| ASMB. | ID. MARK | QUAN. | DESCRIPTION | LENGTH FT. | LENGTH IN. | WEIGHT EACH | TOTAL WEIGHT |
|---|---|---|---|---|---|---|---|
| T3 | | 2 | METER TRUSS | | | | |
| | C6 | 4 | C8 x 18.75 (8" x 2 1/8") | 14 | 7 | 273 | 1092 |
| ESH | | 8 | END STRAP | | | | |
| | a | 16 | 6" x 3 1/2" x 1/2" ANGLE (CUT & WELD) | | 4 | 5 | 80 |
| TWF | | 8 | CROSS MEMBER (STRUT) | | | | |
| | W4 | 8 | W4 x 13, (4 1/8" x 4") | 1 | 11 | 25 | 200 |
| | TEP | 16 | PLATE, 5" x 1/4" THK. | | 5 | 2 | 32 |
| | SHOP BOLTS | 64 | GMB, 5/8 H.S. W/HN, FW, LW | | 1 1/2 | | |
| | SHOP BOLTS | 16 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 | | |
| | FIELD BOLTS | 16 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/2 | | |
| | MPP | 6 | PLATE, 15" x 3/8" THK | 2 | 2 | 42 | 252 |
| | MPC | 6 | PLATE, 10" x 3/8" THK | 3 | 7 | 46 | 276 |
| | SHOP BOLTS | 48 | GMB, 1/2" H.S. W/HN, FW, LW | | 1 1/2 | | |
| | | | | | | | 1932 |
| RB | | 6 | GROUNDING TRANS. RISER STAND | | | | |
| | RB | 6 | ANGLE 2" x 2" x 3/16" (CUT & WELD) | 54 | 0 | 138 | 828 |
| | BA | 12 | ANGLE 2" x 2" x 3/16" | 2 | 3 | 6 | 72 |
| | FIELD BOLTS | 24 | GMB 5/8 H.S. W/HN, FW, LW | | 4 1/2 | | |
| | | | | | | | 900 |
| | RBA | 24 | ANGLE 2" x 2" x 3/16" | 2 | 1 | | |
| | RBB | 24 | ANGLE 2" x 2" x 3/16" | 2 | 3 | | |
| | RBC | 24 | ANGLE 2" x 2" x 3/16" | 3 | 5 | | |
| | RBD | 24 | ANGLE 2" x 2" x 3/16" | 4 | 3 | | |
| | RBE | 6 | ANGLE 2" x 2" x 3/16" | 3 | 3 | | |
| | RBF | 12 | ANGLE 2" x 2" x 3/16" | 1 | 8 | | |
| GR-14 | GR1 | 10 | WB-4 GRATE (1/2 x B BMDS) 3'-6 | 5 | 4 | | |
| | GR2 | 40 | FB x 1 1/2 x 3/16 | 0 | 3 | | |
| | GR3 | 20 | BAR 2 x 1/4 | 0 | 4 | | |
| HA-14 | HA-1 | 2 | PL 5" ϕ x 1/4 | ~ | ~ | | |
| | HA-2 | 2 | FB 2 x 2 x 3/16 | 0 | 3 1/2 | | |

| ASMB. | ID. MARK | QUAN. | DESCRIPTION | LENGTH FT. | LENGTH IN. | WEIGHT EACH | TOTAL WEIGHT |
|---|---|---|---|---|---|---|---|
| G1 | | 2 | H.S. V-SW GIRDER | | | | |
| | 100 | 4 | ∠ 3" x 3" x 1/4" | 30 | 11 | 156 | 624 |
| | 101 | 4 | ∠ 3" x 3" x 1/4" | 30 | 11 | 156 | 624 |
| | 308 | 16 | ∠ 2" x 1 1/2" x 3/16" | 3 | 2 | 7 | 112 |
| | 309 | 48 | " | 3 | 6 3/8 | 8 | 384 |
| | 104 | 32 | " | 3 | 7 5/8 | 8 | 256 |
| | 105 | 46 | ∠ 2" x 2" x 3/16" | 2 | 9 3/4 | 7 | 322 |
| | 106 | 12 | ∠ 3" x 3" x 3/8" | 2 | 9 3/4 | 21 | 252 |
| | 107 | 12 | ∠ 2" x 1 1/2" x 3/16" | 3 | 7 3/8 | 8 | 96 |
| | 108 | 6 | BAR 2 x 1/4 | 2 | 9 3/4 | 5 | 30 |
| | 110 | 16 | PLATE 6" x 1/4" | 0 | 9 1/2 | 4 | 64 |
| | 320 | 14 | ∠ 3" x 3" x 3/16" | 2 | 9 3/4 | 18 | 252 |
| | 310 | 12 | ∠ 3" x 3" x 1/4" | 2 | 5 3/4 | 13 | 156 |
| | 310 | 16 | ∠ 2" x 1 1/2" x 3/16" | 3 | 5 5/8 | 8 | 128 |
| | FIELD BOLTS | 246 | GMB 5/8 H.S. W/HN, FW, LW | | 1 1/4 | | |
| | FIELD BOLTS | 164 | " | | 1 1/2 | | |
| | FIELD BOLTS | 14 | " | | 1 3/4 | | |
| | FIELD BOLTS | 8 | " | | 2 | | |
| | | | | | | | 3300 |
| IM | | 9 | INSULATOR MOUNTING | | | | |
| | CO | 9 | CHANNEL 6" x 8.2 | 2 | 2 1/2 | 18 | 162 |
| | PO | 18 | PLATE 2 1/4 x 1/4 (WELD) | | 6 1/2 | 1 | 18 |
| | FIELD BOLTS | 36 | GMB 5/8 H.S. W/HN, FW, LW | | 1 3/4 | | |
| | | | | | | | 180 |
| VWP | | 6 | V-SW MOUNTING | | | | |
| | VWP | 6 | PLATE 5/8" x 1' | 3 | 0 | 77 | 462 |
| | FIELD BOLTS | 24 | GMB 5/8 H.S. W/HN, FW, LW | | 2 | | |
| | | | | | | | 462 |
| A8 | | 3 | HIGH SIDE ARRESTER COLUMN | | | | |
| | PZ7 | 3 | 10 WF 33 (MODIFIED) CUT & WELD | 9 | 10 13/16 | 338 | 1014 |
| | P47 | 3 | PL 15 1/2 x 1/2 (WELD) | 1 | 3 1/2 | 35 | 105 |
| | PS7 | 6 | PL 10 1/2 x 3/8 (CUT & WELD) | 1 | 3 | 17 | 102 |
| | A9 | 3 | PL 24 x 1/2 | 2 | 0 | 84 | 252 |
| A6 | | 6 | BRACKET | | | | |
| | PU7 | 6 | BT. PL 12 7/8 x 3/8 (CUT & BEND) | 1 | 2 3/4 | 21 | 126 |
| | PV7 | 6 | PL 3 3/8 x 3/8 (CUT & WELD) | | 8 7/8 | 3 | 18 |
| | SHOP BOLTS | 24 | GMB 3/4" H.S. W/HN, FW, LW | | 2 | | |
| | SHOP BOLTS | 12 | GMB 3/4" HS COUNTERSUNK SLOTTED HEAD W/HN, FW, LW | | 2 | | |
| | | | | | | | 1617 |
| ISP | | 6 | INSULATOR SUPPORT PLATE | | | | |
| | ISP | 6 | PLATE 5/8 x 1' | 3 | 0 | 77 | 462 |
| | FIELD BOLTS | 24 | GMB 5/8 H.S. W/HN, FW, LW | | 2 | | |
| | | | | | | | 462 |
| T2 | | 1 | REGULATOR SWITCH TRUSS | | | | |
| | C6 | 2 | C8 x 18.75 (8" x 2 1/8") | 14 | 7 | 273 | 546 |
| ESH | | 4 | END STRAP | | | | |
| | a | 8 | 6" x 3 1/8" x 1/2" ANGLE (CUT & WELD) | 0 | 4 | 5 | 40 |
| HWF | | 4 | CROSS MEMBER (STRUT) | | | | |
| | W4 | 4 | W4 x 13, (4 1/8" x 4") | 1 | 11 | 25 | 100 |
| | TEP | 8 | PLATE, 5" x 1/4" THK. (WELD) | | 5 | 2 | 16 |
| | SHOP BOLTS | 32 | GMB, 5/8 H.S. W/HN, FW, LW | | 1 1/2 | | |
| | SHOP BOLTS | 8 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 | | |
| | FIELD BOLTS | 8 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/2 | | |
| | | | | | | | 702 |

| ASMB. | ID. MARK | QUAN. | DESCRIPTION | LENGTH FT. | LENGTH IN. | WEIGHT EACH | TOTAL WEIGHT |
|---|---|---|---|---|---|---|---|
| B3U | | 3 | H.S. TRANS. BUS | | | | |
| | W3U | 3 | W 12 x 40 (MODIFIED) | 28 | 10 5/8 | 1155 | 3465 |
| | W201C | 3 | W 12 x 40 (CUT & WELD) | 4 | 6 | 180 | 540 |
| | SP | 18 | PLATE 3 27/32 x 5/8 THK (WELD) | | 11 | 7.5 | 135 |
| | B2EPP | 6 | PLATE 10" x 5/8" THK. (WELD) | 2 | 1 | 44 | 264 |
| | FIELD BOLTS | 36 | GMB 3/4" H.S. W/HN, FW, LW | | 2 1/2 | | |
| | | | | | | | 4404 |
| B5A | | 2 | REGULATOR BEAM - ARR | | | | |
| | W5A | 2 | W 8 x 18 | 13 | 10 1/2 | 249 | 498 |
| | B1EP | 4 | PLATE, 8 1/2" x 3/8" THK (WELD) | | 9 | 8 | 32 |
| | AMP | 6 | PLATE, 10" x 3/8" THK | 1 | 4 | 17 | 102 |
| | SHOP BOLTS | 24 | GMB 5/8" H.S. W/HN, FW, LW | | 2 | | |
| | FIELD BOLTS | 16 | GMB, 5/8" H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 632 |
| B7 | | 2 | LONG REG. BEAM | | | | |
| | W7 | 2 | W 8 x 18 | 18 | 11 1/8 | 341 | 682 |
| | BEP | 4 | PLATE, 12 1/2" x 3/8" THK (WELD) | | 11 1/4 | 15 | 60 |
| | FIELD BOLTS | 16 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 742 |
| B8 | | 1 | C.T. BEAM | | | | |
| | W8 | 1 | W 8 x 18 | 18 | 11 1/8 | 341 | 341 |
| | BEP | 2 | PLATE, 12 1/2" x 3/8" THK (WELD) | | 11 1/4 | 15 | 30 |
| | CTP | 3 | PLATE, 11" x 3/8" THK | | 10 | 12 | 36 |
| | SHOP BOLTS | 12 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 | | |
| | FIELD BOLTS | 8 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 407 |
| B16 | | 4 | G.B. BUS BEAM | | | | |
| | W16 | 4 | W 6 x 20 | 12 | 0 | 240 | 960 |
| | FIELD BOLTS | 32 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 960 |
| B17 | | 2 | V-SW BEAM | | | | |
| | W17 | 2 | W 6 x 20 | 8 | 0 | 160 | 320 |
| | B18&VSB | 6 | PLATE 18" x 1/2" THK | 1 | 6 | 46 | 276 |
| | SHOP BOLTS | 24 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | FIELD BOLTS | 8 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 596 |
| ~~B18~~ | | ~~1~~ | ~~BUS BEAM~~ | | | | |
| | ~~W18~~ | ~~1~~ | ~~W 6 x 20~~ | ~~12~~ | ~~6~~ | ~~250~~ | ~~250~~ |
| | ~~FIELD BOLTS~~ | ~~8~~ | ~~GMB, 5/8 HS W/HN, FW, LW~~ | | ~~2 1/4~~ | | |
| | | | | | | | ~~250~~ |
| B503 | | 4 | H.S. SWITCH BEAM - SHORT | | | | |
| | W503 | 4 | W 6 x 20 | 7 | 0 | 140 | 560 |
| | FIELD BOLTS | 32 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 560 |
| B504 | | 4 | H.S. SWITCH BEAM - LONG | | | | |
| | W504 | 4 | W 6 x 20 | 19 | 6 | 390 | 1560 |
| | FIELD BOLTS | 32 | GMB, 5/8 HS W/HN, FW, LW | | 2 1/2 | | |
| | | | | | | | 1560 |
| B903 | | 4 | L.S. SW BEAM | | | | |
| | W903 | 4 | W 6 x 20 | 12 | 0 | 240 | 960 |
| | FIELD BOLTS | 32 | GMB, 5/8 HS W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 960 |

| ASMB. | ID. MARK | QUAN. | DESCRIPTION | LENGTH FT. | LENGTH IN. | WEIGHT EACH | TOTAL WEIGHT |
|---|---|---|---|---|---|---|---|
| C1A | | 6 | HIGH SIDE COLUMN | | | | |
| | W1A | 6 | W 12 x 65 | 26 | 7 1/4 | 1732 | 10,392 |
| | BP | 6 | PLATE 24" x 2" THK (WELD) | 2 | 0 | 327 | 1962 |
| | C3P | 12 | PLATE, 12 5/8" x 5/8" THK (WELD) | 2 | 2 | 58 | |
| | | | | | | | 12354 |
| C6 | | 6 | T-STRUCTURE COLUMN | | | | |
| | W601 | 6 | W 12 x 65 | 13 | 3 3/4 | 865 | 5190 |
| | BP | 6 | PLATE, 24" x 2" THK (WELD) | 2 | 0 | 327 | 1962 |
| A5A | | 12 | ANGLE MOUNT PLATE | | | | |
| | PL501 | 12 | PLATE, 12" x 1/2" THK (BEND) | 3 | 0 | 62 | 744 |
| | PL502 | 12 | PLATE, 17" x 1/2" THK (CUT & WELD) | 1 | 5 | 20 | 240 |
| | SHOP BOLTS | 48 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 8136 |
| C8 | | 4 | TRANS. H.S. SWITCH COLUMN | | 3 3/8 | | |
| | W7A | 4 | W 12 x 65 | 18 | 3 3/8 | 1189 | 4756 |
| | BP | 4 | PLATE 24" x 2" THK. (WELD) | 2 | 0 | 327 | 1308 |
| A5A | | 8 | ANGLE MOUNT PLATE | | | | |
| | PL501 | 8 | PLATE, 12" x 1/2" THK. (BEND) | 3 | 0 | 62 | 496 |
| | PL502 | 8 | PLATE, 17" x 1/2" THK. (CUT & WELD) | 1 | 5 | 20 | 160 |
| | SHOP BOLTS | 32 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 6720 |
| C9 | | 4 | L.S. SWITCH COLUMN | | | | |
| | W9A | 4 | W 12 x 65 | 13 | 3 3/4 | 865 | 3460 |
| | BP | 4 | PLATE, 24" x 2" THK. (WELD) | 2 | 0 | 327 | 1308 |
| A9A | | 8 | ANGLE MOUNT PLATE | | | | |
| | PL901 | 8 | PLATE, 12" x 1/2" THK (BEND) | 2 | 0 | 41 | 328 |
| | PL902 | 8 | PLATE, 8" x 1/2" THK (CUT & BEND) | 1 | 4 | 18 | 144 |
| | SHOP BOLTS | 32 | GMB, 5/8" H.S. W/HN, FW, LW | | 2 1/4 | | |
| | | | | | | | 5240 |
| C11M | | 2 | LOW SIDE COLUMN | | | | |
| | W11 | 2 | W 12 x 65 | 21 | 10 7/8 | 1428 | 2428 |
| | BP | 2 | PLATE 24" x 2" THK. (WELD) | 2 | 0 | 327 | 654 |
| | TP | 2 | PLATE, 12 5/16" x 3/8" THK (BEND & WELD) | 2 | 8 3/8 | 44 | 88 |
| | ML | 4 | PLATE 3" x 1/4" THK (BEND) | 2' | 5 1/2 | | 24 |
| | | | | | | | 3194 |
| C11RSS | | 2 | REGULATOR COLUMN | | | | |
| | W11S | 2 | W 12 x 65 | 21 | 10 7/8 | 1428 | 2428 |
| | BP | 2 | PLATE 24" x 2" THK (WELD) | 2 | 0 | 327 | 654 |
| | TP | 2 | PLATE, 12 5/16" x 3/8" THK (BEND & WELD) | 2 | 8 3/8 | 44 | 88 |
| | | | | | | | 3170 |
| CFA | | 1 | REACTOR COLUMN | | | | |
| | WFA | 1 | W 12 x 65 | 13 | 9 3/8 | 898 | 898 |
| | BP | 1 | PLATE 24" x 2" THK (WELD) | 2 | 0 | 327 | 327 |
| | FIS PL | 1 | PLATE, 13" x 5/8" THK (WELD) | 2 | 0 | 55 | 55 |
| | LR | 2 | ANGLE 4" x 4" x 3/8" THK | 6 | 0 | | |
| | FIELD BOLTS | 4 | GMB, 5/8 H.S. W/HN, FW, LW | | 2 | | |
| | | | | | | | 1280 |
| B3A | | 4 | H.S. TRANS. BUS | | | | |
| | W301A | 4 | W 12 x 40 (MODIFIED) | 28 | 9 1/2 | 1152 | 4608 |
| | W201C | 4 | W 12 x 40 (CUT & WELD) | 4 | 6 | 180 | 720 |
| | SP | 16 | PLATE 3 27/32 x 5/8" THK. (WELD) | | 11 | 7.5 | 120 |
| | B2EPP | 8 | PLATE 10" x 5/8" (WELD) | 2 | 1 | 44 | |
| | FIELD BOLTS | 48 | GMB, 3/4" H.S. W/HN, FW, LW | | 2 1/2 | | |
| | | | | | | | 5448 |

NOTES:
1. ALL HOLES 11/16" ϕ UNLESS NOTED
   BOLTS 5/8" ϕ UNLESS NOTED
2. ALL STEEL TO BE HOT DIP GALVANIZED AFTER FABRICATION.
3. EDGE DISTANCE 1 1/8" UNLESS NOTED
4. ALL STEEL TO BE STRAIGHT ABOUT CENTERLINE
5. EACH PIECE OF STEEL TO HAVE IT'S MARK STAMPED INTO METAL WITH 3/8" HIGH CHARACTERS

| NO. | REVISIONS | DATE | BY |
|---|---|---|---|
| | | | |


M. D. HENRY CO., INC.
P. O. BOX 40 PELHAM, ALABAMA 35124
PHONE (205)-663-5711 FAX (205)-663-6718


SCALE 3/4" = 1'-0 | DRAWN BY RAE
DATE 9-21-94 | CHK'D BY

HARRIMAN UTILITY BOARD ~ HARRIMAN, TN
BLAIR ROAD SUBSTATION ~ 161KV TO 15KV SUBSTATION

STEEL MATERIAL LIST | DRAWING NUMBER DK-5963-1CC


ANY ADDITIONS, MODIFICATIONS, OR CORRECTIONS TO STRUCTURES FURNISHED IN ACCORDANCE WITH THIS DRAWING WITHOUT AUTHORIZATION OF M. D. HENRY CO., INC. WILL RELIEVE M. D. HENRY CO., INC. OF RESPONSIBILITY FOR THE DESIGN, PERFORMANCE, AND OR COST OF ALTERATIONS.