



LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS | LAND SURVEYORS

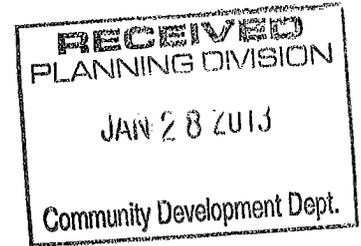
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January 25, 2013

City of San Mateo
Planning Department
330 W. 20th Ave
San Mateo, CA 94403

**Subject: 3 Greenfield Court, San Mateo
Site Development approval
Job# 2120664**



To the department:

Per section 23.40.040 of the San Mateo Municipal Code, we are applying for a Site Development Application. As part of this application, this letter is intended to provide insight into the construction impacts of the project. The project is a new single family residential house that will replace two existing single family homes on two lots, with the two lots being merged into one lot. The project is a very innovative project that is intended to be very green. To help reduce runoff and provide for an attractive landscaped look to the project, the roof is proposed to be a green roof, with soil and landscaping placed on top. This will help to infiltrate water into the ground and greatly reduce the massing of the house from the street.

As part of the construction process, there will be a fair amount of grading taking place to accommodate the new house. Our initial earthwork calculations give us 710 cy of cut and 585 cy of fill, with approximately 125 cy of off-haul. The house was designed to minimize off-haul and balance as much as possible. Grading activities will follow the San Mateo County's Construction Best Management Practices (BMP) sheet as well as an erosion control plan specifically designed for this site. Various BMP's will include sediment control and storm water quality measures. For erosion control a site specific erosion control plans will be created in the permit plan stage. Measures will include:

- Construction entrances designed to minimize tracking of dirt onto City streets.
- Straw rolls and silt fences designed keep as much silt from leaving the site will be placed along the project contours.
- Gravel sacks in the flow lines of the City Street intended to capture silt prior to leaving the site area.
- Ground stabilization once grading is complete
- Timing of construction activities to minimize erosion issues.



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Storm drainage is proposed to be collected and released at a predevelopment rate. Initial calculations give us a flow rate of 0.94 cfs predevelopment and 1.09 cfs post development. This is an increase of 0.15 cfs. Runoff from impervious surfaces is intended to be collected in a series of pipes and directed to a large diameter pipe and metering device intended to act as a retention system. Water during a heavy downpour will collect in these pipes and will be released in a controlled fashion at a rate that is lower than predevelopment. Once the runoff leaves the retention system the runoff will be further controlled and released through a series of level spreaders. The level spreaders allow the runoff to be dispersed equally across the rear downhill slope of the property. By using a level spreader rather than a concentrated release, the impact down slope will be minimized and the chances of erosion reduced. Since the project will have a retention system to control the runoff and release it at a predevelopment rate the chances for issues downstream are minimized. The hydrology results provided include underground portions of the building counted as hardscape, while actually having a green roof. This will allow for additional water to be collected in a soil matrix rather than a typically impervious roof. By counting this area as hardscape, it further reduces the rate of flow release down slope.

This project, with the various measures implemented above, will have little impact on the neighbors and will contribute to a new home that will be a benefit to the neighborhood from a storm water quality and environmental point of view.

Sincerely,


Jim Toby, P.E., P.L.S.
Principal



1-25-13