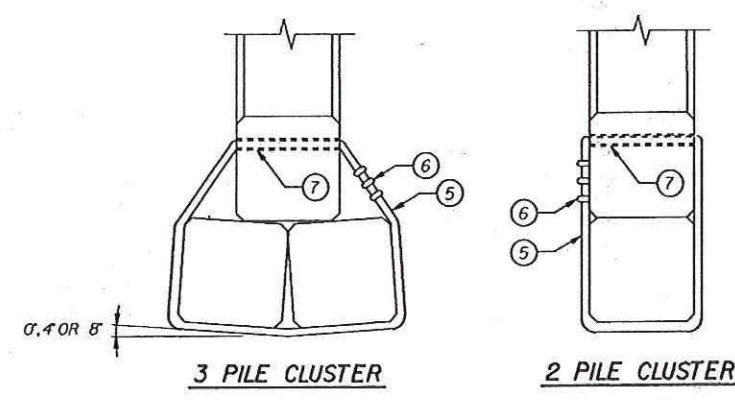


NOTE: 3 SPAN SEGMENT IS SHOWN. 4 SPAN SEGMENT IS SIMILAR, EXCEPT FOR AN ADDITIONAL 5'-0" SPAN.



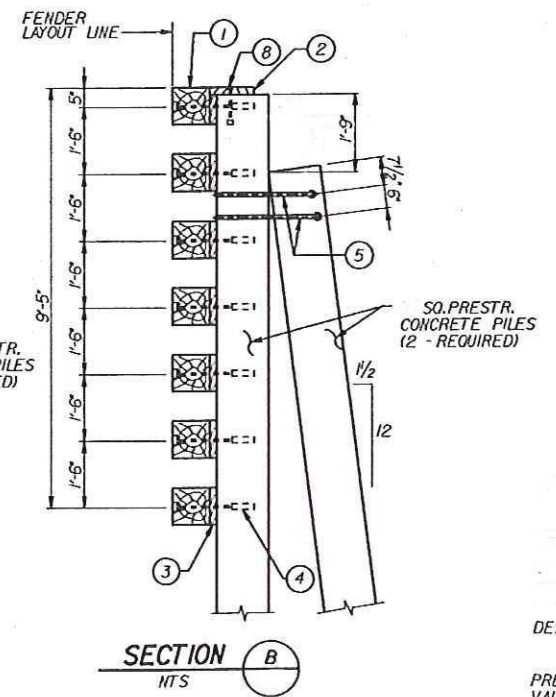
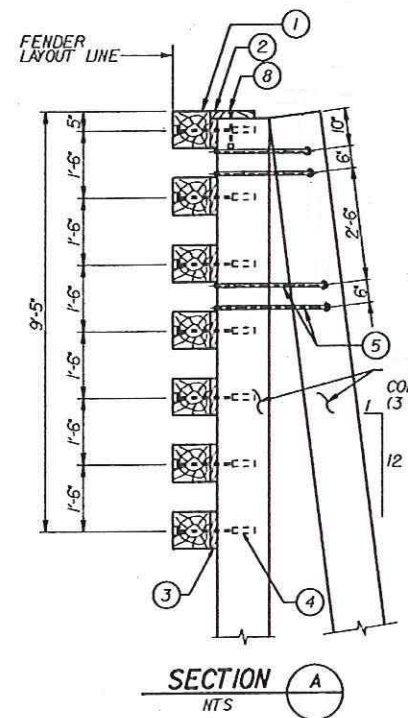
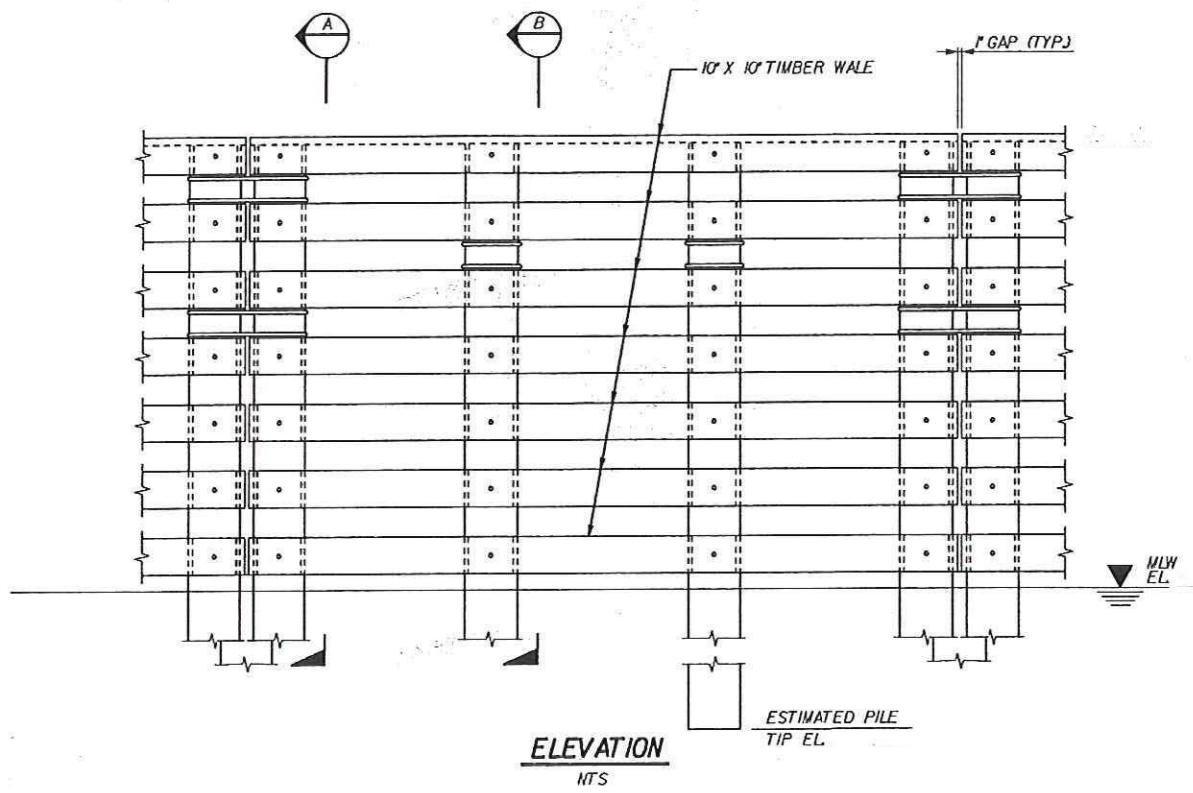
PRESTRESSED CONCRETE PILE CLUSTER
NTS

LEGEND

- ① 10' X 10' TIMBER WALES.
- ② 2' X 12' TIMBER CATWALK.
- ③ 3' X 12' TIMBER SPACER - 8" HIGH FOR TOP WALE AND 10" HIGH FOR OTHER WALES.
- ④ 1" Ø SCREW ANCHOR AND BOLT ASSEMBLY CAST W/PILE, COUNTERSINK BOLT HEAD P (TYP.).
- ⑤ 6 X 19 - 5/8" Ø S.S. WIRE ROPE - 3 LOOPS REQUIRED.
- ⑥ WIRE ROPE CLIPS SPACED AT 4" MIN. - 3 REQUIRED.
- ⑦ 2" I.D. PVC PIPE SLEEVE.
- ⑧ 1" Ø X 11" LONG SCREW ANCHOR AND BOLT ASSEMBLY, CAST W/PILE, COUNTERSINK BOLT HEAD P (TYP.).

NOTES

- 1. PILES SHALL BE PRESTRESSED CONCRETE
- 2. BOLTS AND ANCHORS SHALL BE MANUFACTURED BY RICHMOND SCREW ANCHOR CO. INC. OR APPROVED EQUAL.
- 3. ALL BOLTS, WASHERS, SCREW ANCHORS AND CABLE CLIPS SHALL BE STAINLESS STEEL (S.S.) AND AS FOLLOWS:
 - A. BOLTS AND SCREW ANCHORS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A193, CLASS 1B, GRADE B8NH.
 - B. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A194, GRADE 8NH.
 - C. WASHERS AND WIRE ROPE CLIPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A194, GRADE 8NH.
- 4. ALL PIPE SLEEVES SHALL BE OF POLYVINYL CHLORIDE, (PVC).
- 5. ALL TIMBER SHALL BE ROUGH.
- 6. WALES TO BE CUT IN FIELD, JOINTS TO BE AS SHOWN.



DESIGN LOAD: DEAD LOAD PLUS 65 PSF (SERVICE LOAD) FOR WIND AND WAVE ACTION

PRESTRESSED CONCRETE PILING SHALL HAVE A BEARING VALUE OF 20 TONS.

TIMBER WALES SHALL BE CONTINUOUS OVER A MINIMUM OF 2 SUPPORTS. SEE DETAILS FOR ALTERNATIVE SPLICES. SPLICE LOCATIONS SHALL ALTERNATE BETWEEN ADJACENT WALES, WITH NO MORE THAN 4 SPLICES PERMITTED AT THE SAME LOCATION. WALES SHALL HAVE A MINIMUM LENGTH OF 12 FEET.

SAMPLE FENDER SYSTEM DETAILS