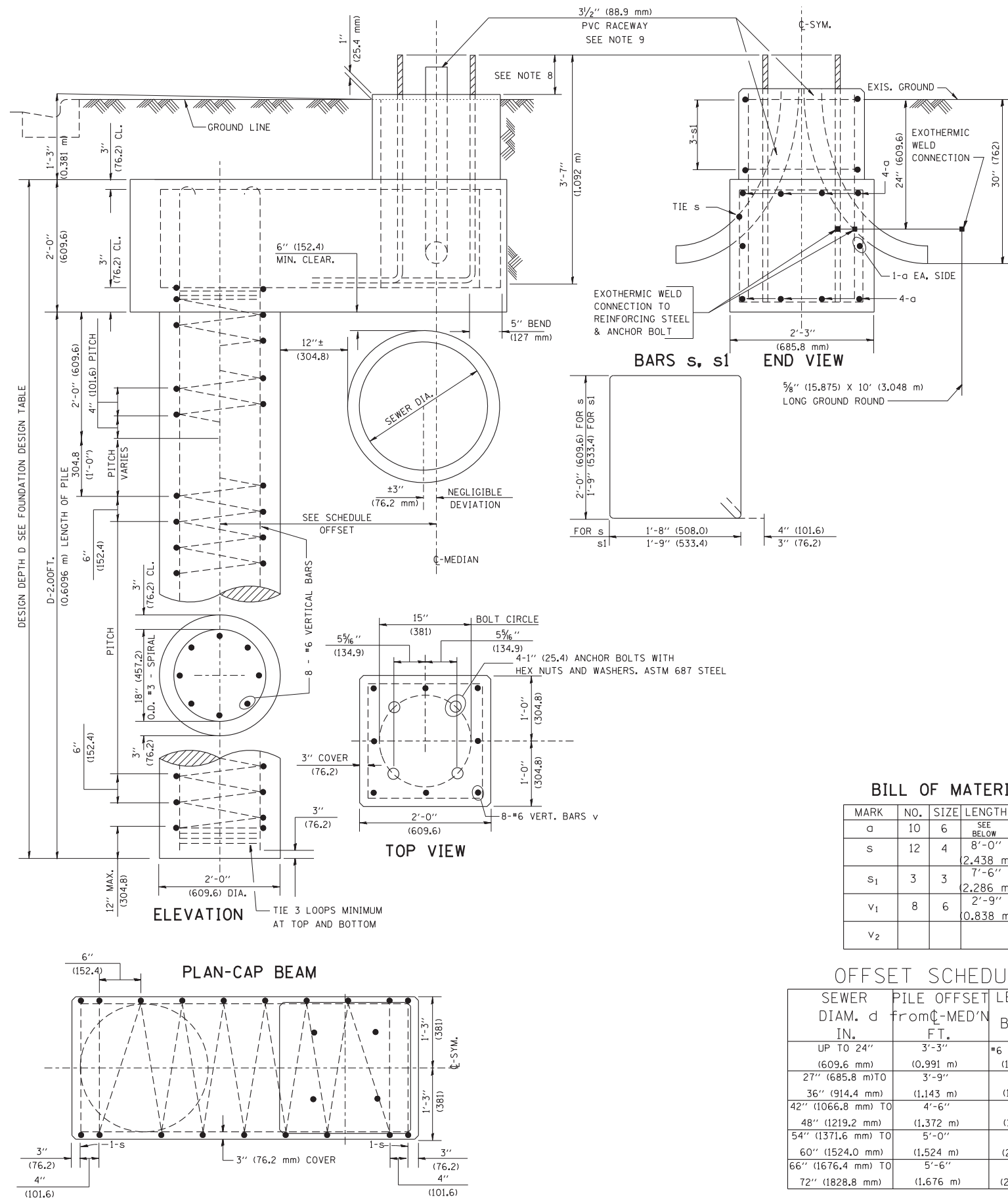


FOUNDATION DESIGN TABLE

| TYPE OF SOIL            | DESIGN DEPTH OF FOUNDATION |                     | REINFORCEMENT IN FOUNDATION |                       |                          |                       |
|-------------------------|----------------------------|---------------------|-----------------------------|-----------------------|--------------------------|-----------------------|
|                         | SINGLE ARM<br>D            | TWIN ARM<br>D       | SINGLE ARM                  |                       | TWIN ARM                 |                       |
|                         |                            |                     | VERT BARS                   | SPIRAL                | VERT BARS                | SPIRAL                |
| SOFT CLAY               | 13'-0"<br>(3.962 m)        | 15'-0"<br>(4.572 m) | 8-#6X12'-6"<br>(3.810 m)    | #3X122'<br>(37.186 m) | 8-#6X14'-3"<br>(4.343 m) | #3X141'<br>(42.977 m) |
| MEDIUM CLAY             | 9'-6"<br>(2.896 m)         | 10'-9"<br>(3.277 m) | 8-#6X9'-0"<br>(2.743 m)     | #3X90'<br>(27.432 m)  | 8-#6X10'-0"<br>(3.048 m) | #3X100'<br>(30.480 m) |
| STIFF CLAY              | 7'-0"<br>(2.134 m)         | 8'-0"<br>(2.438 m)  | 8-#6X6'-6"<br>(1.981 m)     | #3X66'<br>(20.112 m)  | 8-#6X7'-6"<br>(2.286 m)  | #3X76'<br>(23.165 m)  |
| LOOSE SAND              | 9'-0"<br>(2.743 m)         | 10'-0"<br>(3.048 m) | 8-#6X8'-6"<br>(2.591 m)     | #3X85'<br>(25.908 m)  | 8-#6X9'-6"<br>(2.896 m)  | #3X94'<br>(28.651 m)  |
| MEDIUM SAND             | 8'-3"<br>(2.515 m)         | 9'-0"<br>(2.743 m)  | 8-#6X8'-0"<br>(2.438 m)     | #3X78'<br>(23.774 m)  | 8-#6X8'-6"<br>(2.591 m)  | #3X85'<br>(25.908 m)  |
| DENSE SAND              | 7'-9"<br>(2.362 m)         | 9'-0"<br>(2.743 m)  | 8-#6X7'-6"<br>(2.286 m)     | #3X73'<br>(22.250 m)  | 8-#6X8'-6"<br>(2.591 m)  | #3X85'<br>(25.908 m)  |
| ROCK OR SOLIDIFIED SLAG | 5'-0"<br>(1.524 m)         | 5'-0"<br>(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 ERECTED.



BILL OF MATERIAL

| MARK | NO. | SIZE | LENGTH             | SHAPE |
|------|-----|------|--------------------|-------|
| a    | 10  | 6    | SEE BELOW          | —     |
| s    | 12  | 4    | 8'-0"<br>(2,438 m) | □     |
| s1   | 3   | 3    | 7'-6"<br>(2,286 m) | □     |
| v1   | 8   | 6    | 2'-9"<br>(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 36" (914.4 mm)   | 3'-9" (1.143 m)              | 5'-9" (1.753 m)      |
| 42" (1066.8 mm) TO 48" (1219.2 mm) | 4'-6" (1.372 m)              | 6'-6" (1.981 m)      |
| 54" (1371.6 mm) TO 60" (1524.0 mm) | 5'-0" (1.524 m)              | 7'-0" (2.134 m)      |
| 66" (1676.4 mm) TO 72" (1828.8 mm) | 5'-6" (1.676 m)              | 7'-6" (2.286 m)      |

|                                       |                     |            |                               |
|---------------------------------------|---------------------|------------|-------------------------------|
| FILE NAME = K:\diststd22x34\be310.dgn | USER NAME = bauerdl | DESIGNED - | REVISED - 06-16-08 R. TOMSONS |
|                                       |                     | DRAWN -    | REVISED -                     |
|                                       |                     | CHECKED -  | REVISED -                     |
|                                       |                     | DATE -     | 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

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

|              |         |        |                           |           |
|--------------|---------|--------|---------------------------|-----------|
| F.A. RTE.    | SECTION | COUNTY | TOTAL SHEETS              | SHEET NO. |
|              | BE-310  |        | 537                       | 387       |
| CONTRACT NO. |         |        | ILLINOIS FED. AID PROJECT |           |

6/16/2008  
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