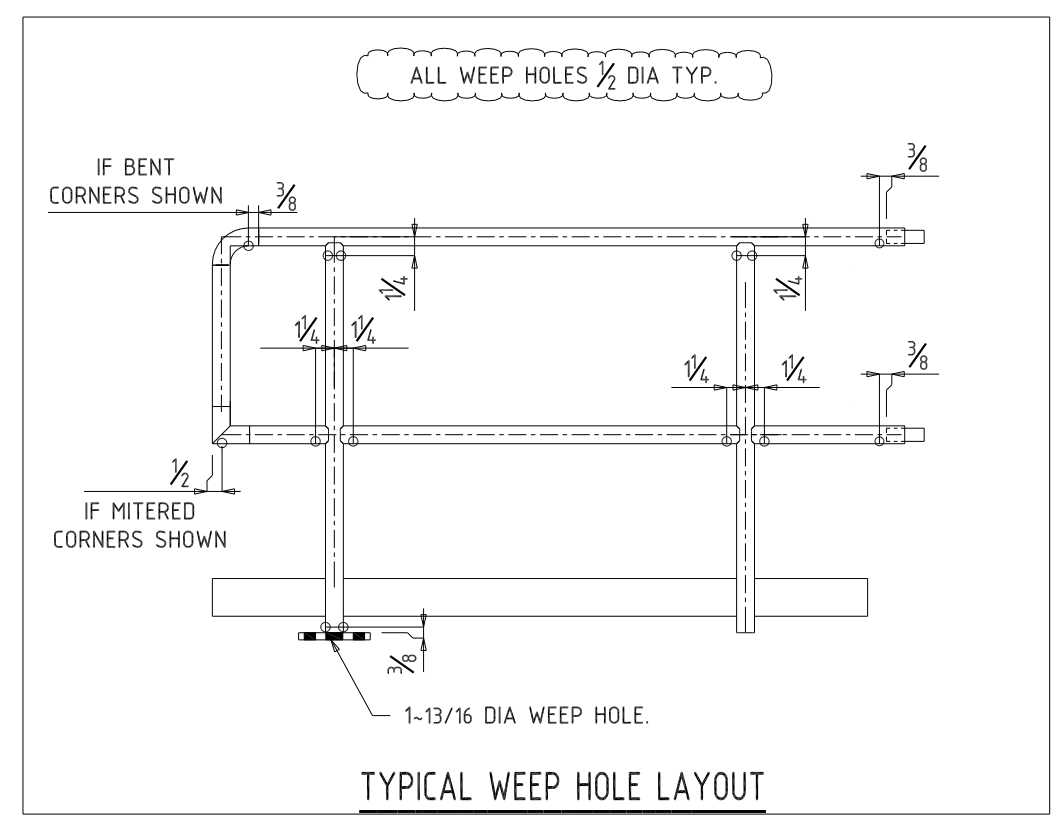
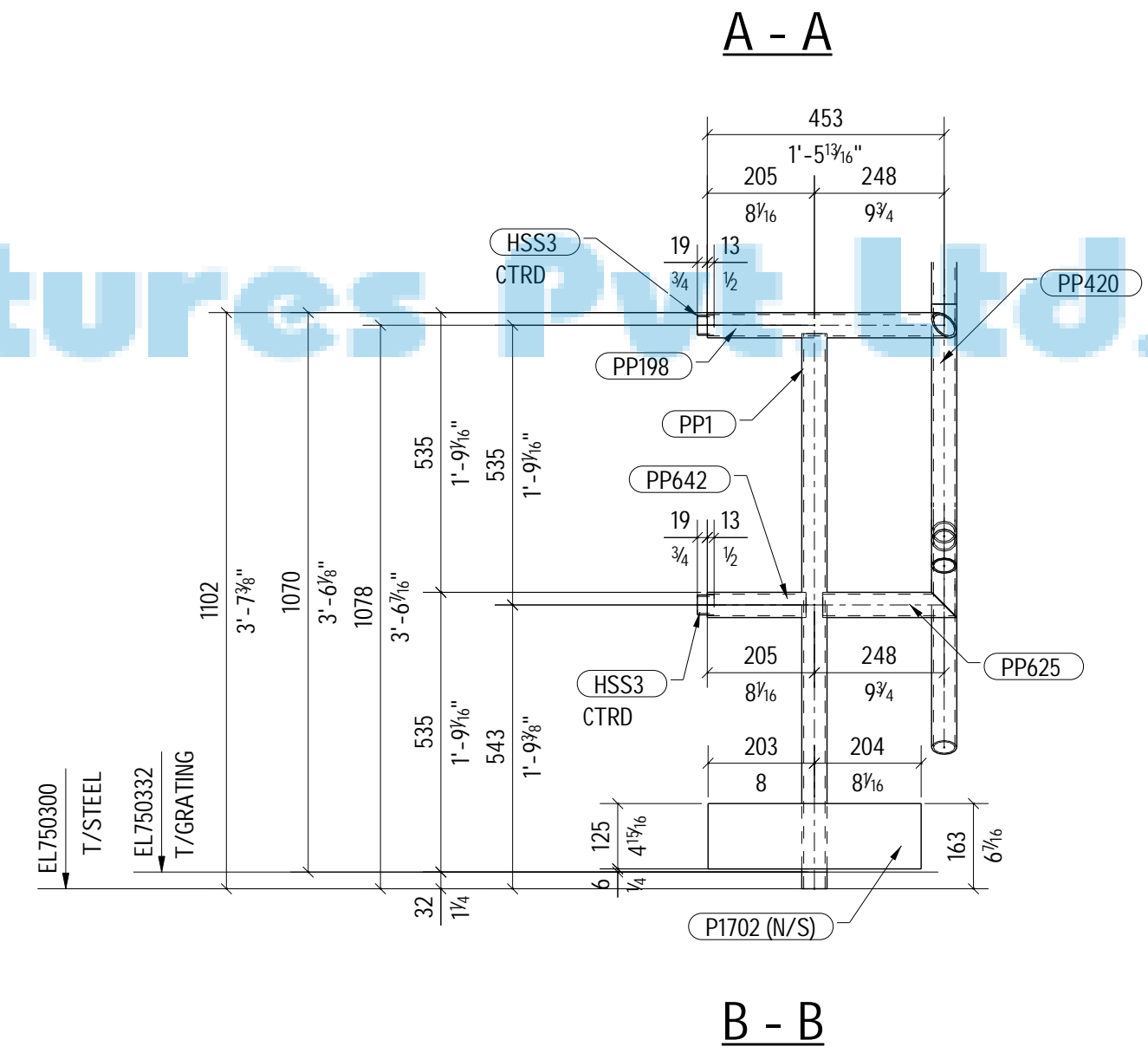
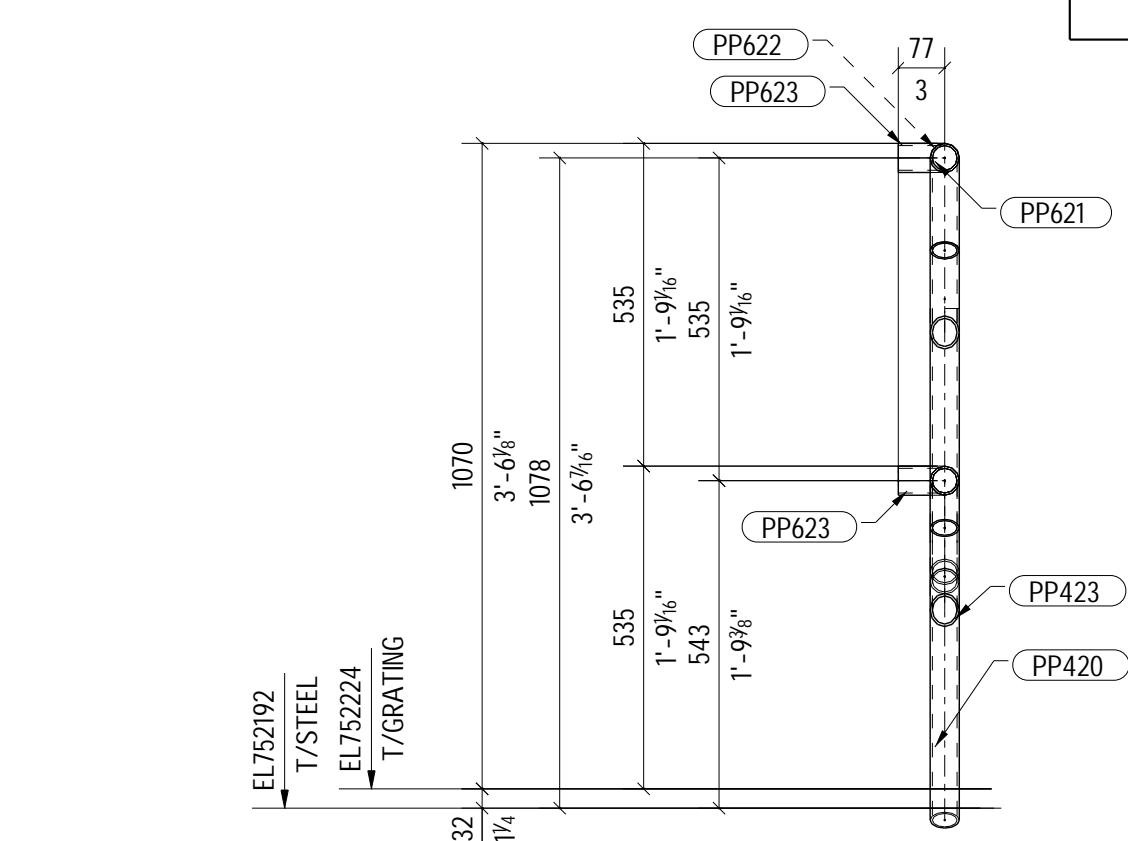
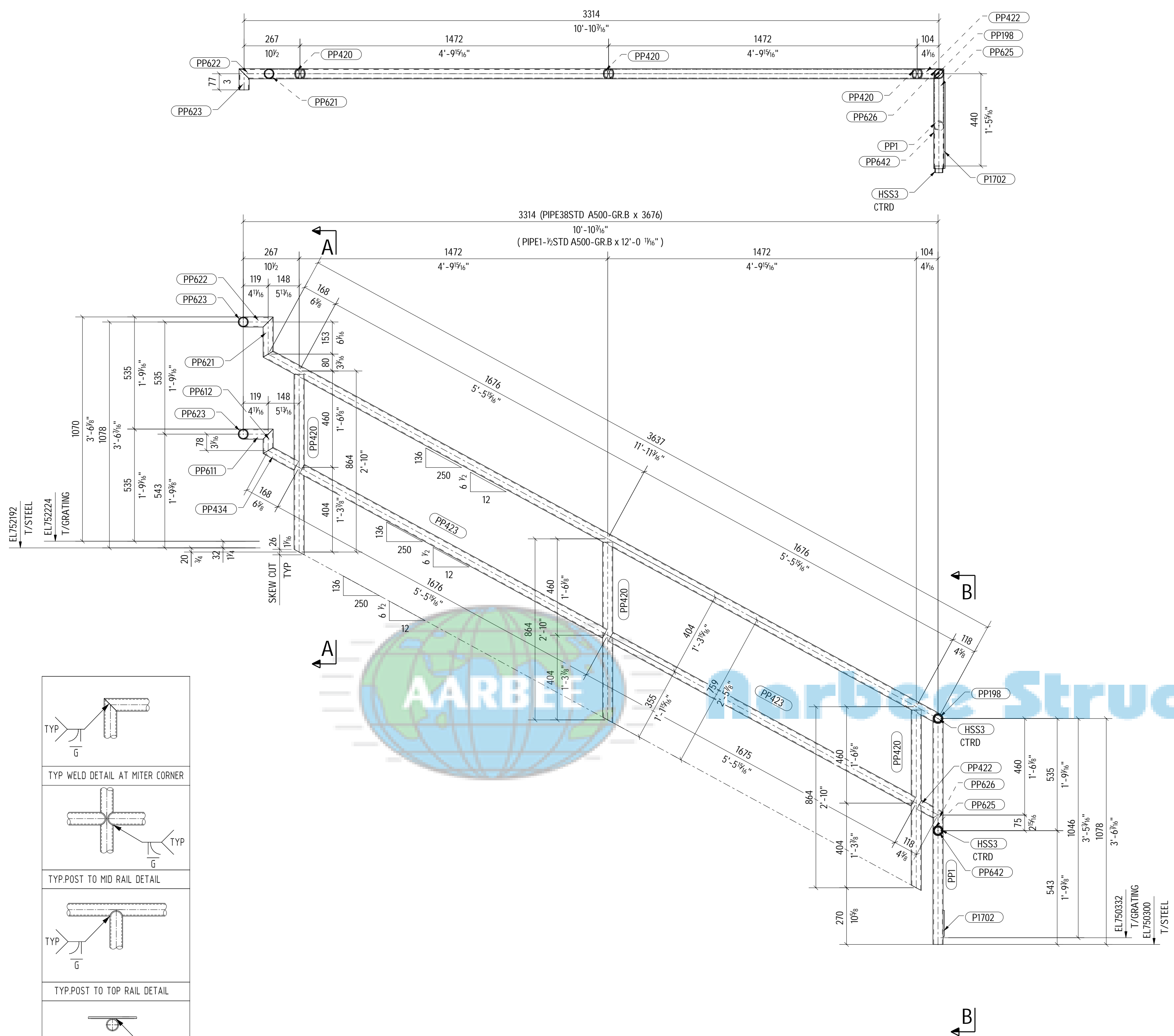


**BILL OF MATERIAL**

| COST CODE                 | MARK  | QTY TOTAL | SHAPE (Metric) | LENGTH (mm) | STEEL GRADE | SHAPE (Imperial) | LENGTH (Imperial) | REMARKS | WEIGHT TOTAL (Lbs)                      | WEIGHT TOTAL (Kg) |
|---------------------------|-------|-----------|----------------|-------------|-------------|------------------|-------------------|---------|---|-------------------|
| 103802H1                  | ONE   |           | HANDRAIL(4441) |             |             |                  |                   |         |   |                   |
| LS29                      | PP432 | 1         | PIPE38STD      | 3676        | A500-GR.B   | PIPE1-1/2STD     | 12'-0 11/16"      |         | 33                                      | 15                |
| LS29                      | HSS3  | 2         | HSS38.10X2.79  | 32          | A500-GR.B   | HSS1.500X0.120   | 0'-1 1/4"         |         | 0                                       | 0                 |
| LS29                      | P1702 | 1         | PL6X125        | 408         | A572-50     | PL1/4"X4 15/16"  | 1'-4 1/16"        |         | 5                                       | 2                 |
| LS29                      | PP1   | 1         | PIPE38STD      | 1062        | A500-GR.B   | PIPE1-1/2STD     | 3'-5 13/16"       |         | 10                                      | 5                 |
| LS29                      | PP198 | 1         | PIPE38STD      | 477         | A500-GR.B   | PIPE1-1/2STD     | 1'-6 13/16"       |         | 4                                       | 2                 |
| LS29                      | PP420 | 3         | PIPE38STD      | 861         | A500-GR.B   | PIPE1-1/2STD     | 2'-9 15/16"       |         | 23                                      | 11                |
| LS29                      | PP422 | 1         | PIPE38STD      | 116         | A500-GR.B   | PIPE1-1/2STD     | 0'-4 9/16"        |         | 1                                       | 1                 |
| LS29                      | PP423 | 2         | PIPE38STD      | 1644        | A500-GR.B   | PIPE1-1/2STD     | 5'-4 11/16"       |         | 29                                      | 13                |
| LS29                      | PP434 | 1         | PIPE38STD      | 167         | A500-GR.B   | PIPE1-1/2STD     | 0'-6 9/16"        |         | 1                                       | 1                 |
| LS29                      | PP611 | 1         | PIPE38STD      | 167         | A500-GR.B   | PIPE1-1/2STD     | 0'-6 9/16"        |         | 1                                       | 1                 |
| LS29                      | PP612 | 1         | PIPE38STD      | 117         | A500-GR.B   | PIPE1-1/2STD     | 0'-4 5/8"         |         | 1                                       | 1                 |
| LS29                      | PP621 | 1         | PIPE38STD      | 192         | A500-GR.B   | PIPE1-1/2STD     | 0'-7 9/16"        |         | 2                                       | 1                 |
| LS29                      | PP622 | 1         | PIPE38STD      | 167         | A500-GR.B   | PIPE1-1/2STD     | 0'-6 9/16"        |         | 1                                       | 1                 |
| LS29                      | PP623 | 2         | PIPE38STD      | 101         | A500-GR.B   | PIPE1-1/2STD     | 0'-4"             |         | 2                                       | 1                 |
| LS29                      | PP625 | 1         | PIPE38STD      | 256         | A500-GR.B   | PIPE1-1/2STD     | 0'-10 1/8"        |         | 2                                       | 1                 |
| LS29                      | PP626 | 1         | PIPE38STD      | 114         | A500-GR.B   | PIPE1-1/2STD     | 0'-4 1/2"         |         | 1                                       | 1                 |
| LS29                      | PP642 | 1         | PIPE38STD      | 189         | A500-GR.B   | PIPE1-1/2STD     | 0'-7 7/16"        |         | 2                                       | 1                 |
| HANDRAIL(4441) - 103802H1 |       |           |                |             |             |                  |                   |         | TOTAL WEIGHT (Lbs / Kg) :               | 120 54            |
|                           |       |           |                |             |             |                  |                   |         | Total Weight (This drawing in Lbs/ Kg): | 120 54            |



- TYP WELD DETAIL AT MITER CORNER
- TYP.POST TO MID RAIL DETAIL
- TYP.POST TO TOP RAIL DETAIL
- TYP.TOE PLATE DETAIL
- SPLICE BAR HSS38.10X2.79 TACK WELD TO ONE SIDE
- TYPICAL SPLICE DETAIL
- WALKING SURFACE TOE PLATE CORNER JOINT
- WALKING SURFACE TOE PLATE CORNER JOINT

1 ~ HANDRAIL(4441) ~ 103802H1

NO PRIME COAT  
NO TOP COAT  
NO TOP COAT  
PRIMER RECD