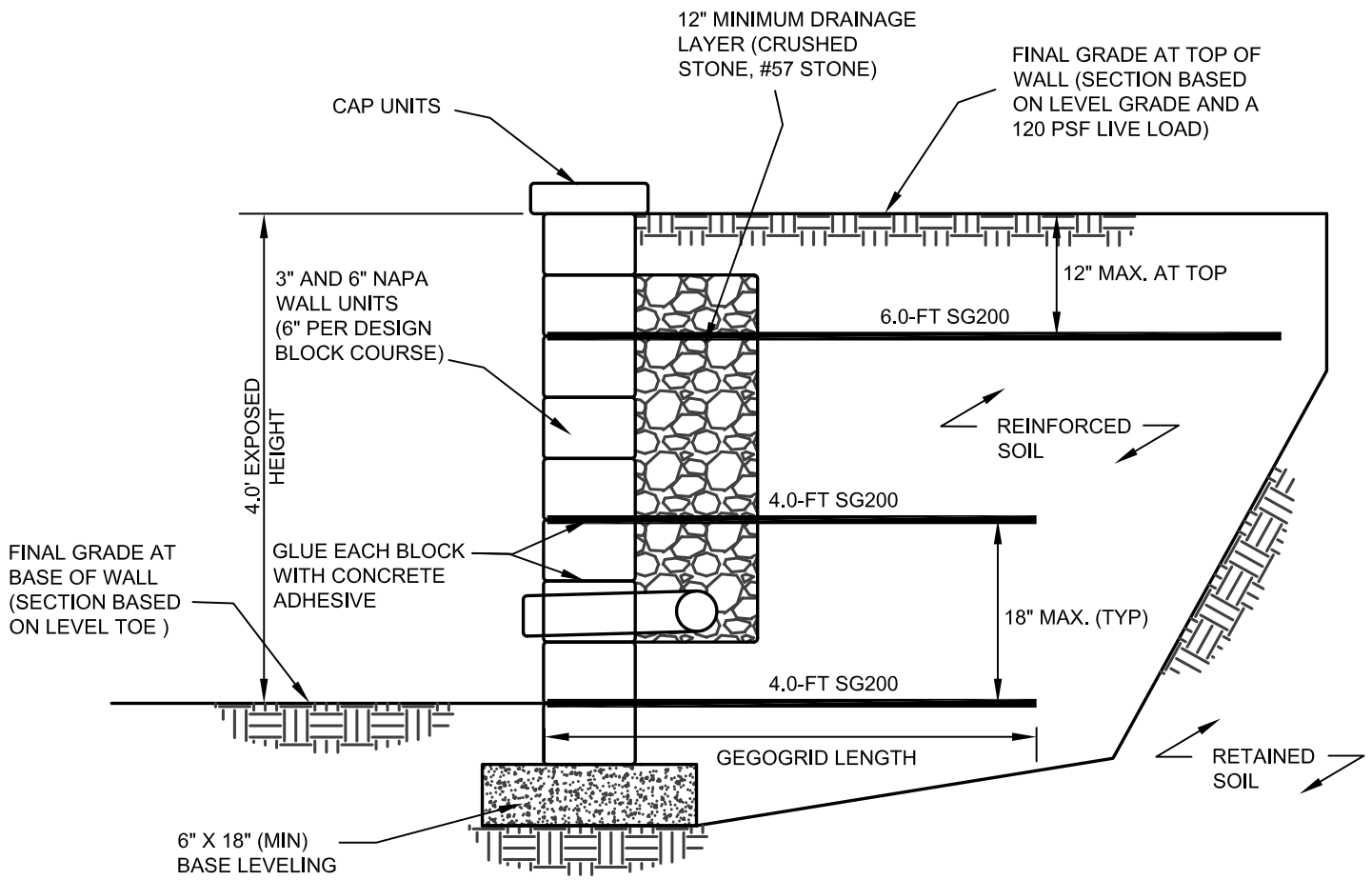

4-FT EXPOSED NAPA WALL SECTION

LEVEL BACKFILL, 26° SOILS, 120 PSF UNIFORM SURCHARGE)

N. T. S.

NOTES:

1. This detail and notes provide preliminary typical wall section information only and for specific wall height, load, and backfill conditions. Actual wall sections, plans, and details should be provided by a professional engineer based on actual site conditions. The user assumes all responsibility for use of this preliminary detail.
2. Modular concrete materials shall consist of NAPA Wall units in accordance with the requirements of ASTM C1372, ASTM C90, and ASTM C140.
3. Install alternating 6" and 3" blocks to create running bond or "ashlar-style" pattern. Do not install with block ends aligned in "stack bond"
4. Base leveling pad shall consist of a Compacted crushed stone base.
5. Unit drainage fill shall consist of clean #57 stone.
6. The retaining Wall backfill selectively may be site excavated soil when approved by the geotechnical engineer or otherwise specified herein. Suitable wall backfill must meet the following:
   - USCS ML, SM or more granular
   - Liquid Limit (LL) ≤ 40; Plasticity Index (PI) ≤ 12
   - Standard Proctor maximum dry density ≥ 108 pcf
   - Internal Friction Angle Φ≥ 26°
   - Moisture content ± 3% of the optimum moisture content for compaction
7. The geogrid shall consist of Strata Grid SG200 geogrid or stronger as noted.
8. All work must be performed in accordance with this section, NAPA Wall construction recommendations, and all applicable building and safety codes.
9. In areas with soil subgrade the geotechnical engineer shall inspect the excavation and verify the subgrade for at least 1,500-psf soil bearing capacity prior to placement of leveling material or fill soils. The bottom of the wall shall be supported upon a granular leveling pad on approved natural ground or controlled structural fill. Unsuitable foundation soils must be overexcavated and replaced with approved Compacted materials.
10. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.
11. The geogrid shall be laid horizontally on compacted backfill and attached to the modular wall units. Place the next course of modular concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to backfill placement on the geogrid.
12. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level.
13. Backfill shall be placed in ±8-in max. loose lifts, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
14. Reinforced backfill shall be Compacted to at least 95% of the maximum density as determined by ASTM D698. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be ±3% of the optimum moisture content for compaction.