

11/10/2023 R:\Structures\Culvert\Martin_MillCreek_Culvert\Drawings\Final\2577A_SMJ_CU_2-2_330000.dgn

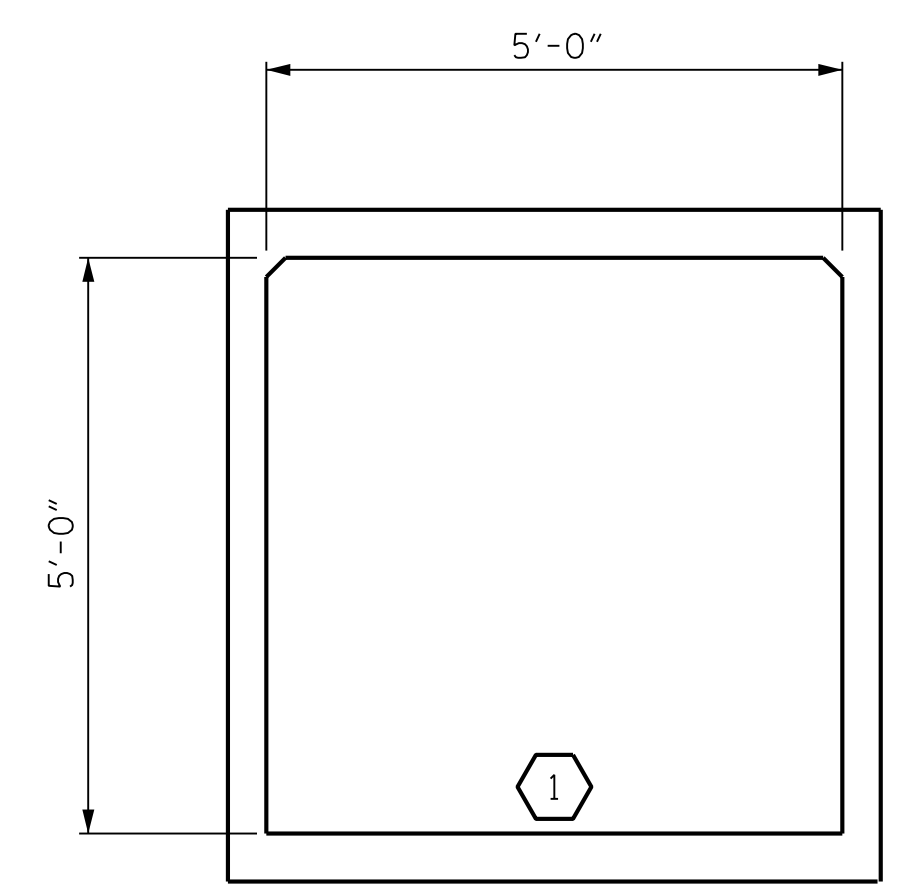
PERMANENT LOAD FACTORS:

LOAD TYPE	MAX FACTOR	MIN FACTOR
DC	1.25	0.90
DW	1.50	0.65
EV	1.30	0.90
EH	1.35	0.90
ES	1.35	0.90
WA	1.00	--

LOAD AND RESISTANCE FACTOR RATING (LRFR) SUMMARY FOR REINFORCED CONCRETE BOX CULVERTS										
	CONTROLLING LOAD RATING	MINIMUM RATING FACTOR (RF)	STRENGTH I LIMIT STATE							
			MOMENT				SHEAR			
			RATING FACTOR	BOX NO.	ELEMENT TYPE	DISTANCE FROM LEFT END OF ELEMENT (ft)	RATING FACTOR	BOX NO.	ELEMENT TYPE	DISTANCE FROM LEFT END OF ELEMENT (ft)
PERMANENT LOAD RATING	1	2.08	2.08	1	BOTTOM SLAB	2.5	3.11	1	BOTTOM SLAB	0.1

NOTES:

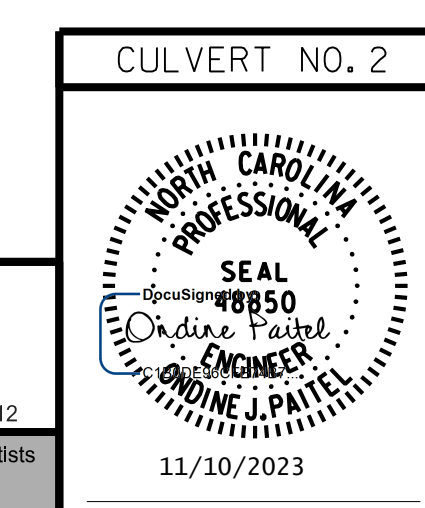
RATING FACTORS ARE BASED ON THE STRENGTH I LIMIT STATE.
 THE EFFECTS OF LIVE LOAD ON DESIGN AND LOAD RATING MAY BE NEGLECTED FOR CULVERTS WITH CERTAIN FILL DEPTHS DESCRIBED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
 CULVERTS WITH NEGLIGIBLE LIVE LOAD SHOULD BE LOAD RATED FOR PERMANENT LOADS ONLY IN ACCORDANCE WITH THE AASHTO MANUAL FOR BRIDGE EVALUATION.



LRFR SUMMARY
(LOOKING DOWNSTREAM)

PROJECT NO. R-2577A
FORSYTH COUNTY
 STATION: 229+09.00 -L2-

SHEET 2 OF 14



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
STANDARD
 LRFR SUMMARY FOR
 REINFORCED CONCRETE
 BOX CULVERT
 (DEEP FILLS)

RK&K
 P: (919) 878-9560
 8601 Six Forks Road, Forum 1 Suite 700
 Raleigh, North Carolina 27615 | NC License No. F-0112
 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com
 Responsive People | Creative Solutions

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 14

DRAWN BY : T. K. BOYD DATE : NOV 2023
 CHECKED BY : B. D. KLAPPENBACH DATE : NOV 2023
 DESIGN ENGINEER OF RECORD : O. J. PAITEL DATE : NOV 2023

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**