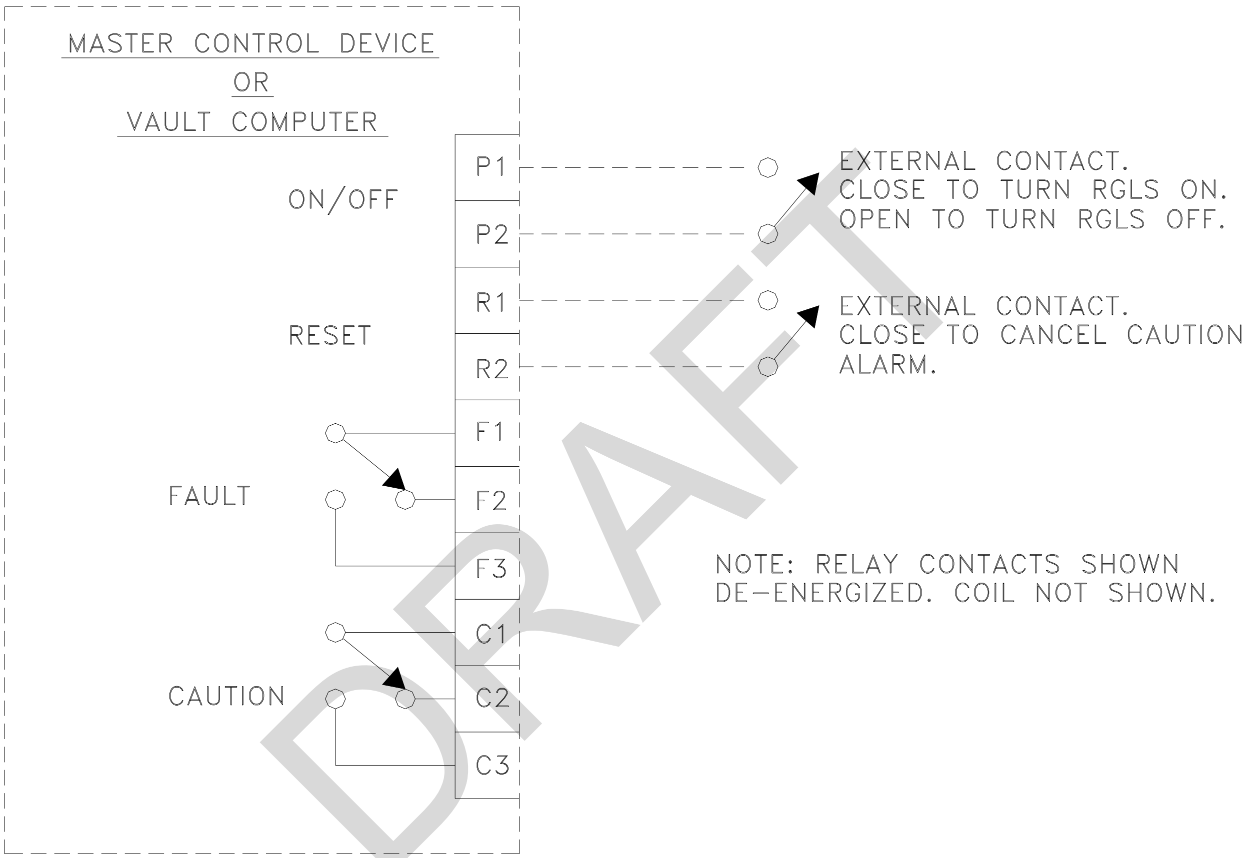


Figure 58. In-Pavement RGL Alarm Signal Connection.

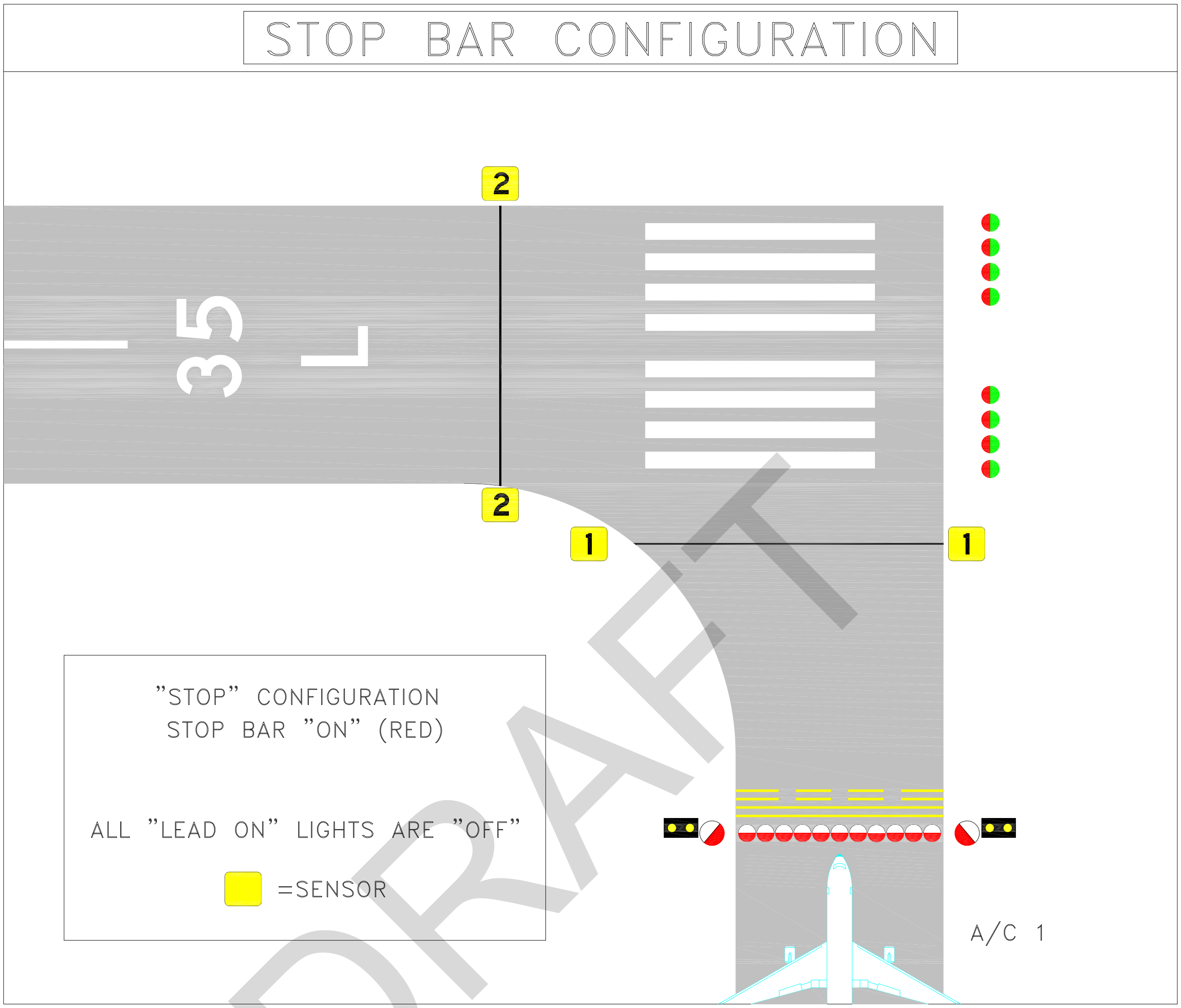


Figure 59. Controlled Stop Bar Design and Operation – "STOP" Configuration.

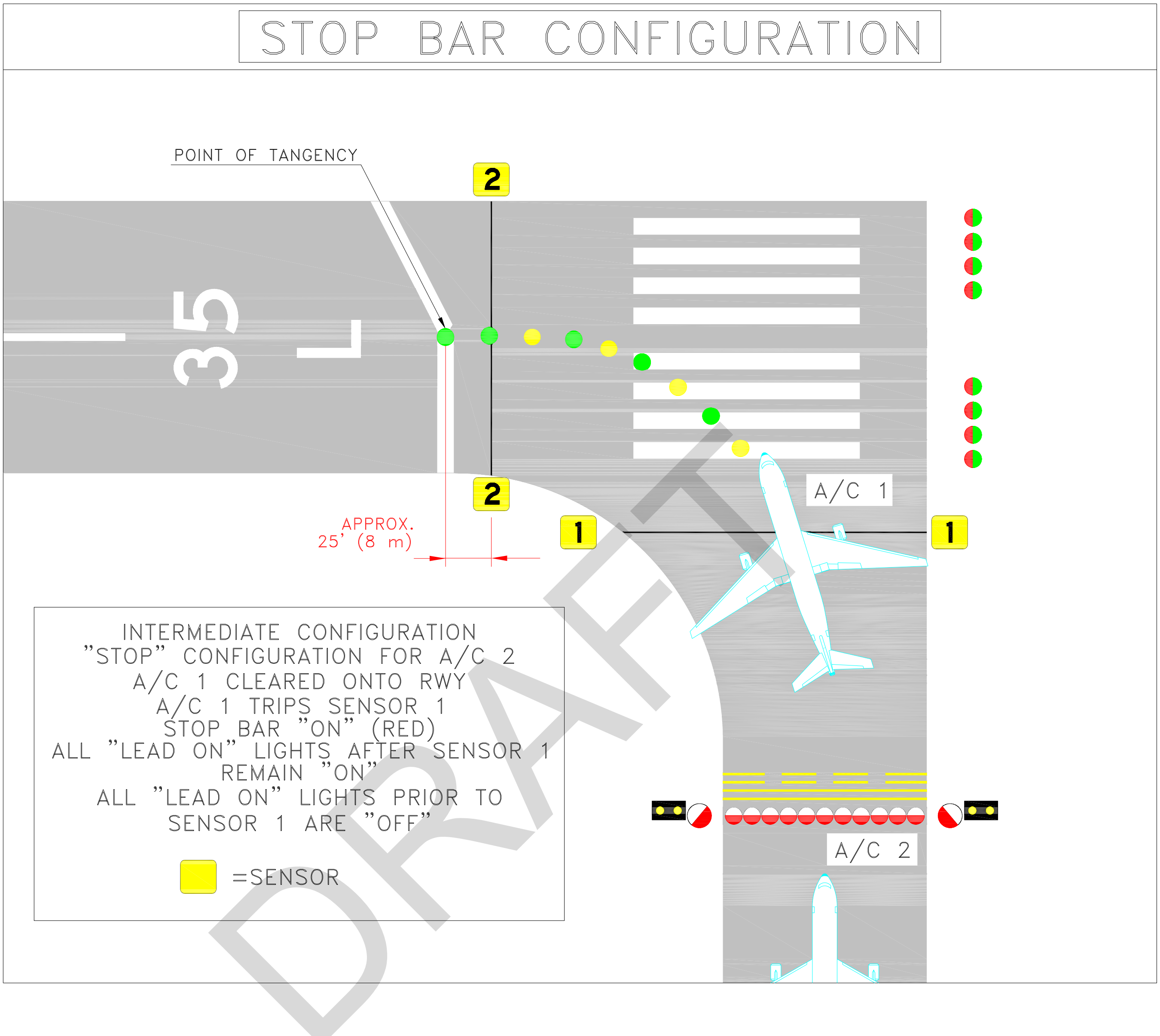


Figure 60. Controlled Stop Bar Design and Operation – Intermediate Configuration.

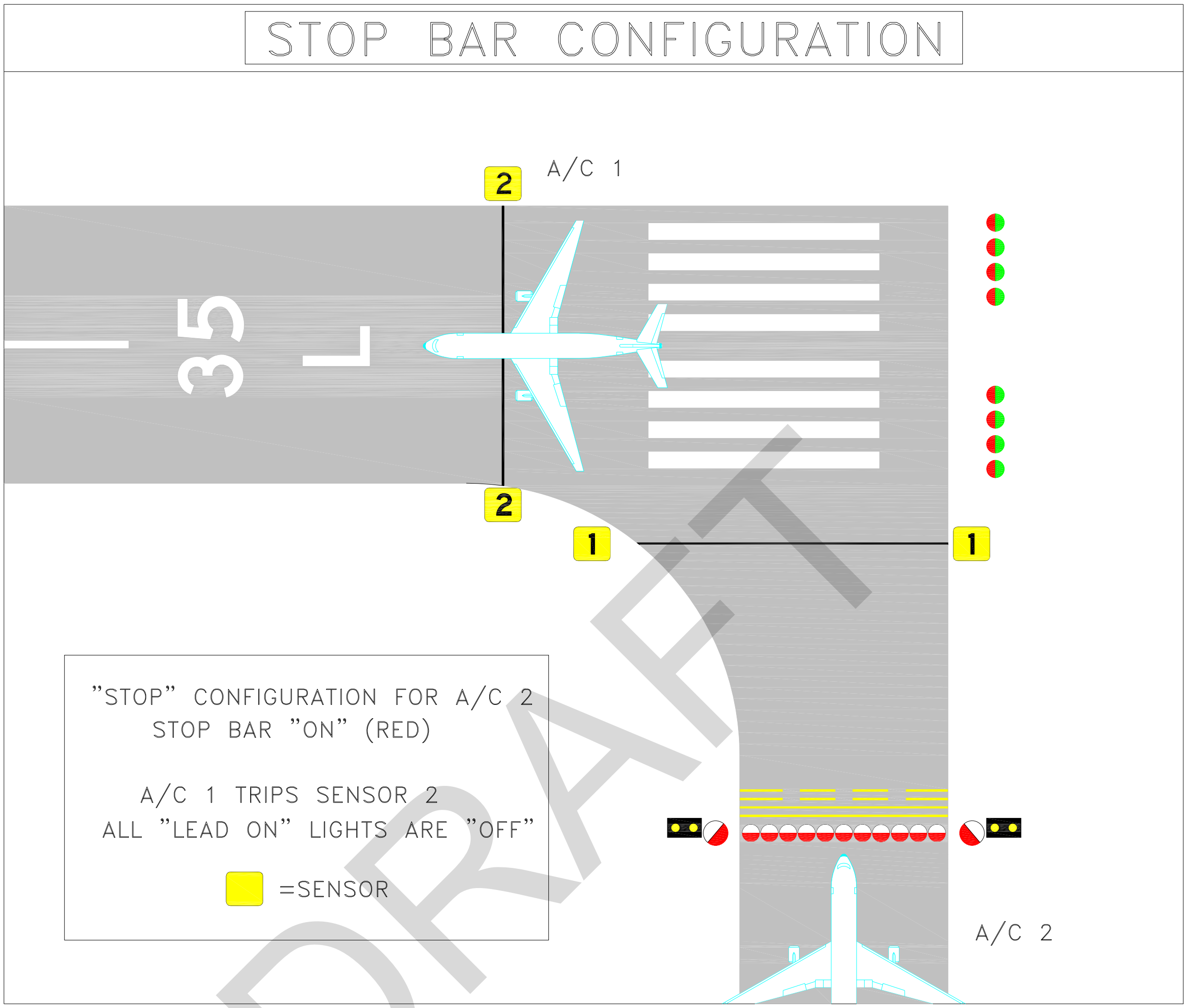
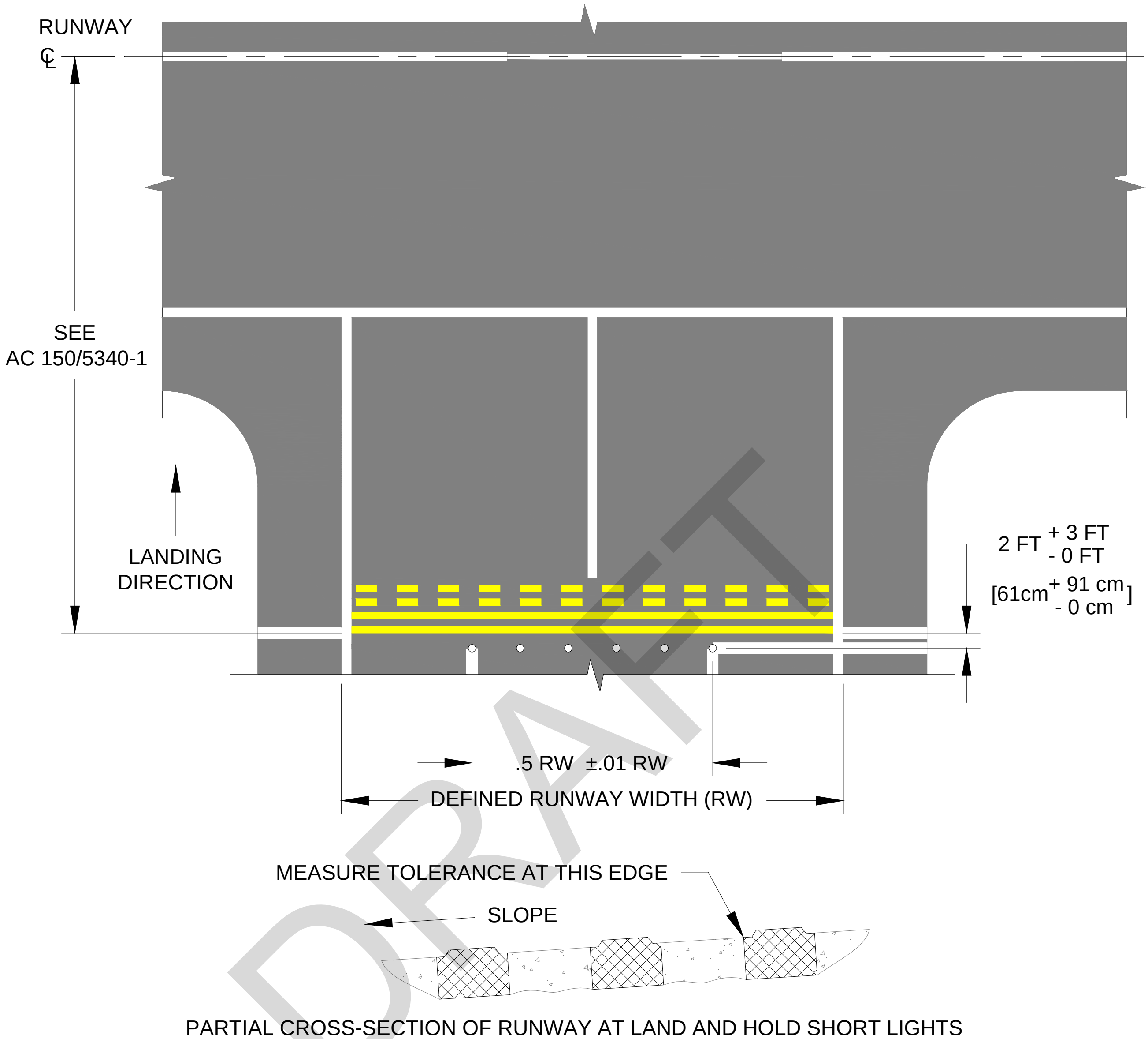


Figure 61. Controlled Stop Bar Design and Operation – "STOP" Configuration for A/C 2.



NOTES:

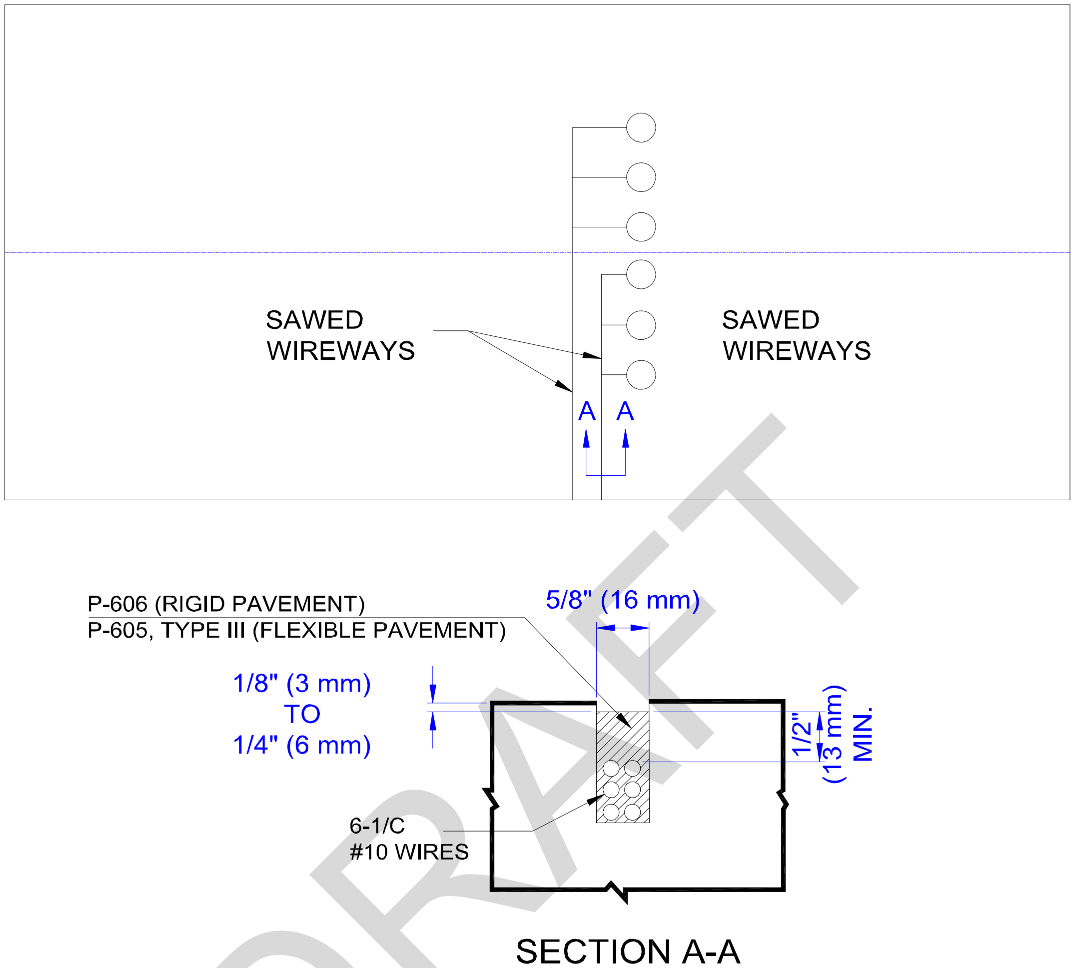
1. THE LIGHT FIXTURES ARE UNIFORMLY SPACED (WITHIN A TOLERANCE OF ± 2 IN. [5 cm] BETWEEN THE OUTBOARD LIGHT FIXTURES.

2. THE LIGHTING SYSTEM IS SYMMETRICAL ABOUT THE RUNWAY CENTERLINE FOR 6-LIGHT SYSTEMS. 7-LIGHT SYSTEMS ARE SYMMETRICAL ABOUT THE CENTER LIGHT FIXTURE, WHICH IS LOCATED IN ACCORDANCE WITH THE CRITERIA FOR RUNWAY CENTERLINE, SEE CHAPTER 3.

3. SEE PARAGRAPH 5.5.B FOR LATERAL SPACING OF 7-LIGHT SYSTEMS.

4. SEE PARAGRAPH 11.1 FOR FIXTURE ALIGNMENT.

Figure 62. Typical Layout for Land and Hold Short Lights.



GENERAL NOTES

1. THE INSTALLATION DETAILS SHOWN ARE FOR RIGID OR FLEXIBLE PAVEMENT UNLESS OTHERWISE SPECIFIED.

2. THE DIAMETERS AND DEPTHS OF HOLES FOR DIRECT-MOUNTED LIGHTING FIXTURES ARE IN ACCORDANCE WITH FIGURE 64.

3. THE ALIGNMENT OF DRILLED HOLES FOR THE FIXTURES SHOULD NOT VARY MORE THAN 2 INCHES.

4. WHERE WIREWAYS CROSS JOINTS IN RIGID PAVEMENT, THEIR DEPTH IS INCREASED AS SHOWN ON PLANS. SEE FIGURE 64 FOR A TYPICAL DETAIL OF JOINT INTERSECTION.

Figure 63. Typical Wireway Installation Details for Land & Hold Short Lights.

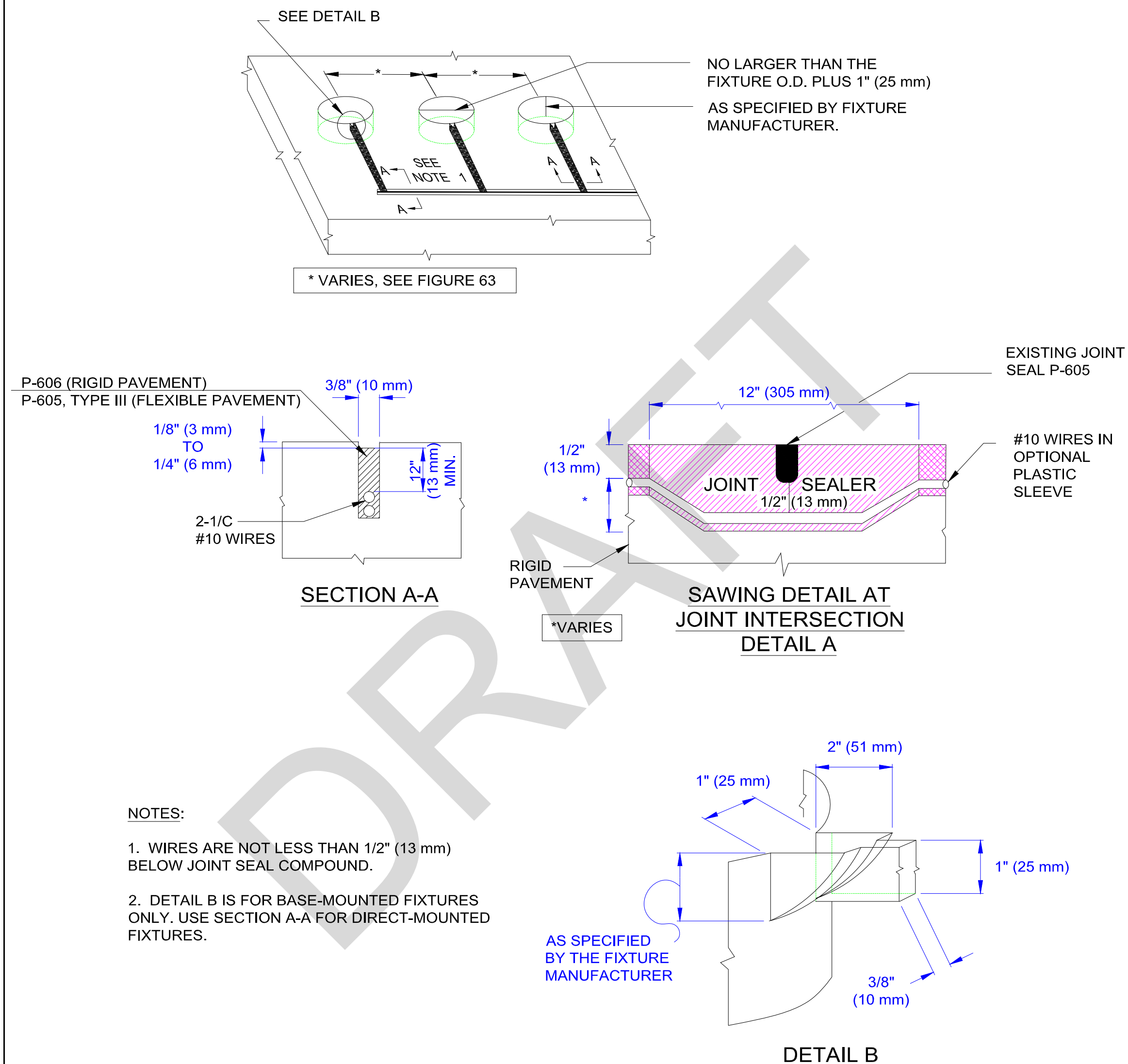


Figure 64. Sawing & Drilling Details for In-pavement Land & Hold Short Lights.

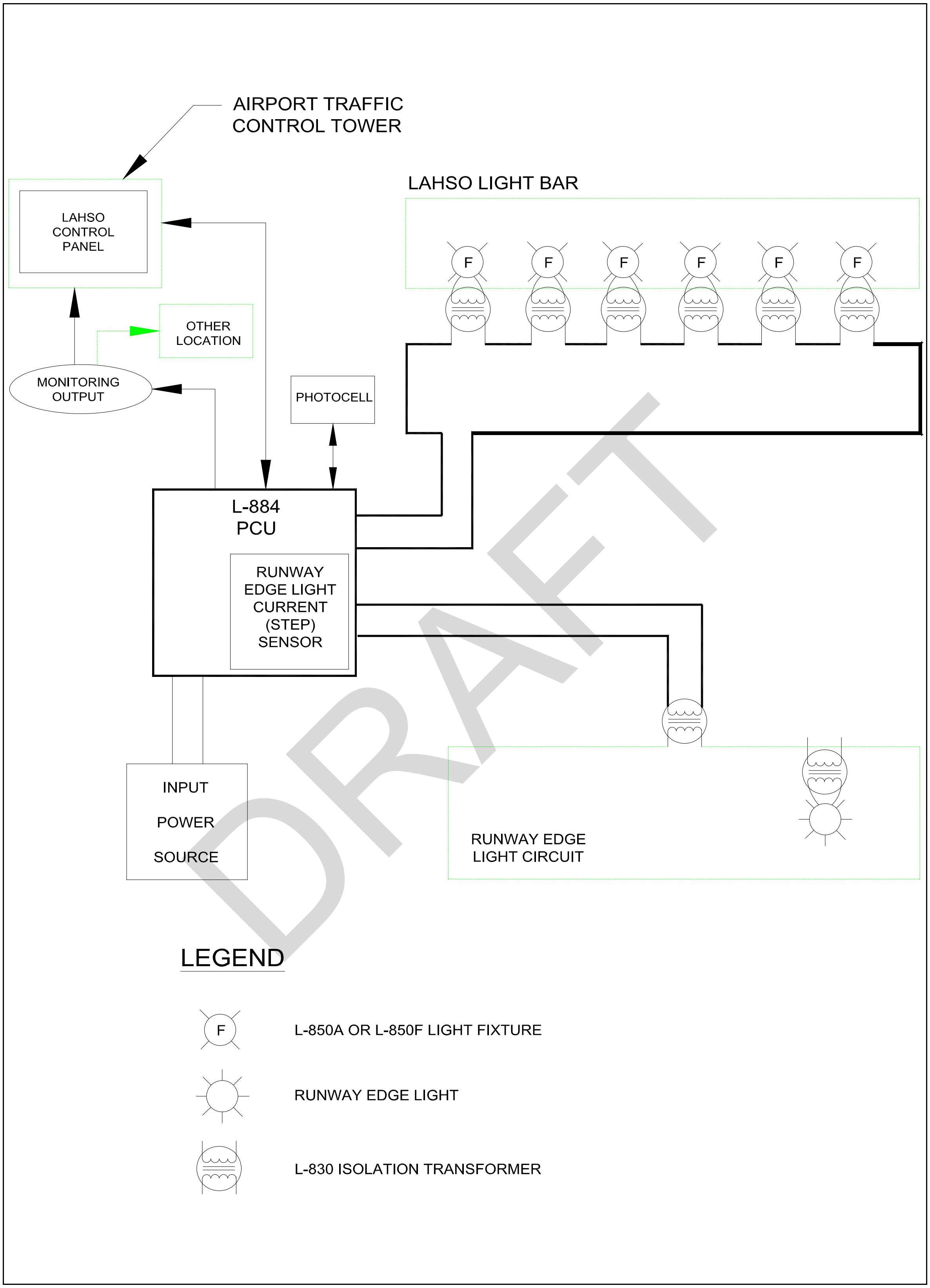


Figure 65. Typical Block Diagram for Land & Hold Short Lighting System.

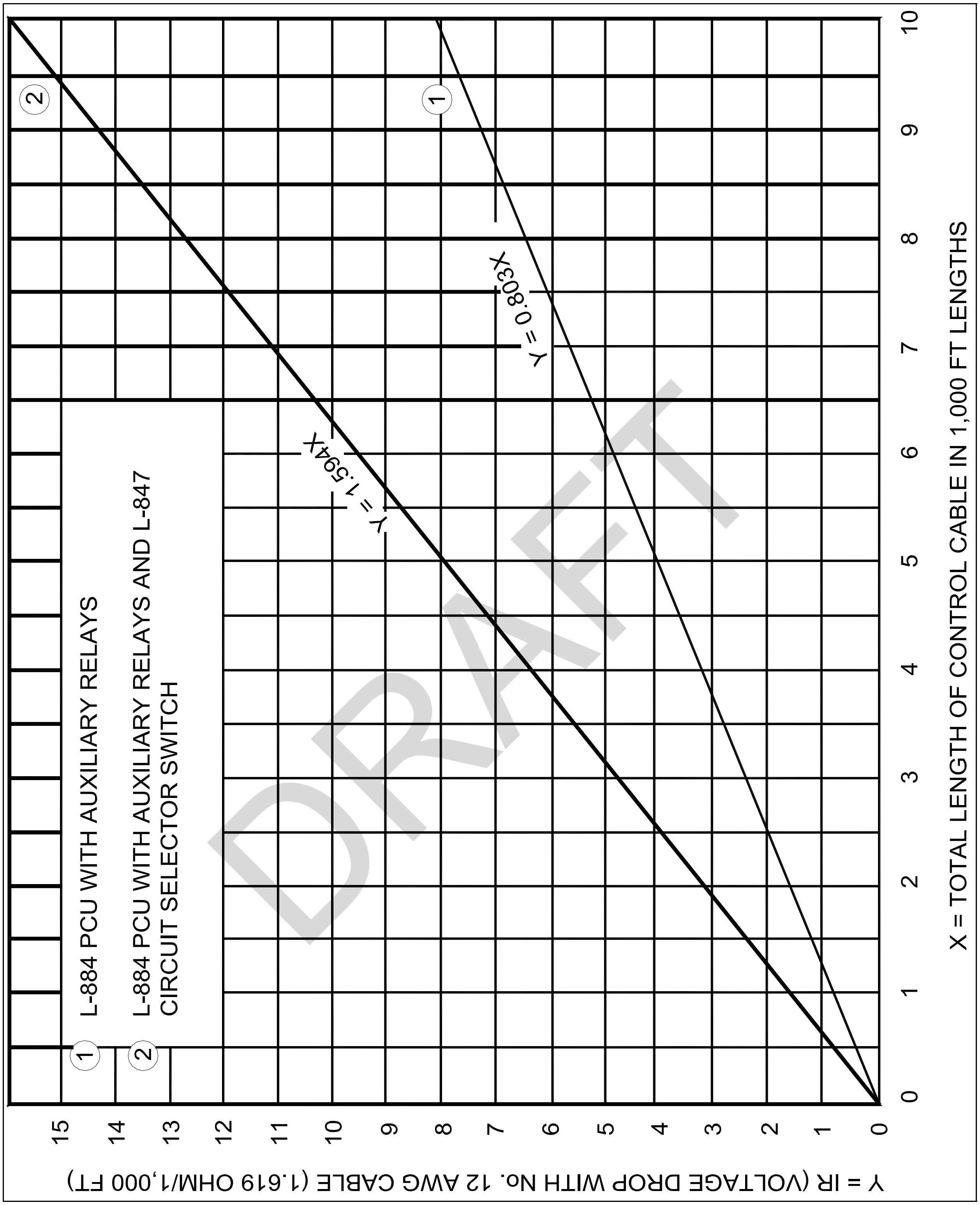


Figure 66. Typical Curve for Determining Maximum Separation Between Vault and Control Panel with 120-volt AC Control.

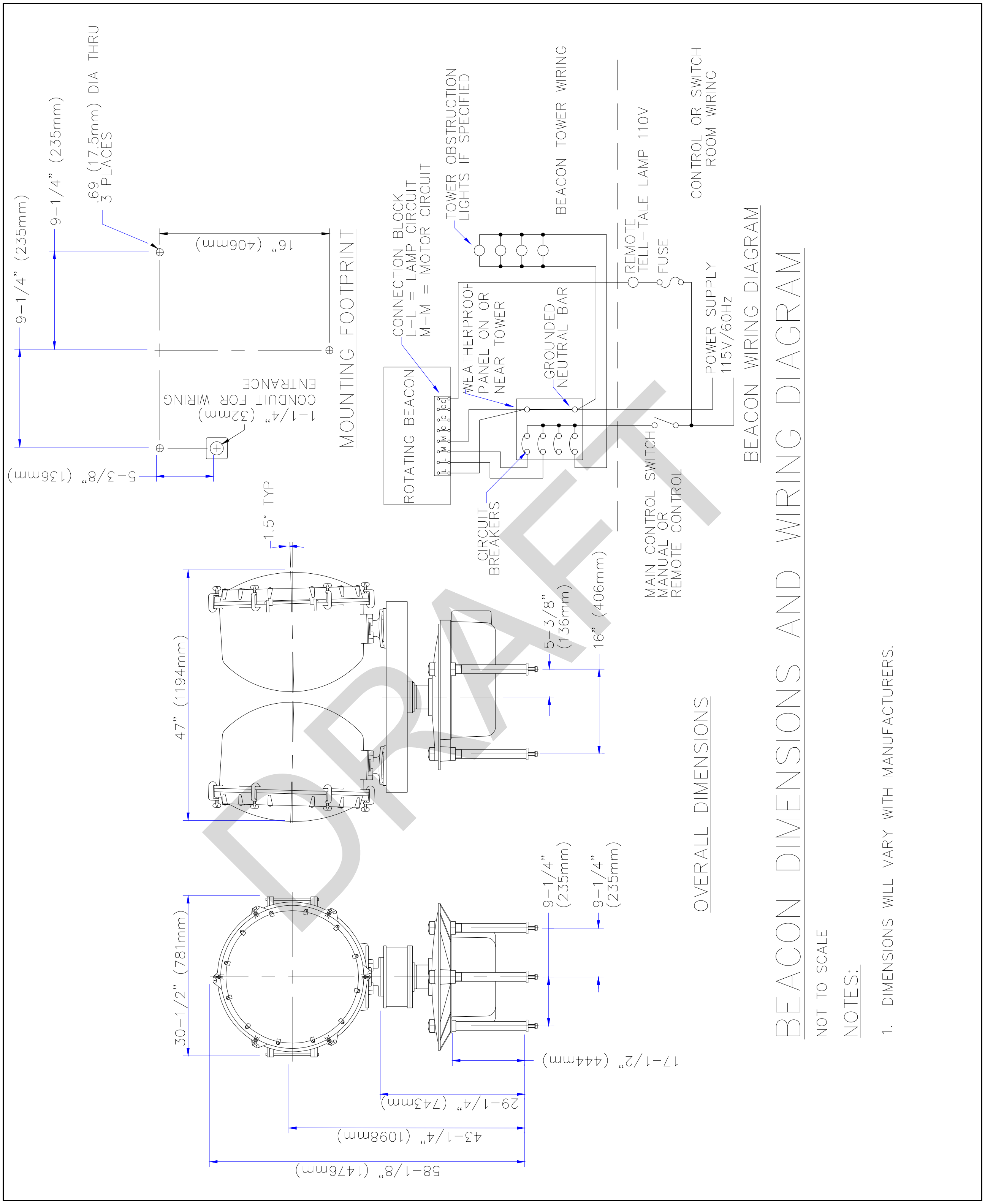


Figure 67. Beacon Dimensions and Wiring Diagram.

COPPER-WIRE, AMERICAN WIRE GAUGE B&S

B&S GAUGE NO.	OHMS PER 1 000 FEET 25°C., 77°F.	AREA CIRCULAR MILS	DIAMETER IN MILS AT 20°C.	APPROXIMATE POUNDS PER 1,000 FEET (305 m)
2	0.1593	66,370	257.6	201
4	0.2523	41,740	204.3	126
6	0.4028	26,250	162.0	79
8	0.6405	16,510	128.5	50
10	1.018	10,380	101.9	31
12	1.619	6,530	80.81	20

<u>Calculations</u>

1. To determine the AWG size wire necessary for a specific connected load to maintain the proper voltage for each miscellaneous lighting visual aid, use the above table and Ohms Law $I = \frac{E}{R}$ as follows:

   a. <u>Example.</u> What size wire will be necessary in a circuit of 120 volts AC to maintain a 2 percent voltage drop with the following connected load which is separated 500 feet from the power supply?

   (1) Lighted Wind Tee Load - 30 lamps, 25 watts each = 750 watts.

   (2) The total operating current for the wind tee is $I = \frac{watts}{volts} = \frac{750}{120} = 6.25\,amperes$.

   (3) Permissible voltage drop for homerun wire is 120 volts x 2% = 2.4 volts.

   (4) Maximum resistance of homerun wires with a separation of 500 feet (1,000 feet (305 m) of wire used) to maintain not more than 2.4 volts drop is $R = \frac{E}{I} = \frac{2.4\,volts}{6.25\,amperes} = 0.384\,ohms$ per 1,000 feet (305 m) of wire.

   (5) From the above table, obtain the wire size having a resistance per 1,000 feet (305 m) of wire that does not exceed 0.384 ohms per 1,000 feet (305 m) of wire. The wire size that meets this requirement is No. 4 AWG wire with a resistance of 0.2523 ohms per 1,000 feet (305 m) of wire.

   (6) By using No. 4 AWG wire in this circuit, the voltage drop is E=IR=6.25-amperes x 0.2523 ohms=1.58 volts which is less than the permissible voltage drop of 2.4 volts.

2. Where it has been determined that it will require an extra large size wire for homeruns to compensate for voltage drop in a 120-volt power supply, one of the following methods should be considered.

   a. A 120/240-volt power supply.

   b. A booster transformer, in either a 120-volt or 120/240-volt power supply, if it has been determined its use will be more economical.

Figure 68. Calculations for Determining Wire Size.

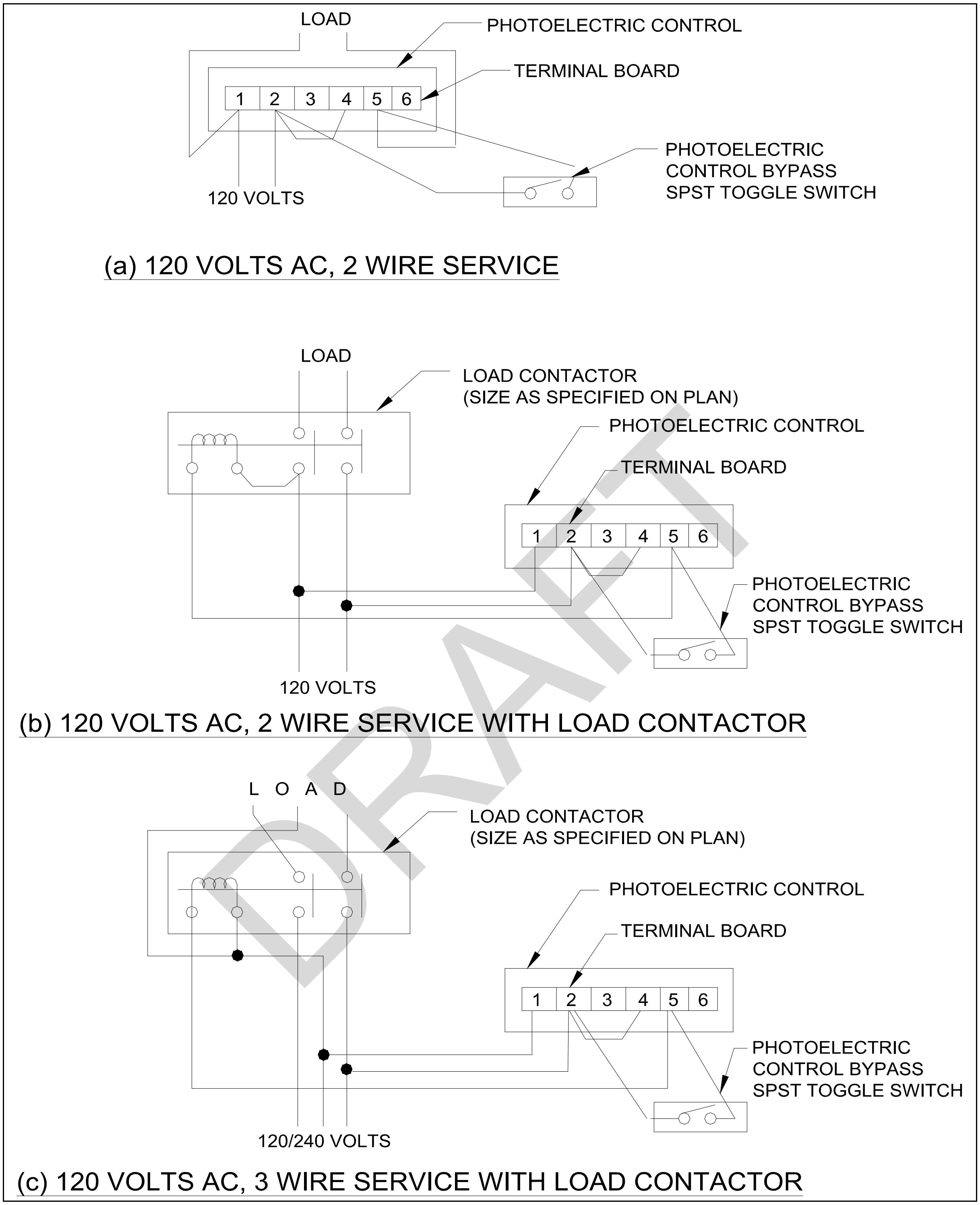


Figure 69. Typical Automatic Control.

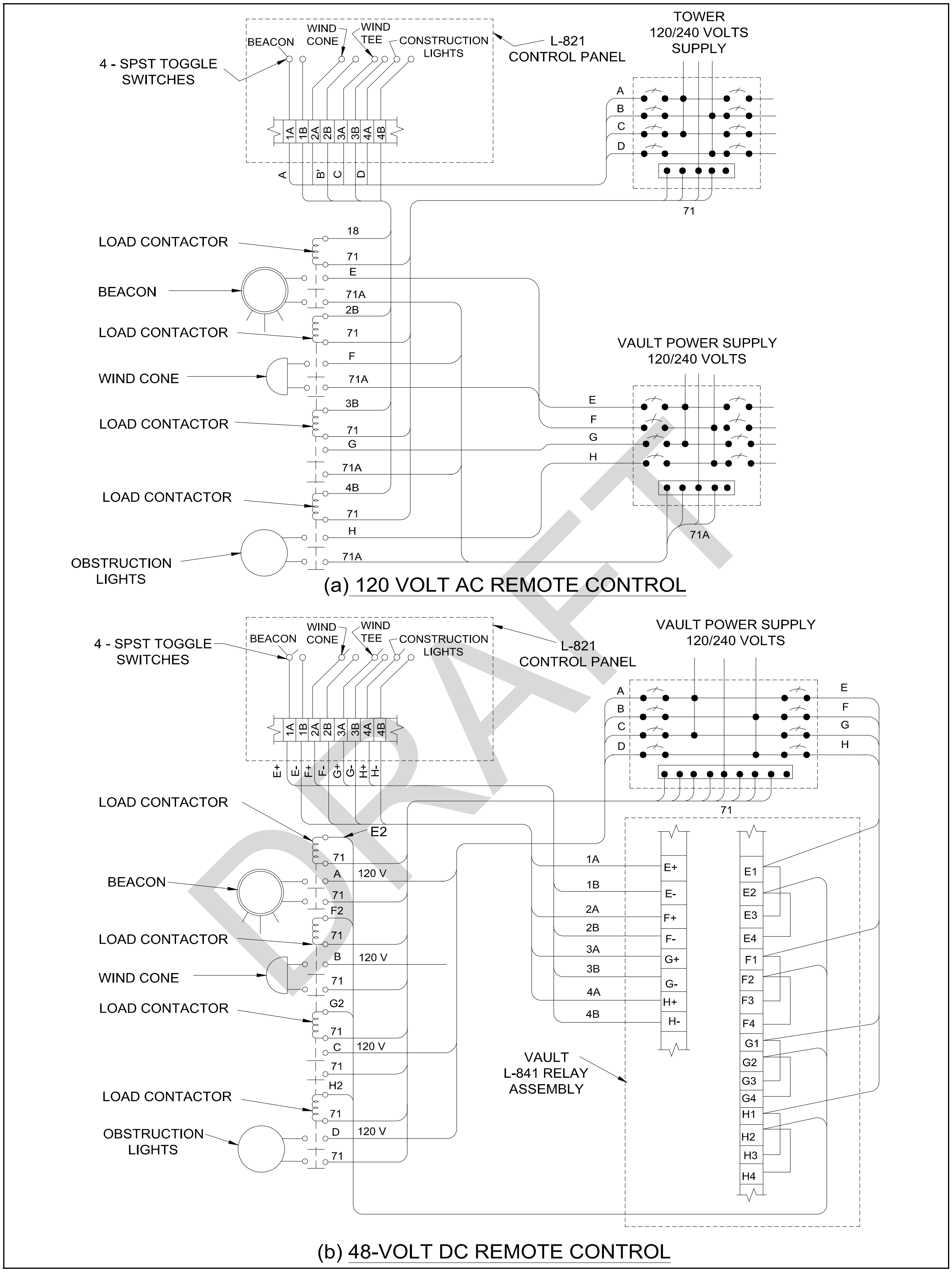


Figure 70. 120-Volt AC and 48-Volt DC Remote Control.

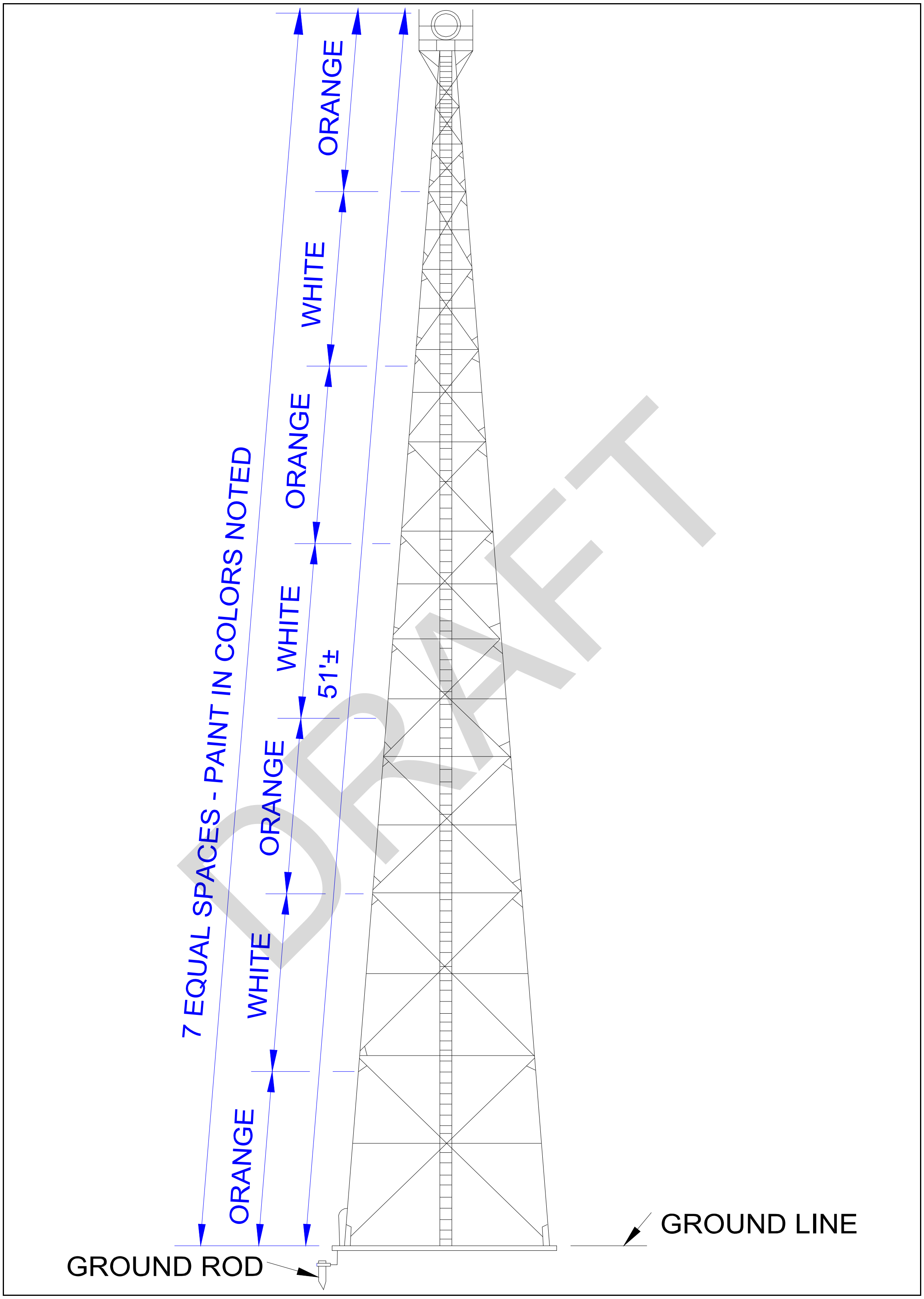


Figure 71. Typical Structural Beacon Tower.

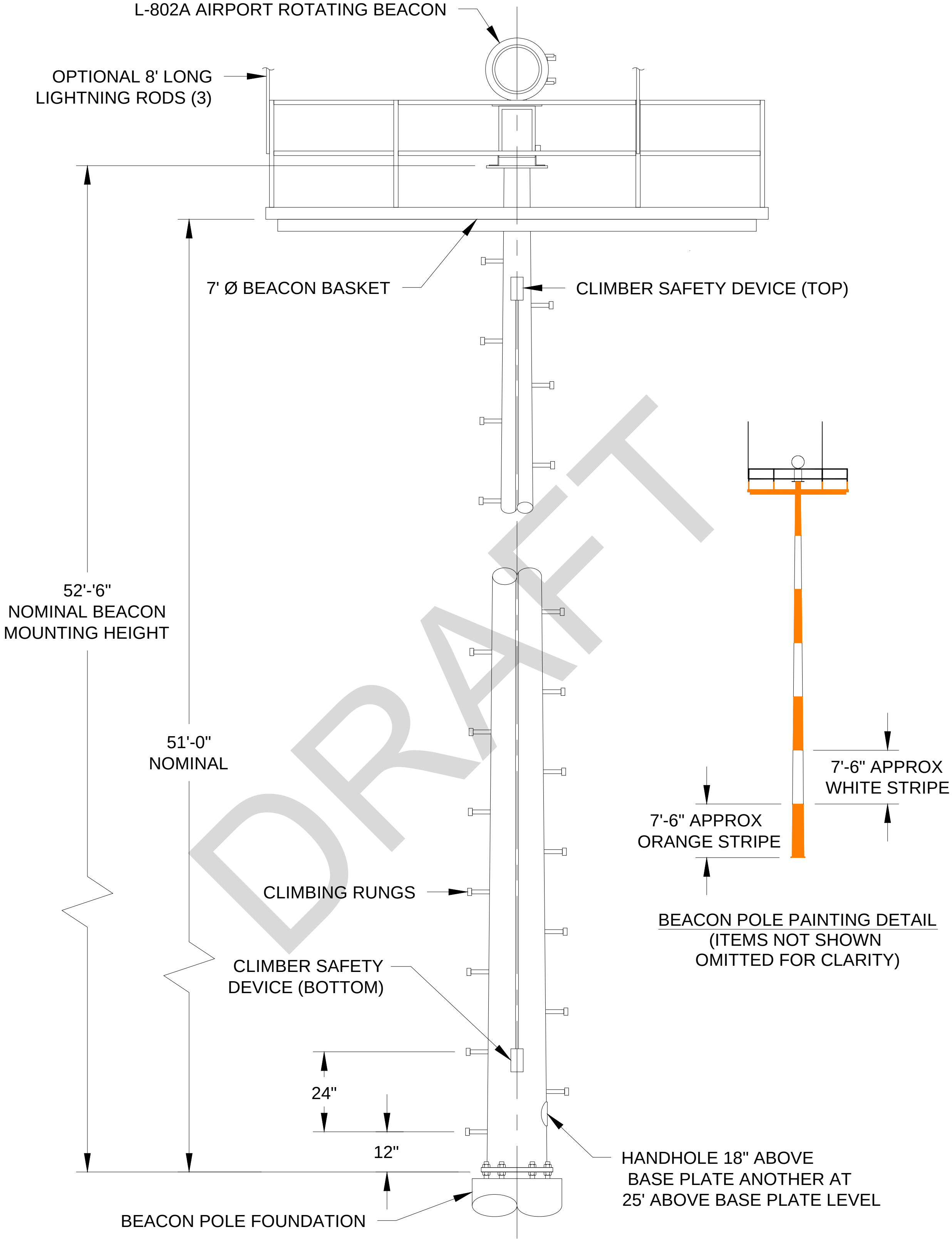


Figure 72. Typical Tubular Steel Beacon Tower.

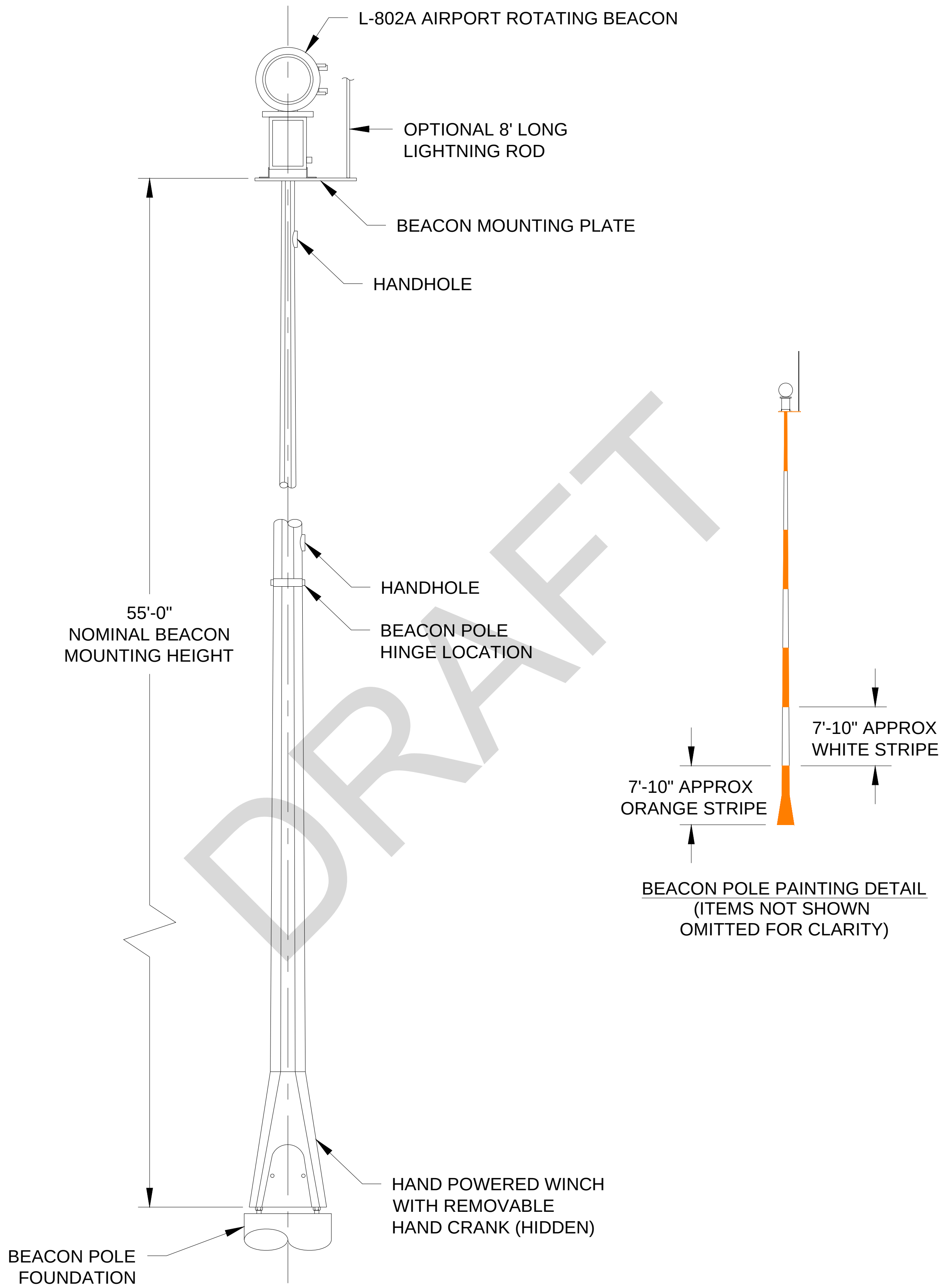


Figure 72a. Typical Airport Beacon Tip-Down Pole

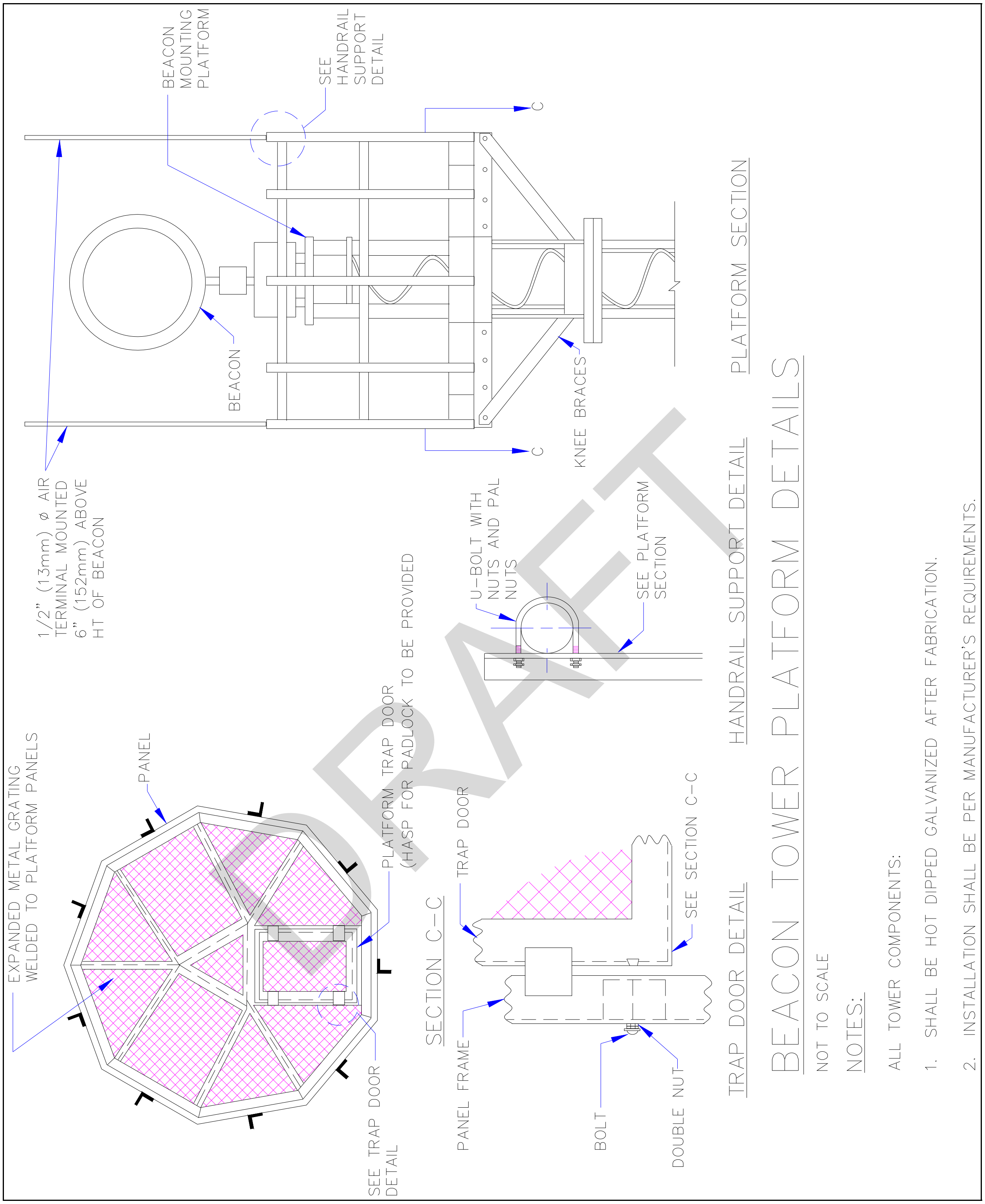
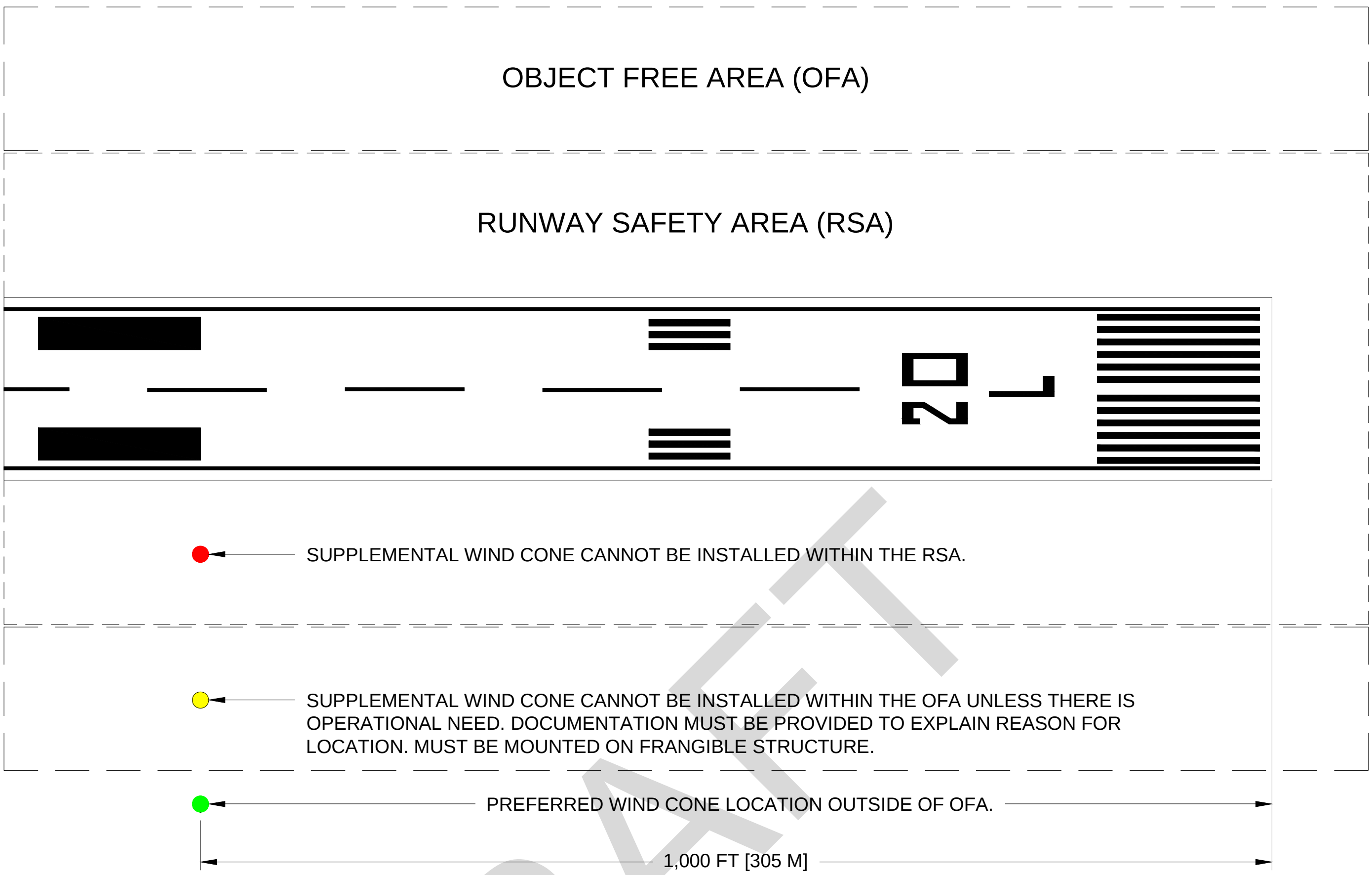


Figure 73. Typical Pre-fabricated Beacon Tower Structure.



NOTES:

1. THE PREFERRED LOCATION FOR THE SUPPLEMENTAL WIND CONE LOCATION IS BETWEEN 0 AND 1,000 FT FROM THE RUNWAY END.
2. SEE AC 150/5300-13 FOR DETAILED INFORMATION ABOUT THE LENGTH AND WIDTH OF THE RSA AND OFA - DIMENSIONS OF BOTH AREAS ARE DEPENDENT UPON THE AIRPLANE DESIGN GROUP AND AIRCRAFT APPROACH CATEGORY.
3. THE OBSTACLE FREE ZONE (OFZ) IS NOT SHOWN. SEE AC 150/5300-13 FOR DETAILED INFORMATION. THE SUPPLEMENTAL WIND CONE MUST NOT PENETRATE THE OFZ.

Figure 74. Typical Location of Supplemental Wind Cone.

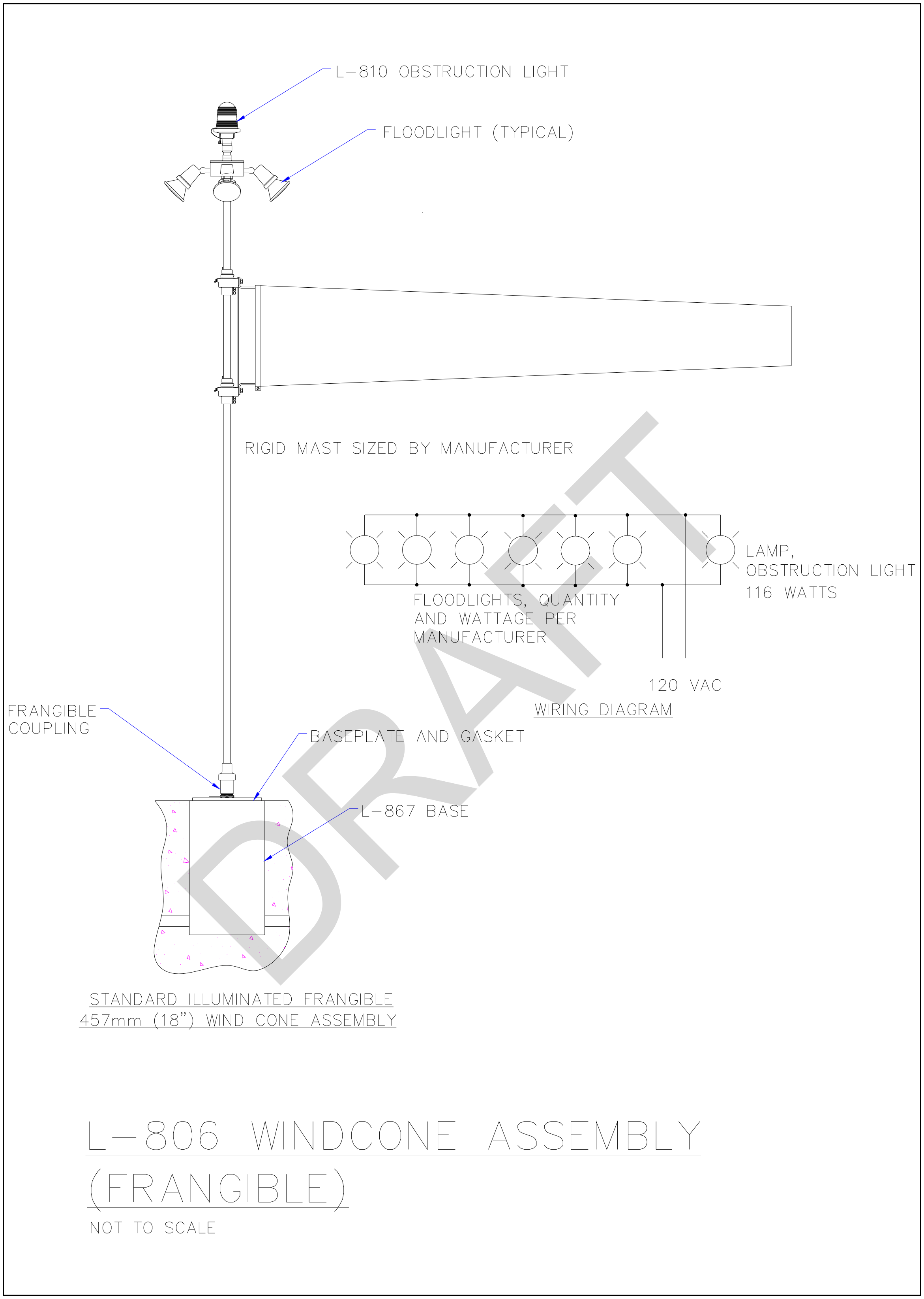
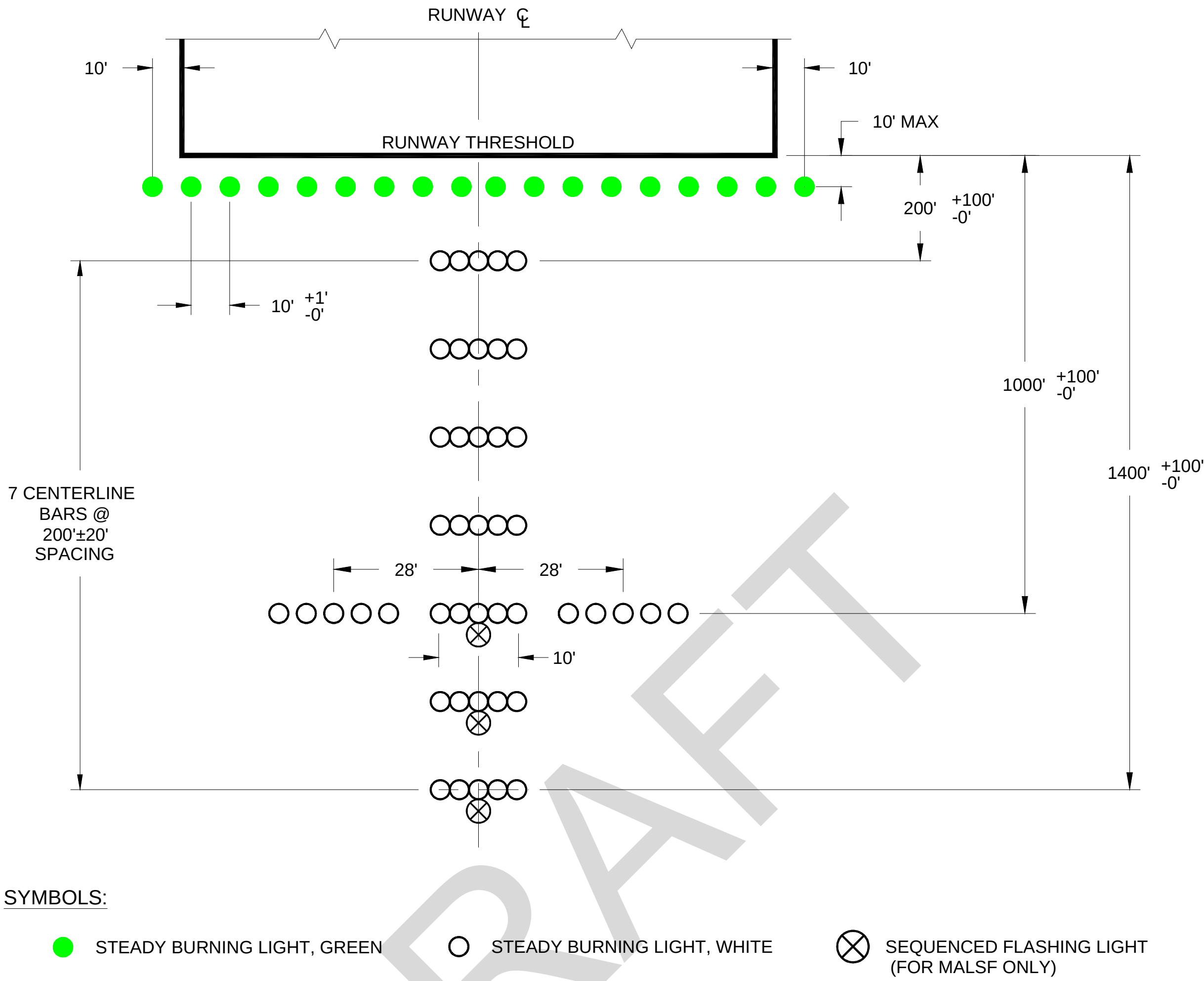


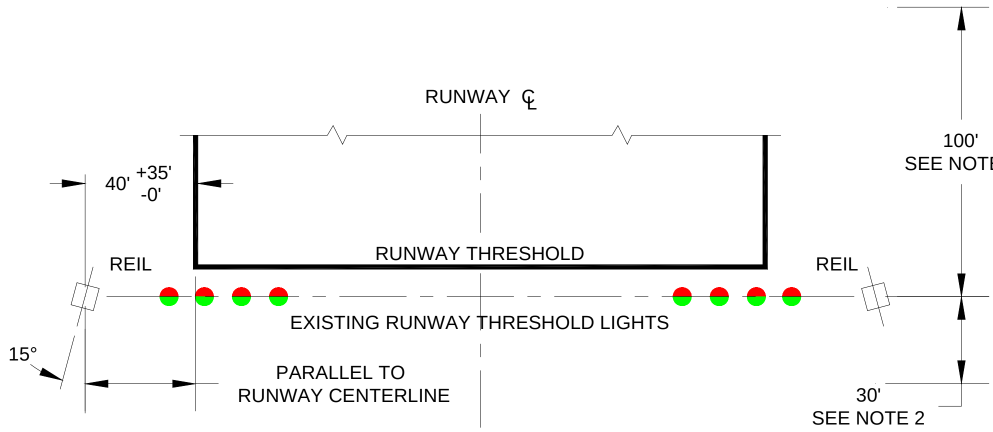
Figure 75. Externally Lighted Wind Cone Assembly (Frangible).



NOTES:

1. THE OPTIMUM LOCATION OF THE APPROACH LIGHTS IS IN A HORIZONTAL PLANE AT RUNWAY END ELEVATION. PROVIDE AT LEAST THREE CONSECUTIVE LIGHT BAR STATIONS IN A SLOPING SEGMENT OF THE SYSTEM. THE SLOPING SEGMENT MAY START AT THE FIRST LIGHT BAR AND EXTEND TO THE END OF THE SYSTEM OR MAY BE PRECEDED BY A HORIZONTAL SEGMENT OR FOLLOWED BY EITHER A HORIZONTAL OR NEGATIVE SLOPING SEGMENT.
2. A MAXIMUM 2 PERCENT UPWARD LONGITUDINAL SLOPE TOLERANCE MAY BE USED TO RAISE THE LIGHT PATTERN ABOVE OBJECTS WITHIN ITS AREA.
3. A MAXIMUM 1 PERCENT DOWNWARD LONGITUDINAL SLOPE TOLERANCE MAY BE USED TO REDUCE THE HEIGHT OF SUPPORTING STRUCTURES.
4. ALL STEADY BURNING AND FLASHING LIGHTS ARE AIMED WITH THEIR BEAM AXES PARALLEL TO THE RUNWAY CENTERLINE AND INTERCEPTING AN ASSUMED 3° GLIDE SLOPE (INTERCEPTING THE RUNWAY 1000 FEET FROM THE LANDING THRESHOLD) AT A HORIZONTAL DISTANCE OF 1600 FEET IN ADVANCE OF THE LIGHT.
5. ALL OBSTRUCTIONS AS DETERMINED BY APPLICABLE CRITERIA (14CFR PART 77) FOR DETERMINING OBSTRUCTIONS TO AIR NAVIGATION ARE LIGHTED AND MARKED AS REQUIRED.
6. INTENSITY CONTROL IS PROVIDED FOR THE STEADY BURNING LIGHTS.
7. THE THREE FLASHING LIGHTS FLASH IN SEQUENCE.
8. THE MINIMUM LAND REQUIREMENTS FOR MALSF IS AN AREA 1600' IN LENGTH BY 400' WIDE.
9. PROVIDE A CLEAR LINE OF SIGHT TO ALL LIGHTS OF THE SYSTEM FROM ANY POINT ON A SURFACE 1/2° BELOW A 3° GLIDE PATH, INTERSECTING THE RUNWAY 1000' FROM THE LANDING THRESHOLD.

Figure 76. Typical Layout for MALSF.



NOTES

1. THE OPTIMUM LOCATION FOR EACH LIGHT UNIT IS IN LINE WITH THE RUNWAY THRESHOLD AT 40 FT FROM THE RUNWAY EDGE.

2. A 100 FT UPWIND AND A 30 FT DOWNWIND LONGITUDINAL TOLERANCE IS PERMITTED FROM THE RUNWAY THRESHOLD IN LOCATING THE LIGHT UNITS.

3. THE LIGHT UNITS SHALL BE EQUALLY SPACED FROM THE RUNWAY CENTERLINE. WHEN ADJUSTMENTS ARE NECESSARY THE DIFFERENCE IN THE DISTANCE OF THE UNITS FROM THE RUNWAY CENTERLINE SHALL NOT EXCEED 10 FT.

4. THE BEAM CENTERLINE (AIMING ANGLE) OF EACH LIGHT UNIT IS AIMED 15 DEGREES OUTWARD FROM A LINE PARALLEL TO THE RUNWAY CENTERLINE AND INCLINED AT AN ANGLE 10 DEGREES ABOVE THE HORIZONTAL. IF ANGLE ADJUSTMENTS ARE NECESSARY, PROVIDE AN OPTICAL BAFFLE AND CHANGE THE ANGLES TO 10 DEGREES HORIZONTAL AND 20 DEGREES VERTICAL.

5. LOCATE THE ADL EQUIPMENT A MINIMUM DISTANCE OF 40 FT FROM OTHER RUNWAYS AND TAXIWAYS.

6. IF REILS ARE USED WITH PAPI, INSTALL REILS AT 75 FT FROM THE RUNWAY EDGE. WHEN INSTALLED WITH OTHER FACILITIES REILS SHALL BE INSTALLED AT 40 FT FROM THE RUNWAY EDGE.

7. THE ELEVATION OF BOTH UNITS SHALL BE WITHIN 3 FT OF THE HORIZONTAL PLANE THROUGH THE RUNWAY CENTERLINE.

SYMBOL:

STEADY BURNING LIGHT, RED

STEADY BURNING LIGHT, GREEN

Figure 77. Typical Layout for REIL

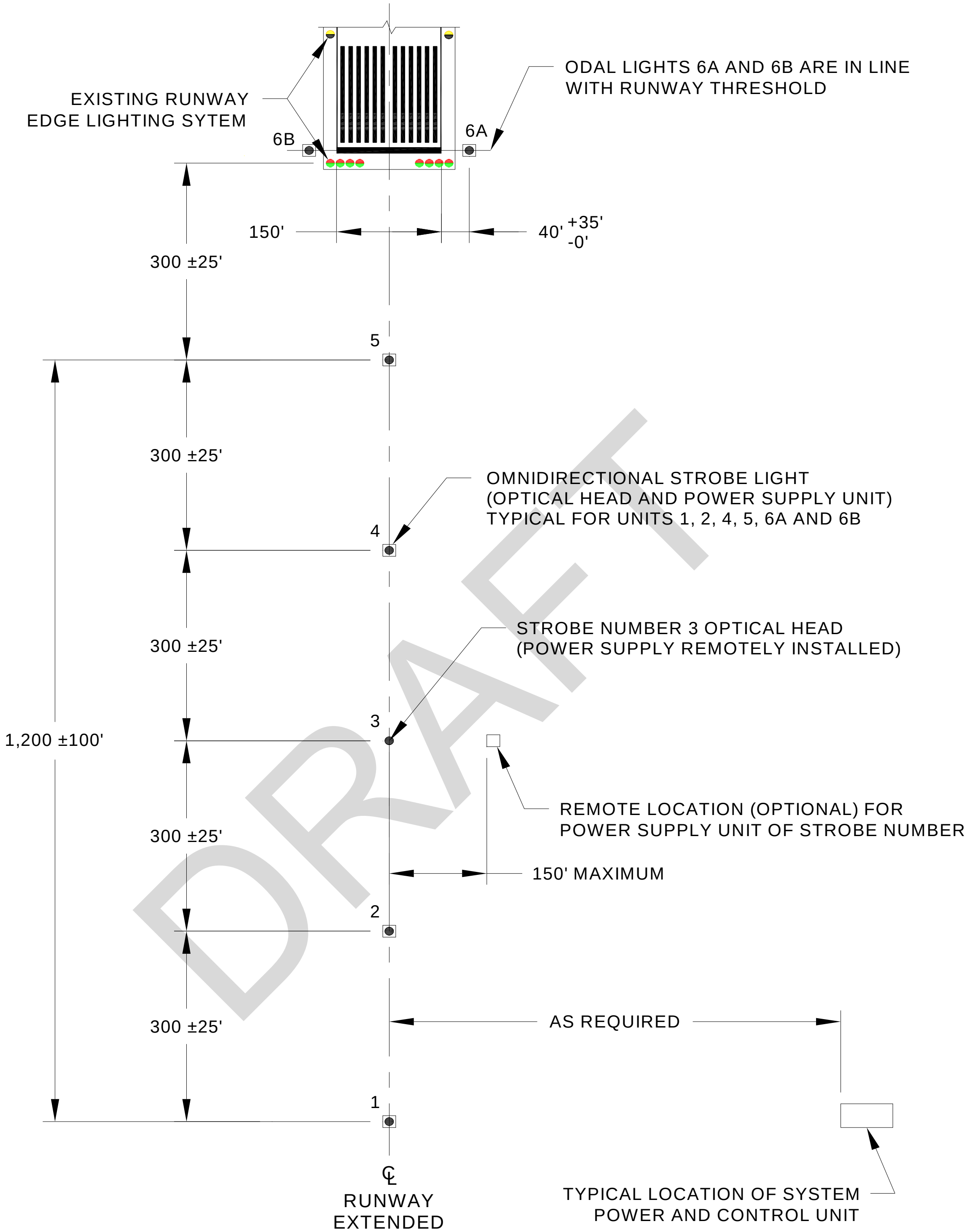
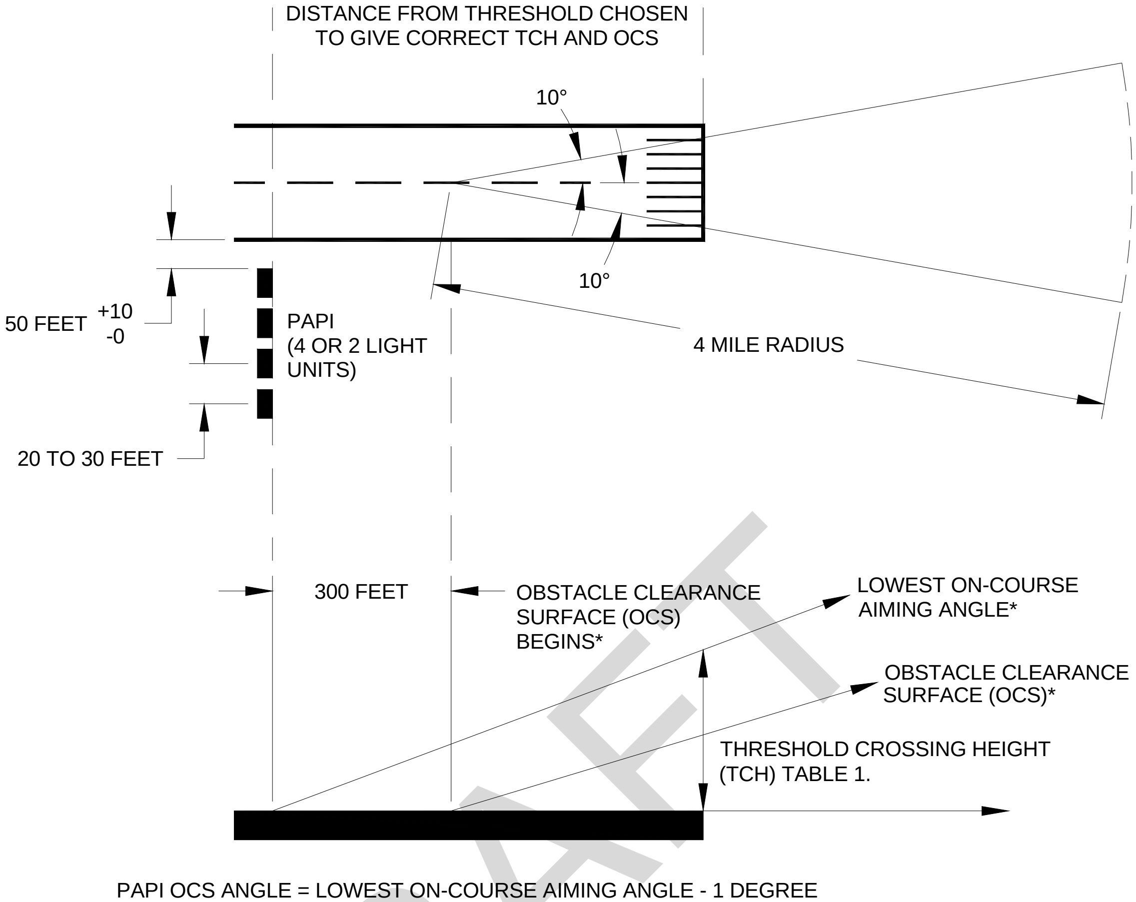


Figure 78. Typical ODALS Layout



NOTES:

1. THE VISUAL GLIDE PATH ANGLE IS THE CENTER OF THE ON-COURSE ZONE, AND IS A NOMINAL 3 DEGREES WHEN MEASURED FROM THE HORIZONTAL SURFACE OF THE RUNWAY.

   A. FOR NON-JET RUNWAYS, THE GLIDE PATH MAY BE RAISED TO 4 DEGREES MAXIMUM TO PROVIDE OBSTACLE CLEARANCE.

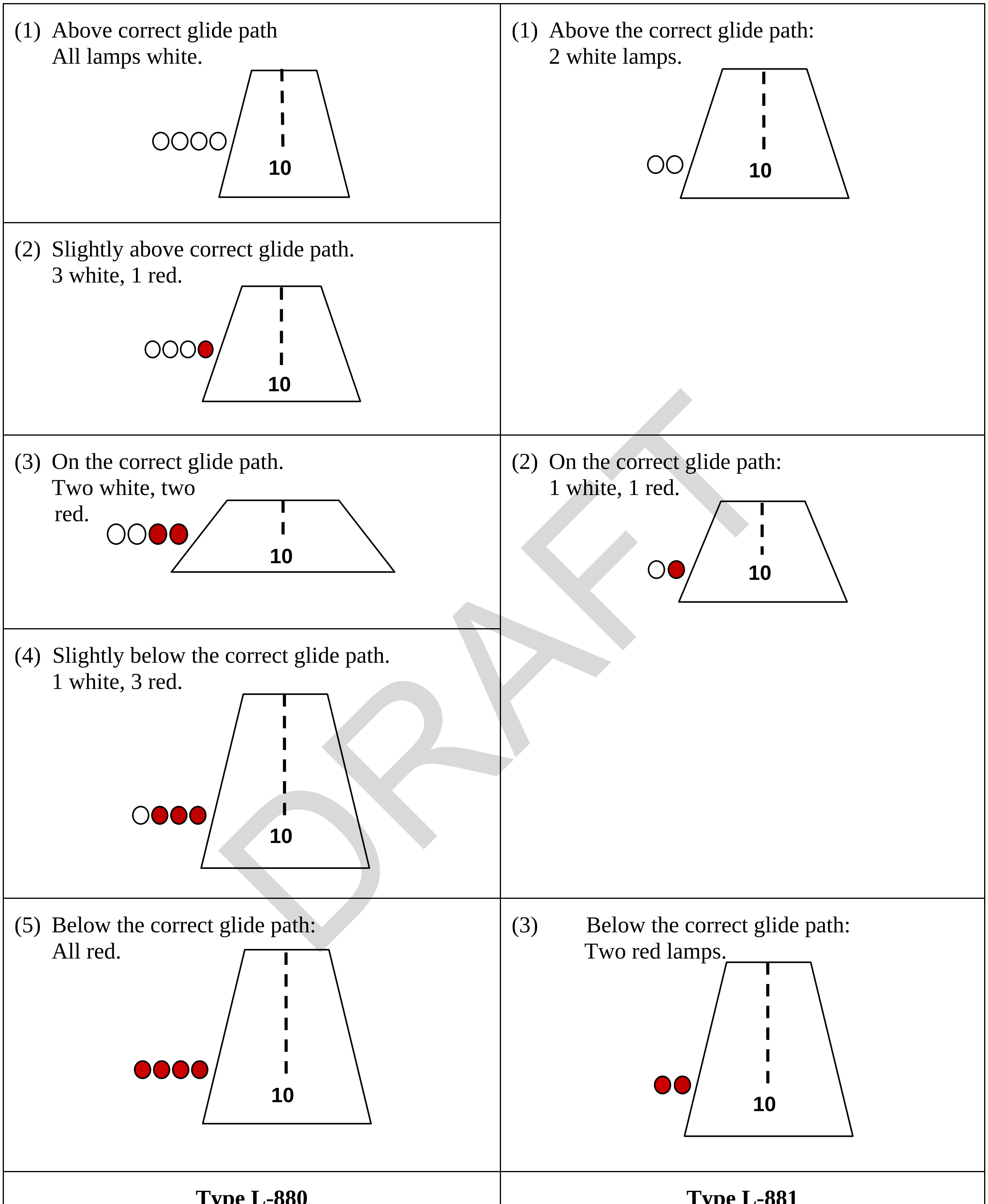
   B. IF THE PAPI GLIDE PATH IS CHANGED TO A HIGHER ANGLE FROM THE NOMINAL 3 DEGREES, IT MUST BE COMMUNICATED IN A NOTICE TO AIRMAN (NOTAM) AND PUBLISHED IN THE AIRPORT FACILITY DIRECTORY.

2. PAPI OBSTACLE CLEARANCE SURFACE (OCS).

   A. THE PAPI OCS PROVIDES THE PILOT WITH A MINIMUM APPROACH CLEARANCE.

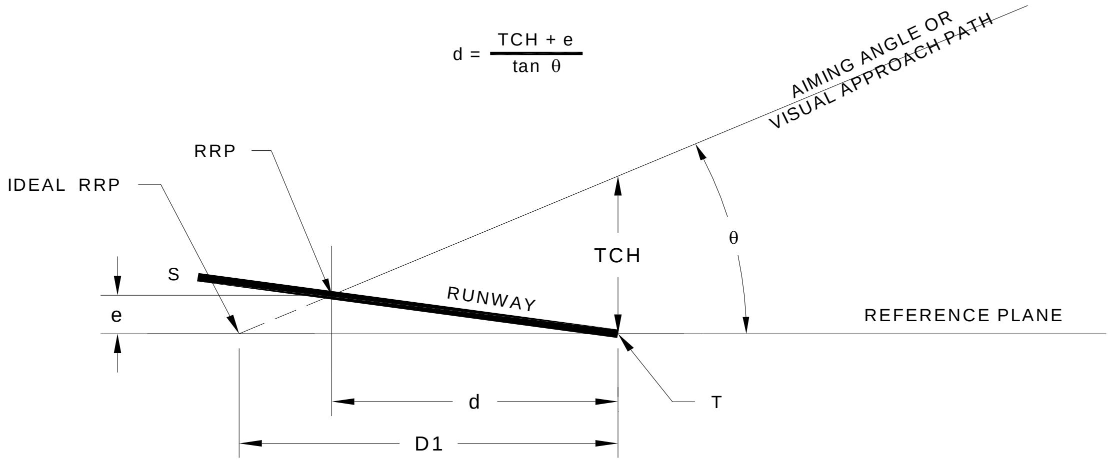
   B. THE PAPI MUST BE POSITIONED AND AIMED SO NO OBSTACLES PENETRATE ITS SURFACE.
   (1) THE OCS BEGINS 300 FEET [90M] IN FRONT OF THE PAPI SYSTEM.
   (2) THE OCS IS PROJECTED INTO THE APPROACH ZONE ONE DEGREE LESS THEN AIMING ANGLE OF THE THIRD LIGHT UNIT FROM THE RUNWAY FOR AN L-880 SYSTEM, OR THE OUTSIDE LIGHT UNIT FOR AN L-881 SYSTEM.

Figure 79. PAPI Obstacle Clearance Surface.

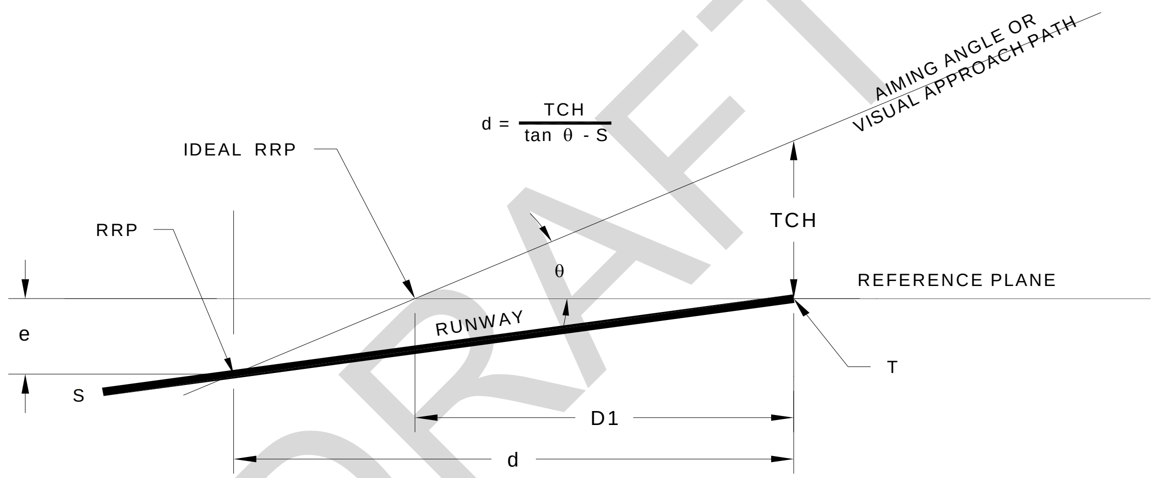


NOTE: *The PAPI is a system of either four or two identical light units placed on the left of the runway in a line perpendicular to the centerline. The boxes are positioned and aimed to produce the visual signal shown above.*

Figure 80. PAPI Signal Presentation.



Siting station displaced toward threshold



Siting station displaced from threshold

SYMBOLS:

D1 = ideal (zero gradient) distance from threshold

RWY = runway longitudinal gradient

TCH = threshold crossing height

T = threshold

e = elevation difference between threshold and RRP

RRP = runway reference point (where aiming angle or visual approach path intersects runway profile)

d = adjusted distance from threshold

θ = aiming angle

S = percent slope of runway = e/d
(S is used in decimal form in the equations)

Figure 81. Correction for Runway Longitudinal Gradient.

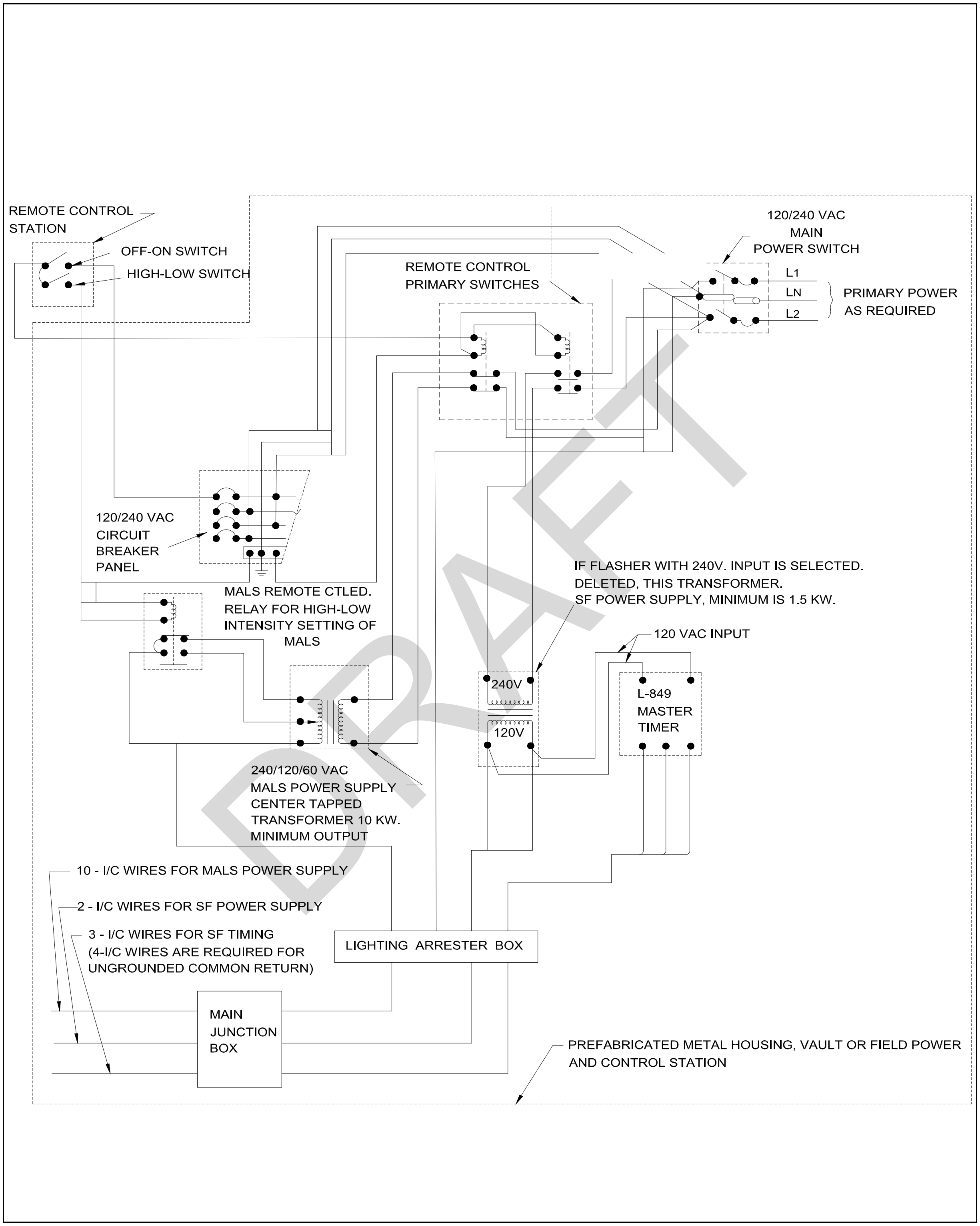


Figure 82. General Wiring Diagram for MALSF with 120-Volt, AC Remote Control.

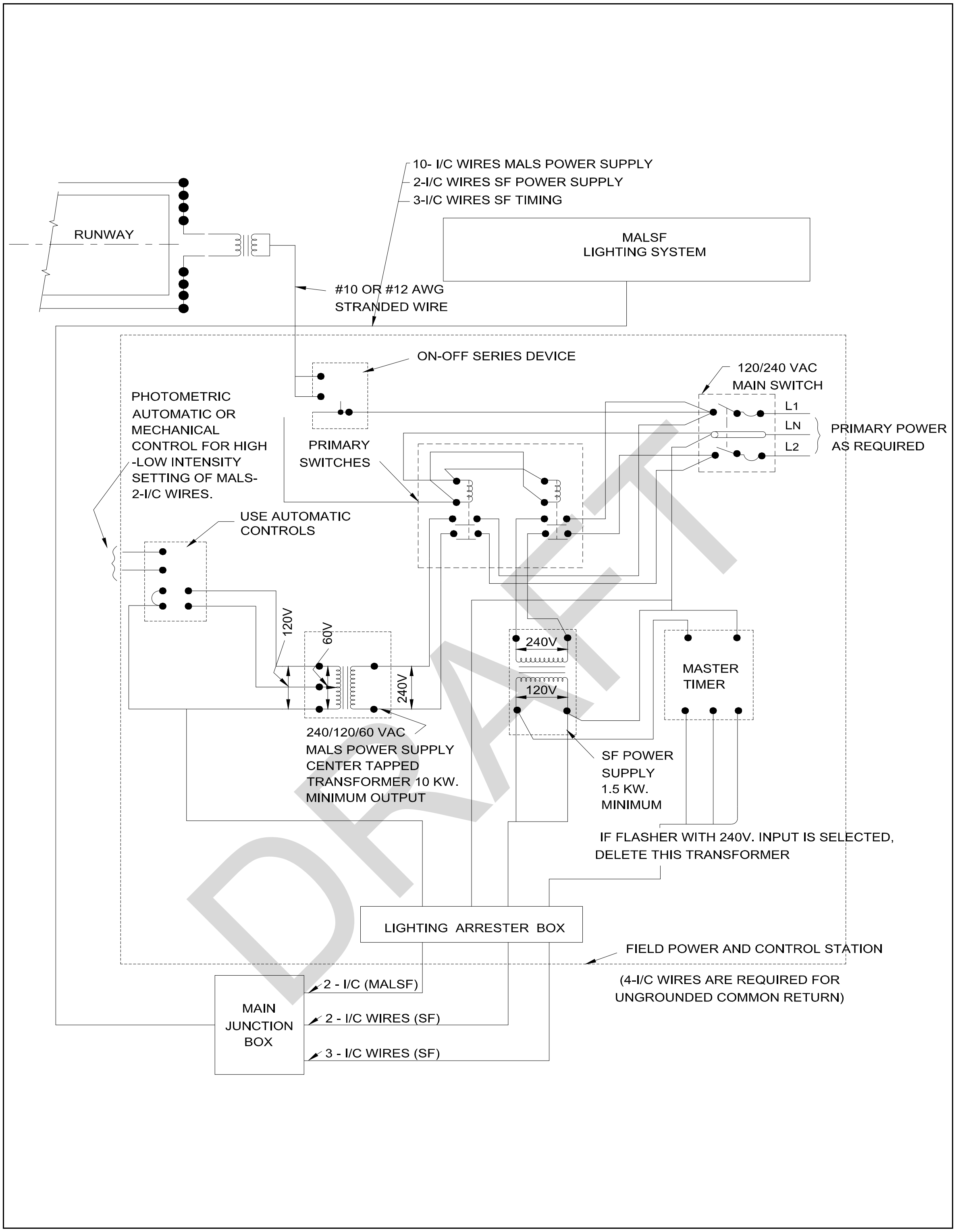
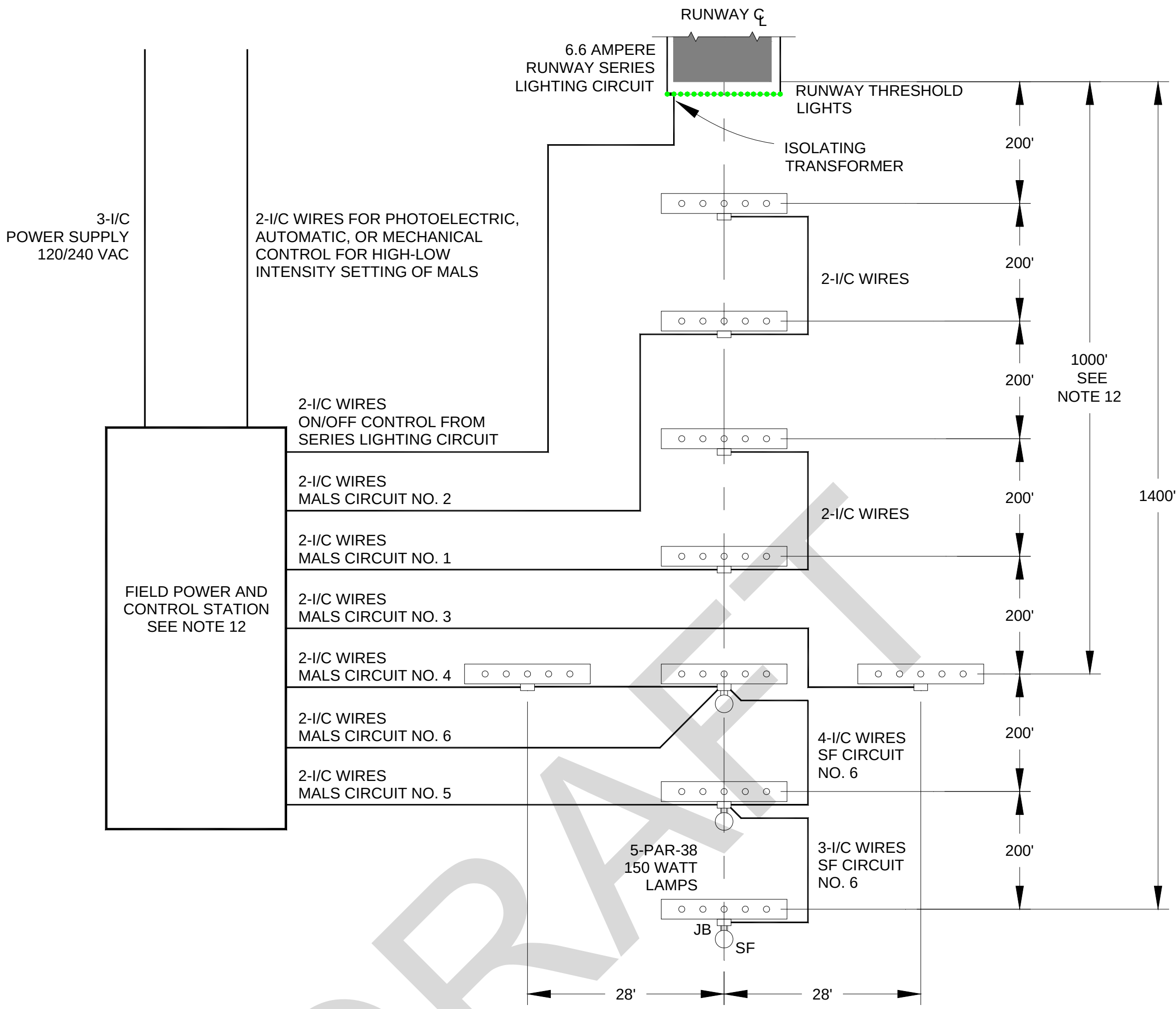


Figure 83. Typical Wiring Diagram for MALSF Controlled from Runway Lighting Circuit.



NOTES:

1. THE INSTALLATION CONFORMS TO THE APPLICABLE SECTION OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
2. INSTALL LIGHTING ARRESTERS FOR POWER AND CONTROL LINES AS REQUIRED.
3. WHERE REQUIRED INSTALL A COUNTERPOISE SYSTEM SPECIFIED IN THE PLANS.
4. INSTALL FUSES, CIRCUIT BREAKERS AND CUTOUTS IN ACCORDANCE WITH EQUIPMENT RATINGS.

   CALCULATE THE MINIMUM WIRE SIZE TO BE USED BETWEEN THE POWER SUPPLY, MAIN JUNCTION BOX, AND LIGHT BARS FOR EACH INSTALLATION.
5. CONNECT THE FLASHING LIGHTS AND THE STEADY BURNING LIGHTS INTO THE ELECTRICAL CIRCUITS IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
6. INSTALL THE PREFABRICATED METAL HOUSING AND THE EQUIPMENT ENCLOSURES IN ACCORDANCE WITH APPLICABLE SECTIONS OF ADVISORY CIRCULAR 150/5370-10 STANDARD SPECIFICATION OF CONSTRUCTION OF AIRPORTS.
7. INSTALL AND CHECK THE UNDERGROUND CABLES IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ITEM L-108 OF ADVISORY CIRCULAR 150/5370-10 STANDARD SPECIFICATION FOR CONSTRUCTION OF AIRPORTS.
8. GROUND EACH LIGHT BAR AND FLASHING LIGHT AS SPECIFIED IN THE INSTALLATION PLANS.
9. MAINTAIN NOT LESS THAN 114 VOLTS 60 Hz NOR MORE THAN 126 VOLTS 60 Hz AT LIGHTS.
10. A TYPICAL LOCATION FOR THE FIELD POWER AND CONTROL STATIONS IS NEAR THE 1000' CROSS BAR. DO NOT INSTALL THE FIELD POWER AND CONTROL STATION CLOSER THAN 400' TO THE MALS CENTERLINE BETWEEN STATION 0+00 AND 10+00.
11. ALL JUNCTION BOXES (JB) ARE FURNISHED BY THE INSTALLATION CONTRACTOR.
12. POWER CIRCUITS ARE ASSIGNED NUMBERS 1 THROUGH 6 FOR REFERENCE PURPOSES.

Figure 84. Typical Field Wiring Circuits for MALSF.

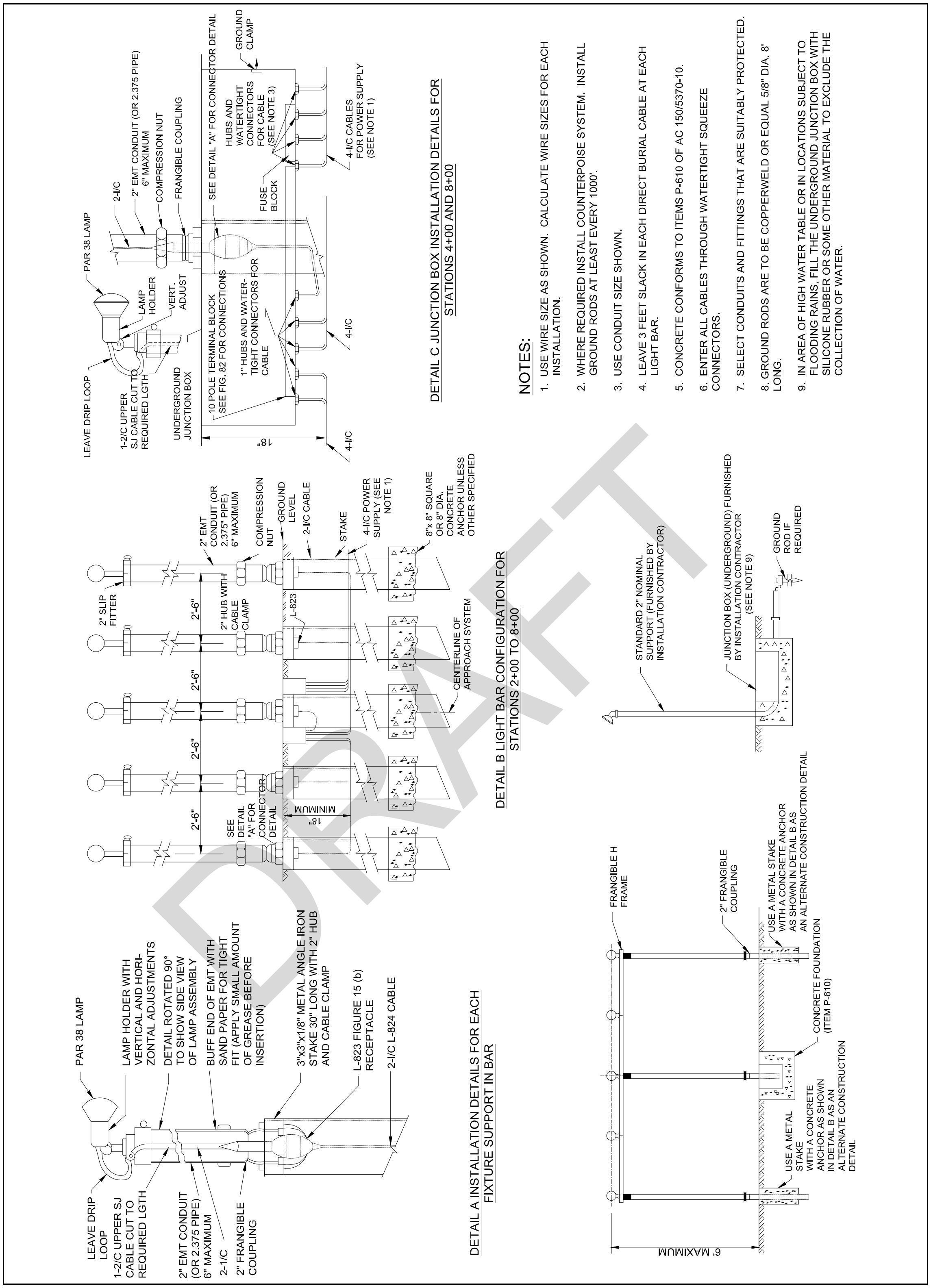
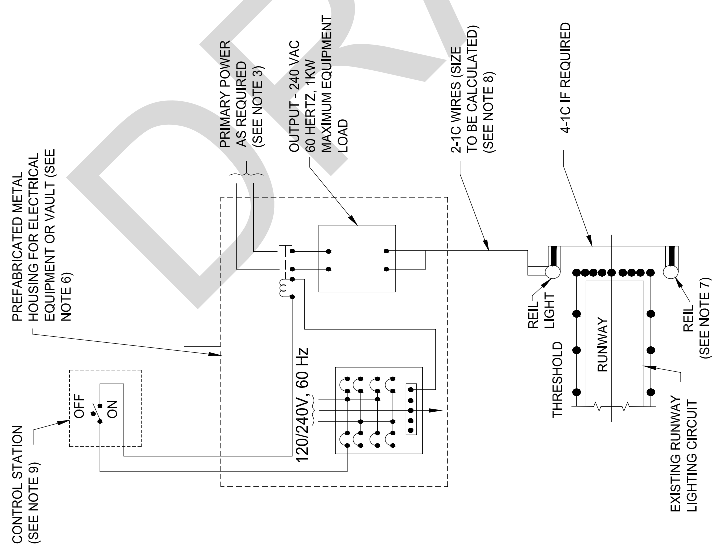


Figure 85. Typical Installation Details for Frangible MALS Structures – 6 foot (1.8 m) Maximum.



NOTES

1. THE INSTALLATIONS SHOULD CONFORM TO THE APPLICABLE SECTIONS OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.

2. LIGHTENING ARRESTERS FOR POWER AND CONTROL LINES SHOULD BE INSTALLED AS REQUIRED.

3. FUSES AND CIRCUIT BREAKERS SHOULD BE IN ACCORDANCE WITH EQUIPMENT RATINGS.

4. THE RUNWAY END IDENTIFER LIGHT SYSTEM IS GROUNDED AS SPECIFIED IN THE PLANS FOR THE INSTALLATION.

5. LOCAL CONTROL CAN BE OBTAINED FOR REILS IF REQUIRED FOR THE INSTALLAION. THE LOCAL SWITCH IS AS STATED IN CHAPTER 7.

6. NO ENCLOSURE IS REQUIRED IF THE EQUIPMENT SHOWN IN THE HOUSING IS DESIGNED FOR OUTDOOR SERVICE.

7. THE LIGHT UNITS AND LOCAL CONTROLS ARE IN ACCORDANCE WITH SPECIFICATION L-849.

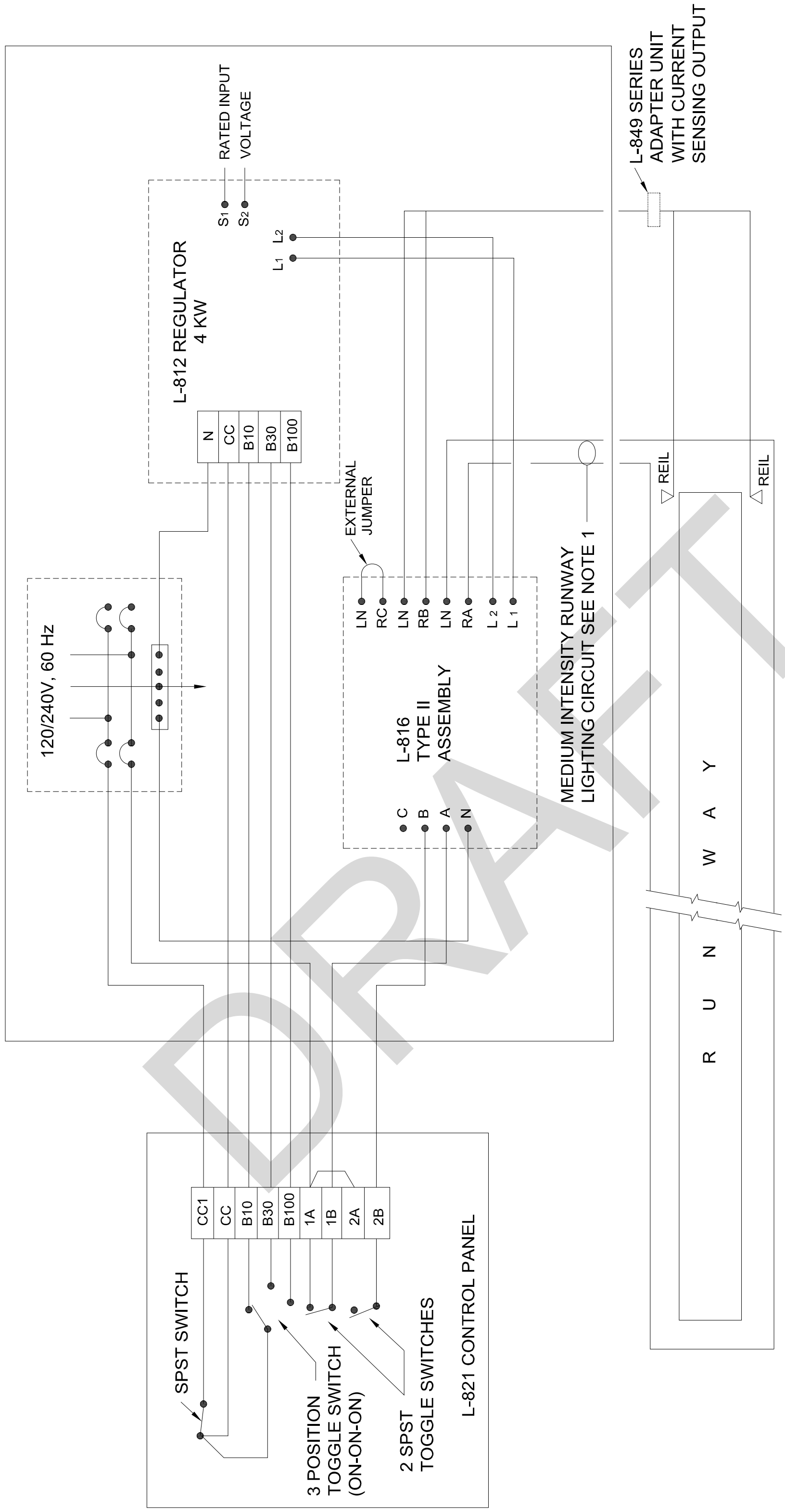
8. SAMPLE CALCULATION TO DETERMINE THE MAXIMUM DISTANCE BETWEEN THE DISTRIBUTION TRANSFORMER AND THE FURTHEST REILS LIGHT UNIT USING No. 12 AWG WIRE (RESISTANCE=1.62OHMS/1000').

a. LOCAL CONDITIONS
(1). LOAD OF 2 REILS LIGHT UNITS - 1KW MAXIMUM.
(2). AVAILABLE VOLTAGE FROM DISTRIBUTION TRANSFORMER FOR REILS-240 VOLTS ± 5%.

b. CALCULATIONS
(1). $\frac{\text{500 WATTS/LIGHT UNIT X 2 LIGHT UNITS}}{\text{240 VOLTS}}$ = 4.16 AMPERES LOAD CURRENT
(2). 240 X 5% = 12 VOLTS PERMISSIBLE LINE LOSS TO HAVE RATED VOLTAGE AT FURTHEST FIXTURE.
(3). 1.62 OHMS/1000' X 4.16 AMPERES LOAD CURRENT = 6.74 VOLTS/1000'.
(4). $\frac{\text{12 VOLTS PERMISSIBLE VD}}{\text{6.74 VD/1000'}}$ = 1780 FEET
(5). SINCE TWO WIRES ARE REQUIRED THE MAXIMUM DISTANCE IS $\frac{1780'}{2}$ = 890 FEET.
(6). TO DETERMINE THE MAXIMUM DISTANCE USING OTHER WIRE SIZES, OBTAIN THE RESISTANCE OF THE WIRE PER 1000' AND FOLLOW THE ABOVE PROCEDURE.

9. THE CONTROL STATION MAY BE A REMOTE CONTROLLED SWITCH, RADIO CONTROL, OR AUTOMATIC CONTROL (PHOTOCELL OR TIMING DEVICES), OR CONTROL FROM RUNWAY EDGE LIGHTING CIRCUIT.

Figure 86. Typical Wiring for REILs Multiple Operation



NOTES
1. INSTALL MEDIUM INTENSITY FEEDER CABLES IN COMMON TRENCH WITH REIL FEEDER CABLES.
2. AN ADDITIONAL LOAD OF UP TO 3KW MAY BE ADDED TO THE REGULATOR IF THE REILS UNITS ARE CONNECTED INTO THE RUNWAY LIGHTING CIRCUIT.
3. THE REILS UNITS ARE CONNECTED INTO THE ELECTRICAL CIRCUITS IN ACCORDANCE WITH THE EQUIPMENT MANFACTURER'S RECOMMENDATIONS.

Figure 87. Typical Wiring for REIL Series Operation

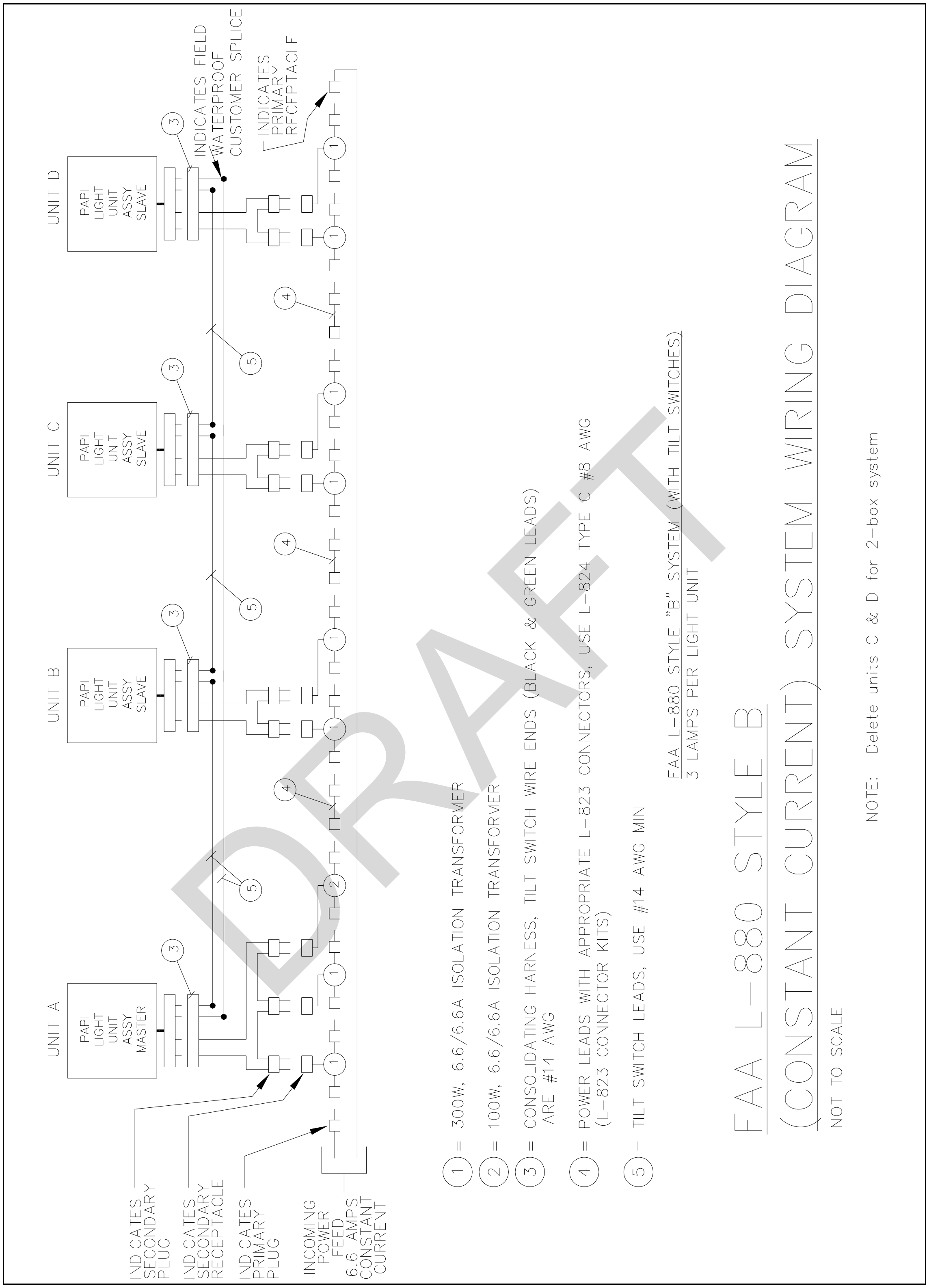


Figure 88. FAA L-880 Style B (Constant Current) System Wiring Diagram.

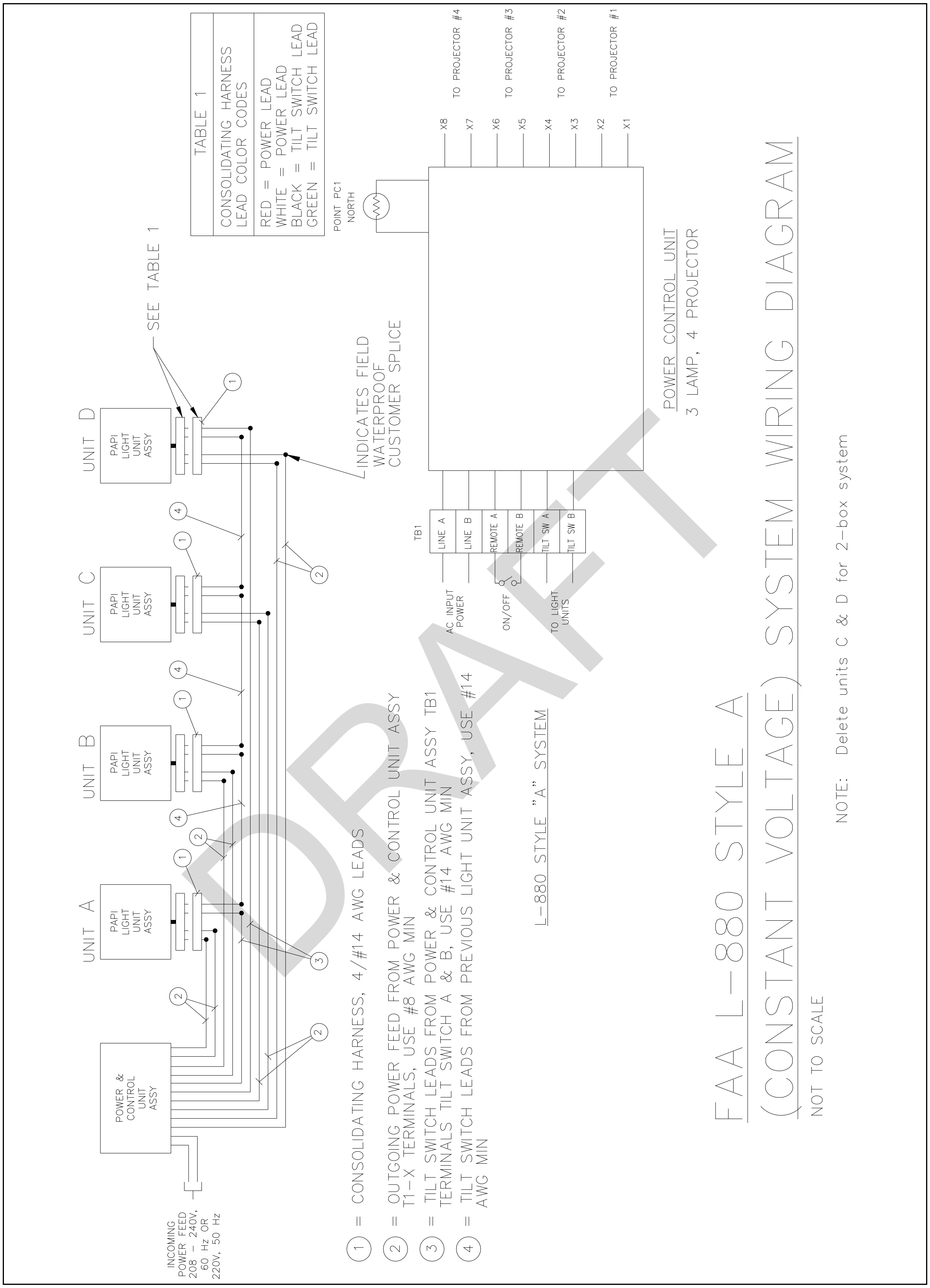


Figure 89. FAA L-880 Style A (Constant Voltage) System Wiring Diagram.

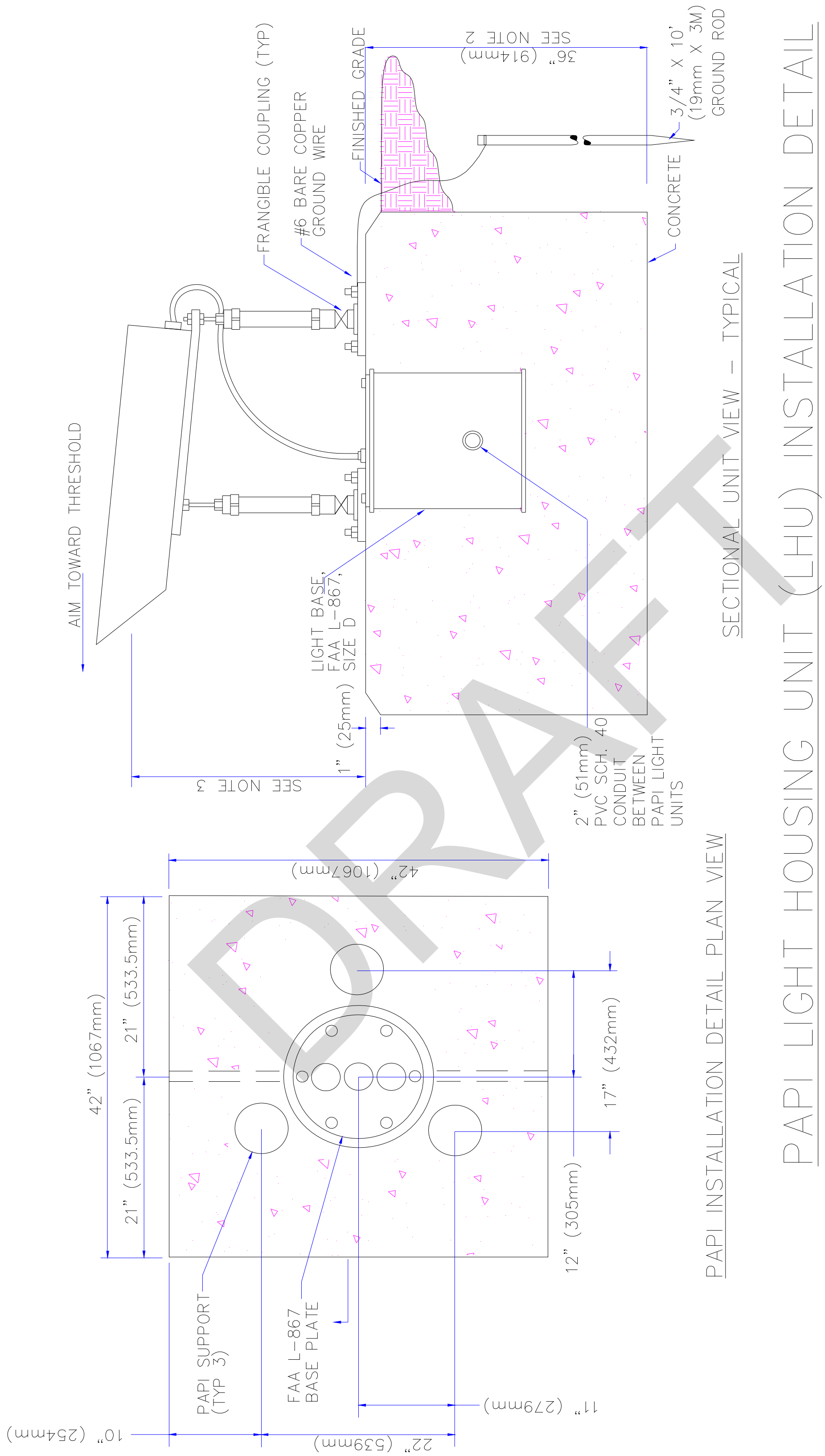
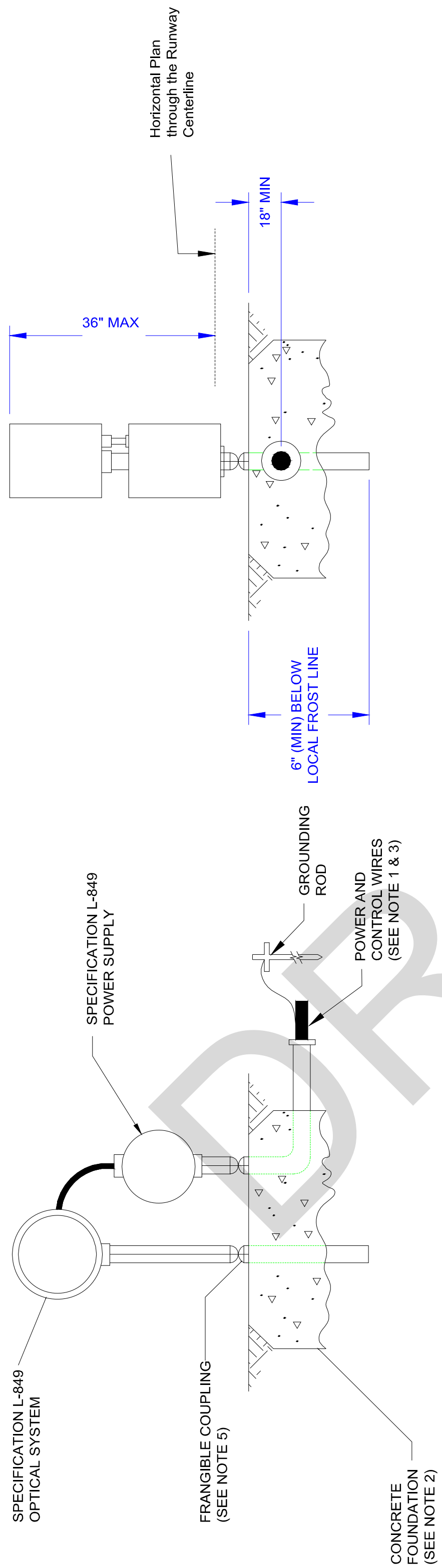


Figure 90. PAPI Light Housing Unit (LHU) Installation Detail.



NOTES:

1. THE INSTALLATIONS SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
2. THE SIZE OF THE CONCRETE FOUNDATION SHOULD BE INDICATED ON THE CONSTRUCTION PLANS.
3. THE TOP OF THE CONCRETE FOUNDATION SHOULD BE SLOPED TO DRAIN TOWARD THE EDGE OF THE FOUNDATION. THE GROUND SURROUNDING SHOULD BE NO MORE THAN THREE INCHES BELOW THE TOP OF THE FOUNDATION.
4. THE INSTALLATION OF POWER AND CONTROL WIRES SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF ITEM L-108 OF STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS.
5. PROVIDE FRANGIBLE COUPLINGS FOR THE LIGHT UNIT AND SUPPLY. THE OUTSIDE DIAMETER OF THE SUPPORTS CAN BE 2.197-INCHES, OR 2.375-INCHES.
6. BREAKING-POINT FRANGIBLE COUPLING SHOULD BE LOCATED 3 INCHES MAX ABOVE GRADE.

Figure 91. Typical Installation Details for Runway End Identifier Lights (REILs).

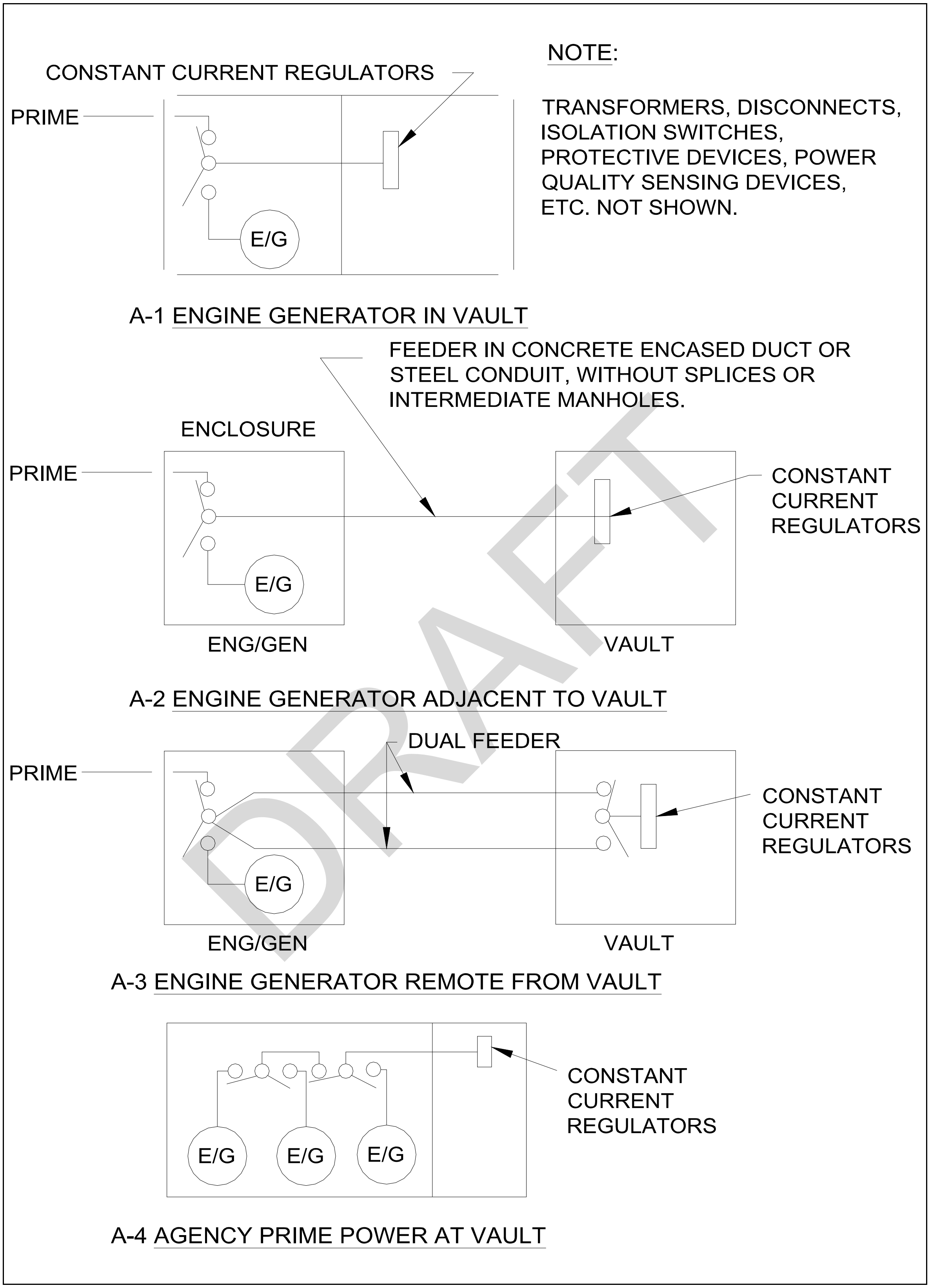
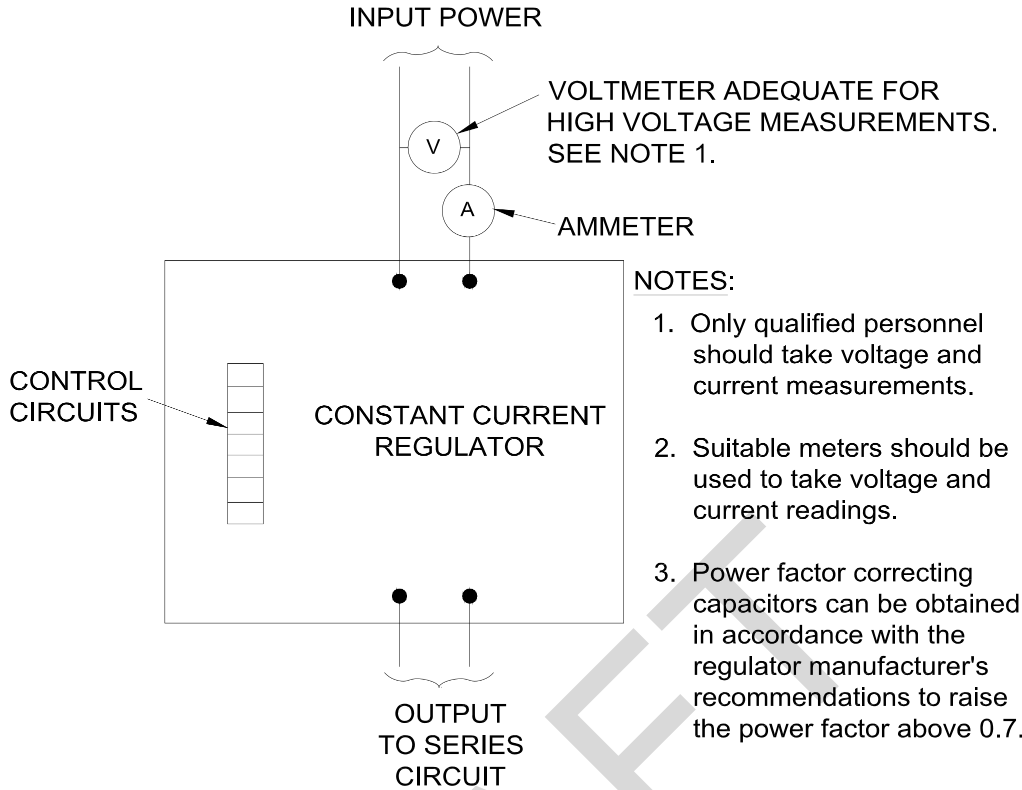


Figure 92. Configuration "A" Electrical Power.



TYPICAL CALCULATIONS

1. Measured KVA
   a. Volts = 2400V
   b. Amperes = 17.0A
   c. KVA Input = $\frac{\text{Volts x Amperes}}{1000}$ $\frac{2400 \times 17.0}{1000}$ = 40.8KVA

2. Calculated KVA
   a. KW = 30
   b. Efficiency = 0.92 (obtain this value from applicable advisory circular for regulator, e.g., Specification L-828)
   c. Power Factor = 0.7 (same as note for b. above)
   d. KVA Input = $\frac{\text{KW}}{\text{Efficiency x Power Factor}}$ $\frac{30}{0.92 \times 0.7}$ = 46.6KVA

3. It is normal for the measured KVA to be less than the calculated KVA, however, the calculated KVA should be used for design purposes. The difference in the values can be caused by the regulator having a higher efficiency and power factor than the values used in the calculations or by the load on the regulator.

Figure 93. Typical KVA Input Requirements.

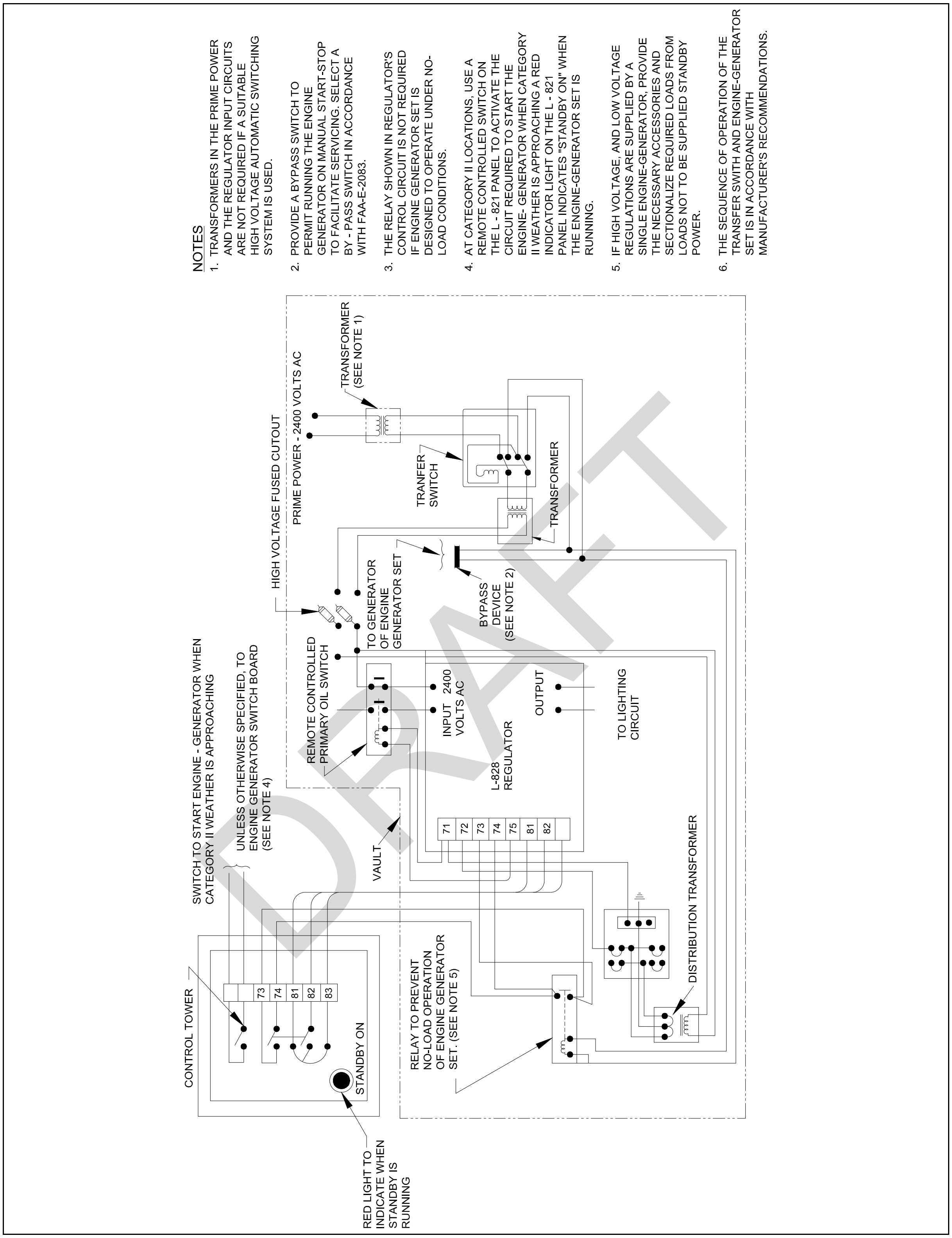


Figure 94. Typical Wiring Diagram for Configuration "A" Electrical Power.

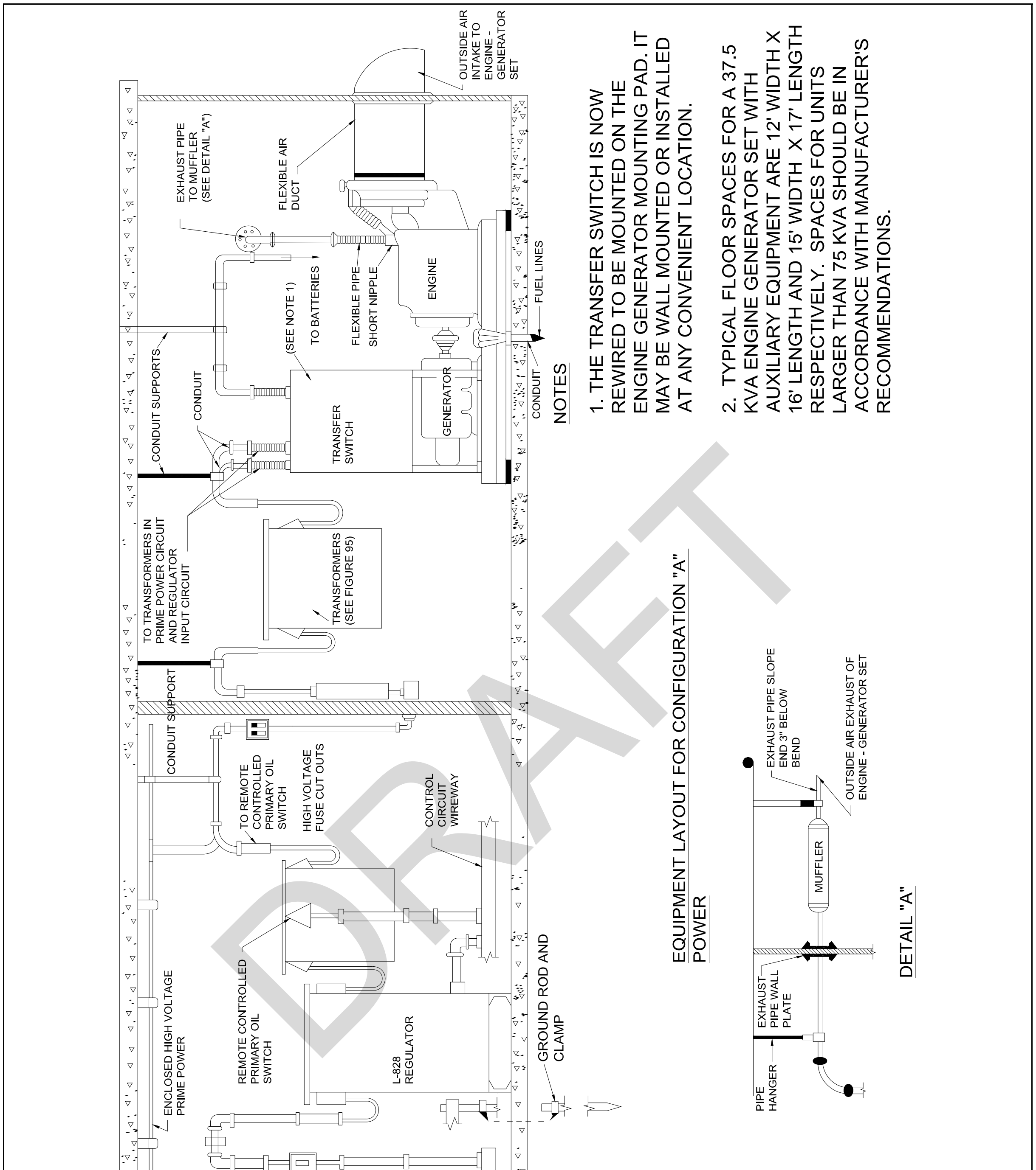


Figure 95. Typical Equipment Layout for Configuration "A" Electrical Power.

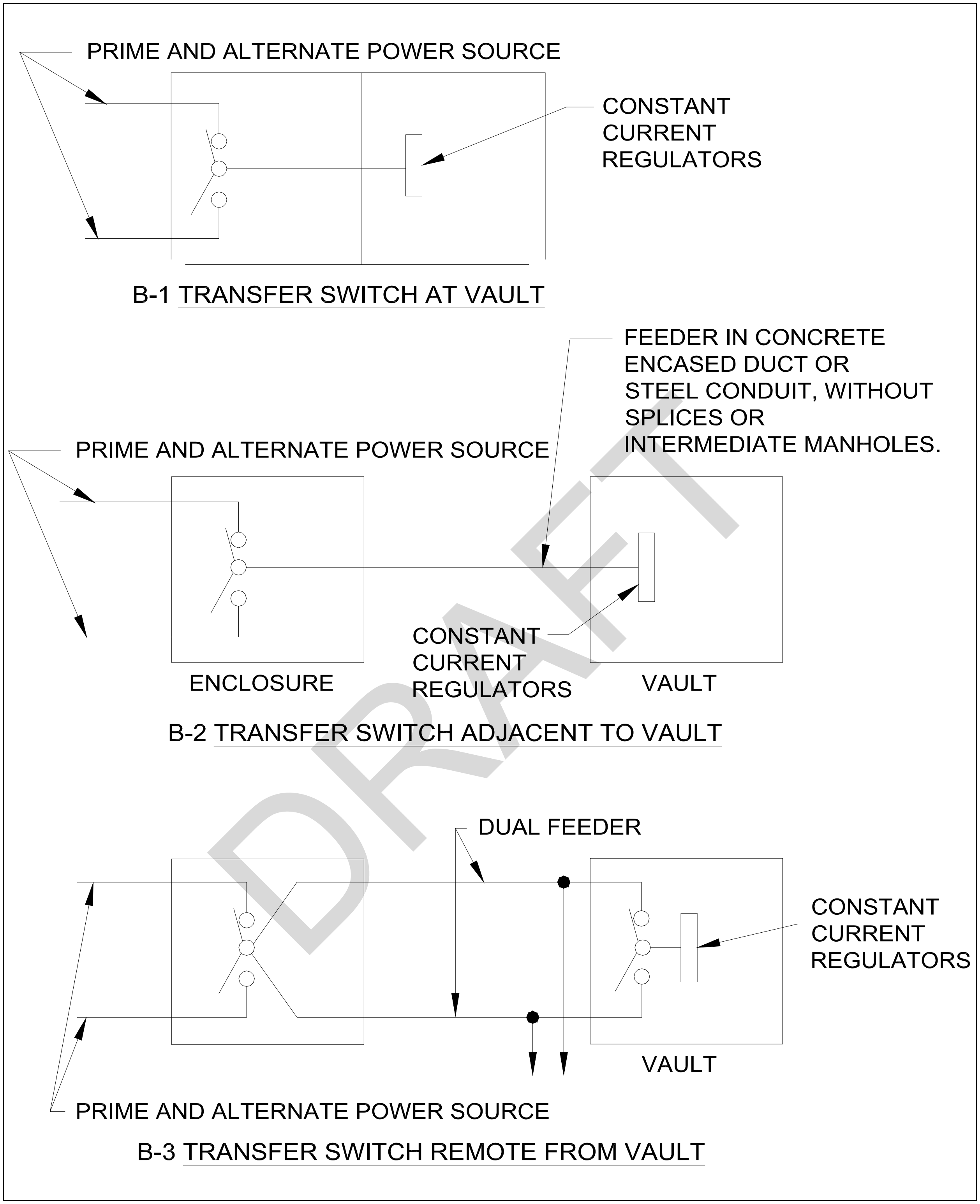


Figure 96. Configuration "B" Electrical Power.

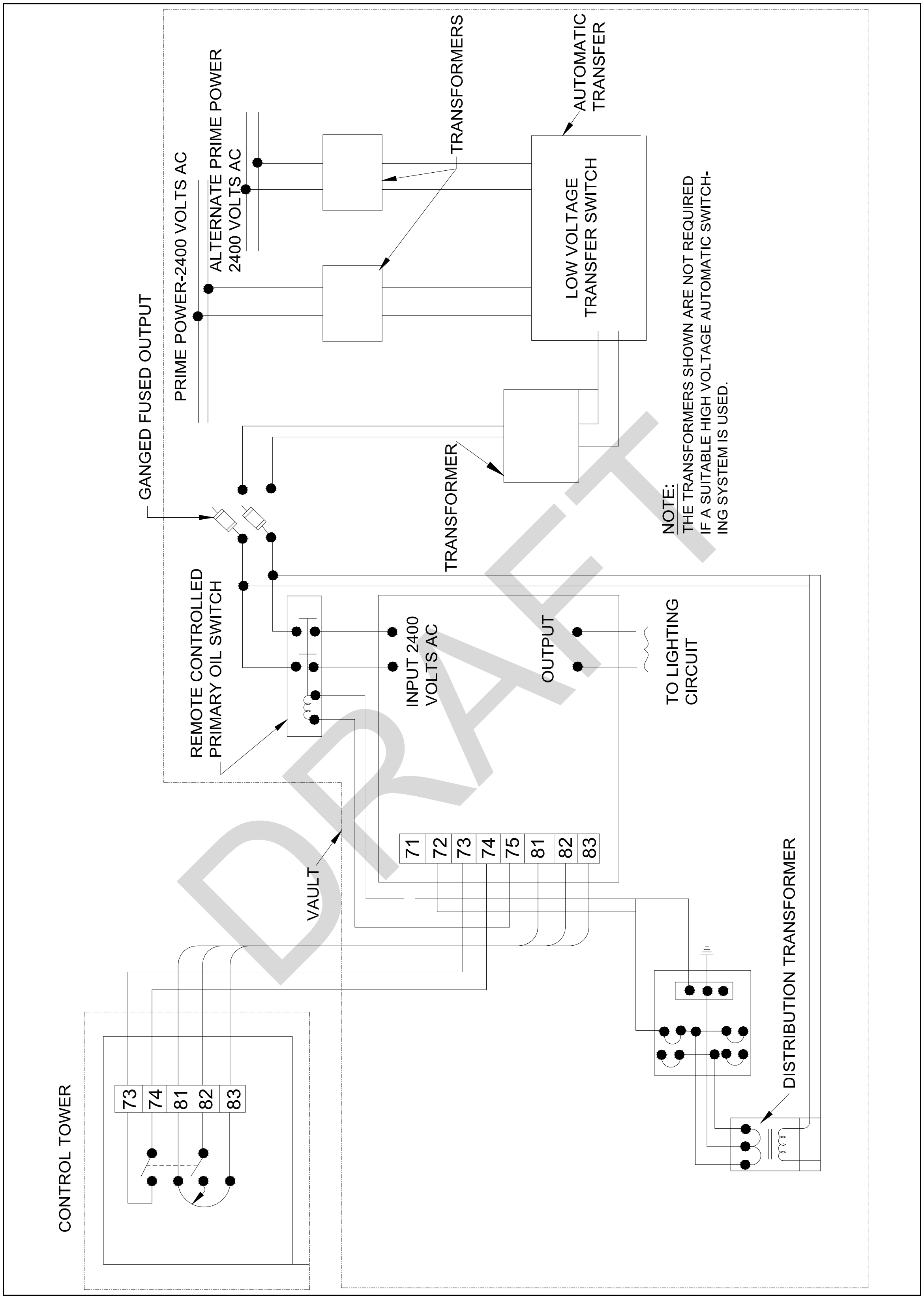


Figure 97. Typical Wiring Diagram for Configuration "B" Electrical Power.

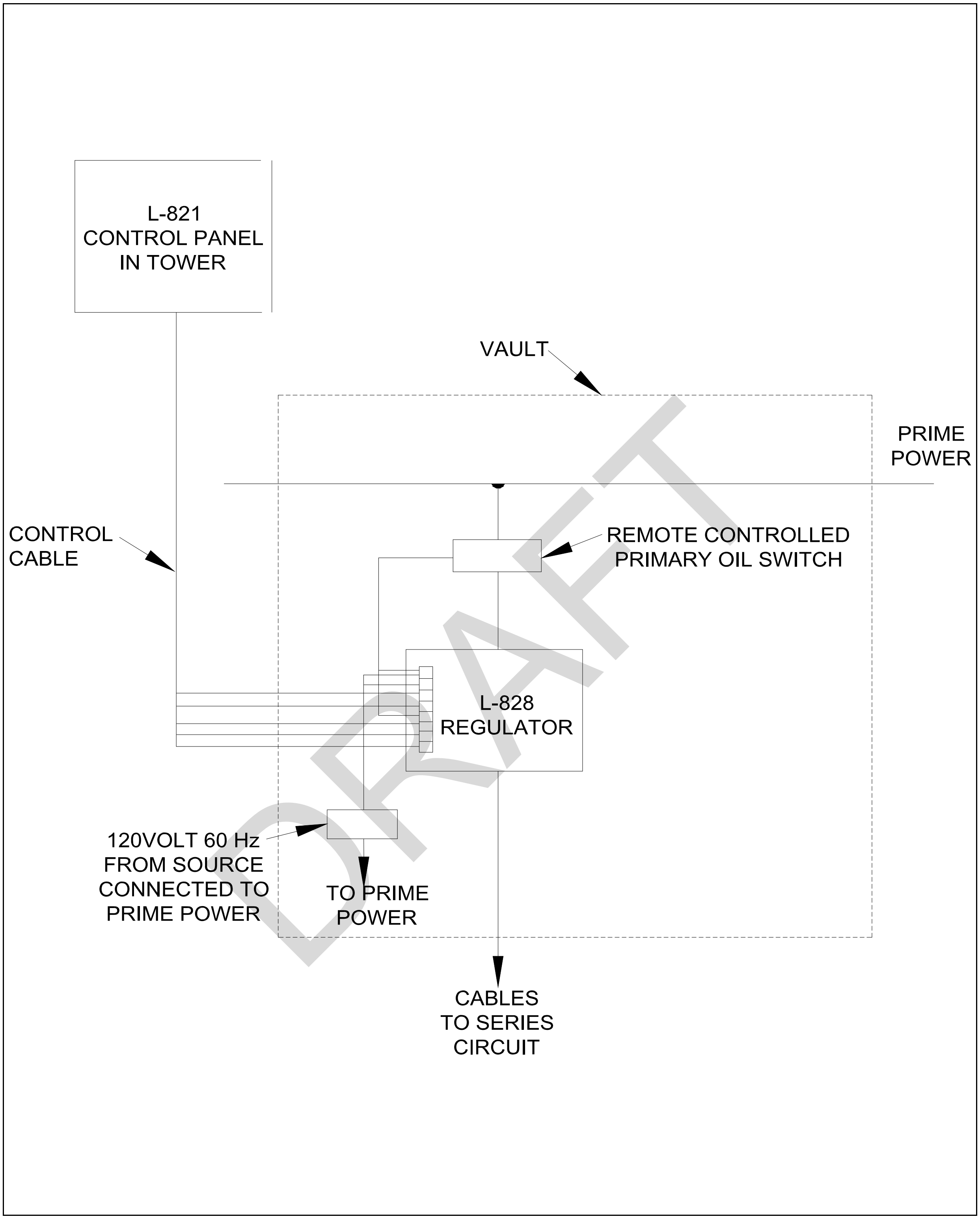


Figure 98. Typical Wiring Diagram for Configuration "C" Power.

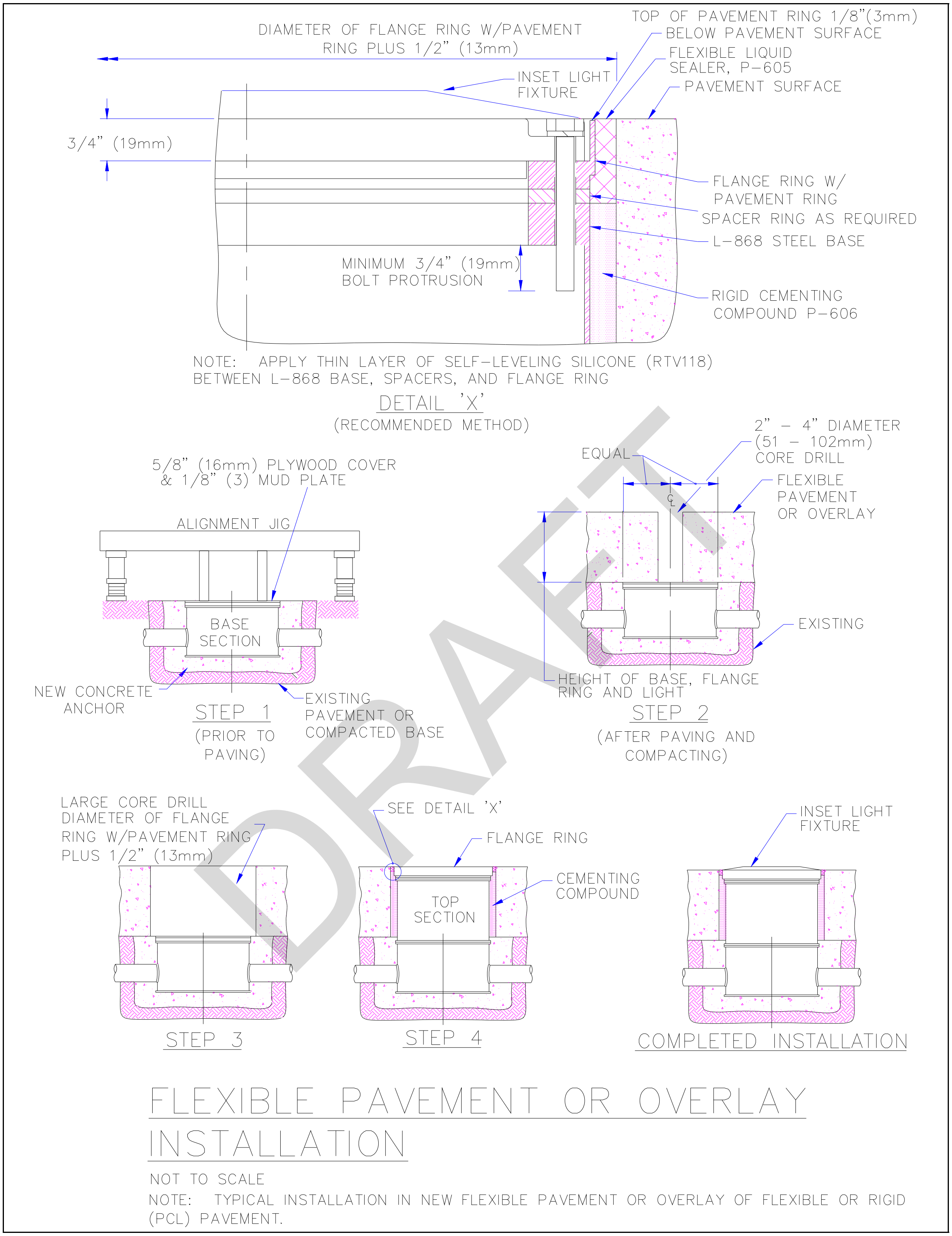


Figure 99. Flexible Pavement or Overlay Installation.

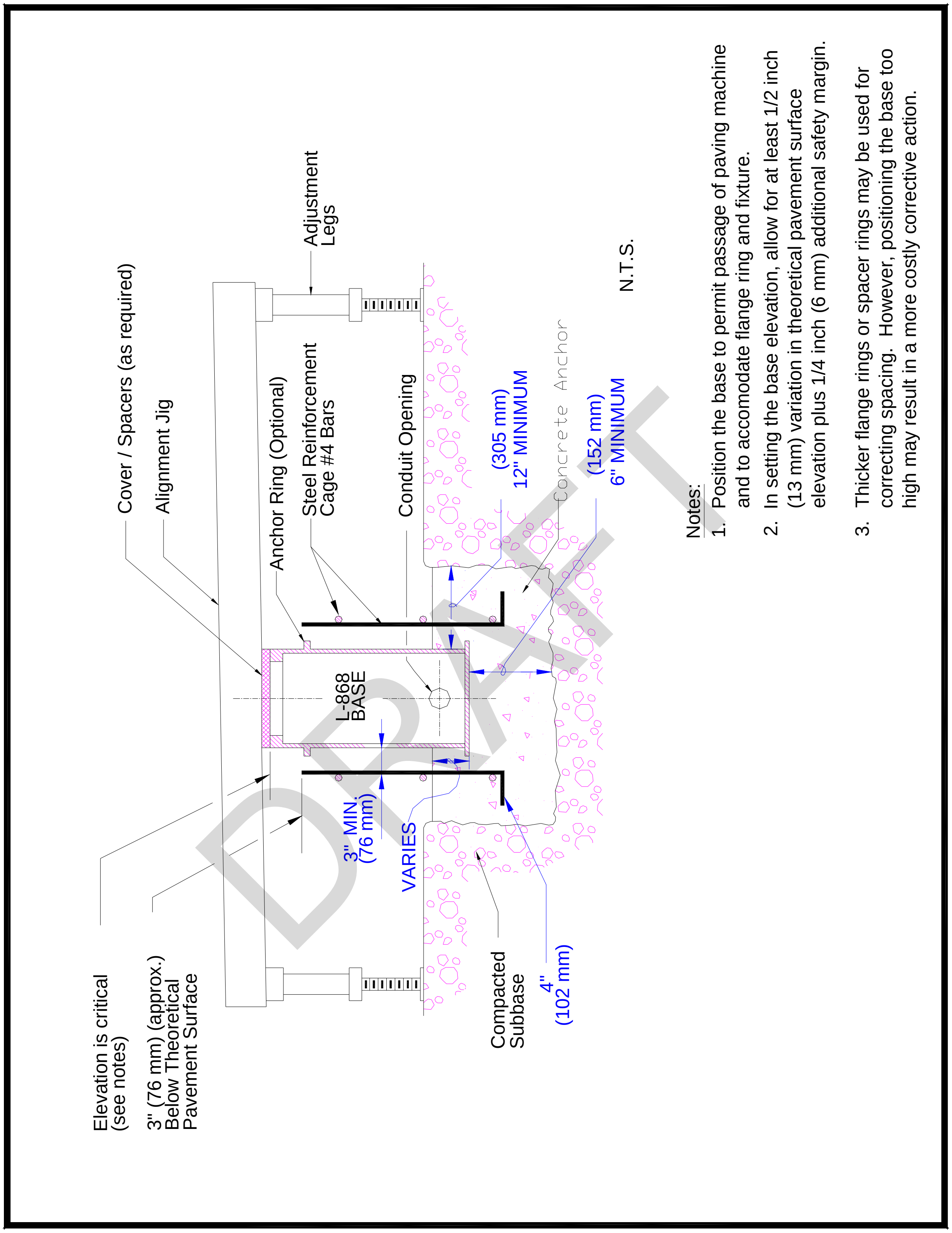


Figure 100. Use of Alignment Jig, No Reference Edge Available, Non-adjustable Base and Conduit System.

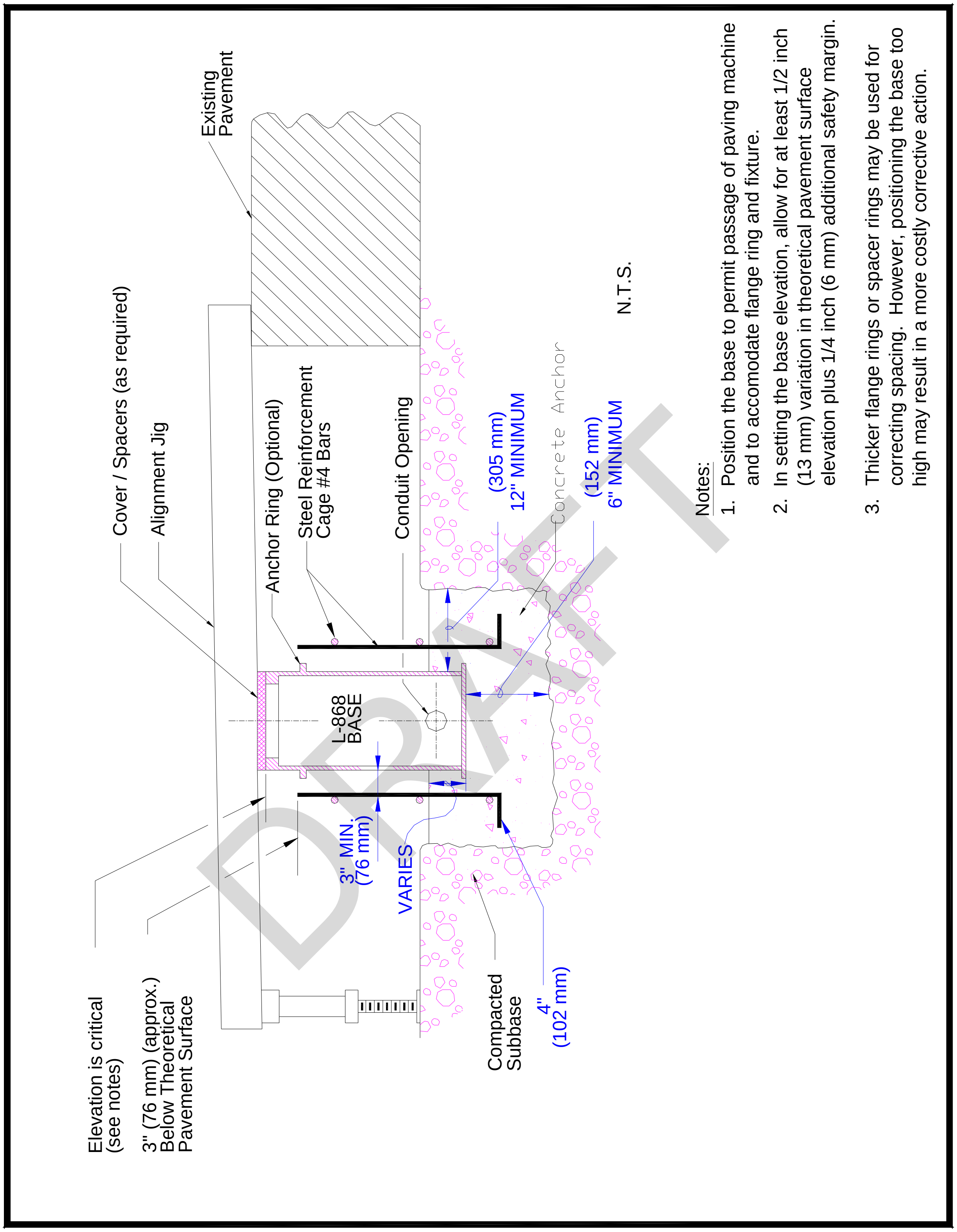


Figure 101. Use of Alignment Jig, Reference Edge Available, Non-adjustable Base and Conduit System.

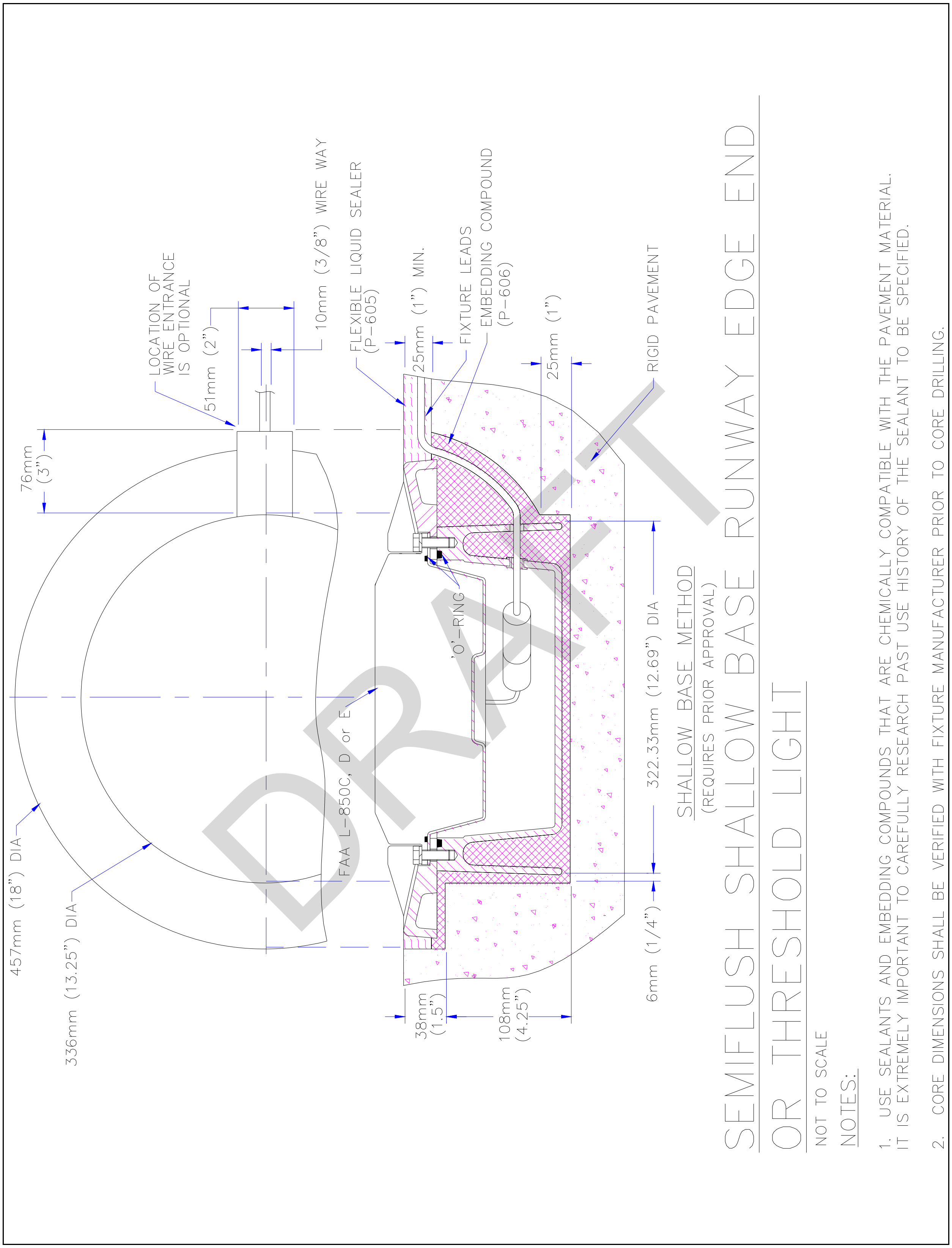


Figure 102. In-pavement Shallow Base Runway Edge End or Threshold Light.

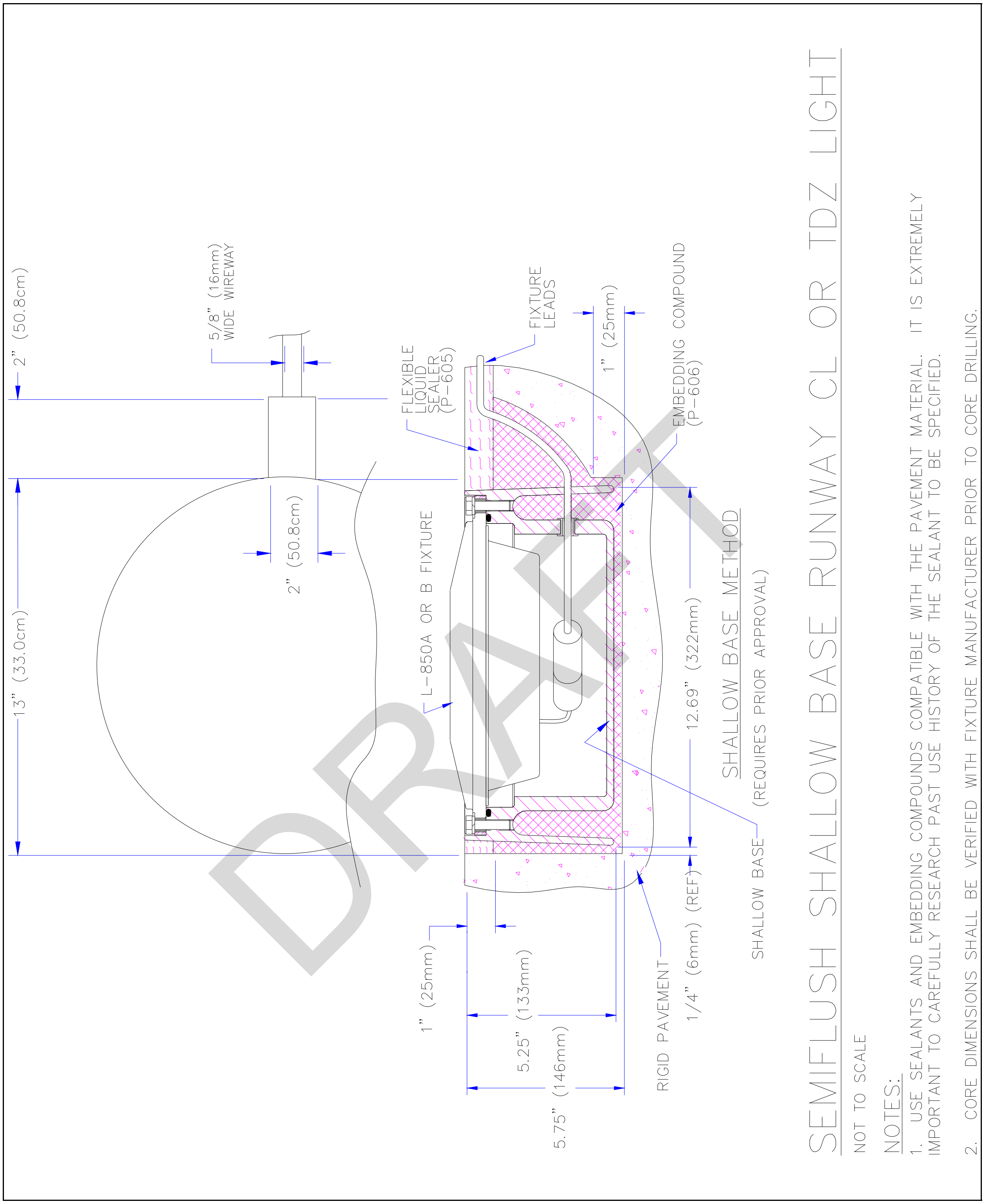


Figure 103. In-pavement Shallow Base Runway Centerline or TDZ Light.

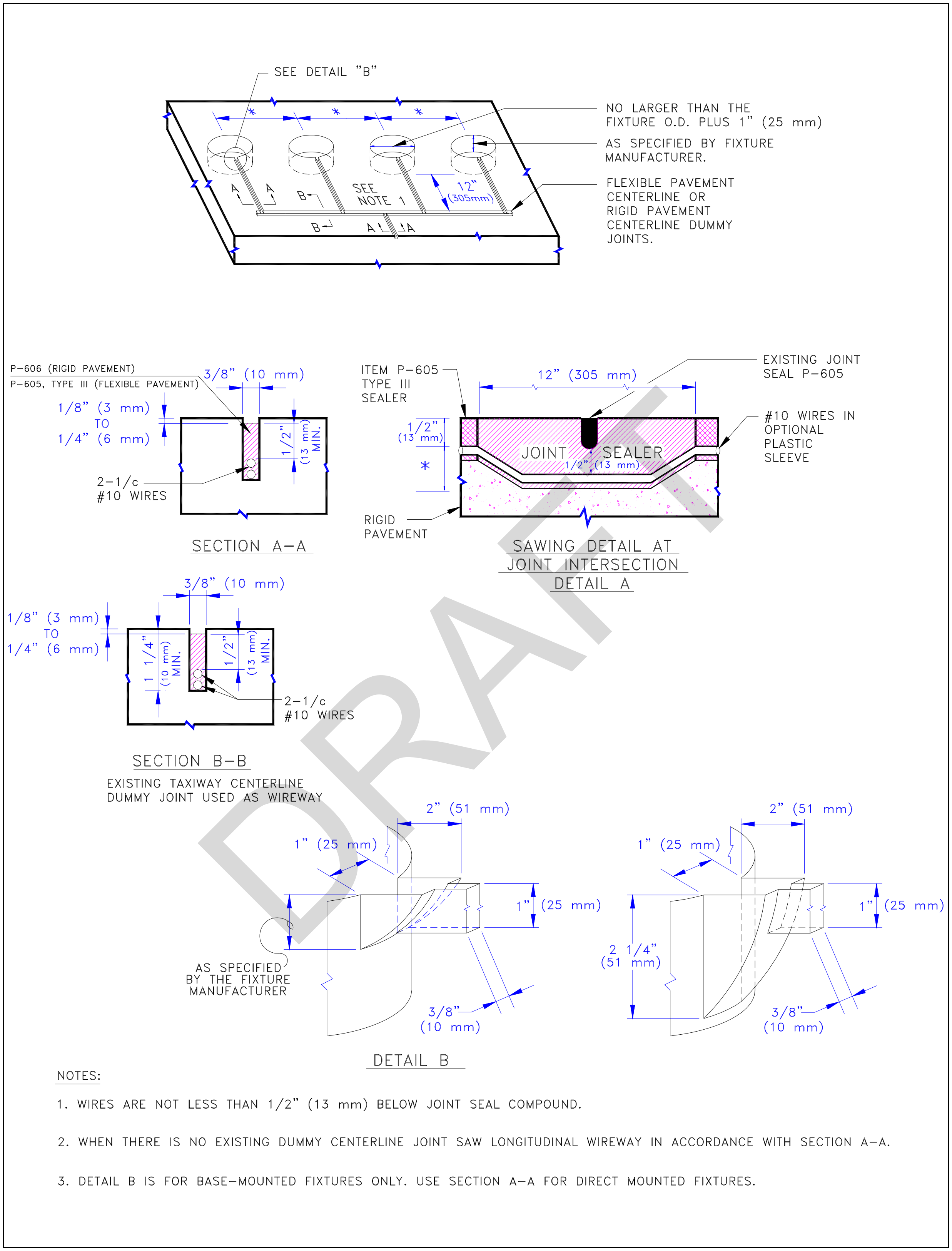


Figure 104. Sawing and Drilling Details for In-Pavement Taxiway Centerline Lights.

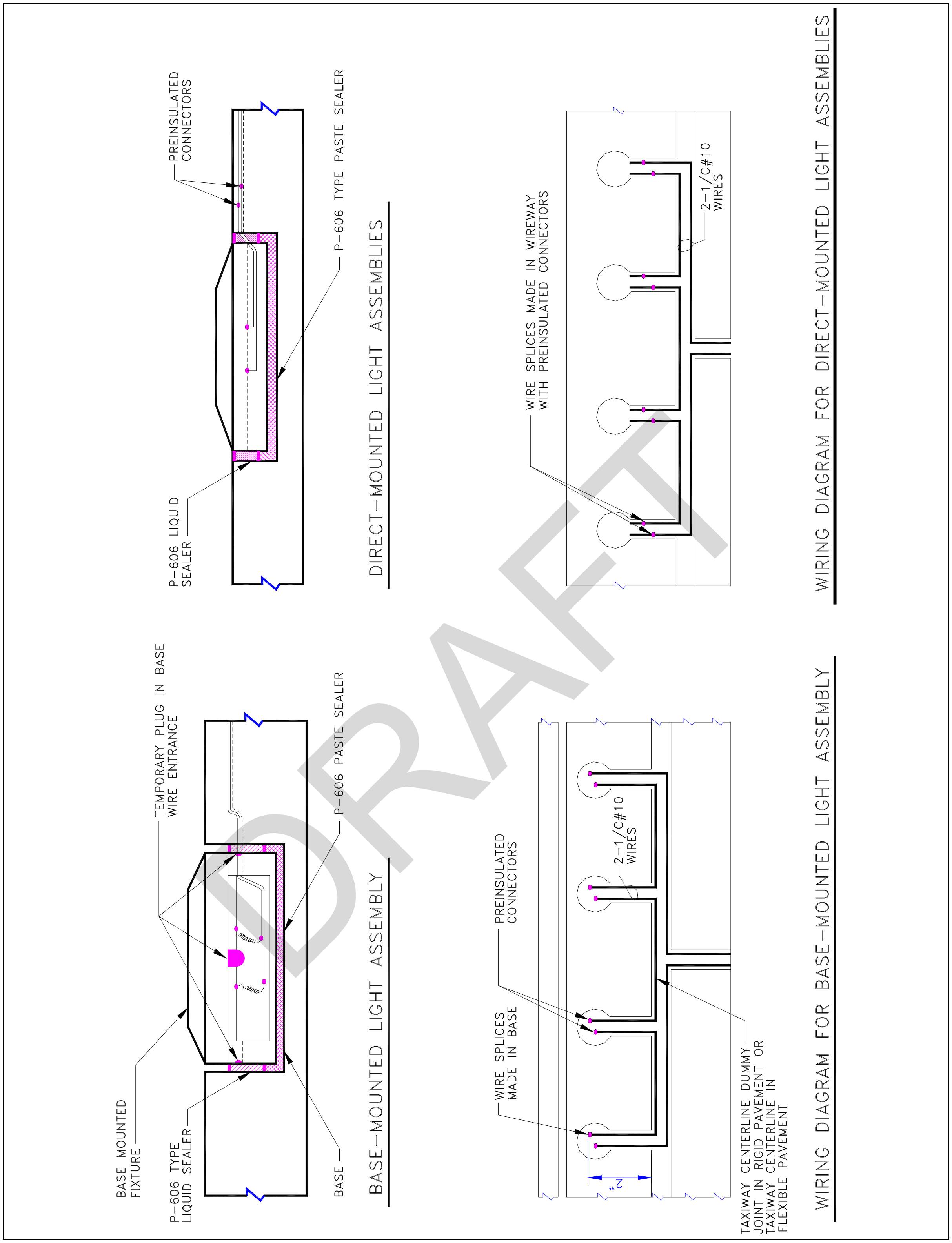
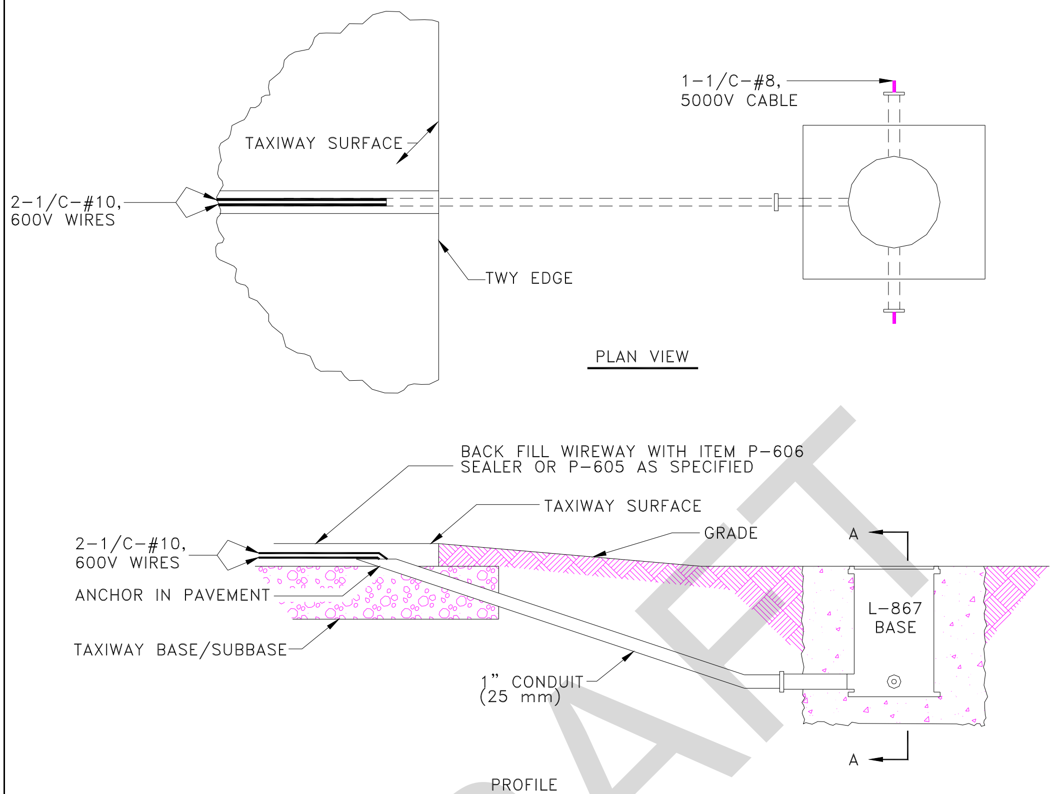
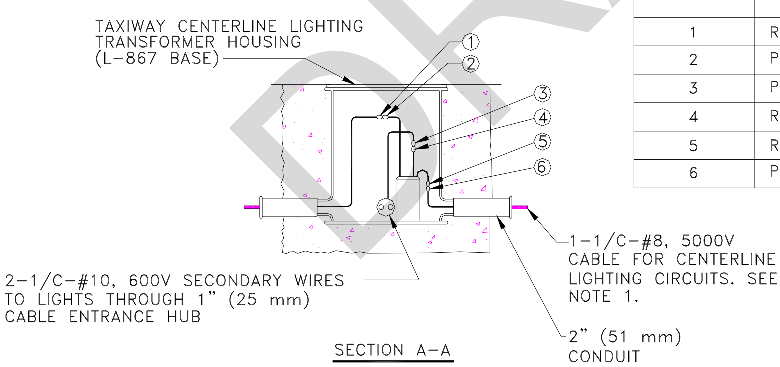


Figure 105. Wiring Details for Direct- and Base-Mounted Taxiway Centerline Lights.



CONNECTOR	L-823 CONNECTORS SEE AC 150/5345-26
1	RECEPTACLE, CLASS B, TYPE I, STYLE 10
2	PLUG, CLASS A, TYPE I, STYLE 2
3	PLUG, CLASS B, TYPE II, STYLE 4
4	RECEPTACLE, CLASS A, TYPE II, STYLE 8
5	RECEPTACLE, CLASS A, TYPE I, STYLE 9
6	PLUG, CLASS B, TYPE I, STYLE 3



NOTES:

1. THE PRIMARY CABLES ARE INSTALLED IN ACCORDANCE WITH ITEM L-108 OF AC 150/5370-10.
2. THE L-867 LIGHT BASE AND TRANSFORMER ARE INSTALLED IN SAME MANNER AS DIRECT MOUNTED CENTERLINE AND TDZ FIXTURES.

Figure 106. Typical Transformer Housing and Conduit Installation Details for Taxiway Centerline Lights.

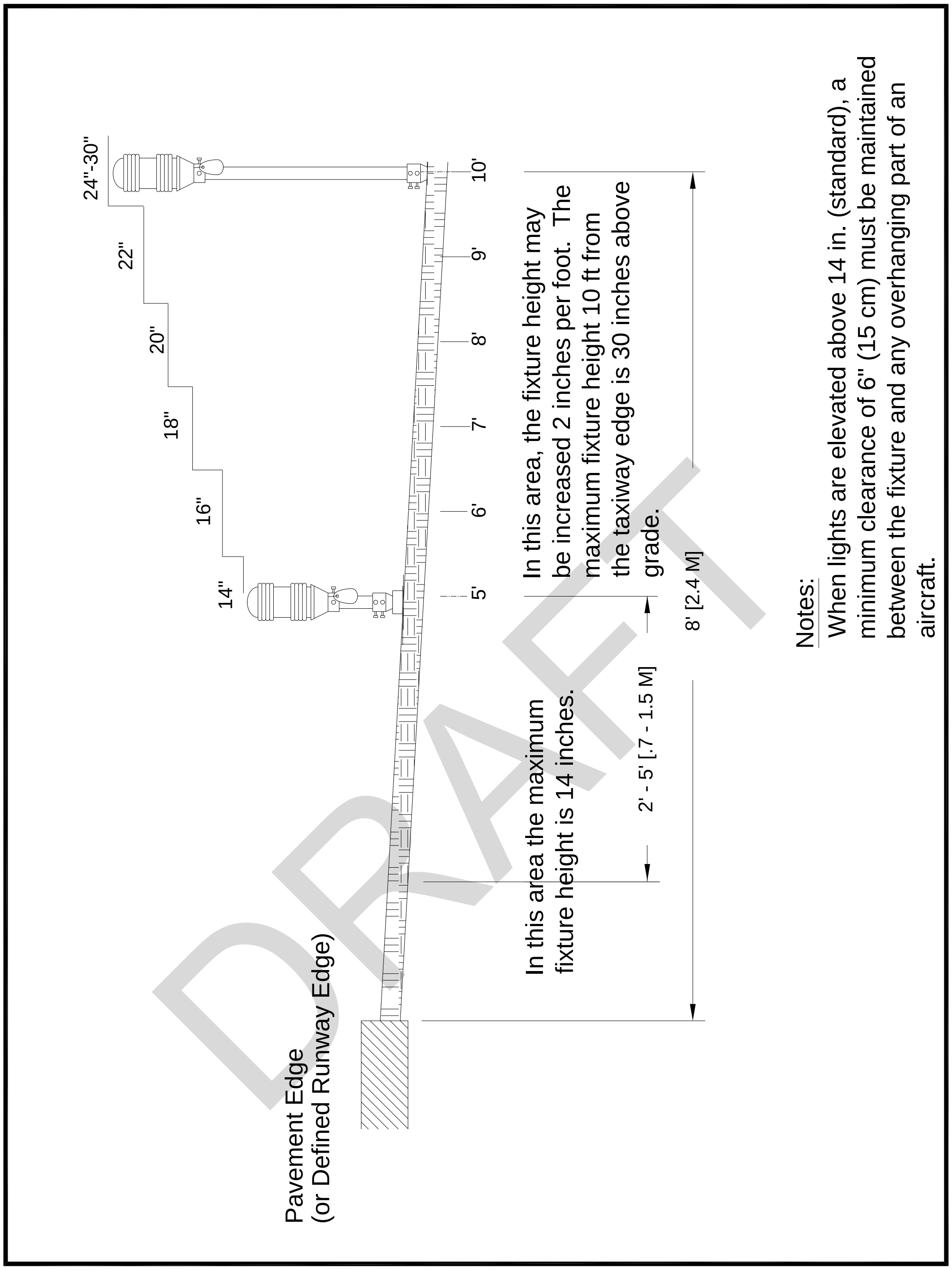


Figure 107. Adjustment of Edge Light Elevation for High Snowfall Areas.

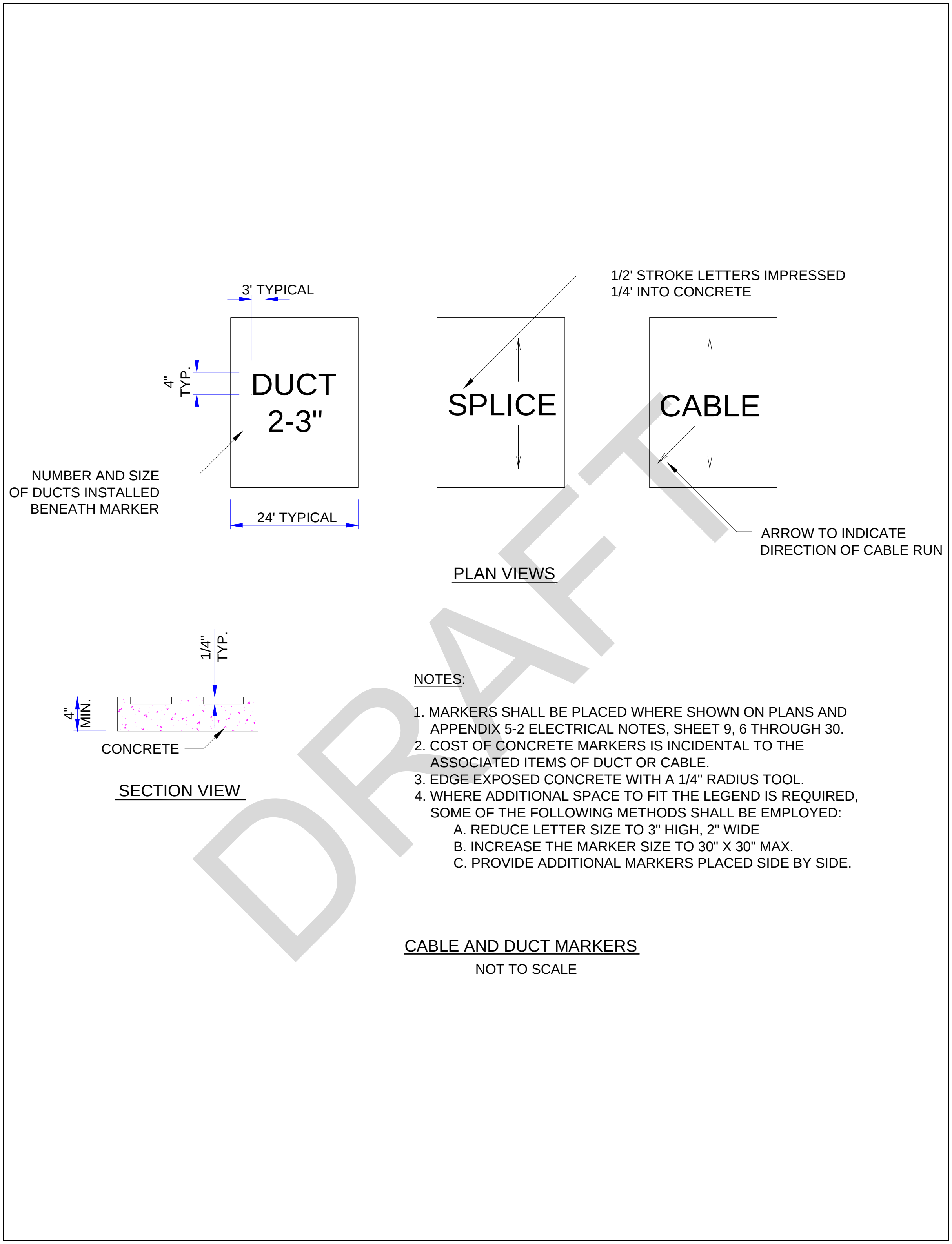


Figure 108. Cable and Duct Markers.

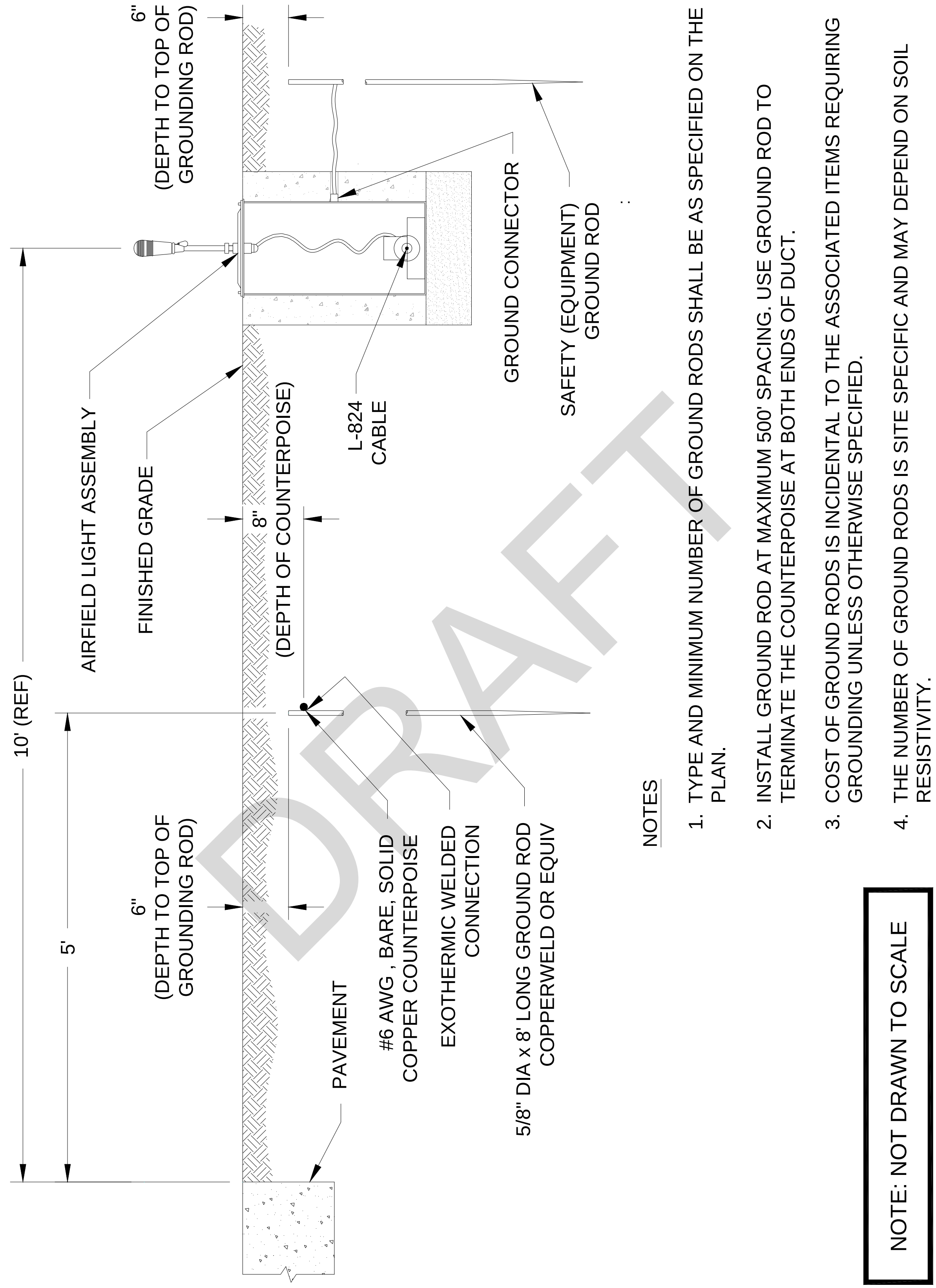


Figure 109. Counterpoise Installation.

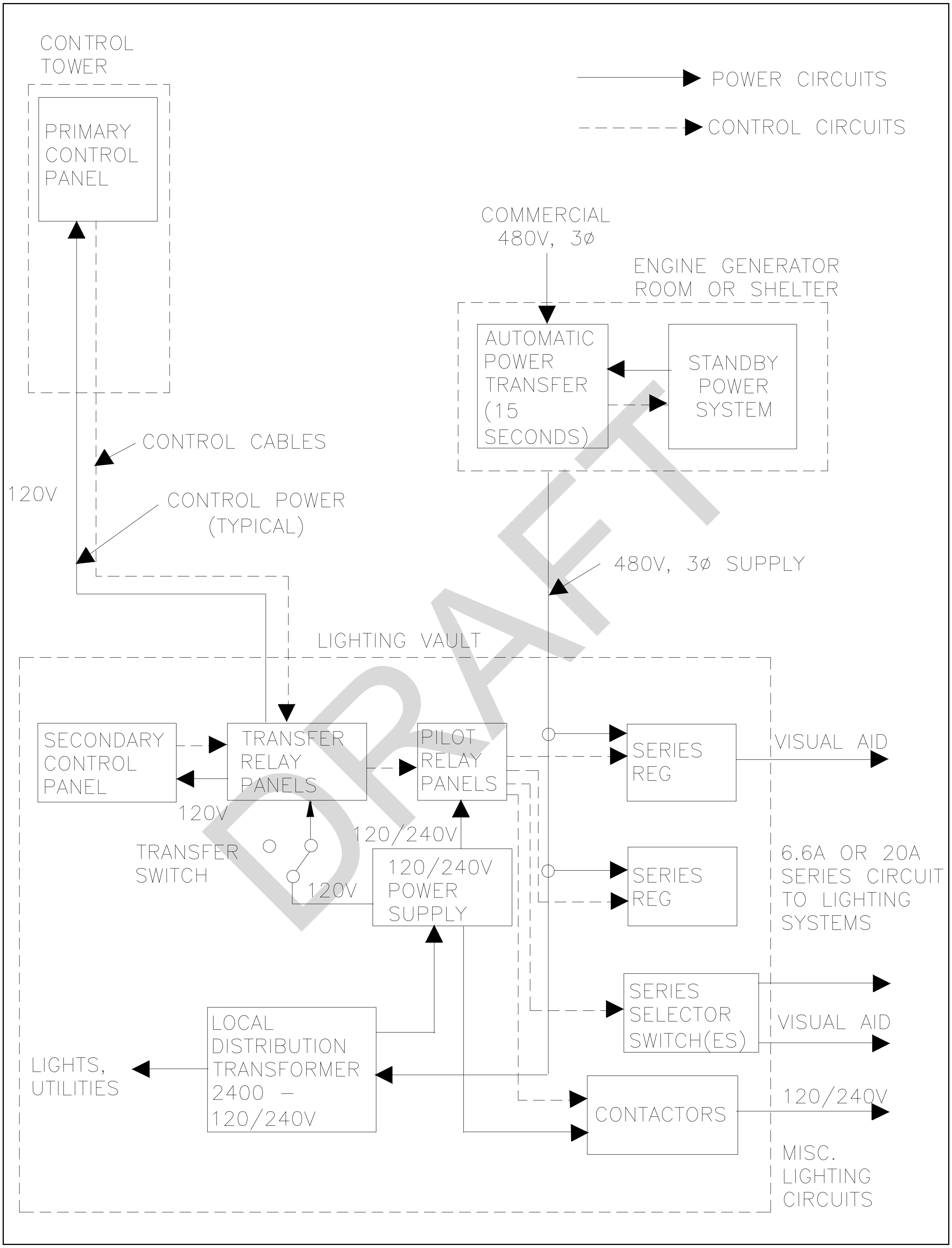


Figure 110. Power and Control System Block Diagram.

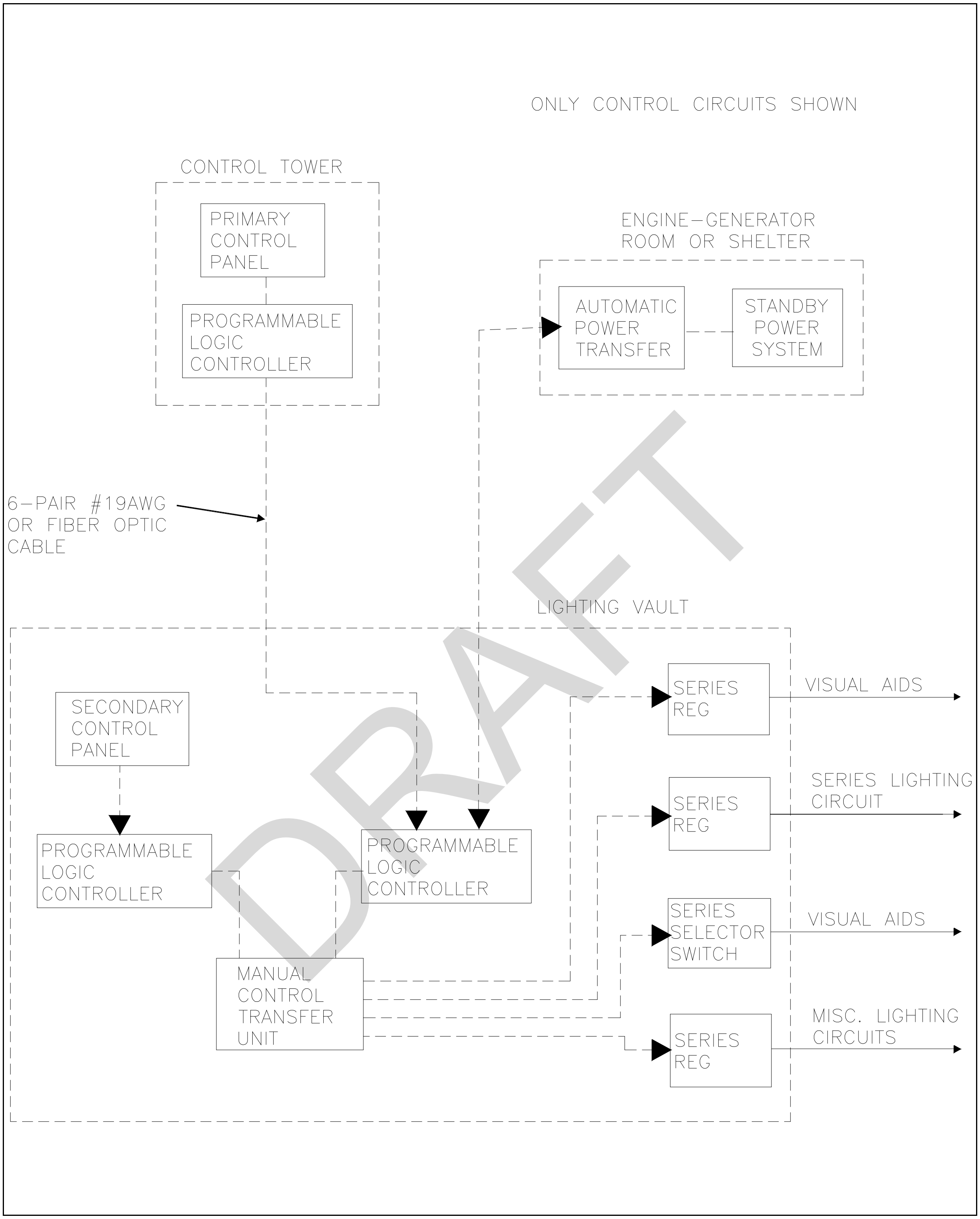


Figure 111. Typical PLC Control System Block Diagram.

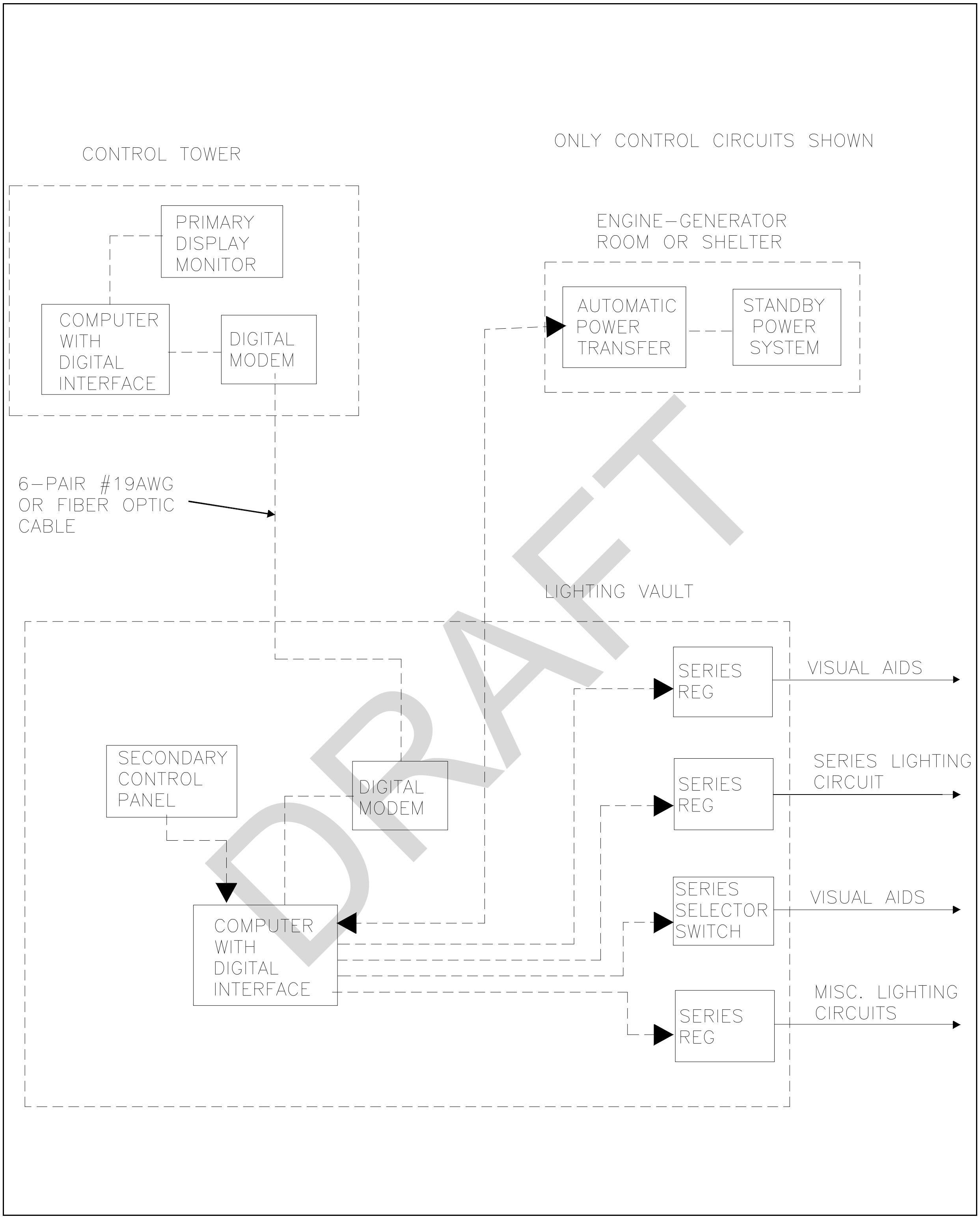


Figure 112. PC Control System Block Diagram.