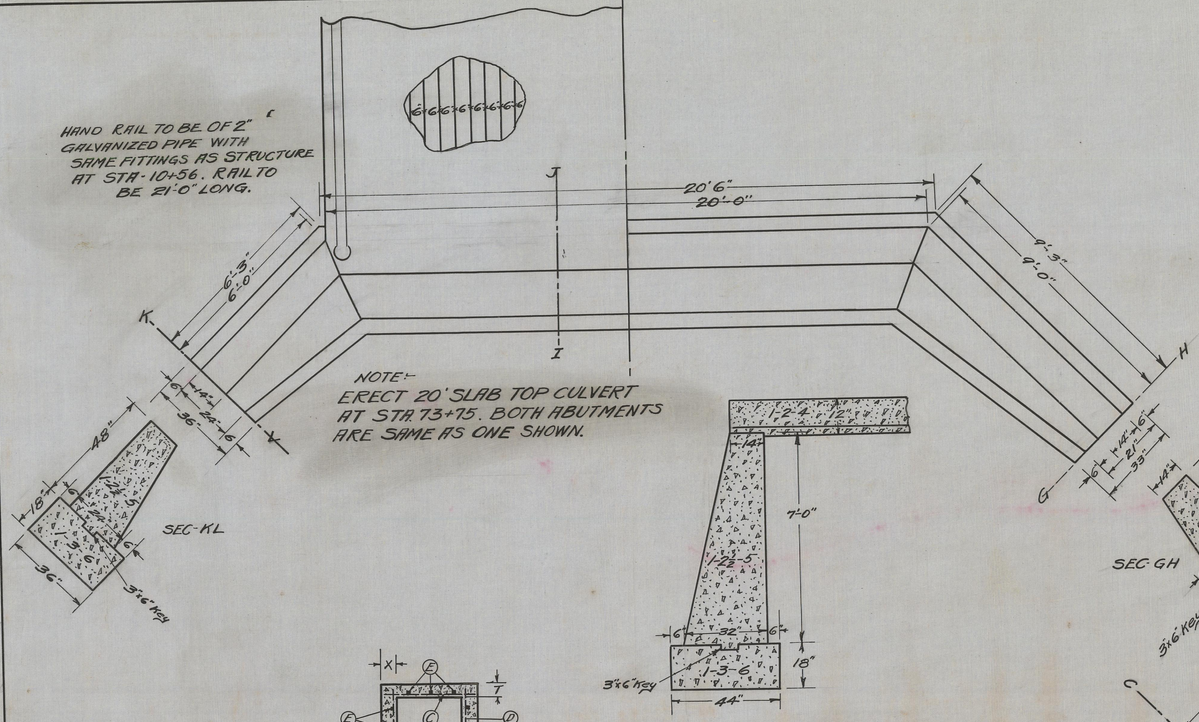
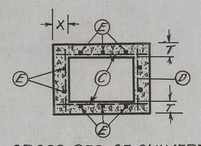
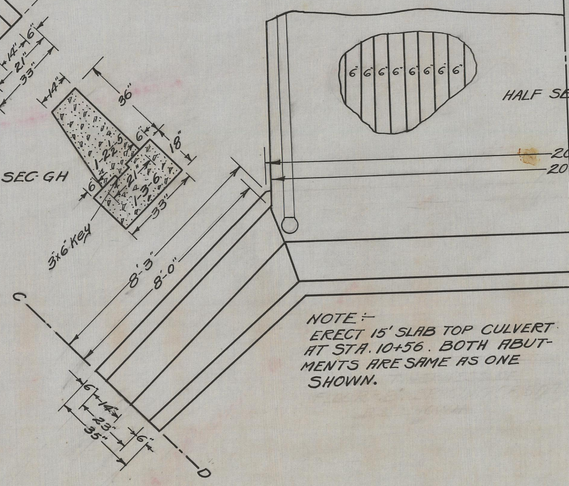
C.H.S. No. 50 W & B.

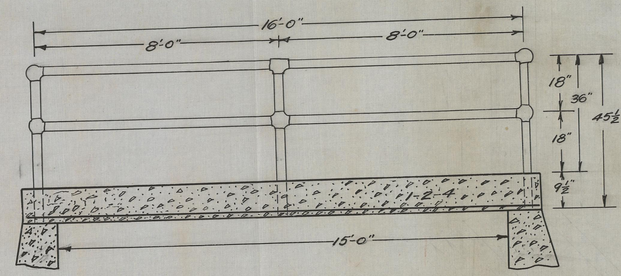
049

HAND RAIL TO BE OF 2" GALVANIZED PIPE WITH SAME FITTINGS AS STRUCTURE AT STA. 10+56. RAIL TO BE 21'-0" LONG.

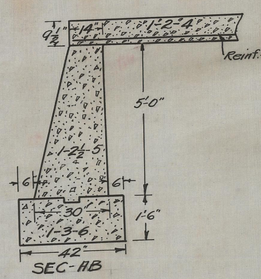


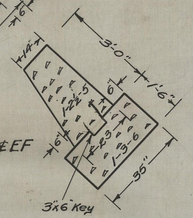


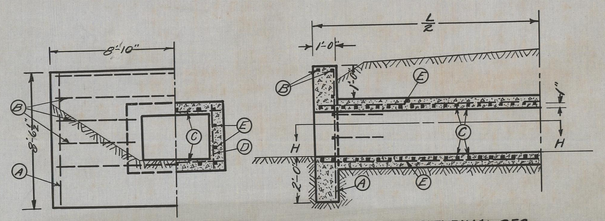


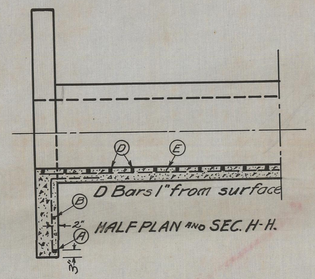


SECTION SHOWING 2" GALVANIZED PIPE HAND RAIL WITH FITTINGS.









Station	Length	WATERWAY		BARREL OF CULVERT																	
						STEEL REINFORCEMENT														Wt. of Steel per lin. ft of Bbl.	Concrete Cu. Yds. per lin. ft of Bbl.
						BARS C				BARS D				BARS E							
	L	CLEAR SPAN	CLEAR HEIGHT	T	X	Size	No. per lin. ft. of Bbl.	Length	Spacing Top	Spacing Bottom	No. per lin. ft. of Bbl.	Length	Spacing Center to Center	No. in Sides	No. in Top and Bottom	No.	Length	No.	Length		
15+00	48'-0"	6'-0"	4'-0"	6⅝	10"	⅞	2.93	7'-3"	7½"	9"	2	5'-0"	1'-0"	8	12	12	"L" less 6"	8	"L" plus 9'-0"	42.5	.650
56+50	30'-0"	6'-0"	4'-0"	6⅝	10"	⅞	2.93	7'-3"	7½"	9"	2	5'-0"	1'-0"	8	12	12	"	8	"L" plus 9'-0"	42.5	.650
90+00	22'-0	6'-0	4'-0"	6⅝	10"	⅞	2.93	7'-3"	7½"	9"	2	5'-0"	1'-0"	8	12	12	"	8	"L" plus 9'-0"	42.5	.650

All bars to be ⅞" except "C" bars which are ⅝".

ESTIMATED QUANTITIES	
EXCAVATION & BACKFILL	47.0 Cu.yds.
CONCRETE (1-2-4)	36.7 Cu.yds.
CONCRETE (1-2½-5)	90.9 Cu.yds.
CONCRETE (1-3-6)	43.0 Cu.yds.
REINFORCING STEEL	1974 lbs.
2" Galvanized Pipe Fittings	93 lin. ft.

W's 6, 7, 18 BE)
42,664 Ind Bridge