

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

HAER  
IND  
2-NEHAV  
1-

Wabash & Erie Canal, Lock #2  
(Gronauer Lock)  
8 miles east of Fort Wayne  
Adjacent to U.S. 24  
New Haven vicinity  
Allen County  
Indiana

HAER No. IN-74

Photographer, All views,

Thomas W. Salmon II  
The Westerly Group, Inc.

May, 1992

CONDITIONS AS OF 20 MAY, 1992

- IN-74-1 Environmental view from the lock looking south, with the canal right-of-way in center of photo, parallel to the road. This photo shows a new viaduct for I-469 and the relocated drainage ditch. Nearby residences are slightly visible in the left background.
- IN-74-2 Environmental view looking northeast from an elevation. East forebay of lock is visible in left mid-ground. Residence can be seen across U. S. 24. View shows profile of Wabash and Erie canal prism (between U.S. 24 and line of electrical poles) as it continues in a northeasterly direction.
- IN-74-3 View from above the pool looking west from the east gate to the west gate of the lock, showing the collapsed lock gate at the east end, the breast walls and the double row of lock floor decking.
- IN-74-4 DETAIL: Crib supporting bay, east of west (or upper) gate, looking south from inside lock. Tenon of crib timber is quite visible since the inner wall 2" planking has been burned off. Spikes holding remaining planks are discernable.
- IN-74-5 DETAIL: Crib supporting bay, west of west gate. View from the east. Rear of west breast wall is visible behind log timbers. Breast wall timbers are squared.

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 2)

- IN-74-6      **DETAIL:** Crib supporting bay west of west gate. View from the south, looking north at the southern or rear wall of the crib. In the background, west gate sill and bay is visible. Canal chamber is in upper right background.
- IN-74-7      **DETAIL:** Crib supporting bay west of west gate, view looking north. Close-up view of floor, with several boulders shown under log timbers in situ.
- IN-74-8      Looking to the west, to the west lock gate and pool. The ramp from U.S. 24 to the elevated new section of I-469 is in the background. View was taken from INDOT temporary service road.
- IN-74-9      Looking north across the lock into the U.S. 24 embankment and barriers. The east forebay is seen in the right center of this view.
- IN-74-10     **DETAIL:** View across the floor of the lock chamber at the approximately center of the lock, looking toward the north wall. Clearly shown are 2" floor decking and spike head pattern, indicating the position of foundation timbers below.
- IN-74-11     A view looking south which shows the telephone company disturbance about mid-way along the length of the lock. The 2" white oak cladding and fastening devices can be seen (the gravel ballast is modern). The depth of the silt and water in the lock chamber is approximately 1 1/2".
- IN-74-12     Long view, looking northeast across the east forebay. U.S. 24, (behind the barricade) and an out building of the former Gronauer house are visible in the background.
- IN-74-13     **DETAIL:** East gate sill, looking from inside lock chamber toward east forebay. Chamber walls can be seen to either side in the background.
- IN-74-14     **DETAIL:** Gate recess at east gate area. Planking of chamber walls and spikes (rear corner) are clearly visible.

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 3)

- IN-74-15    **DETAIL:** View of north side of east gate, showing post and rounded pivot area. Unlike the south east pivot, only the gate sill remains.
- IN-74-16    **DETAIL:** West gate pivot area (south side). This feature retains its curved timber quoin, post base and part of the lower joinery intact.
- IN-74-17    View of the east forebay from overburden windrow looking north across U.S.24, showing how the canted timbers and sills disappear into the embankment on the north side. The random notches in the sills across the forebay may indicate a previous use before the most recent phase of lock construction.
- IN-74-18    Close-up view looking east along polygonal forebay. The four large timber sills which run across this bay are clearly visible.
- IN-74-19    A photograph of the lock during preliminary archaeological work, looking west along the path of the lock, showing the pool, portions of the east forebay and its sills.
- IN-74-20    A view looking south, taken from the barriers along U.S. 24., this view shows the east forebay, east gate sills and recesses as well as four archaeological units along top of cribs. An unworked crib in center of view still contains much of its stone ballast.
- IN-74-21    **DETAIL:** East forebay, south wall. A gap between the wing wall and the lock wall in the bay just east of the east gate. No sill is present at this juncture, although one may have been originally located here. The reason for the notch, which is repeated on the south side of the lock is undetermined.
- IN-74-22    Looking south across the lock, about mid-way along its length, at the telephone cable disturbance and at two archaeological units which reveal a crib and its buttress. 2" white oak cladding is visible in the center of the photo. The depth of the silt and water on the lock floor is approximaely 1 ½". The bank in the background is overburden from the excavation of the lock.

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 4)

- IN-74-23 View looking south across the lock chamber. Medium close-up of a crib shown in photo IN-74-22. The rear crib wall is squared on the inner side and a portion of the buttress is visible.
- IN-74-24 DETAIL: View from south wall near the west gate, looking north toward the rear of the lock wall, showing the interior of a crib. The buttress has been propped up by the archaeologists to prevent its collapse.
- IN-74-25 DETAIL: South wall near west gate, showing the interior of a crib, looking south toward the rear crib wall. Note the plank inserted between the large timbers. These shims (or caulking) were evidently put in place during a repair, or during the rebuilding, and occurred frequently in the crib structure.
- IN-74-26 Looking south at the west gate sill, the pool and an exposed crib to the rear of the west gate recess. Taken from U.S. 24 embankment.
- IN-74-27 DETAIL: West gate sill, looking northwest toward the south facing wall. The chamber wall planks and spikes can be clearly seen. Possible remnants of a gate lie in the bay west of the gate. A portion of the chamber wall's 2" plank sheathing has sprung away from the wall and a small corner can be seen in the right foreground, next to the protective plastic cover.
- IN-74-28 DETAIL: View looking southwest from inside the chamber, showing the west gate sill, south corner. This photograph shows the most complete gate corner assembly in Lock No. 2.
- IN-74-29 DETAIL: View from the west bay to the south corner of the gate pivot area, showing the brace area, including the metal pivot, wood supports and wear (in a circular pattern surrounding the pivot) from the gate post. The view is looking northeast from the bay west of the west gate sill.

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 5)

CONDITIONS AS OF 1 SEPTEMBER, 1992

- IN-74-30 Photograph looking north from western pool, along the cribs and channel toward the east forebay. U.S. 24 is on the left, the archaeological overburden windrow is on the right.
- IN-74-31 DETAIL: A view of the south breast wall of the west lock gate. A prototypical crib is shown immediately behind the wall in the center of the photograph and includes the first rear wall, with rough timbers, and ties within the crib. Some remaining stone ballast is also visible, wedged between the ties.
- IN-74-32 View looking south. A high perspective of the first bay on the south side of the lock. The recesses and grooves are plainly seen in the west lock gate sills.
- IN-74-33 A view taken from U. S. 24, looking towards the west gate. Note the camber which has developed in some of the crib top members due to subsidence.
- IN-74-34 A photograph from the east forebay, toward the west gate, showing all of the opened cribs on the south side. The hoses along the top of the cribs keep the timbers moist. The overpass of the new I-469 is in the background.
- IN-74-35 A view looking northeast across the lock from the southwest edge of excavation. Contemporary 2" x 6" lumber supports a timber in the round which is suspected of not being a component of the adjacent cribs. Excavations have revealed no connecting ties to the crib structure, nor any supports.
- IN-74-36 A view looking towards the southwest (and the west gate) showing the rhythm of the cribs and the adjacent parallel member of unknown provenance.
- IN-74-37 A view similar to IN-74-36, looking toward the west gate, showing a temporary bridge or barrow way giving access to the cribs.
- IN-74-38 A photograph taken from the U.S. 24 embankment looking south, showing a unit dug to prove the length of the southwestern

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 6)

breast wall (in the right middle ground, beyond the cribs) and the irregular configuration of some of the ties within the cribs.

- IN-74-39 A view of the south facing rear wall of the cribs looking north. Water which is being drawn from the exposed canal and excavation of all sides of the cribs is causing the cribs to subside.
- IN-74-40 A view of the rear of the east forebay side wall. The viscous blue gley is compacted behind the member and keeps it water tight.
- IN-74-41 Photograph of the bottom of a crib unit, located at mid-lock, showing large 12" x 12" to 18" timbers, thought to be the foundation timbers or floor joists of the lock.

CONDITIONS AS OF 3 OCTOBER, 1992

- IN-74-42 Open house at the site, Saturday, October 3, 1992. View north/northwest. Photograph shows the lock support floor joists on sleepers and the mortised crib walls. The 1 inch board at the base of the crib wall is the pre-super construction "footprint" for alignment.
- IN-74-43 A view from the north, looking south across the lock floor. Two layers of floor decking are visible at left, where part of the floor decking, damaged by telephone company intervention, has been removed.
- IN-74-44 View looking northeast. The lock was emptied of guests periodically during the day so that the timbers could be sprayed down with water. The board walk was laid over the west miter sill (at center) to allow visitors to enter without damaging the sill.
- IN-74-45 View along the length of the lock, from the east, looking southwest. Oak shooks and carpet protected the resource from visitor traffic. A worker is "watering down" the lock, to prevent damage from desiccation.

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 7)

- IN-74-46 View looking west, toward west gate. Planks were laid in the mud (center left) so that visitors could view the inside of the south, forebay crib and examine the unusual right-handed counter foil. A visiting engineer perceived this as quite "modern".
- IN-74-47 View looking east. In the ground at center left, a top crib back member of the "out-rigger" is visible. This member was accidentally revealed by a back loader. The revealed timber is not the top of the crib, as it is notched for another course. The top level of the lock could have been nearly equal to the modern U.S. 24 road surface.

CONDITIONS AS OF 26 OCTOBER, 1992

- IN-74-48 View looking northwest across lock. Hose cleaning of east forebay before pulling spikes.
- IN-74-49 View looking northwest, toward U.S. 24. Removal of west forebay decking. The technician in the right rear is operating a device used for pulling the spikes - an auto jack, chain and a pair of adapted "vice grip" pliers welded to the chain. This photograph shows the 1 inch boards (in center right) which were laid atop the foundation timbers to locate the cribs for the workers. In addition, the flooring in the first crib is visible (center.) This was the only crib which was floored, the other cribs were built directly above foundation timbers (center right.)
- IN-74-50 View looking east. East bay is on the left. The dismantling of the last crib. Note the identifying tags nailed to the crib sidewalls. Foundation timbers and the outline of the crib structure are visible in the foreground.
- IN-74-51 View looking west, toward the west bay of the lock. A derrick parked on a bench adjacent to U.S. 24 lowers its harness for the raising of a crib back wall section. The flat bed truck used to transport the timbers to the holding tank can be seen in the background, to the right, beyond the crane.

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 8)

- IN-74-52 A view looking northwest, across the lock, shows workmen using the crane sling, a billet of wood and a sledge to loosen the trenail and subsequently the mortise in a crib.
- IN-74-53 Same view. A slight raise and a quick drop was employed to remove the jammed mortised member.
- IN-74-54 Same view. The crib back wall member, freed from the wall, is flown (upper right) to the flat bed truck.
- IN-74-55 Same view. Another member in the same crib is raised and taken into storage. These dressed timbers were rough cut with an adz and then jack planed to smoothness. The parts fit together with remarkable precision. No caulking was required to keep the cribs water tight. Like a taut ship, the oak swelled to a perfect fit.
- IN-74-56 View looking east. Detail showing an end of three crib side walls, being flown by the derrick. The upper part of the fourth member, marked with an identifying tag, shows evidence of burning. Notice how well the lower members fit together. This view shows that individual timber members were worked, in part, after assembly.
- IN-74-57 View looking west. Detail of a recess cut into the southwest corner of the forebay crib floor decking. This aperture was made to receive the crib buttress.
- IN-74-58 View looking north. Detail of the northwest gate pivot in place. This iron forging was held in place by rabbeting in the deck members and two spikes. The use for the large iron staple shown next to the pivot is unknown.
- IN-74-59 Timbers from the lock are shown in one of two large, unused, waste water settling tanks (near the city of New Haven, at some distance from the lock site). All members have been laid up with contemporary separating ties between them to ensure complete wetting during storage.
- IN-74-60 Same view, showing technicians hosing down the timbers. Shortly after this photograph was made, the timbers were

Index to Photographs  
Wabash & Erie Canal, Lock No. 2  
(Gronauer Lock)  
HAER No. IN-74 (Page 9)

completely submerged in water, held down by heavy concrete castings.

CONDITIONS AS OF 6 NOVEMBER, 1992

- IN-74-61 View looking north/northeast along the alignment of the lock, after the removal of all timbers. Note, at left foreground, sawn members which will remain buried at the site.
- IN-74-62 A view looking northeast, parallel to U.S. 24 shows an "outrigger" crib which remains, within a yard of the roadway pavement and approximately 5 feet lower in grade. This actually represents a second register of cribs in the lock.
- IN-74-63 View looking north. A detail which shows the log crib support mortised into the rear (north) wall of the "outrigger".

Key to Photographs  
 Wabash & Erie Canal, Lock No. 2  
 HAER No. IN-74 (Page 10)

U.S. 24



