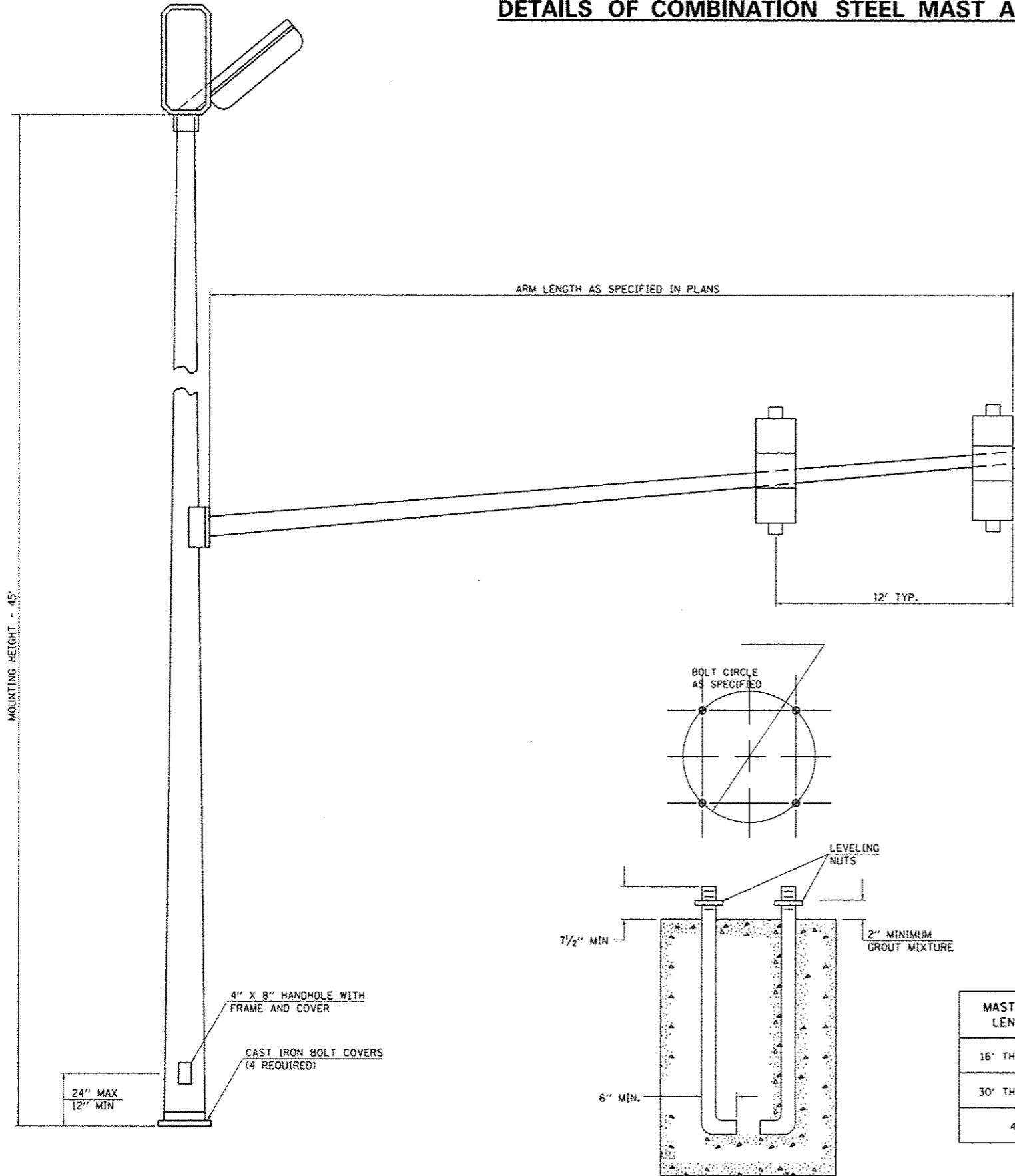


# DETAILS OF COMBINATION STEEL MAST ARM ASSEMBLY AND POLE



## GENERAL NOTES

1. THE COMBINATION MAST ARM ASSEMBLY AND POLE SHALL BE CONSTRUCTED WITH ONE PIECE MAST ARMS AND POLE OR OTHER EQUIVALENT SECTIONAL DESIGN.
2. THIS MAST ARM ASSEMBLY AND POLE SHALL BE DESIGNED TO SUPPORT ONE 80 POUND SIGNAL HEAD WITH A PROJECTED AREA OF 14.7 SQUARE FEET AT THE FREE END OF THE MAST ARM. ONE 24" X 30" SIGN, THE CENTER OF THE SIGN MOUNTED 3 FEET FROM THE CENTER OF THE SIGNAL HEAD ON THE FREE END. ONE 50 POUND SIGNAL HEAD WITH A PROJECTED AREA OF 8.7 SQUARE FEET, THE CENTER MOUNTED 12 FEET FROM THE CENTER OF THE SIGNAL HEAD ON THE FREE END. ONE 80 POUND SIGNAL HEAD WITH A PROJECTED AREA OF 14.7 SQUARE FEET, THE CENTER MOUNTED 24 FEET FROM THE CENTER OF THE SIGNAL HEAD ON THE FREE END. ONE 30" X 72" TOWN NAME SIGN, THE CENTER MOUNTED 5 FEET FROM THE CENTER OF THE VERTICAL SHAFT OR MOUNTED CENTERED ON THE VERTICAL SHAFT. ONE 125 POUND SIGNAL HEAD WITH A PROJECTED AREA OF 7.6 SQUARE FEET MOUNTED WITH THE VERTICAL TERMINAL COMPARTMENT, 10 FEET ABOVE THE FOUNDATION. IN CASE OF TENON MOUNT COMBINATION STEEL MAST ARM, THE TYPICAL LOADING SHALL ALSO INCLUDE TWO 100 POUND LUMINAIRES WITH A PROJECTED AREA OF 3.05 SQUARE FEET.
3. THE CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS SHOWING DESIGN MATERIALS, THICKNESS OF SECTIONS, WELD SIZES, AND ANCHOR BOLTS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. THESE DRAWINGS SHALL BE AT LEAST 17" BY 22" IN SIZE AND OF ADEQUATE QUALITY FOR MICROFILMING.
4. THE TYPE OF SIGNAL HEAD MOUNTING BRACKET TO BE USED SHALL BE APPROVED BY THE ENGINEER.
5. THE SIGNAL HEAD (INCLUDING BACKPLATE WHEN USED) SHALL NOT BE LESS THAN 16' OR MORE THAN 18' ABOVE THE CROWN OF PAVEMENT.
6. THE MANUFACTURER WILL BE ALLOWED TO SLOT THE BASE PLATE IN WHICH OTHER BOLT CIRCLES MAY FIT, PROVIDING THAT THESE SLOTS DO NOT OFFSET THE INTEGRITY OF THE POLE.
7. COMBINATION MAST ARM ASSEMBLIES AND POLES SHALL NOT BE INSTALLED WITHOUT THE LUMINAIRE.
8. THE ANCHOR BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
9. FOR MAST ARMS LESS THAN 32', THE 72" X 30" SIGN S BE MOUNTED ON THE MAST ARM POLE INSTEAD OF THE ARM.

MAST ARM LENGTH	BOLT CIRCLE	ANCHOR BOLT SIZE
16' THRU 28'	15"	1 1/2" X 60"
30' THRU 42'	18"	1 1/2" X 60"
44'	18"	1 3/4" X 90"

REVISIONS			
DRAWN	2-13-90	REVISED	5-14-02
REVISED	8-16-94	REVISED	3-27-08
REVISED	12-18-01	REVISED	
REVISED	2-19-02	REVISED	

STD. 9-70

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

### DETAILS OF COMBINATION STEEL MAST ARM ASSEMBLY AND POLE

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(IX-11R-5,RS-3,N-5,TS-4	WILLIAMSON	288	150
CONTRACT NO. 78203				

FILE NAME	USER NAME	DESIGNED	REVISED
c:\pwworksp\pudot\kellyka\d8184451\78203-3-sh1-dat.dgn	*USER*	-	-
		DRAWN	REVISED
		CHECKED	REVISED
		DATE	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS OF COMBINATION STEEL MAST ARM  
ASSEMBLY AND POLE**

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

ILLINOIS FED. AID PROJECT