

### Optimized Truss Member Schedule

| Member ID | Governing LLC | Member Length (ft) | Type (Tens/Comp) | P <sub>u</sub> (kips) | Member Selected | φP <sub>n</sub> (kips) | # Int Conn. (if any) | Supplier          | Weight per Foot (lbs/ft) | Total Member Weight (lbs) |
|-----------|---------------|--------------------|------------------|-----------------------|-----------------|------------------------|----------------------|-------------------|--------------------------|---------------------------|
| T1        | 3. 1.2D+1.6S  | 8                  | C                | -129.7                | 2L4x4x3/8       | 134                    | 3                    | GERDAU AMERISTEEL | 19.6                     | 156.80                    |
| T2        | 3. 1.2D+1.6S  | 8                  | C                | -129.7                | 2L4x4x3/8       | 134                    | 3                    | GERDAU AMERISTEEL | 19.6                     | 156.80                    |
| T3        | 3. 1.2D+1.6S  | 8                  | C                | -278.3                | 2L6x6x1/2       | 302                    | 2                    | GERDAU AMERISTEEL | 39.2                     | 313.60                    |
| T4        | 3. 1.2D+1.6S  | 8                  | C                | -278.3                | 2L6x6x1/2       | 302                    | 2                    | GERDAU AMERISTEEL | 39.2                     | 313.60                    |
| T5        | 3. 1.2D+1.6S  | 8                  | C                | -278.3                | 2L6x6x1/2       | 302                    | 2                    | GERDAU AMERISTEEL | 39.2                     | 313.60                    |
| T6        | 3. 1.2D+1.6S  | 8                  | C                | -278.3                | 2L6x6x1/2       | 302                    | 2                    | GERDAU AMERISTEEL | 39.2                     | 313.60                    |
| T7        | 3. 1.2D+1.6S  | 8                  | C                | -129.7                | 2L4x4x3/8       | 134                    | 3                    | GERDAU AMERISTEEL | 19.6                     | 156.80                    |
| T8        | 3. 1.2D+1.6S  | 8                  | C                | -129.7                | 2L4x4x3/8       | 134                    | 3                    | GERDAU AMERISTEEL | 19.6                     | 156.80                    |
| D1        | 3. 1.2D+1.6S  | 8.94               | T                | 145                   | 2L4x4x5/16      | 155.52                 | 3                    | GERDAU AMERISTEEL | 16.4                     | 146.69                    |
| D2        | 3. 1.2D+1.6S  | 8.94               | C                | -103.9                | 2L3.5x3.5x7/16  | 108                    | 3                    | GERDAU AMERISTEEL | 19.6                     | 175.31                    |
| D3        | 3. 1.2D+1.6S  | 8.94               | T                | 62.4                  | 2L3x3x3/16      | 70.6                   | 3                    | GERDAU AMERISTEEL | 7.42                     | 66.37                     |
| D4        | 3. 1.2D+1.6S  | 8.94               | C                | -20.8                 | 2L2.5x2.5x1/4   | 26.9                   | 3                    | GERDAU AMERISTEEL | 8.2                      | 73.34                     |
| D5        | 3. 1.2D+1.6S  | 8.94               | C                | -20.8                 | 2L2.5x2.5x1/4   | 26.9                   | 3                    | GERDAU AMERISTEEL | 8.2                      | 73.34                     |
| D6        | 3. 1.2D+1.6S  | 8.94               | T                | 62.4                  | 2L3x3x3/16      | 70.6                   | 3                    | GERDAU AMERISTEEL | 7.42                     | 66.37                     |
| D7        | 3. 1.2D+1.6S  | 8.94               | C                | -103.9                | 2L3.5x3.5x7/16  | 108                    | 3                    | GERDAU AMERISTEEL | 19.6                     | 175.31                    |
| D8        | 3. 1.2D+1.6S  | 8.94               | T                | 145                   | 2L4x4x5/16      | 155.52                 | 3                    | GERDAU AMERISTEEL | 16.4                     | 146.69                    |
| V1        | 3. 1.2D+1.6S  | 4                  | C                | -18                   | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| V2        | 3. 1.2D+1.6S  | 4                  | C                | -0.37                 | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| V3        | 3. 1.2D+1.6S  | 4                  | C                | -18                   | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| V4        | 3. 1.2D+1.6S  | 4                  | C                | -0.37                 | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| V5        | 3. 1.2D+1.6S  | 4                  | C                | -18                   | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| V6        | 3. 1.2D+1.6S  | 4                  | C                | -0.37                 | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| V7        | 3. 1.2D+1.6S  | 4                  | C                | -18                   | 2L2x2x1/8       | 21.5                   | 3                    | GERDAU AMERISTEEL | 3.3                      | 13.20                     |
| B1        | 3. 1.2D+1.6S  | 8                  | T                | 222.6                 | 2L5x5x3/8       | 236.5                  | N/A                  | GERDAU AMERISTEEL | 24.6                     | 196.80                    |
| B2        | 3. 1.2D+1.6S  | 8                  | T                | 222.6                 | 2L5x5x3/8       | 236.5                  | N/A                  | GERDAU AMERISTEEL | 24.6                     | 196.80                    |
| B3        | 3. 1.2D+1.6S  | 8                  | T                | 296.9                 | 2L4x4x3/4       | 353.16                 | N/A                  | GERDAU AMERISTEEL | 37                       | 296.00                    |
| B4        | 3. 1.2D+1.6S  | 8                  | T                | 296.9                 | 2L4x4x3/4       | 353.16                 | N/A                  | GERDAU AMERISTEEL | 37                       | 296.00                    |
| B5        | 3. 1.2D+1.6S  | 8                  | T                | 222.6                 | 2L5x5x3/8       | 236.5                  | N/A                  | GERDAU AMERISTEEL | 24.6                     | 196.80                    |
| B6        | 3. 1.2D+1.6S  | 8                  | T                | 222.6                 | 2L5x5x3/8       | 236.5                  | N/A                  | GERDAU AMERISTEEL | 24.6                     | 196.80                    |

### Cost

|                                                   |                |                   |             |
|---------------------------------------------------|----------------|-------------------|-------------|
| Total weight of steel for ONE Truss (lbs)         |                | 4276.61           |             |
| Total weight of steel for ONE Truss (Tons)        |                | 2.14              |             |
|                                                   | Units Required | Unit Cost         | Total Cost  |
| M - Total cost of steel for One Truss (\$)        | 4276.61 lbs    | \$ 0.50 /lb       | \$ 2,138.30 |
| E - Total cost of Erection for One Truss (\$)     | 2.14 tons      | \$ 750.00 /ton    | \$ 1,603.73 |
| F1 - Total cost of Connections for One Truss (\$) | 16 nodes       | \$ 20.00 /node    | \$ 320.00   |
| F2 - Unique Member Fabrication Cost (\$)          | 4 members      | \$ 100.00 /member | \$ 400.00   |
| Total Cost for ONE Truss (M+E+F1+F2) ----->       |                |                   | \$ 4,462.03 |
| Total Cost for Both Trusses ----->                |                |                   | \$ 8,924.07 |