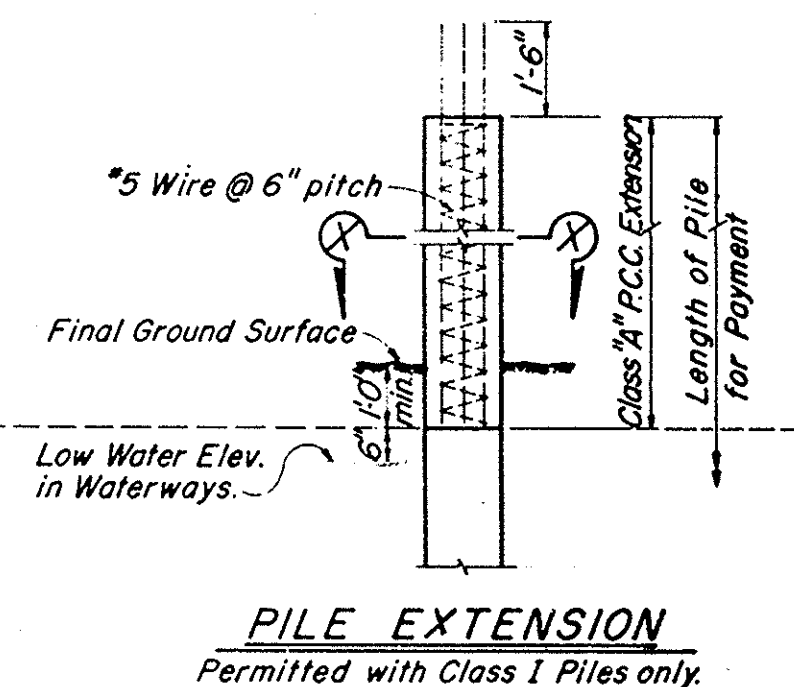
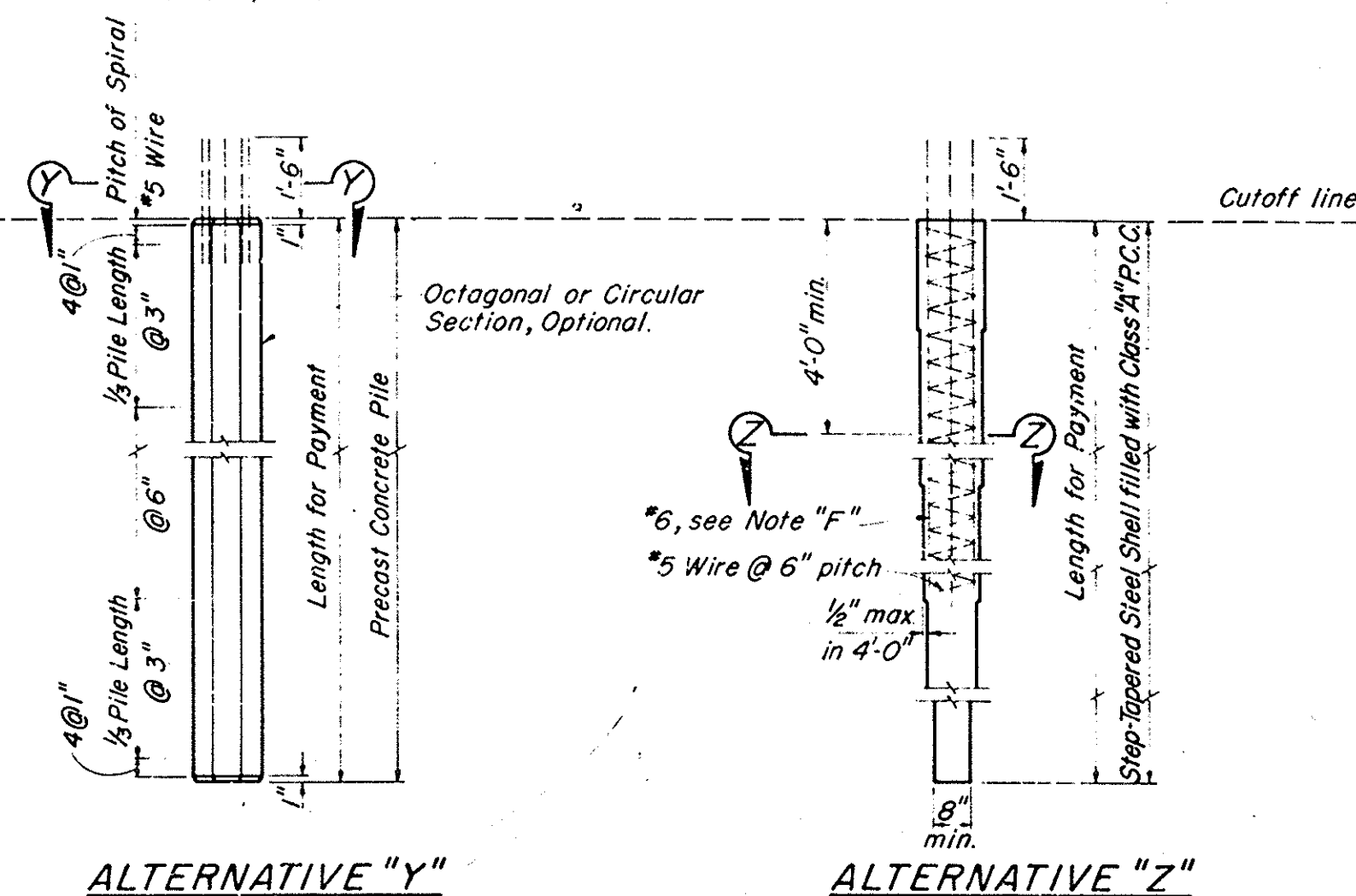
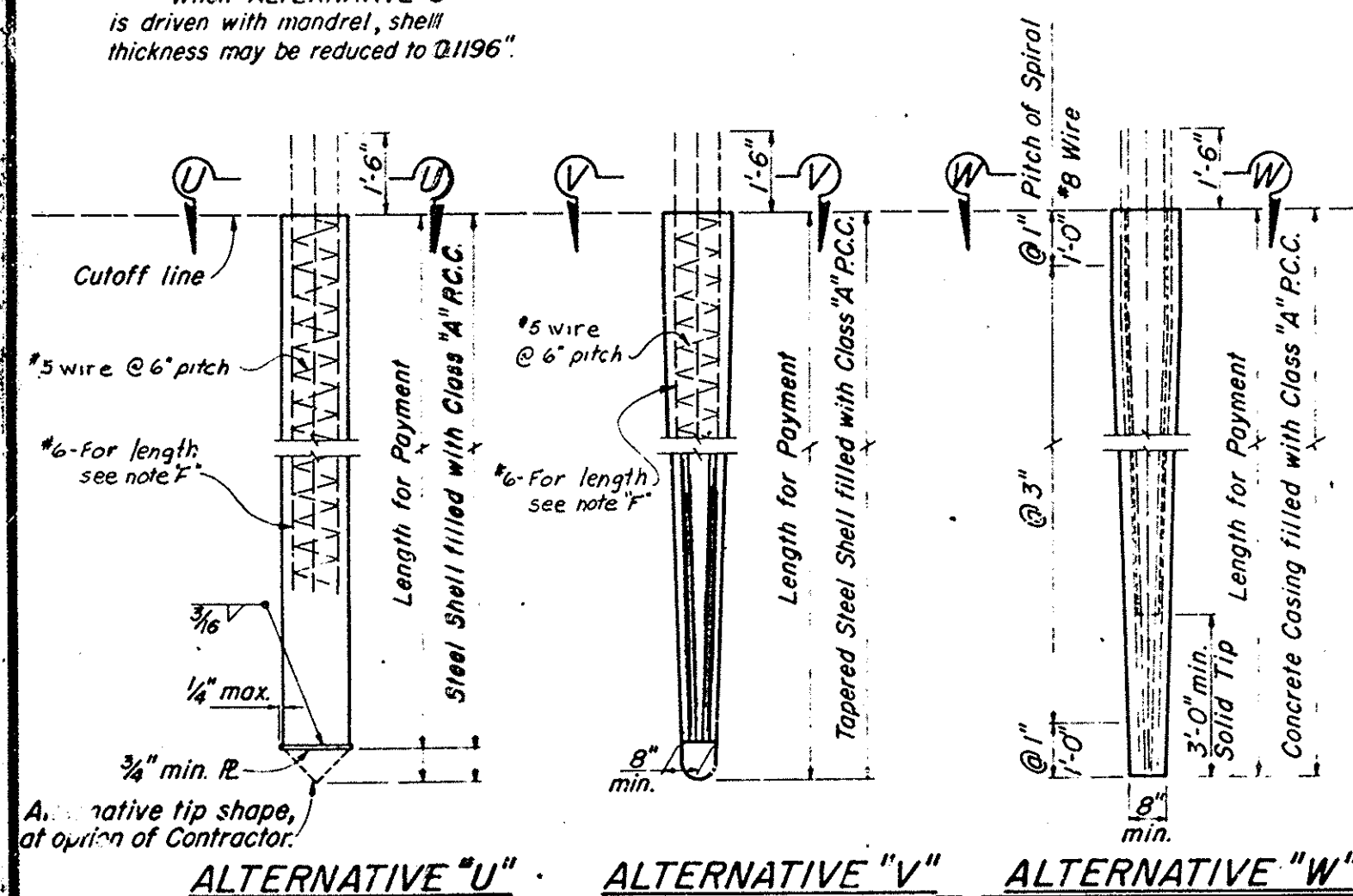


Note:
When "ALTERNATIVE U"
is driven with mandrel, shell
thickness may be reduced to 0.1196".



PILE NOTES

Alternative "W" & "Y" may be driven full length and cutoff without extension or may be extended. All exposed piles or pile extension shall be consistent in cross-section throughout the project.

Alternative "Y" (Precast Prestressed)

P = Prestressing Force (after losses)

Concrete stress:

$f'_c = 4500 \text{ p.s.i. @ 28 days}$

$f'_{ci} = 3500 \text{ p.s.i. @ transfer } (\frac{3}{8}'' \text{ strand})$

$f'_{ci} = 4000$ p.s.i. @ transfer ($\frac{7}{16}$ " strand and $\frac{1}{2}$ " strand)

Note "F": In Alternatives "U" & "Z," 6 bars shall extend a minimum of 12' below the lowest of the following:

1. Bottom of footing
2. Top of final ground surface
3. Top of original ground surface when piles are driven through fills. (top/levee is o.g. for Abut.)

Class I piles may be substituted for Class II piles. Unless indicated to the contrary all piles shall be Class I piles.

ALTERNATIVE "Z"
10" min. dia. pipe extension may be used
at the tip when step taper is 30' or more in length.
Minimum thickness of pipe extension = 0.1793"

FOR PILE TEST: PLACE 4-#8 FULL LENGTH
OF PILE; TENSION PILES ONLY, ALTERNATES
"V" & "Z" ONLY, IN ADDITION TO REINF. SPECIFIED
ABOVE.

DESIGN LOADING = 45 TONS

MICROFILMED

DEC 28 1964

ORANGE COUNTY HIGHWAY DEPARTMENT

McFADDEN AVE
BRIDGE
over S A RIVER

PILE DETAILS

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