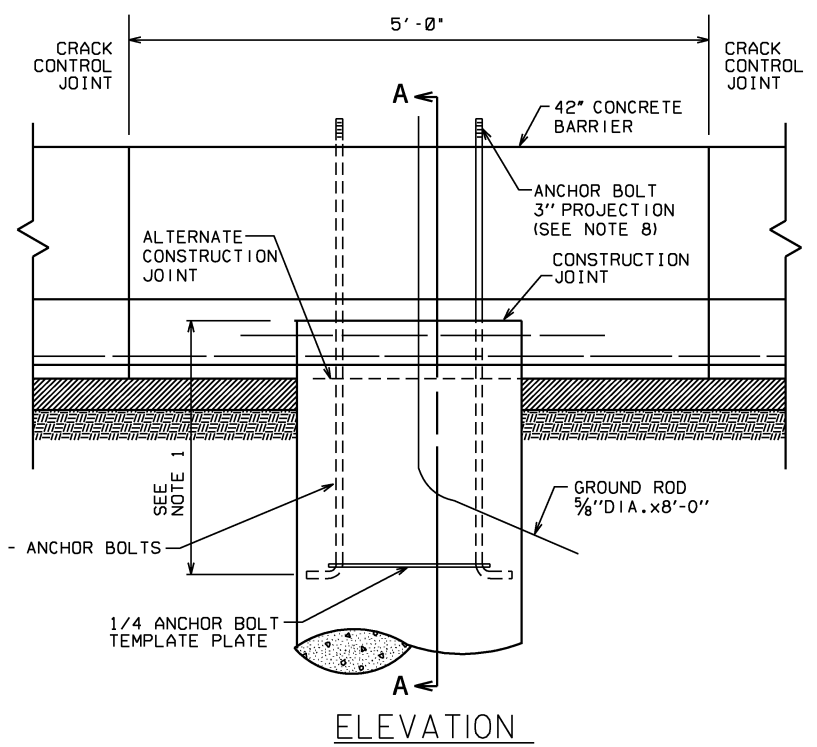
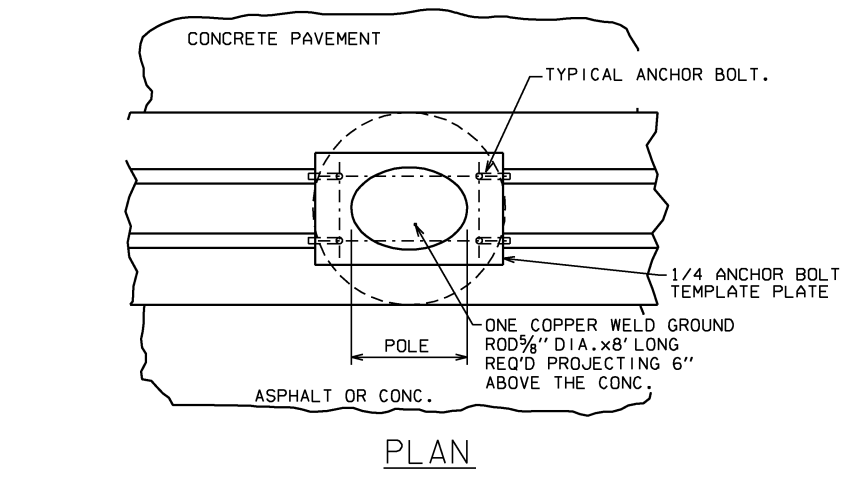


SECTION "A-A"
FOOTING DESIGN NO. 1- DS
0 TO 1/2" MAX. DIFF. IN GRADE ELEVATION



NOTE:

1. ALL PROPOSED LIGHT POLES SHALL BE SUPPORTED BY DRILLED SHAFT FOUNDATIONS. ALL COSTS ASSOCIATED WITH THE LIGHT POLES, INCLUDING POLE AND FOUNDATION MATERIALS, EQUIPMENT, AND LABOR SHALL BE INCLUDED IN THE PRICE BID. THE CONTRACTOR SHALL SUBMIT A FOUNDATION DESIGN FOR APPROVAL BY THE ENGINEER. THE DESIGN SHALL BE IN ACCORDANCE WITH THE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS AND THE 2009 OKLAHOMA STANDARD CONSTRUCTION SPECIFICATIONS. THE DESIGN SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. THE SUBMITTAL SHALL INCLUDE ALL STRUCTURAL DESIGN CALCULATIONS, PERTINENT SOILS DATA, AND ASSOCIATED SHOP DRAWINGS, INCLUDING ALL NECESSARY DETAILS. EMBEDMENT OF ANCHOR BOLTS TO BE DESIGNED BY CONTRACTOR AND INCLUDED IN THE SHOP DRAWINGS. SEE NOTES ON "SUMMARY OF PAY QUANTITIES AND NOTES (LIGHTING)" SHEET AND "ELECTRICAL SCHEDULES AND NOTES" SHEET FOR ADDITIONAL REQUIREMENTS. LIGHT POLES SHALL BE OVALIZED ALUMINUM.

- MATERIAL SPECIFICATIONS:**
- A. ANCHOR BOLTS - 4 REQUIRED AND SHALL BE HOT BEND AND MEET THE STRENGTH REQUIREMENTS OF ASTM A36-M55 AND HAVE A MINIMUM YIELD OF 50,000 PSI.
 - HEX NUTS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ASTM-563 GRADE A, OR ANSI B18.2.2 HEX TYPE.
 - FLAT WASHERS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ANSI B27.2 HEAVY WASHERS.
 - LOCK WASHERS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ANSI B18.21 HEAVY WASHERS.
 - B. ALL BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-153 (AASHTO M-232).
 - C. ALL CONCRETE SHALL BE CLASS "AA", UNLESS OTHERWISE SPECIFIED IN THE PLANS.
 - D. REINFORCING STEEL SHALL BE AASHTO M-31, GRADE 60.
 - E. ANCHOR BOLT TEMPLATE PLATES SHALL BE AASHTO M-183 (ASTM A-36), MINIMUM PLATE THICKNESS OF 0.0598" (16 GAUGE).
 - F. ELECTRICAL CONDUIT OR SLEEVES SHALL BE IN ACCORDANCE WITH THE 2009 STANDARD SPECIFICATIONS AND MAY BE EITHER RIGID GALV. STEEL OR SCH. 40 PLASTIC.

- GENERAL NOTES:**
- 1. A TEMPLATE SHALL BE PROVIDED TO FIX THE LOCATION OF THE ANCHOR BOLTS AND CONDUITS THAT PROJECT OUT OF THE CONCRETE FOOTING.
 - 2. SOME FOOTINGS MAY REQUIRE MORE THAN THE 2 CONDUITS SPECIFIED, SEE THE PLANS FOR LOCATIONS.
 - 3. FOR INFORMATION ON INSTALLATION OF UNDERGROUND/TRENCHED CONDUIT, SEE STD. CCDI-1 (LATEST REVISION).
 - 4. CONSTRUCT CONDUITS IN THE CENTER OF THE ANCHOR BOLT CIRCLE.
 - 5. NO LIGHT POLE FOOTING SHALL BE PLACED WITHIN 12' OF THE END OF A BARRIER.
 - 6. NO LIGHT POLE FOOTING SHALL BE PLACED WITHIN 6' OF A GRATED INLET.
 - 7. IF THE CONTRACTOR ELECTS TO USE DOUBLE NUT LEVELING, THE ANCHOR BOLT PROJECTION SHALL BE INCREASED, 4 ADDITIONAL HEX NUTS AND FLAT WASHERS WILL BE REQUIRED, AND THE VOID BELOW THE INSTALLED BASE PLATE SHALL BE FILLED WITH A NON-SHRINK GROUT.
 - 8. THE CONTRACTOR SHALL PROTECT THE ANCHOR BOLT THREADS FROM ACCUMULATIONS OF CONCRETE AND SHALL PREVENT THE ENTRY OF CONCRETE INTO THE CONDUIT SYSTEM.
 - 9. SEE PLANS FOR FOOTING LOCATIONS.
 - 10. THE CONTRACTOR SHALL USE THE BUBBLE LEVELING METHOD TO ASSURE THAT THE TOP OF THE LIGHT POLE FOOTINGS ARE LEVEL WHEN BEING CONSTRUCTED. THIS IS TO AVOID THE USE OF SHIMS WHEN INSTALLING THE LIGHT POLES ON THE FOOTINGS.

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|----------|---------------|------|-------------------------|
| DESIGN | SFF | 2/15 | TULSA & ROGERS COUNTIES |
| DRAWN | SFF | 2/15 | |
| CHECKED | SFF | 2/15 | |
| APPROVED | | | |
| SQUAD | GARVER | | |

**LIGHTING DETAILS
(SHEET 2 OF 3)**

STATE JOB NO. 21899(04) SHEET NO. 227