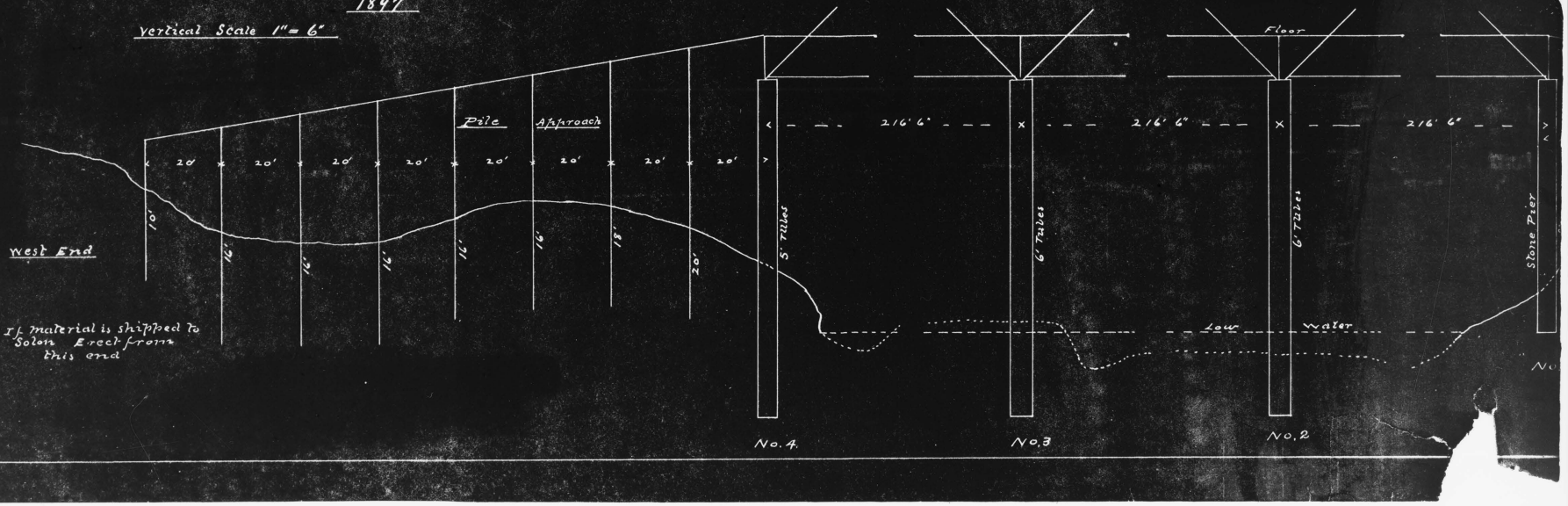
Plan

Profile of Highway Bridge over Cedar River at Sutliffs Ferry in Johnson County Iowa

1897

Vertical Scale 1" = 6"



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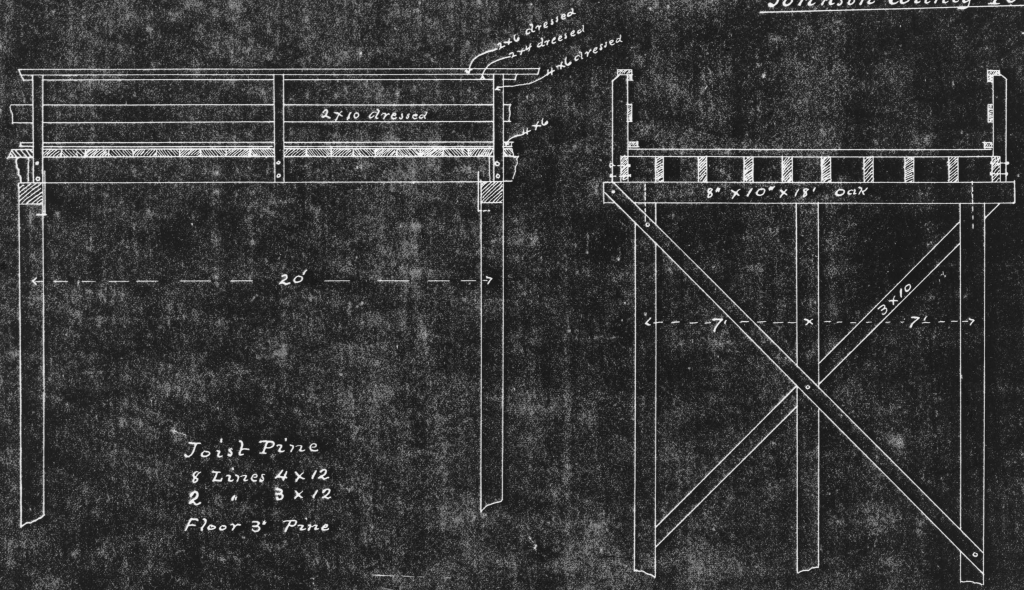
Plan D

Plan of approach for Mehaffey Sutliff Ferry Bridge, over Cedar River Johnson County Iowa

1897



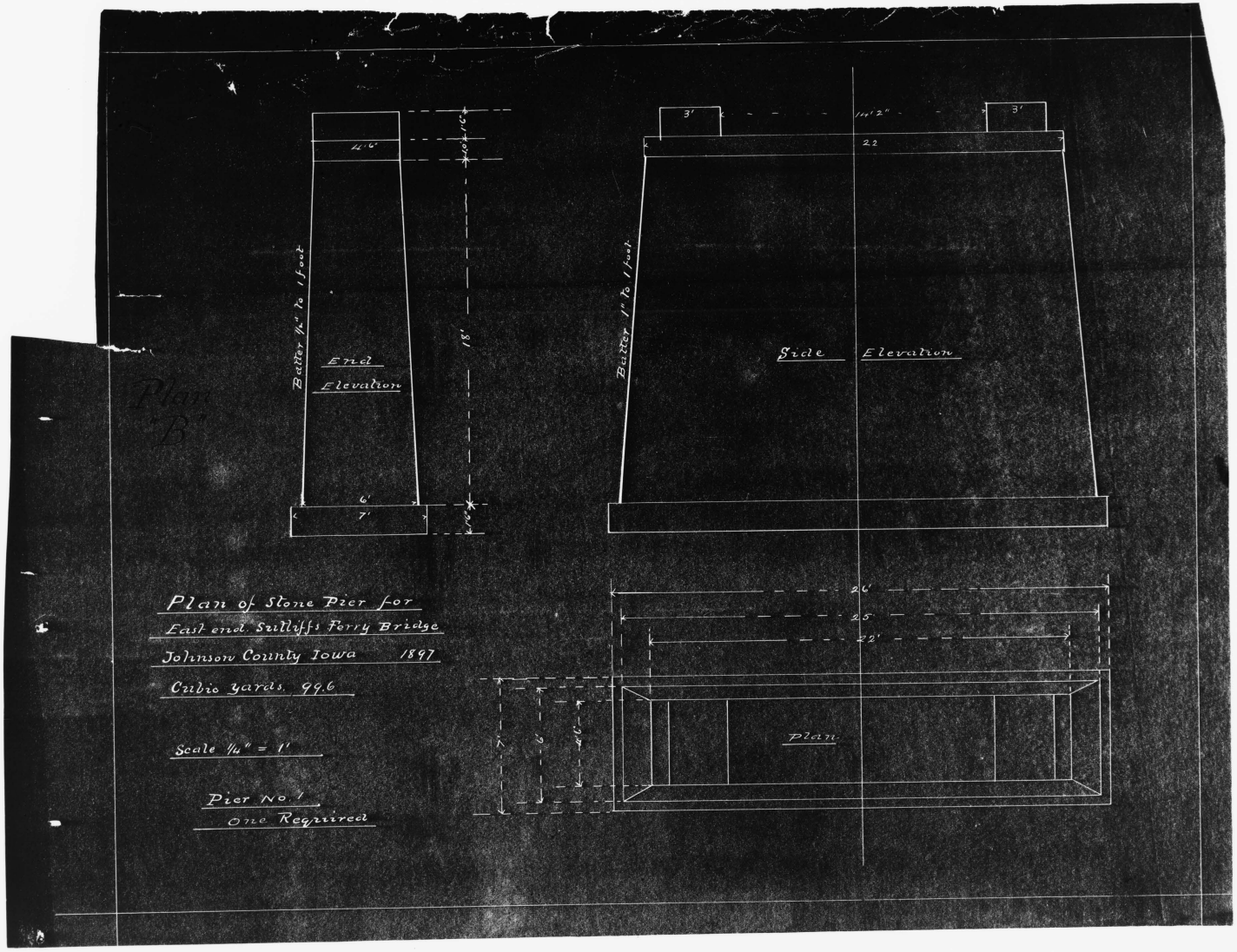

4'6"
2'6"
18'
Batter ¾" to 1 foot
End Elevation
6'
7'
3'
11'2"
3'
22
Batter 1" to 1 foot
Side Elevation
26'
25'
22'
Plan
Plan of Stone Pier for
East end Sullivan's Ferry Bridge
Johnson County Iowa 1897
Cubic yards 99.6
Scale ¼" = 1'
Pier No. 1
One Required

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Plate A

Quantities in one Pier

43 Piles 16' = Lineal feet 688

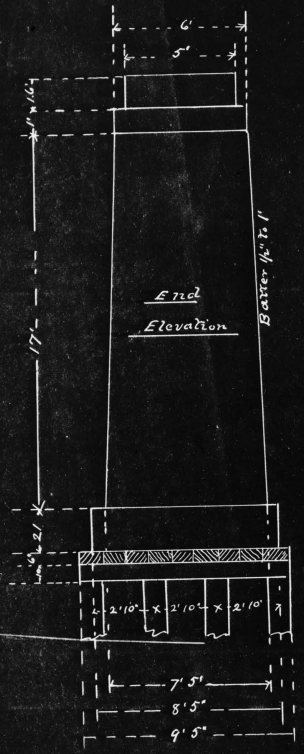
Grillage

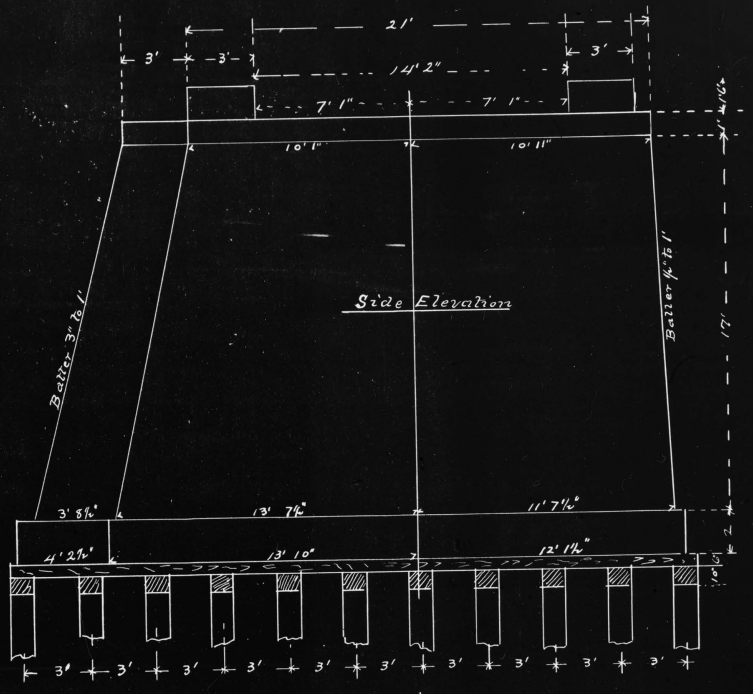
11 Caps 10" x 12" x 10' =	1100	= 2900
6 inch Plank	1800	

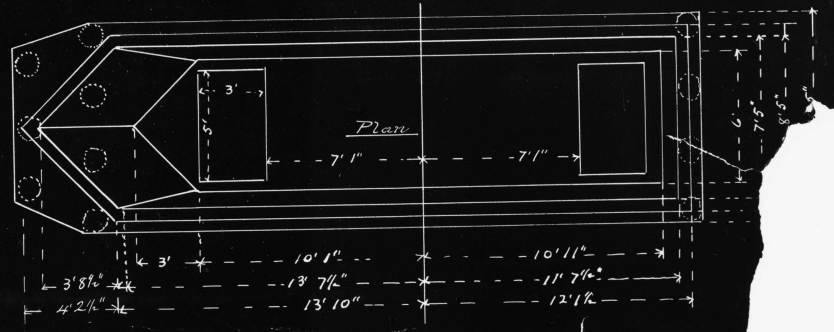
Masonry

Footing Cubic yds	17.49	=129.26
Body of Pier . .	105.10	
Coping . .	5.00	
Pedestals	1.67	

2 Piers Required







Plan of River Piers for Highway Bridge

over Cedar River at Sutliffs Ferry.

Johnson County Iowa

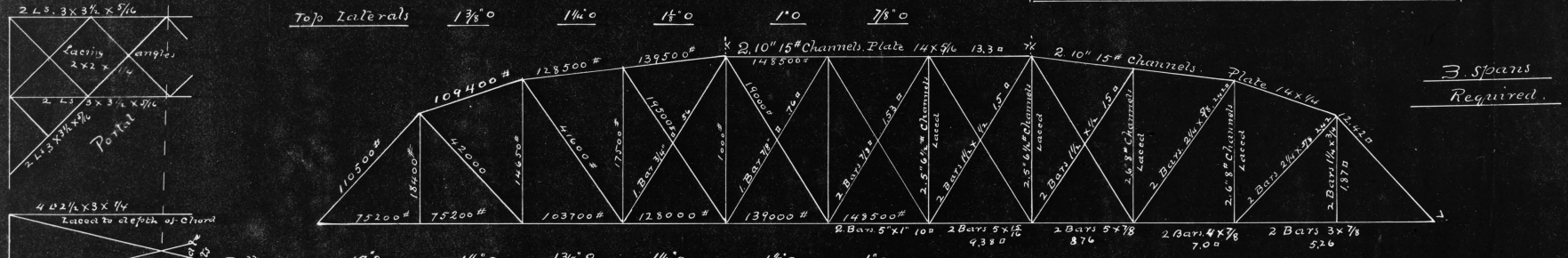
1897

For Bridge over the Cedar River at Sutliffs Ferry Johnson County Iowa.

Length of Span C. to C. 214'6".
Height of Truss. C. to C. 21' 27½". 32'.

Width of Roadway in Clear 16 feet.
Number of Panels 11. Length of Panels 19'6"

Bridge Weight per Lineal foot 660#.
Moving Load " " " on Trusses 1000#.
" " " " " " Floor Sytem 1600#.



Specifications

Portals, Top Lateral Struts, Substruts, and vertical bracing, as shown on diagram.

Floor Beams 15" 42# Eye Beams.

Floor Joist 8 lines 4 X 12 & 2 lines 3 X 12 Pine bridged with plank cut between Joist.

Flooring 3 inch pine not less than 10" wide.

Wheel guards 4 X 6 Pine.

Railing. 1. 2 X 10. 1. 2 X 6. 1. 2 X 4. Posts 4 X 4 Pine dressed and painted.

Pins and pin plates must be proportioned by standard formula, and all riveting must conform to standard requirements.

Floor beams will be riveted to post Connection above the Chord. with standard Connections.

Beam at each end of the bridge will be Connected to Batter post to form Shoe Strut.

A Floor Beam will be placed over each River Pier, and Shoe Struts of 5" 9¾# Eye Beams. or its equivalent. will be used in ends resting on River Piers.

Lacing bars for 5" & 6" Channels 1½" X 1/4". For 10" Channels. 2" X 5/16".

Stay plates for 5" Channels 5" X ½". for 6" Channels 6" X 1/4" for 10" Channels. 10 X 5/16.

Lacing bars must be Spaced. to form angles of not more than 60° with each other.

Connect bottom laterals to floor beam by plates riveted to bottom Flange.

Top and bottom laterals and vertical bracing must have Turnbuckle adjustment.

All Eye Bars must have die forged heads.

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