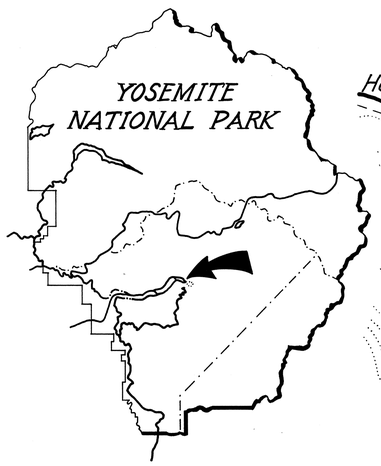
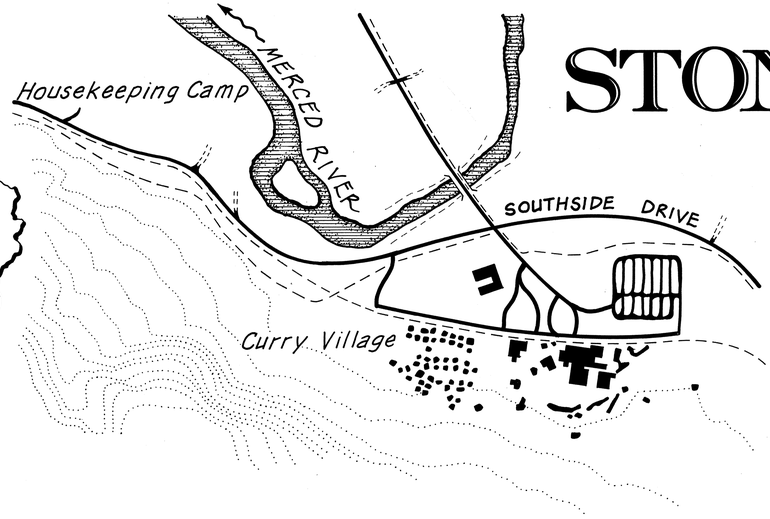
TRIM LINE

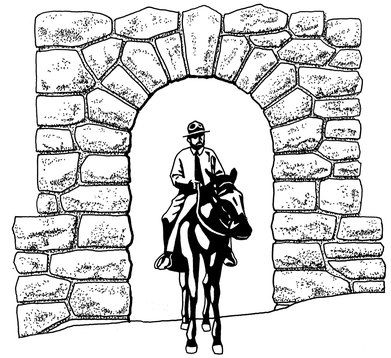
STONEMAN BRIDGE · 1932

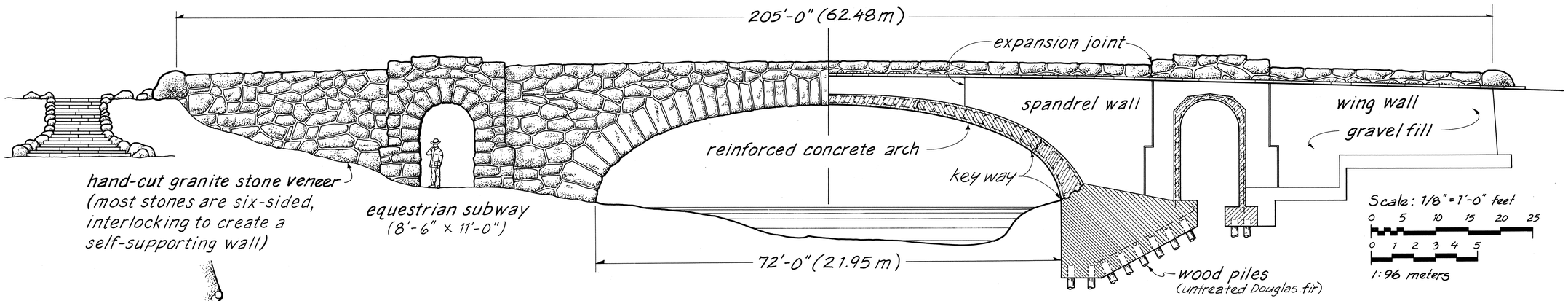


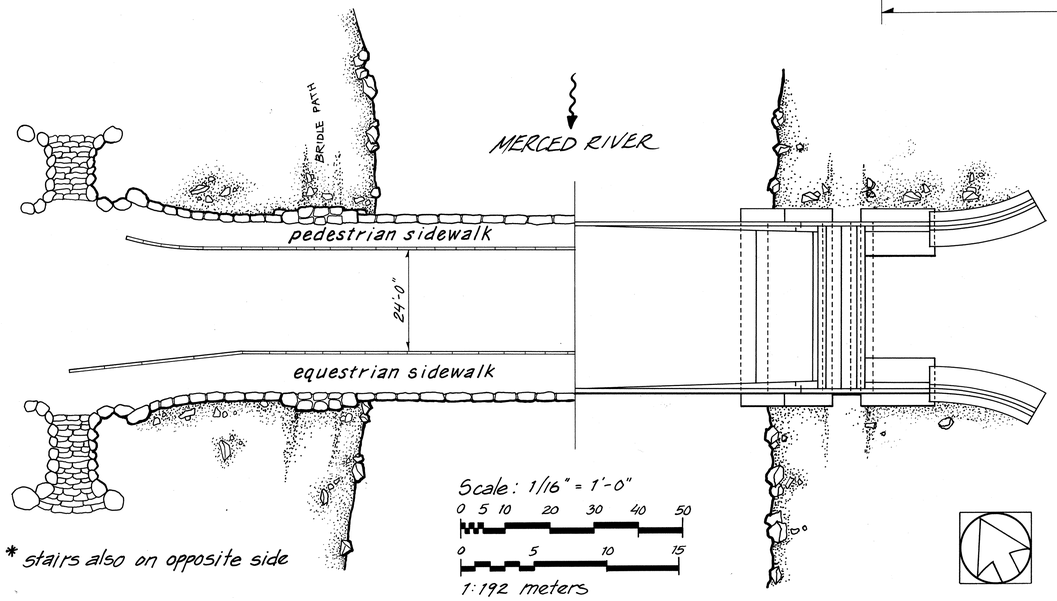


Based on U.S.G.S. 7.5 Min.
Yosemite Valley Map, 1990.
U.T.M.: 11/273360/4179555

Scale: 1" = 450'
0 450 1350







Spanning the Merced River in the Yosemite Valley, Stoneman Bridge was built in 1931-32 and exemplifies the National Park Service's "rustic style" of architecture. Although the filled spandrel arch bridge is constructed of reinforced concrete, the structure is faced in native granite and achieves sympathy with its natural surroundings and with the past. As with the Happy Isles and Clark's bridges elsewhere in the Valley, the Stoneman Bridge incorporates equestrian subways in its abutments. These were designed in conjunction with a new park bridal path system, and alleviated the need for horse riders to cross busy park roads at grade level.
The bridge was designed by the San Francisco district office of the Bureau of Public Roads in close cooperation with National Park Service landscape architects. The Oakland, California firm of Sullivan & Sullivan submitted the low bid for the project and began construction of the bridge in November of 1931. Due to the firm's inexperience in bridge construction and resulting delays, the BPR resident engineer terminated their contract in February, 1932. The bridge was completed in November under a surety bond by Kuckenberg & Wittman of Portland, Oregon. Total cost of the structure was $71,675.

This recording project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. HAER is an agency of the National Park Service, U.S. Department of the Interior. The Yosemite Roads and Bridges Project was co-sponsored by Yosemite National Park, Michael Finley, Superintendent; Kevin Cann, Chief of Maintenance and Engineering; the NPS Roads and Bridges Program, John Gingles Manager; and the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) under the general direction of Robert J. Kapsch, Chief.

The fieldwork, measured drawings, histories and photographs were completed under the direction of Eric DeLony, Chief and Principal Architect, HAER. The recording team consisted of Industrial Designer Todd A. Croteau, field supervisor; Architectural Technicians Dione DeMartelaere, David R. Fleming and Marie-Claude LeSauteur; + Project Historian, Richard H. Quin. Formal on-site photography was done by Brian C. Grogan.

HISTORIC AMERICAN ENGINEERING RECORD
CA - 95

SHEET
1 OF 2

CALIFORNIA

STONEMAN BRIDGE - 1933
STONEMAN BRIDGE CROSSOVER SPANNING THE MERCED RIVER
MARIPOSA COUNTY

YOSEMITE NATIONAL PARK

YOSEMITE ROADS AND BRIDGES
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

DELINEATED BY: DAVID R. FLEMING 1991

IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING

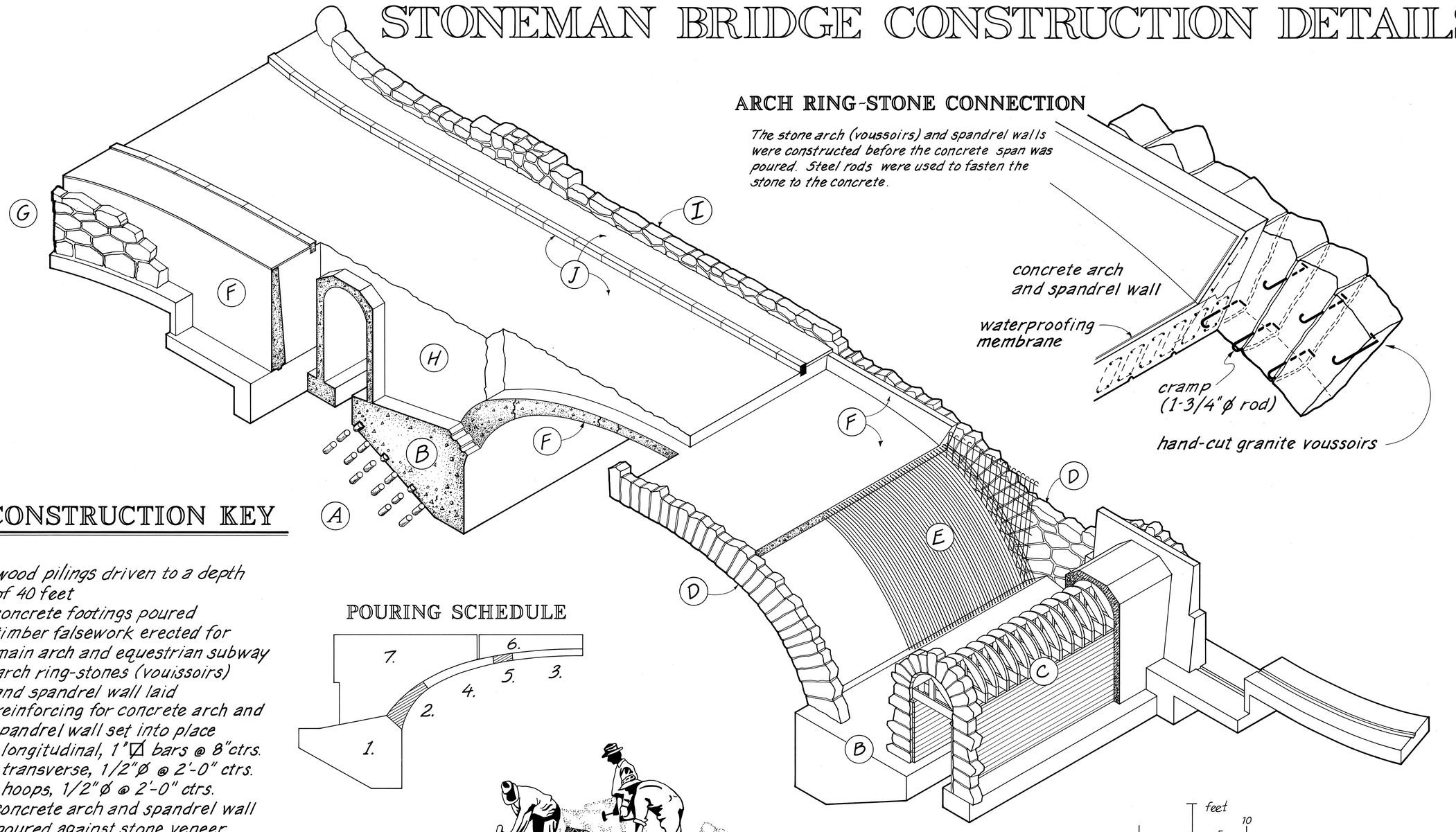
TRIM LINE

TRIM LINE

STONEMAN BRIDGE CONSTRUCTION DETAILS

ARCH RING-STONE CONNECTION

The stone arch (voussoirs) and spandrel walls were constructed before the concrete span was poured. Steel rods were used to fasten the stone to the concrete.



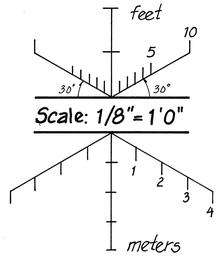
CONSTRUCTION KEY

A. wood pilings driven to a depth of 40 feet
B. concrete footings poured
C. timber falsework erected for main arch and equestrian subway
D. arch ring-stones (vouissoirs) and spandrel wall laid
E. reinforcing for concrete arch and spandrel wall set into place
   · longitudinal, 1"☐ bars @ 8"ctrs.
   · transverse, 1/2"ø @ 2'-0" ctrs.
   · hoops, 1/2"ø @ 2'-0" ctrs.
F. concrete arch and spandrel wall poured against stone veneer
G. stone wing walls laid
H. gravel fill
I. parapet guard wall laid
J. asphalt wearing surface, stone curb and sidewalks placed

POURING SCHEDULE

Stone voussoirs were hand cut using templates. Granite was quarried from within the park.

drawing based on field measurements, historical photographs and original design documents...see Bureau of Public Roads structure no.8800-005P (RG - 293 A,B)



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YOSEMITE NATIONAL PARK

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MARIPOSA COUNTY CALIFORNIA

SHEET 2 OF 2

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TRIM LINE