

ST. LOUIS COUNTY, MISSOURI
BUZZ WESTFALL, COUNTY EXECUTIVE
DEPARTMENT OF PUBLIC WORKS
JOHN L. HOFFMANN, AIA, DIRECTOR

February 13, 1995

Mark Woolbright, President
St. Louis Retaining Wall Co.

St. Louis, MO

Re: Masterplan approval for Hercules Block Retaining Wall

Dear Mark:

The plans submitted for Hercules Block Retaining Walls have been reviewed and approved. Here are the Masterplan Numbers:

Hercules Standard Wall with level backfill and concrete footing	709-94-01
Hercules Standard Wall with level backfill	709-94-02
Hercules Standard Wal with sloping backfill	709-94-03
Hercules Mega and Standard Wall with level backfill	709-94-04
Hercules Mega with slope backfill at 1:3, 1:4 and 1:6 slope	709-94-05

Please inform your customers of the following procedures that they need to follow when applying for a permit.

1. Submit completed permit application form that includes the Masterplan Number.
2. Submit four copies of the site plan showing the location and length of the wall, drawn to scale. Dimension wall distance to any structures and property lines.
3. Submit four copies of plan view of wall.
4. Submit four copies of front elevation views of wall with dimensions.



SAINT LOUIS
RETAINING WALL COMPANY
A Midwest Products Group Company

3916 Geraldine Ave.
St. Louis, MO 63115
phone: 314-389-9255
fax: 314-389-6416
www.herculesmfg.com



Mark Woolbright, President
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5. Submit four sets of cross-section details of wall. This must show leveling pads, wall height, slope of wall and slope of backfill.
6. Applicant must indicate whether he is using the Standard or Mega Hercules Blocks.

If you have any questions, please feel free to call me.

Sincerely,



Siti Kirkpatrick, P.E., 889-3733
Building Code Review Section
Division of Building Permits

SK:am

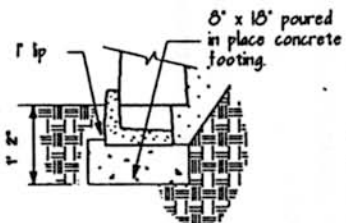
MASTERPLAN FOR RESIDENTIAL RETAINING WALLS OF HERCULES STANDARD AND MEGA MODULES

Hercules Mega Module for foundation

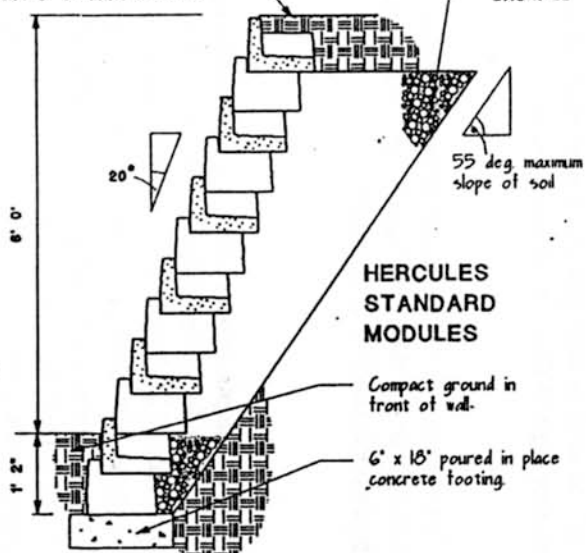


ALTERNATE FOOTING DETAIL FOR 6' 0" HERC. STD. WALL

ALTERNATE CONCRETE FOOTING DETAIL FOR ANY HERCULES STD. WALL



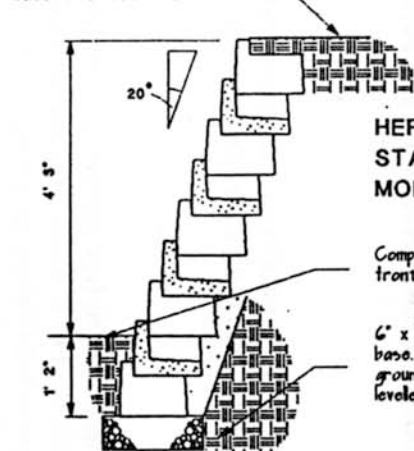
Ground should be level for at least 6' 0" back from wall



HERCULES STANDARD MODULES

Compact ground in front of wall.
6' x 18" poured in place concrete footing.

Ground should be level for at least 4' 8" back from wall

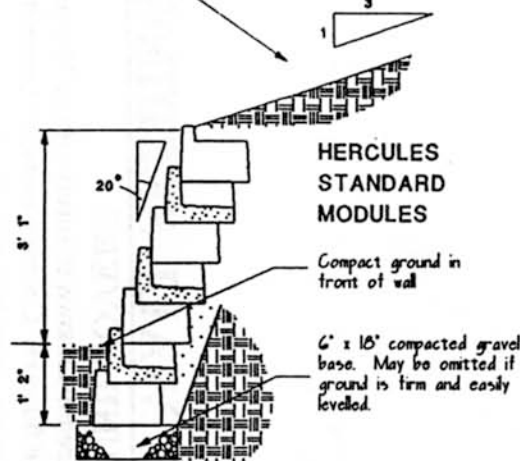


HERCULES STANDARD MODULES

Compact ground in front of wall.
6' x 18" compacted gravel base. May be omitted if ground is firm and easily leveled.

A runoff collection swale can be formed to prevent erosion at the face of the wall

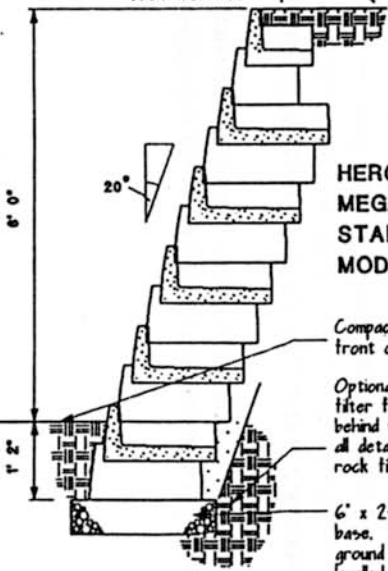
Max. slope 3



HERCULES STANDARD MODULES

Compact ground in front of wall.
6' x 18" compacted gravel base. May be omitted if ground is firm and easily leveled.

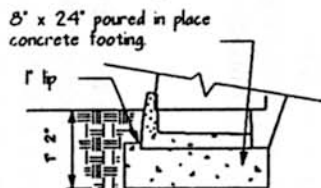
Ground should be level for at least 6' 0" back from wall



HERCULES MEGA and STANDARD MODULES

Compact ground in front of wall.
Optional drainage layer with filter fabric - limits water buildup behind wall in heavy clays - all details. Otherwise use soil or rock fill to modules and behind wall.
6' x 24" compacted gravel base. May be omitted if ground is firm and leveled.

ALTERNATE CONCRETE FOOTING DETAIL - for Hercules Mega walls shown

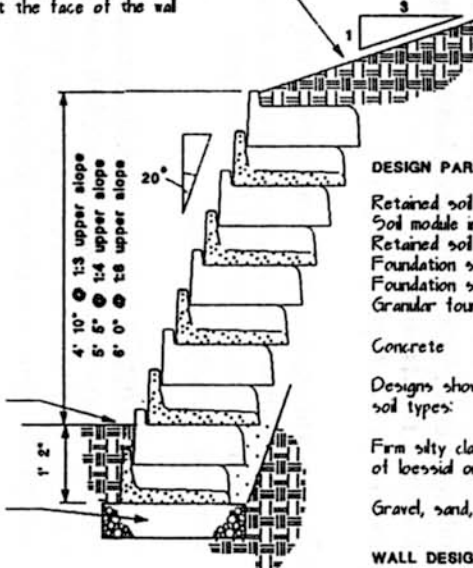


HERCULES MEGA MODULES

Compact ground in front of wall.
6' x 24" compacted gravel base. May be omitted if ground is firm and easily leveled.

A runoff collection swale can be formed to prevent erosion at the face of the wall

Max. slope 3



DESIGN PARAMETERS

- Retained soil density 120 pcf
- Soil module infill density 100 pcf
- Retained soil PHI angle 25 degrees
- Foundation soil PHI angle 25 degrees
- Foundation soil adhesion 250 pcf
- Granular foundation PHI angle 34 degrees

Concrete $f_c = 3000$ psi
Designs shown are suitable for the following soil types:

Firm silty clays typical of the firmer silty clays of loessial origin occurring in the St. Louis area
Gravel, sand, or gravelly or sandy clays

WALL DESIGNS ARE NOT SUITABLE FOR MOST BOTTOM LAND SOILS

FOUNDATION NOTES

- Using the concrete footing detail with a lip will save one course of modules in the foundations (see detail).
- Using the Mega Module for the footing with the 6' 0" Std. wall will avoid using a concrete footing for this wall.



The Engineer's seal (above) on this drawing attests only to the possibility of the detailed construction for the theoretical parameters used. Any person attempting to use these details is cautioned to hire the services of an engineer experienced in soil and foundation work. Building code authority inspectors should take particular care to ensure that conditions in the field do not vary from those indicated for the construction type shown.

ST LOUIS RETAINING WALL COMPANY			
DESIGN BY	REVISION BY	DATE/PLAN	
J.E.P.		M.A.	
DESIGNED BY	J.E.P.	MASTER PLAN	
APPROVED BY	M.A.W.	DATE	REV. 12-18-84
SCALE	1/2" = 1' 0"	DATE	7-24-84
		PAGE 1 OF 1	