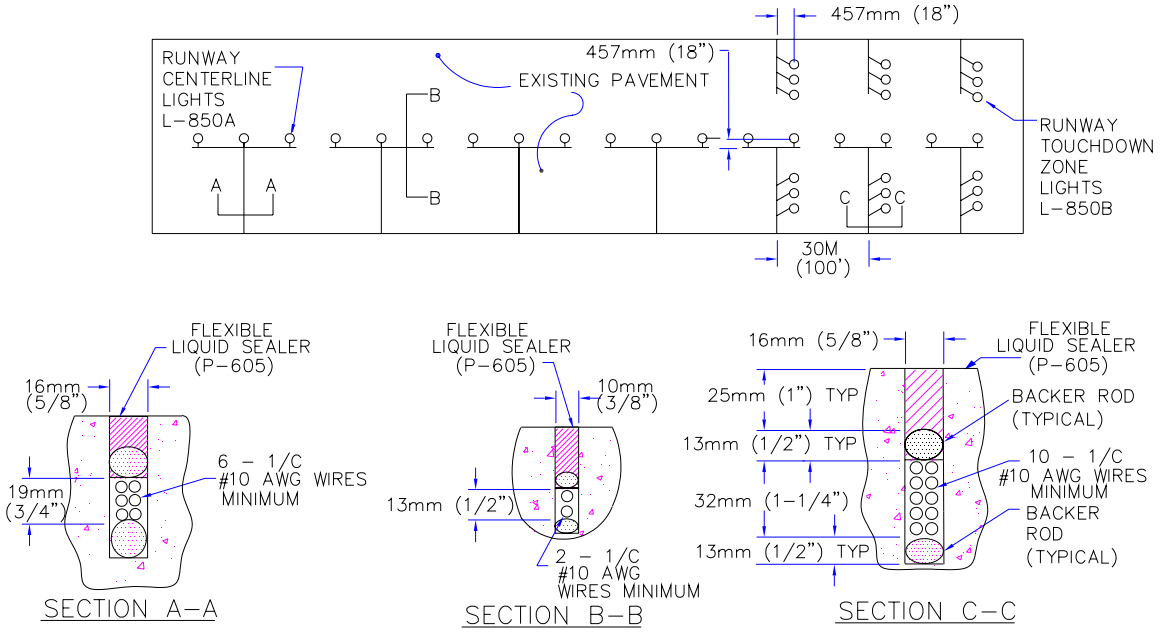
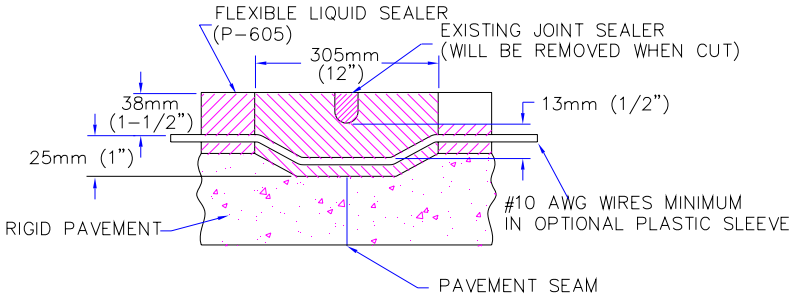


WIREWAY DETAILS FOR
CENTERLINE AND TOUCHDOWN ZONE LIGHTS



JOINT INTERSECTION AND SAWING DETAILS

WIRES ARE NOT TO BE LESS THAN 13mm (1/2") BELOW EXISTING JOINT SEAL COMPOUND

SAW KERF WIREWAY DETAILS: R/W CENTERLINE & TDZ LIGHTS

NOT TO SCALE

NOTES:

1. DIAMETER OF BACKER ROD SHALL BE 6mm (1/4") LARGER THAN WIDTH OF SAW KERF.
2. IN EXISTING PAVEMENT, THE EASIEST METHOD OF INSTALLING IN-PAVEMENT LIGHTING IS TO CORE A HOLE FOR THE FIXTURE AND MAKE A SAW KERF FOR THE WIREWAYS. PRIMARY CABLES AND TRANSFORMERS IN THIS CASE ARE LOCATED AT THE EDGE OF THE RUNWAY.
3. TO ASSURE A SUCCESSFULL INSTALLATION, CARE MUST BE TAKEN TO SEE THAT ALL SURFACES ARE SAND BLASTED AND DRIED BEFORE THE SEALER IS APPLIED.
4. USE SEALANTS THAT ARE CHEMICALLY COMPATIBLE WITH THE PAVEMENT MATERIAL. IT IS EXTREMELY IMPORTANT TO CAREFULLY RESEARCH PAST USE HISTORY OF THE SEALANT TO BE SPECIFIED.

Figure 38. Saw Kerf Wireway Details.

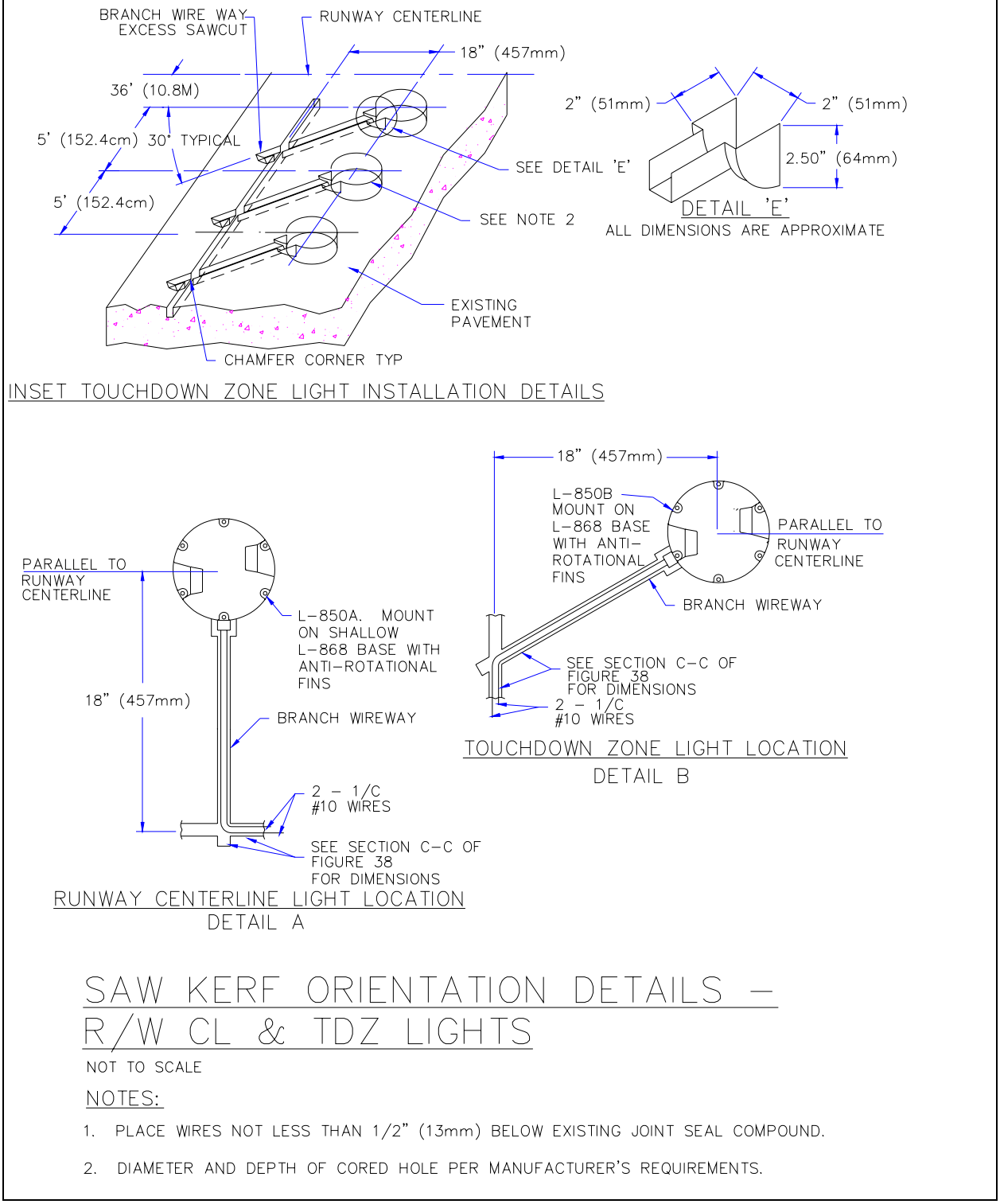


Figure 39. Saw Kerf Orientation Details – R/W Centerline and TDZ Lights.

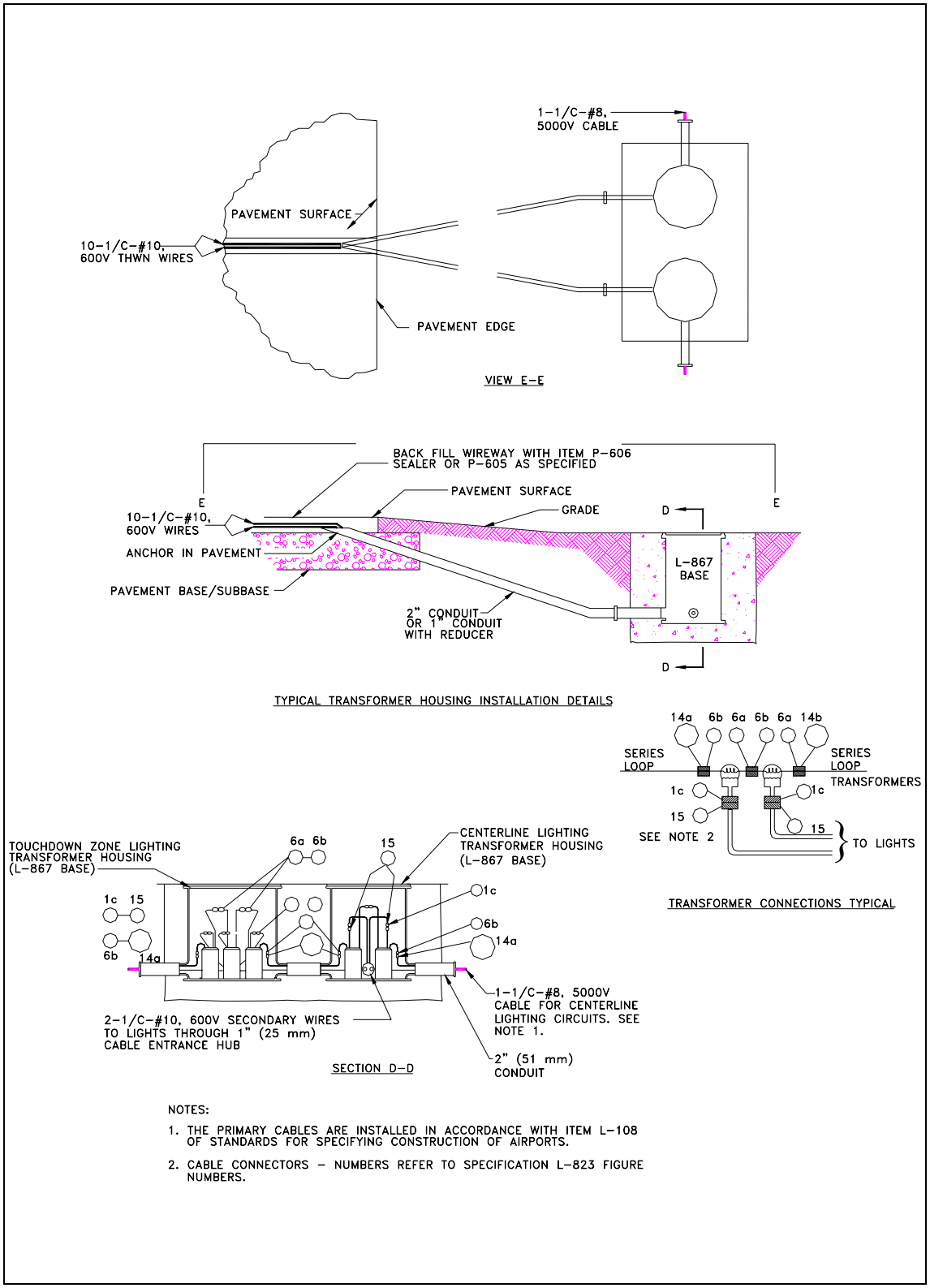


Figure 40. Transformer Housing Installation Details Inset Type Lighting Fixtures.

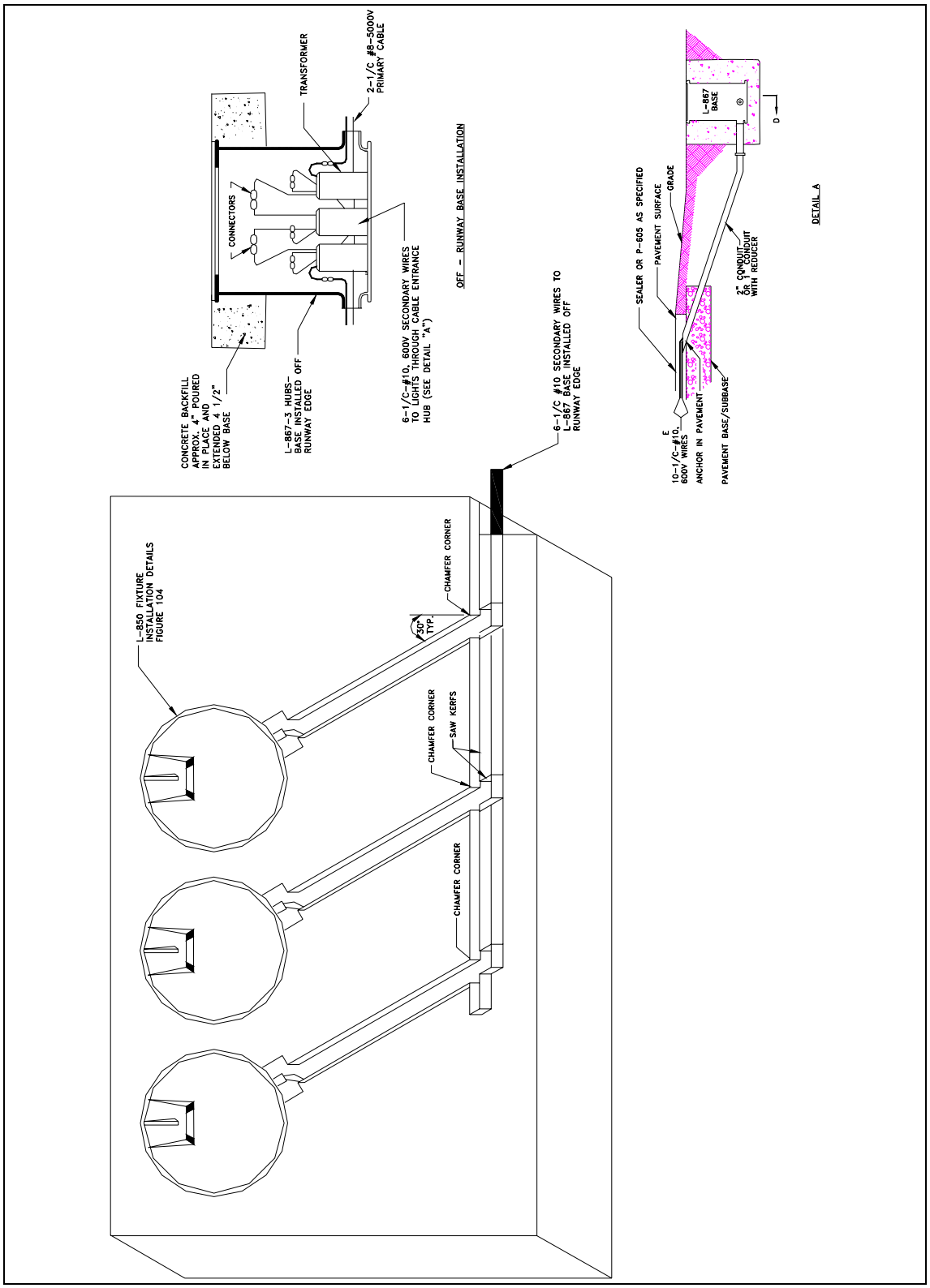


Figure 41. Typical Equipment Layout, Inset Type Lighting Fixtures.

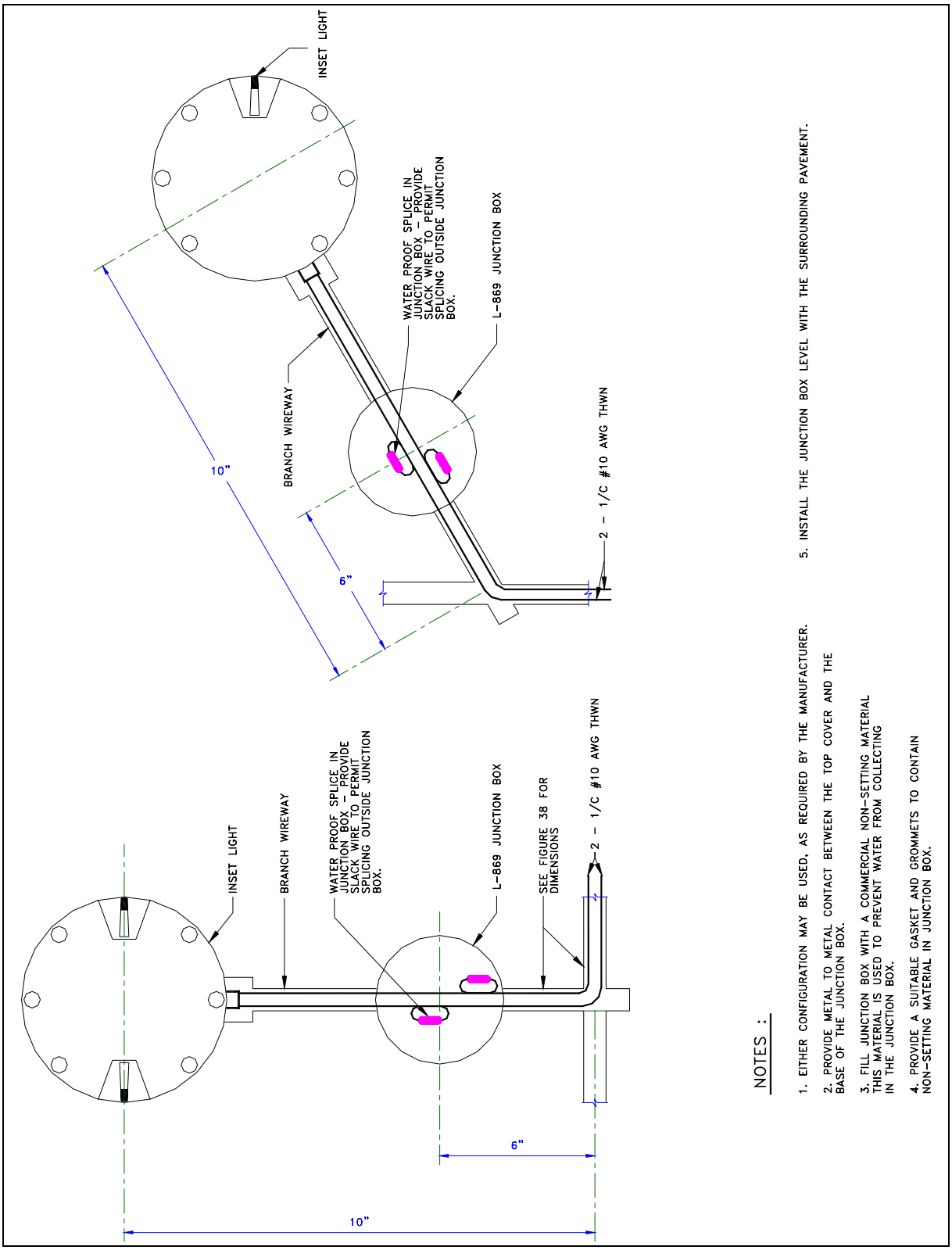


Figure 42. Junction Box for Inset Fixture Installation.

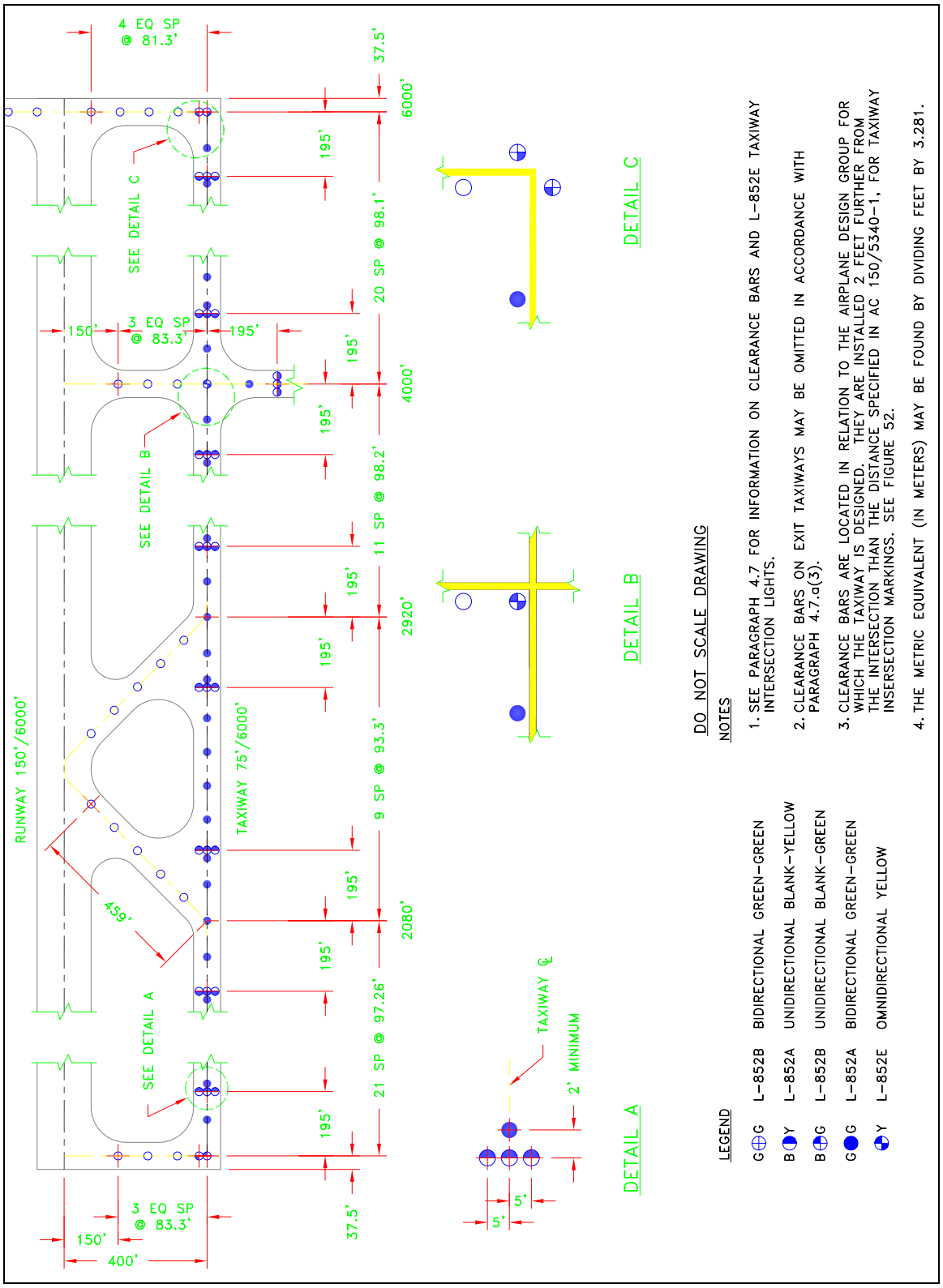


Figure 43. Typical Taxiway Centerline Lighting Configuration for Non-Standard Fillets (Centerline light spacing for operations above 1,200 feet (365 m) RVR).

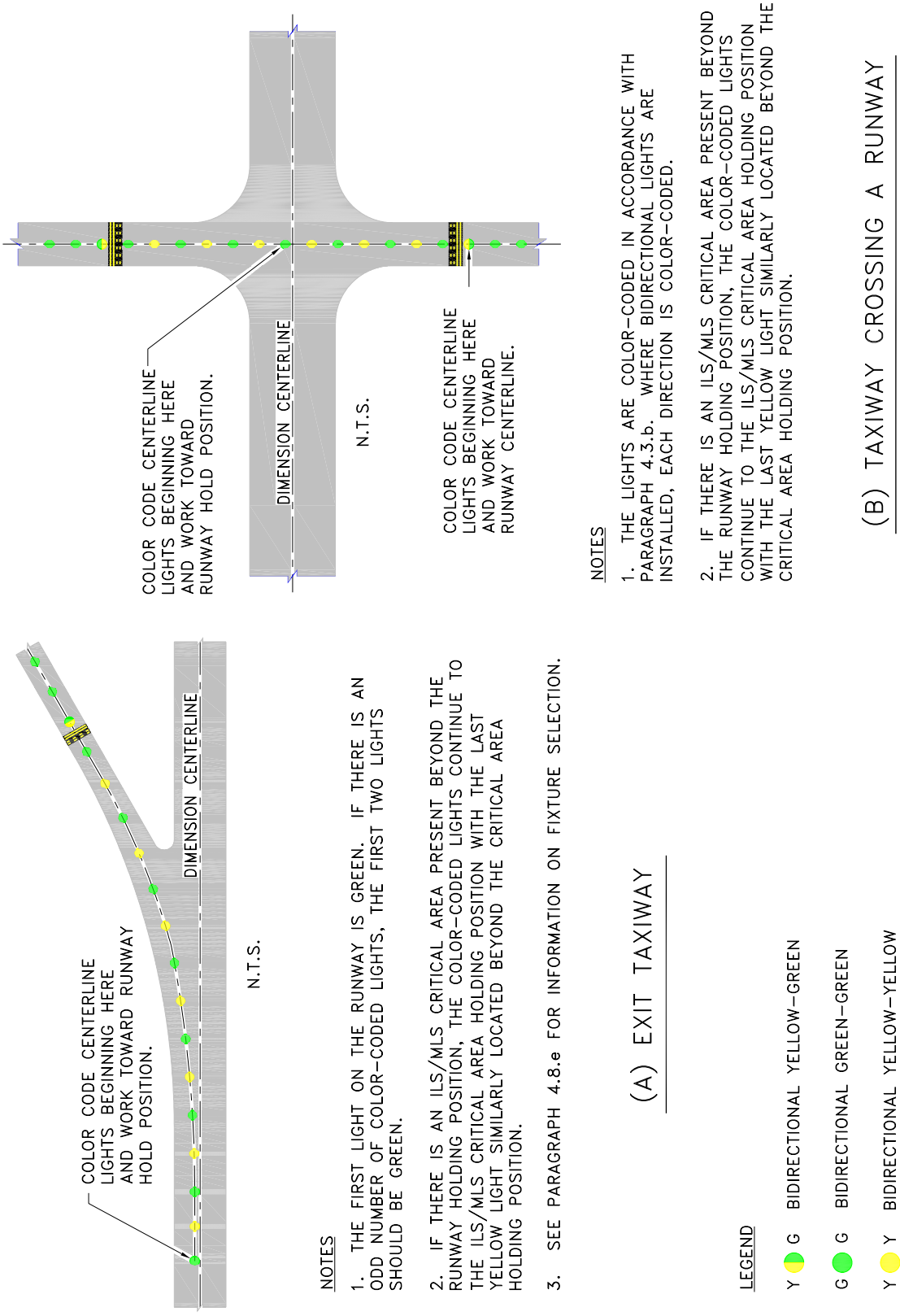


Figure 44. Color-Coding of Exit Taxiway Centerline Lights.

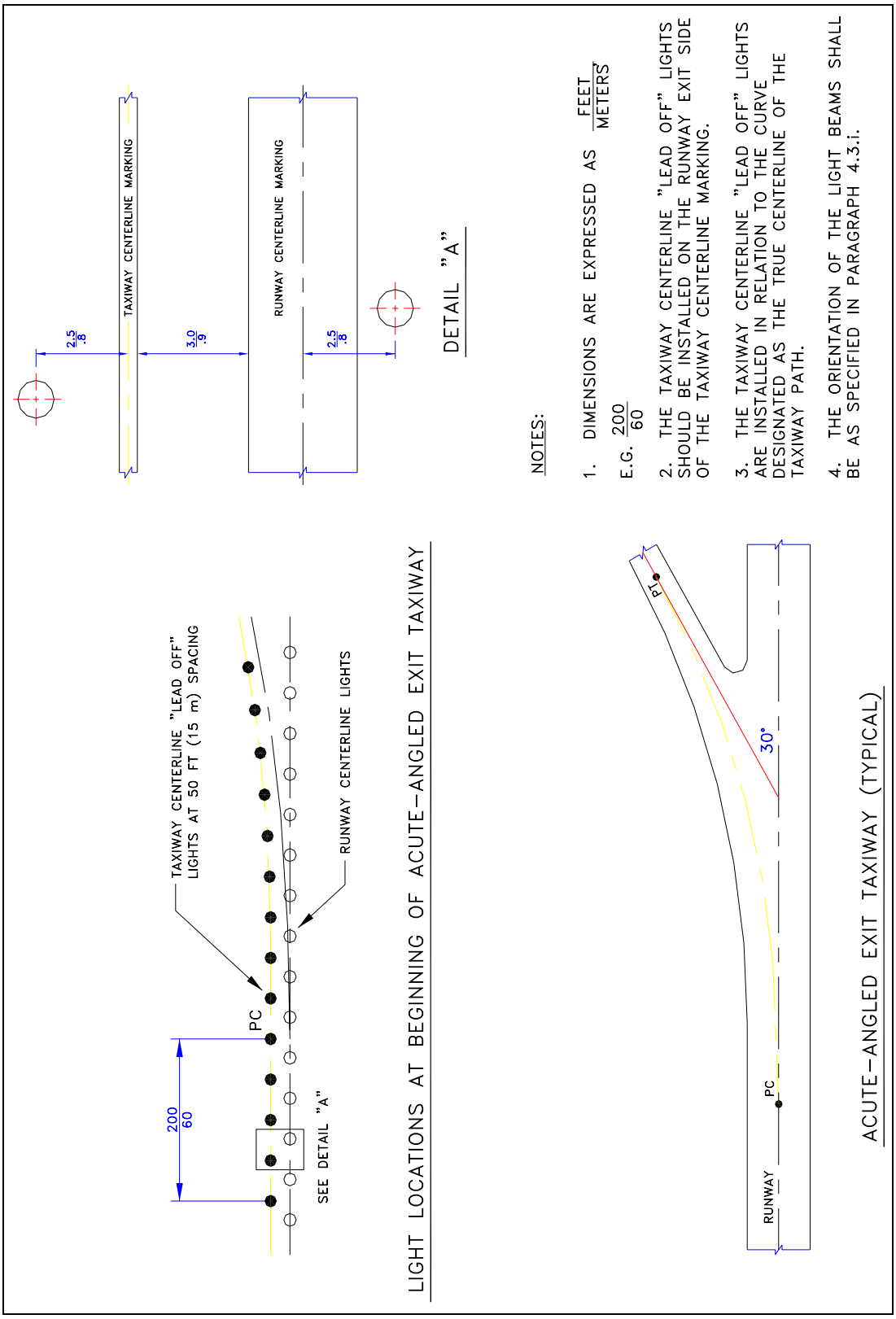


Figure 45. Taxiway Centerline Lighting Configuration for Acute-Angled Exits.

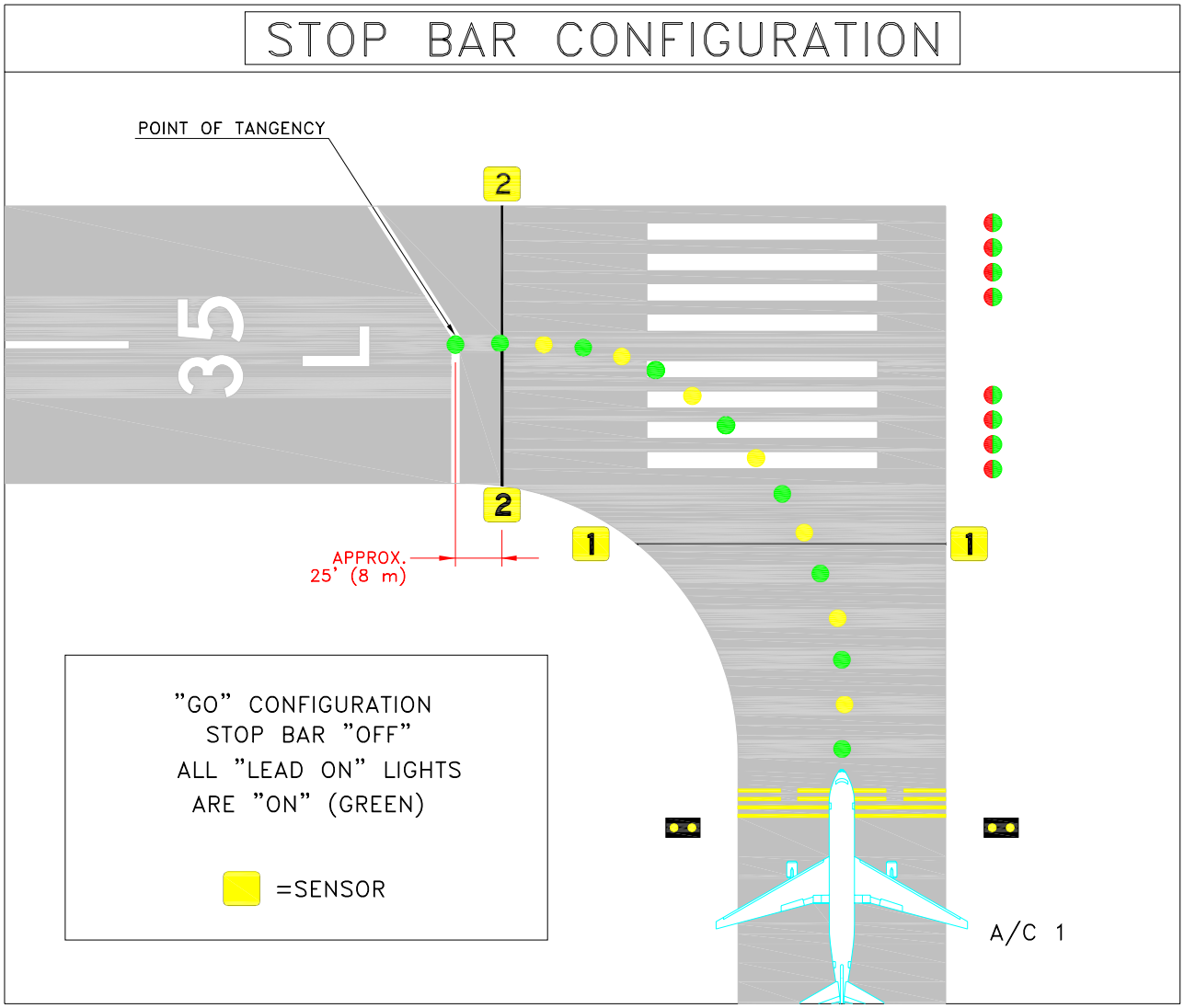


Figure 46. Controlled Stop Bar Design and Operation – "GO" Configuration.

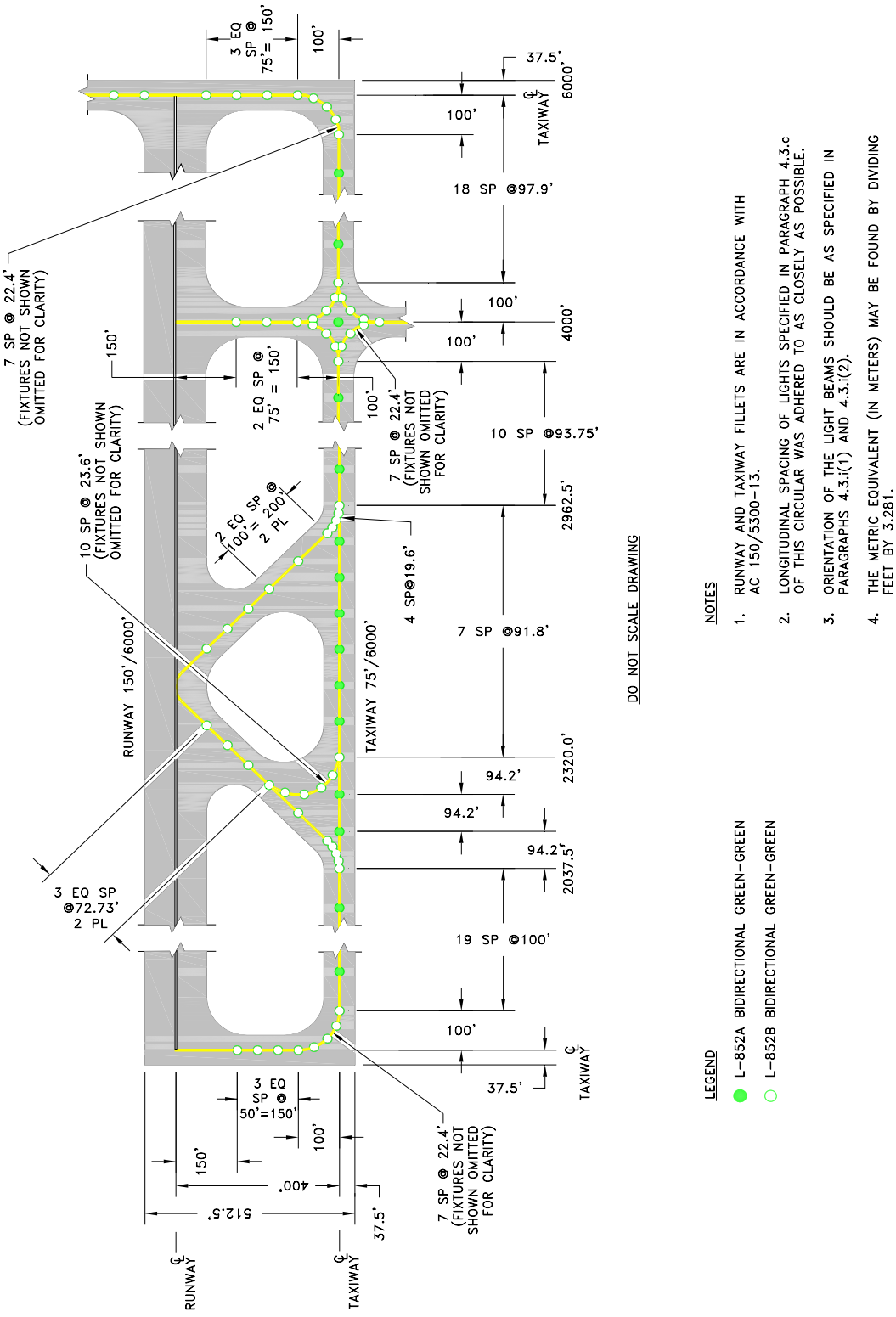


Figure 47. Typical Taxiway Centerline Lighting Configuration for Standard Fillets (Centerline light spacing for operations above 1,200 feet (365 m) RVR).

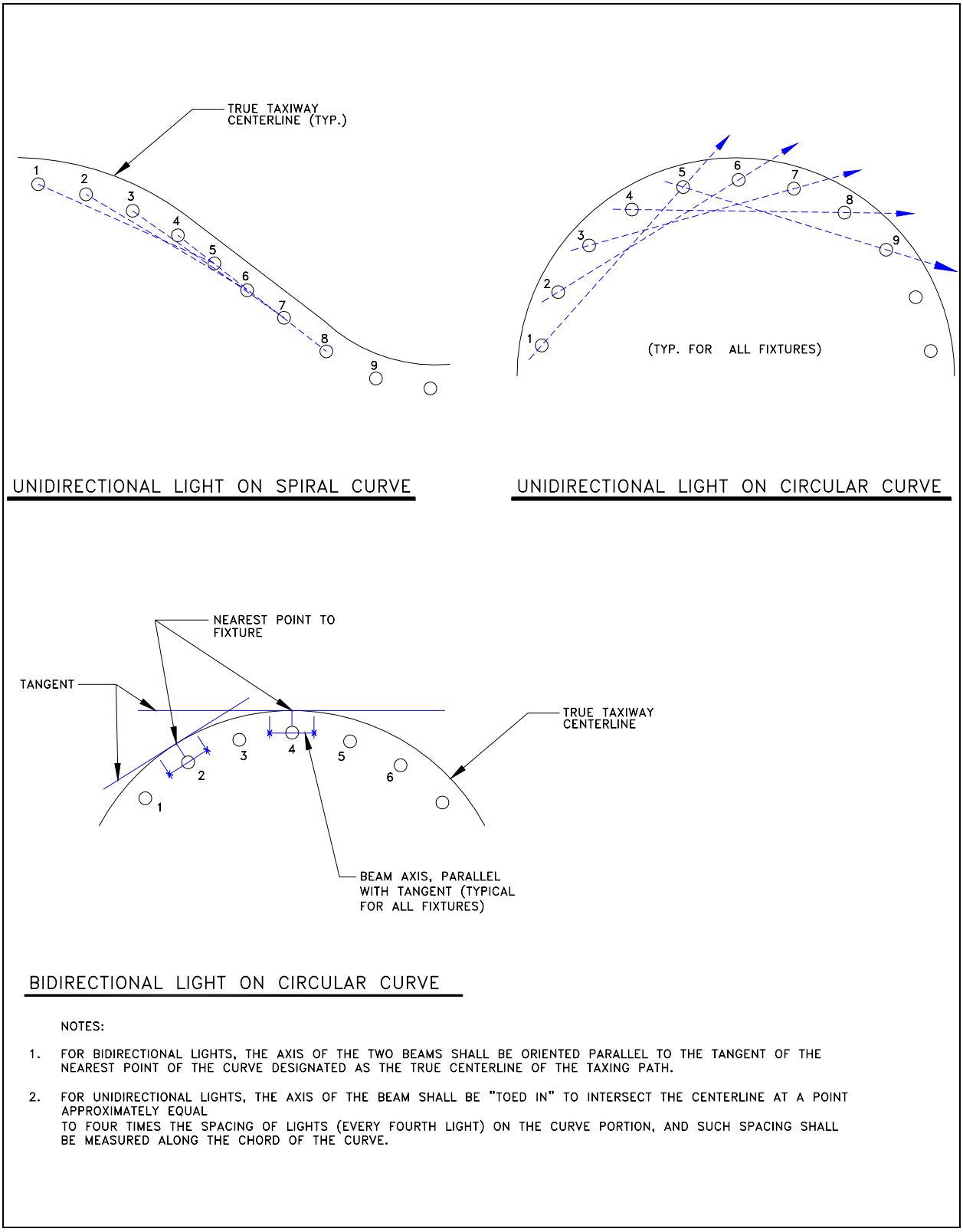


Figure 48. Taxiway Centerline Light Beam Orientation.

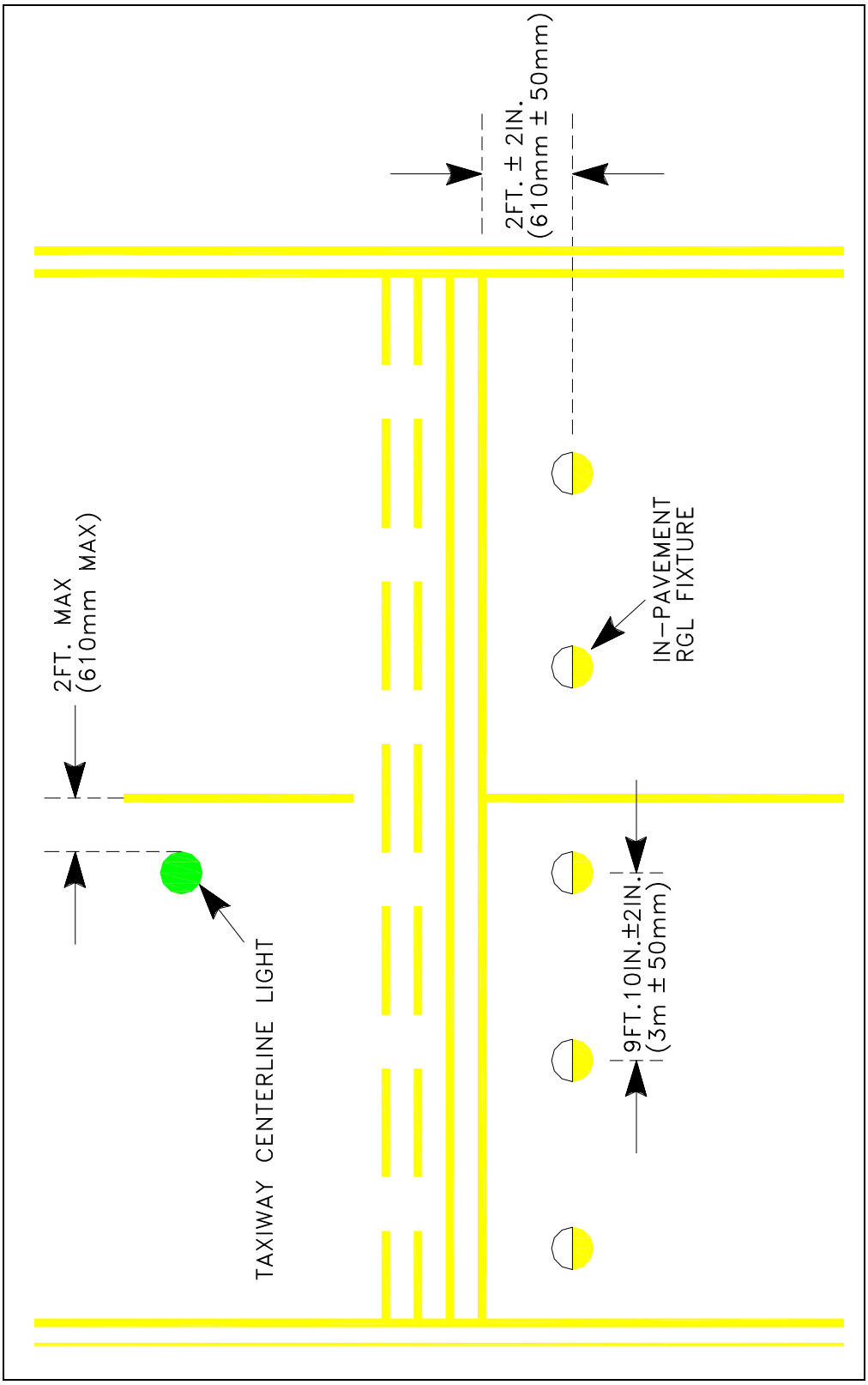


Figure 49. In-Pavement Runway Guard Light Configuration.

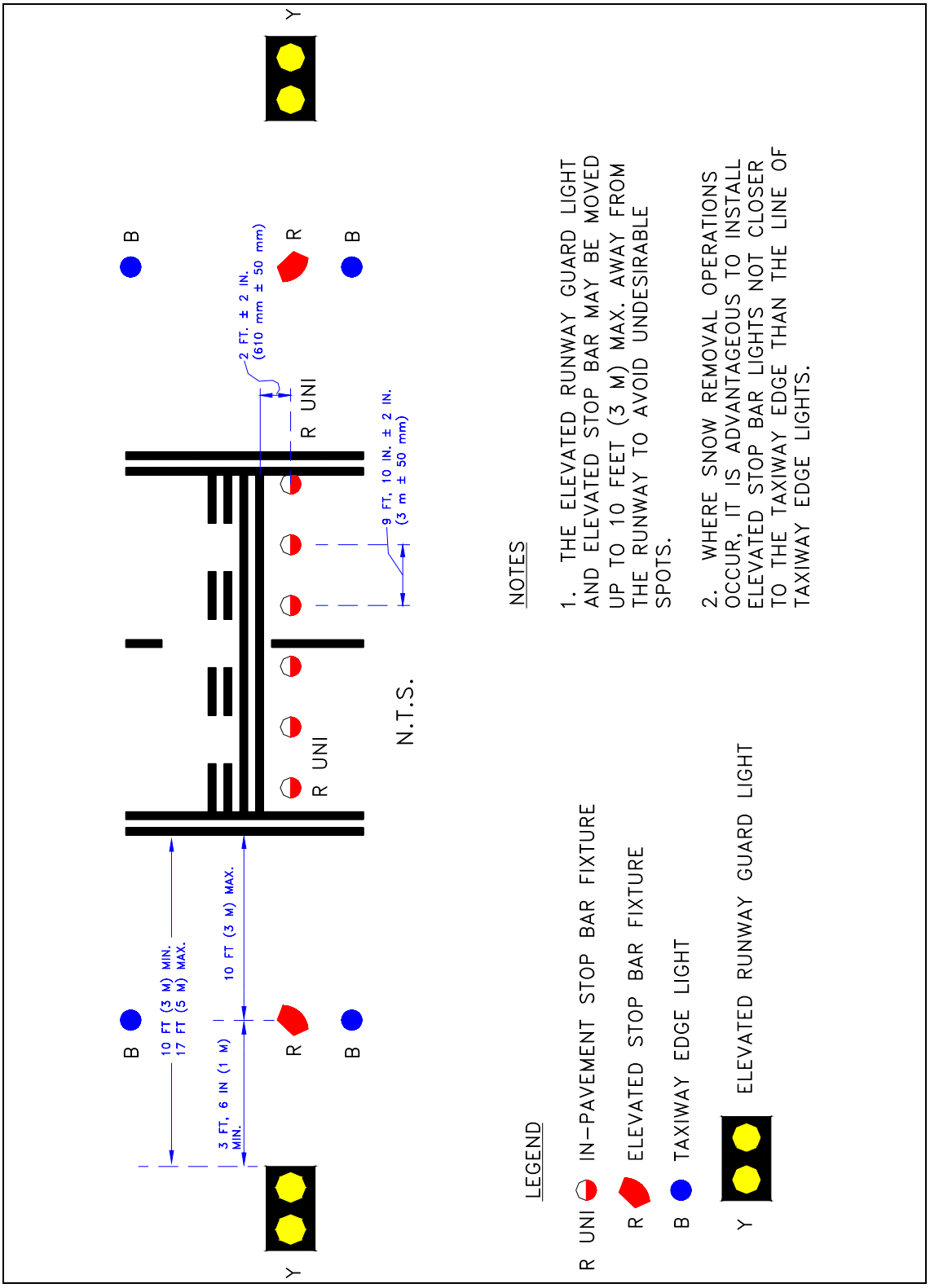


Figure 50. Elevated RGL and Stop Bar Configuration.

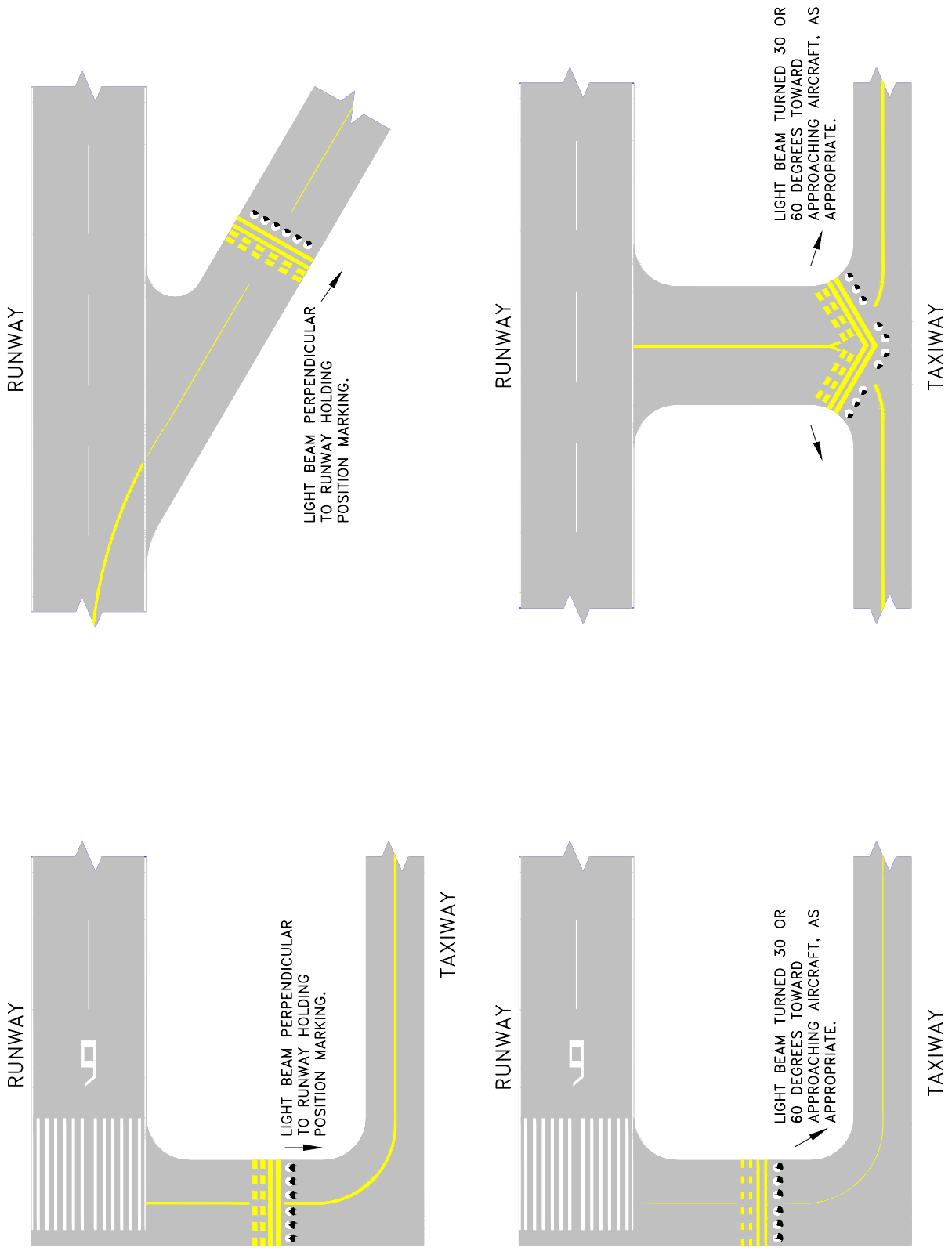


Figure 51. Typical Light Beam Orientation for In-Pavement RGLs and Stop Bars.

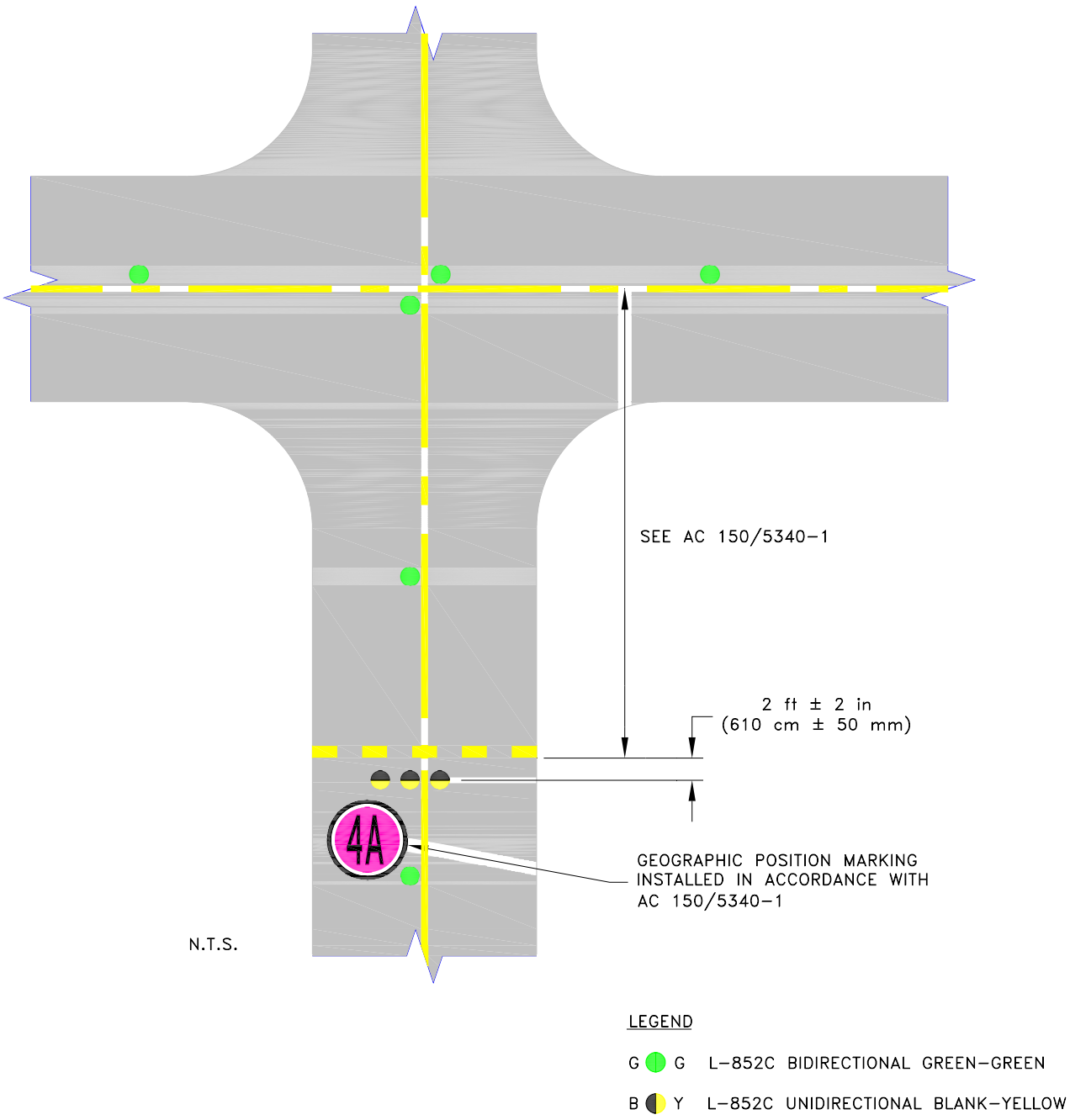


Figure 52. Clearance Bar Configuration at a Low Visibility Hold Point.

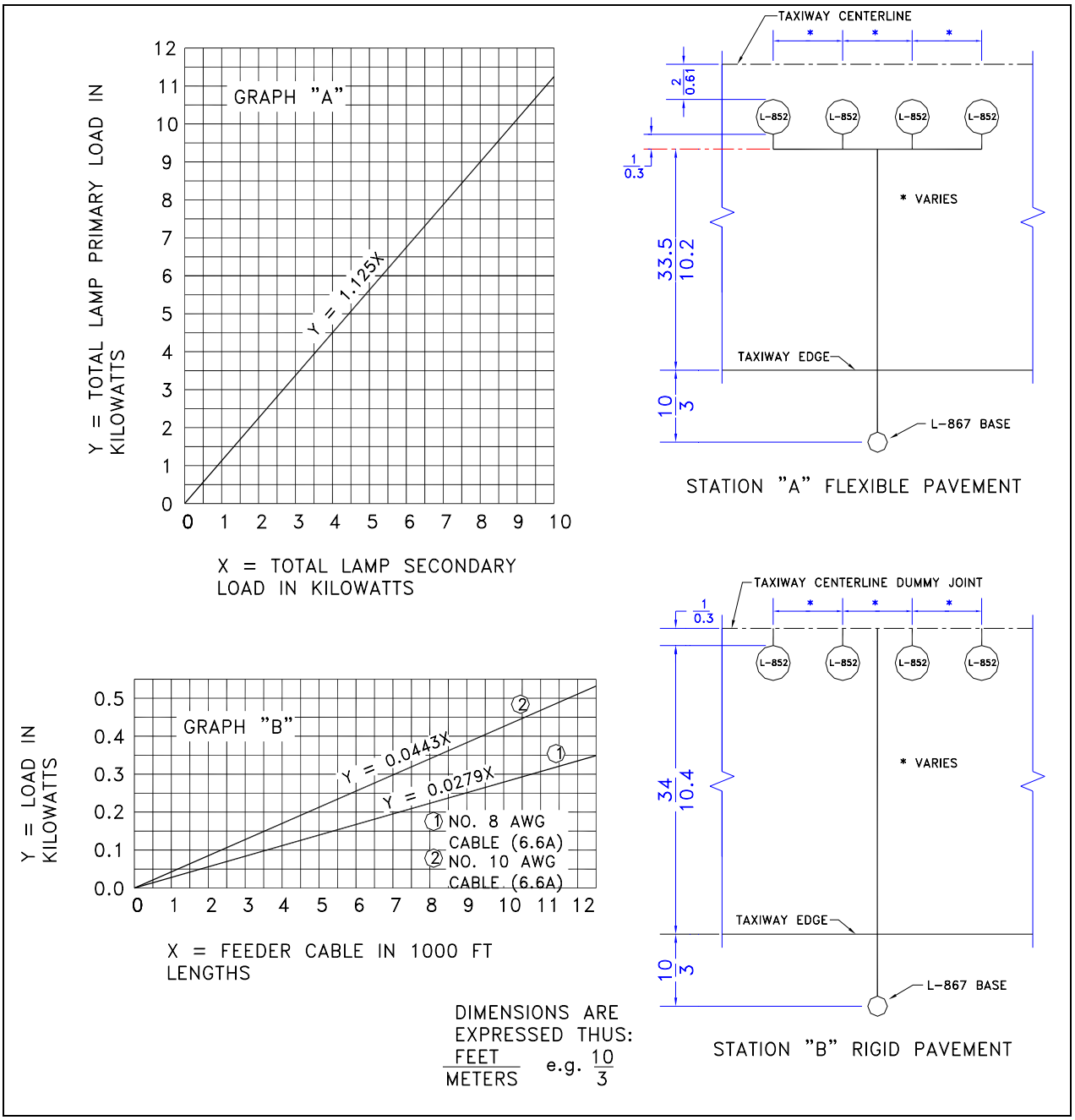


Figure 53. Curves for Estimating Primary Load for Taxiway Centerline Lighting Systems.

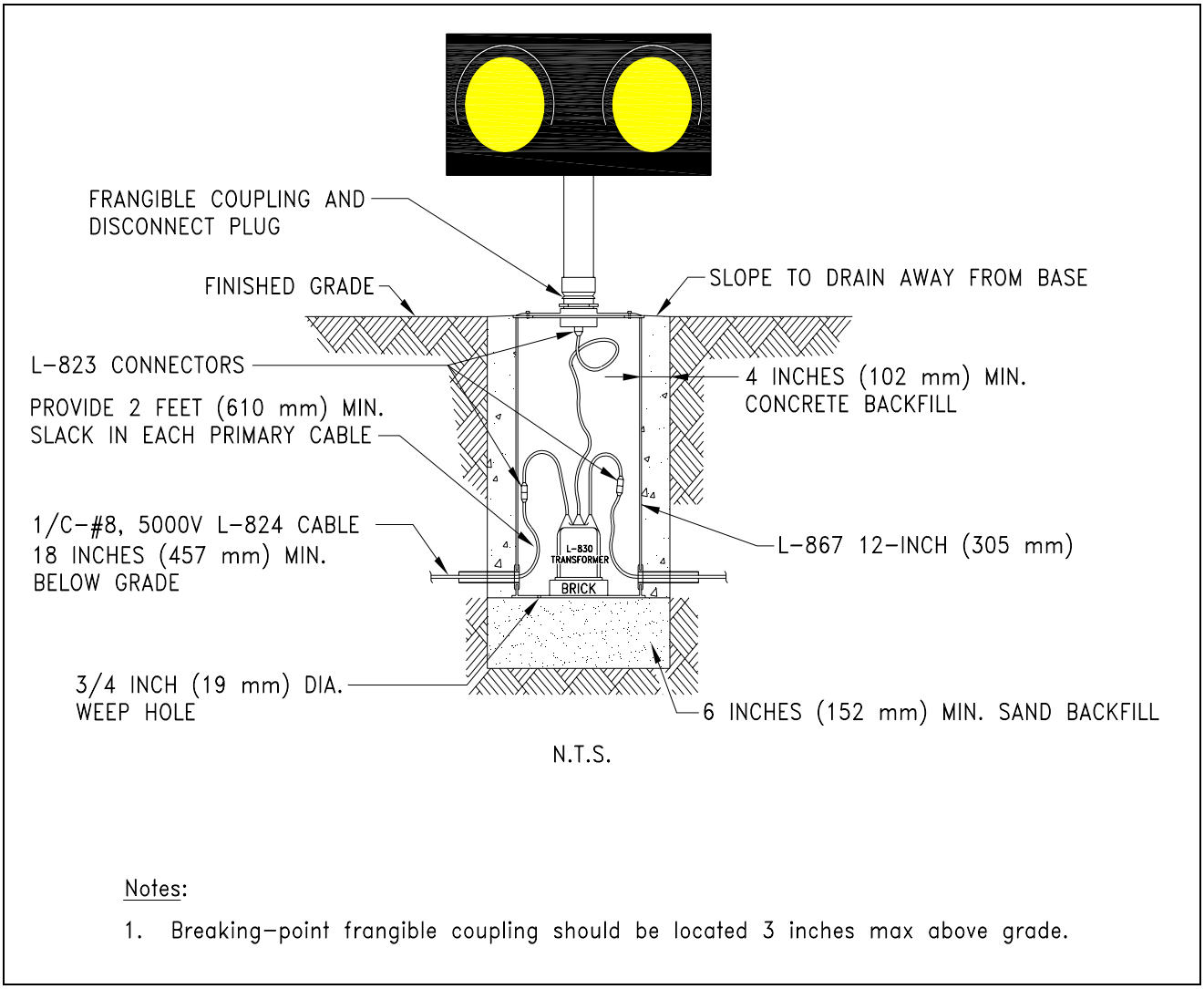


Figure 54. Typical Elevated RGL Installation Details.

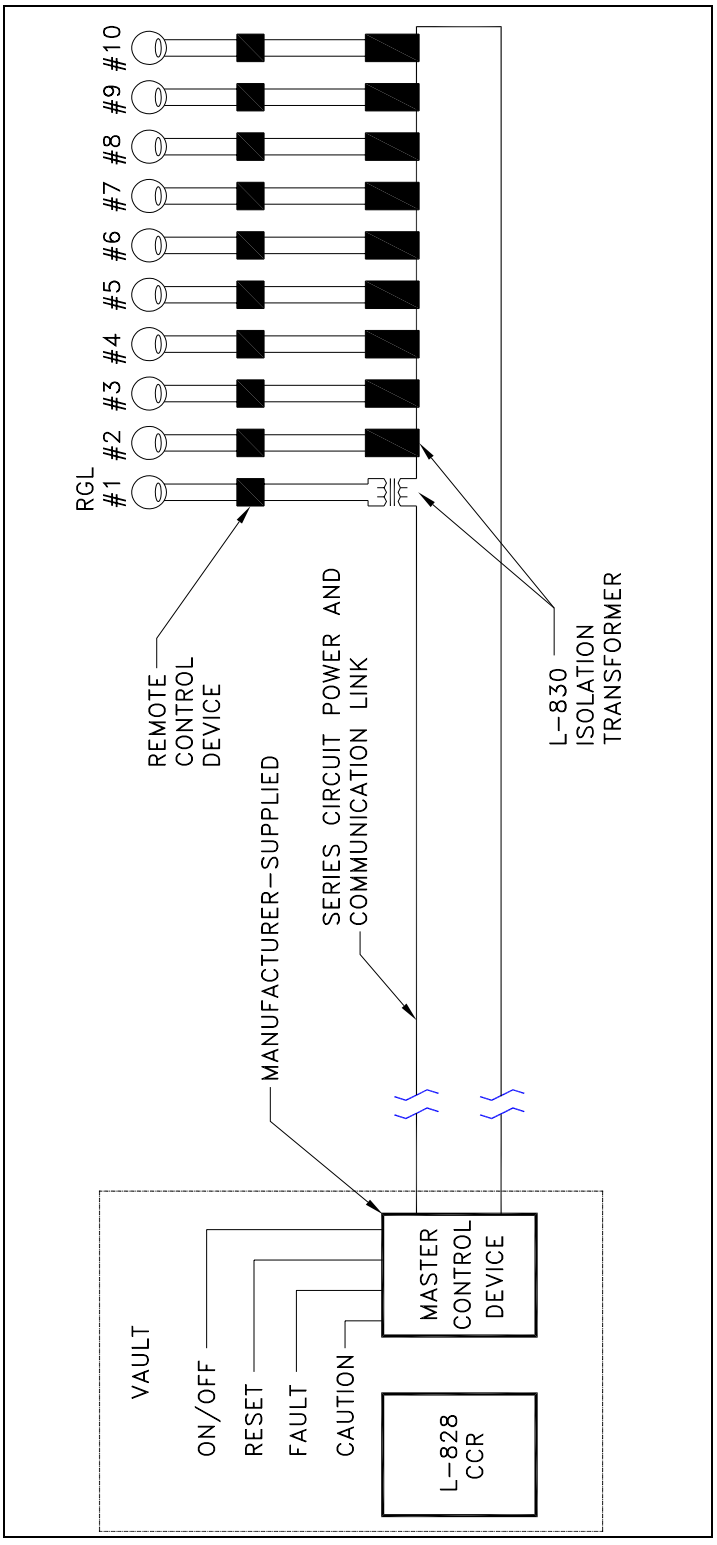


Figure 55. Typical In-Pavement RGL External Wiring Diagram – Power Line Carrier Communication, One Light Per Remote.

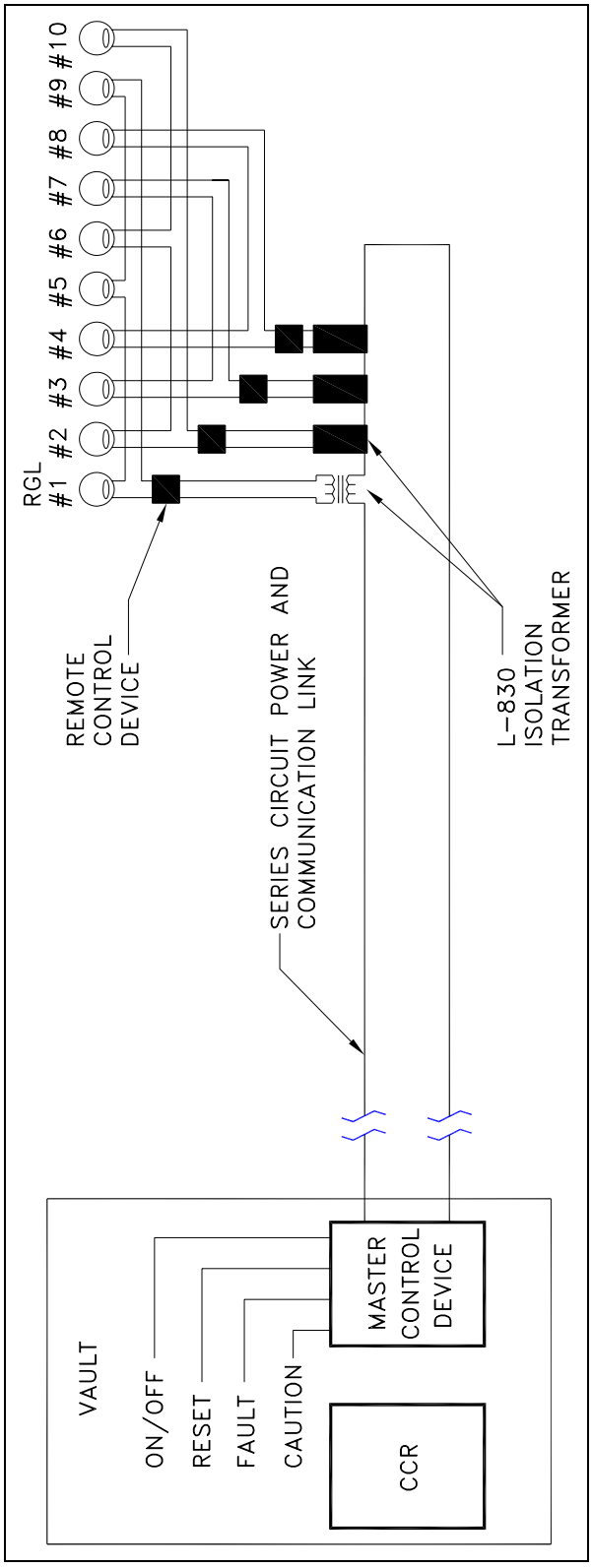


Figure 56. Typical In-Pavement RGL External Wiring Diagram – Power Line Carrier Communication, Multiple Lights per Remote.

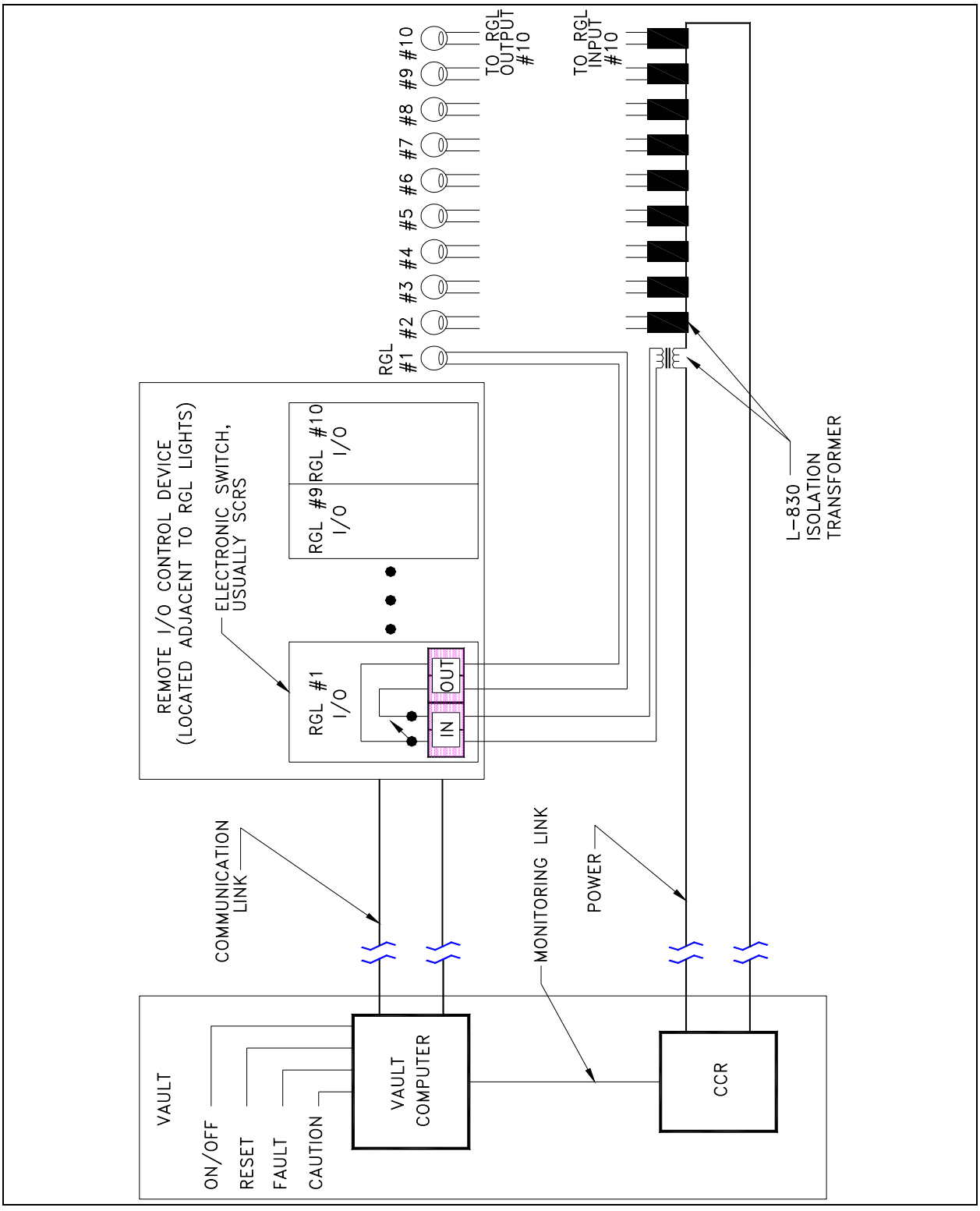


Figure 57. Typical In-Pavement RGL External Wiring Diagram – Dedicated Communication Link.

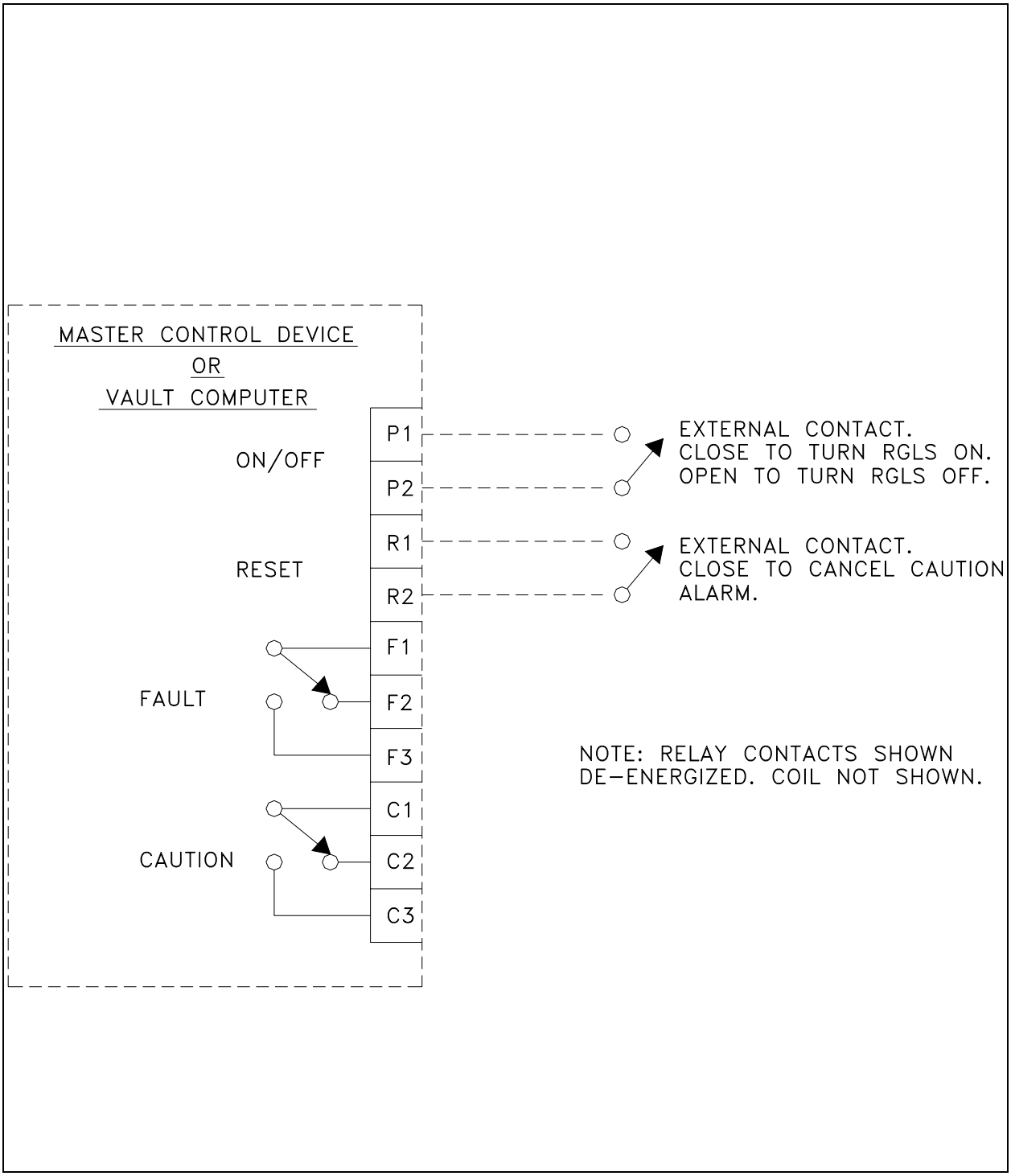


Figure 58. In-Pavement RGL Alarm Signal Connection.

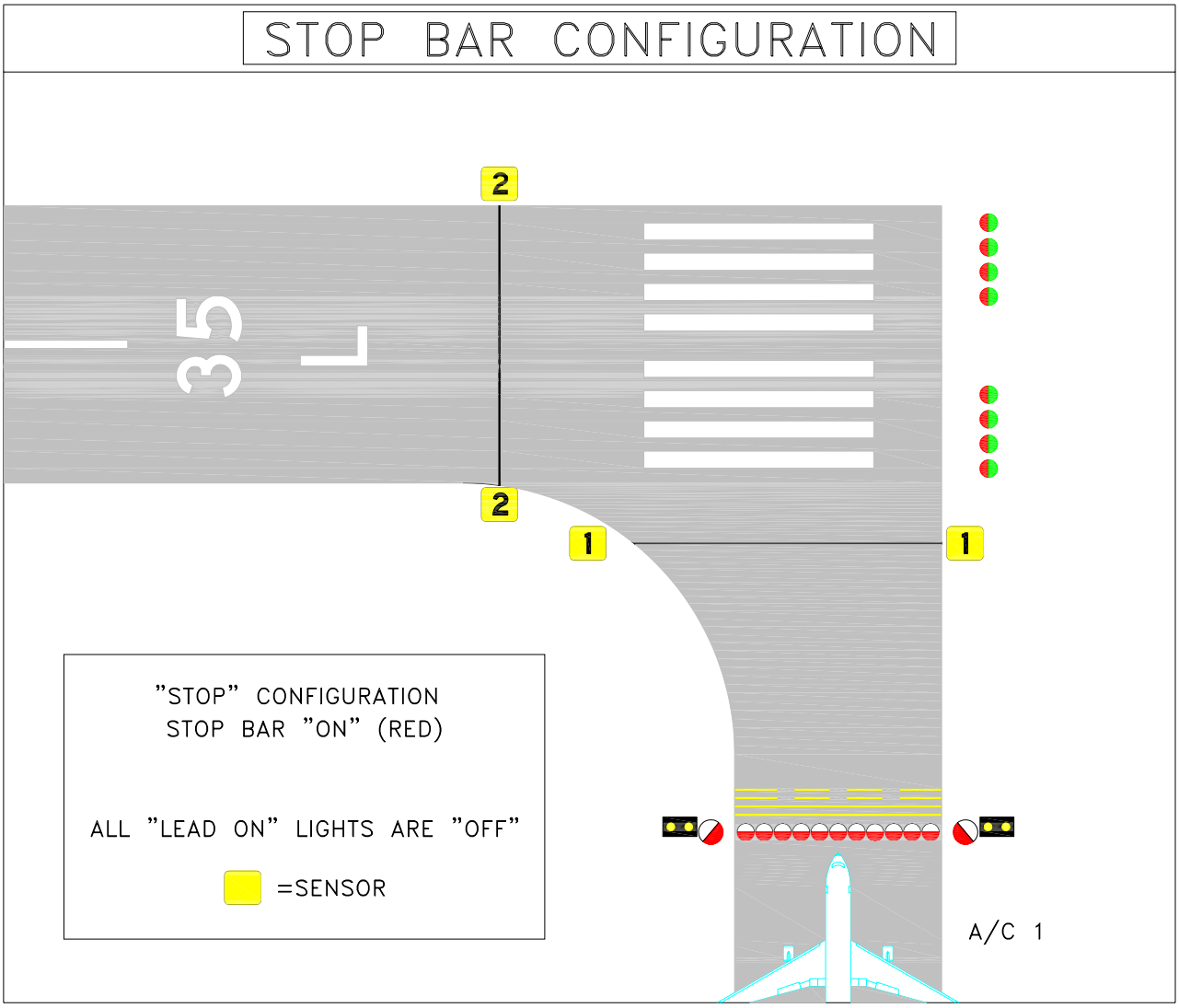


Figure 59. Controlled Stop Bar Design and Operation – "STOP" Configuration.

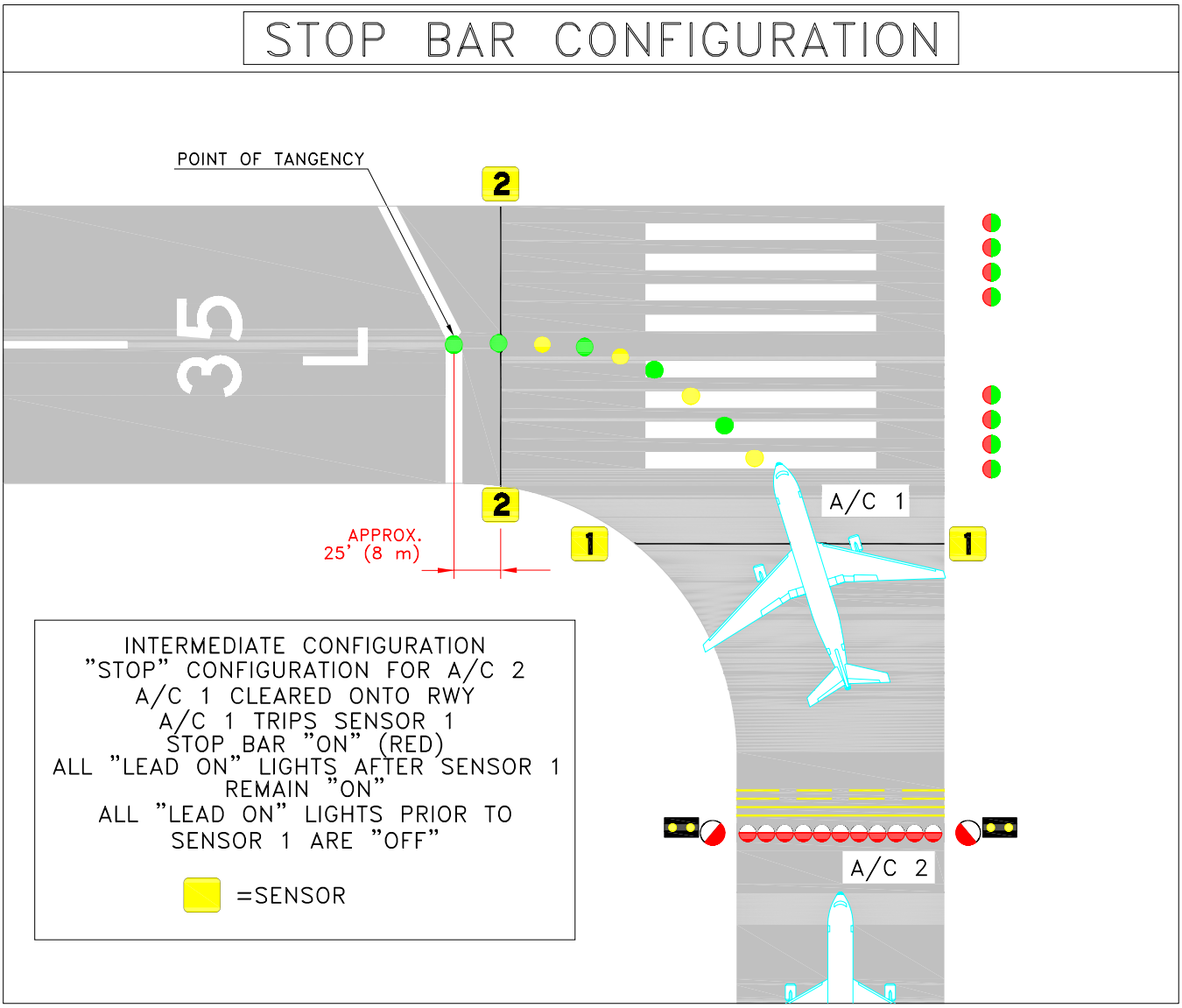


Figure 60. Controlled Stop Bar Design and Operation – Intermediate Configuration.

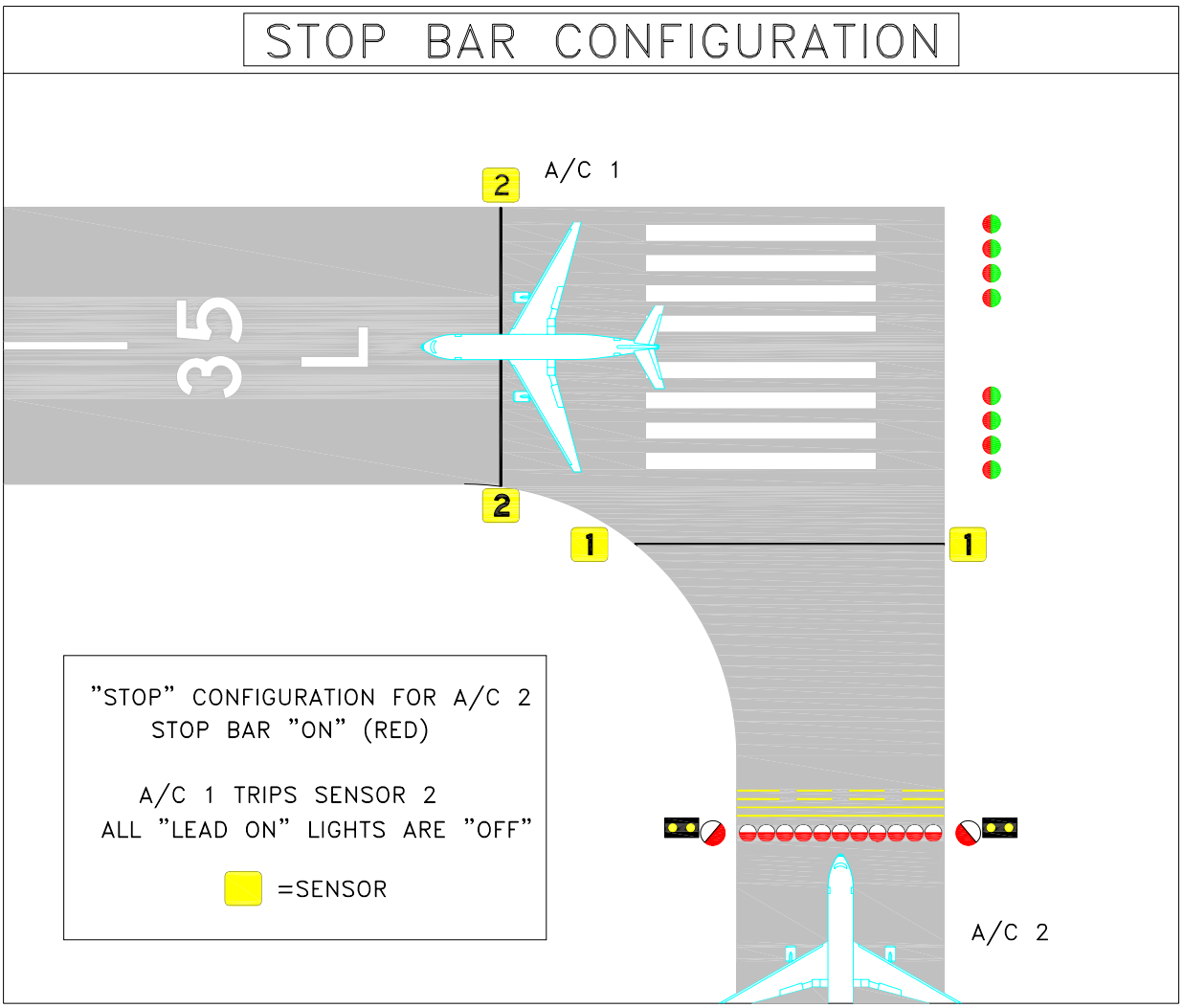


Figure 61. Controlled Stop Bar Design and Operation – "STOP" Configuration for A/C 2.

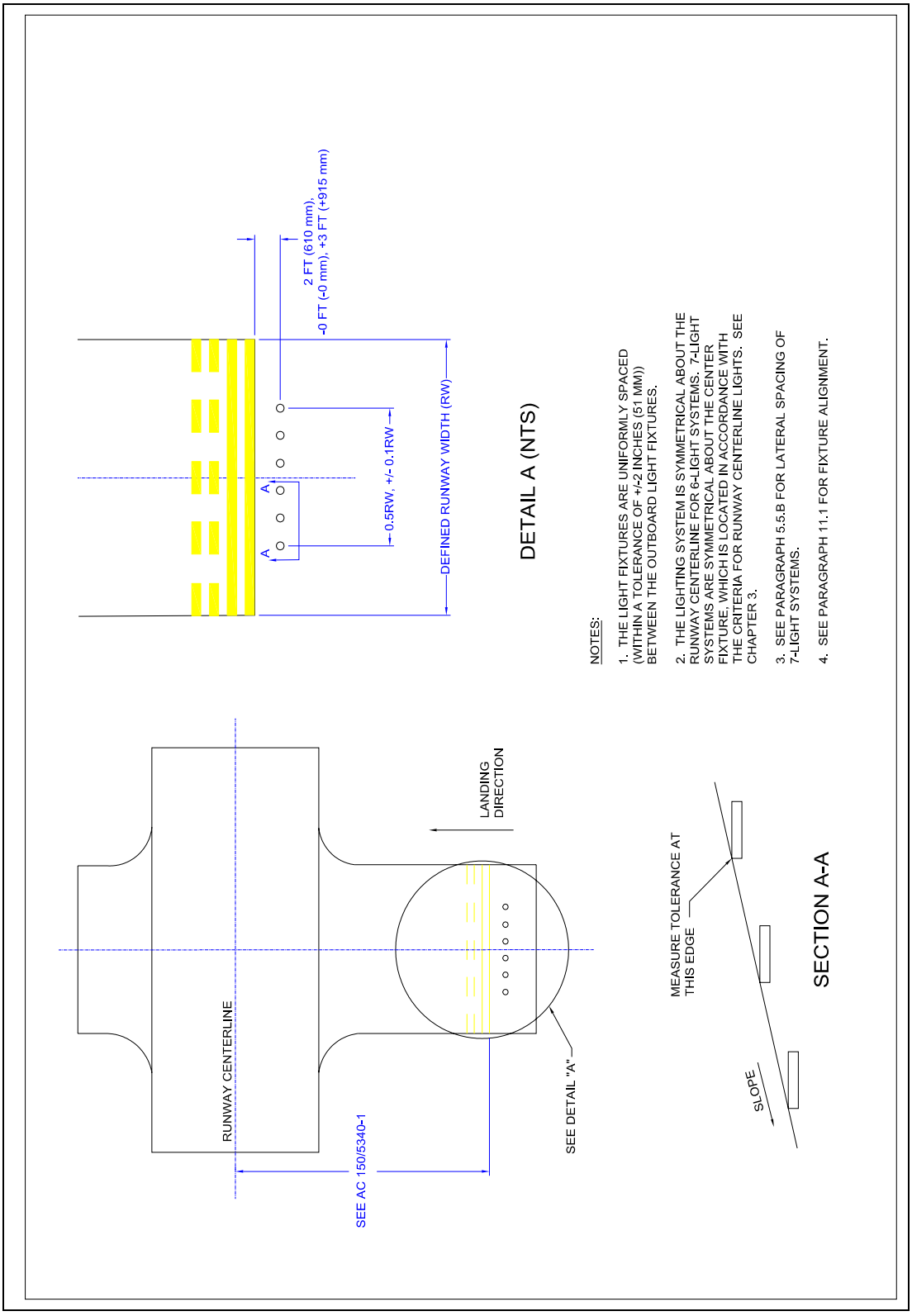
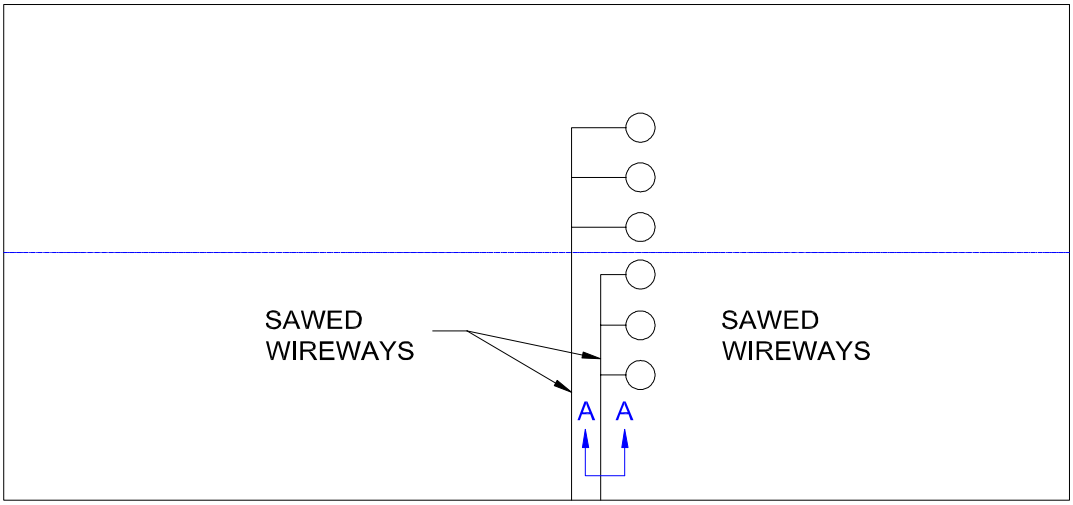
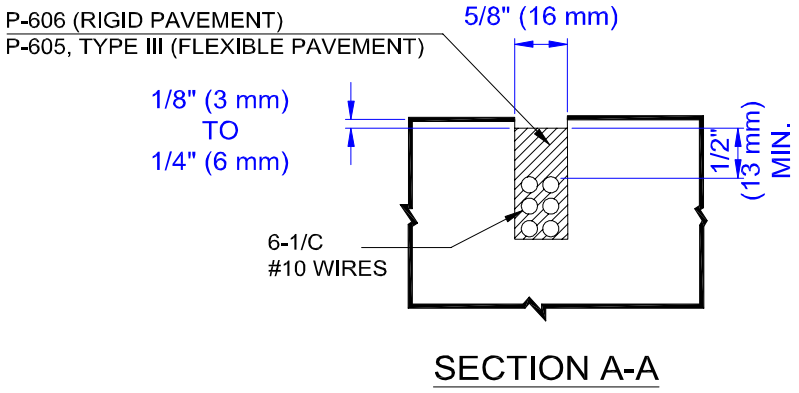


Figure 62. Typical Layout for Land and Hold Short Lights.





SECTION A-A

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.

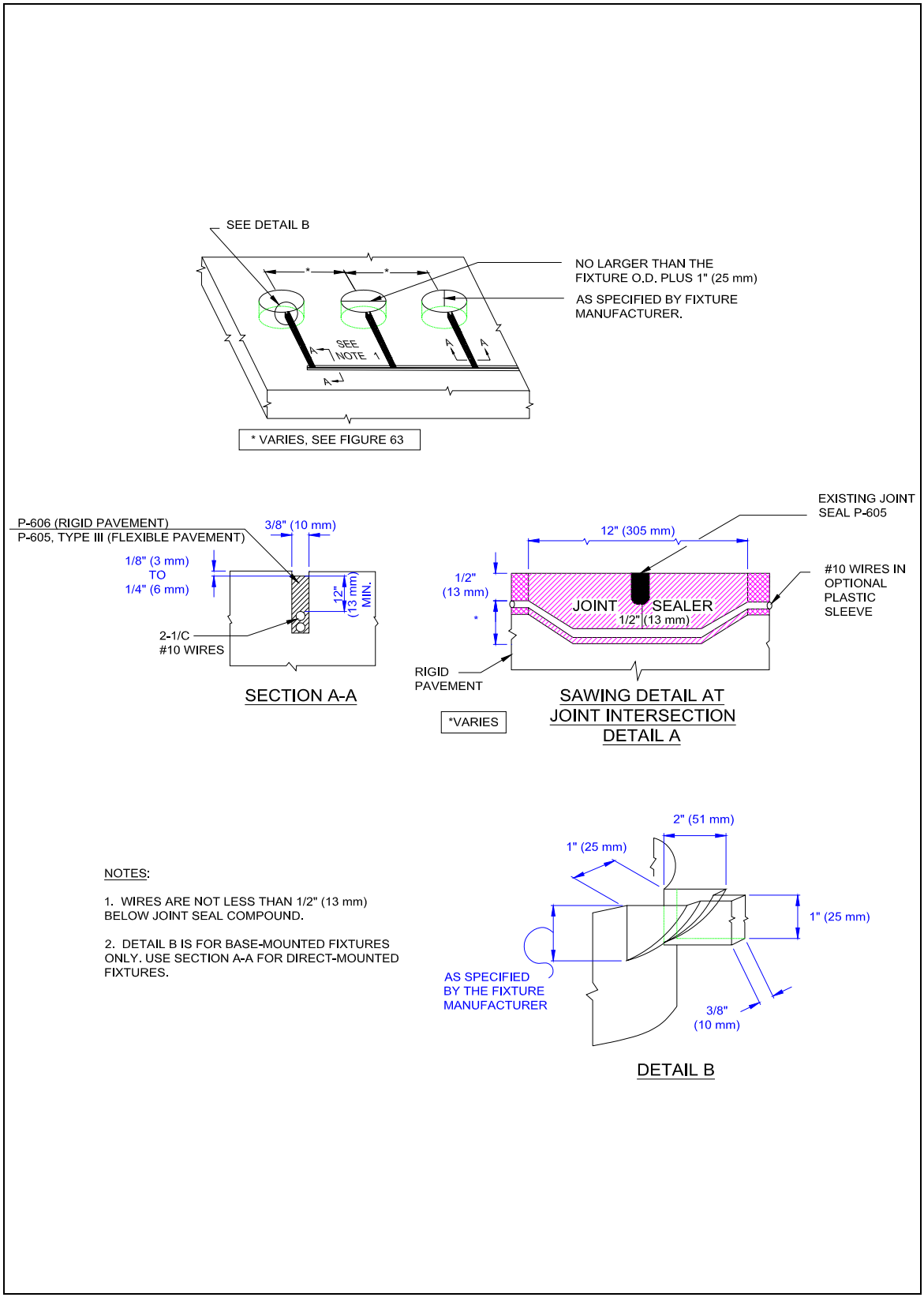


Figure 64. Sawing & Drilling Details for In-pavement Land & Hold Short Lights.

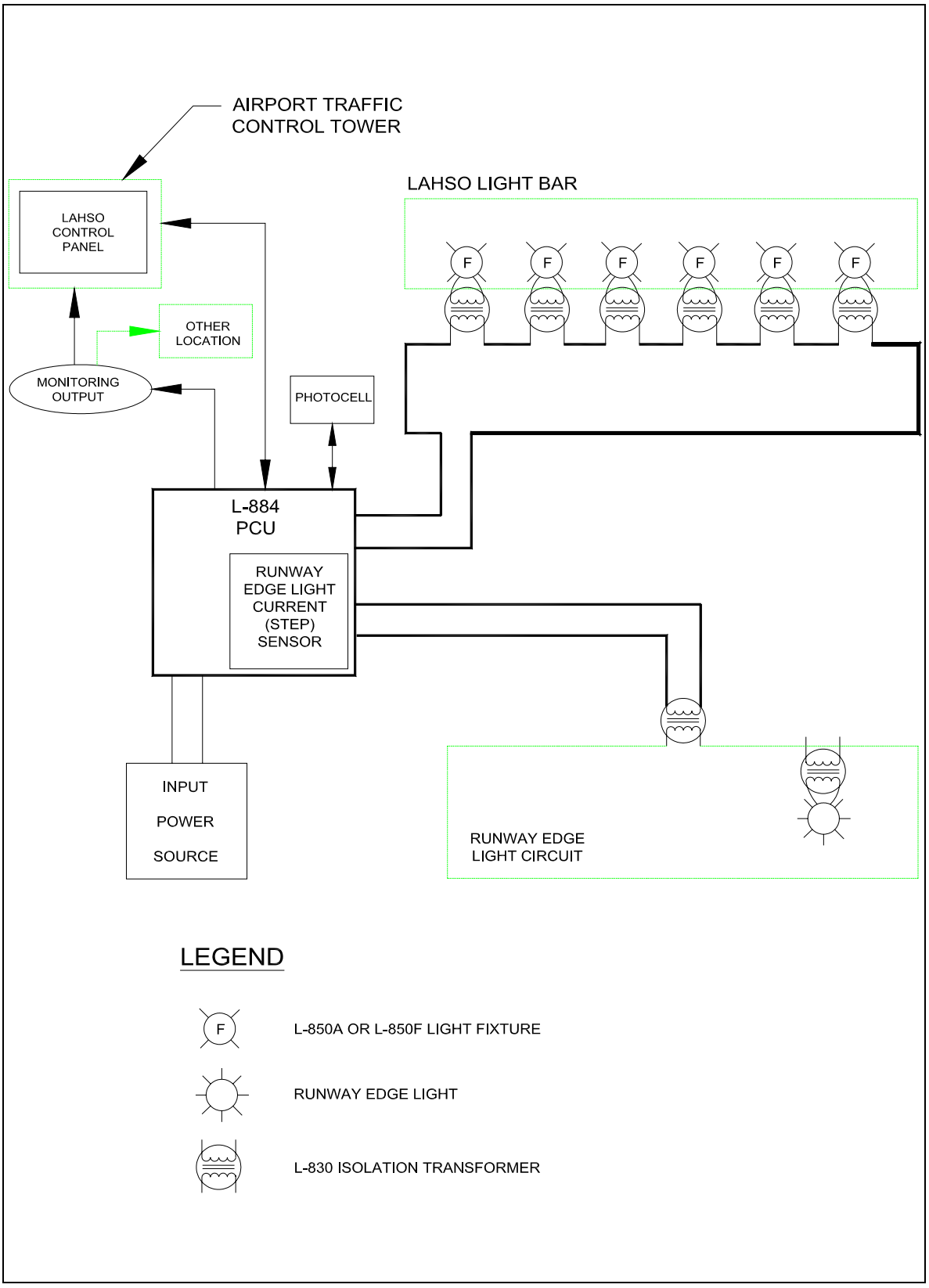


Figure 65. Typical Block Diagram for Land & Hold Short Lighting System.

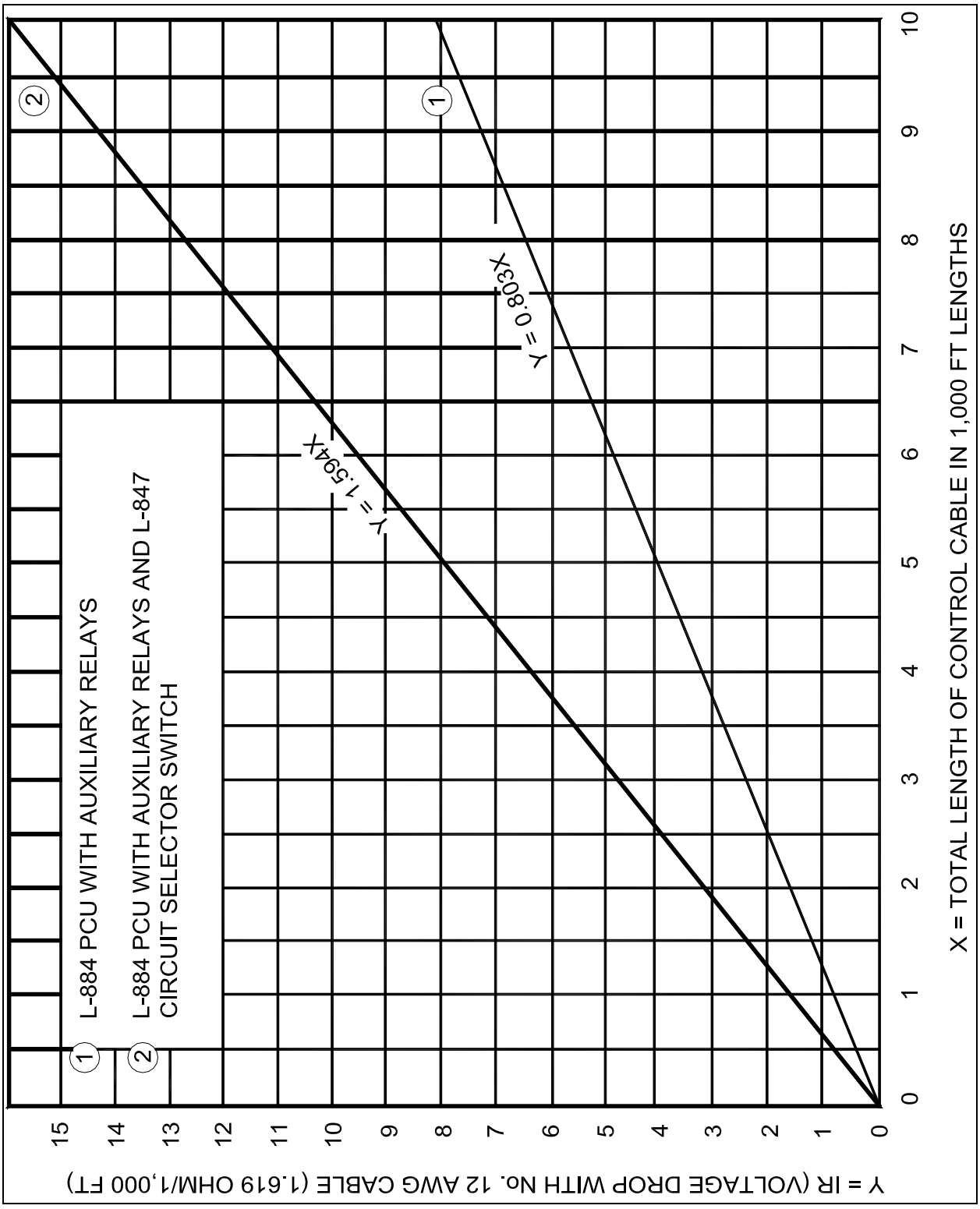


Figure 66. Typical Curve for Determining Maximum Separation Between Vault and Control Panel with 120-volt AC Control.

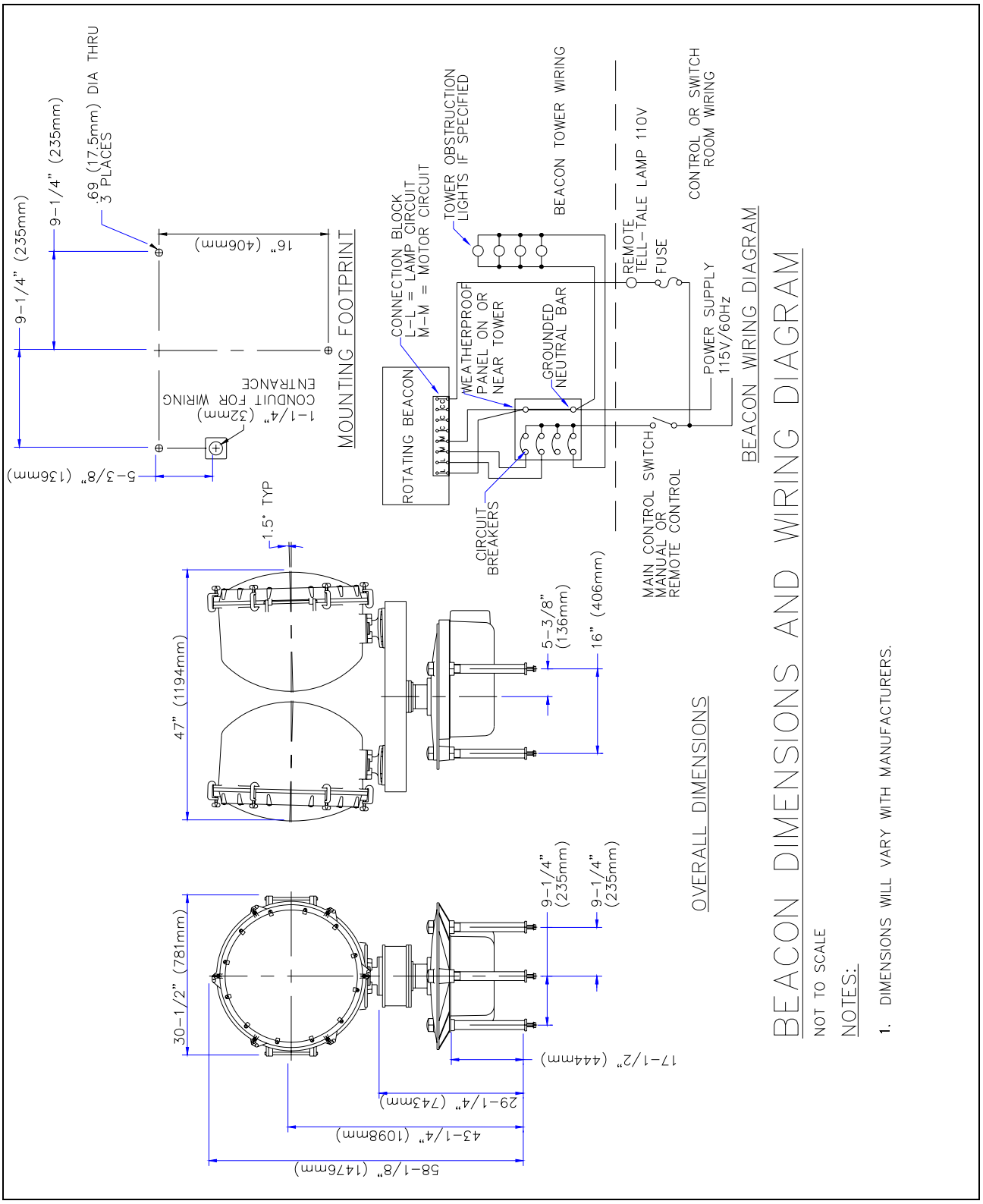


Figure 67. Beacon Dimensions and Wiring Diagram.