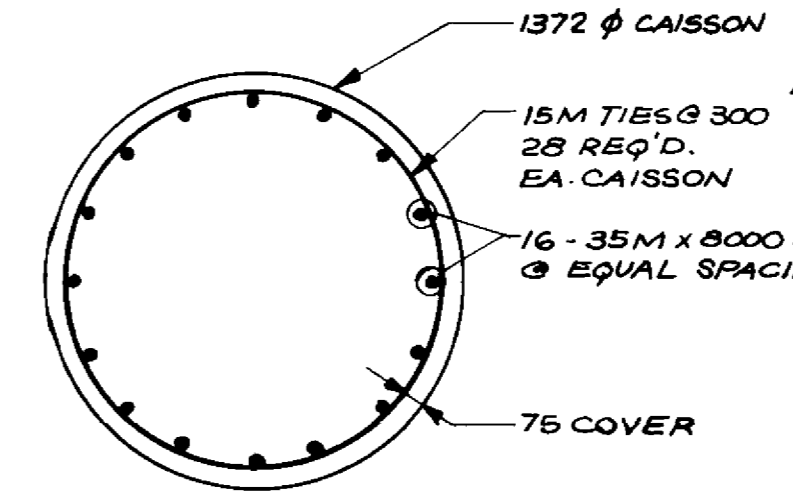
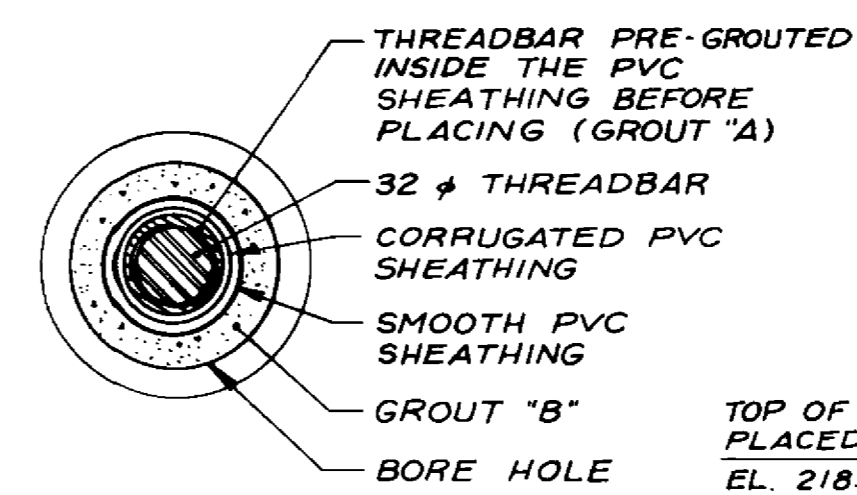
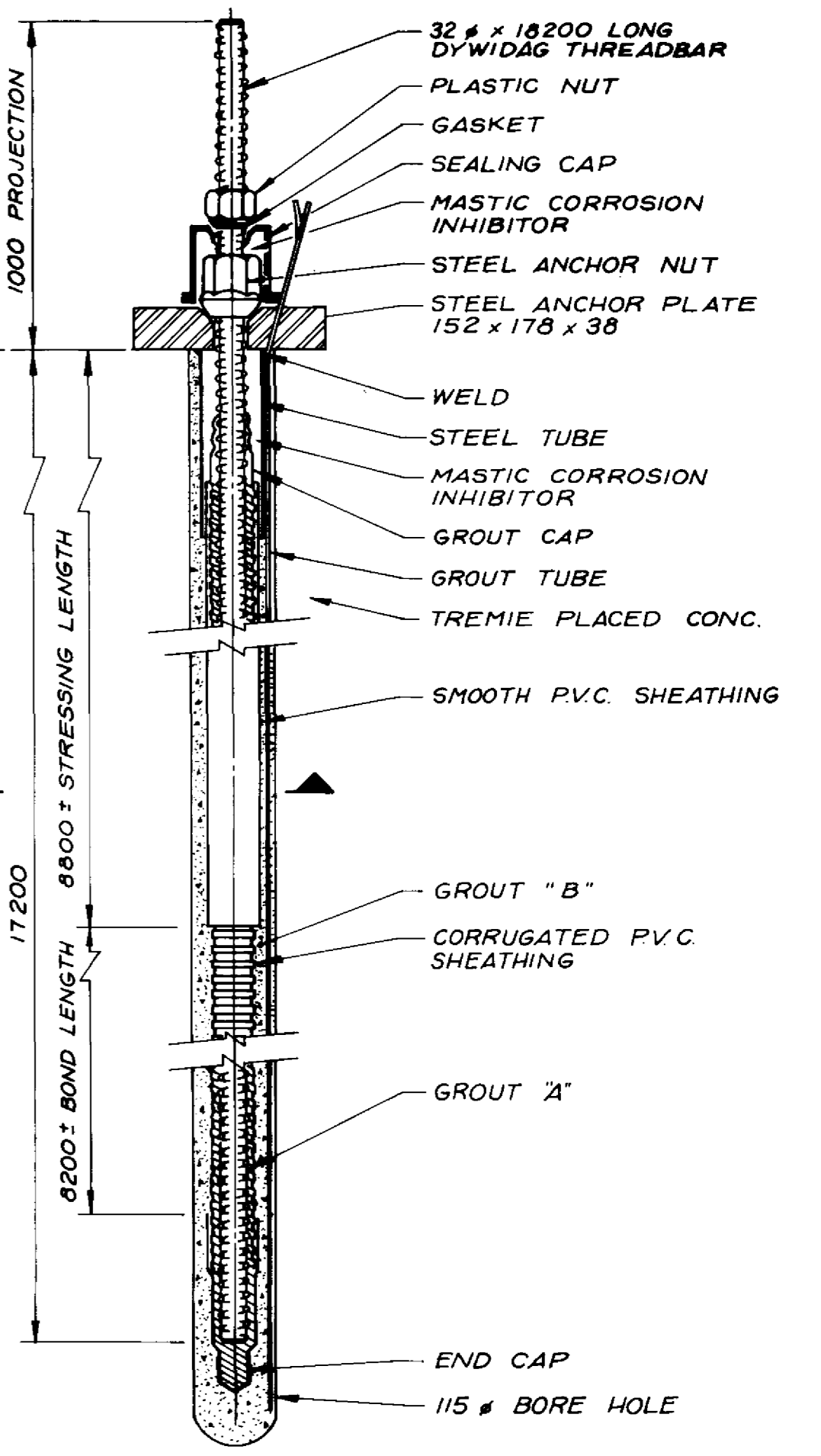


NOTE:
 1A, 2A,..... ROCK ANCHORS INSTALLED AT SU-3 SUB-FOOTING
 1C, 2C,..... ROCK SOCKETED CAISSONS INSTALLED AT SU-4 SUB-FOOTING
 ROCK ANCHORS 1A & 7A DID NOT TAKE TENSILE LOAD (AS BUILT NOTE)

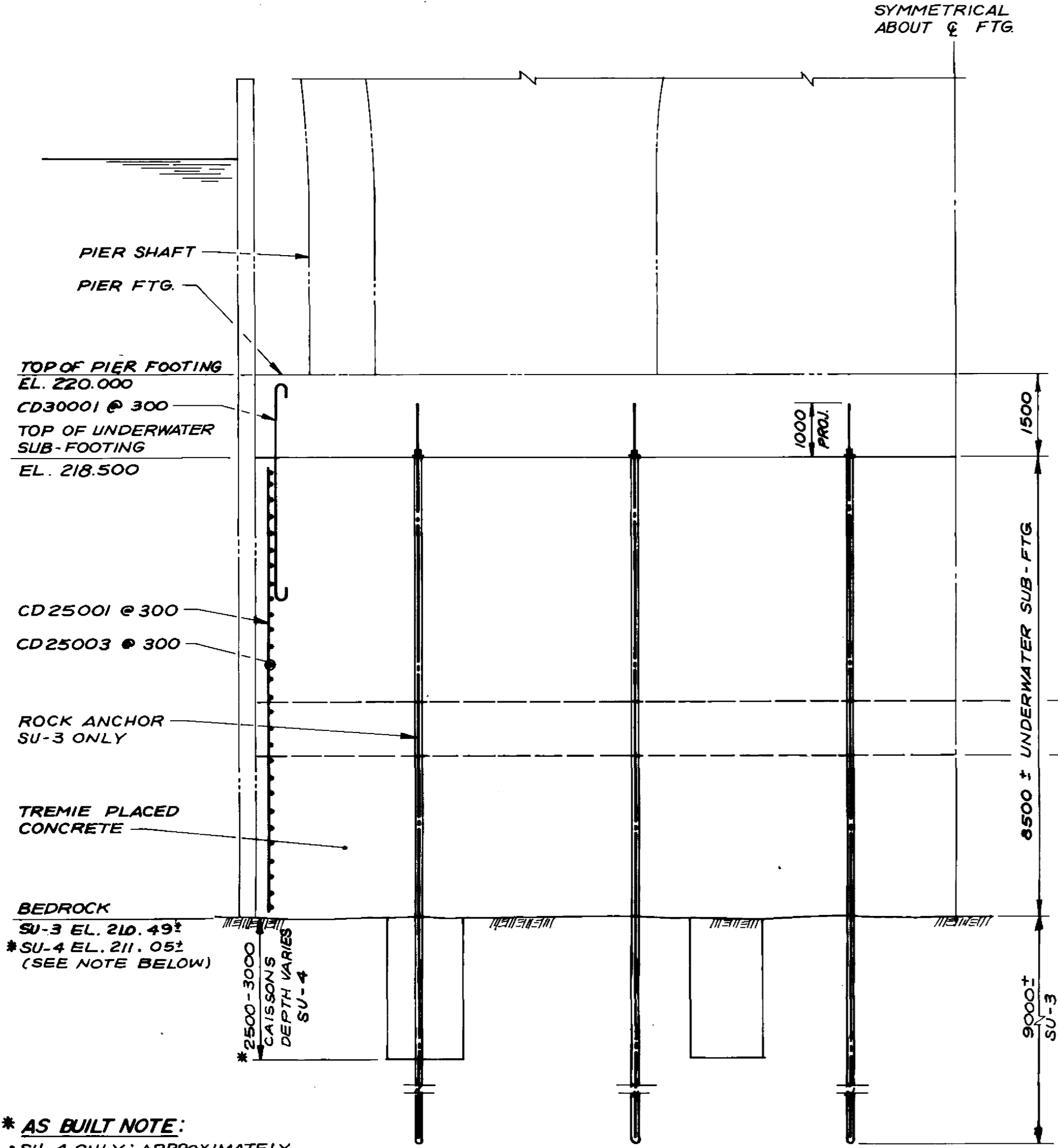
SUB-FOOTING PLAN
 1:75



TYPICAL ROCK SOCKETED CAISSON REINFORCING DETAIL
 B - REQUIRED FOR SU-4 SUB-FOOTING
 1:25

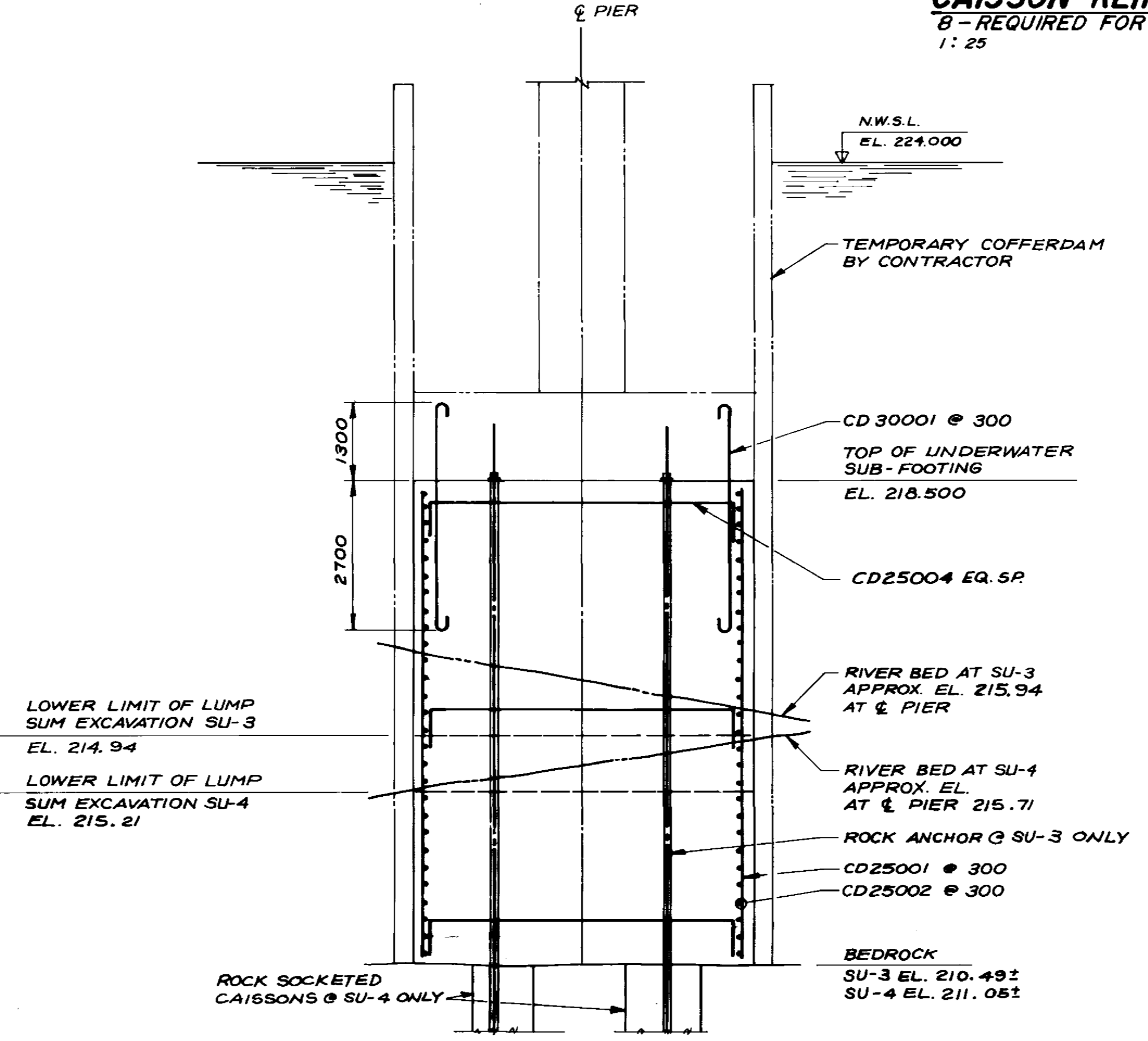


TYPICAL ROCK ANCHOR DETAIL
 12 - REQUIRED FOR SU-3 SUB FOOTING
 N.T.S.



*** AS BUILT NOTE:**
 SU-4 ONLY: APPROXIMATELY 1/2 METER DEPTH OF TILL LEFT AS OVERBURDEN ON VERY UNEVEN BEDROCK SURFACE.
 ROCK CAISSONS PENETRATED THIS TILL AND WERE SOCKETED TO A DEPTH OF 2500 TO 3000 INTO BEDROCK.

HALF LONGITUDINAL SECTION 1
 1:75



SECTION 2
 1:75

ROCK ANCHOR NOTES

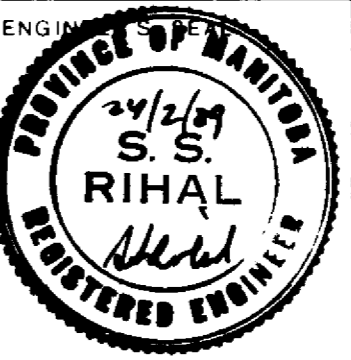
- ROCK ANCHORS SHALL BE 32 φ DYWIDAG THREADBAR GRADE 1030 WITH DOUBLE CORROSION PROTECTION.
- DEMATER COFFERDAM AND CLEAN SURFACE OF TREMIED CONCRETE.
- BORE 115 mm φ HOLES THROUGH TREMIED CONCRETE INTO BEDROCK TO ELEVATION 201.000.
- INSTALL PRE-GROUTED (GROUT "A") ANCHOR ASSEMBLY IN BORE HOLE.
- GROUT BORE HOLE FULL LENGTH WITH TYPE 30 CEMENT GROUT "B".
 i) TEST LOAD TO 300kN
 ii) REDUCE LOAD TO 125 kN PERMANENT FORCE

RECORD DRAWING
 Approved by: *R. S. S. S.* 90J12B
 DATE

LOCATION APPROVED UNDERGROUND STRUCTURES NA	B.M. ELEV.
SUPV U/G STRUCTURES COMMITTEE DATE	
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT THE GIVEN LOCATIONS ARE EXACT CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION	
NO REVISIONS	DATE BY

DILLON
 Consulting Engineers - Planners
 Environmental Scientists

DESIGNED BY D.S.
 CHECKED BY S.S.R.
 DRAWN BY S.K.B.
 APPROVED BY *[Signature]*
 AUTHORIZED BY *[Signature]* 1989-04-07
 STREETS & BRIDGE ENGINEER - DATE
 ACCEPTED BY *[Signature]* 1989-04-07
 BRIDGE ENGINEER - DATE



THE CITY OF WINNIPEG
 WORKS AND OPERATIONS DIVISION
 STREETS & TRANSPORTATION DEPARTMENT

KILDONAN CORRIDOR BRIDGE
 STEEL GIRDER ALTERNATIVE
 RIVER PIERS SU-3 AND SU-4 UNDERWATER SUB-FOOTINGS

CITY DRAWING NUMBER 8216-89-20S
 SHEET OF
B-5828-22

CONSULTANT DRAWING NO.