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Water Stations Along the AC&Y



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Front cover: In 1944, the Akron Beacon Journal published a feature on AC&Y's many contributions to the War effort. A colorized "rotogravure" photo featured Class C 0-8-0 number 35 switching at Brittain yard with the original wood water tank visible. *AC&YHS Archive*

In This Issue

Page 2.... Editorial / Society Information Page 3.... Water Stations Along the AC&Y Page 25... A&BB Water Stations Page 26... AC&Y Tender Capacities

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Editorial

From Bob Lucas . . .

This issue presents the locomotive water sources on the AC&Y-Northern Ohio and the infrastructure supporting storage and delivery along the 169-mile right-of-way.

Water is a foundation for steam era railroads, though the topic is seldom covered to any degree. A steam railroad that does not effectively manage its water resources won't be a viable railroad for long. Water affects many key decisions – route selection process (survey / construction), locomotive and tender acquisitions, crew districts and train service levels. Railroads that stop trains frequently for water simply won't remain competitive.

The evolution of railroads, both in North America and around the world, began with harnessing the expansive power of vaporized water, otherwise known as steam. Steam became the basis of the industrial revolution, a start generally attributed to Thomas Newcomen's invention of the first steam engine in 1712. James Watt of Scotland vastly improved the steam engine in 1769 for applications in steamboats, factories and the first trains.

The United States emerged as an industrial powerhouse after the American Civil War. New industries emerged including petroleum refining, steel manufacturing and electric power generation. Steam railroads expanded extensively, linking remote parts of country to the National market economy. Steam, which required reliable sources of clean water, was the foundation of this growth. AC&Y and its predecessors were part of this process.

Materials presented in this story represent some 20-years 'off-and-on' research. The sources include investigations by Bill Hanslik, Jr. and other AC&Y fans, the National Archives at College Park, MD and associated 1918 ICC Valuation photos. I hope all will find the story to be of interest. I doubt any other railroad historical society can match the information presented on a mile-for-mile basis.

Society Book

From the Publications Editor . . .

In early April 2015 Morning Sun Books released of our much anticipated AC&Y-A&BB publication, the culmination of a two year effort by a dedicated team of AC&Y-A&BB enthusiasts. The book is still available with a pre-arranged AC&YHS discount through Chuck Macklin at **www.railroadbooks.biz**. Morning Sun books are held to the highest standards. All will be pleased with the 128-page publication outlining the captivating history of the AC&Y and A&BB supported by numerous neverseen-before color images. Many rewarding comments and reviews have been received to date.



Above: Delphos, Ohio was the western terminus of the AC&Y where it connected with both the Nickel Plate and Pennsylvania Railroads. The engine terminal and a modest yard were located at milepost 1.0. This undated photo shows the steel coal dock, sand tower, diesel oil pump house / tank and water column about 1950. *Courtesy Dale Fairfax*

O utlined in the Editorial, "a steam railroad that does not effectively manage its water resources will not be a viable railroad for long."

A circa 1909 railroad engineering publication describes "the ordinary water station as consisting of an elevated tank for storage purposes, a pumping outfit to supply the tank and standpipes for replenishment. A (circa 1900-09) locomotive consumes 30-100 gallons of water per mile and carries from 2000-5000 gallons. Owing to a dynamic mix of traffic and tonnages, possible delays and climate changes, it has been found necessary to place water stations 10 to 20 miles apart."

U.S. railroads operated 240,000 route miles in 1910 which means roughly 10-12,000 water stations were required, assuming they were 15-20 miles apart. Virtually none of the estimated 10-12,000 vital steam-era line side and terminal facilities, including approximately twenty water stations on the AC&Y and its predecessors, have survived.

Another undated quote says" U.S. steam railroads use enormous quantities of water for locomotive and other purposes. It is estimated railroads consume around 80 billion (80,000,000,000) cubic feet of water each year, enough to fill a reservoir 1000 feet wide, 10 feet deep and 1515 miles long. T he feature story illustrates water sources and stations both chronologically (1881 through 1955) and geographically (west to east) as the CD&StL-PA&W-Northern Ohio (LE&W) Railways evolved to become the AC&Y. We are fortunate to have located early photos, often where a water station was not the focus. AC&Y's water stations and those of its predecessors were constantly changing (retired or rebuilt and/or relocated) to meet traffic patterns and locomotive assignments.

First, a clarification of terminologies: A water station or



stop is a railroad location where steam locomotives can replenish water. The stopping of the train itself is called a "water stop". Also, descriptions of water cranes, plugs, columns and/or stand-pipes refer to equivalent structures, though they may appear different due to the manufacturer. Documents indicate the Poage patent "Type H" stand-

pipe with Fenner spout was favored the AC&Y.

For the most part a typical Midwestern flatland railroad, the Eastern third of AC&Y's 169-mile route traversed the rolling hills of the Appalachian plateau, whereas the Western two-thirds was natural lowland spanning a broad network of rivers, streams, runs and ditches comprising the Lake Erie watershed. The more familiar names were the Cuyahoga, Huron, Vermilion, Sandusky, Rocky Rivers and the lesser known Ottawa, Blanchard and Auglaize. Many became sources of water together with wells dug expressly for railroad consumption and city owned water supplied to the AC&Y and predecessors under contract.



The earliest AC&Y forerunner was the CD&StL (Cleveland, Delphos & St. Louis), incorporated March 1881, to construct a narrow gauge road from Delphos to Cleveland. Delphos was to be the hub of a projected slim gauge network running from Lake Erie to Mexico.

By 1883, interest in the "Grand Trunk" narrow gauge had collapsed. Though short of the intended destination, 55 miles of the CD&StL was laid to Carey. The CD&StL purchased three locomotives, though little has been found about the supporting infrastructure of the fledgling road.

An 1883 drawing further in the story shows a water tank location at Delphos. There was likely a water tank at >

Carey and perhaps at other intermediate points, namely at Bluffton, Columbus Grove or Mount Blanchard where documented water stations were later installed.

In 1890, the new PA&W began construction east from Carey to Akron while connecting at Carey with the CD&StL. The PA&W reorganized as the Northern Ohio Railway in 1895. The road was subsequently leased to the Lake Erie and Western (LE&W) and in October 1900, the Northern Ohio became part of the New York Central System. NYC made only nominal investments in the N.O. through U.S.R.A. control in 1918. The best early record of water stations is the LE&W survey of 1900



The AC&Y acquired the lease of the N.O. in 1920 and slowly began to upgrade the rail and facilities along the N.O. right of way. Many improvements to the N.O. were implemented between 1927 and 1929 in conjunction with the arrival of AC&Y's newest and largest motive power. AC&Y's first two Mikados were received from Lima in late 1926 and two additional Mikes arrived in 1928. Several bridges and miles of 60# rail were replaced along with upgrades to engine terminal and servicing facilities.

This effort peaked during 1928 when the AC&Y spent nearly \$400,000 on improvements. Several wooden tanks on the Northern Ohio were retired that year. A steel tank was erected at North Auburn, three miles east of New Washington. This new water tank allowed the retirement of the tanks at Plymouth and New Washington. The Plymouth tank was only five years old and thusly was relocated and installed at Sycamore.

Little investment was made throughout the Depression and War years except for minimal maintenance of operating infrastructure. Though, a key event occurred in 1936, installation of new 120# rail which allowed the Class R's to operate between Carey to Delphos for the first time. Changes to AC&Y's locomotive roster and increased tender water capacities changed water station needs. The advent of dieselization in 1948 led to many water station relocations and retirements, also documented in the story. The last fires were extinguished in 1955 and like steam locomotives, water stations became history.

AC&Y Water Stations – December 1938

EASTWARD SUPERIOR DIRECTION								
				CLASS THIRD CLASS				
Distance	Distance	STATIONS		90	94	42	44	46
Delphos	Detween			Daily Except Sunday	Daily	Tuesday Thursday Saturday Only	Monday Wednesday Friday Only	Tuesday Thursday Saturday Only
0.0		DELPHOS		A.M. 8.30	P.M.			A.M.
1.0 5.8 8.2	$\begin{array}{r}1.0\\4.8\\2.4\end{array}$	DELPHOS YARDC-W-Y RUSHMOREE RIMERE		8.40(97) 8.48 8.53	6.20 6.28 6.35			$10.30 \\ 10.40 \\ 10.45$
11.4 16.7 17.1	$3.2 \\ 5.3 \\ 0.4$	VAUGHNSVILLEE C. G. TOWER COLUMBUS GROVEW	s s	9.00 9.10 9.15				$10.55 \\ 11.05 \\ 11.15$
22.4	5.3	PANDORAE	S	9.25	7.20			11.30
28.0 36.1 40.0	0.3 8.1 3.9	A. U. TOWER JENERA E ARLINGTON E	5 5 5	9.40 9.42 10.00 10.10	7.35 7.53 8.07			$11.49 \\11.50 \\12.10 \\12.30$
42.0 45.1 47.9 53.5	$2.0 \\ 3.1 \\ 2.8 \\ 6.1$	PATTERSON E MT. BLANCHARD E PRATTS FISHER	S	10.14 10.25 10.31 10.41	$\begin{array}{c} 8.12 \\ 8.20 \\ 8.25 \\ 8.35 \end{array}$		P.M.	$12.35 \\ 12.45 \\ 12.50 \\ 1.01$
55.162.366.470.5	$ \begin{array}{r} 1.6 \\ 7.2 \\ 4.1 \\ 4.1 \end{array} $	CAREYC-S-W-Y TYMOCHTEE. SYCAMOREE-W PLANKTONE	s f	10.55 11.25 11.38 (43) 11.48	$\begin{cases} \textbf{8.40} \\ \textbf{9.30}(93) \\ 9.45 \\ 9.58 \\ 10.08 \end{cases}$		$1.00 \\ 1.10 \\ 1.20 \\ 1.30$	1.30 P.M.
74.6 78.6 83.1 86.5	$\begin{array}{r} 4.1 \\ 4.0 \\ 4.5 \\ 3.4 \end{array}$	LYKENSE CHATFIELDE NEW WASHINGTONE NORTH AUBURNE-W	f f s f	11.58 12.08 12.20 12.27	$ \begin{array}{r} 10.18 \\ 10.28 \\ 10.38 \\ 10.45 \end{array} $		1.40 1.55 2.18 (95) 2.25	
93.0 101.6 101.9	$ \begin{array}{r} 6.5 \\ 8.6 \\ 0.3 \end{array} $	PLYMOUTHE G. N. TOWER GREENWICH.	s f	$12.40 \\ 1.01 \\ 1.02$	$11.03 \\ 11.20$	 A.M.	$\begin{array}{c} 2.45\\ 3.05\end{array}$	
109.0	7.1	NEW LONDONC-W-Y	S	1.20(95)	11.40	8.00	3.30	
109.7 114.1 116.5 118.6	$ \begin{array}{c} 0.7 \\ 4.4 \\ 2.4 \\ 2.1 \end{array} $	HILES SEMPLE BAKERS HUNTINGTON		$ \begin{array}{c} 1.50 \\ 2.01 \\ 2.06 \\ 2.11 \end{array} $	$12.01 \\ 12.12 \\ 12.17 \\ 12.22$	8.02 8.12 8.17 8.22	P.M.	
$\begin{array}{c c} 123.7 \\ 131.0 \\ 134.2 \\ 140.2 \end{array}$	$ \begin{array}{r} 6.1 \\ 7.3 \\ 3.2 \\ 6.0 \\ \end{array} $	SPENCERW LITCHFIELDE THOMPSONSW	s f s	$2.35 \\ 2.55 \\ 3.01 \\ 3.30$	12.50 1.10 1.20 (97) 1.35	8.55 9.15 9.20 10.20		
145.9 148.1 150.7	5.7 2.2 2.6	BONETA	f	3.40 3.45	1.48 1.55	10.30 10.35		
156.9	3.6	FAIRLAWN	T	3.55 4.12	2.05	12.15		
161.7 165.8 169.3	4.8 4.1 3.5	AKRON W BRITTAIN C-W-T-S MOGADORE	S	4.30 4.50 P.M.	2.25 2.45 A.M.	12.30 12.45 P.M.		

Above: AC&Y Employee Timetable No. 21 lists twelve (12) active water stations (noted "W" and highlighted in yellow) as of the effective date of December 18, 1938. Starting at milepost zero (0.0) on the far west end water stations were located at Delphos yard, Columbus Grove, Bluffton, Carey, Sycamore, North Auburn, New London, Spencer, Medina, Paxton, Akron and Brittain yard as of that date. The average distance between water stations was 16.2 miles. The greatest distance was 27.4 miles between Bluffton and Carey. The late Depression timetable reflects sharply reduced freight traffic and fewer trains. AC&Y's Class O and Class M Consolidations efficiently handled tonnages, holding road assignments in lieu of the Class R Mikes, some of which were stored serviceable. *Bob Lucas collection*

Delphos Yard – Milepost 1.0



Above: This Rehor drawing shows the circa 1883 Delphos yard and terminal layouts for the Cleveland, Delphos and St. Louis (CD&StL), an AC&Y predecessor, and the Toledo, Cincinnati and St. Louis (predecessor of Clover Leaf /NKP). The original CD&StL water tank was adjacent the engine house. Built to narrow gauge standards, both railroads would soon be reorganized and ultimately converted to standard gauge. *Courtesy NKPT&HS*



Above: Here is the Northern Ohio / AC&Y Delphos yard forty years later in 1923. Neither the water tank in the 1883 drawing or described in the 1900 LE&W inventory appears. It was located near the two small wood buildings. Delphos began as a canal town. Ample water was available from the nearby Miami & Erie Canal. *AC&HS Archive*

Summary of Water Facilities at Delphos (compiled by Bill Hanslik, Jr.)

* A water tank of unknown size and construction appears in both 1883 Rehor drawing and 1899 Sanborn map.

* The LE&W inventory of 1900 lists a 56,000 gallon tank (built 1896) with water supplied from the M&E canal.

* A 1918 Valuation photo and a 1921 Sanborn's Insurance drawing show a pump house (built 1916), but no water tank.

* In 1937 the old water supply line was retired. A new line was installed, connecting to the NKP's water line. The water facilities at Plymouth were retired with the Poage water column relocated, installed at Delphos.

PREINVENT	ORY DATA
SUBJECT DELPHOS PUMP	BOUSE.
HELE & W. R. R. CO. W. OR BRANCH	PAGE 123



Above: Pictured is the pump house with construction data and locomotive servicing facilities about 1950. The water standpipe is an unusual design. A new brick diesel oil pump house also appears. *Courtesy Dale Fairfax, AC&YHS*



Left: Pictured are the AC&Y's Delphos engine facilities in 1959. It is believed AC&Y suspended steam operations between Carey and Delphos when the coal dock was retired in 1953. While diesel sanding and fueling facilities were installed in 1948, the unusual water column which replaced AC&Y's favored Poage "Type H" design still appears. *Courtesy Jim Semon*

Columbus Grove – Milepost 17.1





Above: Columbus Grove was a community west of Carey, a source of agricultural traffic (livestock and condensed milk). Located 16.1 miles from Delphos yard, it was a busy interchange connection to the DT&I and B&O. The location and nature of a water station at Columbus Grove has been elusive. There is no mention in the LE&W 1900 inventory or 1918 ICC Valuation records, though AC&Y employee timetables indicate an active water station in 1926, perhaps earlier. Logically, this would be standpipe at the City Water works close to the AC&Y depot (pictured). It is possible a water station might have been installed further east or west of the area pictured. This is most plausible as otherwise AC&Y trains would have stopped in the city for water, tying up vehicle traffic at numerous grade crossings. *AC&YHS Archive*.

Bluffton – Milepost 27.7



Above: The 1900 LE&W inventory lists a 56,000 gallon tank at Bluffton, constructed in 1896. Artesian water was supplied by the City Water Works. The tank was relocated to Medina in 1904, replaced by a column. In 1942, the column was retired, reinstalled at Arlington. The insert shows the Central Ohio Light & Power Woodcock generation station and standpipe location based on a 1939 photo of #402. *Courtesy Bill Hanslik, Jr. and Swiss Historical Society*

Arlington – Milepost 40.0



Above: In 1942, a water plug was installed at Arlington after the Bluffton water facilities were retired. The column appears to be AC&Y's favored Poage "Model H" design. *Courtesy Vaughn Neel*

Mount Blanchard – Milepost 45.1





Above and Left: Mount Blanchard is another early and elusive water station along the AC&Y. The LE&W year 1900 inventory lists a 16'x24', 56,000-gallon tank built in 1896. The water source was the Blanchard River, shown in the top photo of Bridge #440 along with the tank in the distance (circled in red). The LE&W description for the Mt. Blanchard tank is the same as those installed at Delphos and Bluffton by the PA&W. While it seems logical that the PA&W would construct "standard" water tanks, the same cannot be said for PA&W constructed depots which varied in size and types. Mt. Blanchard appears as an active water station in the April 1935 Employee Timetable, though is omitted in the December 1938 timetable, likely retired between those years. *AC&Y HS Archive, Vaughn Neel*



Carey – Milepost 55.1



Above: The water tank partially visible in this 1918 ICC Valuation photo was a 56,000 gallon tank constructed in 1890. It appears similar in construction to the PA&W "standard" tank. The source was well water. The tank apparently was out-of-service before 1900 only to be put back in service in 1903 account salt water causing the nearby Tymochtee tank to be abandoned. It was replaced in 1928 by the steel water tank below. *AC&Y HS Archive*



Above: This mid-50's photo shows the steel water tank at Carey installed in 1928, replacing the wood tank above. In June 1948 with arrival of the four new F-M H20-44 road switchers, the wood water tank at Spencer was moved to Carey allowing the steel tank to be released for diesel oil storage. It was retired around the time AC&Y's last steam locomotives were retired in 1955. Curiously, no photos have been found for the second wood tank. *Courtesy John Wheeler*

Tymochtee – between Milepost 61.3 and 62.3

Only a description exists for the 56,000 gallon water tank at Tymochtee, built by the PA&W in 1896. It was listeded as "out-of-use / abandoned" in the LE&W 1900 survey of Northern Ohio water stations due to salt contamination from nearby oil wells. The water source was the Sandusky River. The wood tank was 16'x24' matching PA&W's "standard" found at many other locations along the AC&Y. It is not known if the Tymochtee tank was dismanted or perhaps moved.

Sycamore and Lykens – Milepost 66.4 and 72.0 to 74.6



PREINVENTO	DRY DATA
SUBJECT. SYGAMORE WAT	BR TANK
HE L. E. & W. R. R. CO. N. OR BRANCH	PAGE 93 MILE 96 STATION STAKE 5935+63 STRUCTURE Star Tank CLASSIFICATION Adds, Ba, Ma
A 12' x 12' wooden water tank on 8 by Company forces in 1908. Water supply	" x 10" x 12' cak foundation, was erected from sity.
Youndation. 20 pcs. 8" x 10" x 12' cak.	
Frame. 883 ft. B.M. pine.	
Yub. 180 ft. B.M. of 2" oak. 446 ft. B.M. of 7/8" sheathing. 240 ft. B.M. of 1" siding. 10 pos. 1" x 10" x 14' dressed pin 316 ft. 0. G. Pattons 4 rolls of Granite roefing. 84 ft. B.M. hemlock. 1 roll building paper. 1 - 6" valve. 1 - 9' drop spout. 1 - 10' chain.	8.
Pipe Lines. 150 ft. of $l_{2}^{\pm n}$ galw. pipe. 80 ft. of $l_{2}^{\pm n}$ m m 1 - $l_{2}^{\pm n}$ step cock. 1 - $l_{2}^{\pm n}$ water meter. 1 - $l_{2}^{\pm n}$ globe valve.	

Above: Shown is the original Sycamore tank errected in 1908 with construction details. It was replaced by the Plymouth tank, just five years old, in 1928. The City supplied water. No record has been found for retirement of second tank. *AC&YHS Archive.*



Above: No photographic evidence exists for a PA&W "standard" tank at Lykens, only appearing in the 1900 LE&W survery. The water source was Sycamore creek. *Bob Lucas collection*

Left: A 1950's view west past AC&Y's Sycamore depot shows no evidence of a water tank or column. A standpipe at Sycamore was retired, though, in 1953. A NYC owned tank existed at the interchange, distant left. *Courtesy Mike Kopach*

New Washington – Milepost 83.1





Above: The water tank and pump house at New Washington were unique, not matching any previous PA&W/NO design or description. Both were built new by the Northern Ohio in 1912. The tank and brick pump house were located just west of the depot and east of the PRR crossing, circled in red in the Sanborn's Fire Insurance map. *AC&YS Archive*



PREINVENTORY DATA

SUBJECT NEW WASHINGTON WATER TANK.

E. & W. R. R. CO.	8U
M BRANCH Hur Ohio Ry	MILE #0
TION SECTION	STATION STAKE AND AD
Chio.	STRUCTURE
TATION New Hashington	CLASSIFICATION
BOI STATIO	CLASSIFICATIONAcclNo18,
A new water tank was constructed a	at New Washington, Ohio in 1919 Tunk
hs 16' x 16' oak tub with 3" staves, wo	oden frame and granite roof. Advice No.
	•
hundation.	
124 bags of coment.	
41 cu. yds. of gravel.	
merstructure.	그는 방법을 알려야 한 것을 다 같다. 이렇게 하는 것이 같아.
2691 ft. B.L. oak.	
2657 ft. B.M. ping.	
66 ft. B.H. fir.	
1146 ft. B.M. 5/8" sheathing.	
980 it. B.M. 3/4" ceiling.	
98 lbs. bolts.	
20 " washers.	
48 ft. of 12" iron ladder.	
18 ft. spout chain.	
5 rolls of Granite Roofing.	
25 ft. of d" chain.	
Rinting.	
8 sal mineral paint.	
7 " 01]	
	이 사람이 잘 주면 가지? 것이 가지? 가지 못 했다.
M. P A Polio 1012 Pore 210.	
and the us torro rard' turke eras	

Left and Below: Additional photos show the pump house and tank built at New Washington in 1908. Construction details describe a wood water tank about 1/3 smaller than the PA&W-NO "standard" 56,000 gallon "standard" structure. The brick pump house is also different than the board and batten construction employed at other water stations. The water source appears to be a large covered cistern/well. Also, the mineral red paint would be similar to Tuscan red. *AC&YHS Archive*



PREINVENTORY DATA

SUBJECT NEW WASHINGTON PUMP HOUSE

ELE & W. B. B. CO.	6.r
LOR BRANCH Rerthern Chio Py.	PAGE
WATION SECTION 5-Ohfo	MILE
ATE OF Chio	STATION STAKE
BEST STATION New Coshington	STRUCTURE Fuge House
STATION	CLASSIFICATION ACCT, NO. 18,
A new autor Frage 141 - 121 b	
Runorstmichter menter met	y 5' high, with concrete foundation, brick
ador Bor acon o' P mirror 1001' 1888	built in 1912. Advice No. 21.
Parmad add an	
AC har of errent	
40 bags of cement.	
y cu. yes, or gravel.	
P	
superstructure.	
655 It. B.E. Cak.	
407 ft. B.M. Pine.	
200 ft. B.M. Sheathing.	
5500 brick.	
5 bble. of lime.	
5 bage of cement.	
raint.	
3 gal. mineral paint.	
1 gt. of trim.	
5 lbs. of putty.	
l gal. cil.	
Machinery.	
1 - 5 H. P. Casoline Pump.	
1 boiler shell 6' x 5'4", seco	and hand.
12 ft. of 3/8" black pipe.	
12 ft. of 1/4" " "	
Voll:	
2541 ft. B.M. Cak.	
117 lbs, bolts,	
8 ft. of 5" wrot, pipe.	
100 pcs. of 6" sewer nine.	
200 ft. of 6" tile	
Pipe Lines.	
86 ft of All cole size	
3 = 4" File	
2 - 44450 221-	
2 - 4" flame union	
2 - 1" -linge unions.	
grope valves.	
19 4 IOOT VELVE.	
LA IT AT LAS black when	

20 ft. of 4" wrot pi 1 - 7" foot valve.

Ref. E. A. Folio 1912, Page 219.

North Auburn – near Milepost 86.5



Above: This is the only known photo showing the steel water tank at Tymochtee. Installed in 1928, the new water station allowed the AC&Y retire older tanks at New Washington (16-years old) and Plymouth. The Plymouth tank was relocated to Sycamore replacing the original structure. There was a major derailment at Tymochtee in 1939. The burned tank car was of intense interest to freight car historians. The answer was revealed by the late Richard Hendrickson who determined the owner was White Rose, a Midwest refiner and gasoline retailer. *Courtesy Vaughn Neel*

Plymouth – Milepost 93.0



Above: This is the only known photo showing a water facility at Plymouth, in this scene a single stand-pipe. The PA&W, however, had constructed a "standard" 56,000 gallon tank constructed with white pine at Plymouth in 1890. It was retired and relocated to Sycamore in 1928. The water source was the Huron River. *AC&YHS Archive*

New London / Hiles – Milepost 109.4 and 109.8





PREINVENTORY DATA

SUBJECT NEW LONDON STAND PIPE.

1 - 2" globe valva.

768 ft. B.M. pine. 72 ft. B.M. oak.

ost Box

THE L. E. & W. R. R. CO. Morthan Onlo Ry. DW. OR BRANCH	PAGE ۲ MILE 53 STATION STAKE 2756+73 STRUCTURE Stand Påge CLASSIFICATION Aceta, No. 16.	
A new stand pipe was erected at New with the C.C.C. & St. L. Ry. Co.'s tank.	Iondon, Chio, in 1903, and conner	cts
stand Pipe. 1 second-hand Poage Column.	•	
Pipe Lines. 20643 lbs. 6" cast iron pipe. 445 lbs. 12" x 12" x 6" cast iron ter	18.	
176 " 12" sleeves. 1 - 6" gate valve. 10 ft. of 6" cast iron pipe, second-!	hand.	• •

Above Top and Center: The steel water tank at the New London terminal originally was located at Plymouth. It appears here in 1951 after being converted to a diesel oil storage tank. AFE's show installation of the water tank and column at the New London wye took place in 1926. Courtesy Vaughn Neel and AC&Y HS Archive

Left: In 1903, a second hand Poage water column with pit and pipe lines was erected at New London between the C.C.C. & StL (Big Four-NYC) eastbound main and the interchange track. The water supply was Big Four's tank. **Bob Lucas Courtesy National Archive**

Spencer / River Corners – Milepost 123.9 and 125.4



Above: The 50,000 gallon capacity water tank and pump house at Spencer (actually at River Corners, about 1.5 miles further east and shown in the photos) was constructed by Northern Ohio Railway company forces in 1911. It replaced a larger PA&W "standard" 56,000 gallon tank originally built in 1890 of which little is known. The water source for the original 1890 tank was the nearby Black River. Presumably, the same water source was retained for the tank built in 1911. Between 1946 and 1948, the River Corners tank was relocated to Carey. *AC&YHS Archive*







Above: The water tank at River Corners, constructed in 1911, was retired in 1946 and reinstalled at Carey. As the AC&Y was still mostly a steam railroad, the need for water remained at Spencer. To fulfill this need, a Poage water column was inserted between the main line and passing siding just east of the busy W&LE (NKP) / AC&Y crossing diamond. The water column was tied into the City water system. The date of column retirement is not known, but likely in the mid-1950's. Mike Kopach and Bob Lucas

collections.

Left: The 50,000 gallon capacity water tank and adjoining brick pump house east of Spencer (River Corners) was constructed by Northern Ohio company forces in 1911. Note the water tank is supported by a steel frame, rather unusual construction for that time period. The wood tank was painted mineral red, a shade believed similar to Tuscan red. *AC&Y HS Archive*

Medina and River Styx – Milepost 139.7 and 143.2





Above: The two images feature the newly completed steel viaduct over the River Styx (Rocky River) east of Medina. Distant is the original 56,000 gallon capacity water tank built in 1890 by the PA&W. It is listed in the 1900 LE&W survey as a "standard" tank with dimensions identical to those at Paxton, Spencer, New London, Lykens, Tymochtee, Carey, Mount Blanchard, Bluffton and Delphos. *Courtesy Bill Hanslik, Jr.*



PREINVENTORY DATA

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SUBJECT MEDINA PUMP HOUSE.
THE L. E. & W. R. R. CO.
                                                                                           28
                                                                                 PAGE
MILE
                                                                           23
                                                         STATION STAKE 1169+50
               Chio
STATE OF.
                                                         STRUCTURE Pump House
CLASSIFICATION Acct. No. 19
        Pump house and machinery at Medina, Ohio, were moved from Plymouth, Ohio,
04. Pump house is 10' x 14' by 10 ft high, with drop siding, tin roof and
  in 1904.
  file foundation. ,
  Pump House Repairs.
       House repairs.
320 ft. B.M. oak.
561 ft. B.M. pine.
1 roll building paper.
 Coal Bin.
1040 ft. B.F. oak.
       54 ft. B.M. hemlock.
50 ft. B.M. pine.
       1090 ft. B.H. oak, second hand.
  Pipe Line, and Machinery.

1 - 36" x 72" submerged flue boiler.
1 direct acting pump.
1 - 12" x 18' smoke stack.
13 ft. of 6" pipe.
104 ft. of 4" ".
20 ft. of 4" ".

      29 ft. of 11" pipe.
819 ft. of 1" "
 Drain.
180 ft. of 6" drain tile.
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Above and Right: In 1904, the PA&W "standard" wood tank at Bluffton was relocated to Medina replacing the original tank just west of the Rocky (Styx) River bridge. A third 38,000 gallon water tank built in 1911 and pump house appear in a rare A.I. Root photo showing damage resulting from a fire in November 1916. At a later date, the 1911 water station at Medina was retired, believed replaced by a water column.

PREINVENTORY DATA

HEL.E. & W. R. R. CO. Northann Chio. Ry.	PAGE
LUATION SECTION	STATION STAKE 1169+99 STRUCTURE Water Tank, CLASSIFICATION Acct. No. 18.
A new water tank was installed latter part of 1904. Tank was moved wooden frame and timber foundation.	3/4 miles west of Medina, Chio, during the from Bluffton, Chio. Tank is 16' x 24' on

Water Tank Foundation. 1512 ft. B.M. of 3" oak.

Frame. 6472 ft. B.M. cak.

12 post caps.

Water Tank Proper. 1761 ft. B.M. pine. 350 ft. B.M. 7/8" sheathing. 84 ft. of 1/4 round. 6250 shingles. 1 sot of 6" tank fixtures. 1 = 54 ft. tank ladder.

Frost Box. 90 ft. B.M. hemlock. 1079 ft. B.H. pine.

1079 ft. B.M. pine. 1 1/2 rolls building paper.

Ref. E. A. Folio 1904, Page 261.

The above water tank at Medina, Ohio, was rebuilt in 1911 on account of old one collapsing.

Re-building Tank. 1 set of tank hoops, second-hand. 1 - 10 ft. drop spout, "". 1 - 33 ft. iron ladder. 8 rolls of granite roofing. 963 ft. B.M. pine. 50 ft. B.M. pak.

910 ft. B.M. 7/8" sheathing. 108 ft. B.M. 3" tank stares. 45 ft. B.M. 3" tank stares, second-hand 342 ft. B.M. pine, second-hand. 1 = 1" globe valve.

Bob Lucas collection and National Archives

Paxton – Milepost 150.7





Above and right: Paxton was selected by the PA&W as site of another 56,000-gallon "standard" water tank constructed in 1895. It is pictured with the spring fed pump house in a 1918 ICC Valuation photo. The late Bob Richardson captured AC&Y's Class M #322 taking water at the new Paxton tank, reconstructed in 1924. *AC&YHS Archive*



Akron (Silver Street) – Milepost 161.7



Above and Below: When PA&W came to Akron in 1891, the AC&Y was two decades from reality. A small terminal was constructed west of downtown Akron including a water tank. In 1907, a new 12'x17' water tank on a wood frame was erected and the standpipe moved. This tank was relocated and standpipe added in the 1920's to the north side of the main, rebuilt with steel supports recycled from the old viaduct over the Ohio Canal. It was retired in November 1950. *AC&YHS Archive, Bob Lucas collection, Akron Public Library*

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INC.

N. VALLEY

SUBJECT AKRON WATER S	TATION	11 4
THE L E. & W. R. R. CO. DIV. OR BRANCH Northern Ohio Ry. DIV. OR BRANCH Northern Ohio Ry. DIV. OR BRANCH Section Solution NALUATION SECTION Solution A new water tank 12' x 16' on wood and stand pipe removed to new location. and Harch, 1907. Authorized by Advice Water Tank Foundation. 1792 ft. B.M. pine 120 ft. B.M. pine 120 ft. B.M. eak. Water Tank Proper. One 12' x 16' second-hand tub. 1000ft. B.M. sheathing. 200 * B.M. pine. 500 * B.M. ceiling. 112 * B.M. hemlock. 4 rolls of Granite Roofing.	PAGE 3 MILE 1 STATION STAKE 39478 STRUCTURE Water Station. CLASSIFICATION Account No. 19. en frame was erected at Akron, Ohic, Work was done during January, February No. 108. Water supply from city.	
Pipe Lines. 40 ft. of 2" pipe. 1 - 2" globy velve. 1 - 2" globy velve. 1 - 3%" Ell. 1 - 3%" x 4" Bushing. Stand Pipe. (Moved to new location.) 30 ft. of 4" pipe. 792 lbs. (36 ft.) 4" C. I. Pipe. 352 ft. of 2" Galvonized pipe. 30 lbs. lead. 5 " Cohume		Re. & Maintenert, Dir Co

Brittain (East Akron) – Milepost 165.8



Above: The two images feature the wood water tank at Brittain yard in East Akron. The tank and a pump house were installed in 1912-13 coinciding with construction of the AC&Y itself. *AC&YHS Archive, Bob Lucas collection.*







Left and Above: 1912-13 construction photos of the water tank and pump house at Brittain yard. The water source was a large well (cistern). *AC&YHS Archive*



Above: This undated view of the Brittain engine terminal taken from the roundhouse shows two Poage water columns adjacent the coal dock. Eventually, the water tank further east was retired and to two columns, tied to a city water supply served as the sole source of for AC&Y's entire steam locomotive roster in East Akron. *Courtesy Gary Dillon*

Water Stations Along the A&BB



Above and Below: The A&BB's primary water station was located at the Barberton terminal. The 32,000-gallon wood water tank was built between 1904 and 1920. It was retired in 1941, replaced by a 40,000-gallon steel tank. Both are pictured with A&BB #7. The steel tank remained into the diesel years. *Bill Hanslik, Jr., Bob Lucas, AC&Y Archive*









Above: The Belt Line also maintained a small water tank at Beaver Street in East Akron. *Courtesy Bill Hanslik, Jr.*

AC&Y Tender Capacities

A factor equally important to the strategic locations of water stations along the AC&Y, were the coal and water capacities of the locomotive tenders. With addition larger and more efficient engines, the tender capacities were significantly greater.





Above: Compare the 3,500 gallon tender behind former Northern Ohio Class E engine 5363 to the 13,700 gallon RA13 tender behind the ex-NKP Class R-2 Mikado 408. That is a fourfold increase in water capacity. *DeGolyer Library – SMU, AC&YHS Archive*



Above: AC&Y's Class R-1 workhorse Mike No. 402 is nearing the C&O diamond at Carey in 1947. Both coal and water capacities were stenciled on the rear of all AC&Y locomotive tenders. *Bob Lucas collection*

Right: AC&Y Class "O" consolidation #355 with 7500 gallon water capacity. *Mike Kopach drawing*

AC&Y Steam Locomotive Capacities						
Engine No.	Class	Туре	Rating	Tons	Gallons	
1, 2, 3	C-1	0-6-0	27.6	4.5	4500	
21, 22	C-2	0-6-0	33.7	10	5000	
5360 thru 5367	E	2-6-0	18.5	9	3500	
300, 301, 303, 304, 305, 307, 308, 309, 310, 312, 313, 314	Р	4-6-0	21.0	12	5500	
35, 36	L	0-8-0	51.0	16	8000 (a)	
"	"	0-8-0	"	12	6000	
37, 38	L-1	0-8-0	51.0	10	8000 (a)	
"	"	0-8-0	"	12	8000	
39, 40	L-2	0-8-0	51.0	10	8000 (a)	
"	"	0-8-0	"	12	6000	
320. 321	М	2-8-0	31.8	12	6800	
322, 323,324	M-1	2-8-0	31.8	12	6800	
350 thru 356	0	2-8-0	42.8	12	7500	
400, 401	R	2-8-2	54.6	11	8500 (b)	
"	"	2-8-2	65.0	16	9500	
402, 403	R-1	2-8-2	54.6	12	9500	
404, 405, 406	R-2	2-8-2	54.6	16	12500	
407 thru 410	2nd R	2-8-2	54.6	18.8	13700 (c)	
(a) Class L, L-1, L-2 tenders rebuilt to increase capacity						
(b) Class R tenders rebuilt to increase capacity						
(c) Ex-NKP 13RA tenders replaced original USRA tenders						

