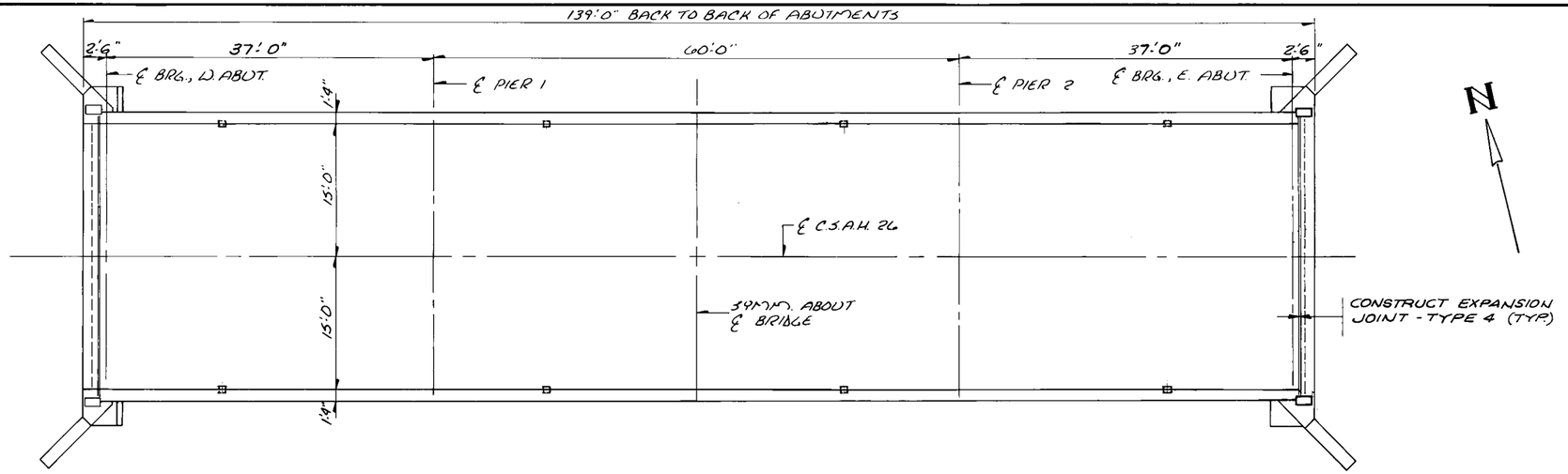
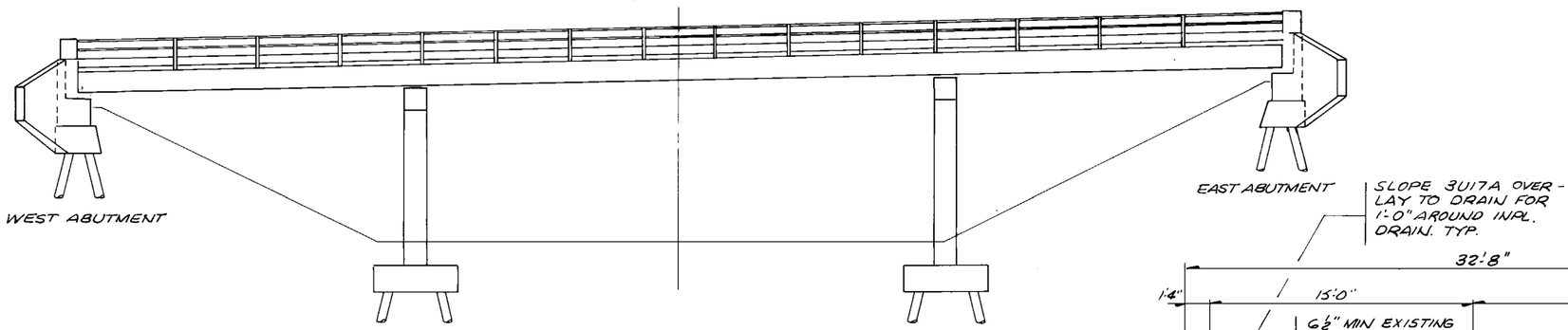
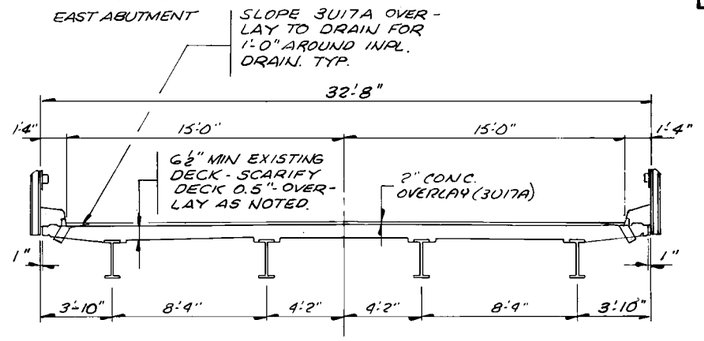


PLAN



ELEVATION



SECTION THRU DECK

DESIGN DATA FOR NEW CONSTRUCTION

1989 & INTERIM. AASHTO DESIGN SPECIFICATIONS
LOAD FACTOR DESIGN METHOD ~ HS 20 LOADING
REINFORCED CONCRETE: f'c: 4000 p.s.i. n: 8
fy: 60000 p.s.i. REINF
NEW STRUCTURAL STEEL: fy: 36000 p.s.i. SPEC. 3306
fy: 50000 p.s.i. SPEC. 3309
TOTAL DECK AREA: 4518 S.F.
ADT: 252
INPL. BRIDGE BUILT 1969

CONSTRUCTION NOTES

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS AMENDED BY THE JAN. 2, 1991 SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN.

THE FIRST DIGIT OR FIRST TWO DIGITS OF EACH BAR MARK INDICATES BAR SIZE.

BARS MARKED WITH THE SUFFIX 'E' SHALL BE EPOXY COATED.

NO CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. REMOVAL & RECONSTRUCTION SHALL CONFORM TO MN DOT 2433.

APPROVED BONDING GROUT SHALL BE APPLIED TO ALL VERTICAL EDGES BETWEEN NEW & INPLACE CONCRETE AT JOINT & SLAB RECONSTRUCTION

ALL EXISTING REINFORCEMENT TO REMAIN INPLACE EXCEPT AS NOTED OR DIRECTED BY THE ENGINEER IN FIELD.

LIST OF SHEETS

NO.	TITLE
1	GENERAL PLAN & ELEVATION
2	MISC. DETAILS
3	EXPANSION JOINT
4	PROTECTION PLATE
5-7	ORIGINAL BRIDGE DETAILS
8	TRAFFIC CONTROL

APPROVED
Michael Sheehan
OLMSTED COUNTY
COUNTY ENGINEER
DATE: 2-25-93

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.

Dale Draves
REG. NO. 20666
DATE: 2-17-93

PLANS PREPARED BY:
ERICKSON ENGINEERING CO.
3340 REPUBLIC AVE.
ST. LOUIS PARK, MN. 55426

C.S.A.H. 26 OLMSTED COUNTY
MINNESOTA DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 55511

LOCATED 1.6 MI. WEST OF JCT. C.S.A.H. 3 ON C.S.A.H. 26 OVER SO. FORK ZUMBRO RIVER.

BRIDGE REHABILITATION ~ REPLACE SCARIFY DECK, ADD LOW SLUMP OVERLAY

GENERAL PLAN & ELEVATION

SEC. 6 T105 R15
ROCK DELL TOWNSHIP
OLMSTED COUNTY

SCHEDULE OF QUANTITIES

ITEM NO.	2021.501	2401.511	0433.607	2401.541	2402.591	0404.603	2402.521	0433.605	0433.601	2433.505	2433.505	0563.601	0478.601		
ITEM	MOBILIZATION	STRUCTURE CONCRETE (3Y33)	RECONSTRUCT EXPANSION JOINT TYPE 4	REINFORCEMENT BARS (EPOXY COATED)	EXPANSION JOINT DEVICES, TYPE 4	OVERLAY CONCRETE (3U17A) 2"	STRUCTURAL STEEL (3306)	RECONSTRUCT EXPANSION BEARINGS	SCARIFY BRIDGE DECK	REMOVE SLAB, TYPE 1	REMOVE SLAB, TYPE 3	TRAFFIC CONTROL	EPOXY ZINCH-RICH PAINT SYSTEM		
QUANTITY	1	226	64	1420 (P)	64	4170 (P)	500 (P)	8	3950 (P)	1000	100	1	310		
UNIT	LUMP SUM	S.F.	LIN. FT.	POUND	LIN. FT.	SQ. FT.	POUND	EACH	SQ. FT.	SQ. FT.	SQ. FT.	LUMP SUM	SQ. FT.		

MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

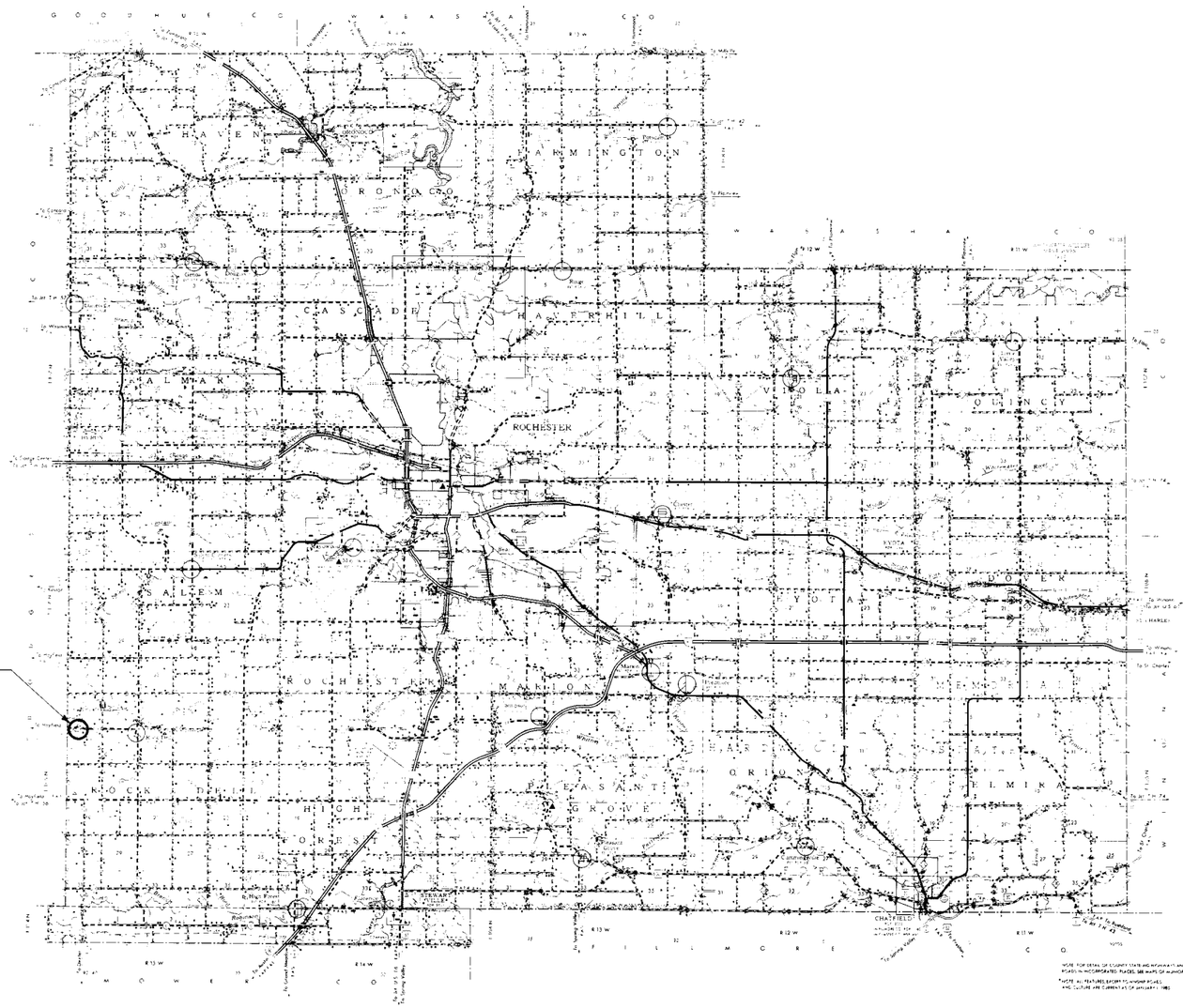
CONSTRUCTION PLAN FOR BRIDGE RECONSTRUCTION

LOCATED ON C.S.A.H. 26 **BETWEEN** C.S.A.H. 3 **AND** DODGE COUNTY C.S.A.H. 15 **(GEOGRAPHIC DESCRIPTION)**

FROM 3,423' W. OF S 1/4 SEC. 6 T105N-R15W **TO** W. OF S 1/4 SEC. 6 T105N-R15W **(LEGAL DESCRIPTION)**

~~STATE PROJ. NO.~~ C26-93-1			
GROSS LENGTH	139.0	FEET 0.026	MILES
BRIDGES-LENGTH	139.0	FEET 0.026	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH		FEET	MILES

STATE PROJ. NO.			
GROSS LENGTH		FEET	MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH		FEET	MILES



PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F. FRAME C. CONCRETE
S. STONE T. TILE
B. BRICK ST. STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY
SLOPE EASEMENT

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRICAL CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRICAL CABLE
AERIAL TELEPHONE CABLE
SEWER (SANITARY OR STORM)
SEWER MANHOLE

SCALES

PLAN
PROFILE
INDEX MAP 0 10,560'
CROSS SECTIONS

ALRINSON MPLS 55405
72165

MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS AMENDED BY THE JANUARY 2, 1991 SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN.

INDEX

SHEET NO. 1A TITLE SHEET AND LAYOUT MAP

SHEET NO. 1 ESTIMATE OF QUANTITIES & BRIDGE LAYOUT

SHEET NO. 2-7 BRIDGE SHEETS

SHEET NO. 8 TRAFFIC CONTROL

DESIGN DESIGNATION

R ΣN18(20)

ADT (Current Year)	=	268 (1993)	Design Speed	MPH
ADT (Future Year)	=	456 (2013)	Based on	Sight Distance
DHV (Design Hr. Vol.)	=		Height of eye	Height of object
D (Directional Distr.)	=	%	Design Speed not achieved at:	
T (Heavy Commercial)	=	%	STA. TO STA.	MPH
SOIL FACTOR			STA. TO STA.	MPH
			STA. TO STA.	MPH

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 2/25/93 REG. NO. 10397 ENGR Michael Sheehan

COUNTY Olmsted

Recommended for Approval ..... 19 .....
DISTRICT STATE AID ENGINEER

Recommended for Approval ..... 19 .....
STATE AID PLANS AND SPECS ENGINEER

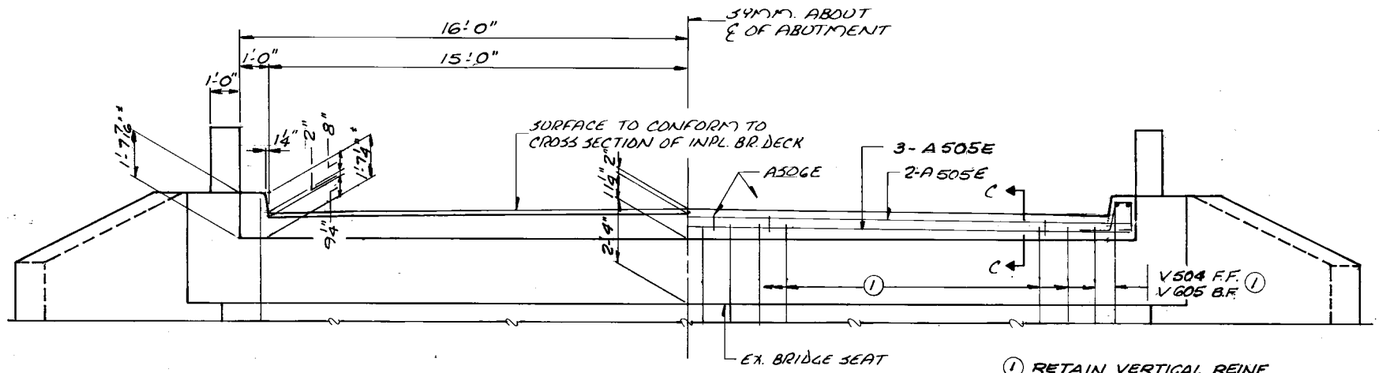
Approved ..... 19 .....
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED

DIVISION ADMINISTRATOR DATE

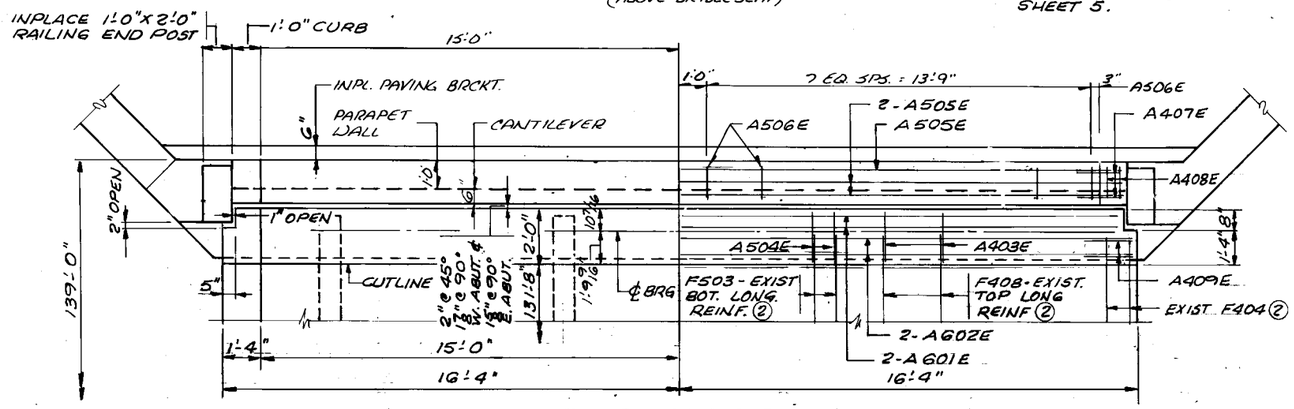
~~STATE AID PROJ. NO.~~ C26-93-1
~~STATE PROJ. NO.~~ C.S.A.H. 26

SHEET NO. 1A **OF** 8 **SHEETS**



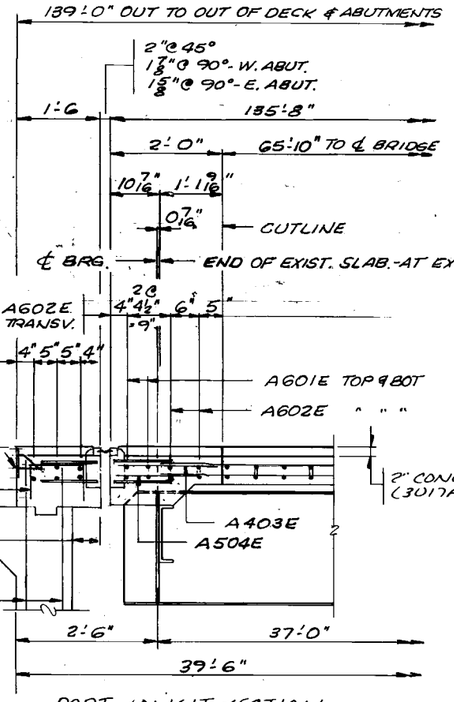
PART ELEVATION @ ABUTMENT
(ABOVE BRIDGE SEAT)

① RETAIN VERTICAL REINF ABOVE PARAPET WALL AS DETERMINED BY THE ENGINEER IN THE FIELD. SEE NOTE ON SHEET 5.

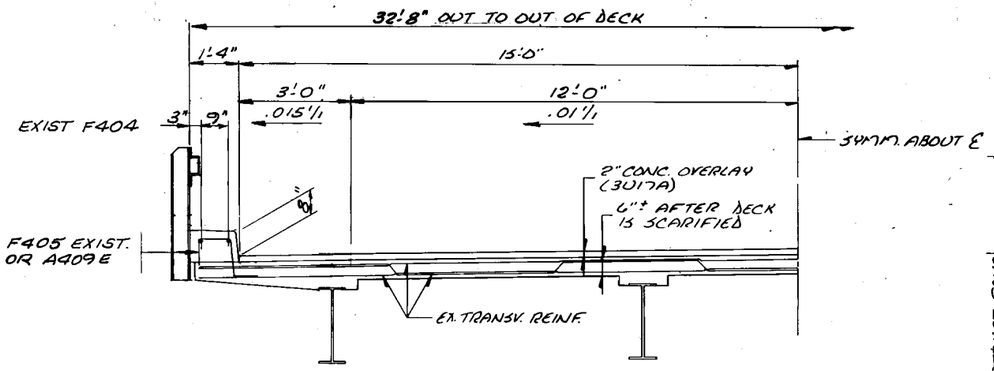


SECTION B-B

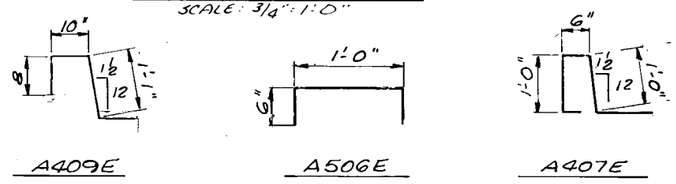
② RETAIN EXISTING LONG. REINF. BEYOND CUTLINE. CLEAN & STRAIGHTEN AS NECESSARY.

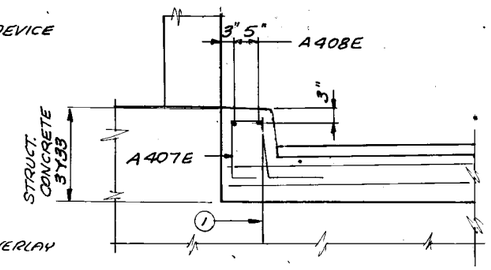


PART LONG. IT. SECTION @ EXPANSION DEVICE
SCALE: 3/4" = 1'-0"



SECTION THRU DECK
SCALE 1/2" = 1'-0"





PART SECTION AT ROADWAY SLAB

BILL OF REINFORCEMENT

BAR	NO	LENGTH	SHAPE	LOCATION
A601E	8	31'-6"	STR.	SLAB - TRANSV
A602E	8	32'-2"	"	" - "
A403E	32	1'-10"	"	" - LONG @ F408 TOP
A504E	90	1'-10"	"	" - " @ F503 BOT
A505E	10	31'-8"	"	ROADWAY SLAB - LONG
A506E	32	2'-0"	BENT	" " - TIES
A407E	8	3'-10"	"	" " " - "
A408E	8	1'-2"	STR.	" " - LONG
A409E	8	3'-3"	BENT	CURB - TIES

SUMMARY OF QUANTITIES

	PROTECTION PLATE (SEE DET. 8553)	
③	STRUCTURE CONCRETE 3Y33	226 SQ. FT.
④	CONCRETE OVERLAY 3U17A	9170 SQ. FT.
⑤	STRUCTURAL STEEL (3306)	500 LBS
	SCARIFY BRIDGE DECK 0.5"	3950 SQ. FT.
⑥	EXPANSION JOINT DEVICE, TYPE 4	64 LIN. FT.
	REINFORCEMENT BARS, EPOXY COATED	1420 LBS
⑥	REMOVE SLAB, TYPE 1	1000 SQ. FT.
⑥	REMOVE SLAB, TYPE 3	100 SQ. FT.

③ APPROX VOLUME 7 CU. YDS.

④ APPROX. VOLUME 26 CU. YDS.

⑤ INCLUDES PROTECTION PLATE (SEE DETAIL 8553)

⑥ SEE SPECIAL PROVISIONS

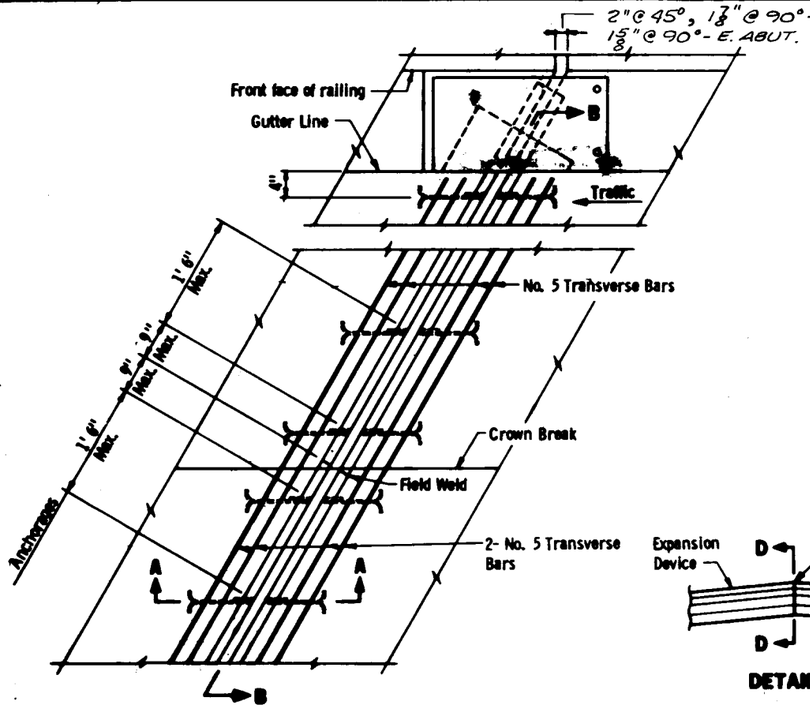
MINNESOTA DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 55511

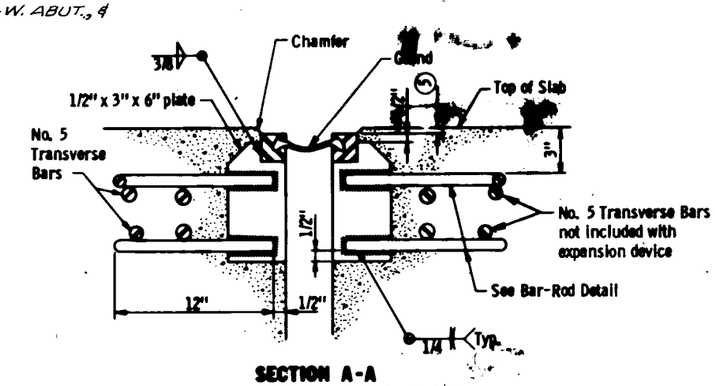
MISC. DETAILS

APPROVED

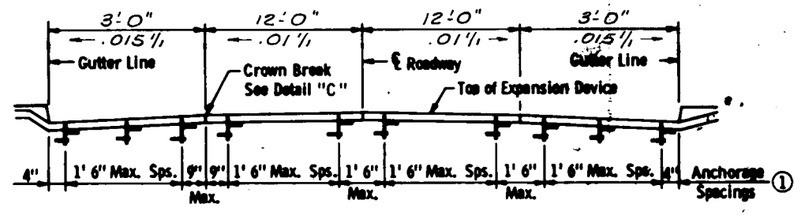
C.P. 26-93-1	55511	NM
SHEET 2 OF 7 SHEETS		BM



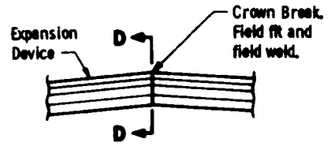
PLAN VIEW AT EXPANSION DEVICE
STRAIGHT EXPANSION DEVICE SHOWN



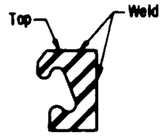
SECTION A-A
ANCHORAGE WITH ROD OPTION SHOWN



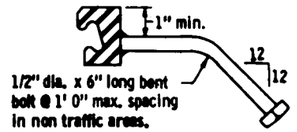
SECTION B-B



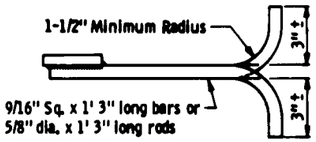
DETAIL C



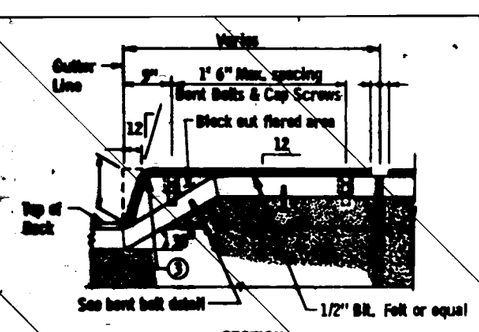
SECTION D-D



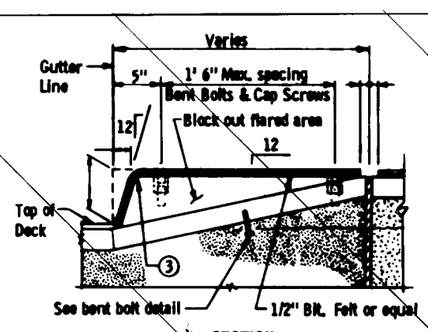
BENT BOLT DETAIL



BAR-ROD DETAIL

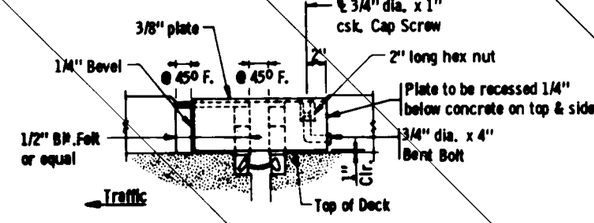


SECTION
ALTERNATE X

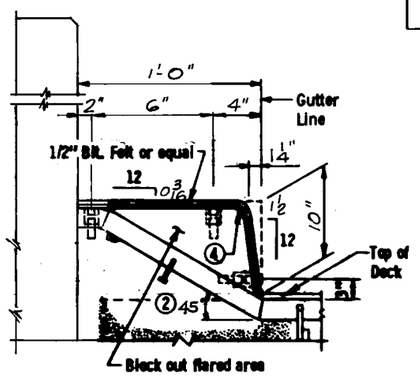


SECTION
ALTERNATE Y

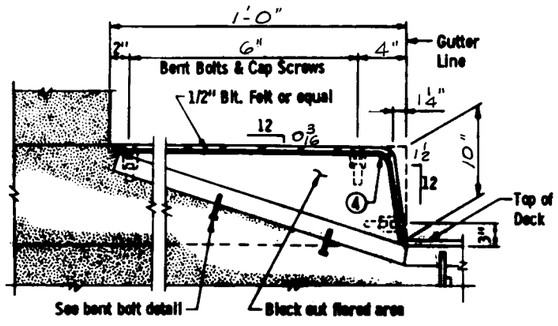
RAISED MEDIAN DETAILS



ELEVATION

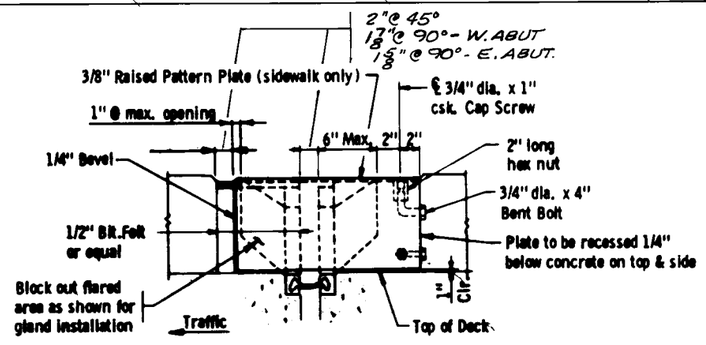


SECTION
ALTERNATE X



SECTION
ALTERNATE Y

SIDEWALK DETAILS



INSIDE ELEVATION

NOTES:

Galvanize structural steel after fabrication as per Spec. 3394.

Joints in roadway plate or extrusion shall be located at breaks in transverse profile and as otherwise required. Joints shall be close fit and welded. Repair after welding as per Spec. 2471.3L.

Structural steel shall comply with Spec. 3306, Spec. 3307 & Spec. 3309.

Expansion device shall be straightened to a tolerance of 1/8" in 10 ft.

Cap screws shall be countersunk 1/16" below top of plate.

Galvanize screws and nuts as per Spec. 3998.

New reinforcement bars are to have the same treatment as the inplace slab reinforcement.

When expansion devices are used at ends of bridge, the bridge contractor shall furnish expansion device and gland. The roadway contractor shall install the part of the expansion device which includes the gland as shown on this sheet.

① Dimension along centerline of joint.

② For roadway skews over 25° use 45°.

③ 2-3/4" outside radius of steel plate

④ 3/4" outside radius of steel plate

⑤ 1/2" (5/8" max.) when Snowplow Fingers are used. 1/8" (1/4" max.) when Snowplow Fingers are not used.

FIG. B-297.0

C.P. 26-93-1

Revised: January 20, 1983 Approved: July 14,

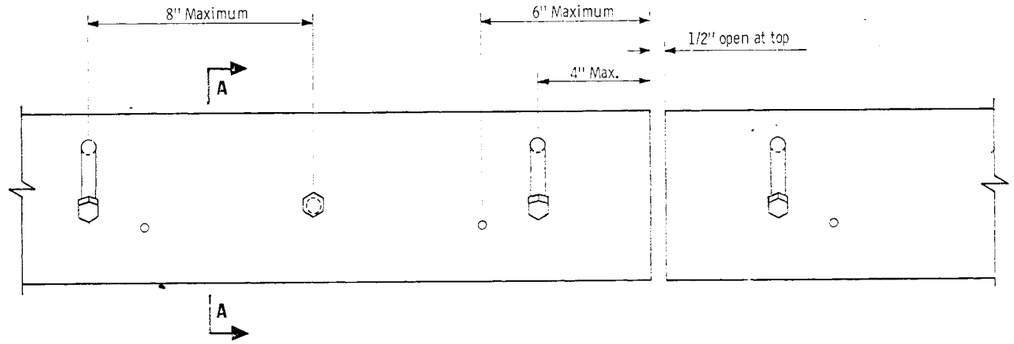
2MI DSB SSA EXTRUSION 400L GLAND

WATERPROOF EXPANSION DEVICE FOR REPAIR WORK
WITH SIDEWALK OR RAISED MEDIAN

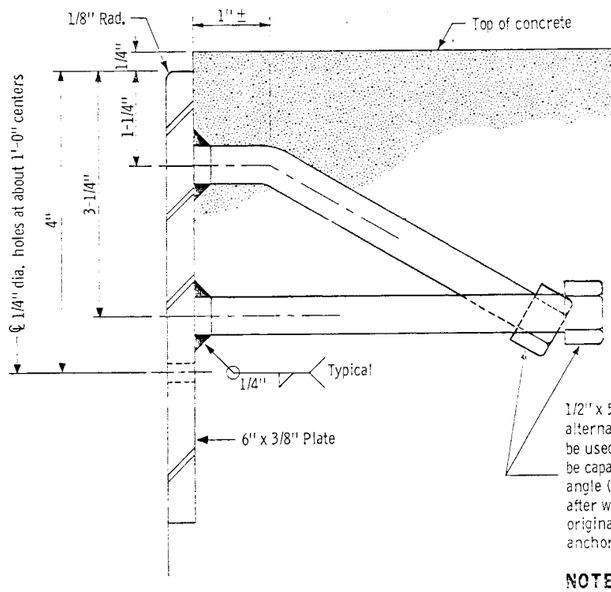
DES: DR: APPROVED:
CHK: CHK:

Sheet No. 3 of 7 Sheets

Bridge No. 55511



ELEVATION
(Concrete not shown)



SECTION A-A

1/2" x 5" bolts, or approved equal, at 8" centers with alternate stagger. 1/2" x 5" stud welded fastners may be used as an alternate for bolts. The anchorage shall be capable of being bent cold by hammering thru a 30° angle (the apex of which shall be at the fusion point) after welding and subsequently straightened to its original position without fracture of the weld or anchorage.

NOTES

Plate shall extend full width of roadway between gutter lines with a 1/2" open joint at each break in crown profile. Maximum length 22 feet.

Materials: Structural steel per spec. 3306. Galvanize after fabrication per spec. 3394

Set plate to proper grade and crown. Plates shall be straightened to a tolerance of 1/16" in 10 feet after galvanizing.

APPROVED Sept. 28, 1977

Developed by BRIDGE STANDARDS AND THE BRIDGES & STRUCTURES SECTION

Issued by: RESEARCH & STANDARDS

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

PROTECTION PLATE FOR END OF SLAB

DETAIL NO. B553

C.P. 26-93-1

DETAILS

DRAWN	CHECKED	APPROVED
W.N.J.		

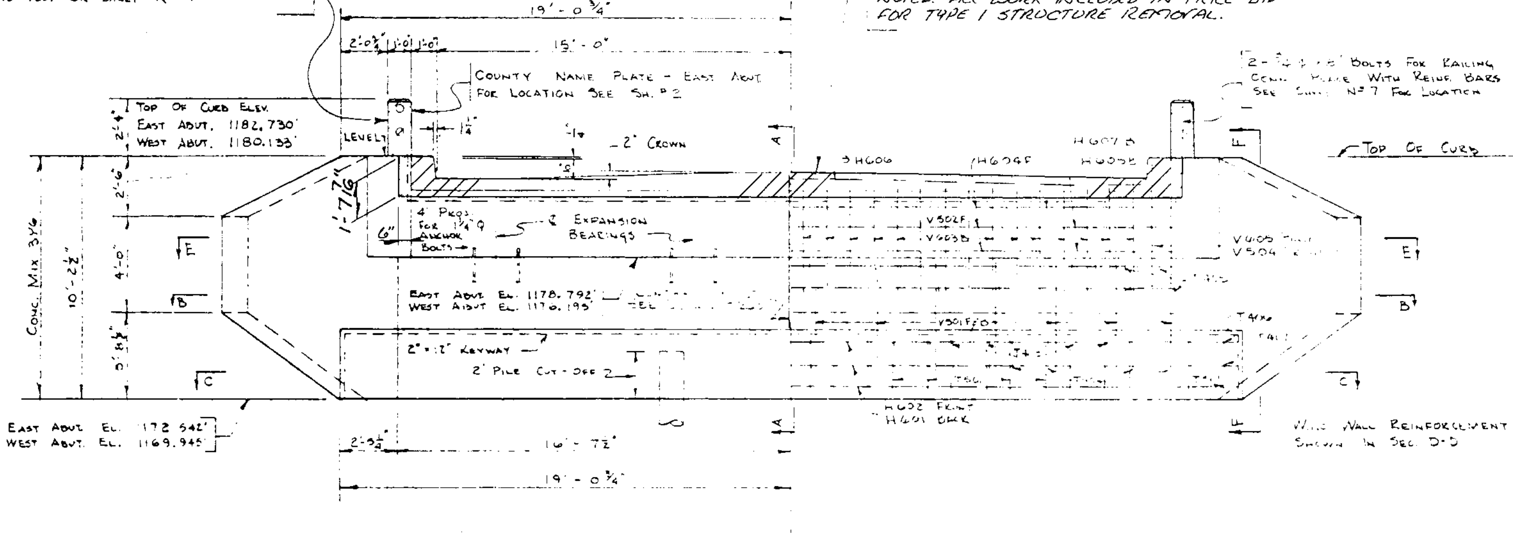
SHEET 4 OF 7 SHEETS

BRIDGE NO. 55511

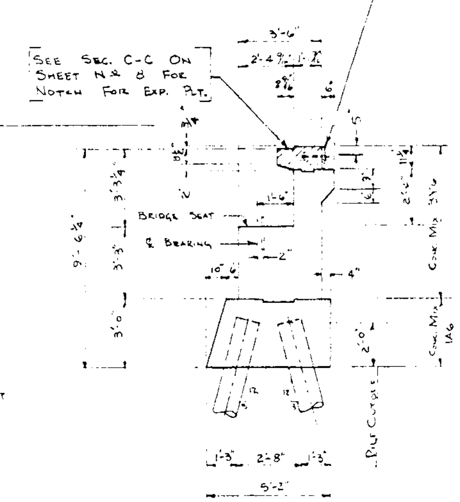
Vertical Edges Of Concrete End Posts To Be Finished To A ½" Bevel, Using Finished Wood Strips In Forms. Posts To Be Vertical. Concrete Mix To Be 3Y60. ⅛" Crown On Top Of Post For Drainage. See Detail Of End Post On Sheet № 7

CONCRETE OUTLINED WITH CROSS HATCHING TO BE REMOVED. ALL VERTICAL REINFORCEMENT SHALL BE CLEANED & STRAIGHTENED UNLESS NOTED. ALL WORK INCLUDED IN PRICE BID FOR TYPE I STRUCTURE REMOVAL.

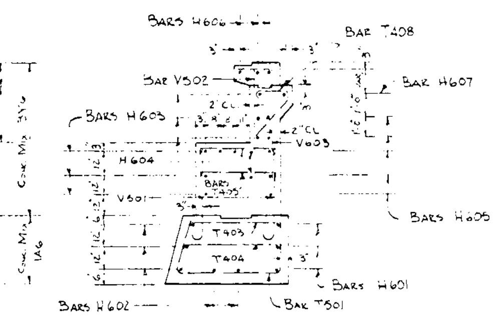
3"×12" Plank. Top Of Plank To Be Trimmed Flush With Transverse Crown Of Top Surface Of Concrete Roadway For Full Width Between Out To Out Of Curbs. Secure With ¾"×9" Sq. Hd. Bolts. Each With Sq. Nut & Cut Washer. See Plan For Spacing.



ELEVATION

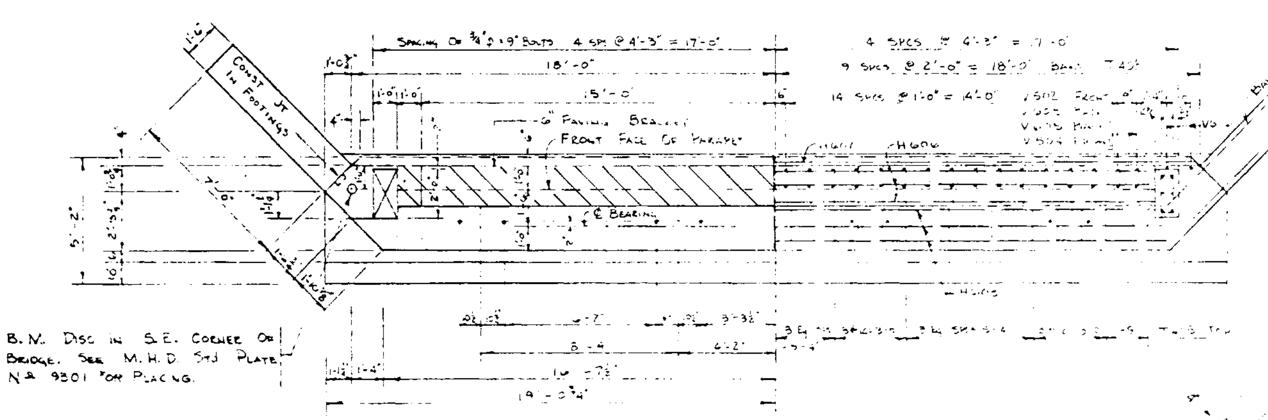


SECTION A-A

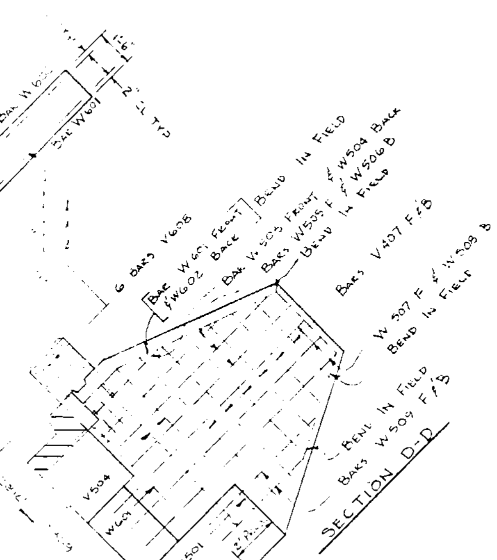


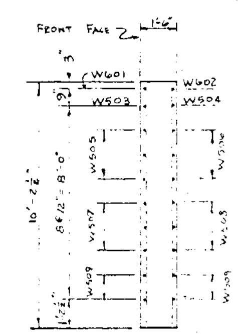
SECTION A-A

Showing Reinforcement

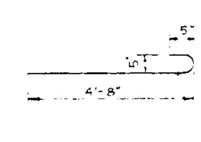


PLAN

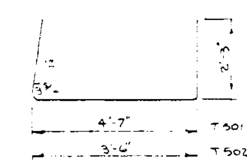




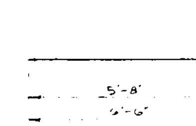
SECTION F-F



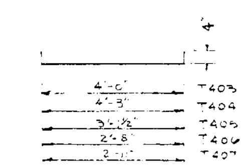
BAR V501



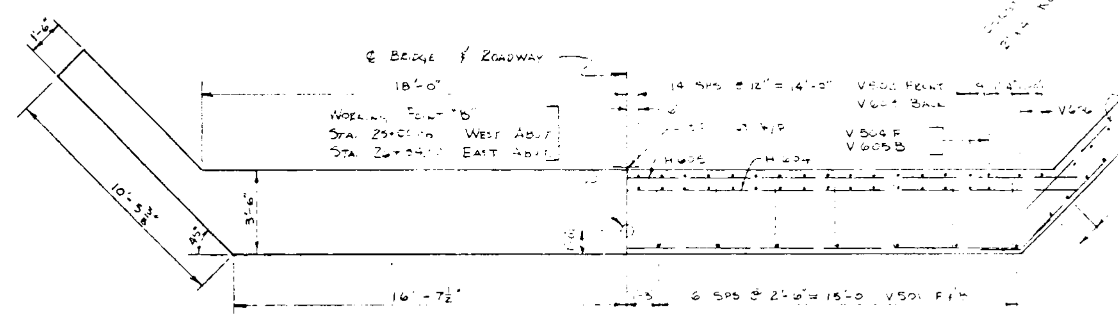
BARS T501 & T502



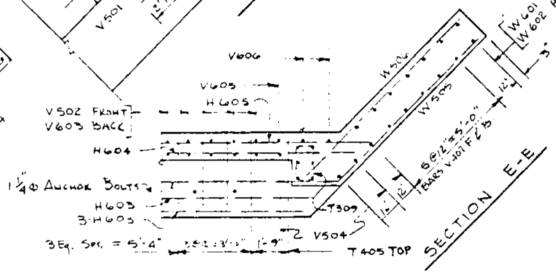
BARS V603 & V605

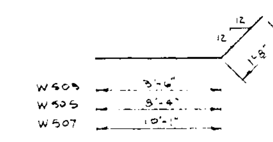


BARS T403 To T407 Incl.

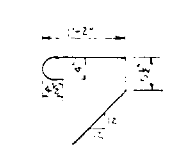


SECTION B-B

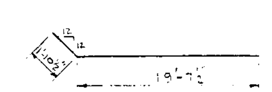




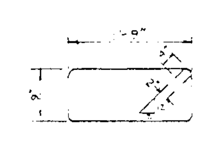
BARS W503, W505 & W507



BAR T408

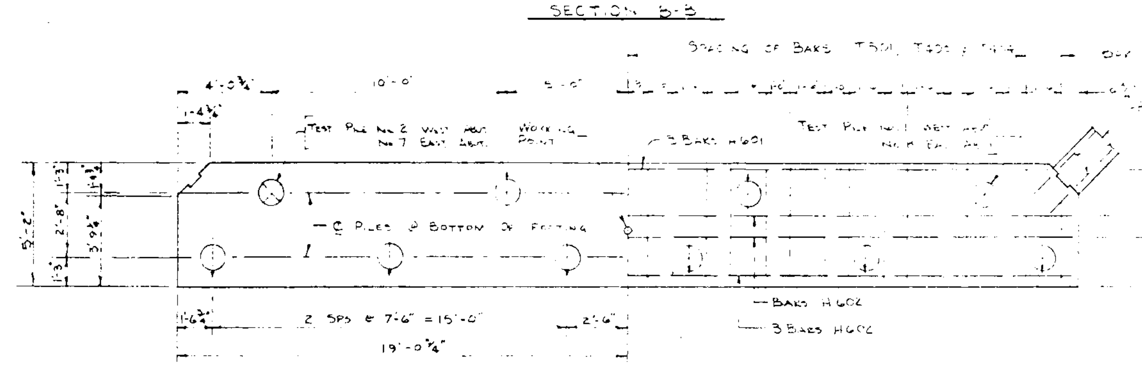


BAR H605



BAR T309

NOTE: All Bar Dimensions Are Out To Out Of Bar.



SECTION C-C

PILE NOTES

2 - Treated Timber Test Piles 40 ft. long East Abut.
2 - " " " " 35 " " West Abut
8 - " " Piles - Estimated Length - 35 ft. East Abut.
8 - " " " " " - 30 ft. West Abut.
20 Treated Timber Piles Required For Two Abutments
All Piles To Be Driven To A Minimum Bearing Value Of 24 Tons Per Pile.
Piles Shown This —⊖— To Be Battered 3" In 12" In Direction Indicated By Arrow.
Estimated Penetration 2 ft. Less Than Length Given.

BILL OF REINFORCEMENT BARS FOR TWO AB[UTS]

BAR	№	SIZE	LENGTH	SHAPE	LOCATION
H601	6	6	35'-6"	Straight	Footing - Longit.
H602	10	6	37'-8"	"	" "
H603	20	6	16'-7½"	"	Bridge Seat - Horizon[tal]
H604	20	6	19'-0"	"	Parapet - Front
H605	20	6	21'-6"	Bent	" - Back
H606	12	6	15'-10½"	Straight	" - Top
H607	4	6	18'-1½"	"	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 - Ties
T407	4	4	3'-7"	"	" "
T408	38	4	3'-6"	"	Paving Bracket
T309	20	3	5'-8"	"	End Posts
V501	64	5	5'-3"	1-Hook	Bridge Seat - Front & [B]
V502	60	5	5'-3"	Straight	Parapet - Front
V603	60	6	7'-2"	Bent	" - Back
V504	12	5	6'-0"	Straight	" - Front
V605	4	6	8'-0"	Bent	" - Back
V606	8	6	6'-6"	Straight	"
* V407	24	4	15'-11"	"	Wing Walls
V608	24	6	5'-0"	"	End Posts
W601	4	6	19'-9"	Bend In Field	Wing Walls - Fr[ont]
W602	4	6	19'-5"	"	" " - Ba[ck]
W503	4	5	5'-2"	Bent	" " - Fr[ont]
W504	4	5	4'-6"	Straight	" " - Ba[ck]
W505	12	5	10'-0"	Bent	" " - Fr[ont]
W506	12	5	9'-6"	Straight	" " - Ba[ck]
W507	12	5	11'-9"	Bent	" " - Fr[ont]
W508	12	5	10'-0"	Straight	" " - Ba[ck]
W509	16	5	6'-0"	"	" " - Front &

* Cut Two Bars From One In The Field.

SUMMARY OF QUANTITIES FOR TWO ABUTS

	Concrete Mix № 3Y6	54 Cu.
	Concrete Mix № 1A6	40 Cu.
	Concrete Mix № 3Y60	1 C.
	Class D.E. Excavation	119 Cu.
	Reinforcement Bars	7070 lb.
	Structural Steel (3305)	30
①	18 Bolts ¾×9" Lg. Sq. Head & Nut & Cut Washer	
②	1 County Name Plate, Detail Plate №. 2104	
③	Bench Mark Disc, One Per M.H.D. Std. Plate No. 93[01]	
	Expansion Bearings Mark "A"	8 Uni.
	Three-Ply Joint Waterproofing	14 Lin.
	2 Treated Timber Test Piles In Place	35 ft. lo.
	2 Treated Timber Test Piles In Place	40 ft. lo.
	Treated Timber Piling (Exclusive Of Test Piles)	520 Lin.
④	4 Pieces 3"×12"×19'-0" Planks	

① Included In Weight Of Structural Steel
② Bridge № 55511 Dated 1964
③ State Will Furnish Disc. Payment For Placing Will Be Included In Price Bid For Other Items.
④ Included In Prices Bid For Other Items.

COMPUTED PILE LOADS	Tons/Pile
Dead Load & Earth Pressure	16.09
Live Load	3.85
Total	19.94

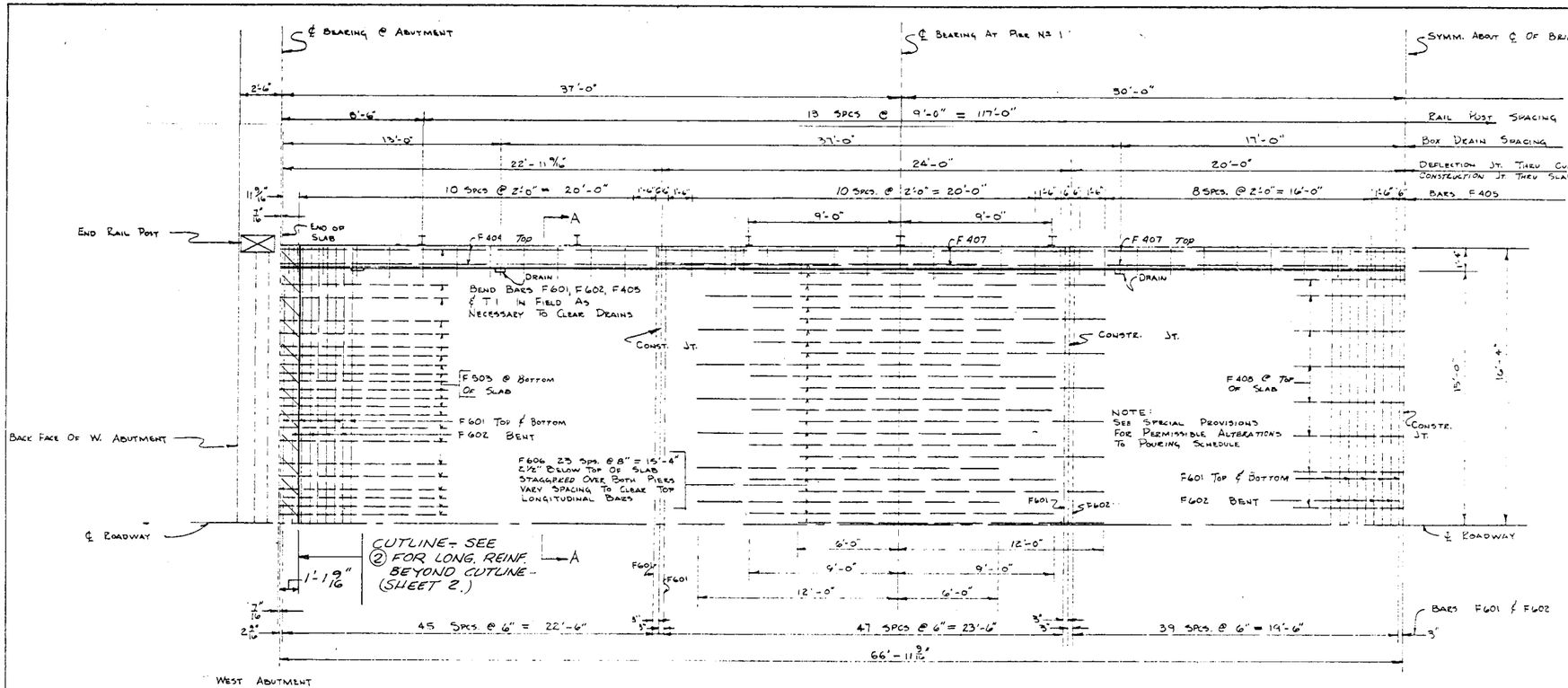
C.P. 26-93-1

PLANS PREPARED BY
AGNEBERG · SANKSTONE · ASSOC.
1418 First Ave. N.E., Rochester, Minn.

C.S.A.H. № 26
BRIDGE № 55511
ABUTMENT DETAILS

Approved 10-23-63

Sheet 5 Of 7 Sheets 55511



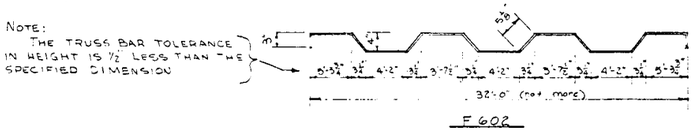
PART QUARTER PLAN
Scale ¼" = 1'-0"

BILL OF REINFORCEMENT BARS FOR SUPERSTRUCTURE

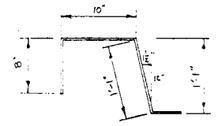
Bar	No	Size	Length	Shape	Location
F601	272	6	32'-3"	Straight	Slab - Transverse
F602	132	6	33'-6"	Bent	" " "
*F503	270	5	23'-7"	Straight	" - Longitudinal
F404	8	4	20'-8"	"	Curb - Longitudinal
F405	144	4	3'-3"	Bent	" - Transverse
F606	94	6	18'-0"	Straight	Slab - Over Pier
F407	16	4	19'-8"	"	Curb - Longitudinal
*F408	108	4	23'-7"	"	Slab - Longitudinal

* To Have A Min. 1'-3" Lap @ Splice

NOTE:
THE TRUSS BAR TOLERANCE IN HEIGHT IS ½" LESS THAN THE SPECIFIED DIMENSION

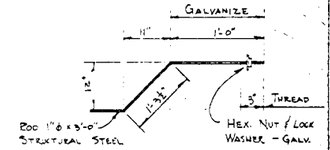


F602

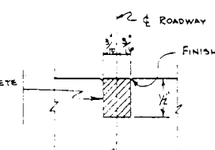


F405

NOTE: All Bar Dimensions Are Out To Out Of Bars



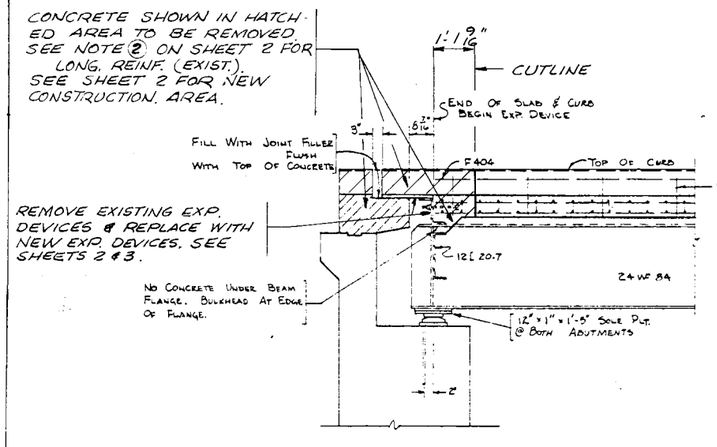
RAIL POST ANCHORS - T1
52 Req'd - 2 @ Each Post



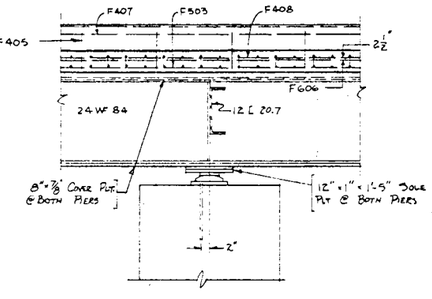
DETAIL OF LANE MARKER

CONCRETE SHOWN IN HATCHED AREA TO BE REMOVED SEE NOTE (2) ON SHEET 2 FOR LONG. REINF. (EXIST.). SEE SHEET 2 FOR NEW CONSTRUCTION. AREA.

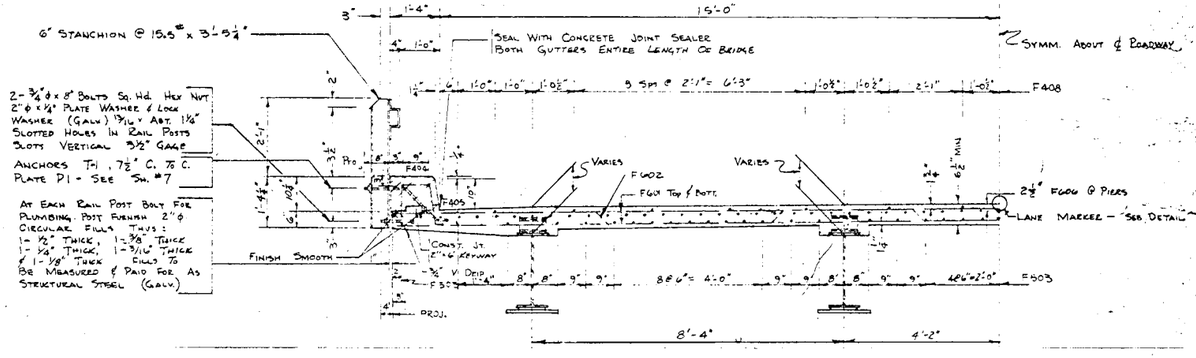
REMOVE EXISTING EXP. DEVICES & REPLACE WITH NEW EXP. DEVICES. SEE SHEETS 2 & 3.



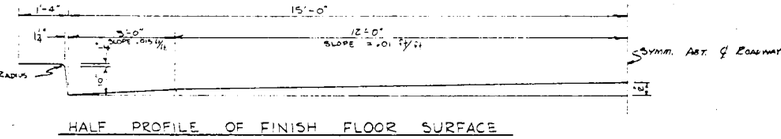
WEST ABUTMENT AS SHOWN
EAST ABUTMENT OPP HAND



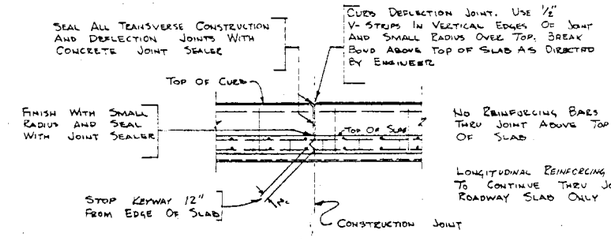
PIERS № 1 & № 2
AS SHOWN



SECTION A-A



HALF PROFILE OF FINISH FLOOR SURFACE



DETAIL OF SLAB CONSTRUCTION JOINTS AND CURB DEFLECTION JOINTS

NOTE:
1. Curbs To Be Mix № 3Y 60 All Other Concrete In Superstructure To Be Mix № 3Y6.
2. Drains Not Shown, See Details On Sh. #7

SUMMARY OF QUANTITIES FOR SUPERSTRUCTURE

Concrete Mix No. 3Y6	95	Cu. Yd.
Concrete Mix No. 3Y60	10	Cu. Yd.
Reinforcement Bars	31 180	lb.
Structural Steel (3306)	52520	lb.
⅝"x8" Bolts - Sq. Hd. Hex Nut, 2"ø x ⅛" R. Wash & Lock Wash - Galv.	8	UNITS
Floor Drains - Box Drains - Details See No. 7		
Railing And Stanchion Ranking Posts - Details See No. 7		
Railpost Anchors T1 - Details Above		
Structural Steel M.H.D. (3305)	19970	lb.

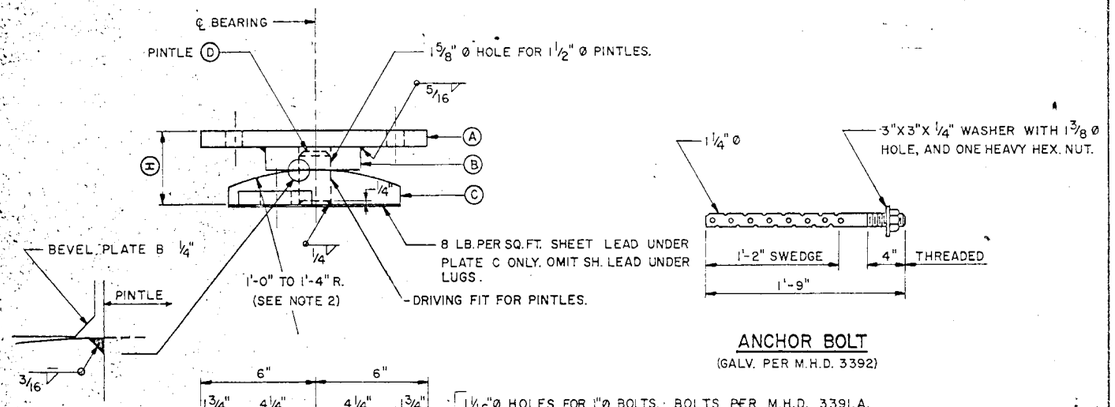
(2) Included In Weight Of Structural Steel (3305)

C.P. 26-93-1

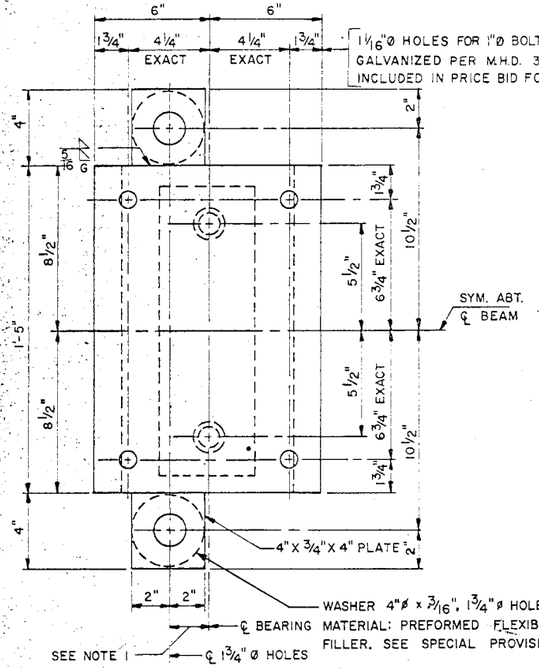
Plans Prepared By
AGNEBERG · SANKSTONE · ASSOC.
1418 First Ave. N. E., Rochester, Minn.

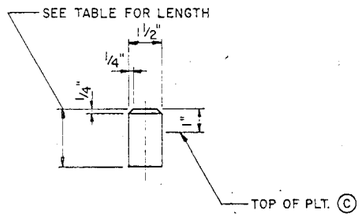
C.S.A.H. № 26
BRIDGE № 55511
SLAB REINFORCEMENT PLAN & LONGIT. SECTIONS
Approved 10-23-63

Sheet 6 Of 7 Sheets | 55511



ANCHOR BOLT
(GALV. PER M.H.D. 3392)





PINTLE D

NOTES:

1 — POSITION OF ANCHOR BOLTS SHOWN IS FOR SQUARE BRIDGES. REVISE POSITION OF ANCHOR BOLT HOLES FOR SKEW TO PERMIT DRILLING HOLES IN BRIDGE SEAT WITH END DIAPHRAGMS IN PLACE.

PINTLE D SHALL COMPLY WITH M.H.D. 3314, TYPE II.

ALL OTHER STRUCTURAL STEEL AS PER M.H.D. 3305.

2 — MACHINE TOP OF PLATE C TO RADIUS SHOWN AND TO 250 MICRO.

PLATES SHALL BE FLAT AFTER WELDING AND FABRICATION.

GALVANIZE AFTER FABRICATION PER M.H.D. 3394, NO PAINT.

PAYMENT FOR BEARING ASSEMBLY SHALL INCLUDE ALL MATERIAL SHOWN ON THIS DETAIL.

LOAD KIPS	A	B	C △	D	H (MIN.)	CODE
200	12"X1"X 1'-5"	5"X1 1/4"X1'-3"	12"X2 1/2"X1'-5"	1 1/2"Ø X3 1/4"	4 11/16"	B137-200
160	12"X1"X 1'-5"	5"X1 1/4"X1'-3"	10"X 2" X1'-5"	1 1/2"Ø X2 3/4"	4 3/16"	B137-160
120	12"X 7/8"X1'-5"	5"X1 1/4"X1'-3"	8"X1 1/2"X1'-5"	1 1/2"Ø X2 1/4"	3 9/16"	B137-120

△ FINISHED THICKNESS OF PLATE C MAY BE 1/16" LESS THAN THICKNESS SHOWN.

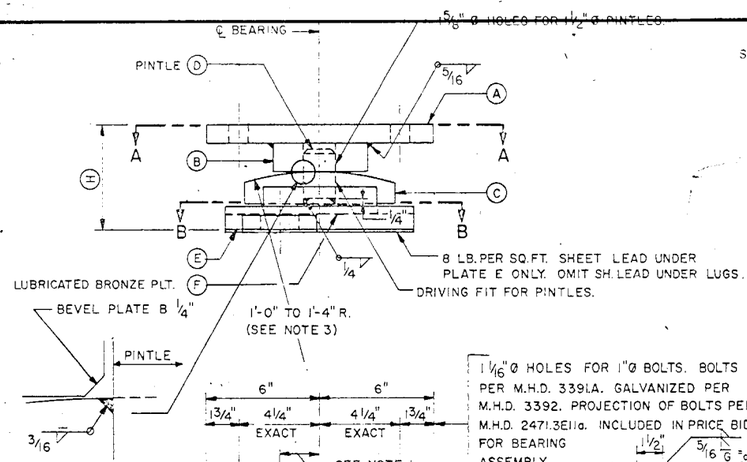
APPROVED MAY 17, 1960

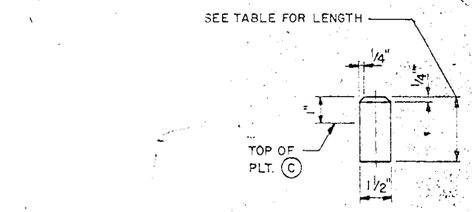
A. C. LaBonte
BRIDGE ENGINEER

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

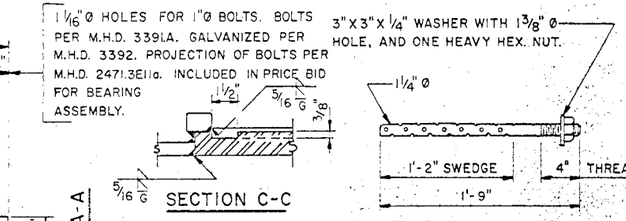
FIXED BEARING ASSEMBLY FOR BEAMS WITH 9" TO 10 1/2" FLANGE

REVISIONS	DETAIL NO.
5/11/60-A 9/26/61-B 5/22/63 8/28/63	B137

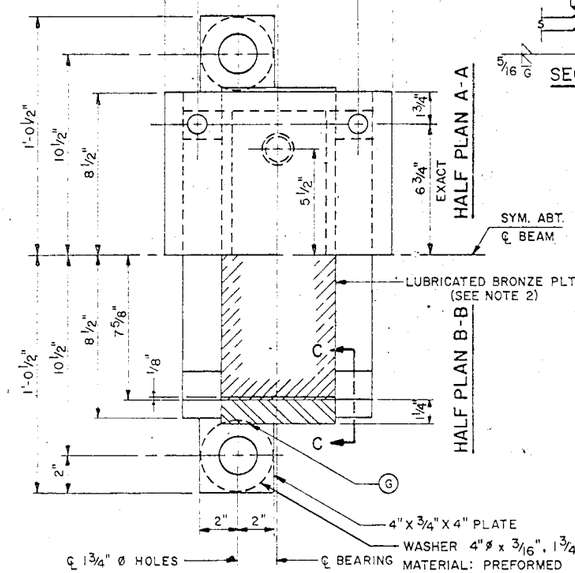




PINTLE D



ANCHOR BOLT
(GALV. PER M.H.D. 3392)



NOTES:

1 — POSITION OF ANCHOR BOLTS SHOWN IS FOR SQUARE BRIDGES. REVISE POSITION OF ANCHOR BOLT HOLES FOR SKEW TO PERMIT DRILLING HOLES IN BRIDGE SEAT WITH END DIAPHRAGMS IN PLACE.

PINTLE D SHALL COMPLY WITH M.H.D. 3314, TYPE II.

ALL OTHER STRUCTURAL STEEL PER M.H.D. 3305.

2 — BRONZE TO BE ROLLED ALUMINUM BRONZE PLATE A.S.T.M. B169, ALLOY D, SOFT TEMPER, MILL FINISH; OR CAST ALUMINUM BRONZE A.S.T.M. B148, ALLOY 9C OR 9D.* FOR LUBRICATION SEE M.H.D. 3329.

3 — MACHINE TOP OF PLATE C TO RADIUS SHOWN AND TO 250 MICRO. MACHINE BOTTOM TO 125 MICRO.

FINISH RECESS IN PLATE E TO 250 MICRO.

PLATES SHALL BE FLAT AFTER WELDING AND FABRICATION.

GALVANIZE AFTER FABRICATION AND BEFORE BRONZE IS FITTED IN PLACE PER M.H.D. 3394, NO PAINT.

LOAD KIPS	A	B	C △	D	E	F*	G	H (MIN.)	CODE
200	12"X1"X1'-5"	5"X1 1/4"X1'-3"	9"X 2" X1'-3"	1 1/2"Ø X 3"	12"X1 1/2"X1'-5"	7"X1 1/2"X1'-3"	1 1/4"X1"X7"	5 13/16"	B138-200
160	12"X1"X1'-5"	5"X1 1/4"X1'-3"	8"X1 3/4"X1'-3"	1 1/2"Ø X2 3/4"	10"X1 1/2"X1'-5"	6"X1 1/2"X1'-3"	1 1/4"X1"X6"	5 5/16"	B138-160
120	12"X1"X1'-5"	5"X1 1/4"X1'-3"	6"X1 1/4"X1'-3"	1 1/2"Ø X 2"	8"X 1"X1'-5"	4"X1 1/2"X1'-3"	1 1/4"X1"X4"	4 7/16"	B138-120

* CAST BRONZE SHALL HAVE MACHINE-FINISHED EDGES TO WIDTH AND LENGTH SHOWN.
BOTTOM SURFACE TO BE MACHINED TO 250 MICRO AND TOP SURFACE TO 125 MICRO.
WIDTH AND LENGTH OF CAST OR WROUGHT BRONZE SHALL BE HELD TO +0.000 AND -0.050 INCH TOLERANCE.
△ FINISHED THICKNESS OF PLATE C MAY BE 1/16" LESS THAN THICKNESS SHOWN.

BRONZE BEARING PLATES SHALL BE BOXED FOR SHIPMENT PER M.H.D. 2471.3K.

PAYMENT FOR BEARING ASSEMBLY SHALL INCLUDE ALL MATERIAL SHOWN ON THIS DETAIL.

APPROVED MAY 17, 1960

A. C. LaBonte
BRIDGE ENGINEER

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

EXPANSION BEARING ASSEMBLY FOR BEAMS WITH 9" TO 10 1/2" FLANGE WITH GUIDE BARS

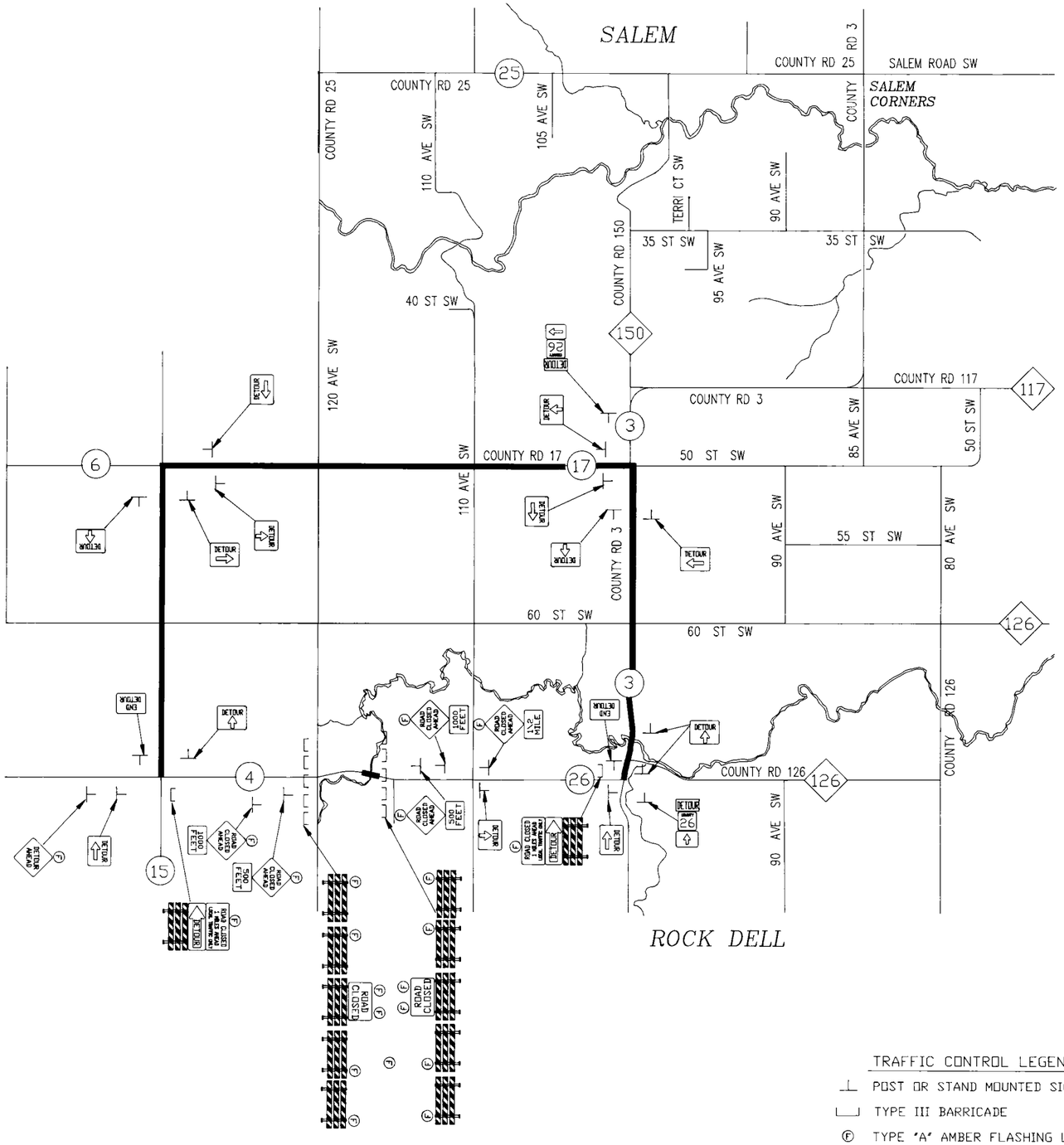
REVISIONS	DETAIL NO.
5/11/60-A 9/26/61-B 5/22/63 8/28/63	B138

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE NO. 5551

DETAILS

APPROVED 10/22/63



ESTIMATE OF TRAFFIC CONTROL DEVICES

DEVICE	NUMBER	SIZE	COLOR	QUANTITY	DEVICE	NUMBER	SIZE	COLOR	QUANTITY
ROAD CLOSED	R11-2	48 x 30	BLK/WH	2	DETOUR	M4-10L	48 x 18	BLK/OR	1
ROAD CLOSED 1 MILES AHEAD LOCAL TRAFFIC ONLY	R11-3	60 x 30	BLK/WH	2	DETOUR	M4-10R	48 x 18	BLK/OR	1
DETOUR AHEAD	W20-2	48 x 48	BLK/OR	1	DETOUR	M4-9L	30 x 24	BLK/OR	4
ROAD CLOSED AHEAD	W20-3	48 x 48	BLK/OR	5	DETOUR	M4-9R	30 x 24	BLK/OR	2
500 FEET	W20-100P	36 x 24	BLK/OR	2	DETOUR	M4-9T	30 x 24	BLK/OR	8
1000 FEET	W20-100P	36 x 24	BLK/OR	2	END DETOUR	M4-8A	24 x 18	BLK/OR	2
1/2 MILE	W20-100P	36 x 24	BLK/OR	1		M6-1	21 x 15	BLK/WH	1
COUNTY 26	M1-X4A	24 x 24	BLK/WH	2		M6-3	21 x 15	BLK/WH	1
DETOUR	M4-8	24 x 12	BLK/OR	2		TYPE III	MIN. 6'	OR & BLK	12
					Ⓕ	TYPE A	FLASHING LAMP	AMBER	20

TRAFFIC CONTROL LEGEND

⊥ POST OR STAND MOUNTED SIGN

⌊⌋ TYPE III BARRICADE

Ⓕ TYPE "A" AMBER FLASHING LAMP

TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ON THIS PROJECT.
2. THE LOCATION OF SIGNS AND DEVICES WILL BE STAKED BY THE ENGINEER IN THE FIELD.
3. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES INCLUDING APPENDIX B DATED MARCH 1990.
4. CONSTRUCTION ZONE SIGNING SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL INCLUDE, BUT NOT BE LIMITED TO SIGNS FOR LANE CLOSURES, MACHINERY AHEAD, BUMP, DIP, LOOSE GRAVEL ETC. THE NUMBER AND LOCATION WILL BE DETERMINED BY THE CONTRACTORS OPERATION.