COUNTY OF	ITEM NO.	SHEET NO.

NOTES:

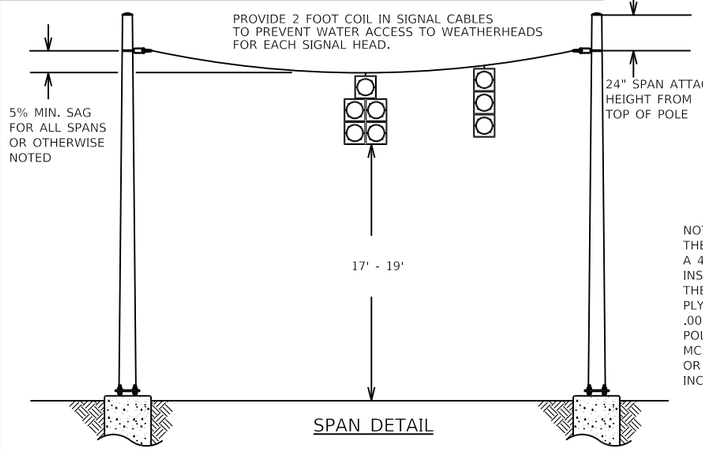
ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "23157EN". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE POLE BASE.

ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT.

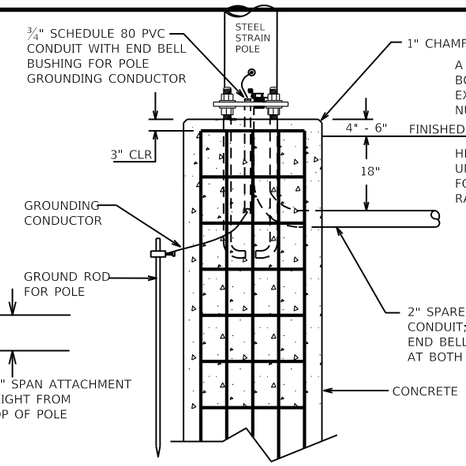
FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A 1" RIGID STEEL CONDUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE CONDUIT.

UNDERGROUND SERVICE WIRES SHALL BE INSTALLED IN 1" RIGID STEEL CONDUIT AS SHOWN ON THE CONTROLLER CABINET DETAIL SHEET.

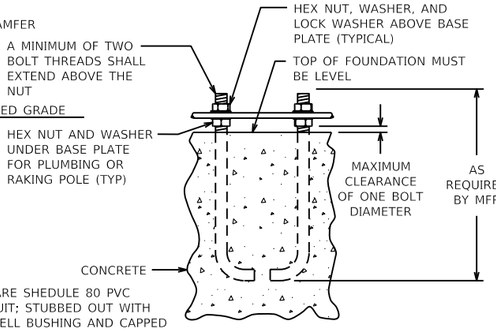


SPAN DETAIL



STEEL STRAIN POLE BASE WITH POLE GROUND DETAIL

NOTE:
THE STEEL STRAIN DOOR SHALL HAVE A 4" BY 6" SHOCK HAZARD WARNING STICKER INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC53FL PRESSURE SENSTIVE ADHESIVE OR APPROVED EQUAL. THIS SHALL BE INCIDENTAL TO THE PROJECT.



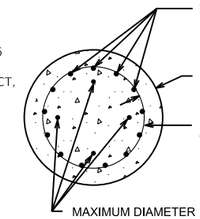
GROUNDING REQUIREMENTS:

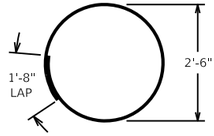
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION.

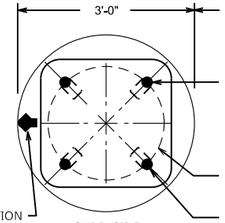
POLE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

ALL GROUND RODS SHALL BE 24" FROM THE CONCRETE POLE BASE.





BENDING DETAIL FOR TIE BARS



IF ANCHOR BOLTS ARE STRAIGHT NOT BEND, THE METAL TEMPLATE SHALL BE INSTALLED FOR STRUCTURAL INTEGRITY.

THE CONTRACTOR SHALL INSTALL SPACERS ON THE POLE BASE CAGES (TOP, BOTTOM, & SIDES) TO GUARANTEE A 3" COVER TO THE EDGE OF THE POURED CONCRETE. THE SPACERS SHALL CONFORM TO "SPECIAL NOTE 11C".

¾" SCHEDULE 80 PVC CONDUIT FOR SERVICE GROUND (REQUIRED AT SERVICE LOCATION ONLY)

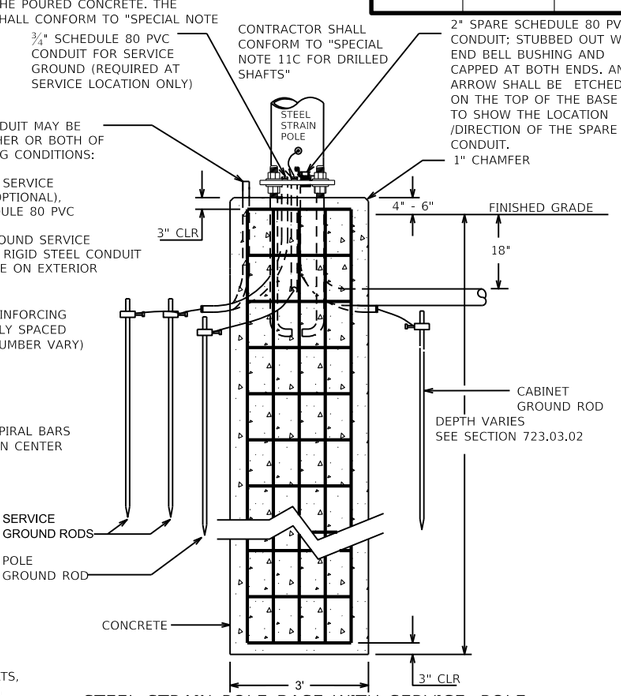
CONTRACTOR SHALL CONFORM TO "SPECIAL NOTE 11C FOR DRILLED SHAFTS"

2" SPARE SCHEDULE 80 PVC CONDUIT; STUBBED OUT WITH END BELL BUSHING AND CAPPED AT BOTH ENDS. AN ARROW SHALL BE ETCHED ON THE TOP OF THE BASE TO SHOW THE LOCATION /DIRECTION OF THE SPARE CONDUIT.

EXTERIOR CONDUIT MAY BE USED FOR EITHER OR BOTH OF THE FOLLOWING CONDITIONS:

FOR EXTERIOR SERVICE GROUNDING (OPTIONAL), USE ¾" SCHEDULE 80 PVC

FOR UNDERGROUND SERVICE FEEDS, USE 1" RIGID STEEL CONDUIT TO METER BASE ON EXTERIOR OF POLE



STEEL STRAIN POLE BASE WITH SERVICE, POLE, AND POLE MOUNTED CABINET GROUNDING DETAILS

CLAMP ASSEMBLY SPECIFCATIONS

CLAMP ASSEMBLIES MUST BE DESIGNED IN ACCORDANCE TO THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, SIXTH EDITION 2013. ADDITIONAL DESIGN PROVISIONS NOT ADDRESSED IN THE AFOREMENTIONED CODE SHALL BE OBTAINED FROM THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (2002). CLAMP ASSEMBLIES SHALL CONFORM TO SECTION 835.07.01 OF THE 2012 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE DRAWINGS SHOWN ON THIS STANDARD.
MATERIALS:

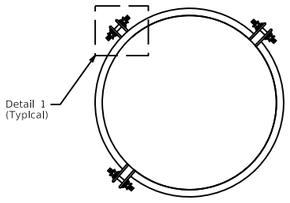
CLAMP/CLEVIS- ASTM A36 (GRADE 36)/ASTM A572 (GRADE 50)

BOLTS (EXCEPT U- BOLTS)- HIGH STRENGTH ASTM A325, ASTM A449, OR ASTM A490

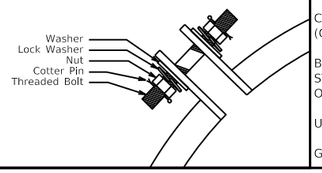
U- BOLTS- MINIMUM ASTM A36

GALVANIZING- ASTM A153

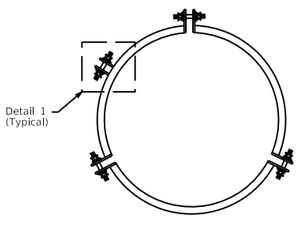
Clamp Assembly Alt. 1



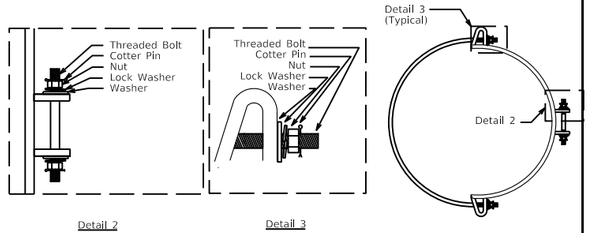
Detail 1



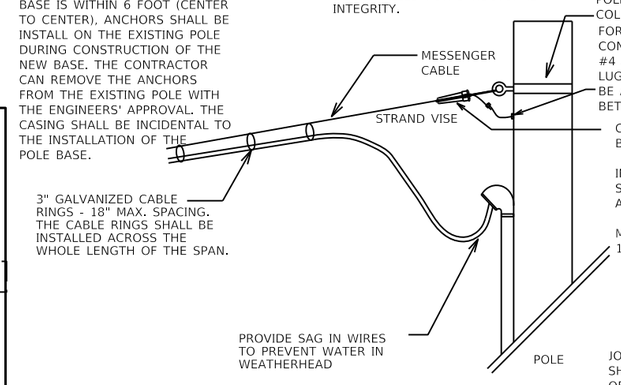
Clamp Assembly Alt. 2



Clamp Assembly Alt. 3



THE CONTRACTOR SHALL ADD A 16-GAUGE CORRUGATED STEEL CASING TO THE INSTALLATION OF THE NEW POLE BASE IF BASE IS 9 FEET (CENTER TO CENTER) FROM THE EXISTING POLE BASE. IF BASE IS WITHIN 6 FOOT (CENTER TO CENTER), ANCHORS SHALL BE INSTALL ON THE EXISTING POLE DURING CONSTRUCTION OF THE NEW BASE. THE CONTRACTOR CAN REMOVE THE ANCHORS FROM THE EXISTING POLE WITH THE ENGINEERS' APPROVAL. THE CASING SHALL BE INCIDENTAL TO THE INSTALLATION OF THE POLE BASE.



SPAN WIRE DETAIL

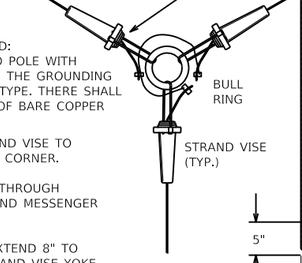
SPECIAL NOTE FOR POLE DOOR:
FURNISH A SHOCK HAZARD WARNING STICKER ON DISCONNECT WITH THE FOLLOWING INFORMATION:
VOLTAGE (120 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (CONTACT)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

FOR EQUIPMENT GROUND:
CONNECT SPAN WIRE TO POLE WITH #4 AWG BARE COPPER. THE GROUNDING LUG SHALL BE BRONZE TYPE. THERE SHALL BE AT LEAST 1.5 FOOT OF BARE COPPER BETWEEN EACH LUG.

CONNECT EACH STRAND VISE TO BULL RING AT AERIAL CORNER.

INSTALL MESSENGER THROUGH STRAND VISE AND BEND MESSENGER AT EXIT POINT.

MESSENGER SHALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE.



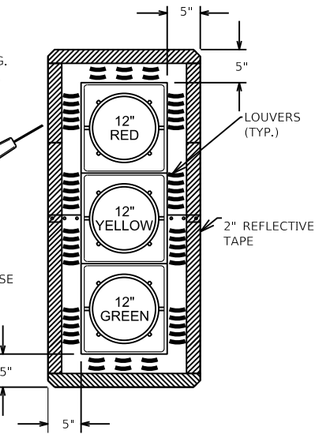
DROP BOX AERIAL CORNER DETAIL

JOHNNYBALLS OR STRAIN ISOLATORS SHALL NOT BE USED ON THE ATTACHMENT OF THE SPAN WIRE TO THE POLE.

INSTALL MESSENGER THROUGH STRAND VISE AND BEND MESSENGER AT EXIT POINT.

MESSENGER SHALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE.

THERE SHALL BE A SEPARATE COLLAR USED FOR EACH SPAN.



BACKPLATE DETAIL

FOR EQUIPMENT GROUND SIGNAL/PED HEADS:
CONNECT GREEN WIRE FROM 5C/7C IMSA CABLE TO CONNECTOR THAT WILL BE INSTALLED UNDER ONE OF THE BOLTS FOR THE TRI STUD ASSEMBLY THAT CONNECTS THE HEADS. WE RECOMMEND BUTTED SEAM CLOSED BARREL FOR THIS CONNECTION.

POLE BASE/SIGNAL HEAD DETAILS

7/1/2025

FILE NAME: C:\USERS\JESSICA.GOODWIN\DESKTOP\07-POLES (PO).DGN
USER: jessica.goodwin
DATE PLOTTED: November 27, 2024
E-SHEET NAME:
OpenRoads Designer v23.00.01.11