.94		
927a. Center line of rd. over					
culvert and small stream	1855	39 35 30.51	78 10 54.77		
936a. Center line of rd. at					
trail W.	1762	39 35 16.02	78 11 07.25		
946a. Center line of rd. at					
walk to house E.	2129	39 35 00.58	78 11 25.72		
952a. P. P. 3-206 C, inter-					
section of crossroads	1354	39 34 50.11	78 11 36.47		
954A. Duckwall School, 1.2 mi. N. of, on NW. end of steel bridge					
over Sleepy Creek, set in NE. wing wall of bridge; standard					
tablet stamped					
"55 JWM 1947 589"	703	39 34 49.30	78 11 27.55		
960a. Center line of rd. over					
culvert and small stream	1503	39 34 36.57	78 11 17.67		
967+. Center line of rd. at					
more northerly branch of rd.					
to house W.	1849	39 34 18.92	78 11 11.58		
975+. P. P. 3-188 A, center					
line of rd. at rd. SE.	1913	39 34 00.75	78 11 09.95		
985+. Center line of rd. at					
rd. E.	2214	39 33 40.36	78 11 20.20		
992A. Highland Church, 1.3 mi. N. of, 0.8 mi. S. of Duckwalls					
School, 80 ft. S. of red house standing on E. side of rd.,					
15 ft. E. of center line of rd., -set in top of rock; standard					
tablet stamped "54 JWM 1947 896"					
	1697	39 33 24.25	78 11 26.23		

HANCOCK QUADRANGLE

Pks. A H₄5f (fld.)
 " A H₄6a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

(Cont'd. p. 12)

992+	Center line of rd. at long tangent of rd. N. along northerly edge of orchard	120	39 33 23.14	78 11 51.72
995+	P. P. 3-188 B, center line of rd. at fence line NW.	1650	39 33 07.57	78 11 32.99
998+	Center line of rd. at rd. E.	2062	39 32 48.64	78 11 42.72
1000+	Center line of rd. at rd. E.	1789	39 32 32.60	78 11 52.57
1002A.	Highland Church, at E. entrance to church, set in N. corner of first concrete step; standard tablet stamped "55 JWM 1947 956"	1000	39 32 22.97	78 11 57.25
1003+	P. P. 3-188 C, center line of rd. at rd. SE.	1209	39 32 11.63	78 12 02.09
1010+	Center line of rd. at rd. W.	2518	39 31 43.27	78 12 13.13
1018+	Center line of rd. at fence line N. along W. edge of orchard	2255	39 31 30.67	78 11 55.49
1021a.	P. P. 3-134 C, center line of NW.-SE. rd. at rd. SW.	1435	39 31 25.91	78 11 38.24
1025A.	Highland Church, 2.0 mi. S. of, in NE. end of concrete culvert over small creek, set in NW. wing wall; standard tablet stamped "52 JWM 1947 877" 2338	39 31 05.74	78 11 52.81	

HANCOCK QUADRANGLE

Eks. A H45f (fld.)
 " A H45a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

(Cont'd. p. 13)

1029+. Center line of rd.

at rd. ESE. 671 39 31 02.50 78 12 00.27

1037+. Center line of rd. at

woods rd. E. 1874 39 30 49.85 78 12 17.7 (74)

1047+. P. P. 3-134 B, center

of bridge over small stream

2111 39 30 30.80 78 12 28.73

1055+. Center of bridge over

small creek

1715 39 30 19.62 78 12 45.15

1067a. Junction of E.-W. rd.

and N.-S. paved rd. 2964 39 30 32.54 78 13 14.09

1070+. Center line of rd. at

driveway W. 2437 39 30 55.86 78 13 26.90

1073A. Stotlers Crossroad, 0.7 mi W. of; 440 ft N. of T-rd. W.; on

S. end of concrete bridge over Middle Fork Creek; in W. wingwall of

bridge; standard tablet stamped "51 JWM 1947 RESET 1979"

Horizontal position lost

~~1082+. Center~~

line of rd. at long tangent

of rd. N. 1506 39 31 02.64 78 13 53.03

1099+. Center line of rd. at

fence crossing 3172 39 30 39.28 78 14 20.01

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Bks. A H45f (fld.)
 " A H46a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

(Cont'd., p. 14)

1107a. =~~1107a.~~ Center line of

NW.-SE. rd. at long tangent

of rd. SW. 1647 39 30 45.52 78 14 39.43

1111+. Center line of rd. at

13 fence line SE. 1769 39 30 30.21 78 14 50.32 (.32)

Bks. A H45h (fld.)

" A H46a (cmp.)

By C. W. Haas, 1947

1279a. =1107a. Center line of

NW.-SE. rd.

(described in line) 39 30 45.52 78 14 39.43

1290+. Center line of rd.

at fence line SW. 1572 39 30 57.87 78 14 51.60

1360+. Center line of rd.

at rd. SE. (2373) 39 35 26.17 78 14 50.25

1363. P. P. 3-209 B, center

of culvert over drainage
ditch 2829 39 35 51.58 78 14 35.20

1364. Berkley Springs, 2.2 mi. SE. of along U.S. Highway 522,
 95 ft. S. of center line of T-rd, E. to Stotlers Crossroads,
 40 ft. E. of center line of hwy., set in top of rock;
 standard tablet stamped

"47 JWM 1947 685" 53 39 35 51.82 78 14 34.59

HANCOCK QUADRANGLE

Bks. A H₄5h (fld.)
 " A H₄6a (cmp.)
 By C. W. Haas, 1947
 4/1/48 msf

(Cont'd. p. 15)

WEST VIRGINIA-MARYLAND-
PENNSYLVANIA

1365+. Center line of hwy.					
at rd. NW.	2164	39 36 11.38	78 14 23.42		
1369a. Center line of hwy.					
at rd. SE.	2750	39 36 37.30	78 14 12.87		
1371+. P. P. 4-54 B, inter-					
section of crossroads	1733	39 36 50.85	78 13 59.32		
1375+. Street E. at					
irregular intersection	2293	39 37 12.37	78 13 50.1..		
1378a. Berkeley Springs, at S. entrance to Morgan County					
Courthouse, set in first step 9 in. S. of building;					
standard tablet stamped "46 JWM 1947 612"					
	2576	39 37 36.57	78 13 39.93		
1379. P. P. 4-54 A, Street					
intersection	959	39 37 45.11	78 13 34.61		
1389+. Center line of rd.					
at fence line W.	2491	39 37 37.85	78 14 05.03		
1397+. Center line of rd. at					
rd. to house W.	2669	39 38 04.16	78 14 07.43		
1402a. Center line of rd. at					
rd. N.	2283	39 38 24.87	78 13 55.85		
1416+. Center of concrete					
bridge over creek	2284	39 38 47.36	78 13 58.23		
1419. Sir Johns Run, in village of, on S. step of schoolhouse,					
set in SE. corner of first step; standard tablet stamped					
"45 JWM 1947 442" <i>Disturbed</i> 1951	840	39 38 52.86	78 14 06.27		
1425a. P. P. 4-75 A, center of					
R. R. bridge over creek	1290	39 39 02.32	78 14 17.33		

HANCOCK QUADRANGLE

Bks. A. H45h {fld.
A H40a {cmp.
By G. W. Haas, 1947
4/1/48 msf

WEST VIRGINIA-MARYLAND-
PENNSYLVANIA

(Cont'd. p. 16)

1435+. Center line of rd. at

rd. SE. 2123 39 39 12.69 78 14 40.92

1450. Hancock, Md., 5.1 mi SW. of post office, 2.8 mi W. along Highway 40, thence 2.3 mi S., 13 ft N. and 27 ft W. of rd. fork and 2 ft higher in elevation, in line with first row of apple trees, in concrete post; standard tablet stamped "TT 34 CWH 1947" *Dist 1951* (1415) 39 40 25.52 78 14 57.42

1461A. Center line of rd.

at fence line E. 942 39 40 34.75 78 14 51.55

1455+. Center line of rd. at

field rd E. 3445 39 41 04.35 78 14 29.80

1470a. P. P. 4-124 B, center

line of rd. at rd E. 2094 39 41 21.92 78 14 15.64

1473+. Center line of rd. at

field rd. SW. 2506 39 41 44.09 78 14 01.35

1478a. P. P. 4-124 A., rd.

junction 2939 39 42 11.10 78 13 47.53

1473. Hancock, Md., 2.8 mi W. of post office, along Highway 40, 30 ft N. of junction of rd S., and 1 ft higher in elevation, 8 ft NE. of 18-in. walnut tree, in concrete post; standard tablet stamped "TT 35 FWH 1947"

30 39 42 11.39 78 13 47.53

1493+. Center line of rd. at

rd. NW. 1902 39 42 26.55 78 14 01.76

HANCOCK QUADRANGLE

WEST VIRGINIA-MARYLAND-
PENNSYLVANIABks. A H₄5h (fld.)
" A H₄6a (cmp.)By C. W. Haas, 1947
4/1/48 msf

(Cont'd. p. 17)

1498+. P. P. 5-11 A, center

line of NE.-SW. rd. at rd.

W. at irregular crossroads 2313 39 42 46.59 78 13 47.28

1499A. Hancock, 3.4 mi. W. of post office at, along U. S.

Highway 40, thence 1.2 mi. NE. along macadam rd., 3.0 mi. W. of
Hancock along Tonoloway Creek rd., 130 ft. NW. of crossroads,
in NW. wing wall of concrete bridge, in a step 7 ft. lower
than rd.; standard tablet stamped "42 EOM 1947 461"

116 39 42 47.06 78 13 48.63

1502+. Center line of rd. at

rd. W. 1688 39 43 01.71 78 13 38.32

1507A. Hancock, Md. 4.2 mi. NW. of along Tonoloway Creek rd.,
200 ft. NW. of Pa.-Md. State line, 50 ft. SE. of four-way rd.
intersection, at E. corner of concrete bridge over Minnow Run,
in top of wing wall; F. D. H. brass tablet stamped "498"

2211 39 43 22.91 78 13 31.45

1508a. Center line of rd. at

easterly one of two rds. N. 45 39 43 23.15 78 13 31.93

1515+. Center line of rd. at

field rd. N. 2404 39 43 35.15 78 13 58.48

Bks. A H₄5i (fld.)
" A H₄6a (cmp.)

PENNSYLVANIA

1525+. T.P. P. 5-69 C, center

line of rd. at rd. SW. 2565 39 43 34.36 78 14 31.29

1532+. Center of bridge over
creek

1922 39 43 42.34 78 14 53.61

PA.
HANCOCK QD. PERHA. BY ROY C. DARNELL, 1934.UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

8/11/34 10 (Cont'd. P. 18)

SRF

Eks-D995-6 (fld-cmp.)

NORTH AMERICAN DATUM.

S-776

FRANKLIN AND FULTON COUNTIES.

TRANSIT TRAVERSE BY R.C.DARNELL IN 1934.	LATITUDE	LONGITUDE	DOM. EXP. STATION
ALONG HIGHWAYS- WEST NEAR NORTH EDGE OF QUADRANGLE.			
* 185A. Sylvan, 0.8 mi.S. of, on Little Cove rd., in SE. cor. of second concrete step of S. entrance to Little Cove Creek Methodist Episcopal Church; standard tablet stamped "T.T. 4-D-1932"	39 44 38.41	78 02 02.70	(4,640)
189+. Intersection of rd. SE. to Eagle's Mill	39 44 17.0	78 02 25.9	(10,778)
204A. Centerline of iron bridge over Licking Creek	39 43 24.3	78 03 36.0	7,643
204B. Indian Spring District, Washington Co., Md., 120 ft. E. of stock barn on the old John Bair property; original Pa.-Md. State marker on Mason-Dixon line. (Note: This marker was an original "Crown Top", but has been broken off about 6-in. above the ground.)	39 43 20.69	78 02 56.20	3,134
211+. T-rd. NW. at cor. of wire fence	39 43 39.0	78 04 05.1	2,712 (Dist. from) (204 A)
218. Warren Point, 0.4 mi.E. of, 1 mi. W. of iron bridge over Licking Creek on State Hwy. Traffic Route, on rd. up Licking Creek, 48 ft.N. of triangular blaze on sycamore tree, 500 ft. W. of rd. fork, along very rocky bluff in large sandstone rock; standard tablet stamped "T.T.-5-D-1934"	39 44 16.9 39 43 37.2	78 05 06.0 78 04 50.9	865 2025

F.J. Mac

WEST VIRGINIA

Publication J-1

MERIDIAN MARK

#123 - Hancock

MORGAN COUNTY, BERKELEY SPRINGS

Bks. AH 669a {fld.
AH 670a {cmp.)

By T. W. Cayce, 1961

Berkeley Springs, about 0.8 mi S. of courthouse; at center of Greenway Cemetery; in top of 3- by 3-ft stone and concrete marker ("GAR post #13 W.VA.") projecting 2 ft.; standard tablet stamped "MORGAN MERIDIAN 1961"

Geodetic azimuth from MORGAN MERIDIAN to MERIDIAN N: $179^{\circ}59'57\frac{1}{2}''$
At Greenway Cemetery; 7 ft E. of Buzzard tombstone; in S. retaining wall around the Buzzard lot; standard tablet stamped "MERIDIAN N 1961"

APPENDIX D

USGS vertical and horizontal controls for Williamsport, Md. 15 minute quadrangle

THIRD-ORDER LEVELING
SEA LEVEL DATUM OF 1929

39-077-43
WILLIAMSPORT QUADRANGLE
68 MD.-122 W.VA.-9 PA.
N3930-W7745/15
DIAGRAM NJ 18-1
BALTIMORE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Washington County, Md.; Berkeley County, W. Va.;
Franklin County, Pa.

Only the permanent marks
are listed for lines
run more than 25 years
before edition date

Final adjustment of 1972

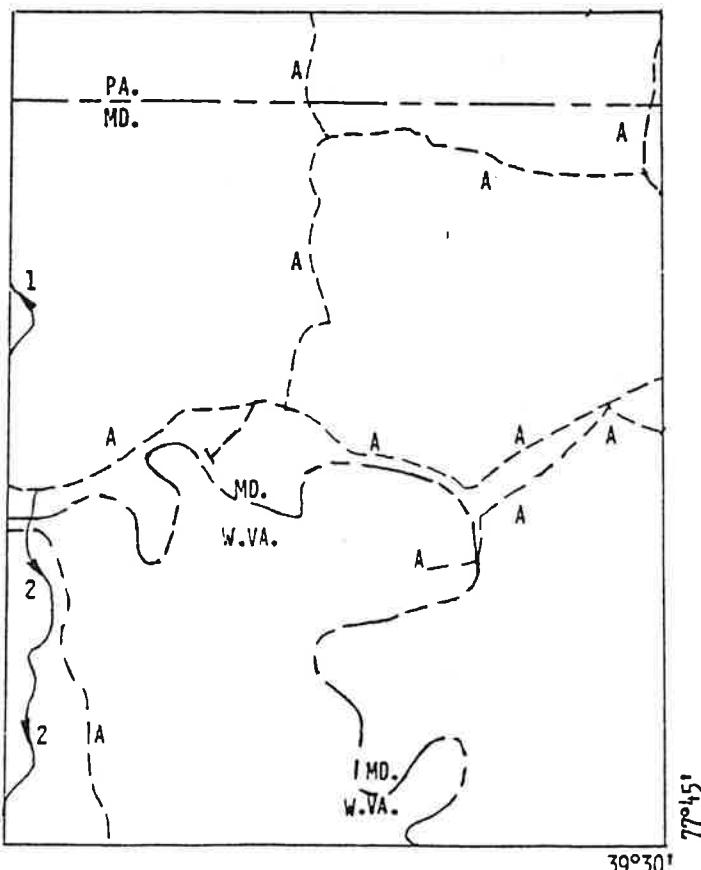
Edition of 10/23/74

PR: Gwk/jyk

MERCERSBURG
(32)

HANCOCK
(69 MD.-123 W.VA.-10 PA.)

HAGERSTOWN
(67 MD.-8 PA.)



MARTINSBURG
(56 MD.-106 W.VA.-222 VA.)

NGS (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle 390774

WILLIAMSPORT QUADRANGLE

39-077-43
N3930-W7745/15
68 MD.-122 W.VA.-9 PA.

INDEX OF PERMANENT MARKS

<u>MARK (USGS)</u>	<u>PAGE NO.</u>	<u>NGS</u>	<u>PAGE NO.</u>
363	3	N 42 1941	4
372	3		
387	3		
390.840 FEET RESET 1948	3		
404	3		
406	3		
447 MD	3		
471	3		
473 MD	3		
539 MD	3		
566	3		
570	3		
607	3		
609	3		
PTS NO 1 1914 470	3		
TT 19 CWH 1947 652	4		
TT 20 CWH 1947 584	4		
TT 21 CWH 1947 544	4		
TT 22 CWH 1947 541	4		

3		39-077-43
WILLIAMSPORT	MD.-W.VA.-PA.	J. M. Harris, 1908 K. W. Trimble, 1914
Books A 9411 and A 7568		
ISOLATED BENCH MARKS (By J. M. Harris, 1908; Book A 7568, K. W. Trimble, 1914; Book A 9411)		<u>Feet</u>
St. James; opposite station; 50 ft from track; under porch of two-story frame cottage; standard tablet stamped "473 MD" (Reported destroyed, 1953)		472.903
Grimes, 0.4 mi S. of; at RR. bridge 705; in W. end of N. bridge seat; standard tablet stamped "390.840 FEET RESET 1948"		390.840
Halfway; 150 ft W. of RR. track; on Williamsport Pike; at concrete store of R. P. Beckley; in front face of SW. corner of store; standard tablet stamped "539 MD" (Reported not found, 1953)		538.910
Halfway, 2.9 mi SW. of; between county rd. and RR. track; in center of S. headwall of concrete box culvert under track; standard tablet stamped "447 MD"		446.751
Williamsport, 2.3 mi SW. of; at RR. bridge 82-2; in top of SW. corner of W. bridge seat; standard tablet stamped "363" (Reported destroyed, 1974)		362.456
Falling Waters, 0.6 mi SW. of; at concrete box culvert under RR. at telephone pole 85/31; in top of center of S. headwall; standard tablet stamped "404" (Reported in 1935 that bench mark had settled several inches) (Reported destroyed, 1974)		404.097
Bedington; 0.2 mi E. of station; on N. side of track; in RR. concrete culvert; standard tablet stamped "387" (Reported not found, 1955)		387.175
Berkeley; 0.3 mi N. of station; at overhead bridge; in front face of E. abutment; standard tablet stamped "471" (Reported not found, 1955)		471.203
"570" (Destroyed, 1978)		570.206
Fairview, 0.6 mi SE. of; at E. end of bridge over Conococheague Creek; N. end of top of abutment; standard tablet stamped "406" (Reported destroyed, 1953)		405.761
Dry Run; at NE. corner of brick schoolhouse; in front face; standard tablet stamped "609" (Reported not found, 1955)		608.254
Dry Run, 3.4 mi S. of; at Montpelier farm; at SW. corner of brick farmhouse; in front face; standard tablet stamped "607"		607.060
Clear Springs; at SW. corner of Potowmack Hotel; in W. face; standard tablet stamped "566" (Reported destroyed, 1955)		566.116
Williamsport, 7.7 mi W. of; at Two Locks; 10 ft S. of gate; in top of Lock 46; E. wall; standard tablet stamped "372"		371.482
Berkeley, 0.3 mi NE. of; 45 ft N. of overhead bridge; 10 ft W. of C. V. RR. track; in limestone ledge; standard tablet stamped "PRIM TRAV STA NO 1 1914 470" (Reported not found, 1955)		470.169

4
WILLIAMSPORT
Book AV 16

MD.-W.VA.-PA.

39-077-43
E. O. Miner

LINE 1.

1947

Feet

E. O. Miner, 1947; Book AV 16

There are no permanent marks on this line in this quadrangle.

LINE 2.

E. O. Miner, 1947; Book AV 16

"N 42 1941" (NGS) (Not found, 1974)

427.748

North Mountain, 1.6 mi N. of; 29 ft N. of mailbox; 20 ft SW. of house; 11 ft NE. of center of rd.; 2 ft SW. of tile block retaining wall; in 7- by 7-in. concrete post; standard tablet stamped "TT 22 CWH 1947 541" (Reported destroyed, 1955)

540.725

Reference mark; 0.15 mi SE. of tablet; on top of NW. corner of masonry culvert under RR. track; chiseled square

503.34

U.E., North Mountain, 0.8 mi N. of; 60 ft E. of center of rd.; 5 ft N. of NW. corner of main building of brick plant; on top of concrete wall; chiseled square

541.39

U.E., North Mountain; 30 ft NE. of grade crossing of main line of B. & O. RR.; on top of concrete base of warning bell; chiseled square

539.13

North Mountain, 0.4 mi W. of; 0.6 mi NE. of Hedgesville, from main square; 51 ft N. and 7 ft E. of center of rd. at driveway to house NW.; and at same elevation; 24 ft NW. of center of rd.; 5 ft SW. of telephone pole; in 7- by 7-in. concrete post; standard tablet stamped "TT 21 CWH 1947 544"

544.320

Reference mark; 70 ft E. of tablet; 14 ft SW. of NE. end of SE. headwall of concrete culvert; chiseled square

544.20

Hedgesville, 0.6 mi SE. of, along State Highway 9 from main square, thence 0.8 mi SW. along dirt rd.; 14 ft N. and 18 ft E. of crossroad, and at same elevation; 4 ft NE. of mailbox; 1 ft W. of fence; in 7- by 7-in. concrete post; standard tablet stamped "TT 20 CWH 1947 584"

584.139

Hedgesville, 1.6 mi SE. of, along State Highway 9 from main square, thence 1.1 mi SW.; about 710 ft SW. of junction of rd. through orchard; 52 ft SW. of power pole; 12 ft NW. of center of rd.; 1 ft E. of fence; in concrete post; standard tablet stamped "TT 19 CWH 1947 652" (not found, 1974)

652.155

Reference mark; 480 ft SW. of tablet; in NW. corner of woods; 35 ft SE. of center of rd.; in root on W. side of 4-ft oak tree; copper nail and washer

653.53

122 W. VA. 68 MD.

9 PA.

122 W. VA.
WILLIAMSPORT QUADRANGLE

Bks. A H45c (fld.)

" A H46a (cmp.)

By C. W. Haas, 1947

4/2/48 msf

WEST VIRGINIA-MARYLAND-
PENNSYLVANIA

Mag. decl. 6°30' W.

FRANKLIN COUNTY, PA.

WASHINGTON COUNTY, MD.

BERKELEY COUNTY, W. VA.

1927 N. A. D.

531+. Center line of rd. at
dirt rd. WNW. (2470) 39 30 46.21 77 59 48.38

533+. Center line of rd. at
fence line WNW. 2443 39 31 07.77 77 59 34.35

534. Hedgesville, 2.7 mi. SE. of, 1.6 mi. SE. along
Highway 9 from main square, thence 1.1 mi. SW., about 710 ft.
SW. of junction of rd. W. thru orchard, 52 ft. SW. of power
pole, 12 ft. NW. of center line of rd., 1 ft. E. of fence, in
concrete post; standard tablet stamped

"T T 19 CWH 1947" 619 39 31 13.21 77 59 30.77

536a. P. P. 3-127 C, center
line of rd. at dirt rd. WNW. 707 39 31 19.32 77 59 26.40

539a. Center line of rd. at
Y-rd. SW. 2537 39 31 29.73 77 59 55.84

557a. Intersection of
crossroads (2800) 39 32 12.23 77 59 50.38

557. Hedgesville, 1.4 mi. SE. of, 0.6 mi. SE. along
Highway 9 from main square, thence 0.8 mi. SW. along dirt rd.,
14 ft. N. and 18 ft. E. of intersection of crossroads, and at
same elevation, 4 ft. NE. of mail box, 1 ft. W. of fence,
in concrete post; standard tablet stamped

"T T 20 CWH 1947" 23 39 32 12.36 77 59 50.15

559+. Center line of rd. at
rd. WNW. 2152 39 32 31.25 77 59 37.54

WILLIAMSPORT QUADRANGLE

WEST VIRGINIA-MARYLAND
PENNSYLVANIABks. A H₄5c (fld.)" A H₄6a (cmp.)

By C. W. Haas, 1947

4/2/48 msf

(Cont'd. p. 2)

1927 N.A.D.

562+. Center line of rd. at

driveway to house ESE. 1522 39 32 44.56 77 59 28.50

568+. P. P. 3-195 ,

Center line of Highway

9 at dirt rd. SW. 1359 39 32 57.73 77 59 25.13

572a. Intersection of main rds.

in center of Hedgesville

2016 39 33 12.57 77 59 42.29

576a. Center line of rd. at

very short dirt rd. NE. 1848 39 33 24.68 77 59 24.63

580. Hedgesville, 0.6 mi. NE. from main square, 51 ft. N. and
7 ft. E. of center line of rd. at driveway to house NW., and at
same elevation, 24 ft. NW. of center line of rd., 5 ft. SW. of
telephone pole, in concrete post; standard tablet stamped ..

"T T 21 CWH 1947" 1415 39 33 33.16 77 59 10.27

583a. P. P. 3-195 A, junction

NE.-SW. rd. and rd. NW. 1834 39 33 45.63 77 58 53.27

589a. Center line of rd. at
driveway ESE.

1532 39 33 59.43 77 59 01.34

593+. Center line of rd. at
fence line E.

1816 39 34 17.01 77 58 56.69

600+. P. P. 3-200 B, center
line of rd. at long tangent
of rd. NE.

1564 39 34 31.96 77 58 51.64

607+. Center line of rd. at

rd. E. over R.R. track 1792 39 34 46.29 77 59 05.09

WILLIAMSPORT QUADRANGLE

WEST VIRGINIA-MARYLAND-PENNSYLVANIA

Bks A H₄5c (fld.)" A H₄6a (cmp.)By C. W. Haas, 1947
4/2/48 msf

(Cont'd. p. 3)

1927 N.A.P.

610.	Hedgesville, 2.6 mi. N. of, 1.0 mi. NE. of main square to rd., junction, thence 1.6 mi. NW., 29 ft. N. of mail box, 20 ft. SW. of house, 11 ft. NE. of center line of rd., 2 ft. SW. of tile block retaining wall, in concrete post;	
	standard tablet stamped "T T 22 CWH 1947"	Destroyed 1951 J. A. Kalswarsky
613+.	Center line of rd. at rd. S.	1001 39 34 54.06 77 59 13.00 1071 39 34 54.57 77 59 26.67
618a.	Center line of rd. at woods trail SE.	1606 39 35 09.70 77 59 32.86
627+.	P. P. 3-200 A; intersection of rd. and R.R. crossing	1718 39 35 25.82 77 59 25.94
674.	Hancock, Washington Co., about 12.4 mi. SE. along Western Maryland Ry. from sta., about 18 rails NW. of milepost 103, at rd. crossing, 67 ft. NW. of center line of rd., 26 ft. SW. of SW. rail of east-bound track, 4 ft. S. of pole, in concrete post; U.S.C. & G.S. standard disk stamped "N 42 1941"	5556 39 36 19.77 77 59 39.14
675a.	P. P. 4-61 C, intersection of rd. and R.R. right-of-way between two main tracks	71 39 36 20.02 77 59 38.29
680+.	Intersection of crossroads	2225 39 36 41.93 77 59 36.00
684a.	P. P. 4-61 B, center line of Highway 56 at dirt rd. SSE.	2452 39 37 06.01 77 59 39.45

WILLIMSPORT QUADRANGLE

WEST VIRGINIA RYLAND
PENNSYLVANIABks. A H₄5c (fld.)" A H₄6a (cmp.)By C. W. Haas, 1947
4/2/48 msf

(Cont'd. p. 4)

1927 N.A.P.

722+. Center line of rd. at
fence line E.

(2349) 39 39 08.68 77 59 54.85

Bks. A H₄5d (fld.)" A H₄6a (cmp.)

By C. W. Haas, 1947

722+. Center line of rd.

(described in line) 39 39 08.68 77 59 54.85

726a. Center line of rd. at
fence line W.

2237 39 39 30.63 77 59 51.46