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W.O. 18125.01

March 18, 2008

Mr. Steve Yates
The Conceptual Motion Company
1501 Chapala Street
Santa Barbara, CA 93101

**Subject: Traffic Analysis for the Radio Square Mixed-Use Project,
Santa Barbara, Ca**

Dear Mr. Yates,

The following letter contains a preliminary traffic analysis of the Radio Square Mixed-Use Project, located at 210 W. Carrillo Street in the City of Santa Barbara. The analysis determines the trip generation and trip distribution for the proposed development and evaluates the potential traffic impacts to the vicinity intersections. An evaluation of the site access and circulation plan is also provided.

Project Statistics

Exhibit 1 shows the location of the Radio Square Mixed-Use Project. The site is currently occupied by the Carrillo Plaza/Radio Square commercial site, which contains a total of 20, 244 gross square feet (GFA) of retail and service uses. The project proposes to demolish the existing buildings and construct a mixed-use site with 32 residential units and 14,166 GFA of commercial space. Access is proposed via one driveway on Carrillo Street and one outbound only driveway on De La Vina Street. Frontage improvements include reconstruction of the median on Carrillo Street to restrict left-turn outbound movements from the project driveway. The project proposes to provide a total of 122 parking spaces in a subterranean parking garage.

Project Generated Traffic

Project Trip Generation Estimates and Distribution

Trip generation estimates were developed for the existing site and proposed project based on rates contained in ITE's *Trip Generation* manual¹ for Shopping

¹ Trip Generation, Institute of Transportation Engineers, 7th Edition, 2003.

Center (Land Use #820) and Residential Condominium (Land Use #230). Table 1 shows the trip generation rates.

Table 1
Project Trip Generation Rates

| Land Use | Unit | Daily Rate | AM Peak Hour Rate | | | PM Peak Hour Rate | | |
|--|------------------|------------|-------------------|------|-------|-------------------|------|-------|
| | | | In | Out | Total | In | Out | Total |
| <u>Existing Site</u> Shopping Center | KSF ¹ | 118.78 | 1.80 | 1.16 | 2.96 | 5.18 | 5.60 | 10.78 |
| <u>Proposed Project</u> Shopping Center | KSF ¹ | 134.59 | 2.09 | 1.33 | 3.42 | 5.84 | 6.33 | 12.17 |
| Residential Condominium | Unit | 5.86 | 0.07 | 0.37 | 0.44 | 0.35 | 0.17 | 0.52 |

¹ 1,000 square feet of gross floor area (GFA). Rates are based on ITE regression equations.

The rates contained in Table 1 assume that the project components are stand-alone land uses and not incorporated in a mixed-use site. Due to the mix of land uses proposed on the site, a percentage of the trips generated by the project would be internal to the site and not enter the external roadway network. This is called the internal capture rate. ITE's *Trip Generation Handbook*² defines a multi-use development as a "real estate project that consists of two or more ITE land use classifications between which trips are made without using the off-site road system." The proposed project is an example of multi-use developments containing residential units, retail buildings. The project's internal trips were determined based on internal capture rates and procedures outlined in the ITE Trip Generation Handbook.

In addition, a portion of trips to the existing and proposed commercial uses are "pass-by" trips, meaning trips that already exist on the adjacent road system (De La Vina Street and Carrillo Street) and visit the site on their way to or from another primary destination. The average pass-by rates contained in ITE's Trip Generation Handbook for shopping centers is 34% of the external trips during the PM peak hour. A 10% pass-by rate was applied to the ADT volumes. The trip generation estimates for the existing site and proposed project are shown in Table 2.

It should also be noted that the published trip generation rates were collected by ITE at sites located in a suburban setting. The Radio Square Mixed-Use Project is located in a downtown setting with various residential, retail and service uses located within walking distance. The project is also located on a major transit corridor and one block from a bus transit center. These factors will likely reduce vehicular trips generated by the site compared to the trip generation estimates developed using ITE rates.

² Trip Generation Handbook, Institute of Transportation Engineers, 2nd Edition, 2004.



Table 2
Project Trip Generation Estimates

| Land Use | Size | ADT | AM Peak Hour Trips | | | PM Peak Hour Trips | | |
|---|------------|-------------|--------------------|-----------|------------|--------------------|------------|------------|
| | | | In | Out | Total | In | Out | Total |
| <i>Existing Site</i> | | | | | | | | |
| <u>Shopping Center</u> | 20.244 KSF | 2,405 | 37 | 23 | 60 | 105 | 113 | 218 |
| pass-by trips ^a | | <u>241</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>36</u> | <u>38</u> | <u>74</u> |
| primary trips | | 2,164 | 37 | 23 | 60 | 69 | 75 | 144 |
| <i>Proposed Project</i> | | | | | | | | |
| <u>Shopping Center</u> | 14.166 KSF | 1,907 | 29 | 19 | 48 | 83 | 89 | 172 |
| mixed-use trips ^b | | 65 | 1 | 0 | 1 | 3 | 3 | 6 |
| pass-by trips ^a | | <u>184</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>27</u> | <u>29</u> | <u>56</u> |
| primary trips | | 1,658 | 28 | 19 | 47 | 53 | 57 | 110 |
| <u>Condominium</u> | 32 Units | 188 | 2 | 12 | 14 | 11 | 6 | 17 |
| mixed-use trips ^b | | <u>65</u> | <u>0</u> | <u>1</u> | <u>1</u> | <u>3</u> | <u>3</u> | <u>6</u> |
| primary trips | | 123 | 2 | 11 | 13 | 8 | 3 | 11 |
| <i>Total Primary Trips</i> | | 1,781 | 30 | 30 | 60 | 61 | 59 | 121 |
| Net New Primary Trips - Commercial | | -506 | -9 | -4 | -13 | -16 | -18 | -34 |
| Net New Primary Trips - Total | | -383 | -7 | 7 | 0 | -8 | -15 | -23 |

^a Pass-by rate of 10% to ADT and 34% to PM peak hour trips applied (average ITE pass-by rate).

^b Mixed-use trips based on internal capture rates outlined in ITE Trip Generation Handbook.

Shopping center size is expressed in gross square feet (GFA).

The trip generation calculations show that the traffic generated by the commercial uses on the site would be *reduced* by 506 ADT, 13 AM peak hour trips and 34 PM peak hour trips. The total project would result in a *reduction* of 383 ADT and 23 PM peak hour trips. The number of AM peak hour trips would not change.

City of Santa Barbara Traffic Impact Thresholds

Project-Specific Threshold

The City's project-specific impact threshold states that if a development project would cause the V/C ratio at an intersection to exceed 0.77, or if the project would increase the V/C ratio at intersections which already exceed 0.77 by 0.01, the project's impact is considered significant.

Cumulative Threshold

The City cumulative impact threshold states that if a development project would add five or more trips to an intersection which is forecast to operate above V/C 0.77 with cumulative traffic volumes, the project's contribution is considered a significant cumulative impact. The distribution and impact analysis is based on the City's practice of following 5 vehicle trips or more through adjacent intersections. This provides a statistical certainty for project-generated traffic additions at critical intersections on a day-to-day basis.



Potential Intersection Impacts

The trip generation calculations contained in Table 2 indicate that the Radio Square Mixed-Use Project would not add traffic during the AM peak hour, and reduce traffic during the PM peak hour. The project would not change the V/C ratio at any of the vicinity intersections during either peak hour. No project-specific or cumulative impacts would be generated.

Project Site Access

Access

Access to proposed project is via one three-quarter access driveway on Carrillo Street and an outbound only driveway on De La Vina Street. The peak hour traffic volumes at the driveways are illustrated in Exhibit 2. Carrillo Street currently contains a two-way left-turn lane adjacent to the site, allowing full access to the existing site. The project proposes to reconfigure the existing two-way left-turn lane and the adjacent raised median on Carrillo Street to a channelizing left turn inbound only lane. Left turn movements from the driveway onto Carrillo Street would be restricted by construction of a new raised median. Outbound traffic wishing to head east of the site would need to exit using the outbound only driveway on De La Vina Street. Sufficient storage length exists between Bath Street and the project driveway to accommodate inbound peak hour traffic (18 AM PHT and 53 PM PHT). If left turns from Carrillo Street were restricted, traffic from the west would be required to travel from Carrillo Street to Bath Street, from Bath Street to Figueroa Street, from Figueroa Street to De La Vina Street, and from De La Vina Street to westbound Carrillo Street to access to site. This circuitous route would add approximately 900 ADT to Bath, Figueroa and De La Vina Streets.

The reconfiguration of the median on Carrillo Street would also restrict left-turn movements to and from St. Vincent Avenue, which are currently allowed. It is expected that a minor amount of traffic would be affected by the left-turn restriction. Left-turn traffic currently using the St. Vincent Avenue connection to Carrillo Street would divert to De La Vina Street and Canon Perdido Street to enter St. Vincent Avenue, and exit St. Vincent Avenue using Canon Perdido Street and Bath Street to Carrillo Street.

Parking Garage Access

Since access to the parking garage will be controlled by a manned or controlled gate, some queuing is expected to occur at the entrance. The gate will be set back approximately 150 feet from street level (Carrillo Street sidewalk) to allow for off street vehicle queuing so through traffic is not adversely impacted by the driveway on Carrillo Street. This distance is sufficient to store up to six vehicles, which would accommodate the expected peak hour volumes (30 AM and 88 PM peak hour inbound trips). To avoid excessive queuing at the gate in the event the garage is full, automated signage should be provided at the entrance on Carrillo Street to indicate if the garage is full, or vehicles can be routed through the garage to the exit on De La Vina Street if the gate is manned.

Parking

The project proposes to provide a total of 122 parking spaces. The City Zoning Ordinance parking requirements for the project components are as follows:



- Residential
 - 1.25 space per studio condominium
 - 1.5 spaces per one-bedroom condominium
 - 2 spaces per two-bedroom condominium
 - 1 visitor space per 4 condominiums
- Commercial
 - 1 space per 250 net square feet

The parking requirements for the Radio Square Mixed-Use Project are shown in Table 4.

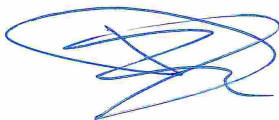
**Table 4
Parking Requirements**

| Project Component | Size | Required Spaces |
|------------------------------|------------------------|-------------------|
| <u>Residential</u> | | |
| Studio Condominium | 14 Units | 18 Spaces |
| One-Bedroom Condominium | 11 Units | 17 Spaces |
| Two-Bedroom Condominium | 7 Units | 14 Spaces |
| Visitors | 32 Units | <u>8 Spaces</u> |
| Total Residential | | 57 Spaces |
| <u>Commercial</u> | 16,301 Net Square Feet | 65 Spaces |
| Total Spaces Required | | 122 Spaces |

Table 3 shows that the parking requirement for the project is 122 spaces. The proposed parking supply of 122 parking spaces would satisfy the City's parking requirement.

This concludes our traffic analysis of the Radio Square Mixed-Use project.

PENFIELD & SMITH



Dennis J. Lammers, PTP
Associate Transportation Planner

Attachments: Exhibits 1 and 2



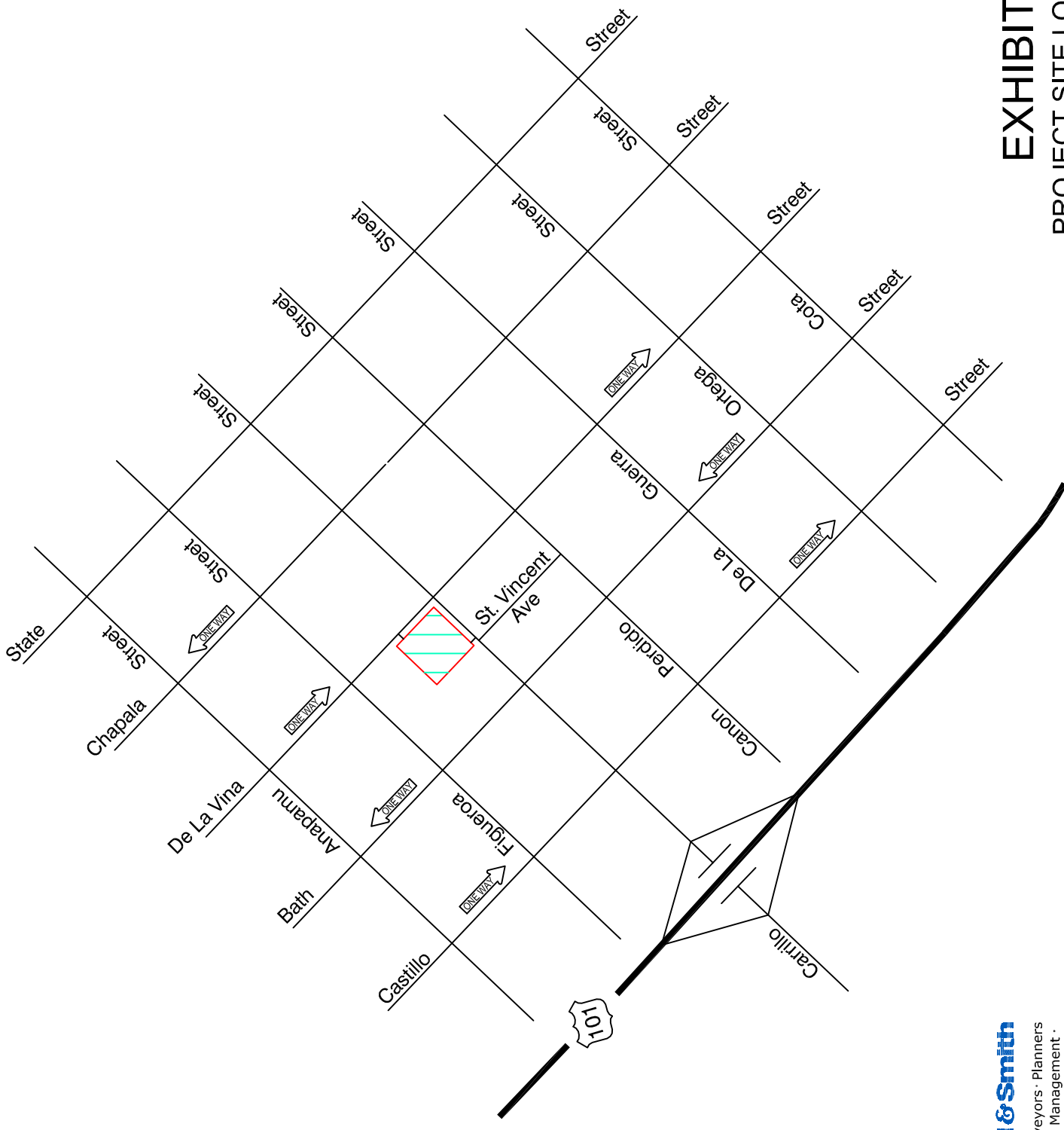
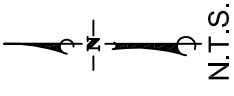


EXHIBIT 1

PROJECT SITE LOCATION

RADIO SQUARE MIXED-USE PROJECT

W.O.18125.01 18125.01.DWG

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