

APPENDIX A

Traffic Impacts Resulting from New Site Plan



MEMORANDUM

Date: May 18, 2006

To: Patrick Van Ness, Signature Properties

From: Chris Gray, Fehr & Peers

Subject: Oak to 9th Project Traffic Impacts Resulting from New Site Plan

1031-1998

This memorandum documents our analysis of the newly proposed site plan for the Oak to 9th Development. The major change from the previous site plan is that the dwelling units and commercial space were deleted from the site of Estuary Park (formerly known as Parcel N), with these units redistributed to other areas of the project.

We reviewed the new site plan to determine if these land use changes would result in additional traffic impacts beyond those previously identified in the Draft and Final EIR published previously. Our analysis considered three questions:

1. Does the new site plan contain more overall development than the previous one, which could lead to additional traffic impacts beyond those previously identified at off-site intersections?
2. Does the redistribution of dwelling units and commercial space increase traffic volumes at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?
3. Does any increase in traffic volumes lead to additional traffic impacts at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?

QUESTION #1- DOES THE NEW SITE PLAN CONTAIN MORE DEVELOPMENT?

A review of the new site plan indicates that there are 3,100 multi-family dwelling units proposed within the project site. 200,000 square feet of commercial space are proposed to be constructed as well. The old site plan also contained 3,100 multi-family dwelling units and 200,000 square feet of commercial space. Therefore, the dwelling unit and commercial space totals are identical between both uses. The overall project trip generation would also therefore be identical.

Since the trip generation between the two alternatives is identical, and the distribution of project-generated traffic would be unaffected by changes to the site plan, we would expect the project impacts to be the same at all off-site intersections. Off-site intersections would include all intersections except those directly adjacent to the project site. 49 of the 51 study intersections can be classified as off-site. The only study intersections directly adjacent to the project site would be Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp.

QUESTION #2- DOES THE REDISTRIBUTION OF UNITS INCREASE TRAFFIC VOLUMES AT PROJECT DRIVEWAYS

As noted above, the major change in the site plan is the movement of dwelling units and commercial space from the former Parcel N to the remaining areas of the development. The number of driveways proposed along Embarcadero is proposed to remain the same. At one of these driveways (Estuary Drive near the former Parcel N), the traffic volume is expected to decrease significantly with the removal of dwelling units and commercial space from this driveway.

At the remaining six parcels, the number of trips is expected to increase, although the increase at any one driveway is expected to be minimal. The trip increase at each driveway ranges from 5 AM peak hour trips at Embarcadero / 5th Avenue to 40 PM peak hour trips at Embarcadero / 6th Avenue/I-880 off-ramp. The other driveways would also experience minimal increases in traffic volumes. This minimal increase occurs for the following reasons:

1. The change in the site plan results in the redistribution of no more than 10 percent of the uses on site (300 dwelling units and 15,000 square feet of commercial)
2. These dwelling units and the commercial space are distributed across the remaining areas of the project
3. There are six driveways which provide access to the site
4. The project maintains an extensive internal roadway system which allows vehicles from the various parcels to access multiple driveways

Therefore, the redistribution of land uses results in a minimal increase in trips across all driveways.

QUESTION #3- DOES ANY INCREASE IN VOLUMES AT PROJECT DRIVEWAYS RESULT IN ADDITIONAL IMPACTS AT PROJECT DRIVEWAYS

The impact analysis for the EIR included two of the major intersections adjacent to the project site. These intersections are Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp. As noted in the response to Question #2, above, there will be a minor increase in the number of vehicles at these intersections.

The traffic study documented in the Draft and Final EIR identified impacts and recommended mitigation measures at these two intersections. With the recommended mitigations, mainly a widening of Embarcadero from 5th Avenue along the project frontage, both of these intersections would operate at an acceptable service levels (LOS D or better).

An analysis of intersection operations indicates that the additional trips cause a minimal increase in delay and no change in LOS. The delay change ranges from less than 1 second at the intersection of Embarcadero/5th Avenue in the AM peak hour to a change in delay of 3 seconds at the intersection of Embarcadero/6th Avenue/I-880 off-ramp in the PM peak hour. During all analysis periods, the change in delay is insufficient to cause a change in LOS. Therefore, these two intersections would continue to operate at acceptable levels even with the change in the project site, assuming implementation of the mitigation measures identified in the Draft and Final EIR.

SUMMARY

The answers to the three questions posed at the beginning of this memo are as follows:

1. Does the new site plan contain more overall development than the previous one, which could lead to additional traffic impacts beyond those previously identified at off-site intersections?- **No, trip generation and trip distribution the same. No additional off-site impacts.**
2. Does the redistribution of units increase traffic volumes at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?- **Yes, slight increase in traffic at driveways.**
3. Does any increase in traffic volumes lead to additional traffic impacts at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?- **No, minimal increase in volume leads to minimal increase in delay. No additional impacts.**

We hope you find this information to be helpful. If you have any questions or comments about this analysis, please call me at 949.859.3200 or e-mail me at cgray@fehrandpeers.com.