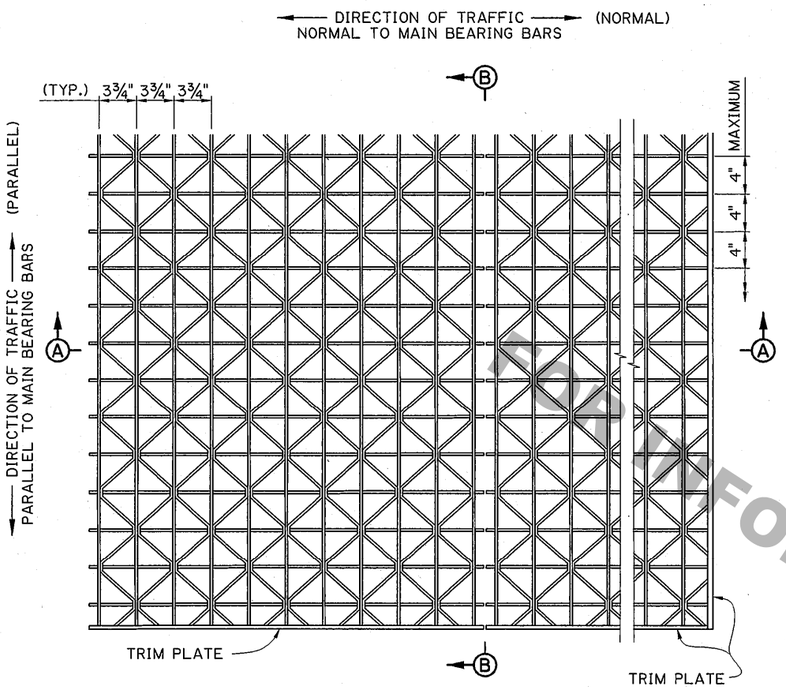
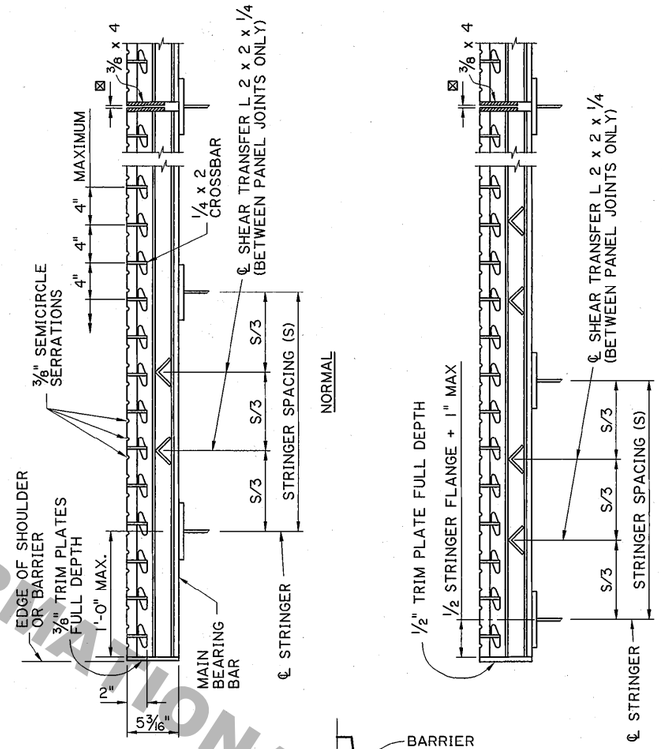
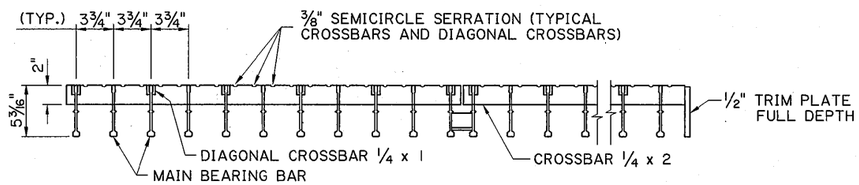
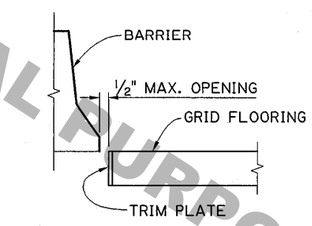


TYPICAL GRID FLOORING PLAN

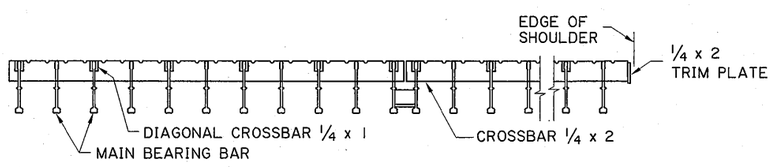




NORMAL

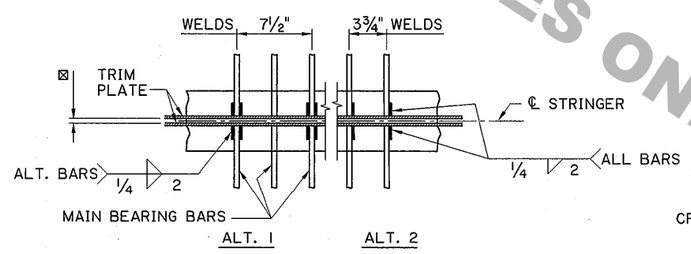


TYPICAL AT BARRIER

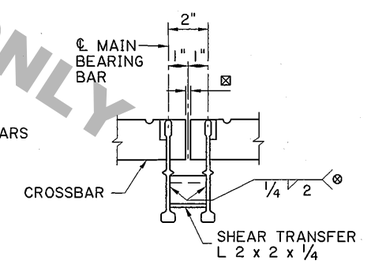


PARALLEL

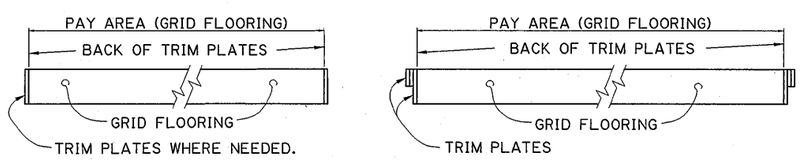
SECTION A-A



TYPICAL JOINT OVER STRINGER



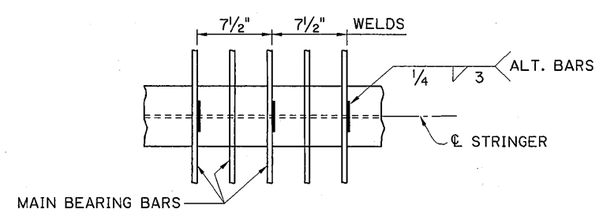
TYPICAL JOINT BETWEEN ADJACENT PANELS



TRANSVERSE DIRECTION
(NORMAL TO ℄ ROADWAY)

LONGITUDINAL DIRECTION
(ALONG ℄ ROADWAY)

METHOD OF MEASUREMENT



TYPICAL CONTINUOUS OVER STRINGER

FIELD WELDING DIAGRAM

⊠ 0" TO 1/4" MAXIMUM CROSS BAR GAP (NO WELD)

⊗ SHOP WELD TO EXTERIOR BAR ON ONE SIDE. THEN FIELD WELD TO OTHER SIDE AFTER INSTALLATION. (TYP. ALONG BOTH LEGS OF ANGLE)

GENERAL NOTES:

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 2002 AND INTERIM SPECIFICATIONS.

CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT SPECIFICATIONS AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS.

LIVE LOAD: AASHTO HS-20 AND HST-18.

DESIGN SPAN: THE DESIGN SPAN IS EQUAL TO STRINGER SPACING MINUS ONE- HALF STRINGER FLANGE WIDTH.

STRUCTURAL STEEL: TYPE STEEL SHALL BE AS SPECIFIED.

DESIGN WEIGHT: STRUCTURES USING THESE GRID FLOORINGS SHALL BE DESIGNED FOR A FLOORING WEIGHT OF 25 POUNDS PER SQUARE FOOT.

ACTUAL WEIGHT: GRID FLOORING MANUFACTURED UNDER THIS STANDARD SHALL NOT WEIGH LESS THAN 22 POUNDS PER SQUARE FOOT.

MOVABLE SPANS: WHEN GRID FLOORING IS TO BE USED ON A MOVABLE SPAN, THE FABRICATOR SHALL BE REQUIRED TO SUBMIT TO THE BRIDGE DESIGN ENGINEER THE ACTUAL WEIGHT PER SQUARE FOOT OF THE GRID FLOORING, BOTH WITH AND WITHOUT ATTACHMENTS.

PROTECTIVE COATING: GRID FLOORING SHALL BE PAINTED OR GALVANIZED AS CALLED FOR IN THE SPECIFICATIONS.

TRIM PLATES: TRIM PLATES SHALL BE SAME MATERIAL AND GRADE AS THE GRID FLOORING. USE 1/4" FILLET WELDS FOR TRIM PLATES TO GRID FLOORING CONNECTION. TRIM PLATES TO BE INCLUDED IN THE COST OF STEEL GRID FLOORING.

MAIN BEARING BAR DESIGN DATA			
FLOORING TYPE	I	II	III
WEIGHT OF MAIN BAR (MINIMUM LBS/FT)	4.65	4.65	5.50
MOMENT OF INERTIA (MINIMUM IN^4)	3.5	3.5	4.6
SECTION MODULUS (MINIMUM IN^3)	1.25	1.25	1.55
STEEL TYPE	A36	A588	A36
MAXIMUM STRINGER SPACING *	4'-1"	5'-1"	

* ASSUME CONTINUOUS SPANS AND 6" WIDE STRINGER FLANGE

STATE OF LOUISIANA
KIAN LAM YAP
REG. No. 26128
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
8-20-2003

DETAILS ARE NTS

FOR INFORMATIONAL PURPOSES ONLY

SHEET NUMBER	
PARISH	
FEDERAL PROJECT	
STATE PROJECT	
DESIGNED K. YAP	
CHECKED	
DETAILED P. GELPI	
CHECKED K. YAP	
DATE 06-06-02	
SHEET	

NO. | DATE | REVISION DESCRIPTION | BY

OPEN STEEL GRID FLOORING
(HEAVY DUTY)

SPECIAL DETAIL GF-02

BRIDGE AND STRUCTURAL DESIGN