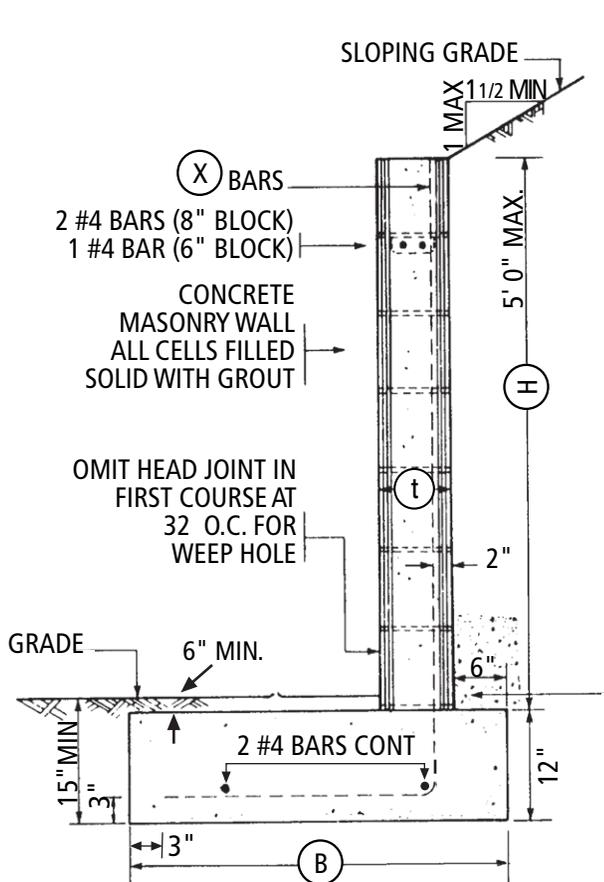


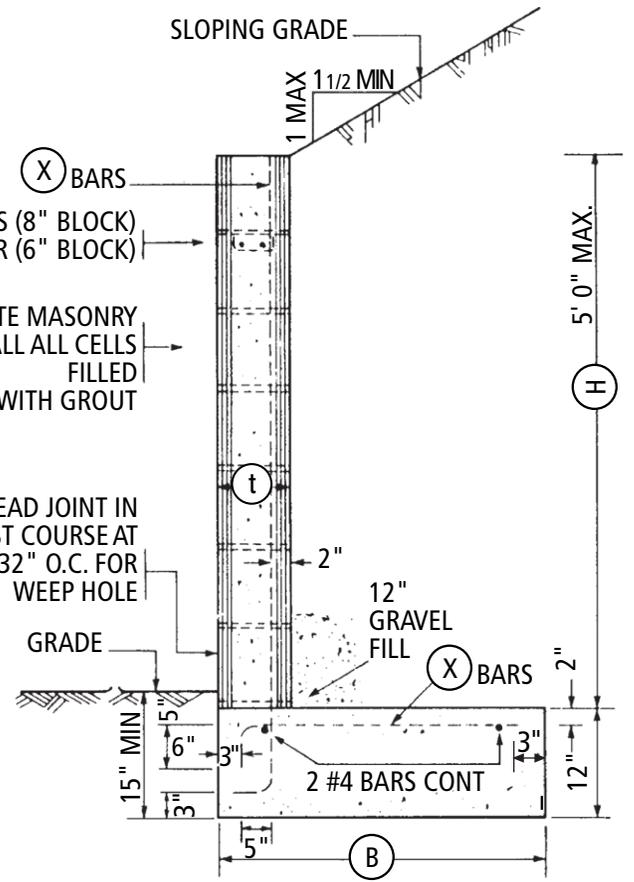
**CONCRETE MASONRY RETAINING WALL**

**MUST BE BUILT EXACTLY TO THESE SPECIFICATIONS**

**SLOPING GRADE**



POUR FOOTING AGAINST UNDISTURBED NATURAL SOIL



POUR FOOTING AGAINST UNDISTURBED NATURAL SOIL

H	t	B	X BARS
3'	6"	2'-3"	#4 @ 32" O.C.
4'	8"	3'-0"	#4 @ 24" O.C.
5'	8"	3'-6"	#5 @ 16" O.C.

Design for Sloping Grade Above Wall

H	t	B	X BARS
3'	6"	2'-9"	#4 @ 32" O.C.
4'	8"	3'-6"	#4 @ 24" O.C.
5'	8"	4'-0"	#5 @ 16" O.C.

Design for Sloping Grade Above Wall

**PERMIT REQUIRED FOR WALLS REFORMING 3 FT.**

**GENERAL NOTES:**

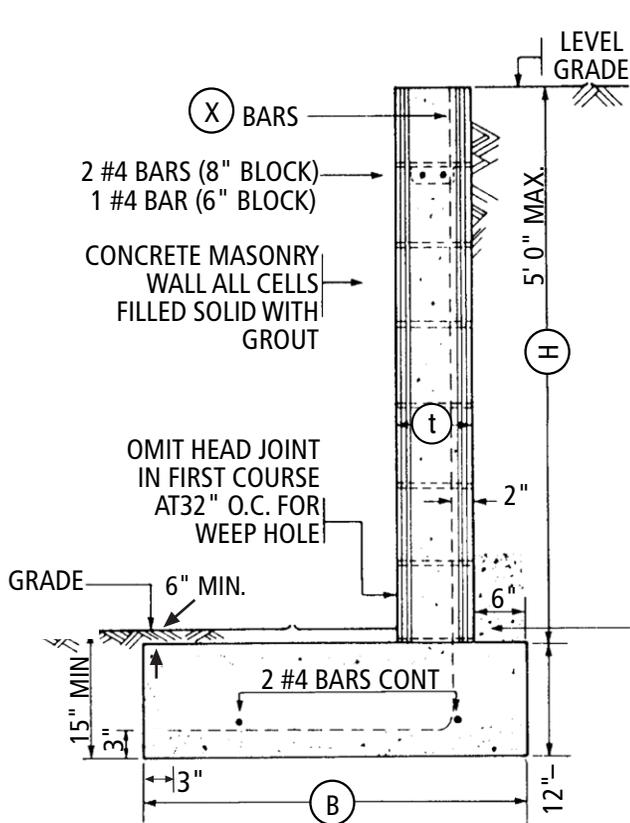
- Concrete - 2500 p.s.i. Min. @ 28 days
- Reinf. Steel - ASTM.A15 & A305, Min.  $f_s = 20,000$  p.s.i.
- Reinf. Steel Laps - Min. 24"
- Concrete Masonry Units - ASTM C 90; Conc. Blks. Grade 'A'
- Grout - 1 part Cement, 2 to 3 parts sand, 2 parts pea gravel 1800 psi @ 28 days
- Mortar - Type S per Table 2103 (8), CBC
- Soil - Max 1000 p.s.f. bearing pressure
- Backfill - Cohesionless soil
- All workmanship and materials to conform with the CBC.
- No surcharge on wall. Consult a professional Civil or Structural Engineer for design of retaining walls having:
  - a height greater than 5 feet and/or
  - any surcharge. (Vehicle loading, adjacent footings, etc.)
- 4 ft max. lift subject to building inspector verification
- Walls cannot be reconstructed or newly constructed on property lines

**THIS HANDOUT IS NOT INTENDED TO TAKE THE PLACE OF ANY LAWS OR REGULATIONS**

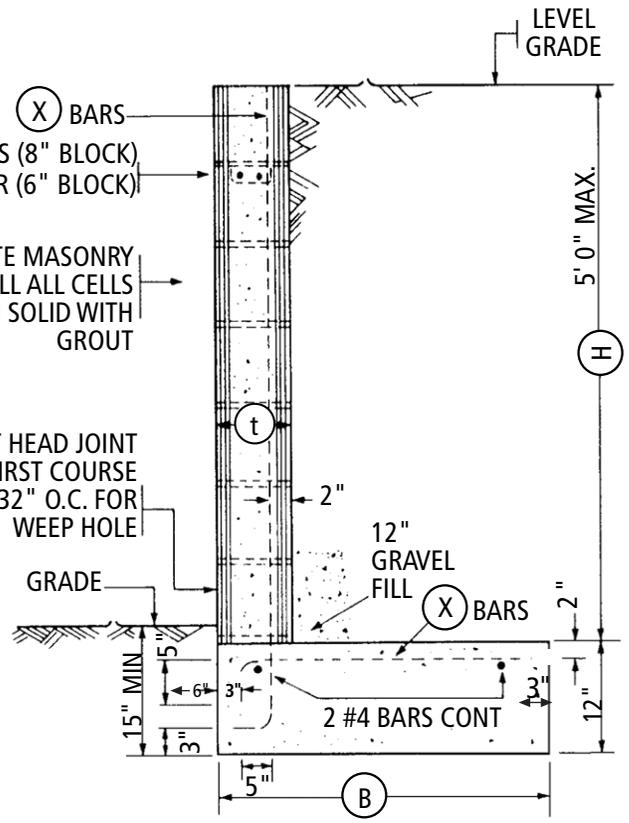


**MUST BE BUILT EXACTLY TO THESE SPECIFICATIONS**

**LEVEL GRADE**



POUR FOOTING AGAINST UNDISTURBED NATURAL SOIL



POUR FOOTING AGAINST UNDISTURBED NATURAL SOIL

H	t	B	X BARS
3'	6"	1'-9"	#4 @ 32" O.C.
4'	8"	2'-3"	#4 @ 24" O.C.
5'	8"	2'-9"	#5 @ 24" O.C.

Design for Level Grade Above Wall

H	t	B	X BARS
3'	6"	1'-10"	#4 @ 32" O.C.
4'	8"	2'-6"	#4 @ 24" O.C.
5'	8"	3'-0"	#5 @ 24" O.C.

Design for Level Grade Above Wall

**GENERAL NOTES:**

1. Concrete - 2500 p.s.i. Min. @ 28 days
2. Reinf. Steel - ASTM.A15 & A305, Min. fs = 20,000 p.s.i.
3. Reinf. Steel Laps - Min. 24"
4. Concrete Masonry Units - ASTM C 90; Conc. Blks. Grade 'A'
5. Grout - 1 part Cement, 2 to 3 parts sand, 2 parts pea gravel 1800 psi min. @ 28 days
6. Mortar - Type S per Table 2103 (8), CBC
7. Soil - Max 1000 p.s.f. bearing pressure
8. Backfill - Cohesionless soil
9. All workmanship and materials to conform with the CBC.
10. No surcharge on wall. Consult a professional Civil or Structural Engineer for design of retaining walls having:
  - a) a height greater than 5 feet and/or
  - b) any surcharge. (Vehicle loading, adjacent footings, etc.)
11. 4 ft max. lift subject to building inspector verification
12. Walls cannot be reconstructed or newly constructed on property lines

**HOURS:** Monday, Tuesday, Wednesday and Friday, 7:30 am to 5:30 pm  
Thursday 9:00 am to 5:30 pm

**LOCATION:** Ventura City Hall, 501 Poli Street, Room 117

**PHONE:** (805) 654-7869

**MAILING ADDRESS:** P.O. Box 99, Ventura, CA 93002-0099