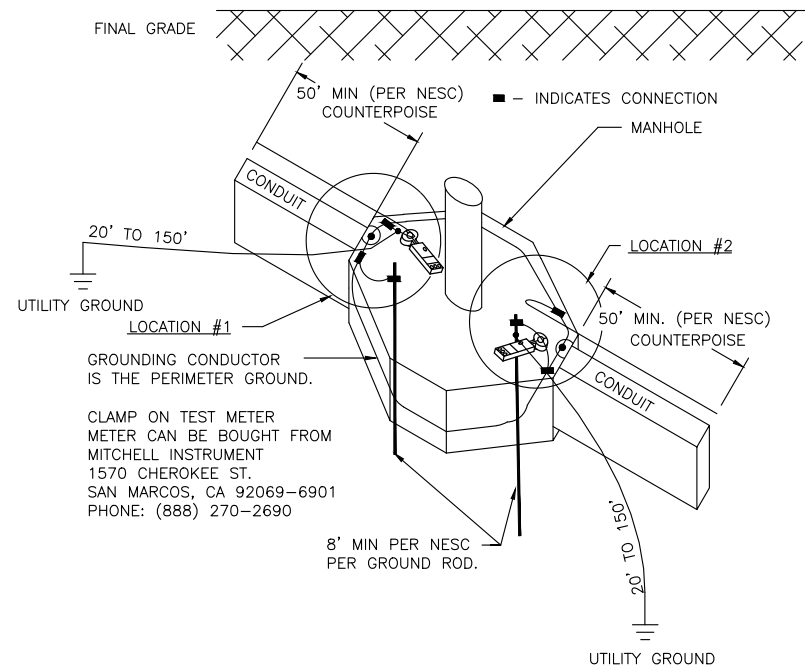


SAMPLE INSTALLATION (CLAMP ON METER)



NOTE:

OBSERVE ALL SAFETY REQUIREMENTS AND THEN REMOVE COVERING ON THE GROUND CONDUCTOR IF PRESENT AND PROVIDE SUFFICIENT ROOM FOR THE MODEL 3710/3730 JAWS, WHICH MUST BE ABLE TO CLOSE EASILY AROUND THE CONDUCTOR. THE JAWS CAN BE PLACED AROUND THE GROUND ROD ITSELF.
 NOTE: THE CLAMP MUST BE PLACED SO THAT THE JAWS ARE IN AN ELECTRICAL PATH FROM THE SYSTEM NEUTRAL OR GROUND WIRE TO THE GROUND ROD, OR COUNTERPOISE.

SELECT THE CURRENT RANGE "A". CLAMP ONTO THE GROUND CONDUCTOR AND MEASURE THE GROUND CURRENT. THE MAXIMUM CURRENT RANGE IS 30 A. IF THE GROUND CURRENT EXCEEDS 5 A, GROUND RESISTANCE MEASUREMENTS ARE NOT POSSIBLE. DO NOT PROCEED FURTHER WITH THE MEASUREMENT. REMOVE THE CLAMP-ON TESTER FROM THE CIRCUIT, NOTING THE LOCATION FOR MAINTENANCE, AND CONTINUE TO THE NEXT TEST LOCATION. RECORD CURRENT ON DATA SHEET.

AFTER NOTING THE GROUND CURRENT, SELECT THE GROUND RESISTANCE RANGE Ω (OHM) AND MEASURE THE RESISTANCE DIRECTLY. THE READING YOU MEASURE WITH THE 3710/3730 INDICATES THE RESISTANCE OF THE ROD, RESISTANCE OF THE COUNTERPOISE, BUT ALSO OF THE CONNECTION TO THE SYSTEM NEUTRAL AND ALL BONDING CONNECTIONS BETWEEN THE NEUTRAL AND THE ROD.

RECORD 2 OR 4 RESISTANCE READINGS ON DATA SHEET. IF ANY ONE READING IS ABOVE 25 OHMS, CONTACT DPU-E IMMEDIATELY.
 SEND COMPLETED DATA SHEET TO THE PROJECT ENGINEER AND RECORDS.

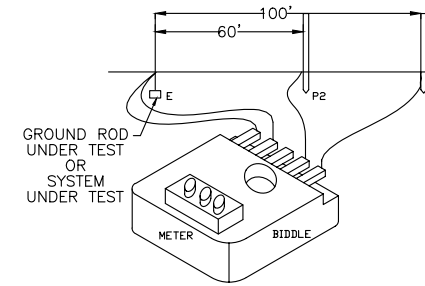
NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	GROUNDING WITH GROUND RODS (DETAIL)	DATE: 05-01-05 Page 5 of 7 56270-100
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DATA SHEET FOR RECORDING GROUND RESISTANCE BY THE FALL OF POTENTIAL METHOD.

F.A.P. RTE. 338/IL 59	SECTION 2011-035	COUNTY DUPAGE	TOTAL SHEETS	SHEET NO.
FED.ROAD.DIST.NO.		ILLINOIS	CONTRACT 60R42 FED. AID PROJECT	

TYPE OF METER AND MFG.: _____
 MANHOLE NUMBER + TYPE: _____
 POLE NUMBER + SIZE: _____
 STREET ADDRESS: _____
 NAME OF PERSON PERFORMING TEST: _____
 W.F. # _____
 TEMPERATURE (AIR): ____°F
 SIZE OF GROUND RODS: 5/8 DIA COPPER CLAD, UNLESS NOTED
 SIZE OF CABLE FOR GROUND WIRE AND/OR COUNTERPOISE IS 4/0 COPPER (BARE) 7 STRAND, UNLESS NOTED

TEST INSTRUMENT:
 MANUFACTURER: _____
 MODEL NO: _____
 CALIBRATION DATE: _____



TEST METHOD USED
 1) 3 POINT ELECTRODE AC "FALL-OF-POTENTIAL"

LOCATION	TEST METHOD	NO. OF RODS	ROD SIZE & LENGTH	DISTANCE BETWEEN RODS (FT.)	AUX. ELECTRODE TEST POINT (FT.)		RESISTANCE OHMS	REMARKS
					P2	C2		

NOTE

DATA SHEET FOR RECORDING GROUND RESISTANCE MEASUREMENT BY THE CLAMP ON GROUND RESISTANCE TEST METHOD

DATE: _____
 TYPE OF METER AND MFG.: _____
 MANHOLE NUMBER + TYPE: _____
 POLE NUMBER + SIZE: _____
 STREET ADDRESS: _____
 NAME OF PERSON PERFORMING TEST: _____
 W.F. # _____
 TEMPERATURE (AIR): ____°F
 SIZE OF GROUND RODS: 5/8 DIA COPPER CLAD, UNLESS NOTED
 SIZE OF CABLE FOR GROUND WIRE AND/OR COUNTERPOISE IS 4/0 COPPER (BARE) 7 STRAND, UNLESS NOTED

INSTALL FEET OF GROUND RODS TOTAL PER LOCATION		INSTALL FEET OF COUNTERPOISE TOTAL PER LOCATION		MEASURED RESISTANCE OF GROUND RODS (OHMS)		MEASURED RESISTANCE OF COUNTERPOISE (OHMS)		MEASURED RESISTANCE OF GROUND RODS AND COUNTERPOISE (OHMS)		SOIL CONDITION i.e. ROCK, CLAY SAND, WET OR DRY		METHOD OF CONNECTION TO GROUND RODS i.e. CADWELD i.e. BOLTED, AMPACT, CRIMP.		CURRENT READING (AMPS)		MEASURED WATER LEVEL IN MANHOLE (FT)		REMARKS	
LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2	LOCATION #1	LOCATION #2		

NOTE:
 A HIGH READING INDICATES ONE OR MORE OF THE FOLLOWING:
 1) POOR GROUND RODS.
 2) OPEN GROUND CONDUCTOR.
 3) HIGH RESISTANCE, DUE TO POOR CONNECTIONS ON RODS, HARDWARE & CLAMPS.
 4) METER CLAMP IS IMPROPERLY CLOSED.
 5) FAULTY METER.

NAPERVILLE PUBLIC UTILITIES DEPARTMENT	GROUNDING WITH GROUND RODS (DETAIL)	DATE: 05-01-05 Page 7 of 7 56270-100
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NAPERVILLE PUBLIC UTILITIES DEPARTMENT ELECTRIC STANDARDS	GROUNDING WITH GROUND RODS (DETAIL)	DATE: 05-01-05 Page 6 of 7 56270-100
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PROJECT TITLE ROUTE 59 ROAD IMPROVEMENTS			
PROJECT DESCRIPTION DETAILS AND STANDARDS			
ENGINEER BCC	DRAFTING DATE 8-04-12	MAP # 4211,4224	SCALE N.T.S.
DESIGN BY DL	DRAFTED BY PSM	REVISIONS DATE	AT&T JOINT AGREEMENT # N/A
CHECKED BY	APPROVED BY	CAD FILE 0061123001D12.DWG	PROJECT # EU-12
SHEET # 12 OF 40		WORK REQUEST # 61123	
Naperville Department of Public Utilities Electric Division			