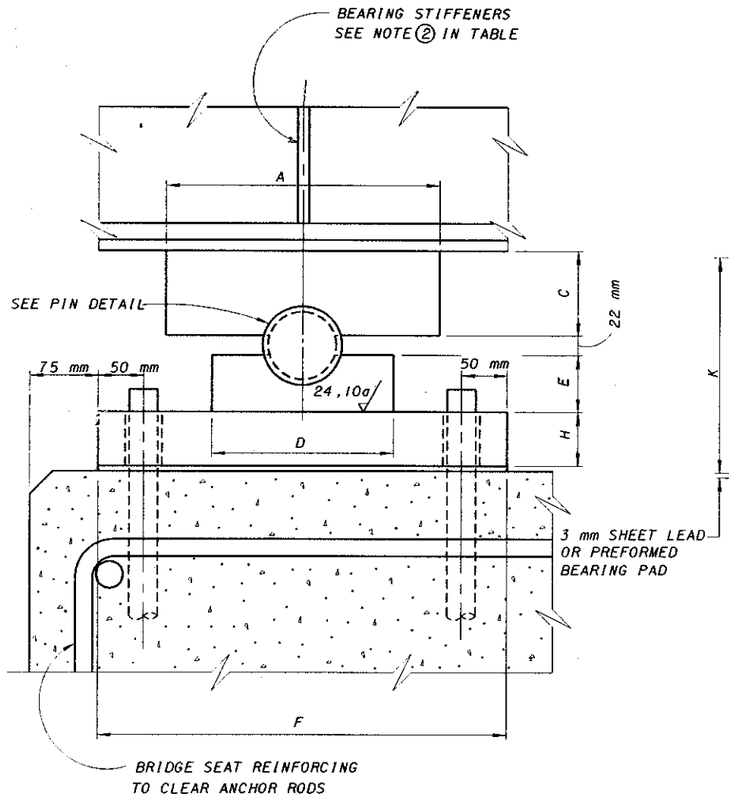
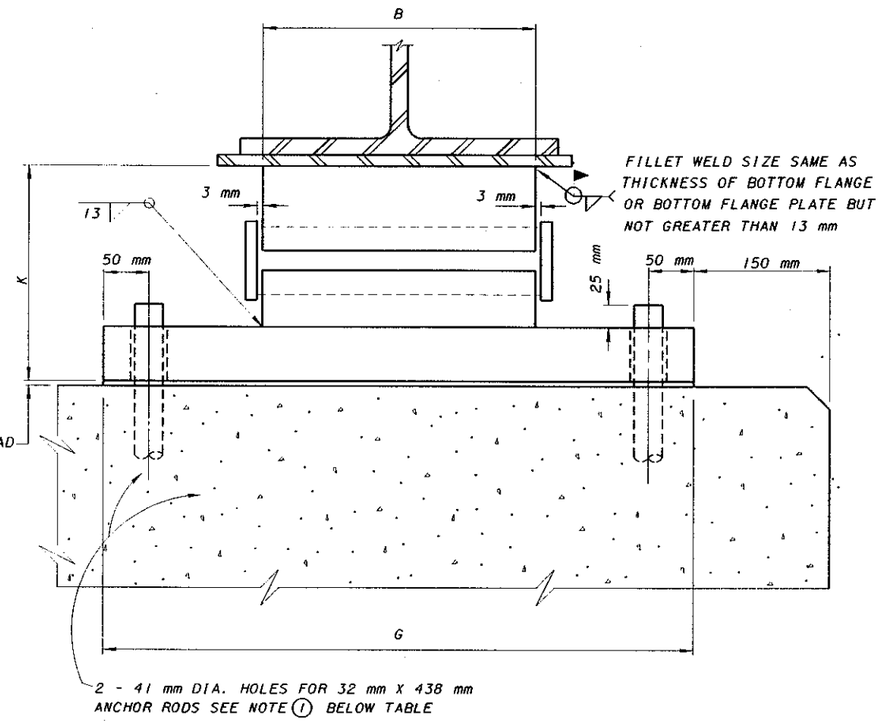




ELEVATIONS OF FIXED BEARING

SEE TABLE FOR ADDITIONAL DIMENSIONS

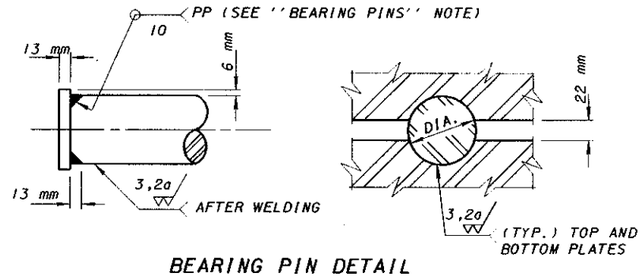
	FIXED BEARING NO.	FIXED BEARINGS DIMENSIONS (MILLIMETER) A	B	C	D	E	F	G	H	K	DIA.	WEIGHT EACH (Kg)	MAXIMUM LOAD (kN)
(1)	F - 225	152	152	38	76	32	203	406	38	130	51	45	225
(1)	F - 450	178	229	45	102	38	229	457	38	143	51	65	450
	F - 675	229	229	64	127	38	279	508	51	175	64	111	675
	F - 900	254	254	76	152	51	279	559	51	200	64	136	900
	F -1100	279	254	89	178	51	305	610	64	226	76	181	1100
	F -1325	305	279	95	203	64	356	635	64	245	76	228	1325
(2)	F - 1550	305	279	95	203	64	406	635	64	245	76	245	1550
(2)	F - 1800	305	305	95	203	64	457	660	64	245	76	277	1800

(1) ONLY 2 ANCHOR RODS REQUIRED. PLACED IN DIAGONALLY OPPOSITE CORNERS OF THE MASONRY PLATE.

(2) BEARING STIFFENERS ARE REQUIRED ON BOTH SIDES OF THE BEAM OR GIRDER WEB ABOVE.

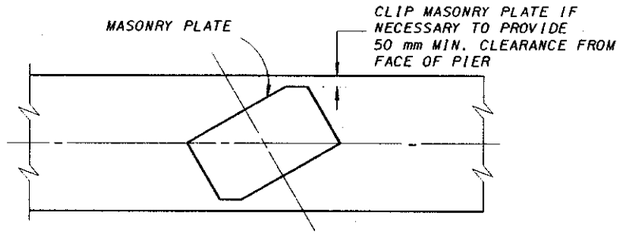
WEIGHTS GIVEN ARE FOR ONE COMPLETE BEARING, INCLUDING SHEET LEAD AND ANCHOR RODS.

BEARING CAPACITIES SHOWN ON THIS STANDARD DRAWING ARE BASED ON ACTUAL DEAD LOAD, LIVE LOAD AND IMPACT



BEARING PIN DETAIL

SEE TABLE FOR ADDITIONAL DIMENSIONS



PLAN VIEW OF TOP OF PIER

SHOWING MASONRY PLATE FOR BRIDGE ON SKEW

NOTES

DESIGN SPECIFICATIONS : THIS STANDARD DRAWING CONFORMS TO THE REQUIREMENTS OF "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977, INCLUDING THE 1978, 1979, 1980 AND 1981 INTERIMS TO THE ABOVE AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS. EXCEPT THAT THE MASONRY PLATES FOR THE BEARINGS ARE DESIGNED ON THE BASIS OF AN ALLOWABLE BENDING STRESS OF 207 MPa ASSUMING UNIFORM DISTRIBUTION OF BEARING ON THE CONCRETE.

STEEL PLATES : IF THE SUPERSTRUCTURE MEMBERS ARE A36M STEEL THE PLATES SHALL BE THE SAME MATERIAL AND SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IF THE SUPERSTRUCTURE MEMBERS ARE A588M STEEL, UNPAINTED, THE PLATE ELEMENT ABOVE THE BEARING PIN SHALL ALSO BE A588M STEEL. THE PLATE ELEMENTS BELOW THE BEARING PIN MAY BE EITHER A36M, GALVANIZED BEFORE WELDING, OR A588M UNPAINTED, BUT BOTH PLATES SHALL BE OF THE SAME MATERIAL.

BEARING PINS : IF THE SUPERSTRUCTURE MEMBERS ARE A36M STEEL THE PINS SHALL BE MADE FROM STOCK MEETING THE REQUIREMENTS OF 711.04 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND SHALL BE PAINTED IN ACCORDANCE WITH THE SAME SPECIFICATIONS AS THOSE FOR PAINTING THE SUPERSTRUCTURE MEMBERS. IF THE SUPERSTRUCTURE MEMBERS ARE A588M STEEL AND THE BOTTOM PLATES ARE A36M, GALVANIZED, THE PINS SHALL BE AS ABOVE, GALVANIZED INSTEAD OF PAINTED. IF THE BOTTOM PLATES ARE A588M THE PINS SHALL ALSO BE A588M. BEARING PINS MAY BE FABRICATED FROM ONE PIECE OF STOCK OR FROM ROD STOCK AND PLATES, WELDED AS SHOWN ON THESE DETAILS.

SURFACE FINISH : SURFACE FINISHES SHOWN ON THESE DETAILS SHALL BE MINIMUM BEFORE GALVANIZING. A 12,5a FINISH OR SMOOTHER SHALL BE USED WHERE NOT OTHERWISE NOTED.

ROADWAY GRADE : IF THE ROADWAY GRADE EXCEEDS 2% THE UPPER LOAD PLATE OF THE BEARING SHALL BE BEVELED TO MATCH THE GRADE. DIMENSION C SHALL BE MAINTAINED AT THE CENTER OF THE PLATE.

LATERAL EXPANSION : ALL BEARINGS MUST BE ACCURATELY PLACED SO THAT PROPER CLEARANCE WILL BE PROVIDED AT ALL BEARINGS FOR LATERAL EXPANSION OF THE SUPERSTRUCTURE. IF THE SUPERSTRUCTURE EXCEEDS 18 000 mm IN WIDTH THE 3 mm CLEARANCE SHOWN AT EACH END OF THE BEARING PIN SHALL BE INCREASED. A CLEARANCE OF 6 mm AT EACH END WILL BE ADEQUATE FOR A SUPERSTRUCTURE WIDTH UP TO 36 000 mm.

BEARING ANCHOR RODS : AT THE OPTION OF THE CONTRACTOR, THE BEARING ANCHOR RODS (OR FORMED HOLES), LOCATED AND SUPPORTED BY TEMPLATES, MAY BE CAST-IN-PLACE.

BRIDGE SEAT REINFORCING : PROJECT PLANS SHALL INCLUDE A PLAN VIEW OF THE SEAT AREA FOR THE FIXED BEARING SHOWING THE OUTLINE OF THE MASONRY PLATE, THE ANCHOR RODS AND THE MAIN REINFORCING BARS IN THE TOP OF THE BRIDGE SEAT. ADEQUATE DIMENSIONS SHALL BE PROVIDED TO ENSURE THAT THERE WILL BE NO INTERFERENCE BETWEEN THE ANCHOR RODS AND THE RE-BARS, AND THAT THE SEAT AREA WILL ACCOMMODATE THE BEARING.

MASONRY PLATE DIMENSIONS SHOWN IN THE TABLE MAY BE USED PROVIDED CLIPPED CORNERS DO NOT REDUCE THE BEARING AREA OF THE PLATE BY MORE THAN 5%. BEARINGS WITH CLIPPED MASONRY PLATES SHALL BE IDENTIFIED ON THE PLANS WITH THE WORD "MODIFIED". THUS : "F-1325 MODIFIED.

DESIGN AGENCY
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
Richard L Engel — 12-2-94
ENGINEER OF BRIDGES — DATE

REVISIONS

DESIGNED JFF
DRAWN JFF
CHECKED JAM
REVIEWED LMW

FB-1-82M

STANDARD
METRIC
FIXED BEARINGS FOR STEEL
BEAM AND GIRDER BRIDGES

1 / 1