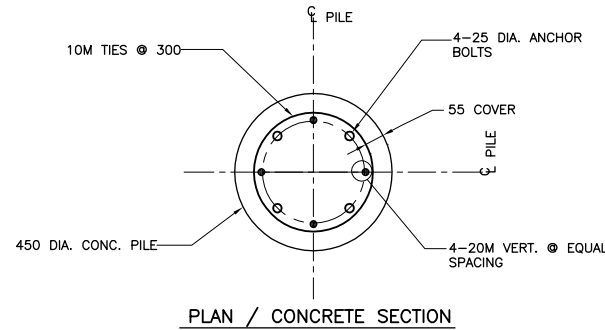
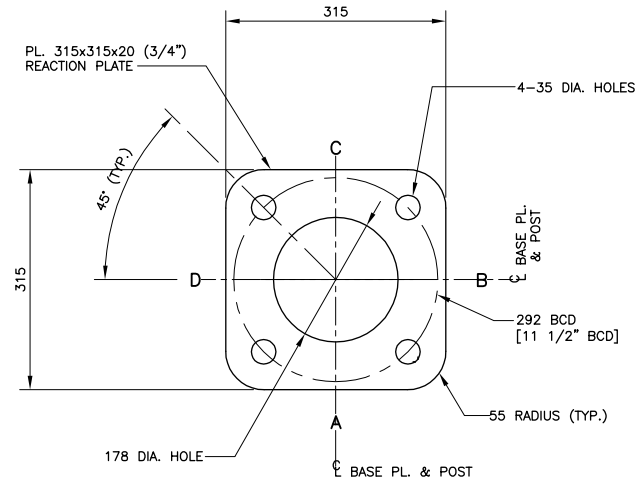


ANCHOR BOLTS LAYOUT

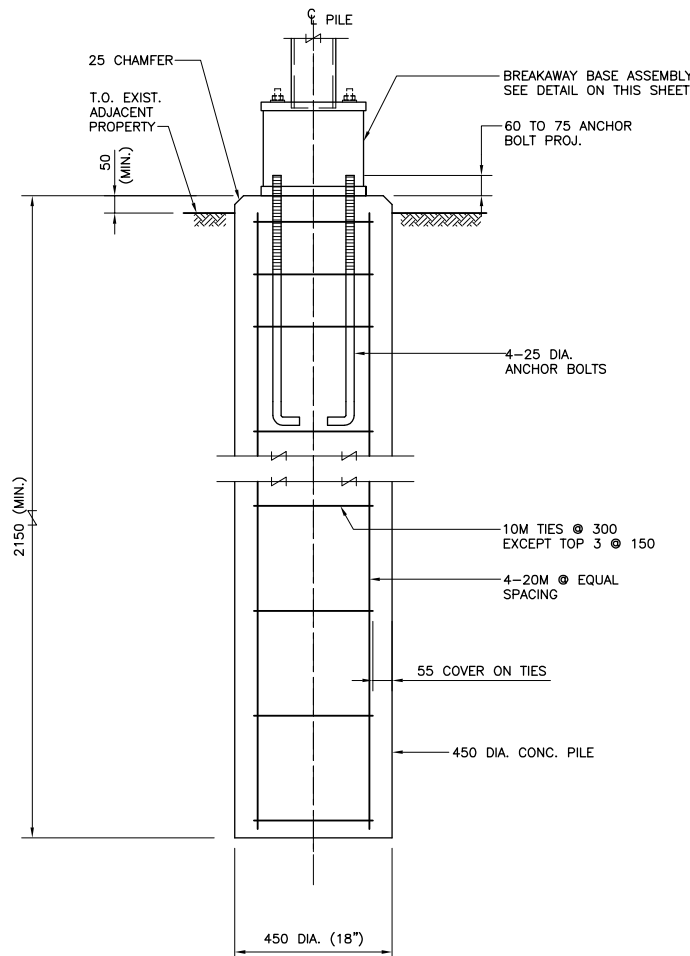


PLAN / CONCRETE SECTION



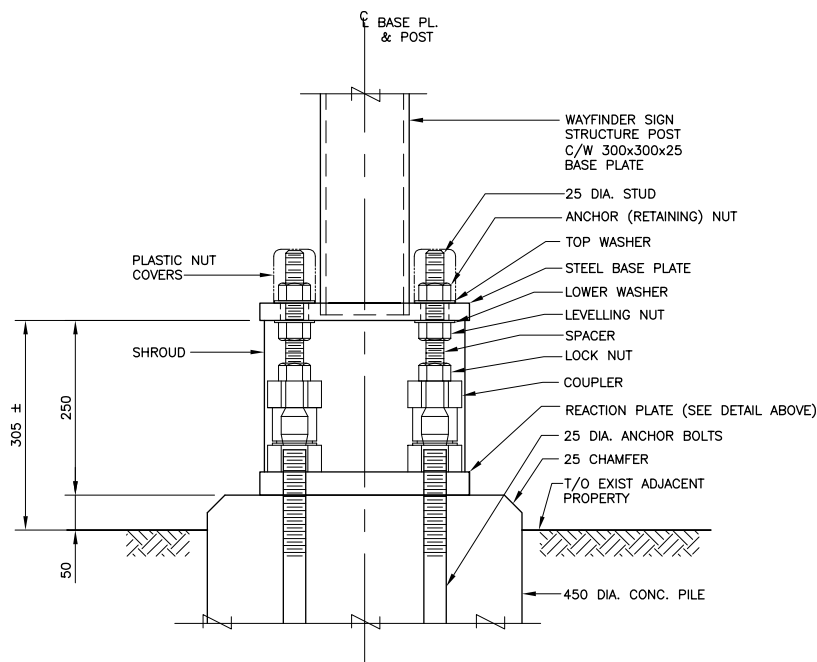
REACTION PLATE DETAIL

1: 5



ELEVATION  
FOUNDATION DETAIL

1: 10



BREAKAWAY BASE ASSEMBLY DETAIL

1: 5

NOTES:

1. REINFORCING STEEL
  - CSA G30.12 GR. 400W
  - VERTICAL BARS FULL LENGTH OF PILE
2. ANCHORS BOLTS
  - CSA G40.21 GR. 300W
  - 4-25 DIA. x 1500 LONG + 150 HOOK
  - TOP 300 THREADED
  - HOT DIP GALVANIZED FULL LENGTH INCL. NUTS + WASHERS
3. CONCRETE MIX DESIGN
 

PROPORTIONING OF FINE AGGREGATE, COARSE AGGREGATE, CEMENT, WATER, AND AIR ENTRAINING AGENT SHALL BE SUCH AS YIELD CONCRETE HAVING THE REQUIRED STRENGTH AND WORKABILITY AS FOLLOWS:

  - i) MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 35 MPa
  - ii) MAXIMUM WATER/CEMENT RATIO = 0.45
  - iii) MINIMUM CEMENT CONTENT = 340 kg/m
  - iv) SLUMP = 80mm ± 30mm
  - v) AGGREGATE: 20mm NOMINAL
  - vi) AIR CONTENT: 5.0 TO 8.0 PERCENT
  - vii) CEMENT - TYPE HS, HIGH SULPHATE RESISTANT
4. TOP RING & ANCHOR BOLT TEMPLATE
  - CONTRACTOR SHALL USE A STEEL TOP RING FORM FOR ALL PILE INSTALLATIONS. REFER TO STANDARD DWG. ST-116 FOR FABRICATING THE TOP RING FORM SUITABLE FOR 450 (18") DIA. PILES.
  - CONTRACTOR SHALL USE A STEEL ANCHOR BOLT TEMPLATE TO SET THE ANCHOR BOLTS IN THE PILES. REFER TO STANDARD DWG. ST-117 FOR FABRICATING THE TEMPLATE SUITABLE FOR 450 (18") DIA. PILES.
5. BREAKAWAY BASE
 

COMPONENTS REQUIRED FOR TYPICAL ASSEMBLY

  - REACTION PLATE ASTM A36 OR EQUAL (HOT-DIP GALV.)
  - 30,000 PSI GRAY CAST-IRON COUPLER
  - LOCK NUT, LEVELING NUT & RETAINING NUTS, LOWER WASHER & TOP WASHER ASTM A36 OR EQUAL (HOT DIP GALV.)
  - 25 (1") DIA. BUNC STUD-4140 STEEL (HOT DIP GALV.)
  - SPACER-25 (1") DIA. PVC PIPE
  - PLASTIC NUT COVERS- FOR 25 (1") DIA NUTS.
  - SHROUD- #24 U.S. GAUGE, ATTACH WITH 3-#10x3/4" SELF-TAPPING S/S SHEET METAL SCREWS. SHROUD SHALL BE HOT-DIP GALV.
6. PAINT FINISH
  - FOR SIGN BOX OPTION ALTERNATIVES 1, 2 & 3 : REACTION PLATE, SHROUD INCL. SCREW HEADS AND PLASTIC NUT COVERS SHALL BE PAINTED DARK BLUE MATCHING PANTONE COLOR SYSTEM PMS 2738
7. UNDERGROUND UTILITIES
  - UNDERGROUND UTILITIES ARE NOT SHOWN.
  - CONTRACTOR SHALL OBTAIN CLEARANCE FROM ALL UTILITY COMPANIES AT EACH PILE LOCATION PRIOR TO PILE CONSTRUCTION.

DRAWING REDUCED  
NOT TO SCALE

B.M. ELEV.	DESIGNED BY	S.S.R./A.S.D.				WAYFINDER SIGNS CITY DRAWING NUMBER WF-04-07 SHEET 7 OF 11
	DRAWN BY	N.B.G.				
	CHECKED BY	S.S.R.				
	APPROVED BY					
	HOR. SCALE	AS SHOWN				
VERTICAL		RELEASED FOR CONSTRUCTION	CONSULTANT PROJECT NO.	04-3144-1000	SIGN BOX OPTION CONCRETE PILE FOUNDATION DETAILS	
NO. REVISIONS	DATE	BY	DATE	SEPT. 2004		