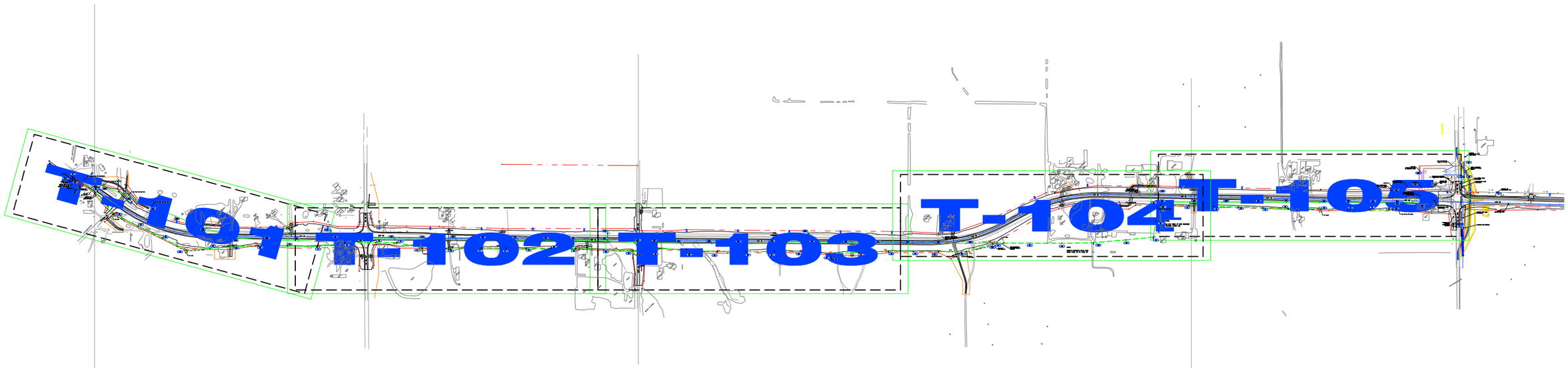



| | | | | | |
|---|---|---|---|---|---|
| REMOVAL | | TLINE CENTERLINE |
| REPLACE EXISTING POLE | | TLINE CENTERLINE ALTERNATE |
| EXISTING WOOD POLE | | ROW |
| NEW WOOD POLE | | TEMPORARY EASEMENT |
| EXISTING METAL POLE | | PROPOSED IMU EASEMENT |
| NEW METAL POLE | | |
| EXISTING SPAN GUY | | |
| INSTALL SPAN GUY | | |
| DOUBLE DEADEND | | |
| DEADEND | | |
| EXISTING GUY | | |
| INSTALL GUY | | |

**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| A | 03–13–13 | P&E | RMB | ARP | ORGINAL ISSUE |

P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com

INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

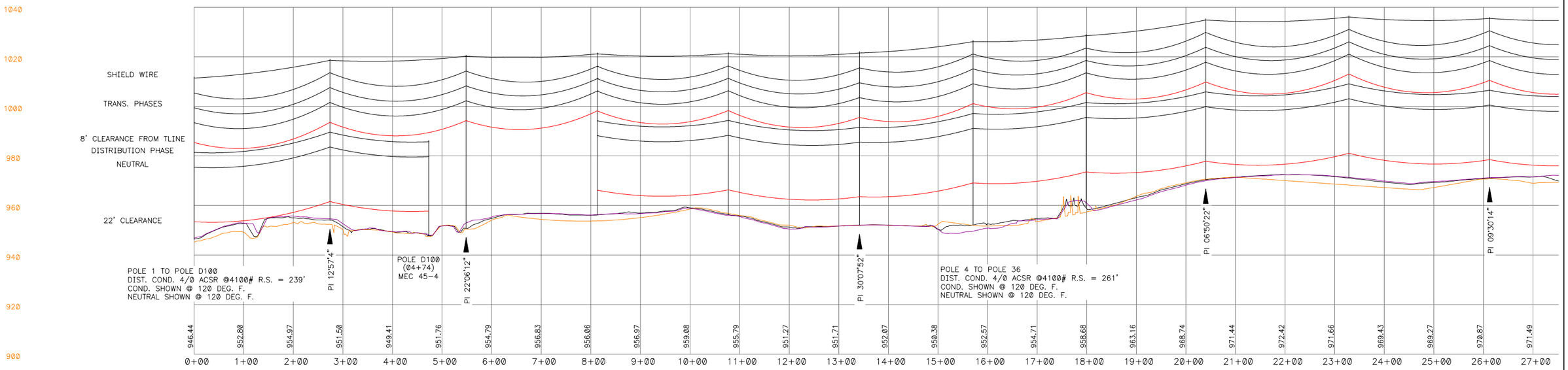
| | |
|---|---|
| DATE | 01–08–12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

INDIANOLA MUNICIPAL UTILITIES
HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN & PROFILE

SCALE: AS NOTED
REV A
DWG NO E8958-T100

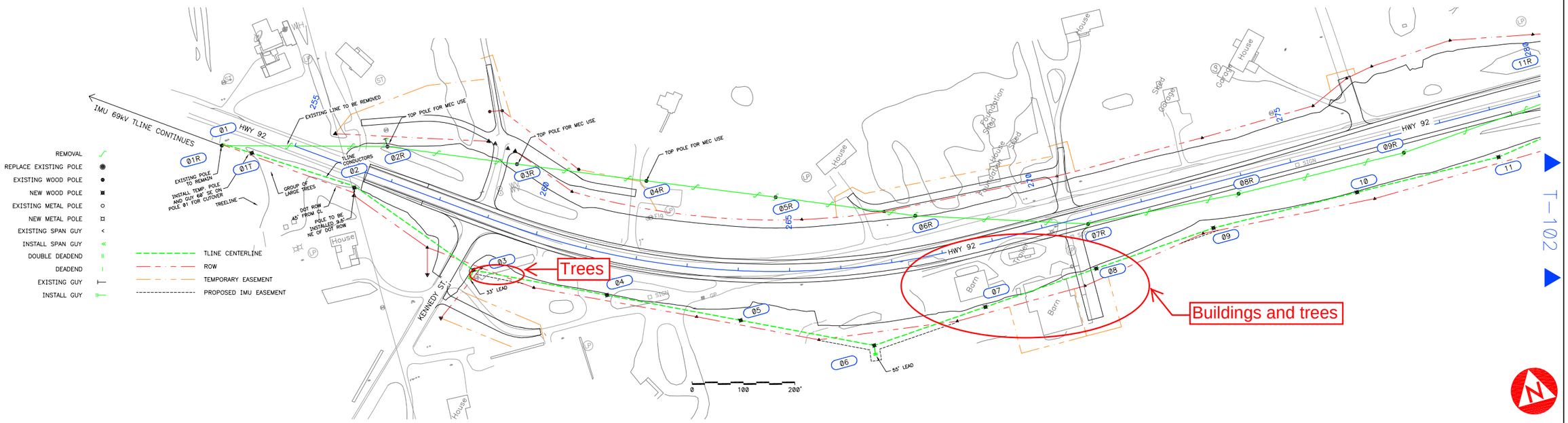
ACAD 22X34

POLE 1 TO POLE 36
TLINE COND. 2-336 KCMIL ACSR @7100# R.S. = 261'
SHIELD. 3/8 EHS @3000# R.S. = 261'
COND. SHOWN @ 212 DEG. F.
SHIELD SHOWN @ -20 DEG F.




| STRUCTURE NUMBER | POLE 01 | | POLE 02 | | POLE 03 | | POLE 04 | | POLE 05 | | POLE 06 | | POLE 07 | | POLE 08 | | POLE 09 | | POLE 10 | | POLE 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (STRUCTURE STATIONING) | (00+00) | | (02+74) | | (05+49) | | (08+13) | | (10+77) | | (13+41) | | (15+70) | | (17+99) | | (20+40) | | (23+29) | | (26+13) |
| GRID STATIONING | 00+00 | | | | 05+00 | | | | 10+00 | | | | 15+00 | | | | 20+00 | | | | 25+00 |
| SPAN LENGTH | | 274' | | 275' | | 265' | | 265' | | 265' | | 229' | | 228' | | 241' | | 289' | | 284' | |
| POLE HEIGHT - CLASS | 75-1 | | LW-65' AGL | | 80-1 | | 75-1 | | 75-1 | | 80-1 | | 80-1 | | 80-1 | | LW 65' AGL | | 75-1 | | LW 65' AGL |
| NOTES | | | | | | | | | | | | | | | | | | | | | |
| | RE-USE EXISTING POLE | | | | | | | | | | | | | | | | | | | | |

SEE STAKING SHEETS
FOR FRAMING DATA




**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| A | 03-13-13 | P&E | RMB | ARP | ORGINAL DESIGN |


P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com


INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

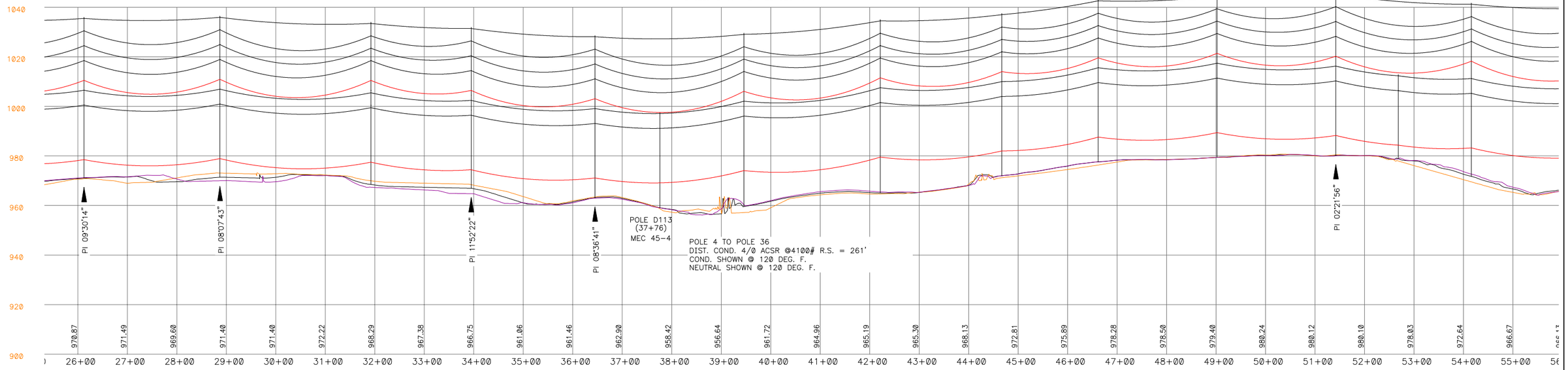
| | |
|---|---|
| DATE | 01-08-12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

INDIANOLA MUNICIPAL UTILITIES
HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN & PROFILE

SCALE: AS NOTED
REV A
DWG NO E8958-T101

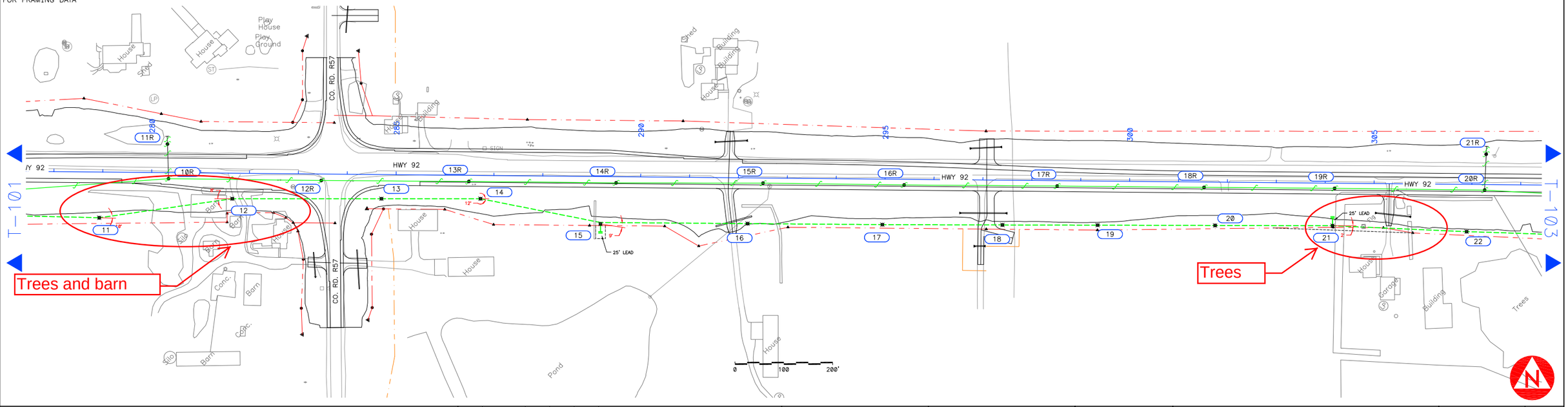
ACAD 22X34

POLE 1 TO POLE 36
TLINE COND. 2-336 KCMIL ACSR @7100# R.S. = 261'
SHIELD. 3/8 EHS @3000# R.S. = 261'
COND. SHOWN @ 212 DEG. F.
SHIELD SHOWN @ -20 DEG F.




| STRUCTURE NUMBER | POLE 11 | POLE 12 | POLE 13 | POLE 14 | POLE 15 | POLE 16 | POLE 17 | POLE 18 | POLE 19 | POLE 20 | POLE 21 | POLE 22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (STRUCTURE STATIONING) | (26+13) | (28+88) | (31+93) | (33+95) | (36+45) | (39+46) | (42+22) | (44+67) | (46+22) | (49+02) | (51+42) | (54+16) |
| GRID STATIONING | | 30+00 | | 35+00 | | 40+00 | | 45+00 | | 50+00 | | 55+00 |
| SPAN LENGTH | 275' | 305' | 202' | 250' | 301' | 276' | 245' | 195' | 280' | 240' | 274' | |
| POLE HEIGHT - CLASS | LW 65' AGL | LW 65' AGL | 75-1 | LW 65' AGL | 80-1 | 80-H1 | 80-1 | 75-1 | 75-1 | 75-1 | 75-1 | 80-1 |
| NOTES | | | 13' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | | | | | | | | | 15' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION |

SEE STAKING SHEETS
FOR FRAMING DATA




**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| B | 03-28-13 | P&E | RMB | ARP | CHANGED TYPE OF POLE 25 |
| A | 03-13-13 | P&E | RMB | ARP | ISSUED FOR BIDDING |


P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com


INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

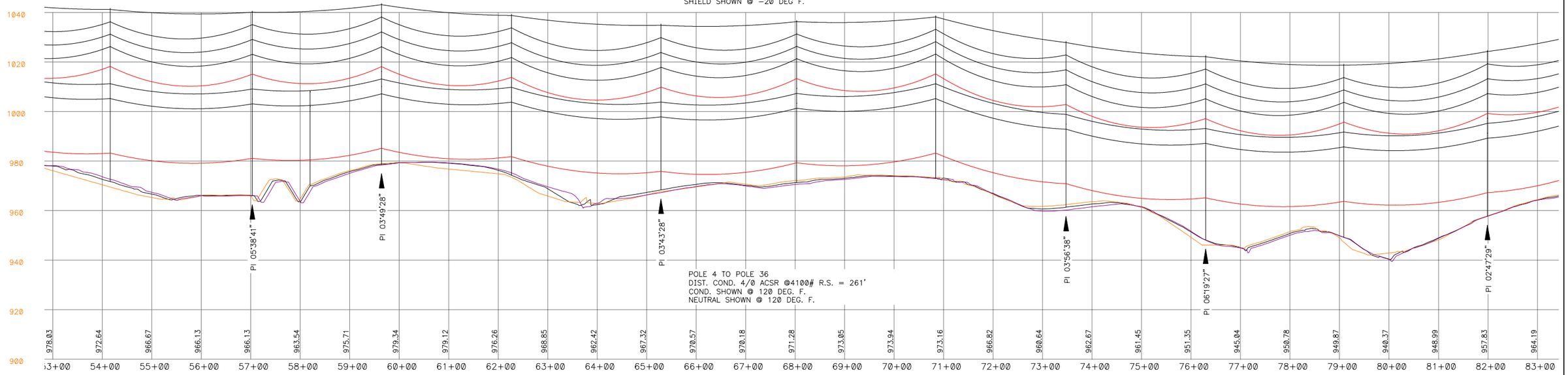
| | |
|---|---|
| DATE | 01-08-12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

INDIANOLA MUNICIPAL UTILITIES
HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN & PROFILE

SCALE: AS NOTED
REV A
DWG NO E8958-T102

AGAD 22X34

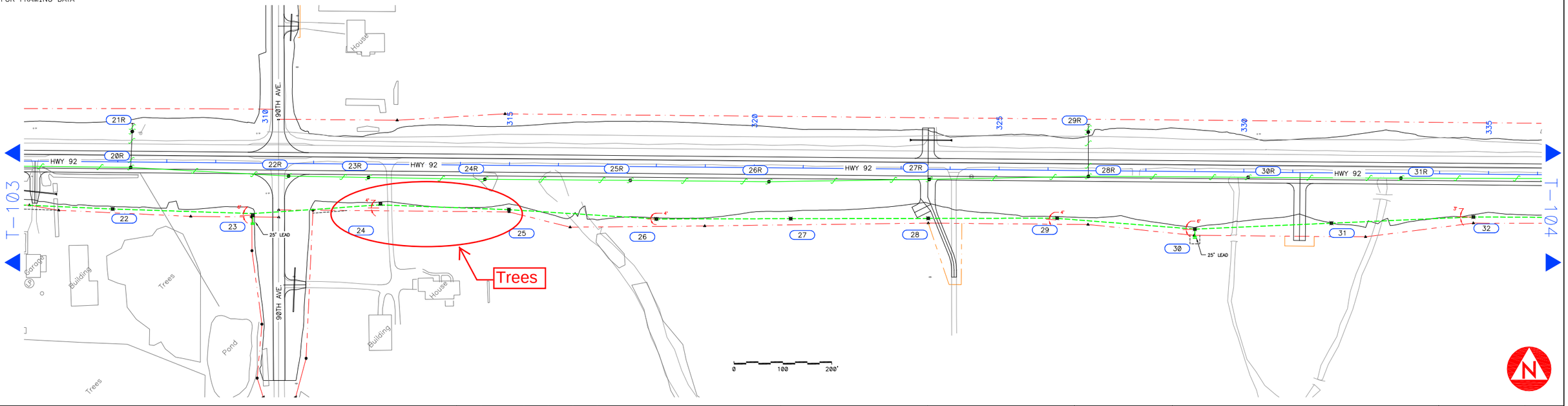
POLE 1 TO POLE 36
TLINE COND. 2-336 KCMIL ACSR @7100# R.S. = 261'
SHIELD. 3/8 EHS @3000# R.S. = 261'
COND. SHOWN @ 212 DEG. F.
SHIELD SHOWN @ -20 DEG F.




POLE 4 TO POLE 36
DIST. COND. 4/0 ACSR @4100# R.S. = 261'
COND. SHOWN @ 120 DEG. F.
NEUTRAL SHOWN @ 120 DEG. F.

| STRUCTURE NUMBER | POLE 22 | POLE 23 | POLE 24 | POLE 25 | POLE 26 | POLE 27 | POLE 28 | POLE 29 | POLE 30 | POLE 31 | POLE 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (STRUCTURE STATIONING) | (54+16) | (57+03) | (59+64) | (62+27) | (65+29) | (68+03) | (70+84) | (73+47) | (76+30) | (79+09) | (81+99) |
| GRID STATIONING | 55+00 | | 60+00 | | 65+00 | | 70+00 | | 75+00 | | 80+00 |
| SPAN LENGTH | 274' | 261' | 263' | 302' | 274' | 281' | 263' | 283' | 279' | 290' | |
| POLE HEIGHT - CLASS | 80-1 | 80-1 | LW 65' AGL | 75-1 | LW 67' AGL | 75-1 | 75-1 | LW 67' AGL | 85-1 | 80-1 | LW 67' AGL |
| NOTES | 15' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | 14' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | 13' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | | 14' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | 14' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | | | | | 13' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION |

SEE STAKING SHEETS
FOR FRAMING DATA




**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| B | 03-28-13 | P&E | RMB | ARP | CHANGED TYPE OF POLE 25 |
| A | 03-13-13 | P&E | RMB | ARP | ISSUED FOR BIDDING |


P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com


INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

| | |
|---|---|
| DATE | 01-08-12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

INDIANOLA MUNICIPAL UTILITIES
HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN & PROFILE

SCALE: AS NOTED
REV A
DWG NO E8958-T103

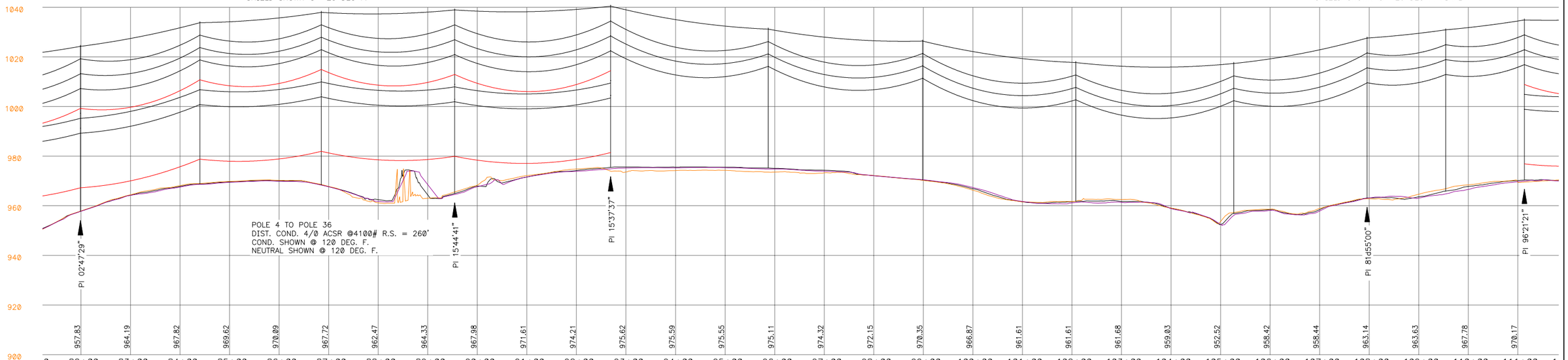
ACAD 22X34

POLE 1 TO POLE 36
TLINE COND. 2-336 KCMIL ACSR @7100# R.S. = 261'
SHIELD. 3/8 EHS @3000# R.S. = 261'
COND. SHOWN @ 212 DEG. F.
SHIELD SHOWN @ -20 DEG F.

POLE 36 TO POLE 41
TLINE COND. 2-336 KCMIL ACSR @7100# R.S. = 307'
SHIELD. 3/8 EHS @3000# R.S. = 307'
COND. SHOWN @ 212 DEG. F. FINAL
SHIELD SHOWN @ -20 DEG F. FINAL

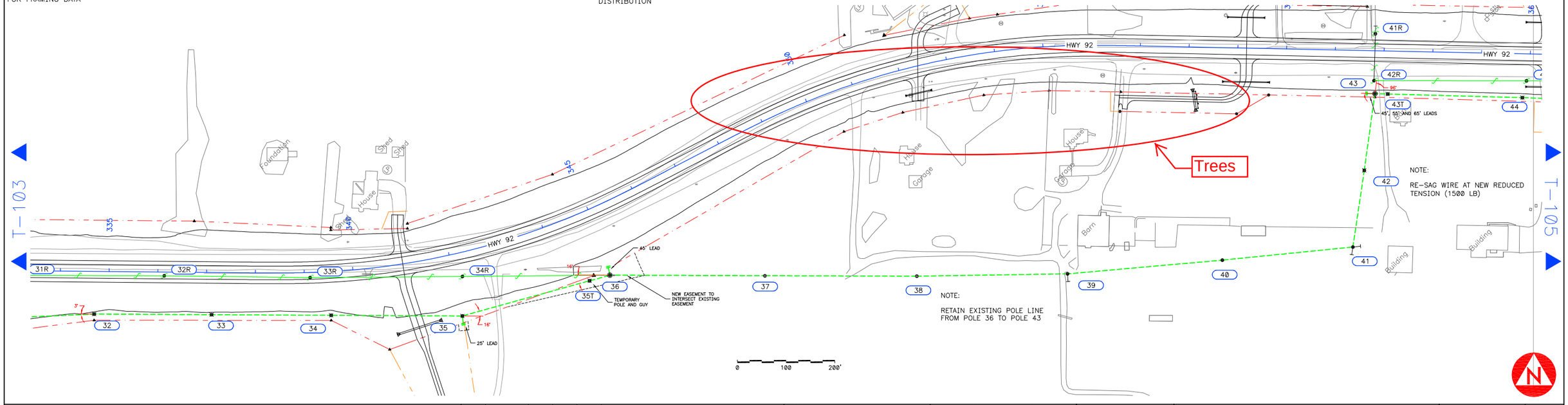
POLE 41 TO POLE 43
TLINE COND. 2-336 KCMIL ACSR @1500# R.S. = 159'
SHIELD. 3/8 EHS @3000# R.S. = 159'
COND. SHOWN @ 212 DEG. F. FINAL
SHIELD SHOWN @ -20 DEG F. FINAL

POLE 4 TO POLE 36
DIST. COND. 4/0 ACSR @4100# R.S. = 260'
COND. SHOWN @ 120 DEG. F.
NEUTRAL SHOWN @ 120 DEG. F.




| STRUCTURE NUMBER | POLE 32 | POLE 33 | POLE 34 | POLE 35 | POLE 36 | POLE 37 | POLE 38 | POLE 39 | POLE 40 | POLE 41 | POLE 42 | POLE 43 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (STRUCTURE STATIONING) | (81+99) | (84+40) | (86+85) | (89+54) | (92+69) | (95+87) | (99+98) | (102+08) | (105+26) | (107+96) | (109+54) | (111+13) |
| GRID STATIONING | | 85+00 | | 90+00 | | 95+00 | | 100+00 | | 105+00 | | 110+00 |
| SPAN LENGTH | 241' | 245' | 269' | 315' | 318' | 311' | 310' | 318' | 270' | 158' | 159' | |
| POLE HEIGHT-CLASS | LW 67' AGL | 75-1 | 80-1 | 85-1 | 75-1 | 65-2 | 65-2 | 65-2 | 70-2 | 75-2 | 75-1 | LW 65' AGL |
| NOTES | | | 13' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | 13' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | RE-USE EXISTING WIRE FROM LOCATION 36 TO 43 13' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | EXISTING POLE TO BE RE-USED | EXISTING POLE TO BE RE-USED | EXISTING POLE TO BE RE-USED | EXISTING POLE TO BE RE-USED | EXISTING POLE TO BE RE-USED | | |

SEE STAKING SHEETS FOR FRAMING DATA




**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| A | 03-04-13 | P&E | RMB | ARP | ORGINAL DESIGN |


P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com


INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

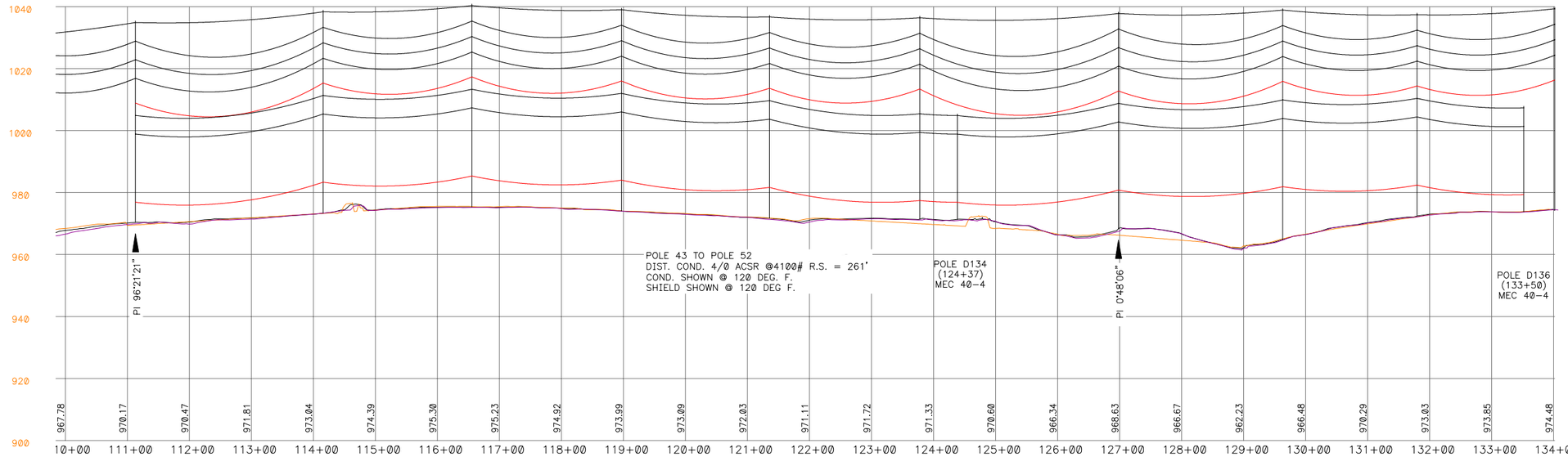
| | |
|---|---|
| DATE | 01-08-12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

**INDIANOLA MUNICIPAL UTILITIES**
HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN & PROFILE

SCALE: AS NOTED
REV A
DWG NO **E8958-T104**

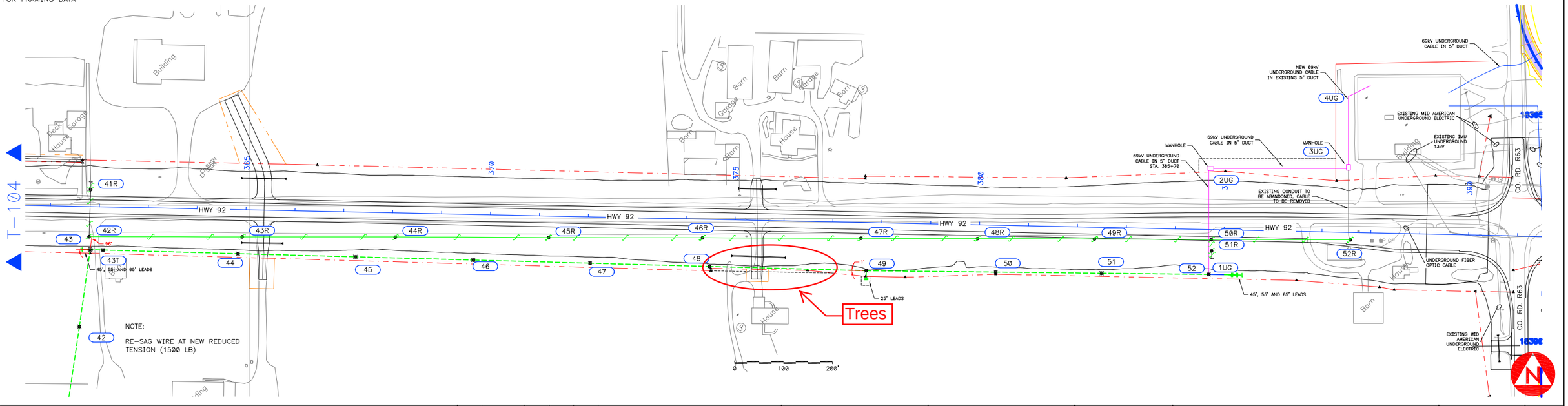
ACAD 22X34

POLE 43 TO POLE 52
TLINE COND. 2–336 KCMIL ACSR @7100# R.S. = 261'
SHIELD. 3/8 EHS @3000# R.S. = 261'
COND. SHOWN @ 212 DEG. F.
SHIELD SHOWN @ –20 DEG F.




| STRUCTURE NUMBER | POLE 43 | POLE 44 | POLE 45 | POLE 46 | POLE 47 | POLE 48 | POLE 49 | POLE 50 | POLE 51 | POLE 52 |
|---|---|---|---|---|---|---|---|---|---|---|
| (STRUCTURE STATIONING) | (111+13) | (114+16) | (116+56) | (118+97) | (121+36) | (123+78) | (127+98) | (129+63) | (131+80) | (134+02) |
| GRID STATIONING | | 115+00 | | 120+00 | | 125+00 | | 130+00 | | |
| SPAN LENGTH | 303' | 240' | 241' | 239' | 242' | 320' | 265' | 217' | 222' | |
| POLE HEIGHT – CLASS | LW 65' AGL | 75–1 | 75–1 | 75–1 | 75–1 | 75–1 | 75–1 | 80–1 | 75–1 | 75–1 |
| NOTES | | | | | | 16' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | | 14' SPACING BETWEEN BOTTOM TLINE PHASE AND DISTRIBUTION | | |

SEE STAKING SHEETS
FOR FRAMING DATA




**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| A | 03–13–13 | P&E | RMB | ARP | ISSUED FOR BIDDING |


P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com

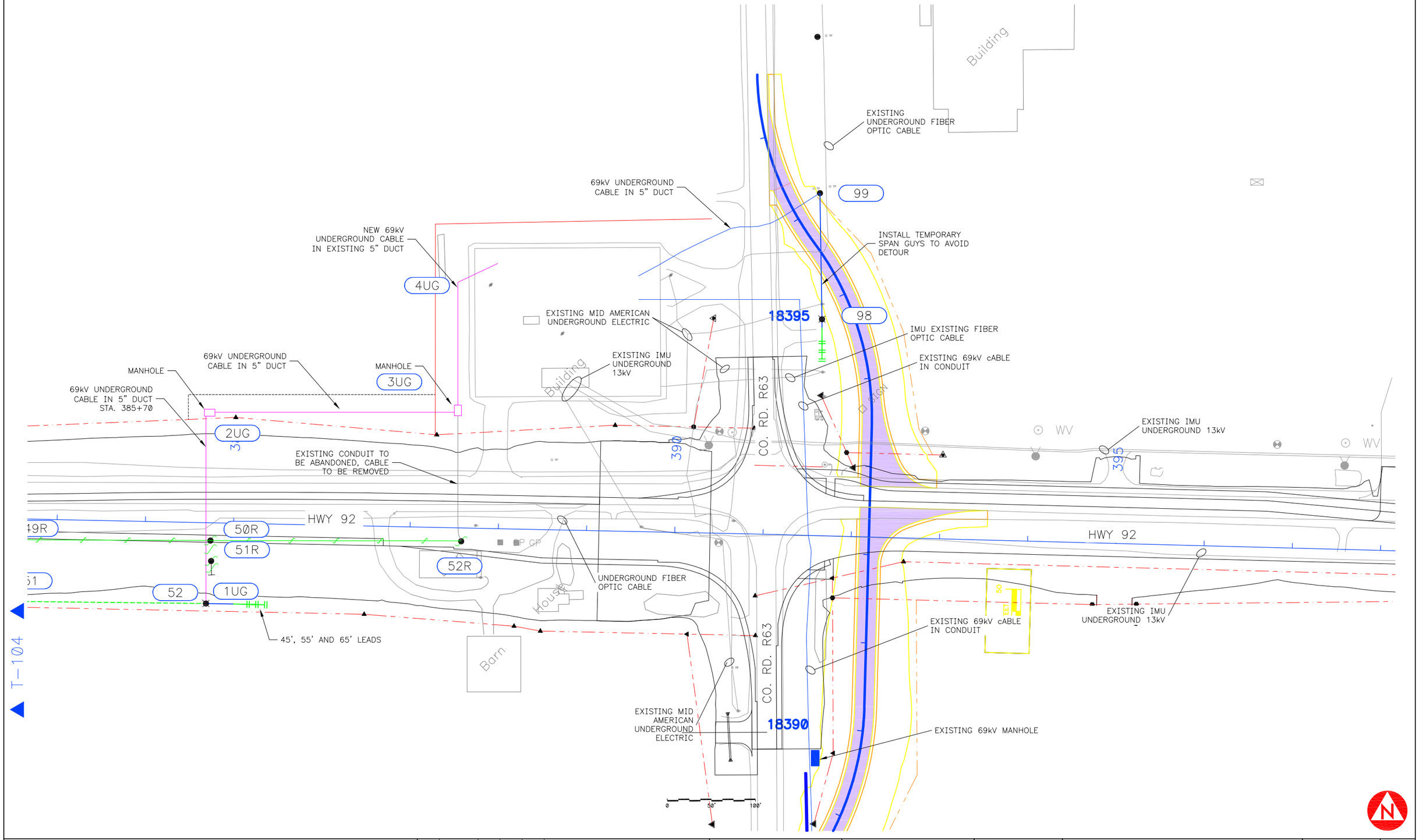

INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

| | |
|---|---|
| DATE | 01–08–12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

**INDIANOLA MUNICIPAL UTILITIES**
HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN & PROFILE

SCALE: AS NOTED
REV A
DWG NO E8958-T105

ACAD 22X34




**PRELIMINARY**
**NOT FOR CONSTRUCTION**

| REV | DATE | DESG | DFTR | APP | DESCRIPTION |
|---|---|---|---|---|---|
| A | 03-13-13 | P&E | RMB | ARP | ISSUED FOR BIDDING |


P & E ENGINEERING CO.
POWER SYSTEM ANALYSIS AND DESIGN
245 S. 5th
P.O. Box 620
Carlisle, IA 50047
Office: 515-989-3083
FAX: 515-989-3138
peengr@peengr.com


INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Network Services • Water

| | |
|---|---|
| DATE | 01-08-12 |
| DESIGNED | P&E |
| DRAWN | RMB |
| APPROVED | JWE |
| APPROVED | ARP |

INDIANOLA MUNICIPAL UTILITIES

HIGHWAY 92 DOT PROJECT
TRANSMISSION PLAN
TEMPORARY WORK EAST OF SUBSTATION

SCALE: AS NOTED

REV A

DWG NO E8958-T106

ACAD 22X34