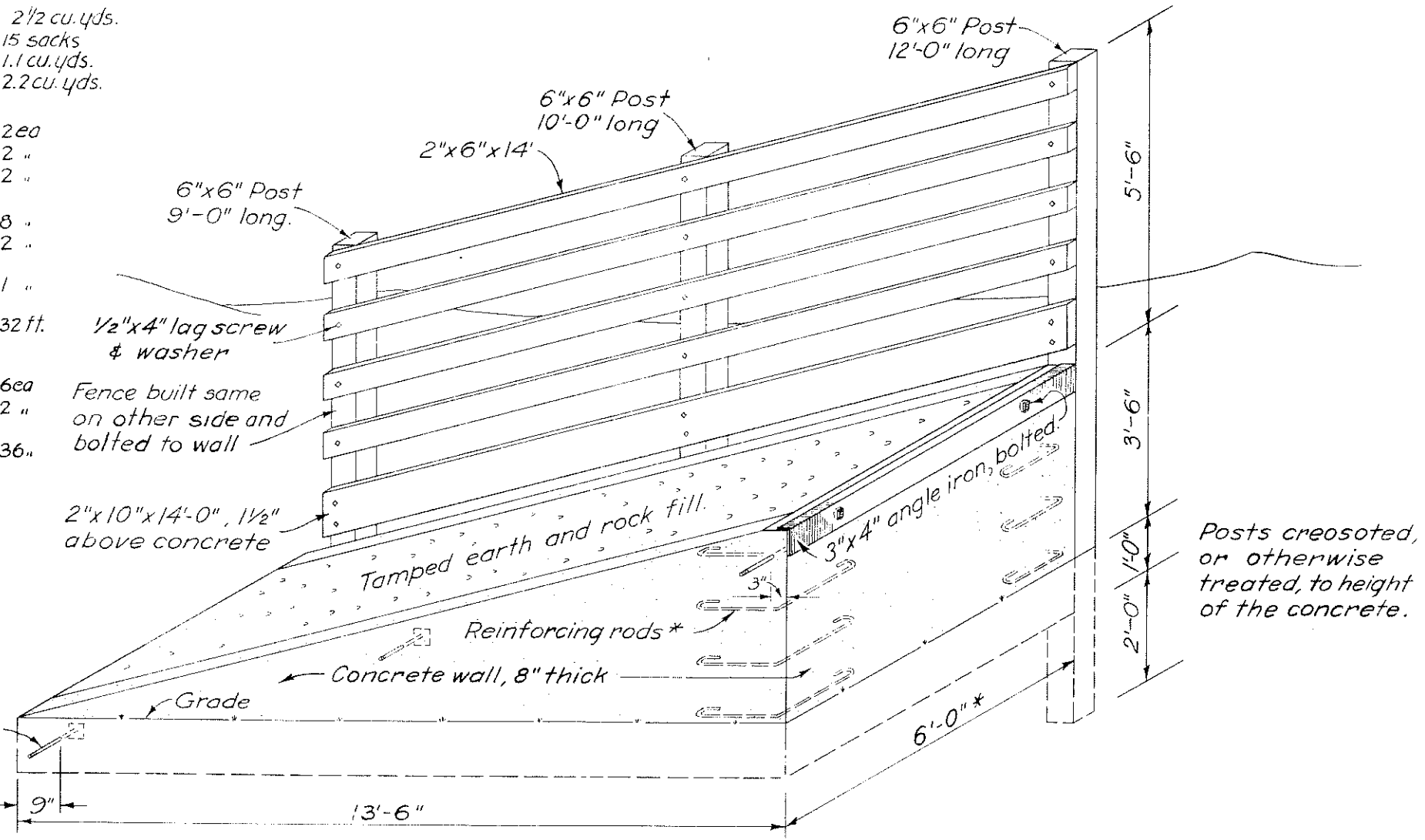
BILL OF MATERIALS

Concrete - 1:2:4 mix	2 1/2 cu. yds.
cement	15 sacks
sand	1.1 cu. yds.
gravel	2.2 cu. yds.
Posts	
6"x 6"x 12'-0"	2 ea
6"x 6"x 10'-0"	2 "
6"x 6"x 9'-0"	2 "
Rails	
2"x 6"x 14'-0"	8 "
2"x 10"x 14'-0"	2 "
Steel angle	
4"x 3"x 1/2"x 6'-0"	1 "
Steel reinforcing	
1/2" rods	32 ft.
Steel anchor bolts	
5/8"x 11" with 3"	
plate washers	6 ea
1/2"x 4"	2 "
Lag screws	
1/2"x 4"	36 "



Posts creosoted, or otherwise treated, to height of the concrete.

ISOMETRIC VIEW OF LOADING RAMP

Scale 1/2" = 1'-0"

* Make ramp 8'-0" wide if it is to be used for loading machinery, & reinforce corners with 1/2"φ rods 4'-0" long, 12" o.c.

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LIVESTOCK LOADING RAMP

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