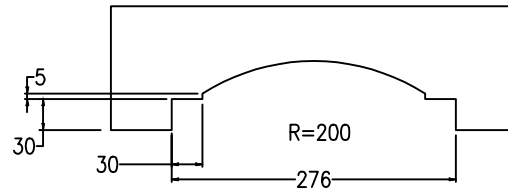


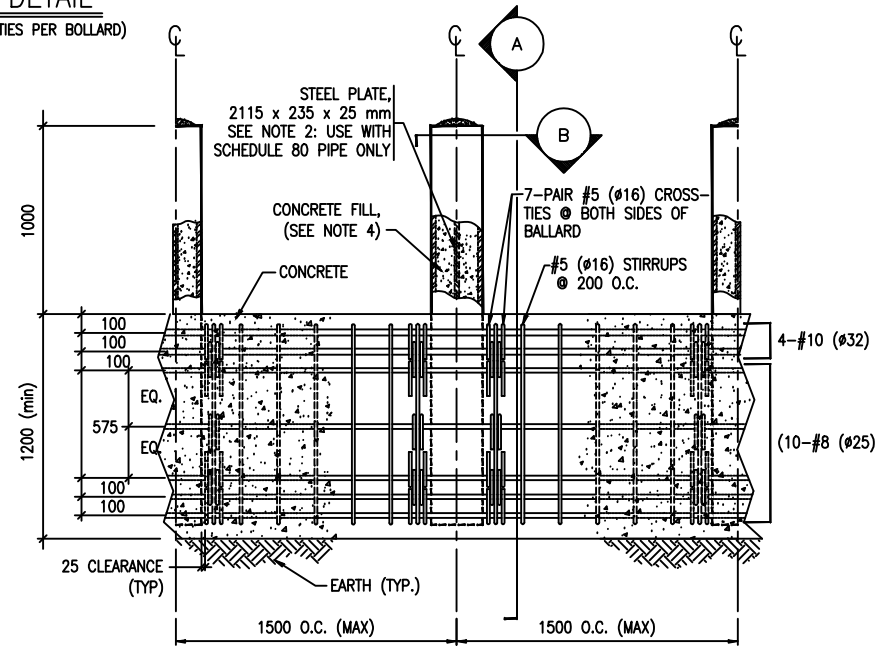
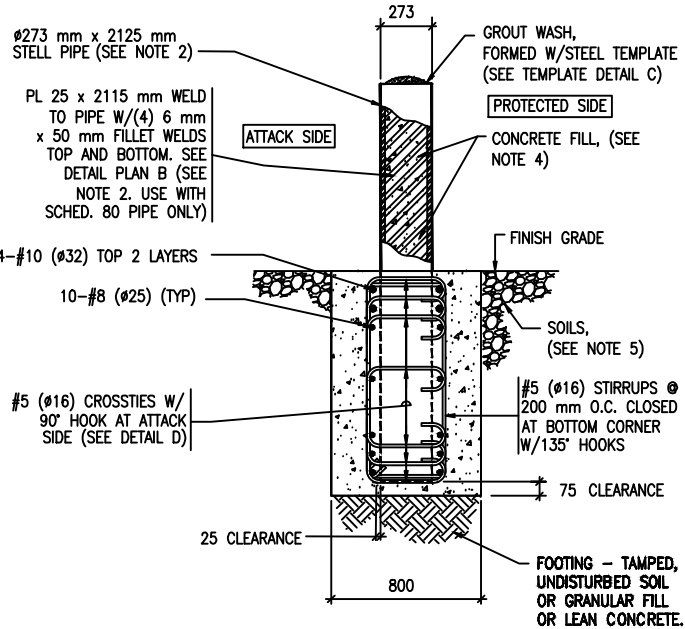
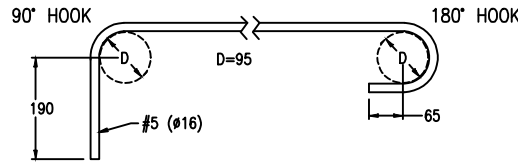
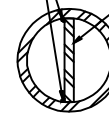
| REVISIONS | | | |
|-----------|-------------|------|-------|
| LTR | DESCRIPTION | DATE | APPVD |
| | | | |
| | | | |
| | | | |

- NOTES:**
- 1) REINFORCING STEEL - ASTM A-615, $f_y=420$ MPa (MIN). EQUIVALENT INTERNATIONAL REINFORCING BARS ARE SHOWN IN PARENTHESIS. THE SUBSTITUTION OF NON ASTM BAR SIZES MUST BE APPROVED BY OBO PER THE REQUIREMENTS OF AEDG CHAPTER 5.1, SECTION 6.2.3.4.
 - 2) STEEL PIPE - ASTM A-53 GRADE-B, $f_y=250$ MPa (MIN)
OPTION 1: SCHEDULE 140 (25.4 mm WALL THK.),
OPTION 2: SCHEDULE 80 (15.09 mm WALL THK.),
USE PL 25 x 2115 WITH OPTION 2.
 - 3) STEEL PLATE - ASTM A-36, $f_y=250$ MPa (MIN).
 - 4) CONCRETE - $F'_c = 25$ MPa @ 28 DAY (MIN) IN ACCORDANCE WITH ASTM C31, C39 AND C470.
 - 5) SOILS - ALL BACKFILL SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF SE-STD-02.01, SECTION 5.1.2. IF THE LATERAL CAPACITY OF THE EXISTING SOIL IS NOT IN CONFORMANCE WITH THE REQUIREMENTS OF SD-STD-02.01, SECTION 5.1.2, THEN THE EXISTING SOIL SHALL BE REPLACED WITH SOIL MEETING THOSE REQUIREMENTS.
 - 6) STAGGERED, CLASS-A TENSION SPLICES SHALL BE ALLOWED FOR SPlicing OF HORIZONTAL BARS.
 - 7) CROSSTIE: THE #5 (#16) CROSSTIE HAS 90° AND 180° HOOK AT EACH END. (SEE DETAIL D) THE 90° HOOK SHOULD BE PLACED AT THE ATTACK SIDE OF THE FOOTING. PROVIDE 7-PAIR CROSSTIES COMBINING WITH THE FIRST ROW OF THE STIRRUP AT EACH SIDE OF THE BOLLARD. (SEE ELEVATION 1)
 - 8) ALL DIMENSIONS WITH A DECIMAL ARE IN METERS, ALL DIMENSIONS WITHOUT A DECIMAL ARE IN MILLIMETERS U.N.O.



BOTH ENDS OF PIPE $\frac{6}{6}$ 50

NOTE: WELD STEEL PLATE W/IN STEEL PIPE PARALLEL TO VEHICLE TRAVEL DIRECTION (SEE NOTE 2: USE WITH SCHEDULE 80 PIPE ONLY)



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|-------------------|------------------------------|---|---------|---------------|--|-----------------|----------------|
| SERIES NUMBER: | DS-22B | CAGE CODE: | 6NQJ8 | SIZE: | | DRAWING NUMBER: | BOLLARD DS-22B |
| PRODUCT FAMILY: | FIXED BOLLARD | DRAWN BY: | MJW | CHECKED BY: | | DRAWING REV: | |
| PRODUCT CLASS: | STANDARD OR CUSTOMER DEFINED | PRODUCT LINE: | BOLLARD | APPROVED BY: | | SHEET: | 1 OF 1 |
| PRODUCT SUB LINE: | FIXED | 1-800-BOLLARDS, Inc. 24370 Northwestern Hwy, Suite 250 Southfield, MI 48075 | | TITLE: | | BOLLARD, FIXED | |
| APPLICATION | | PHONE: 1-800-BOLLARDS | | RELEASE DATE: | | | |
| NEXT ASSY | USED IN | WEB: WWW.1800BOLLARDS.COM | | | | | |
| | | EMAIL: INFO@1800BOLLARDS.COM | | | | | |