RETURN TRACING TO STRAKA

THE C.E.I. CO.	REQUESTED ISD 5-27-11	FAC. MAPPING REFERENCE #	GRID #4722 NW
FILE WR# 53706522	DATE 4-18-2011	SHEET 1 OF 5	

2 WORKING DAYS BEFORE YOU DIG "IT'S THE LAW" CALL TOLL FREE 800-362-2764 OHIO UTILITIES PROTECTION SERVICE

DESIGN

- SURVEY FOR: ODOT- INNERBELT BRIDGE PROJECT
- ADDRESS: WEST 3RD ST
- MUNICIPALITY: CLEVELAND — SCALE: 1"=20
- ORDER FOR: RELOCATION OF OH FACILITIES.
- PREPARED BY: SURVEY D. STRAKA — DRAWN → — ENGINEERING 440-546-8795
- DESCRIPTION: PID #77332 / WBS: CE-000224
- CONST. PLANS APPROVED: [signature] 4-27-11 — JOINT PROPOSAL #943683
- MARKETING — J.O. — B.J.O.
- CONSUMER'S CHARGE $

DATE	J.P.	FOR-EST	O.H.	SUB-WAY	CABLE	SERV	MRKT.	REC.	ENGR	STORE/FEET			TOTAL
	2		3		1			1	2	1	1		

RETURN TO RIGHT-OF-WAY BEFORE SCHEDULING	JOINT POLE RELEASE	GANG MEET	TREE WORK	MUNICIPAL PERMIT	INFO
DATE CLEARED ____		☐	☐	☐	☐

REVISION HISTORY

DATE	DESCRIPTION	APPROVED BY

CONSTRUCTION

A CHECK MARK NEXT TO EACH ITEM ON THE SKETCH, INCLUDING CHANGES, INDICATES THAT THE WORK HAS BEEN COMPLETED

ITEMS	INSTALLED	REMOVED	SHIFTED
POLES			
WIRE			
TRANS-FORMER			
ANCHORS			

KIND OF POLE(S) INSTALLED BY SYMBOL

POLES LEFT FOR TEL. TO REMOVE

RE-MARKS

DATE WORK COMPLETED — SUPERVISORS SIGNATURE

CAUTION

UNDERGROUND FACILITIES WARNING

HIGH PRESSURE PIPELINE ____ AT SYMBOL ____ CHECKED BY ____ — SPECIAL INSTRUCTIONS
CEI ____
TELEPHONE ____

O. H. TRANSMISSION CLEARANCE WARNING

____ FT. MIN. CLEARANCE REQUIRED AT ____ DEGREES F.
AT SYMBOLS ____
ENGINEERING CHECKED BY: — DATE
CONSTRUCTION CHECKED BY: — DATE

MAXIMUM RMS SYMMETRICAL FAULT CURRENT AVAILABLE AT SERVICE ENTRANCE IS
____AMPS., 3PHASE, ____VOLTS
____AMPS., 1PHASE, ____VOLTS
CEI CONTRIBUTION ONLY.

THE CUSTOMER SHALL PROVIDE THE GROUNDING ELECTRODE CONDUCTOR AND GROUNDING ELECTRODE TO THE SERVICE ENTRANCE LOCATION.

CIRCUITS: V-23-CK-G
V-710-HO-G
H-5-CN-P
H-98-CN-P

WIRE NOTES

(2) TO (2) SHT #2 REM 3#7 STATIC WIRE - 386
(2) TO (2) SHT #2 REM 3-477 ACSR-11 KV COND (V-23-CK-G) - 386'
(1) TO (1) SHT #2 REM 3#6 WP CU PRI (H-5-CN-P) - 433'
(5) TO (7) REM 3#6 WP CU PRI (H-5-CN-P) - 120'
(1) TO (2) REM #4 QUAD SEC - 130'
(4) TO (1) SHT #2 REM #4 TRI SEC - 235'
(1) TO (7) INST 3#1/0 WP AL PRI (H-5-CN-P) - 456'
(3) TO (1) SHT #2 INST #1/0 TRI SEC - 241'
(5) TO (6) INST #1/0 TRI SEC - 40'

OVERHEAD FOREMAN NOTE:

NOTE SOME POLES ARE BEING ABANDONED IN PLACE. TO BE REMOVED BY ODOT - CONTRACTOR.

(2) CXC-223975-65'-1-32.5'-1963-D-60%
REM 15KV VERT POST INSULATOR
" 3#7 STATIC WIRE (SE)
" 7'HLX HWB & 1-36 KV POST INSULATOR (27412373)
" 1-477 ACSR 11 KV COND (SE)
" 10'HLX HWB & 2-36KV POST INSULATORS (27412373)
" 2-477 ACSR 11 KV COND (SE)
" 10'X STRAPS & 3 WD PINS/INSULATORS
" 3#6 WP PRI (NW&SE) ST. SIDE

INST MACHINE BOLT GALV 3/4"X14" (93337463)
" 2-3/4" THIMBLE EYES (44847052)
" 2-CURVED WASHERS 3"X3"X1/4" (93506993)
" 2-3/4" GALV SPRING LOCK WASHER (93521803)
" DE. GRIP FOR 3#7 ALUMOWELD (22612353)
" 2 STANDOFF GROUND DOWN BRACKET (95912143)
" #4 SOL SD BA CU GROUNDING CONDUCTOR (20502693)
" 8 FT 5/8" GROUND ROD (29933923)
" 1-69KV POLYMER SUSPENSION INSULATOR (27403463)
" STRAIN CLAMP FOR 477 ACSR (22130603)
" HL HD GUY (SE) - 60'
" D10'HLX HWB & GRID PLATE.
" 2-69 KV POLYMER SUSPENSION INSULATORS (27403463)
" 2-STRAIN CLAMPS FOR 477 ACSR (22130603)
" 2-HL-X-GUYS (SE) 60' EA.
" 10'X WB & 3 ST PINS/INSULATORS.

TRSF 3-477KCM ACSR 11 KV COND (NW)
" DISTB RISER TAPS
EX 7'HX STRAPS 2-LA'S & 2-SPC'S
" 75KVA 1Φ BT TRANSF.
4340 - 120/240V
" 2-358RK's #4 TRI SEC (NW) & #1/0 TRI SEC (SE)
" #1/0 TRI LP (NW) TO #1902
" #4 TRI LP (S)
" SWR #4 QUAD SEC (NW&SE)
" #4 QUAD LP (NW) TO #1902
" 3 HL X-GUYS FE (NW)
" CATV 1 CBL (NW&SE)
" AT&T 1 CBL (NW&SE)

(3) CXC-303221-40'-3-10'-1939-D-60%
SUB TO 65'-1 CEI 32.5'/AT&T 24' INCH
SET ON 1' OF CRUSHED STONE
REM 10'BUSS-X STRAPS & 3 WD PINS/INSULATORS
" 3#6 WP CU BUSS WIRE (SE)
" 2 SWR'S & 3 E. FORKS
" 3#500KCM CU 3Φ 240V LP TO PT (A) - 20'
INST HL HD GUY FE (NW)
" 2 HL X-GUYS FE (NW)
" HL 12" EXP ANC 30' LD (SE)
" HL 2 ANC GUYS (SE) & SHLD
" 10'X WB & 3 STL PINS/INSULATORS
" FE STD DWG 11-130
" 20T FUSING
" 3-25 KVA 1Φ DE TRANSF's (56863402)
4340 X7620 - 240V 3Φ CLOSED △

(3) CONTINUED.
INST 358RK FOR 3Φ
" #336.4 KCM QUAD LP TO PT (A) - 25'
" 358RK FOR 1Φ

TRSF #4 QUAD SEC (NW)
" #1/0 QUAD LP (NW)
" #1/0 TRI SEC (NW)
" #1/0 TRI LP (W)
EX CATV 1 CBL (NW&SE) @ 22'
" AT&T 1 CBL (NW&SE) @ 21'

BETWEEN SYM (3) AND SYM (4)
REM 200 KVA 3Φ BI-POD TRANSF
4340 - 240V 3Φ △
" BI-POD STRUCTURE

REMOVE SYM'S #3 & #4

TRANS DATA	
CO #. ____	Ø CON
KVA 200	A B C

(4) CXC-529261-45'-1-1942-D-100% (NO TAG)
REM POLE & BACKFILL HOLE
" D10'X STRAPS & 6 WD PINS/INSULATORS
" 3#6 WP CU PRI (NW&SE)
" 3-LA's & 3-LPD's
" D10' LAPD SEC-X 3 WD PINS/INSULATORS
" 10' BUSS-X STRAPS & 3 WD PINS/INSULATORS
" 3#6 WP CU BUSS WIRE (NW)
" 358 RK #4 TRI SEC (SE)
TRSF CPP 6' USB & FE LWP TO SYM #3
EX CATV 1 CBL (NW&SE) @ 22'
" AT&T 1 CBL (NW&SE) @ 21'

INSTALL - SYM #3

TRANS DATA	
CO #. ____	Ø COND
KVA 25	A B C

TRANS DATA	
CO #. ____	Ø COND
KVA 25	A B C

TRANS DATA	
CO #. ____	Ø COND
KVA 25	A B C

MODEL OF TEST EQUIPMENT USED____
DATE OF TESTING____
NUMBER OF GROUND ELECTRODES____
FINAL RESISTANCE MEASUREMENT____

(5) CXC-243819-70'-1-37'-1963-D-60%
CUT OFF 18 FT OF POLE TOP TO BE A 50'-1 43FT OUT OF GROUND.
REM 15KV VERT POST INSULATOR
" 3#7 STATIC WIRE (NW&SE) w/GUY DN
" 7'HLX HWB & 1-36 KV POST INSULATOR (27412373)
" 1-477 ACSR 11 KV COND (NW&SE)
" 10'HLX HWB & 2-36 KV POST INSULATORS (27412373)
" 2-477 ACSR 11 KV COND (NW&SE)
" D10BX STRAPS & 3 VB's (W)
" 3#6 WP CU PRI (W)
" BUCKTAPS.
" 10'X STRAPS 3 WD PINS/INSULATORS
" 3#6 WP CU PRI (NW&SE)
INST D10'X WB's & GRID PLATE
" 3#1/0 AL FADES (NW)
" HD GUY (SE) - 95'
" BUCKTAPS

(5) CONTINUED
INST D10BX WB's & GRID PLATE.
" 3#1/0 AL FADES (W)
C&T Φ WIRES NEW 1/0 TRI SEC (NW).
EX 2-358RK's; REM #4 TRI SEC (NW&SE)
" CPP 6' USB & FE LWP, TRSF TAP
" FA 2'X 2 OW's (SE)
" CATV 1 CBL (NW&SE&W)
" AT&T 1 CBL (NW&SE&W)
" ST SIGN ON POLE.

(6) EX AT&T POLE 35'-5
SUB TO 50'-3 CEI 19'/AT&T 24' INCH
PLACE POLE TAG CXC-734706
INST D10'X WB's & GRID PLATE
" 3 STL PINS/INSULATORS & OVERTAPS
" 3#1/0 AL FADES (E) & (W)
" 3 LA's & LPD's (E).
" FE STD DWG 11-110
" 6T FUSING.
" 25 KVA 1Φ DB TRANSF (56830652)
4340 X7620 - 120/240V
" 358 RK
" 12" PIS ANC 20' LD (E)
" ANC GUY (E) & SHLD.
" FE STD DWG 5-052
EX CATV 1 CBL (E&W) @ 26'
" AT&T 1 CBL (E&W) @ 25'
" AT&T ANC & GUY (W) NO PSIS

INSTALL - SYM #6

TRANS DATA	
CO #. ____	Ø COND
KVA 25	A B C

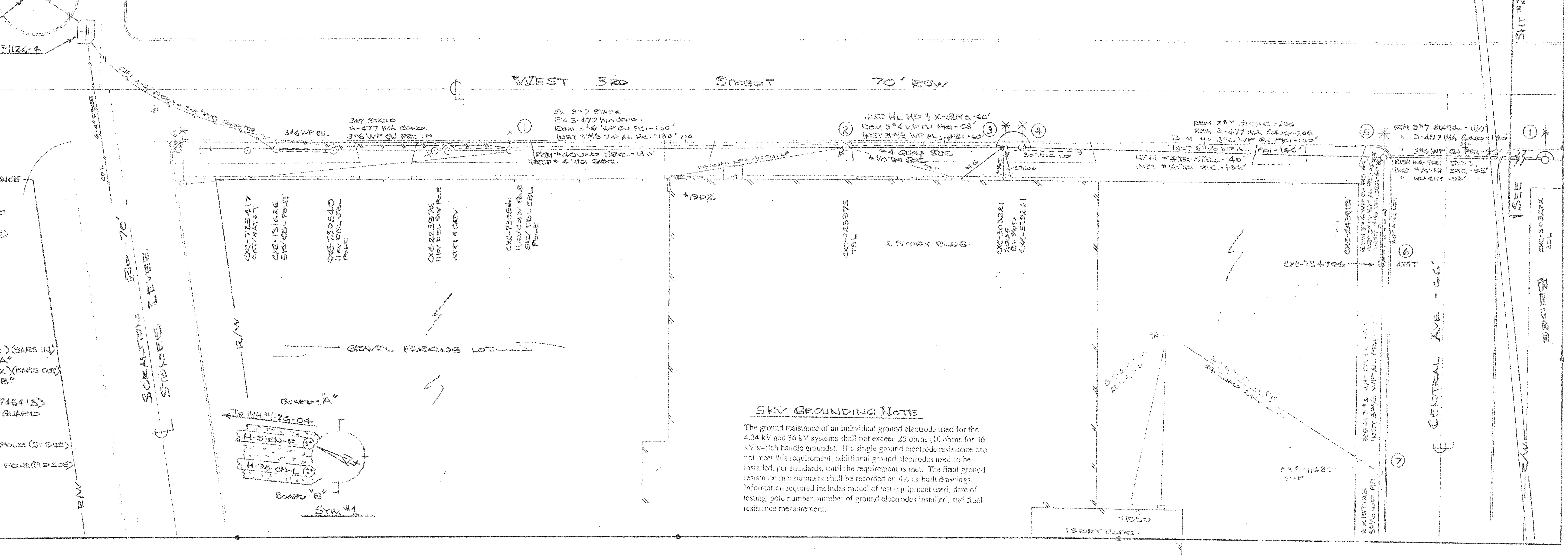
MODEL OF TEST EQUIPMENT USED____
DATE OF TESTING____
NUMBER OF GROUND ELECTRODES____
FINAL RESISTANCE MEASUREMENT____

(7) CXC-116891-50'-1-19-1959-D-60%
EX D10'X AIS
REM 6 WD PINS/INSULATORS
" OVERTAPS.
INST 3#1/0 AL FADES (SE)
" 3 STL PINS/INSULATORS.
" OVERTAPS.
EX 3#1/0 CU FADES (W)
" 3#1/0 WP CU PRI (W)
" BUCKTAPS.
" D7'BX STRAPS & 3 VB's (N)
" 3#6 WP CU PRI (S)
" 7'HX STRAPS 3 LA's & 3-LPD's
" 30 KVA 3Φ TRANSF.
4340 - 240V 3Φ △
" 458 RK #4 QUAD SEC (N)
" CATV 1 CBL (E)
" AT&T 1 CBL (E&W)
" NO PARKING SIGN ON POLE.

MODEL OF TEST EQUIPMENT USED____
DATE OF TESTING____
NUMBER OF GROUND ELECTRODES____
FINAL RESISTANCE MEASUREMENT____

(1) CXC-730541-65'-1-2006-D-100%
EX HL STATIC DE
" HL 3#7 STATIC WIRE (SE)
" HL 2 TIE GUYS (NW)
" FE STD DWG 17-312 CONVERGENCE
" 6-477 ACSR 11 KV COND (NW)
" 3-477 ACSR 11 KV COND (SE)
REM 8'X & 3 STL PINS/INSULATORS
" 3#6 WP CU PRI (SE)
LWR TRI RK #4 TRI SEC (NW&SE)
" 6' USB & FE LWP.
REM SWR #4 QUAD SEC (SE)

INST D10'X WB's & GRID PLATE
" 3 STL PINS/INSULATORS
" 3 VB's (NW)
" 3#1/0 AL FADES (SE)
" OVERTAPS
" D12'HX WB's & GRID PLATE
" 3-10KV LA's
" 3-LPD's - ST SIDE (53518202) (BARS IN)
UG TO OH OF H-5-CN-P - BD "A"
" 3-LPD's - FLD SIDE (53518202) (BARS OUT)
UG TO OH OF H-98-CN-L - BD "B"
" D12 HX WB's & GRID PLATE
" 6#3/0 AL-1C-15KV TERM. (36745413)
" 6-10' SECTIONS OF 4" PVC U-GUARD (36916263)
" 2 CBL GRIPS (36302011)
" 3#3/0-CU-25KV FSN CBL's UP POLE (ST. SIDE)
UG TO OH OF H-98-CN-L
" 3#3/0-CU-25KV FSN CBL's UP POLE (FLD SIDE)
UG TO OH OF H-5-CN-P
" 2 CONDUIT ADAPTERS.
TRSF 3#6 WP CU PRI (NW)



5KV GROUNDING NOTE

The ground resistance of an individual ground electrode used for the 4.34 kV and 36 kV systems shall not exceed 25 ohms (10 ohms for 36 kV switch handle grounds). If a single ground electrode resistance can not meet this requirement, additional ground electrodes need to be installed, per standards, until the requirement is met. The final ground resistance measurement shall be recorded on the as-built drawings. Information required includes model of test equipment used, date of testing, pole number, number of ground electrodes installed, and final resistance measurement.

MTP CADD SYSTEM *
091831
FORM SR13G REV. 2-92