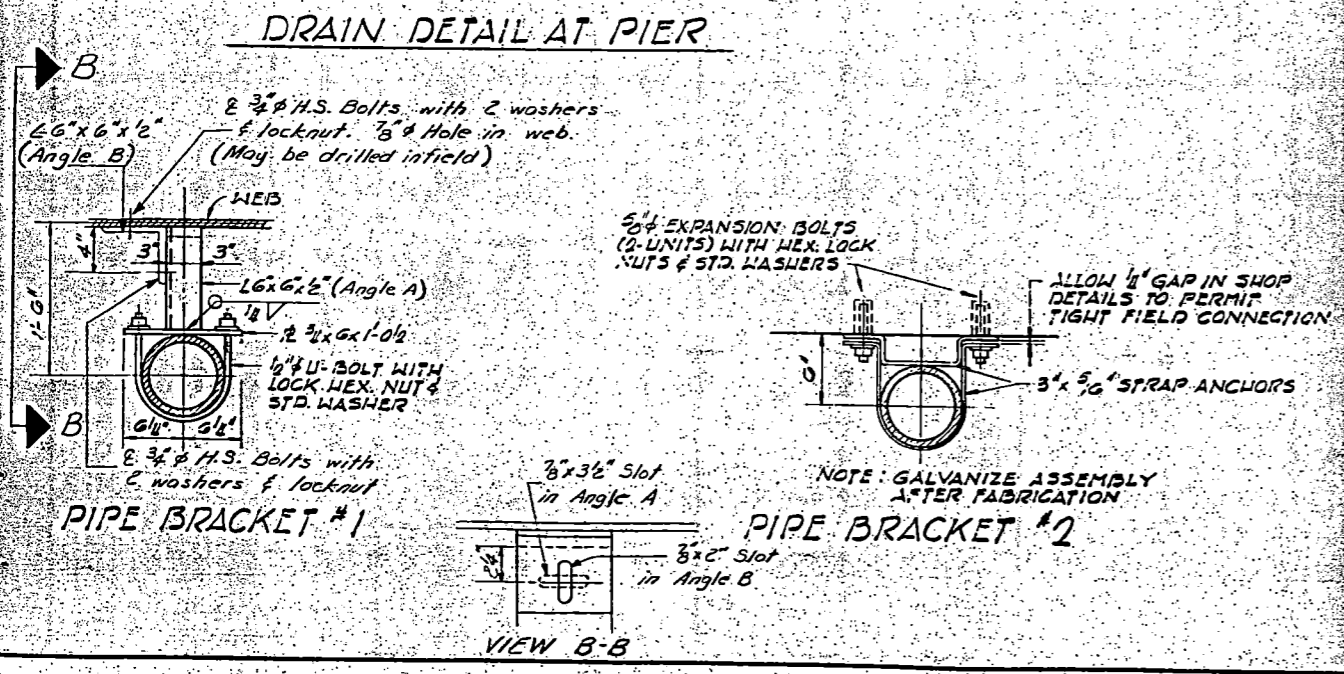
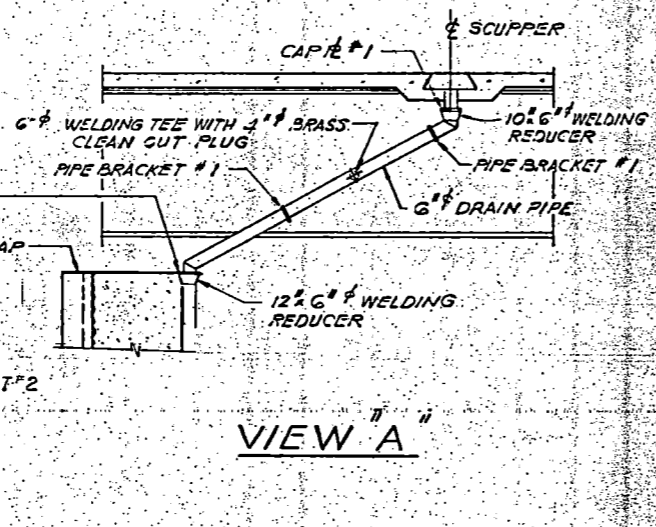
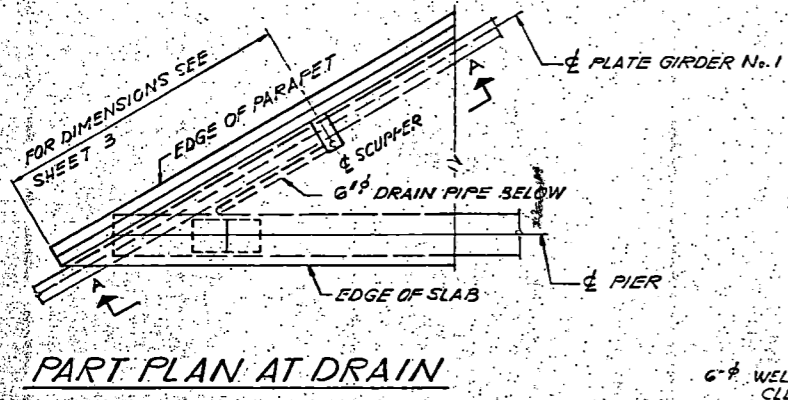
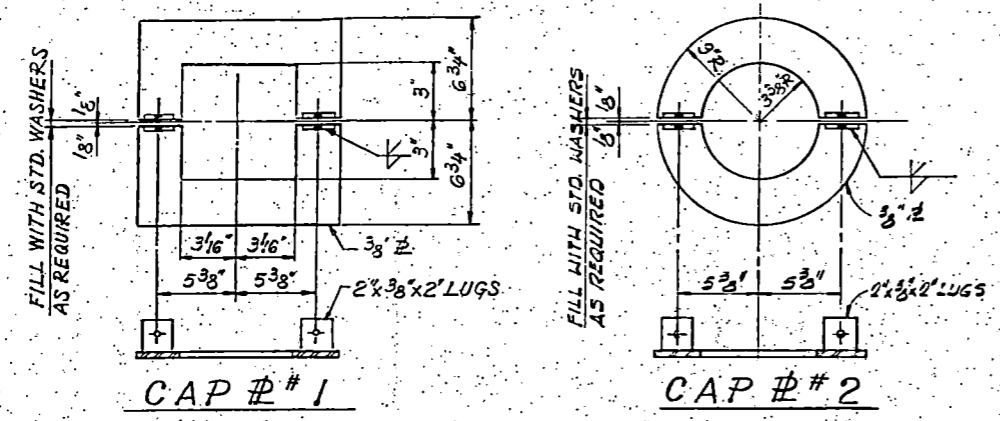


ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA-412	201-2HB-1	WINNEBAGO	347	94
STA.	TO STA.			
F. & REG. NO. 4	ILLINOIS	PROJECT		

SHEET 2 OF 20



**GENERAL NOTES**

ALL REINFORCEMENT BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE SHOWN.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4" DIAMETER, OPEN HOLES 13/16" DIAMETER, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 598, 890 LBS.

THE BASIC LEAD SILICO CHROMATE PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.

SLOPEWALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" X 6" MESH, WEIGHING 58 LBS. PER 100 SQ. FT.

THE CONTRACTOR SHALL DRIVE ONE STEEL TEST PILE IN A PERMANENT LOCATION AT EACH ABUTMENT AND PIER AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.

THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS AND PIERS.

THE CONCRETE RAIL SECTION ABOVE THE MANDATORY CONSTRUCTION JOINT AT TOP OF THE SLAB SHALL BE CONSTRUCTED OF CLASS X CONCRETE, EXCEPT THE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL CONCRETE.

PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATERPROOFING MEMBRANE SYSTEM IS APPLIED.

BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF ± 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

SEE SHEET NO. 19-20 FOR BORING DATA.

The main steel carrying member components subject to the tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs, and all splice plates and hanger plates of the steel girders.

All reinforcement bars in deck slab shall conform to AASHTO M31 or M59 grade 60.

**DRAINAGE NOTES**

MATERIALS. SCUPPERS SHALL BE IN ACCORDANCE WITH DETAILS ON SHEET 20. DRAIN PIPE SHALL BE STANDARD WEIGHT PIPE CONFORMING TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR WELDED AND SEAMLESS STEEL PIPE", ASTM DESIGNATION A53.

STEEL FOR CAP PLATES AND BRACKETS SHALL CONFORM TO THE REQUIREMENTS FOR A.S.H.T.O. DESIGNATION M183. THE PIPE BRACKETS SUPPORTING THE DRAIN PIPE TO THE PIER SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO SPECIFICATION M111. AFTER INSTALLATION, THE PIPE AND ITS SUPPORTS SHALL BE CLEANED AND PAINTED WITH THE FULL BASIC LEAD SILICO CHROMATE PAINT SYSTEM.

METHOD OF MEASUREMENT. THE ACTUAL NUMBER OF LINEAR FEET OF DRAIN PIPE, INCLUDING FITTINGS, FURNISHED AND INSTALLED IN THE WORK, WILL BE MEASURED FOR PAYMENT IN PLACE ALONG THE CENTERLINE OF THE PIPE FROM END TO END THROUGH ALL FITTINGS.

BASIS OF PAYMENT. DRAIN PIPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR DRAIN PIPE, 6 INCH, WHICH PRICE SHALL BE PAYMENT IN FULL FOR ALL WORK AND MATERIAL, INCLUDING VARIOUS TYPES OF FITTINGS AND SUPPORTS AS REQUIRED TO COMPLETE THE WORK.

**BILL OF MATERIAL**

ITEM	UNIT	SUB	SUPER	TOTAL
CLASS X CONCRETE	CU. YD.	426.4	340.5	767.0
STUD SHEAR CONNECTORS	EACH	-	1,512	1,512
FURNISHING & ERECTING STRUCTURAL STEEL	L. SUM	-	.47	.47
ALUMINUM RAILING	LIN. FT.	-	559	559
REINFORCEMENT BARS	LBS.	57,820	98,260	156,080
STEEL PILES, HP 8X36	LIN. FT.	4,338	-	4,338
DRIVING STEEL PILES	LIN. FT.	4,338	-	4,338
TEST PILE STEEL, HP 8X36	EACH	4	-	4
NAME PLATES	EACH	-	1	1
SLOPE WALL, 4 INCH	SQ. YD.	1,260	-	1,260
PERMANENT SURVEY MARKERS, TYPE I	EACH	-	1	1
NEOPRENE EXPANSION JOINT, 2 INCH	LIN. FT.	-	79	79
NEOPRENE EXPANSION JOINT, 4 INCH	LIN. FT.	-	79	79
DRAINAGE SCUPPERS	EACH	-	1	1
DRAIN PIPE, 6 INCH	LIN. FT.	-	38	38
Structure Excavation	Cu. Yds.	755	-	755

STATION 2552+06.76  
BUILT 197 BY  
STATE OF ILLINOIS  
F.A. RT. 412 SEC. 201-2HB-1  
F.A. PROJ. FFD-412-5(11)  
LOADING HS 20

1 REQ'D  
(SEE STATE OF ILLINOIS STD. 2113)  
LETTERING FOR NAME PLATE

**GENERAL NOTES AND QUANTITIES**  
F.A. ROUTE 412 N. BD.  
OVER RAMP, BD  
PROJECT FFD-412-5(11)  
SECTION 201-2HB-1  
WINNEBAGO COUNTY  
STATION 2552+06.76

ALFRED BENESCH & COMPANY  
CONSULTING ENGINEERS  
JOB NO. 10005-E  
233 N. MICHIGAN AVE., CHICAGO, ILLINOIS