

CONDUIT ENTRANCE INTO MANHOLE/HANDHOLE

APPLICABLE TO SWITCHGEAR AND TRANSFORMER VAULTS

GENERAL
 CONDUIT ENTRANCES INTO MANHOLES/HANDHOLES SHALL NORMALLY BE MADE WITH PLASTIC ENTRANCE BELLS PER FIGURE 1 OR 2. THE ENTRANCE CONDUIT SHALL BE PLASTIC OR STEEL ENCASED IN CONCRETE AS PER FIGURE 1 AND 2 BELOW, SPECIFIED BY THE ENGINEER ON THE CONSTRUCTION DRAWINGS.

POCKETS
 DUCT POCKETS SHALL BE PROVIDED IN WALLS WHERE SPECIFIED ON CONSTRUCTION DRAWINGS. POCKET NOT REQUIRED ON NEWER STYLE MANHOLE DESIGNS (FIGURE 2). TYPICAL POCKET DIMENSIONS ARE INDICATED BELOW ON FIGURE 1.

CONDUIT SPACING
 CONDUIT SHALL NORMALLY BE SUPPORTED BY VERTICAL AND HORIZONTALLY INTERLOCKED PLASTIC SPACERS TO PROVIDE ALIGNMENT WITH PLASTIC ENTRANCE BELL UNITS AT 8 1/4 IN. SPACING.

ENTRANCE BELL UNITS
 PLASTIC 6 INCH ENTRANCE BELLS, DPU-E# 285-103-00100 SHALL BE USED ON CONDUIT ENTRANCES TO MANHOLES.

ENTRANCE PIPES
 GALVANIZED STEEL CONDUIT, M30-1550, SHALL BE USED FOR ALL BENDS. PIPES INTENDED FOR CABLES ON INITIAL INSTALLATION SHALL BE CAPPED WITH PLUGS (DPU-E# 285-103-00090) TO PREVENT CONTAMINATION FROM ENTERING THE PIPES.

INSTALLATION METHODS
 EVERY EFFORT SHALL BE MADE TO INSURE A WATERTIGHT INSTALLATION OF ENTRANCE PIPES. WHERE PIPES ARE INSTALLED THROUGH AN OPENING LEFT IN A MANHOLE, OR BROKEN OUT OF AN EXISTING MANHOLE WALL, SURFACES SHALL BE CLEANED, WETTED AND COVERED WITH A COATING OF 3 TO 1 SAND AND CEMENT MORTAR. IF BRICKWORK IS EXISTING ON THE INNER FACE OF WALL, IT SHALL ALSO BE COATED WITH A SAND AND CEMENT MORTAR. AN ALTERNATE PROCEDURE IS TO DRILL HOLES IN THE WALL AND GROUT THE PIPES IN PLACE WITH A SAND AND CEMENT MORTAR. THE INSIDE SURFACE OF THE HOLES SHALL BE ROUGHENED TO OBTAIN A STRONG AND WATERTIGHT BOND.

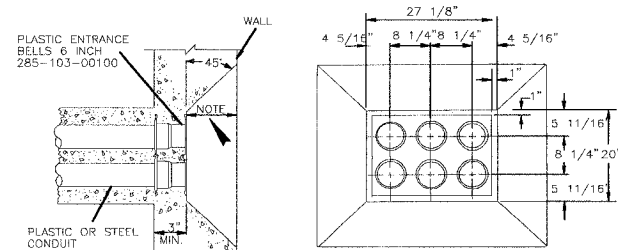


FIG. 1 MANHOLE ENTRANCE WITH PLASTIC TERMINATORS (OLDER STYLE) FOR PLASTIC OR STEEL CONDUIT (POCKET TYPE)

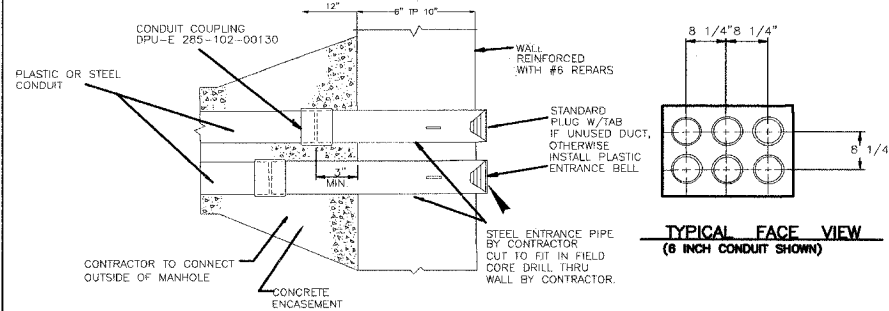
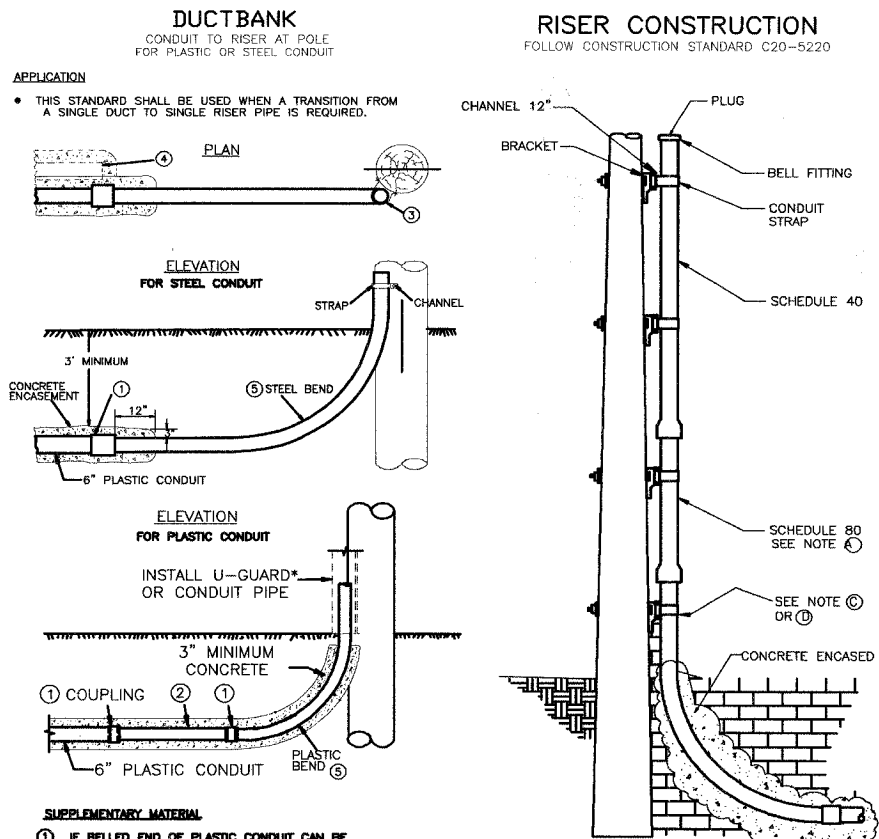


FIG. 2 ENTRANCE IN MANHOLE/HANDHOLE (NEWER STYLE)

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CONDUIT TO RISER AT POLE



SUPPLEMENTARY MATERIAL
 ① IF BELLED END OF PLASTIC CONDUIT CAN BE CONNECTED TO STEEL BEND OMIT COUPLING.

NOTES:

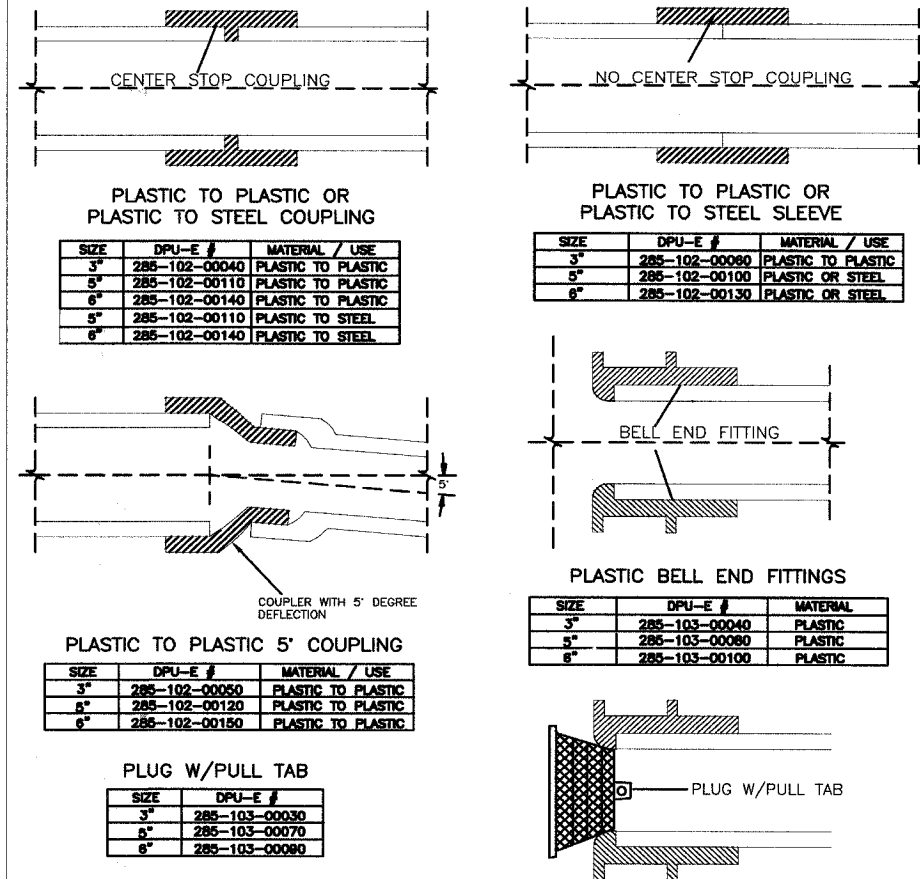
- FIRST SECTION ABOVE ELBOW MUST BE SCHEDULE 80.
- FOR LARGER POLES (>50'), ADDITIONAL CONDUIT AND HARDWARE MAY BE REQUIRED.
- STEEL BEND AND POLE BRACKET EXISTING FROM PREVIOUS DUCT BANK INSTALLATION.
- INSTALL STEEL BEND AND POLE BRACKET AND CHANNEL.
- INSTALL SPARE OF CONDUIT UP POLE WITH BEND, ATTACH TO BRACKET AND PLUG.

INFORMATION

- FIELD CUT SO THAT A GOOD CONNECTING FIT CAN BE MADE BETWEEN THE CONDUITS AND BENDS.
- LOCATE THE BEND ON A QUADRANT OF THE POLE WHERE IT IS THE LEAST SUSCEPTIBLE TO DAMAGE BY VEHICLES.
- IF SPARE DUCT IS INSTALLED, PLUG AT BOTH ENDS AND ENCASE IN CONCRETE WHEN NECESSARY.
- SCHEDULE 80 PVC DOES NOT REQUIRE CONCRETE ENCASUREMENT.
- CONDUIT TO A U-GUARD* RISER FOLLOWS C20-5222, FOR USE AS MAINTENANCE ONLY.

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PLASTIC CONDUIT COUPLINGS FOR CONCRETE ENCASED PLASTIC CONDUIT



APPLICATION
 THIS STANDARD SHALL BE USED FOR THE INSTALLATION OF CONDUIT CONNECTIONS ON CONCRETE ENCASED PLASTIC CONDUIT DUCTBANK.

THE 6" EXPANDING PLUG W/EYE NUT DPU-E# 285-103-00150

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WF# INFORMATION		CITY OF NAPERVILLE/DEPARTMENT OF PUBLIC UTILITIES - ELECTRIC			
WF# 59481 WASHINGTON ST. 75TH TO OLYMPUS DR. EAST SIDE	JOB 1 EU-73	CALL J.U.L.I.E. 48 HRS. PRIOR TO CONSTRUCTION			
WF# 59482 75TH WASHINGTON ST. TO OLYMPUS DR. NORTH SIDE	JOB 2 EU-73	PROJECT TITLE	MAP NO.:	CAD FILE:	
WF# 59484 75TH WASHINGTON ST. TO CLYDE DR. SOUTH SIDE	JOB 3 EU-73	75TH ST. AND WASHINGTON ST. ROAD IMPROVEMENTS		D056270001D38.DWG	
WF# 59485 WASHINGTON ST. 75TH TO BAILEY RD. EAST SIDE	JOB 4 EU-73	PROJECT DESCRIPTION	DRWN BY:	PROJECT NO.:	
		TRENCH SECTION DETAILS	JK, PM	EU12-08-03	
		DATE	4-01	ISSUED	
		ENGINEER	RPS	APPR.	
		REVISION	1	SCALE:	NTS
		WORK REQUEST NO.:	56270	COMPLETED BY:	
		SHEET	38	OF	73