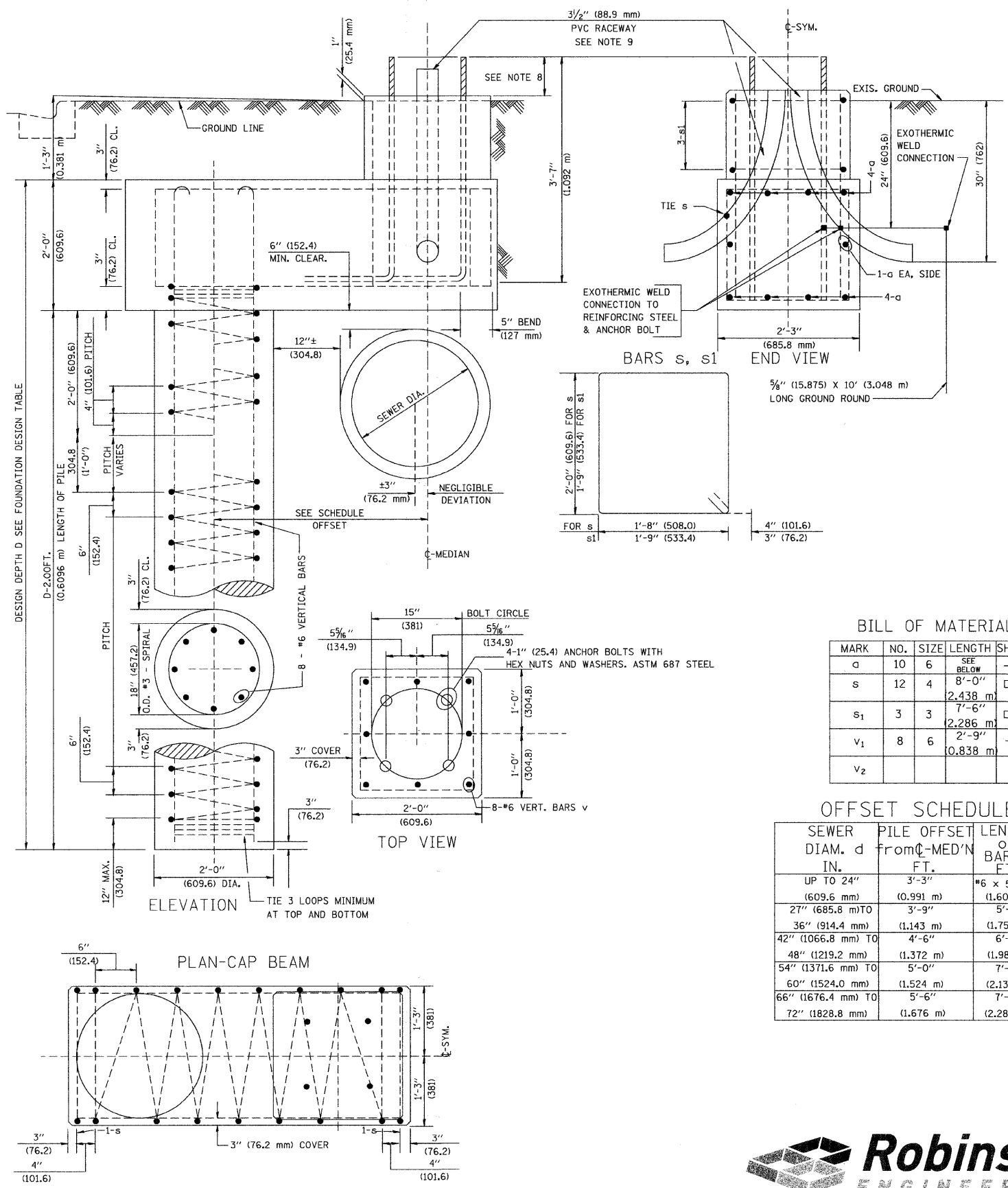


FOUNDATION DESIGN TABLE

| TYPE OF SOIL | DESIGN DEPTH OF FOUNDATION | | REINFORCEMENT IN FOUNDATION | | | |
|-------------------------|----------------------------|---------------------|-----------------------------|-----------------------|--------------------------|-----------------------|
| | SINGLE ARM D | TWIN ARM D | SINGLE ARM | | TWIN ARM | |
| | | | VERT BARS | SPIRAL | VERT BARS | SPIRAL |
| SOFT CLAY | 13'-0" (3.962 m) | 15'-0" (4.572 m) | 8-#6X12'-6" (3.810 m) | #3X122' (37.186 m) | 8-#6X14'-3" (4.343 m) | #3X141' (42.977 m) |
| MEDIUM CLAY | 9'-6" (2.896 m) | 10'-9" (3.277 m) | 8-#6X9'-0" (2.743 m) | #3X90' (27.432 m) | 8-#6X10'-0" (3.048 m) | #3X100' (30.480 m) |
| STIFF CLAY | 7'-0" (2.134 m) | 8'-0" (2.438 m) | 8-#6X6'-6" (1.981 m) | #3X66' (20.112 m) | 8-#6X7'-6" (2.286 m) | #3X76' (23.165 m) |
| LOOSE SAND | 9'-0" (2.743 m) | 10'-0" (3.048 m) | 8-#6X8'-6" (2.591 m) | #3X85' (25.908 m) | 8-#6X9'-6" (2.896 m) | #3X94' (28.651 m) |
| MEDIUM SAND | 8'-3" (2.515 m) | 9'-0" (2.743 m) | 8-#6X8'-0" (2.438 m) | #3X78' (23.774 m) | 8-#6X8'-6" (2.591 m) | #3X85' (25.908 m) |
| DENSE SAND | 7'-9" (2.362 m) | 9'-0" (2.743 m) | 8-#6X7'-6" (2.286 m) | #3X73' (22.250 m) | 8-#6X8'-6" (2.591 m) | #3X85' (25.908 m) |
| ROCK OR SOLIDIFIED SLAG | 5'-0" (1.524 m) | 5'-0" (1.524 m) | NONE | NONE | NONE | NONE |

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERCTED.



BILL OF MATERIAL

| MARK | NO. | SIZE | LENGTH | SHAPE |
|------|-----|------|--------------------|-------|
| a | 10 | 6 | SEE BELOW | — |
| s | 12 | 4 | 8'-0" (2,438 m) | □ |
| s1 | 3 | 3 | 7'-6" (2,286 m) | □ |
| v1 | 8 | 6 | 2'-9" (0,838 m) | — |
| v2 | | | | |

OFFSET SCHEDULE

| SEWER DIAM. d IN. | PILE OFFSET from C-MED'N FT. | LENGTH of BAR a FT. |
|----------------------|------------------------------|----------------------|
| UP TO 24" (609.6 mm) | 3'-3" (0.991 m) | #6 x 5'-3" (1,600 m) |
| 27" (685.8 mm) TO | 3'-9" (1.143 m) | 5'-9" (1,753 m) |
| 36" (914.4 mm) TO | 4'-6" (1.372 m) | 6'-6" (1,981 m) |
| 42" (1066.8 mm) TO | 5'-0" (1,524 m) | 7'-0" (2,134 m) |
| 48" (1219.2 mm) TO | 5'-6" (1,676 m) | 7'-6" (2,286 m) |
| 54" (1371.6 mm) TO | 6'-0" (1,828.8 mm) | 8'-0" (2,438 m) |
| 60" (1524.0 mm) TO | 6'-6" (1,981 m) | 8'-6" (2,591 m) |
| 66" (1676.4 mm) TO | 7'-0" (2,134 m) | 9'-0" (2,743 m) |
| 72" (1828.8 mm) | 7'-6" (2,286 m) | 9'-6" (2,896 m) |

| | | | |
|---------------------------------|---------------------------|------------|-------------------------------|
| FILE NAME = 06859-LGHT-02 - P04 | USER NAME = | DESIGNED = | REVISED = 06-16-08 R. TOMSONS |
| | | CHECKED = | REVISED = |
| | PLOT SCALE = 50.000' / IN | DRAWN = | REVISED = |
| | PLOT DATE = 8-19-08 | CHECKED = | REVISED = |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | | |
|---|---------------------------|-----------------|------------------------|-----------------------|-----------------|------------------------------|
| LIGHT POLE FOUNDATION OFFSET 40' (12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE | | F.A.P. RTE. 351 | SECTION 09-00086-00-CH | COUNTY COOK | TOTAL SHEETS 43 | SHEET NO. 20 |
| SCALE: | SHEET NO. 20 OF 43 SHEETS | STA. | TO STA. | CONTRACT NO. 63261 | | |
| | | | | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT M-9003(330) |

