

CITY OF MONTCLAIR

GRADING GUIDELINES

All grading shall be designed and performed in accordance with the requirements of Appendix J of the Uniform Building Code – 2007 Edition – and these guidelines. Grading plans shall be prepared by or under the direction of a Licensed Civil Engineer. Unless otherwise exempted by the Uniform Building Code or the City of Montclair Municipal Code, no grading shall be undertaken without first obtaining a grading permit from the City of Montclair Building Official. A grading permit will not be issued unless and until a grading plan has been approved by the City Engineer.

General Conditions – In preparing a grading plan the designer shall follow normally accepted standards and practices and exercise good engineering judgment. No grading shall be permitted or performed that would:

- Block drainage from an adjacent site tributary to the site in question,
- Divert drainage onto an adjacent site,
- Convert sheet flow to an adjacent site to concentrated flow,
- Increase runoff (peak flow or volume) to an adjacent site, or
- Create a flood hazard to either the site in question or any adjacent sites.

Cross lot drainage is to be avoided.

Plan Requirements – The standard size plan sheet used by the City is 24” by 36”. Once approved, three copies of plans (blue lines or black lines) shall be provided to the City for signature. One copy will be provided to the contractor at the time the grading permit is issued. The second copy will be given to the Public Works Department for monitoring erosion control requirements. The third copy will be retained by the Building Division for inspection purposes. Only the three wet-signed copies shall be considered the approved grading plans. Any copies made from these prints are not considered official. A set of approved plans shall be on the job site at all times.

Any proposed changes to the approved grading plan must be submitted to the City Engineer for review prior to implementation. If approved, three revised sets of drawings shall be submitted to the Building Official for signature. Upon completion of grading, the engineer of record shall submit a certification to the Building Official indicating that the work was done in accordance with the approved plan. The engineer of record shall also prepare an “as-built” record drawing and submit an electronic version of it to the Building Division. Electronic plans shall be submitted in accordance with the Building Division’s “Electronic Archiving Policy.”

A title block shall be provided on all sheets showing, at a minimum, project title, other project identifying information, developer information, sheet number, and name of engineering firm, engineering consultant, or individual Civil Engineer responsible for the preparation of the plan. Each sheet shall be signed and sealed by the Licensed Civil

Engineer responsible for the design. In addition, the title sheet shall have a signature block and stamp location for the City Engineer.

The title sheet shall include the following information:

- Vicinity map showing north arrow, scale, and project location in relationship to major streets
- Index
- Legend of symbols & abbreviations
- Underground Service Alert notice
- Private Engineer's statement
- Survey monument" note and "Contractor's responsibility for Safety" note
- Description of property (address, APN, legal description)
- General grading notes
- General erosion control notes
- All construction notes
- Construction quantities including cut, fill, and shrinkage quantities
- Benchmark(s) and basis of bearing
- Date of soils report and name of soils engineer

Construction details shall not be shown on title page unless the project is a "one-sheet" job.

The plan and detail sheets shall be prepared according to the following criteria:

- North arrow shall be up or to the right.
- Scale shall be 1"=10', 1"=20', or 1"=40'. Scales smaller than 1"=40' will require approval from the City Engineer prior to beginning design.
- Existing features (curbs, gutters, structures, trees, spot elevations, contours, etc.) shall be screened or in a color easily distinguishing them.
- Show existing and proposed elevations and contours.
- Show existing features a minimum of 25 feet beyond property lines.
- Show all existing substructures and surface features.
- To minimize potential confusion, a separate demolition plan may be required.
- To minimize potential confusion, a separate dimension plan may be required.

An erosion control plan shall be prepared and included as an integral part of the grading plan, and shall use the same numbering convention as the grading plan.

Design Criteria – The following design criteria shall be adhered to as a minimum. Additional requirements may be imposed as determined necessary by the City Engineer.

A soils report including recommendations for overexcavation, compaction, pavement design, etc., is required.

Cut and fill slopes shall not exceed a slope of two horizontal to one vertical (2:1). Compaction requirements on fill slopes shall be in accordance with recommendations of the soils or geotechnical engineer. Construction of fill slopes on existing slopes exceeding five horizontal to one vertical (5:1), will require benching. The top of slope shall be a minimum of 2.0 feet from any property line. The toe of slope shall be a minimum of 3.0 feet from any property line. Slopes steeper than five horizontal to one vertical (5:1) shall not cross property lines.

Graded areas not intended to be paved shall have a minimum slope of two percent (2%) unless otherwise reduced by the City Engineer. In no event shall the slope be less than one percent (1%).

Asphalt concrete paved areas shall have a minimum slope of one percent (1%).

PCC paved areas shall have a minimum slope of one half percent (0.5%). PCC paved areas on site include combination curbs and gutters, vee or ribbon gutters, driveways, walks, parking areas, etc.

Sidewalk grades shall not exceed two percent (2%) cross slope or five percent (5%) longitudinal slope. Asphalt paved areas identified as parking stalls, pedestrian walk areas, or walkways shall have the minimum slope possible but in no case shall exceed two percent (2%) in any direction.

Drainage shall be concentrated in concrete gutters. Asphalt swales or asphalt gutters are not permitted.

For multi-family residential, commercial, and industrial developments nuisance runoff/drainage shall not be permitted to cross sidewalks or drive approaches. Nuisance runoff/drainage shall be collected at the back of sidewalk and conveyed to the street through a parkway culvert. The minimum parkway culvert size shall be 4" high by 12" wide. It is not the intent of this requirement to capture and convey all storm water runoff. The intent is to prevent nuisance flows and irrigation runoff from crossing sidewalks.

Developments greater than two acres may require an onsite storm drain system and adequate outlet. Before proceeding with design, check requirements with City Engineer. All hydrology studies and calculations shall be in accordance with standards developed by the San Bernardino County Flood Control District.

Retaining walls, if required, shall be per City of Montclair standards, to the extent for which standards are available and apply. For retaining walls not covered by City standards, the designer shall submit calculations for the walls specified.

Improvements within the public right-of-way – Most improvement projects will require separate street improvement plans for improvements within the public right-of-way.

However, if street improvements are limited to drive approach removals/construction/reconstruction, sidewalks, streetlights, or similar type improvements, they may be shown on the grading plan with prior approval of the City Engineer.

Water Quality Management Plan

In compliance with the California State Water Code and Regional Water Quality Control Board requirements and guidelines, a Water Quality Management Plan (WQMP) is required for most projects. The WQMP shall be submitted and approved prior to acceptance of any grading plan for plan checking. Contact Joe Rosales at 909-625-9470 to discuss WQMP requirements.