DRAFT

TRAFFIC ANALYSIS FOR THE PROPOSED BRADLEY LANDFILL AND RECYCLING CENTER TRANSITION MASTER PLAN

Prepared for:

WASTE MANAGEMENT RECYCLING AND DISPOSAL SERVICES OF CALIFORNIA, INC.

Prepared by:

Crain & Associates
2007 Sawtelle Boulevard, Suite 4
Los Angeles, California 90025
(310) 473-6508

August 2005

EXECUTIVE SUMMARY

The Bradley Landfill and Recycling Center Transition Master Plan include two phases of construction before project completion. Currently, the landfill is permitted to accept 10,000 tons of solid waste per day with operation from 6:00 AM to 8:00 PM, seven days per week. However, the landfill is accepting 1,500 tons per day of solid waste on Bradley West, 92 tons per day at the Materials Recovery Center (recyclables), and 1,260 tons per day of green waste, 200 tons of inert material and 5,500 tons of imported dirt Mondays through Fridays from 6:00 AM to 6:00 PM and on Saturdays from 7:00 AM to 3:00 PM. Receipt of dirt imports is permitted 24 hours per day. Since the landfill will reach maximum fill in the near future, Waste Management, Inc. proposes to increase the maximum height of the landfill by 43 feet in order to meet current market demands while converting the existing operations to a transfer station and materials recovery facility. The new operation will receive, compact, and then transport solid waste and recyclables for disposal at other facilities throughout the region. The wood and green waste operation will increase.

The first phase will initiate the transition from an active landfill to a transfer station and materials recovery facility. Solid waste will continue to be processed to a new height limit while new buildings are being constructed for the ultimate plan. An interim proposed increase in the presently permitted height of the landfill, reduction of the permitted daily tonnage from 10,000 tons per day, construction of a new Transfer Station and Materials Recovery Facility (MRF) and the beginning of the conversion of the Waste Management (WM) Sun Valley fleet to alternative clean fuels at the Bradley West Facility will be conducted during this Phase I construction. Soil will be imported for the building foundations for approximately 80 days during this phase. This import of soil has been evaluated separately due to its temporary nature and included in this report. The Bradley East Facility will increase wood and green waste operation, increase the

acceptance at the MRF, and continue electricity production at current levels. Phase I is expected to be completed by 2007. The second phase provides for the continued operation of the landfill while initiating conversion to operate as a transfer station and materials recovery facility with completion of the WM Sun Valley Fleet to alternative fuels at the Bradley West site. Closure of the landfill will require import of soil for capping. The Bradley East site will continue wood/green waste operation, closure of the Phase I MRF, with continuation of electricity production at current levels. Phase II is expected to be initiated in 2008. Completion of the project in year 2012 will provide for the processing of 4,000 tons per day (tpd) of solid waste, 2,500 tpd of green waste and 1,000 tpd for MRF. Solid waste and recyclables will be transported into the site from the trash trucks. It will then be compacted and loaded onto transfer trucks. The transfer trucks will exit with the compacted trash and bring it to acceptance landfills in Palmdale, Lancaster, and El Sobrante-Corona. This will improve transport of the trash by loading compacted trash onto fewer trucks prior to the commute to the acceptance landfills. The Bradley Landfill and Recycling Center will continue to accept and process green waste on a currently filled portion of the landfill.

The Bradley Transfer Station and Recycling Center is located at 9227 Tujunga Avenue on the west side of Tujunga Avenue north of Tuxford Street in the Sun Valley Community Plan area in the northeastern San Fernando Valley. The landfill is located in a predominately industrial area.

Current traffic engineering practice indicates that land uses which generate a large amount of truck traffic cannot be considered the same as one which generates passenger vehicle traffic. Trucks need a greater amount of time and space in terms of both volume and time for movement. Therefore the trucks associated with the site have been converted into Passenger Car Equivalents (PCE). Due to their size difference, trash trucks are considered 1.5 PCE and the transfer trucks are considered 2.0 PCE. It

is estimated that during Phase I construction, the greatest number of new trips will be created by the project with an increase of 2,163 PCE daily trips over the existing operations during the bulk of Phase I and 2,643 PCE daily trips during the time that dirt is being imported. As construction continues the number of trips will be increased with Phase II construction creating an increase of 3,195 PCE daily trips over existing. When construction activities have ceased at project completion it is estimated that there will be an increase of 2,440 PCE daily trips over the existing operations with the converted operation from a landfill to a Transfer Station and Materials Recovery Facility.

This traffic study analyzes existing and future peak hour traffic conditions within the study area that is expected to be directly affected by the conversion of the operation from a landfill to a Transfer Station and Materials Recovery Facility. The existing and future traffic volumes were increased by 10% to account for the truck traffic in the area. The future conditions are evaluated without the project, with Phase I construction with and without soil import for construction, with Phase II construction and with project completion. Existing conditions are demonstrated with the landfill's current self reduced operation rather than what is currently permitted.

Of the nine study intersections included in this study three intersections are significantly impacted with Phase I construction with and without the import of dirt for the foundation, four intersections are significantly impacted temporarily with Phase II construction, and three intersections are significantly impacted with project completion. The applicant proposes to implement traffic mitigation measures during Phase I construction at three intersections. The implementation of the improvements successfully mitigates impacts for Phase I without and with the import of the fill dirt for the foundation. Phase II Construction will require the implementation of three additional improvements. Phase II Complete is successfully mitigated to a level of insignificance with the implementation of the Phase I & II improvements. Installation of physical improvements, new traffic signal

and signal system improvements are proposed. Below is a list of the significantly impacted intersections along with the proposed improvements.

PHASE I CONSTRUCTION

Improvements to be conducted prior to implementation of Phase I Construction.

6. Bradley Avenue and Tuxford Street – PM Peak Hour – Prohibit parking on the north side of Tuxford Street east of Bradley Avenue and on the south side of Tuxford Street west of Bradely Avenue to convert existing east and westbound lane configurations from left turn lane, through lane and shared through/right to a dedicated left turn lane, two through lanes and dedicated right turn lane. Participate in the contribution towards funding for the ATSAC/ATCS signal system improvements.

8. I-5 Southbound On/Off Ramps and Penrose Street – PM Peak Hour – Design and install a new traffic signal at this currently unsignalized location. Caltrans approval will be required to implement this improvement.

9. Bradley Avenue and Penrose – PM Peak Hour – Convert existing single southbound left/through/right shared lane to a dedicated right-turn only lane and one through/right shared lane. Improve eastbound lane configurations from one left-turn only lane and one through lane to one left-turn only lane and one through/right shared lane.

PHASE II CONSTRUCTION

1. San Fernando Road and Sheldon Street – PM Peak Hour – Participate in the contribution towards funding for the City of Los Angeles expanded signal system improvement where traffic signals are interconnected known as Automated Traffic Surveillance and Control (ATSAC)/Adaptive Traffic Control System (ATCS). This improvement provides for increased capacity at the intersection. The ATSAC/ATCS provides signal synchronization through monitoring upstream and downstream traffic

volumes and delay. The synchronization is enhanced through computer enhancement and manual monitoring by a centralized control system.

5. San Fernando Road and Tuxford Street – PM Peak Hour – – Participate in the contribution towards funding for the ATSAC/ATCS expanded signal system improvements as described above.

6. Bradley Avenue and Tuxford Street – PM Peak Hour – Same as Phase I improvement.

7. Glenoaks Boulevard and Tuxford Street – AM and PM Peak Hour – Participate in the contribution towards funding for the ATSAC/ATCS expanded signal system improvements as described above.

PHASE II COMPLETE

1. San Fernando Road and Sheldon Street – PM Peak Hour – Same as Phase II improvement

6. Bradley Avenue and Tuxford Street – AM & PM Peak Hour Hour – Same as Phase I improvement

7. Glenoaks Boulevard and Tuxford Street – PM Peak Hour – Same as Phase II improvement

Implementation of the improvements mitigates these impacts to below a level of significance.

An evaluation of potential traffic impacts to the surrounding regional facilities including the nearby freeways the Golden State Freeway, Hollywood Freeway, Antelope Valley Freeway and Foothill Freeway was conducted. This analysis indicated that no regional facilities will be significantly impacted by the project. Cumulative analysis is considered in the future without project conditions as dictated by LADOT.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

The project under consideration consists of two phase construction before project completion which will allow the Bradley Landfill to convert from their existing landfill operation to a Transfer Station and Materials Recovery Facility (MRF). Currently, the landfill is permitted to accept 10,000 tons of solid waste per day with operation 6:00 AM to 8:00 PM, seven days per week. However, the landfill is accepting 1,500 tons per day of solid waste on Bradley West, 92 tons per day at the Materials Recovery Center (recyclables), 1,260 tons per day of green waste, 200 tons of inert material and 5,500 tons of imported dirt Mondays through Fridays from 6:00 AM to 6:00 PM and on Saturdays from 7:00 AM to 3:00 PM. Receipt of dirt imports is permitted 24 hours per day. Since the landfill will reach maximum fill in the near future, Waste Management, Inc. proposes to increase the maximum height of the landfill by 43 feet in order to meet current market demands while converting the existing operations to a Transfer Station and Materials Recovery Facility. The new operation will receive, compact, and then transport solid waste and recyclables for disposal at other facilities throughout the region. The wood and green waste operation will increase.

The first phase will initiate the transition from an active landfill to a Transfer Station and Material Recovery Facility. Solid waste will continue to be processed to a new height limit while new buildings are being constructed for the ultimate plan. An interim proposed increase in the presently permitted height of the landfill, reduction of the permitted daily tonnage from 10,000 tons per day to 7,000 tons per day, construction of a new Transfer Station and Materials Recovery Facility (MRF) and the beginning of the conversion of the Waste Management (WM) Sun Valley fleet to alternative clean fuels at the Bradley Waste Facility will be conducted during this Phase I construction. Soil will be imported for the foundations for approximately 80 days. The Bradley East Facility will increase wood and green waste operation to 2,500 tons per day (tpd), increase the acceptance at the MRF to 99 tpd, continue acceptance of inert material at 200 tpd, and

continue electricity production at current levels. This phase expected to be completed by 2007. The second phase provides for the continued operation of the landfill while initiating conversion to operate as a Transfer Station and Materials Recovery Facility with completion of the WM Sun Valley Fleet to alternative fuels at the Bradley West site. Closure of the landfill will require import of soil for capping. During Phase II construction 4,000 tpd of solid waste and 1,000 tpd of MRF will be accepted. The Bradley East site will continue wood/green waste operation at 2,500 tpd, closure of the Phase I MRF, acceptance of 120 loads per day of imported dirt, 500 tons of inert materials, and continuation of electricity production at current levels. Phase II is expected to be initiated in 2008. Completion of the project in year 2012 will provide for the processing of 4,000 tons per day (tpd) of solid waste, 2,500 tpd of green waste and 1,000 tpd for MRF. Solid waste and recyclables will be transported into the site from the trash trucks. It will then be compacted and loaded onto transfer trucks. The transfer trucks will exit with the compacted trash and bring it to acceptance landfills in Palmdale, Lancaster, and El Sobrante-Corona. This will improve transport of the trash by loading compacted trash onto fewer trucks prior to the commute to the acceptance landfills. The Bradley Landfill and Recycling Center will continue to accept and process green waste on a currently filled portion of the landfill.

Bradley Landfill is located in the Sun Valley community of the northeast San Fernando Valley on the west side of Tujunga Avenue north of Tuxford Street. The location of the project is shown on Figure 1, Site Vicinity Map.

The developer has retained Crain & Associates to conduct a traffic study to assess the impact of the proposed development on the surrounding street system under the requirements of the City of Los Angeles. This report presents the results of the analyses of existing conditions, future conditions with existing level of activity at the landfill, and projected traffic conditions with Phase I construction, with Phase II

construction and following completion of the Transfer Station and Materials Recovery Facility.

As requested by the Los Angeles Department of Transportation, this analysis incorporates a detailed evaluation of traffic conditions during the AM and PM peak hour at the following nine intersections.

1. San Fernando Road and Sheldon Street
2. Glenoaks Boulevard and Peoria Street
3. I-5 NB Off/SB On Ramps and Tuxford Street
4. I-5 NB On Ramp and Tuxford Street
5. San Fernando Road and Tuxford Street
6. Bradley Avenue and Tuxford Street
7. Glenoaks Boulevard and Tuxford Street
8. I-5 SB On/Off Ramps and Penrose Street
9. Bradley Avenue and Penrose Street

These locations are within an area surrounding the project site and include the intersections expected to be most directly impacted by the proposed project's traffic generation. Figure 2, Study Intersections Map, illustrates the location of the nine study intersections.

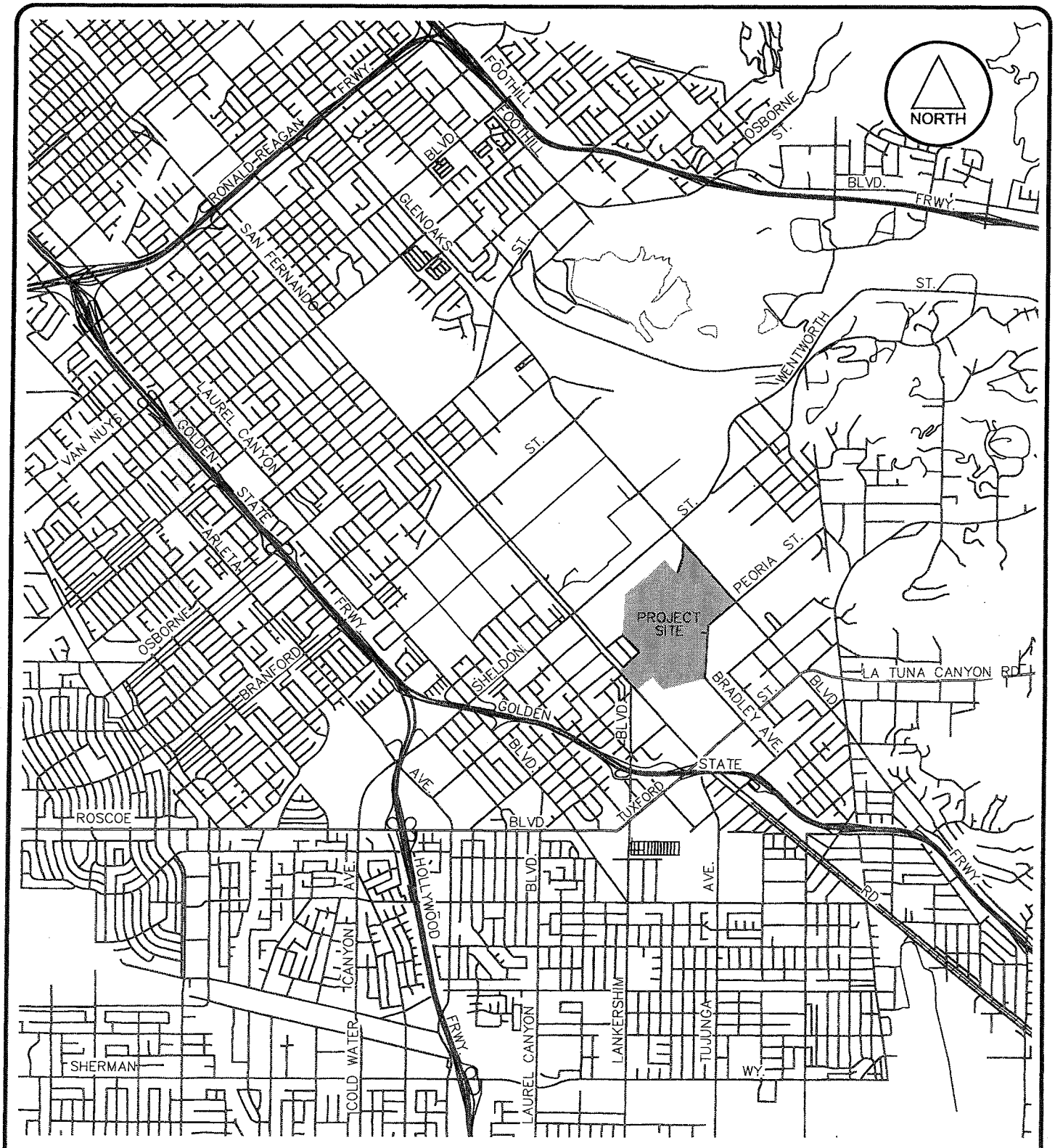


FIGURE 1

4/13/05

FN: BRADLEY LANDFILL 2\SITEVICN

SITE VICINITY MAP

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

FIGURE 2

4/13/05

FN: BRADLEY LANDFILL 2\STUDY-INTS

STUDY INTERSECTIONS

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

PROJECT DESCRIPTION

The project under consideration consists of the continued operation of the Bradley Landfill and Recycling Center (BLRC) to a maximum additional 43 feet in height while converting the current landfill operations to a Transfer Station operation and Materials Recovery Facility. This transition will be conducted in two phases of construction before project completion in year 2012.

BLRC is currently approved to be built to a maximum height of 1,010 feet above mean sea level (msl) and is permitted to accept 10,000 tons of solid waste 3,000 tons of inert debris and dirt, 1,260 tons of green waste and 92 tons per day for material recover. Operation is permitted from 6:00 AM to 8:00 PM, 7 days per week. However, Waste Management has altered what they are currently accepting to 1,500 tpd of solid waste, 5,500 tons of imported dirt, 200 tpd of inert material, 1,260 tpd of green waste and 92 tpd for materials recovery. Operations are conducted Mondays through Fridays from 6:00 AM to 6:00 PM and Saturdays from 7:00 AM to 3:00 PM with a maximum of 100 employees. As the BLRC is expected to reach maximum capacity in the near future, the project proposes to increase the landfill 43 feet in height to a maximum of 1,053 feet above msl.

As a part of the project, Waste Management proposes to continue operations to meet current market demands at or below its current level of activity while converting the existing operations completely to a Transfer Station and Materials Recovery Facility. The conversion will be conducted in two phases and require the construction of an enclosed building. The building will consist of approximately 55,000 square feet dedicated to Transfer Station operations and approximately 40,000 square feet used for the Materials Recovery Facility (MRF) component. A support building of approximately 2,500 square feet will be constructed to provide a break room, restrooms, and office. The buildings will be located southwest of the management office. The first phase of

construction will include a reduction of the maximum daily acceptance from 10,000 tpd to 7,000 tpd of solid waste with trash loads arriving on trash and transfer trucks, 425 truckloads of imported dirt (of which 120 truckloads will be temporary for 80 days for the foundation fill), 200 tpd of inert material, 2,500 tpd of green waste, 99 tpd of MRF and an increase of 28 employees. Phase I is expected to be completed by year 2007. Throughout Phase II construction, expected to commence year 2008, BLRC will service 4,000 tpd of solid waste, 120 truckload per day of imported dirt, 500 tons of inert material, 2,500 tpd of green waste, 1,000 tpd of MRF and Phase II will generate 9 additional employees. Currently the landfill accepts waste from a variety trash trucks loaded to approximately 5.6 tons, with the 7,000 tpd during phase I the loads will arrive on trash trucks in addition to heavier loads and then back to the lighter load with the 4,000 tpd.

The completed Transfer Station and Materials Recovery Facility will accept solid waste and recyclables from the trash trucks, compact it, and load it onto transfer trucks. The transfer trucks will exit with the compacted trash and take them to acceptance landfills in Palmdale, Lancaster, and El Sobrante-Corona. The Bradley Landfill will continue to accept and process green waste. It is anticipated that, at project completion, the Bradley Landfill will process a maximum of 4,000 tons of solid waste and 1,000 tons of recyclables per day for compaction and transfer and will have 21 fewer employees than with Phase II construction. The green waste operation will process a maximum of 2,500 tons per day. Instead of dumping the waste, trash and transport trucks will proceed to the Transfer Station and Material Recovery Facility where the trash will be compacted and loaded onto transfer trucks. The transfer trucks hold three to four loads from the trash trucks. It is estimated that the trash trucks carry 5.6 tons under lighter operation and the transfer trucks carry approximately 23 tons. Trucks of varying sizes are used including ten ton and 18 ton vehicles.

When the Transfer Station is fully operational, active landfill operations will be phased out. The compaction of the trash prior to its transfer to remote landfills will reduce the number of trucks making the regional trips.

The existing access will not be changed. Two driveways on Tujunga Avenue will remain and the scale building will be used in the Transfer Station operation. There is an existing driveway on Peoria Street which is used minimally for service of the Gas plant. Figure 3 provides a site plan for the proposed Transfer Station and Materials Recovery Facility.

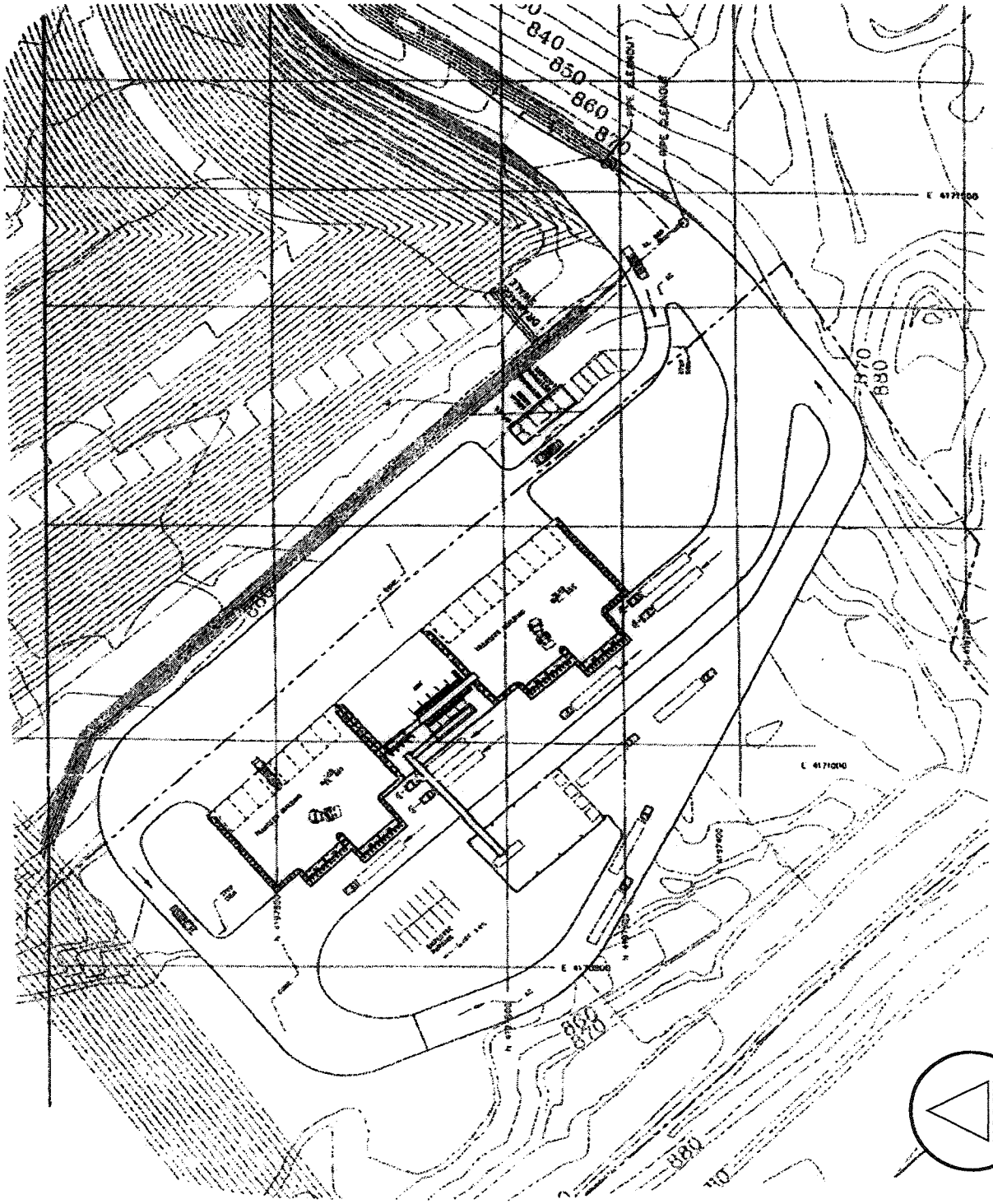


FIGURE 3

08/05/05

BRADLEY LANDFILL Z:\SITE PLAN.DWG

CONCEPTUAL PROJECT SITE PLAN

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

ENVIRONMENTAL SETTING

The site of the proposed project is located in the Sun Valley Planning Area of the northeastern San Fernando Valley. The project is located north of Tujunga Avenue and east of San Fernando Road. The project area is primarily industrial in nature with a concrete processing operation as an immediate neighbor. The following describes the regional freeways and surface streets in the vicinity of the project.

Freeways

Golden State Freeway (I-5) is southwest of the project site and is the closest regional facility. The Golden State Freeway runs through the state of California and beyond. In the project vicinity, the I-5 has four to five lanes in each direction with on- and off-ramps at Tuxford Street, Penrose Street, and Sheldon Street. The Golden State Freeway connects to the Ronald Regan Freeway, Foothill Freeway, and San Diego Freeway to the north. It connects with the Hollywood Freeway southwest of the project site.

Hollywood Freeway (State Highway 170) is approximately two and three quarters of a mile southwest of the project site and provides four lanes in each direction. The Hollywood Freeway originates off of the Golden State Freeway between Branford Street and Sheldon Street and continues southerly through the San Fernando Valley where it becomes the 101 Freeway north of Ventura Boulevard.

Foothill Freeway (I-210) is north of the project site and provides regional east-west service from the I-5 to Pasadena, San Dimas, and Pomona. The Foothill Freeway provides three to four lanes with a high-occupancy vehicle (HOV) lane in each direction.

Streets and Highways

In the City of Los Angeles a Major Highway is described as a roadway designed to carry over 30,000 vehicles per day ultimately designed for three to four travel lanes per direction during peak hours. Secondary Highways are designed to supplement the through-traffic carrying characteristics of the major highways. They are destined to carry 20,000 to 30,000 vehicles per day, with typically two travel lanes in each direction

San Fernando Road is a designated Major Highway situated southwest of the project site. A small portion of the project site borders San Fernando Road but access will not be taken from this roadway. Two lanes in each direction are provided in the project vicinity with left-turn channelization at major intersections. The roadway is bordered by the Southern Pacific Railroad/MTA railroad tracks currently used by Metrolink to the northwest. The railroad tracks separate San Fernando Road from "Little San Fernando Road" a discontinuous roadway northwest of the tracks.

Glenoaks Boulevard is a Major Highway which runs northwest to southeast on the eastern side of the project site. A portion of the project site is bordered by Glenoaks Boulevard but no project access will be taken from Glenoaks Boulevard. The roadway provides two lanes in each direction with left-turn channelization and a bikeway on approximately 80 feet.

Tuxford Street is designated as a Major Highway by the City of Los Angeles. Tuxford Street is southeast of the project site and provides freeway on- and off- ramps for the Golden State Freeway. Two lanes in each direction are provided on an approximately 70 feet of roadway.

Peoria Street is designated as a Secondary Highway on the west side of Glenoaks Boulevard and is designated as a Collector Street east of Glenoaks Boulevard. The

street segment west of Glenoaks Boulevard is along a portion of the southeastern part of the project. Peoria Street provides one lane of travel in each direction on 30 to 36 feet of roadway.

Tujunga Avenue borders a portion of the site and contains both main driveways into the project site. Tujunga Avenue is designated as a Secondary Highway in the project vicinity. This roadway varies in width from 30 to 36 feet and generally provides one lane in each direction.

Bradley Avenue is a roadway with one lane in each direction which spans from Tujunga Avenue to Penrose Street as a Secondary Highway in the project vicinity. Bradley Avenue is the southeastern gateway into the project area. This roadway provides over 40 feet of roadway surface.

Sheldon Street is designated as a Secondary Highway in the project vicinity and is northwest of the project site. It provides two lanes in each direction and is signalized at San Fernando Road and Glen Oaks Boulevard. Sheldon Street is approximately 60 feet in width.

Penrose Street is designated as a Secondary Highway. West of Bradley Avenue, Penrose Street provides two lanes in each direction. However, east of Bradley Avenue only one lane in each direction is provided.

Existing (2005) Traffic Volumes

Traffic volume count data with truck volumes were obtained by recent counts performed by Crain & Associates during April 2004. Traffic volumes during the AM and PM peak periods for the major streets in the study area were increased by two percent to reflect growth during the past year and existing (2005) volumes are summarized below. Due to the existing high volume of trucks in the project area, the existing data collected was

converted to passenger car equivalents and are shown for the nine study intersections on Figure 4.

The Golden State Freeway carries approximately 170,000 vehicles per day (VPD) with 13,100 VPD during the peak hours. The Hollywood Freeway carries approximately 190,000 VPD and the Foothill Freeway carries approximately 96,000 VPD in the vicinity of the project.

San Fernando Road carries approximately 15,000 VPD in the vicinity of the project site. Directional volumes are 600 vehicles per hour (VPH) northbound and 700 VPH southbound during the morning peak hour and 1,000 VPH northbound with 700 VPH southbound during the evening peak hours.

Glenoaks Boulevard carries approximately 14,000 VPD in the vicinity of the project site. Directional volumes are 500 VPH northbound and 800 VPH southbound during the morning peak hours and 900 VPH northbound with 700 VPH southbound during the evening peak hours.

The average daily volume for Tuxford Street in the vicinity of the proposed site is approximately 12,000 VPD. Directional daily traffic is approximately 500 VPH eastbound and approximately 700 VPH westbound during the morning peak hours and 700 VPH eastbound with 500 VPH westbound during the evening peak hours.

Peoria Street carries estimated daily traffic of approximately 1,050 VPD. Directional daily traffic volumes are approximately 40 VPH eastbound and approximately 70 VPH westbound during the morning peak hours and 50 VPH eastbound with 40 VPH westbound during the evening peak hours.

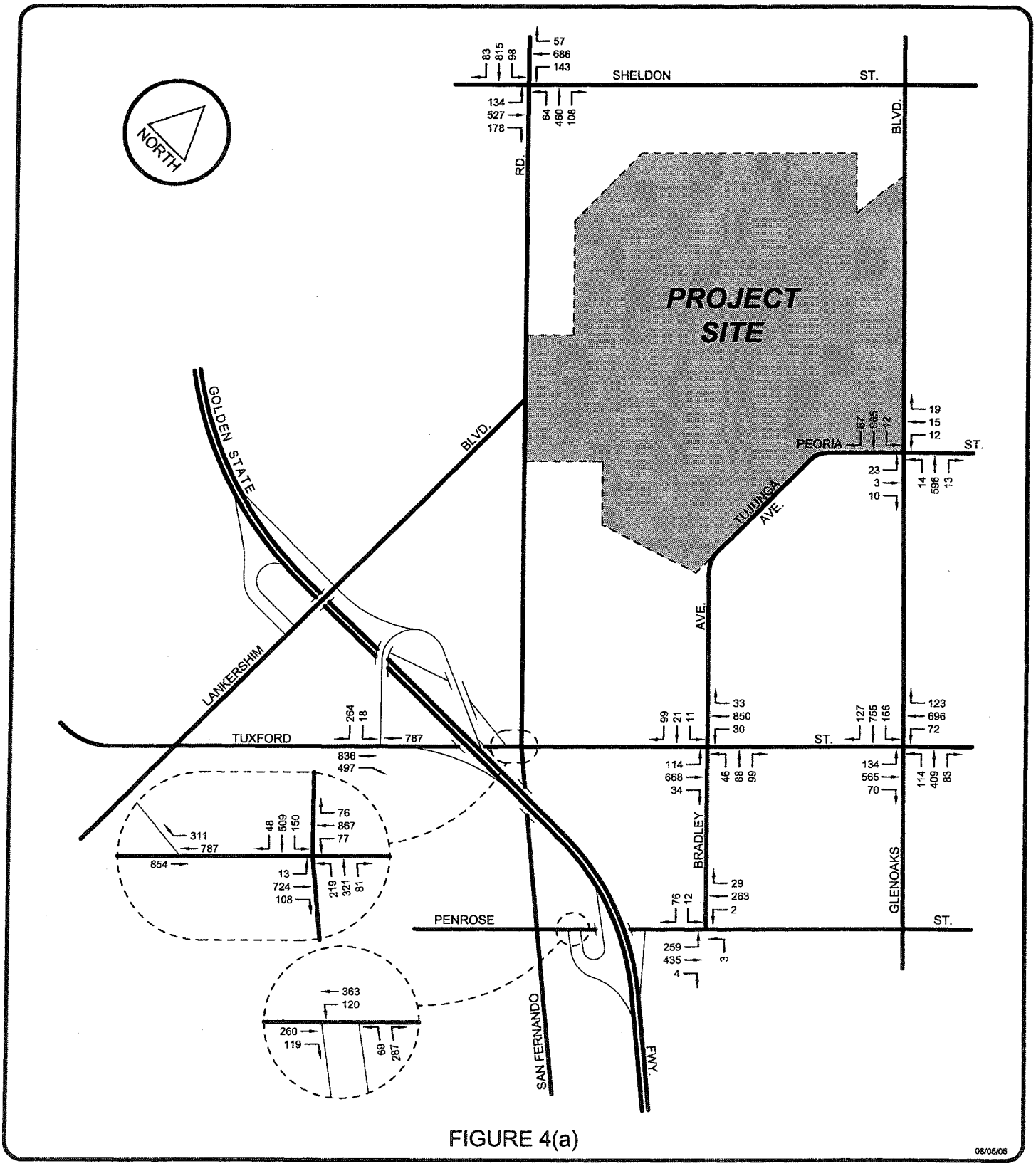


FIGURE 4(a)

08/05/05

Bradley Landfill\Bradley Landfill 2\AM2005EX

EXISTING (2005) TRAFFIC VOLUMES
AM PEAK HOUR

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

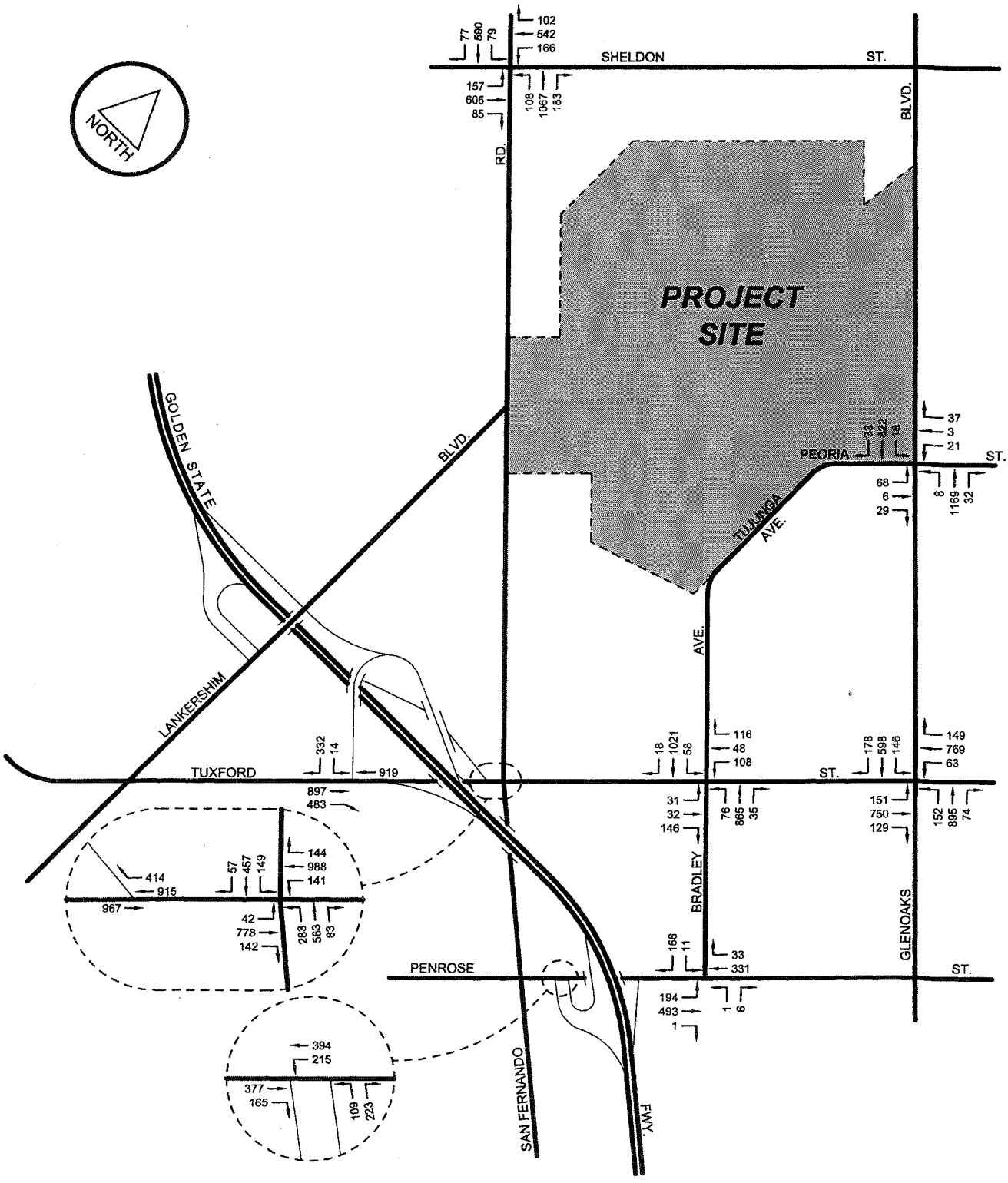


FIGURE 4(b)

08/05/05

Bradley Landfill\Bradley Landfill 2\PM2005EX

EXISTING (2005) TRAFFIC VOLUMES
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

Bradley Avenue carries approximately 1,200 VPD in the vicinity of the project site. Directional volumes are 200 VPH northbound and 100 VPH southbound during the morning peak hours and 250 VPH northbound with 120 VPH southbound during the evening peak hours.

Sheldon Street carries an estimated daily traffic volume of approximately 15,000 VPD. Directional daily traffic volumes are approximately 750 VPH eastbound and approximately 730 VPH westbound during the morning peak hours and 800 VPH eastbound with 700 VPH westbound during the evening peak hours.

Public Transit

Transit services operate near the project site. The Los Angeles County Metropolitan Transportation Authority (LACMTA) has developed an extensive system of bus and rail routes to provide transit patrons with a high level of connectivity throughout the region. In addition, Metrolink provides service through the area with a station in Sun Valley, Sylmar and Burbank. The routes which operate within walking distance of the project site are described below.

Route 94-394 -- This bus route operates along San Fernando Road in the project vicinity and provides service between Downtown Los Angeles, Glendale, Burbank, Sun Valley, Pacoima, San Fernando, and Sylmar. Route 94 operates between Downtown Los Angeles and Olive View Medical Center. Route 394 operates between Downtown Los Angeles and the Sylmar/San Fernando Metrolink Station with limited stop service. These lines operate Monday through Friday with limited service on Saturdays, Sundays, and Holidays. Headways are approximately 12 minutes during peak periods with Lines 94 and 394 alternating during the peak periods with as little as two minutes between each.

Route 92-93-410 -- This bus route cluster operates along Glenoaks Boulevard in the project vicinity and provides service between Downtown Los Angeles, Glendale, Burbank, and the Sylmar/San Fernando Metrolink Station. Routes 92 and 93 differ in service within Glendale and Burbank, and Route 410 provides limited stop express service. In the project vicinity, the headways are approximately 22 minutes during the morning peak period and seven minutes during the evening peak period.

Route 152 -- This bus route provides service between Woodland Hills, Panorama City, Sun Valley, North Hollywood, and Burbank. Nine minute headways are provided during peak periods on Mondays through Fridays. Limited service is provided on Saturdays, Sundays, and holidays. The service is provided along Tuxford Street in the project vicinity.

Route 166 -- This bus route provides service between Chatsworth, Northridge, Pacoima, Sun Valley, North Hollywood, and Studio City. The bus operates Mondays through Fridays with 14 minute headways during peak periods in Sun Valley. Limited service is provided on Saturdays, Sundays, and holidays. In the project vicinity, this line operates along Glenoaks Boulevard.

Metrolink -- The Antelope Valley Line provides service to/from the Antelope Valley and Santa Clarita to/ from the Sun Valley, Sylmar/San Fernando Metrolink Stations. In addition, it provides service to/from Downtown Los Angeles and Burbank to/from the Sun Valley, Sylmar/San Fernando Metrolink Stations. The Sun Valley station is located south of Penrose Avenue near the intersection of Sunland Boulevard and San Fernando Road. The service rate is dependent on the number of zones traveled. Service is provided weekdays with one half hour headways during peaks, weekends, and holidays.

As shown by the above information, the project is well-served by direct transit links and when transfer opportunities are considered, many areas of Los Angeles are accessible via transit from the project site. Due to the proximity of project and readily accessible transit links, some employees and visitors may choose transit as a viable alternative to driving.

Analysis of Existing Roadway Traffic Conditions

An analysis of current traffic conditions was conducted on the streets and highways serving the project area. Detailed traffic analyses of existing conditions were performed at the following nine intersections:

1. San Fernando Road and Sheldon Street
2. Glenoaks Boulevard and Peoria Street
3. I-5 NB Off/SB On Ramps and Tuxford Street (not signalized)
4. I-5 NB On Ramp and Tuxford Street (not signalized)
5. San Fernando Road and Tuxford Street
6. Bradley Avenue and Tuxford Street
7. Glenoaks Boulevard and Tuxford Street
8. I-5 SB On/Off Ramps and Penrose Street (not signalized)
9. Bradley Avenue and Penrose Street

The traffic analysis was performed through the use of established traffic engineering techniques. The new traffic counts described earlier were utilized so as to reflect any recent changes in traffic demand patterns. Other data pertaining to intersection geometrics, parking-related curb restrictions, truck traffic, and signal operations were obtained through field surveys of the study locations. Appendix A details the existing lane configurations.

As required by LADOT, the methodology used in this study for the intersection analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in Circular Number 212 of the Transportation Research Board.[1] In the discussion of Critical Movement Analysis for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" (LOS) describes the quality of traffic flow. LOS A to C operate quite well. LOS D typically is the level for which a metropolitan area street system is designed. LOS E represents volumes at or near the capacity of the highway which might result in stoppages of momentary duration and fairly unstable flow. LOS F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A determination of the LOS at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the sum of critical movement volumes has been obtained, the values indicated in Table 1 can be used to determine the applicable LOS. Note that the phase refers to the number of traffic signal phases such as through and/or left turn signalization. For example, if the north/south receives a green light, yellow, and red then the east/west receives a green light then that is a two phase operation. If one of the directions includes a left turn indication then that could be a third phase.

[1] Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, 1980

Table 1
Critical Movement Volume Ranges*
For Determining Levels of Service

Level of Service	Maximum Sum of Critical Volumes (VPH) Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	----------Not Applicable----------		

* For planning applications only, i.e., not appropriate for operations and design applications.

"Capacity" represents the maximum total hourly movement volume of vehicles in the critical lanes which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of LOS E, as indicated in Table 1. The Critical Movement Analysis (CMA) indices used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. Thus, the LOS corresponding to a range of CMA values are shown in Table 2. Unsignalized locations were evaluated in the same manner but with a reduced capacity to simulate the additional delay which may occur.

Table 2
Level of Service
As a Function of CMA Values

Level of Service	Description of Operating Characteristics	Range of CMA Values
A	Uncongested operations; all vehicles clear in a single cycle.	< 0.60
B	Same as above.	>0.60 < 0.70
C	Light congestion; occasional backups on critical approaches.	>0.70 < 0.80
D	Congestion on critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.	>0.80 < 0.90
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	>0.90 < 1.00
F	Forced flow with stoppages of long duration.	> 1.00

The project is proposed in an area which has many industrial uses. These land uses have a tendency to create an increased amount of truck traffic in the area. Therefore, when traffic was counted previously at the intersections, the types and numbers of trucks were noted. Previous counts at intersections in the study area indicate an approximate average of 10% volume of trucks. Since trucks in the area occupy more space and time to conduct their turning movements, the existing conditions were modified to reflect the truck traffic by increasing the volumes by 10% to account for truck traffic in the area. By applying this analysis procedure to the study intersections, the CMA value and the corresponding LOS for existing traffic conditions were calculated. Those values, for existing (2005) AM and PM peak hour conditions, are shown in Table 3.

Table 3
Critical Movement Analysis Summary
Existing (2005) Traffic Conditions

No.	Intersection	AM Peak Hour CMA	AM Peak Hour LOS	PM Peak Hour CMA	PM Peak Hour LOS
1.	San Fernando Rd. & Sheldon St.	0.679	B	0.810	D
2.	Glenoaks Blvd. & Peoria St.	0.364	A	0.484	A
3.	I-5 NB Off/SB On Ramps & Tuxford St.	0.583	A	0.672	B
4.	I-5 NB On Ramp & Tuxford St.	0.458	A	0.553	A
5.	San Fernando Rd. & Tuxford St.	0.639	B	0.746	C
6.	Bradley Ave. & Tuxford St.	0.533	A	0.920	E
7.	Glenoaks Blvd. & Tuxford St.	0.649	B	0.753	C
8.	I-5 SB On/Off Ramps & Penrose St.	0.506	A	0.589	A
9.	Bradley Ave. & Penrose St.	0.428	A	0.491	A

Analysis of Existing Freeway Conditions

An examination was also made of freeway conditions on the regional facilities within the project study area and along the transfer truck routes. Freeway segments were selected for this analysis based on their location in relation to the project, the transfer truck routes and availability of published information from Caltrans and the Metropolitan Transportation Authority's Congestion Management Program. These segments analyzed are:

- Golden State Freeway (I-5) north of the Hollywood Freeway (S-170) to the truck access ramp onto the Antelope Valley Freeway (Rte-14)
- Hollywood Freeway (S-170) between Sherman Way and Vanowen Street
- Foothill Freeway (I-210) at Terra Bella Street
- Antelope Valley Freeway (Rte-14) from the Golden State Freeway (I-5) Truck Ramp to Avenue G

Current traffic volumes on these freeway segments were obtained from several sources. Daily traffic volumes on the segments analyzed were obtained from the most current Caltrans published data.[2] In addition, AM and PM peak hour volumes were taken from the Los Angeles County 2002 Congestion Management Program (CMP), where available. All of the freeway traffic volumes from 2002 were growth-factored by two percent per year, consistent with the LADOT requirements for intersection traffic analysis. Existing freeway geometrics (e.g., number of mainline travel lanes) for each of the segments analyzed were determined from CMP data and field surveys. Segment peak hour traffic capacities were computed for each direction using established Highway Capacity Manual (HCM) methodology. As detailed in procedures discussed in the HCM Chapter 3, each mainline travel was assumed to have a capacity of 2,000 vehicles per hour (VPH). The total directional capabilities were then computed and used in conjunction with the previously determined peak hour directional freeway segment volumes to calculate the existing 2005 freeway levels of services in the project vicinity. The level of service definitions for the freeway segments are provided in Table 4. Table 5 details the existing 2005 study freeway segment volumes and level of service.

Table 4
Freeway Mainline Level of Service Definitions

D/C Ratio	LOS	D/C Ratio	LOS*
0.00 - 0.35	A	<1.00 - 1.25	F(0)
>0.35 - 0.54	B	>1.25 - 1.35	F(1)
>0.54 - 0.77	C	>1.35 - 1.45	F(2)
>0.77 - 0.93	D	>1.45	F(3)
>0.93 - 1.00	E		

* LOS F(1) through F(3) represent severe congestion (travel speeds less than 25 MPH for more than one hour. Source: LA County Metropolitan Transportation Authority, Congestion Management Program

[2] 2003 Traffic volumes on California State Highways Website, State of California Department of Transportation, Sacramento, California

Table 5
Existing (2005) Freeway Conditions

Location		Direction	No. Lanes	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C Ratio	LOS
Hollywood Freeway (S-170)	AM	N/B	4	8,000	177,840	5,608	0.701	C
South of Sherman Way		S/B	4	8,000		8,518	1.065	F(0)
	PM	N/B	4	8,000		6,560	0.820	D
		S/B	4	8,000		5,954	0.744	C
Foothill Freeway (I-210)	AM	E//B	4	8,000	112,320	6,715	0.839	D
at Terra Bella Street		W/B	4	8,000		4,492	0.562	C
	PM	E/B	4	8,000		4,651	0.581	C
		W/B	4	8,000		4,492	0.562	C
Golden State Freeway (I-5)	AM	N/B	6	12,000	195,520	9,329	0.777	D
North of Hollywood Freeway (S-170)		S/B	6	12,000		12,920	1.077	F(0)
	PM	N/B	6	12,000		16,359	1.363	F(2)
		S/B	6	12,000		12,920	1.077	F(0)
Golden State Freeway (I-5)	AM	N/B	6	12,000	191,360	6,798	0.567	C
at Burbank Boulevard		S/B	6	12,000		8,376	0.698	C
	PM	N/B	6	12,000		7,905	0.659	C
		S/B	6	12,000		7,185	0.599	C
Golden State Freeway (I-5)	AM	N/B	5	10,000	317,200	9,375	0.938	E
at Terra Bella Street, Pacoima		S/B	5	10,000		12,945	1.295	F(1)
	PM	N/B	5	10,000		14,121	1.412	F(2)
		S/B	5	10,000		8,655	0.866	D
Golden State Freeway (I-5)	AM	N/B	5	10,000	288,080	8,818	0.882	D
at Ronald Regan Fwy (Rt-118)		S/B	5	10,000		12,177	1.218	F(0)
	PM	N/B	5	10,000		13,283	1.328	F(1)
		S/B	5	10,000		8,141	0.814	D
Golden State Freeway (I-5)	AM	N/B	4	8,000	159,120	4,495	0.562	C
at Brand Avenue, Mission Hills		S/B	4	8,000		6,207	0.776	D
	PM	N/B	4	8,000		6,770	0.846	D
		S/B	4	8,000		4,150	0.519	B

Table 5 (cont.)
Existing (2005) Freeway Conditions

Location		Direction	No. Lanes	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C* Ratio	LOS
Golden State Freeway (I-5)	AM	N/B	3	6,000	138,320	4,204	0.701	C
s/o San Diego Freeway (Rt 405)		S/B	3	6,000		5,572	0.929	D
	PM	N/B	3	6,000		5,475	0.913	D
		S/B	3	6,000		4,301	0.717	C
Golden State Freeway (I-5)	AM	N/B	6	12,000	274,560	8,586	0.716	C
at Roxford Street, Sylmar		S/B	6	12,000		11,382	0.949	E
	PM	N/B	6	12,000		11,182	0.932	E
		S/B	6	12,000		8,786	0.732	C
Golden State Freeway (I-5)	AM	N/B	6	12,000	248,560	7,737	0.645	C
at Foothill Freeway (Rte 210), Truck		S/B	6	12,000		10,255	0.855	D
	PM	N/B	6	12,000		10,076	0.840	D
		S/B	6	12,000		7,916	0.660	C
Golden State Freeway (I-5)	AM	N/B	2	4,000	35,880	1,476	0.369	B
at BeginTruck Freeway		S/B	2	4,000		1,956	0.489	B
	PM	N/B	2	4,000		1,922	0.481	B
		S/B	2	4,000		1,510	0.378	B
Golden State Freeway (I-5)	AM	N/B	2	4,000	48,880	2,035	0.509	B
at Junction Rte 14 - Truck Route		S/B	2	4,000		2,697	0.674	C
	PM	N/B	2	4,000		2,651	0.663	C
		S/B	2	4,000		2,082	0.521	B
Antelope Valley Freeway (Rte 14)	AM	N/B	5	10,000	160,160	2,745	0.275	A
at San Fernando Road		S/B	5	10,000		9,761	0.976	E
	PM	N/B	5	10,000		8,698	0.870	D
		S/B	5	10,000		3,689	0.369	B
Antelope Valley Freeway (Rte 14)	AM	N/B	5	10,000	148,720	2,540	0.254	A
at Placerita Canyon, Santa Clarita		S/B	5	10,000		9,004	0.900	D
	PM	N/B	5	10,000		8,081	0.808	D
		S/B	5	10,000		3,463	0.346	A

Table 5 (cont.)
Existing (2005) Freeway Conditions

Location		Direction	No. Lanes	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C* Ratio	LOS
Antelope Valley Freeway (Rte 14) at Sierra Highway	AM	N/B	5	10,000	139,360	2,380	0.238	A
		S/B	5	10,000		8,436	0.844	D
	PM	N/B	5	10,000		7,571	0.757	C
		S/B	5	10,000		3,245	0.325	A
Antelope Valley Freeway (Rte 14) at Sand Canyon Road, Santa Clarita	AM	N/B	5	10,000	109,200	1,899	0.190	A
		S/B	5	10,000		6,733	0.673	C
	PM	N/B	5	10,000		6,042	0.604	C
		S/B	5	10,000		2,590	0.259	A
Antelope Valley Freeway (Rte 14) at Agua Dulce Canyon Raod	AM	N/B	4	8,000	95,680	1,762	0.220	A
		S/B	4	8,000		6,246	0.781	D
	PM	N/B	4	8,000		5,606	0.701	C
		S/B	4	8,000		2,402	0.300	A
Antelope Valley Freeway (Rte 14) at Escondido Canyon Road	AM	N/B	3	6,000	93,600	1,739	0.290	A
		S/B	3	6,000		6,165	1.028	F(0)
	PM	N/B	3	6,000		5,533	0.922	D
		S/B	3	6,000		2,371	0.395	B
Antelope Valley Freeway (Rte 14) at Santiago Road	AM	N/B	3	6,000	92,560	2,370	0.395	B
		S/B	3	6,000		5,274	0.879	D
	PM	N/B	3	6,000		5,148	0.858	D
		S/B	3	6,000		2,652	0.442	B
Antelope Valley Freeway (Rte 14) at Vincent, Angeles Forest Hwy	AM	N/B	2	4,000	96,720	1,889	0.472	B
		S/B	2	4,000		4,160	1.040	F(0)
	PM	N/B	2	4,000		4,160	1.040	F(0)
		S/B	2	4,000		2,185	0.546	C
Antelope Valley Freeway (Rte 14) at Avenue S	AM	N/B	2	4,000	72,800	1,896	0.474	B
		S/B	2	4,000		4,219	1.055	F(0)
	PM	N/B	2	4,000		4,118	1.030	F(0)
		S/B	2	4,000		2,122	0.531	B
Antelope Valley Freeway (Rte 14) at Juntion Rte 138, Palmdale Bl,	AM	N/B	3	6,000	79,040	2,054	0.342	A
		S/B	3	6,000		4,571	0.762	C
	PM	N/B	3	6,000		4,462	0.744	C
		S/B	3	6,000		2,298	0.383	B

Table 5 (cont.)
Existing (2005) Freeway Conditions

Location		Direction	No. Lanes	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C* Ratio	LOS
Antelope Valley Freeway (Rte 14) at Avenue M, Lancaster	AM	N/B	3	6,000	89,440	2,433	0.406	B
		S/B	3	6,000		5,415	0.903	D
	PM	N/B	3	6,000		5,285	0.881	D
		S/B	3	6,000		2,723	0.454	B
Antelope Valley Freeway (Rte 14) at Avenue L, Lancaster	AM	N/B	3	6,000	87,360	2,401	0.400	B
		S/B	3	6,000		5,345	0.891	D
	PM	N/B	3	6,000		5,217	0.870	D
		S/B	3	6,000		2,687	0.448	B
Antelope Valley Freeway (Rte 14) at Avenue J-8/20th St W, Lancaster	AM	N/B	3	6,000	55,120	1,549	0.258	A
		S/B	3	6,000		3,446	0.574	C
	PM	N/B	3	6,000		3,363	0.561	C
		S/B	3	6,000		1,733	0.289	A
Antelope Valley Freeway (Rte 14) at Avenue I, Lancaster	AM	N/B	3	6,000	45,760	1,311	0.219	A
		S/B	3	6,000		2,918	0.486	B
	PM	N/B	3	6,000		2,849	0.475	B
		S/B	3	6,000		1,467	0.245	A
Antelope Valley Freeway (Rte 14) at Avenue G	AM	N/B	2	4,000	37,960	1,074	0.269	A
		S/B	2	4,000		2,391	0.598	C
	PM	N/B	2	4,000		2,334	0.584	C
		S/B	2	4,000		1,202	0.301	A

* D/C is the Demand to Capacity Ratio

PROJECT TRAFFIC

The following section describes the methodology used to determine the trip generation, distribution, and assignment of the proposed project.

Traffic Generation

Traffic-generating characteristics of many land uses have been extensively surveyed and documented in studies conducted under the auspices of the Institute of Transportation Engineers (ITE). The most recent information is available in the ITE 6th and 7th Edition Trip Generation manuals. However, the current landfill and proposed Transfer Station and Materials Recovery Facility are not typical land uses. Therefore trip generation has been based upon empirical data collected at the Bradley Landfill site and operational standards for transporting waste material. Conservative (higher) assumptions were made when ranges of values were considered. Most of the vehicles to and from the site are trucks. Therefore all of the trip generation was converted to PCEs with smaller trucks converted to 1.5 PCE and the soil and transfer trucks converted to 2.0 PCE's as requested by LADOT. This conversion accounts for the larger volume of the trucks, longer start up time from stop and the additional time needed to conduct turning moves. It provides for a greater number of vehicle trips and a more conservative analysis.

Currently, the landfill is accepting approximately 1,500 tons of solid waste, 92 tons of recyclables and 1,260 tons of green and wood waste, 5,500 tons of imported dirt and 200 tons of inert material per day. In order to determine the existing trip generation, vehicular counts were conducted at the project driveways. These counts can be referenced in Appendix C. However, acceptance can vary from day to day. Therefore, existing operational standards with typical arrival and departure patterns at the landfill were determined. The driveway counts and operational information were calibrated to

determine the typical existing Bradley Landfill trips. The calibrated existing vehicular trip generation is detailed in Appendix B with a summary provided in Table 6.

Several types of vehicles bring waste to the landfill. These include dump trucks, trash trucks which carry approximately 5.6 tons per load, transfer trucks at 23 tons per load, 18 ton vehicles for dirt, 10 ton vehicles for inert material and green waste which comes in an average 6.2 tons per vehicle.

The amount of solid waste tonnage which can be accepted by the landfill without further entitlements is 10,000 tpd of solid waste. The existing operation outlined previously was increased to reflect the increase in waste material which could be accepted at the landfill. The details of the trip generation at the entitled rate of acceptance are detailed in Appendix B. The same is done for both of the construction phases. Phase I construction will include the construction of the new buildings and fill dirt for the pad. Phase II construction will provide for additional dirt import for capping the landfill and the gradual transition from a land fill to operation and project completion as a transfer station and materials recovery facility. Upon project completion the solid waste will be transported to the site and compacted prior to loading onto transfer trucks for transport to off site locations. Each construction phase and project completion trip generation was based upon existing data projected to the future with conservative estimates on the operation during each construction phase and project completion.

Appendix B shows a calculation of the existing, permitted, and the construction phases and project completion daily trip generation with conversion to PCEs. Table 6 provides a summary of the number of vehicle trips associated with the landfill site for the existing, permitted, and construction phase and project completion scenarios.

Table 6
Number of Vehicles (Gross) for
Existing, Construction Ph I & II and Project Completion

			Rate (per Empl)	Existing	Ph I Constr.	Ph 2 Constr	Complete Project
Employees	Number			100	128	165+120^	135+90^
	Daily**		3.32	332	425	813	714
	AM Pk Hr	In	88%	42	54	104	91
		Out	12%	6	7	14	12
		Total	0.48	48	61	118	103
	PM Pk Hr	In	17%	6	10	13	11
		Out	83%	38	49	63	51
		Total	0.46	44	59	76	62
# of Trash Trucks* and Other	Daily**			1,680	2,478	2,692	2,592
	AM Pk Hr	In		71	114	118	115
		Out		72	120	121	104
		Total		143	234	239	219
	PM Pk Hr	In		76	127	142	125
		Out		65	124	186	119
		Total		141	151	328	244
# of Transfer Trucks*	Daily**			118	532	894	654
	AM Pk Hr	In		2	17	31	21
		Out		2	17	32	22
		Total		4	34	63	43
	PM Pk Hr	In		8	27	45	37
		Out		7	27	32	24
		Total		15	54	77	71

* Combined solid waste, recyclables, and green waste
Not converted to PCEs.
^ Day Shift Employees + Swing Shift Employees
** Daily volume is a count of each vehicle entering and exiting

Table 6 portrays the number of vehicles associated with each phase. These vehicles will create inbound and outbound vehicular trips. On the basis of the traffic generation calculations, projections of the amount of net new traffic to be generated by the proposed site were derived. During the temporary conditions created by construction Phase I the proposed project is expected to generate (calculated in PCEs) an additional 2,163 net daily trips, with 193 net trips during the AM peak hour and 261 net trips during the PM peak hour at adjacent intersections when compared to the current operation at the site. Temporarily, these trips increase to 2,643 daily trips with 251 net trips during the AM peak hour and 357 net trips during the PM peak hour for 80 days when the fill dirt is imported for the building pad. Phase II project construction generates 3,195 net daily trips with 287 during the morning peak hour and 281 during the PM peak hour. Upon project completion, the fully operational Transfer Station and Material Recovery Facility will create a net increase in traffic of 2,440 daily trips, 222 morning peak hour trips and 221 evening peak hour trips. Table 7 shows the project trip generation calculation with project traffic based upon the anticipated volumes at the proposed Transfer Station and Materials Recovery Facility.

Table 7
Total Project Trip Generation

Existing - Calibrated

Time Period	Inbound	PCE	Outbound	PCE	Total	PCE
Daily:					2,130	3,356
AM Peak Hour:	115	163	80	127	195	290
PM Peak Hour:	92	147	110	167	202	314

Phase I Construction - Without fill dirt

Time Period	Inbound	PCE	Outbound	PCE	Total	PCE
Daily:					3,435	5,519
AM Peak Hour:	185	273	127	210	312	483
PM Peak Hour:	164	270	200	305	364	575

Phase I Construction - With fill dirt

Time Period	Inbound	PCE	Outbound	PCE	Total	PCE
Daily:					3,675	5,999
AM Peak Hour:	201	303	141	238	342	541
PM Peak Hour:	188	318	224	353	412	671

Phase II Construction

Time Period	Inbound	PCE	Outbound	PCE	Total	PCE
Daily:					4,399	6,551
AM Peak Hour:	253	340	153	237	406	577
PM Peak Hour:	187	290	218	305	405	595

Phase II Completed Project

Time Period	Inbound	PCE	Outbound	PCE	Total	PCE
Daily:					3,693	5,796
AM Peak Hour:	227	302	138	210	365	512
PM Peak Hour:	173	265	194	270	367	535

Trip Distribution

Determination of the geographic distribution of generated trips was the next step in the process. A primary factor affecting trip distribution is the relative distribution origin and destination of the trash and transfer trucks. The trash trucks will be coming from the local community and beyond. The transfer trucks will be transporting the trash to remote landfills. The estimated distribution based upon the landfills current experience, anticipated routes and origin/destination points is detailed in Table 8 and portrayed in Figure 5(a), 5(b), 5(c) and 5(d) for the trash and transfer trucks from Phase 1, construction dirt from Phase 1 and transfer trucks for solid waste and dirt from Phase 2 respectively.

Table 8
Directional Trip Distribution

Direction	Trash/Other Trucks Percentage of Trips	Construction Dirt Phase I Percentage of Trips
North	35%	50%
South	47%	50%
East	3%	0%
West	15%	0%
Total:	100%	100%

Direction	Transfer Trucks Phase I Percentage of Trips	Transfer Trucks Phase II SW & Dirt Percentage of Trips
North	0%	95%
South	100%	5%
East	0%	0%
West	0%	0%
Total:	100%	100%

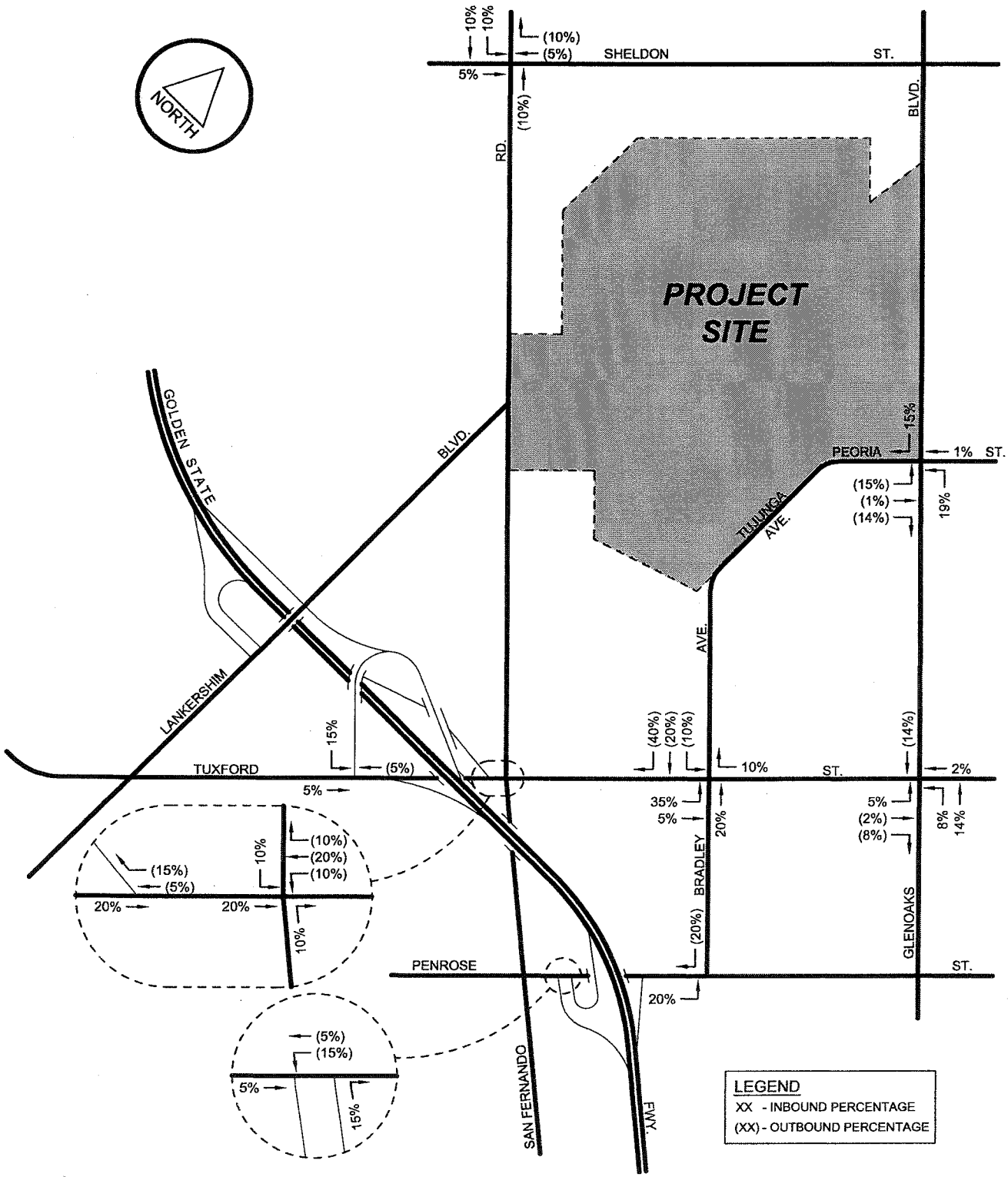


FIGURE 5(a)

08/05/05

FN: BRADLEY LANDFILL 2\PROJDIST\TRASHTRK

PROJECT TRIP DISTRIBUTION
TRASH TRUCKS/OTHER

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

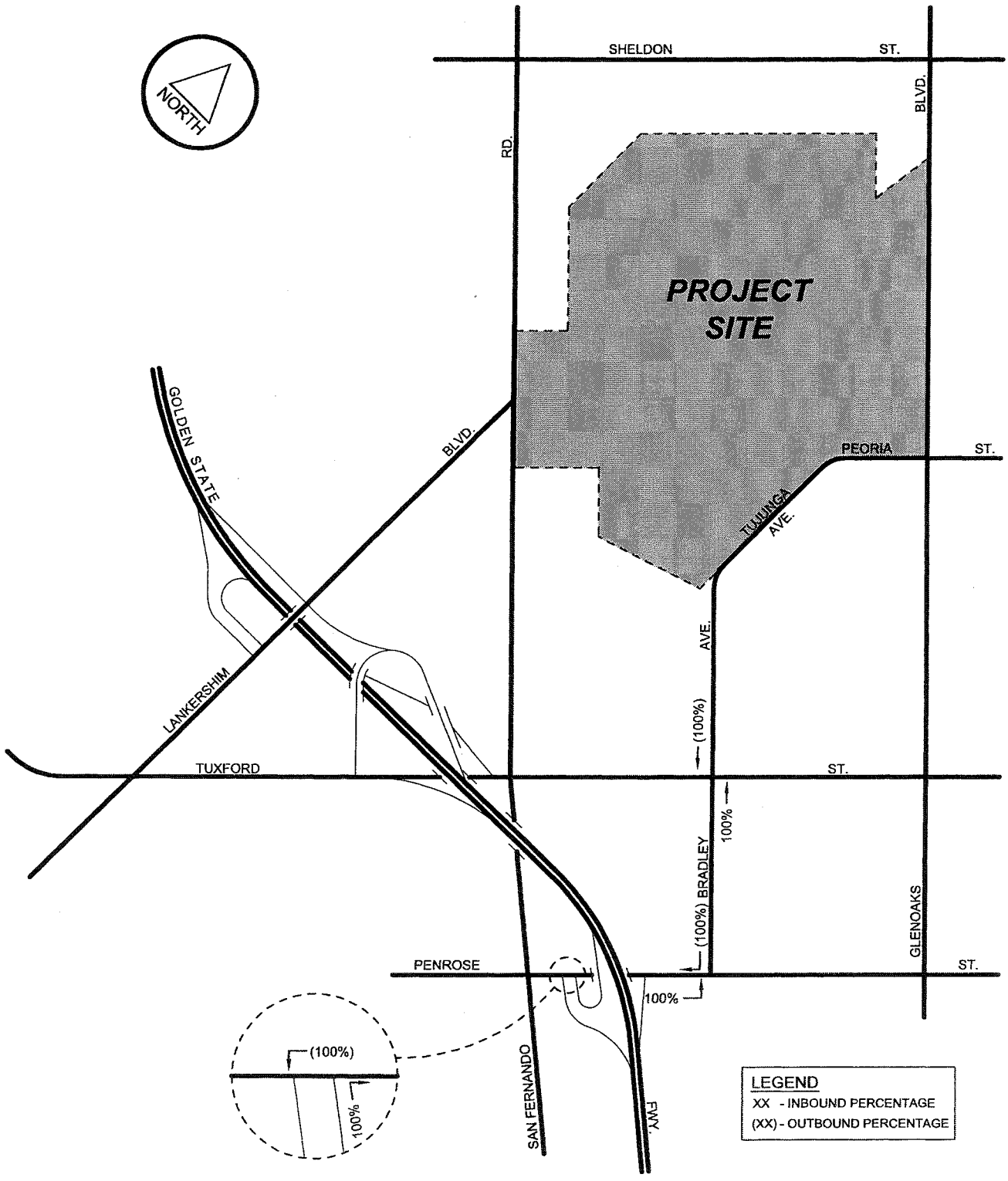


FIGURE 5(b)

08/05/05

FN: BRADLEY LANDFILL 2\projdist\transfrk

PROJECT TRIP DISTRIBUTION
TRANSFER TRUCKS
PHASE 1

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

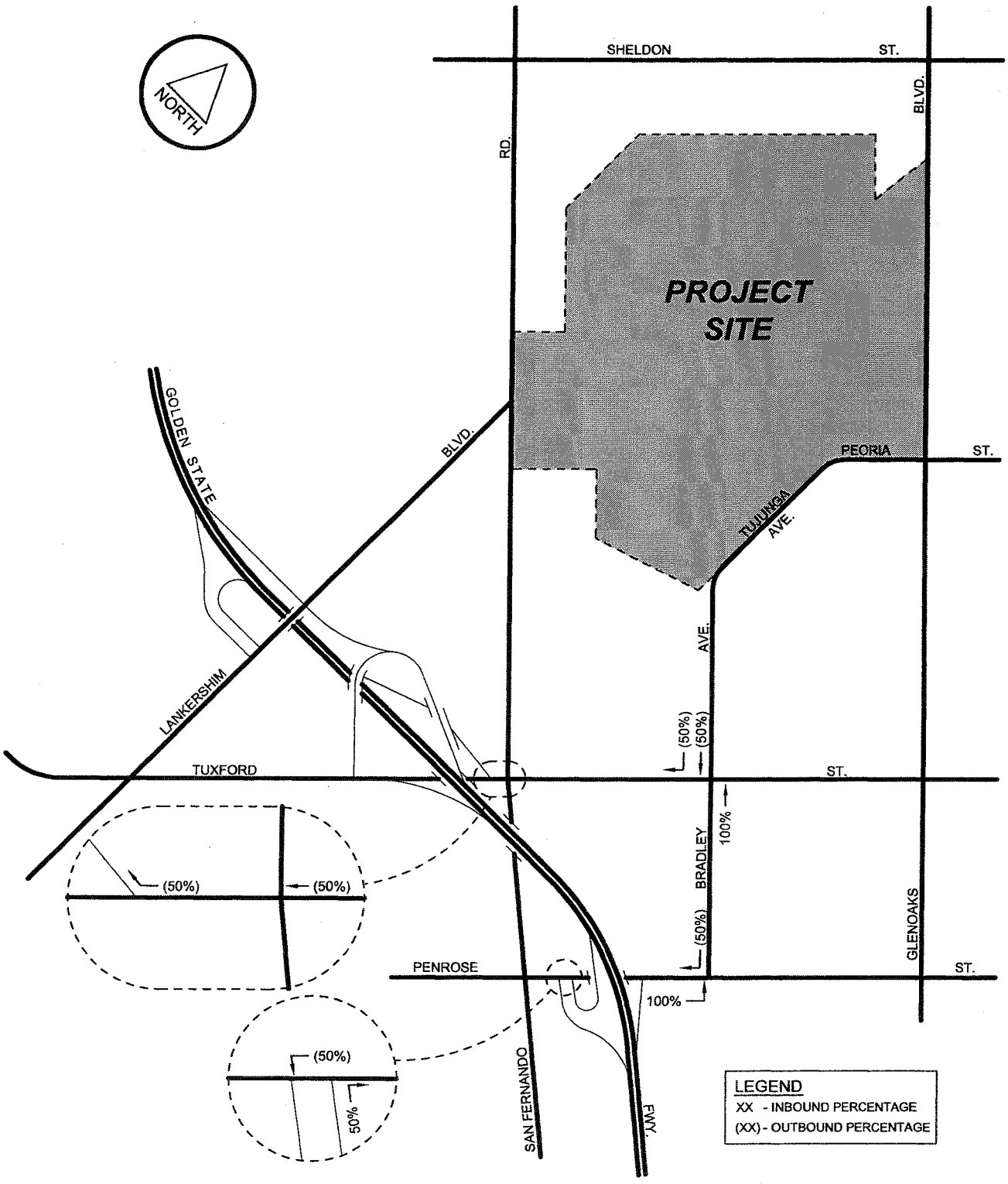


FIGURE 5(c)

08/05/05

FN: BRADLEY LANDFILL 2\projdist%constrdirtph1

PROJECT TRIP DISTRIBUTION
CONSTRUCTION DIRT
PHASE I

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

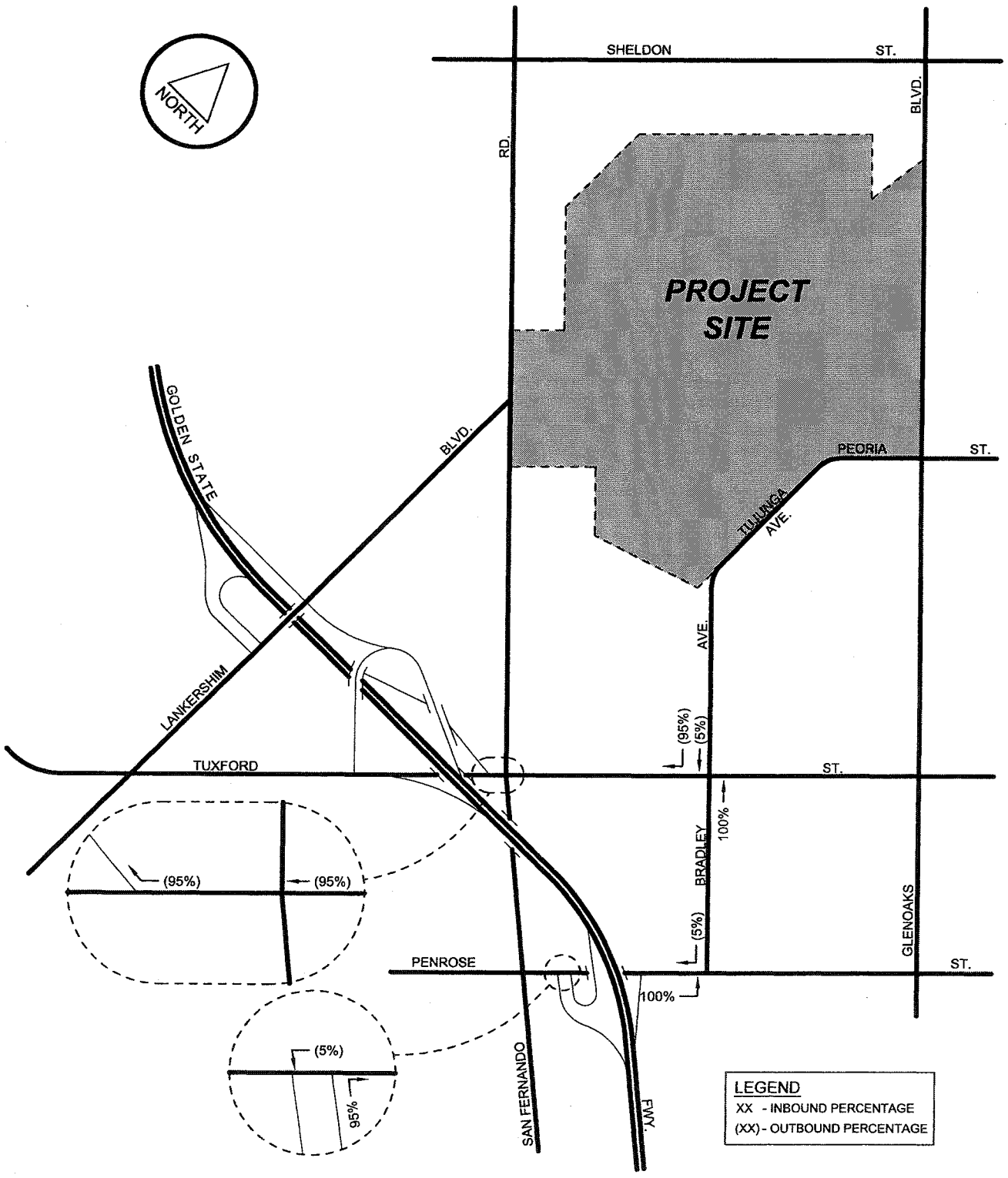


FIGURE 5(d)

08/05/05

FN: BRADLEY LANDFILL Z\proj\dist%transftrk(solid waste&dirt ph2).dwg

PROJECT TRIP DISTRIBUTION
TRANSFER TRUCKS - SOLID WASTE & DIRT
PHASE II

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

Traffic Assignment

The assignment of project traffic to the street and highway systems was accomplished in two steps. Using the directional distribution percentages for the streets developed previously, the number of trips in each direction was calculated for the trash trucks and the transfer trucks. The second step was to assign these trips to specific routes serving the project area. This assignment is based upon anticipated origin/destination points and current landfill experience. The results of the traffic assignment provide the necessary level of detail to conduct the traffic analysis. The results of the traffic assignments are shown in Figures 6(a) through 6(f), Project Traffic Volumes, which estimate the AM and PM peak-hour project traffic on the nearby street system.

Parking and Access

The number of parking spaces needed for the conversion to the Transfer Station and Materials Recovery Facility will need to accommodate additional employees at project completion and during construction. The number of visitors will remain relatively the same. The current parking at the Waste Management offices is underutilized and will not be changed. However, approximately 60 additional parking spaces will be provided near the new Transfer Station and Materials Recovery Facility structure in order to provide parking immediately adjacent to the building. This level of parking supply is more than adequate to meet the needs of the site.

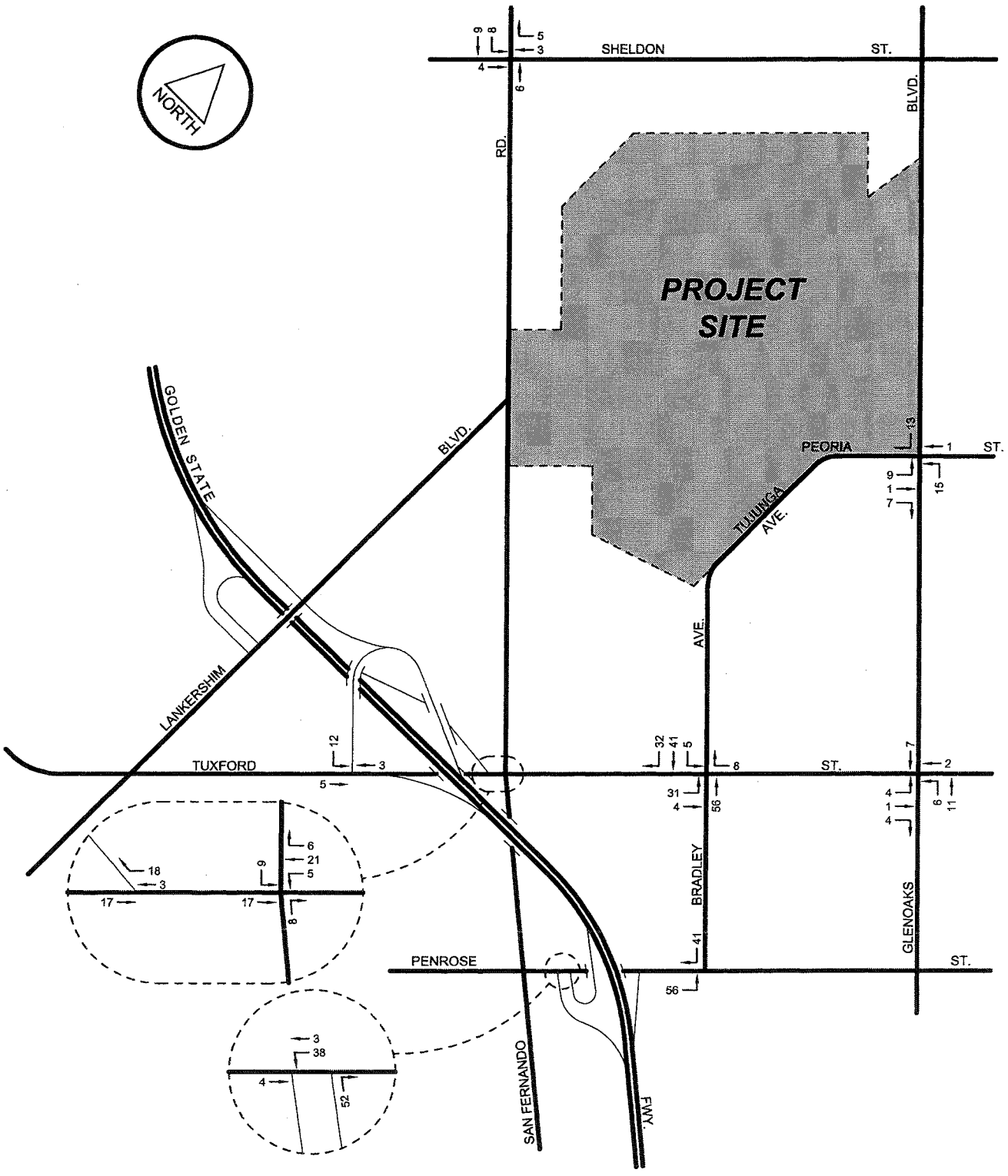


FIGURE 6(a)

8/3/2005

Bradley Landfill\Bradley Landfill 2\AMNETPRJ(PHASE I)

NET PROJECT ONLY TRAFFIC VOLUMES
PHASE I (2007) CONSTRUCTION
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

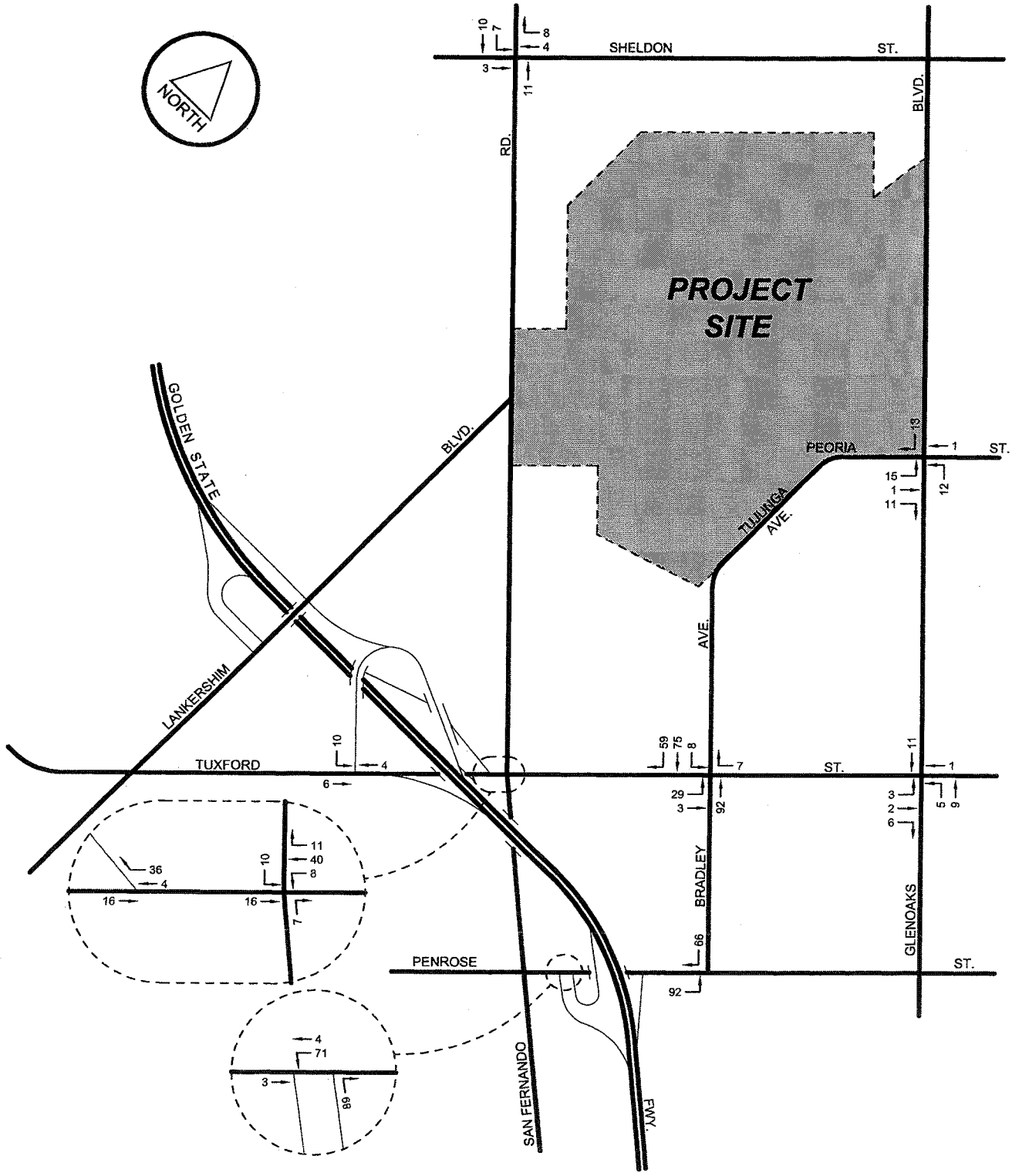


FIGURE 6(b)

8/3/2005

Bradley Landfill\Bradley Landfill ZI\PMNETPRJ(PHASE I)

NET PROJECT ONLY TRAFFIC VOLUMES
PHASE I (2007) CONSTRUCTION
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

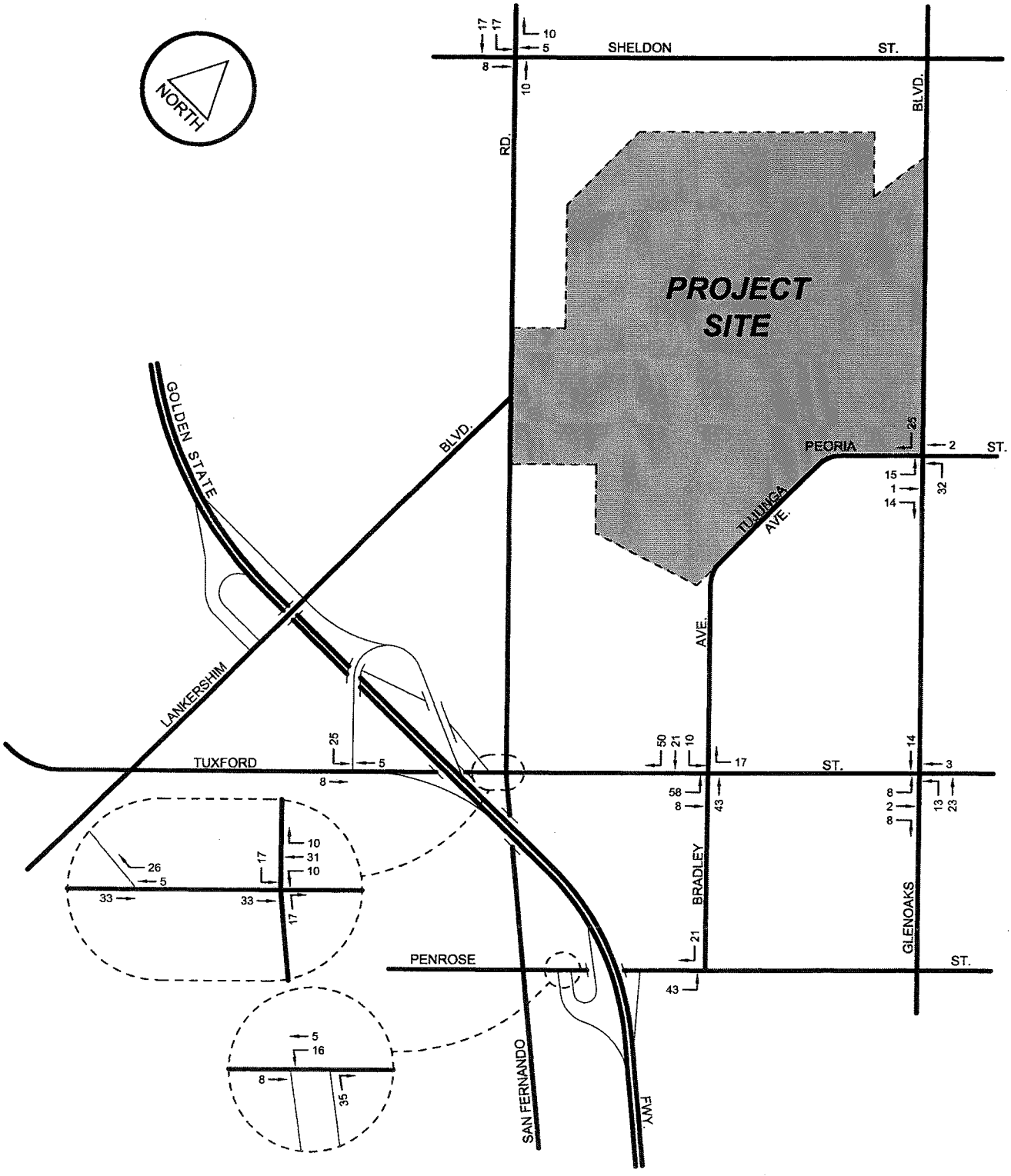


FIGURE 6(c)

8/3/2005

Bradley Landfill\Bradley Landfill Z\AMNETPR.I(PHASE II)

NET PROJECT ONLY TRAFFIC VOLUMES
PHASE II (2008) CONSTRUCTION
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

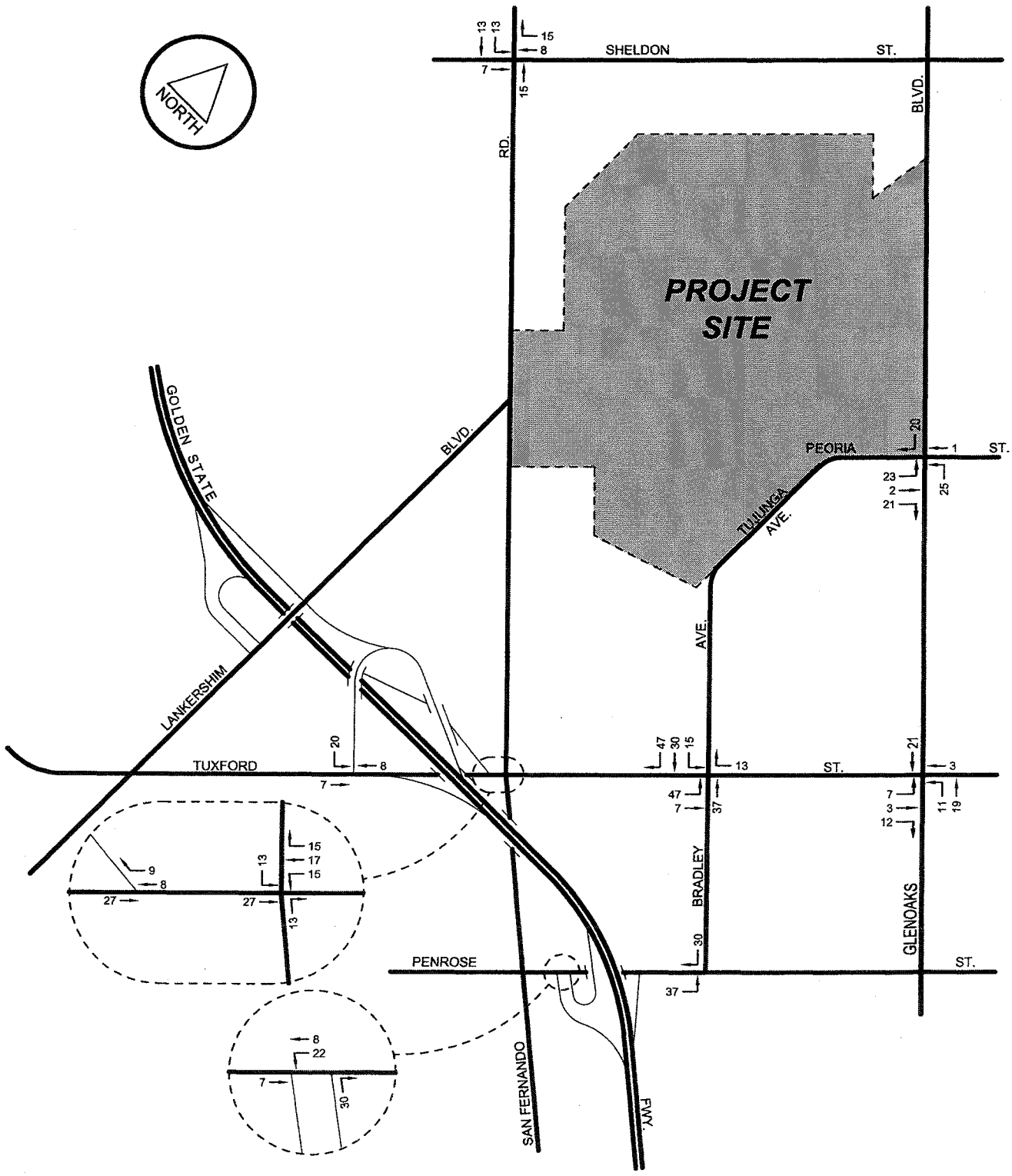


FIGURE 6(d)

8/3/2005

Bradley Landfill\Bradley Landfill Z\PMNETPRJ(PHASE II)

NET PROJECT ONLY TRAFFIC VOLUMES
PHASE II (2008) CONSTRUCTION
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

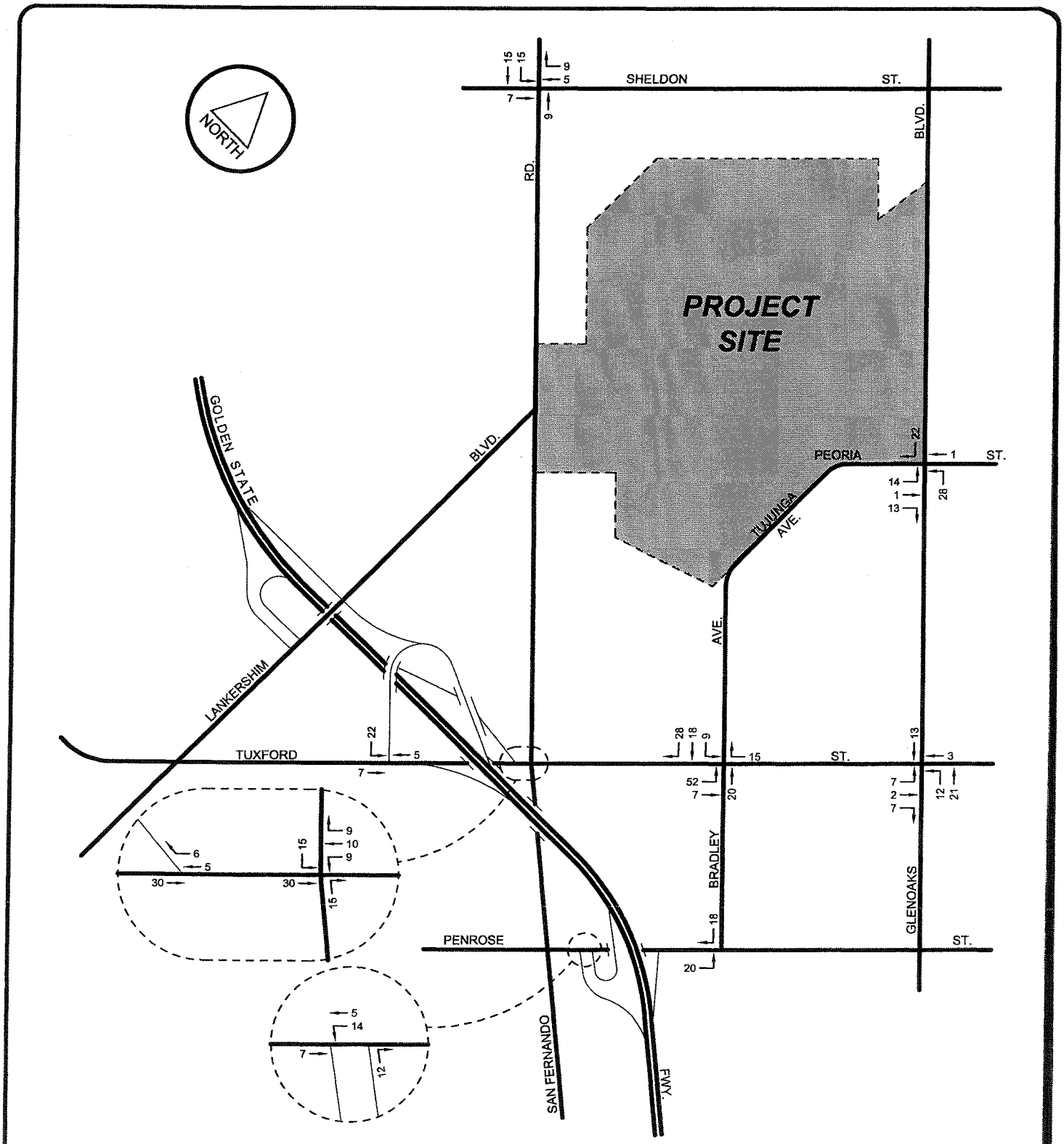


FIGURE 6(e)

8/3/2005

Bradley Landfill\Bradley Landfill 2\AMNETPRJ(2012)

NET PROJECT ONLY TRAFFIC VOLUMES
PHASE II (2012) COMPLETED PROJECT
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

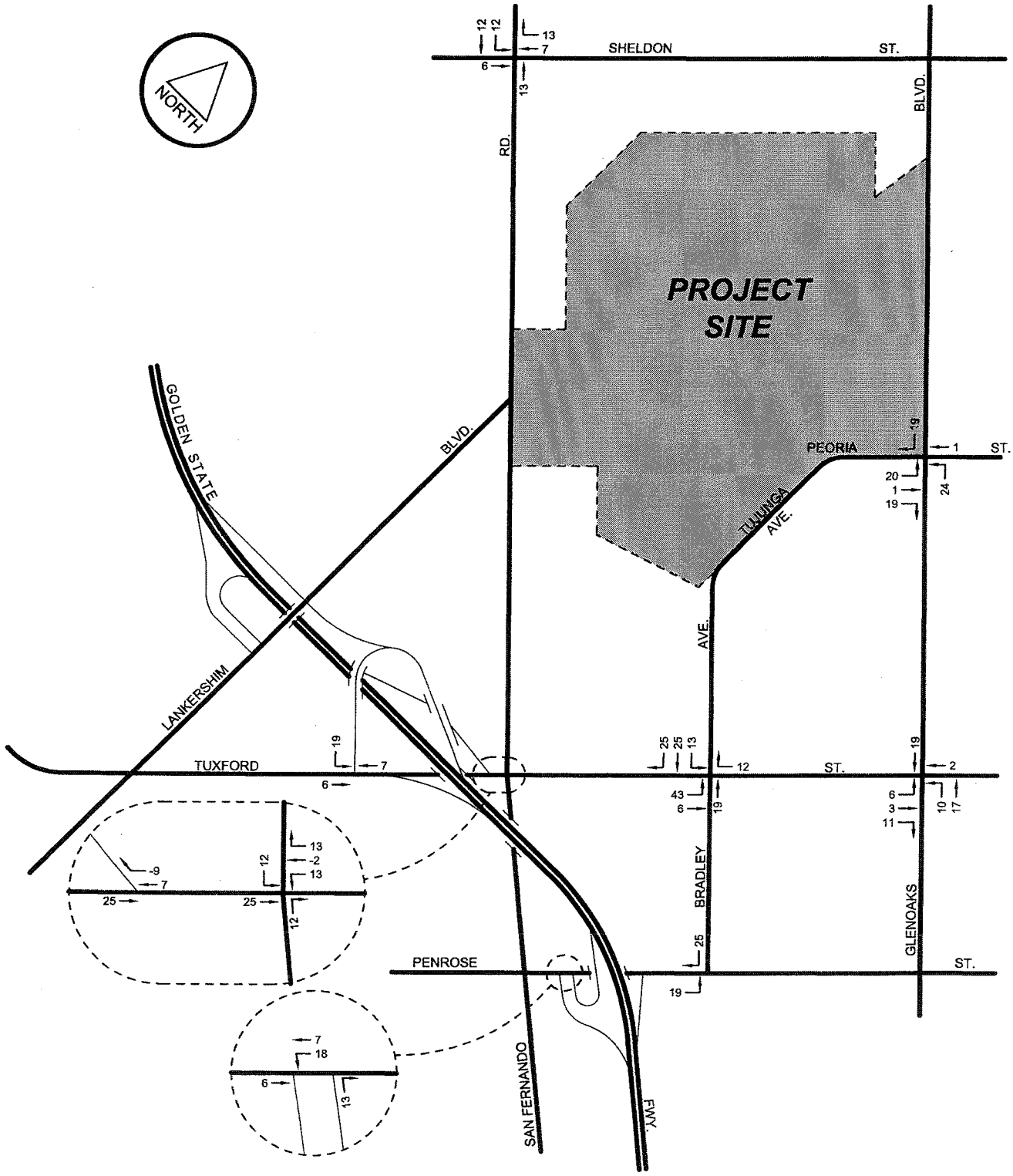


FIGURE 6(f)

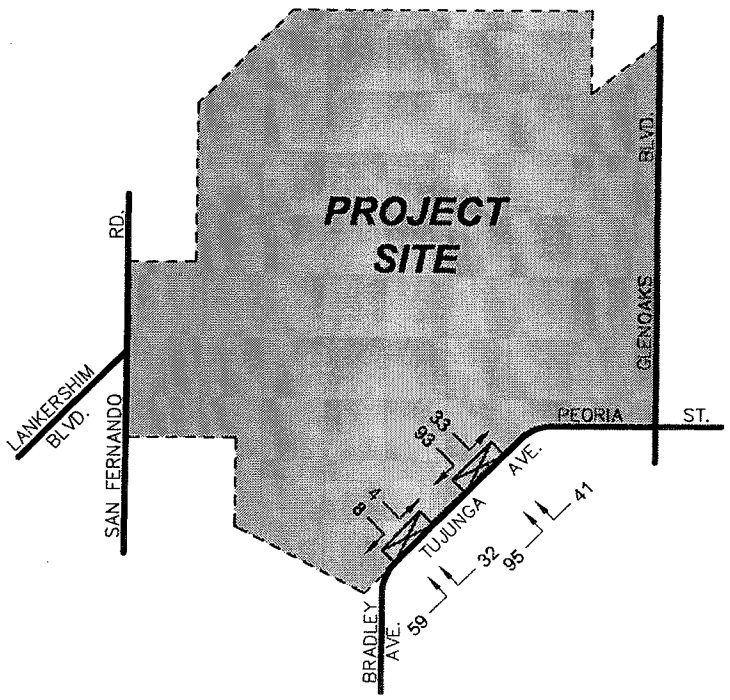
8/3/2005

Bradley Landfill\Bradley Landfill 2\PMNETPRJ(2012)

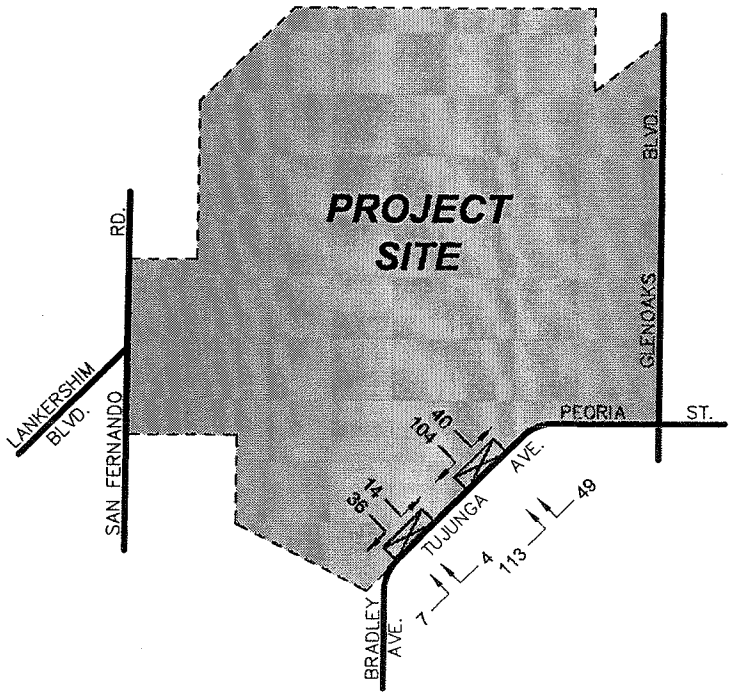
NET PROJECT ONLY TRAFFIC VOLUMES
PHASE II (2012) COMPLETED PROJECT
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

Currently, there are two driveways on Tujunga Avenue and one on Peoria Street which provide access to the Waste Management site. The Peoria Street driveway is used minimally for service of the Gas plant. The northerly Tujunga Avenue driveway provides access to the landfill operations and internal roadways throughout the site. In addition, this access point provides scales which will continue to operate with the change to the Transfer Station operation. The southerly driveway on Tujunga Avenue provides access to the Waste Management office buildings. None of the driveways will be altered with the change in operation from a landfill to a Transfer Station. An estimation of the number of vehicles and trucks entering the driveways during the morning and afternoon peak hours for the proposed project is provided in Figure 7. The numbers illustrated in Figure 7 are an actual vehicle count (not PCE equivalent) of the trucks and vehicles estimated to be utilizing the driveways with completion of the proposed project.



AM PEAK HOUR



PM PEAK HOUR

FIGURE 7

8/05/05

FN: BRADLEY LANDFILL 2\DRIVE-VOLS

BRADLEY TRANSFER STATION
AT PROJECT COMPLETION
DRIVEWAY VOLUMES

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

FUTURE TRAFFIC CONDITIONS

Other projects under development could add substantial amounts of traffic to the project area. For this reason, the analysis of future traffic conditions has been expanded to include potential traffic from as yet undeveloped or unoccupied projects. Briefly, the methodology for estimating future traffic volumes was as follows: First, current traffic volumes were determined by traffic counts (as described in a preceding section). Next, a traffic growth factor of 2.0 percent compounded annually was applied to develop 2007, 2008 and 2012 "baseline" figures. Traffic expected to be generated from cumulative developments in the study area was then added to the baseline traffic volumes to form the basis for years 2007, 2008, and 2012 "Without Project" condition. Finally, project traffic, calculated previously, was analyzed as an incremental addition to the 2007 Without Project condition for construction Phase I project, 2008 for Construction Phase II project and 2012 for project completion.

Traffic Growth

Based on an analysis of the trends in traffic growth in the central Los Angeles area over the last several years, an annual traffic growth factor of 2.0 percent appeared conservative (an over estimate of growth). This growth factor was used to account for increases in traffic resulting from projects not yet proposed or outside of the study area. This growth factor, compounded annually, was applied to the 2005 traffic volumes altered to PCE equivalents to develop an estimate of baseline volumes for future study years 2007, 2008, and 2012.

Cumulative Developments

In addition to the use of the 2.0 percent annual growth rate, listings of potential projects located in the study area were obtained from the City of Los Angeles Department of Transportation and field verified. From a review of these lists, it was determined that

traffic from 28 potential projects near the study site would produce additional traffic at the study intersections. Traffic expected to be generated from these "related projects" was estimated by applying the trip generation rates in Table 9.

Table 9
Related Projects
Trip Generation Rates and Equations

General Light Industrial (per 1,000 sf) - LU 110

Daily:	T = 6.97 (A)
AM Peak Hour:	T = 0.92 (A); I/B = 88%, O/B = 12%
PM Peak Hour:	T = 0.98 (A); I/B = 12%, O/B = 88%

Industrial Park (per 1,000 sf) - LU 130

Daily:	T = 6.96 (A)
AM Peak Hour:	T = 0.89 (A); I/B = 82%, O/B = 18%
PM Peak Hour:	T = 0.92 (A); I/B = 21%, O/B = 79%

Mini-Warehouse (per 1,000 sf) - LU 151

Daily:	T = 2.50 (A)
AM Peak Hour:	T = 0.15 (A); I/B = 59%, O/B = 41%
PM Peak Hour:	T = 0.26 (A); I/B = 51%, O/B = 49%

Single-Family Detached Housing (per dwelling unit) - LU 210

Daily:	T = 9.57 (D)
AM Peak Hour:	T = 0.75 (D); I/B = 25%, O/B = 75%
PM Peak Hour:	T = 1.01 (D); I/B = 64%, O/B = 36%

Apartment (per dwelling unit) - LU 220

Daily:	T = 6.63 (D)
AM Peak Hour:	T = 0.51 (D); I/B = 16%, O/B = 84%
PM Peak Hour:	T = 0.62 (D); I/B = 67%, O/B = 33%

Congregate Care Facility (per dwelling unit) - LU 252

Daily:	T = 2.15 (D)
AM Peak Hour:	T = 0.06 (D); I/B = 61%, O/B = 39%
PM Peak Hour:	T = 0.17 (D); I/B = 56%, O/B = 44%

Recreational Community Center (per 1,000 sf) - LU 495

Daily:	T = 9.11 (A)
AM Peak Hour:	T = 0.72 (A); I/B = 54%, O/B = 46%
PM Peak Hour:	T = 0.66 (A); I/B = 54%, O/B = 46%

Table 9 (cont.)
Related Projects
Trip Generation Rates and Equations

Private School (per student) - LU 521

Daily *:	T = 5.596 (S)
AM Peak Hour:	T = 0.92 (S); I/B = 60%, O/B = 40%
PM Peak Hour:	T = 0.20 (S); I/B = 38%, O/B = 62%

Day Care Center (per student) - LU 565

Daily:	T = 4.52 (S)
AM Peak Hour:	T = 0.81 (S); I/B = 53%, O/B = 47%
PM Peak Hour:	T = 0.86 (S); I/B = 47%, O/B = 53%

Library (per 1,000 sf) - LU 590

Daily:	T = 54.00 (A)
AM Peak Hour:	T = 1.06 (A); I/B = 72%, O/B = 28%
PM Peak Hour:	T = 7.09 (A); I/B = 48%, O/B = 52%

Specialty Retail (per 1,000 sf) - LU 814

Daily:	T = 40.67 (A)
AM Peak Hour **:	T = 1.2201 (A); I/B = 60%, O/B = 40%
PM Peak Hour:	T = 2.59 (A); I/B = 43%, O/B = 57%

Shopping Center (per 1,000 sf) - LU 820

Daily:	Ln(T) = 0.643 Ln(A) + 5.866
AM Peak Hour:	Ln(T) = 0.596 Ln(A) + 2.329; I/B = 61%, O/B = 39%
PM Peak Hour:	Ln(T) = 0.660 Ln(A) + 3.403; I/B = 48%, O/B = 52%

Where:

T = trip ends	A = building area in 1,000's of square feet
I/B = inbound	D = dwelling unit
O/B = outbound	S = student

Notes:

* Daily rate not available; estimated by summation of AM & PM rates and multiplied by a factor of 5.

Source:

** San Diego Traffic Generators, San Diego Association of Governments, 1998.
Trip Generation, 6th Edition, Institute of Transportation Engineers, 1997.

The locations of the related projects are shown in Figure 8 and the projects are listed and described in Table 10. The estimates of traffic generated by each project are displayed in Table 11 and collectively displayed in Figure 9(a) and 9(b) for AM and PM

peak periods. To determine the 2007, 2008, and 2012 "null" or no-project traffic condition, the traffic expected to be generated by the cumulative developments was combined with the 2005 peak hour traffic increased by 2.0 percent per year to 2007, 2008 and 2012. The resulting Without Project (2007, 2008 and 2012) AM and PM peak hour traffic estimates are shown in Figures 10 (a to f). These estimates form the basis for "benchmark" values for determining project traffic impacts on the street system.

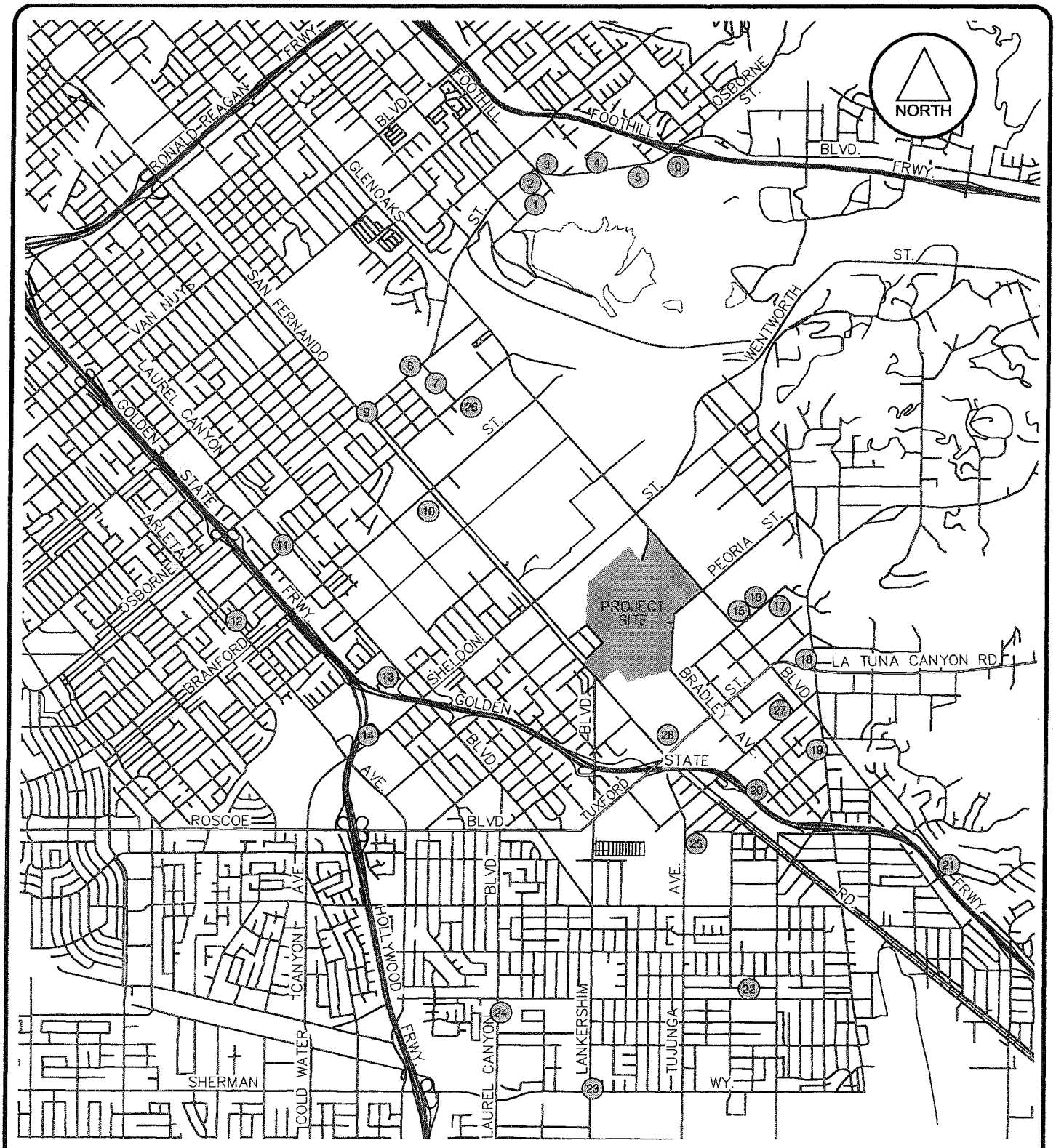


FIGURE 8

7/28/06

FN: BRADLEY LANDFILL 2\RELPROJS

RELATED PROJECTS LOCATIONS MAP

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

Table 10
Related Projects Locations and Descriptions

Map No.	Address	Size		Project Description
1.	Dronfield Av. & Osborne St. [1]	2	ac	Boundless Playground
2.	S/E corner Foothill Bl./Osborne St. [2]	80,000	sf	Children's Museum
3.	11840 Foothill Bl.	75	du	Apartment
		15375	sf	Recreation center/day care
4.	11681 Foothill Bl.	56	du	Apartment
5.	S/E corner Foothill Bl./Gladstone Av. [1]	52,000	sf	Hansen Dam Skate Park
6.	S/W Foothill Bl. & I-210 Fwy Ramp [1]	9 soccer	fld	Hansen Dam Soccer Fields Complex
		4 softball	fld	
7.	10323 Norris Av.	61,000	sf	General light industrial
8.	12448 Osborne St.	60,140	sf	Warehouse for movie set
9.	12653 Osborne St.	300,000	sf	General light industrial
10.	12450 Branford St.	550,000	sf	Industrial park
11.	9752 Laurel Canyon Bl.	2,516	sf	Fast-food restaurant w/ drive-through
12.	9221 Arleta Av.	96	du	Adult living & nursing facility
13.	9040 Laurel Canyon Bl.	18,760	sf	Shopping center
14.	12700 Sheldon St.	48,000	sf	Cabinet shop & wholesale dress maker
15.	11121 Pendleton Bl. [3]	3,000	tons	Mixed waste site
16.	11051 Pendleton St. [4]	284,600	sf	Swap meet
17.	11050 Pendleton St. [3]	115,158	sf	Maintenance facility
18.	8652 Sunland Bl.	11,000	sf	Shopping center
		8,000	sf	Office
19.	9040 Sunland Bl.	5,040	sf	Church
		50	st	Day care/school
		1,859	sf	Medical clinic
20.	11022 Olinda St.	94,044	sf	Self storage mini-warehouse
21.	8000 Glenoaks Bl.	44	du	Single family homes
22.	11134 Saticoy St.	416	st	Private elementary school
		72	st	Preschool/day care
23.	7201 Lankershim Bl. [5]	3,695	sf	Fast-food restaurant w/ drive-through
		4,343	sf	Laundromat
24.	7526 Laurel Canyon Bl. [3]	N/A		Retail with residential use
25.	8101 Tujunga Avenue			Motorcross Park
26.	12506 Montague Avenue[6]	1,000	tpd	Cordova Constr. Svcs Expansion
27.	9143 De Garmo Avenue	6,700	tpd	Community/Crown Recycling Increase
28.	San Fernando Rd & Tuxford Street	750	tpd	Sun Valley Paper Stock Increase

[1] Traffic Impact Study for Proposed Major League Baseball Youth Academy Hansen Dam Recreation Area, November 2001.

[2] Technical Letter to Mr. Robert Takasaki, Re: Children's Museum Project-Hansen Dam Recreation Area Alternative Site, LADOT, April 2000.

[3] Provided by LADOT.

[4] Traffic Analysis for an Open Air Market Place Located on Pendleton Street, East of Glenoaks Boulevard, Sun Valley, Crain & Associates, April 2000.

[5] Traffic Impact Study for Proposed McDonald's Restaurant and Lucy's Laundromat at Lankershim Boulevard and Sherman Way, North Hollywood (EAF No. 2000-2146), Crain & Associates, September 2000.

[6] Estimated Project.

Table 11
Related Projects Trip Generation

Map No.	Size	Project Description	Daily	AM Peak Hour I/B	AM Peak Hour O/B	AM Peak Hour Total	PM Peak Hour I/B	PM Peak Hour O/B	PM Peak Hour Total
1.	2 ac	Boundless Playground	152	0	0	0	5	5	10
2.	80,000 sf	Children's Museum	1,480	90	Negl.	90	Negl.	125	125
3.	75 du	Apartment	497	6	32	38	31	16	47
	15375 sf	Recreation center/day care	140	6	5	11	5	5	10
			637	12	37	49	36	21	57
4.	56 du	Apartment	371	5	24	29	23	12	35
5.	52,000 sf	Hansen Dam Skate Park	N/A	N/A	N/A	N/A	55	68	123
6.	9 soccer fld 4 softball fld	Hansen Dam Soccer Fields Complex	1,800	48	72	120	144	96	240
7.	61,000 sf	General light industrial	425	49	7	56	7	53	60
8.	60,140 sf	Warehouse for movie set	298	22	5	27	7	24	31
9.	300,000 sf	General light industrial	2,091	243	33	276	35	259	294
10.	550,000 sf	Industrial park	3,828	402	88	490	106	400	506
11.	2,516 sf	Fast-food restaurant w/ drive-through	1,248	64	61	125	44	40	84
12.	96 du	Adult living & nursing facility	206	4	2	6	9	7	16
13.	18,760 sf	Shopping center	2,324	36	23	59	100	108	208
14.	48,000 sf	Cabinet shop & wholesale dress maker	1,952	35	23	58	53	71	124
15.	3,000 tons	Mixed waste site	440	39	91	130	50	40	90
16.	284,600 sf	Swap meet	N/A	319	176	495	112	292	404
17.	115,158 sf	Maintenance facility	1,340	40	47	87	84	128	212
18.	11,000 sf	Shopping center	1,649	26	17	43	70	76	146
	8,000 sf	Office	191	22	3	25	15	73	88
			1,840	48	20	68	85	149	234
19.	5,040 sf	Church	46	2	2	4	2	1	3
	50 st	Day care/school	226	22	19	41	20	23	43
	1,859 sf	Medical clinic	58	1	1	2	5	5	10
			330	25	22	47	27	29	56
20.	94,044 sf	Self storage mini-warehouse	235	8	6	14	12	12	24
21.	44 du	Single family homes	421	8	25	33	28	16	44
22.	416 st	Private elementary school	2,328	230	153	383	32	51	83
	72 st	Preschool/day care	325	31	27	58	29	33	62
			2,653	261	180	441	61	84	145
23.	3,695 sf	Fast-food restaurant w/ drive-through	1,889	77	81	158	65	59	124
	4,343 sf	Laundromat							
24.	N/A	Retail with residential use	329	26	18	44	15	21	36
25.		Motorcross Park	200	0	0	0	25	25	50
26.	1,000 tpd	Cordova Construction Services Expansi	182	20	5	25	8	19	27
27.	6,700 tpd	Community/Crown Recycling Increase	2,233	250	63	313	100	235	335
28.	750 tpd	Sun Valley Paper Stock Increase	250	28	7	35	11	27	38

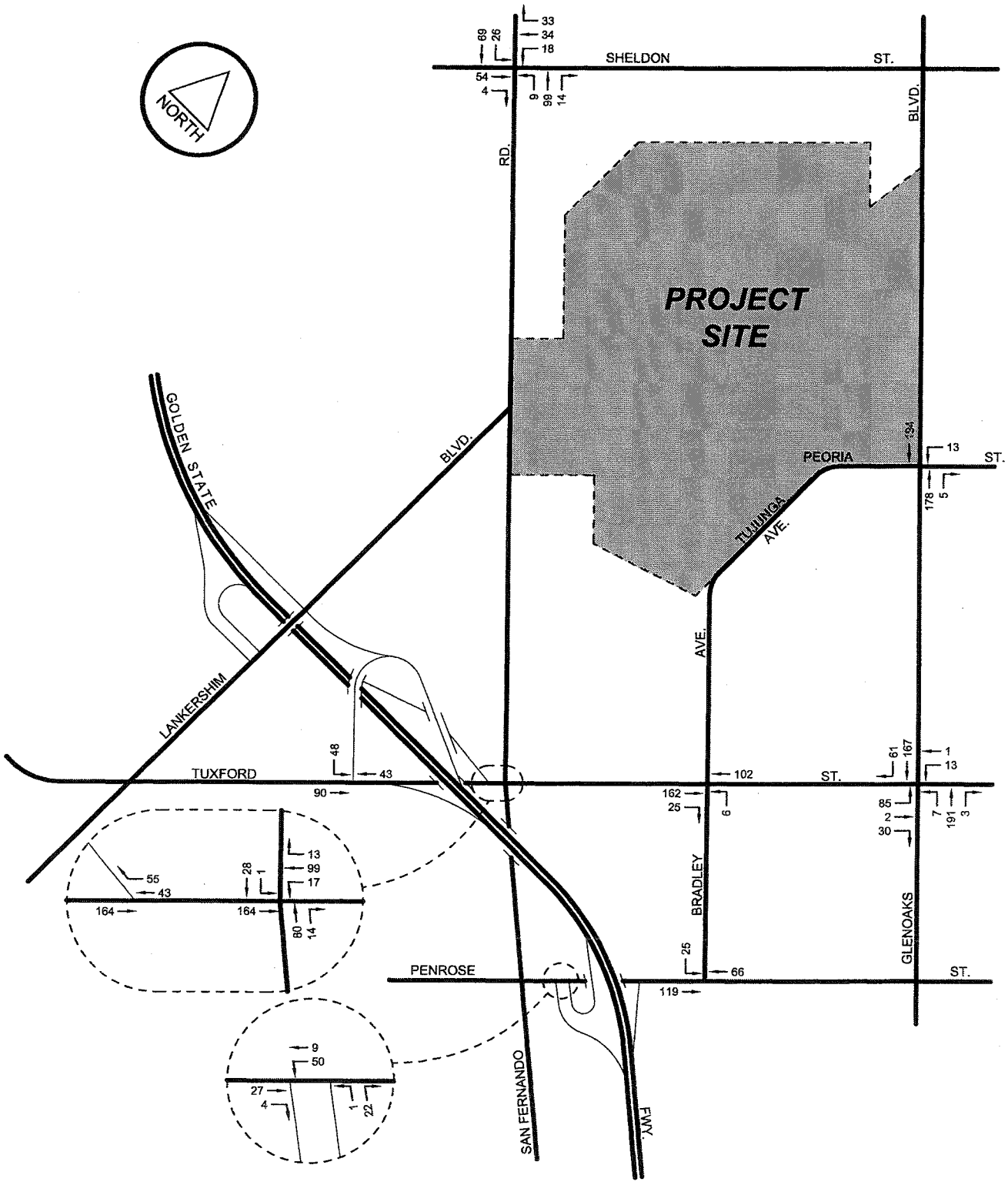


FIGURE 9(a)

7/28/2006

Bradley Landfill\Bradley Landfill 2AMRELPRJS

RELATED PROJECT VOLUMES ONLY
AM PEAK HOUR

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

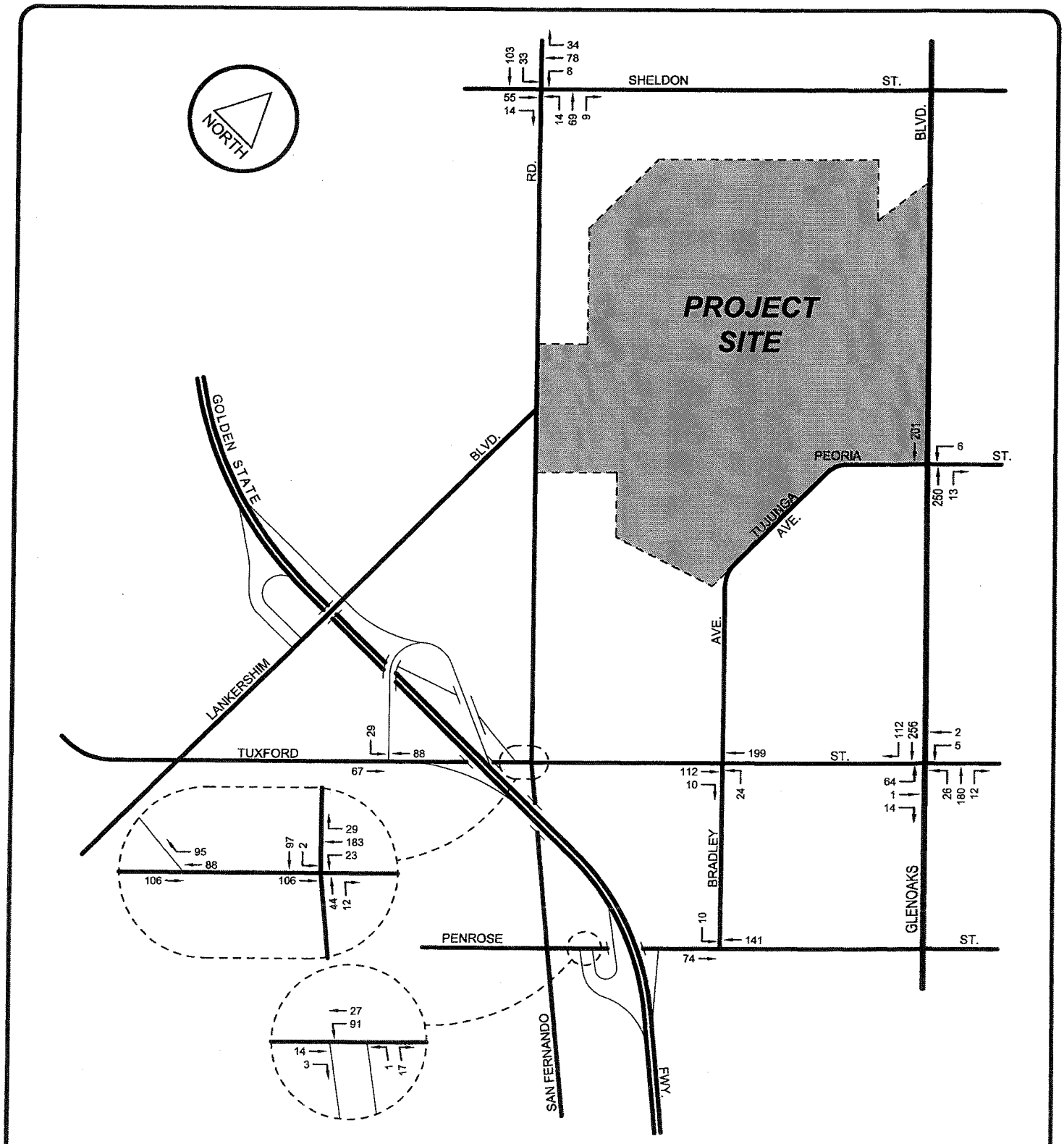


FIGURE 9(b)

7/28/2005

Bradley Landfill\Bradley Landfill Z\PMRELPRJS

RELATED PROJECT VOLUMES ONLY
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

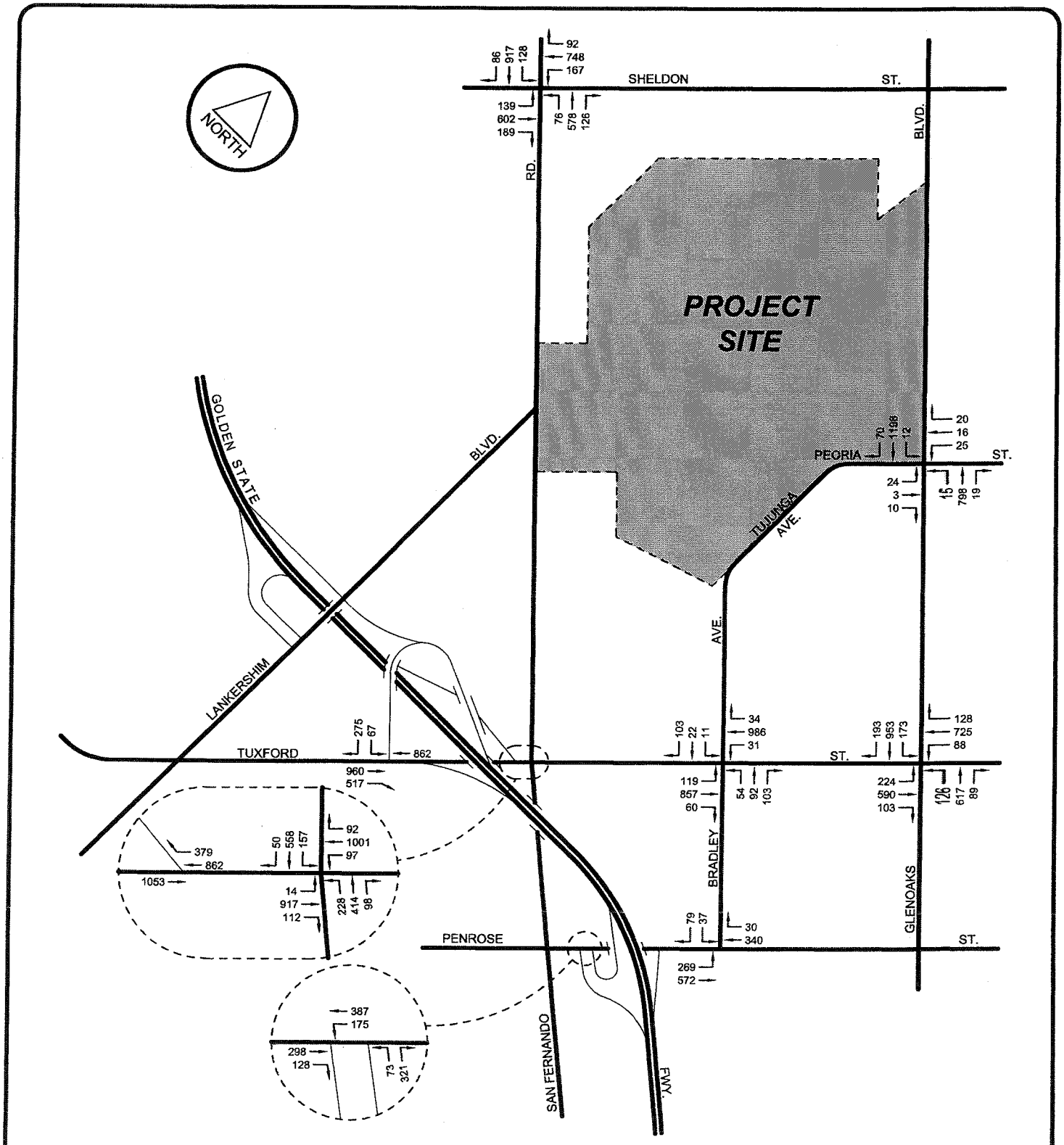


FIGURE 10(a)

8/3/2005

Bradley Landfill\Bradley Landfill 2AM2007WO

FUTURE (2007) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

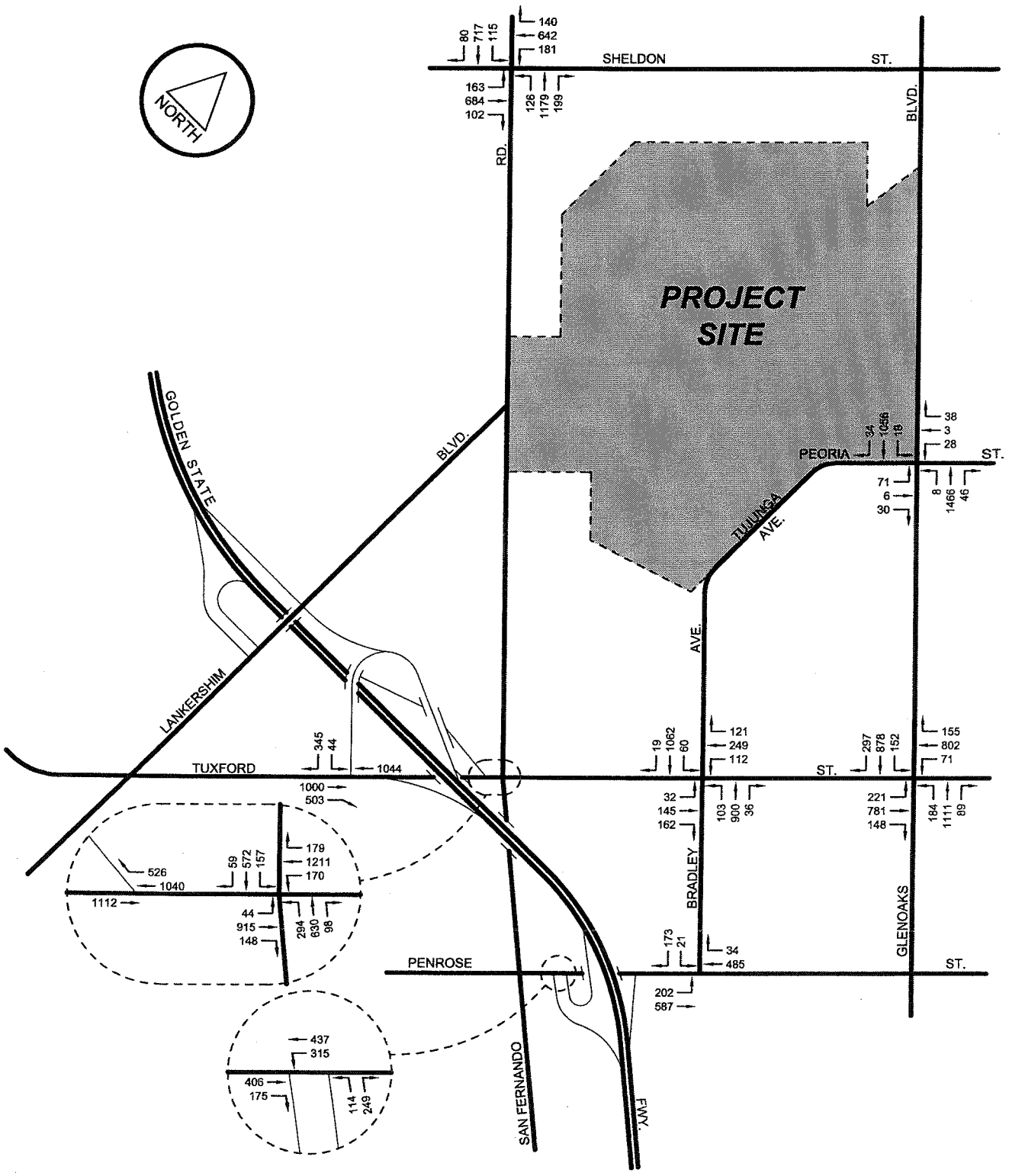


FIGURE 10(b)

8/3/2005

Bradley Landfill\Bradley Landfill 2\PM2007WO

FUTURE (2007) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

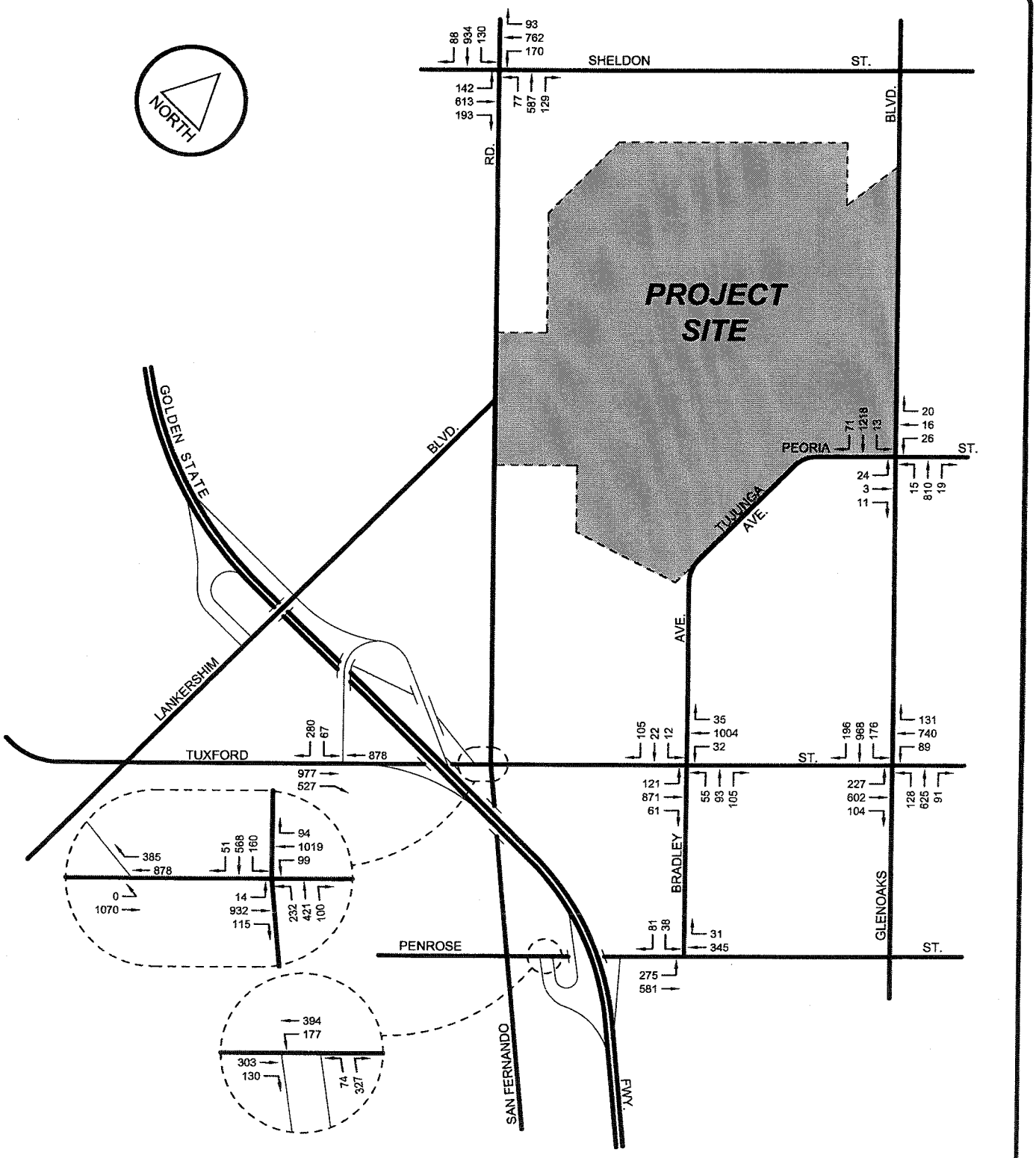


FIGURE 10(c)

8/3/2005

Bradley Landfill\Bradley Landfill ZAM2008WO

FUTURE (2008) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

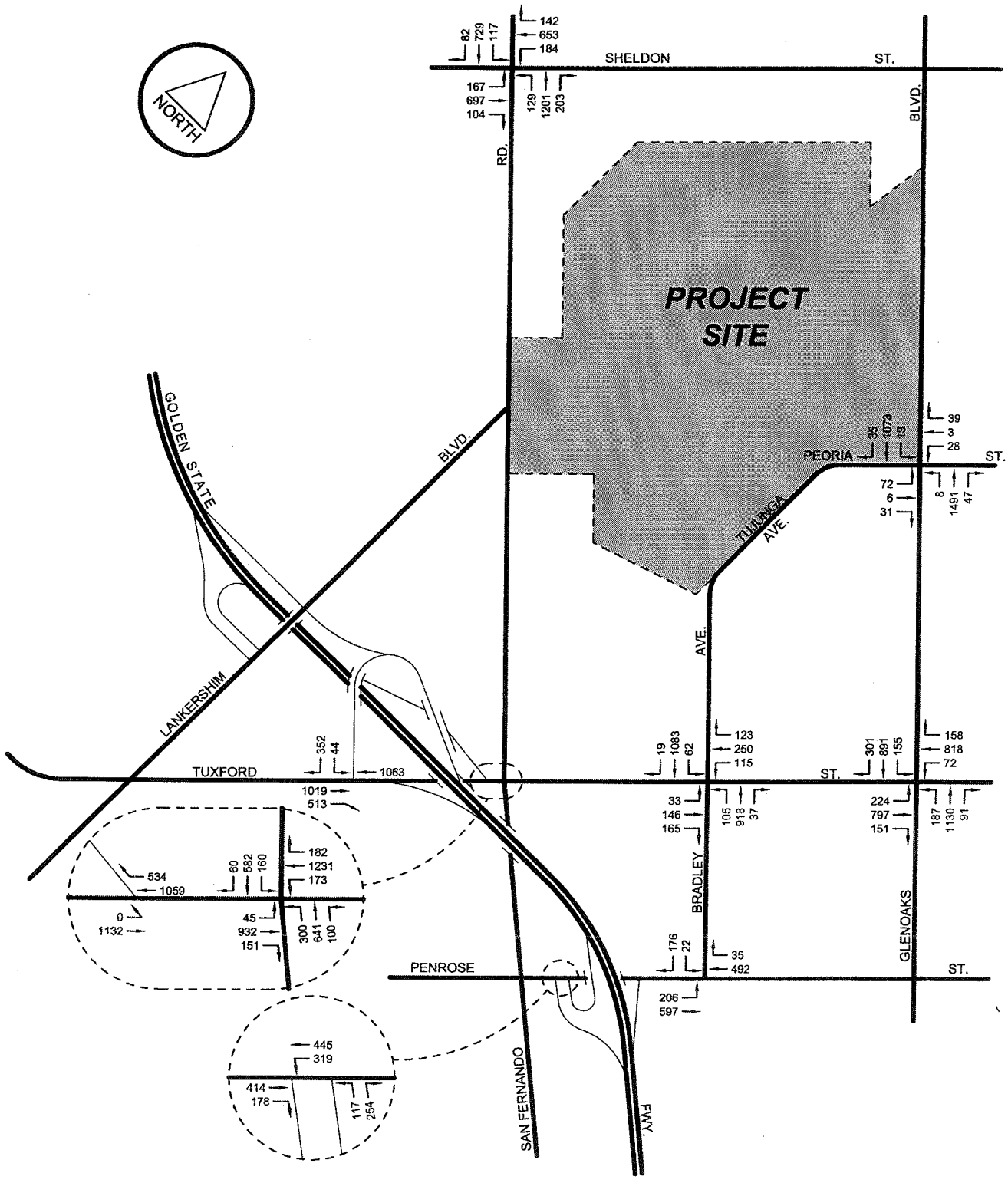


FIGURE 10(d)

8/3/2005

Bradley Landfill\Bradley Landfill Z\PM2008WO

FUTURE (2008) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

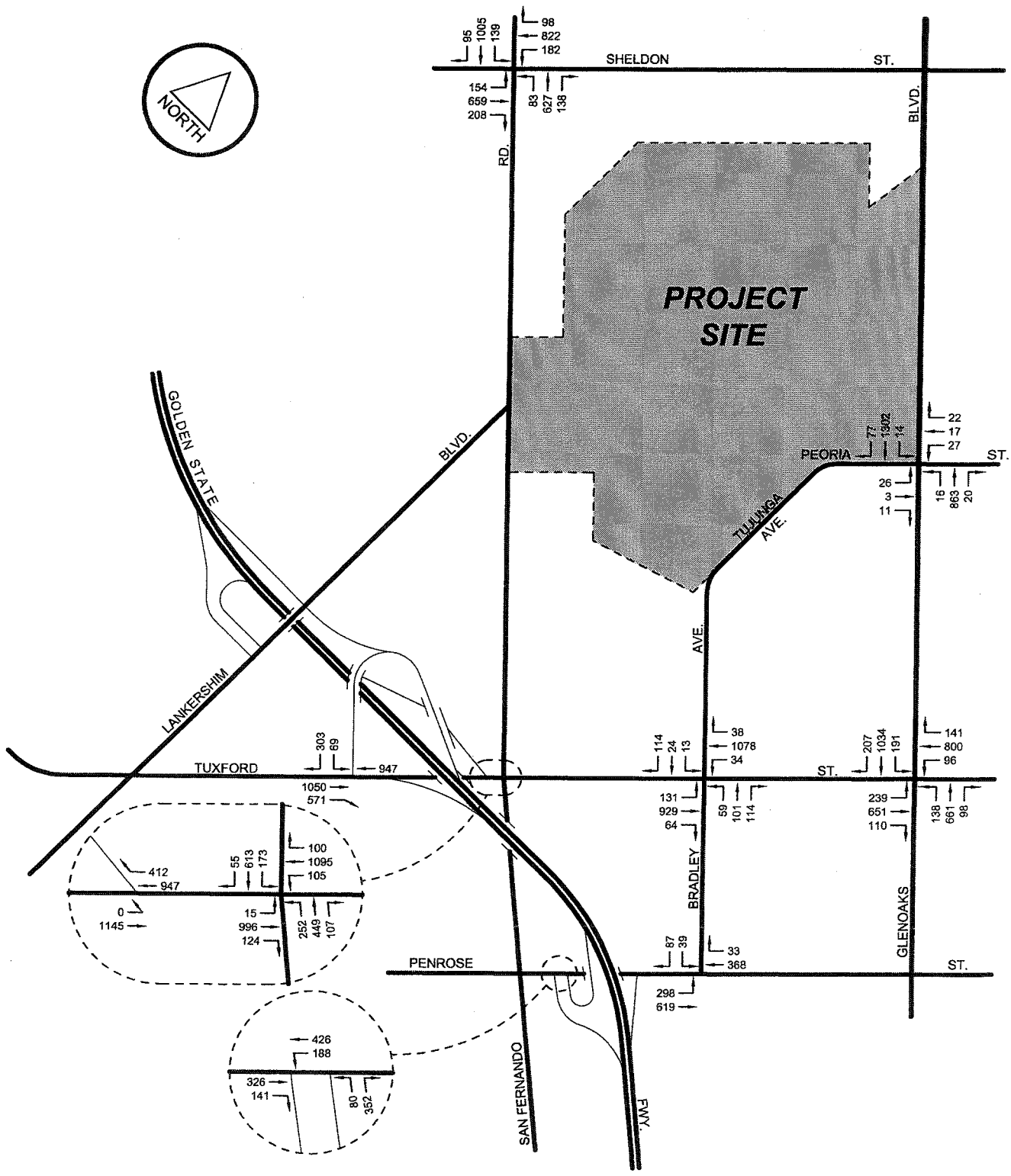


FIGURE 10(e)

8/3/2005

Bradley Landfill\Bradley Landfill 2\AM2012WO

FUTURE (2012) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

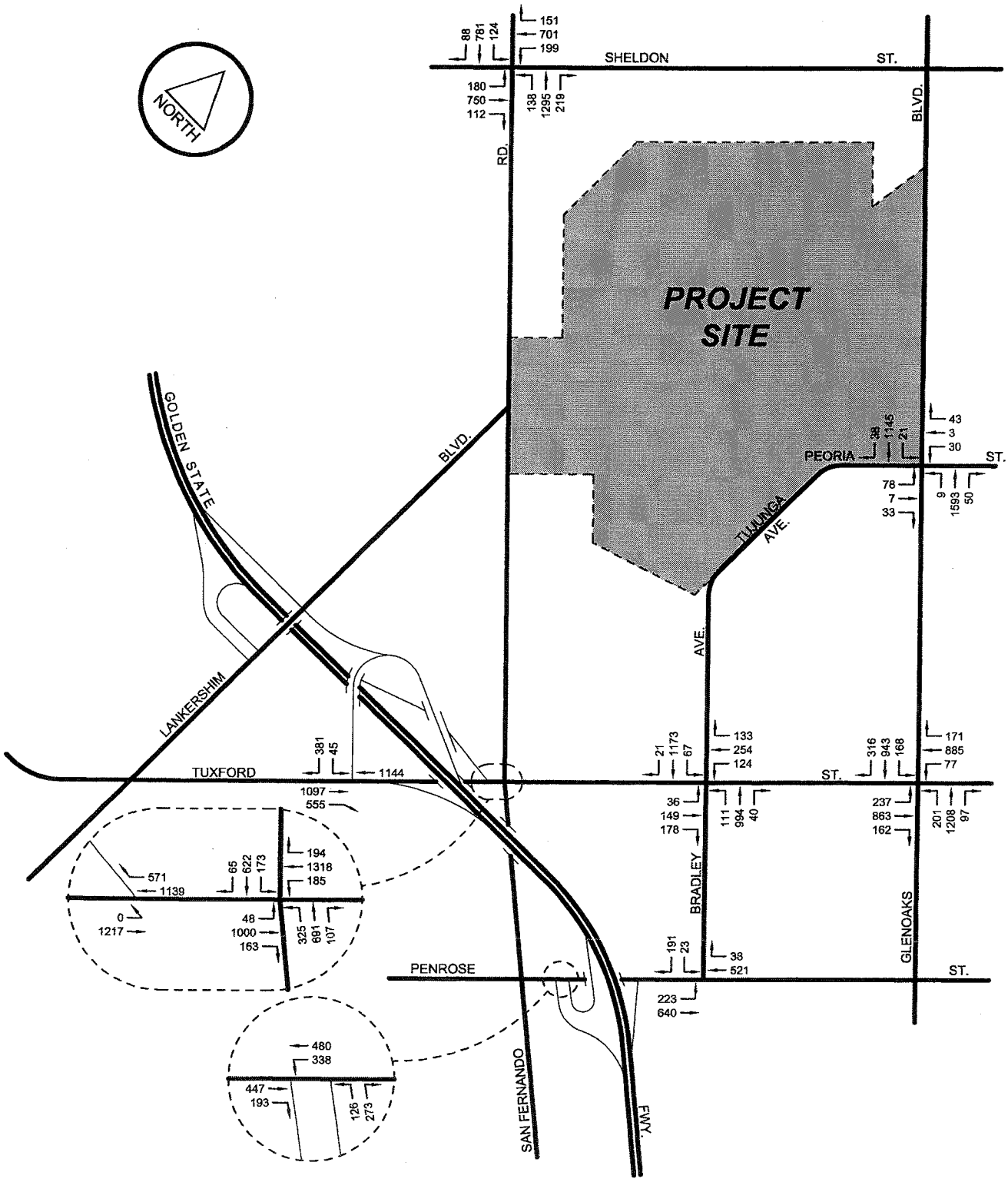


FIGURE 10(f)

8/3/2005

Bradley Landfill\Bradley Landfill 2\PM2012WO

FUTURE (2012) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

Highway System Improvements

No highway improvements in the project area were identified in the City of Los Angeles Five-Year Capital Improvements Program (CIP). As a result, the future roadway network was assumed to remain in its current condition.

Analysis of Future Traffic Conditions (Without and With Project)

The analysis of future conditions in the project area was performed using the same critical lane analysis procedures described previously in this report. For future project conditions, the roadway system was not considered to be improved from existing conditions.

Traffic volumes for the analysis were developed as follows:

- As described earlier in the report, future year benchmark traffic volumes for the no-project condition were determined by combining the area traffic growth with new traffic generated by cumulative development in the vicinity of the project site and existing landfill development in PCE's.
- Traffic volumes generated by the project in PCE's were then combined with these benchmark volumes to arrive at the "With Project" traffic analysis and to determine traffic impacts directly attributable to the proposed development. This analysis was conducted for construction Phase I, construction Phase II and project completion.

The projected traffic volumes for the "With Project" (2007, 2008 and 2012) conditions described above are shown in Figure 11.

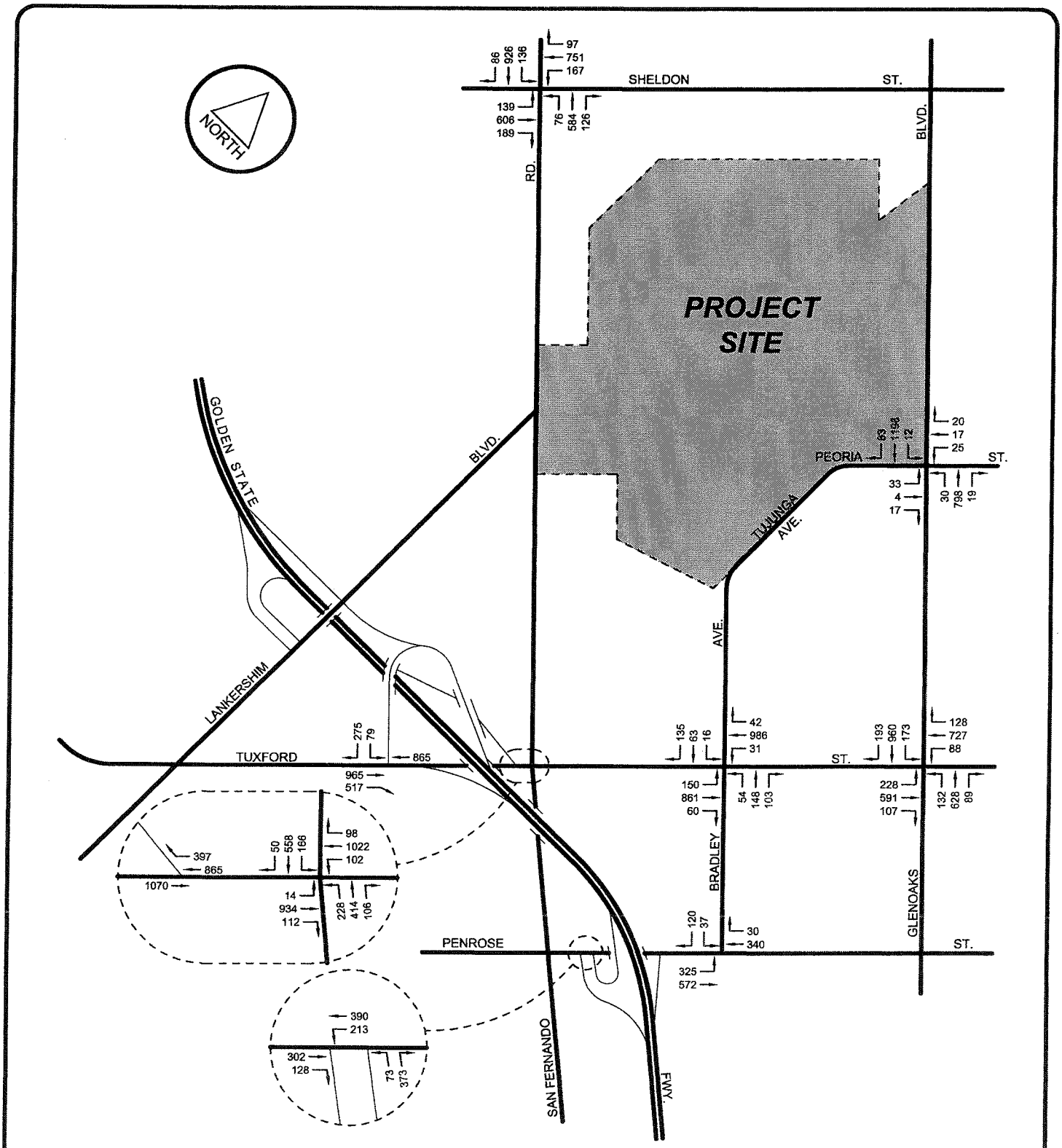


FIGURE 11(a)

8/3/2005

Bradley Landfill\Bradley Landfill 2\AM2007WP(PHASE I)

FUTURE (2007) TRAFFIC VOLUMES
WITH PROJECT (PHASE I CONSTRUCTION)
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

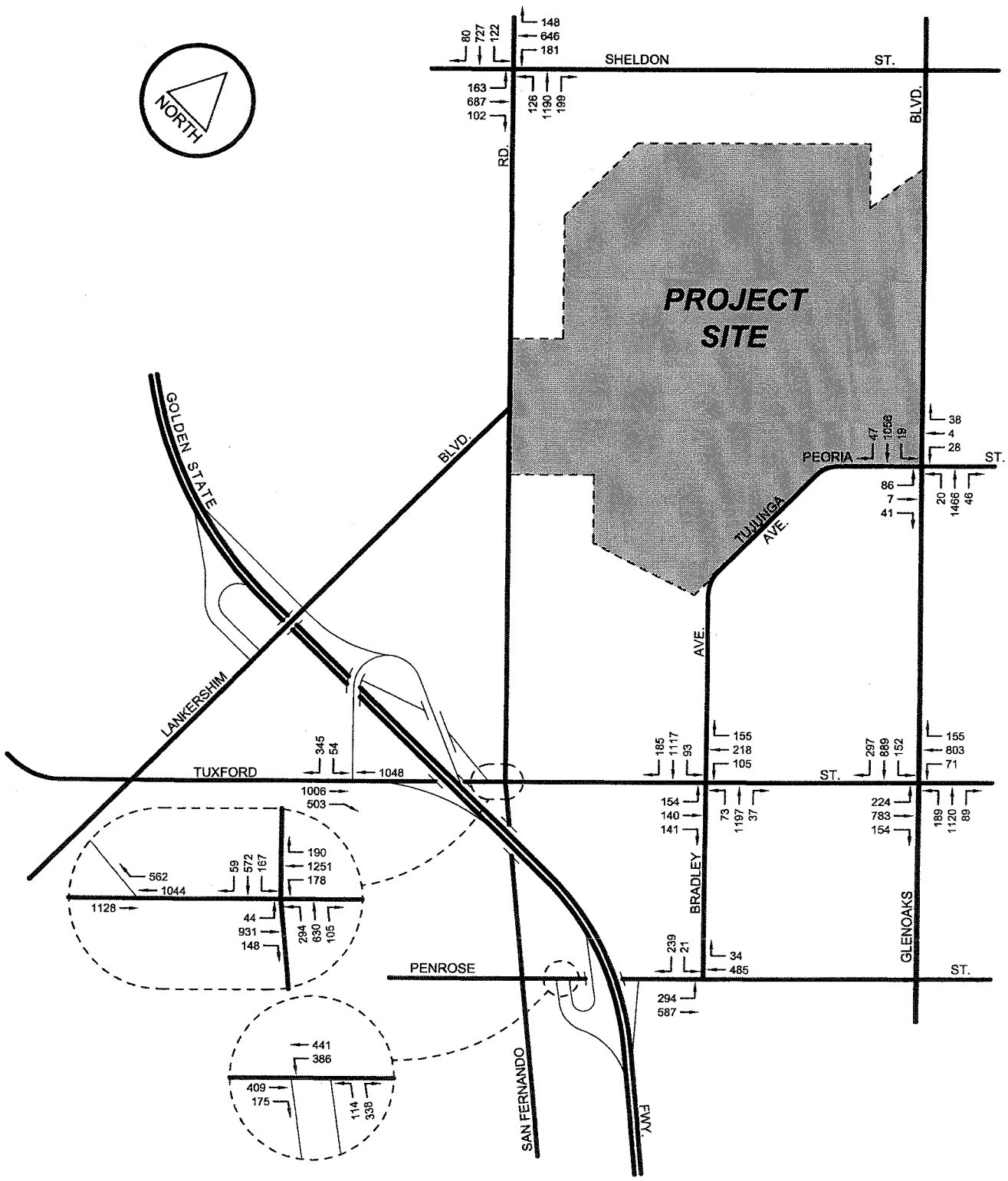


FIGURE 11(b)

8/3/2005

Bradley Landfill\Bradley Landfill ZPM2007WP(PHASE I)

FUTURE (2007) TRAFFIC VOLUMES
WITH PROJECT (PHASE I CONSTRUCTION)
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

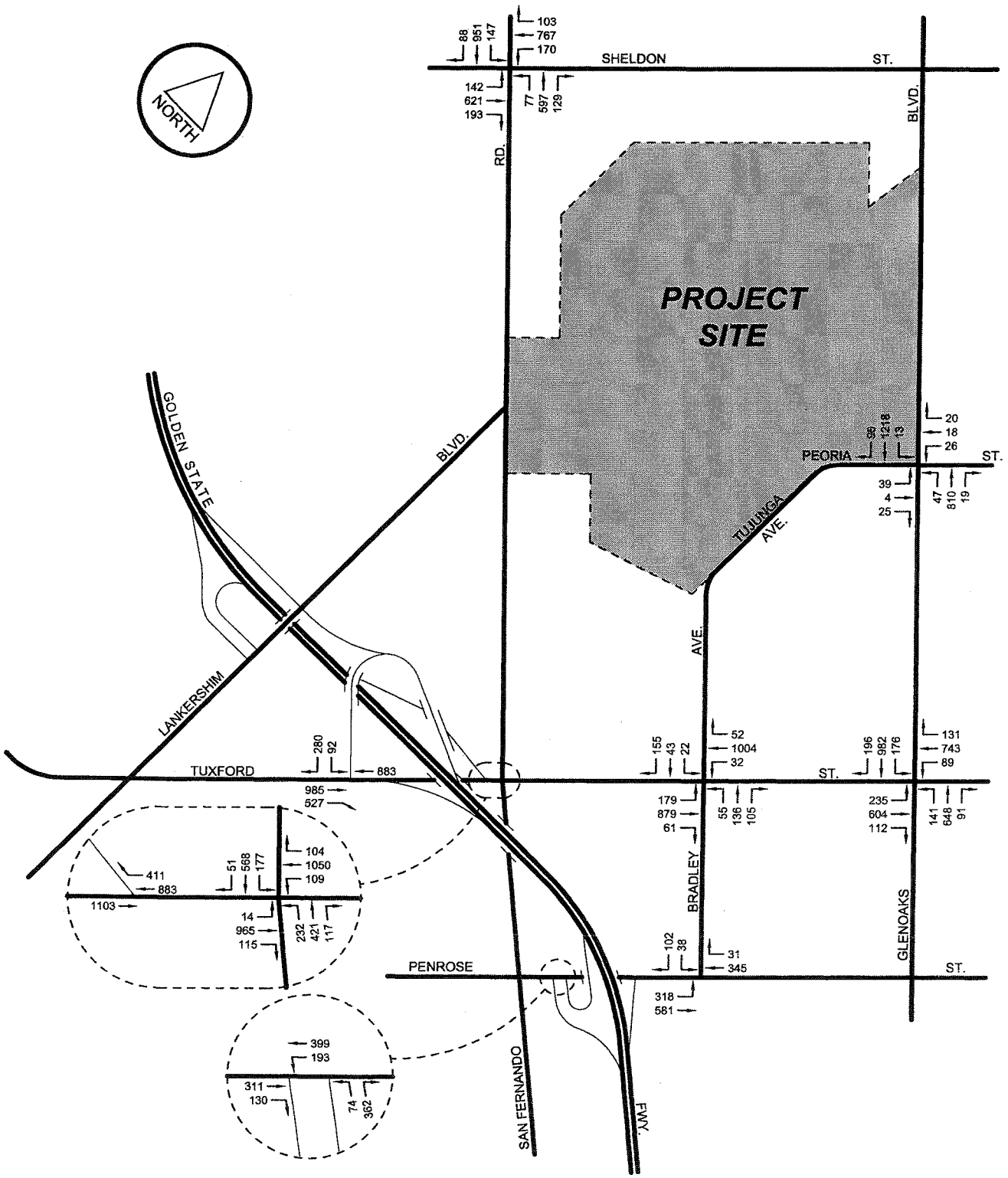


FIGURE 11(c)

8/3/2005

Bradley Landfill\Bradley Landfill 2\AM2006WP(PHASE II)

FUTURE (2008) TRAFFIC VOLUMES
WITH PROJECT (PHASE II)
AM PEAK HOUR

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

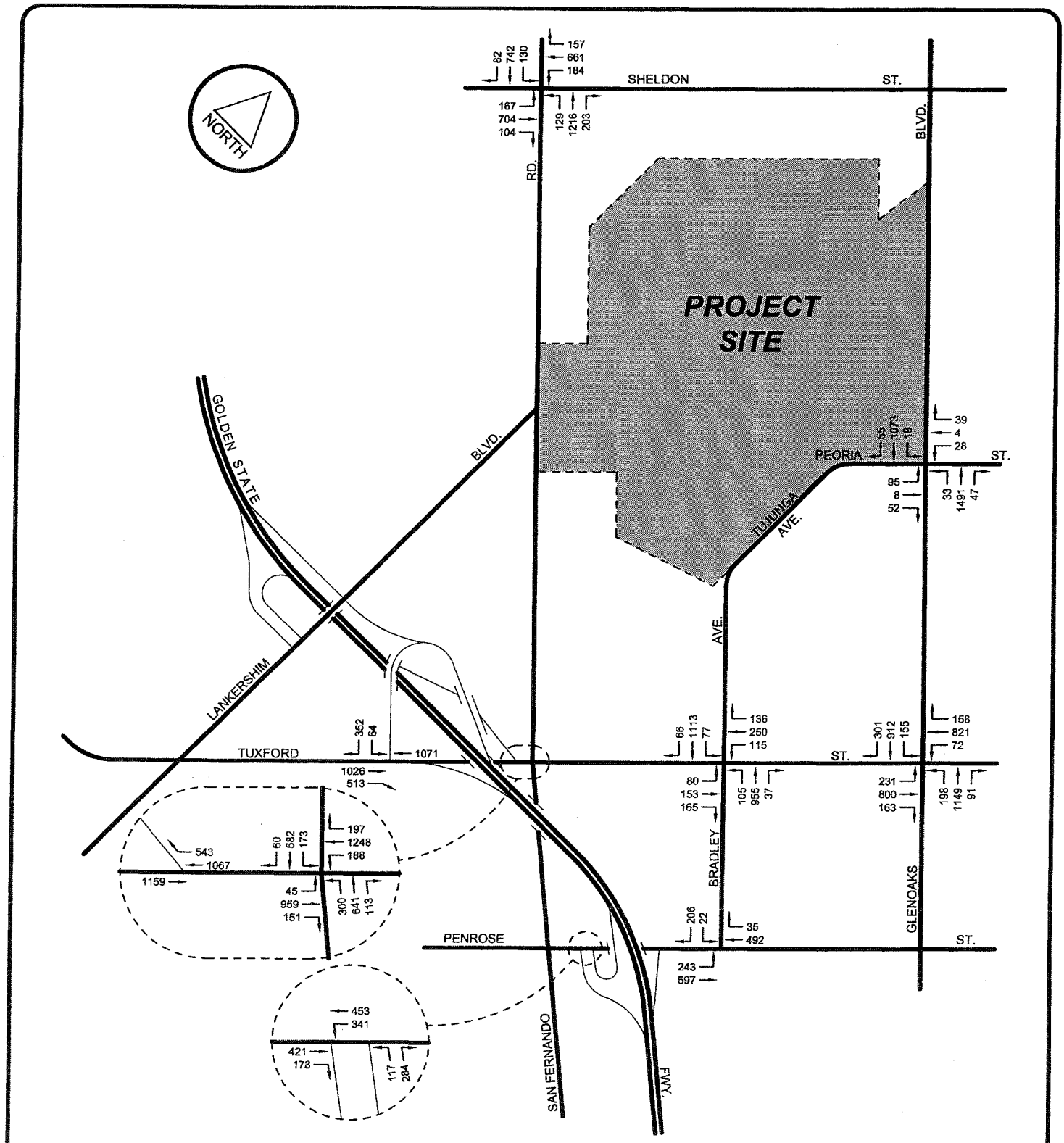


FIGURE 11(d)

8/3/2005

Bradley Landfill\Bradley Landfill 2\PM2008WP(PHASE II)

FUTURE (2008) TRAFFIC VOLUMES
WITH PROJECT (PHASE II)
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

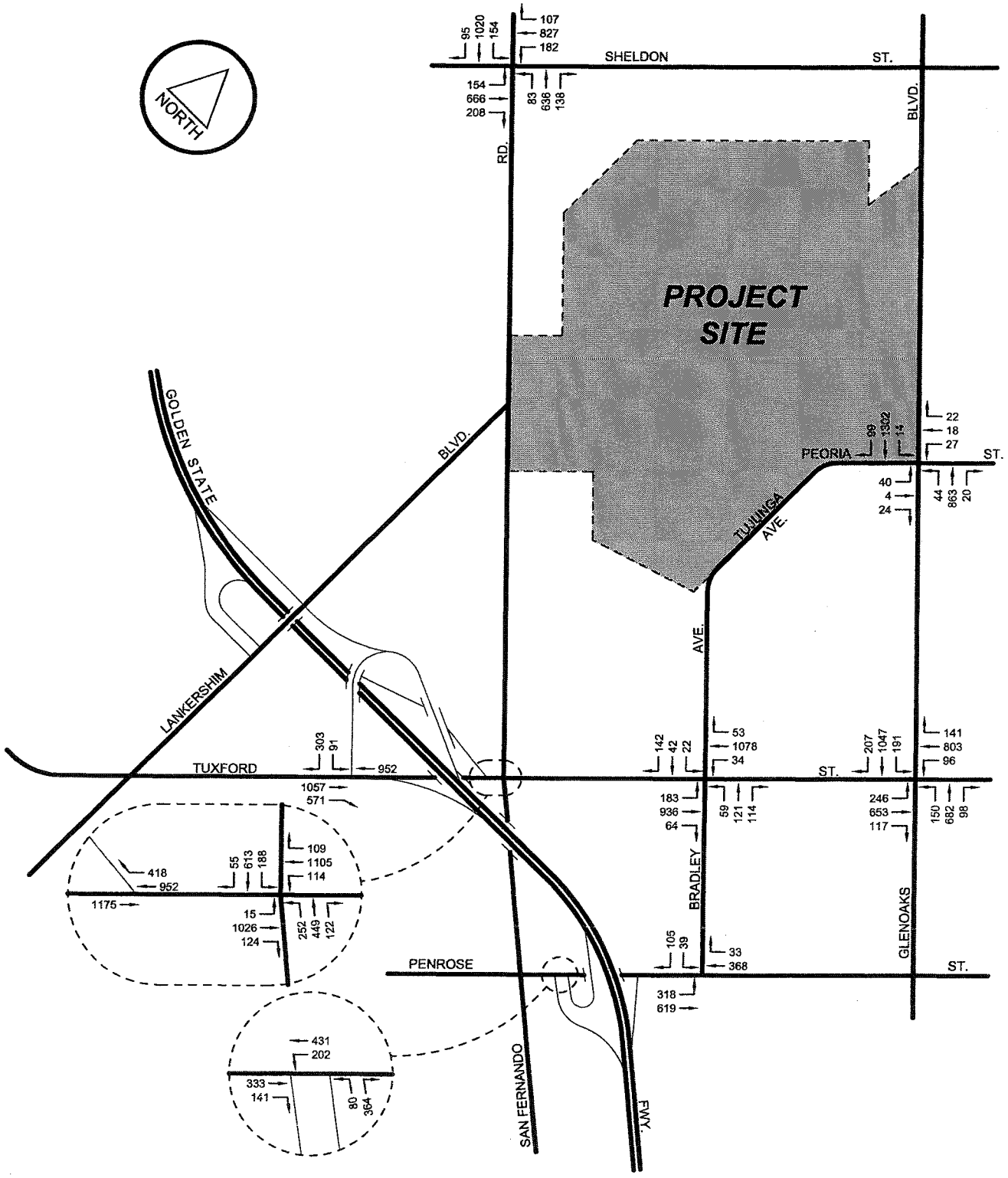


FIGURE 11(e)

8/3/2005

Bradley Landfill\Bradley Landfill 2\AM2012WP(COMPLETED)

FUTURE (2012) TRAFFIC VOLUMES
WITH PROJECT (PHASE II COMPLETED)
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

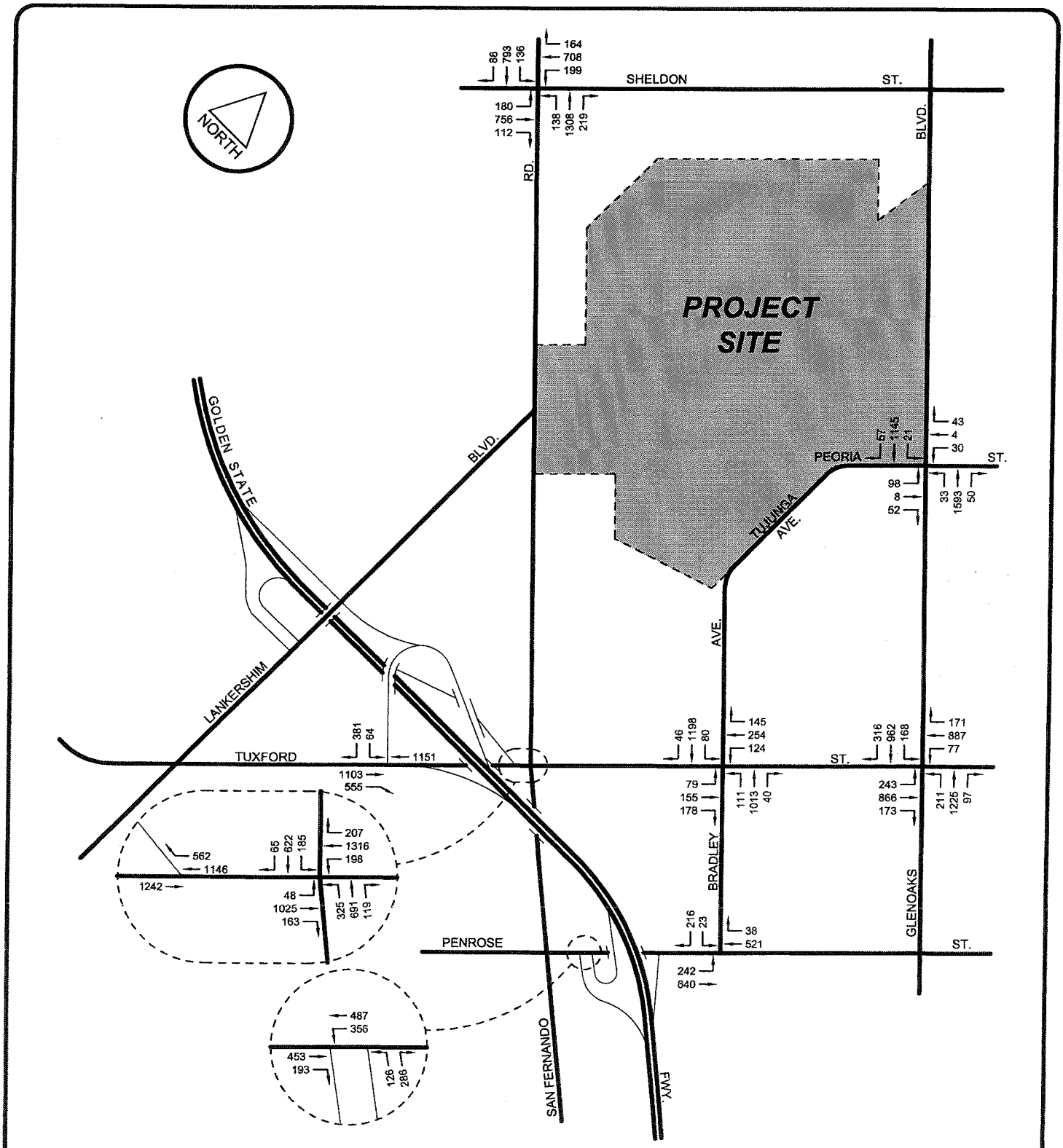


FIGURE 11(f)

8/3/2005

Bradley Landfill\Bradley Landfill 2\PM2012WP(COMPLETED)

FUTURE (2012) TRAFFIC VOLUMES
WITH PROJECT (PHASE II COMPLETED)
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning • Traffic Engineering

The current definition of a "significant traffic impact" attributable to a project can occur within three ranges of CMA values as detailed in Table 12.

Table 12
Criteria for Significant Traffic Impact

LOS	Final CMA Value	Project-Related Increase in CMA Value
C	0.700 - 0.800	equal to or greater than 0.040
D	>0.800 - 0.900	equal to or greater than 0.020
E, F	>0.900	equal to or greater than 0.010

As indicated in Table 13 (a-c), the proposed project is expected to have three significant intersection impacts with Phase I construction (without and with fill dirt), four significant intersection impacts with Phase II construction, and three significant intersection impacts at project completion. Implementation of improvement measures reduces all of these impacts below a level of significance. Note that no additional significant impact occurs for the estimated 80 days import of dirt during Phase I construction for the building pad.

Table 13(a)
Summary of Critical Movement Analysis
Future (2007) Traffic Conditions – Without and With Phase I Project

No.	Intersection	Peak Hour	Without Project CMA	Without Project LOS	With Project Without Fill Dirt CMA	With Project Without Fill Dirt LOS	With Project Without Fill Dirt Impact		With Project With Fill Dirt CMA	With Project With Fill Dirt LOS	With Project With Fill Dirt Impact	
1.	San Fernando Road & Sheldon Street	AM	0.761	C	0.765	C	0.004		0.765	C	0.004	
		PM	0.919	E	0.927	E	0.008		0.927	E	0.008	
2.	Glenoaks Boulevard & Peoria Street	AM	0.453	A	0.472	A	0.019		0.472	A	0.019	
		PM	0.591	A	0.609	B	0.018		0.609	B	0.018	
3.	I-5 NB Off/SB On Ramps & Tuxford Street	AM	0.685	B	0.697	B	0.012		0.697	B	0.012	
		PM	0.759	C	0.769	C	0.010		0.769	C	0.010	
4.	I-5 NB On Ramp & Tuxford Street	AM	0.517	A	0.526	A	0.009		0.529	A	0.012	
		PM	0.652	B	0.669	B	0.017		0.669	B	0.017	
5.	San Fernando Road & Tuxford Street	AM	0.711	C	0.721	C	0.010		0.721	C	0.010	
		PM	0.879	D	0.896	D	0.017		0.896	D	0.017	
6.	Bradley Avenue & Tuxford Street	AM	0.593	A	0.657	B	0.064		0.667	B	0.074	
		PM	1.006	F	1.179	F	0.173	*	1.093	F	0.087	*
7.	Glenoaks Boulevard & Tuxford Street	AM	0.792	C	0.803	D	0.011		0.803	D	0.011	
		PM	0.887	D	0.892	D	0.005		0.892	D	0.005	
8.	I-5 SB On/Off Ramps & Penrose Street	AM	0.609	B	0.673	B	0.064		0.683	B	0.074	
		PM	0.696	B	0.792	C	0.096	*	0.814	D	0.118	*
9.	Bradley Avenue & Penrose Street	AM	0.505	A	0.570	A	0.065		0.586	A	0.081	
		PM	0.611	B	0.716	C	0.105	*	0.734	C	0.123	*

* Denotes a significant project traffic impact, prior to mitigation implementation.

Table 13(b)
Summary of Critical Movement Analysis
Future (2008) Traffic Conditions – Without and With Phase II Construction Project

No.	Intersection	Peak Hour	Without Project CMA	Without Project LOS	With Project CMA	With Project LOS	With Project Impact	
1.	San Fernando Road & Sheldon Street	AM	0.774	C	0.783	C	0.009	
		PM	0.935	E	0.952	E	0.017	*
2.	Glenoaks Boulevard & Peoria Street	AM	0.460	A	0.500	A	0.040	
		PM	0.601	B	0.632	B	0.031	
3.	I-5 NB Off/SB On Ramps & Tuxford Street	AM	0.696	B	0.720	C	0.024	
		PM	0.773	C	0.793	C	0.020	
4.	I-5 NB On Ramp & Tuxford Street	AM	0.527	A	0.539	A	0.012	
		PM	0.663	B	0.671	B	0.008	
5.	San Fernando Road & Tuxford Street	AM	0.724	C	0.738	C	0.014	
		PM	0.895	D	0.905	E	0.010	*
6.	Bradley Avenue & Tuxford Street	AM	0.604	B	0.683	B	0.079	
		PM	1.027	F	1.072	F	0.045	*
7.	Glenoaks Boulevard & Tuxford Street	AM	0.806	D	0.826	D	0.020	*
		PM	0.902	E	0.913	E	0.011	*
8.	I-5 SB On/Off Ramps & Penrose Street	AM	0.620	B	0.663	B	0.043	
		PM	0.708	C	0.738	C	0.030	
9.	Bradley Avenue & Penrose Street	AM	0.515	A	0.558	A	0.043	
		PM	0.621	B	0.666	B	0.045	

* Denotes a significant project traffic impact, prior to mitigation implementation.

Table 13 (c)
Summary of Critical Movement Analysis
Future (2012) Traffic Conditions – Without and With Project Completion

No.	Intersection	Peak Hour	Without Project CMA	Without Project LOS	With Project CMA	With Project LOS	Impact	
1.	San Fernando Road &	AM	0.833	D	0.841	D	0.008	
	Sheldon Street	PM	1.007	F	1.022	F	0.015	*
2.	Glenoaks Boulevard &	AM	0.491	A	0.527	A	0.036	
	Peoria Street	PM	0.643	B	0.670	B	0.027	
3.	I-5 NB Off/SB On Ramps &	AM	0.748	C	0.768	C	0.020	
	Tuxford Street	PM	0.832	D	0.851	D	0.019	
4.	I-5 NB On Ramp &	AM	0.567	A	0.571	A	0.004	
	Tuxford Street	PM	0.712	C	0.712	C	0.000	
5.	San Fernando Road &	AM	0.781	C	0.790	C	0.009	
	Tuxford Street	PM	0.960	E	0.964	E	0.004	
6.	Bradley Avenue &	AM	0.651	B	0.710	C	0.059	*
	Tuxford Street	PM	1.109	F	1.143	F	0.034	*
7.	Glenoaks Boulevard &	AM	0.863	D	0.881	D	0.018	
	Tuxford Street	PM	0.967	E	0.978	E	0.011	*
8.	I-5 SB On/Off Ramps &	AM	0.664	B	0.686	B	0.022	
	Penrose Street	PM	0.759	C	0.779	C	0.020	
9.	Bradley Avenue &	AM	0.552	A	0.577	A	0.025	
	Penrose Street	PM	0.665	B	0.694	B	0.029	

* Denotes a significant project traffic impact, prior to mitigation implementation.

Impacts on Regional Transportation System

To address the increasing public concern that traffic congestion was impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111.

The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A countywide approach has been established by the Metropolitan Transportation Authority, the local CMP agency, to implement the statutory requirements of the CMP. The countywide approach includes designating a highway network that includes all state highways and principal arterials within the County and monitoring the network's Level of Service standards. This monitoring of the CMP network is one of the responsibilities of local jurisdictions. If Level of Service standards deteriorate, then local jurisdictions must prepare a deficiency plan to be in conformance with the countywide plan.

Furthermore, all development projects which are required to prepare an EIR are subject to the Land Use Analysis program of the CMP. This requirement will provide decision-makers with the project-specific traffic impacts created by large projects on the CMP highway network. The traffic impact analysis (TIA) to be included in an EIR requires that all freeway segments where the project adds 150 or more trips, in either direction, during the peak hours be analyzed. Based upon the trip distribution presented earlier in the report, the project will not add 150 or more trips to the nearby freeways. An analysis is also required at all CMP intersections where the project will add 50 or more trips during the morning or evening peak hour. There are no CMP intersections in the vicinity of the project. Although no further analysis is required, an analysis of freeway conditions on the Golden State Freeway, Hollywood, Antelope Valley and Foothill Freeways in the vicinity of the project and potential routes was conducted.

Based upon the 2003 Annual Average Daily Truck Traffic on the California State Highway System database prepared by Caltrans (2004) the following table summarizes percentage of trucks are currently on the Golden State (I-5) and Antelope Valley (Hwy 14) Freeways. The project will increase the number of trucks on the systems and is demonstrated below with a note as to the percentage increase in trucks due to the project.

Percentage of Trucks Compared to All Vehicles

Location	Existing (2005)	Future With Project Completion	Difference
I-5 at Hollywood Freeway	7.4%	7.7%	0.3%
I-5 at Simi Freeway	8.0 %	8.4%	0.4%
I-5 at 405 Freeway	9.6%	10.4%	0.8%
I-5 at 210 Freeway	9.1%	9.5%	0.4%
Hwy 14 at San Fernando Rd	4.5%	5.3%	0.8%
Hwy 14 at Angeles Forest Hwy	4.9%	6.1%	1.2%
Hwy 14 at Palmdale Blvd	5.3%	6.1%	0.8%

The project does not increase the percentage of trucks on any of the segments more than 1.2% which is less than the 2% significance criteria for overall traffic as identified by the CMP and is not anticipated to create a regional impact.

The Hollywood Freeway carries approximately 4.4% trucks daily and the Foothill Freeway carries between 6.3 and 9.5% trucks daily in the vicinity of the project. Less than 1% growth in trucks is anticipated on these two regional facilities due to the project.

A summary of the current, future without project, and future with project conditions follows in Table 14 for construction Phase I project, construction Phase II project and project completion. Review of Table 14 (a-c) indicates that the project would not cause or worsen a LOS F segment or increase traffic demand by two percent of capacity at LOS F for the freeway segments analyzed according to the CMP TIA requirements. Therefore no significant project impacts are identified for these regional facilities.

Table 14(a)
Future (2007) Freeway Volumes and Levels of Service

Location		Dir	No. Lanes	Freeway Capacity	Future (2007) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2007) With Construction Phase I Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Hollywood Freeway	AM	N/B	4	8,000	184,954	5,832	0.729	C	114	185,068	12	5,844	0.731	C	0.2%
South of Sherman Way		S/B	4	8,000		8,859	1.107	F(0)			9	8,868	1.109	F(0)	0.1%
	PM	N/B	4	8,000		6,822	0.853	D			11	6,833	0.854	D	0.2%
		S/B	4	8,000		6,192	0.774	D			13	6,205	0.776	D	0.2%
Foothill Freeway	AM	E//B	4	8,000	116,813	6,984	0.873	D	276	117,089	21	7,005	0.876	D	0.3%
at Terra Bella Street		W/B	4	8,000		4,672	0.584	C			27	4,699	0.587	C	0.6%
	PM	E/B	4	8,000		4,837	0.605	C			31	4,868	0.609	C	0.6%
		W/B	4	8,000		4,672	0.584	C			27	4,699	0.587	C	0.6%
Golden State Freeway	AM	N/B	6	12,000	203,341	9,702	0.809	D	3,073	206,414	61	9,763	0.814	D	0.6%
N of Hwd Fwy (S-170)		S/B	6	12,000		13,437	1.120	F(0)			60	13,497	1.125	F(0)	0.4%
	PM	N/B	6	12,000		17,013	1.418	F(2)			81	17,094	1.425	F(2)	0.5%
		S/B	6	12,000		13,437	1.120	F(0)			70	13,507	1.126	F(0)	0.5%
Golden State Freeway	AM	N/B	6	12,000	199,014	7,070	0.589	C	276	199,290	36	7,106	0.888	D	0.5%
at Burbank Boulevard		S/B	6	12,000		8,711	0.726	C			26	8,737	1.092	F(0)	0.3%
	PM	N/B	6	12,000		8,221	0.685	C			32	8,253	1.032	F(0)	0.4%
		S/B	6	12,000		7,472	0.623	C			38	7,510	0.939	E	0.5%
Golden State Freeway	AM	N/B	5	10,000	329,888	9,750	0.975	E	3,073	332,961	32	9,782	0.978	E	0.3%
at Terra Bella Street,		S/B	5	10,000		13,463	1.346	F(1)			32	13,495	1.350	F(1)	0.2%
	PM	N/B	5	10,000		14,686	1.469	F(3)			51	14,737	1.474	F(3)	0.3%
		S/B	5	10,000		9,001	0.900	D			51	9,052	0.905	D	0.6%
Golden State Freeway	AM	N/B	5	10,000	299,603	9,171	0.917	D	3,073	302,676	32	9,203	0.920	D	0.3%
at Ronald Regan Fwy		S/B	5	10,000		12,664	1.266	F(1)			32	12,696	1.270	F(1)	0.3%
	PM	N/B	5	10,000		13,814	1.381	F(2)			51	13,865	1.387	F(2)	0.4%
		S/B	5	10,000		8,467	0.847	D			51	8,518	0.852	D	0.6%

Table 14(a) cont.
Future (2007) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2007) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2007) With Construction Phase I Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Golden State Freeway	AM	N/B	4	8,000	165,485	4,675	0.584	C	3,073	168,558	32	4,707	0.588	C	0.7%
at Brand Ave, Mission Hills		S/B	4	8,000		6,455	0.807	D			32	6,487	0.811	D	0.5%
	PM	N/B	4	8,000		7,041	0.880	D			51	7,092	0.887	D	0.7%
		S/B	4	8,000		4,316	0.540	B			51	4,367	0.546	C	1.2%
Golden State Freeway	AM	N/B	3	6,000	143,853	4,372	0.729	C	1,011	144,864	32	4,404	0.734	C	0.7%
s/o San Diego Freeway		S/B	3	6,000		5,795	0.966	E			32	5,827	0.971	E	0.5%
	PM	N/B	3	6,000		5,694	0.949	E			51	5,745	0.958	E	0.9%
		S/B	3	6,000		4,473	0.746	C			51	4,524	0.754	C	1.1%
Golden State Freeway	AM	N/B	6	12,000	285,542	8,929	0.744	C	1,011	286,553	32	8,961	0.747	C	0.4%
at Roxford Street, Sylmar		S/B	6	12,000		11,837	0.986	E			32	11,869	0.989	E	0.3%
	PM	N/B	6	12,000		11,629	0.969	E			51	11,680	0.973	E	0.4%
		S/B	6	12,000		9,137	0.761	C			51	9,188	0.766	C	0.6%
Golden State Freeway	AM	N/B	6	12,000	258,502	8,046	0.671	C	1,011	259,513	32	8,078	0.673	C	0.4%
at Foothill Fwy, Truck Rte		S/B	6	12,000		10,665	0.889	D			32	10,697	0.891	D	0.3%
	PM	N/B	6	12,000		10,479	0.873	D			51	10,530	0.878	D	0.5%
		S/B	6	12,000		8,233	0.686	C			51	8,284	0.690	C	0.6%
Golden State Freeway	AM	N/B	2	4,000	37,315	1,535	0.384	B	1,011	38,326	32	1,567	0.392	B	2.0%
at BeginTruck Freeway		S/B	2	4,000		2,034	0.509	B			32	2,066	0.517	B	1.5%
	PM	N/B	2	4,000		1,999	0.500	B			51	2,050	0.513	B	2.5%
		S/B	2	4,000		1,570	0.393	B			51	1,621	0.405	B	3.1%
Golden State Freeway	AM	N/B	2	4,000	50,835	2,116	0.529	B	1,011	51,846	32	2,148	0.537	B	1.5%
at Junc Rte 14 - Truck Rte		S/B	2	4,000		2,805	0.701	C			32	2,837	0.709	C	1.1%
	PM	N/B	2	4,000		2,757	0.689	C			51	2,808	0.702	C	1.8%
		S/B	2	4,000		2,165	0.541	C			51	2,216	0.554	C	2.3%

Table 14(a) cont.
Future (2007) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2007) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2007) With Construction Phase I Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy (Rte 14) at San Fernando Road	AM	N/B	5	10,000	166,566	2,855	0.286	A	1,011	167,577	32	2,887	0.289	A	1.1%
		S/B	5	10,000		10,151	1.015	F(0)			32	10,183	1.018	F(0)	0.3%
	PM	N/B	5	10,000		9,046	0.905	D			51	9,097	0.910	D	0.6%
		S/B	5	10,000		3,837	0.384	B			51	3,888	0.389	B	1.3%
Antelope Valley Fwy (Rte 14) at Placerita Cyn, Santa Clarita	AM	N/B	5	10,000	154,669	2,642	0.264	A	1,011	155,680	32	2,674	0.267	A	1.2%
		S/B	5	10,000		9,364	0.936	E			32	9,396	0.940	E	0.3%
	PM	N/B	5	10,000		8,404	0.840	D			51	8,455	0.846	D	0.6%
		S/B	5	10,000		3,602	0.360	B			51	3,653	0.365	B	1.4%
Antelope Valley Fwy (Rte 14) at Sierra Highway	AM	N/B	5	10,000	144,934	2,475	0.248	A	1,011	145,945	32	2,507	0.251	A	1.3%
		S/B	5	10,000		8,773	0.877	D			32	8,805	0.881	D	0.4%
	PM	N/B	5	10,000		7,874	0.787	D			51	7,925	0.793	D	0.6%
		S/B	5	10,000		3,375	0.338	A			51	3,426	0.343	A	1.5%
Antelope Valley Fwy (Rte 14) at Sand Cyn Rd, Santa Clarita	AM	N/B	5	10,000	113,568	1,975	0.198	A	1,011	114,579	32	2,007	0.201	A	1.6%
		S/B	5	10,000		7,002	0.700	C			32	7,034	0.703	C	0.5%
	PM	N/B	5	10,000		6,284	0.628	C			51	6,335	0.634	C	0.8%
		S/B	5	10,000		2,694	0.269	A			51	2,745	0.275	A	1.9%
Antelope Valley Fwy (Rte 14) at Agua Dulce Cyn Rd	AM	N/B	4	8,000	99,507	1,832	0.229	A	1,011	100,518	32	1,864	0.233	A	1.7%
		S/B	4	8,000		6,496	0.812	D			32	6,528	0.816	D	0.5%
	PM	N/B	4	8,000		5,830	0.729	C			51	5,881	0.735	C	0.9%
		S/B	4	8,000		2,498	0.312	A			51	2,549	0.319	A	2.0%
Antelope Valley Fwy (Rte 14) at Escondido Canyon Road	AM	N/B	3	6,000	97,344	1,809	0.302	A	1,011	98,355	32	1,841	0.307	A	1.7%
		S/B	3	6,000		6,412	1.069	F(0)			32	6,444	1.074	F(0)	0.5%
	PM	N/B	3	6,000		5,754	0.959	E			51	5,805	0.968	E	0.9%
		S/B	3	6,000		2,466	0.411	B			51	2,517	0.420	B	2.0%

Table 14(a) cont.
Future (2007) Freeway Volumes and Levels of Service

					Future (2007) Without Project				Future (2007) With Construction Phase I Project						
Location		Dir	No. Lane	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy	AM	N/B	3	6,000	96,262	2,465	0.411	B	1,011	97,273	32	2,497	0.416	B	1.3%
at Santiago Road		S/B	3	6,000		5,485	0.914	D			32	5,517	0.920	D	0.6%
	PM	N/B	3	6,000		5,354	0.892	D			51	5,405	0.901	D	0.9%
		S/B	3	6,000		2,758	0.460	B			51	2,809	0.468	B	1.8%
Antelope Valley Fwy	AM	N/B	2	4,000	100,589	1,965	0.491	B	1,011	101,600	32	1,997	0.499	B	1.6%
at Vincent, Angl. Frst Hwy		S/B	2	4,000		4,326	1.082	F(0)			32	4,358	1.090	F(0)	0.7%
	PM	N/B	2	4,000		4,326	1.082	F(0)			51	4,377	1.094	F(0)	1.2%
		S/B	2	4,000		2,272	0.568	C			51	2,323	0.581	C	2.2%
Antelope Valley Fwy	AM	N/B	2	4,000	75,712	1,972	0.493	B	1,011	76,723	32	2,004	0.501	B	1.6%
at Avenue S		S/B	2	4,000		4,388	1.097	F(0)			32	4,420	1.105	F(0)	0.7%
	PM	N/B	2	4,000		4,283	1.071	F(0)			51	4,334	1.084	F(0)	1.2%
		S/B	2	4,000		2,207	0.552	C			51	2,258	0.565	C	2.3%
Antelope Valley Fwy	AM	N/B	3	6,000	82,202	2,136	0.356	B	505	82,707	16	2,152	0.538	B	0.7%
at Rte 138, Palmdale Bl		S/B	3	6,000		4,754	0.792	D			16	4,770	1.193	F(0)	0.3%
	PM	N/B	3	6,000		4,640	0.773	D			26	4,666	1.167	F(0)	0.6%
		S/B	3	6,000		2,390	0.398	B			26	2,416	0.604	C	1.1%
Antelope Valley Fwy	AM	N/B	3	6,000	93,018	2,530	0.422	B	505	93,523	16	2,546	0.637	C	0.6%
at Avenue M, Lancaster		S/B	3	6,000		5,632	0.939	E			16	5,648	1.412	F(2)	0.3%
	PM	N/B	3	6,000		5,496	0.916	D			26	5,522	1.381	F(2)	0.5%
		S/B	3	6,000		2,832	0.472	B			26	2,858	0.715	C	0.9%
Antelope Valley Fwy	AM	N/B	3	6,000	90,854	2,497	0.416	B	505	91,359	16	2,513	0.628	C	0.6%
at Avenue L, Lancaster		S/B	3	6,000		5,559	0.927	D			16	5,575	1.394	F(2)	0.3%
	PM	N/B	3	6,000		5,426	0.904	D			26	5,452	1.363	F(2)	0.5%
		S/B	3	6,000		2,794	0.466	B			26	2,820	0.705	C	0.9%

Table 14(a) cont.
Future (2007) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2007) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2007) With Construction Phase I Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy	AM	N/B	3	6,000	57,325	1,611	0.269	A	505	57,830	16	1,627	0.407	B	1.0%
at Avenue J-8/20th St W,		S/B	3	6,000		3,584	0.597	C			16	3,600	0.900	D	0.4%
	PM	N/B	3	6,000		3,498	0.583	C			26	3,524	0.881	D	0.7%
		S/B	3	6,000		1,802	0.300	A			26	1,828	0.457	B	1.4%
Antelope Valley Fwy	AM	N/B	2	4,000	47,590	1,363	0.341	A	505	48,095	16	1,379	0.345	A	1.2%
at Avenue I, Lancaster		S/B	2	4,000		3,035	0.759	C			16	3,051	0.763	C	0.5%
	PM	N/B	2	4,000		2,963	0.741	C			26	2,989	0.747	C	0.9%
		S/B	2	4,000		1,526	0.382	B			26	1,552	0.388	B	1.7%
Antelope Valley Fwy	AM	N/B	2	4,000	39,478	1,117	0.279	A	505	39,983	16	1,133	0.283	A	1.4%
at Avenue G		S/B	2	4,000		2,487	0.622	C			16	2,503	0.626	C	0.6%
	PM	N/B	2	4,000		2,427	0.607	C			26	2,453	0.613	C	1.1%
		S/B	2	4,000		1,250	0.313	A			26	1,276	0.319	A	2.0%

*D/C is the Demand to Capacity Ratio

Table 14(b)
Future (2008) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2008) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2008) With Construction Phase II Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Hollywood Freeway (S-170)	AM	N/B	4	8,000	192,067	5,944	0.743	C	262	192,329	14	5,958	0.745	C	0.2%
South of Sherman Way		S/B	4	8,000		9,029	1.129	F(0)			9	9,038	1.130	F(0)	0.1%
	PM	N/B	4	8,000		6,954	0.869	D			10	6,964	0.871	D	0.1%
		S/B	4	8,000		6,311	0.789	D			12	6,323	0.790	D	0.2%
Foothill Freeway (I-210)	AM	E//B	4	8,000	121,306	7,118	0.890	D	328	121,634	24	7,142	0.893	D	0.3%
at Terra Bella Street		W/B	4	8,000		4,762	0.595	C			34	4,796	0.600	C	0.7%
	PM	E/B	4	8,000		4,930	0.616	C			31	4,961	0.620	C	0.6%
		W/B	4	8,000		4,762	0.595	C			29	4,791	0.599	C	0.6%
Golden State Freeway (I-5)	AM	N/B	6	12,000	211,162	9,889	0.824	D	1,243	212,405	91	9,980	0.832	D	0.9%
N/O Hollywood Fwy (S-170)		S/B	6	12,000		13,695	1.141	F(0)			85	13,780	1.148	F(0)	0.6%
	PM	N/B	6	12,000		17,341	1.445	F(2)			87	17,428	1.452	F(3)	0.5%
		S/B	6	12,000		13,695	1.141	F(0)			93	13,788	1.149	F(0)	0.7%
Golden State Freeway (I-5)	AM	N/B	6	12,000	206,669	7,206	0.601	C	328	206,997	42	7,248	0.906	D	0.6%
at Burbank Boulevard		S/B	6	12,000		8,879	0.740	C			26	8,905	1.113	F(0)	0.3%
	PM	N/B	6	12,000		8,379	0.698	C			30	8,409	1.051	F(0)	0.4%
		S/B	6	12,000		7,616	0.635	C			36	7,652	0.957	E	0.5%
Golden State Freeway (I-5)	AM	N/B	5	10,000	336,232	9,938	0.994	E	1,243	337,475	61	9,999	1.000	E	0.6%
at Terra Bella Street, Pacoima		S/B	5	10,000		13,722	1.372	F(2)			59	13,781	1.378	F(2)	0.4%
	PM	N/B	5	10,000		14,968	1.497	F(3)			61	15,029	1.503	F(3)	0.4%
		S/B	5	10,000		9,174	0.917	D			86	9,260	0.926	D	0.9%
Golden State Freeway (I-5)	AM	N/B	5	10,000	305,365	9,347	0.935	E	1,243	306,608	38	9,385	0.939	E	0.4%
at Ronald Regan Fwy (Rt-118)		S/B	5	10,000		12,908	1.291	F(1)			36	12,944	1.294	F(1)	0.3%
	PM	N/B	5	10,000		14,080	1.408	F(2)			32	14,112	1.411	F(2)	0.2%
		S/B	5	10,000		8,629	0.863	D			57	8,686	0.869	D	0.7%

Table 14(b) cont.
Future (2008) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2008) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2008) With Construction Phase II Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Golden State Freeway (I-5) at Brand Avenue, Mission Hills	AM	N/B	4	8,000	168,667	4,765	0.596	C	1,243	169,910	38	4,803	0.600	C	0.8%
		S/B				6,579	0.822	D			36	6,615	0.827	D	
			4	8,000											0.5%
	PM	N/B	4	8,000		7,176	0.897	D			32	7,208	0.901	D	0.4%
		S/B	4	8,000		4,399	0.550	C			57	4,456	0.557	C	1.3%
Golden State Freeway (I-5) s/o San Diego Freeway (Rt 405)	AM	N/B	3	6,000	146,619	4,456	0.743	C	1,243	147,862	38	4,494	0.749	C	0.8%
		S/B				5,906	0.984	E			36	5,942	0.990	E	
			3	6,000											0.6%
	PM	N/B	3	6,000		5,804	0.967	E			32	5,836	0.973	E	0.5%
		S/B	3	6,000		4,559	0.760	C			57	4,616	0.769	C	1.2%
Golden State Freeway (I-5) at Roxford Street, Sylmar	AM	N/B	6	12,000	291,034	9,101	0.758	C	1,243	292,277	38	9,139	0.762	C	0.4%
		S/B	6	12,000		12,065	1.005	F(0)			36	12,101	1.008	F(0)	0.3%
	PM	N/B	6	12,000		11,853	0.988	E			32	11,885	0.990	E	0.3%
		S/B	6	12,000		9,313	0.776	D			57	9,370	0.781	D	0.6%
Golden State Freeway (I-5) at Foothill Fwy (Rte 210) Truck Route	AM	N/B	6	12,000	263,474	8,201	0.683	C	1,243	264,717	38	8,239	0.687	C	0.5%
		S/B	6	12,000		10,870	0.906	D			36	10,906	0.909	D	0.3%
	PM	N/B	6	12,000		10,681	0.890	D			32	10,713	0.893	D	0.3%
		S/B	6	12,000		8,391	0.699	C			57	8,448	0.704	C	0.7%
Golden State Freeway (I-5) at BeginTruck Freeway	AM	N/B	2	4,000	38,033	1,565	0.391	B	1,243	39,276	38	1,603	0.401	B	2.4%
		S/B	2	4,000		2,073	0.518	B			36	2,109	0.527	B	1.7%
	PM	N/B	2	4,000		2,037	0.509	B			32	2,069	0.517	B	1.5%
		S/B	2	4,000		1,601	0.400	B			57	1,658	0.415	B	3.4%
Golden State Freeway (I-5) at Junct Rte 14-Truck Route	AM	N/B	2	4,000	51,813	2,157	0.539	B	1,243	53,056	38	2,195	0.549	C	1.7%
		S/B	2	4,000		2,859	0.715	C			36	2,895	0.724	C	1.2%
	PM	N/B	2	4,000		2,810	0.703	C			32	2,842	0.711	C	1.1%
		S/B	2	4,000		2,207	0.552	C			57	2,264	0.566	C	2.5%

Table 14(b) cont.
Future (2008) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2008) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2008) With Construction Phase II Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy (Rte 14)	AM	N/B	5	10,000	169,770	2,910	0.291	A	1,243	171,013	38	2,948	0.295	A	1.3%
at San Fernando Road		S/B	5	10,000		10,347	1.035	F(0)			36	10,383	1.038	F(0)	0.3%
	PM	N/B	5	10,000		9,220	0.922	D			32	9,252	0.925	D	0.3%
		S/B	5	10,000		3,910	0.391	B			57	3,967	0.397	B	1.4%
Antelope Valley Fwy (Rte 14)	AM	N/B	5	10,000	157,643	2,692	0.269	A	1,243	158,886	38	2,730	0.273	A	1.4%
at Placerita Cyn, Santa Clarita		S/B	5	10,000		9,544	0.954	E			36	9,580	0.958	E	0.4%
	PM	N/B	5	10,000		8,566	0.857	D			32	8,598	0.860	D	0.4%
		S/B	5	10,000		3,671	0.367	B			57	3,728	0.373	B	1.5%
Antelope Valley Fwy (Rte 14)	AM	N/B	5	10,000	147,722	2,523	0.252	A	1,243	148,965	38	2,561	0.256	A	1.5%
at Sierra Highway		S/B	5	10,000		8,942	0.894	D			36	8,978	0.898	D	0.4%
	PM	N/B	5	10,000		8,025	0.803	D			32	8,057	0.806	D	0.4%
		S/B	5	10,000		3,440	0.344	A			57	3,497	0.350	A	1.6%
Antelope Valley Fwy (Rte 14)	AM	N/B	5	10,000	115,752	2,013	0.201	A	1,243	116,995	38	2,051	0.205	A	1.9%
at Sand Canyon Road, Santa		S/B	5	10,000		7,137	0.714	C			36	7,173	0.717	C	0.5%
	PM	N/B	5	10,000		6,405	0.641	C			32	6,437	0.644	C	0.5%
		S/B	5	10,000		2,745	0.275	A			57	2,802	0.280	A	2.0%
Antelope Valley Fwy (Rte 14)	AM	N/B	4	8,000	101,421	1,868	0.234	A	1,243	102,664	38	1,906	0.238	A	2.0%
at Agua Dulce Canyon Raod		S/B	4	8,000		6,621	0.828	D			36	6,657	0.832	D	0.5%
	PM	N/B	4	8,000		5,942	0.743	C			32	5,974	0.747	C	0.5%
		S/B	4	8,000		2,546	0.318	A			57	2,603	0.325	A	2.2%
Antelope Valley Fwy (Rte 14)	AM	N/B	3	6,000	99,216	1,843	0.307	A	1,243	100,459	38	1,881	0.314	A	2.0%
at Escondido Canyon Road		S/B	3	6,000		6,535	1.089	F(0)			36	6,571	1.095	F(0)	0.5%
	PM	N/B	3	6,000		5,865	0.978	E			32	5,897	0.983	E	0.5%
		S/B	3	6,000		2,513	0.419	B			57	2,570	0.428	B	2.2%

Table 14(b) cont.
Future (2008) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2008) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2008) With Construction Phase II Project: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy at Santiago Road	AM	N/B	3	6,000	98,114	2,512	0.419	B	1,243	99,357	38	2,550	0.425	B	1.5%
		S/B	3	6,000		5,590	0.932	E			36	5,626	0.938	E	0.6%
	PM	N/B	3	6,000		5,457	0.910	D			32	5,489	0.915	D	0.6%
		S/B	3	6,000		2,811	0.469	B			57	2,868	0.478	B	2.0%
Antelope Valley Fwy at Vincent, Ang Frst Hwy	AM	N/B	2	4,000	102,523	2,002	0.501	B	1,243	103,766	38	2,040	0.510	B	1.9%
		S/B	2	4,000		4,410	1.103	F(0)			36	4,446	1.112	F(0)	0.8%
	PM	N/B	2	4,000		4,410	1.103	F(0)			32	4,442	1.111	F(0)	0.7%
		S/B	2	4,000		2,316	0.579	C			57	2,373	0.593	C	2.4%
Antelope Valley Fwy at Avenue S	AM	N/B	2	4,000	77,168	2,010	0.503	B	1,243	78,411	38	2,048	0.512	B	1.9%
		S/B	2	4,000		4,472	1.118	F(0)			36	4,508	1.127	F(0)	0.8%
	PM	N/B	2	4,000		4,365	1.091	F(0)			32	4,397	1.099	F(0)	0.7%
		S/B	2	4,000		2,249	0.562	C			57	2,306	0.577	C	2.5%
Antelope Valley Fwy at Rte 138, Palmdale Bl,	AM	N/B	3	6,000	83,782	2,177	0.363	B	622	84,404	19	2,196	0.549	C	0.9%
		S/B	3	6,000		4,845	0.808	D			18	4,863	1.216	F(0)	0.4%
	PM	N/B	3	6,000		4,730	0.788	D			16	4,746	1.187	F(0)	0.3%
		S/B	3	6,000		2,436	0.406	B			29	2,465	0.616	C	1.2%
Antelope Valley Fwy at Avenue M, Lancaster	AM	N/B	3	6,000	94,806	2,579	0.430	B	622	95,428	19	2,598	0.650	C	0.7%
		S/B	3	6,000		5,740	0.957	E			18	5,758	1.440	F(2)	0.3%
	PM	N/B	3	6,000		5,602	0.934	E			16	5,618	1.405	F(2)	0.3%
		S/B	3	6,000		2,886	0.481	B			29	2,915	0.729	C	1.0%
Antelope Valley Fwy at Avenue L, Lancaster	AM	N/B	3	6,000	92,602	2,545	0.424	B	622	93,224	19	2,564	0.641	C	0.7%
		S/B	3	6,000		5,666	0.944	E			18	5,684	1.421	F(2)	0.3%
	PM	N/B	3	6,000		5,530	0.922	D			16	5,546	1.387	F(2)	0.3%
		S/B	3	6,000		2,848	0.475	B			29	2,877	0.719	C	1.0%

Table 14(b) cont.
Future (2008) Freeway Volumes and Levels of Service

					Future (2008) Without Project				Future (2008) With Construction Phase II Project						
Location		Dir	No. Lane	Freeway Capacity	Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy (Rte 14)	AM	N/B	3	6,000	58,427	1,642	0.274	A	622	59,049	19	1,661	0.415	B	1.1%
at Ave J-8/20th St W, Lanc.		S/B	3	6,000		3,653	0.609	C			18	3,671	0.918	D	0.5%
	PM	N/B	3	6,000		3,565	0.594	C			16	3,581	0.895	D	0.4%
		S/B	3	6,000		1,837	0.306	A			29	1,866	0.467	B	1.6%
Antelope Valley Fwy (Rte 14)	AM	N/B	3	6,000	48,506	1,390	0.232	A	622	49,128	19	1,409	0.352	B	1.3%
at Avenue I, Lancaster		S/B	3	6,000		3,093	0.516	B			18	3,111	0.778	D	0.6%
	PM	N/B	3	6,000		3,020	0.503	B			16	3,036	0.759	C	0.5%
		S/B	3	6,000		1,555	0.259	A			29	1,584	0.396	B	1.8%
Antelope Valley Fwy (Rte 14)	AM	N/B	2	4,000	40,238	1,138	0.285	A	622	40,860	19	1,157	0.289	A	1.6%
at Avenue G		S/B	2	4,000		2,534	0.634	C			18	2,552	0.638	C	0.7%
	PM	N/B	2	4,000		2,474	0.619	C			16	2,490	0.623	C	0.6%
		S/B	2	4,000		1,274	0.319	A			29	1,303	0.326	A	2.2%

* D/C is the Demand to Capacity Ratio

Table 14(c)
Future (2012) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2012) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2012) With Project Completion: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Hollywood Freeway (S-170)	AM	N/B	4	8,000	202,738	6,393	0.799	D	224	202,962	13	6,406	0.801	D	0.2%
South of Sherman Way		S/B	4	8,000		9,711	1.214	F(0)			8	9,719	1.215	F(0)	0.1%
	PM	N/B	4	8,000		7,478	0.935	E			10	7,488	0.936	E	0.1%
		S/B	4	8,000		6,788	0.849	D			11	6,799	0.850	D	0.2%
Foothill Freeway (I-210)	AM	E//B	4	8,000	128,045	7,655	0.957	E	290	128,335	21	7,676	0.960	E	0.3%
at Terra Bella Street		W/B	4	8,000		5,121	0.640	C			30	5,151	0.644	C	0.6%
	PM	E/B	4	8,000		5,302	0.663	C			27	5,329	0.666	C	0.5%
		W/B	4	8,000		5,121	0.640	C			27	5,148	0.644	C	0.5%
Golden State Freeway (I-5)	AM	N/B	6	12,000	222,893	10,635	0.886	D	1,243	224,136	70	10,705	0.892	D	0.7%
North of Hollywood Fwy (S-		S/B	6	12,000		14,729	1.227	F(0)			68	14,797	1.233	F(0)	0.5%
	PM	N/B	6	12,000		18,649	1.554	F(3)			72	18,721	1.560	F(3)	0.4%
		S/B	6	12,000		14,729	1.227	F(0)			80	14,809	1.234	F(0)	0.5%
Golden State Freeway (I-5)	AM	N/B	6	12,000	218,150	7,750	0.646	E	290	218,440	39	7,789	0.974	E	0.5%
at Burbank Boulevard		S/B	6	12,000		9,549	0.796	F(0)			25	9,574	1.197	F(0)	0.3%
	PM	N/B	6	12,000		9,012	0.751	F(0)			29	9,041	1.130	F(0)	0.3%
		S/B	6	12,000		8,191	0.683	F(0)			33	8,224	1.028	F(0)	0.4%
Golden State Freeway (I-5)	AM	N/B	5	10,000	361,608	10,688	1.069	F(0)	1,243	362,851	42	10,730	1.073	F(0)	0.4%
at Terra Bella St, Pacoima		S/B	5	10,000		14,757	1.476	F(3)			40	14,797	1.480	F(3)	0.3%
	PM	N/B	5	10,000		16,098	1.610	F(3)			46	16,144	1.614	F(3)	0.3%
		S/B	5	10,000		9,867	0.987	E			70	9,937	0.994	E	0.7%
Golden State Freeway (I-5)	AM	N/B	5	10,000	328,411	10,053	1.005	F(0)	1,243	329,654	38	10,091	1.009	F(0)	0.4%
at Ronald Regan Fwy (Rt-118)		S/B	5	10,000		13,882	1.388	F(2)			36	13,918	1.392	F(2)	0.3%
	PM	N/B	5	10,000		15,143	1.514	F(3)			32	15,175	1.518	F(3)	0.2%
		S/B	5	10,000		9,281	0.928	D			57	9,338	0.934	E	0.6%

Table 14(c) cont.
Future (2012) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2012) Without Project				Future (2012) With Project Completion						% of Project Impact
					Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	
Golden State Freeway (I-5)	AM	N/B	4	8,000	181,397	5,124	0.641	C	1,243	182,640	38	5,162	0.645	C	0.7%
at Brand Avenue, Mission Hills		S/B	4	8,000		7,076	0.885	D			36	7,112	0.889	D	0.5%
	PM	N/B	4	8,000		7,718	0.965	E			32	7,750	0.969	E	0.4%
		S/B	4	8,000		4,731	0.591	C			57	4,788	0.599	C	1.2%
Golden State Freeway (I-5)	AM	N/B	3	6,000	157,685	4,793	0.799	D	1,243	158,928	38	4,831	0.805	D	0.8%
s/o San Diego Freeway (Rt		S/B	3	6,000		6,352	1.059	F(0)			36	6,388	1.065	F(0)	0.6%
	PM	N/B	3	6,000		6,242	1.040	F(0)			32	6,274	1.046	F(0)	0.5%
		S/B	3	6,000		4,903	0.817	D			57	4,960	0.827	D	1.1%
Golden State Freeway (I-5)	AM	N/B	6	12,000	312,998	9,788	0.816	D	1,243	314,241	38	9,826	0.819	D	0.4%
at Roxford Street, Sylmar		S/B	6	12,000		12,975	1.081	F(0)			36	13,011	1.084	F(0)	0.3%
	PM	N/B	6	12,000		12,747	1.062	F(0)			32	12,779	1.065	F(0)	0.3%
		S/B	6	12,000		10,016	0.835	D			57	10,073	0.839	D	0.6%
Golden State Freeway (I-5)	AM	N/B	6	12,000	283,358	8,820	0.735	C	1,243	284,601	38	8,858	0.738	C	0.4%
at Foothill Fwy (Rte 210), Truck		S/B	6	12,000		11,691	0.974	E			36	11,727	0.977	E	0.3%
	PM	N/B	6	12,000		11,487	0.957	E			32	11,519	0.960	E	0.3%
		S/B	6	12,000		9,024	0.752	C			57	9,081	0.757	C	0.6%
Golden State Freeway (I-5)	AM	N/B	2	4,000	40,903	1,683	0.421	B	1,243	42,146	38	1,721	0.430	B	2.2%
at BeginTruck Freeway		S/B	2	4,000		2,230	0.558	C			36	2,266	0.567	C	1.6%
	PM	N/B	2	4,000		2,191	0.548	C			32	2,223	0.556	C	1.4%
		S/B	2	4,000		1,721	0.430	B			57	1,778	0.445	B	3.2%
Golden State Freeway (I-5)	AM	N/B	2	4,000	55,723	2,320	0.580	C	1,243	56,966	38	2,358	0.590	C	1.6%
at Junction Rte 14 - Truck		S/B	2	4,000		3,075	0.769	C			36	3,111	0.778	D	1.2%
	PM	N/B	2	4,000		3,022	0.756	C			32	3,054	0.764	C	1.0%
		S/B	2	4,000		2,373	0.593	C			57	2,430	0.608	C	2.3%

Table 14(c) cont.
Future (2012) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2012) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2012) With Project Completion: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy (Rte 14) at San Fernando Road	AM	N/B	5	10,000	182,582	3,129	0.313	A	1,243	183,825	38	3,167	0.317	A	1.2%
		S/B	5	10,000		11,128	1.113	F(0)			36	11,164	1.116	F(0)	0.3%
	PM	N/B	5	10,000		9,916	0.992	E			32	9,948	0.995	E	0.3%
		S/B	5	10,000		4,205	0.421	B			57	4,262	0.426	B	1.3%
Antelope Valley Fwy (Rte 14) at Placerita Canyon, Santa Clarita	AM	N/B	5	10,000	169,541	2,896	0.290	A	1,243	170,784	38	2,934	0.293	A	1.3%
		S/B	5	10,000		10,265	1.027	F(0)			36	10,301	1.030	F(0)	0.3%
	PM	N/B	5	10,000		9,212	0.921	D			32	9,244	0.924	D	0.3%
		S/B	5	10,000		3,948	0.395	B			57	4,005	0.401	B	1.4%
Antelope Valley Fwy (Rte 14) at Sierra Highway	AM	N/B	5	10,000	158,870	2,713	0.271	A	1,243	160,113	38	2,751	0.275	A	1.4%
		S/B	5	10,000		9,617	0.962	E			36	9,653	0.965	E	0.4%
	PM	N/B	5	10,000		8,631	0.863	D			32	8,663	0.866	D	0.4%
		S/B	5	10,000		3,699	0.370	B			57	3,756	0.376	B	1.5%
Antelope Valley Fwy (Rte 14) at Sand Canyon Road, Santa	AM	N/B	5	10,000	124,488	2,165	0.217	A	1,243	125,731	38	2,203	0.220	A	1.7%
		S/B	5	10,000		7,676	0.768	C			36	7,712	0.771	D	0.5%
	PM	N/B	5	10,000		6,888	0.689	C			32	6,920	0.692	C	0.5%
		S/B	5	10,000		2,953	0.295	A			57	3,010	0.301	A	1.9%
Antelope Valley Fwy (Rte 14) at Agua Dulce Canyon Raod	AM	N/B	4	8,000	109,075	2,009	0.251	A	1,243	110,318	38	2,047	0.256	A	1.9%
		S/B	4	8,000		7,120	0.890	D			36	7,156	0.895	D	0.5%
	PM	N/B	4	8,000		6,391	0.799	D			32	6,423	0.803	D	0.5%
		S/B	4	8,000		2,738	0.342	A			57	2,795	0.349	A	2.0%
Antelope Valley Fwy (Rte 14) at Escondido Canyon Road	AM	N/B	3	6,000	106,704	1,982	0.330	A	1,243	107,947	38	2,020	0.337	A	1.9%
		S/B	3	6,000		7,028	1.171	F(0)			36	7,064	1.177	F(0)	0.5%
	PM	N/B	3	6,000		6,308	1.051	F(0)			32	6,340	1.057	F(0)	0.5%
		S/B	3	6,000		2,703	0.451	B			57	2,760	0.460	B	2.1%

Table 14(c) cont.
Future (2012) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2012) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2012) With Project Completion: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy (Rte 14) at Santiago Road	AM	N/B	3	6,000	105,518	2,702	0.450	B	1,243	106,761	38	2,740	0.457	B	1.4%
		S/B	3	6,000		6,012	1.002	F(0)			36	6,048	1.008	F(0)	0.6%
	PM	N/B	3	6,000		5,869	0.978	E			32	5,901	0.984	E	0.5%
		S/B	3	6,000		3,023	0.504	B			57	3,080	0.513	B	1.9%
Antelope Valley Fwy (Rte 14) at Vincent, Angeles Forest Hwy	AM	N/B	2	4,000	110,261	2,153	0.538	B	1,243	111,504	38	2,191	0.548	C	1.7%
		S/B	2	4,000		4,742	1.186	F(0)			36	4,778	1.195	F(0)	0.8%
	PM	N/B	2	4,000		4,742	1.186	F(0)			32	4,774	1.194	F(0)	0.7%
		S/B	2	4,000		2,491	0.623	C			57	2,548	0.637	C	2.2%
Antelope Valley Fwy (Rte 14) at Avenue S	AM	N/B	2	4,000	82,992	2,161	0.540	B	1,243	84,235	38	2,199	0.550	C	1.7%
		S/B	2	4,000		4,810	1.203	F(0)			36	4,846	1.212	F(0)	0.7%
	PM	N/B	2	4,000		4,695	1.174	F(0)			32	4,727	1.182	F(0)	0.7%
		S/B	2	4,000		2,419	0.605	C			57	2,476	0.619	C	2.3%
Antelope Valley Fwy (Rte 14) at Rte 138, Palmdale Bl,	AM	N/B	3	6,000	90,106	2,342	0.390	B	622	90,728	19	2,361	0.590	C	0.8%
		S/B	3	6,000		5,211	0.869	D			18	5,229	1.307	F(1)	0.3%
	PM	N/B	3	6,000		5,087	0.848	D			16	5,103	1.276	F(1)	0.3%
		S/B	3	6,000		2,620	0.437	B			29	2,649	0.662	C	1.1%
Antelope Valley Fwy (Rte 14) at Avenue M, Lancaster	AM	N/B	3	6,000	101,962	2,774	0.462	B	622	102,584	19	2,793	0.698	C	0.7%
		S/B	3	6,000		6,173	1.029	F(0)			18	6,191	1.548	F(3)	0.3%
	PM	N/B	3	6,000		6,025	1.004	F(0)			16	6,041	1.510	F(3)	0.3%
		S/B	3	6,000		3,104	0.517	B			29	3,133	0.783	D	0.9%
Antelope Valley Fwy (Rte 14) at Avenue L, Lancaster	AM	N/B	3	6,000	99,590	2,737	0.456	B	622	100,212	19	2,756	0.689	C	0.7%
		S/B	3	6,000		6,093	1.016	F(0)			18	6,111	1.528	F(3)	0.3%
	PM	N/B	3	6,000		5,947	0.991	E			16	5,963	1.491	F(3)	0.3%
		S/B	3	6,000		3,063	0.511	B			29	3,092	0.773	D	0.9%

Table 14(c) cont.
Future (2012) Freeway Volumes and Levels of Service

Location		Dir	No. Lane	Freeway Capacity	Future (2012) Without Project: Daily Volume	Peak Hour Volume	D/C* Ratio	LOS	Future (2012) With Project Completion: Daily Project Only	Daily Volume	Peak Hour Project Only	Peak Hour Volume	D/C* Ratio	LOS	% of Project Impact
Antelope Valley Fwy (Rte 14)	AM	N/B	3	6,000	62,837	1,766	0.294	A	622	63,459	19	1,785	0.446	B	1.1%
at Ave J-8/20th St W,		S/B	3	6,000		3,928	0.655	C			18	3,946	0.987	E	0.5%
Lancaster	PM	N/B	3	6,000		3,834	0.639	C			16	3,850	0.963	E	0.4%
		S/B	3	6,000		1,976	0.329	A			29	2,005	0.501	B	1.4%
Antelope Valley Fwy (Rte 14)	AM	N/B	3	6,000	52,166	1,495	0.249	A	622	52,788	19	1,514	0.379	B	1.3%
at Avenue I, Lancaster		S/B	3	6,000		3,327	0.555	C			18	3,345	0.836	D	0.5%
	PM	N/B	3	6,000		3,248	0.541	C			16	3,264	0.816	D	0.5%
		S/B	3	6,000		1,672	0.279	A			29	1,701	0.425	B	1.7%
Antelope Valley Fwy (Rte 14)	AM	N/B	2	4,000	43,274	1,224	0.306	A	622	43,896	19	1,243	0.311	A	1.5%
at Avenue G		S/B	2	4,000		2,726	0.682	C			18	2,744	0.686	C	0.7%
	PM	N/B	2	4,000		2,661	0.665	C			16	2,677	0.669	C	0.6%
		S/B	2	4,000		1,370	0.343	A			29	1,399	0.350	A	2.1%

*D/C is the Demand to Capacity Ratio

MITIGATION MEASURES

As indicated in this project traffic analysis, significant impacts are created by the proposed project during Phase I construction, Phase II construction and at project completion. Improvements should be in place or guaranteed satisfactory to the City of Los Angeles prior to initiating each phase of construction. Prior to Phase I Construction improvements at Bradley Avenue/Tuxford Street, I-5 Southbound On/Off Ramps/Penrose Street, and Bradley Avenue/Penrose Street. Prior to Phase II Construction improvement measures at San Fernando Road/Sheldon Street, San Fernando Road/Tuxford Street, and Glenoaks Avenue/Tuxford Street should be in place. Implementation of improvements as noted below will mitigate all impacts below a level of significance.

PHASE I CONSTRUCTION

6. Bradley Avenue and Tuxford Street – PM Peak Hour – Prohibit parking on the north side of Tuxford Street east of Bradley Avenue and on the south side of Tuxford Street west of Bradely Avenue to convert existing east and westbound lane configurations from left turn lane, through lane and shared through/right to a dedicated left turn lane, two through lanes and dedicated right turn lane. Participate in the contribution towards funding for the ATSAC/ATCS signal system improvements.

8. I-5 Southbound On/Off Ramps and Penrose Street – PM Peak Hour – Design and install a new traffic signal at this currently unsignalized location. Caltrans approval will be required to implement this improvement.

9. Bradley Avenue and Penrose Street – PM Peak Hour – Convert existing single southbound left/through/right shared lane to a dedicated right-turn only lane and one

through/right shared lane. Improve eastbound lane configurations from one left-turn only lane and one through lane to one left-turn only lane and one through/right shared lane

Implementation of these improvements reduce the impacts below a level of significance as demonstrated below in Table 15 (a).

Table 15(a-1)
Summary of Critical Movement Analysis with Mitigation
Construction Phase I Without Fill Dirt

No.	Intersection	Peak Hour	Without Project CMA	LOS	With Project W/o Fill CMA	LOS	Impact		With Project + Mitigation CMA	LOS	Impact
6.	Bradley Avenue & Tuxford Street	AM	0.593	A	0.657	B	0.064		0.474	A	-0.119
		PM	1.006	F	1.179	F	0.173	*	0.984	E	-0.022
8.	I-5 SB On/Off Ramps & Penrose Street	AM	0.609	B	0.673	B	0.064		0.538	A	-0.071
		PM	0.696	B	0.792	C	0.096	*	0.633	B	-0.063
9.	Bradley Avenue & Penrose Street	AM	0.505	A	0.570	A	0.065		0.490	A	-0.015
		PM	0.611	B	0.716	C	0.105	*	0.604	B	-0.007

* Denotes a significant project traffic impact, prior to mitigation implementation.

Table 15(a-2)
Summary of Critical Movement Analysis with Mitigation
Construction Phase I With Fill Dirt

No.	Intersection	Peak Hour	Without Project CMA	LOS	With Project CMA	LOS	Impact		With Project + Mitigation CMA	LOS	Impact
6.	Bradley Avenue & Tuxford Street	AM	0.593	A	0.667	B	0.074		0.485	A	-0.108
		PM	1.006	F	1.093	F	0.087	*	0.932	E	-0.074
8.	I-5 SB On/Off Ramps & Penrose Street	AM	0.609	B	0.683	B	0.074		0.546	A	-0.063
		PM	0.696	B	0.814	D	0.118	*	0.651	B	-0.045
9.	Bradley Avenue & Penrose Street	AM	0.505	A	0.586	A	0.081		0.501	A	-0.004
		PM	0.611	B	0.734	C	0.123	*	0.616	B	0.005

* Denotes a significant project traffic impact, prior to mitigation implementation.

PHASE II CONSTRUCTION

1. San Fernando Road and Sheldon Street – PM Peak Hour – Participate in the contribution towards funding for the City of Los Angeles expanded signal system improvement where traffic signals are interconnected known as Automated Traffic Surveillance and Control (ATSAC)/Adaptive Traffic Control System (ATCS). This improvement provides for increased capacity at the intersection. The ATSAC/ATCS provides signal synchronization through monitoring upstream and downstream traffic volumes and delay. The synchronization is enhanced through computer enhancement and manual monitoring by a centralized control system.

5. San Fernando Road and Tuxford Street – PM Peak Hour – Same as Phase I improvement.

6. Bradley Avenue and Tuxford Street – PM Peak Hour – Same as Phase I improvement.

7. Glenoaks Boulevard and Tuxford Street – AM and PM Peak Hour – Participate in the contribution towards funding for the ATSAC/ATCS expanded signal system improvements.

Implementation of the Phase I construction improvements mitigate these impacts to below a level of significance as demonstrated below in Table 15(b).

Table 15(b)
Summary of Critical Movement Analysis with Mitigation
Construction Phase II

		Peak	Without Project		With Project			W/ Project + Mitigation		
No.	Intersection	Hour	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
1.	San Fernando Road &	AM	0.774	C	0.783	C	0.009	0.683	B	-0.091
	Sheldon Street	PM	0.935	E	0.952	E	0.017 *	0.852	D	-0.083
5.	San Fernando Road &	AM	0.724	C	0.738	C	0.014	0.638	B	-0.086
	Tuxford Street	PM	0.895	D	0.905	E	0.010 *	0.805	D	-0.090
6.	Bradley Avenue &	AM	0.604	B	0.683	B	0.079	0.542	A	-0.062
	Tuxford Street	PM	1.027	F	1.072	F	0.045 *	0.950	E	-0.077
7.	Glenoaks Boulevard &	AM	0.806	D	0.826	D	0.020 *	0.726	C	-0.080
	Tuxford Street	PM	0.902	E	0.913	E	0.011 *	0.813	D	-0.089

PHASE II COMPLETE

1. San Fernando Road and Sheldon Street – PM Peak Hour – Same as Phase II improvement

6. Bradley Avenue and Tuxford Street – AM and PM Peak Hour Hour – Same as Phase I improvement

7. Glenoaks Boulevard and Tuxford Street – PM Peak Hour – Same as Phase II improvement

Implementation of the Phase I construction improvements continues to mitigate these impacts to below a level of significance as demonstrated below in Table 15(c).

Table 15(c)
Summary of Critical Movement Analysis with Mitigation
Phase II Project Completion

		Peak	Without Project		With Project			With Project + Mitigation		
No.	Intersection	Hour	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
1.	San Fernando Road &	AM	0.833	D	0.841	D	0.008	0.741	C	-0.092
	Sheldon Street	PM	1.007	F	1.022	F	0.015 *	0.922	E	-0.085
6.	Bradley Avenue &	AM	0.651	B	0.710	C	0.059 *	0.516	A	-0.135
	Tuxford Street	PM	1.109	F	1.143	F	0.034 *	0.990	E	-0.119
7.	Glenoaks Boulevard &	AM	0.863	D	0.881	D	0.018	0.781	C	-0.082
	Tuxford Street	PM	0.967	E	0.978	E	0.011 *	0.878	D	-0.089

* Denotes a significant project traffic impact, prior to mitigation implementation.