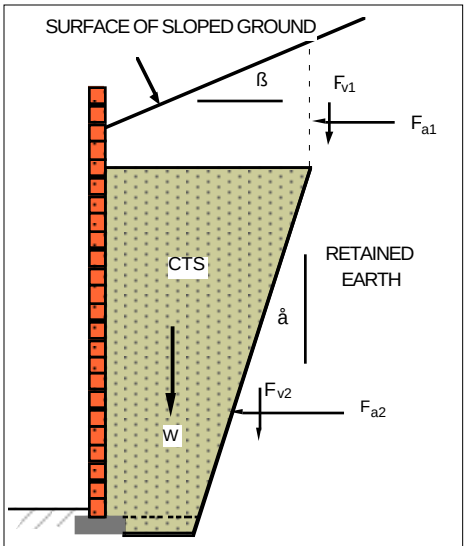
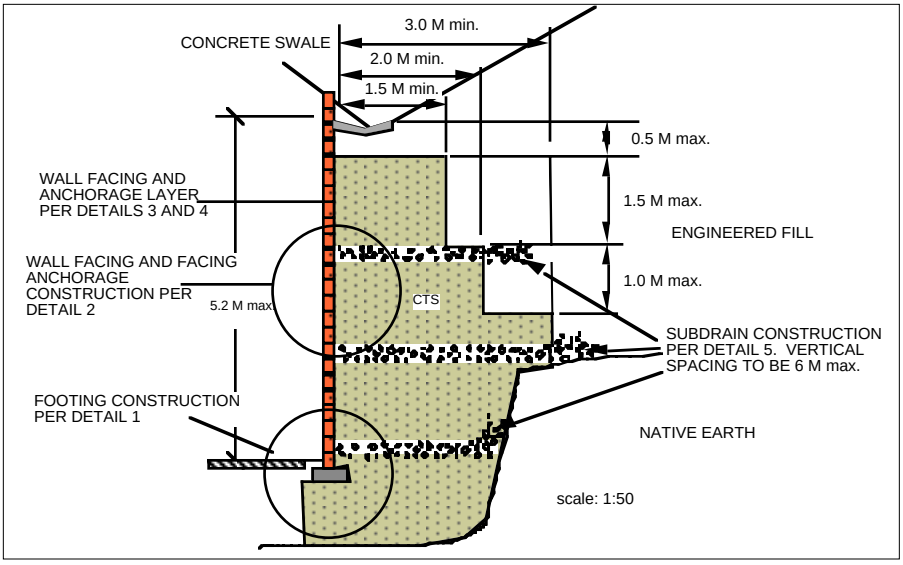
An additional feature of the CTS Retaining Wall is that the cement treated soil can be placed directly in contact with supported ground. In this way, the strength of the supported ground always controls the design of the CTS Retaining Wall whereas in conventional retaining walls, the often much weaker soil backfill establishes the design. Where highly competent native ground is encountered, the resistance developed by the CTS Retaining Wall only needs to be that necessary to resist seismic loading.

In consequence, a most commonly formed CTS Retaining Wall has a contact against native earth sloped with the supported ground at approximately 1/4 to 1 or about 14 degrees with the vertical. The sloped contact may also be made against engineered fill taking advantage of the preferred location of the center of gravity and the reduction in the active earth pressure. The sloped contact against engineered fill is formed either by placing the engineered fill prior to construction of the CTS Retaining Wall or coordinating the CTS Retaining Wall construction with the fill placement.

Another favorable feature of the CTS Retaining Wall comes about from the need to construct on sloped ground. The code and good engineering practice requires that the footing of an engineered structure be set back from the face of slope a suitable distance to assure the stability of the structure. For most slopes having slope ratios of 2 to 1, a set back of 10 feet has been considered appropriate. This implies a depth of footing below adjacent grade of 5 feet. For conventional concrete and masonry retaining walls as well as the common specialty retaining walls, all components of the retaining wall must begin at the deeper depth to conform with this requirement.



CTS Retaining Wall supporting sloped ground with sloped contact against supported earth.



The CTS Retaining Wall too must begin at the deeper depth, however, it is importantly different from conventional and specialty retaining walls in that its construction only entails placement of the cement treated soil at the lowest depths. The facing element begins at a convenient elevation consistent with the planned landscaping and the need to provide forming for the cement treated soil.