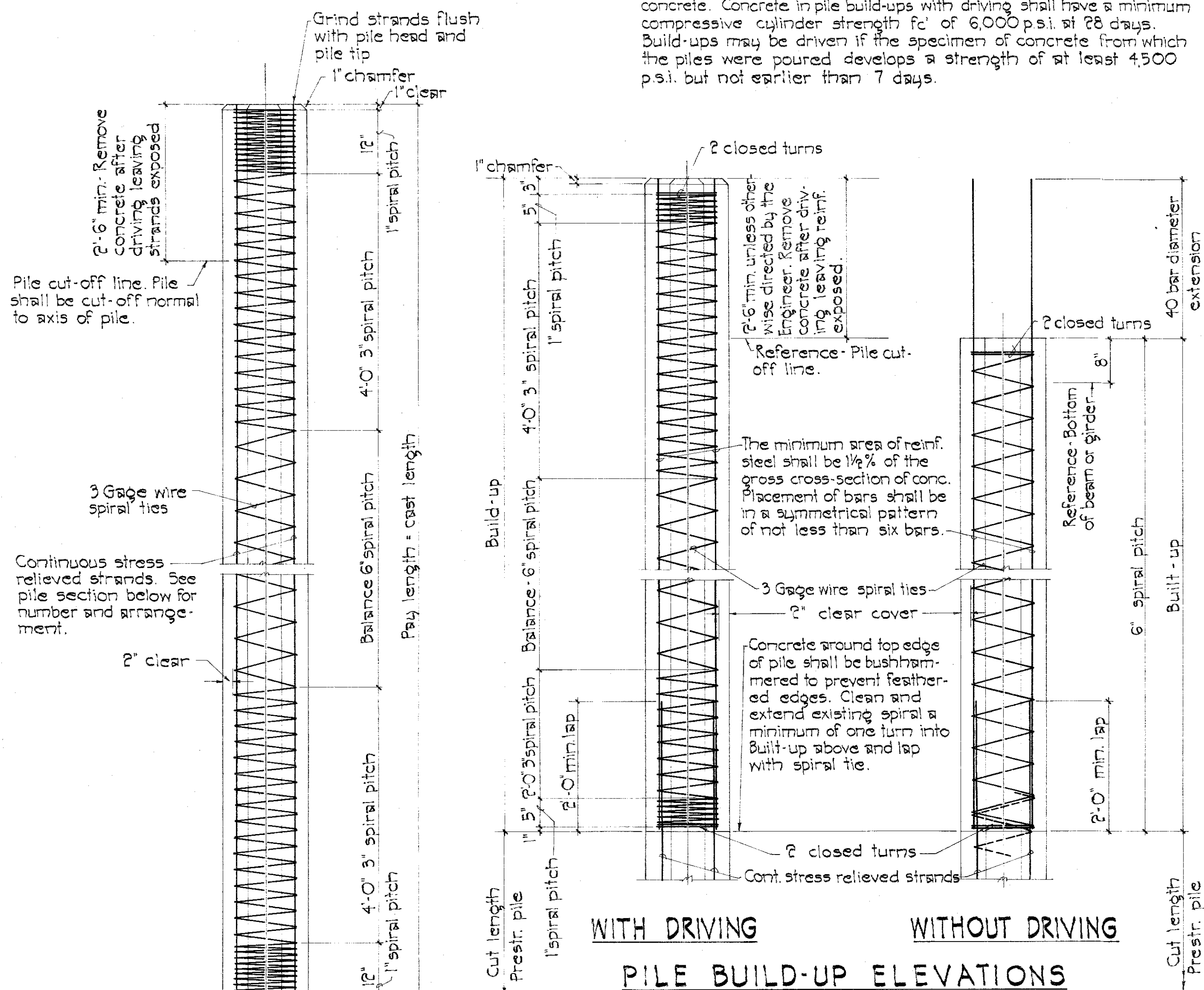
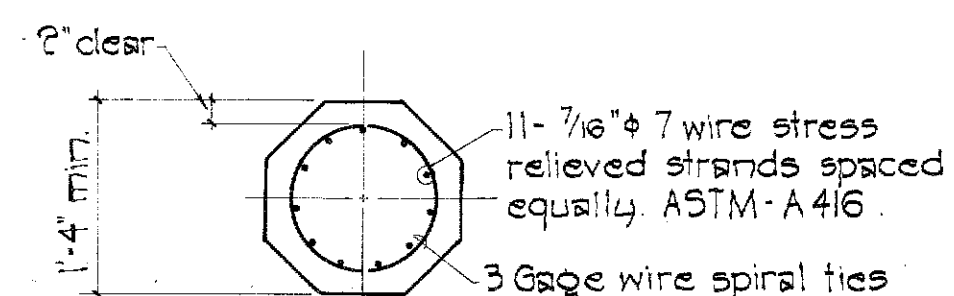


NOTE: Concrete in pile build-ups without driving shall be 4,000 p.s.i. concrete. Concrete in pile build-ups with driving shall have a minimum compressive cylinder strength f_c' of 6,000 p.s.i. at 28 days. Build-ups may be driven if the specimen of concrete from which the piles were poured develops a strength of at least 4,500 p.s.i. but not earlier than 7 days.

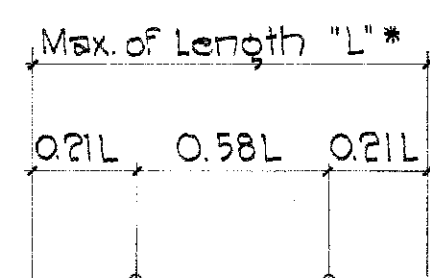


TYPICAL PILE ELEVATION



TYPICAL PILE SECTION

WITH DRIVING
WITHOUT DRIVING
PILE BUILD-UP ELEVATIONS



2 POINT PICK-UP

* The length "L" is the end to end distance of the pile.

NOTES

1. Unless special lifting devices are attached for pick-up points, pick-up points shall be plainly marked on all piles after removal of the forms and all lifting shall be done at these points.
2. The use of special embedded or attached lifting devices, the employment of other pick-up points or any other method of pick-up shall be subject to the approval of the Engineer.

PILE DETAILS

Scale: 3/4" = 1'-0"

Depth in Ft.	Boring No. 1	Boring No. 2	Boring No. 3	Boring No. 4	Boring No. 5	Boring No. 6
0	Soft river sand, gravel and silt	Soft silty and gravel	Loose boulders and gravel	Boulders, river sand, gravel	Soft loose sand and gravel	Hardpacked river sand and gravel
5	Boulders hard-packed w/ gravel	Hardpacked river sand, gravel & boulders	Very soft silty sand and rotten wood	Very soft silty sand and rotten wood	Fairly well packed river sand and gravel	Fairly well packed river sand and gravel
10	Hardpacked sand and gravel		Fairly well-packed river sand and gravel	Fairly well packed river sand	Soft gray sand, shell and coral fragments	
15	Soft gray sand, shell and silt		Soft gray sand, shell, silt and coral fragments	Soft gray sand, shell, silt and coral fragments	Soft gray sand, shell and coral fragments	
20		Soft gray sand, shell, silty clay and coral fragments	Soft gray sand, shell, silt and coral fragments w/ more clay and silt			
25	Soft gray sand, shell and silt w/ coral fragments		Soft silty gray sand and coral fragment	Hardpacked gray sand, shell, silt and coral fragments	Soft gray sand, shell and coral fragments w/ more clay & shell	Soft gray sand, shell, silt and rotten wood
30		Soft fine gray sand and shell	Tree coral very hardpacked w/ sand	Soft silty sand and shell	Soft gray sand, shell and coral fragments w/ more clay & shell	
35	Loose fine gray sand, shell and silt	Shell only	Very soft silt and shell	Tree coral very hardpacked with sand	Fairly well packed river sand, gravel and coral fragments	Hardpacked river sand and gravel
40	Fairly well packed river sand and gravel	Fairly well-packed river sand, gravel and shell				
45	Soft and loose - fine river sand, silt and rotten wood	Soft, loose fine river sand, silty clay and rotten wood	Soft, loose river sand, gravel, silt and rotten wood	Soft fine gray sand and silt and rotten wood	Very soft fine river sand, silt and rotten wood	Soft loose fine river sand and silty clay
50	Hardpacked river sand and gravel	Hardpacked river sand and gravel		Soft river sand and gravel	Hardpacked river sand and gravel	Hardpacked river sand and gravel
55	Hardpacked river sand and gravel w/ boulders	Boulder, hard-packed w/ river sand and gravel	Boulders hard-packed w/ river sand and gravel	Boulders hard-packed with river sand and gravel	Boulders hard-packed w/ river sand & gravel	Boulders hardpacked with sand and gravel
60						
65						
70						

BORING DATA

	STANLEY S. SHIMABUKURO & ASSOCIATES, INC. CIVIL & STRUCTURAL ENGINEERS	
	COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS WAILUKU, MAUI, HAWAII	
	WAILUA (KAHAWAIKI) BRIDGE WAILUA, MOLOKAI, HAWAII	
	BORING DATA & PILE DETAILS	
DESIGNED BY: H.L.Y.		CHECKED BY: S.S.S.
DRAWN BY: L.M.G.		DATE: July 8, 1969