

11+50.8 6" Concrete 20' S  
 11+50.8 6" Concrete 20' N  
 11+50.8 6" Concrete 20' W  
 11+50.8 6" Concrete 20' E

11+100 12" Concrete 11' N  
 11+100 12" Concrete 11' S  
 11+100 12" Concrete 11' W  
 11+100 12" Concrete 11' E

11+125 12" Concrete 11' N  
 11+125 12" Concrete 11' S  
 11+125 12" Concrete 11' W  
 11+125 12" Concrete 11' E

11+150 12" Concrete 11' N  
 11+150 12" Concrete 11' S  
 11+150 12" Concrete 11' W  
 11+150 12" Concrete 11' E

11+175 12" Concrete 11' N  
 11+175 12" Concrete 11' S  
 11+175 12" Concrete 11' W  
 11+175 12" Concrete 11' E

11+200 12" Concrete 11' N  
 11+200 12" Concrete 11' S  
 11+200 12" Concrete 11' W  
 11+200 12" Concrete 11' E

11+225 12" Concrete 11' N  
 11+225 12" Concrete 11' S  
 11+225 12" Concrete 11' W  
 11+225 12" Concrete 11' E

11+250 12" Concrete 11' N  
 11+250 12" Concrete 11' S  
 11+250 12" Concrete 11' W  
 11+250 12" Concrete 11' E

11+275 12" Concrete 11' N  
 11+275 12" Concrete 11' S  
 11+275 12" Concrete 11' W  
 11+275 12" Concrete 11' E

11+300 12" Concrete 11' N  
 11+300 12" Concrete 11' S  
 11+300 12" Concrete 11' W  
 11+300 12" Concrete 11' E

11+325 12" Concrete 11' N  
 11+325 12" Concrete 11' S  
 11+325 12" Concrete 11' W  
 11+325 12" Concrete 11' E

11+350 12" Concrete 11' N  
 11+350 12" Concrete 11' S  
 11+350 12" Concrete 11' W  
 11+350 12" Concrete 11' E

11+375 12" Concrete 11' N  
 11+375 12" Concrete 11' S  
 11+375 12" Concrete 11' W  
 11+375 12" Concrete 11' E

11+400 12" Concrete 11' N  
 11+400 12" Concrete 11' S  
 11+400 12" Concrete 11' W  
 11+400 12" Concrete 11' E

11+425 12" Concrete 11' N  
 11+425 12" Concrete 11' S  
 11+425 12" Concrete 11' W  
 11+425 12" Concrete 11' E

COMPACTED BEEM  
 TO BE USED AT ALL FILL STATIONS  
 SEE SHEETS 4-5-6

Sta	11+478	11+500	11+550	11+600	11+650	11+700	11+750	11+800
Accum. Elev.	159.87	159.87	159.87	159.87	159.87	159.87	159.87	159.87
Chgd. Lev. @								
Chgd. Lev. @								
Chgd. Lev. @								
Chgd. Lev. @								

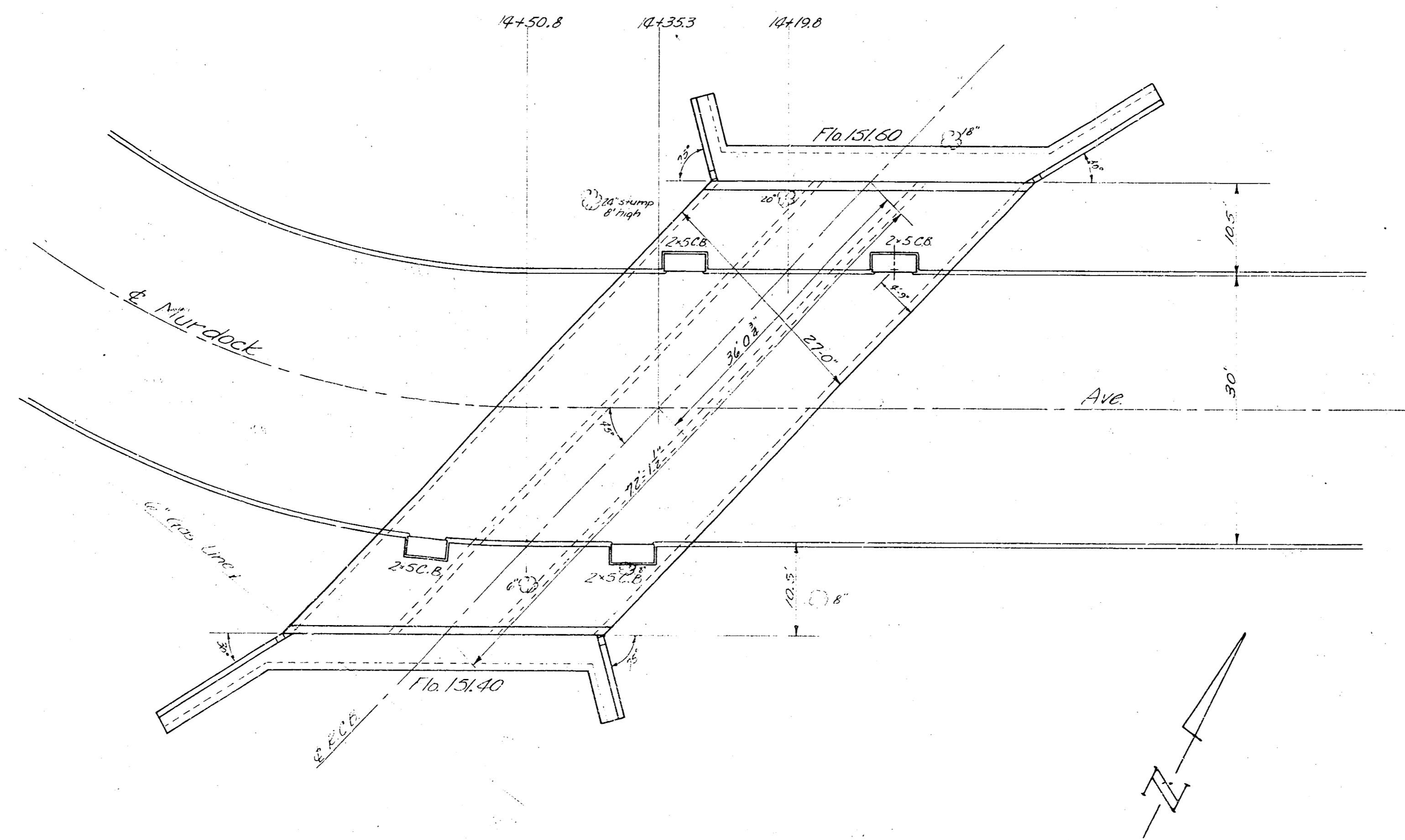
Sta	11+800	11+850	11+900	11+950	11+1000	11+1050	11+1100
Accum. Elev.	159.87	159.87	159.87	159.87	159.87	159.87	159.87
Chgd. Lev. @							
Chgd. Lev. @							
Chgd. Lev. @							
Chgd. Lev. @							

2/6

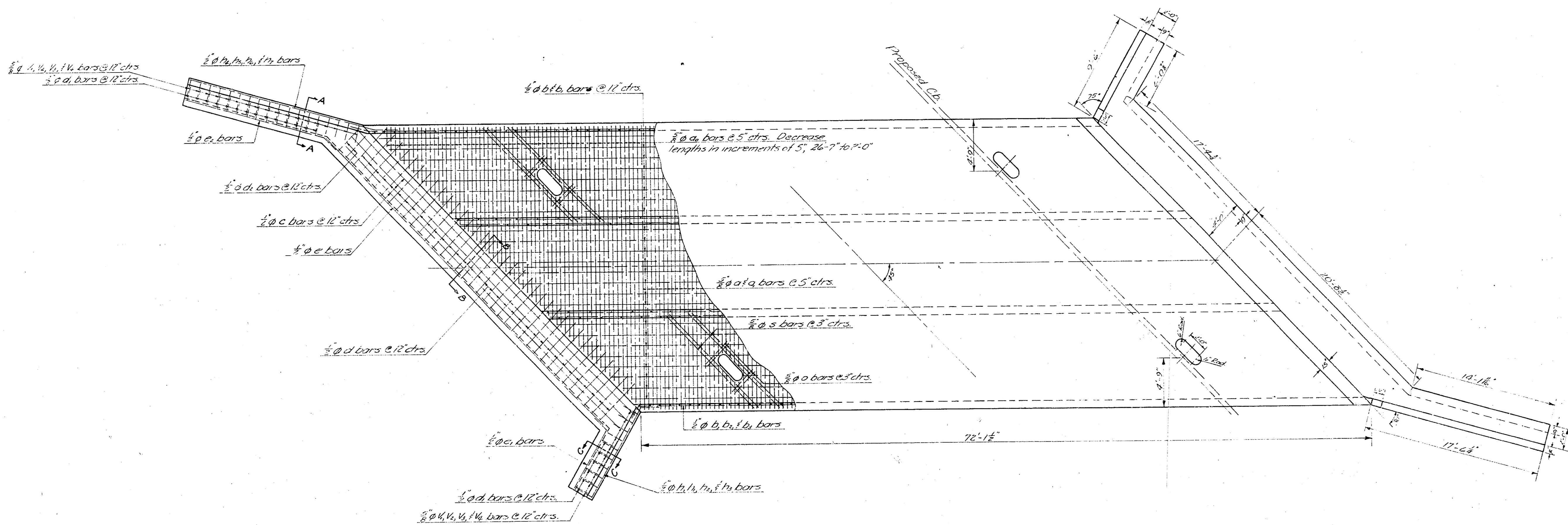
MURDOCK  
C13-59



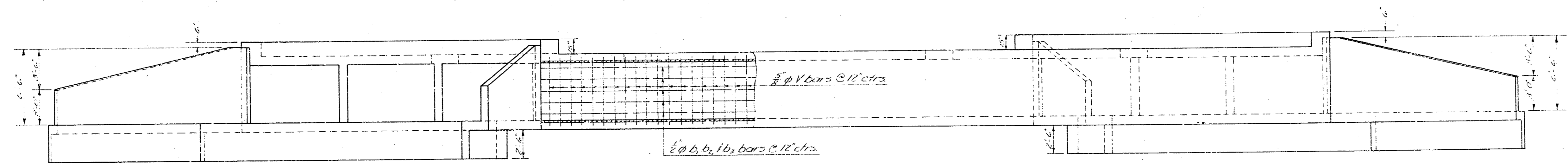
3 - 8'x5' R.C.B.  
MURDOCK AVE.



PLAN LAYOUT  
Scale: 1" = 10'

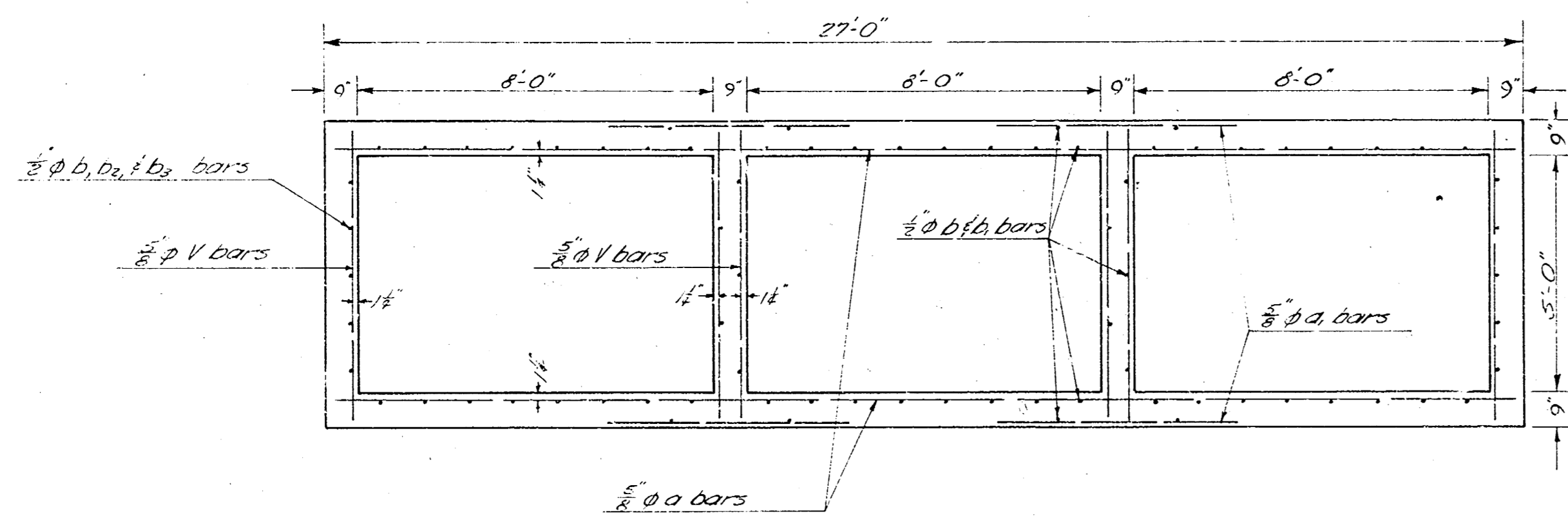


PLAN VIEW  
Scale: 1/8" = 1'-0"

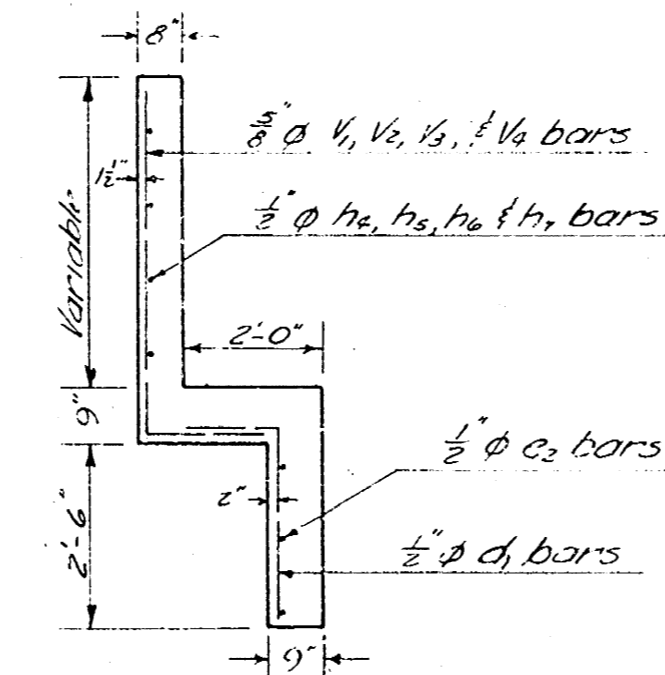


SIDE ELEVATION  
Scale: 1/8" = 1'-0"

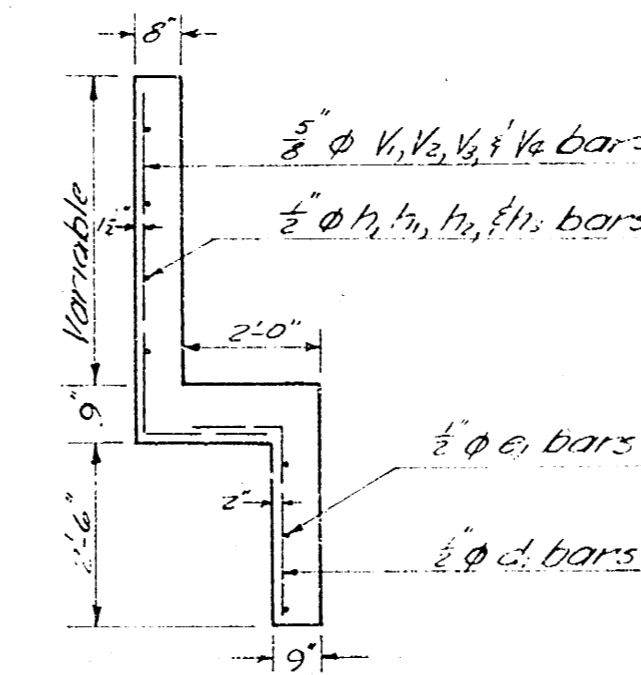
NOTE: Excavation is to be extended 2.0' beyond sides of the box & wingwalls. Backfill is to be carried to original ground elevation. Backfill is to be sand stabilized and mechanically tamped.



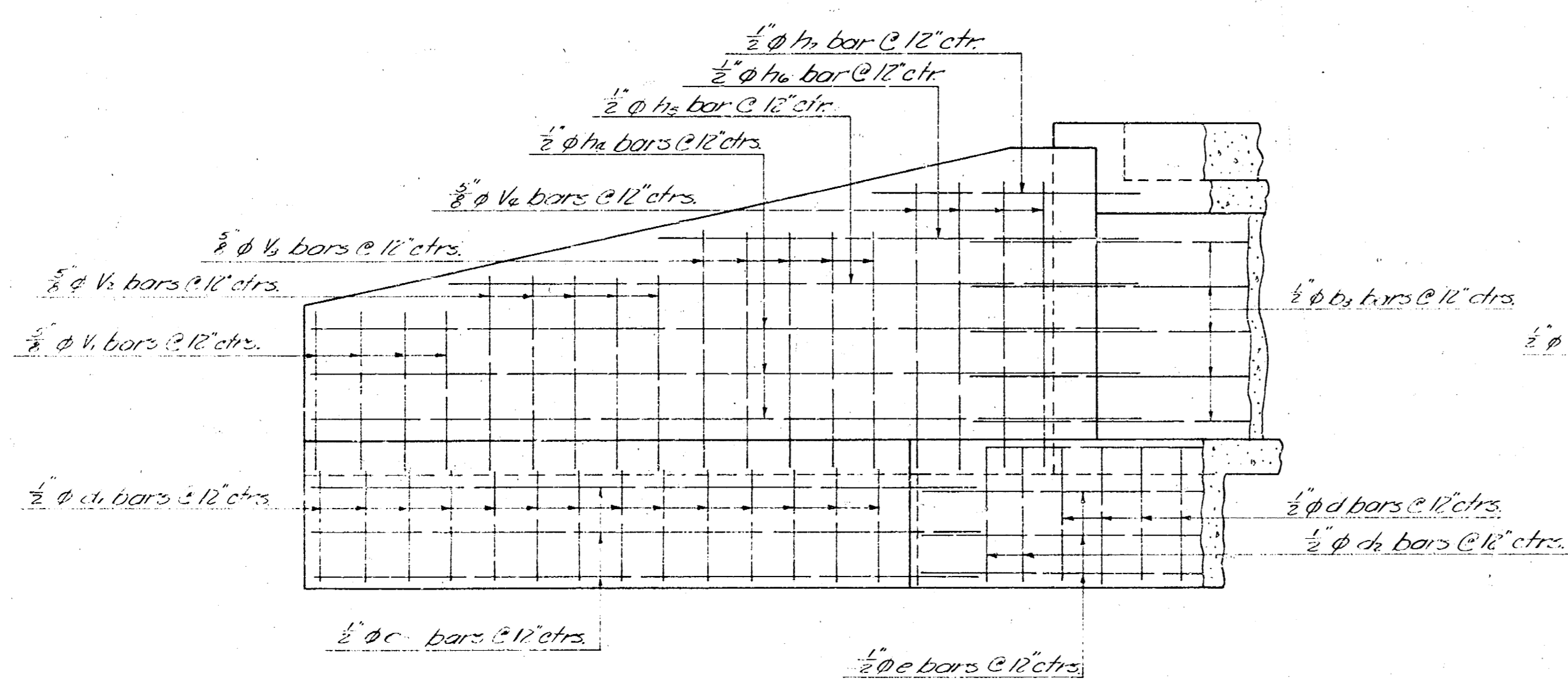
CROSS SECTION OF BOX  
Scale: 3/8" = 1'-0"



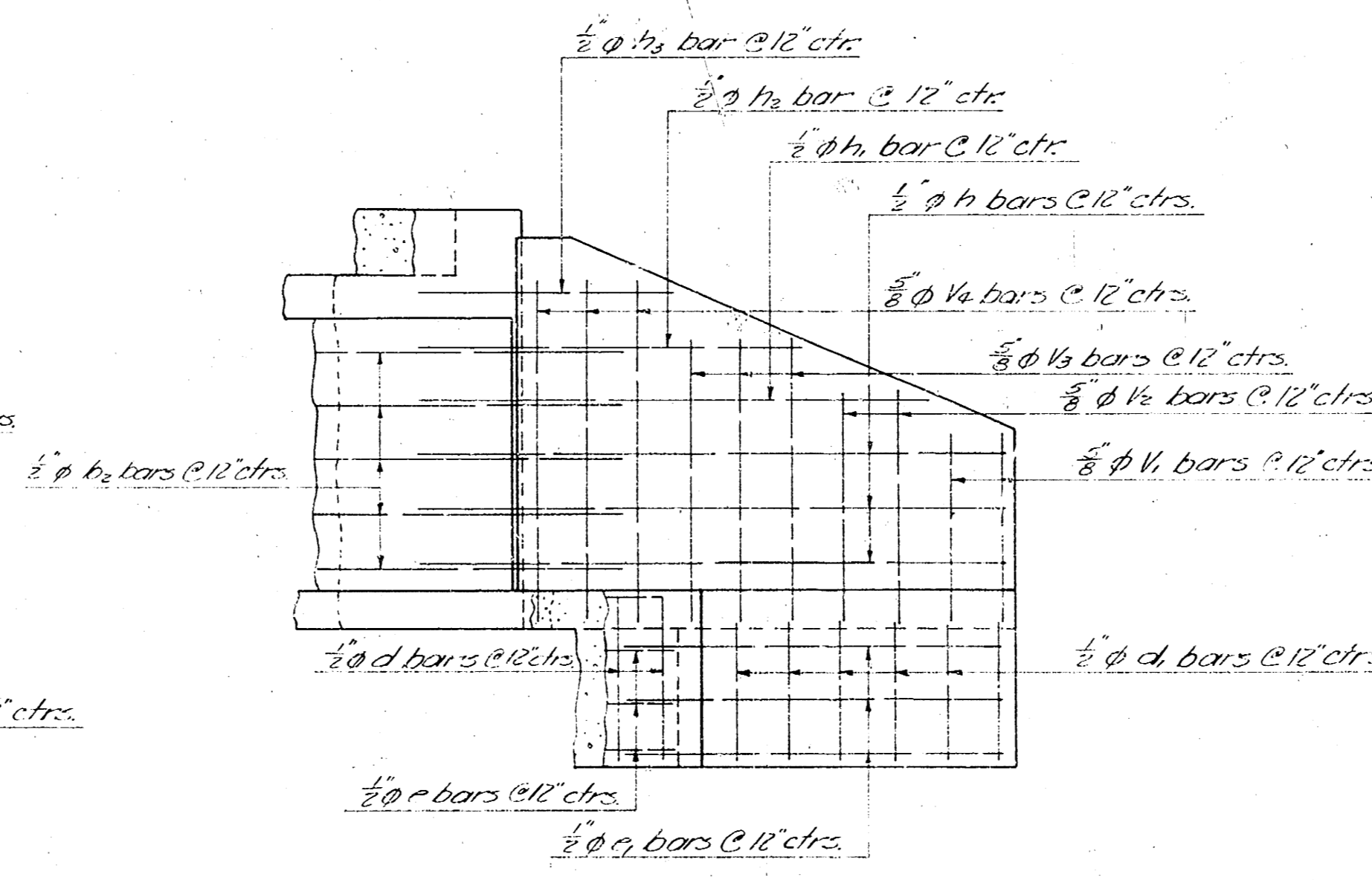
SECTION A-A  
No Scale



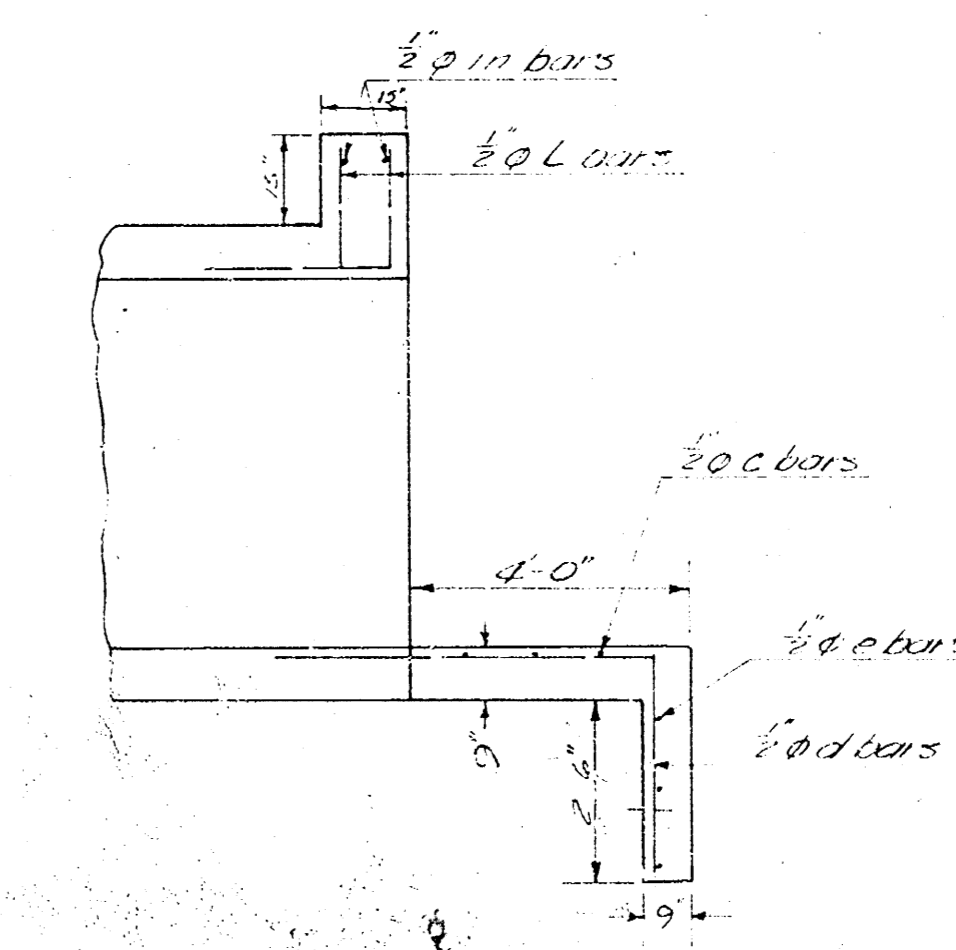
SECTION C-C  
No Scale



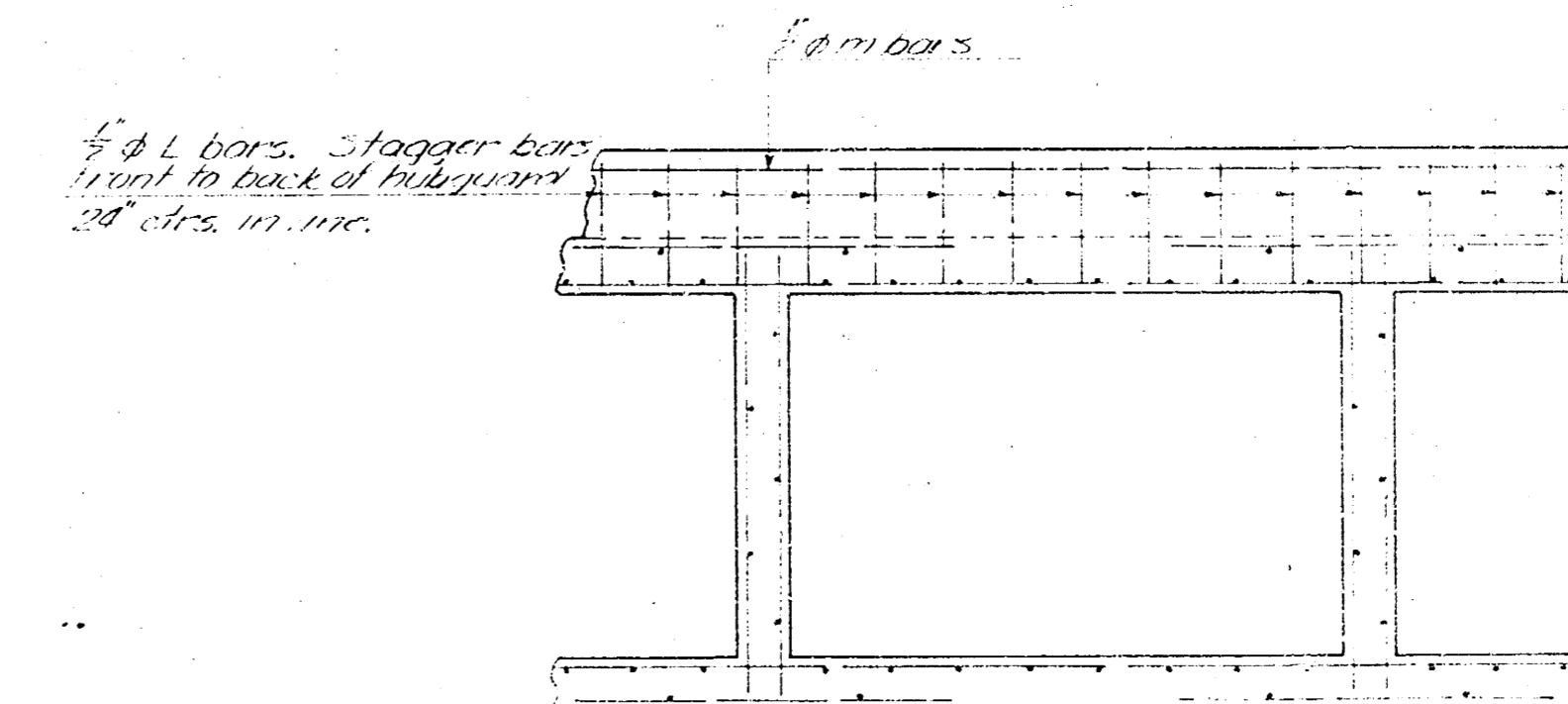
LONGITUDINAL SECTION OF WINGWALL  
Scale: 3/8" = 1'-0"



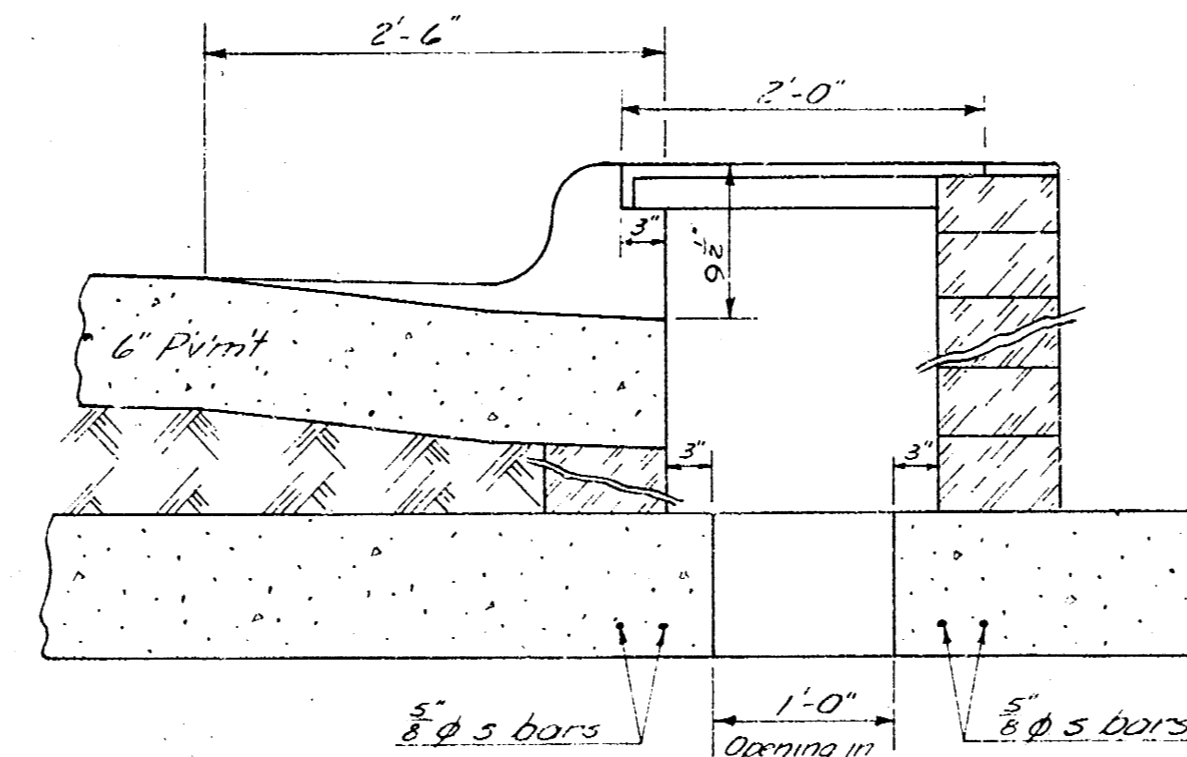
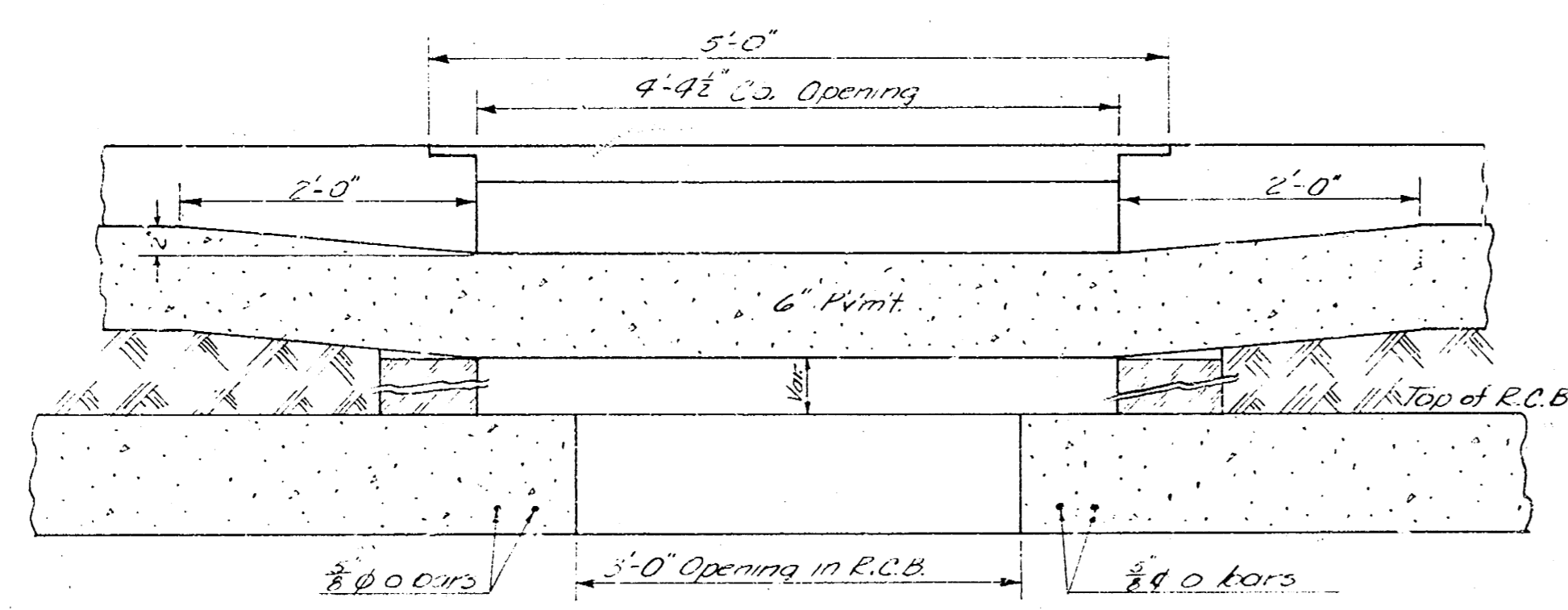
LONGITUDINAL SECTION OF WINGWALL  
Scale: 3/8" = 1'-0"



SECTION B-B  
Scale: 3/8" = 1'-0"

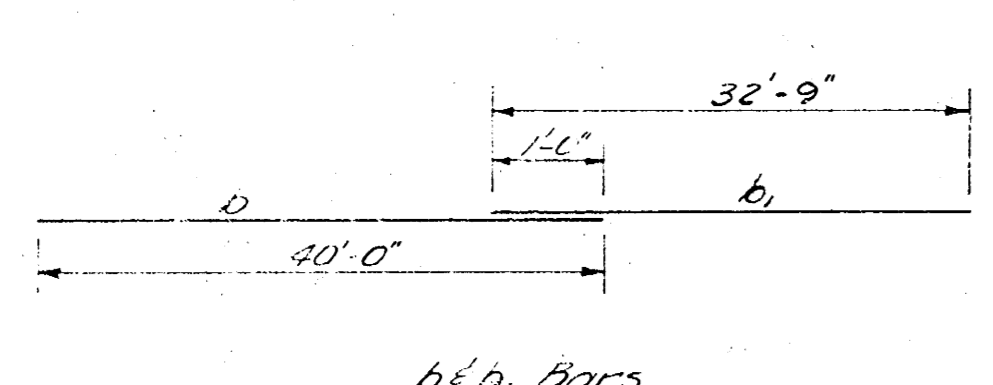


SECTION OF BOX & HUBGUARD  
Scale: 3/8" = 1'-0"

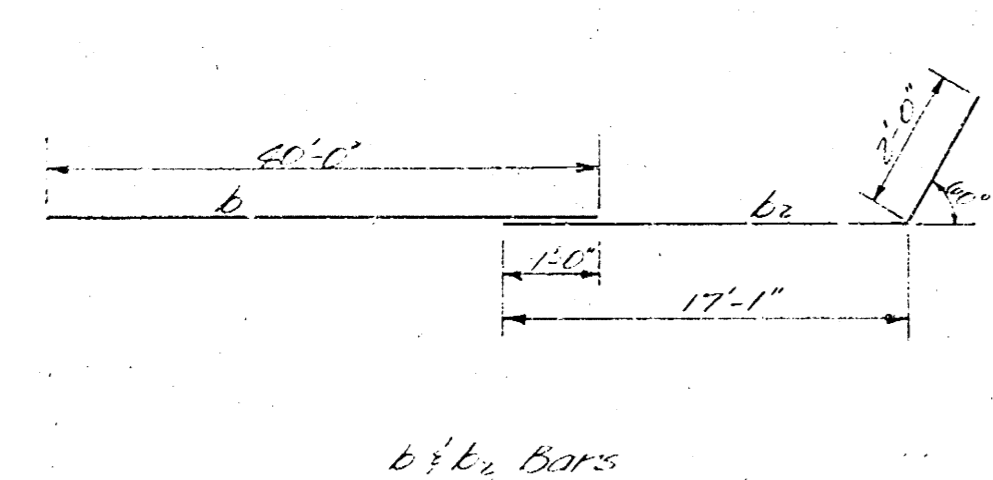


SECTIONS THROUGH CATCH BASINS  
Scale: 1" = 1'-0"

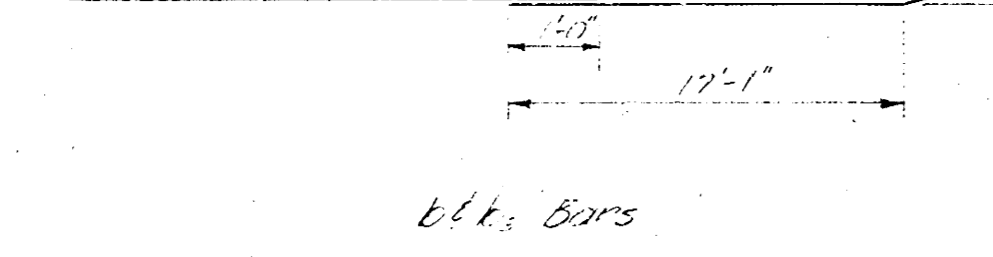
STEEL SCHEDULE									
BAR	SIZE	NO.	LENGTH	SHAPE	BAR	SIZE	NO.	LENGTH	SHAPE
a	2/0	212	26'-8"	—	b <sub>2</sub>	2/0	2	12'-11"	—
a <sub>2</sub>	2/0	2232	2'-0"	—	b <sub>1</sub>	2/0	2	7'-11"	—
a	2/0	656	5'-6"	—	c	2/0	72	3'-6"	—
b	2/0	72	40'-0"	—	d	2/0	4	37'-4"	—
b <sub>1</sub>	2/0	66	32'-9"	—	e	2/0	16	3'-0"	—
b <sub>2</sub>	2/0	10	19'-1"	—	f	2/0	16	12'-4"	—
b <sub>3</sub>	2/0	10	19'-1"	—	g	2/0	288	6'-8"	—
c	2/0	6	36'-0"	—	h	2/0	12	5'-6"	—
d	2/0	70	8'-0"	—	i	2/0	18	6'-0"	—
d <sub>1</sub>	2/0	40	4'-3"	—	j	2/0	16	7'-3"	—
d <sub>2</sub>	2/0	42	5'-0"	—	k	2/0	18	6'-3"	—
e	2/0	6	36'-2"	—					
e <sub>1</sub>	2/0	6	8'-5"	—					
e <sub>2</sub>	2/0	6	16'-1"	—					
f	2/0	6	11'-11"	—					
f <sub>1</sub>	2/0	2	10'-6"	—					
f <sub>2</sub>	2/0	2	8'-1"	—					
f <sub>3</sub>	2/0	2	5'-8"	—					
f <sub>4</sub>	2/0	6	31'-0"	—					
f <sub>5</sub>	2/0	2	17'-11"	—					



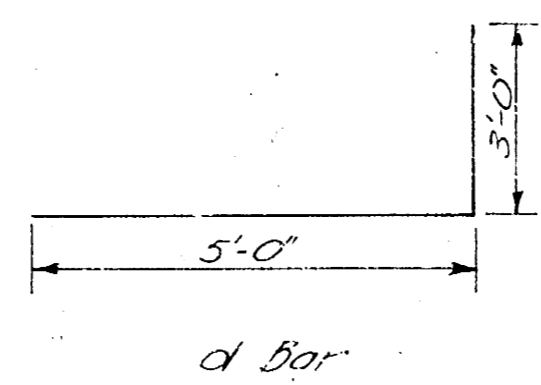
b<sub>1</sub>/b<sub>2</sub> Bars  
NOTE: Alternate sizes of b<sub>1</sub>/b<sub>2</sub> bars at opposite ends of the box.



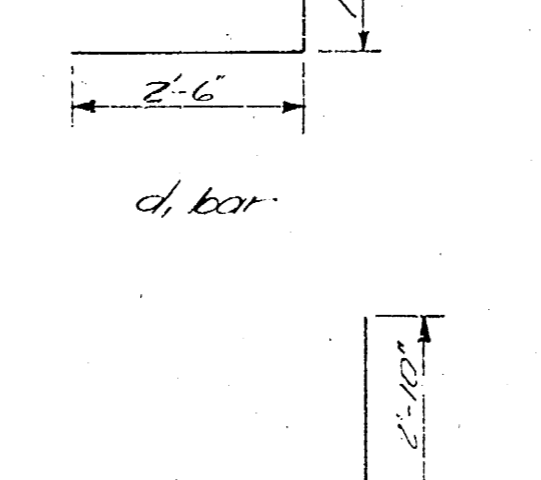
b<sub>3</sub>/b<sub>4</sub> Bars



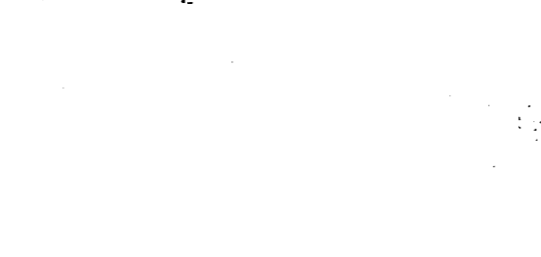
b<sub>5</sub>/b<sub>6</sub> Bars



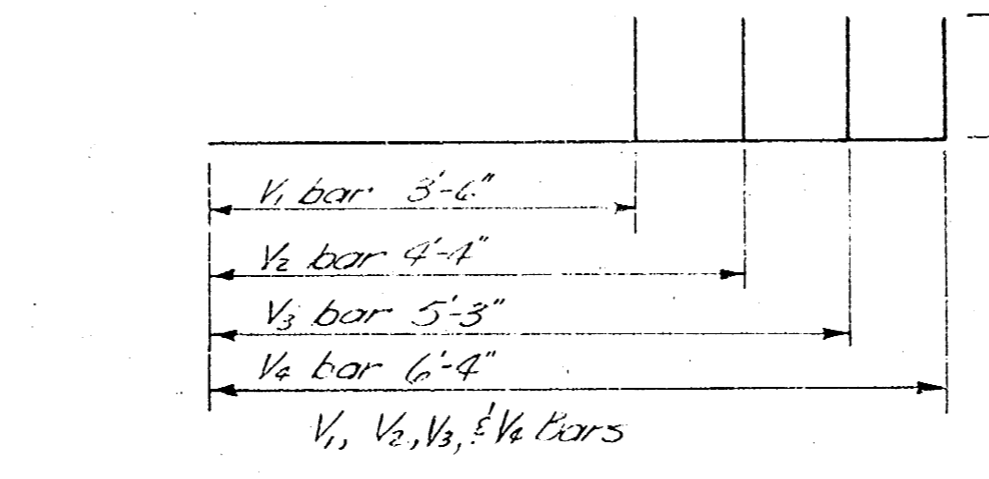
d Bar



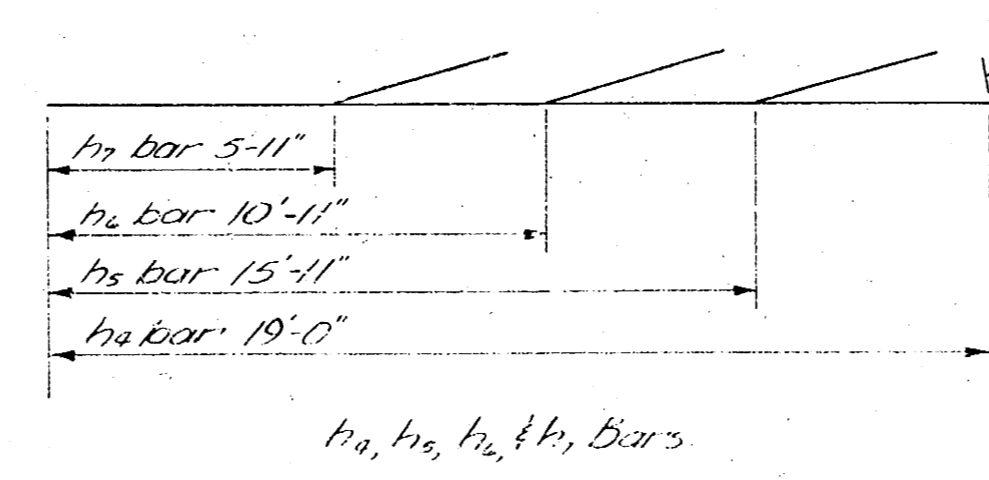
d<sub>1</sub> Bar



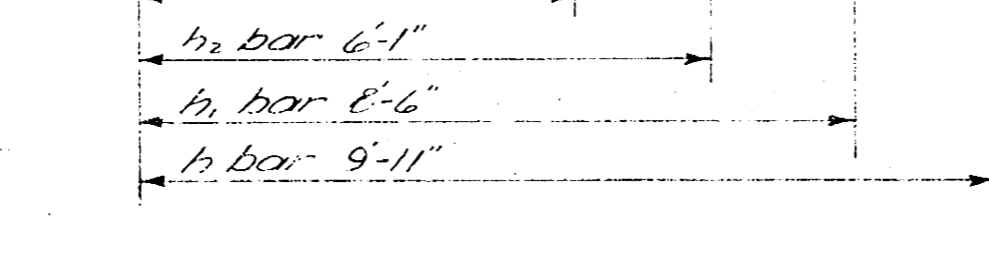
d<sub>2</sub> Bar



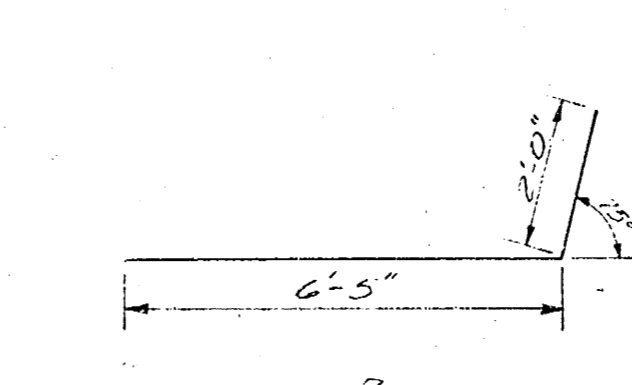
v<sub>1</sub>, v<sub>2</sub>, v<sub>3</sub>, v<sub>4</sub> Bars



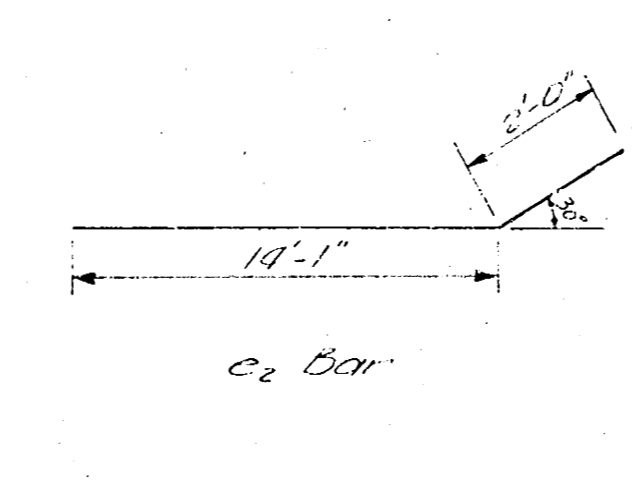
h<sub>1</sub>, h<sub>2</sub>, h<sub>3</sub>, h<sub>4</sub> Bars



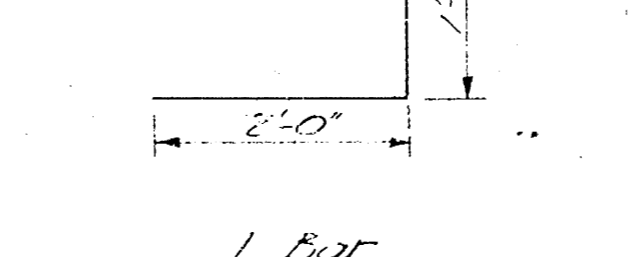
h<sub>5</sub>, h<sub>6</sub>, h<sub>7</sub>, h<sub>8</sub> Bars



e Bar



e<sub>1</sub> Bar



e<sub>2</sub> Bar

BILL OF MATERIALS		
ITEM	QUANTITY	UNITS
Class II Concrete	179.60	Cu Yd
General Excavation	139.0	Cu Yd
Hand Excavation	19.1	Cu Yd
Compacted Backfill - Sand	25	Ton
Reinf. Steel	20,935	Lbs
Catch Basins	4	Complete
Large Trees Removed	3	
Small Trees Removed	2	

BAR BENDING DIAGRAMS No Scale