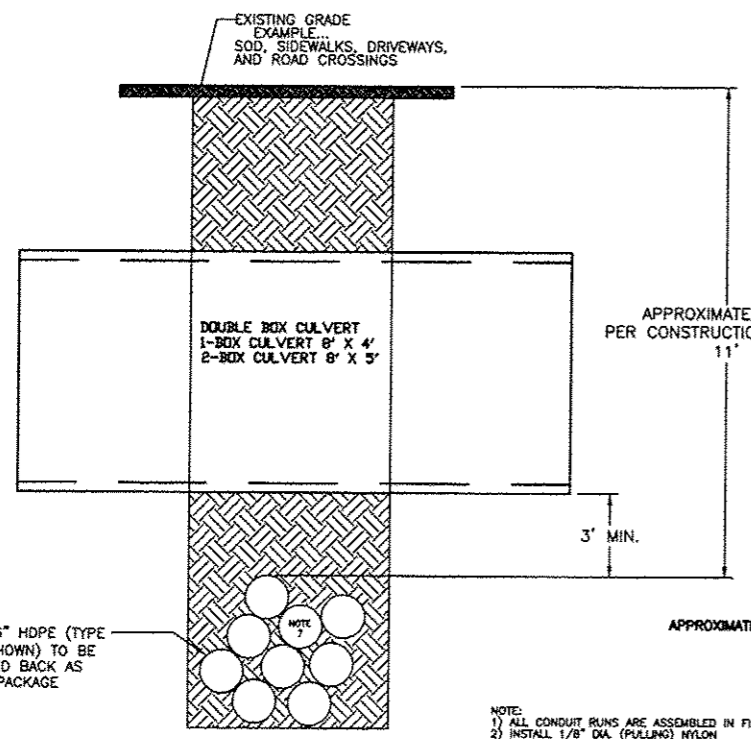


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-0337	DUPAGE		
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT 60P42	
			FED. AID PROJECT	

HORIZONTAL DIRECTIONAL DRILLING METHOD 9-6" HDPE

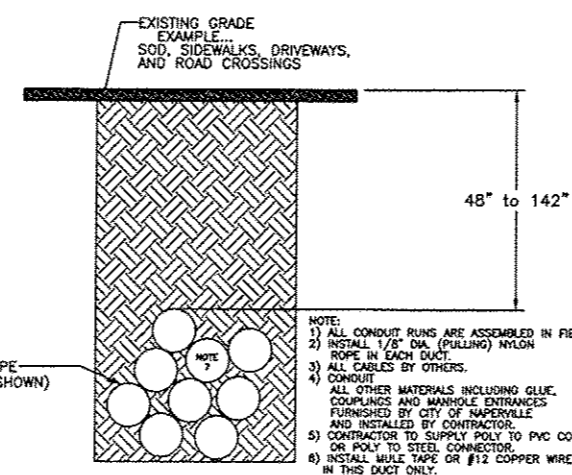


- NOTE:
- 1) ALL CONDUIT RUNS ARE ASSEMBLED IN FIELD.
 - 2) INSTALL 1/8" DIA. (PULLING) NYLON ROPE IN EACH DUCT.
 - 3) ALL CABLES BY OTHERS.
 - 4) CONDUIT ALL OTHER MATERIALS INCLUDING GLUE, COUPLINGS AND MANHOLE ENTRANCES FURNISHED BY CITY OF NAPERVILLE AND INSTALLED BY CONTRACTOR.
 - 5) CONTRACTOR TO SUPPLY POLY TO PVC CONNECTOR OR POLY TO STEEL CONNECTOR.
 - 6) INSTALL MULE TAPE OR #12 COPPER WIRE THHN IN THIS DUCT ONLY.
 - 7) CONTRACTOR TO INSTALL PUSH PER C30-1950.

HORIZONTAL DIRECTIONAL DRILL METHOD SECTION L-L

CITY OF NAPERVILLE
DEPARTMENT OF PUBLIC UTILITIES-ELECTRIC
TYPICAL CONDUIT SECTION L-L
ROUTE 59
APPROXIMATE LENGTH = 210 FEET. HORIZONTAL DIRECTIONAL DRILL METHOD

HORIZONTAL DIRECTIONAL DRILLING METHOD 9-6" HDPE

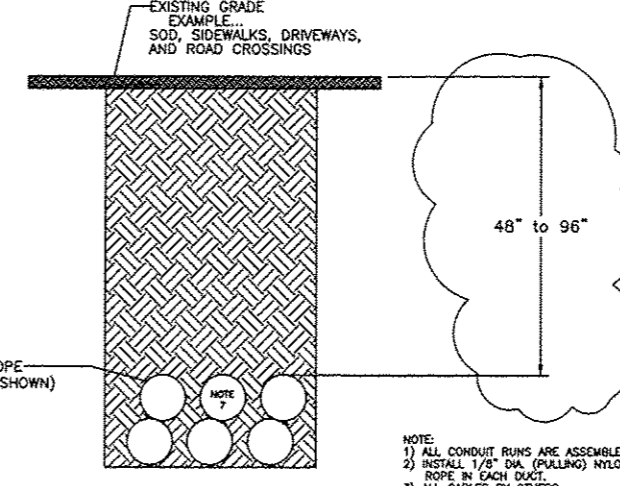


- NOTE:
- 1) ALL CONDUIT RUNS ARE ASSEMBLED IN FIELD.
 - 2) INSTALL 1/8" DIA. (PULLING) NYLON ROPE IN EACH DUCT.
 - 3) ALL CABLES BY OTHERS.
 - 4) CONDUIT ALL OTHER MATERIALS INCLUDING GLUE, COUPLINGS AND MANHOLE ENTRANCES FURNISHED BY CITY OF NAPERVILLE AND INSTALLED BY CONTRACTOR.
 - 5) CONTRACTOR TO SUPPLY POLY TO PVC CONNECTOR OR POLY TO STEEL CONNECTOR.
 - 6) INSTALL MULE TAPE OR #12 COPPER WIRE THHN IN THIS DUCT ONLY.
 - 7) CONTRACTOR TO INSTALL PUSH PER C30-1950.

HORIZONTAL DIRECTIONAL DRILL METHOD SECTION M-M

CITY OF NAPERVILLE
DEPARTMENT OF PUBLIC UTILITIES-ELECTRIC
TYPICAL CONDUIT SECTION M-M
ROUTE 59
APPROXIMATE LENGTH = 210 FEET. HORIZONTAL DIRECTIONAL DRILL METHOD

HORIZONTAL DIRECTIONAL DRILLING METHOD 6-6" HDPE

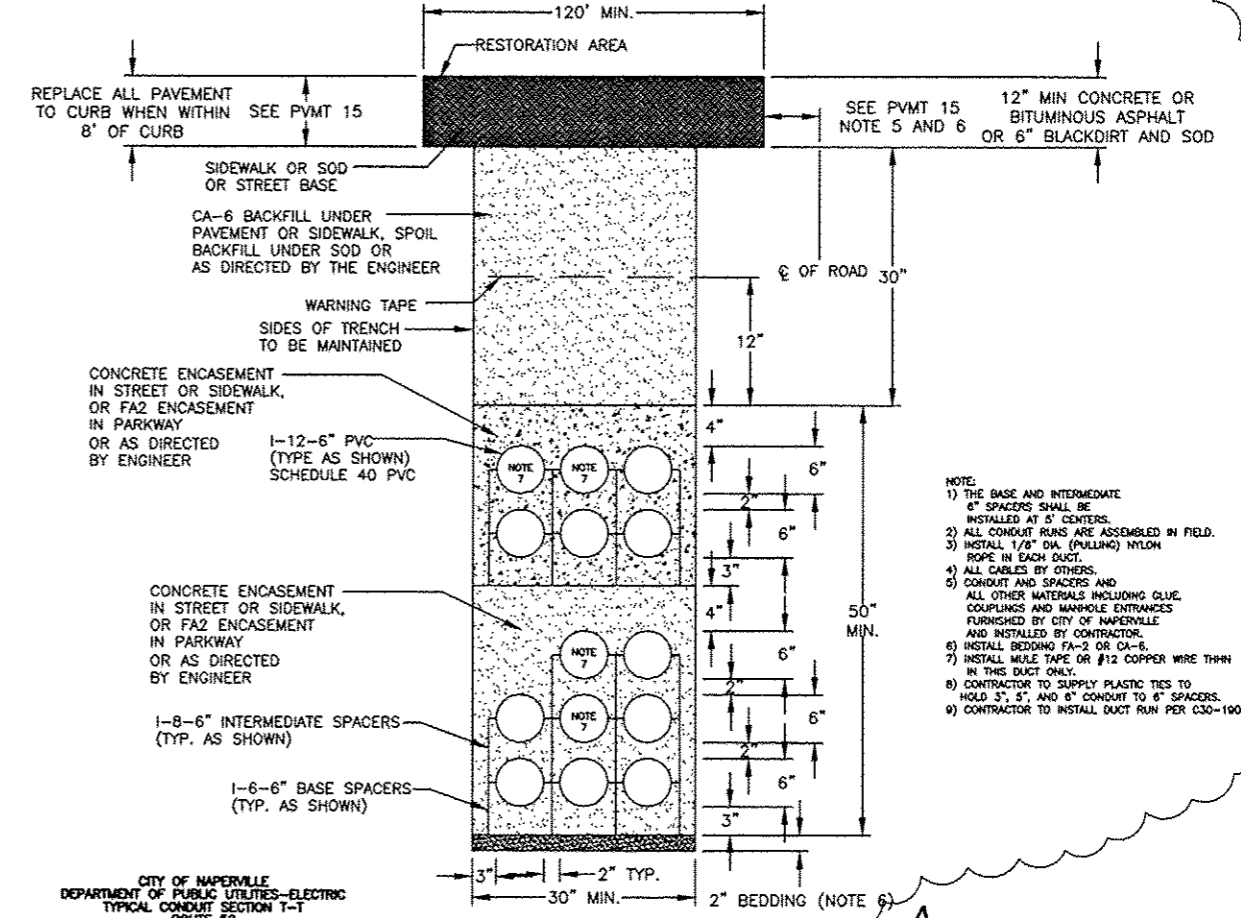


- NOTE:
- 1) ALL CONDUIT RUNS ARE ASSEMBLED IN FIELD.
 - 2) INSTALL 1/8" DIA. (PULLING) NYLON ROPE IN EACH DUCT.
 - 3) ALL CABLES BY OTHERS.
 - 4) CONDUIT ALL OTHER MATERIALS INCLUDING GLUE, COUPLINGS AND MANHOLE ENTRANCES FURNISHED BY CITY OF NAPERVILLE AND INSTALLED BY CONTRACTOR.
 - 5) CONTRACTOR TO SUPPLY POLY TO PVC CONNECTOR OR POLY TO STEEL CONNECTOR.
 - 6) INSTALL MULE TAPE OR #12 COPPER WIRE THHN IN THIS DUCT ONLY.
 - 7) CONTRACTOR TO INSTALL PUSH PER C30-1950.

HORIZONTAL DIRECTIONAL DRILL METHOD SECTION N-N

CITY OF NAPERVILLE
DEPARTMENT OF PUBLIC UTILITIES-ELECTRIC
TYPICAL CONDUIT SECTION N-N
ROUTE 59
APPROXIMATE LENGTH = 970 FEET. HORIZONTAL DIRECTIONAL DRILL METHOD

14-WAY JOINT DUCT BANK WITH AT&T AND COM-ED - 5 HIGH BY 3 WIDE (6" DUCT)

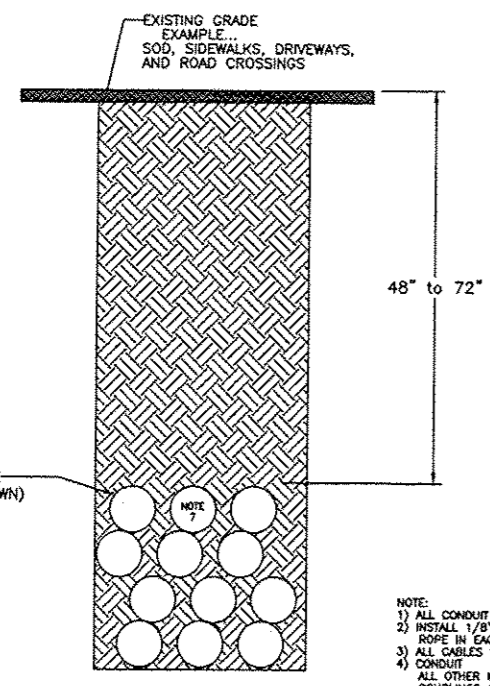


- NOTE:
- 1) THE BASE AND INTERMEDIATE 8" SPACERS SHALL BE INSTALLED AT 6" CENTERS.
 - 2) ALL CONDUIT RUNS ARE ASSEMBLED IN FIELD.
 - 3) INSTALL 1/8" DIA. (PULLING) NYLON ROPE IN EACH DUCT.
 - 4) ALL CABLES BY OTHERS.
 - 5) CONDUIT AND SPACERS AND ALL OTHER MATERIALS INCLUDING GLUE, COUPLINGS AND MANHOLE ENTRANCES FURNISHED BY CITY OF NAPERVILLE AND INSTALLED BY CONTRACTOR.
 - 6) INSTALL BEDDING FA-2 OR CA-6.
 - 7) INSTALL MULE TAPE OR #12 COPPER WIRE THHN IN THIS DUCT ONLY.
 - 8) CONTRACTOR TO SUPPLY PLASTIC TIES TO HOLD 3", 5", AND 8" CONDUIT TO 6" SPACERS.
 - 9) CONTRACTOR TO INSTALL DUCT RUN PER C30-1900.

SECTION X-X

APPROXIMATE LENGTH = (NONE) CONCRETE AND CONCRETE ENCASE SPOIL BACKFILL
APPROXIMATE LENGTH = (NONE) CONCRETE AND CONCRETE ENCASE CA-6 BACKFILL
APPROXIMATE LENGTH = 400 FEET CONCRETE AND (FA-2 ENCASED) SPOIL BACKFILL
APPROXIMATE LENGTH = (NONE) CONCRETE AND (FA-2 ENCASED) CA-6 BACKFILL

HORIZONTAL DIRECTIONAL DRILLING METHOD 12-6" HDPE

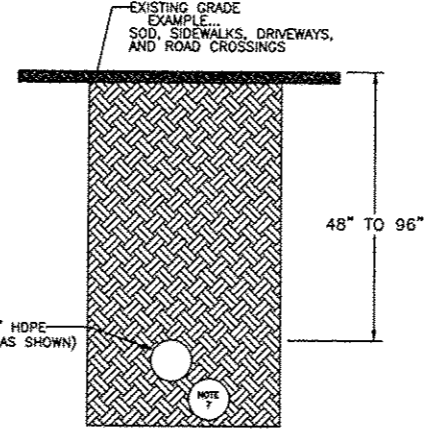


- NOTE:
- 1) ALL CONDUIT RUNS ARE ASSEMBLED IN FIELD.
 - 2) INSTALL 1/8" DIA. (PULLING) NYLON ROPE IN EACH DUCT.
 - 3) ALL CABLES BY OTHERS.
 - 4) CONDUIT ALL OTHER MATERIALS INCLUDING GLUE, COUPLINGS AND MANHOLE ENTRANCES FURNISHED BY CITY OF NAPERVILLE AND INSTALLED BY CONTRACTOR.
 - 5) CONTRACTOR TO SUPPLY POLY TO PVC CONNECTOR OR POLY TO STEEL CONNECTOR.
 - 6) INSTALL MULE TAPE OR #12 COPPER WIRE THHN IN THIS DUCT ONLY.
 - 7) CONTRACTOR TO INSTALL PUSH PER C30-1950.

HORIZONTAL DIRECTIONAL DRILL METHOD SECTION P-P

CITY OF NAPERVILLE
DEPARTMENT OF PUBLIC UTILITIES-ELECTRIC
TYPICAL CONDUIT SECTION P-P
ROUTE 59
APPROXIMATE LENGTH = 90 FEET. HORIZONTAL DIRECTIONAL DRILL METHOD

HORIZONTAL DIRECTIONAL DRILLING METHOD 2-6" HDPE



- NOTE:
- 1) ALL CONDUIT RUNS ARE ASSEMBLED IN FIELD.
 - 2) INSTALL 1/8" DIA. (PULLING) NYLON ROPE IN EACH DUCT.
 - 3) ALL CABLES BY OTHERS.
 - 4) CONDUIT ALL OTHER MATERIALS INCLUDING GLUE, COUPLINGS AND MANHOLE ENTRANCES FURNISHED BY CITY OF NAPERVILLE AND INSTALLED BY CONTRACTOR.
 - 5) CONTRACTOR TO SUPPLY POLY TO PVC CONNECTOR OR POLY TO STEEL CONNECTOR.
 - 6) INSTALL MULE TAPE OR #12 COPPER WIRE THHN IN THIS DUCT ONLY.
 - 7) CONTRACTOR TO INSTALL PUSH PER C30-1950.

HORIZONTAL DIRECTIONAL DRILL METHOD SECTION S-S

CITY OF NAPERVILLE
DEPARTMENT OF PUBLIC UTILITIES-ELECTRIC
TYPICAL CONDUIT SECTION S-S
ROUTE 59
APPROXIMATE LENGTH = 195 FEET. HORIZONTAL DIRECTIONAL DRILL METHOD

ADDENDUM A 7-16-12

PROJECT TITLE				ROUTE 59 ROAD IMPROVEMENTS			
PROJECT DESCRIPTION				DETAILS AND STANDARDS			
ENGINEER	BCC	DRAWING DATE	5-11-12	MAP #	4211,4212,4223	SCALE	N.T.S.
DESIGN BY	DL	DRAWN BY	PSM	AVET JOINT AGREEMENT #	N/A	PROJECT #	EU-12
CHECKED BY		APPROVED BY		CAD FILE	0060648001018.DWG	SHEET #	18 OF 63
Naperville		Department of Public Utilities Electric Division		WORK REQUEST #		60468	