CALIFORNIA COASTAL COMMISSION

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Staff: Staff Report: GDC-SD 3/21/2001

Hearing Date:

April 8-12, 2002

AMENDMENT REQUEST STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-84-578-A5

RECORD PACKET COPY

Applicant:

Mira Costa College

Agents: Don Skelton

Susan McCabe

Original

Description:

Construction of a southern campus for Mira Costa Community College on

a 47.62 acre site. The 80,000 sq. ft. facility will house classrooms,

administrative offices and a library and will be constructed in two phases.

Proposed

Amendment: Delete Special Condition #8 from original permit which prohibits classes

from commencing prior to 9:00 a.m.

Site:

3333 Manchester Avenue, approximately one-half mile east of Interstate

5, Cardiff, Encinitas, San Diego County. APN Nos.: 261-150-10, 54, 57.

STAFF NOTES:

Summary of Staff's Preliminary Recommendation: Staff is recommending that the proposed amendment request be denied. The original permit prohibited classes from commencing prior to 9:00 a.m. because the Commission found that at that time, classes in the early morning hours would have an adverse effect on traffic along Manchester Avenue and the Interstate 5 interchange during peak morning traffic hours resulting in the potential need to expand these facilities into the adjacent San Elijo Lagoon to accommodate the increased traffic. The applicant contends that recent roadway improvements in the area have improved traffic along Manchester Avenue such that commencing classes between 7:00 and 9:00 a.m. will not result in adverse traffic conditions. However, the traffic analysis submitted by the applicant does not adequately support that conclusion. Staff finds the same concerns raised by the Commission in the original approval in 1985 still exist today and in fact are even more a concern today because of the intensification of development along the Manchester/El Camino Real corridor that has occurred since 1985. Therefore, staff recommends the Commission deny the amendment request.

Substantive File Documents: Certified City of Encinitas Local Coastal Program (LCP); "Encinitas MiraCosta College Traffic Report" Letter dated May 30, 2001 by Daniel Benson & Associates; "Encinitas MiraCosta College Early Classes Responses to Coastal Commission –Oct. 25, 2001" by Dan Benson and Associates dated January 28, 2002; "Traffic Impact Analysis for the Museum Overlay Zone and the Lux Art Institute" by Linscott Law & Greenspan Engineers, dated November 17, 2000; CDP Nos.: 6-84-578 and 5-84-578-A-3/Mira Costa College.

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

MOTION:

I move that the Commission approve proposed amendment to Coastal Development Permit No. 6-94-578 for the development as proposed by the applicant.

STAFF RECOMMENDATION OF DENIAL:

Staff recommends a **NO** vote. Failure of this motion will result in denial of the permit amendment and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO DENY THE PERMIT AMENDMENT:

The Commission hereby denies the proposed amendment to the coastal development permit on the grounds that the development as amended will not conform with the provisions of the certified Encinitas Local Coastal Program (LCP). Approval of the amendment would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the amended development on the environment.

III. Findings and Declarations.

The Commission finds and declares as follows:

1. Project History/Amendment Description. The San Elijo Campus of Mira Costa College, subject of this amendment request, is one of two community college campuses serving coastal north San Diego County. The site is located on the north side of Manchester Avenue, approximately one-half mile east of Interstate 5 and directly across from San Elijo Lagoon Ecological Reserve and Regional Park in the Cardiff community of the City of Encinitas.

In March of 1985, the Commission approved a coastal development permit for the new southern campus of Mira Costa Community College (CDP No. 6-84-578/Mira Costa College). The original permit involved the construction of thirteen buildings totaling approximately 80,000 sq. ft. to be constructed in two phases and consisting of classrooms, administrative office and library facilities to be built on the northern portion

of an approximately 47 acre site. Phase I involved construction of up to approximately 43,000 sq. ft. of structures with Phase II to involve up to an additional approximately 37,000 sq. ft. In addition, the original approval included an 815 space, landscaped parking lot in front of the buildings along Manchester Avenue with access being taken from three driveways off Manchester Avenue.

The original permit was approved with conditions addressing improvements and alignments to Manchester Avenue adjacent to the site; the limitation of the enrollment to a maximum of 3,000 students with no more than 1,000 students on campus at any one time; the prohibition of classes scheduled before 9:00 a.m. to avoid peak morning rush hour; the quality of runoff and erosion control; visual impacts through landscaping, lighting, and height limits on buildings; the requirement of a recorded offer to dedicate open space; the documentation of parking adequacy and a study of traffic circulation prior to commencement of Phase II; and, the use of the parking lot for any potential beach shuttle service in the future.

In 1991, the Commission approved an amendment to the original permit (CDP #6-84-578-A3) to increase the maximum enrollment from 3,000 to 6,900 students with no more than 1,300 students on campus any one time; partial implementation of Phase II development by constructing approximately 14,070 sq. ft. of school facilities; and, construction of an additional 394 parking spaces to accommodate the increase in permissible enrollment and square footage additions. In addition, the Commission maintained the prohibition against classes prior to 9:00 a.m.

The subject amendment request involves the deletion of Special Condition #8 of the original permit which prohibits the commencement of classes prior to 9:00 a.m. The applicant contends that because of recent roadway improvements in the area, the level of traffic during the peak hours has been reduced or kept constant such that commencing classes at 7:00 and 8:00 a.m. will not have an adverse effect on the Level of Service (LOS) on Manchester Avenue.

The City of Encinitas has a certified Local Coastal Program (LCP) and has been issuing coastal development permits since May of 1995. The subject site is located within the City's LCP jurisdiction. However, since the proposal involves an amendment to a previously approved coastal development permit issued by the Commission, the request is reviewed by the Commission with the Certified LCP used as the standard of review.

2. <u>Intensity of Use/Traffic Impacts.</u> Circulation Policy 2.22 on Page C-7 of the certified LUP is applicable and states:

To avoid impacts of the expansion and improvement of Manchester Avenue on the San Elijo Lagoon and its environmental resources, right-of-way dedication and widening shall occur to the north, away from the lagoon, rather than toward the lagoon; and the use of fill shall be prohibited. The design of the Manchester/I-5 interchange shall also avoid the use of fill and locate structures as far north as possible to avoid impacts on the lagoon. When design and improvement of Manchester Avenue and the interchange are undertaken, the County Department of

Parks and Recreation, the State Department of Fish and Game, the Coastal Commission and others will be notified and given opportunity to participate in the design and environmental review process.

Mira Costa College is located on the north side of Manchester Avenue directly across from San Elijo Lagoon Ecological Reserve and Regional Park. San Elijo Lagoon, which is an environmentally sensitive habitat area, is managed jointly by the California Department of Fish and Game (DFG) and the San Diego County Parks and Recreation Department. The lagoon provides habitat for at least five State or Federally-listed threatened or endangered birds that include the California least tern, the light-footed clapper rail, Belding's savannah sparrow, the brown pelican and the western snowy plover.

The subject amendment request is to eliminate Special Condition #8 of the original permit which prohibits classes from commencing prior to 9:00 a.m. In approving the original permit, the Commission determined that allowing classes to occur earlier than 9:00 a.m. would have an adverse effect on traffic along Manchester Avenue and at the I-5/Manchester Avenue interchange during peak rush hour (7:00 to 8:00 a.m.). The concern was not on the effect such traffic would have on public access to the shoreline (the ocean is located approximately 1 mile west of the site), but rather the potential adverse effect intensification of traffic would have on the need to expand the I-5/Manchester Avenue Interchange or Manchester Avenue into San Elijo Lagoon. As noted above, Manchester Avenue and the I-5/Manchester Avenue Interchange are located directly adjacent to San Elijo Lagoon and the main channel serving the lagoon runs at the base of the slope of Manchester Avenue. Thus, if roadway or interchange improvements are necessary that cannot be accommodated to the north, direct and significant impacts to San Elijo Lagoon would result.

The applicant contends that conditions have changed since the time of the Commission's original action such that classes can now occur before 9:00 a.m. without adversely affecting morning peak traffic. In particular, the applicant cites the recent expansion of Manchester Avenue between I-5 and El Camino Real from two-lanes to four and the extension of Leucadia Boulevard (a collector east/west roadway which connects eastern San Diego County to I-5 approximately 3 ½ miles north of the subject site) from Sidonia Street, east to El Camino Real. The applicant contends that many previous peak hour users of the El Camino Real/Manchester Avenue corridor connection to I-5 are now utilizing Leucadia Blvd. to access I-5 approximately 3 ½ miles north of the subject site. However, since Encinitas Blvd., another east/west I-5 collector roadway lies between Manchester Avenue and Leucadia Blvd., it is not clear why the extension of Leucadia Blvd. would improve traffic conditions on Manchester Avenue.

The applicant has submitted traffic analyses to support the amendment request (Ref. Exhibit #4 and #5). However, the applicant's traffic analyses do not include adequate data supporting the contention that traffic conditions have improved and that no adverse effects would occur from offering classes prior 9:00 a.m. In particular, the applicant's traffic studies do not compare existing LOS on Manchester Avenue or the I-5/Manchester Interchange with previous years and does not compare existing LOS with the proposal for

early morning classes. Instead the data supplied by the applicant consists of comparing peak traffic hours during one day in April of 2001 with one different day in selective years (2000, 1997, 1996 and 1995). Because the traffic counts for those selective days show a trend toward less traffic, the applicant's studies asserts that early morning classes will have no adverse impact to traffic at the I-5/Manchester intersection.

In addition, the analyses do not evaluate the effect the proposed additional early morning classes would have in conjunction with all pending and constructed developments along the Manchester Avenue/El Camino Real corridor. With the exception of the college campus, which is zoned Public/Semi-Public, properties along the Manchester Avenue/El Camino Real corridor leading to I-5 are zoned and planned for low to very low density residential development. However, in the last several years, numerous developments along the Manchester Avenue/El Camino Real corridor that are far more intense than low density residential have been built or approved. These developments include several churches and schools, child and elderly care facilities and a museum (See Exhibits #2 and #3).

At the time of the original approval, Manchester Avenue was a two-lane roadway with 13,400 Average Daily Trips (ADT's) between I-5 and El Camino Real which, at that time, exceeded the design capacity for a two-lane road and thus was operating at an unacceptable Level of Service (LOS). Subsequently, the City has recently widened Manchester Avenue from I-5 to El Camino Real to four lanes. (The section directly in front of the school is currently paved to its ultimate width to accommodate 6-lanes but is currently striped and operating as a four lane roadway.) The City's Certified Circulation Plan, Page C-24, identifies that a four-lane "collector roadway", such as the existing Manchester Avenue in front of the school, would operate at LOS C up to a maximum of 26,000 ADT's. If Manchester Avenue is currently experiencing 25,700 ADT's, the addition of only 301 ADT's would change the LOS from C to D. The applicant's traffic study suggests that more than 301 ADT's would be generated by classes starting before 9:00 a.m. In addition, a traffic study performed for another development proposal in the same general area, identifies that Manchester Avenue between I-5 and El Camino Real currently experiences 25,700 ADT's (ref. "Traffic Impact Analysis for the Museum Overlay Zone and the Lux Art Institute" by Linscott Law & Greenspan Engineers, dated November 17, 2000) and suggests that with existing and approved development the roadway would operate at LOS D.

The applicant's traffic study asserts that the LOS in front of the school is actually LOS A because it eventually will be striped for six-lanes. In other words, the traffic study is using traffic figures today, but assuming the road is operating with 6 lanes of traffic. In addition, it asserts that the only congestion is on Manchester Avenue west of the campus entrance and that the congestion is caused by the freeway ramp meter. The study asserts that even if 1,300 students were taking classes (the maximum allowed at any one time), "such growth would have no effect on traffic Level of Service (LOS) because student movements are in different directions and do not add to the ramp meter traffic." ("Encinitas MiraCosta College Early Classes Responses to Coastal Commission –Oct. 25, 2001" by Dan Benson and Associates dated January 28, 2002.) However, the applicant's traffic studies fail to document this assertion. In fact, its own traffic data documents that

on April 25, 2001, 57 cars exited the campus westbound on Manchester toward I-5 during the hours of 7:15 a.m. to 9:15 a.m. In addition, the applicant's traffic analysis of May 30, 2001, estimates the directions from which current students arrive to campus. "Since the current peak hour entrance volumes are distributed at 38 percent from the East and 62 percent from the I-5, to the west, we estimated early students to have the same distribution." ("Encinitas MiraCosta College Traffic Report" Letter dated May 30, 2001 by Daniel Benson & Associates). Therefore, if 62 percent of the early morning students arrive from the direction of I-5, it is likely that many will return to I-5 once done with class, which may occur between 8:15 a.m. and 9:15 a.m. In addition, some students who may come to school from the east nonetheless could head to I-5 once they leave school in order to go to work or run errands.

The applicant asserts that adding classes earlier in the morning will reduce traffic during the 8:15 to 9:15 peak periods because many students currently attending classes at 9:00 a.m. will change to earlier hours. The applicant's traffic study compares the percentage of students enrolled in early morning classes (7:00 to 8:30 a.m.) with students enrolled in 9:00 a.m. classes at Mira Costa College's Oceanside campus. Using those percentage differences, the traffic study estimates how many students could be expected to enroll in early morning classes at the subject San Elijo Mira Costa College campus. Based on this estimate, the applicant contends that of the 626 existing 9:00 a.m. students, no more than 351 students in 2001 would have been on campus at any one time between 7:00 and 9:00 a.m. In addition, the study estimates that approximately 10 college instructors and staff would be needed to accommodate these students. Based on this analysis, at least 361 additional students and staff would attend classes in the morning which by itself, would result in the LOS along Manchester Avenue in front of the school declining from LOS C to D. In addition, Mira Costa College's original coastal permit, and as amended (6-84-578-A3), allows for up to 1,300 students to be enrolled in classes at any one time. The applicant's traffic study failed to adequately demonstrate what impact 1,300 total students would have on traffic and the LOS as it relates to Manchester Avenue or the I-5 interchange during the morning peak traffic hours. Instead as cited above, the traffic study simply asserts, "student movements are in a different direction".

In addition, instead of comparing LOS, which is the typical method of evaluating traffic impacts, the applicant's study contends that by offering classes as early as 7:00 a.m., the existing traffic impacts caused by students starting classes at 9:00 a.m. will be spread out over a two hour span (7:00 to 9:00 a.m.) which will lessen whatever adverse effects currently exists. However, the applicant is not proposing to eliminate 9:00 a.m. classes, but rather proposing to add classes that start as early as 7:00 a.m. If early morning class end between 8:00 a.m. and 9:00 a.m., it would seem that students could be leaving the campus during the peak traffic period of 8:15 a.m. to 9:15 a.m. and, based on the applicant's limited traffic data, would mostly be turning west on Manchester Avenue toward I-5 where traffic is already very congested. In addition, although some current 9:00 a.m. students could decide to change to earlier classes if available, nothing would preclude more students taking their places in the 9:00 a.m. classes. Therefore, it is not clear how adding classes and allowing more students on campus will lessen traffic impacts.

While Manchester Avenue between I-5 and El Camino Real has been widened to four lanes, only two lanes, plus a freeway entrance lane exist at the Manchester/I-5 interchange. Currently, even with the recently widened road, westbound traffic on Manchester Avenue backs up in the morning up to the campus entrance (approximately ½ mile), resulting in significant long lines and delays for morning commuters. The applicant's traffic study, however, fails to document the extent of these delays or impacts associated with having earlier classes. Instead the report simply discounts the congestion as "only congested when Caltrans ramp meters artificially hold traffic from entering the freeway...". Therefore, the effect of early morning classes on the already congestion peak morning traffic is unknown.

The City's LCP requires any expansions of Manchester Avenue to occur to the north, away from lagoon resources and suggests that any future design of the I-5/Manchester Avenue interchange avoid impacts to the lagoon. However, northward expansion is limited by the amount of available space north of the interchange. The Commission is concerned that with the intensification of development along this corridor, traffic on Manchester Avenue and at the I-5/Manchester Avenue Interchange will soon reach a point where improvements become necessary to accommodate the increased traffic and these needed improvements may result in fill/impacts to San Elijo Lagoon, which would be inconsistent with LCP policies. This concern stems from the fact that ultimate sizing of Manchester Avenue was based on traffic assumptions that the corridor would be built out with low to very low density residential development. However, since that analysis and adoption of the LCP, development is occurring along this corridor that is far more intensive, from a traffic generation standpoint, than was originally planned for (See Exhibit #2). Because of the proximity of San Elijo Lagoon to this roadway, there is finite area for further road/interchange improvements. Approval of the proposed amendment request to allow classes prior to 9:00 a.m. will, at best, further serve to exacerbate the existing traffic problem along this stretch of Manchester Avenue in the a.m. peak period and, at worst, result in the need to widen the road/interchange into San Elijo Lagoon.

While Circulation Policy 2.22 of the Certified LCP prohibits Manchester Avenue from being expanded toward the lagoon, the same Policy only requires that future I-5/Manchester interchange improvements "avoid the use of fill and locate structures as far north as possible to avoid impacts on the lagoon." With increasing traffic demands due to increased development intensities, the concern continues to be that a point will be reached such that the designers of a future I-5/Manchester Avenue interchange will be unable to avoid fill of the lagoon. Therefore, no further intensification of this corridor should be allowed to occur without first addressing the cumulative impacts of such on the existing roadway system.

Based on the above, the applicant has failed to adequately demonstrate that commencing classes prior to 9:00 a.m. would have no adverse effect on the early morning traffic or further the potential need to widen or expand the I-5/Manchester Avenue Interchange into San Elijo Lagoon which would be inconsistent the intent of Special Condition #8 of Coastal Development Permit 6-84-578 and with Circulation Policy 2.2 of the City's Certified LCP. Therefore, the amendment request must be denied.

3. <u>Local Coastal Planning</u>. Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding cannot be made.

The City of Encinitas received approval of its LCP in November of 1994 and began issuing coastal development permits on May 15, 1995. The subject site is designated and zoned Public/Semi-Public in the City's Certified Implementation Plan. The proposed amendment request is consistent with that planning designation. However, the proposed development amendment would result in adverse traffic impacts which could result in demands to widen Manchester Avenue and/or I-5 toward San Elijo Lagoon which contains environmentally sensitive resources. As noted previously, the proposed development is inconsistent with Circulation Policy 2.22 of the City's certified LCP. Because an insufficient traffic analysis was performed, the Commission is unable to determine the cumulative effective the proposed development may have on the Manchester Avenue/I-5 interchange. Therefore, the Commission finds the proposed amendment request could prejudice the ability of the City of Encinitas to implement their certified local coastal program. As such, the Commission finds that the proposed development must be denied.

4. <u>California Environmental Quality Act (CEQA)</u>. Section 13096 of the California Code of Regulations requires Commission approval of a coastal development permit to be supported by a finding showing the permit to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

As stated previously, the commencement of classes prior to 9:00 a.m. could result in adverse impacts to traffic congestion such that demands for roadway improvements toward San Elijo Lagoon could occur. In addition, there are feasible alternatives to the proposal. These feasible alternatives include continued use of the site with classes commencing at 9:00 a.m, reducing or limiting the number of students allowed on campus in the morning hours, and alternative transportation measures. These alternatives could potentially reduce or maintain demands for expansion of the roadway system toward San Elijo Lagoon. Therefore, the proposed development is not the least environmentally damaging alternative. Thus, the proposed project must be denied.

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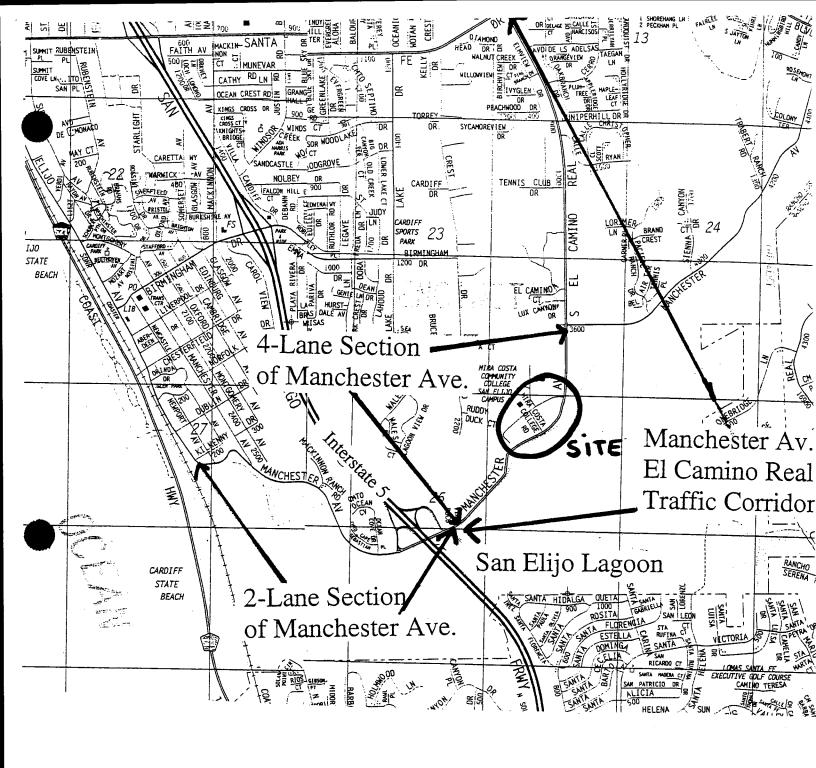




EXHIBIT NO. 1

APPLICATION NO.
6-84-578-A5

Location Map

California Coastal Commission

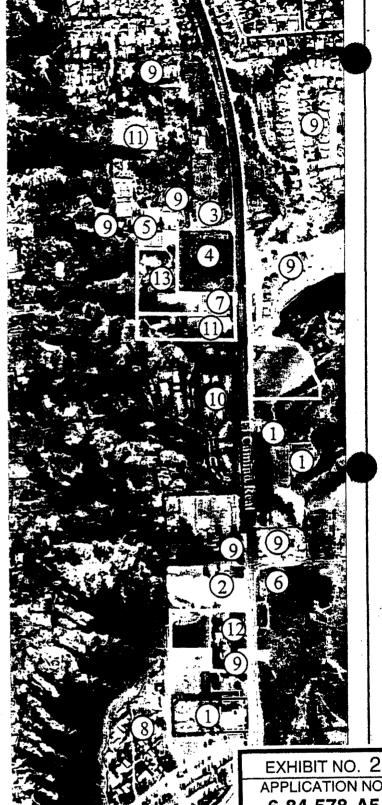
LEGEND

- House of Worship Existing
- House of Worship Planned
- 3 Residential Care Facility - Existing
- Residential Care Facility Planned
- Tennis Club Existing 5
- Athletic Park Planned 6
- Childcare Facility
- 8. Educational Institution
- Single-Family Residences
- 10 Multiple-Family Residences
- 11 Agriculture - Greenhouse
- 12 Agriculture - Orchard
- Proposed Lux Art Institute



Proposed Museum Overlay Zone

Note: See Exhibit 4 of this Staff Report to compare existing and proposed uses with underlying zoning designation.



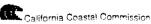
Mira COSTA College

APPLICATION NO.

6-84-578-A5

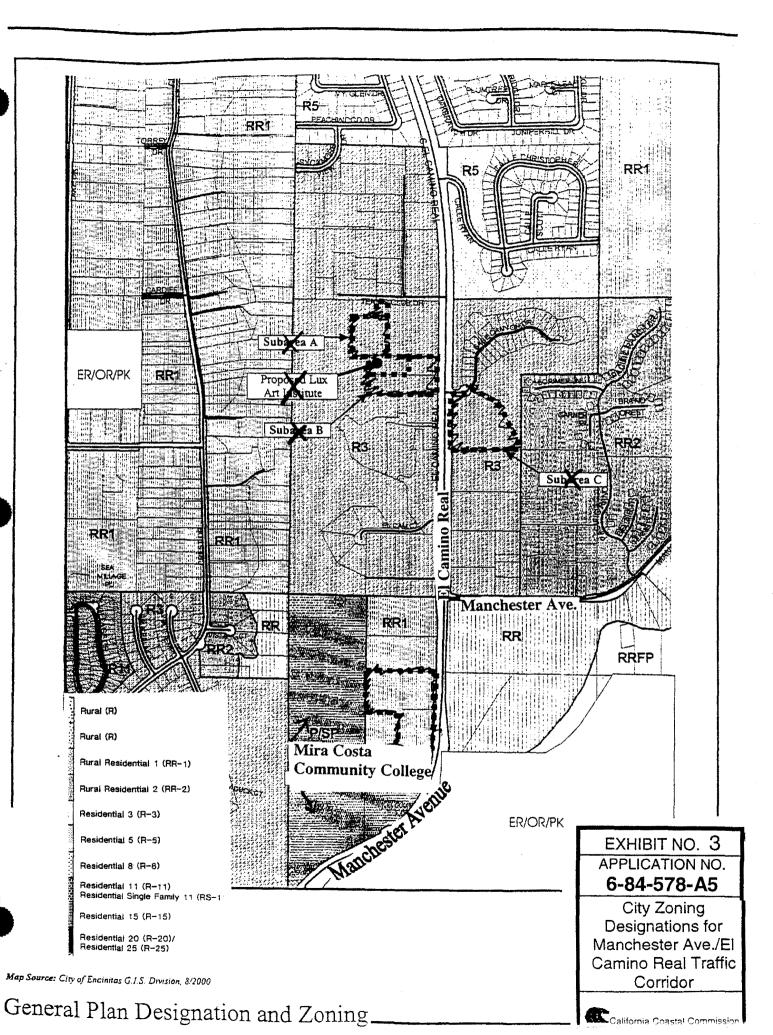
Depiction of Surrounding Existing and Proposed Uses Alor Manchester -

Avenue/El Camino Real Traffic Corridor



Map Source: Aerial Fotobank, Date Flown 1/4/00

Existing and Planned Land Uses _



Daniel
Benson

Associates

PARKING
TRAFFIC
TRANSIT
RIDESHARING

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JUN 2 0 2001

San Elijo Campus MiraCosta College c/o One Barnard Drive Oceanside, CA 92056 Attn: Mr. Don Skelton, Director of Facilities May 30, 2001

CALIFORNIA COASTAL COMMISSION SAN DIEGO COAST DISTRICT

Re: Encinitas MiraCosta College Traffic Report Traffic Impact of Offering Classes Before 9 am

Dear Mr. Skelton:,

With reference to our recent discussions with you and Mr. Coate and pursuant to your request, Daniel Benson & Associates is pleased to submit this letter report on our professional transportation engineering services relative to the San Elijo Campus Pre-9 am Class Traffic Impact Analysis to determine the traffic impact of offering classes before the current 9 am earliest class time at that campus the City of Encinitas, California. In response to requests from students, classes would be offered beginning at 8 am or 7:30 am or earlier. When the campus opened, access was limited to the congested two-lane Manchester Avenue, with peak hour traffic backing up from the I-5 interchange, less than a mile away. The College had accepted elimination of any classes before 9 am as a condition requested by the City of Encinitas and required by the state Coastal Commission. Now that Manchester is four lanes and no longer congested at its driveway, the college would like to offer earlier classes. As a result of the proposed change, the City of Encinitas has expressed interest in a traffic analysis of potential AM peak hour traffic impacts on Manchester at the intersection signals at the Campus and at the I-5 northbound ramps.

Scope of Services

In brief, the scope of services of the limited traffic impact analysis included review of the existing traffic and planned land use and parking conditions in the site environs, development of traffic counts required for AM peak movements at two signalized intersections and 24-hour tube counts on both sides of the campus entrance, evaluation of the ability of the existing roadway system and parking to accommodate the projected demands, based on counts or data on early class patterns at the Oceanside campus, and identification of circulation and access requirements to mitigate the effects of the proposed changes, if any. In particular, we evaluated the intersections with the campus entrance and the 1-5 northbound ramps to accommodate any increases due to the change. We received class and student counts from both MiraCosta campuses in order to overlay the potential impact of early classes of the type already offered in Oceanside on the current 9 am start time at Encinitas. We reviewed the analysis with Mr. Rob Blough, the City of Encinitas Traffic Engineer in order to meet the City requirements from the beginning of the study and we anticipate that this analysis will also satisfy the Coastal Commission. Included also is the recommended classes starting hour, if needed.

EXHIBIT NO. 4
APPLICATION NO.
6-84-578-A5

Traffic Study May 30, 2001 Page 1 of 4

California Coastal Commission

Encinites San Elijo Campus Traffic Report on Early Classes

Study Findings and Recommendations

MiraCosta College will not increase traffic congestion on Manchester Avenue by offering classes before 9 am, and Daniel Benson & Associates recommends that the Coastal Commission eliminate its restriction on College early class starting times. Two events have actually reduced or kept constant the AM peak hour traffic on Manchester Avenue—(1.) The roadway was widened to two lanes in each direction plus left turn bays, and (2.) Leucadia Boulevard was opened up to Rancho Santa Fe Road, allowing commuters between San Marcos/ Escondido and San Diego near the I-5/ I-805 to avoid getting on or off the I-5 at Manchester Avenue and instead continue on Leucadia Boulevard to reach the I-5.instead of going South on El Camino Real or other arterials to get to I-5 via Manchester Avenue.

We have made counts that verify reduced or relatively unchanged AM traffic volumes on Manchester Avenue, despite the fact that capacity was more than doubled to four lanes divided. There is currently excess street capacity on Manchester Avenue during the 7 to 8:30 am period which will readily accommodate the minor additional traffic from early classes. Since the current Manchester Avenue AM peak hour of 8:15 to 9:15 is when most students and staff now come to campus, offering earlier classes will reduce the need for 9 am classes and will actually improve traffic by spreading out the class times and moving some of the 9 am traffic to less busy hours. Earlier classes will mitigate the traffic peaking.

Counts

Our tube or 24-hour counts were made in both directions and on both sides of the campus entrance. AM totals were 8,925, east of the College entrance, and 9,373 to the west. This is similar to the City's 10/2000 count of 9,116 and 5/1997 count of 9,031. But in 1996 and 1995 the City's counts were 9,339 and 9,590, respectively, on a 2-lane road, representing a very unusual traffic reduction for the reasons summarized above. Westbound AM peak hour volumes have also held steady, with current counts of 966 west of the college and 1,078 east of the college, whereas 10/2000 counts were 930 and 5/1997 counts were 1,070, but 1996 and 1995 counts were still 1,056 and 1,147 on the 2-lane road to the I-5. In summary, capacity has more than doubled while traffic volumes held steady or dropped.

We made AM peak hour turn counts at the campus entrance and at the I-5 Northbound Ramp signal in order to allow Level of Service analysis if needed. The peak hour is 8:15 to 9:15 am, so students are arriving for classes at the same time as the Manchester Avenue traffic is peaking. Therefore the 9 am

limitation exacerbates what little congestion there is on Manchester..

The college entrance is obviously at Level of Service A because left turns into the campus totaled 237, or about 4 per minute, and left turn exits at the start of classes are negligible at 13 vehicles.

The 1-5 Northbound Ramp signal is only congested when the Caltrans ramp meters artificially hold traffic from entering the freeway Southbound, but no traffic leaves the college in the early morning, and if it did the college traffic would go north because the campus is near the southern boundary of the Community College District. The highest volumes from the I-5 in the morning come from the south and 641 vehicles turn left onto Manchester Eastbound, but almost all of those vehicles come from outside the District, as well. The highest volumes that could serve the campus through this intersection come Southbound and pass the intersection as Eastbound through traffic, so they have limited impact on that intersection. Again, the college 9 am start time makes conditions at the I-5 Northbound signal worse, because the college starts during the signal's peak hour, and traffic coming to earlier classes would find lighter traffic conditions.

Because earlier classes would improve the signalized intersection conditions or would have no impact on critical movements, no Highway Capacity or ICU calculations were made from the turn counts. Earlier classes would be the only appropriate mitigating measure for any congestion.

Analysis of Traffic Impacts of Earlier Classes

We compared student counts at the Oceanside Campus with counts at the Encinitas Campus to factor up estimates of Encinitas traffic volumes during the 7:30-8:30 am hour if the same pattern of early classes is established at both campuses and we prepared a spreadsheet showing the traffic results. We used Spring 2001 "Census Day" counts that are made after the first week of dropouts. They represent conditions for most of the school year. The peak class time of Wednesday at 9 am in Encinitas was projected to 2 years of growth at the current 2 per cent annually, and then distributed to 8:30, 8, 7:30 and 7 am classes in proportion to Oceanside early class student counts.

Encinites Sen Elijo Campus Traffic Report on Early Classes Page 3

Current traffic counts at the Encinitas campus entrance were also projected to 2003. Since current peak hour entrance volumes are distributed at 38 per cent from the East and 62 per cent from the I-5, to the West, we estimated early students to have the same distribution. We calculated the ratio or percentage of peak vehicle turns to registered students in order to determine that after transit and car pool or drop offs, 23 per cent of students from the East and 38 per cent of students from the I-5 are drivers, based on verified current ratios of turns to 9 am student census counts.

The results are that 33 additional right turns, which have no traffic impacts, and 85 additional left turns will occur between 7:30 and 8:30 am if the start restrictions are lifted. The net result on the campus entrance intersection is only about 2 left turns per minute during that period, an insignificant impact on the intersection level of service. When compared with conditions at the current 8:15 to 9:15 am peak hour, the traffic volumes are about half in 2003.

In conclusion, we find that earlier start times for classes at the Encinitas Campus will help overall traffic flow on Manchester Avenue by distributing the 9 am peak traffic to less busy times.

We trust this Report is responsive to your needs for this project, and if you have any questions, please don't hesitate to let me know. We thank you for the opportunity to assist you with this important effort.

Respectfully submitted,

DANIEL BENSON & ASSOCIATES

freel Doron

Daniel E. Benson, P.E., A.I.C.P.,

Principal DEB:je

cc: (delivery by client)

Rob Blough, Encinitas Traffic Engineer

California Coastal Commission

MiraCosta College Student and Traffic Estimates San Elijo Campus

| | Counts of | Students En | rolled as of | February 5 | 2001 (Cens | sus Day) in | Oceanside (| Classes | | T | |
|-------------------------------------|----------------|--|--------------|--------------|-----------------------|-----------------|--|-------------|--|---|--|
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Daniel Benson

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Associates

Daniel E. Benson, P.E., A.I.C.P., Principal

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RIDESHARING

Forensic Transportation Engineering Microcomputer Applications

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January 28, 2002

San Elijo Campus, MiraCosta College c/o One Barnard Drive Oceanside, CA 92056

Attn: Mr. Don Skelton,

Re: Encinitas MiraCosta College Early Classes Response to Coastal Commission- Oct. 25, 2001

Dear Mr. Skelton:

With reference to our recent discussions with you and the questions raised by the Coastal Commission's October 25, 2001 Staff Report and Preliminary Recommendation, and pursuant to your request, Daniel Benson & Associates is pleased to submit this response as a follow up to our "San Elijo Campus Pre-9 am Class Traffic Impact Analysis" to determine the traffic impact of offering classes before the current 9 am earliest class time at that campus in the City of Encinitas, California. We are satisfied with our original study, and are confident of our results. Our responses are grouped as shown. The San Elijo Campus of MiraCosta College is on Manchester Ave., less than a mile east of the I-5 interchange, and a few miles east of the coast.

Summary

When the campus opened, Manchester was a congested 2-lane road and the Coastal Commission assumed that limiting the earliest classes to 9 am or later would keep the college from further impacting Manchester. In fact, those 9 am classes start in the middle of the Manchester commuter peak hour. However, they have not added to congestion because the flows to the campus are different and do not add on to the congested movements at the I-5 interchange. In addition, Manchester has become a 4 to 6 lane with left turns Major Arterial with a very good Level of Service (LOS) except beyond the college entrance, where Caltrans ramp meters cause backups into Manchester at the interchange. Manchester now has adequate capacity to serve the college and the proposed new developments in Encinitas, and the college entrance is already paved to 6 lanes plus left turn bay.

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EXHIBIT NO. 5

Traffic Volumes have declined steadily with the improvement of Encinitas signals and the completion of Leucadia Blvd., which directly serves San Marcos.

Manchester traffic volumes have dropped, based upon the evidence of 24 hour tube counts back to 1996. The reason for this is that in July 2000 improvements were made in Encinitas Blvd. signals and the Leucadia Blvd. "missing link" was completed, allowing direct access to the I-5 from San Marcos. There are few other options to drive from inland homes to the job centers south of Encinitas, so as alternative roadways have improved, commuters could continue west to reach the I-5 freeway earlier in their trip, rather than go south in El Camino Real commercial traffic to the tightly ramp metered Manchester on ramp. The ramp meter congestion does not back up to or beyond the campus entrance.

The trend of reduced traffic on Manchester, east of the college is shown clearly on the appended 24 hour tube counts from several years, obtained mostly from the City of Encinitas, and summarized as follows:

| COUNT DATE | DAILY | AM PK | PEAK HR | SUPPLIER |
|--------------|--------|-------|-----------|--------------------------------|
| April 2001 | 23,904 | 1,676 | 8:15-9:15 | Traffic Data Service Southwest |
| October 2000 | 24,462 | 1,723 | 8:15-9:15 | Transportation Studies, Inc. |
| May 1997 | 25,689 | 1,747 | 8:30-9:30 | Traffic Counts, Inc. |
| March 1996 | 26,980 | 1,844 | 8:15-9:15 | Traffic Counts, Inc. |
| May 1995 | 26,682 | 1,929 | 8:15-9:15 | Traffic Counts, Inc. |

Note: Suppliers were contracted by consultants, the City of Encinitas, or Caltrans.

The details of these 24 hour tube counts were not in the original report. They are appended. The explanation for reduced traffic is that while freeway volumes may have increased, drivers seemed to find more and faster alternative routes to the I-5 freeway, including Leucadia Blvd., to go from northeastern San Diego County to I-5 job centers like Sorrento Valley, just to the south. The counts confirm the drop in Manchester traffic.

In addition, the MiraCosta movements are unaffected by commute LOS because commuters have only one through lane to the offending ramp meter and this lane conflicts with (takes green time away from) the Northbound off-ramp left turn to Manchester. Neither movement contains college traffic, as demonstrated in the appended "Manchester/ I-5 Flows (8:15 - 9:15 am)." Students do not use the ramp meter because they are not leaving campus at 9 am (they are arriving). A second reason is that few students live south of Manchester, which is near the southern boundary of the community college district, so students also do not use the conflicting northbound off-ramp left turn to go to 9 am classes.

Peak Hour for Commuters vs. College traffic

The current peak hour is 8:15 to 9:15 am, not 7 am, as suggested by Coastal Commission staff. Our counts, other consultant counts and Caltrans counts all show that the peak hour on Manchester and the I-5 Northbound signal is from 8:15 am to 9:15 am— the same as the peak arrival time of college students for 9 am classes.

Obviously, having earlier classes would allow some students to arrive before the Daniel Benson and Associates

commuter peak hour to take classes. In addition, we have previously explained that students do not travel in the congested commute flows, except when approaching the campus entrance westbound, in which case they turn right into campus before any congestion backup. They do not congest the campus signalized intersection, and they also do not add to the freeway on ramp congestion.

The LOS figures cited by the Commission staff on page 5 are Encinitas planning guidelines for Average Daily Traffic (ADT) used only in long range General Plans and are never used by any traffic engineers for current LOS analysis or short range forecasting because they are not based on intersection analysis. Corridor LOS and Capacity are only used by planners to identify ultimate sizing of future street widths in 10 or 20 years. In fact, LOS and capacity are defined only at the busiest intersections; there is generally no capacity problem in a corridor with no signalized intersections. It is only at signals that capacity is constrained by conflicting green time, and the LOS is based only on whether the intersection gives the busiest movements enough green time to avoid too much delay. The movements that are not the busiest don't figure in LOS at all—they aren't critical. The commuter approach volumes and delays are critical on Manchester, but the college movements are lighter and don't even enter into LOS calculations because the college movements receive an excess of green time. The excess green time is only needed by the heavier volume of commuters going in the opposite direction at the same time as the students pass by on the same green light.

Manchester would not need to be widened into the Lagoon, to the south.

The Commission staff has misread the City of Encinitas Circulation Plan and Roadway Capacity Standards. Manchester is not a Collector Roadway with 26,000 ADT at LOS C, but is a Prime Arterial which is already fully constructed using ultimate right-of-way at the college entrance for 6 lanes plus left turn lanes, although it is not yet striped for 6 lanes. There will be no need to widen into the habitat areas south of Manchester. As a Prime Arterial, Manchester is shown as an ultimate 46,000 ADT at LOS C. Since most cities accept LOS D or E as a street's capacity, Manchester might carry 51,200 at LOS D, doubling the Commission staff's capacity estimate. The City can accomplish any widening needed on the north side of Manchester Avenue.

Intersection Level of Service (LOS) Analysis and Lack of Student Impact on Commuter Congestion

The movements of concern, commuter congestion and traffic to and from the college, are not restrained by the signals and their LOS, just as right turns are unaffected. No students leave the college at 9 am to go South (or North) with the commuters. Students coming from the North are in a lower volume of flow than the commuters and are therefore not delayed at the I-5 NB signal. There are few students coming from the freeway and they have excess green time because of higher volumes in the opposite direction. In addition, Cumulative projects identified in the LLG Lux Art Institute project have no impact on college traffic—they are mostly school projects planned or recently built, and their AM traffic is mostly by parents going to and from school. They have little impact on commuter traffic after dropping off their children, and none on college flows, which are right turns or come off the I-5 from the North. Parent-trips, by contrast, come from nearby homes along Manchester and El Camino Real.

The attached LOS tabulations for the Manchester/I-5 signalized intersection show it to be at LOS A, except at LOS C when assuming Caltrans Year 2030 volumes and 6 ianes with left turns on Manchester, based on ultimate development. They also show LOS A for the Manchester/MiraCosta Entrance as well, except LOS B using Caltrans Year 2030 volumes and 6 lanes on Manchester. Why would the intersection flow at LOS A when vehicles are backed up from the ramp meters? Because the volumes are not high and the ramp meters create artificial congestion to discourage short freeway trips. Even the Year 2030 Caltrans volumes enjoy high LOS because 6 lanes will be provided without widening into the environmentally sensitive adjacent lands. Our LOS tabulations for both intersections calculate LOS under four situations: existing traffic counts, after two years at 2 per cent annual growth (although volumes have declined), after the schools and other developments identified in the LLG Lux Art Institute study are operating, and finally in Year 2030 based on Caltrans forecasts by Katz, Okitsu & Associates, dated Nov. 15, 2001, and the assumption of doubled college attendance to the 1,300 student maximum, which is not expected to occur.

The attached simple layout explains which movements are related to campus access and shows why commuters are delayed only by the metered ramps, resulting in backups through the I-5 NB signal. Levels of Service (LOS) are usually based on the two most conflicting or delayed movements for each intersection. But college-bound traffic does not compound the congestion and backup from the I-5 ramp meter. That congestion begins west of the campus entrance.

According to the analysis, proposed developments have little or no impact on LOS because Manchester has excess capacity except at the ramp meter and will be expanded to 6 through lanes without land purchases on the south side of Manchester. In addition, our calculations of LOS were made after the LLG/ Lux counts and are based on the lower volumes now occurring on Manchester.

Other Developments have Minimal Impact on Manchester LOS

Our LOS analyses confirm no impact from the LLG/ Lux developments, including other anticipated but uncertain Cumulative Projects list in the study. That study was also made using older, higher Manchester counts. When the campus entrance intersection is restriped to a 6 lane street it will have ample capacity and any widening at other locations will occur to the north of the existing lanes.

Analyses include Teachers and Staff

We used turn volumes that include students, teachers, and staff to project traffic volume change from earlier classes. The projection of 351 8 am students was applied to the percentage distribution of MiraCosta turn movements for everybody, including teachers and staff. The turns into campus from each direction, which include everyone, were factored up by the percentage increase in students at each time period. The increase in pre-9 am students is based on actual experience with attendance at those class times at the Oceanside campus.

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The actual distribution between students and faculty/staff during early classes is not difficult to analyze. If 351 students were taking classes before 9 am in 2001, the Classes would have no more than 40 students per room, and therefore no more than 8 or 9 classes would be offered with 8 or 9 instructors. The support staff that would be required is one additional to open the admission and records office at 7 am. Therefore, the total would be 361 traffic entrances on Manchester Ave. or entering the college site, and the staff/student ratio at that time is only 3 per cent.

Analyses of Maximum Student Population would be Unrealistic, and would not add to congestion, anyway

The San Elijo campus is allowed by the Commission to have a maximum allowance of 1,300 students at any one time. Actual student population is currently less than half of that and achieving the maximum is not anticipated, given current growth rates. In any case, such growth would have no effect on traffic Level of Service (LOS) because student movements are in different directions or do not add to ramp meter traffic. Student volumes are not part of the Critical Movements at the Manchester/ I-5 signal. Congestion is west of the campus entrance and is due to backup from the freeway ramp meter.

Earlier Classes will not significantly increase the Student Population Base

Our report conservatively assumed the same 9 am student load as at present, redistributed, plus growth before 9 am, based on experience at the Oceanside campus. The student population is limited by area population and economics. It is expected that current students will move to earlier classes. These students do not add to the peak flows at I-5 because they come before the 8:15 to 9:15 am peak hour and because they do not add to the peak flows—they go in the other direction, as shown in the attached flow drawing.

MiraCosta College has no data that would suggest that if classes were offered before 9 am they would generate additional student enrollments beyond the existing student base. Certain classes would be offered earlier in the morning to appeal to students that are currently are forced to start classes at 9 am but would prefer early classes for the following reasons identified in student surveys. The Coastal Commission is being asked to respond to the following student-identified needs:

- Student wants a class in the early morning rather than the evening because of family and child care issues or commitments.
- Student is a morning person and does better academically then.
- Student work schedule limits daytime classes.

We can assume that the same percentage of our existing student population at both campuses would want to take classes beginning at 7:00 to 8:30 am, if they were made available. Although our report was conservative in not taking students from 9 am classes, it is logical to assume that early classes would spread the current traffic load and divert some of our students from 9:00 am classes, thereby reducing the traffic load at 9 am.

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Estimates, San Elijo Campus," in the third section, entitled, "Estimates of Students Enrolled in Spring 2001 in San Elijo Classes if before 9AM," we see that as of February, 2001, 626 peak Wednesday students arrive at the campus for 9:00 am classes. It is realistic to expect that 9 am enrollments would drop if earlier classes open up. Based on earlier class offering trends at the Oceanside campus, we estimate that 82 new students would come to classes offered at 7 am and some 230 earlier arriving students at 7:30 am for a total of 312 students. These earlier classes could potentially spread the load previously impacting the 9 am time period on Manchester at the college. These would reduce the 9 am 626-student load to about 396 students (626, less 230).

There are no Commuter Delays from Early Classes Because Students have Different Travel Flows

As shown in previous discussions, our conservative assumptions have been that earlier classes will not significantly increase or decrease commuter congestion. Students come from other than the peak directions, peak times, and peak movements. However, based on the assumptions of the previous paragraph, 230 students could arrive earlier and would reduce traffic flows during the 9 am peak hour. This would result in a shift of possibly 2 left turns per minute from the 9 am peak hour to the 7-8 am off peak period, a useful benefit that is based on projected shifts in student arrival times.

Summary

In conclusion, we have shown that earlier start times for classes at the Encinitas Campus will help overall traffic flow on Manchester Avenue by distributing the 9 am peak traffic to less busy times, and that these movements will marginally help rather than hinder Manchester congestion. In addition, campus traffic movements generally do not add to commute critical movements and therefore do not change Level of Service (LOS). The most positive likely result would be moving two peak hour left turns per minute out of the peak hour.

Respectfully submitted,

DANIEL BENSON & ASSOCIATES

Daniel E. Benson

Daniel E. Benson, P.E., A.I.C.P., Principal DEB:je Manchester/ I-5 Flows (8:15-9:15 am):

Commute traffic goes Westbound. Thru the Northbound signal and under the I-5, then Rt. on the Loop to Ramp Meter, crossing the Southbound Lt. turn to El Camino

College traffic goes Southbound off ramp, turns Lt. onto Manchester, goes thru Northbound signal, then Lt. to Campus

