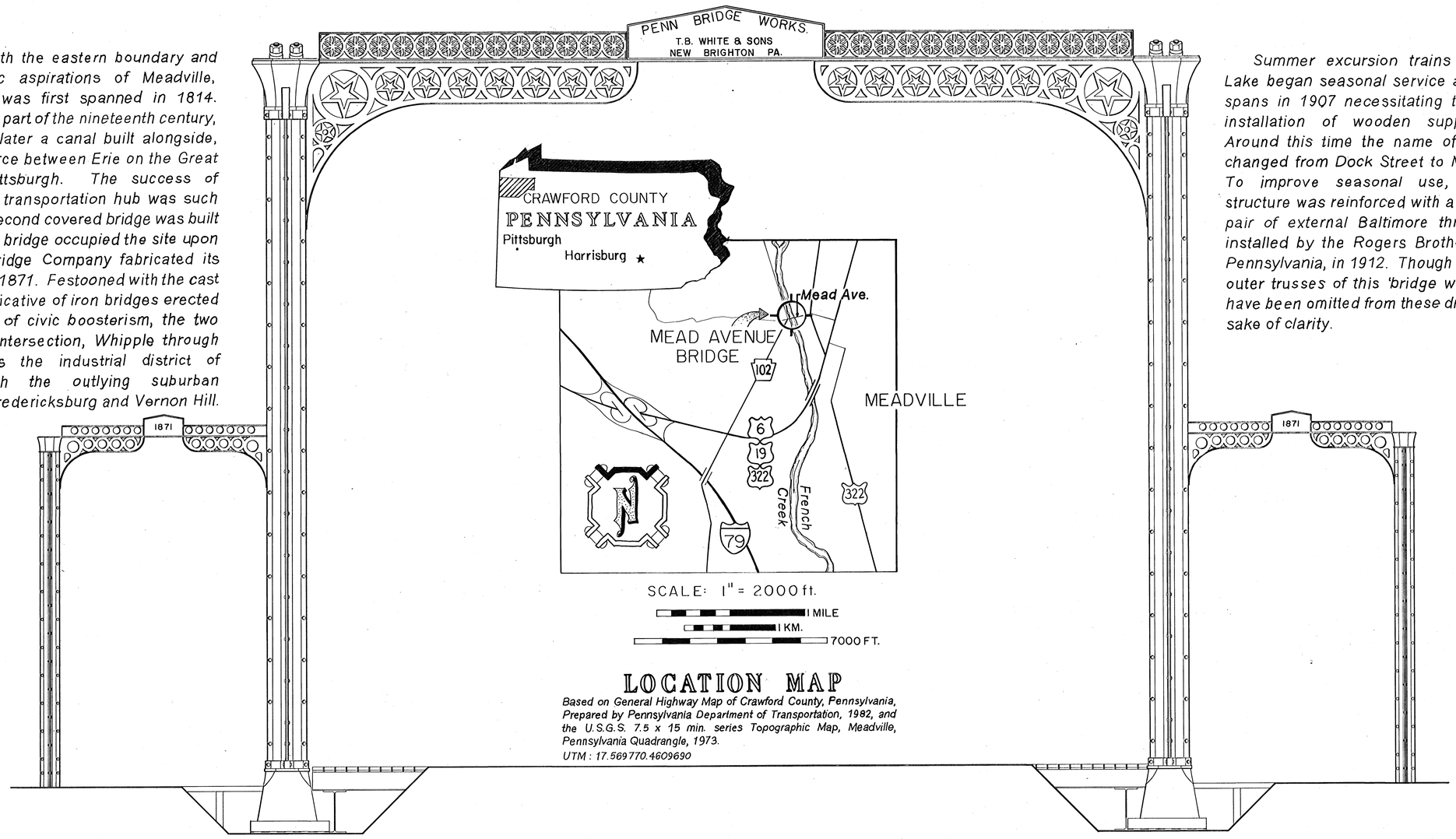
MEAD AVENUE BRIDGE

MEADVILLE, PENNSYLVANIA · 1871

Defining both the eastern boundary and early economic aspirations of Meadville, French Creek was first spanned in 1814. During the early part of the nineteenth century, the creek and later a canal built alongside, carried commerce between Erie on the Great Lakes and Pittsburgh. The success of Meadville as a transportation hub was such that in 1828 a second covered bridge was built upstream. This bridge occupied the site upon which Penn Bridge Company fabricated its replacement in 1871. Festooned with the cast iron tracery indicative of iron bridges erected during periods of civic boosterism, the two span, double intersection, Whipple through truss connects the industrial district of Meadville with the outlying suburban townships of Fredericksburg and Vernon Hill.



LOCATION MAP

Based on General Highway Map of Crawford County, Pennsylvania, Prepared by Pennsylvania Department of Transportation, 1982, and the U.S.G.S. 7.5 x 15 min. series Topographic Map, Meadville, Pennsylvania Quadrangle, 1973.

UTM : 17.569770.4609690

Summer excursion trains to Conneaut Lake began seasonal service across its two spans in 1907 necessitating the temporary installation of wooden support trestles. Around this time the name of the roadway changed from Dock Street to Mead Avenue. To improve seasonal use, the original structure was reinforced with a supplemental pair of external Baltimore through trusses installed by the Rogers Brothers of Albion, Pennsylvania, in 1912. Though still in use, the outer trusses of this 'bridge within a bridge' have been omitted from these drawings for the sake of clarity.

PORTAL ELEVATION

SCALE: 0 1 2 4 FT

3/4" = 1'-0" 0 0.2 0.4 0.6 1.0 M

TRIM LINE

HISTORIC AMERICAN ENGINEERING RECORD PA-19

SHEET 1 OF 6

PENNSYLVANIA

MEAD AVENUE BRIDGE (1871)
SPANNING FRENCH CREEK AT MEAD AVENUE
CRAWFORD COUNTY
MEADVILLE

DELINEATED BY: Grace H. Wallace & Susan H. Gordon, 1998.
PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - II
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE, HISTORIC AMERICAN ENGINEERING RECORD

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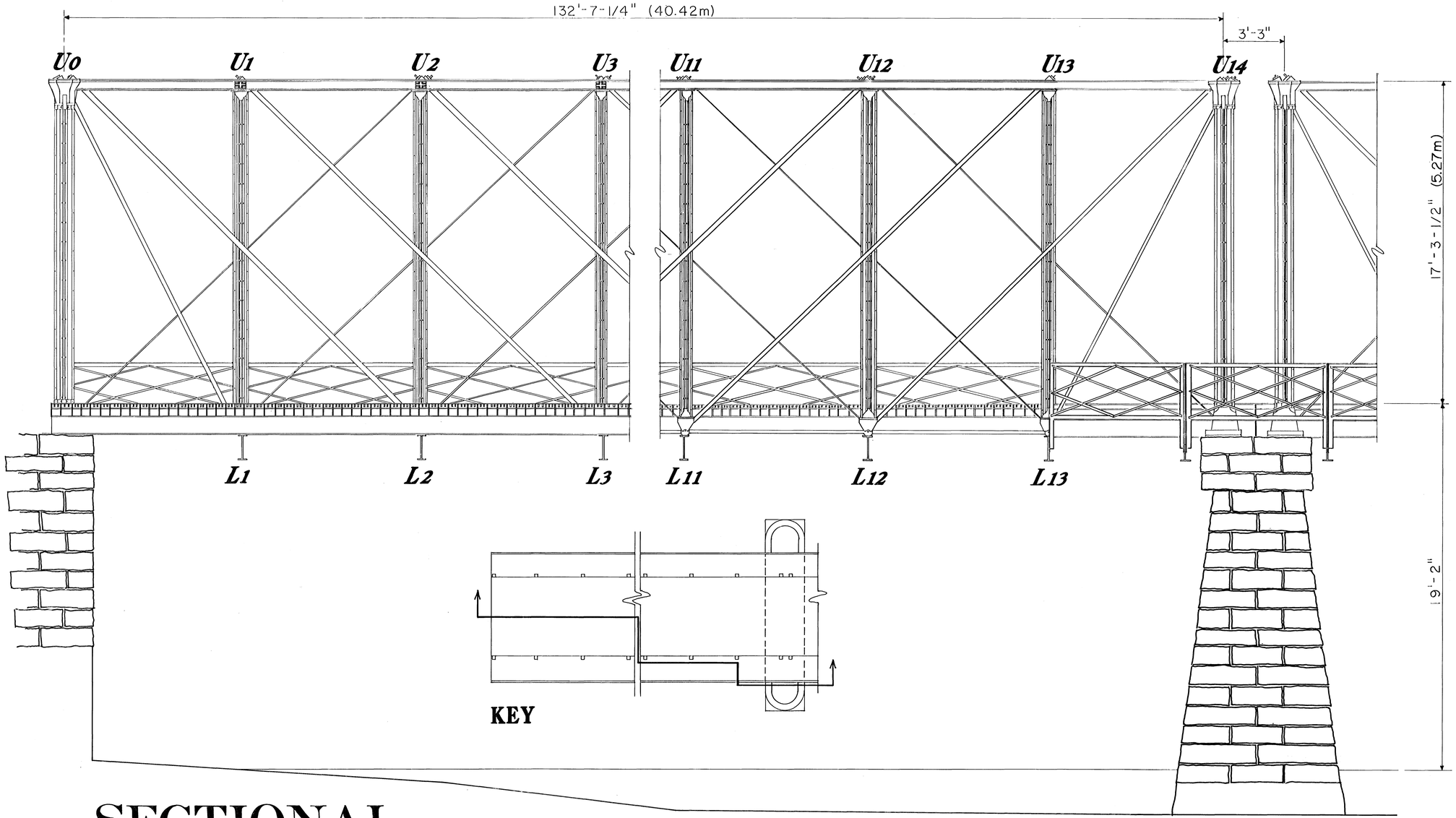
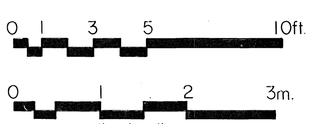
TRIM LINE

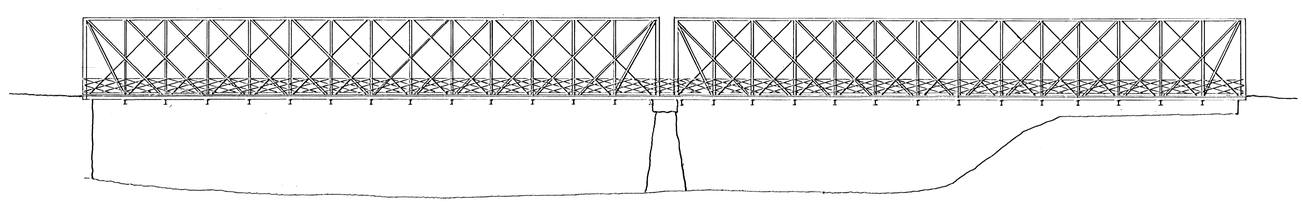


KEY

SECTIONAL ELEVATION



Scale: 3/8" = 1'-0"



FULL SPAN

DELINEATED BY: Susan H. Gordon, 1998

PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - 11
HISTORIC AMERICAN ENGINEERING RECORD
UNITED STATES DEPARTMENT OF THE INTERIOR

MEADVILLE

MEAD AVENUE BRIDGE (1871)
SPANNING FRENCH CREEK AT MEAD AVENUE
CRAWFORD COUNTY
PENNSYLVANIA

SHEET 2 OF 6

HISTORIC AMERICAN ENGINEERING RECORD
PA - 19

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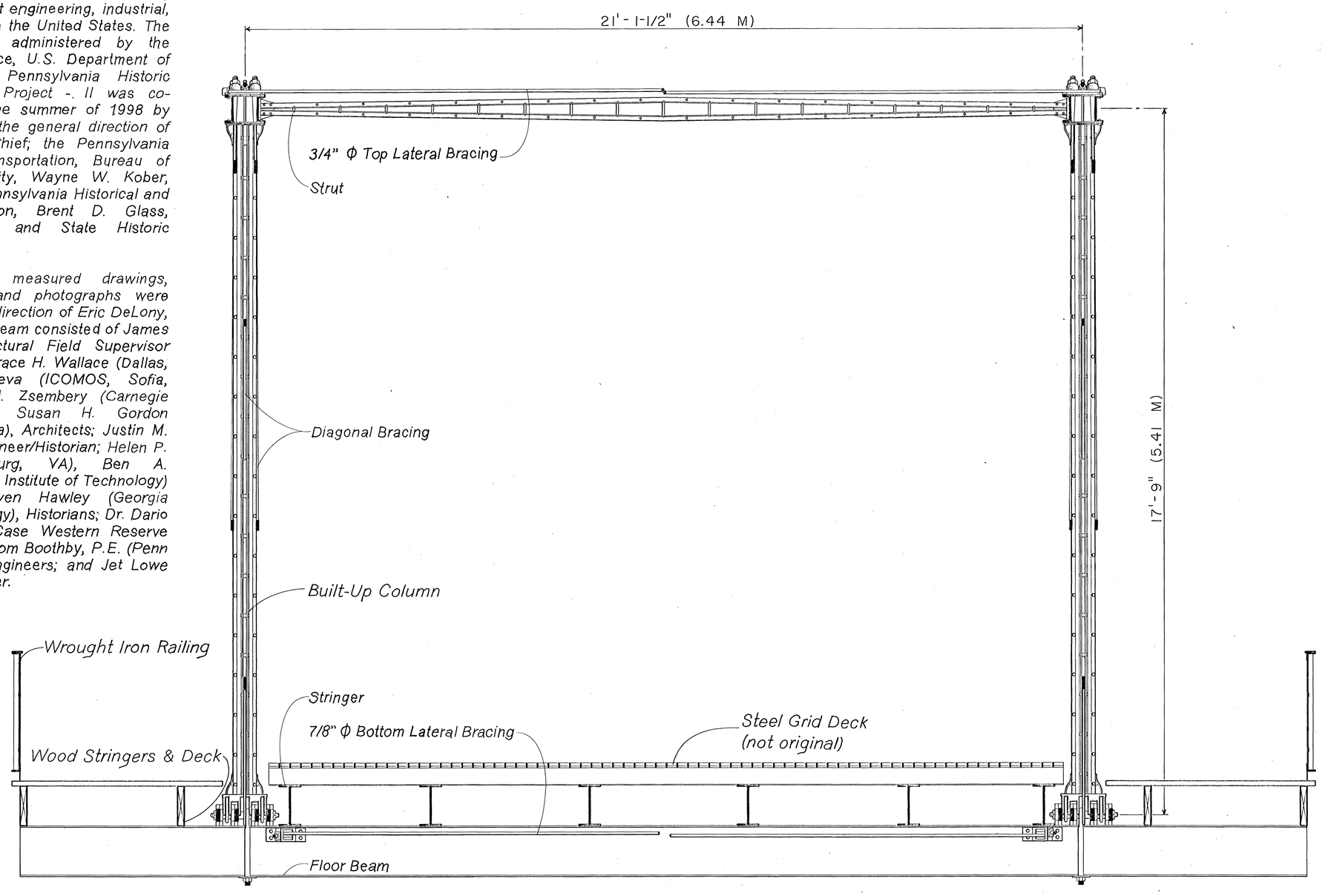
595168

TRIM LINE

The Pennsylvania Historic Bridges Recording Project - II is a part of the Historic American Engineering Record (HAER), a long-range program of documenting historically significant engineering, industrial, and maritime sites in the United States. The HAER program is administered by the National Park Service, U.S. Department of the Interior. The Pennsylvania Historic Bridges Recording Project -. II was co-sponsored during the summer of 1998 by HABS/HAER under the general direction of E. Blaine Cliver, Chief; the Pennsylvania Department of Transportation, Bureau of Environmental Quality, Wayne W. Kober, Director; and the Pennsylvania Historical and Museum Commission, Brent D. Glass, Executive Director and State Historic Preservation Officer.

The fieldwork, measured drawings, historical reports, and photographs were prepared under the direction of Eric DeLony, Chief of HAER. The team consisted of James P. Hanley, Architectural Field Supervisor (Bloomington, IL), Grace H. Wallace (Dallas, TX), Julia Maleeva (ICOMOS, Sofia, Bulgaria), Rachel J. Zsembery (Carnegie Mellon University), Susan H. Gordon (University of Virginia), Architects; Justin M. Spivey (HAER), Engineer/Historian; Helen P. Ross (Fredericksburg, VA), Ben A. Shackleford (Georgia Institute of Technology) and Elizabeth Haven Hawley (Georgia Institute of Technology), Historians; Dr. Dario Gasparini, P.E. (Case Western Reserve University) and Dr. Tom Boothby, P.E. (Penn State University), Engineers; and Jet Lowe (HAER), Photographer.



SECTION

SCALE: 3/4" = 1'-0"

0 1 2 4 FT.

0 0.2 0.4 0.6 1.0 M.

DELINEATED BY: Grace H. Wallace, 1998.

PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - II
HISTORIC AMERICAN ENGINEERING RECORD
UNITED STATES DEPARTMENT OF THE INTERIOR

MEADVILLE

MEAD AVENUE BRIDGE (1871)
SPANNING FRENCH CREEK AT MEAD AVENUE
CRAWFORD COUNTY
PENNSYLVANIA

SHEET 3 OF 6

HISTORIC AMERICAN ENGINEERING RECORD
PA - 19

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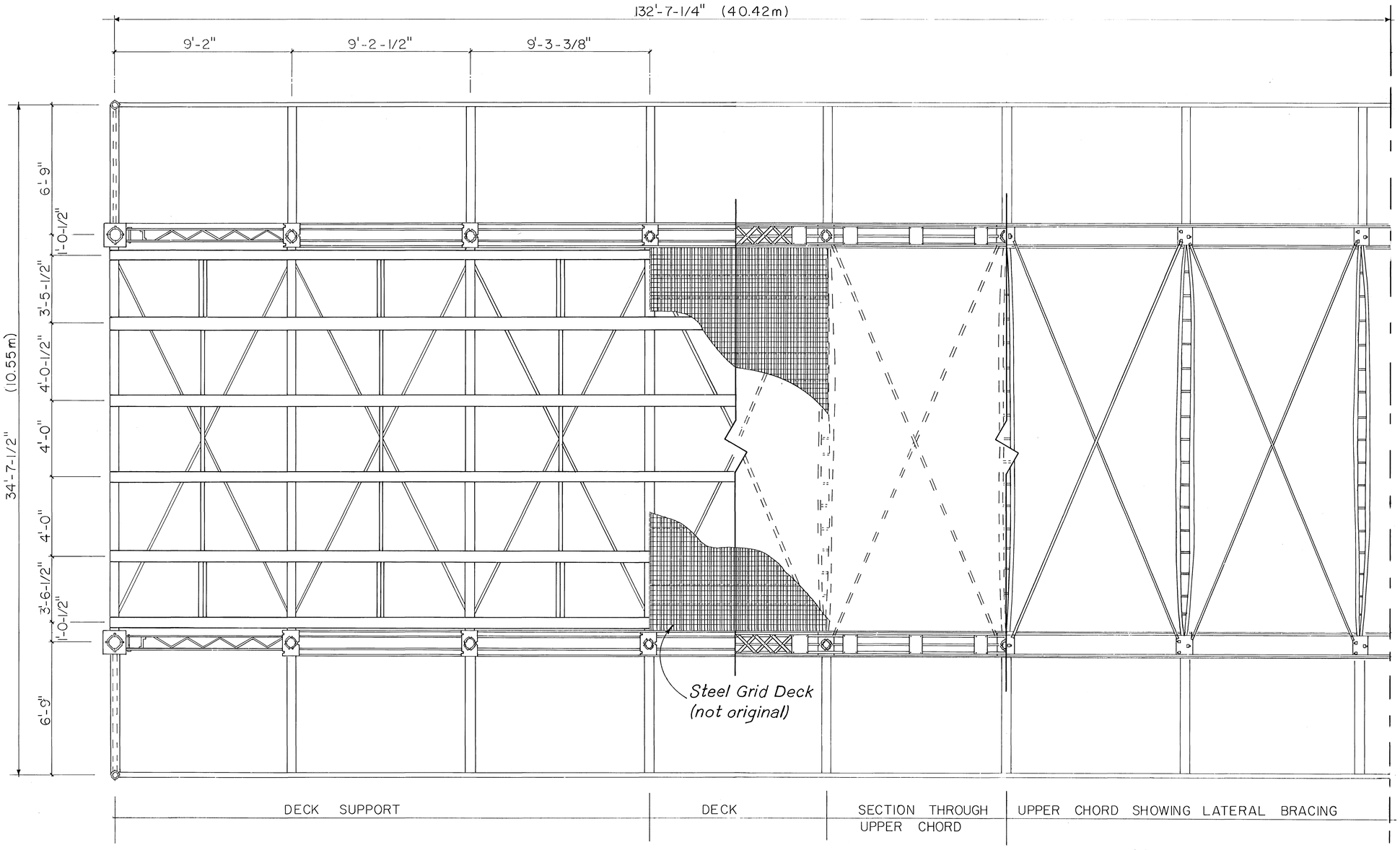
TRIM LINE

TRIM LINE



PLAN

Scale: 3/8"=1'-0"

0 1 2 3 4 5 10ft

0 1 2 3m

N

HISTORIC AMERICAN ENGINEERING RECORD
PA-19

SHEET 4 OF 6

MEAD AVENUE BRIDGE (1871)
SPANNING FRENCH CREEK AT MEAD AVENUE
MEADVILLE
CRAWFORD COUNTY
PENNSYLVANIA

DELINEATED BY: Rachel J. Zsembery, 1998

PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - '11
HISTORIC AMERICAN ENGINEERING RECORD
NATIONAL PARK SERVICE
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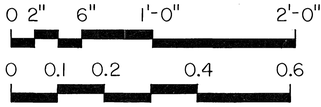
TRIM LINE

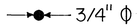
TRIM LINE

TABLE OF SECTIONS

SCALE: 2" = 1'-0"



TOP LATERAL BRACING



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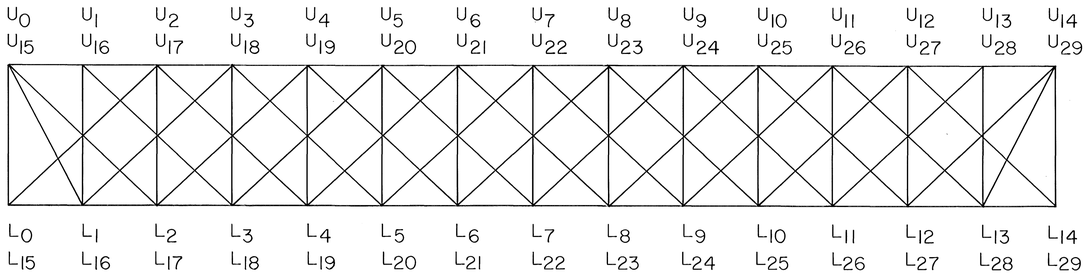
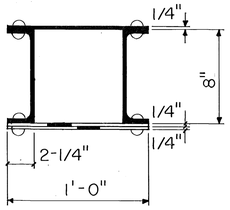
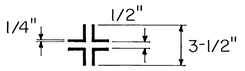


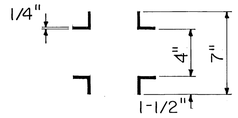
UPPER CHORD



STRUT

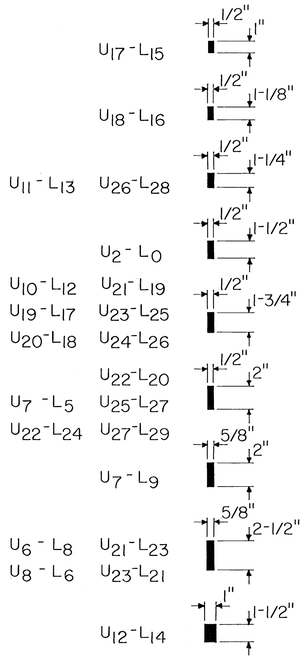


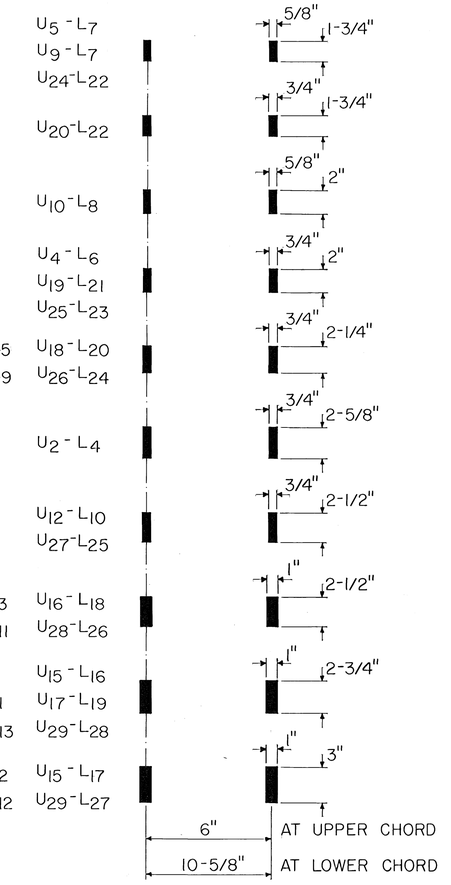
STRUT AT END CONNECTION WITH UPPER CHORD



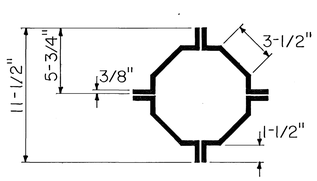
STRUT AT CENTER

DIAGONAL BRACING

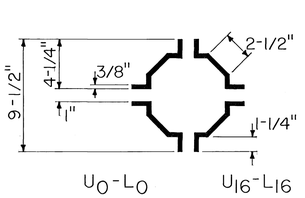




POSTS



U_0-L_0, U_{14}-L_{14} ; U_{15}-L_{15}, U_{29}-L_{29}



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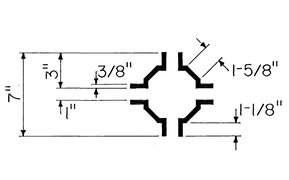
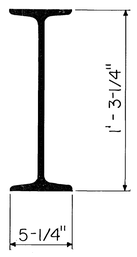
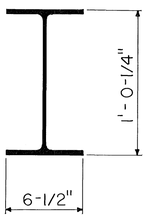


U_3-L_3 THRU U_{11}-L_{11} ; U_{18}-L_{18} THRU U_{26}-L_{26}

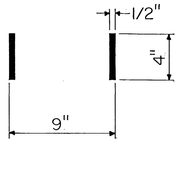
FLOOR BEAM



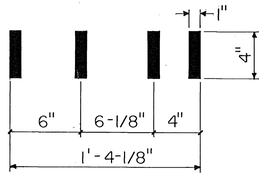
STRINGER



LOWER CHORD

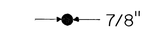


L_0-L_1, L_{13}-L_{14} ; L_{15}-L_{16}, L_{28}-L_{29}



L_1-L_2 THRU L_{12}-L_{13} ; L_{16}-L_{17} THRU L_{27}-L_{28}

BOTTOM LATERAL BRACING



HISTORIC AMERICAN ENGINEERING RECORD PA - 19

SHEET 5 OF 6

MEAD AVENUE BRIDGE (1871)
SPANNING FRENCH CREEK AT MEAD AVENUE
MEADVILLE
CRAWFORD COUNTY
PENNSYLVANIA

DELINEATED BY: Grace H. Wallace, 1998.

PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - II
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

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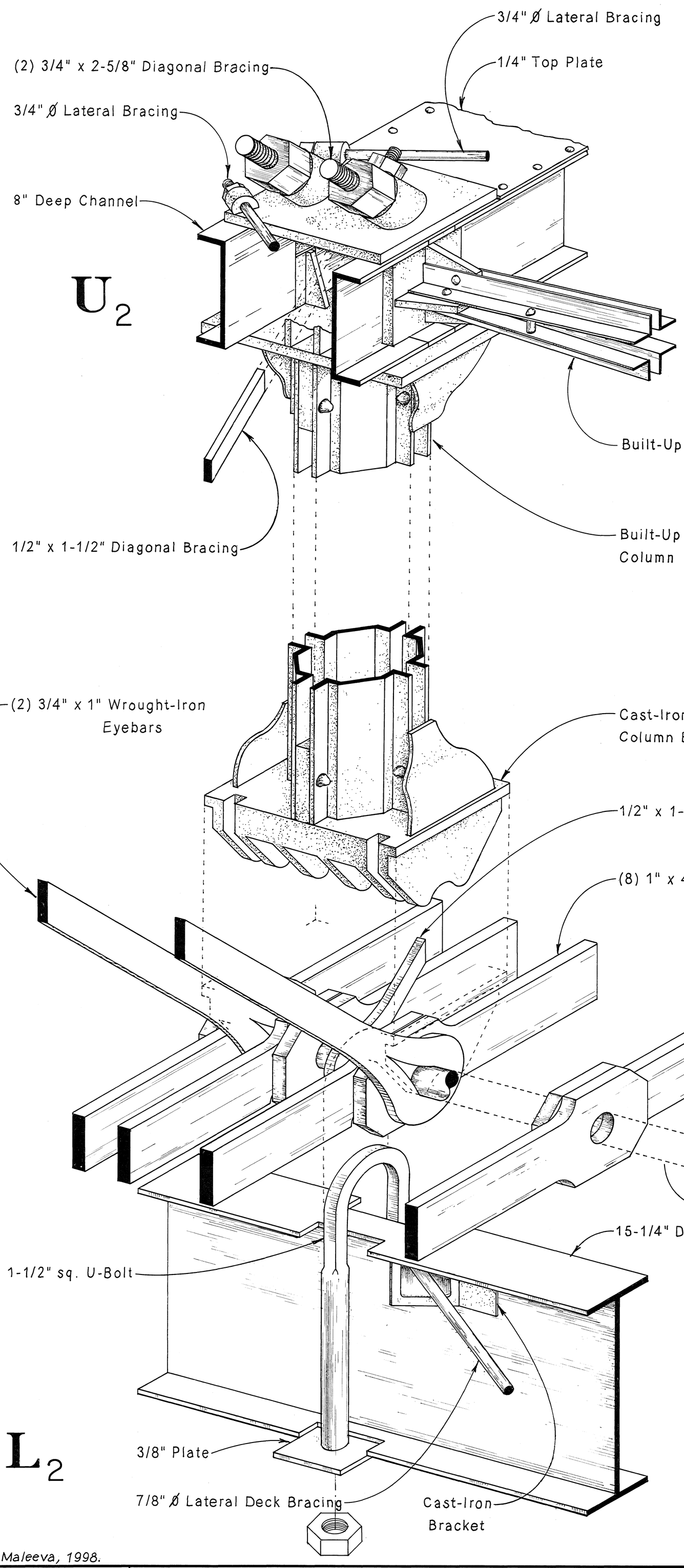
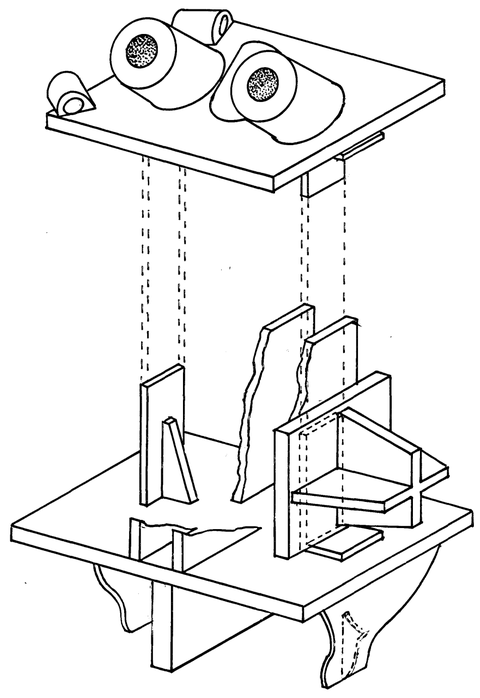
TRIM LINE

595149

CONNECTIONS

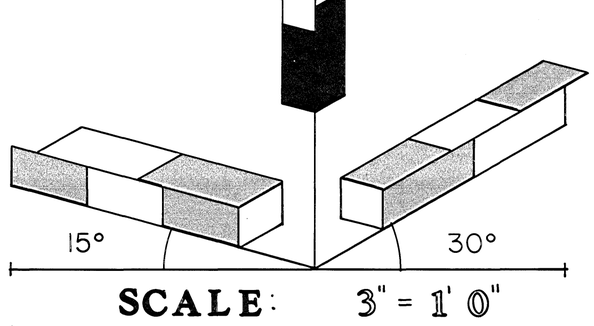
U_2





Interior View of
Cast-Iron Joint Box

L_2



SCALE: 3" = 1' 0"

DELINEATED BY: *Julia Maleeva, 1998.*

PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - II NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR	MEAD AVENUE BRIDGE (1871). SPANNING FRENCH CREEK AT MEAD AVENUE MEADVILLE — CRAWFORD COUNTY — PENNSYLVANIA	SHEET 6 of 6	HISTORIC AMERICAN ENGINEERING RECORD PA - 19	LIBRARY OF CONGRESS INDEX NUMBER

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