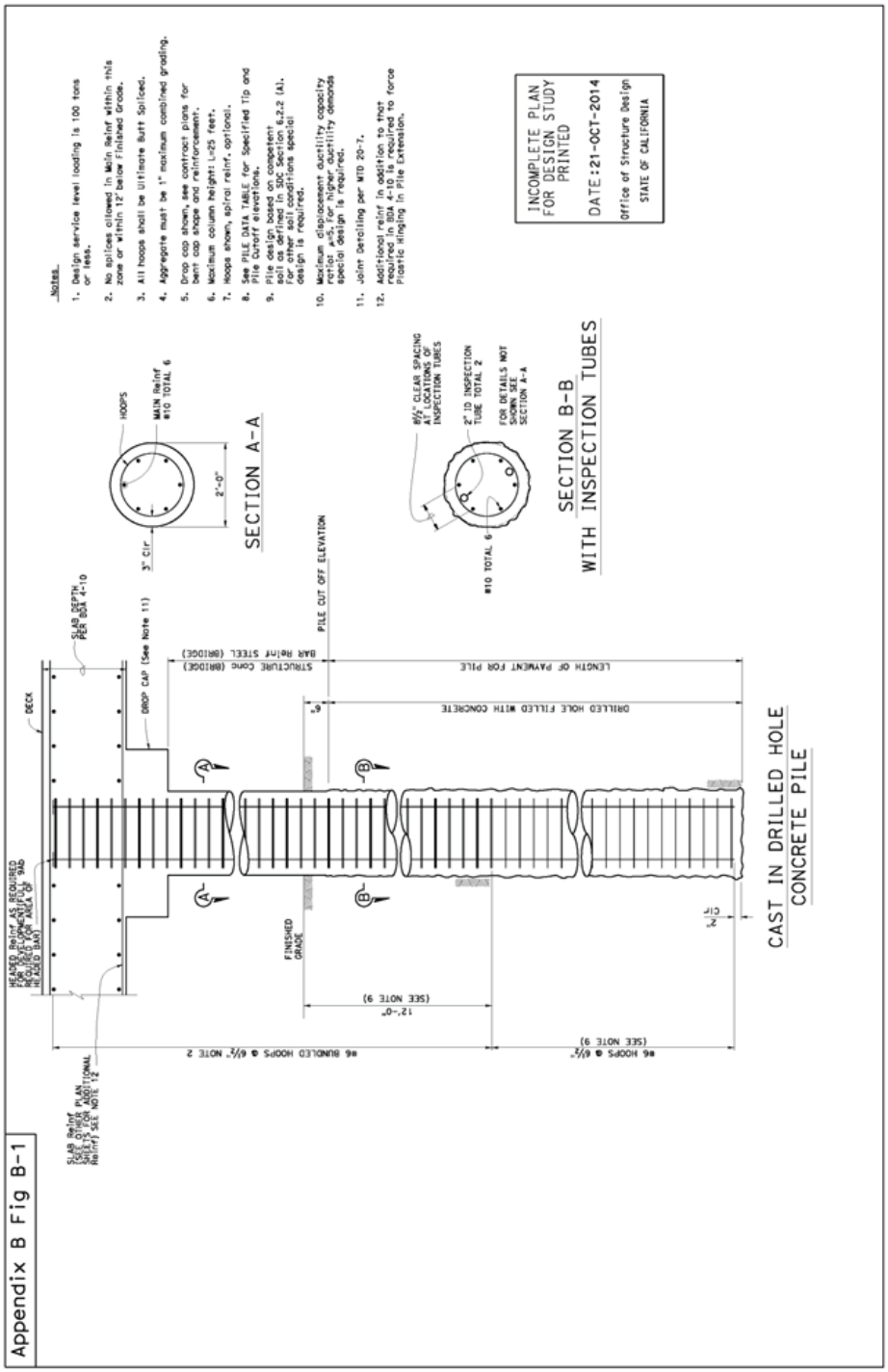
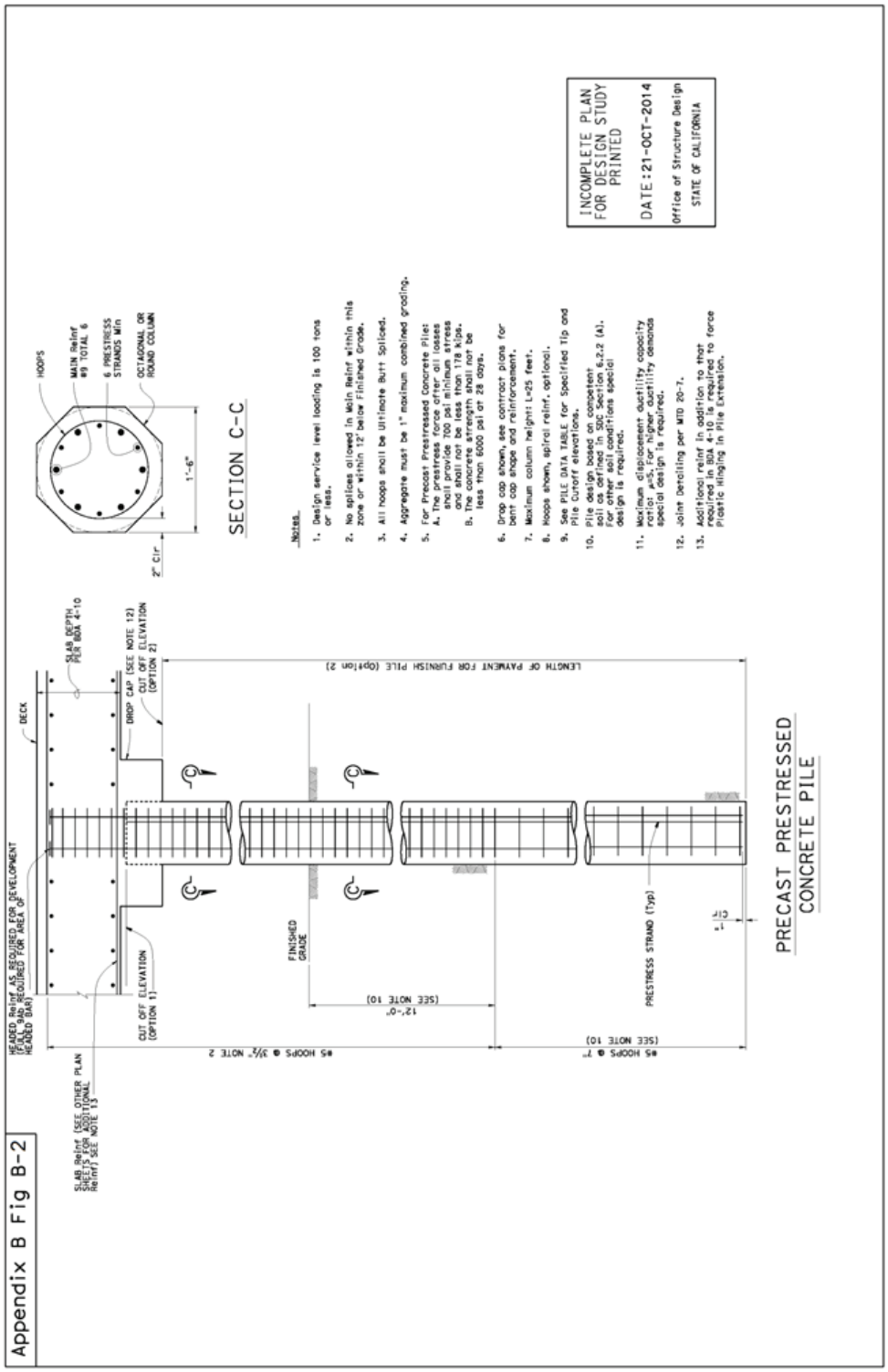
20-7B

APPENDIX B: Reinforcement Details for Pile/Shaft Extensions that Meet SDC Requirements.



APPENDIX B


Appendix B Fig B-2
INCOMPLETE PLAN FOR DESIGN STUDY PRINTED
DATE:21-OCT-2014
Office of Structure Design
STATE OF CALIFORNIA
SECTION C-C
HOOPS
MAIN Reinf #9 TOTAL 6
6 PRESTRESS STRANDS Min
OCTAGONAL OR ROUND COLUMN
1'-6"
2" Clr
Notes
1. Design service level loading is 100 tons or less.
2. No splices allowed in Main Reinf within this zone or within 12' below Finished Grade.
3. All hoops shall be Ultimate Butt Spliced.
4. Aggregate must be 1" maximum combined grading.
5. For Precast Prestressed Concrete Pile:
A. The prestress force after all losses shall provide 700 psi minimum stress and shall not be less than 178 kips.
B. The concrete strength shall not be less than 6000 psi at 28 days.
6. Drop cap shown, see contract plans for bent cap shape and reinforcement.
7. Maximum column height: L=25 feet.
8. Hoops shown, spiral reinf. optional.
9. See PILE DATA TABLE for Specified Tip and Pile Cutoff elevations.
10. Pile design based on competent soil as defined in SDC Section 6.2.2 (A). For other soil conditions special design is required.
11. Maximum displacement ductility capacity ratio: μ=5. For higher ductility demands special design is required.
12. Joint Detailing per MTD 20-7.
13. Additional reinf in addition to that required in BDA 4-10 is required to force Plastic Hinging in Pile Extension.
DECK
SLAB DEPTH PER BDA 4-10
DROP CAP (SEE NOTE 12)
CUT OFF ELEVATION (OPTION 2)
LENGTH OF PAVEMENT FOR FURNISH PILE (Option 2)
HEADED Reinf AS REQUIRED FOR DEVELOPMENT (FULL 9ab REQUIRED FOR AREA OF HEADED BAR)
CUT OFF ELEVATION (OPTION 1)
FINISHED GRADE
12'-0" (SEE NOTE 10)
PRESTRESS STRAND (Typ)
1" Clr
#5 HOOPS @ 3½" NOTE 2
#5 HOOPS @ 7" (SEE NOTE 10)
SLAB Reinf (SEE OTHER PLAN SHEETS FOR ADDITIONAL Reinf) SEE NOTE 13
PRECAST PRESTRESSED CONCRETE PILE