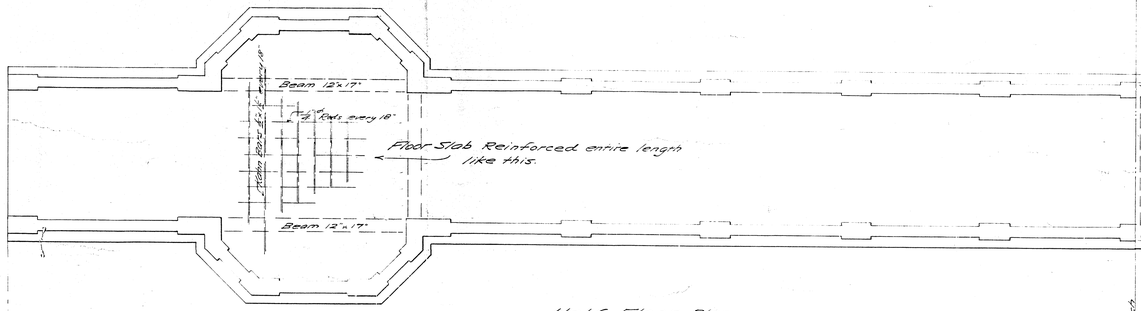
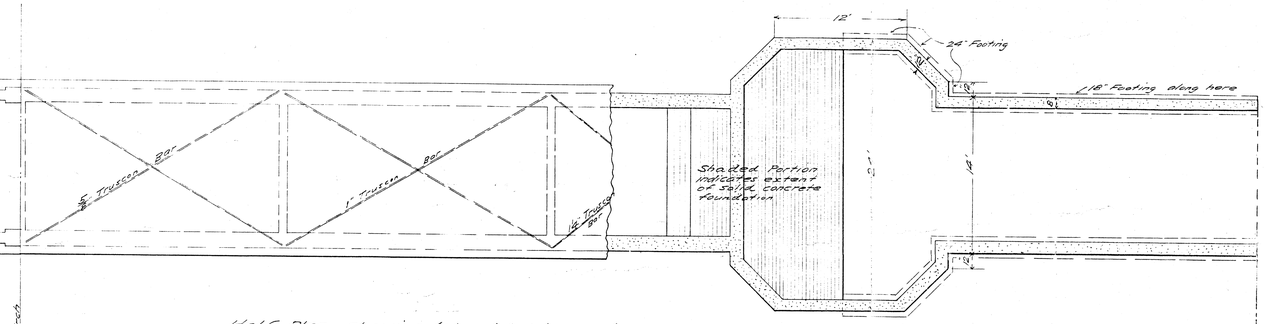
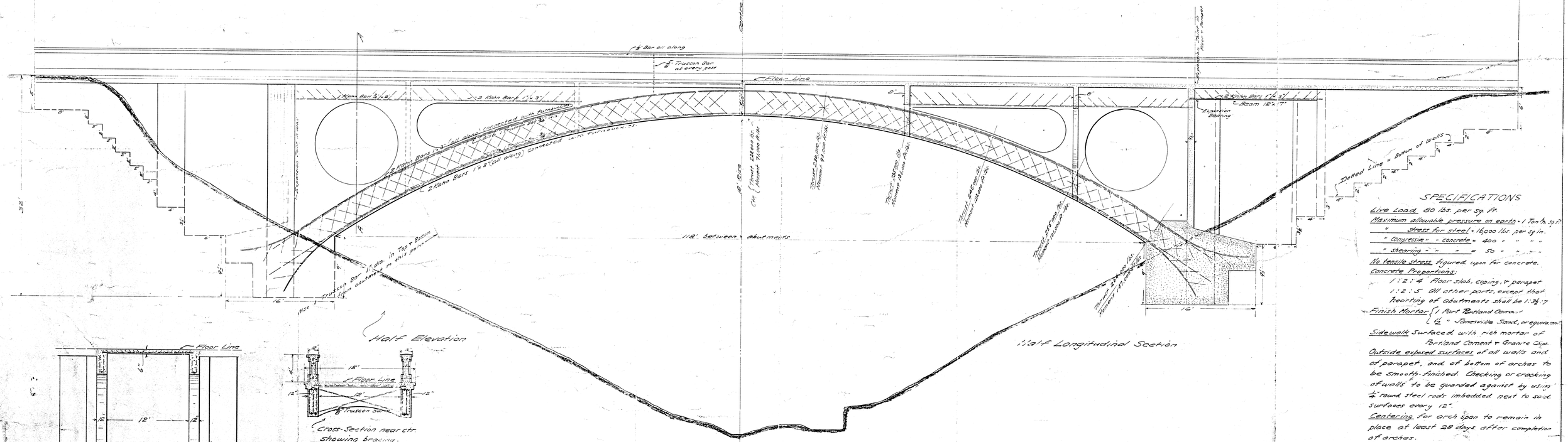


Half Floor Plan

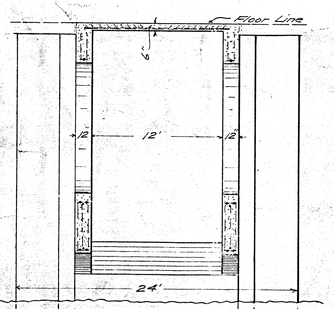


Half Plan showing lateral bracing and abutment.



Half Elevation

Half Longitudinal Section



Cross-Section at "AA" looking toward abutment

Cross-Section near ctr. showing bracing.

Similar bracing in all other cross walls.

SPECIFICATIONS

Live Load 80 lbs. per sq. ft.

Maximum allowable pressure on earth = 1 Ton to sq. ft.

" stress for steel = 16,000 lbs. per sq. in.

" Compressive " " concrete = 400 " " " "

" Shearing " " " = 50 " " " "

No tensile stress figured upon for concrete.

Concrete Proportions:

1:2:4 Floor slab, coping, & parapet

1:2:5 All other parts, except that hearting of abutments shall be 1:3½:7

Finish Mortar { 1 Part Portland Cement
½ " Jamesville Sand, or equivalent

Sidewalk Surfaced with rich mortar of Portland Cement & Granite Chips.

Outside exposed surfaces of all walls and of parapet, and of bottom of arches to be smooth-finished. Checking or cracking of walls to be guarded against by using ¼" round steel rods imbedded next to said surfaces every 12".

Centering for arch span to remain in place at least 28 days after completion of arches.

Arch to be given proper camber so that when centering is removed the curve of arch will be true to design.

Concrete to be mixed by machine.

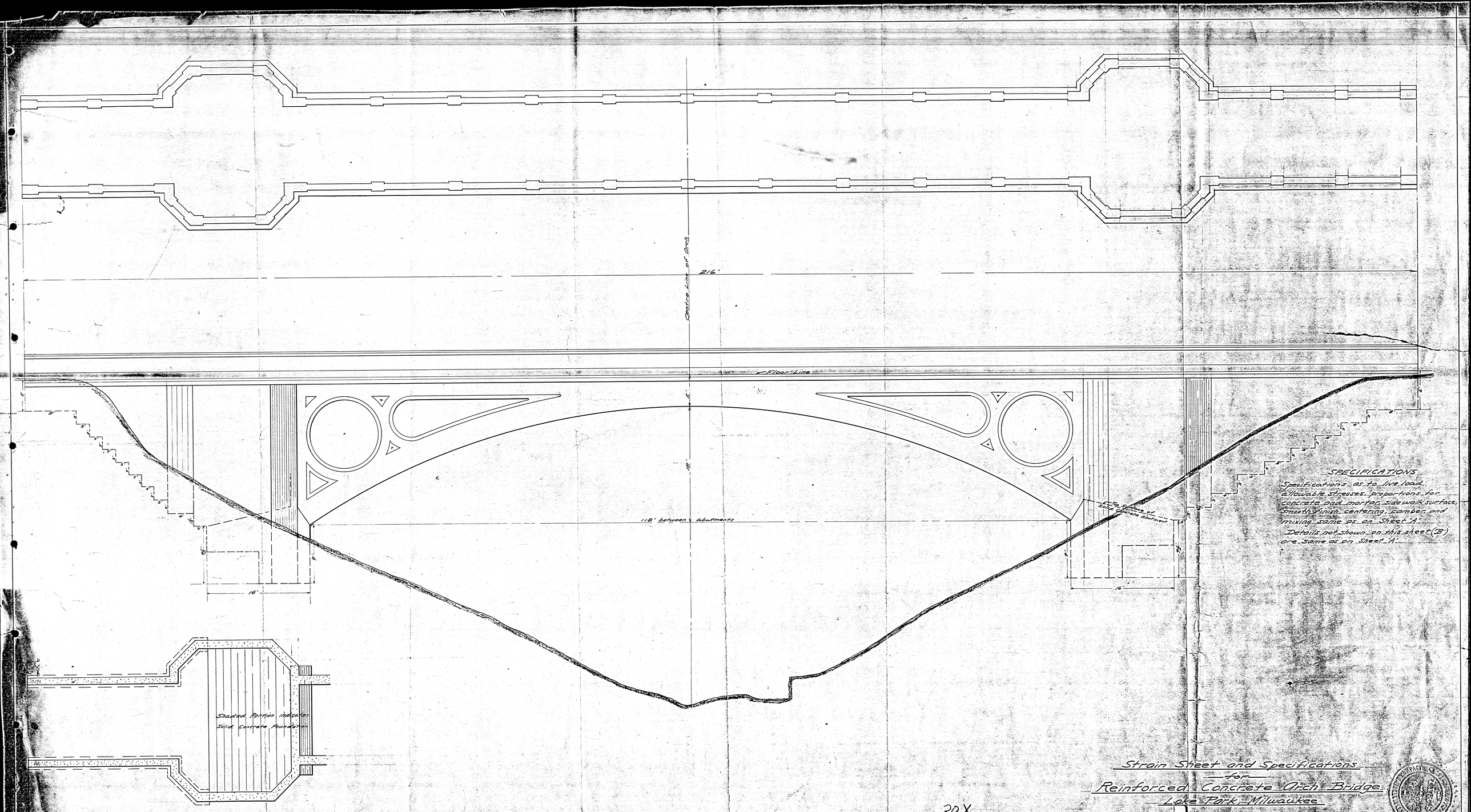
All sections as shown, or of equivalent strength. This strain sheet & is the exclusive property of the Newton Engineering Company, until incorporated in contract with said company.

Strain Sheet and Specifications
— for —
Reinforced Concrete Arch Bridge
Lake Park, Milwaukee.

Ferry & Clas, — Architects.

Kahn System Reinforced Concrete
Newton Engineering Co., Milwaukee.

SHEET



SPECIFICATIONS

Specifications as to live load, allowable stresses, proportions for concrete and mortar, sidewalk surface, smooth finish, centering, camber and mixing same as on Sheet "A".
Details not shown on this sheet (B) are same as on Sheet "A".

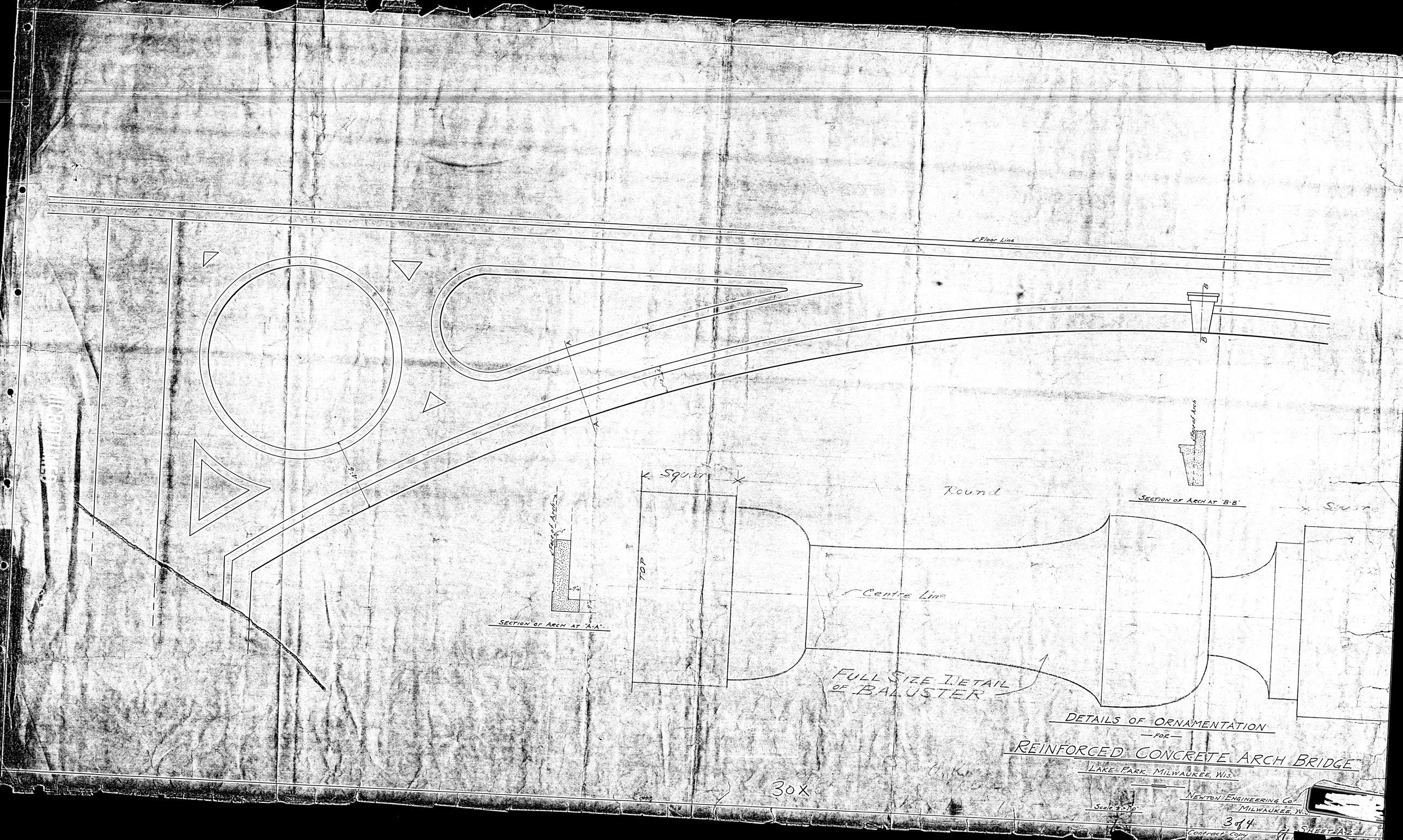
All sections as shown, or of equivalent strength.
This strain sheet is the exclusive property of the Newton Engineering Company, unless incorporated in contract with said company.

30 X

Kahn System Reinforced Concrete
Newton Engineering Co. Milwaukee.

Strain Sheet and Specifications
for
Reinforced Concrete Arch Bridge
Lake Park, Milwaukee
Ferry & Clas Architects

SHEET "B"



DETAILS OF ORNAMENTATION
—FOR—
REINFORCED CONCRETE ARCH BRIDGE
LAKE PARK, MILWAUKEE, WIS.

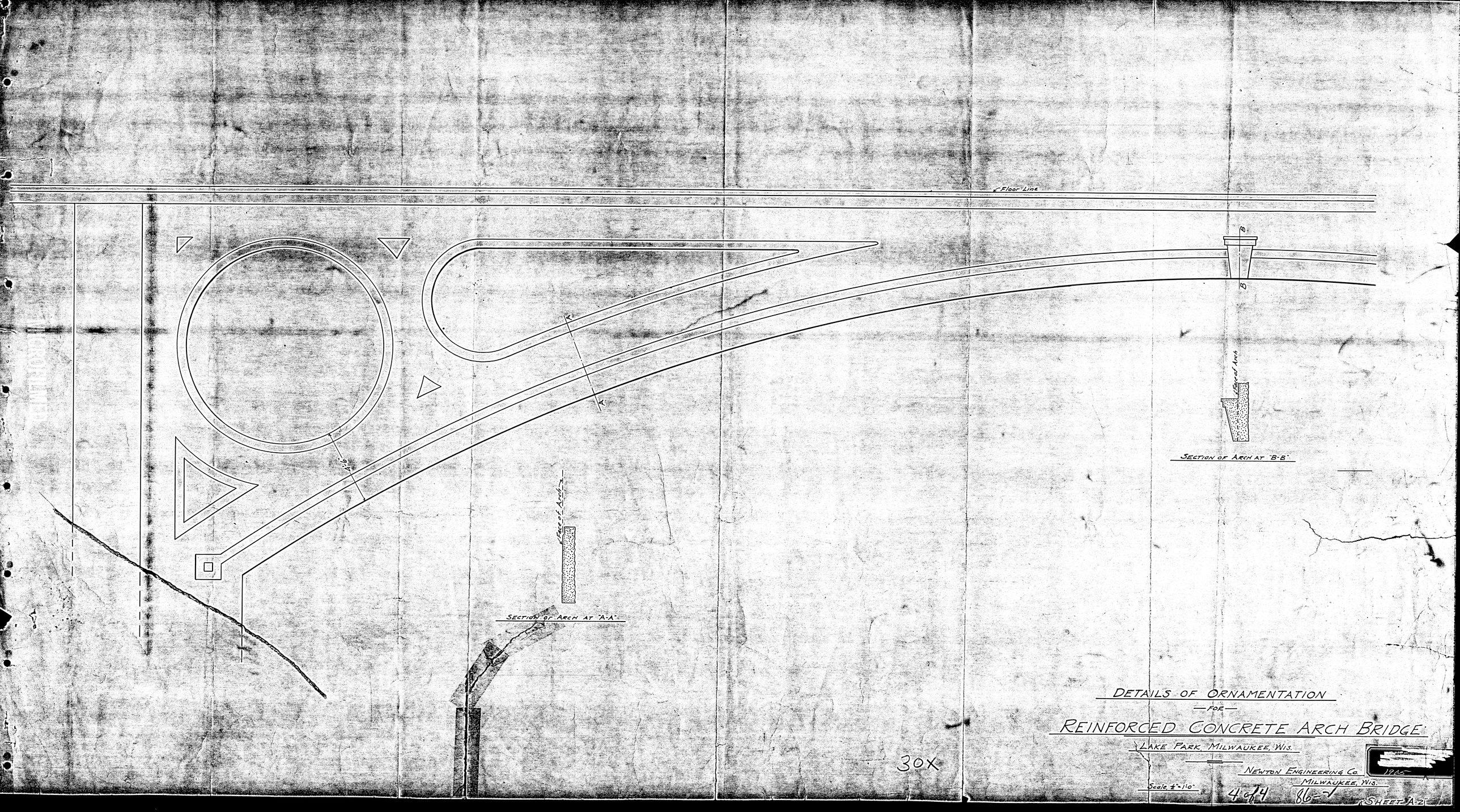
Scale 1/2"=1'-0"

NEWTON ENGINEERING CO.
MILWAUKEE, WIS.

3 of 4

Contract Copy

SHEET A-2



DETAILS OF ORNAMENTATION

—FOR—

REINFORCED CONCRETE ARCH BRIDGE

LAKE PARK, MILWAUKEE, WIS.

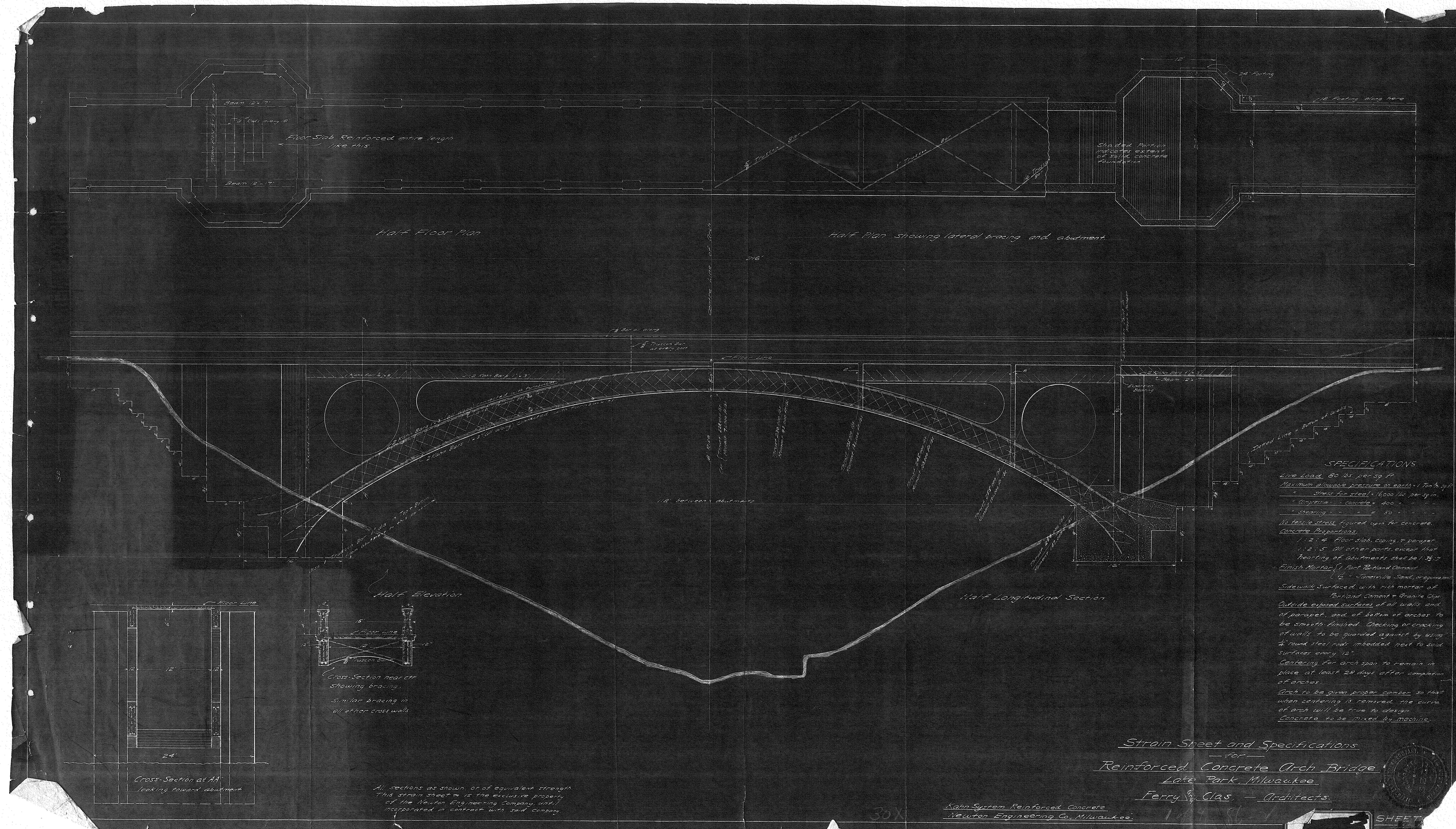
NEWTON ENGINEERING CO.

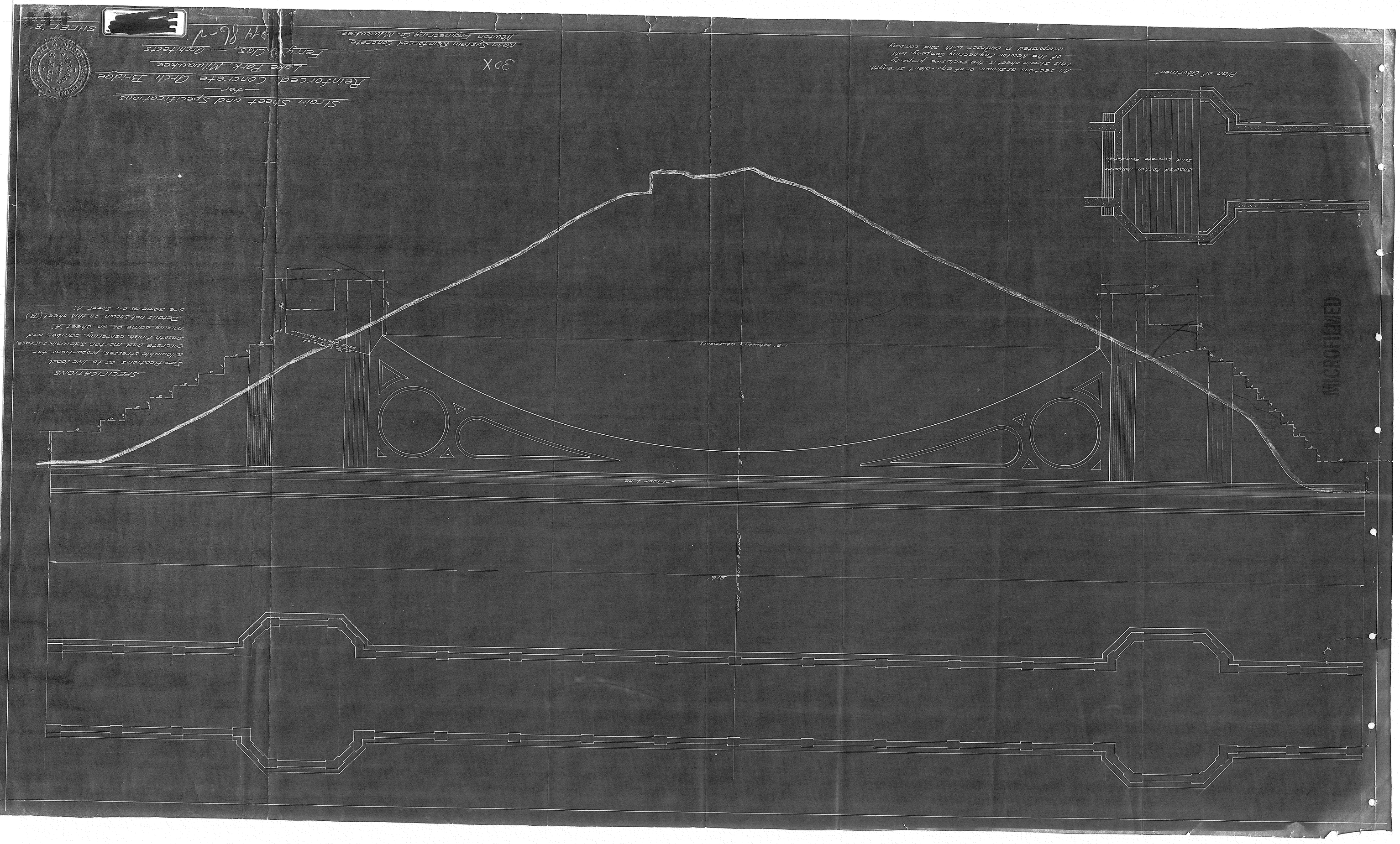
MILWAUKEE, WIS.

Scale 1/4"=1'-0"

4 of 4 86-7

SHEET A-2


Floor-Slab Reinforced entire length like this.
Beam 12 x 17
Beam 12 x 17
Half Floor Plan
Shaded Portion indicates extent of solid concrete foundation
24' Footing
18' Footing along here
Half Plan showing lateral bracing and abutment.
216'
Centre Line of Arch
Floor Line
Expansion Joint in Floor + Parapet
Expansion Bearing
Thrust 228000 lbs / Moment 71000 ft lbs
Thrust 230000 lbs / Moment 93000 ft lbs
Thrust 235000 lbs / Moment 118000 ft lbs
Thrust 245000 lbs / Moment 123000 ft lbs
Thrust 255000 lbs / Moment 101000 ft lbs
Thrust 284000 lbs / Moment 147000 ft lbs
18' Rise
118' Between Abutments
Dotted Line = Bottom of Walls
Half Elevation
Half Longitudinal Section
Cross-Section near ctr showing bracing.
Similar bracing in all other cross walls.
Cross-Section at "AA" looking toward abutment
Floor Line
24'
12'
All sections as shown, or of equivalent strength.
This strain sheet is the exclusive property of the Newton Engineering Company, until incorporated in contract with said Company.
SPECIFICATIONS
Live Load 80 lbs per sq ft
Maximum allowable pressure on earth = 1 Ton per sq ft
" Stress for steel = 16000 lbs per sq in.
" Compression " concrete = 400 " " "
" Shearing " " = 50 " " "
No tensile stress figured upon for concrete.
Concrete Proportions.
1:2:4 Floor slab, coping & parapet
1:2:5 All other parts except that hearting of abutments shall be 1:3½:7
Finish Mortar { 1 Part Portland Cement / 2 " Janesville Sand, or equivalent
Sidewalk Surfaced with rich mortar of Portland Cement + Granite Chips
Outside exposed surfaces of all walls and of parapet, and of bottom of arches to be smooth finished. Checking or cracking of walls to be guarded against by using ¼" round steel rods imbedded next to said surfaces every 12".
Centering for arch span to remain in place at least 28 days after completion of arches.
Arch to be given proper camber so that when centering is removed the curve of arch will be true to design.
Concrete to be mixed by machine.
Strain Sheet and Specifications
— for —
Reinforced Concrete Arch Bridge
Lake Park, Milwaukee
Ferry & Clas — Architects.
Kahn System Reinforced Concrete
Newton Engineering Co. Milwaukee.
30X
SHEET [redacted]



All sections as shown or of equivalent strength
This strain sheet is the exclusive property
of the Hewson Engineering Company, and
incorporated in contract with said company

30X

John Siebenthaler Concrete
Hewson Engineering Co. Milwaukee

Strain Sheet and Specifications
— for —
Reinforced Concrete Arch Bridge
Lake Park, Milwaukee
Perry & Clas, — Architects

SHEET 3

SPECIFICATIONS

Specifications as to live load allowable stresses, proportions for concrete and mortar sidewalk surface smooth finish, centering, camber and mixing same as on Sheet #1.
Details not shown on this sheet (3) are same as on Sheet #1.

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