Form 413 Rev. 1959

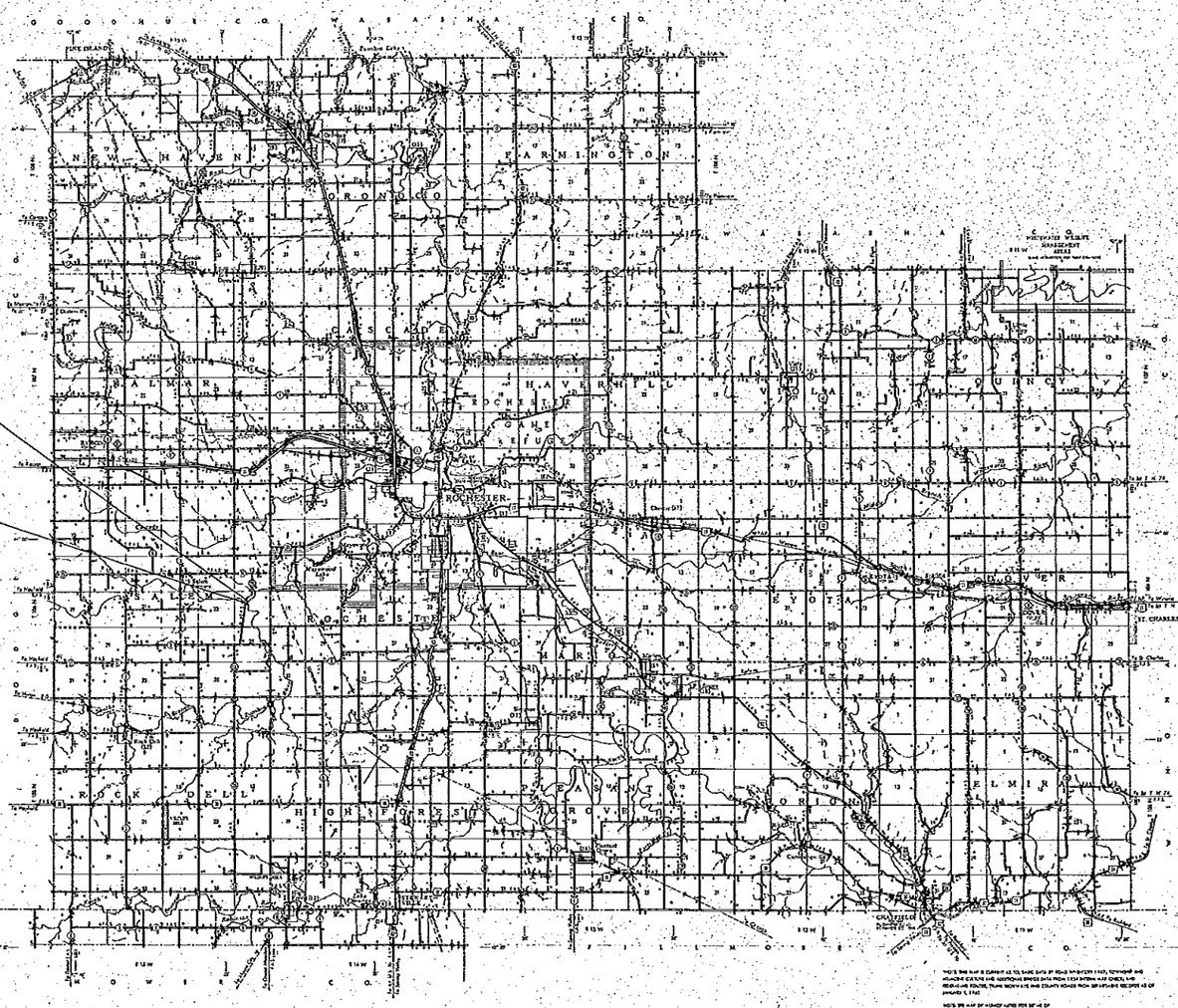
CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT ROAD R/W LINE
LIMITED ACCESS
PROPERTY LINE (Except Land Use)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
STEAM RAILROAD
ELECTRIC RAILROAD
RAILROAD RIGHT-OF-WAY LINE
CREEK
RAPIDS OR WATERFALL
DRY RUN
ORAINAGE DITCH
HIGH TENSION LINE
POWER POLE LINE
TELEPHONE OR TELEGRAPH LINE
TELEPHONE CONDUIT
GUARD RAIL
WIRE FENCE
RAILROAD SNOW FENCE
BOARD OR HIGHWAY SNOW FENCE
STONE WALL OR FENCE
GAS MAIN
WATER PIPE
SEWER PIPE
DRAIN TILE
GRAVEL PIT
SAND PIT
CLAY PIT
ROCK QUARRY
SPRINGS
MARSH

TIMBER
BRUSH
ORCHARD
ROCK LEDGE
SAND
EDGE OF CUT
TOE OF EMBANKMENT
CATCH BASIN
MANHOLE
DROP INLET
FIRE HYDRANT
ARC LAMP
OTHER LIGHTS (Pole Kind)
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
CATTLE GUARD
OVERHEAD (Highway Over)
UNDERPASS (Highway Under)
ABUTMENT, WALL & PIER
BRIDGE
CULVERT
BUILDING (One Story Frame) 1-STY F
C-CONCRETE S-STONE T-TILE B-BRICK SE-STUCCO
HEDGE
IRON PIPE
STONE MONUMENT
WOOD STAKE OR HUB
MEANDER CORNER

T.106N. R.24W. / R.24W. T.105N. — 35 | 36 | 2 | 1
CENTER SECTION 35 T.106N. R.24W.
12 | 1 | 13

NOTE: SECTION NUMBERS READ FROM THE SOUTH



STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PLAN FOR BRIDGE NO. 55508
County State Aid Highway No. 15

LAND TIE: A POINT 1182 FT. NORTH AND 775 FT. WEST OF THE CENTER OF SEC. 24, T106N, R15W
Give proper reference to Sections, Township and Range

GROSS LENGTH	FEET	MILES
BRIDGES LENGTH	134 FEET	.0254 MILES
EXCEPTIONS LENGTH	FEET	MILES
NET LENGTH	134 FEET	.0254 MILES

S.A.P. No. 55-615-04

SCALES
PLAN, 1 Inch = 200 Feet
PROFILE, Horz. 1 Inch = 200 Feet, Vert. 1 Inch = 20 Feet
WORKING PLANS: Horz. 1 Inch = 100 Feet; Vert. 1 Inch = 10 Feet; Cross-Section 1 Inch = Feet
LAYOUT
Scale, 1 Inch = 10560 Feet

INDEX OF SHEETS

Sheet No. 1 Title Sheet
" 2 General Plan & Elevation
" 3 Deck Layout
" 4 Abutment Details
" 5 Pier Details
" 6 Slab Reinforcing Plan & Longitudinal Sections
" 7 Framing Plan & Beam Span Elevations
" 8 Structural Details & Expansion Device
" 9 Detail Plates
" 10 Detail Plates
" 11 Detail Plates
" 12 Bridge Survey

ALL FEDERAL, STATE AND LOCAL LAWS WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

G. J. Luchsinger — COUNTY ENGINEER — DATE 6/27/62
Olmsted — COUNTY — REG. NO. 207

RECOMMENDED FOR APPROVAL Arend Zylstra — ASSISTANT DISTRICT ENGINEER — 9/27/1962
RECOMMENDED FOR APPROVAL M. G. Ridgway — ASST. BRIDGE ENGINEER — 8/6/1962
APPROVED 8-6-1962 — STATE AID ENGINEER

REVISED DATE 7/23/62

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED

—SPECIFICATIONS—

THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED MAY 1, 1959, AND SUBMITTED FOR APPROVAL BY THE DIVISION ENGINEER OF THE BUREAU OF PUBLIC ROADS ON MARCH 26, 1959, SHALL GOVERN.

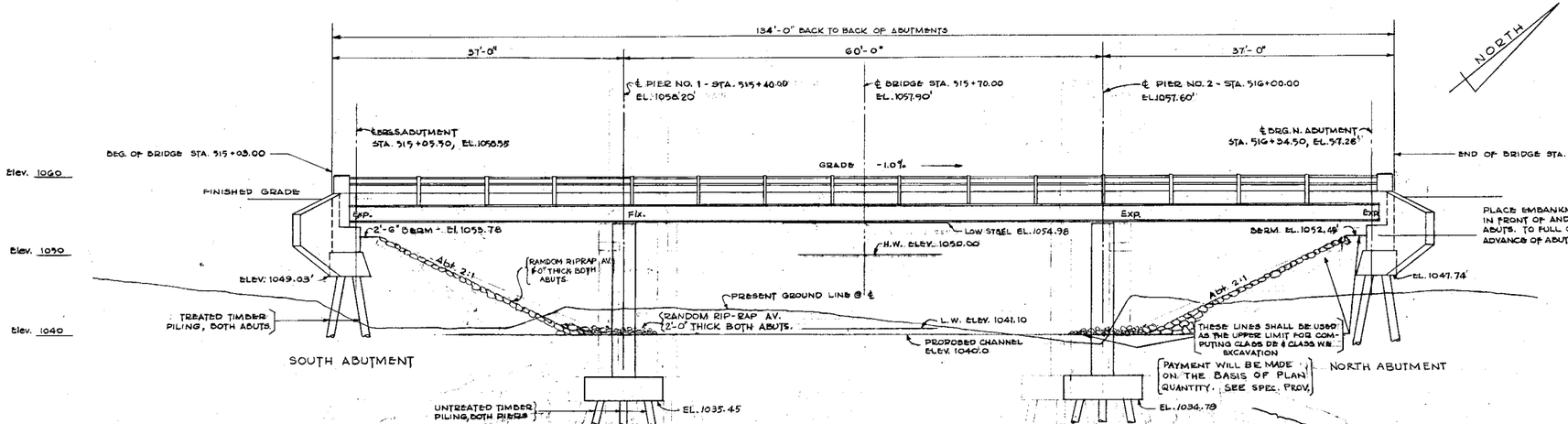
MICRO-FILMED

Minn. Proj. No. _____ State Proj. No. _____ State Aid Project No. 55-615-04

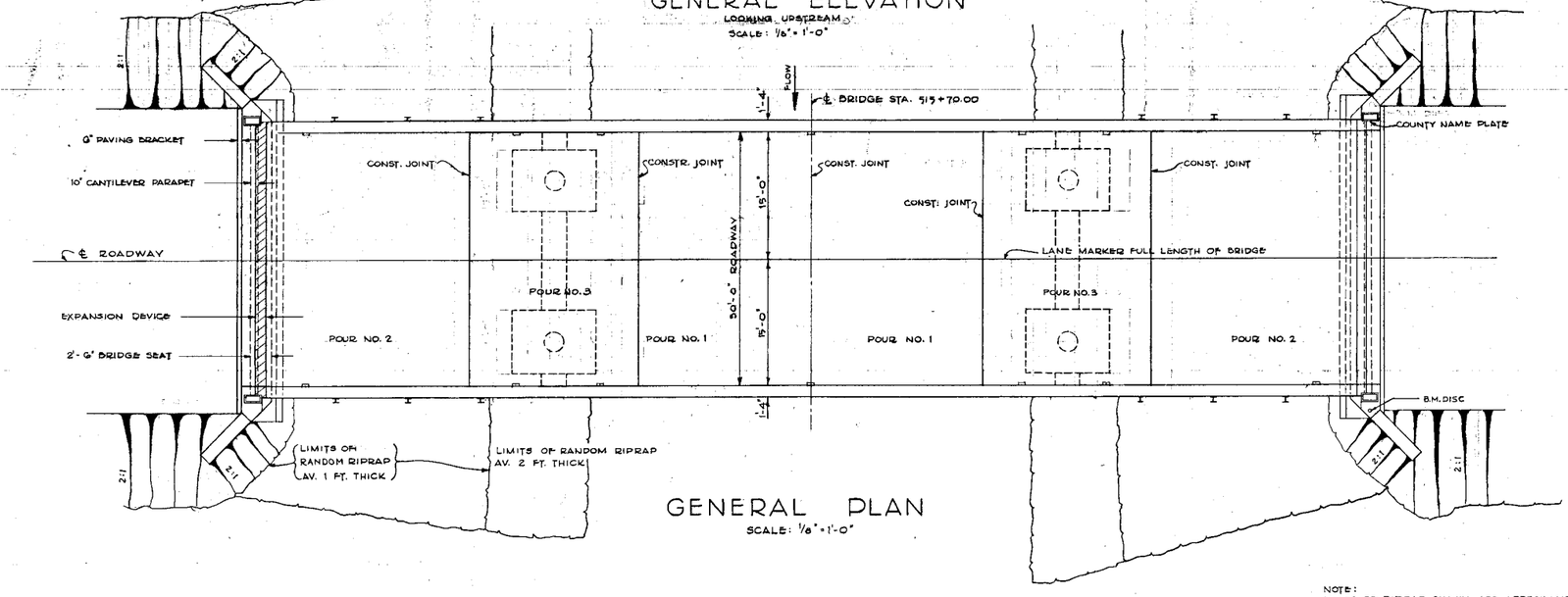
OLMSTED County, Minnesota — County Proj. No. _____ Plan No. _____ Sheet No. 1 of 12 Sheets

L. A. ROGERS CO. Minneapolis

DESIGN DATA
1961 A.A.S.H.O. SPECIFICATIONS
2-LANES H-20-44 LOADING
fs REINF. STEEL = 20,000 P.S.I.
fc 1600 P.S.I. n=8
fs=20,000psi STRUCTURAL STEEL-MHD 3306-61
fs=18,000 psi STRUCTURAL STEEL-MHD 3305-59

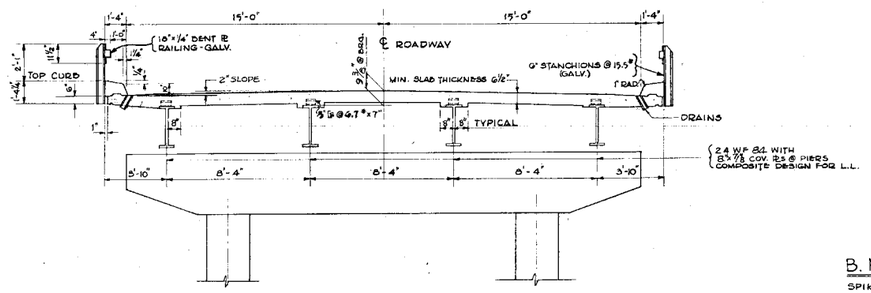


GENERAL ELEVATION
LOOKING UPSTREAM
SCALE: 1/8" = 1'-0"



GENERAL PLAN
SCALE: 1/8" = 1'-0"

NOTE:
LIMITS OF RIPRAP SHOWN ARE APPROXIMATE ONLY.
EXACT LIMITS TO BE DETERMINED BY ENGINEER IN FIELD.



TRANSVERSE SECTION THRU DECK
SCALE: 1/4" = 1'-0"

B. M. EL. 1047.80
SPIKE IN 24" COTTONWOOD
10' RIGHT STA. 516+95

SCHEDULE OF QUANTITIES FOR ENTIRE STRUCTURE

	Item No.	Item	Unit	Quantity
	2401.501	Concrete Mix Nº 1AG	cu. yd.	73
	2401.501	Concrete Mix Nº 3YG	cu. yd.	180
	2401.501	Concrete Mix Nº 3YG0	cu. yd.	11
	2401.521	Class DE Excavation	cu. yd.	117
	2401.522	Class WE Excavation	cu. yd.	160
	2402.546	Floor Drains (Type D)	unit	14
	2402.577	Standard Name Plate	unit	one
	2402.593	Bearing Assemblies - Fixed (Type "C")	unit	4
	2402.594	Bearing Assemblies - Expansion (Type "A")	unit	6
	2402.594	Bearing Assemblies - Expansion (Type "B")	unit	6
	2452.501	Untreated Timber Piling - Delivered	Lin. ft.	1120
	2452.502	Untreated Timber Piling - Driven	Lin. ft.	1084
	2452.503	Treated Timber Piling - Delivered	Lin. ft.	720
	2452.504	Treated Timber Piling - Driven	Lin. ft.	688
	2452.519	Untreated Timber Test Piles in Place - 50 ft. lg.	Pile	4
	2452.517	Treated Timber Test Piles in Place - 45ft. lg.	Pile	2
	2452.517	Treated Timber Test Piles in Place - 55ft. lg.	Pile	2
	2476.501	Painting Metal Structures	Structure	one
	2511.501	Random Rip-Rap Class A	cu. yd	275
*	401.641	Furnishing Reinforcement Bars	Pounds	46,590
*	401.741	Placing Reinforcement Bars	Pounds	46,590
*	402.621	Furnishing Structural Steel (MHD 3805-59)	Pounds	19,435
*	402.621	Furnishing Structural Steel (MHD 3306-61)	Pounds	50,642
*	402.721	Erecting Structural Steel	Pounds	70,077
Δ	2123.506	cu. yd. Drag Line	Hours	10

* See Special Provisions

LIST OF SHEETS

1	TITLE SHEET
2	GENERAL PLAN & ELEVATION
3	DECK LAYOUT
4	ABUTMENT DETAILS
5	PIER DETAILS
6	SLAB REINFORCING PLAN & LONGITUDINAL SECTIONS
7	FRAMING PLAN & BEAM SPAN ELEVATIONS
8	STRUCTURAL DETAILS & EXPANSION DEVICE
9	DETAIL PLATES
10	DETAIL PLATES
11	DETAIL PLATES
12	BRIDGE SURVEY

CONSTRUCTION NOTES
THE MINNESOTA DEPARTMENT OF HIGHWAYS SPECIFICATION FOR HIGHWAY CONSTRUCTION DATED MAY 1959 AND SUBMITTED FOR APPROVAL BY THE DIVISION ENGINEER OF THE BUREAU OF PUBLIC ROADS ON MARCH 26, 1959 SHALL GOVERN
KEYWAY SIZES ARE NOMINAL.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE 6-27-62 Signed: Leroy Tompkins REG. Nº 5523

PLANS PREPARED BY
AGNEBERG • SANKSTONE • ASSOCIATES
1418 FIRST AVE. N.E., ROCHESTER, MINN.

C.S.A.H. No. 15
BRIDGE No. 55508
OVER WEST BRANCH ZUMBRO RIVER
6 MILES S.W. OF ROCHESTER
GENERAL PLAN & ELEVATION
37'-60'-37' BEAM SPAN - 30 FT ROADWAY
SEC 24 T106N R15W
SALEM TWP OLMSTED CO.

APPROVED
DATE _____ OLMSTED COUNTY ENGINEER

APPROVED
STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
DATE 8-6-62 M. C. Waterloo BRIDGE ENGINEER - ASST

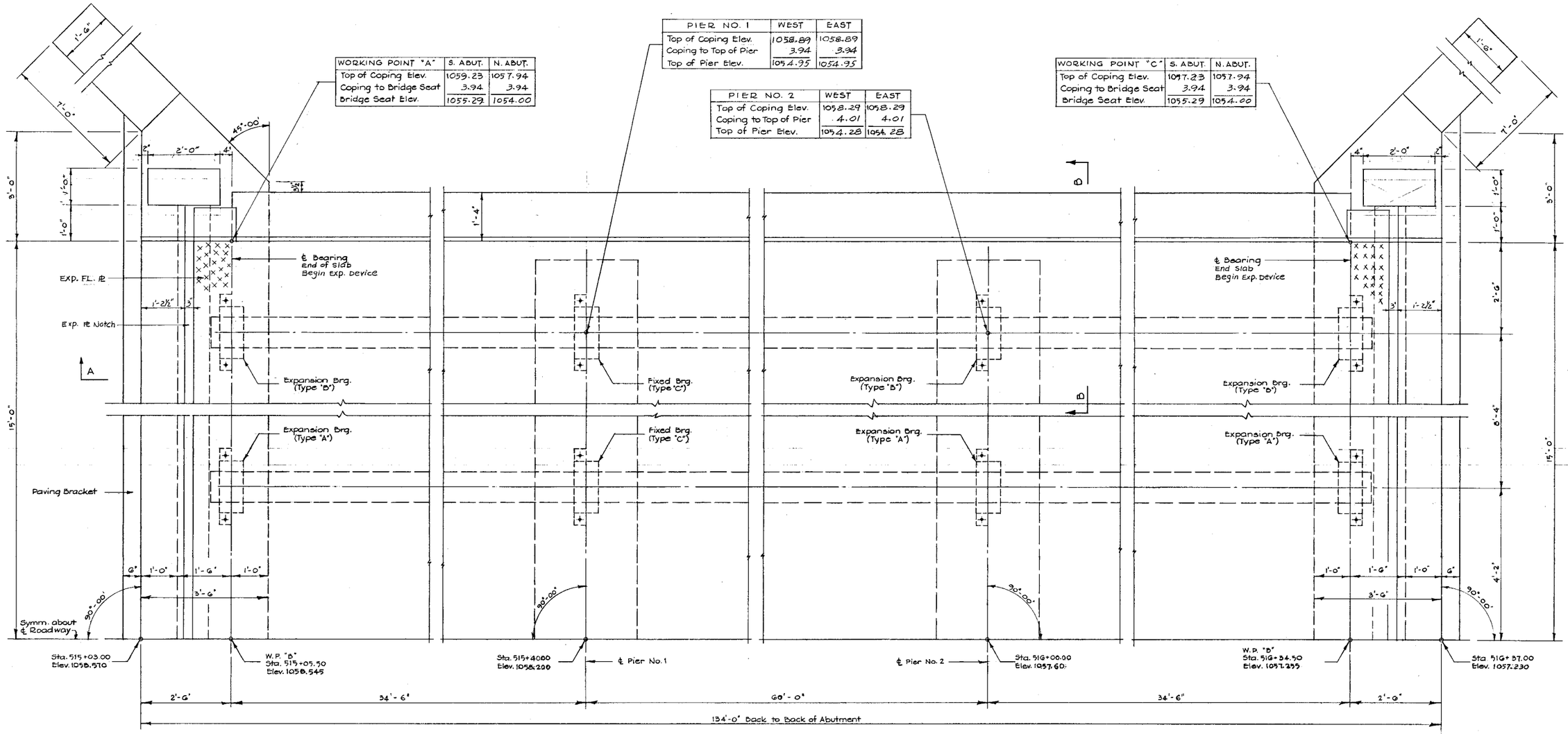
REVISED
DATE 7-23-62

WORKING POINT "A"	S. ABUT.	N. ABUT.
Top of Coping Elev.	1059.23	1057.94
Coping to Bridge Seat	3.94	3.94
Bridge Seat Elev.	1055.29	1054.00

PIER NO. 1	WEST	EAST
Top of Coping Elev.	1058.89	1058.89
Coping to Top of Pier	3.94	3.94
Top of Pier Elev.	1054.95	1054.95

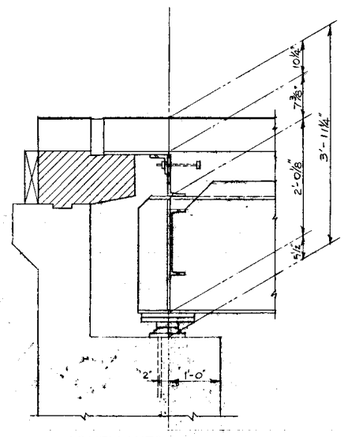
PIER NO. 2	WEST	EAST
Top of Coping Elev.	1058.29	1058.29
Coping to Top of Pier	4.01	4.01
Top of Pier Elev.	1054.28	1054.28

WORKING POINT "C"	S. ABUT.	N. ABUT.
Top of Coping Elev.	1059.23	1057.94
Coping to Bridge Seat	3.94	3.94
Bridge Seat Elev.	1055.29	1054.00

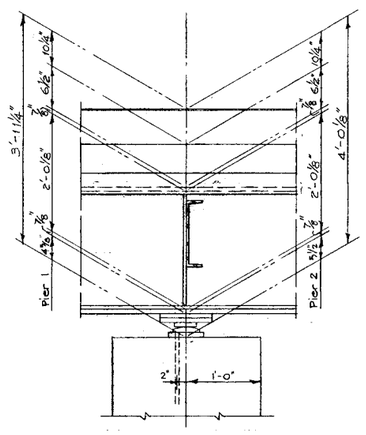


PART PLAN

Scale: ¾" = 1'-0"



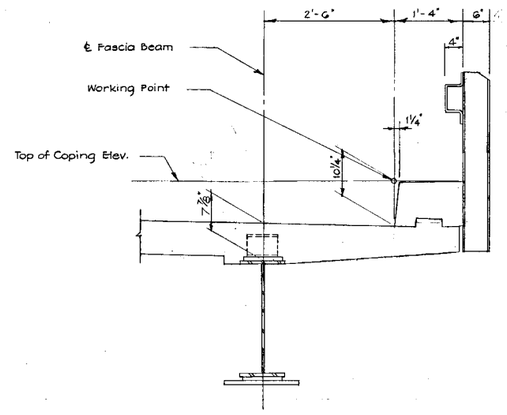
ABUTMENTS



PIERS 1 & 2

SECTION A-A

Showing Bearings for Fascia Beams



SECTION B-B

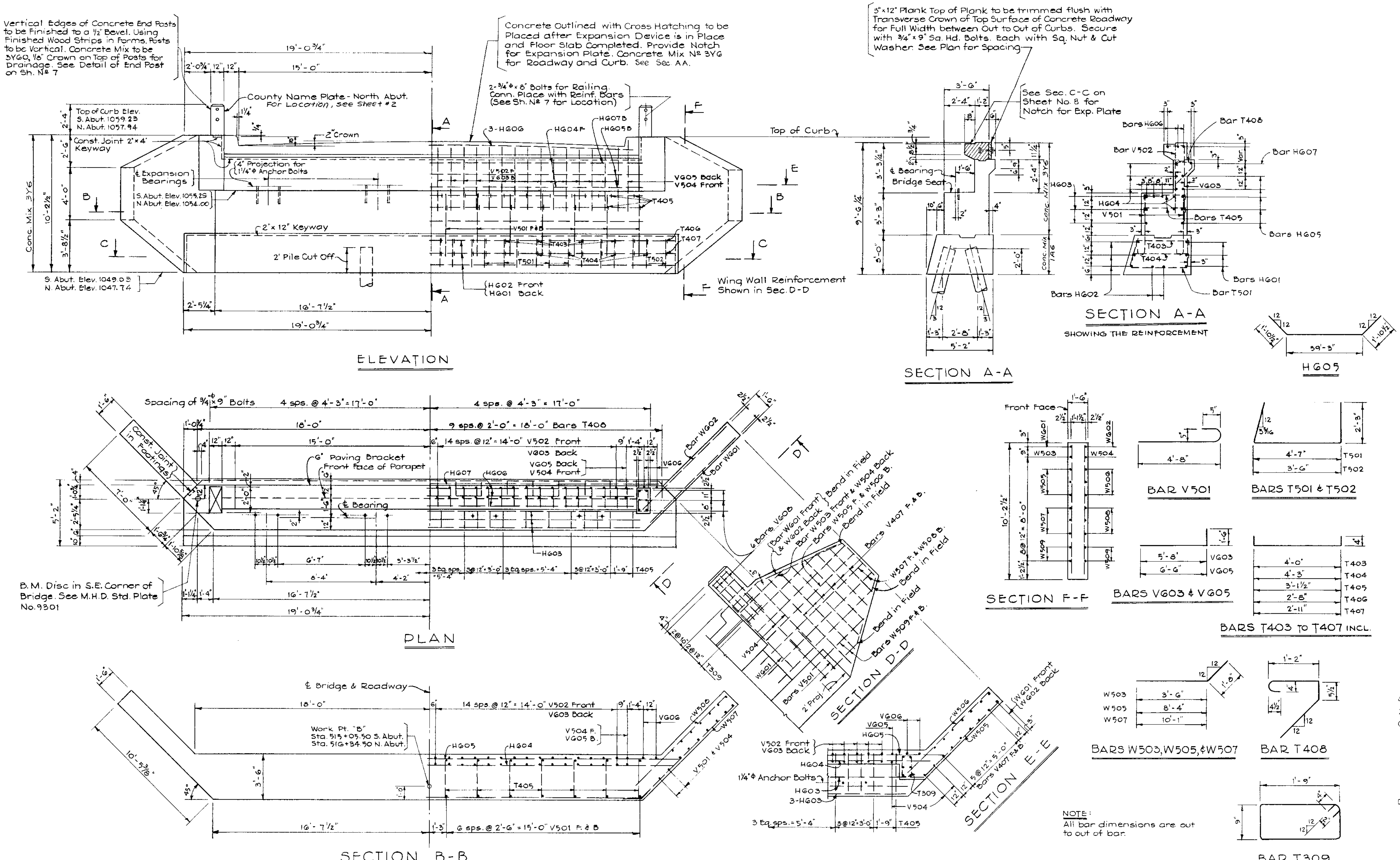
PLANS PREPARED BY
AGNEBERG • SANKSTONE & ASSOCIATES
1418 FIRST AVE. N.E., ROCHESTER, MINN.

C.S.A.H. Nº 15
BRIDGE Nº 55508

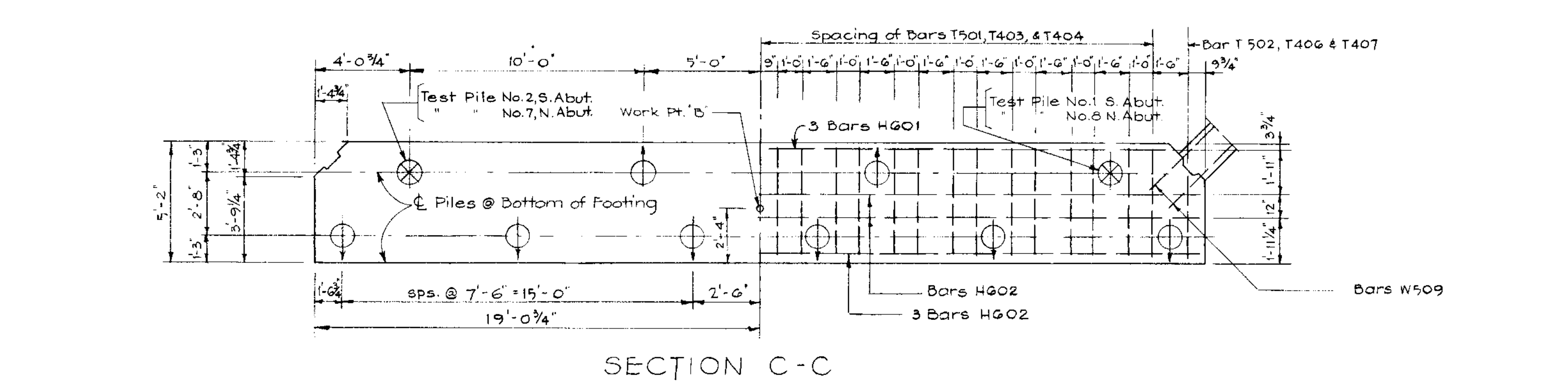
DECK LAYOUT

APPROVED 8-6-62

REVISED DATE 7/23/62



NOTE:
All bar dimensions are out to out of bar.



PILE NOTES

2 - Treated Timber Test Piles - 45 ft. long - South Abutment
2 - " " " " 55 ft. " North "
8 - " " Piles - Estimated Length - 40 ft. South Abut.
8 - " " Piles - " " - 50 ft. North Abut.
20 - Treated Timber Piles Req'd for 2 Abutments
All piles to be driven to a minimum bearing value of 24 tons per pile.
Piles shown thus ⌀ to be battered 3" in 12" in direction indicated by arrow
Estimate penetration 2 ft. less than length given.

COMPUTED PILE LOADS	TONS/PILE
Dead Load & Earth Pressure	15.85
Live Load	3.85
TOTAL	19.70

BILL OF REINFORCEMENT BARS FOR 2 ABUTS.

	Bar	№	Size	Length	Shape	Location
	H601	6	6	35'-6"	Str't	Footing - Longit.
	H602	10	6	37'-8"	"	" - "
	H603	10	6	33'-3"	"	Bridge Seat - Horiz.
	H604	10	6	38'-0"	"	Parapet - Front
	H605	10	6	43'-0"	Bent	" - Back
	H606	6	6	31'-9"	Str't	" - Top
	H607	2	6	36'-3"	"	Paving Bracket
	T501	56	5	9'-4"	Bent	Footing - Ties
	T502	4	5	8'-3"	"	" - "
	T403	56	4	4'-8"	"	" - "
	T404	56	4	4'-11"	"	" - "
	T405	76	4	3'-9"	"	Bridge Seat - Ties
	T406	4	4	3'-4"	"	Footing - "
	T407	4	4	3'-7"	"	" - "
	T408	38	4	3'-6"	"	Paving Bracket
	T309	20	3	5'-9"	"	End Posts
	V501	64	5	5'-3"	1-Hook	Bridge Seat - Front & Back
	V502	60	5	5'-3"	Str't	Parapet - Front
	V603	60	6	7'-2"	Bent	" - Back
	V504	12	5	6'-0"	Str't	" - Front
	V605	4	6	8'-0"	Bent	" - Back
	V606	8	6	6'-6"	Str't	" - "
*	V407	24	4	13'-11"	"	Wing Walls
	V608	24	6	5'-0"	"	End Posts
	W601	4	6	19'-9"	Bend in Field	Wing Walls - Front
	W602	4	6	13'-6"	"	" " - Back
	W503	4	5	5'-2"	Bent	" " - Front
	W504	4	5	4'-6"	Str't	" " - Back
	W505	12	5	10'-0"	Bent	" " - Front
	W506	12	5	9'-6"	Str't	" " - Back
	W507	12	5	11'-9"	Bent	" " - Front
	W508	12	5	10'-0"	Str't	" " - Back
	W509	16	5	6'-0"	"	" " - Front & Back

* Cut two bars from one in the field

SUMMARY OF QUANTITIES FOR 2 ABUTMENTS

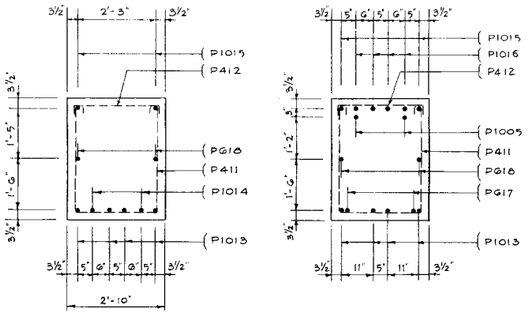
	Item	Quantity
	Concrete Mix № 3Y6	56.4 cu. yd.
	Concrete Mix № 1A6	39.7 cu. yd.
	Concrete Mix № 3Y60	0.7 cu. yd.
	Class D.E. Excavation	117 cu. yd.
	Reinforcement Bars	7070 lbs.
	Structural Steel (M.H.D. 3305-59)	30 lbs.
△	18 Bolts 3/4"x9" Lg. Sq. Head & Nut & Cut Washer	
×	1 County Name Plate, Detail Plate № 2104	
○	Bench Mark Disc, One Per M.H.D. Std. Plate No. 9300	
	Expansion Bearings Mark "A"	4 units
	Expansion Bearings Mark "B"	4 units
	2 Treated Timber Test Piles in Place	45 ft. long
	2 Treated Timber Test Piles in Place	55 ft. long
	Treated Timber Piling (Exclusive of Test Piles)	720 lin. ft.
□	4 Pieces 3"x12"x19'-0" Planks	

△ Included in weight of structural steel
× Bridge № 55508 Dated 1962
○ State will furnish disc. Payment for placing disc will be included in price bid for other items.
□ Included in prices bid for other items.

PLANS PREPARED BY
AGNEBERG, SANKSTONE & ASSOCIATES
1418 FIRST AVE. N.E. ROCHESTER, MINN.

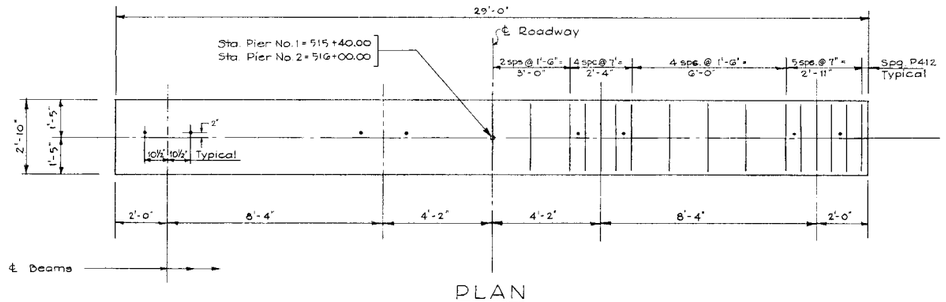
C.S.A.H. № 15
BRIDGE № 55508
ABUTMENT DETAILS

APPROVED 8-6-62 REVISED DATE 7/23/62

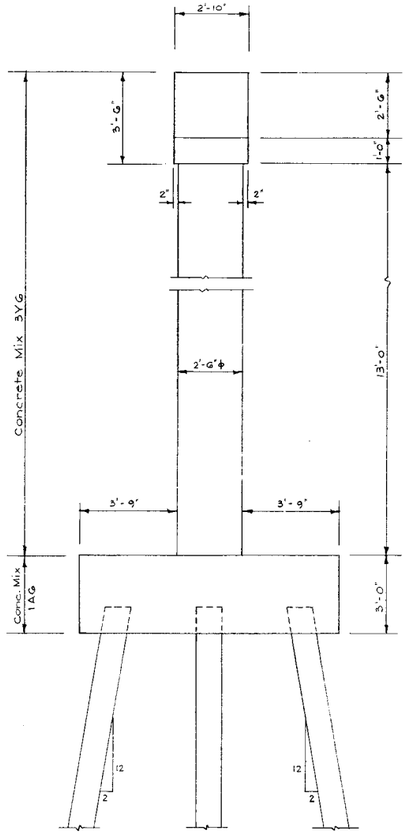


SECTION A-A
Scale: ½"=1'-0"

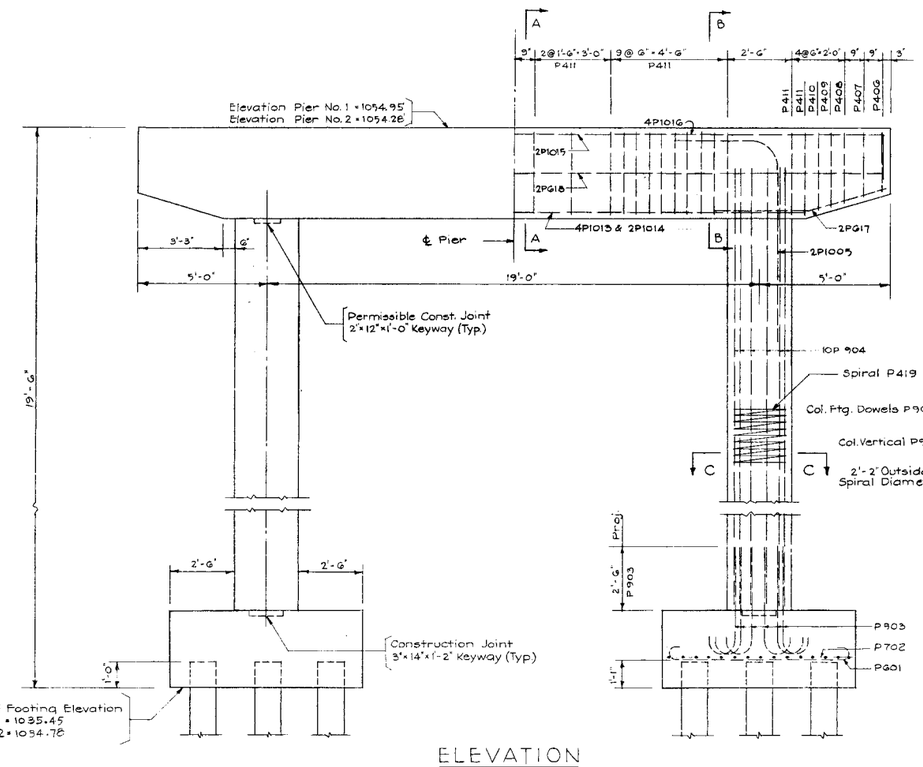
SECTION B-B
Scale: ½"=1'-0"



PLAN

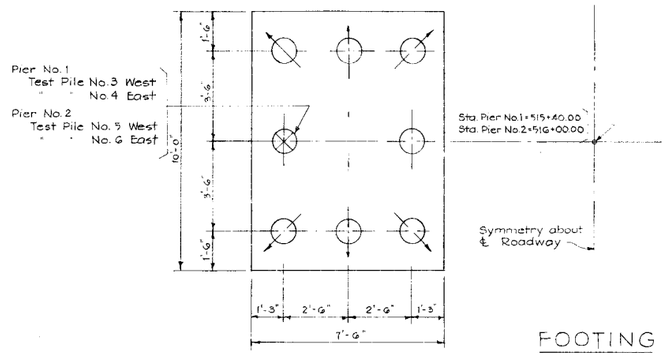


END ELEVATION

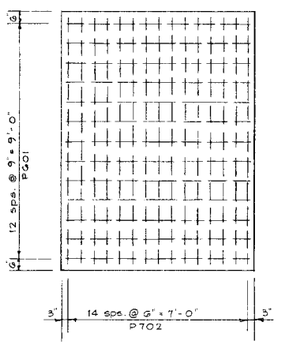


ELEVATION
Scale: ⅜"=1'-0"

SECTION C-C



FOOTING



BILL OF REINFORCEMENT BARS FOR TWO PIERS					
Bar	No.	Size	Length	Shape	Location
P601	52	6	8'-5"	Bent	Footing - Transverse
P702	60	7	11'-3"	"	" - Longitudinal
P903	40	9	5'-9"	"	" - Dowels
P904	40	9	15'-0"	Straight	Column - Vertical
P1005	8	10	9'-10"	Bent	" - Dowels
P406	4	4	7'-6"	Bent	Cap - Stirrups
P407	4	4	8'-1"	"	" - "
P408	4	4	8'-5"	"	" - "
P409	4	4	8'-9"	"	" - "
P410	4	4	9'-1"	"	" - "
P411	36	4	9'-5"	"	" - "
P412	62	4	3'-6"	"	" - Brg. Seat Ties
P1013	8	10	22'-6"	Straight	Cap - Horiz. - Bot.
P1014	4	10	15'-0"	"	" - " - " - Bot.
P1015	4	10	32'-6"	Bent	" - " - " - Top
P1016	16	10	9'-0"	Straight	" - " - " - Top
P617	8	6	6'-8"	Bent	" - " - " - End
P618	4	6	28'-6"	Straight	" - " - " - Middle
P419		4			Column - Spiral

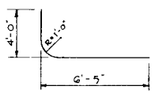
NOTE:
Bridge seat reinforcement shall be carefully placed to avoid interference with drilling holes for anchor bolts.

Anchor bolt holes shall be drilled and anchor bolts grouted in place after girders have been erected.

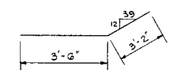
SUMMARY OF QUANTITIES FOR TWO PIERS	
Concrete Mix No. 1AG	33.3 cu. yds.
Concrete Mix No. 3YG	32.3 cu. yds.
Reinforcement Bars	9250 lb.
Class WE Excavation	160 cu. yds.
Δ Untreated Timber Test Piles in Place - 50 ft. long	4 piles
Untreated Timber Piling Delivered	112.0 lin. ft.
Fixed Bearings Mark "C"	4 units
Expansion Bearings Mark "A"	2 units
Expansion Bearings Mark "B"	2 units

Δ Exclusive of Test Piles

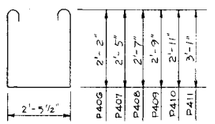
P412 & P1015



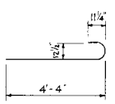
P1005



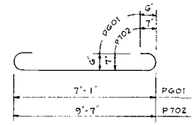
PG17



P406 TO P411 INCL.



P903



PG01 & P702

NOTE: All dimensions are out to out of bars.

COMPUTED PILE LOADS	TONS/PILE
Dead Load	9.9
Live Load	4.0
Overturning	5.3
Total	19.2

P419 - SPIRAL DATA	
Outside Diameter	2'-2"
Height	13'-3"
Pitch	3"
Spiral Rod Size	½" ϕ
Est. Weight Each	260#

For Material & Workmanship, See Special Provisions

PILE NOTES:

2 Untreated Timber Test Piles in Place, 50 ft. long - Pier No.1
14 Untreated Timber Piles, Est. Length 40 ft. long - Pier No.1
2 Untreated Timber Test Piles in Place, 50 ft. long - Pier No.2
16 Untreated Timber Piles, Est. Length 40 ft. long - Pier No.2
32 Untreated Timber Piles Reqd. for 2 Piers
Estimated penetration 2 ft. less than length given
All piles to be driven to a minimum bearing of 24 tons per pile
Piles marked thus ⊖→ to be battered 2" per ft. in direction shown

PLANS PREPARED BY
AGNEBERG - SANKSTONE & ASSOCIATES
1418 FIRST AVE. N.E., ROCHESTER, MINN.

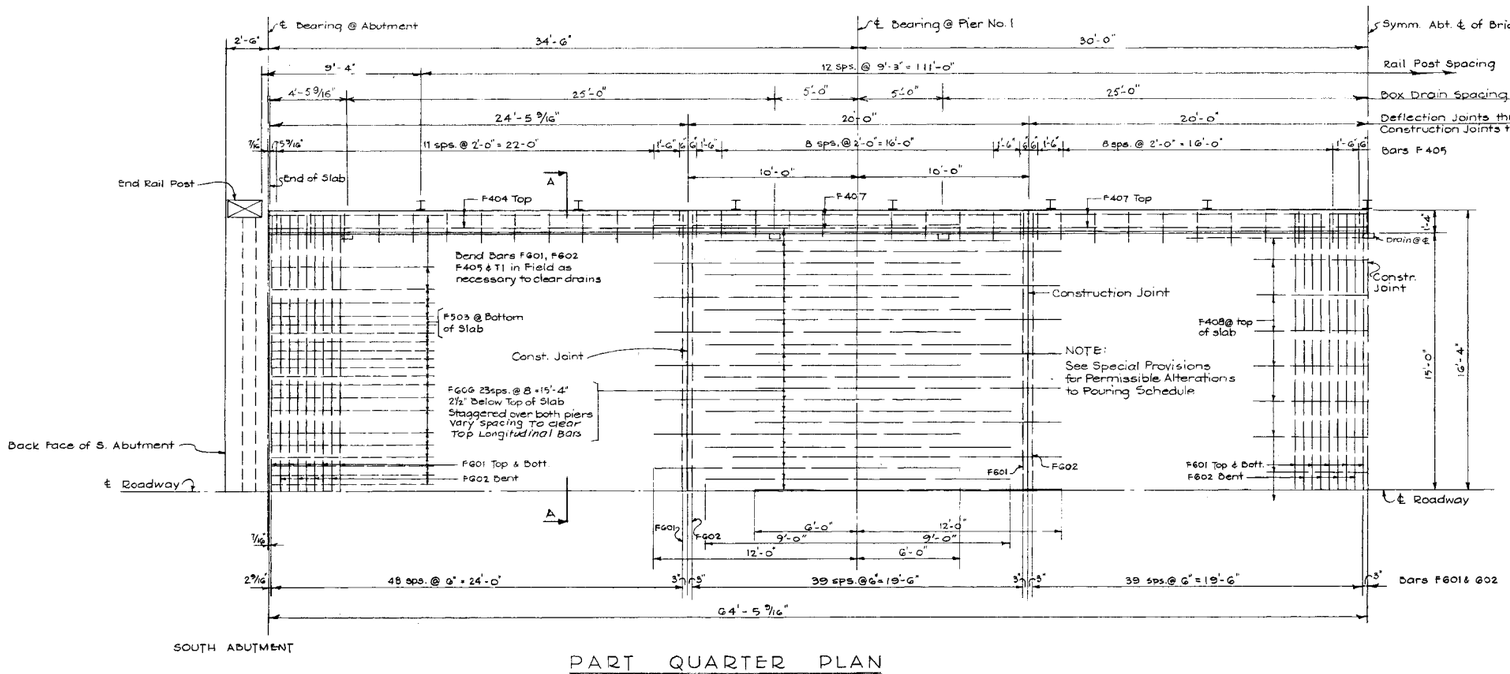
C.S.A.H. No. 15
BRIDGE No. 55508
PIER DETAILS

APPROVED 8-6-62
REVISED DATE 7/23/62

55508

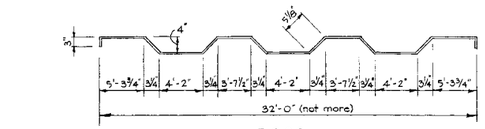
BILL OF REINFORCEMENT BARS FOR SUPERSTRUCTURE					
Bar	No.	Size	Length	Shape	Location
F601	260	6	32'-3"	Str't	Slab - Transverse
F602	128	6	33'-6"	Bent	" - "
* F503	270	5	22'-9"	Str't	" - Longitudinal
F404	8	4	24'-2"	"	Curb - Longitudinal
F405	140	4	3'-3"	Bent	" - Transverse
F406	94	6	18'-0"	Str't	Slab - over pier
F407	16	4	19'-8"	"	Curb - Longitudinal
* F408	108	4	22'-9"	"	Slab - Longitudinal

* To have a min. 1'-3" Lap @ splice

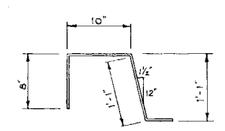


PART QUARTER PLAN

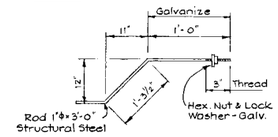
Scale: ¼" = 1'-0"



F602



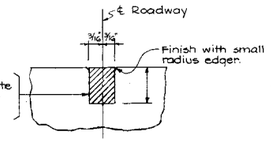
F405



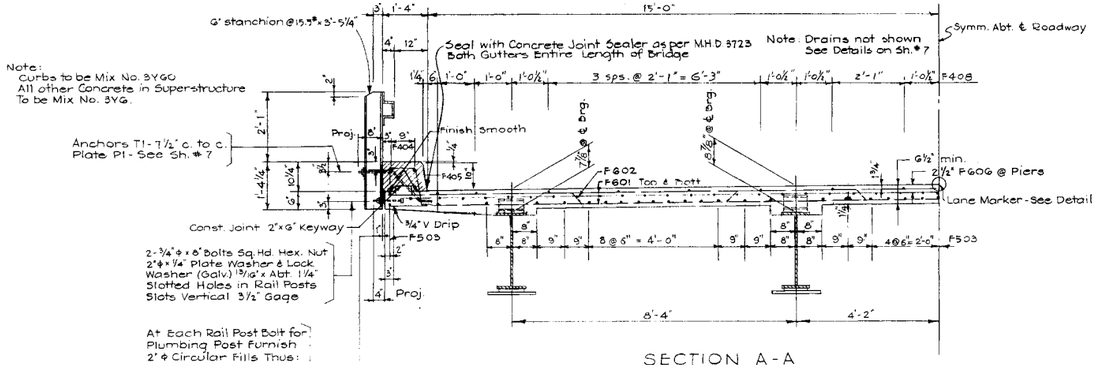
RAIL POST ANCHORS-T1

52 Req'd - 2 @ Each Post

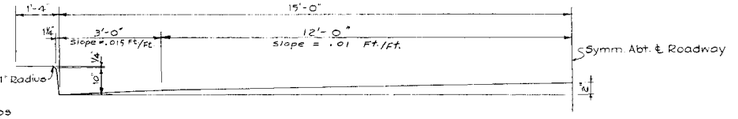
Note: All Bar Dimensions are out to out of Bars.



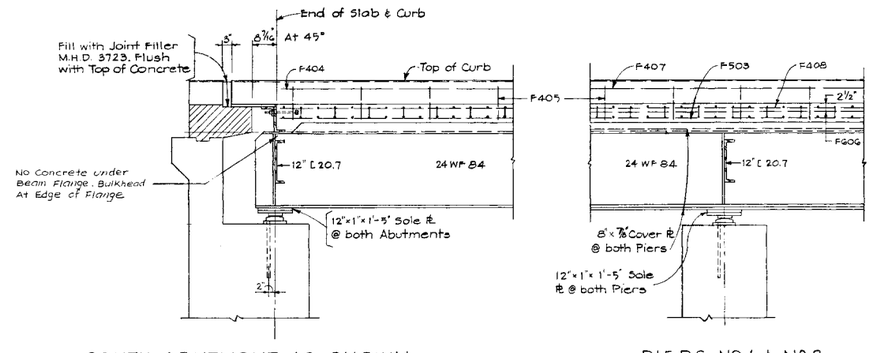
DETAIL OF LANE MARKER



SECTION A-A

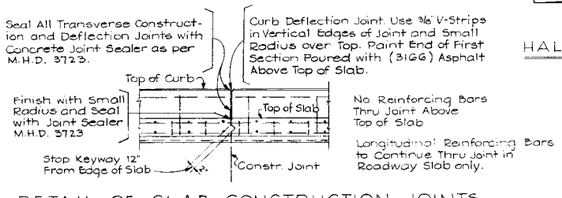


HALF PROFILE OF FINISHED FLOOR SURFACE



SOUTH ABUTMENT AS SHOWN
NORTH ABUTMENT OPP. HAND

PIERS No. 1 & No. 2
AS SHOWN



DETAIL OF SLAB CONSTRUCTION JOINTS AND CURB DEFLECTION JOINTS

SUMMARY OF QUANTITIES FOR SUPERSTRUCTURE	
Concrete Mix No. 3YG	91 cu. yd.
Concrete Mix No. 3YG0	10 cu. yd.
Reinforcement Bars	30,268 #
Structural Steel (M.H.D. 3302-61)	50,642 #
* Lead Wool	
□ ¾"ø x 8" Bolts - Sq. Hd. Hex. Nut 2"ø x ¼" ℄ Wash & Lock Washer - Galv.	
Floor Drains - Box Drains - Details Sh. No. 7	14 units
□ Railing and Stanchion Railing Posts - Details Sh. No. 7	
□ Railpost Anchors T1 - Details Above	
Structural Steel (M.H.D. 3305-59)	19405 *

* Included in Prices Bid for Other Items
□ Included in Weight of Structural Steel

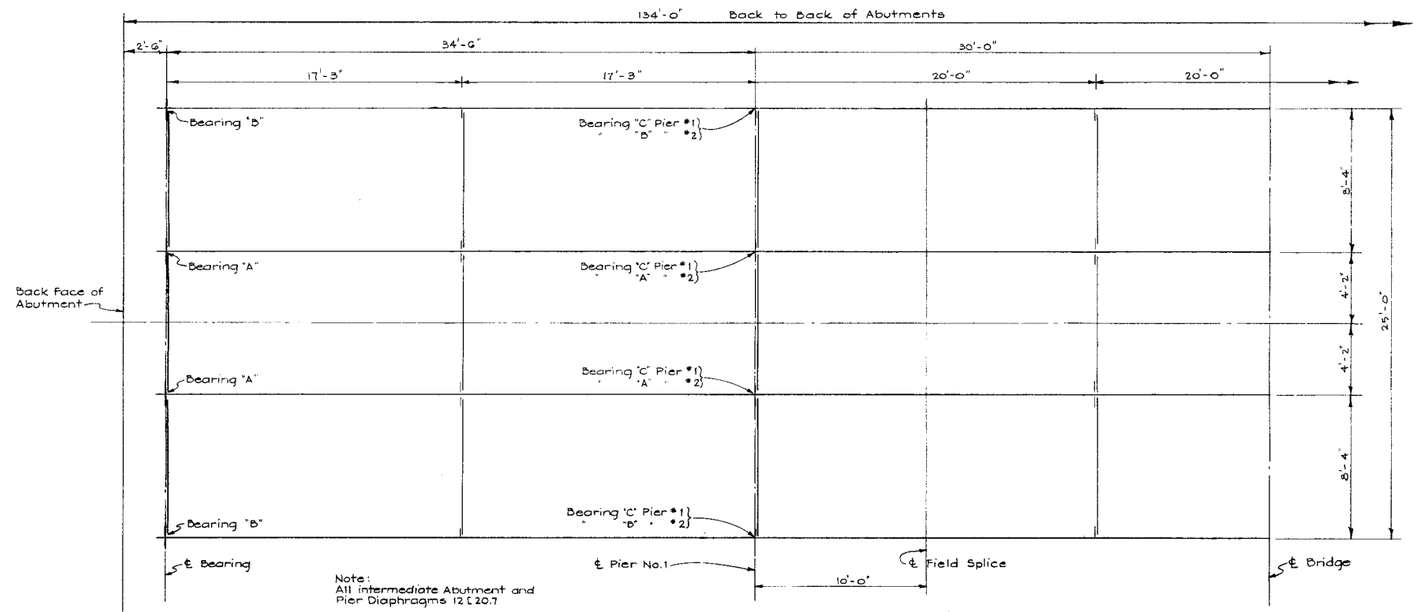
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C.S.A.H. No. 15
BRIDGE No. 55508
SLAB REINFORCEMENT PLAN & LONG. SECTIONS

REVISED DATE 7/23/62

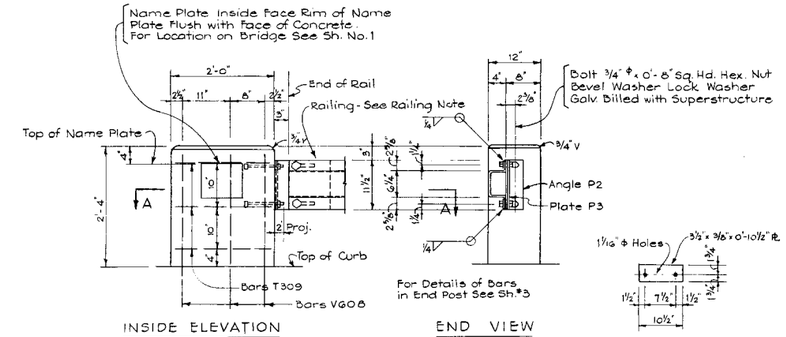
APPROVED 8-6-62

LOCATION AND DESCRIPTION OF BEARINGS						
Bearing Mark	Location	Nº Units	Type	Std Detail	Load kips	Depth
A	Both Abut.	4	Exp. Type with Guide Bars	B138A	120	4½"
B	" "	4	" " without " "	B139A	120	4½"
C	Pier Nº 1	4	Fixed Type	B137A	120	3⁵/₁₆"
A	" Nº 2	2	Exp. Type with Guide Bars	B138A	120	4½"
B	" Nº 2	2	" " without " "	B139A	120	4½



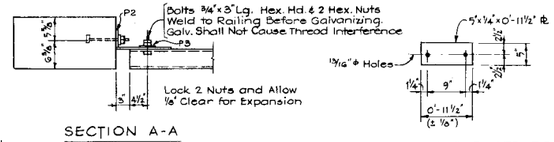
SOUTH ABUTMENT

HALF STEEL FRAMING PLAN



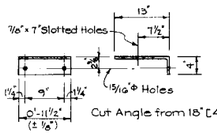
DETAIL OF END RAILPOST

RAILPOST PLATES P1
26 Req'd. Thus (galvanized)

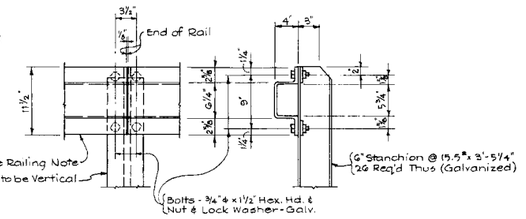


SECTION A-A

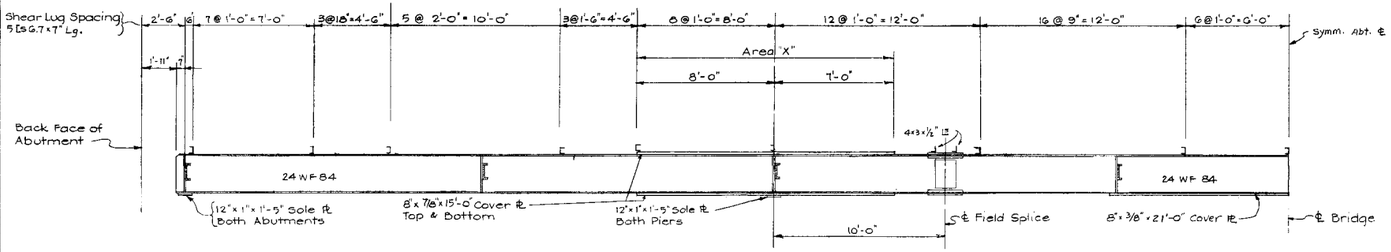
RAIL CONNECTOR PLATE P3
4 Req'd Thus (Galvanized)



RAIL CONNECTOR ANGLE P2
4 Req'd Thus (Galvanized)

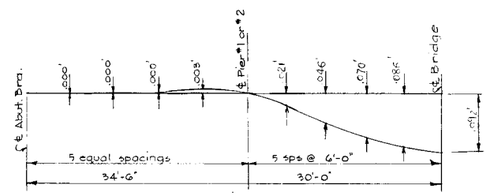


DETAIL OF RAILING CONNECTION TO STEEL INTERMEDIATE POSTS



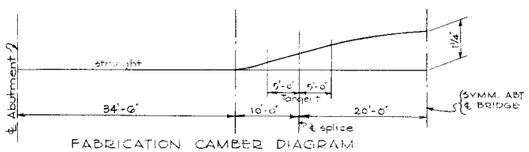
ELEVATION OF BEAMS

Scale : ¼" = 1'-0"

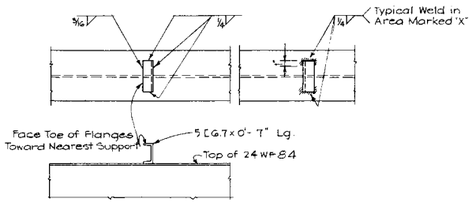


HALF DEFLECTION DIAGRAM

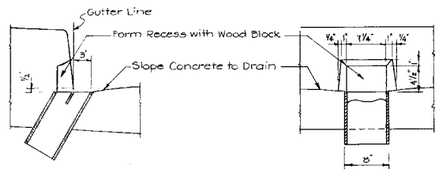
Deflections shown are for weight of concrete only. The Engineer will take elevations at top of beams after erection and will allow for deflections shown to enable contractor to build forms to correct grade and specified slab thickness.



FABRICATION CAMBER DIAGRAM



DETAIL OF SHEAR LUGS



DETAIL OF BOX DRAINS

14 Req'd Thus

Box Drains to be as per M.H.D. Std Plate Nº B13A, Sheet 11.

Railing Note:

Railing to be 18" x ¼" U.M. plate bent to dimensions shown with ½" inside radius bends.
Railing to be continuous for a minimum of two panels and a maximum of three panels. Leave ⅛" clear opening at joints between ends of rails.
The fabricator will be permitted to splice continuous bent plate railings at the ℄ of railposts using a butt weld ground smooth.

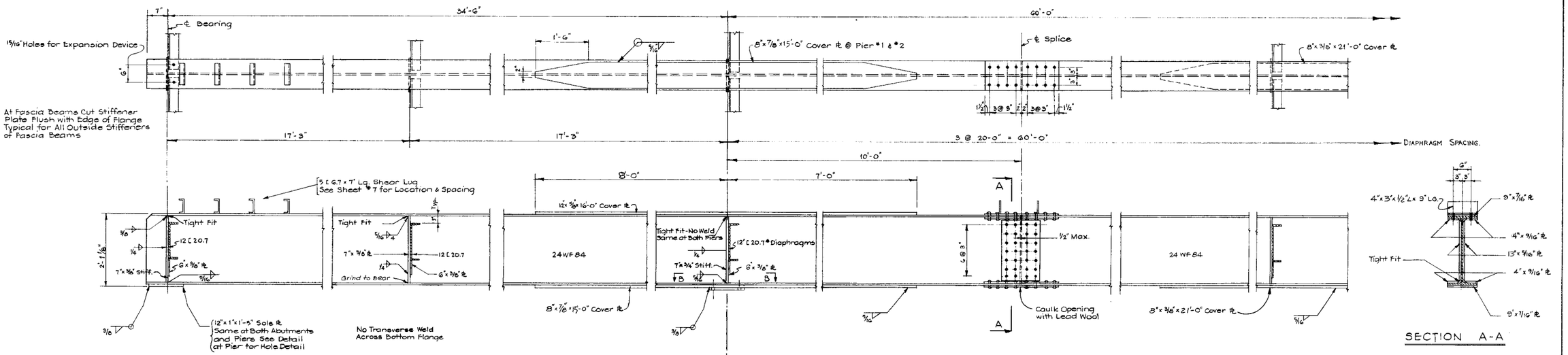
All railings, posts, bolts, and all fittings to be measured and paid for as structural steel.
Galvanize Structural Steel items after fabrication as per M.H.D. 3394
Galvanize bolts, nuts, washers, fills and anchors T1 as per M.H.D. 3392

REVISED DATE 7/23/62

PLANS PREPARED BY
AGNEBERG · SANKSTONE · ASSOCIATES
1418 FIRST AVE. N.E. ROCHESTER, MINN.

C.S.A.H. Nº 15
BRIDGE Nº 55508
FRAMING PLAN AND BEAM SPAN ELEVATIONS

APPROVED 8-6-62



NOTE: For Expansion Device

Galvanize per M.H.D. 3394 after fabrication
Repair galvanized surfaces damaged after welding per M.H.D 2471.3L3
Roadway floor plates shall be raised pattern, similar to Inland Steel Company's Large Pattern, U.S. Steel Section 3-300, Allan Wood Company's Super Diamond or equal.

Galvanize as per M.H.D. 3394
Galvanizing shall not cause Thread Interference

CONSTRUCTION NOTES:

All rivets to be 7/8" ø, all holes 15/16" ø unless otherwise noted.
All field connections to be riveted except as noted.
Paint all structural steel except drains and railing and except as noted.
Shop coat - red lead as per M.H.D. 3506
1st field coat - aluminum as per M.H.D. 3527
2nd field coat - aluminum as per M.H.D. 3528
General reaming will be required as per M.H.D. 2471.3 E1c
All diaphragm spacing are dimensioned to ℄ of plates.
WF Beams, Splices and Cover plates shall be Structural Steel M.H.D. 3306-61
All other steel shall conform to M.H.D. 3305-59 (Structural Steel)

Weld Cover Plates as follows:
Start Cover Plate welds at center of plate and proceed simultaneously on both sides of plate towards either end.
Do not tack weld. Use C clamps and release clamp as welding proceeds, to relieve stress.

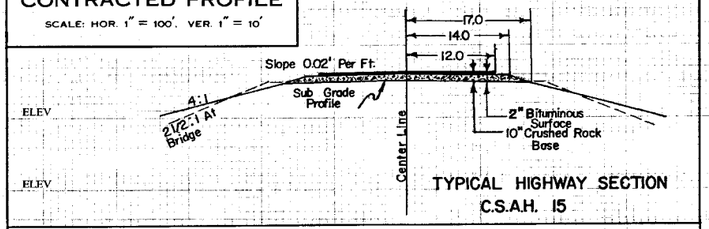
PLANS PREPARED BY
AGNEBERG, SANKSTONE & ASSOCIATES
1418 FIRST AVE. N.E. ROCHESTER, MINN.

C.S.A.H. No 15
BRIDGE No 55508
STRUCTURAL DETAILS & EXPANSION DEVICE

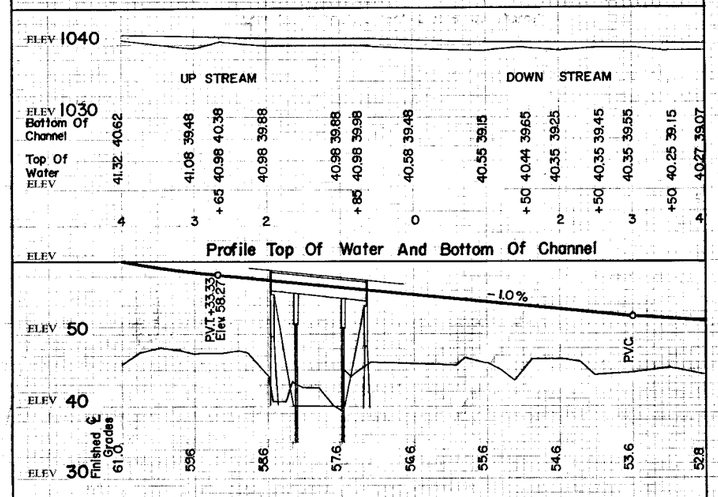
REVISED
DATE 7/21/62
APPROVED 8-6-62

CONTRACTED PROFILE

SCALE: HOR. 1" = 100'. VER. 1" = 10'



TYPICAL HIGHWAY SECTION
C.S.A.H. 15

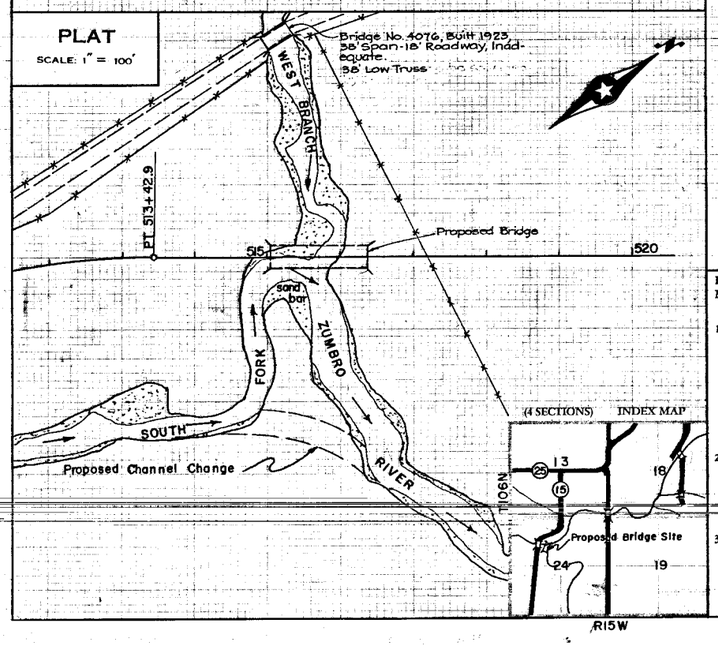


Profile Top Of Water And Bottom Of Channel

PROFILE C.S.A.H. 15

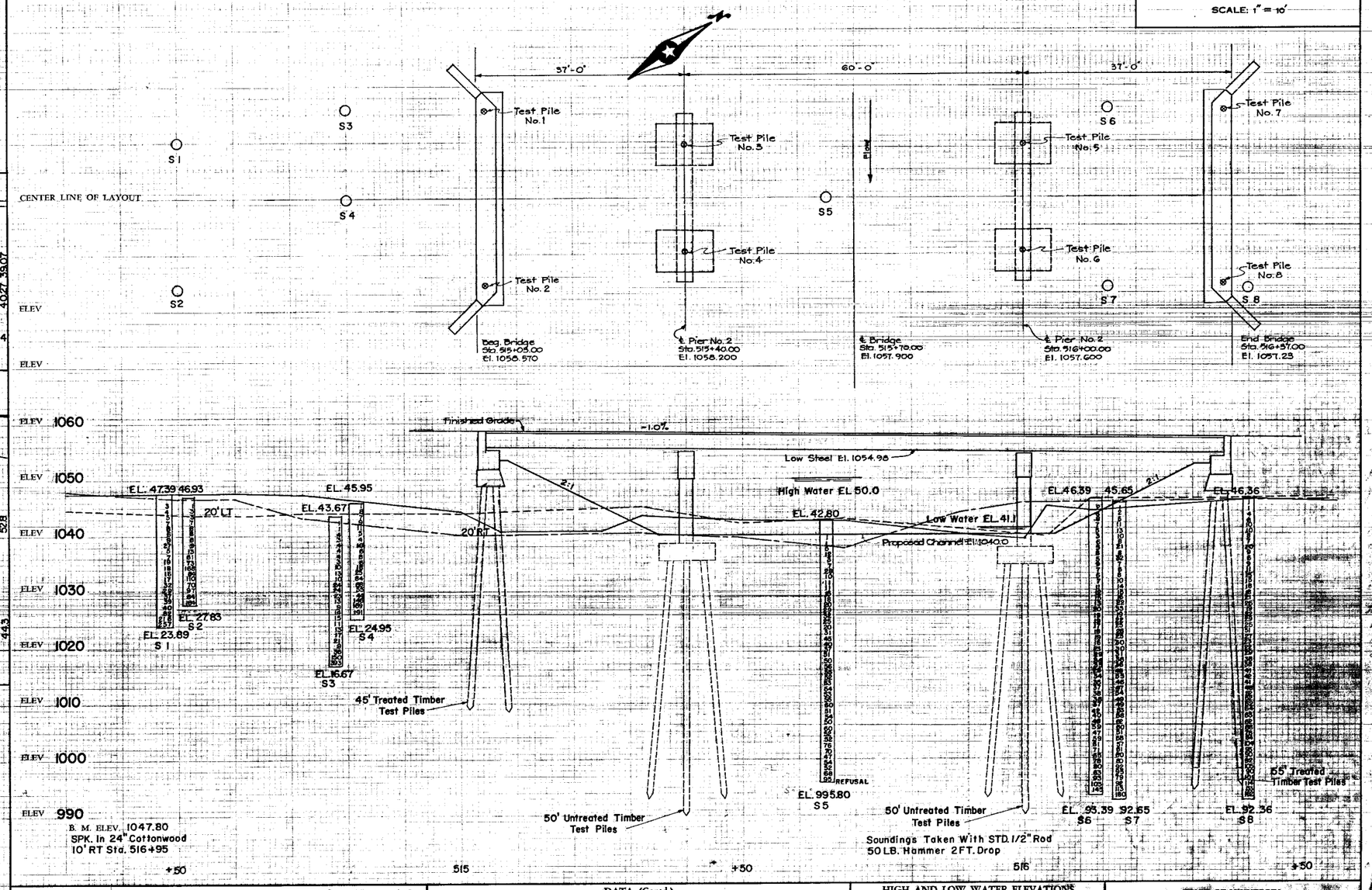
PLAT

SCALE: 1" = 100'



PLAN AND PROFILE

SCALE: 1" = 10'



FOLLOW SEPARATE "INSTRUCTIONS FOR PREPARATION OF BRIDGE SURVEYS" WHEN MAKING BRIDGE SURVEYS.

DATA

1. Preliminary recommendations of Engineer in charge of Bridge Survey:
   - a. Net span length and type of bridge: 37'-60'-37' Beam Span
   - b. Width of roadway on bridge: 30'
   - c. Number and width of sidewalks, if any: None
   - d. Locate center of bridge at station: Sta. 515+70
   - e. If a skew bridge is recommended, the angle of skew should be: None
   - f. Is piling required? Yes
2. Special features: Waterfalls, dams, exceptional floods, ice, driftwood, sliding banks, logging, etc. Channel Change required to obtain proper horizontal alignment of roadway.
3. Changes: In height or length from that of old bridge, and reasons why: Raise and length to improve waterway.

DATA (Contd.)

4. Other bridges in vicinity:
   - a. Over same stream (particularly structures which carry high water without overflow of roadway); give location, length, height above water, net cross-sectional area at high water stage and estimated age: 2-40' Spans approx. 2 mi. upstream. 600 Sq. ft. of opening approx. 3 mi. upstream. 44' Span Low Truss approx. 1/2 mi. downstream. Present Bridge No. 4076 BUILT 1923, 38' Span-18' Roadway, Inadequate
   - b. Over or under same highway or railroad; give location, length, horizontal and vertical clearances and estimated age:
   - c. Reasons why these bridges are, or are not, fair indications of what length the proposed bridge should be:
5. If structure is over a drainage ditch, is ditch gradient liable to be altered?
6. Navigation clearances required, if any: None
7. Information and evidence in regard to high water stages was obtained as follows: March 26, 1961 – Field Observation
8. Must contractor provide for traffic during construction of proposed bridge? No. If so, by what means?

HIGH AND LOW WATER ELEVATIONS

Data obtained from Field Observation reflects highest water elevation in the area of this construction to be 1050.00 and the lowest water elevation to be 1041.10. The above figures are for informational purposes only. The state neither warrants nor represents that these figures for high water and low water are in any way indicative of the high water or low water to be expected or encountered during this construction.

SHIPPING POINT

Proposed Bridge is 6 miles S.W. of * Rochester Minn. which is the nearest Railroad shipping point.

*(Give name of town, station or siding)

1-26-62 Date — G. J. Sadlowski, Project or County Engineer

3/27/62 Date — Claude H. Hebblewhite, District Engineer

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE SURVEY

FOR

PROPOSED BRIDGE LOCATED 6 MILES S.W. OF Rochester (TOWN OR CITY) ON C.S.A.H. 15 (T.H., S.A.R. OR C.A.R. NUMBER)

SEC. 24 TWP. 106 N R. 15 W

TOWNSHIP Salem COUNTY Olmsted

SURVEY MADE DURING MONTH OF July 19 61

SURVEY MADE BY G. J. Sadlowski

REVISED DATE 7/23/62

BRIDGE No. 55508

State Proj. No. 55-615-04 CSAH No. 15 North Bridge Sheet No. 12 of 12 Sheets