| TENNESSEE D.O.T. | DESIGN DIVISION | FILE NO. |
|---|---|---|

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|---|---|---|---|
| CONST. | 2015 | NH-29(86) | U2-1 |
| | | | |
| | | | |

MORGAN COUNTY 65001-3268-14

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U2-3 ELECTRIC RELOCATION STA. 252+00 TO STA. 264+00
U2-4 ELECTRIC RELOCATION STA. 264+00 TO STA. 276+00
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## ESTIMATED UTILITY QUANTITIES

Project No. 1: 65001-3268-14

| | ITEM NO. | DESCRIPTION | UNIT | QUANTITY | % Utility Betterment | % Project Public | % Project Private | Harriman Utility Board Unit Designation |
|---|---|---|---|---|---|---|---|---|
| 9 11 | 790-03.03 | POLE 40FT CLASS 4 WOOD | EACH | 2 | | 0.00% | 100.00% | |
| 9 11 | 790-04.02 | POLE 45FT CLASS 2 WOOD | EACH | 1 | | 0.00% | 100.00% | |
| 9 11 | 790-04.03 | POLE 45FT CLASS 3 WOOD | EACH | 11 | | 0.00% | 100.00% | |
| 9 11 | 790-05.02 | POLE 50FT CLASS 2 WOOD | EACH | 6 | | 0.00% | 100.00% | |
| 9 11 | 790-05.03 | POLE 50FT CLASS 3 WOOD | EACH | 21 | | 0.00% | 100.00% | |
| 9 11 | 790-06.02 | POLE 55FT CLASS 2 WOOD | EACH | 4 | | 0.00% | 100.00% | |
| 9 11 | 790-07.01 | POLE 60FT CLASS 1 WOOD | EACH | 2 | | 0.00% | 100.00% | |
| 2 | 790-21.05 | 1Ø DBL PRIMARY SUPPORT 15KV | EACH | 2 | | 0.00% | 100.00% | A2 |
| 2 | 790-21.07 | 1Ø PRIMARY LG ANGLE 15KV | EACH | 2 | | 0.00% | 100.00% | A4 |
| 2 | 790-21.08 | 1Ø DEADEND 15KV | EACH | 1 | | 0.00% | 100.00% | A5 |
| 2 | 790-21.09 | 1Ø PRIMARY TAP 15KV | EACH | 6 | | 0.00% | 100.00% | A5-1, A5-2 |
| 2 | 790-21.10 | 1Ø VERTICAL DDE 15KV | EACH | 1 | | 0.00% | 100.00% | A6 |
| 2 | 790-25.07 | 3Ø CROSSARM DBL LRG COND 15KV | EACH | 3 | | 0.00% | 100.00% | C1-3CL |
| 2 | 790-25.08 | 3Ø CROSSARM SGL LRG COND 15KV | EACH | 16 | | 0.00% | 100.00% | C1-2CL |
| 2 | 790-25.11 | 3Ø CROSSARM DBL PRIM SUP LRG COND 15KV | EACH | 17 | | 0.00% | 100.00% | C2-2CL |
| 2 | 790-25.21 | 3Ø CROSSARM DEADEND SGL 15KV | EACH | 9 | | 0.00% | 100.00% | C7-1C |
| 2 | 790-25.23 | 3Ø CROSSARM DDE 15KV | EACH | 2 | | 0.00% | 100.00% | C8C |
| 3 | 790-30.06 | SECONDARY CONDUCTOR 6 AL DUPLEX | LF | 282 | | 0.00% | 100.00% | |
| 3 | 790-31.02 | SERVICE ASSEMBLY-POLE TYPE | EACH | 7 | | 0.00% | 100.00% | K6, K7 |
| 3 | 790-31.12 | SERVICE CONDUCTOR 1/0 AL TRIPLEX | LF | 75 | | 0.00% | 100.00% | |
| 4 | 790-31.20 | SERVICE CONDUCTOR 1/0 AL QPLEX | LF | 37 | | 0.00% | 100.00% | |
| 5 | 790-32.01 | DOWN GUY - THROUGH BOLT TYPE | EACH | 57 | | 0.00% | 100.00% | E1-2T, E1-2F |
| 5 | 790-32.07 | OH GUY - THROUGH BOLT TYPE | EACH | 1 | | 0.00% | 100.00% | E2-2T |
| 5 | 790-32.23 | GUY GUARD | EACH | 42 | | 0.00% | 100.00% | E3-10P |
| 6 | 790-33.20 | ANCHOR TRIPLE EYE POWER INSTALLED | EACH | 42 | | 0.00% | 100.00% | FP-2 |
| 7 | 790-40.03 | OH COND 1/0 6/1 ACSR RAVEN | LF | 837 | | 0.00% | 100.00% | |
| 7 | 790-40.39 | OH COND 4/0 7 AAC OXLIP | LF | 10161 | | 0.00% | 100.00% | |
| 7 | 790-40.42 | OH COND 336.4 19 AAC TULIP | LF | 30483 | | 0.00% | 100.00% | |
| 7 | 790-40.73 | OH PRI COND 2 6/1 ACSR SPARROW | LF | 2781 | | 0.00% | 100.00% | |
| 8 | 790-42.12 | CONDUIT - POLE MTD - 2FT SCH 80 PVC | LF | 1 | | 0.00% | 100.00% | UM5-2 |
| 10 | 790-46.01 | 1Ø TRANSFORMER | EACH | 3 | | 0.00% | 100.00% | G11 |
| 10 | 790-47.02 | 2Ø XFMR BANK POLE MTD W/FUSE/ARRESTERS | EACH | 1 | | 0.00% | 100.00% | G22 |
| 11 | 790-58.05 | GOLB SWITCH 15KV | EACH | 1 | | 0.00% | 100.00% | M3-15C |
| | 790-60.02 | 1Ø FUSE CUTOUT BRKT MOUNT 15KV | EACH | 3 | | 0.00% | 100.00% | M5-10C |
| | 790-65.03 | LIGHTNING ARRESTER ARM MTD 9KV | EACH | 3 | | 0.00% | 100.00% | M5-6C |
| | 790-68.01 | POLE GROUND ROD TYPE | EACH | 16 | | 0.00% | 100.00% | M2-11R |
| | 790-68.02 | POLE GROUND PLATE TYPE | EACH | 23 | | 0.00% | 100.00% | M2-12B |
| | 790-68.07 | POLE GROUND FOR AIR BREAK SWITCH | EACH | 1 | | 0.00% | 100.00% | M2-15R |
| | 790-69.22 | POLE TOP PIN | EACH | 1 | | 0.00% | 100.00% | M5-2S |
| | 790-69.32 | ARM PIN | EACH | 26 | | 0.00% | 100.00% | M5-5S |
| 12 | 790-70.01 | STREET LIGHT ON WOOD POLE | EACH | 2 | | 0.00% | 100.00% | 100 HPS, 200 HPS |
| 13 | 790-98.01 | REMOVE WIRE | LF | 44990 | | 0.00% | 100.00% | |
| 14 | 790-98.02 | REMOVE POLES | EACH | 42 | | 0.00% | 100.00% | |
| 15 | 790-98.03 | REMOVE FRAMING/ASSOCIATED APPARATUS | EACH | 170 | | 0.00% | 100.00% | |
| 16 | 790-98.20 | TREE AND BRUSH REMOVAL OFF ROW | LS | 1 | | 0.00% | 100.00% | |

FOOTNOTE 1:
INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT FOR COMPLETE INSTALLATION INCLUDING BUT NOT LIMITED TO SETUP, TRAFFIC CONTROL, DIGGING HOLE, FILLING HOLE, BLASTING, BUTT WRAP OR SINGLE GROUND ROD, MGNV, NUMBERING POLE.

FOOTNOTE 2:
ASSEMBLIES OF SIMILAR CONSTRUCTION BUT DIFFERING ONLY IN USE OF EPOXY VS. PORCELAIN INSULATORS OR FIBERGLASS VS. WOOD CROSSARMS OR LACK OF NEUTRAL ASSEMBLY SHOULD BE GROUPED WITHIN THE SAME ITEM.

FOOTNOTE 3:
INCLUDES SAGGING AND STRINGING OF OH SECONDARY OR SERVICE CONDUCTORS. ALSO INCLUDES CONNECTORS AND WEDGE CLAMPS AT EACH END.

FOOTNOTE 4:
INCLUDES WEDGE CLAMP AND CONNECTORS.

FOOTNOTE 5:
INCLUDES FIBERGLASS INSULATED LINKS WHERE REQUIRED.

FOOTNOTE 6:
10 INCH DOUBLE HELIX PISA WITH TRIPLE EYE ATTACHMENT.

FOOTNOTE 7:
INCLUDES SAGGING AND TYING IN OF OH PRIMARY CONDUCTORS. ALSO INCLUDES ARMOR RODS WITH TIES AND/OR PREFORMED TIES.

FOOTNOTE 8:
SECONDARY RISER. PVC CONDUIT WITH WEATHERHEAD AND UG CONDUCTOR.

FOOTNOTE 9:
POLES DESIGNATED AS HIGHLAND TELEPHONE COOPERATIVE (HTC) SHALL BE BRANDED AND TAGGED AS HTC POLES.

FOOTNOTE 10:
INCLUDES CUTOUT, ARRESTOR AND ALL MISCELLANEOUS MATERIALS EXCEPT TRANSFORMERS.

FOOTNOTE 11:
1200AMP GANG OPERATED SWITCH, MANUFACTURER AND MODEL TO BE APPROVED BY HARRIMAN UTILITY BOARD.

FOOTNOTE 12:
MAY TRANSFER EXISTING LIGHTS FROM EXISTING POLES TO NEW POLES IF APPROVED BY HUB.

FOOTNOTE 13:
INCLUDES DROP WIRE, OH GUYS, MAIN LINE WIRE

FOOTNOTE 14:
INCLUDES MAINLINE POLES, SERVICE POLES, STUB POLES

FOOTNOTE 15:
INCLUDES CROSSARMS, TRANSFORMERS, SWITCHES, ETC.

FOOTNOTE 16:
INCLUDES ALL TRIMMING AND DISPOSAL.

GENERAL NOTES
PROJECT DESCRIPTION IN GENERAL, THE CONTRACT SHALL REPLACE 10161 SPAN FEET OF EXISTING 3 PHASE 3/0 ACSR OVERHEAD POWER DISTRIBUTION ALONG SR 29 IN ROANE & MORGAN COUNTIES WITH NEW 3 PHASE 336 AAC.

UTILITIES
(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(3) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(4) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

(5) THE UTILITY OWNER WILL FURNISH DESIGN TENSION AND SAG DATA AS REQUIRED DURING THE COURSE OF INSTALLATION.

(6) THE UTILITY OWNER WILL FURNISH ALL TRANSFORMERS TO BE INSTALLED PER THE CONTRACT DRAWINGS. ALL OTHER MATERIAL TO BE PROVIDED BY THE CONTRACTOR. TRANSFORMERS TO BE REMOVED WILL BE RETURNED TO THE UTILITY OWNER. ALL OTHER MATERIAL TO BE KEPT BY THE CONTRACTOR.

(7) ALL POLE HEIGHTS ARE FOR FINAL GRADE. IN LOCATIONS WHERE POLES ARE INSTALLED WITHIN PROPOSED GRADE WORK, IT IS ASSUMED GRADE WORK WILL BE COMPLETED PRIOR TO POLE INSTALLATION. IF NOT, COORDINATE ALL REQUIRED WORK WITH DEPARTMENTS RPR AND UTILITY.

## LEGEND

PROPOSED DOWNGUY
EXISTING DOWNGUY
EXISTING POLE
NEW POLE
NEW LIGHT POLE

+++P EXISTING 3-PHASE PRIMARY CONDUCTOR
---P NEW 3-PHASE PRIMARY CONDUCTOR
+++P REMOVE 3-PHASE PRIMARY CONDUCTOR
+P EXISTING 1-PHASE PRIMARY CONDUCTOR
-P NEW 1-PHASE PRIMARY CONDUCTOR
+P REMOVE 1-PHASE PRIMARY CONDUCTOR
TRIPLEX SERVICE CONDUCTOR
DUPLEX SERVICE CONDUCTOR

UTILITY INFORMATION

HARRIMAN UTILITY BOARD
300 NORTH ROANE STREET,
HARRIMAN TN 37748
CONTACT: MR. STEVE LADD
PHONE: 865.882.3242
CONTACT FAX: 865.882.1024
CONTACT EMAIL: sladd@hub-tn.com

ALL MATERIAL USED ON THIS PROJECT SHALL COMPLY WITH TDOT'S BUY AMERICAN REQUIREMENTS.


Cannon&Cannon, Inc.
Consulting Engineers • Field Surveyors
8550 Kingston Pike
Knoxville, Tennessee 37919
Telephone: (865) 670-8555 • Fax: (865) 670-8866
www.cannon-cannon.com


HARRIMAN UTILITY BOARD
300 North Roane Street
Harriman, TN 37748
Phone (865) 882-3242

ELECTRIC RELOCATION
ESTIMATED QUANTIES
DRAWING INDEX

JEFF L. MEADOW REGISTERED AGRICULTURE COMMERCE No. 23024 STATE OF TENNESSEE

| | |
|---|---|
| CCI NO. | 923-0005 |
| P.I.C. | JEFF MEADOW |
| DRAWN | JNR |
| Q.C. | DM |
| SCALE: 1" = 50' | DATE: 8-29-2014 |

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Survey & Design Division