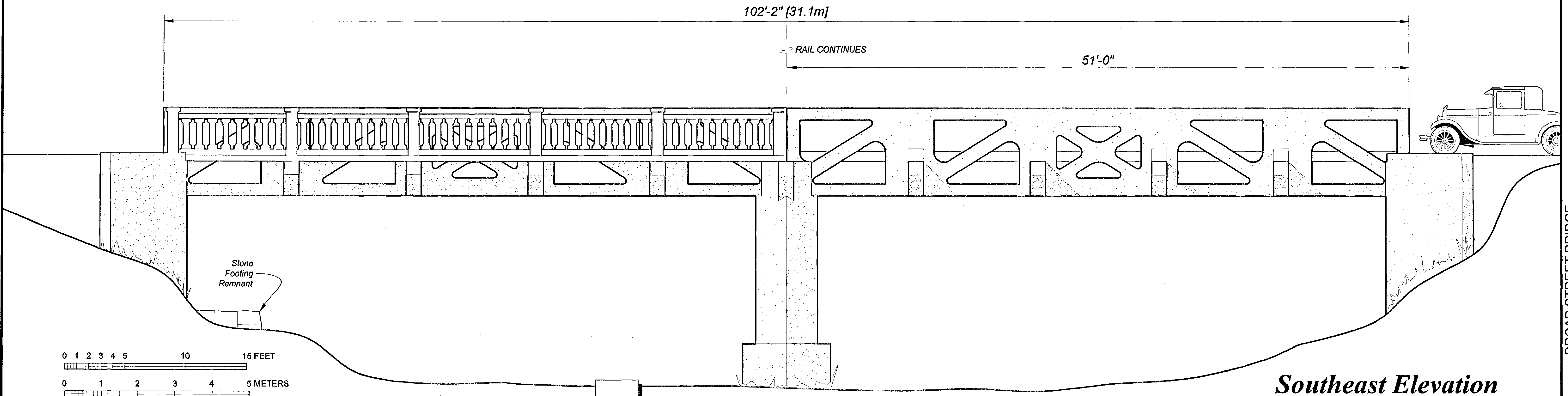


# BROAD STREET BRIDGE

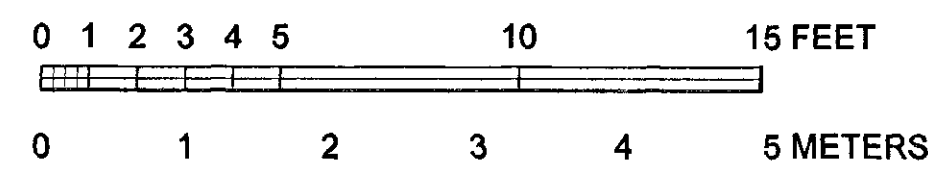
## 1918

## Mason, Texas



**Southeast Elevation**

Bridge UTM: 14/477891/3574157

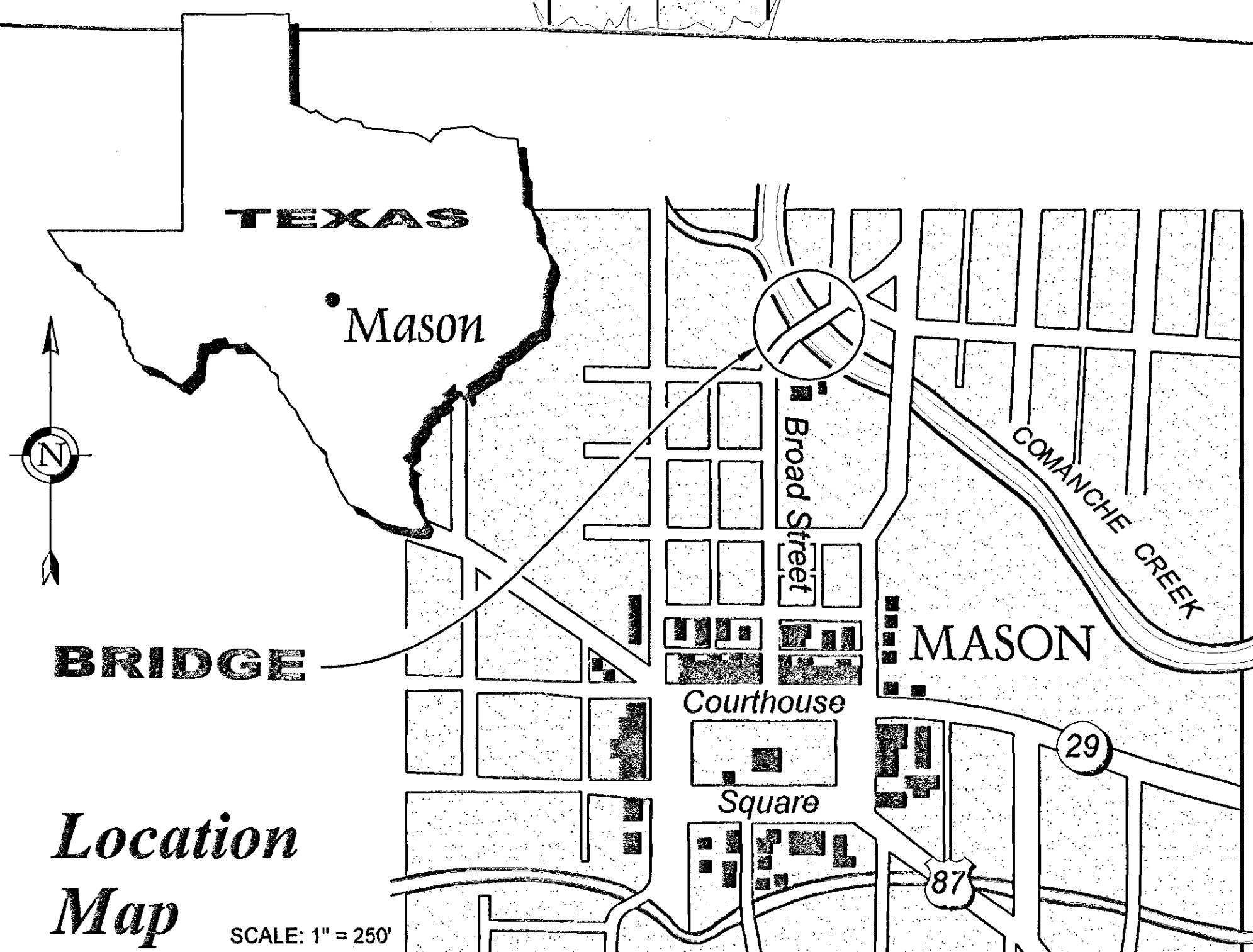


SCALE: 1/4" = 1'-0" (1:48)

In 1917 the residents of Mason petitioned the Commissioner's Court for a wagon bridge to cross Comanche Creek. As a result, the town contracted with The Alamo Construction Company, of San Antonio, to build a concrete bridge at what was then known as the Katemcy Road Crossing. By April of 1918, Alamo had finished the bridge on the north edge of town, collected \$9000 for their work, and vanished from the historical record.

The bridge Alamo built, however, was unusual for its time, and today is the only known example of its kind in Texas--a concrete truss girder-bridge. This type had several advantages over other concrete bridges: structural pieces were pre-cast on the ground then raised into place, allowing forms to be reused; costly falsework was not needed; and a patented system could be used to tie the deck, beams and trusses together without added material.

Two similar bridges, built in New Mexico between 1913 and 1915, are strong evidence that Broad Street Bridge is part of a larger body of concrete truss girder-bridges designed and built during the early 20th century, (see sheet 3 of 3). Broad Street's cantilevered sidewalks and slotted abutments distinguish it from other known examples.



**Location Map**

SCALE: 1" = 250'

The Texas Historic Bridges Recording Project II is part of the Historic American Engineering Record (HAER), a long-range program 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 Texas Historic Bridges Recording Project II was co-sponsored during the summer of 2000 by HAER under the general direction of E. Blaine Cliver, Chief; and the Texas Department of Transportation, Environmental Affairs Division, Dianna F. Noble, P. E., Director.

The field team, measured drawings, historical reports, and photographs were prepared under the direction of Eric DeLony, Chief of HAER. The team consisted of Pete Brooks, Architectural Supervisor (Yale University), Jennifer M. Chrusciel (Kent State University), Wenhai Li, (ICOMOS-People's Republic of China), Megan C. Olson (Washington State University), Tim S. Reynolds (University of California at Berkeley), architects; Dr. Mark M. Brown, Dr. Peggy J. Hardman, Dr. Robert W. Jackson, Dr. Joseph King, historians; Dr. Dario A. Gasparini and Stephen G. Buonopane, consulting engineers.

NOTE: DRAWING BASED ON FIELD NOTES AND PHOTOGRAPHS; FOR MORE INFORMATION, SEE HAER FIELD NOTEBOOKS. MAP BASED ON USGS 7.5' MASON QUAD, 1967 & T.R.C. ENGINEERING MAP, 1996. FOR AN ANNOTATED LIST OF SOURCES, SEE THE HAER HISTORICAL REPORT.

DELINEATED BY: Tim S. Reynolds & Pete Brooks, 2000

TEXAS HISTORIC BRIDGES  
RECORDING PROJECT 2

MASON

BROAD STREET BRIDGE  
BROAD STREET SPANNING COMANCHE CREEK  
MASON COUNTY

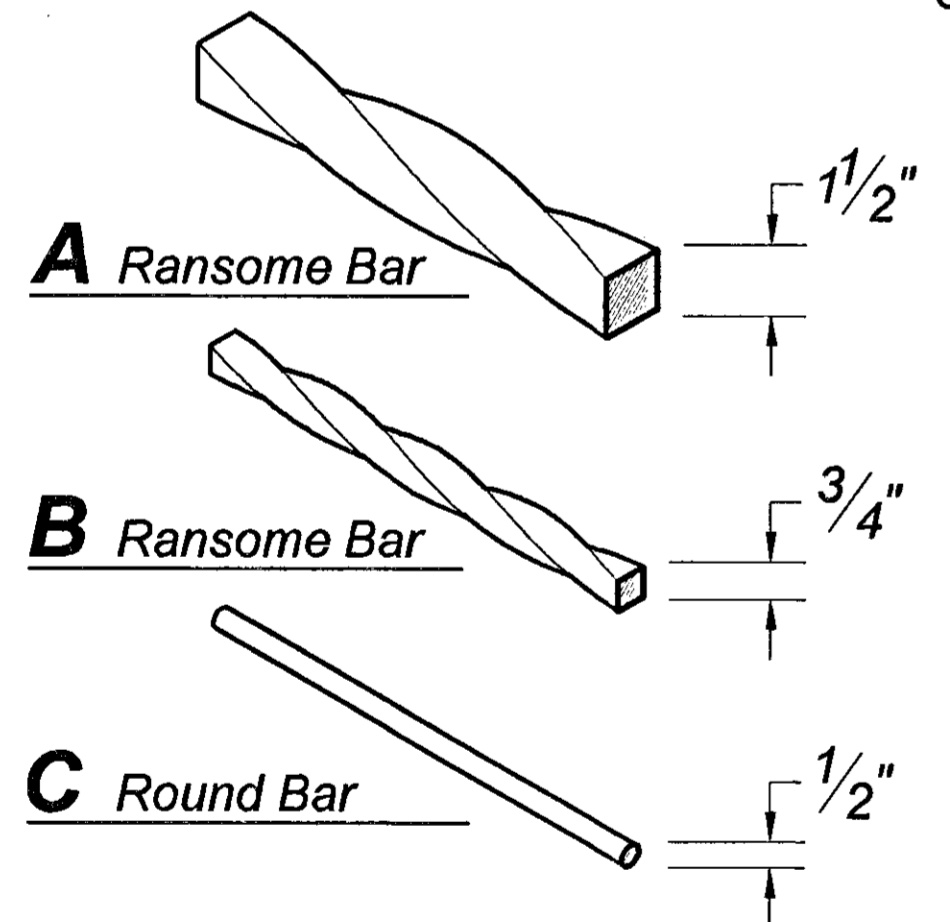
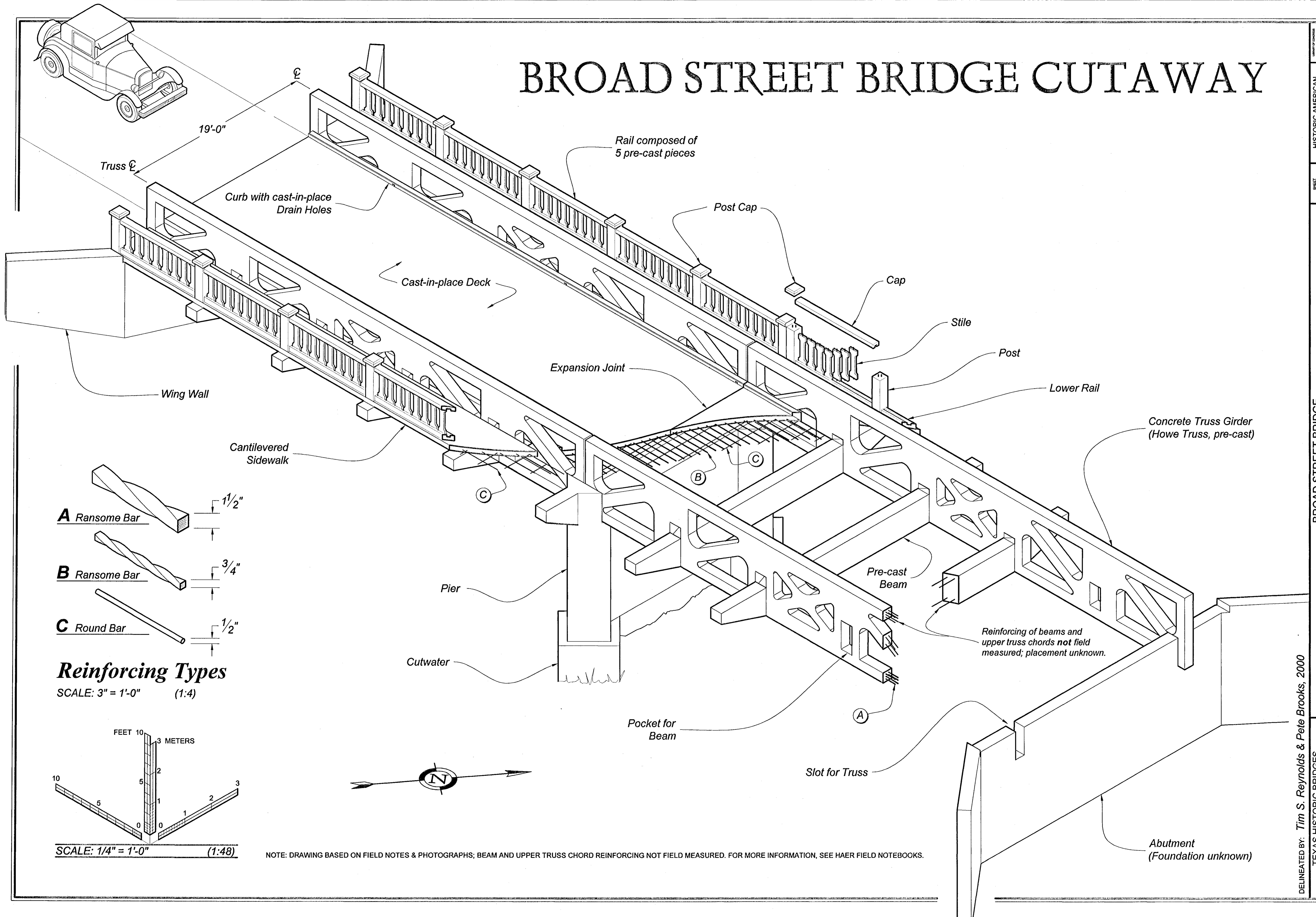
TEXAS

SHEET  
1 of 3

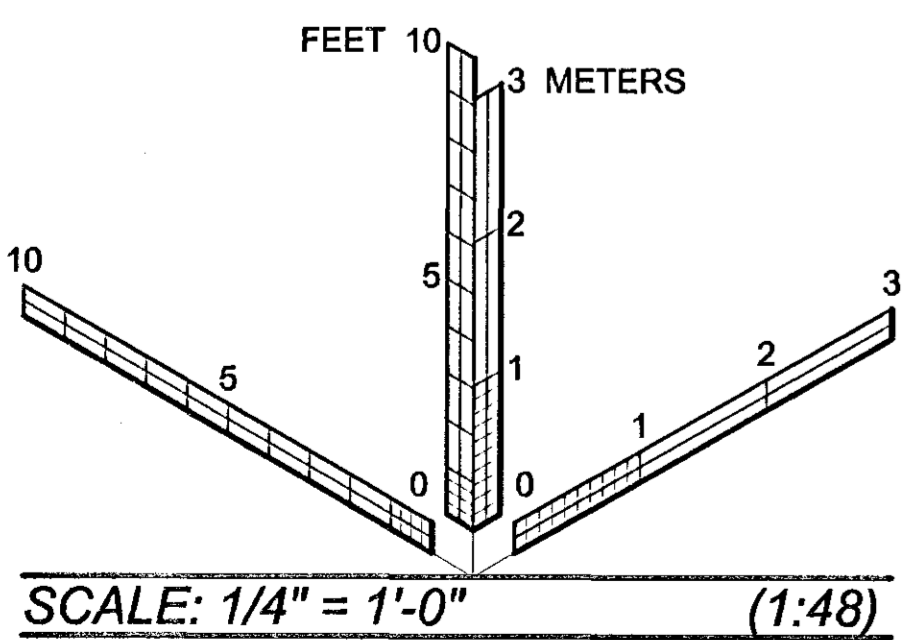
HISTORIC AMERICAN  
ENGINEERING RECORD  
TX-45

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# BROAD STREET BRIDGE CUTAWAY



**Reinforcing Types**  
SCALE: 3" = 1'-0" (1:4)



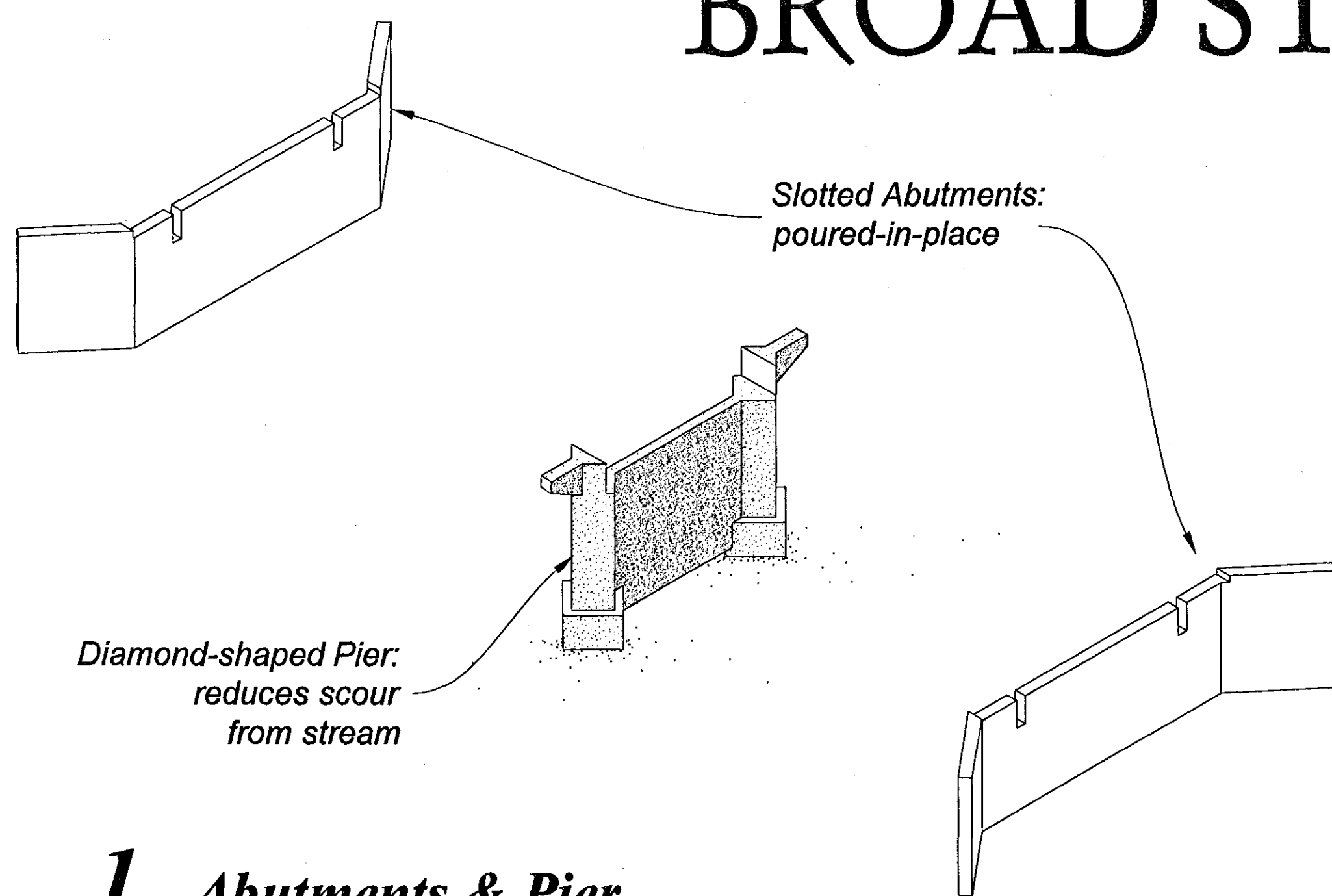
SCALE: 1/4" = 1'-0" (1:48)

NOTE: DRAWING BASED ON FIELD NOTES & PHOTOGRAPHS; BEAM AND UPPER TRUSS CHORD REINFORCING NOT FIELD MEASURED. FOR MORE INFORMATION, SEE HAER FIELD NOTEBOOKS.

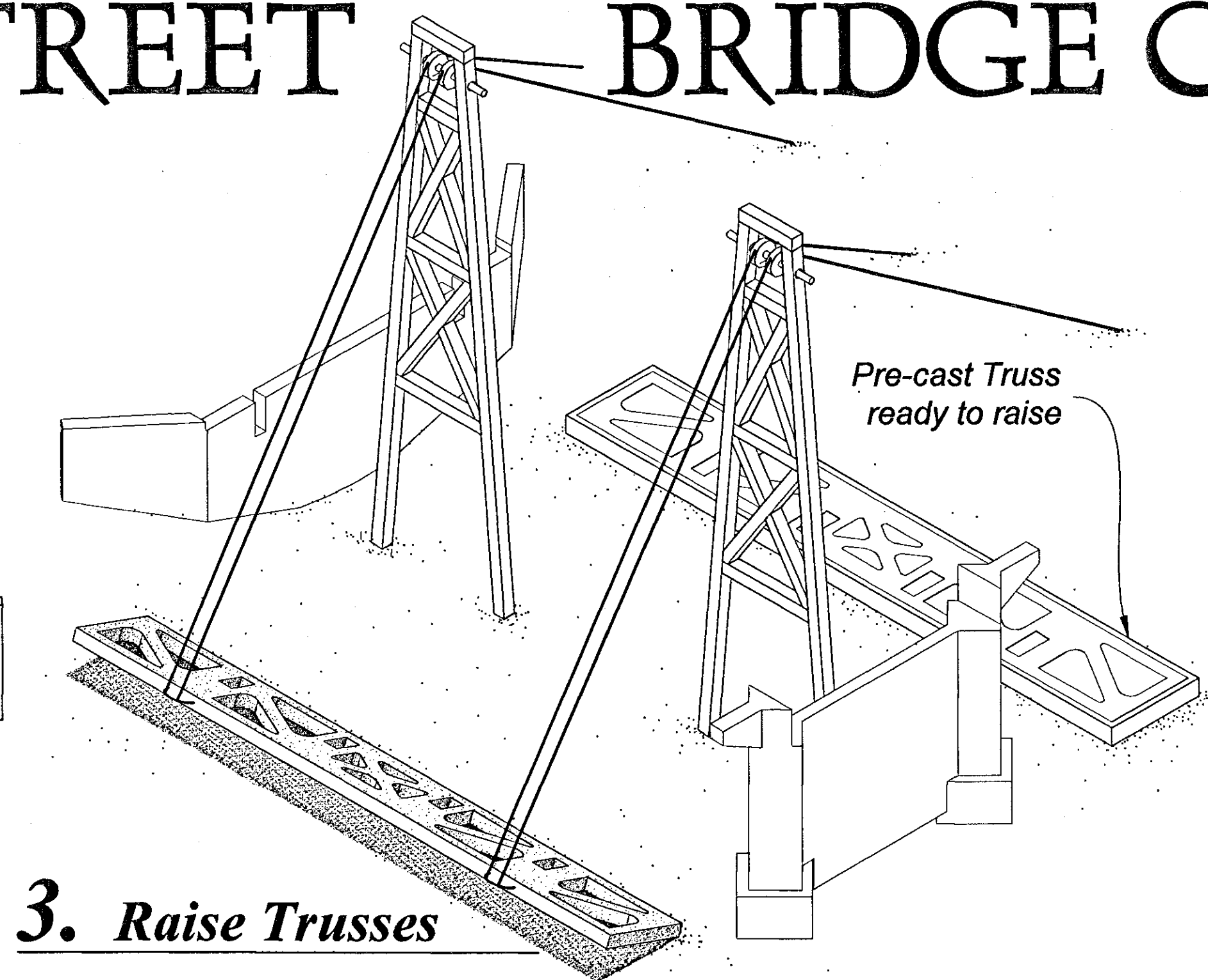
HISTORIC AMERICAN ENGINEERING RECORD  
 TEXAS 2 of 3 TX-45  
 BROAD STREET BRIDGE  
 BROAD STREET SPANNING COMANCHE CREEK  
 MASON COUNTY  
 DELINEATED BY: Tim S. Reynolds & Pete Brooks, 2000  
 TEXAS HISTORIC BRIDGES RECORDING PROJECT 2  
 NATIONAL PARK SERVICE  
 UNITED STATES DEPARTMENT OF THE INTERIOR  
 MASON



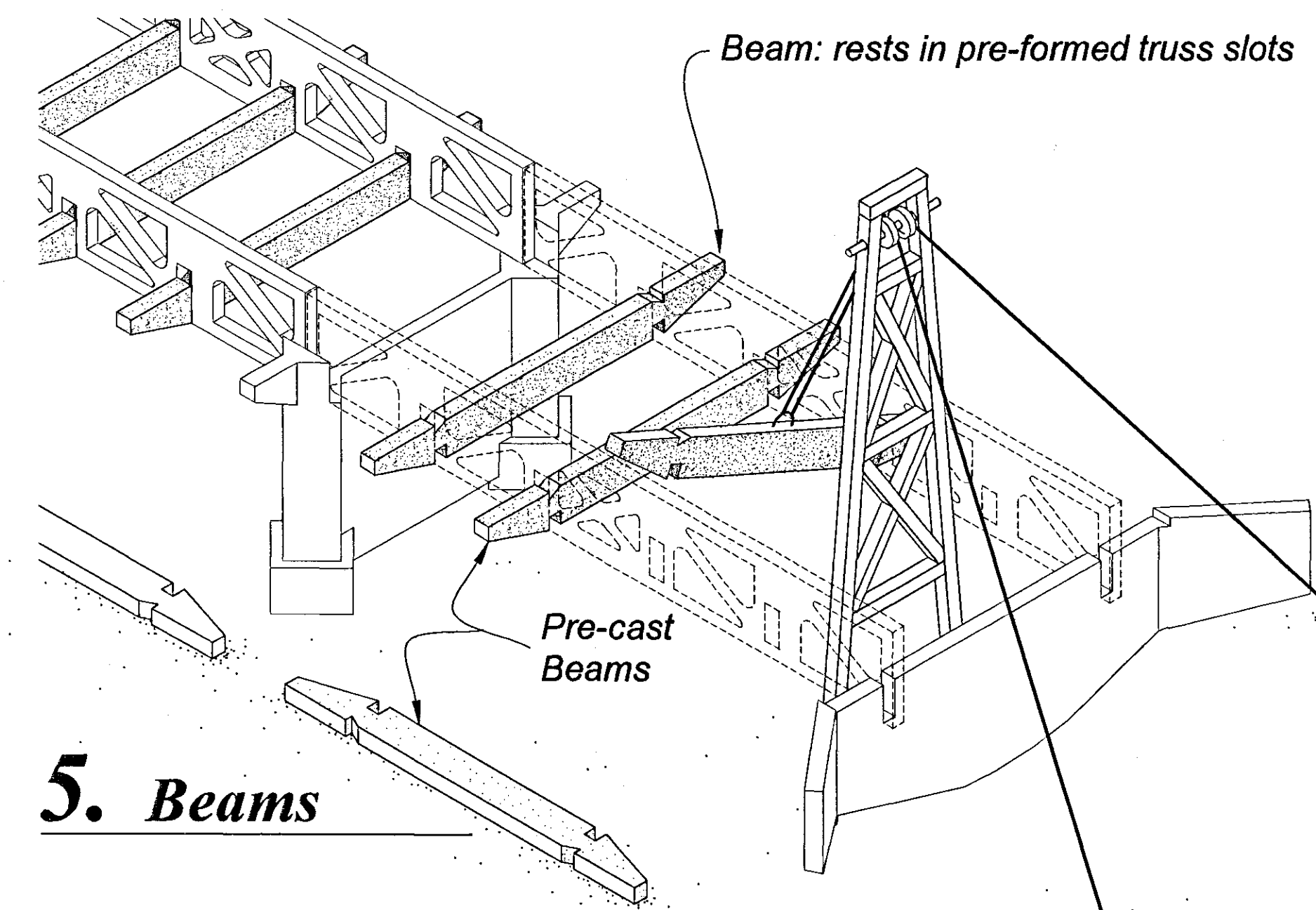
# BROAD STREET BRIDGE CONSTRUCTION



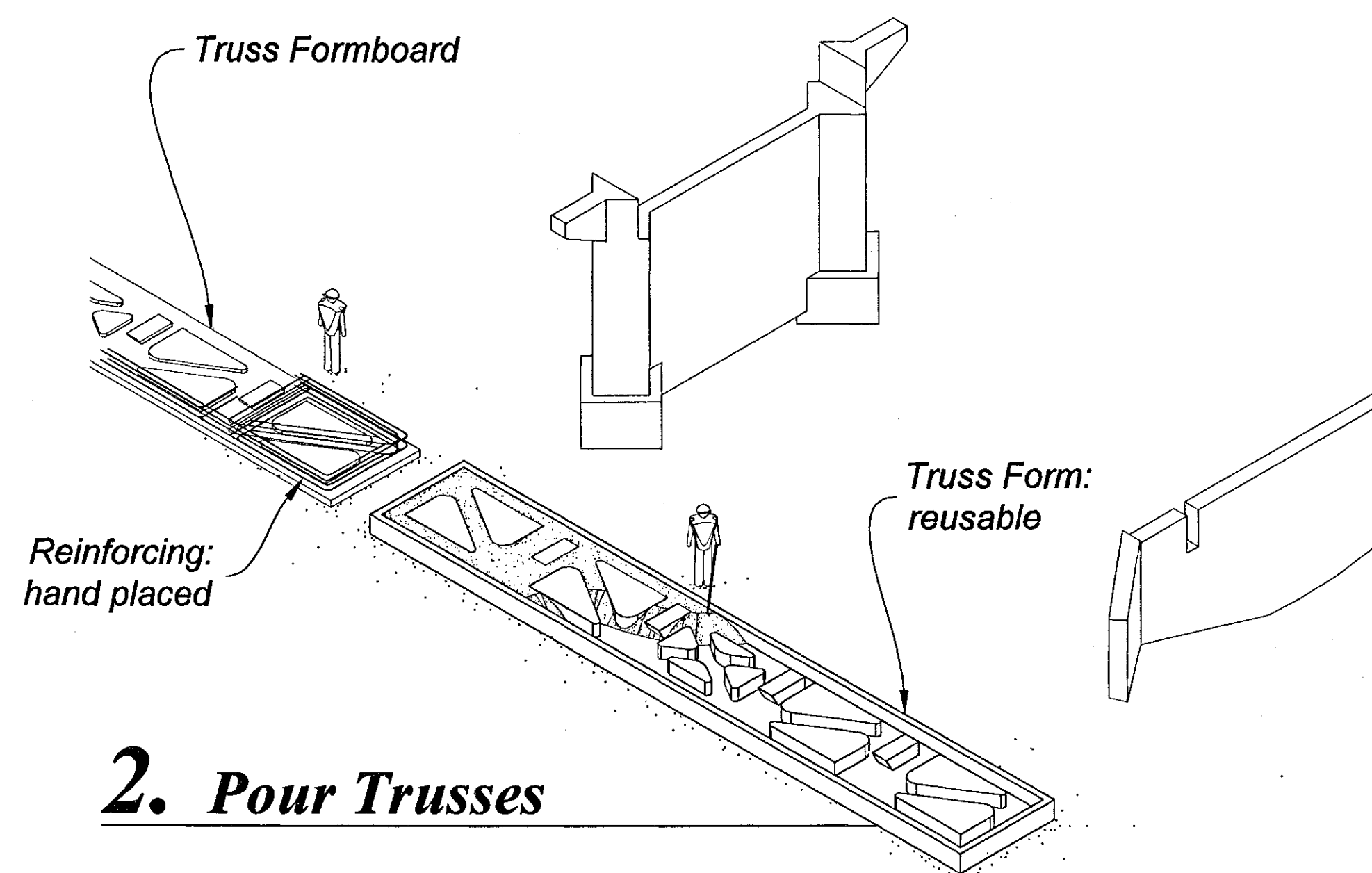
**1. Abutments & Pier**



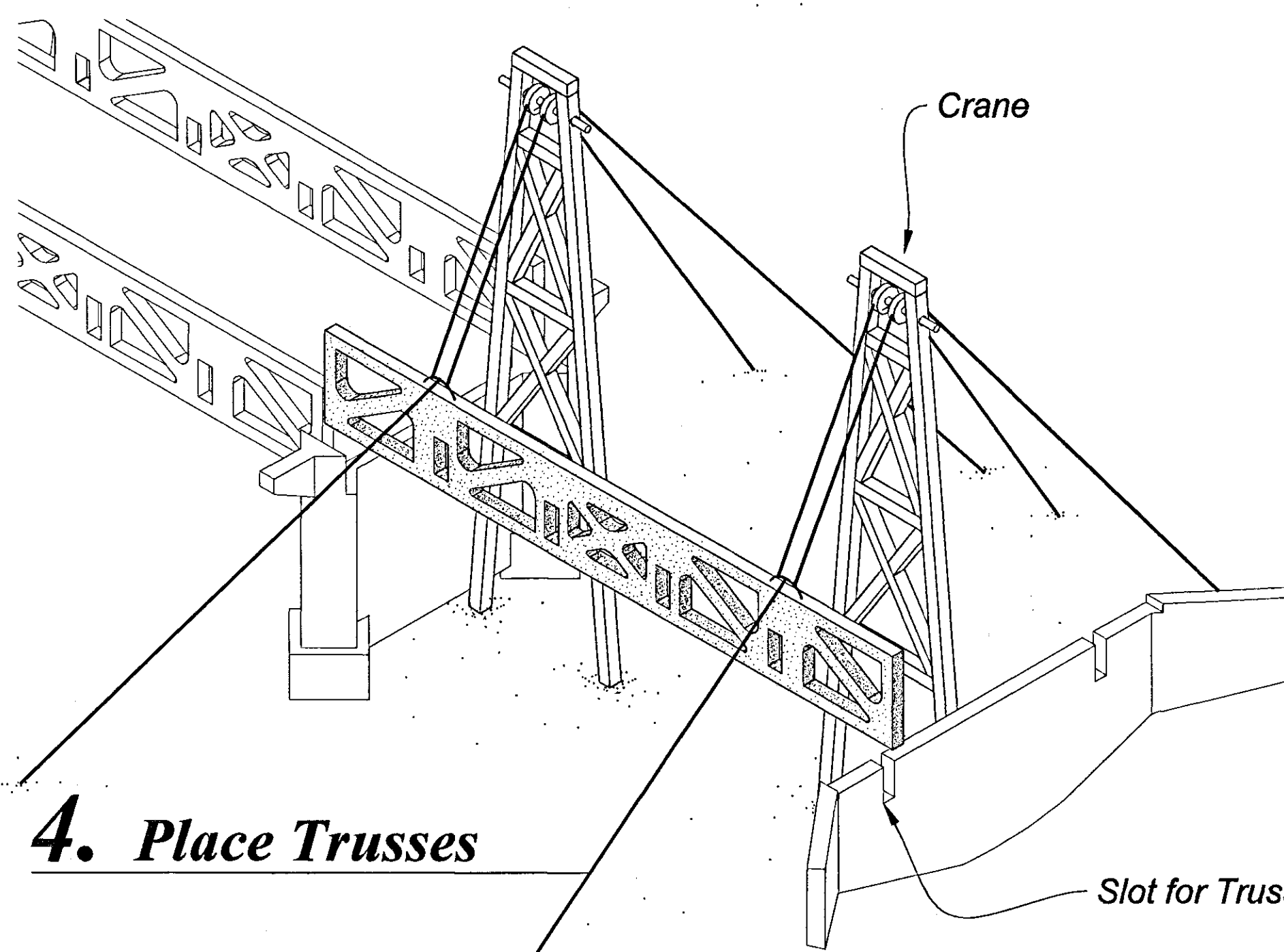
**3. Raise Trusses**



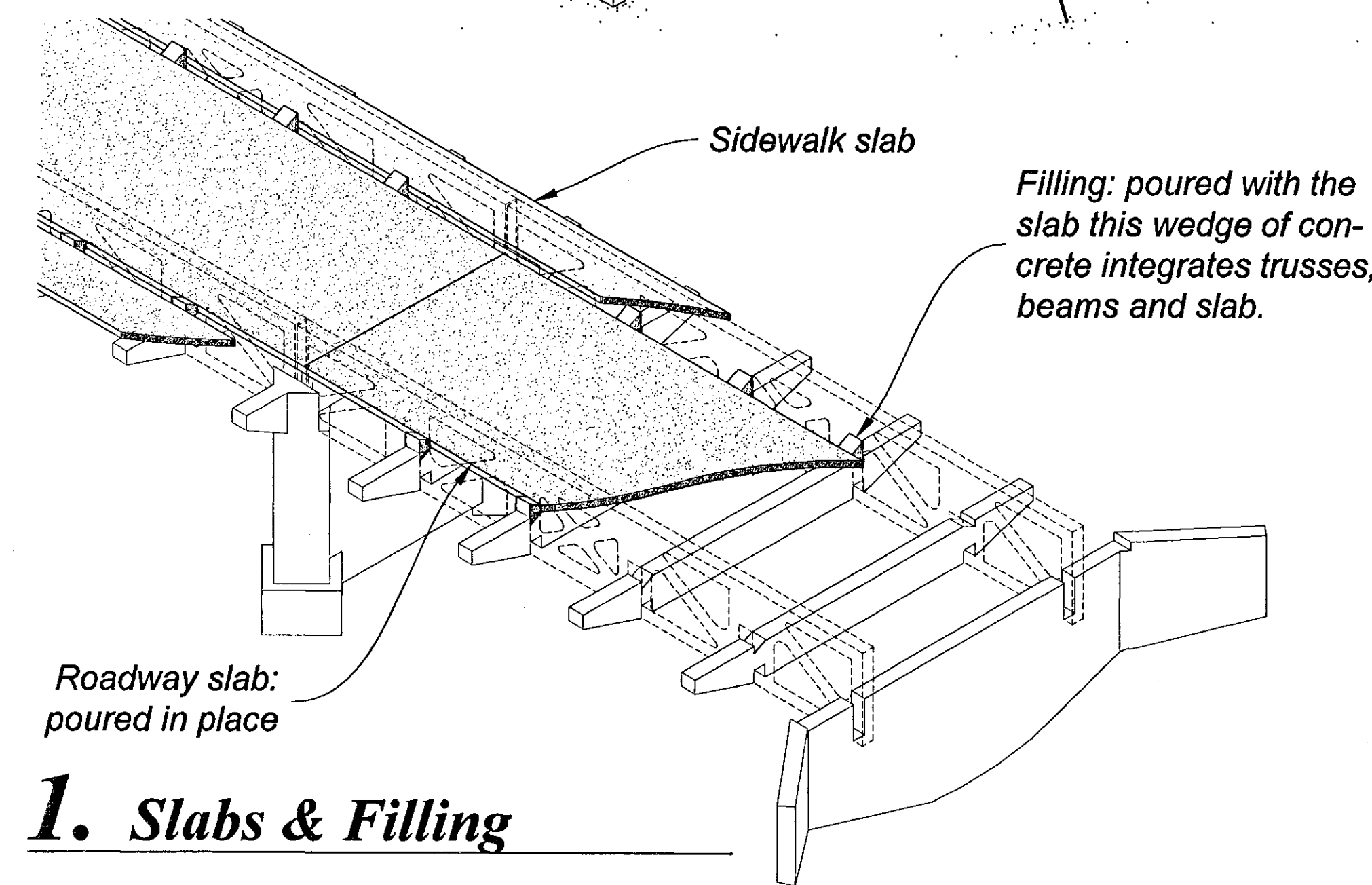
**5. Beams**



**2. Pour Trusses**



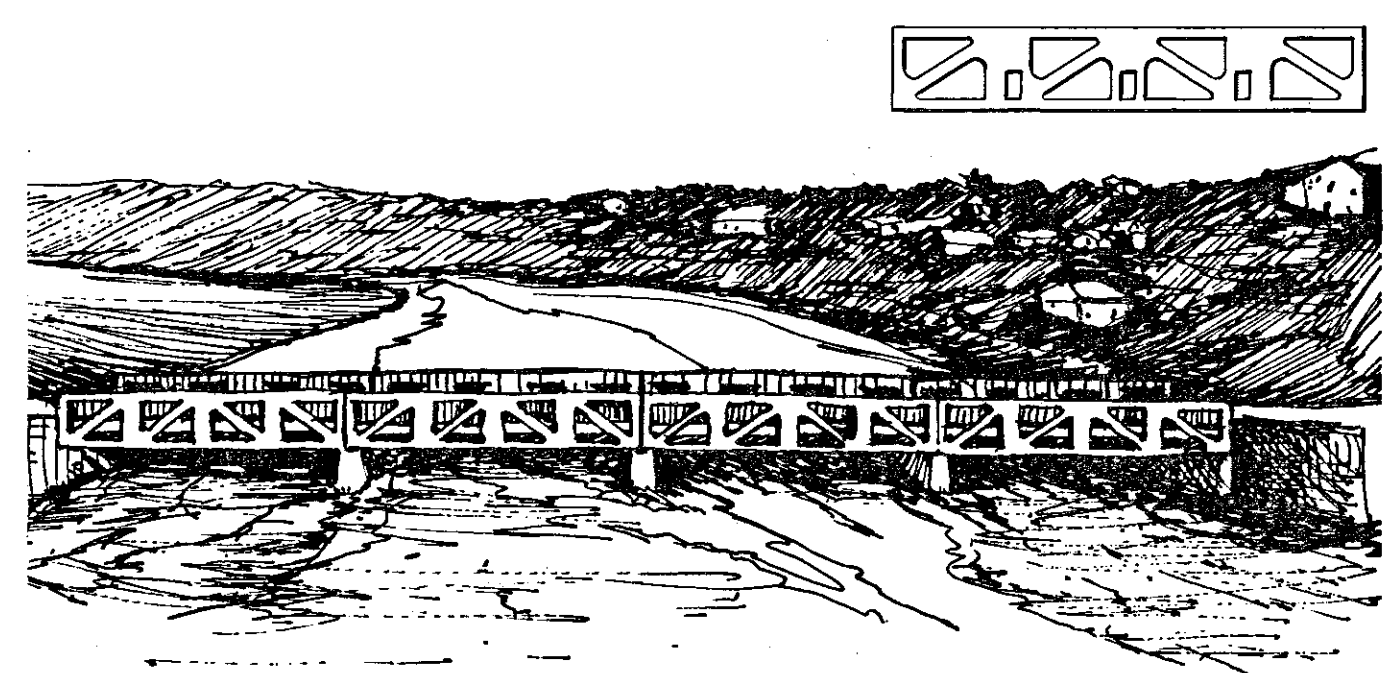
**4. Place Trusses**



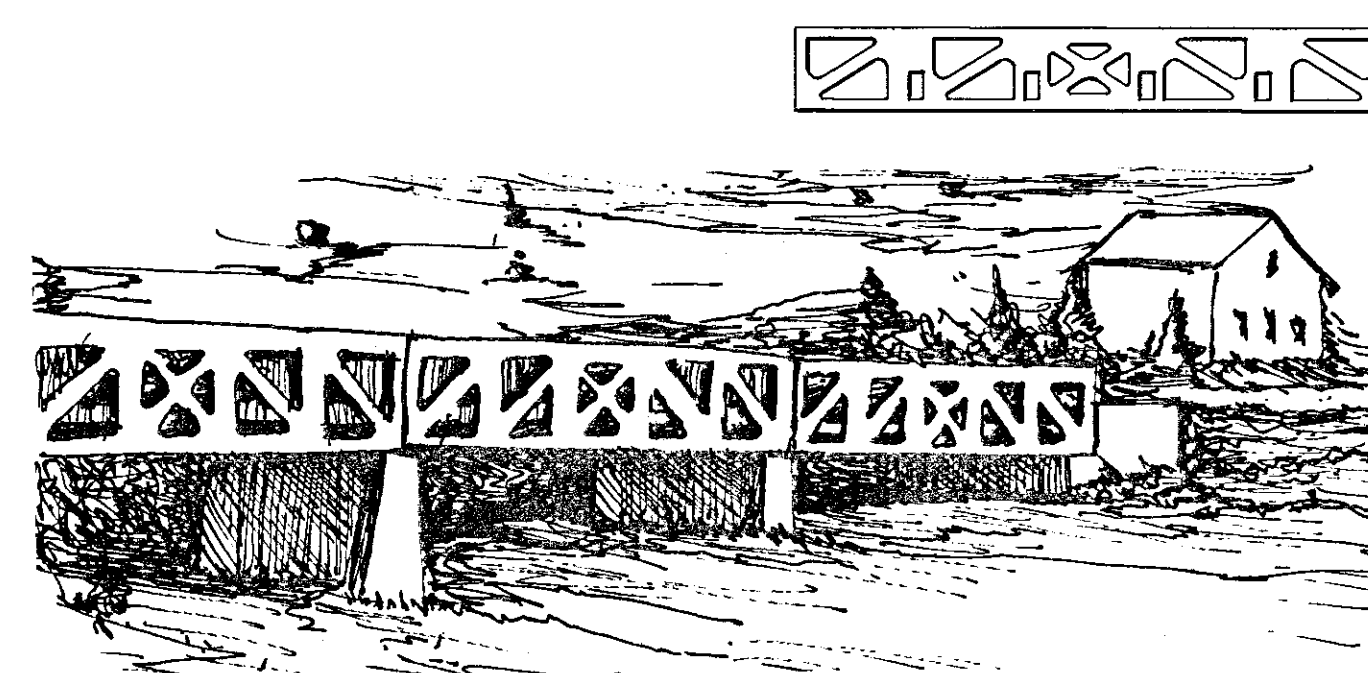
**1. Slabs & Filling**

## Historic Bridge Type

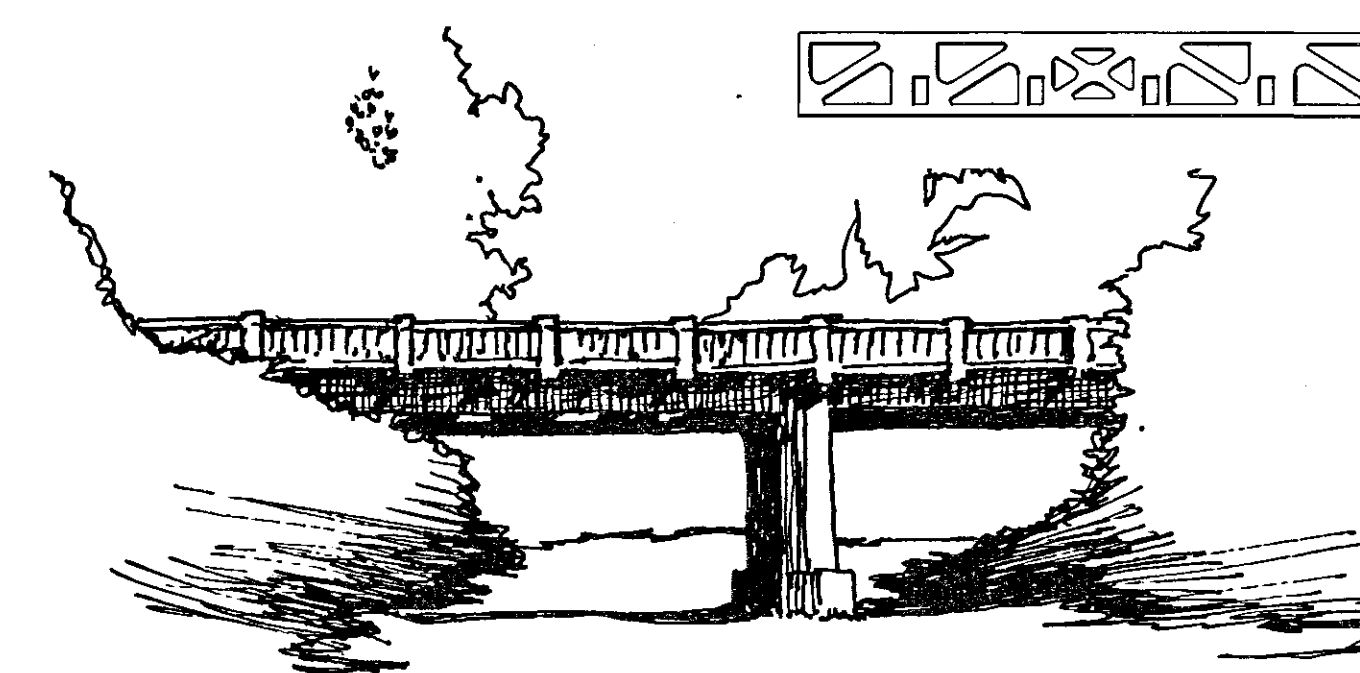
Between 1913 and 1918, at least 5 concrete truss girder-bridges were built using the method shown above. The Gallinas River Bridge (1913 in New Mexico, destroyed) is the first known example, and in 1916 resulted in a patent of this process. The 200' long Variadero Bridge (ca. 1915, New Mexico) expanded on the theme by changing the truss length and pattern. Broad Street Bridge (1918), with its cantilevered sidewalks, was yet another variation on the idea--and quite possibly the last. By the 1920s, this type of concrete bridge all but disappeared from the bridge-builder's oeuvre.



*Gallinas River Bridge - 1913*



*Variadero Bridge - ca. 1915*



*Broad Street Bridge - 1918*

NOTE: DRAWING BASED ON FIELD NOTES, HISTORIC ARTICLES, AND PATENT NO. 1,195,820. FOR AN ANNOTATED LIST OF SOURCES, SEE THE HAER HISTORICAL REPORT.

DELINEATED BY: Pete Brooks, 2000

TEXAS HISTORIC BRIDGES RECORDING PROJECT 2

NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR

BROAD STREET BRIDGE  
BROAD STREET SPANNING COMANCHE CREEK  
MASON COUNTY

MASON

TEXAS

SHEET 3 OF 3

TX 45

HISTORIC AMERICAN ENGINEERING RECORD

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