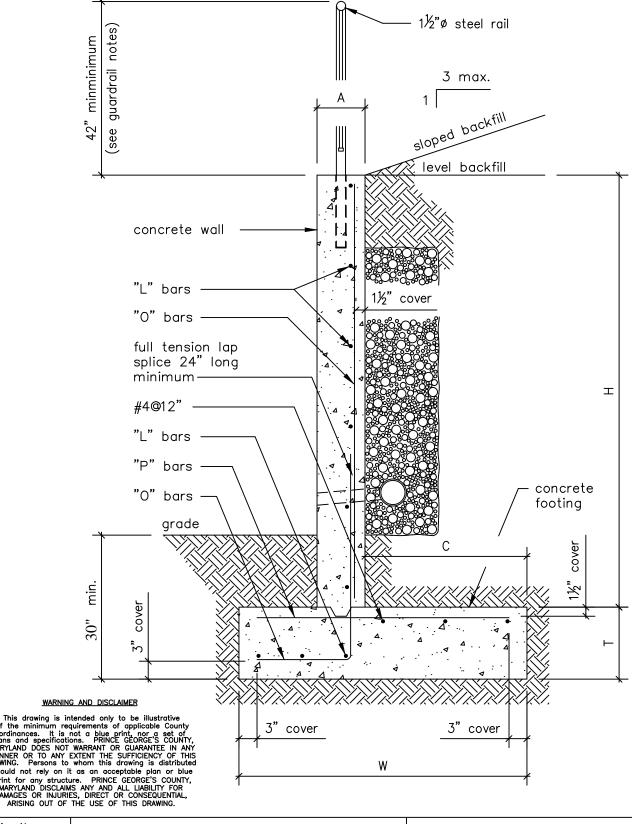
| CONCRETE RETAINING WALL DIMENSIONS AND REINFORCEMENT | | | | | | | | | | | |
|--|----|----------|--------|-----|-------------------|--------|--------|--|--|--|--|
| | ď | imensior | าร | | reinforcing steel | | | | | | |
| level backfill | | | | | | | | | | | |
| H* | Α | С | W | Т | L | 0 | Р | | | | |
| 4' | 8" | 1'-9" | 2'-10" | 12" | #4@14" | #4@12" | #4@12" | | | | |

| sloped backfill | | | | | | | | | | |
|-----------------|-----|-------|-------|-----|-----------------|-------|-------|--|--|--|
| 4' | 10" | 2'-4" | 4'-0" | 12" | #4 @ 12" | #4@9" | #4@9" | | | |

* wall height is measured from top of footing



Drawing No.

D - 027

Sheet <u>1</u> Of <u>2</u>

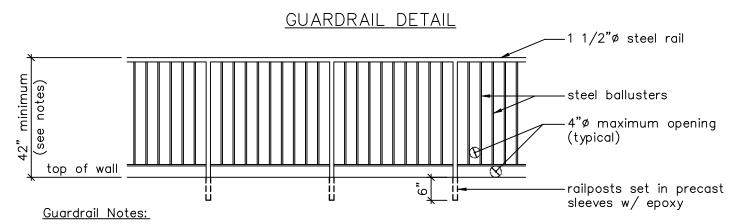
CONCRETE RETAINING WALL STRUCTURAL DETAILS





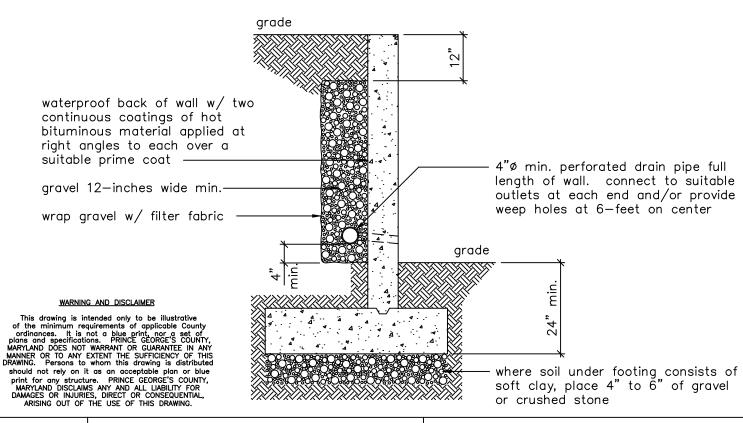
CONCRETE RETAINING WALL SPECIFICATIONS

- the maximum unbalanced fill height is five feet; in no case shall the wall retain more than five feet of earth.
- 2) the details contained may not be used in a problem soil area; problems soil is a soil type that may have, but is not limited to, a high water table, expansive clays, low bearing capacities, frost heave potential, or other behavioral problems. contractor must field verify the soil(s) type(s) during the inspections process and if problem soils are encountered, then a geotechnical engineer, licensed in maryland, must investigate the soil and engineer the wall design.
- 3) footings shall extend a minimum of 24—inches below finish grade and bear on suitable undisturbed soil. where soil under footing is soft clay, place 4" to 6" of crushed stone or gravel as shown in the detail below.
- 4) the minimum concrete compressive strength at 28 days shall be 3500 psi. design, mix and place concrete in accordance with the requirements of the latest edition of ACI 318.
- 5) reinforcing steel shall comply with the requirements of ASTM A615 and shall have a yield strength of 60,000 psi.
- 6) backfilling against reinforced concrete retaining walls shall not be permitted until the concrete has reached its 28 day strength. where heavy equipment is used in backfilling, equipment shall not approach closer to the top of the wall than a distance equal to the height of the wall. care shall also be taken to avoid exerting large impact forces on the wall as caused by a large mass of moving earth.
- 7) provide vertical front face control joints (1/8"x2") at 16-feet on center and 3/4" keyed expansion joints at 80—feet on center maximum spacing.



- 1.) guardrails are required when the top of the wall is 30—inches or more above the grade below.
- 2.) the guardrail height is reduced to 36-inches minimum in one and two family dwellings.

DRAINAGE SYSTEM



Drawina No.

CONCRETE RETAINING WALL D-028 SPECIFICATIONS, DRAINAGE SYSTEM 28 GUARDRAIL





Prince George's County Government Department of Permitting, Inspections and Enforcement