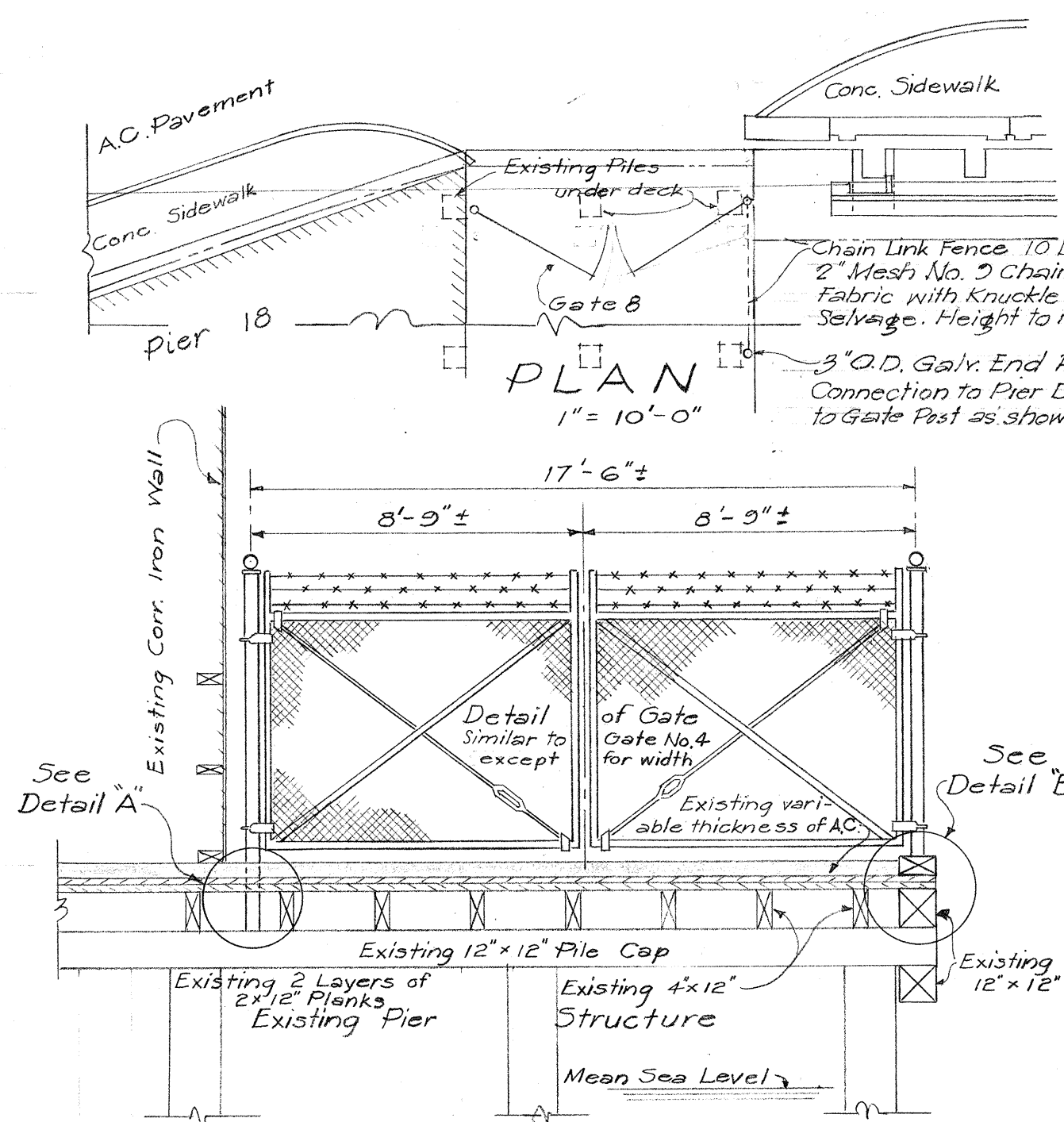


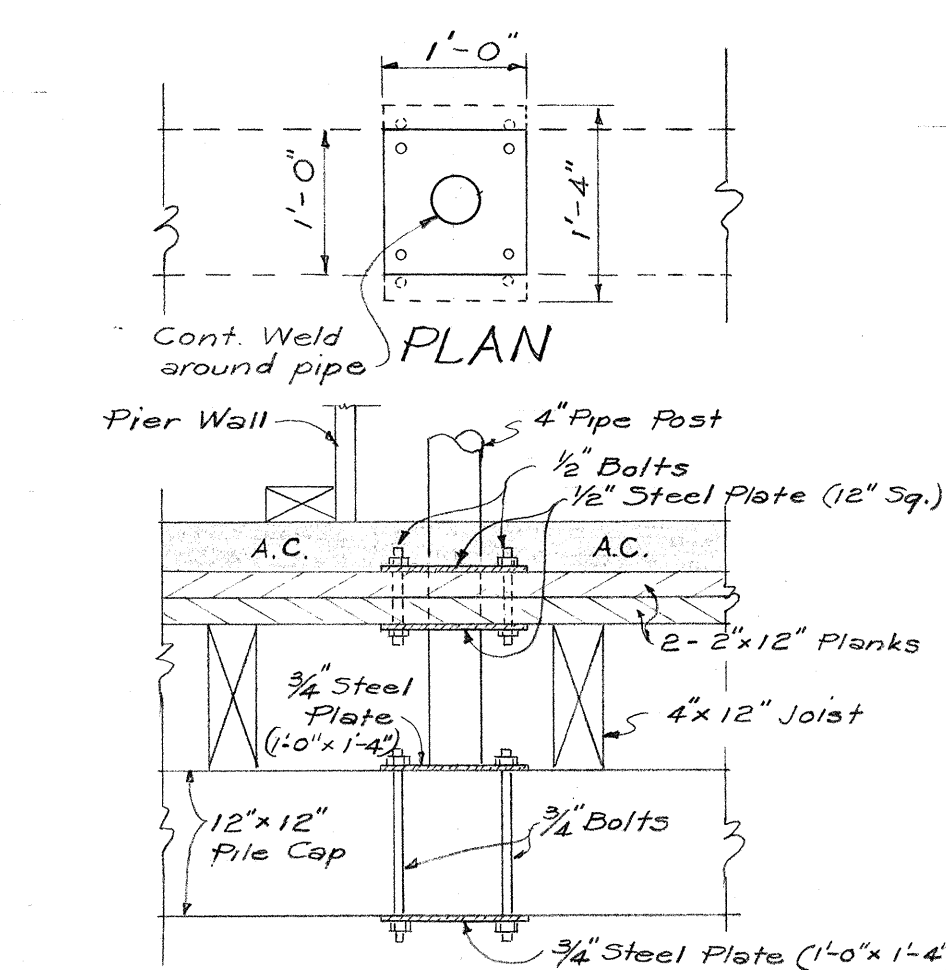
ESTIMATED QUANTITIES

NOTE:
For "As Built" Quantities See
Quantity And Cost Control Sheet.

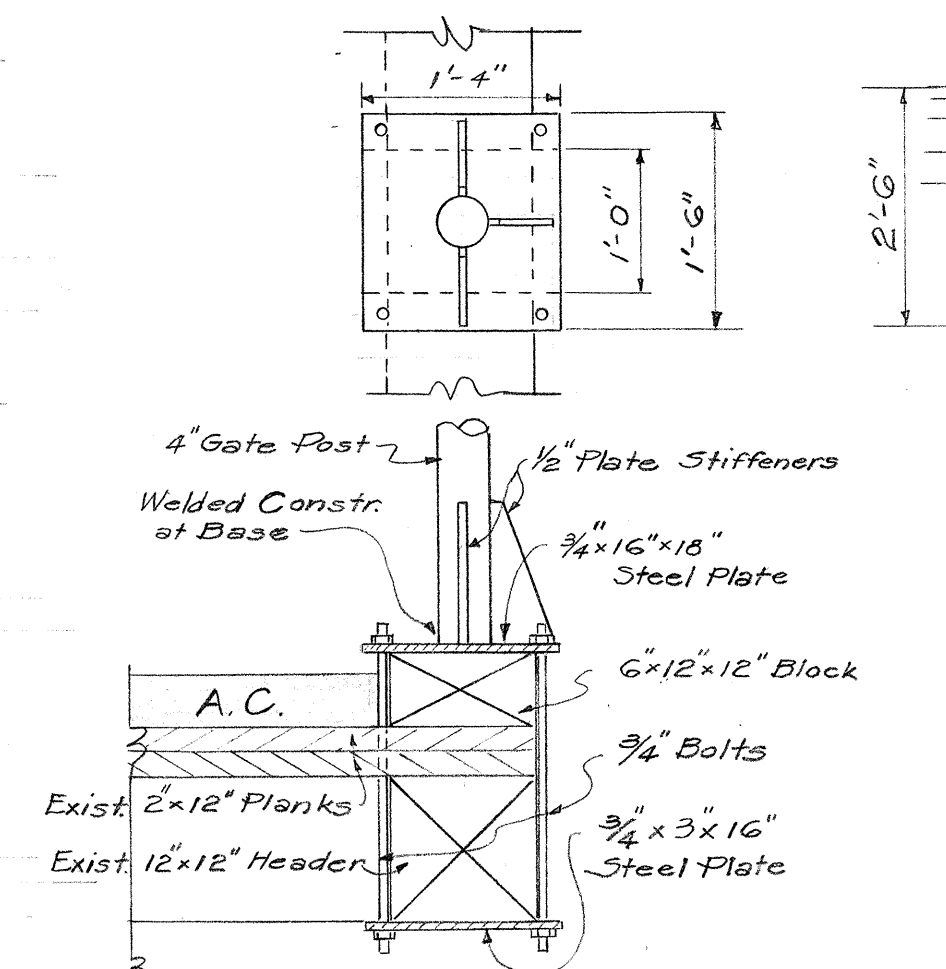
ITEM	TYPE	LOCATION	TOP CURB ELEV.	TOP & MANHOLE COVER ELEV.	FLOOR INVERT ELEV.	STD. MANHOLE CASTING TYPE	CONC. PIPE CULVERT FT.	STD. REINF. CONC. PIPE FT.	STRUCT. EXC. CU. YDS.	CONCRETE CLASS	REINF. STEEL LBS.
CB#1	Std. "D"	Line "A" Sta. 6+07±	6.54	6.60	2.18	"A" "B"			12.9	4.6	69
18" Pipe Culvert		CB#1 to CB#2					50		28.9		
CB#2	Std. "D"	Line "A" Sta. 6+13±	6.62	6.68	1.98				14.0	4.8	69
18" Pipe Culvert		CB#2 to CB#3					32		18.5		
CB#3	Std. "D"	18 Sta. 100+08±	6.30	6.36	1.85				13.7	4.5	69
18" Pipe Culvert		CB#3 to MH#1						88	53.8		
8" Conc. Pipe Drain		Conc. Sump to CB#4					74 Lin. Ft. 8" Conc. Drain Pipe		9.4		
CB#4	Std. "D"	Line "A" Sta. 7+85±	6.96	7.02	2.10				13.7	4.6	69
18" Pipe Culvert		CB#4 to CB#5					43		23.3		
CB#5	Std. "D"	Line "A" Sta. 7+85±	7.02	7.08	1.88				14.4	5.0	69
18" Pipe Culvert		CB#5 to MH#1					118	72	115.2		
MH#1	"D"	18 Sta. 101+00±	5.83	5.89	1.50				7.5	0.6	13
24" Pipe Culvert		MH#1 to CB#6					92		68.7		
CB#6	Std. "A"	18 Sta. 102+00±	5.55	5.61	1.38				24.6	7.3	126
24" Pipe Culvert		CB#6 to MH#2						66	49.6		
MH#2	"E"	18 Sta. 102+75±	5.80	5.86	1.29				13.5	3.4	62
24" Pipe Culvert		MH#2 to Exist. M.H.					32	98	74.3		
36" Pipe Culvert		MH#2 to CB#7					64	206	289.9		
CB#7	Special	18 Sta. 105+50	7.18	7.24	0.96				30.2	9.0	127
36" Pipe Culvert		CB#7 to MH#3					136	234	465.8		
CB#8	Std. "D"	End of Line "B"	8.56	8.62	2.37				14.4	5.7	69
18" Pipe Culvert		CB#8 to CB#9					40		28.1		
CB#9	Std. "D"	End of Line "B"	8.61	8.67	1.57				17.4	6.2	69
18" Pipe Culvert		CB#9 to MH#3					108		84.6		
CB#10	Std. "D"	Line "B" Sta. 2+40±	7.56	7.62	1.35				16.3	5.6	69
18" Pipe Culvert		CB#10 to CB#11					44		29.0		
CB#11	Std. "B"	Line "B" Sta. 6+40±	7.67	7.73	0.91				23.1	7.1	96
18" Pipe Culvert		CB#11 to MH#3					40		28.6		
MH#3	"F"	18 Sta. 109+28±		7.56	0.51				21.1	7.7	1070
42" Pipe Culvert		MH#3 to CB#12					106	78	274.0		
CB#12	Std. "D"	End of Line "F"	7.48	7.52	1.22				21.3	6.0	69
18" Pipe Culvert		CB#12 to CB#13					92		72.7		
CB#13	Special	18 Sta. 111+18±	7.53	7.59	0.88				32.2	9.7	127
42" Pipe Culvert		CB#13 to Outfall					170		239.3		
CB#14	Std. "D"	18 Sta. 112+90±	6.64	6.70	-0.25				24.3	7.0	697
48" Pipe Culvert		CB#14 to Outfall					24 Lin. Ft. 48" Std. Reinf. Conc. Pipe		28.0		
Concrete Drop Inlet	Std. Def.	18 Sta. 112+90±			2.04	1-C.I. Grating			4.4	1.2	53
CB#17	Std. "B"	Line "D" Sta. 1+45±	6.80	6.86	2.35				14.2	5.5	96
18" Pipe Culvert		CB#17 to CB#16					78		37.5		
CB#16	Std. "C"	Line "C" Sta. 1+75±	6.43	6.49	1.89				18.9	5.5	96
18" Pipe Culvert		CB#16 to CB#15					46		26.6		
CB#15	Std. "D"	Line "C" Sta. 1+77±	6.38	6.44	1.61				12.0	4.9	69
18" Pipe Culvert		CB#15 to Outfall					28	52	43.7		
24" Pipe Culvert		Extension of Exist. 18" Sta. 116+00±					16		0		
CB#18	Std. "A"	18 Sta. 116+30±	5.04	5.10	Outfall 3.00				0	6.3	476
24" Pipe Culvert		MH#4 to MH#5					46		36.5		
CB#19	Std. "A"	Line "G" Sta. 2+40±	4.76	8.62	1.30				12.4	7.0	126
18" Pipe Culvert		CB#19 to CB#20					54		25.6	2.1	
CB#20	Std. "A"	Line "G" Sta. 2+50±	5.38	5.44	1.06				19.6	7.4	126
18" Pipe Culvert		CB#20 to CB#21					52		15.6		
CB#22	Std. "A"	18 Sta. 123+25±	4.14	4.20	0.13±				19.9	6.9	126
6x3" Conc. Box Culvert		Line "J" Sta. 0+65±							60.0	66.3	9260
CB#24	Std. "A"	18 Sta. 126+10±	5.08	5.14	1.15				25.1	7.2	126
24" Pipe Culvert		CB#24 to CB#23					68		41.8		
CB#23	Std. "C"	18 Sta. 126+10±	6.12	6.18	0.74				12.5	6.0	96
24" Pipe Culvert		CB#23 to Outfall						8	3.0		
Conc. Retaining Wall									150.4	30.6	
M.H. #4 & 5	"D"	18 Sta. 114+88±		5.58	+0.7	2			15.0	1.2	26
M.H. #6	"D"	18 Sta. 115+90±		5.58	-1.35	1			6.6	0.6	13
Conc. Sump		18 Sta. 98+95±							0.8	0.2	



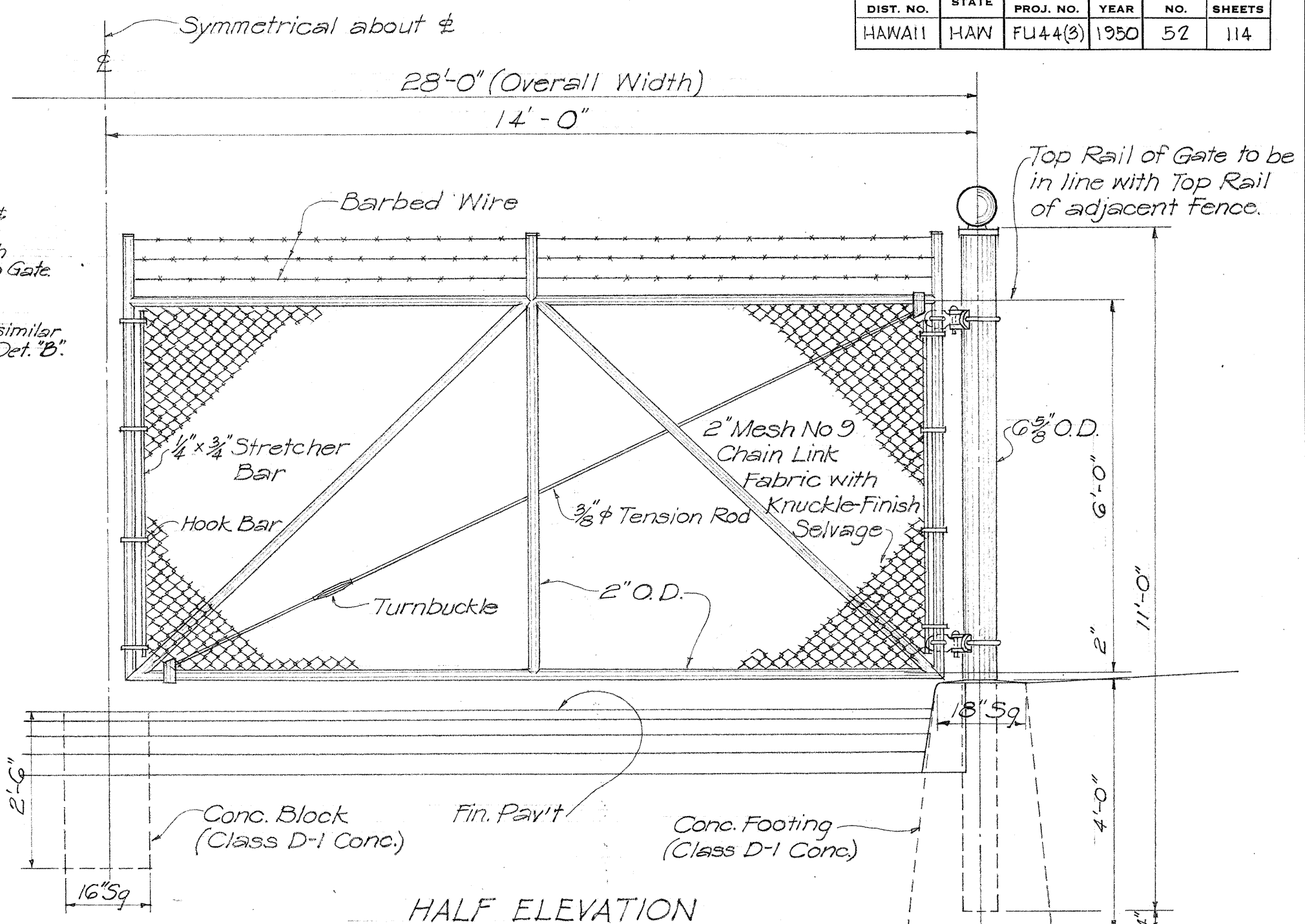
ELEVATION
GATE #8
Scale: 1/4" = 1'-0"



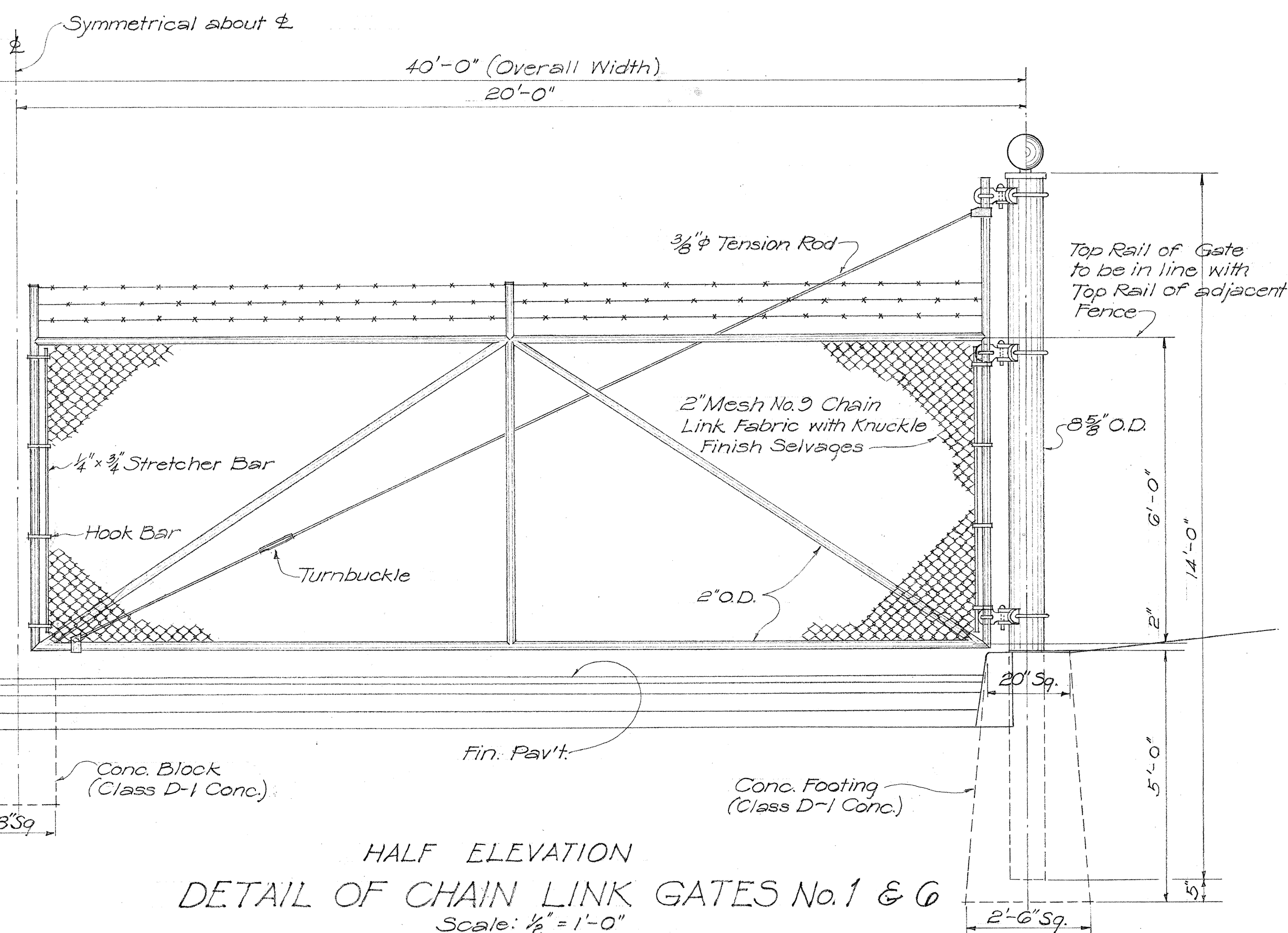
ELEVATION
DETAIL "A"
Scale: 3/4" = 1'-0"



ELEVATION
DETAIL "B"
Scale: 3/4" = 1'-0"



HALF ELEVATION
DETAIL OF CHAIN LINK GATE No. 4
Scale: 1/2" = 1'-0"



HALF ELEVATION
DETAIL OF CHAIN LINK GATES No. 1 & 6
Scale: 1/2" = 1'-0"

NOTE:
All Chain Link Gate Frames to be
constructed with welded connections.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
ESTIMATED QUANTITIES AND
CHAIN LINK GATES
HONOLULU-PEARL HARBOR ROAD
IWILEI SECTION
PROJECT No. FU 44(3) 2ND UNIT
Scale: As Noted Date: Sept. 1950

SHEET No. 1 OF 1 SHEETS

5484.52