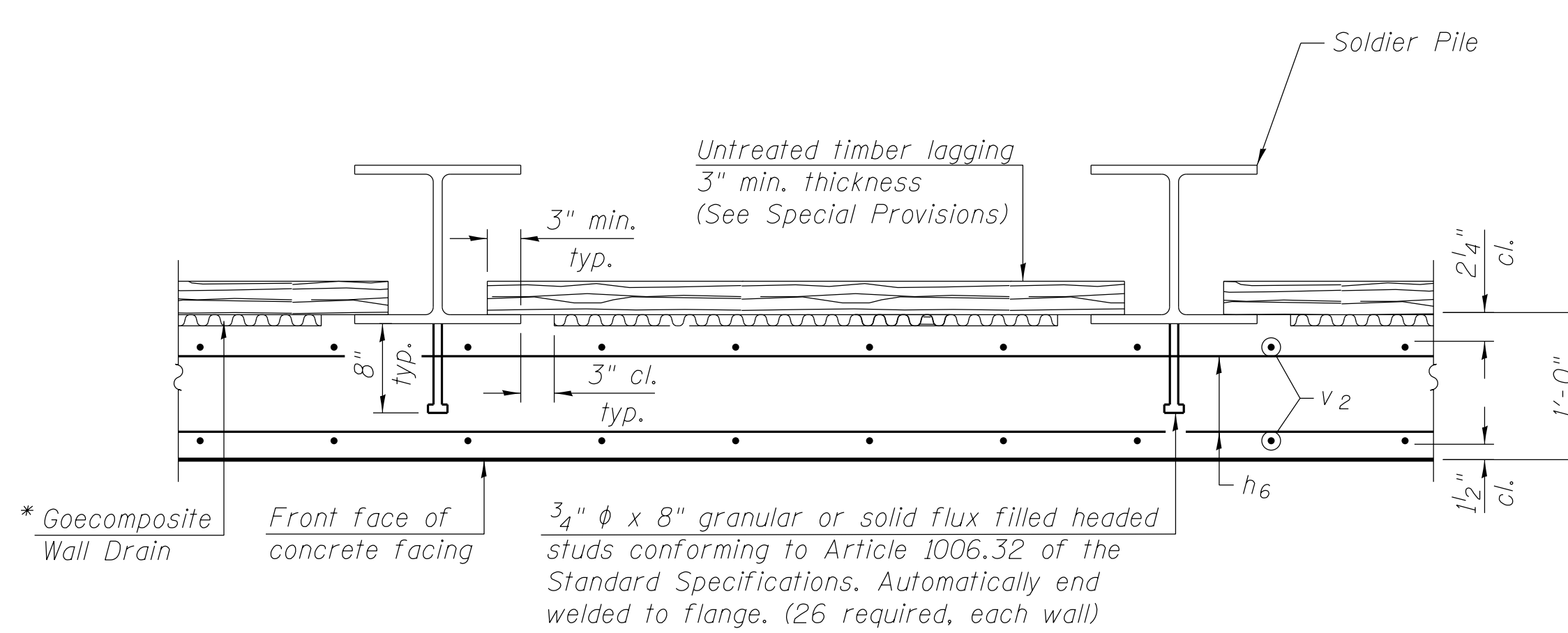
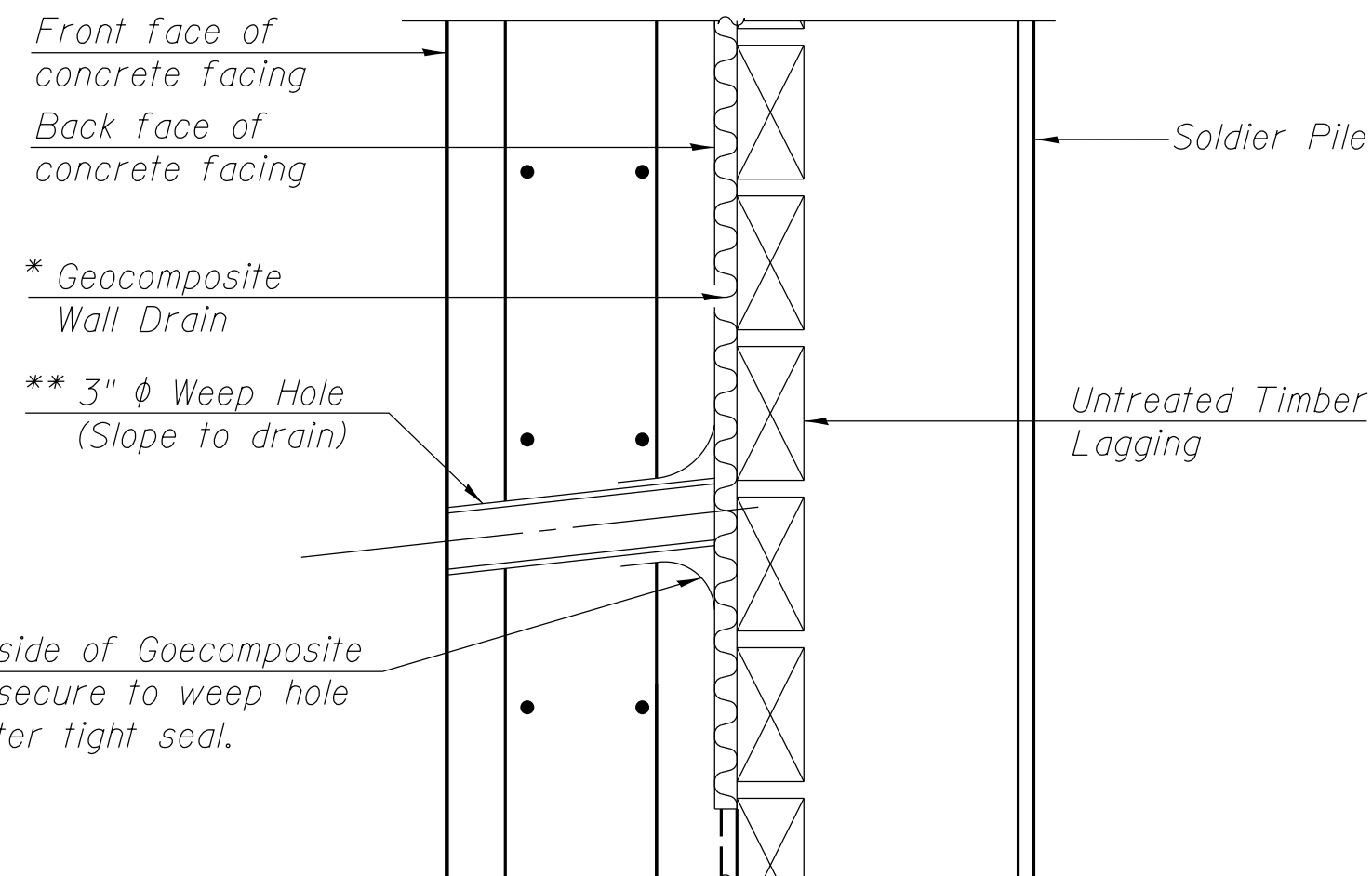


**SECTION F-F**



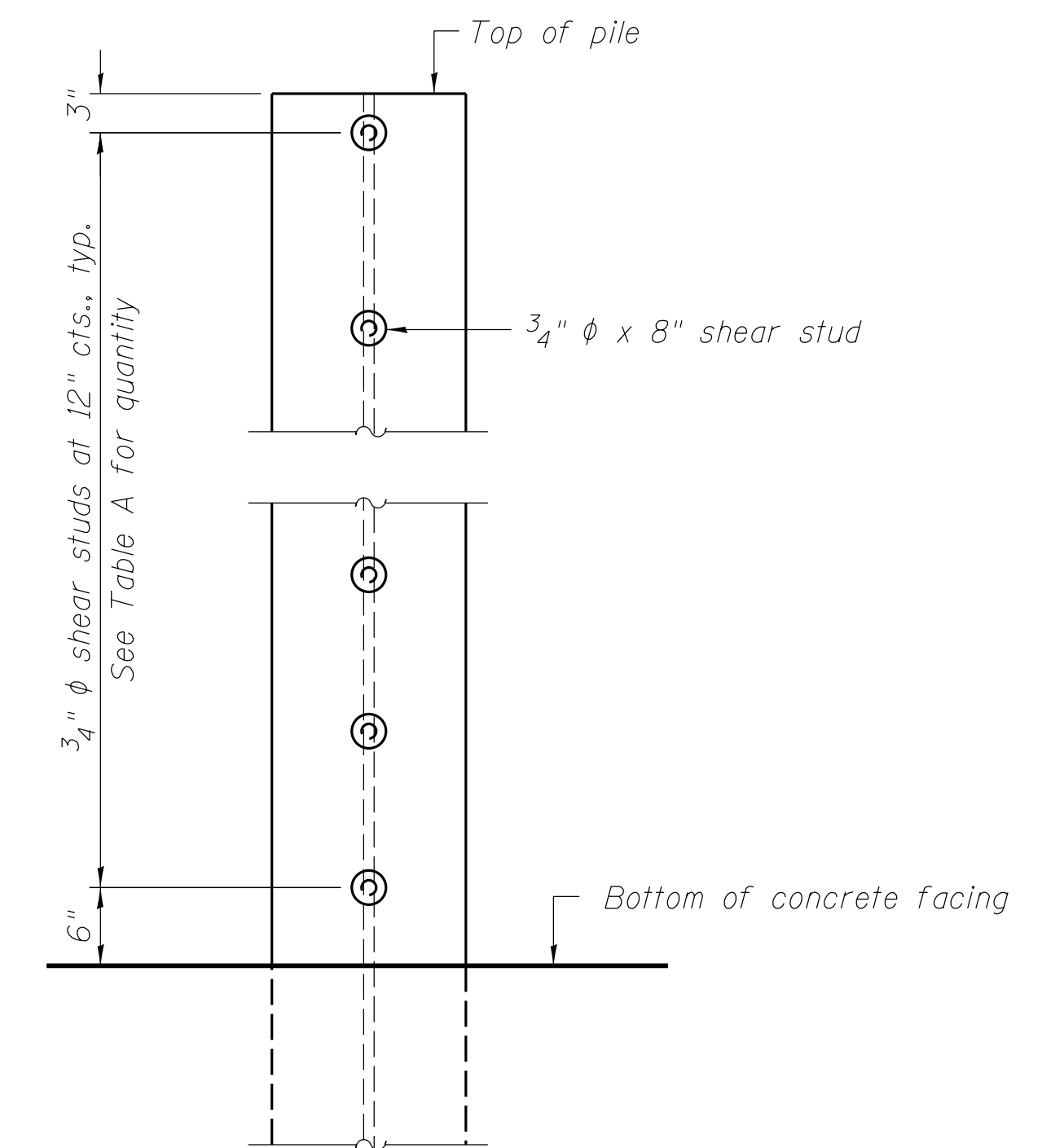
**SECTION G-G**



**WEEP HOLE DRAIN DETAIL**

\*\* Cost of the weep hole drain and the connection to the geocomposite wall drain are included with Box Culvert End Sections.

Note:  
The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.



**SHEAR STUD DETAIL**

(Elevation of Pile Shown)

**TABLE A**

(Upstream)

| Soldier Pile | Pile Size      | Top Elevation (ft.) | Bottom Elevation (ft.) | Total Height (ft.) | Number of Shear Studs |
|--------------|----------------|---------------------|------------------------|--------------------|-----------------------|
| 1            | HP 14 x 89     | 664.22              | 637.3                  | 26.92              | 10                    |
| 2            | HP 14 x 89     | 662.70              | 637.3                  | 25.40              | 9                     |
| 3            | HP 14 x 89     | 661.19              | 637.3                  | 23.89              | 7                     |
| 4            | HP 8x36 (min.) | 659.04              | 648.8                  | 10.24              |                       |

**TABLE A**

(Downstream)

| Soldier Pile | Pile Size      | Top Elevation (ft.) | Bottom Elevation (ft.) | Total Height (ft.) | Number of Shear Studs |
|--------------|----------------|---------------------|------------------------|--------------------|-----------------------|
| 1            | HP 14 x 89     | 664.15              | 637.3                  | 26.85              | 10                    |
| 2            | HP 14 x 89     | 662.63              | 637.3                  | 25.33              | 9                     |
| 3            | HP 14 x 89     | 661.12              | 637.3                  | 23.82              | 7                     |
| 4            | HP 8x36 (min.) | 658.97              | 648.8                  | 10.17              |                       |