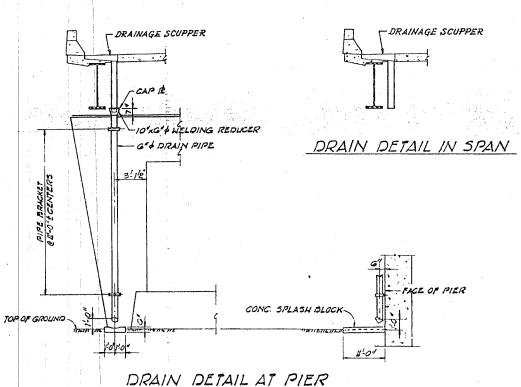
FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

316 316" L\_\_ 38″# 531 53 -2125x211UG5 CAP R'DETAIL





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 = 343,530 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 GIRDESS 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 DEFORE 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.

THE CONCRETE RAIL SECTION ADOVE 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  $^\pm$  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.

THE MAIN LOAD CARRYING COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2.
THESE COMPONENTS ARE THE TENSION FLANGES AS DESIGNATED IN THE ELEV. VIEW, WEBS AND ALL SPLICE PLATE MATERIAL OF THE STEEL GIRDERS.

FOR BORING DATA, SEE SPECIAL PROVISIONS.

All Reinforcement Bars In The Deck Side Of Spans 2 \$3 Shall Conform To The Requirements Of AASHTO M31 Gr 60 Or AASHTO M53 Gr 60.

## DRAINAGE NOTES

MATERIALS. SCUPPERS SHALL BE IN ACCORDANCE WITH DETAILS ON SHEET 15. DRAIN PIPE SHALL BE STANDARD WEIGHT PIPE CONFORMING TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR WELDED AND SEAMLESS STEEL PIPE", ASTM DESIGNATION AS3.

STEEL FOR CAP PLATES AND BRACKETS SHALL CONFORM TO THE REQUIREMENTS FOR A.A.S.H.T.O. DESIGNATION MIBD. THE PIPE BRACKETS SUPPORTING THE DRAIN PIPE TO THE PIER SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM SPECIFICATION A123. 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

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

5% EXPANSION BOLTS (2-UNITS) WITH HEX. LOCK NUTS & STD. WASHERS "G" STRAP ANCHORS

> NOTE: GALVANIZE ASSEMBLY
> AFTER FABRICATION PIPE BRACKET

> > NORTH BOUND I-39 PIER OVER **US 20 BYPASS** SN 101-0135

## BILL OF MATERIAL

ITEM	UNIT	SUB	SUPER	TOTAL
* BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE E, CLASS I	TON	-	115	115
STRUCTURE EXCAVATION	CU.YP.	108	- '	fos
> PROTECTIVE COAT	SQ.YD.	_'	183	183
CLASS X CONCRETE	CU.YD.	375.2	454.0	829.
STUD SHEAR CONNECTORS	EACH	-	3,234	3,234
FURNISHING & ERECTING STRUCTURAL STEEL	. L.SUM	•	0.54	0.34
ALUMINUM RAILING	LIN FT.		469	489
RÉINFORCEMENT BARS	LBS.	43,980	116,450	160,43
STEEL PILES, HP 0X36	LIN.FT.	2,235		2,235
				•
TEST PILE STEEL, HP 8X36	EACH	3	_	3
NAME PLATES	EACH	1	•	1
SLOPE WALL, 4 INCH	SQ.YD.	504		504
* WATERPROOF MEMBRANE SYSTEM	SQ.YD.	•	1,392	1,392
PREFORMED JOINT SEALER (2-1/2")	LIN.FT.	-	109	109
SAND BACKFILL	CU.YD.	342		342
DRAIN PIPE, & INCH	, LIN.FT.	34	18	52
DRAINAGE SCUPPERS	ÉA.	-	4	4

\*Not in this contract To be constructed under Paving Section

ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE: VERT.