

# **RETAINING WALL**

# **Submittal/Permitting Guidelines**

Permits are required for all retaining walls greater than 48 inches in height measured from the bottom of the footing to the top of the wall. Retaining walls require compliance with the 2016 CBC, CRC, CEC, CGBS and the 2016 California Energy Code.

## **Submittal Requirements**

Retaining walls are subject to the standard plan review procedures of 5 to 10 business days. Plan check submittals for the initial plan check require three (3) sets of scaled drawings with the following information included. PLEASE NOTE: If all items on this list are not with the plans at the time of submittal, the plans may be rejected by the Counter Technician as incomplete. Even If the plans are accepted by the Counter Technician, they may still be rejected by the Plan Checker as incomplete.

- 1. **Site Plan** Show surface drainage, lot dimensions, setbacks to property lines, building dimensions, easements, existing structures.
- 2. **Details** Indicate footing sizes, drainage, reinforcing steel, wall height, etc.
- 3. **Design Professional's Stamp** <u>Every page</u> of each set of plans must be wet stamped and signed by the Design Professional prior to permit issuance. (Business and Professions Code Section 6735(a) to view this code see: <a href="http://www.leginfo.ca.gov/calaw.html">http://www.leginfo.ca.gov/calaw.html</a> and check Business and Professions Code and click "Search").
- 4. **Engineer's Structural Calculations** Two (2) sets may be required to justify lateral analysis, horizontal torsional moments, stability against overturning, anchorage, distribution of uniform loads and concentrated loads.
- 5. **Soils Report** Two (2) sets may be required. See attached matrix to determine if a soils report is required.

#### **Fees for Retaining Wall Permits:**

Retaining Wall Plan Check Fee \$95.06 per 100sf

Retaining wall 3'-6' high (includes footing) \$161.28 for up to 50lf + \$19.23 for each additional 50lf or portion

thereof

Retaining wall 6'-10' (includes footing) \$307.61 for up to 50lf + \$19.23 for each additional 50lf or portion

thereof

Retaining wall 10' & higher (includes footing) \$453.94 for up to 50lf + \$19.23 for each additional 50lf or portion

thereof

Issuance Fee \$85.45

SMIP Fee \$0.00013 per \$1.00 of valuation with a minimum fee of \$0.50

(Strong Motion Instrumentation and Seismic Hazard Mapping Fee)

State Title 24 Fee \$1.00 per \$25,000 (or portion thereof) of valuation

State CASp Fee \$4.00

Plans & Documents Fee \$2.14 per page 11" x 17" or smaller & \$3.20 per page larger than

11" x 17"

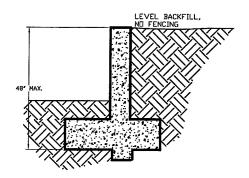
### If your project includes adding any electrical an Electrical Permit will also be required:

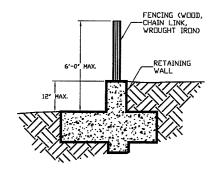
Fixtures Fee \$18.16 per 100sf or \$18.16 per fixture

Issuance Fee \$85.45
Plans & Documents \$2.14
State CASp Fee \$4.00

# PERMITS ARE NOT REQUIRED FOR THE FOLLOWING CONDITIONS:

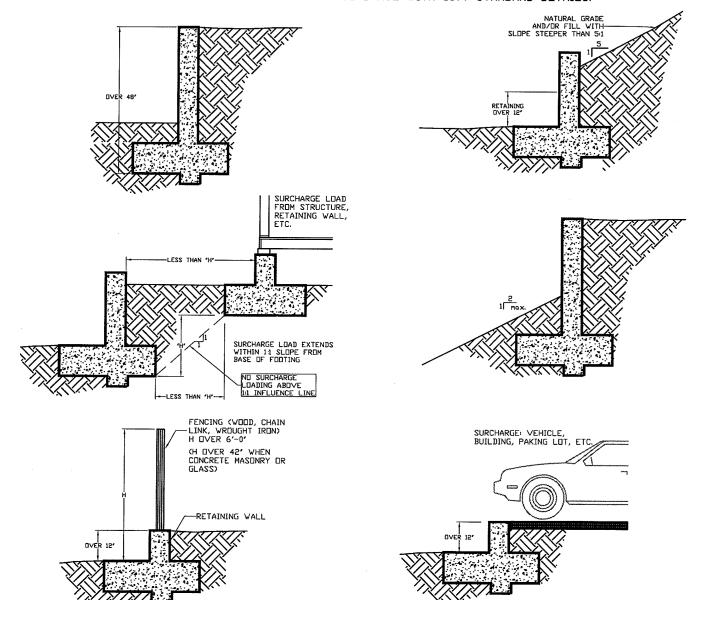
But-check with the Planning and Engineering Division prior to construction of any retaining wall to ensure that wall will not be built in a required setback or right-of-way.

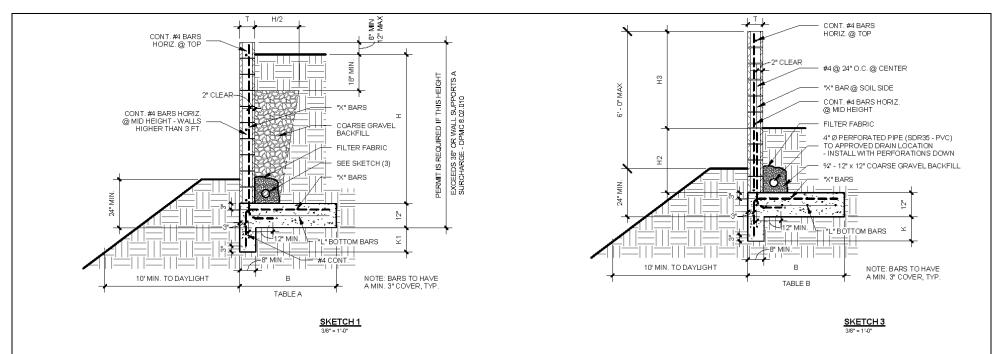


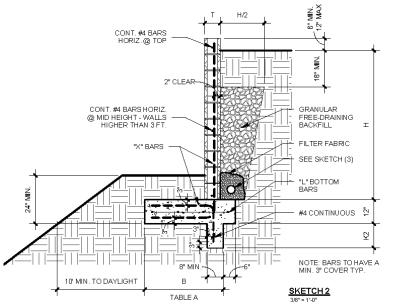


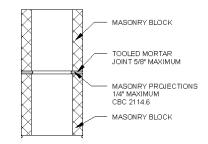
# PERMITS ARE REQUIRED FOR THE FOLLOWING CONDITIONS:

ALL RETAINING WALL PLANS AND STRUCTURAL CALCULATIONS SUBMITTED FOR PERMITTING AND REVIEW SHALL BE SIGNED AND SEALED BY A CALIFORNIA REGISTERED CIVIL OR STRUCTURAL ENGINEER AND A SOILS REPORT MUST BE PROVIDED OR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARD DETAILS.









PRIOR TO GROUTING, THE GROUT SPACE SHALL BE CLEAN SO THAT ALL SPACES TO BE FILLED DO NOT CONTAIN MORTAR PROJECTIONS, MORTAR DROPPINGS, AND/OR OTHER FOREIGN MATERIALS, WALLS WITH EXCESS MORTAR DROPPINGS OR DEBRI WILL REQUIRE CLEANOUTS

# MORTAR JOINT DETAIL

RETAINING WALL INFORMATION TABLE A							
Н	В	Т	х	١	K1	K2	
>2' - 3'	3' - 0"	6"	#3 @ 24" O.C.	3 - #4	1	12"	
>3' - 4'	3' - 8"	8"	#4 @ 24" O.C.	4 - #4	8"	18"	
>4' - 5'	4' - 8"	8"	#5 @ 16" O.C.	4 - #5	12"	24"	

SEE SKETCH (1) & (2)

FENCE / WALL INFORMATION TABLE B							
Н3	H2	В	Т	х	L	K	
4' - 5'	1' - 2'	3' - 8"	8"	#4 @ 24" O.C. @ CL	4 - #4	-	
3' - 4'	2' - 3'	4' - 0"	8"	#4 @ 16" O.C. @ CL	4 - #4	12"	
2' - 3'	3' - 4'	4' - 6"	8"	#5 @ 16" O.C. @ CL	4 - #4	16"	

SEE SKETCH (3)

VERTICAL BARS SHALL BE LAPPED 2 FEET WHERE NOT CONTINUOUS. ALL HOOKS SHOWN SHALL BE STANDARD 90° HOOKS. SOLID GROUT ALL CELLS FOR THE ENTIRE WALL.

DESIGN BASED ON 60 PCF ACTIVE SOIL PRESSURE 2013 CALIFORNIA BUILDING CODE

INSTRUCTIONS:
HIGHLIGHT OR CIRCLE BOTH THE WALL
SECTION TO BE USED AND THE WALL
HEIGHT OF THE APPLICABLE TABLE.

NO SURCHARGE ALLOWED



**CITY OF LAGUNA HILLS BUILDING DEPARTMENT**  **Retaining Wall Standard** 2013 CBC



# City of Laguna Hills Matrix to Determine if a Soils Report and/or a Field Memo is Required

				- 110 9 0111 0 0		
Project Type	Project Size	Design Soil Bearing Pressure ≤ 1500 psf for continuous and /or pad footing only	Foundation Clearance from Top of Slope per Figure 1808 .7.1	Both Soils Report & Field Memo Required	Field Memo Required Prior to Foundation Inspection	Neither Soils Report or Field Memo Required
New Building or Addition including attached Misc. Structures	≥ 1000 sqft	N/A	N/A	✓		
	from 401 to 1000 sqft	✓	✓		✓	
	≤ 400 sqft	✓	✓			<b>✓</b>
	> 400 sqft	>1,500 psf	✓	✓		
Detached Misc. Structures		<b>√</b>	✓		✓	
(Includes Patio Covers, decks, etc.)		N/A	Closer than minimum required	<b>✓</b>		
	≤ 400 sqft	<b>√</b>	✓			✓
Retaining Walls	≤ 6 ft	✓	✓		<b>√</b> (*)	
	> 6 ft	N/A	N/A	✓		
Two Story Additions	Any size			<b>✓</b>		

<sup>(\*)</sup> Back fill 30 degree triangle with crushed rock; Perforated drain pipe provided at bottom of crushed rock fill; back fill is level and does not support any structures.

Variance or exceptions to these requirements will be reviewed and approved on a case by case basis by the Deputy Building Official or Building Official.