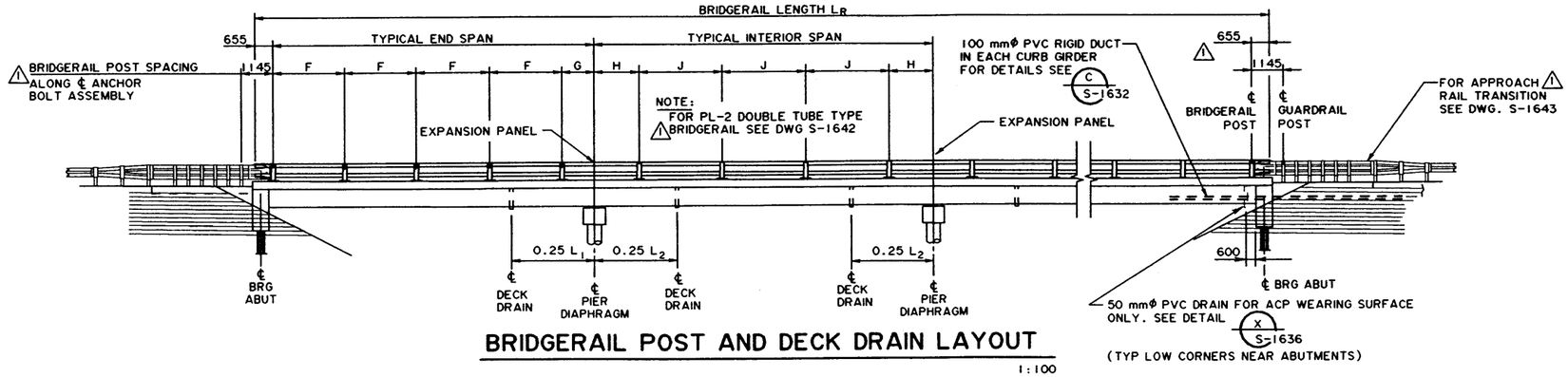
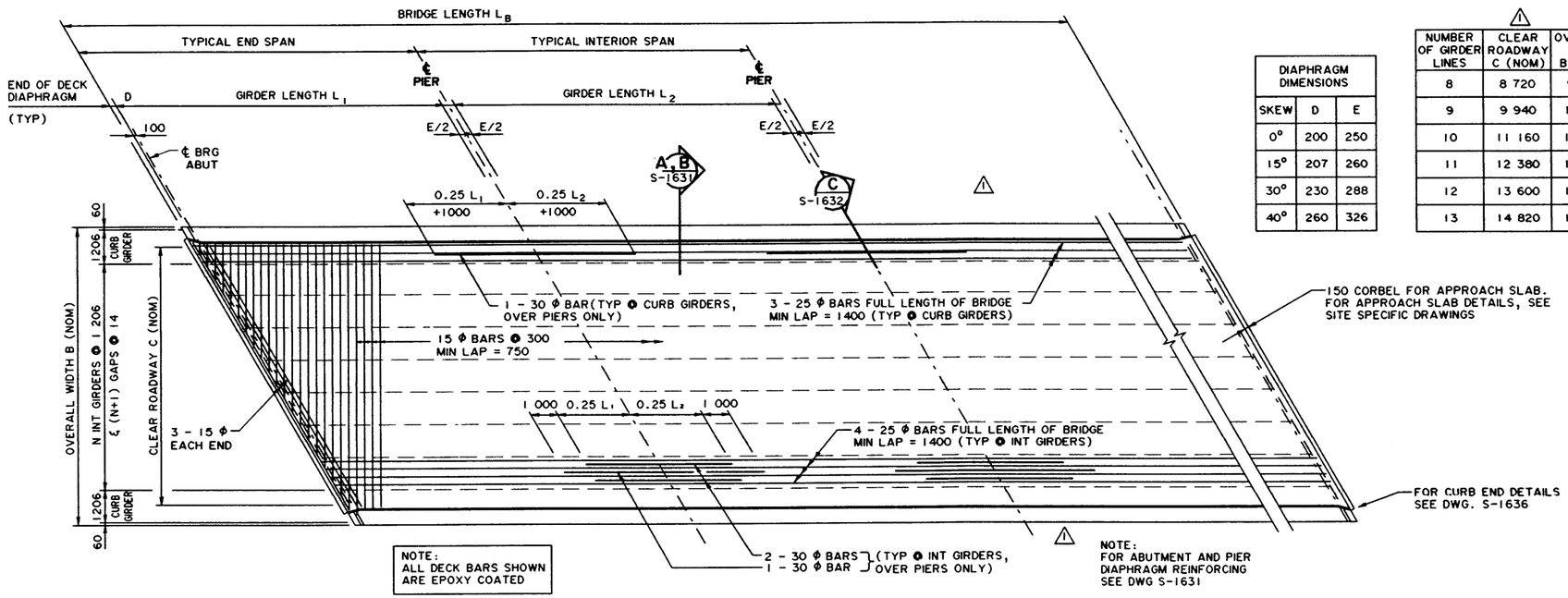


BRIDGERAIL POST AND DECK DRAIN LAYOUT

1:100



NOTE:
ALL DECK BARS SHOWN ARE EPOXY COATED

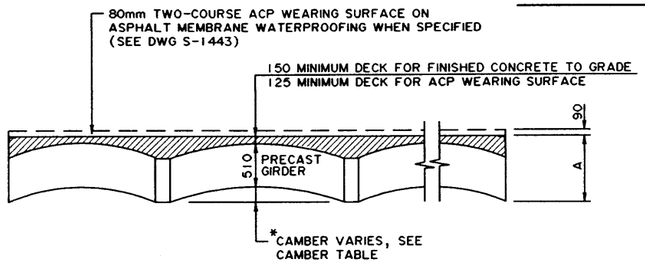
DECK REINFORCING PLAN

1:100

DIAPHRAGM DIMENSIONS		
SKEW	D	E
0°	200	250
15°	207	260
30°	230	288
40°	260	326

⚠1

NUMBER OF GIRDER LINES	CLEAR ROADWAY C (NOM)	OVER ALL WIDTH B (NOM)
8	8 720	9 870
9	9 940	11 090
10	11 160	12 310
11	12 380	13 530
12	13 600	14 750
13	14 820	15 970



CAMBER DIAGRAM

NTS

*NOTES:

- NET CAMBER VALUES ARE ESTIMATED VALUES ONLY. ACTUAL VALUES MAY VARY ACCORDING TO VARIATIONS IN PRESTRESS LOSSES AND PROPERTIES OF CONCRETE.
- FIELD ADJUST AS REQUIRED BY RAISING OR LOWERING GRADE LINE TO MAINTAIN MINIMUM DECK THICKNESS.

CAMBER TABLE								
DEFLECTION (-) OR CAMBER (+)	8m GIRDER		10m GIRDER		12m GIRDER		14m GIRDER	
	INTERIOR	CURB	INTERIOR	CURB	INTERIOR	CURB	INTERIOR	CURB
GIRDER DL	-2	-2	-5	-5	-10	-10	-19	-19
PRESTRESS TRANSFER	4	4	12	12	24	24	41	41
CURB WEIGHT	0	-1	0	-3	0	-5	0	-10
150mm DECK	-1	0	-2	0	-4	0	-7	-1
ESTIMATED FINAL CAMBER	1	1	5	4	10	8	15	11

GENERAL NOTES

- ALL DRAWINGS ARE DIMENSIONED IN MILLIMETRES.
- THIS DESIGN IS APPLICABLE FOR BOTH FINISHED CONCRETE TO GRADE AND ACP WEARING SURFACE ON ASPHALT MEMBRANE WATERPROOFING.
- FOR DETAILS OF DECK WATER PROOFING SYSTEM WITH 80mm TWO COURSE HOT MIX ASPHALTIC CONCRETE PAVEMENT SEE DWG. S-1443.
- ALL REFERENCES TO OTHER STANDARD DRAWINGS REFER TO THE LATEST REVISION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR BRIDGE CONSTRUCTION LATEST VERSION.

DESIGN

- THIS DESIGN IS APPLICABLE TO SPAN ARRANGEMENTS BASED ON THE FOLLOWING COMBINATIONS OF GIRDER LENGTHS:

8m	10m	12m	14m
8-8m	10-10m	12-12m	14-14m
8-8-8m	10-10-10m	12-12-12m	14-14-14m
8-10-8m	10-12-10m	12-14-12m	14-14-14-14m
8-12-8m	10-14-10m	12-12-12-12m	
8-14-8m	10-10-10-10m	12-14-14-12m	
8-8-8-8m	10-12-12-10m		
8-10-10-8m	10-14-14-10m		
8-12-12-8m			
8-14-14-8m			

- STANDARD SKEW ANGLES : 0° 15° 30° 40°
- CAN/CSA-S6-88 SPECIFICATIONS
- LIVE LOAD - CAN/CSA-S6-88 CS-750 0.672 WHEEL LINES PER GIRDER
- DEAD LOAD - INTERIOR GIRDERS
  - PRECAST GIRDER AND 150mm DECK WEIGHT = 13.6 kN/m (125mm EFFECTIVE DECK THICKNESS USED FOR RESISTANCE CALCULATIONS)
  - 50mm FUTURE WEARING SURFACE ALLOWANCE = 1.3 kN/m
- DEAD LOAD - CURB GIRDERS
  - PRECAST GIRDER AND CURB WEIGHT = 15.5 kN/m
  - 150mm DECK WEIGHT = 1.8 kN/m
  - 50mm FUTURE WEARING SURFACE ALLOWANCE = 0.5 kN/m

SITE SPECIFIC REQUIREMENTS

- THIS SET OF STANDARD DRAWINGS ARE TO BE WORKED TOGETHER WITH THE FOLLOWING SITE SPECIFIC DRAWINGS, WHICH SHALL BE PREPARED BY A CONSULTANT PRE-QUALIFIED BY THE DEPARTMENT TO DESIGN BRIDGE STRUCTURES.
  - GENERAL LAYOUT
  - SITE INFORMATION SHEET(S)
  - SUB-STRUCTURE DRAWINGS
  - SITE SPECIFIC DECK REINFORCEMENT PLAN INCLUDING COMPLETE DECK AND DIAPHRAGM BAR LISTS, DIMENSIONS TABLE FOR LETTER DIMENSIONS L_B, L_R, L_1, L_2, A TO H, J, K, M, N.
  - DESIGN CONSULTANT SHALL BE RESPONSIBLE FOR CHECKING GIRDER SHOP DRAWINGS.

DECK

- CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 4, CAST-IN-PLACE CONCRETE.
- ALL CONCRETE SHALL BE CLASS SF.
- REINFORCING STEEL SHALL BE GRADE 400.
- ALL CONCRETE CORNERS SHALL HAVE A 20 mm CHAMFER OR FILLET UNLESS NOTED OTHERWISE.
- DECK CONCRETE SHALL BE PLACED CONTINUOUSLY WITHIN A 4-HOUR MAXIMUM TIME PERIOD. DECK INCLUDES DIAPHRAGMS.
- ALL REINFORCING STEEL SHALL HAVE A 50 mm CLEAR COVER UNLESS NOTED OTHERWISE.
- GALVANIZING SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATIONS A123 OR A153 AS APPLICABLE.
- FOR CONCRETE TO GRADE, DECK CONCRETE FINISH SHALL BE CLASS 5. CURB BLOCKOUT AND PIER DIAPHRAGM FINISHES TO MATCH PRECAST GIRDERS. SILANE SEALER SHALL BE APPLIED TO THE DECK SURFACE AND INSIDE VERTICAL FACE OF CURB.
- FOR ACP WEARING SURFACE, DECK CONCRETE FINISH SHALL BE CLASS 4. CURB BLOCKOUT AND PIER DIAPHRAGM FINISHES TO MATCH PRECAST GIRDERS. SILANE SEALER SHALL BE APPLIED TO THE INSIDE VERTICAL FACE OF CURB.
- STEEL FOR ANCHOR DOWELS AND MISCELLANEOUS IRON SHALL CONFORM TO CSA G40.21M-300W.

(2)

REV	DATE	REVISIONS	BY
⚠1	00-04-25	PL-2 BRIDGERAIL & CURB	RY

APPROVED
ORIGINAL DRAWING APPROVED BY
ALLAN KWAN
EXECUTIVE DIRECTOR
TECHNICAL STANDARDS BRANCH
NOVEMBER 19, 1998

Alberta INFRASTRUCTURE
TECHNICAL STANDARDS BRANCH

STANDARD SCC COMPOSITE BRIDGES SUPERSTRUCTURE LAYOUT

DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
RY	WJW	98-08-21	CTC						1 of 7	S-1630

C:/WSCHNEIDER/DATA/TSB2530/USR3/STANDARDS/S1630.RVI PLOTTED MAY 8, 2000