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FOUNDATIONS, WALLS, PILES
UNDERPINNING, TIEBACKS
DEEP RETAINED EXCAVATIONS
SHORING & BULKHEADS
CEQA, EARTHWORK & SLOPES
CAISSONS, COFFERDAMS
COASTAL & MARINE STRUCTURES

SOIL MECHANICS, GEOLOGY
GROUNDWATER HYDROLOGY
CONCRETE TECHNOLOGY

April 18, 2010

Mayor & City Council
City of Berkeley
2180 Milvia Street
Berkeley, CA 94704

Subject: 2707 Rose Street (Use Permit)
Supplemental Information

Dear Mayor & City Council:


After my letter-report of 4/16/10, which was based on my review of the file as was provided to me by City Planning on 4/15/10, a report "Geotechnical Investigation - Kapur Klein Residence" prepared for Marcy Wong was filed with the City. The report by Alan Kropp & Assoc. is dated 7/31/09. Architectural plans are not referenced, but the text refers to preliminaries and the Site Plan shows locations of exploratory borings. No fill slopes are shown in plan or section and the recommendations for retaining walls do not include lateral earth pressures for slopes with inclinations of more than 2h:1v (~27°) or for wall heights more than 12 feet. A footnote reads "Slopes steeper than 2:1 are not anticipated at the site.", consistent with 2007 CBC §J106.1.

The architectural plans I reviewed for the 4/16/10 letter-report are dated 11/12/09 and they include cross-sections and elevations that are inconsistent with the Site Plan and limitations in the 7/31/09 report (there have been significant changes). The Site Plan is the topo survey (attached) overlain with a building footprint of 3,870 sq. ft. (includes carport). Decks indicated on fill total 1,670 sq. ft. without including the off-street parking area. The 7/31/09 report indicates the project will be a 6,000 sq. ft. single family residence with a detached carport. The building that was approved is 9,868 sq. ft. which includes a 10 car garage.

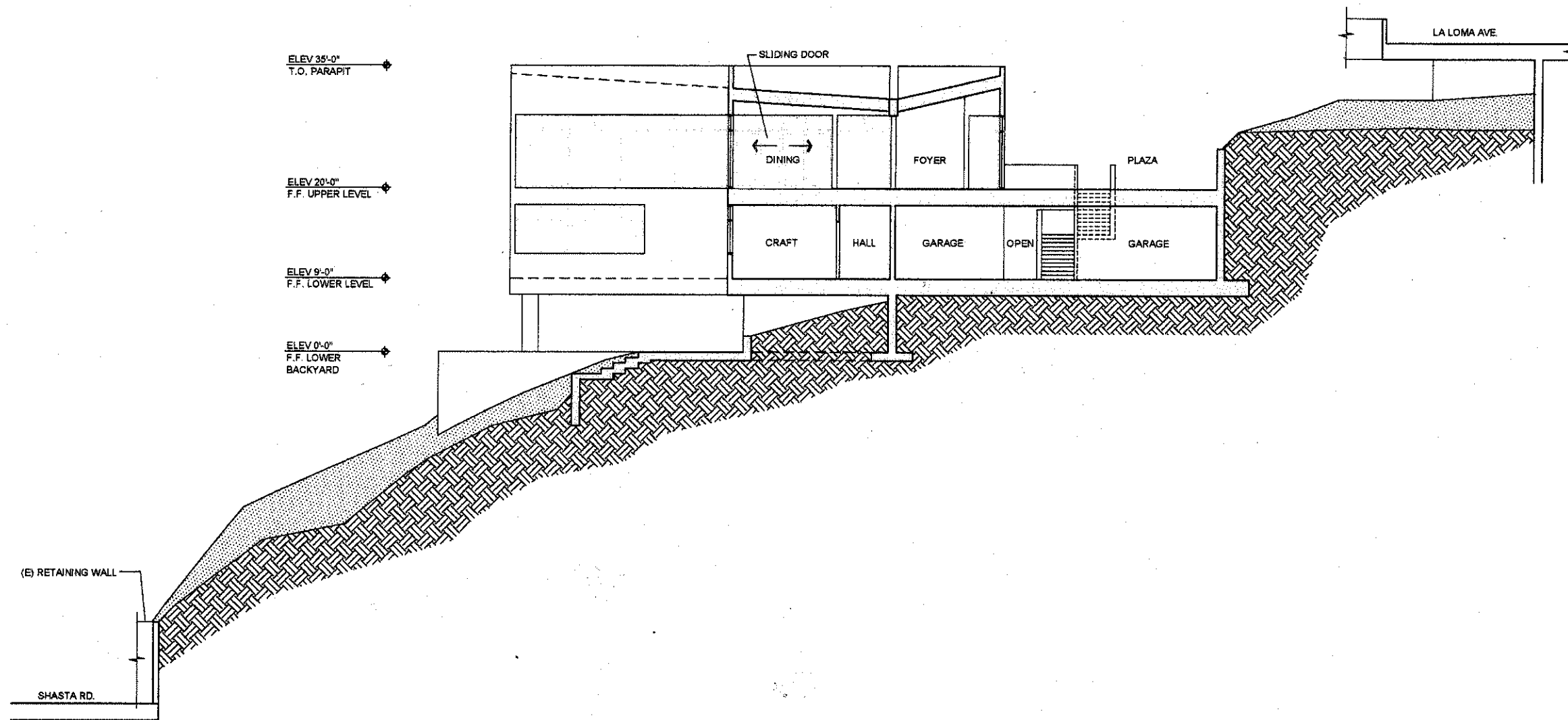
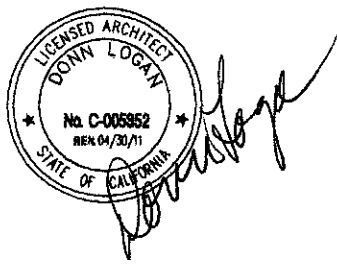
As noted in my letter-report of 4/16/10, the plans (11/12/09) approved by the ZAB (1/28/10) depict portions of the major fill for the project (Sht. 16 attached) to be placed on an existing slope inclined at about 42° (~1.1h:1v) to create a new fill slope more than 50° (~0.8h:1v). The main site section (Sht. 14 attached) has the building's roof at Elev. 694, lower yard at Elev. 659, and Shasta is at Elev. 616. There will be 78 feet vertical between Shasta and the roof and 43 feet between Shasta and the lower yard level which means, for a 2h:1v maximum slope between Shasta and the building, all vegetation will have to be removed for grading, and retaining walls totaling 27 feet in height will be necessary to achieve grades. Vertical cuts for grading and retaining walls will total about 43 feet (17 feet for bench cutting and 26 feet for wall cutting).

A drawing in the report depicts site drainage to be collected and discharged into an energy dissipator dug into the slope, which is inconsistent with the intended very steep fill slopes. To reiterate, in my professional opinion, the project as proposed is likely to have very significant environmental impacts not only during construction, but in service due to the probability of seismic lurching of the oversteepened side-hill fills.

Yours truly,


Lawrence B. Karp

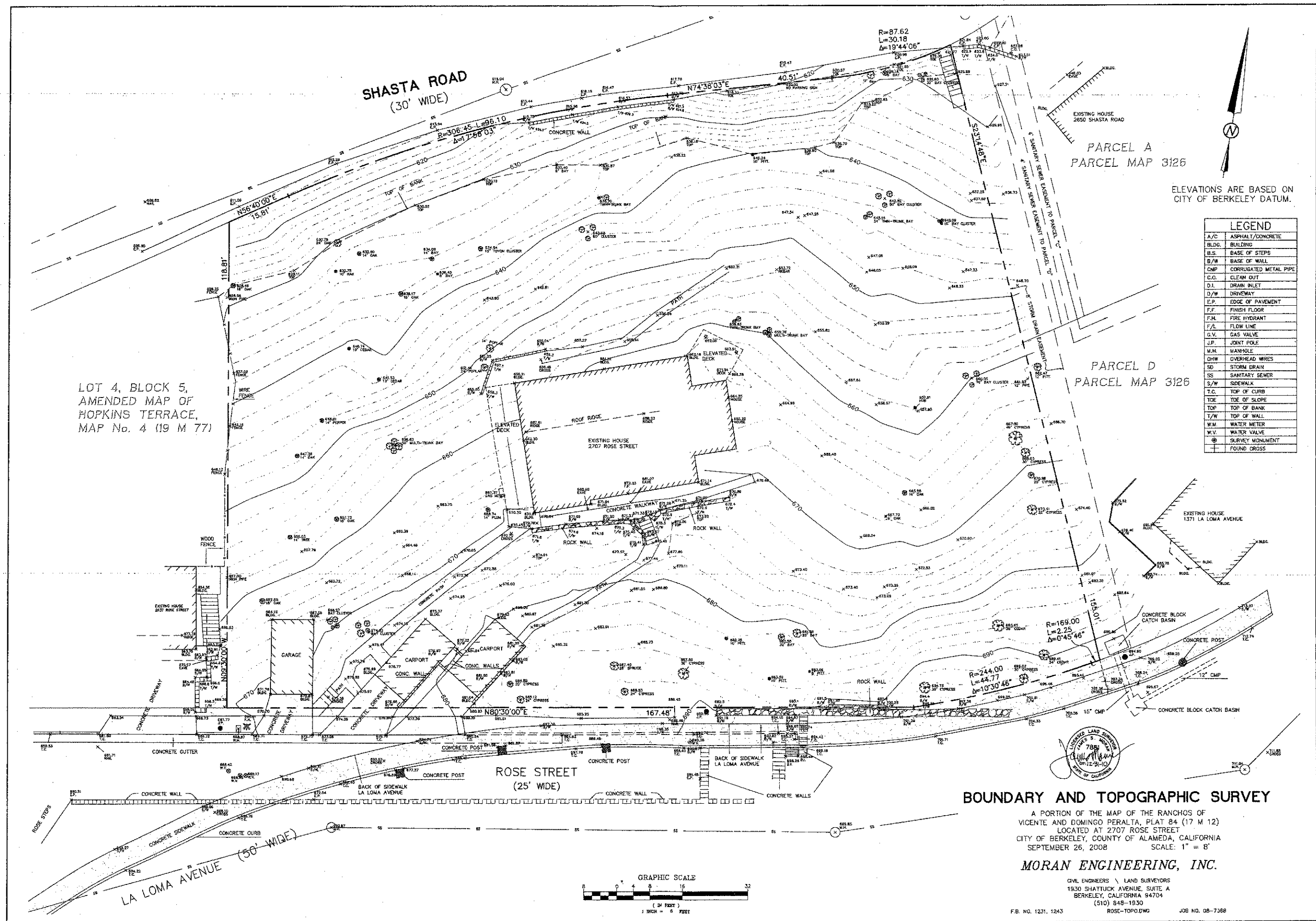


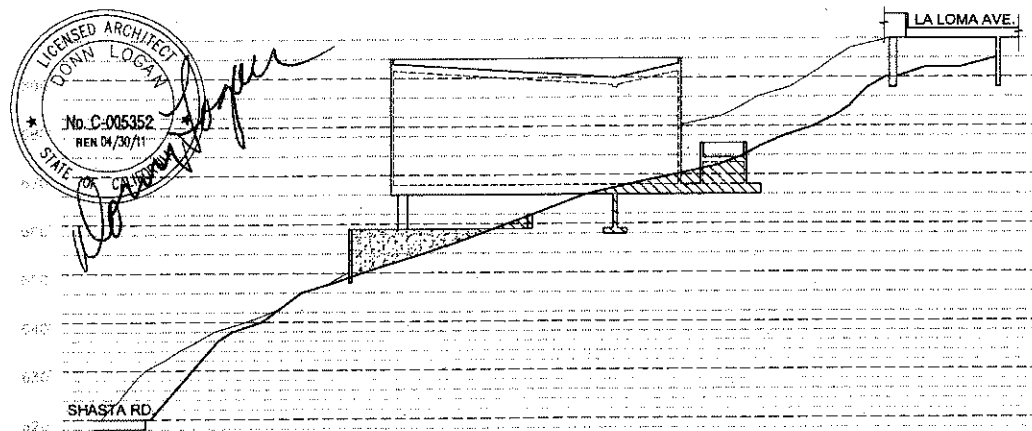
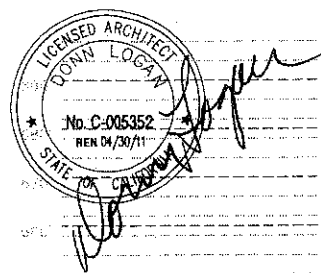


TRANVERSE SECTION LOOKING EAST

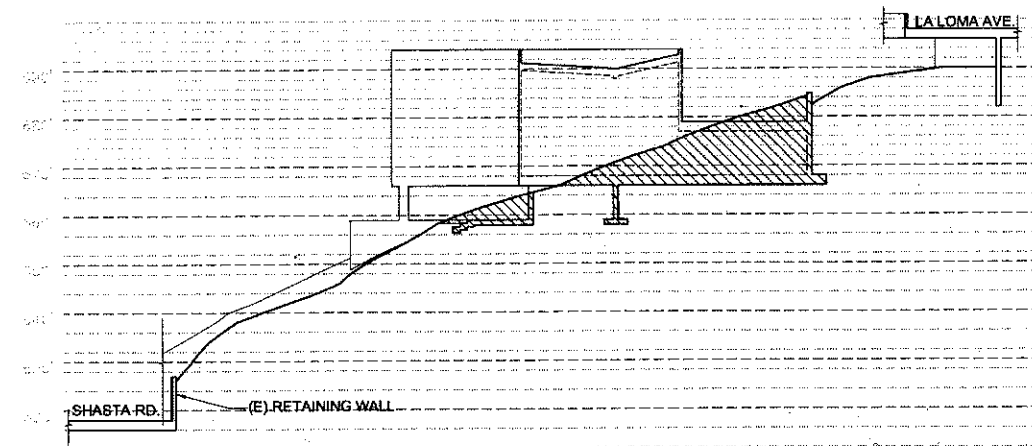
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MAY 15, 2009

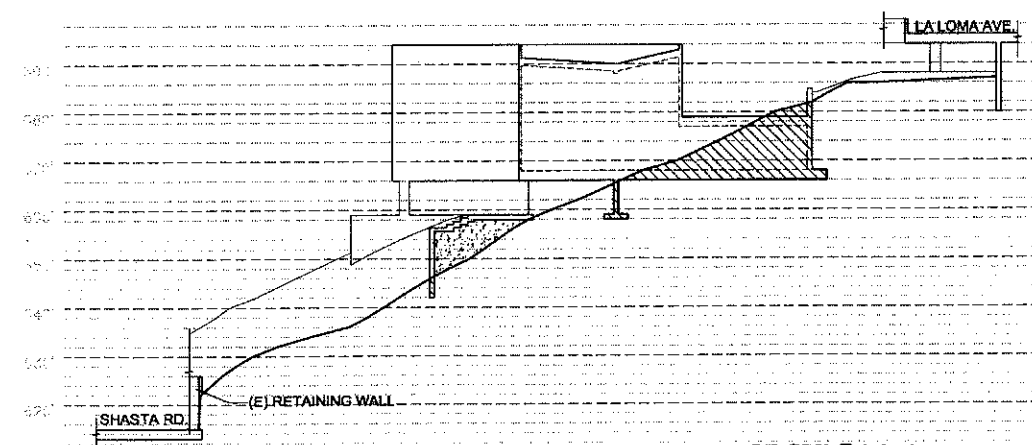




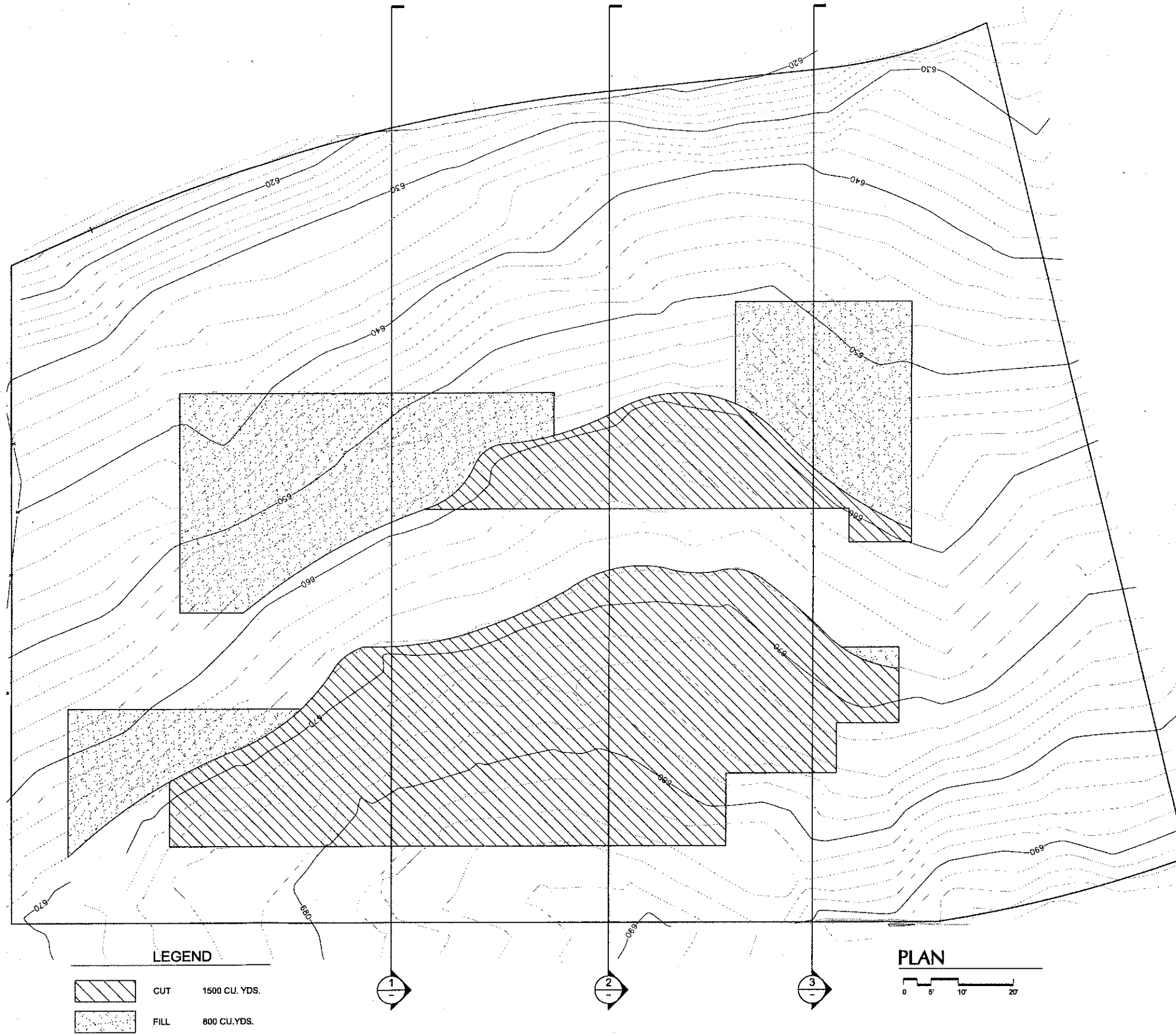
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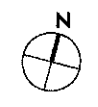
SECTION 2
0 10' 20' 40'



SECTION 1
0 10' 20' 40'



CONCEPTUAL GRADING PLAN



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