SIGNATURE MISSING BECAUSE ENGINEER DID NOT WANT HIS
SIGNATURE DONE ELECTRONICALLY~ORIGINALS ARE SIGNED BY HAND~

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

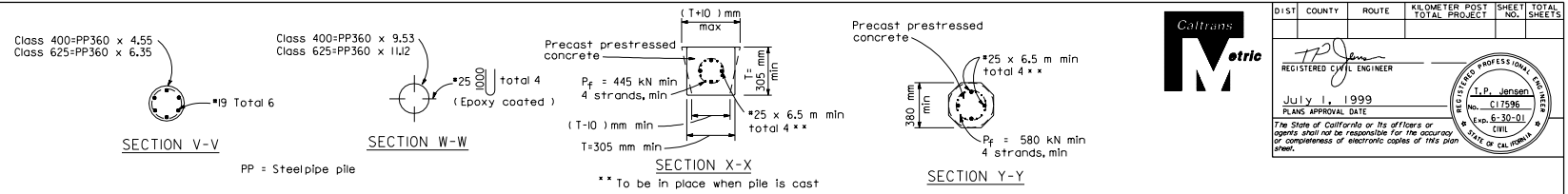
Caltrans Metric

REGISTERED CIVIL ENGINEER

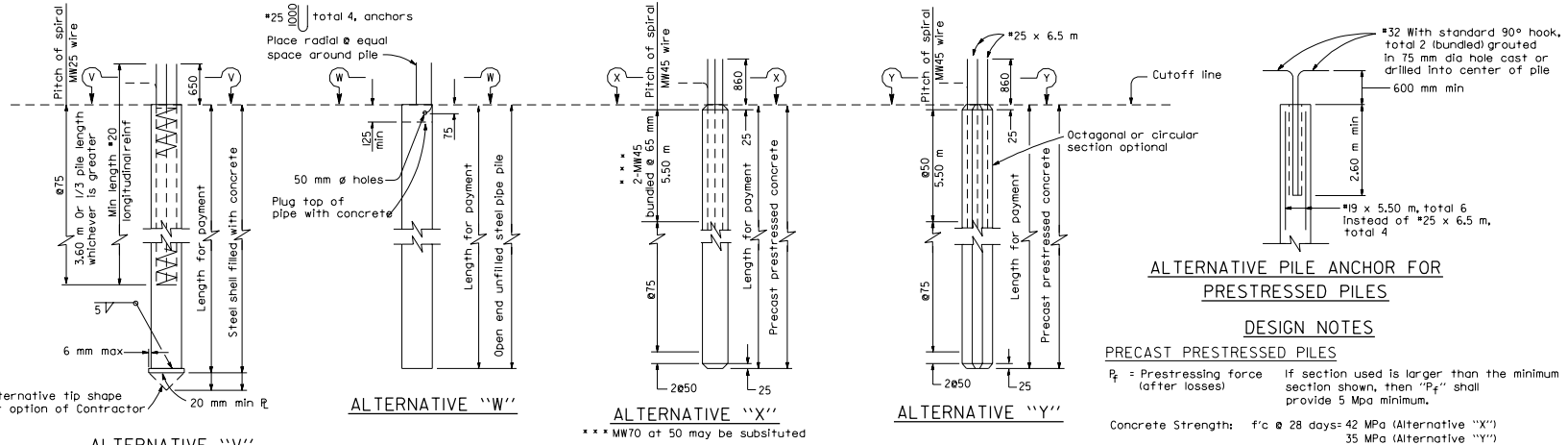
July 1, 1999
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER T.P. Jensen No. C17596 Exp. 6-30-01 CIVIL STATE OF CALIFORNIA

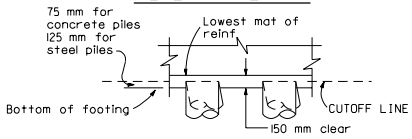
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



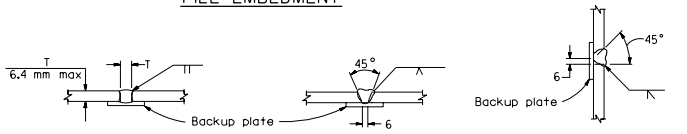
PP = Steel pipe pile



ALTERNATIVE PILE ANCHOR FOR PRESTRESSED PILES



PILE EMBEDMENT



SQUARE GROOVE — SINGLE VEE-GROOVE — SINGLE BEVEL-GROOVE

PILE WELDING DETAIL - BUTT JOINTS

NOTES

1. Single Vee-Grove and Square Groove permitted for all positions.
2. Single Bevel-Groove permitted for horizontal joints only.

NOTES

1. Details are the same for both Class 400 and Class 625 piles unless noted otherwise.
2. At the Contractor's option, alternative steel pipe with at least the diameter and wall thickness shown on these plans may be used. The diameter shall not exceed 460 mm.
3. Pile reinforcement and steel pile anchor bars extending into a footing shall be hooked as required to provide clearance to top of footing. Piles shall be extended only in accordance with details shown elsewhere in these plans.
4. Lapped splices in spiral pile reinforcement shall be lapped 80 wire diameters minimum. Spiral pile reinforcement at splices and at ends shall be terminated by a 135° hook with 150 mm tail hooked around a longitudinal bar or strand.
5. 50 mm clearance to spiral reinforcement shall be maintained if section used is larger than the minimum section shown.
6. Maximum cutoff length at the top of the Alternative "X" and Alternative "Y" Piles is three (3) meters.
7. For additional longitudinal reinforcement and prestressing for anchor piles and load test piles, see "Load Test Pile Details (2)", Standard Plan B2-10.

DESIGN NOTES

PRECAST PRESTRESSED PILES

P_f = Prestressing force (after losses)

If section used is larger than the minimum section shown, then "P_f" shall provide 5 Mpa minimum.

Concrete Strength: f'c @ 28 days= 42 MPa (Alternative "X")
35 MPa (Alternative "Y")
f'ci @ transfer= 28 MPa

REINFORCED CONCRETE

f'c = 28 Mpa
fy = 420 Mpa

STEEL PIPE PILE

Fy (Minimum yield strength) = 240 Mpa
Fu (Minimum tensile strength) = 400 Mpa

DESIGN CAPACITY

Class 400
Compression = 400 kilonewtons (Service state)
= 800 kilonewtons (Nominal axial resistance)
Tension = 400 kilonewtons (Nominal axial resistance)

Class 625
Compression = 625 kilonewtons (Service state)
= 1250 kilonewtons (Nominal axial resistance)
Tension = 625 kilonewtons (Nominal axial resistance)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PILE DETAILS
CLASS 400 AND CLASS 625

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

B2-5

1999 STD. PLAN B2-5