

HISTORIC AMERICAN BUILDINGS SURVEY

VAN BUREN BRIDGE

HAER OR-191

Spanning Willamette River at Northwest Van Buren Avenue (OR Route 34)

Corvallis, Oregon | Benton County

Justin R. Scalera, photographer, September 2023

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Photo Number	Description
OR-191-1	Overview of north side of Van Buren Bridge from the east bank of the Willamette River, showing partial view of Warren pony truss, Pratt trusses and tower of swing span, and Parker truss at far right. Concrete piers 4, 3, 2, and metal-clad pier 1 visible below deck. View looking west.
OR-191-2	Timber bents supporting east approach with bridge trusses partially shrouded in fog over the Willamette. View looking west.
OR-191-3	View from east end of bridge deck showing Warren pony truss in foreground, as headlights glow through the bridge trusses in the morning fog. View looking west.
OR-191-4	North elevation of Warren pony truss from temporary bypass bridge, looking south.
OR-191-5	Oblique view of Warren pony truss from pedestrian walkway, looking northeast.
OR-191-6	Portal of east Pratt truss of the swing span, looking west.
OR-191-7	Portal of the west Pratt truss of the swing span, looking northeast from the pedestrian walkway.
OR-191-8	Skewed view of truss components, including eyebars connecting the top chord of the west Pratt truss and center tower of the swing span, webbed members, and sway bracing, looking northwest.
OR-191-9	Detail of a "Lackawanna" mill roll stamp, located on a diagonal on the south side of the west Pratt truss, looking north.
OR-191-10	Oblique view through the Parker truss showing 1979-replacement sway bracing, with the westbound Harrison Boulevard Bridge in the background, looking northeast.
OR-191-11	View of the west approach of the Van Buren Bridge, which is partially shrouded in fog, looking east.
OR-191-12	Detail of a "Carnegie" mill roll stamp, located on south side of the westernmost diagonal of the Parker truss, looking north.
OR-191-13	Overview of Van Buren Bridge from the west bank of the Willamette River. Note riveted steel pier 1 supporting Parker truss portal in foreground. Temporary bypass bridge visible at left with the work bridge at right. View looking southeast.
OR-191-14	Foggy morning vertical view of Van Buren Bridge from the west bank of the Willamette River, looking southeast.

- OR-191-15 Elevation of pier 2 underneath the bridge from the west bank of the river showing steel deck beams and bracing and timber deck stringers. Note concrete triangular projections, cast at top of pier, designed to support sidewalks. Newly constructed temporary bypass bridge (left) and work bridge (right) visible on either side of the Van Buren Bridge.
- OR-191-16 Straight on view of riveted steel pier 1 from the west abutment underneath bridge deck. Supplemental steel supports and timber bracing, installed after western pony truss was partially destroyed by a falling tree in 1962, visible in foreground.
- OR-191-17 Elevated view of all four bridges from crane basket, looking northwest. Camera is located above the work bridge to the south of Van Buren Bridge. From left to right: work bridge, western spans of Van Buren Bridge, temporary bypass bridge, Harrison Boulevard Bridge.
- OR-191-18 Elevated wide-angle view of Van Buren Bridge from crane basket hovering over the Willamette River, looking northeast. Buoy lines for temporary boat channel through work zone shown in foreground.
- OR-191-19 Elevated view of Van Buren Bridge with Parker truss in foreground, looking northeast from crane over work bridge.
- OR-191-20 Elevated view from crane basket directly over western Van Buren Bridge trusses, showing top chords, lateral and sway bracing, looking east.
- OR-191-21 Elevated view from crane basket directly over center tower of Van Buren Bridge. View straight down Van Buren Avenue towards the west Pratt and Parker trusses, looking west towards the city of Corvallis.
- OR-191-22 Oblique view of Parker truss, looking northwest from work bridge.
- OR-191-23 Oblique view of swing span Pratt trusses and tower, looking northeast from work bridge.
- OR-191-24 South elevation of the center tower of the swing span. Portion of turning mechanism and rollers visible below.
- OR-191-25 Timber abutment on the east end of timber approach trestle, with construction staging area in background.
- OR-191-26 Straight-on view of timber bents supporting the eastern approach deck, looking west.
- OR-191-27 Oblique view of timber bents supporting the eastern approach from beneath work bridge, looking northeast.
- OR-191-28 Straight-on view of pier 4 on east bank from beneath the Warren pony truss span, looking west.
- OR-191-29 View showing pier 3 (pivot pier) from the east bank of the Willamette River. Note rollers, ring gear, and human-powered gear train used to open swing span. Portions of piers 2 and 4 visible as well as portions of temporary work bridge (left) and temporary bypass bridge (right).
- OR-191-30 Oblique view of plate girder box and turning mechanism assembly, sitting atop rollers, ring gear, and cylindrical pivot pier, looking northeast from the work bridge. Wood railing for pedestrian walkway supported by steel brackets visible in foreground.
- OR-191-31 Detail of riveted plate girder atop rollers on cast-iron track surrounded by ring gear supported by cylindrical pivot pier, looking north.

- OR-191-32 Detail of plate girder box and turning mechanism, with exterior gear reduction assembly visible at right. The smaller diameter secondary gear shaft has a square head that could be turned by a “key” inserted through a hole in the bridge deck to manually turn the swing span, looking northwest.
- OR-191-33 Interior of the turning mechanism below the bridge deck showing arrangement of eight triangular steel spokes to an octagonal plate girder drum with a cast-iron track bolted to its lower edge that rides atop forty-two tapered cast-iron rollers that are held in position by round steel rods. Space is accessible by a fixed ladder suspended below a hatch in the bridge deck, looking east.
- OR-191-34 Interior of turning mechanism, looking west. Some of the forty-two axles connecting from spider to circumferential rollers visible below.
- OR-191-35 Detail of “Illinois” mill roll stamp and rivet heads on a steel girder located inside the gear room.
- OR-191-36 Detail of pin connection, forged eyebars, and lattice vertical on the Parker truss, looking south from the temporary bypass bridge.
- OR-191-37 Detail of pier 2 showing the west end of Pratt truss on swing span (left) meeting east end of Parker truss (right), looking south from the temporary bypass bridge. Note that timber decking and steel guardrails, replaced or installed after the bridge last opened in 1960, would prevent it from operating.
- OR-191-38 Oblique view of the swing span Pratt trusses looking northeast from the work bridge. HAER field team in foreground (l to r): Justin Scalera, Jason McNatt, Dana Lockett, Christopher Marston, and Duncan Hay.
- OR-191-39 Original key used for turning Van Buren Bridge, featuring a 17'-0"-long wood crossbar over an iron shaft with a square socket that engaged the head of the gear train through a hole in the bridge deck. Located at the Benton County Historical Society, Philomath, Oregon.
- OR-191-40 Original key used for turning Van Buren Bridge, alternate view. Located at the Benton County Historical Society, Philomath, Oregon.