

## Item #4

DATE: December 6, 2005

ATTENTION: Real Estate (Planning & Projects) Committee  
Meeting of December 7, 2005

SUBJECT: Downtown San Diego Quiet Zone—G Street One-Way Conversion—  
Area Wide

REFERENCE: Basic Concept Drawing for Kettner Boulevard and G Street Quiet  
Zone Grade Crossing  
G Street One-Way Conversion Traffic Study selected pages

STAFF CONTACT: John L. Anderson, Senior Project Manager - Public Works  
Garry Papers, Manager - Architecture & Planning

### SUMMARY

Staff Recommendation - That the Real Estate (Planning & Projects) Committee direct staff to initiate a public notification process towards the conversion of G Street to one-way, from Pacific Highway to Front Street, as part of the design for the Downtown Quiet Zone. **On December 7, the Real Estate Committee by unanimous vote, recommended staff to proceed with the public notification process.**

Other Recommendations - The Quiet Zone design was approved by the Redevelopment Agency on June 14, 2005, with the condition that the proposed conversion of G Street from two-way to one-way in the vicinity of the Kettner Boulevard and G Street intersection return to the Real Estate (Planning & Projects) Committee for further clarification and consideration when the traffic study was completed.

The above condition was placed on the approval of the design by the Centre City Development Corporation Board on May 25, 2005.

Fiscal Impact - None.

### BACKGROUND

Downtown San Diego, like many urban environments with large population growth, has had an increase in residents adjacent to railroad tracks and crossings. As the area along the rail corridor has transitioned from industrial to residential and recreational uses, the noise associated with the sounding of locomotive and trolley horns has become a major concern of residents and Centre City Development Corporation (“CCDC”). Train horns,

especially during the nighttime hours, can have a significant negative impact on the quality of life to the residents. The Federal government, through the Federal Railroad Administration (FRA), is addressing this quality-of-life issue in the Final Rule for the Use of Locomotive Horns at Highway-Rail Crossings. In this rule, the FRA (for the first time) set out the regulatory procedures and technical requirements necessary for the implementation of a Quiet Zone in which train horn noise may be reduced. It is important to note that the rules limit, but not completely prohibit, the sounding of horns.

Examples of continued use are the requirement to sound the horns when starting and stopping at stations, and in emergencies. CCDC, to improve the quality of life for downtown residents and visitors, is working towards the implementation of a Downtown San Diego Quiet Zone.

Environmental Impact – This activity is a categorical exemption under existing facilities pursuant to the State of California Environmental Act Guidelines 15301 (C) and (F).

#### QUIET ZONE DESIGN OF THE KETTNER AND G INTERSECTION

G Street is a three lane road from Pacific Highway to Front Street, with two lanes in the eastbound direction and one westbound lane west of Front Street. East of Front Street, it is one-way to the east with three lanes of traffic. Metered parallel parking is generally present on both sides of the road throughout the length of G Street.

Kettner Boulevard is a two-way street with one traffic lane in both the north and southbound directions between Broadway and Seaport Village. Metered parallel parking is generally present on both sides of the road throughout the length of Kettner Boulevard.

At the Kettner Boulevard and G Street intersection, the trolley and freight tracks cross diagonally through the intersection. This limits the design options for a Quiet Zone to either closing one or both streets, or converting one or both to one-way streets. It is not possible to use other options (SSM and ASMs) such as medians only, or upgrading the intersection to quad gates, to meet the Quiet Zone requirements and the diagnostic team's recommendations due to the diagonal alignment of the crossing.

Historically, the railroads and the California Public Utilities Commission ("CPUC") have had concerns over the design of the existing intersection. In 2000, BNSF hired a consultant to conduct a Quiet Zone Study (not based on current Quiet Zone requirements) and recommended improvements for a Quiet Zone. That study recommended the complete closure of Kettner Boulevard at G Street (the study also recommended the closure of Beech Street and Fifth Avenue).

As part of the court decision to reopen Park Boulevard at Harbor Drive to vehicles by the construction of a pedestrian bridge, the court directed the City of San Diego to continue researching the closure of Kettner Boulevard at the G Street intersection.

The intent of the Quiet Zone design is to minimize revisions to this vital intersection, while proposing a design that will meet the requirements of a Quiet Zone, and be seen as a significant safety improvement by the various railroad entities-the FRA, CPUC, BNSF, NCTD, and MTS.

Converting G Street to one-way eastbound at Kettner Boulevard has been determined to have the least negative impact to traffic circulation when considering the alternatives that would meet the criteria of a Quiet Zone, such as converting both Kettner Boulevard and G Street to one-way streets, or making Kettner Boulevard one-way southbound, or closing either Kettner Boulevard or G Street to pedestrian and vehicle traffic.

The most likely alternative to converting G Street would be converting Kettner Boulevard to one-way southbound, which would have a greater impact on the existing traffic patterns to adjacent properties. The most likely scenario for converting Kettner Boulevard from two-way to one-way would be from A Street south to Harbor Drive, resulting in Kettner Boulevard being one-way for its length from the I-5 freeway exit south to Harbor Drive. Kettner Boulevard has a number of cross streets that do not connect through in this area - A, B, and C streets to the west of Kettner Boulevard (blocked by Santa Fe Depot), E and F streets south of Broadway on both sides of Kettner. The majority of the cross streets on G Street connect through excepting India Street, south of G Street.

Comparing the two conversions, the Kettner Boulevard conversion would result in more multi-block "loop arounds" from properties than the G Street conversion. Kettner Boulevard one-way south of Broadway would require vehicles leaving properties south of Broadway such as Park Row, Electra, and 7 on Kettner Boulevard, with northbound destinations, to travel multiple blocks south to G Street, and then loop back north on Pacific Highway or other routes. This would result in larger changes in existing traffic patterns, plus add vehicles to the Kettner Boulevard and G Street area, by vehicles now traveling south on Kettner Boulevard, which would have exited their properties to the north on Kettner Boulevard instead. 655 Broadway, located at the SEC of Broadway and G Street, has driveways entering and exiting the building both to Broadway and Kettner Boulevard; therefore if Kettner Boulevard was converted to one-way southbound, vehicles would still be able to exit north to Broadway.

The Santa Fe Depot train station, with two-way Kettner Boulevard as the existing condition, would also lose access to the station from Broadway north on Kettner Boulevard. Kettner Boulevard one-way southbound creates a multi-block loop around to the north, then back south on Kettner Boulevard from Ash or B streets to the station.

Because of numerous superblocks and grid interruptions in this vicinity, Kettner Boulevard is a valuable two-way street for flexibly serving the Santa Fe transit node, and preserving long-term circulation options such as a downtown circulator shuttle or other transit modes.

For these reasons, CCDC staff supports the G Street one-way conversion over the Kettner Boulevard one-way conversion option.

CCDC, as the planning agency for downtown San Diego, does not support the closure of G Street or Kettner Boulevard, as closures would have a major negative impact on vehicle traffic circulation in this part of downtown. The expectation of the railroad entities would also be that the closure would apply to pedestrians also.

### G STREET ONE-WAY CONVERSION TRAFFIC STUDY

G Street is currently two-way from Pacific Highway to Front Street, and then changes to one-way eastbound at Front Street. The minimum that G Street can be revised to one-way for the purpose of the Quiet Zone is from Pacific Highway to Kettner Boulevard, then to Columbia Street (westbound G Street- left on Columbia Street, south to Market Street), or to State Street (westbound G Street - right turn north, or left turn south to Market Street). The consultant has performed a traffic study converting G Street to a one-way street at Kettner Boulevard, including the twelve intersections adjacent to Kettner Boulevard and G Street. The study includes the existing traffic circulation patterns at the time of conversion and in 2030 compared to the potential traffic circulation patterns of G Street one-way. The study takes into account G Street being extended to Pacific Highway to the west as part of the downtown master plan.

Three separate one-way eastbound scenarios were evaluated for G Street:

One-way eastbound from Pacific Highway to Columbia Street;  
One-way eastbound from Pacific Highway to State; and  
One-way eastbound from Pacific Highway to Front Street.

All three one-way conversions would maintain the two traffic lanes in the eastbound direction. The space currently occupied by the metered on-street parking and the westbound lane would be replaced with diagonal parking on the north side of the road. A concern expressed from converting a street from two-way to one-way operation is that motorists may travel faster. However, in this case the westbound traffic lane and parallel on-street parking will be replaced by diagonal parking which will have a traffic calming effect. The vehicle speed on G Street is sign limited and not expected to change significantly. The design also includes a "popout" design at Kettner Boulevard and G Street.

The popout is in the parking shoulder on the south side of G Street, and the parking shoulder and westbound lane on the north side of G Street, will also serve as a traffic calming device, reducing vehicle speed. The diagonal parking will increase the number of public parking spaces available, and provide an enhanced buffer for users of Pantoja Park.

Traffic that would otherwise continue to travel westbound on G Street if the two-way character of the street is retained was redistributed to the other roadway movements, primarily Broadway, Market Street, and the portion of Harbor Drive west of Market Street. Turning movements from side streets onto westbound G Street were also redistributed onto adjacent roadways.

The traffic study compared the existing condition to one-way conversions in the years 2005 and 2030.

### TRAFFIC STUDY CONCLUSIONS

The City of San Diego, Traffic Engineering, has reviewed the G Street one-way conversion traffic study and supports the conversion of G Street from Pacific Highway to Front Street as the preferred conversion. This conversion results in all of G Street being one-way east, consistent with their policy. The other two conversions to Columbia and State streets leave a section of two-way G Street with one-way G Street at the ends, which is not supported as a policy by the City of San Diego for one-way streets. Typically, a street is either all two-way, all one-way, or changes once from two-way to one-way, but not back again, which is seen as confusing to motorists.

The conversion of G Street to one-way eastbound is not expected to result in a significant change in vehicular speeds, because of the traffic calming effects of the proposed diagonal parking on the north side of the road, and the popout at the Kettner Boulevard and G Street intersection.

One of the benefits of converting G Street one-way at the Kettner Boulevard intersection, is that it allows westbound G Street and the parking shoulder to be converted to a large "popout" on the north side, expanding the size of the sidewalks and improving crosswalks at the intersection. One concern expressed over the existing condition by the Diagnostic team, (made up of experts from the railroads, CPUC, and FRA) is at the northwest corner of the intersection the pedestrian ramp and crosswalks are in the track area. The existing pedestrian ramp at that corner is located between the trolley tracks and the freight track. The one-way G Street conversion allows the pedestrian ramp at that corner and associated crosswalks relocated to the west, which places the new pedestrian ramp outside the tracks, which is the preferred location. This will result in a safer and more pedestrian-friendly design.

### CONSULTANT FIRM

<b>ROLE/FIRM</b>	<b>CONTACT</b>	<b>OWNED BY</b>
<b>Prime Consultant – BDS Engineering</b>	Severo Chavez	<i>Privately Owned - Principals: Thomas A. Jones (President)</i>

EQUAL OPPORTUNITY

BDS Engineering, Inc. has an approved Equal Opportunity Plan on file dated January 2005. City of San Diego staff will request for an updated Work Force Report for BDS Engineering, Inc., as the previous report on file is dated August 20, 2004.

- \*(1) Hispanic in Services
- (2) Filipinos in Technical
- (1) Female in Professional
- (4) Females in Technical
- (1) Female in Sales

SUB-CONSULTANTS

The sub-consulting firms are comprised of the following:

<b>Firm Name: BDS Engineering</b>		
<b>Sub-consulting Firms</b>	<b>Principals</b>	<b>Firm Certification</b>
Korve Engineering	Hans Korve	Uncertified SBE

SUMMARY

The Quiet Zone project does not in itself create any additional traffic volumes to the associated streets; the G Street one-way conversion from Pacific Highway to Front Street will redistribute existing vehicle driving patterns depending on the specific starting point and destination.

G Street, Pacific Highway to Front Street, is currently one lane westbound and two lanes eastbound. This conversion will eliminate the westbound lane and replace it with diagonal parking, resulting in two travel lanes instead of the existing three travel lanes.

The proposed G Street one-way conversion per the traffic study is expected to result in decrease in delay for 14 of the 24 possible intersection/peak hour combinations, increase in delay for 9 combinations, and no change at one combination.

The conversion of G Street to one-way eastbound traffic will not significantly change the peak hour level of service at key intersections in the study based on 2005 traffic volumes.

One concern expressed to CCDC by the public and residents has been that vehicle speed will increase on G Street if converted to one-way. The use of sidewalk “popouts” at the Kettner and G intersection, and diagonal parking replacing the westbound lane on the north side of G will both serve as traffic calming devices to lower vehicle speeds. Speed signs will also be employed.

The proposed one-way conversion of G Street will meet the Final Rule requirements for a Quiet Zone, and ensure that the Kettner Boulevard and G Street intersection meets the safety standards for pedestrians, vehicles, and train interactions as set forth in the FRA Final Rule and as determined by the Quiet Zone Diagnostic team.

Respectfully submitted,

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Senior Project Manager – Public Works

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Garry Papers  
Manager – Architecture and Planning

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