9
21
MASTARM MOUNTING DETAIL
SIGNAL POLE
POLE PLATE
ARM PLATE
WIRE ACCESS HOLE
MASTARM
HOOK
CONTINUOUS WELD
A
BANDED SIGN MOUNTING BRACKET DETAIL
B
TYPE I SIGNAL MOUNTING BRACKET ASSEMBLY DETAIL
C1
STANDARD SIGNING
LEFT TURN YIELD ON GREEN
R10-12
24" x 30"
SEE DETAIL "B" FOR MOUNTING HARDWARE.
60" x 16"
Street Name
SEE DETAIL "B" FOR MOUNTING HARDWARE-USA TYPE SIGN
D
TYPE I SIGNAL MOUNTING BRACKET (ALTERNATE)
C2
DRILL & REAM AT BOTTOM OF MASTARM 6"-12" INBOARD OF CL OF SIGNAL HEAD
GROMMET
THROUGH HOLES IN ARM SHALL BE DRILLED AND REAMED, THEN FITTED WITH A WIRING GROMMET TO PREVENT CABLE CHAFING.
STREET NAME BLADE SEE DETAIL "D" & "B"
SIGN TO BE CENTERED BETWEEN THRU SIGNALS.
12" LENSES
8" LENSES
12" LENSES
R10-12 SEE DETAIL D & B
12"
X2
X1
MASTARM LENGTH VARIES - AS REQUIRED
5% STD RAKE
0%
JOINT-USE POLE @ 35'
17'-6" MASTARM STD. POLE @ 20'
PLUMB
10' BOTTOM OF SIGNAL
16'-19' (MIN.-MAX.) BOTTOM OF LOWEST SIGNAL
R10-4
POLE TO BACK OF CURB VARIABLE WITH EACH SIGNAL PLAN (6' NORMAL MIN.)
SEE BASEPLATE DETAIL
*NOTE: PUSHBUTTON IS 3'-6" FROM SIDEWALK FINISH GRADE TO CENTER OF PUSHBUTTON.
BASEPLATE
2% BACK RAKE (1/4 BUBBLE) MASTARMS 40' & UNDER
2.6% BACK RAKE (1/3 BUBBLE) MASTARMS OVER 40'
0%
BASEPLATE DETAIL
PEDESTRIAN PUSHBUTTON/SIGN UNIT DETAIL
*NOTE: MESSAGE TO BE CAST WITH HOUSING (ONE PIECE).
PUSH BUTTON WAIT FOR WALK SIGNAL
POLE BASE ASSEMBLY DETAIL
SEE DETAIL
16" OR 20" BOLT CIRCLE
ACCESS HOLE/COVER ASS'Y.
COVER
FASTENER ASS'Y
GROUNDING BOLT
LEVELING NUT/WASHER
CORNER CAP ASS'Y
FASTENER ASS'Y.
ANCHOR BOLT
POLE BASE
SIGNAL POLE
SEE CONCRETE SIGNAL BASE DETAIL NOTE 5
E1
POLE BASE ASSEMBLY DETAIL (ALTERNATE)
POLE BASES SHOWN ARE FOR ASSEMBLY DETAILS ONLY. OPTIONAL BASES THAT MAY BE PURCHASED MAY VARY IN ACTUAL APPEARANCE WITH MFG. CO.
E2
TYPE II OR III SIGNAL MOUNTING BRACKET ASSEMBLY (SIDE-OF-POLE) TYPE II SHOWN
BANDED MTG. SADDLE
1-1/2" I.D. PIPE
STD. "TEE" FITTING
STD. 90° ELBOW
FASTENER ASS'Y FOR 2" PED. INDICATION
45°
PARALLEL TO MASTARM
PERP. TO MASTARM
MASTARM
1. DIRECTIONAL ALIGNMENT OF PED. INDICATIONS & BRACKET(S) SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. THROUGH HOLES IN THE POLE SHALL BE DRILLED AND WELL REAMED TO PREVENT CABLE CHAFING.
F
GROUNDING BOLT
GROUNDING WIRE/CLAMP
FASTENER/LEVELING ASS'Y
2" CONDUIT
ANCHOR BOLT
#8 REBAR CAGE
5/8" GROUND ROD
TACK WELD (TYP.)
1" CHAMFER
#8 REBAR
#8 AWG (GREEN) GRND. WIRE (SEE NOTE "A")
6" CAP (SEE NOTE 5)
1/2" REBAR STATIONER ROD(S) TACK WELD
2" CONDUIT: POLE TO SERV. BOX ONLY. 24"-30" DEPTH & 24" MIN. RAD. BEND
NOTE-A:
A SINGLE CONDUCTOR STRANDED #8 GREEN WIRE SHALL CARRY THE EQUIP. GROUND FROM THE GROUND LUG OF ALL SIGNAL POLES TO THE CONTROLLER CABINET AND THE POWER DISCONNECT BOX. WHEN NECESSARY, EQUIPMENT GROUND CAN BE SPLICED IN SERVICE BOX WITH SPLIT BOLT CONNECTOR.
12" x 36" DIA.
WIRE WRAP (TYP.)
NOTES
1. THE ANCHOR BOLTS FOR THE SIGNAL POLE SHALL BE TACK WELDED TOGETHER IN A 16" OR 20" DIA. BOLT PATTERN (ON CENTERS AS SHOWN) TO MAINTAIN REQUIRED B.C. PATTERN AND TO AID IN VERTICAL POSITIONING WHILE CONC. BASE IS POURED.
2. USE ANTI-SEIZE COMPOUND ON ALL THREADS.
3. 12 FT. x 5/8" GROUND ROD TO BE POSITIONED BEFORE POURING BASE.
4. CLASS "A" CONCRETE SHALL BE USED TO CONSTRUCT BASE.
5. CONSTRUCT A 6" THK X 30" SQ. CONC. CAP AFTER POLE HAS BEEN ERECTED & PLUMBED. CAMFER EDGE 1". MUST BE APPROVED BY ENG. BEFORE POURED.
6. CONDUIT SHALL HAVE PLASTIC (OR METAL) BUSHING (ABOVE BASE) TO PREVENT CABLE CHAFING.
7. USE #8 BARE COPPER GND. CONDUCTOR FROM CLAMP TO GROUND BOLT IN ACCESS HOLE.
CONCRETE SIGNAL BASE DETAIL
G
PROJECT DESCRIPTION
STEEL SIGNAL POLE ASSEMBLY DETAILS
PROJECT NUMBER
87 N-0047-01
STP-N 004(701)
BOOK NO.
APPROVED BY
DATE AUG. 83
DRAWN BY SEAL
REVISED
CITY OF WICHITA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF TRAFFIC ENGINEERING
SCALE
WM. O. McKINLEY: TRAFFIC ENGINEER
REV. DATE
COMMENTS
INT.
Dec. 90
Revised Ground Rod
JKR