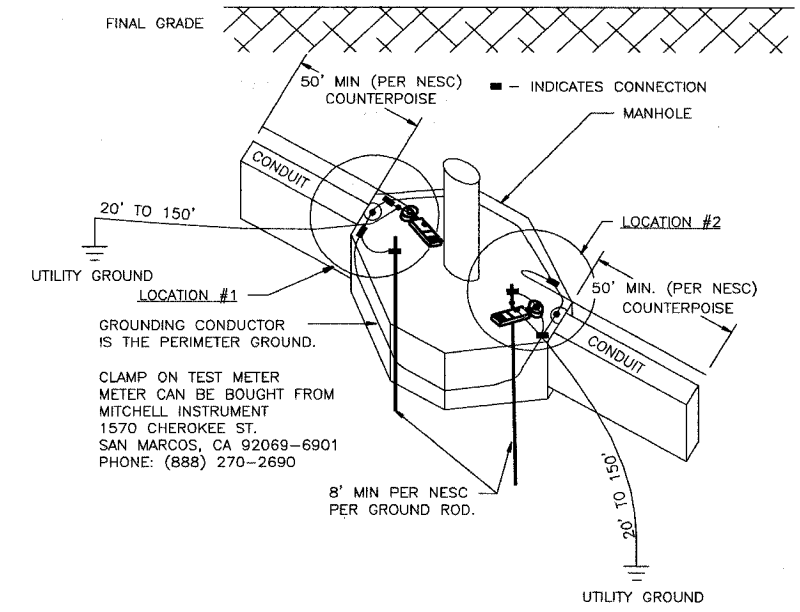


F.A. RTE. 2552	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	00-0014-00-PV	DUPAGE	563	283
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT 63024				

### 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.

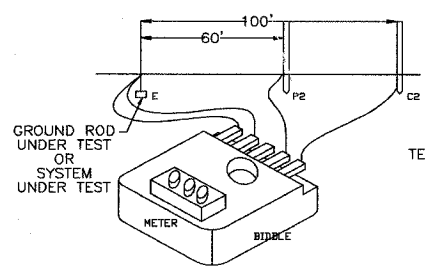
AFTER NOTING THE GROUND CURRENT, SELECT THE GROUND RESISTANCE RANGE (OHM) AND MEASURE THE RESISTANCE DIRECTLY. THE READING YOU MEASURE WITH THE 3710/3730 INDICATES THE RESISTANCE OF THE ROD, RESISTANCE OF THE COUNTERPOISE, BUT ALSO OF THE CONNECTION TO THE SYSTEM NEUTRAL AND ALL BONDING CONNECTIONS BETWEEN 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 6 of 7 56270-100
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### DATA SHEET FOR RECORDING GROUND RESISTANCE BY THE FALL OF POTENTIAL METHOD.

DATE: \_\_\_\_\_  
 TYPE OF METER AND MFG.: \_\_\_\_\_  
 MANHOLE NUMBER + TYPE: \_\_\_\_\_  
 POLE NUMBER + SIZE: \_\_\_\_\_  
 STREET ADDRESS: \_\_\_\_\_  
 NAME OF PERSON PERFORMING TEST: \_\_\_\_\_  
 V.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**

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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### 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: \_\_\_\_\_  
 V.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 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			

**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 ELECTRIC STANDARDS	GROUNDING WITH GROUND RODS (DETAIL)	DATE: 05-01-05 Page 7 of 7 56270-100
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<b>WF# INFORMATION</b>		<b>CITY OF NAPERVILLE/DEPARTMENT OF PUBLIC UTILITIES - ELECTRIC</b>			
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	<b>75TH ST. AND WASHINGTON ST. ROAD IMPROVEMENTS</b>		MAP NO.: -	CAD FILE: 0056270001D42.DWG
WF# 59484 75TH WASHINGTON ST. TO CLYDE DR. SOUTH SIDE	JOB 3 EU-73	PROJECT DESCRIPTION TRENCH SECTION DETAILS		DRAWN BY: JK, PM	PROJECT NO.: EU12-06-03 EUT3
WF# 59485 WASHINGTON ST. 75TH TO BAILEY RD. EAST SIDE	JOB 4 EU-73	DATE: 4-01-08	ISSUED	WORK REQUEST NO.: 56270	COMPLETED BY:
		ENGINEER: RPS	REVISION:	APPR:	SCALE: NTS
					SHEET 42 OF 73