CITY COUNCIL
REGULAR
MEETING

OCTOBER 09, 2012
7:00 PM

AGENDA

Melody Carruth, Mayor
Joel Lautenschleger, Mayor Pro Tempore **Barbara Kogerman, Council Member**
Randal Bressette, Council Member **L. Allan Songstad, Jr., Council Member**

Location: City Council Chamber, 24035 El Toro Road, Laguna Hills, California 92653

Any person wishing to address the City Council/Planning Agency on any matter, whether or not it appears on this Agenda, is asked to complete a pink "Request to Speak" form available on the table at the back of the Chamber. The completed form is to be submitted to the City Clerk prior to an individual being heard by the City Council/Planning Agency. Completion of the form is voluntary. All persons may attend the meeting regardless of whether this form is completed.

Members of the public wishing to address the City Council can do so during the Public Comments portion of the Agenda with a time limitation of three minutes per person, an overall time limit of ten minutes for any one subject, and a total time limit of thirty minutes for Public Comments. If you are commenting on an Agenda item, your comments will be heard at the time that item is scheduled on the Agenda. If you are addressing the City Council on an item not listed on the Agenda, the City Council is prohibited by law from discussing or taking any action on that item.

CALL TO ORDER

Resolution No. 96-04-09-1 established rules of decorum for public meetings held by the City of Laguna Hills. Resolution No. 96-04-09-1 is available on the table at the back of the City Council Chamber.

PLEDGE OF ALLEGIANCE: COUNCIL MEMBER KOGERMAN

ROLL CALL OF CITY COUNCIL MEMBERS

1. PRESENTATIONS AND PROCLAMATIONS

1.1 LAGUNA HILLS HIGH SCHOOL STUDENT LIAISON

RECOMMENDATION: THAT THE CITY COUNCIL RECEIVE AN ORAL REPORT FROM LAGUNA HILLS HIGH SCHOOL STUDENT LIAISON ADAM WONG.

1.2 EL TORO WATER DISTRICT PRESENTATION REGARDING RECYCLED WATER EXPANSION PROJECT

RECOMMENDATION: THAT THE CITY COUNCIL RECEIVE A PRESENTATION FROM THE EL TORO WATER DISTRICT REGARDING THEIR RECYCLED WATER EXPANSION PROJECT.

2. PUBLIC COMMENTS

This is the time to address the City Council on any matter not listed on this Agenda that is within the subject matter jurisdiction of the City Council. Public Comments are limited to three minutes per person, an overall time limit of ten minutes for any one subject, and a total time limit of thirty minutes.

3. MINUTES

3.1 REGULAR MEETING, SEPTEMBER 25, 2012

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE THE MINUTES OF THE SEPTEMBER 25, 2012, REGULAR MEETING.

4. CONSENT CALENDAR

All matters listed under “CONSENT CALENDAR” are considered to be routine and will be enacted by one motion approving the recommendation listed on the Agenda. There will be no separate discussion unless Members of the City Council or Staff request specific items be removed from the Consent Calendar.

4.1 MOTION TO APPROVE THE READING BY TITLE OF ALL ORDINANCES AND RESOLUTIONS, SAID TITLES, WHICH APPEAR ON THE PUBLIC AGENDA, SHALL BE DETERMINED TO HAVE BEEN READ BY TITLE AND FURTHER READING WAIVED

RECOMMENDATION: THAT THE CITY COUNCIL WAIVE READING OF ORDINANCES AND RESOLUTIONS.

4.2 APPROVAL OF WARRANT REGISTER FOR PERIOD ENDED OCTOBER 9, 2012

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE THE WARRANT REGISTER IN THE AMOUNT OF $539,565.43.

4.3 AMENDMENT NO. 15 TO AGREEMENT NO. C-95-978 BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITY OF LAGUNA HILLS FOR COMBINED TRANSPORTATION FUNDING PROGRAMS PROJECT

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE AMENDMENT NO. 15 TO AGREEMENT NO. C-95-978 BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITY OF LAGUNA HILLS FOR COMBINED TRANSPORTATION FUNDING PROGRAMS PROJECT, AUTHORIZE THE MAYOR TO EXECUTE THE AGREEMENT, AND AUTHORIZE THE CITY CLERK TO ATTEST THERETO.

4.4 AMENDMENT NO. 1 TO PROFESSIONAL SERVICES AGREEMENT WITH STV INCORPORATED FOR THE ENVIRONMENTAL CLEARANCE AND DESIGN OF THE WIDENING OF PASEO DE VALENCIA, CIP NO. 145A

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE AMENDMENT NO. 1 TO PROFESSIONAL SERVICES AGREEMENT WITH STV INCORPORATED, AUTHORIZE THE MAYOR TO SIGN AND AUTHORIZE THE CITY CLERK TO ATTEST THERETO.

4.5 MEMORANDUM OF UNDERSTANDING NO. C-2-1592 BY AND BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITIES OF IRVINE, LAGUNA HILLS, LAGUNA WOODS, LAKE FOREST AND COUNTY OF ORANGE FOR AMENDMENT OF THE MASTER PLAN OF ARTERIAL HIGHWAYS

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE MEMORANDUM OF UNDERSTANDIGN NO. C-2-1592 BY AND BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITIES OF IRVINE, LAGUNA HILLS, LAGUNA WOODS, LAKE FOREST AND COUNTY OF ORANGE FOR AMENDMENT OF THE MASTER PLAN OF ARTERIAL HIGHWAYS AND AUTHORIZE THE CITY MANAGER TO EXECUTE THE MEMORANDUM OF UNDERSTANDING.

4.6 PROGRESS PAYMENT NO. 3, FINAL, FOR TURF RENOVATION LAGUNA HILLS COMMUNITY CENTER AND SPORTS COMPLEX, CIP NO. 238

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE PROGRESS PAYMENT NO. 3, FINAL, IN THE NET AMOUNT OF $1,620.00, TO CSA HOLDINGS INC., DBA SPORTS FIELD INSTALLATION SPORTS FIELD SERVICES, FOR TURF RENOVATION LAGUNA HILLS COMMUNITY CENTER AND SPORTS COMPLEX, CIP NO. 238, AND AUTHORIZE THE FILING OF THE NOTICE OF COMPLETION AND SUBSEQUENT RELEASE OF

RETENTION IN 35 DAYS, IF NO LIENS HAVE BEEN FILED.

4.7 PROGRESS PAYMENT NO. 18 FOR LA PAZ ROAD WIDENING AT I-5 IMPROVEMENT PROJECT, CIP NO. 159

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE PROGRESS PAYMENT NO. 18, IN THE NET AMOUNT OF $280,167.44, AND CONTRACT CHANGE ORDER NO. 6 TO SEMA CONSTRUCTION, INC., FOR THE LA PAZ ROAD WIDENING AT I-5 IMPROVEMENT PROJECT, CIP NO. 159.

ITEMS REMOVED FROM THE CONSENT CALENDAR

5. PLANNING AGENCY

5.1 ROLL CALL OF PLANNING AGENCY MEMBERS

5.2 PUBLIC COMMENTS

This is the time to address the Planning Agency on any matter not listed on this Agenda that is within the subject matter jurisdiction of the Planning Agency. Public Comments are limited to three minutes per person, an overall time limit of ten minutes for any one subject, and a total time limit of thirty minutes.

5.3 MINUTES

5.3.1 REGULAR MEETING, SEPTEMBER 25, 2012

RECOMMENDATION: THAT THE PLANNING AGENCY APPROVE THE MINUTES OF THE SEPTEMBER 25, 2012, REGULAR MEETING.

5.4 PLANNING AGENCY PUBLIC HEARINGS

5.4.1 MINOR SITE DEVELOPMENT PERMIT/PARKING USE PERMIT NO. 9-12-2372, A REQUEST BY WBSA ARCHITECTS INC., ON BEHALF OF SADDLEBACK MEMORIAL MEDICAL CENTER, A CALIFORNIA NON-PROFIT CORPORATION, FOR A JOINT USE PARKING PERMIT TO ESTABLISH OFF-SITE STAFF PARKING FOR USE BY MEMORIAL CARE CANCER TREATMENT CENTER, WHICH PLANS TO OCCUPY THE EXISTING BUILDING AT 24302 PASEO DE VALENCIA, AND FOR A MINOR SITE DEVELOPMENT PERMIT FOR A 3,160 SQUARE FOOT BUILDING ADDITION AND MINOR SITE IMPROVEMENTS

RECOMMENDATION: THAT THE PLANNING AGENCY: (1) CONDUCT A PUBLIC HEARING; AND (2) ADOPT A RESOLUTION ENTITLED, "A RESOLUTION OF THE PLANNING AGENCY OF THE CITY OF LAGUNA HILLS, CALIFORNIA, APPROVING MINOR SITE DEVELOPMENT PERMIT/PARKING USE PERMIT NO. 9-12-2372, A REQUEST BY WBSA ARCHITECTS INC., ON BEHALF OF SADDLEBACK MEMORIAL MEDICAL CENTER, A CALIFORNIA NON-PROFIT CORPORATION, FOR A JOINT USE PARKING PERMIT TO ESTABLISH OFF-SITE STAFF PARKING FOR USE BY MEMORIAL CARE CANCER TREATMENT CENTER, WHICH PLANS TO OCCUPY THE EXISTING BUILDING AT 24302 PASEO DE VALENCIA, AND FOR A MINOR SITE DEVELOPMENT PERMIT FOR A 3,160 SQUARE FOOT BUILDING ADDITION AND MINOR SITE IMPROVEMENTS."

PLANNING AGENCY ADJOURNMENT

6. CITY COUNCIL PUBLIC HEARINGS

7. ADMINISTRATIVE REPORTS

7.1 City Manager

7.2 Assistant City Manager

7.2.1 LABOR NEGOTIATIONS PROCESS

RECOMMENDATION: THAT THE CITY COUNCIL RECEIVE AND FILE THIS REPORT.

7.3 City Clerk

7.3.1 CLARIFICATION OF MUNICIPAL CODE FOR TERMS OF OFFICE FOR THE PARKS AND RECREATION COMMISSION AND TRAFFIC COMMISSION

RECOMMENDATION: THAT THE CITY COUNCIL INTRODUCE AN ORDINANCE ENTITLED: AN ORDINANCE OF THE CITY OF LAGUNA HILLS, CALIFORNIA, AMENDING CHAPTER 2-28.070 OF THE LAGUNA HILLS MUNICIPAL CODE CONCERNING THE TERMS OF OFFICE FOR THE PARKS AND RECREATION COMMISSION AND THE TRAFFIC COMMISSION.

7.4 Public Services Director/City Engineer

7.4.1 EQUESTRIAN TRAIL CROSSING EVALUATION

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE: (1) THE ADDITION OF SIGNAGE AND STRIPING AS DEPICTED IN THE ATTACHED VICINITY MAPS AT THE EQUESTRIAN TRAIL CROSSINGS OF NELLIE GAIL ROAD EAST OF LOST COLT DRIVE AND NOTTINGHAM COURT SOUTH OF OSO PARKWAY; (2) IMPLEMENTATION OF ADDITIONAL TRAFFIC SPEED ENFORCEMENT WITH A REVIEW OF TRAFFIC CONDITIONS IN SIX MONTHS; AND (3) ESTABLISHMENT OF AN EQUESTRIAN AD HOC COMMITTEE TO PRIORITIZE AND EVALUATE OTHER EQUESTRIAN TRAIL CROSSING LOCATIONS IN THE COMMUNITY.

8. MATTERS AGENDIZED AND PRESENTED BY CITY COUNCIL MEMBERS AND MAYOR

9. CITY COUNCIL MEMBER COMMENTS

10. CLOSED SESSION

The City Council shall convene in Closed Session, in the City Hall Conference Room, to consider the following matters:

10.1 PUBLIC EMPLOYEE PERFORMANCE EVALUATION

Pursuant to Government Code Section 54957(b)(1)
Public Employee Title: City Manager - Annual Performance Evaluation

10.2 CONFERENCE WITH LABOR NEGOTIATOR

Pursuant to Government Code Section 54957.6(a)
City Designated Representative: Bruce Channing, City Manager, and
Don White, Assistant City Manager
Employee Organization: Laguna Hills City Employees Association
City Employee Organization

Reconvene in regular session in the City Council Chamber.

Report on whether any reportable action was taken on matters considered during Closed Session.

ADJOURNMENT

The next Regular Meeting of the City Council will be October 23, 2012, at 7:00 PM, in the City Council Chamber, located at 24035 El Toro Road, Laguna Hills, California.

CERTIFICATION

I, PEGGY J. JOHNS, City Clerk of the City of Laguna Hills, do hereby certify that a copy of the foregoing Agenda was posted at Laguna Hills City Hall, Laguna Hills Community Center, and La Paz Center by October 5, 2012, at 5:00PM.

Peggy J. Johns

PEGGY J. JOHNS, CITY CLERK

October 5, 2012

DATE

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the office of the City Clerk at (949) 707-2635. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to assure accessibility to this meeting.

Materials related to an item on this Agenda submitted to the City Council after distribution of the agenda packet are available for public inspection in the City Clerk's Office at 24035 El Toro Road, Laguna Hills, California, during normal business hours.

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: **OCTOBER 9, 2012**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **PEGGY J. JOHNS**
CITY CLERK

ISSUE: **EL TORO WATER DISTRICT PRESENTATION REGARDING RECYCLED WATER EXPANSION PROJECT**

RECOMMENDATION: **THAT THE CITY COUNCIL RECEIVE A PRESENTATION FROM THE EL TORO WATER DISTRICT REGARDING THEIR RECYCLED WATER EXPANSION PROJECT.**

SUMMARY:

The El Toro Water District is undertaking a comprehensive, multi-phase Recycled Water Expansion Project that will enhance local water supplies and reliability, reduce dependence on imported water and expand recycled water deliveries to meet future customer demand. Mr. Bob Hill, General Manager of the El Toro Water District, will be making a short presentation to the City Council on this issue.

CITY OF LAGUNA HILLS, CALIFORNIA
CITY COUNCIL/PLANNING AGENCY REGULAR MEETING
MINUTES
SEPTEMBER 25, 2012

CALL TO ORDER

Mayor Carruth called the Regular Meeting of the City Council of the City of Laguna Hills, California, to order at 7:00 PM in the Laguna Hills City Council Chamber, 24035 El Toro Road, Laguna Hills.

PLEDGE OF ALLEGIANCE: Council Member Songstad

ROLL CALL OF CITY COUNCIL MEMBERS

Present: Council Member Bressette, Council Member Kogerman, Council Member Songstad, Mayor Pro Tempore Lautenschleger, and Mayor Carruth

1. PRESENTATIONS AND PROCLAMATIONS

There were no Presentations and Proclamations.

2. PUBLIC COMMENTS

DARK HORSE COMMITTEE

Mike Bland, Laguna Hills, gave an update on the Dark Horse Committee.

2.1 LAGUNA HILLS HIGH SCHOOL STUDENT LIAISON

THE CITY COUNCIL RECEIVED AN ORAL REPORT FROM LAGUNA HILLS HIGH SCHOOL STUDENT LIAISON ADAM WONG.

3. MINUTES

3.1 REGULAR MEETING, SEPTEMBER 11, 2012

MOTION TO APPROVE THE MINUTES OF THE SEPTEMBER 11, 2012, REGULAR MEETING, BY M/COUNCIL MEMBER BRESSETTE, S/COUNCIL MEMBER SONGSTAD.
APPROVED BY A VOTE OF 5-0.

4. CONSENT CALENDAR

MOTION TO APPROVE THE CONSENT CALENDAR, BY M/COUNCIL MEMBER BRESSETTE, S/MAYOR PRO TEMPORE LAUTENSCHLEGER. APPROVED BY A VOTE OF 5-0.

4.1 MOTION TO APPROVE THE READING BY TITLE OF ALL ORDINANCES AND RESOLUTIONS, SAID TITLES, WHICH APPEAR ON THE PUBLIC AGENDA, SHALL BE DETERMINED TO HAVE BEEN READ BY TITLE AND FURTHER READING WAIVED

THE CITY COUNCIL WAIVED READING OF ORDINANCES AND RESOLUTIONS.

4.2 APPROVAL OF WARRANT REGISTER FOR PERIOD ENDED SEPTEMBER 25, 2012

THE CITY COUNCIL APPROVED THE WARRANT REGISTER IN THE AMOUNT OF $2,214,770.16.

4.3 AUTHORIZATION TO ADVERTISE FOR BIDS FOR THE COMMUNITY CENTER BUILDING REFURBISHMENT, CIP NO. 513A

THE CITY COUNCIL APPROVED THE PLANS AND SPECIFICATIONS FOR THE COMMUNITY CENTER BUILDING REFURBISHMENT, CIP NO. 513A, AUTHORIZED THE ADVERTISEMENT FOR BIDS OF THE PROJECT, AND AUTHORIZED THE DIRECT PURCHASE OF WALL CAPS FROM QUICKCRETE CORPORATION.

4.4 PROGRESS PAYMENT NO. 2 FOR CITYWIDE PAVEMENT REHABILITATION PROJECT, CIP NO. 101-H

THE CITY COUNCIL APPROVED PROGRESS PAYMENT NO. 2, IN THE NET AMOUNT OF $1,177,371.79, TO ALL AMERICAN ASPHALT, FOR CITYWIDE PAVEMENT REHABILITATION PROJECT, CIP NO. 101-H.

5. PLANNING AGENCY

Mayor Carruth recessed the City Council meeting and acting in the capacity of Chair, called the regular meeting of the Planning Agency of the City of Laguna Hills, California, to order at 7:13 PM.

5.1 ROLL CALL OF PLANNING AGENCY MEMBERS

Present: Chair Carruth, Vice Chair Lautenschleger, Agency Member Bressette, Agency Member Kogerman, and Agency Member Songstad

5.2 PUBLIC COMMENTS

There were no Public Comments.

5.3 MINUTES

5.3.1 REGULAR MEETING, SEPTEMBER 11, 2012

MOTION TO APPROVE THE MINUTES OF THE SEPTEMBER 11, 2012, REGULAR MEETING, BY M/AGENCY MEMBER SONGSTAD, S/AGENCY MEMBER BRESSETTE.
APPROVED BY A VOTE OF 5-0.

5.4 PLANNING AGENCY PUBLIC HEARINGS

5.4.1 CONDITIONAL USE PERMIT NO. 08-12-2346, A REQUEST BY H2O PARTNERS, LLC., TO OPERATE AN INDOOR TRAMPOLINE PARK AT 23251 AVENIDA DE LA CARLOTA IN THE (FC) FREEWAY COMMERCIAL ZONING DISTRICT.

Chair Carruth opened the Public Hearing.

Joshua Hunter, Applicant, spoke on Conditional Use Permit No. 08-12-2345, a request by H20 Partners, LLC., to operate an indoor trampoline park.

Greg Briggs, representative of H20 Partners, spoke on Conditional Use Permit No. 08-12-2345, a request by H20 Partners, LLC., to operate an indoor trampoline park. Mr. Briggs indicated he read and agreed to all of the Conditions of Approval.

Chair Carruth closed the Public Hearing.

THE PLANNING AGENCY ADOPTED RESOLUTION NO. PA2012-09-25-1, A RESOLUTION OF THE PLANNING AGENCY OF THE CITY OF LAGUNA HILLS, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT NO. 08-12-2346, A REQUEST BY H20 PARTNERS, LLC., TO OPERATE AN INDOOR TRAMPOLINE PARK AT 23251 AVENIDA DE LA CARLOTA IN THE (FC) FREEWAY COMMERCIAL ZONING DISTRICT, BY M/AGENCY MEMBER BRESSETTE, S/AGENCY MEMBER KOGERMAN.
APPROVED BY A VOTE OF 5-0.

PLANNING AGENCY ADJOURNMENT

Mayor Carruth reconvened the City Council meeting at 7:22 PM. All Council Members were present.

6. CITY COUNCIL PUBLIC HEARINGS

There were no City Council Public Hearings.

7. ADMINISTRATIVE REPORTS

7.1 City Manager

City Manager Channing explained the process of the City non-management employee negotiations that were going to be discussed in Closed Session.

8. MATTERS AGENDIZED AND PRESENTED BY CITY COUNCIL MEMBERS AND MAYOR

8.1 MAYOR CARRUTH

8.1.1 RESPONSE TO GRAND JURY REPORT ENTITLED "THE USE OF GOVERNMENT INFLUENCE ON A PRIVATE EDUCATIONAL INSTITUTION"

Seven Laguna Hills residents spoke in opposition to the City's Response to the Grand Jury Report entitled: "The Use of Government Influence on a Private Educational Institutions."

THE CITY COUNCIL AUTHORIZED THE MAYOR TO SIGN THE LETTER OF RESPONSE TO THE GRAND JURY'S JULY 5, 2012, REPORT REGARDING THE USE OF GOVERNMENT INFLUENCE ON A PRIVATE EDUCATIONAL INSTITUTION, AS AMENDED TO CHANGE THE FIRST PARAGRAPH ON THE SECOND PAGE, SECOND SENTENCE TO READ: "THE REPORT CONTAINS INFERENCES, CONJECTURE, AND INNUENDOES NOT APPLICABLE TO THE OPERATIONS OF THE CITY OF LAGUNA HILLS," DELETE THE REMAINDER OF THAT PARAGRAPH, AND SUBMIT THE RESPONSE TO THE PRESIDING JUDGE OF THE ORANGE COUNTY SUPERIOR COURT AS REQUIRED BY STATE LAW, BY M/MAYOR CARRUTH, S/MAYOR PRO TEMPORE LAUTENSCHLEGER.
APPROVED BY A VOTE OF 3-1-1 (COUNCIL MEMBER KOGERMAN VOTED NO, COUNCIL MEMBER SONGSTAD ABSTAINED).

9. CITY COUNCIL MEMBER COMMENTS

Mayor Carruth reported on her attendance at the Southern California City Clerk's Association Meeting on Thursday, September 20, 2012. Mayor Carruth indicated that she was pleased to have given the Oath of Office to City of Laguna Hills City Clerk, Peggy Johns, as the incoming Chair of the organization.

Mayor Carruth indicated that two new businesses had opened up in the City of Laguna Hills, Chase Bank and Athena College of Beauty.

10. CLOSED SESSION

Dore Gilbert, Laguna Hills, spoke on the Conference with Labor Negotiator.

Andrew Blount, Laguna Hills, spoke on the Conference with Labor Negotiator.

Dr. Ragu Mathur, Laguna Hills, spoke on the Conference with Labor Negotiator.

Mayor Carruth recessed the meeting into Closed Session at 8:23 PM.

10.1 PUBLIC EMPLOYEE PERFORMANCE EVALUATION

Pursuant to Government Code Section 54957
Public Employee Title: City Manager

10.2 CONFERENCE WITH LABOR NEGOTIATOR

Pursuant to Government Code Section 54957.6(a)
City Designated Representative: Bruce Channing, City Manager, and Don White, Assistant City Manager
Employee Organization: Laguna Hills City Employees Association City Employee Organization

Mayor Carruth reconvened the meeting at 11:15 PM. All Council Members were present.

There was no reportable action taken in Closed Session.

ADJOURNMENT

There being no further business before the City Council at this session. Mayor Carruth declared the meeting adjourned at 11:16 PM.

_____
PEGGY J. JOHNS, CITY CLERK

ATTEST:

_____
MELODY CARRUTH, MAYOR

APPROVED AT MEETING OF _____

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: OCTOBER 09, 2012

TO: MAYOR AND COUNCIL MEMBERS

FROM: DONALD J. WHITE, ASSISTANT CITY MANAGER

ISSUE: APPROVAL OF WARRANT REGISTER FOR PERIOD ENDED OCTOBER 09, 2012.

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE THE WARRANT REGISTER IN THE AMOUNT OF $539,565.43.

SUMMARY:

In accordance with Government Code Section 37202, the attached Warrant Register reflects the disbursements of the City of Laguna Hills for the period reported thereon. The Assistant City Manager certifies and attests to its accuracy and the availability of funds for the payment thereof. These warrants are hereby submitted to the City Council for approval of payment.

Prepared by:

JANICE MATEO REYES
Finance Manager

Certified:

DONALD J. WHITE
Assistant City Manager

10-2-12
DATE

FISCAL IMPACT:

The warrant register total is $539,565.43.

ATTACHMENTS:

1. **Warrant Register**

CITY OF LAGUNA HILLS
WARRANT REGISTER
October 9, 2012

VENDOR	DESCRIPTION	CHECK NO.	AMOUNT
PREPAID WARRANTS:			
ALDERETE POOLS, INC.	*Refund, Pool Bond, CR# 43903*	8804055	$ 500.00
ALICEA, MIA	*Contract Instructor Fee, Dancing Fall Session, Community Services*	8804056	12,173.00
AT&T	*Communication Expense, Administrative Services Fax Line, Sep '12*	8804057	63.41
AT&T- CALNET 2	*Communication Expense, Alarm System, 2-Way Line, Switchboard, Modem, T-1 Line and Traffic Control, Sep '12*	8804075	2,137.66
AU-YEUNG, MELISSA	*Travel Reimbursement, Administrative Services, Sep '12*	8804076	95.92
COX COMMUNICATION	*Communication Expense, Traffic Control, Sep '12*	8804086	179.00
DEVRIES, GENNY	*Reimbursement, Training, Building, Sep '12*	8804058	180.00
EL TORO WATER DISTRICT	*Water Usage, Parks, Aug '12*	8804091	18,947.46
EVERBANK COMMERCIAL FINANCE	*Lease - Copier, City Hall, Sep '12*	8804094	221.04
JOHNS, PEGGY	*Reimbursement, Training, City Clerk, Sep '12*	8804059	128.00
KOGERMAN, BARBARA	*Reimbursement, Travel and Meeting Expense, LOCC, Sep '12*	8804104	474.87
LAUTENSCHLEGER, JOEL	*Reimbursement, Travel and Meeting Expense, LOCC, Sep '12*	8804106	217.33
OROS CONSULTING SERVICES, LLC	*Professional Fees, Computer Consulting Services, Sep '12*	8804060	5,443.75
RALPHS GROCERY COMPANY	*Program Supplies, Community Services, Aug - Sep '12*	8804120	99.38
REFUND, COMMUNITY SVCS PROGRAM	*J. Devera, V# 2002529.002*	8804061	185.00
REFUND, COMMUNITY SVCS PROGRAM	*P. Sachman, V# 2002535.002*	8804062	58.00
REFUND, FACILITY RENTAL DEPOSIT	*P. Alexander, V# 2002528.002*	8804063	500.00
REFUND, FACILITY RENTAL DEPOSIT	*T. Sullivan, V# 2002531.002*	8804064	500.00
REFUND, FACILITY RENTAL DEPOSIT	*Pacific Sun League V# 2002532.002*	8804065	500.00
REFUND, FACILITY RENTAL DEPOSIT	*D. Medina, V# 2002526.002*	8804066	470.00
REFUND, FACILITY RENTAL DEPOSIT	*Cargo Express Freight, V# 2002540.002*	8804122	500.00
REFUND, FACILITY RENTAL FEE	*Cargo Express Freight, V# 2002539.002*	8804121	3,700.00
REYES, JANICE MATEO	*Petty Cash Replenishment, Departmental Operating Expenditures, Sep '12*	8804123	681.68

CITY OF LAGUNA HILLS
WARRANT REGISTER
October 9, 2012

VENDOR	DESCRIPTION	CHECK NO.	AMOUNT
SADDLEBACK VALLEY UNIFIED	*Program Expense, 4th of July Event, Community Services*	8804067	916.35
SAN DIEGO GAS & ELECTRIC	*Electric Usage, Street Lights and Traffic Control, Aug '12*	8804068	9,606.91
SAN DIEGO GAS & ELECTRIC	*Electric Usage, Community Center and Street Lights, Aug '12*	8804126	13,189.91
SONGSTAD, ALLAN	*Reimbursement, Travel and Meeting Expense, LOCC, Sep '12*	8804129	614.66
SOUTHERN CALIFORNIA EDISON	*Electric Usage, Street Lights and Traffic Control, Aug '12*	8804069	1,213.19
SOUTHERN CALIFORNIA EDISON	*Electric Usage, Street Lights and Traffic Control, Sep '12*	8804131	1,348.33
SPARKLETTS	*Operating Supplies, Community Services, Aug '12*	8804070	71.71
SPRINT	*Communication Expense, Community Services, Aug '12*	8804071	150.11
	Total Prepaid Warrants:		**$ 75,066.67**
REGULAR WARRANTS:			
A. C. LANDSCAPE, INC.	*Water Management Services, Irrigation Repairs, Sep '12*	8804072	$ 1,182.61
ABRAMS, JOHN	*Program Expense, Deposit, Community Services, Dec '12*	8804073	100.00
BEE MAN, THE	*Bee Removal, Parks, Sep '12*	8804077	370.00
BSN SPORTS	*Program Supplies, Community Services, Sep '12*	8804078	158.29
BUREAU VERITAS NORTH AMERICA	*Professional Fees, NPDES CIP # 410*	8804079	2,477.50
C&D ELECTRIC, INC.	*Lighting Repairs, Parks, Sep '12*	8804080	3,194.44
C2 REPROGRAPHICS	*Printing Expense, Engineering, Sep '12*	8804081	45.86
CALIFORNIA OFFICE SYSTEMS	*Usage - Copier, City Hall, Aug '12*	8804082	304.15
CHARLES ABBOTT ASSOCIATES, INC	*Professional Fees, Plan Checking and Building & Safety Services, Aug '12*	8804083	7,378.21
COMPLETE OFFICE OF CALIFORNIA	*Office and Operating Supplies, Community Center, Sep '12*	8804085	146.09
CREATIVE KIDS PLAYHOUSE	*Contract Instructor Fee, Music Summer Session, Community Services*	8804087	1,411.20
CROP PRODUCTION SERVICES, INC.	*Program Expense, Community Services, Sep '12*	8804088	177.09
DALEY & HEFT, LLP	*Professional Fees, Legal Services, Jul '12*	8804089	486.55
DUNBAR ARMORED, INC.	*Courier Fee, Armored Transport, Sep '12*	8804090	106.57

CITY OF LAGUNA HILLS
WARRANT REGISTER
October 9, 2012

VENDOR	DESCRIPTION	CHECK NO.	AMOUNT
ELKINS, CHRISTINA	*Contract Instructor Fee, Dancing Summer Session, Community Services*	8804092	240.10
ENVIRONMENTAL SYS RESEARCH, INS	*Annual Maintenance, GIS System, Public Works, FY 12/13*	8804093	5,193.75
FAUBEL PUBLIC AFFAIRS	*Professional Fees, Combined Issue, City Views/Community Services Fall 2012 Activity Guide*	8804095	15,865.43
FEDERAL EXPRESS CORPORATION	*Delivery Services, Aug '12*	8804096	41.26
GREEN MART, INC.	*Operating Supplies, Parks, Sep '12*	8804097	818.90
HARTZOG & CRABILL, INC.	*Professional Fees, Traffic Engineering Services, Aug - Sep '12*	8804098	7,120.20
HDL, COREN & CONE	*CAFR Statistical Data, FY 11/12*	8804099	695.00
INTERNATIONAL CODE COUNCIL	*Membership, Building, FY 12/13*	8804100	125.00
IRON MOUNTAIN OFFSITE	*Off Site Data Storage, Aug '12*	8804101	208.26
JAMEY CLARK, INC.	*Miscellaneous Park Repairs, Janitorial Services and Graffiti Removal, Aug - Sep '12*	8804102	6,837.30
JOE A. GONSALVES & SON	*Professional Fees, Legislative Services, Oct '12*	8804103	2,900.00
LA OPINION LIMITED PARTNERSHIP	*Legal Advertising, City Clerk, Aug '12*	8804105	713.75
LINDY OFFICE PRODUCTS	*Operating Supplies, Sep '12*	8804107	49.52
LUCY, STEVEN	*Program Expense, Community Services, Oct '12*	8804108	450.00
MAILFINANCE, INC.	*Lease, Postage Meter, Aug - Oct '12*	8804109	582.13
MARTIN-RUSK, DINA	*Contract Instructor Fee, Zumba Summer Session, Community Services*	8804110	112.00
MOBILE MINI, INC.	*Storage Rental Fee, Community Services, Oct '12*	8804111	82.97
NIEVES LANDSCAPE, INC.	*Other Assorted Landscape Services, Sep '12*	8804112	1,619.17
OC DIV, LEAGUE OF CAL CITIES	*Meeting Expense, Administrative Services, Aug '12*	8804113	80.00
OFFICE SOLUTIONS	*Office and Operating Supplies, Sep '12*	8804114	568.35
ORANGE COUNTY REGISTER	*Subscription, Community Center, 09/21/12 - 11/16/12*	8804115	101.72
ORANGE COUNTY REGISTER-FREEDOM	*Legal Advertising, City Clerk, Aug '12*	8804116	205.42
P. W. GILLIBRAND CO., INC.	*Professional Fees, Community Center and Sports Field Renovation CIP # 238*	8804117	3,959.99
PARSONS BRINCKERHOFF	*Professional Fees, Engineering, La Paz Widening @ I-5 CIP # 159*	8804118	2,073.68
QUIKSILVER COURIER	*Delivery Service, Aug '12*	8804119	29.64

CITY OF LAGUNA HILLS
WARRANT REGISTER
October 9, 2012

VENDOR	DESCRIPTION	CHECK NO.	AMOUNT
RICHARD FISHER ASSOCIATES	*Professional Fees, On-Call Inspections, Sep '12*	8804124	1,380.00
RPW SERVICES, INC.	*Rodent Control, Parks, Aug '12*	8804125	1,560.00
SANTA FOR HIRE.COM	*Program Expense, Deposit, Community Services, Dec '12*	8804127	150.00
SEMA CONSTRUCTION, INC.	*Progress Payment #18, La Paz Widening @ I-5 CIP # 159*	8804128	280,167.44
SOPER, GREG	*Umpire Fees, Adult Softball, Community Services*	8804130	90.00
SPORTS FIELD SERVICES	*Progress Payment #3, Community Center and Sports Field Renovation CIP # 238*	8804132	1,620.00
STATE DEPARTMENT OF JUSTICE	*Pre-employment Fingerprinting, Aug '12*	8804133	32.00
WEST COAST ARBORISTS, INC.	*Tree Planting, Urban Reforestation, CIP # 320, Annual Street Maintenance CIP # 101 and Tree Trimming, Jul - Aug '12*	8804134	29,483.00
WEST PUBLISHING CORPORATION	*Subscription, City Clerk, Aug '12*	8804135	176.72
WILLDAN	*Professional Fees, Annual Street Maintenance CIP # 101*	8804136	45,417.50
WOODRUFF, SPRADLIN & SMART	*Professional Fees, Legal Services, Aug '12*	8804137	35,724.49
XEROX CORPORATION	*Lease - Copier, City Hall, Sep '12*	8804138	485.51
	Total Regular Warrants:		**$ 464,498.76**
	*****WARRANT REGISTER TOTAL*****		**$ 539,565.43**

10/9/2012 ITEM NO. 4.2

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: **OCTOBER 9, 2012**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **KENNETH H. ROSENFIELD**
PUBLIC SERVICES DIRECTOR/CITY ENGINEER

ISSUE: **AMENDMENT NO. 15 TO AGREEMENT NO. C-95-978 BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITY OF LAGUNA HILLS FOR COMBINED TRANSPORTATION FUNDING PROGRAMS PROJECT**

RECOMMENDATION: **THAT THE CITY COUNCIL APPROVE AMENDMENT NO. 15 TO AGREEMENT NO. C-95-978 BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITY OF LAGUNA HILLS FOR COMBINED TRANSPORTATION FUNDING PROGRAMS PROJECT, AUTHORIZE THE MAYOR TO EXECUTE THE AGREEMENT, AND AUTHORIZE THE CITY CLERK TO ATTEST THERETO.**

SUMMARY:

The City is a party to a cooperative agreement with the Orange County Transportation Authority (OCTA), Agreement No. C-95-978, which governs the City's duties associated with the expenditure of Measure M and Measure M-2 funds. The OCTA has prepared a technical amendment to the Agreement to add clarifying language governing project reviews, the financial audit timeframe and the return of any funds found not to be expended in accordance with OCTA's guidelines. Staff has determined the City will not have any difficulty complying with the new requirements in the proposed amendment. In order to remain eligible to receive Measure M-2 funds, it is necessary to approve the proposed Amendment No. 15 to Agreement No. C-95-978, attached. Approval is recommended.

ATTACHMENTS:

- Amendment No. 15

AMENDMENT NO. 15 TO

AGREEMENT NO. C-95-978

BETWEEN

ORANGE COUNTY TRANSPORTATION AUTHORITY

AND

CITY OF LAGUNA HILLS

FOR

COMBINED TRANSPORTATION FUNDING PROGRAMS PROJECT

THIS AMENDMENT NO. 15 is effective this _____ day of _____, 2012, by and between the Orange County Transportation Authority, a public corporation of the State of California (hereinafter referred to as "AUTHORITY"), and City of Laguna Hills, a municipal corporation (hereinafter referred to as "AGENCY").

WITNESSETH:

WHEREAS, by Agreement No. C-95-978 dated August 18, 1995, as last changed by Amendment No. 14 dated October 14, 2008, AUTHORITY and AGENCY entered into an agreement which determined that AGENCY was eligible to receive funding under the Combined Transportation Funding Programs (CTFP) as specified in the CTFP Manual and also the Bicycle and Pedestrian Facilities Program; and

WHEREAS, AUTHORITY is updating the audit language with no change to the maximum cumulative obligation; and

NOW, THEREFORE, it is mutually understood and agreed by AUTHORITY and AGENCY that Agreement No. C-95-978 is hereby amended in the following particulars only:

1. Amend **Item 5**, page 2 of 3, lines 18 through 23, to delete in its entirety and replace with:

"5. Upon close-out of each PROJECT(s) under this Agreement and before final payment is processed, AUTHORITY, or other agents of AUTHORITY, may perform a technical and or field review to ensure that CTFP policies and procedures were followed. In addition, an independent audit may be

performed within 5 years of AUTHORITY releasing the final payment for each PROJECT(s). If the audit determines that any of the activities performed are ineligible for CTFP funding or did not comply with CTFP policies and procedures, AGENCY shall return the amount of funding used to perform ineligible activity to AUTHORITY."

The balance of Agreement No. C-95-978 remains unchanged.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 15 to Agreement No. C-95-978 to be effective as of the date first above written.

CITY OF LAGUNA HILLS

By: _____

Melody Carruth
Mayor

ATTEST:

By: _____

Peggy J. Johns
City Clerk

APPROVED AS TO FORM:

By: _____

Gregory E. Simonian
City Attorney

Dated _____

ORANGE COUNTY TRANSPORTATION AUTHORITY

By: _____

Meena Katakia
Manager, Capital Projects

APPROVED AS TO FORM:

By: _____

Kennard R. Smart, Jr.
General Counsel

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: OCTOBER 9, 2012

TO: MAYOR AND COUNCIL MEMBERS

FROM: KENNETH H. ROSENFIELD
PUBLIC SERVICES DIRECTOR/CITY ENGINEER

ISSUE: AMENDMENT NO. 1 TO PROFESSIONAL SERVICES AGREEMENT WITH STV INCORPORATED FOR THE ENVIRONMENTAL CLEARANCE AND DESIGN OF THE WIDENING OF PASEO DE VALENCIA, CIP NO. 145A

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE AMENDMENT NO. 1 TO PROFESSIONAL SERVICES AGREEMENT WITH STV INCORPORATED, AUTHORIZE THE MAYOR TO SIGN AND AUTHORIZE THE CITY CLERK TO ATTEST THERETO.

SUMMARY:

A Public Information meeting to introduce the project concept of the widening of Paseo de Valencia from Kennington Drive to Laguna Hills Drive was held on April 16, 2012. During the course of this meeting, several residents expressed concern about existing settlement within their residential properties on Sunset Place and whether the potential widening of Paseo de Valencia would have any impact on this pre-existing condition. STV, Inc. is currently in the environmental evaluation and preliminary design stages of the project and has proposed an additional geotechnical investigation to confirm the in-situ soil conditions adjacent to the project site within the City greenbelt area southerly of Beckenham Street. An amendment to the STV, Inc. Professional Services Agreement is proposed in order to add this work to the Scope of Services in that Agreement. Approval of Amendment No. 1 is recommended.

BACKGROUND:

STV, Inc. was selected on December 13, 2011, to enter into a Professional Services Agreement for the Environmental Clearance and Design of the potential widening of Paseo de Valencia from Kennington Drive to Laguna Hills Drive. The project proposes to widen this arterial highway to complete the lane configuration of three travel lanes in each direction, add bicycle lanes, add pedestrian sidewalks, and install a street tree pattern and

landscaping. Following the completion of preliminary design sketches, a public information meeting was held on April 16, 2012.

Approximately 20 people attended the April 2012 public information meeting to review the project concepts. The residents were advised that environmental studies were being initiated to evaluate the environmental impacts of the project and this information would be shared with the residents in late fall 2012. STV, Inc. is currently preparing the environmental studies which will be presented to the City Council at a future meeting.

During this public information meeting, a few residents living on Sunset Place, which is accessed off of Beckenham Street, expressed concern about existing soil settlement within their residential properties on Sunset Place and whether the potential widening of Paseo de Valencia would have any impact on this pre-existing condition. The potential widening of Paseo de Valencia is estimated to be for a width of ten feet of a roadway that is approximately 75 feet from the property lines of the residences on Sunset Place. The resident's concerns cannot be directly related to a project that has not yet occurred and are likely not relevant given the distance of Paseo de Valencia to their homes. Nevertheless, Staff believes it prudent to evaluate the soils conditions within the City's property adjacent to the Sunset Place homes within the greenbelt southerly of Beckenham Street.

STV, Inc. was requested to prepare a proposal to supplement their Scope of Services to add a geotechnical investigation to confirm the in-situ soil conditions adjacent to the project site within the City greenbelt area southerly of Beckenham Street. An Amendment No. 1 to the Professional Services Agreement with STV, Inc. has been prepared by the Office of the City Attorney and is attached. Approval of this Amendment No. 1 is recommended.

FISCAL IMPACT:

Amendment No. 1 to the Professional Services Agreement with STV, Inc. for additional geotechnical evaluations has a cost of $13,605 and is within the budget for the project.

ATTACHMENTS:

- Amendment No. 1 to the Professional Services Agreement with STV, Inc.

AMENDMENT NO. 1
TO
PROFESSIONAL SERVICES AGREEMENT
(Paseo De Valencia Roadway Widening from Kennington Drive to Laguna Hills Drive)
STV, INC.

THIS FIRST AMENDMENT to the STV, INC. Professional Services Agreement (the "Amendment") is made and entered into to be effective the ____ day of October 2012, by and between the CITY OF LAGUNA HILLS, a municipal corporation organized and existing under the laws of the State of California (hereinafter referred to as the "City"), and STV, INC., a California corporation (hereinafter referred to as "Consultant"). City and Consultant are sometimes hereinafter individually referred to as "Party" and are hereinafter collectively referred to as the "Parties."

RECITALS

A. City and Consultant previously entered into a Professional Services Agreement for professional civil engineering, land surveying, geotechnical, landscape architecture, planning and related support services, in connection with the preliminary design, environmental clearance and final design of roadway improvements to widen Paseo de Valencia to six travel lanes meeting Master Plan of Arterial Highway standards between Kennington Drive and Laguna Hills Drive ("Project"), which agreement was made and entered into on December 13, 2011, (the "Agreement"). Sections 1.8 (Additional Services), 2.3 (Changes in Scope of Work), and 10.3 (Amendments) of the Agreement provide that the Agreement may be amended in writing at any time by mutual consent of the Parties.

B. The Parties now desire to amend the Agreement to authorize the Consultant to perform additional services beyond what was included within the Scope of Work set forth in Section 1.1 of the Agreement, to add additional documents to the Contract Documents set forth in Section 1.2, and to provide for additional compensation as set forth in Section 2.1 of the Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the Parties agree as follows:

AGREEMENT

1. Amendment to Section 1.1, entitled "Scope of Services and Standard of Performance," of the Agreement: Section 1.1 of the Agreement is hereby deleted in its entirety and replaced as follows:

"**1.1 Scope of Services and Standard of Performance**. In compliance with all terms and conditions of this Agreement, Consultant agrees to perform the

professional services set forth in the Proposal/Scope of Work, dated November 15, 2011, along with the Proposal/Scope of Work, dated August 1, 2012, which is attached hereto as Exhibit "A" and Exhibit "A-2" respectively (unless otherwise specified herein, Exhibit "A" and Exhibit A-2" are referred to herein collectively as Exhibit "A"), and is incorporated herein by reference (hereinafter referred to as the "Services" or "Work") for the Project. As a material inducement to the City entering into this Agreement, Consultant acknowledges and understands that the Services and Work contracted for under this Agreement require specialized skills and abilities and that, consistent with this understanding, Consultant's services and work shall be performed in a skillful and competent manner and shall be held to a standard of quality and workmanship prevalent in the industry for such service and work and with the standards recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional discipline necessary to perform the Services and Work and that it holds the necessary skills and abilities to satisfy the standard of work as set forth in this Agreement. Consultant represents and warrants that it and all of its employees and subcontractors providing services under this Agreement shall have sufficient skill and experience to perform the Services and Work assigned to them. All Services and Work shall be completed to the reasonable satisfaction of the City."

2. Amendment to Section 1.2, entitled "Contract Documents," of the Agreement: Section 1.2 of the Agreement is hereby deleted in its entirety and replaced as follows:

"**1.2 Contract Documents.** The Agreement between the Parties shall consist of the following: (1) this Agreement; (2) the Consultant's signed, original Proposals/Scopes of Work dated November 15, 2011, and August 1, 2012, ("Consultant's Proposal") and submitted to City; and, (3) the City's Request for Proposals dated October 14, 2011, not including the sample draft Professional Services Agreement contained therein, which shall all be referred to collectively hereinafter as the "Contract Documents." The Consultant's Proposals and the City's Request for Proposals, which are both attached hereto as Exhibits "A" and "B," respectively, are hereby incorporated by reference and are made a part of this Agreement. All provisions of this Agreement, the Consultant's Proposals, and the City's Request for Proposals shall be binding on the Parties. Should any conflict or inconsistency exist in the Contract Documents, the conflict or inconsistency shall be resolved by applying the provisions in the highest priority document, which shall be determined in the following order of priority: (1st) the terms and conditions of this Agreement; (2nd) the provisions of the City's Request for Proposals (Exhibit "B"); and (3rd) the provisions of the Consultant's Proposals (Exhibit "A")."

3. Amendment to Section 2.1, entitled "Maximum Contract Amount," of the Agreement: Section 2.1 of the Agreement is hereby deleted in its entirety and replaced as follows:

"**2.1** **Maximum Contract Amount**. For the Services rendered pursuant to this Agreement, Consultant shall be compensated by City in accordance with the Schedule of Compensation/Fees, which is attached hereto as Exhibit "A" and Exhibit "A-2" and is incorporated herein by reference, but not exceeding the total maximum contract amount of four hundred twelve thousand eight hundred seventy-one dollars and 00/100 ($412,871) (hereinafter referred to as the "Maximum Contract Amount") ($399,266 is allocated for the Scope of Work set forth in Exhibit "A," and $13,605 is allocated for the Scope of Work set forth in Exhibit "A-2"), except as may be provided pursuant to Section 1.8 above. The method of compensation shall be as set forth in Exhibit "A". Compensation for necessary expenditures for reproduction costs, telephone expenses, and transportation expenses must be approved in advance by the Contract Officer designated pursuant to Section 4.2 and will only be approved if such expenses are also specified in the Schedule of Compensation/Fees. The Maximum Contract Amount shall include the attendance of Consultant at all Project meetings reasonably deemed necessary by the City. Consultant shall not be entitled to any increase in the Maximum Contract Amount for attending these meetings. Consultant hereby acknowledges that it accepts the risk that the services identified in the Scope of Work may be more costly and/or time-consuming than Consultant anticipates, that Consultant shall not be entitled to additional compensation therefore, and that the provisions of Section 1.8 shall not be applicable to the services identified in the Scope of Work. The maximum amount of City's payment obligation under this section is the amount specified herein. If the City's maximum payment obligation is reached before the Consultant's Services under this Agreement are completed, consultant shall nevertheless complete the Work without liability on the City's part for further payment beyond the Maximum Contract Amount."

4. Addition of Exhibit "A-2" to the Agreement. Exhibit "A-2", the August 1, 2012, Proposal/Scope of Work, including the cover letter dated August 23, 2012, schedule of performance and schedule of fees, attached hereto and incorporated herein, shall be added and incorporated into the Agreement as Exhibit "A-2."

5. Full Force and Effect. This modifying Amendment is supplemental to the Agreement and is by reference made a part of said Agreement. All of the terms, conditions, and provisions, thereof, unless specifically modified herein, shall continue in full force and effect. In the event of any conflict or inconsistency between the provisions of this Amendment and any provisions of the Agreement, the provision of this Amendment shall in all respects govern and control.

6. Corporate Authority. The persons executing this Amendment on behalf of the Parties hereto warrant that (i) such party is duly organized and existing, (ii) they are duly authorized to execute and deliver this Amendment on behalf of said party, (iii) by so executing this Amendment, such party is formally bound to the provisions of

this Amendment, and (iv) the entering into this Amendment does not violate any provision of any other agreement to which said party is bound.

IN WITNESS WHERE OF, the Parties have executed and entered into this Amendment to the Agreement as of the date first written above.

"**CITY"**

CITY OF LAGUNA HILLS, a California municipal corporation

By: _____
Melody Carruth, Mayor

ATTEST:

By: _____
Peggy John, City Clerk

APPROVED AS TO FORM:

By:_____
Gregory E. Simonian,
City Attorney

"**CONSULTANT"**

STV, Inc., a California corporation

By:_____
William Matts, P.E.
Executive Vice President

By:_____
David L. Borgen, P.E.
Senior Vice President

EXHIBIT "A-2"

AUGUST 1, 2012 PROPOSAL/SCOPE OF WORK
INCLUDING,
AUGUST 23, 2012 COVER LETTER,
SCHEDULE OF PERFORMANCE
AND SCHEDULE OF COMPENSATION/FEES

August 23, 2012

Kenneth H. Rosenfield, PE
Director of Public Services
City of Laguna Hills
24035 El Toro Road
Laguna Hills CA 92653

Re: Paseo de Valencia Street Widening – Change Request 1, for Supplemental Geotechnical Investigations

Dear Ken:

Attached please find details from Group Delta Consultants, Inc. to perform Supplemental Geotechnical Investigations to address the concerns of some home owners voiced at the Public Information Meeting held on April 16, 2012

The summary of the proposed change request is as follows:

1. Coordination and Management by STV Incorporated Project Manager
   6 hours @ $200/hours $1,200

2. Research, Field Work, Analysis and Report by Group Delta Consultants, Inc. (see attached details) $12,405

TOTAL for Change Request 1 **$13,605**

We will commence on this task, on your approval and notice to proceed.

Please contact me at 949.278.7748 or tapas.dutta@stvinc.com, if you have any questions.

Thank you.

Sincerely,

Tapas Dutta, PE
Project Manager
STV, Incorporated

Attach

AN EMPLOYEE-OWNED COMPANY PROVIDING QUALITY SERVICE SINCE 1912 | 100 PACIFICA, SUITE 140
IRVINE, CALIFORNIA 92618-7438
(949) 727-3238 FAX: (949) 727-3019

GROUP DELTA CONSULTANTS

Geotechnical Engineering

Geology

Hydrogeology

Earthquake Engineering

Materials Testing & Inspection

Forensic Services

August 1, 2012

STV Incorporated
100 Pacifica, Suite 140
Irvine, CA 92618

Attention: Tapas Dutta, P.E.

Subject: Supplemental Geotechnical Investigation for the Proposed Widening of Paseo de Valencia Between Kennington Drive and Laguna Hills Drive Laguna Hills, California
GDC Project No. IR-556

Dear Tapas:

At your request and as directed by the City of Laguna Hills (City), Group Delta Consultants, Inc. (GDC) is pleased to provide this proposal to perform additional geotechnical investigation for the subject project.

BACKGROUND

Project Description and Previous Geotechnical Studies

STV is providing engineering services to the City of Laguna Hills (City) for the widening of an approximately 0.4 mile section of Paseo de Valencia located between Kennington Drive and Laguna Hills Drive in Laguna Hills, California. The project location is shown in Figure 1. GDC performed a geotechnical investigation for the project, and the results of this investigation and our geotechnical recommendations for project design and construction were presented in our report dated May 21, 2012.

Homeowner Concerns

As part of their community outreach efforts the City held a Public Information Meeting on April 16th, 2012. During and subsequent to the meeting numerous local homeowners and their homeowners associations (particularly those along Sunset Place West, as shown in Figure 2) submitted emails and comment cards voicing concerns and opposition to the project. In addition to general comments about open space encroachment, noise and need for soundwalls, pollution and related health concerns, reduced property values, and safety some homeowners cite existing problems with their homes and the concern that construction of the proposed project may exacerbate these problems. Some typical problems and concerns cited by the homeowners include the following:

10/9/2012 ITEM NO. 4.4

- **25015 Sunset Place West Resident**: House foundation is not level, there are cracks in foundation and walls, there is concern project demolition and construction, and moving traffic close to homes, will increase vibrations and make these problems worse
- **24045 Sunset Place West Resident:** Concern vibrations will affect the stability of the homes
- **25001 Sunset Place West Resident and Homeowners Association Secretary**: Houses are on fill, movement towards Paseo De Valencia and downward tilting has been observed, fence pilasters have tilted, vibration from construction and increased traffic may worsen conditions, problems have increased since a 3rd lane was added on PDV
- **24951 Sunset Place West Resident**: Project construction and additional traffic may impact the integrity of Sunset Place West slope and North Slope on Beckenham near PDV intersection
- **25011 Sunset Place West Resident**: Project construction and additional traffic may cause slope slippage
- **24971 Sunset Place West Resident**: Hill is a fill and the project may cause settlement
- **24985 Sunset Place West Resident**: Homes on the slope are on fill dirt, a lot of ground / slope movement has been observed including tilting of fence pilasters, wall and ceiling cracks that continue to reappear after patching, doors and windows that don't close properly, patio cracking, one home closer to Beckenham required slab lifting to repair, concern project will weaken the slopes
- **HOA Member**: Expansive soils are known to be present

DISCUSSION

Existing Soil Conditions

Based on the results of our previous investigations, the project site, including the green belt adjacent to Sunset Place, is underlain at the surface (or at shallow depth) by Tertiary age formational soils of the Capistrano Formation Claystone. These units are generally considered "soft rock" bedrock units. Within the roadway and green belt area limited roadway and residential fills are present over the formational soils in some areas, and these fills are generally composed of locally derived very stiff clayey fill soils. Deeper off-site fills and fill slopes support some of the adjacent residential developments.

Causes of Reported Distress

Homeowners adjacent to the site who have reported problems with foundation and slope movements appear to be on properties that are underlain by fill soils. Fill soils in this area are clayey and moderately to highly expansive, and are known to be subjected to post-construction volume changes (swelling, settlement, lateral slope extension) when subjected to irrigation and rain water, and these movements can occur over extended periods of time (many years).

The reported conditions (slab settlement, tilting, and cracking and lateral movement of slabs away from the house and tilting of fence pilasters) are consistent with long term deformation of clayey compacted fills typical in Southern Orange County. These movements are solely related to moisture-induced volume changes in the fills supporting the homes and slopes, and would not be influenced by the proposed grading activity and resulting construction vibrations.

Protection Against Damage Claims

Although technically speaking the potential for project construction to have an adverse effect on the adjacent properties is considered very low, in order to protect the City from unwarranted damage claims the following may be considered:

- Pre-construction inspection and photographic documentation of existing properties focusing on signs of existing settlement or cracking problems. This may include floor level manometer surveys.
- Installation and construction period monitoring of survey points along the property line and/or within adjacent properties to measure any vertical movements of the ground.
- Vibration monitoring during construction to verify vibrations are below the level considered safe for adjacent structures.

PROPOSED SCOPE OF WORK

We understand that the City does not want to have any involvement upon private property, and has suggested performing borings and soils tests within the open space green belt adjacent to the Sunset Place homes to evaluate the fill/cut conditions between the homes and Paseo de Valencia. The City has further suggested adding construction settlement monitoring devices in this area to document any movements or lack thereof during construction. Therefore, we propose the following scope of work:

- Perform a visual and photographic site reconnaissance and visibly observe conditions along the property line and the adjacent slope between Sunset Place West and the green belt, with a focus on existing fill, slope conditions, evidence of movements along the property line or wall, etc. The observations will be performed from the greenbelt without entering the private properties.
- Conduct a desktop review of any available information including published historical topographic maps and aerial photos, and review any information the City can provide regarding the site development such as grading plans that may help to identify the location and depth of fill soils placed within and adjacent to the project site and under the subject properties. It should be noted that the availability of existing information may be limited.
- Perform one day of drilling boreholes along the eastern edge of the greenbelt and Beckenham Street (tentative locations shown in Figure 2) to identify soil conditions along the property boundary, and where possible to determine the fill / formational contact. A boring location plan will be submitted and traffic control will be coordinated with the City.
- Perform laboratory testing on selected samples to determine physical and engineering properties of the soils along the project boundary.
- Based on the above data review, site observations, and subsurface investigation estimate the limits and depth of fill (to the extent possible) underlying the Sunset Place West residences. It should be recognized that by staying within the public right of way no data on the fill underlying the slopes or residential properties will be obtained.
- Summarize our findings in an addendum to our original report. Our report will provide, but not necessarily be limited to:
    - Summary of site observations and testing
    - Estimate of extent and depth of fill materials
    - Estimate of properties of existing fill materials
    - Discussion of potential causes of existing reported distress
    - Discussion of potential for construction operations to adversely impact the residential properties
    - Recommendations for settlement and vibration monitoring during construction

SCHEDULE

We are prepared to start work and mark and clear the site for utilities and prepare our exploration plan within one week following the receipt of your written

authorization and obtaining right of entry onto the site. We estimate that our fieldwork can be completed within a week of marking the site for utilities and receiving approval of our exploration plan. Laboratory testing will be completed within one week of completion of fieldwork. Our analyses will be performed and report will be issued within 4 weeks following completion of fieldwork. We anticipate submittal of the final report within one (1) week after receiving report review comments. Preliminary recommendations can be provided as the project progresses.

FEES

Our fee for the above scope of work will be a lump sum of **$12,405.** A detailed cost breakdown is provided in Table 1. We will not exceed these fees unless we encounter significant unexpected problems, or change of scope, in that event, we will discuss the situation with you before incurring any additional cost.

The above fee estimate covers services provided through the completion of our report. Supplemental post-report services will be provided, as needed, on a time-and-materials basis in accordance with our Schedule of Fees in effect at the time the work is performed. A copy of our Schedule of Fees is attached in Appendix A. Geotechnical services that we typically provide after the submittal of our report include additional investigation, consultations and meetings, review of foundation and grading plans, responses to questions from local regulatory agencies, as well as field observation and soil testing services during construction. Budgets for such services can be presented as needed as the project progresses.

SUPPORT NEEDED FROM CLIENT

The schedule and budget estimate presented above is based on the understanding that you will provide the following information and support prior to start of work:

- Existing plans and reports such as Tract grading plans, geotechnical reports by others, topographic maps, aerial photographs, or other relevant information, if available;
- Utility plan;
- Right of Entry onto the site;
- Permits and any associated fees.

ATTACHMENTS

The following are attached and complete this proposal:

Table 1	Cost Estimate
Figure 1	Vicinity Map
Figure 2	Properties along Sunset Place West
Appendix A	Fee Schedule and Terms

We appreciate the opportunity to provide geotechnical services for this project. If you have any questions pertaining to this report, or if we can be of further service, please do not hesitate to contact us.

Sincerely,
GROUP DELTA CONSULTANTS, INC.

Curt Scheyhing

Curt Scheyhing, PE, GE
Associate Geotechnical Engineer

TABLES

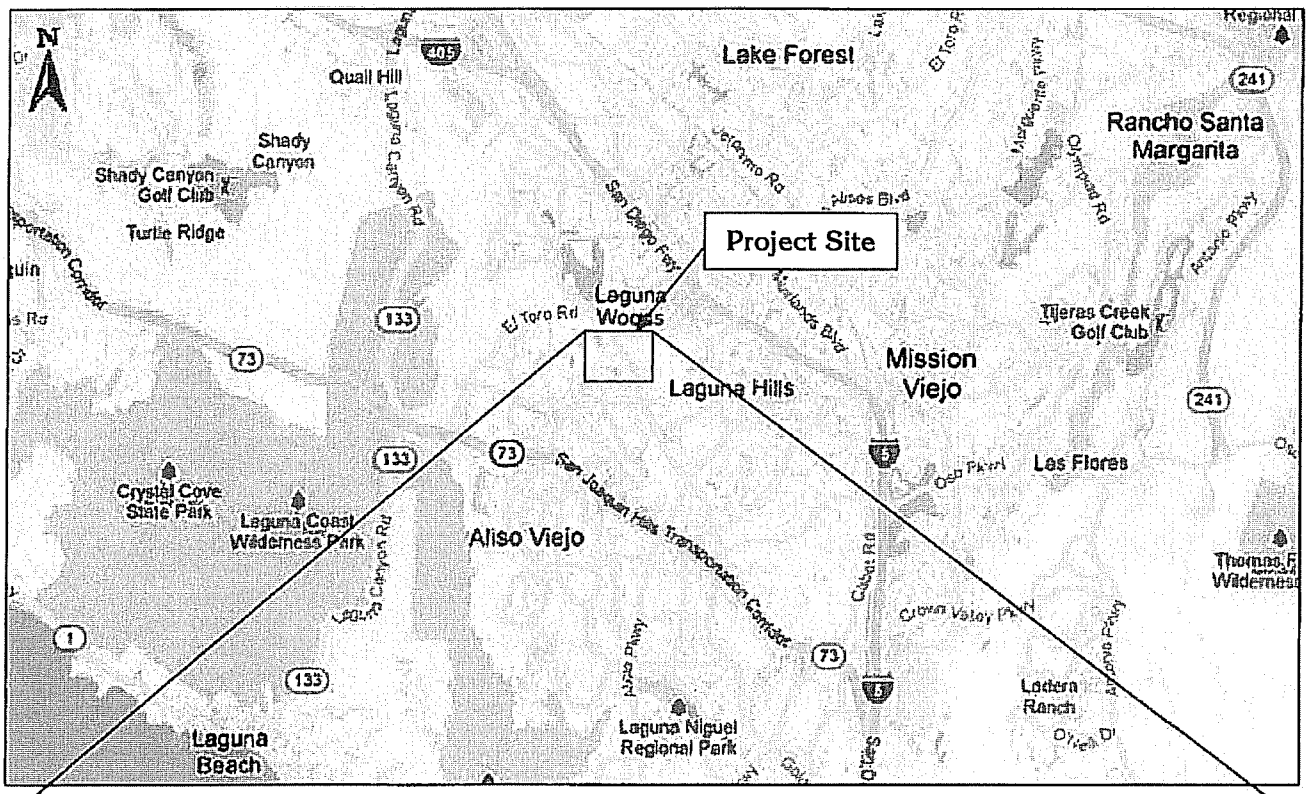
Table 1 - COST ESTIMATE
Supplemental Geotechnical Investigation for the
Proposed Widening of Paseo de Valencia
Between Kennington Drive and Laguna Hills Drive
Laguna Hills, California
GDC Project No. IR-556

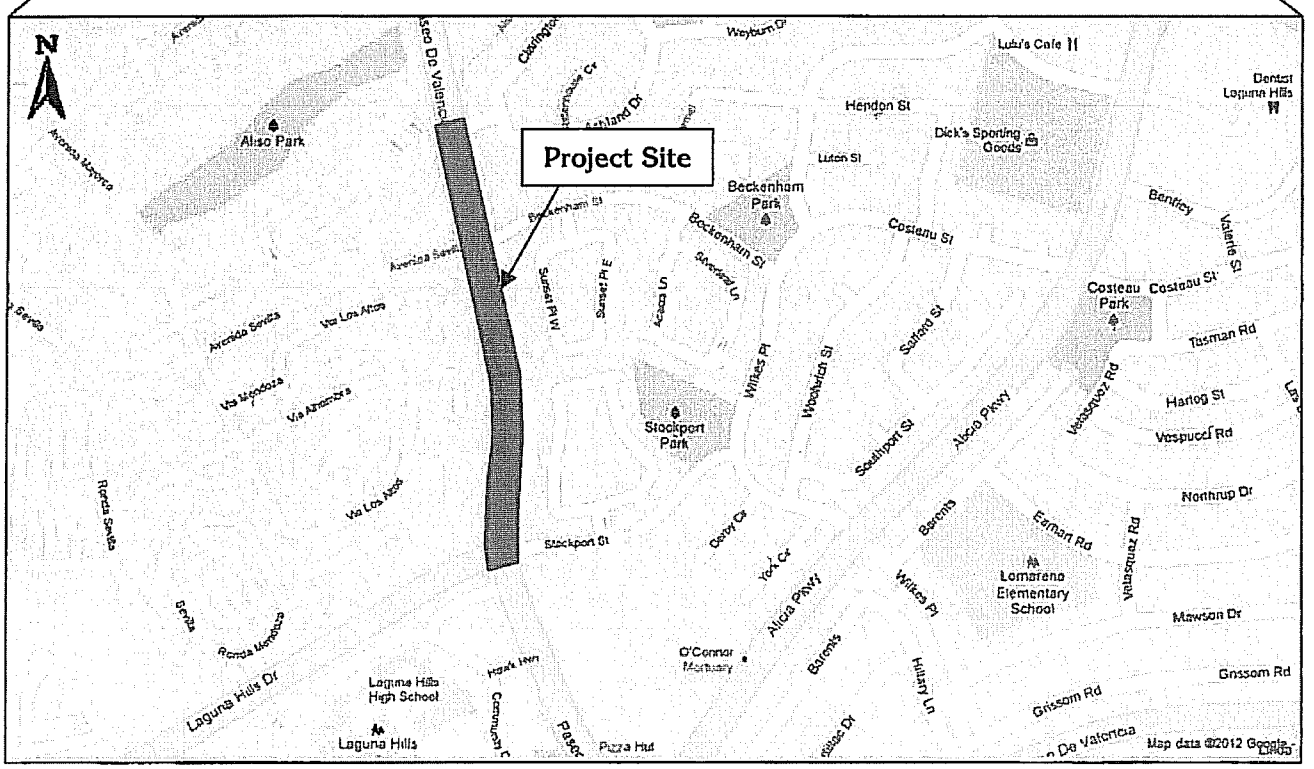
Task No.	TASK DESCRIPTION	PERSONNEL HOURS									TOTALS				
		Senior Principal	Associate	Senior	Project	Staff	Field/Lab Technician	Illustrator/Drafting	Clerical & Support Assistant	LABOR	EQUIP/LAB	OUTSIDE EXPENSES	SUB CONTRACTS	Total ODC's	TOTAL
	Hourly Rate (2012)	$250	$160	$150	$130	$115	$90	$85	$65						
	TASK NAME														
	Additional Geotechnical Investigation														
	Site Reconnaissance		4							$640					640
	Review Available Existing Information (topo maps, aerial photos, grading plans, etc..)		4			8				$1,560					1,560
	Field Investigation														
	Mark Borings and Clear Utilities					4				$460					460
	Drilling and Sampling (one day)					8				$920			2,000	2,000	2,920
	Limited Traffic Control												500	500	500
	Laboratory Testing					1	16			$1,555					1,555
	Data Reduction and Analyses		8			8				$2,200					2,200
	Report	1	8					4	2	$2,000					2,000
	Project Admin, QA/QC, Meetings	1	2							$570					570
	TOTAL	*2*	*26*			*29*	*16*	*4*	*2*	*9905*			*2500*	*2500*		**$ 12,405**

Notes:

10/9/2012 ITEM NO. 4.4

FIGURES





Reference: Google Maps

GROUP DELTA CONSULTANTS

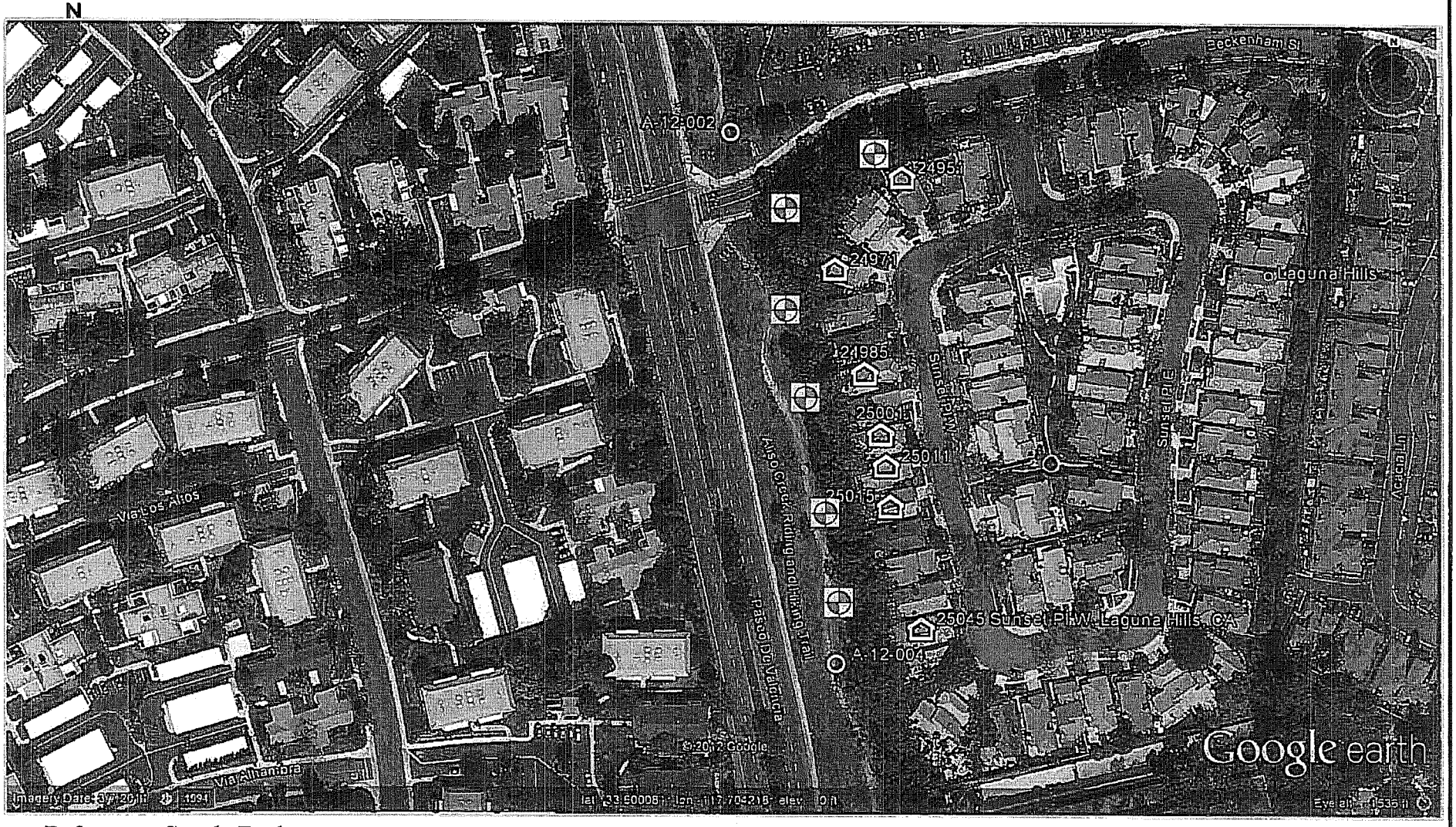
GDC Project No. IR-556

Paseo de Valencia Widening Project
Laguna Hills, California

Vicinity Map

Figure 1

10/9/2012 ITEM NO. 4.4



Reference: Google Earth

LEGEND

- Properties with Documented Homeowner Concerns
- Existing Borings
- Additional Proposed Borings

GROUP DELTA CONSULTANTS

GDC Project No. IR-566

ADDITIONAL INVESTIGATION
PASEO DE VALENCIA WIDENING , LAGUNA HILLS, CA

Properties along Sunset Place West

Figure 2

APPENDIX A
FEE SCHEDULE AND TERMS

GROUP DELTA CONSULTANTS

Geotechnical Engineering
Geology
HydroGeology
Earthquake Engineering
Materials Testing & Inspection

GROUP DELTA CONSULTANTS, INC.
2012 FEE SCHEDULE

HOURLY CHARGES FOR PERSONNEL

PROFESSIONAL SERVICES (per hour)

Senior Principal Engineer/Geologist	$250
Principal Engineer/Geologist	$190
Associate Engineer/Geologist	$160
Senior Engineer/Geologist	$150
Project Engineer/Geologist	$130
Staff Engineer/Geologist/ Environmental Assessor	$115
Expert Testimony (minimum 4 hours)	$360
Environmental Technician	$85*
Engineering Technician equipped with Field Vehicle and Nuclear Density Gauge for Earthwork Testing	$85*
Engineering Technician Supervisor	$90*
Materials Technician, ACI Registered	$85*
Registered Special Inspector	$85*
Registered Special Inspector with NDT	$90*
Draftsperson/CADD Technician	$85
Word Processor	$50
Technical Assistant	$65
Accountant	$50

*Indicates wages subject to prevailing wage. Client is responsible for notifying Group Delta Consultants, Inc. of Prevailing Wage requirements of project.

Outside services will be charged at cost plus 15 percent. Technician and support personnel time for work over eight (8) hours per day will be charged at 1.50 times the regular rates. Holidays and weekends hours (all hours) will be charged 1.50 times the regular rates.

EQUIPMENT CHARGES

Refraction Seismograph	$50/hr.
Inclinometer Monitor	$50/hr.
Hazardous Gas Safety Monitor	$15/hr.
Pneumatic Piezometer/Settlement Monitor	$50/hr.
Photo Ionization Detector	$25/hr.
Concrete Coring Equipment	$50/hr.
Anchor/Rebar Pull Tester	$25/hr.
Mil Thickness Gauge	$25/hr.
Skidmore	$25/hr.
Torque Wrench	$10/hr.
Rebar Locator	$25/hr.

4201 Santa Ana Street, Suite F ▲ Ontario, California 91761 ▲ (909) 605-6500 voice ▲ (909) 605-6502 fax
Irvine (949) 450-2100 ▲ Torrance (310) 320-5100 ▲ San Diego (858) 536-1000 ▲ El Centro (760) 337-2067 ▲ Sacramento (916) 774-7123
www.GroupDelta.com

LABORATORY TESTING
(unit cost)

SOIL AND ROCK TESTS

CLASSIFICATION AND INDEX TESTS:

Atterberg Limits (ASTM D4318)	$125
Moisture Content (ASTM D2216)	$20
Percent Passing #200 Sieve (ASTM D1140)	$75
pH (CALTRANS 643)	$30
Resistivity (CALTRANS 643)	$70
Sieve with Hydrometer Analysis (ASTM D422)	$150
Sieve Analysis without Hydrometer (ASTM D422)	$95
Soluble Sulfate (ASTM D516)	$75
Soluble Chloride	$50
Specific Gravity (ASTM D854)	$75
Unit Weight/Moisture Content, chunk sample	$50
Unit Weight/Moisture Content, sampler ring	$30

STRENGTH TESTS:

Direct Shear, residual (ASTM D3080)	$400
Direct Shear, consolidated (ASTM D3080)	$200
Direct Shear, consolidated (ASTM D3080), remolded	$250
In-Situ Stress-Strain Behavior	quote
Triaxial Compressive Strength (CU with PP)	$1,000
Unconfined Compression (ASTM D2166)	$160

VOLUMETRIC CHANGE:

Consolidation Test (ASTM D2435), without time rate	$200
Consolidation Test (ASTM D2435), with time rate	$300
Free Swell	$175
Double Oedometer	$300
Expansion Index (ASTM D4829)	$120
Response to Wetting (ASTM D4546)	$75
Soil Suction (ASTM D5298)	$90

PERMEABILITY:

Permeability of Granular Soil (ASTM D2434)	$300
Permeability, Flexible Wall (ASTM D5084)	$400

Any necessary sample preparation time, including remolding, will be added at hourly rate.

COMPACTION:

Maximum Density and Optimum Moisture (ASTM D1557)	$175
Maximum Density/Optimum Moisture with Rock (ASTM D4718)	$225
Maximum Density Check Point	$45
California Impact Compaction, test only (CAL 216)	$150

CONSTRUCTION MATERIALS

AGGREGATE/SUBGRADE:

Abrasion Test (ASTM C131)	$180
California Bearing Ratio	$450
Clay Lumps/Friable Particles (ASTM C142)	$95
Durability Index (ASTM D3744),	$150
Lime Stabilized Subgrade Mix Design	$400
Organic Impurities (ASTM C40)	$40
Percent Fractured Aggregate (ASTM D5821)	$78
Uncompacted Void Content of Aggregates (CTM 234)	$150
Flat & Elongated (ASTM D2419/CTM 235)	$150
R-Value (CALTRANS 301)	$225
Sand Equivalent (ASTM D2419)	$85
Sieve Analysis, aggregate base (ASTM C136)	
coarse aggregate	$95
fine aggregate	$95
Specific Gravity and Absorption:	
fine aggregate (ASTM C128)	$100
coarse aggregate (ASTM C127)	$75
Sulfate Soundness (ASTM C88) per size	$145
Cleanness Value (CAL 227)	$110

ASPHALT CONCRETE:

Bulk Specific Gravity/Density, core (ASTM D1188)	$75
Hveem Unit Weight (ASTM 2727), 2 plug average	$185
Hveem Unit Weight (CTM 304, 308)	$225
Marshall Unit Weight (ASTM D1559), 3 plug average	$200
Theoretical Maximum Density (ASTM D2041)	$100
Percent Bitumen (CTM 382)	$100
Percent Bitumen w/ Gradation (CTM 382/202)	$190
Ignition Oven Correction Factors	
aggregate and oil	$600
Stabilometer Value (CTM 366)	$180
Unit Weight (ASTM D1188)	$45
Asphalt Concrete JMF Verification	$2,000
Asphalt Concrete Mix Design, Dense Graded	
w/ out Aggregate Properties	$2,000
w/ Aggregate Properties	$2,400
w/ Lime, No Aggregate Properties	$2,300
w/ RAP, No Aggregate Properties	$3,200
w/ RAP & Aggregate Properties	$3,700
w/ RAP, Lime & Aggregate Properties	$4,000
Asphalt Concrete Mix Design, Rubberized	
w/ out Aggregate Properties	$2,200
w/ Aggregate Properties	$2,600
w/ Lime, No Aggregate Properties	$2,400
Tensile Strength Ratio (CTM 371)	
Field Mixed Specimens	$900
Lab Mixed Specimens	$1,600
Lab Mixed Specimens w/ Lime	$1,800

GROUP DELTA CONSULTANTS

LABORATORY TESTING, CONTINUED

(unit cost)

REINFORCED CONCRETE TESTS:

Compressive Strength, 6x12 or 4x8, per cylinder fabricated $25
Compressive Strength, per core prepared $50
Flexural Strength, 6x6x18 beam $60
Compressive Strength, Shotcrete, 3 core set, Coring of sample will be added at hourly rate $210
Compressive Strength, Light Weight Concrete Fill $25
Drying Shrinkage, 3 specimens, 28-day $400
Coefficient of Thermal Expansion $700
Modulus of Elasticity, static ..... quote
Tensile Strength, Splitting ..... quote
Unit Weight, Light Weight Concrete Fill $30
Petrographic Analysis ..... quote
Potential Alkali-Silica Reactivity of Aggregates
- Chemical Method (ASTM C289) ..... quote
- Mortar Bar Method (ASTM C1260) ..... quote

Trial Batch at Plant (Assuming 4 hours) $600
Portland Cement Concrete Mix Design
- with trial batch testing $1,000
- with aggregate properties $1,800

STRUCTURAL MASONRY

CMU Compressive Strength, per prism
- 8x16x8, under 400,000 lbs $100
- 8x16x16, under 400,000 lbs $140

CMU Compressive Strength, single block
- larger than 8x8x16 ..... $60
- less than/equal to 8x8x16 ..... $50

Efflorescence, Block with Mortar, per unit $40
Efflorescence, Block only, per unit $40
CMU Compressive Strength, coupons, w/prep $55
Linear Shrinkage, per unit $200
Shear Test, cores, w/o sample prep $80
Compressive Strength, cores $50
CMU Unit Weight and Absorption, 3 units $150
DSA CMU Conformance Suite (ASTM C140)
Includes: Dimension, Compressive Strength, Absorption, Unit Weight, Moisture Content, 3 unit set $450
Mortar Compressive Strength
- 2x4, per cylinder fabricated $25

Grout Compressive Strength
- 2x2x2, per cube fabricated $25
- 3x3x6, per cube fabricated $25

Brick Compressive Strength, 5 brick set $200
Brick Absorption Test (ASTM C67)
- 5 or 24-hour submersion, 5 brick set $200
- 1, 2, or 5-hour boiling, 5 brick set $200

Efflorescence, Brick, 5 brick set $200
Modulus of Rupture, 5 brick set $150
Moisture As-Received, 5 brick set $125
Saturation Coefficient/Absorption, 5 brick set (requires 24 hr. Submersion and 5 hr, boil Absorption test prior to calculation) $100

STRUCTURAL STEEL

High Strength Bolt Testing (ASTM F606)
- Hardness, bolt, washer, or nut, each $20
- Bolt Wedge Test, each $50
- Bolt Proof Testing, each $40
- Nut Proof Load, each $30
- Set-Up, charged for each size if less than three bolts of each size are submitted $80

Rebar/Tendon, Tensile Test
- No. 11 bar and smaller $50
- No. 14 and larger $100

Rebar, Bend Test
- No. 11 bar and smaller $50
- No. 14 bar and Larger $100

Mechanically Spliced or Welded Rebar
- No. 11 bar and smaller $75
- No. 14 and larger $125

Structural Steel, Tensile Test
- 200k or less $80

Structural Steel, Bend Test $60
Structural Steel, Pipe Flattening Test $40

FIREPROOFING

Spray-Applied Fireproofing, Density
- Oven-Dry Method $40
- Displacement Method $40

ROOFING

Asbestos Evaluation, per ply $50
Asphalt Softening Point ..... quote
Roofing Material Analysis
- with Surfacing ..... quote
- without Surfacing ..... quote

Roofing Tile, Absorption, set of 5 ..... $200
Roofing Tile, Strength, set of 5 ..... $200

SAMPLE PREPARATION

Sample preparation such as hand-cutting of samples, extraction from samplers, processing, and mixing of stabilized soils will be charged in addition to the individual test at the Engineering Technician hourly rate $78

GROUP DELTA CONSULTANTS

TERMS & CONDITIONS

RECOGNITION OF RISK

Client recognizes that the interpretations and recommendations of Group Delta Consultants, Inc. (GDC) are based solely on the information available to GDC. Client further recognizes that surface and subsurface conditions can vary from those encountered at the times and locations where data are obtained by GDC, and that the limitation on available data results in some level of uncertainty with respect to the interpretation of these conditions despite the use of due professional care.

GDC will not be responsible for the effect on any opinion rendered hereunder of unknowns such as acts of others on adjacent properties, variables of nature including but not limited to earthquakes, masking of rocks by heavy ground cover or the works of man, acts of God or other variables beyond the control of GDC.

GDC shall write reports so as to meet the administrative requirements of local governmental agencies; however, as the decisions of such agencies are discretionary, GDC does not guarantee the approval of its reports or of Client's project by any governmental agency.

PROFESSIONAL RESPONSIBILITY

GDC represents that the services shall be performed, within the limits prescribed by Client, in a manner consistent with that level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document or otherwise.

INDEMNIFICATION

Client agrees to indemnify, hold harmless and defend GDC from and against any and all loss, expenses, including attorney's fees, injury, damage, to property or person, liability, costs and/or claims arising out of the services performed by GDC and/or work performed by client and/or other parties upon the real property described herein above, regardless of the negligence of GDC, its agents, employees, officers, directors or shareholders, except where such loss, injury, damage, liability, cost, expenses or claims are the result of the sole negligence or willful misconduct of GDC, its agents, employees, officers, directors or shareholders; provided, however, that any such liability resulting from any design defects (as defined in California Civil Code Section 2782.5) shall be the sole responsibility of the client.

LIMITATION OF LIABILITY

In the event the indemnification clause contained herein is found to be void, unenforceable, against public policy or otherwise inapplicable to claims advanced against GDC by Client or others, the liability for damages due to the professional negligence of GDC shall be limited to an amount not to exceed $50,000 or the fee of GDC, whichever sum is more.

For any damage caused by negligence other than professional negligence, GDC's liability, including that of its employees, agents and subcontractors, in the aggregate under this Agreement, shall not exceed the limits of GDC's comprehensive general and automobile liability insurance coverage.

In no event shall either GDC or Client be liable for consequential damages, including, without limitation, loss of use, loss of profits or the additional costs of completing the development of the property described herein above due to delays, incurred by one another or their respective subsidiaries or successors, regardless of whether such claim is based upon alleged breach of contract, willful misconduct or negligent act or omission, whether professional or non-professional, of either of them or their agents, employees, subcontractors, officers, directors or shareholders.

METHOD OF CHARGING AND PAYMENT CONDITIONS

GDC will submit the invoices to Client as stated in the proposal or periodically and a final invoice will be submitted upon completion of our services. All retainers are held for credit to the final invoice. Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1-1/2%) per month, or the maximum rate allowed by law, on past due accounts. Payments shall first be applied to accrued interest and to the principal unpaid amount. Client specifically agrees further to pay all expenses and costs, including but not limited to GDC's staff time at GDC's current Schedule of Fees, attorneys' fees, and court and other costs associated with collection of past due accounts.

If any invoice for work performed by GDC is outstanding and unpaid for a period in excess of 90 (ninety) days, the Client agrees that, in addition to any other remedy which may be available to it, GDC may stop work, withhold reports/plans, and submit such invoice to binding arbitration under the Commercial Arbitration Rules of the American Arbitration Association, as the same may be in effect at the date of such submission, and that judgment upon the award rendered in such arbitration may be entered in any court having jurisdiction thereof.

GROUP DELTA CONSULTANTS

ESTIMATED CHARGES AND PAYMENT CONDITIONS
GDC charges are only estimated and shall not be regarded as "lump sum" or "fixed price" or "guaranteed maximum" compensation unless it is expressly so stated in writing.

ESTIMATED TIME SCHEDULE
Because of the uncertainties inherent in the services contemplated hereunder, time schedules are only estimated schedules which are subject to revision unless specifically described as otherwise herein.

RIGHT OF ENTRY
The Client will provide for right of entry for GDC personnel, and for any other personnel and all equipment necessary in order to complete the work. While GDC will take all reasonable precautions to minimize any damage to the property, it is understood by Client that in the normal course of work some damage may occur, the correction of which is not part of this Agreement. The client agrees to indemnify and hold GDC harmless from any liability for any damage so caused by the performance of such work, unless caused by the gross negligence or willful misconduct of GDC or its personnel.

SUBTERRANEAN STRUCTURES OR UTILITIES
Client shall indemnify and hold GDC harmless for damage or injury arising from damage to subterranean structures or utilities (pipes, tanks, telephone cables, etc.) that are not called to the attention of GDC or are not correctly shown on the plans furnished to GDC, in connection with work performed by GDC.

CONSTRUCTION PROCEDURES
GDC shall not specify construction procedures, manage or supervise construction, or implement or be responsible for health and safety procedures; shall not be responsible for the acts or omissions of contractors or other parties on the project; and shall not have control or charge of and shall not be responsible for construction, means, methods, techniques, sequences or procedures, or for safety precautions and programs. GDC testing or inspection of portions of the work of other parties on project shall not relieve such other parties from their responsibility for performing their work in accordance with applicable plans and specifications.

SAMPLES
GDC will retain all soil and rock samples for thirty (30) days following exploration. Further storage or transfer of samples can be made at an agreed expense upon Client's written request.

HAZARDOUS SUBSTANCES
Unless specifically included in the "Scope of Services," this Agreement does not include any services (including detection or identification) relative to any substances which might be considered hazardous by an applicable regulations.

OWNERSHIP OF DOCUMENTS
All reports, boring logs, field data and notes, laboratory test data, calculations, estimates and other documents prepared by GDC, as instruments of service, shall remain the property of GDC. Client agrees that all reports and other work furnished to the Client or its agents, which are not paid for, will be returned upon demand and will not be used by the Client for any purpose whatever.

NO THIRD PARTY RIGHTS
This Agreement shall not create any rights or benefits to parties other than Client and GDC.

TIME BAR TO LEGAL ACTION
All legal actions by either party against the other for breach of this Agreement, or for failure to perform in accordance with the applicable standard of care, however denominated, that are essentially based on such breach or failure, shall be barred in two (2) years from the time claimant knew or should have known of its claim, but, in any event, not later than four (4) years from the substantial completion of GDC's services.

DISPUTES
In the event that a dispute arises relating to the performance of the services to be provided under this Agreement, and should that dispute result in litigation, it is agreed that the prevailing party shall be entitled to recover all reasonable costs incurred in connection with such dispute, including GDC's staff time at GDC's Schedule of Fees in effect at the time of such dispute, court costs, attorneys' fees and all other claim related expenses.

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: **OCTOBER 9, 2012**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **KENNETH H. ROSENFIELD**
PUBLIC SERVICES DIRECTOR/CITY ENGINEER

ISSUE: **MEMORANDUM OF UNDERSTANDING NO. C-2-1592 BY AND BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITIES OF IRVINE, LAGUNA HILLS, LAGUNA WOODS, LAKE FOREST AND COUNTY OF ORANGE FOR AMENDMENT OF THE MASTER PLAN OF ARTERIAL HIGHWAYS**

RECOMMENDATION: **THAT THE CITY COUNCIL APPROVE MEMORANDUM OF UNDERSTANDING NO. C-2-1592 BY AND BETWEEN ORANGE COUNTY TRANSPORTATION AUTHORITY AND CITIES OF IRVINE, LAGUNA HILLS, LAGUNA WOODS, LAKE FOREST AND COUNTY OF ORANGE FOR AMENDMENT OF THE MASTER PLAN OF ARTERIAL HIGHWAYS AND AUTHORIZE THE CITY MANAGER TO EXECUTE THE MEMORANDUM OF UNDERSTANDING.**

SUMMARY:

The City of Irvine has presented a proposal to change the Master Plan of Arterial Highways (MPAH) to eliminate the extension of portions of Bake Parkway, Ridge Route Drive and Santa Maria Avenue from traversing the Laguna Coast Wilderness Park westerly of the Laguna Hills city boundary. The process to amend the MPAH is administered by the Orange County Transportation Authority (OCTA) and requires all affected parties to agree to the MPAH Amendment through the approval of a Memorandum of Understanding (MOU), attached. The proposed MPAH change has been "in process" for several years and has included an analysis of the impacts of the termination of the above described streets on other locations. The City of Laguna Hills will be impacted by the change in MPAH and it has been determined that a financial contribution of CARITS funds from the County of Orange Major Thoroughfare Fund to the City's recent widening project of Avenida de la Carlota at both the Paseo de Valencia and El Toro Road intersections will mitigate the impacts. Following the approval of the MOU by all parties, each affected agency will also need to revisit their General Plan and undertake

an amendment to the Circulation Element of their General Plan to complete the MPAH Amendment process. Approval of the MOU is recommended.

BACKGROUND:

The Master Plan of Arterial Highways is a county-wide plan used for the implementation of a backbone roadway system as deemed necessary to accommodate the build-out of the County. From time to time, new roads are added to the MPAH and other roads are deleted from the MPAH to account for changing development plans, changes in land use and changes in access requirements. The MPAH is administered by the Orange County Transportation Authority. The MPAH in the City of Laguna Hills is included within the Mobility Element of the General Plan on the Street Network figure (Figure M-1, Laguna Hills General Plan). The City's Street Network is in conformance with the county-wide MPAH.

Some years ago, the Irvine Company changed their development plans in Laguna Canyon in the land areas westerly of the Laguna Hills city boundary during which they provided land to the Laguna Coast Wilderness Park and also downsized their land development plans in the remaining parcels. Consequently, the Irvine Company worked with the City of Irvine and the County of Orange to initiate an amendment to the MPAH to eliminate now unnecessary roadways. The City of Irvine has taken the lead in this effort and is processing an MPAH amendment through OCTA to include the deletion of portions of Bake Parkway, Ridge Route Drive and Santa Maria Avenue where they would have traversed through the Laguna Coast Wilderness Park.

The process to amend the MPAH requires all affected parties to agree to the MPAH Amendment through the approval of a Memorandum of Understanding (MOU), attached. Exhibit C to the MOU provides a map delineating the proposed changes to the MPAH. Because the MPAH needs to be continuous, Santa Vittoria Drive is also being added to the MPAH as a Collector Roadway from Santa Maria Avenue to Lake Forest Drive consistent with its current cross-section. The City of Laguna Hills will be impacted by the MPAH Amendment. It has been determined through traffic studies that a financial contribution of CARITS funds from the County of Orange Major Thoroughfare Fund to the City's recent widening project of Avenida de la Carlota at both intersections at Paseo de Valencia and at El Toro Road will mitigate the impacts of the MPAH Amendment. Exhibit A to the MOU provides the calculation of the impact to Laguna Hills and the financial compensation to be provided is shown on Exhibit B. While there are several changes to the MPAH in the proposed Amendment, effectively, the MPAH only changes one roadway segment in the City of Laguna Hills, the deletion of the not as yet constructed portion of Ridge Route Drive westerly of Santa Vittoria Drive.

Following the approval of the MOU by all parties, each affected agency will also need to revisit their General Plan and undertake an amendment to their Circulation Element of the

General Plan to complete the MPAH Amendment process. Approval of the MOU is recommended.

FISCAL IMPACT:

The MOU provides the City with financial compensation for the traffic impact resulting from the MPAH Amendment in the amount of $352,434.

CEQA FINDINGS:

OCTA has determined the "Amendments to the Master Plan of Arterial Highways" is exempt under CEQA Guidelines Sections 15262, 15061(b)(3). OCTA will file a Notice of Exemption.

ATTACHMENTS:

- MOU

MEMORANDUM OF UNDERSTANDING NO. C-2-1592

BETWEEN

ORANGE COUNTY TRANSPORTATION AUTHORITY

AND

CITIES OF IRVINE, LAGUNA HILLS, LAGUNA WOODS, LAKE FOREST,

AND COUNTY OF ORANGE

FOR

AMENDMENT OF THE MASTER PLAN OF ARTERIAL HIGHWAYS

THIS MEMORANDUM OF UNDERSTANDING (hereinafter referred to as "MOU") is effective this _____ day of _____, 2012, by and between the Orange County Transportation Authority, 550 South Main Street, P.O. Box 14184, Orange, California 92863-1584 (hereinafter referred to as "AUTHORITY"), and the City of Irvine, the City of Laguna Hills, the City of Laguna Woods, the City of Lake Forest, and the County of Orange (hereinafter collectively referred to as "AGENCIES" and individually as "AGENCY"). AUTHORITY and each AGENCY are sometimes referred to collectively in this MOU as the "PARTIES" and individually as "PARTY."

RECITALS

WHEREAS, AUTHORITY administers the Master Plan of Arterial Highways (hereinafter referred to as "MPAH") including the review and approval of amendments requested by local agencies; and

WHEREAS, the City of Irvine has requested an Amendment to the MPAH to delete Bake Parkway from Lake Forest Drive to State Route 133; to delete Ridge Route Drive from Santa Vittoria Drive to Bake Parkway; to delete Santa Maria Avenue from Santa Vittoria Drive to State Route 133; and to add Santa Vittoria Drive from Lake Forest Drive to Santa Maria Avenue as a collector (two-lane, undivided) arterial (hereinafter referred to as the "Amendment to the MPAH"); and

/

/

WHEREAS, the City of Irvine in association with the City of Laguna Hills, the City of Laguna Woods, the City of Lake Forest, the County of Orange, and AUTHORITY initiated the MPAH Cooperative Study Process; and

WHEREAS, traffic analyses conducted as part of the MPAH Cooperative Study Process determined that the Amendment to the MPAH would result in projected changes to future traffic patterns; and

WHEREAS, these projected changes in future traffic patterns resulted in a determination that appreciable impacts would occur at the intersections of Bake Parkway/Research Drive (City of Irvine), Paseo de Valencia/Avenida de la Carlota (City of Laguna Hills), El Toro Road/Avenida de la Carlota (City of Laguna Hills), and Ridge Route Drive/Rockfield Boulevard (City of Lake Forest); and

WHEREAS, an appreciable impact is defined in the AUTHORITY's Guidance for Administration of the Orange County MPAH, as an increase in Intersection Capacity Utilization ("ICU") of 0.01 for intersections exceeding Level of Service "D" or the General Plan standard adopted by the respective jurisdiction; and

WHEREAS, Exhibit A titled "SUMMARY OF MPAH AMENDMENT APPRECIABLE IMPACTS and TRAFFIC SHARE", provides a summary of the appreciable impacts occurring as a result of the Amendment to the MPAH; and

WHEREAS, improvements have been identified to mitigate appreciable impacts and maintain the operational integrity of the MPAH system; and

WHEREAS, AUTHORITY's Board of Directors approved this Amendment to the MPAH on July 23, 2012, contingent upon full execution of this MOU, as well as amendments to appropriate AGENCIES' general plans including California Environmental Quality Act requirements; and

WHEREAS, all PARTIES wish to enter into an MOU to identify the roles, responsibilities and commitments of the PARTIES in processing the Amendment to the MPAH and mitigating the related appreciable impacts; and

/

NOW, THEREFORE, it is mutually understood and agreed by the PARTIES as follows:

ARTICLE 1. COMPLETE AGREEMENT:

A. This MOU, including all exhibits and documents incorporated herein and made applicable by reference, constitutes the complete and exclusive statement of the term(s) and condition(s) of the MOU between the PARTIES concerning the Amendment to the MPAH and supersedes all prior representations, understandings and communications between the PARTIES. The invalidity, in whole or part, of any term or condition of this MOU shall not affect the validity of other term(s) or conditions(s) of this MOU. The above referenced Recitals are true and correct and are incorporated by reference herein.

B. AUTHORITY'S failure to insist on any instance(s) of any AGENCY'S performance of any term(s) or condition(s) of this MOU shall not be construed as a waiver or relinquishment of AUTHORITY's right to such performance or to future performance of such term(s) or condition(s), and AGENCY'S obligation in respect thereto shall continue in full force and effect.

C. Any AGENCY'S failure to insist on any instance(s) of AUTHORITY's performance of any term(s) or condition(s) of this MOU shall not be construed as a waiver or relinquishment of AGENCY's right to such performance or to future performance of such term(s) or condition(s), and AUTHORITY's obligation in respect thereto shall continue in full force and effect.

ARTICLE 2. RESPONSIBILITIES OF AUTHORITY:

AUTHORITY agrees to the following responsibilities:

A. AUTHORITY shall administer the MPAH, including updating the MPAH to reflect the Amendment to the MPAH, upon fulfillment of all of the following conditions:

1. AUTHORITY's Board of Directors conditional approval of the Amendment to the MPAH. The AUTHORITY's Board of Director approval of the Amendment to the MPAH will not become final until conditions 2 and 3 below have been satisfied; and

2. Receipt of an original, fully executed MOU (signed by all PARTIES); and

3. Receipt of documentation that that the Cities of Irvine, Laguna Hills,

Laguna Woods, and County of Orange have amended their general plans to reflect the Amendment to the MPAH.

B. AUTHORITY shall file a Notice of Exemption from the provisions of the California Environmental Quality Act in support of the amendment to the MPAH.

ARTICLE 3. RESPONSIBILITIES OF CITY OF IRVINE:

The CITY of Irvine agrees to the following responsibilities:

A. The CITY of Irvine acknowledges that the AUTHORITY has determined the amendment to the MPAH to be exempt from the California Environmental Quality Act, and that the AUTHORITY has caused a Notice of Exemption to be filed, posted, and recorded.

B. The CITY of Irvine shall implement one of the two mitigation measures identified below.

1. Bake Parkway/Research Drive: conversion of a westbound through lane on Research Drive to shared through/second right-turn lane; or

2. Bake Parkway/Research Drive: addition of a second westbound right-turn lane on Research Drive.

C. This mitigation measure is to be implemented before the ICU at this intersection reaches the pre-Amendment to the MPAH ICU of 0.94. These improvements are not meant to be prescriptive. If the CITY of Irvine is able to identify alternative improvements which meet the overall objective of achieving and/or maintaining the pre-Amendment to the MPAH ICU, then those improvements shall be considered acceptable alternatives and shall be implemented as substitute solutions.

D. The CITY of Irvine shall amend the Circulation Element of its General Plan to reflect the Amendment to the MPAH, and in doing so, shall comply with the requirements of the California Environmental Quality Act.

E. The CITY of Irvine enters into this MOU in order for the above mitigation measure to be implemented.

F. The Share Cost Allocation for this mitigation, as identified in Exhibit B titled "IMPACTED INTERSECTIONS SHARE COST ALLOCATION," will be funded through the County of Orange's

Coastal Area Roadway Improvements and Traffic Signal Program (hereinafter referred to as the "CARITS Program").

ARTICLE 4. RESPONSIBILITIES OF CITY OF LAGUNA HILLS:

The CITY of Laguna Hills agrees to the following responsibilities:

A. The CITY of Laguna Hills acknowledges that the AUTHORITY has determined the amendment to the MPAH to be exempt from the California Environmental Quality Act, and that the AUTHORITY has caused a Notice of Exemption to be filed, posted, and recorded.

B. The CITY of Laguna Hills shall implement the mitigation measures identified below.

1. Paseo de Valencia/Avenida de la Carlota: restripe the southbound approach on Paseo de Valencia to provide 2.5 left-turn lanes, 1.5 through lanes and no right-turn lane, and construct a third eastbound receiving lane on Avenida de la Carlota for the third southbound left-turn lane; and

2. El Toro Road/Avenida de la Carlota: restripe the westbound approach on Avenida de la Carlota to provide a shared left-turn/through lane and two right-turn lanes, retaining the existing westbound right-turn overlap with the southbound left-turn movement.

C. These mitigation measures are to be implemented before the ICU at these intersections reaches the pre-Amendment to the MPAH ICU of 1.01 for the Paseo de Valencia/Avenida de la Carlota intersection and 1.02 for the El Toro Road/Avenida de la Carlota intersection, respectively. These improvements are not meant to be prescriptive. If the CITY of Laguna Hills is able to identify alternative improvements, which meet the overall objective of achieving and/or maintaining the pre-Amendment to the MPAH ICU, then those improvements shall be considered acceptable alternatives and shall be implemented as substitute solutions.

D. The CITY of Laguna Hills shall amend the Circulation Element of its General Plan to reflect the Amendment to the MPAH, and comply with the requirements from the California Environmental Quality Act.

E. The CITY of Laguna Hills enters into this MOU in order for the above mitigation

measures to be implemented.

F. The Share Cost Allocation for this mitigation is identified in Exhibit B, and will be funded through the CARITS Program.

ARTICLE 5. RESPONSIBILITIES OF CITY OF LAGUNA WOODS:

The CITY of Laguna Woods agrees to the following responsibilities:

A. The CITY of Laguna Woods acknowledges that the AUTHORITY has determined the amendment to the MPAH to be exempt from the California Environmental Quality ACT, and that the AUTHORITY has caused a Notice of Exemption to be filed, posted, and recorded.

B. The CITY of Laguna Woods shall amend the Circulation Element of its General Plan to reflect the Amendment to the MPAH, and comply with the requirements from the California Environmental Quality Act.

ARTICLE 6. RESPONSIBILITIES OF CITY OF LAKE FOREST:

The CITY of Lake Forest agrees to the following responsibilities:

A. The CITY of Lake Forest acknowledges that the AUTHORITY has determined the amendment to the MPAH to be exempt from the California Environmental Quality Act, and that the AUTHORITY has caused a Notice of Exemption to be filed, posted, and recorded.

B. The CITY of Lake Forest shall implement the following mitigation measure identified below.

1. Ridge Route Drive/Rockfield Boulevard: narrowing of the existing raised median on Ridge Route Drive to four feet in both the northbound and southbound directions to create left turn pockets, and also provide defacto right turn lanes in both directions.

C. This mitigation measure is to be implemented before the ICU at this intersection reaches the pre-Amendment to the MPAH ICU of .98. This improvement is not meant to be prescriptive. If the CITY of Lake Forest is able to identify alternative improvements which meet the overall objective of achieving and/or maintaining the pre-Amendment to the MPAH ICU, then those improvements shall be considered acceptable alternatives and shall be implemented as substitute solutions.

D. The CITY of Lake Forest enters into this MOU in order for the above mitigation measure to be implemented.

E. The Share Cost Allocation for this mitigation is identified in Exhibit B and will be funded through available CITY of Lake Forest non-general fund and/or grant sources.

ARTICLE 7. RESPONSIBILITIES OF COUNTY OF ORANGE:

The COUNTY of Orange agrees to the following responsibilities:

A. The COUNTY of Orange acknowledges that the AUTHORITY has determined the amendment to the MPAH to be exempt from the California Environmental Quality Act, and that the AUTHORITY has caused a Notice of Exemption to be filed, posted, and recorded.

B. The COUNTY of Orange, contingent upon the finalized Amendment to the MPAH, will reprogram CARITS Program mitigation funds originally identified for the intersection of Bake Parkway/Laguna Canyon Road as part of the Aliso Creek Road MPAH amendment (now being deleted as a result of the Amendment to the MPAH).

C. These CARITS funds, when reprogrammed, will be allocated to the Share Cost Allocations for improvements at the intersections of Bake Parkway/Research Drive (City of Irvine), Paseo de Valencia/Avenida de la Carlota (City of Laguna Hills), and El Toro Road/Avenida de la Carlota (City of Laguna Hills) as identified in Exhibit B.

D. The COUNTY of Orange shall amend the Transportation Element of the County of Orange General Plan, including the Circulation Plan to reflect the Amendment to the MPAH, and comply with the requirements from the California Environmental Quality Act.

E. The COUNTY of Orange enters into this MOU in order for the above mitigation measures to be implemented.

F. Upon receipt of evidence of the finalized MPAH Amendment, the COUNTY, within 60 days, will make reprogrammed CARITS funding available to the eligible jurisdictions identified in this MOU.

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ARTICLE 8. DELEGATED AUTHORITY:

The actions required to be taken by the CITIES of Irvine, Laguna Hills, Lake Forest, and Laguna Woods in the implementation of this MOU are delegated to each CITY's City Manager, or designee. The actions required to be taken by COUNTY in the implementation of this MOU are delegated to its Chair of the Board, or designee. The actions required to be taken by AUTHORITY in the implementation of this MOU are delegated to AUTHORITY's Chief Executive Officer, or designee.

ARTICLE 9. INDEMNIFICATION:

A. Each AGENCY shall indemnify, defend and hold harmless AUTHORITY, its officers, directors, employees and agents from and against any and all claims (including attorney's fees and reasonable expenses for litigation or settlement) for any loss or damages, bodily injuries, including death, worker's compensation subrogation claims, damage to or loss of use of property, arising from the negligent acts, omissions or willful misconduct by each AGENCY, its officers, directors, employees or agents in connection with or arising out of the performance of this MOU.

B. AUTHORITY shall indemnify, defend and hold harmless each AGENCY, its officers, directors, employees and agents from and against any and all claims (including attorney's fees and reasonable expenses for litigation or settlement) for any loss or damages, bodily injuries, including death, worker's compensation subrogation claims, damage to or loss of use of property, arising from the negligent acts, omissions or willful misconduct by AUTHORITY, its officers, directors, employees or agents in connection with or arising out of the performance of this MOU.

C. AGENCIES shall indemnify, defend and hold harmless each AGENCY, its officers, directors, employees and agents from and against any and all claims (including attorney's fees and reasonable expenses for litigation or settlement) for any loss or damages, bodily injuries, including death, worker's compensation subrogation claims, damage to or loss of use of property, arising from the negligent acts, omissions or will misconduct by AGENCIES, their officers, directors, employees or agents in connection with or arising out of the performance of this MOU.

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D. Indemnification and defense obligations of this MOU shall survive its expiration or termination.

ARTICLE 10. MUTUAL RESPONSIBILITIES OF ALL AGENCIES:

A. Each PARTY to this MOU agrees to cooperate and coordinate with the other PARTIES to this MOU and their respective staff, contractors, consultants, and vendors, etc. providing services required under this MOU to the extent practicable.

B. All PARTIES to this MOU agree to work diligently together, and in good faith, toward the resolution of any unforeseen issues and disputes arising out of the performance of this MOU.

ARTICLE 11. ADDITIONAL PROVISIONS

The PARTIES agree to the following:

A. Termination: This Agreement shall continue in full force and effect through June 30, 2032. This MOU shall not be terminated without the written consent of all PARTIES.

B. This MOU may be amended in writing at any time by the consent of all PARTIES. No amendment shall have any force or effect unless executed in writing by all PARTIES.

C. AUTHORITY and AGENCIES shall comply with all applicable federal, state, and local laws, statues, ordinances and regulations in the performance of this MOU.

D. Successors in Interest: This MOU shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns.

E. Attorney's Fees: In the event any action is brought between the parties hereto relating to this MOU or the breach thereof, the prevailing party in such action shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs in connection with such action or proceeding.

D. Legal Authority: Each of the undersigned represents and warrants that they are authorized to execute this MOU on behalf of said PARTIES and that, by so executing this MOU, the PARTIES hereto are formally bound to the provisions of this MOU.

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E. Severability: If any term, provision, covenant or condition of this MOU is held to be invalid, void or otherwise unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this MOU shall not be affected thereby, and each term, provision, covenant or condition of this MOU shall be valid and enforceable to the fullest extent permitted by law.

F. Counterparts of Agreement: This MOU may be executed and delivered in any number of counterparts, each of which, when executed and delivered shall be deemed an original and all of which together shall constitute the same agreement. Facsimile signatures will be permitted.

G. Force Majeure: Any PARTY shall be excused from performing its obligations under this MOU during the time and to the extent that it is prevented from performing by an unforeseeable cause beyond its control, including but not limited to: any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; or a material act or omission by any other PARTY; when satisfactory evidence of such cause is presented to the other PARTIES, and provided further that such nonperformance is unforeseeable, beyond the control and is not due to the fault or negligence of the PARTY not performing.

H. Assignment: Neither this MOU, nor any PARTY's rights, obligations, duties, or authority hereunder may be assigned in whole or in part by any PARTY without the prior written consent of all other PARTIES in their sole and absolute discretion. Any such attempted assignment shall be deemed void and of no force and effect. Consent to one assignment shall not be deemed consent to any subsequent assignment, nor the waiver of any right to consent to such subsequent assignment.

I. Obligations To Comply with Law: Nothing herein shall be deemed nor construed to authorize or require any PARTY to issue bonds, notes or other evidence of indebtedness under terms, in amounts, or for purposes other than as authorized by local, state or federal law.

J. Governing Law: The laws of the State of California and applicable local and federal laws, regulations and guidelines shall govern this MOU.

K. Notices: Any notices, requests, or demands made between the PARTIES pursuant to this MOU are to be directed as follows:

To CITY OF IRVINE:	To AUTHORITY:
City of Irvine	Orange County Transportation Authority
P.O. Box 19575 Irvine CA 92623	550 South Main Street P. O. Box 14184 Orange, CA 92863-1584
Attention: Manuel Gomez Director of Public Works Tel: (949) 724-7509 Email: mgomez@cityofirvine.org	Attention: Meena Katakia, Manager, Capital Programs Tel: (714) 560-5694 Email: mkatakia@octa.net

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To CITY OF LAGUNA HILLS:	To CITY OF LAGUNA WOODS:
City of Laguna Hills	City of Laguna Woods
24035 El Toro Road Laguna Hills, CA 92653	24264 El Toro Road Laguna Woods, CA 92637
Attention: Bruce Channing City Manager Tel: (949) 707-2610 Email:	Attention: Leslie A. Keane City Manager Tel: (949) 639-050 Email:

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To CITY OF LAKE FOREST:	To COUNTY OF ORANGE:
City of Lake Forest	County of Orange
25550 Commercecentre Drive, Suite 100 Lake Forest, CA 92630	300 N. Flower Street P.O. Box 4048 Santa Ana, CA 92702
Attention: Robert Dunek City Manager Tel: (949) 461-3400 Email:	Attention: Ignacio Ochoa Director/Chief Engineer Tel: (714) 667-3213 Email:

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L. Successors and Assigns: The provisions of this MOU shall bind and inure to the benefit of each of PARTY hereto, and all successors or assigns of any PARTY hereto.

This MOU shall continue in full force and effect until all terms and conditions of this MOU are implemented, unless terminated earlier by written consent of all the PARTIES.

The above understandings are a guide to the intent and policies of the PARTIES to this MOU. This MOU shall be effective upon execution by all PARTIES.

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IN WITNESS WHEREOF, the PARTIES hereto have caused this Memorandum of Understanding No. C-2-1592 to be executed on the date first written above.

CITY OF IRVINE

By: _____
Manuel Gomez
Director of Public Works

ATTEST:

By: _____
Sharie Apodaca
City Clerk

APPROVED AS TO FORM:

By: _____
Phil Kohn
City Attorney

Dated: _____

ORANGE COUNTY TRANSPORTATION AUTHORITY

By: _____
Will Kempton
Chief Executive Officer

APPROVED AS TO FORM:

By: _____
Kennard R. Smart, Jr.
General Counsel

APPROVAL RECOMMENDED:

By: _____
Kia Mortazavi
Executive Director, Planning

Dated: _____

Attachments:

Exhibit A: Summary of MPAH Amendment, Appreciable Impacts and Traffic Share

Exhibit B: Impacted Intersections Share Cost Allocation

Exhibit C: MPAH Amendment Map

IN WITNESS WHEREOF, the PARTIES hereto have caused this Memorandum of Understanding No. C-2-1592 to be executed on the date first written above.

CITY OF LAGUNA HILLS

By: _____
Bruce Channing
City Manager

APPROVED AS TO FORM:

By: _____
Gregory E. Simonian
City Attorney

Dated: _____

IN WITNESS WHEREOF, the PARTIES hereto have caused this Memorandum of Understanding No. C-2-1592 to be executed on the date first written above.

CITY OF LAGUNA WOODS

By: _____
Leslie A. Keane
City Manager

APPROVED AS TO FORM:

By: _____
David B. Cosgrove
City Attorney

Dated: _____

IN WITNESS WHEREOF, the PARTIES hereto have caused this Memorandum of Understanding No. C-2-1592 to be executed on the date first written above.

CITY OF LAKE FOREST

By: _____
Robert Dunek
City Manager

APPROVED AS TO FORM:

By: _____
Scott Smith
City Attorney

Dated: _____

IN WITNESS WHEREOF, the PARTIES hereto have caused this Memorandum of Understanding No. C-2-1592 to be executed on the date first written above.

COUNTY OF ORANGE
A political subdivision of the State of California

By: _____
Chair, Board of Supervisors

Date:_____

SIGNED AND CERTIFIED THAT A COPY
OF THIS DOCUMENT HAS BEEN
DELIVERED TO THE CHAIRMAN OF
THE BOARD OF SUPERVISORS

By:_____
Susan Novak
Clerk of the Board of Supervisors
Orange County, CA

Date:_____

APPROVED AS TO FORM:
COUNTY COUNSEL
ORANGE COUNTY, CALIFORNIA

By _____
Deputy

Date: _____

OCTA

EXHIBITA: SUMMARY OF MPAH AMENDMENT APPRECIABLE IMPACTS and TRAFFIC SHARE

Intersection	Jurisdiction	Peak Hour	Post-2030 Level of Service				Difference in LOS (Level of Appreciable Impact)	Share[1]
			Current MPAH		Amendment to MPAH			
			ICU	LOS	ICU	LOS		
Bake Parkway/Research Drive	Irvine	PM	0.94	E	0.96	E	0.02	5%
Paseo de Valencia/Avenida de la Carlota	Laguna Hills	PM	1.01	E	1.04	F	0.03	15%
El Toro Road/Avenida de la Carlota	Laguna Hills	PM	1.02	F	1.03	F	0.01	15%
Ridge Route/Rockfield Boulevard	Lake Forest	PM	.98	F	1.01	F	0.03	7%

[1] Shares are based on the percentage of trips from the deleted Amendment to the MPAH roads, which are assigned onto the circulation system without these roads, to the total growth in traffic at the intersection from existing to Post-2030.

OCTA

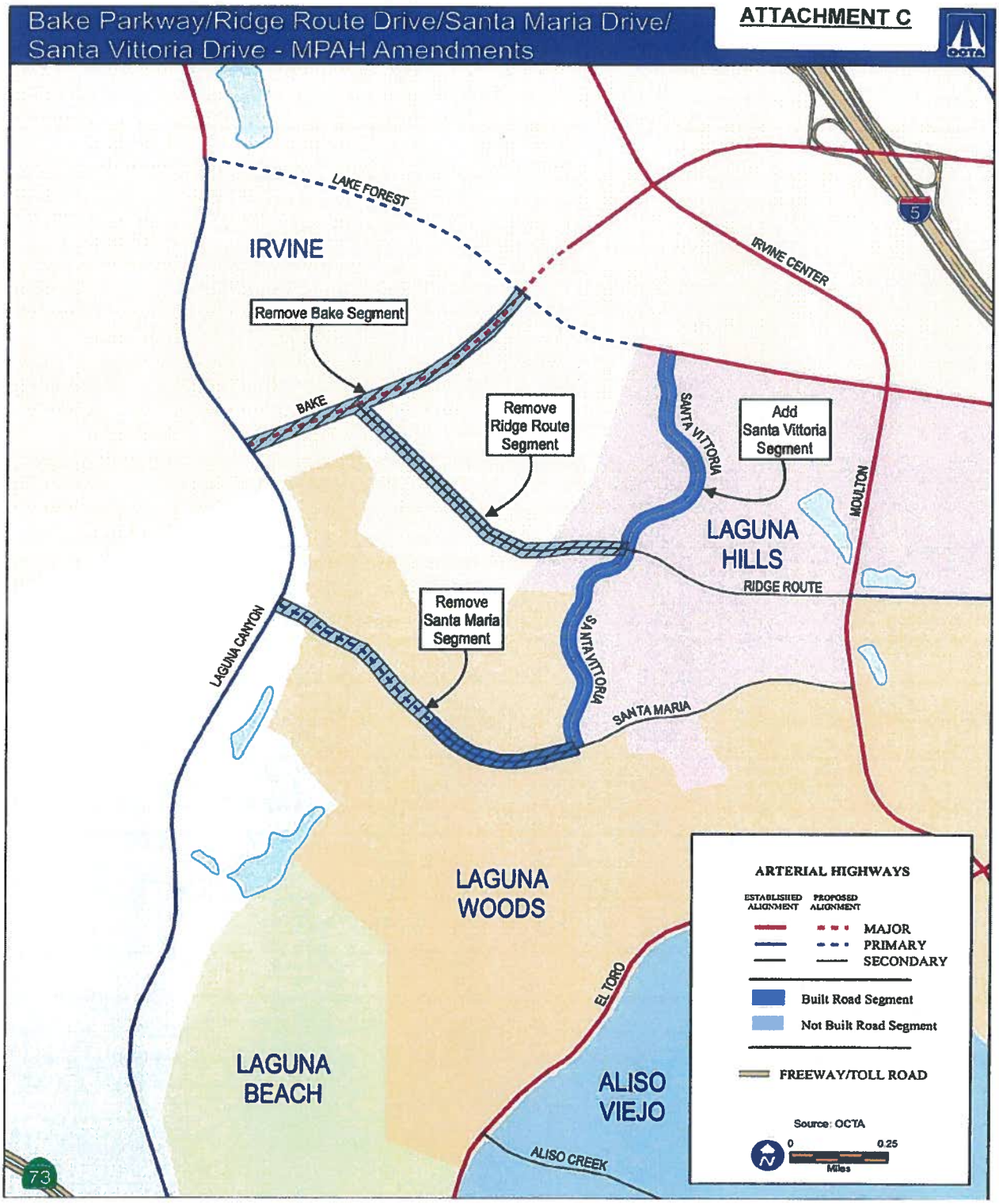
EXHIBIT B: IMPACTED INTERSECTIONS SHARE COST ALLOCATION

Impacted Intersection	Total Improvement Cost	Share	Share Cost Allocation
Bake Parkway/ Research Drive (City of Irvine)	$1,184,000	5%	$1,184,000 * .05 = **$59,200**
Paseo de Valencia/ Avenida de la Carlota (City of Laguna Hills); and El Toro Road/ Avenida de la Carlota (City of Laguna Hills)	$2,349,560	15%	$2,349,560 *.15 = **$352,434**
Ridge Route Drive/Rockfield Boulevard (City of Lake Forest)	$190,000	7%	$190,000 * .07 = **$13,300**[1]

[1] The City of Lake Forest is not a CARITS Program participant. As a result, funding for this mitigation is not available through the CARITS Program. Instead, the City of Lake Forest agrees that it will fund this improvement, if needed in the future, through non-General Fund, grant-funding sources.

OCTA

EXHIBIT C: MPAH AMENDMENT MAP



City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: OCTOBER 9, 2012

TO: MAYOR AND COUNCIL MEMBERS

FROM: KENNETH H. ROSENFIELD
PUBLIC SERVICES DIRECTOR/CITY ENGINEER

ISSUE: PROGRESS PAYMENT NO. 3, FINAL, FOR TURF RENOVATION LAGUNA HILLS COMMUNITY CENTER AND SPORTS COMPLEX, CIP NO. 238

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE PROGRESS PAYMENT NO. 3, FINAL, IN THE NET AMOUNT OF $1,620.00, TO CSA HOLDINGS INC., DBA SPORTS FIELD INSTALLATION SPORTS FIELD SERVICES, FOR TURF RENOVATION LAGUNA HILLS COMMUNITY CENTER AND SPORTS COMPLEX, CIP NO. 238, AND AUTHORIZE THE FILING OF THE NOTICE OF COMPLETION AND SUBSEQUENT RELEASE OF RETENTION IN 35 DAYS, IF NO LIENS HAVE BEEN FILED.

SUMMARY:

Work on the Turf Renovation Laguna Hills Community Center and Sports Complex, CIP No. 238, began on July 9, 2012, and is being performed by CSA Holdings Inc., dba Sports Field Installation Sports Field Services. The work has been satisfactorily completed. The contractor has submitted the third progress payment request for approval.

BACKGROUND:

A routine monthly action for capital improvement projects is the submission, review, and approval of the contractor's invoice. Procedurally, field staff verifies the contractor's quantities and matches them with the submitted invoice. The unit prices and total costs of the project are confirmed by the office staff and a progress payment is then processed. A ten-percent (10%) retention is withheld from each payment to assure final performance of the work. The contractor for the project, CSA Holdings Inc., dba Sports Field Installation Sports Field Services, has submitted the third progress payment for the subject project as follows:

ITEM #	DESCRIPTION	QUANTITY*	UNIT	$	AMOUNT*
1	Clearing & Grubbing	.024	LS	$22,630.00	$ 545.00
2	Excavation/Grading	.024	LS	$12,250.00	$ 297.00
3	Place Sand/Grade	.024	LS	$15,630.00	$ 378.00
4	Fertilization	.024	LS	$ 1,250.00	$ 33.00
5	Place and Roll Sod	.024	LS	$10,880.00	$ 265.00
6	Infield Renovation	.024	LS	$ 8,560.00	$ 208.00
7	Turf Maintenance	.024	LS	$ 2,000.00	$ 49.00
8	SWPPP	.024	LS	$ 1,000.00	$ 25.00

Total To Date	$81,362.18	
Less Prior Billing	$79,562.18	
Total This Period	$ 1,800.00	$ 1,800.00
Less 10% Retention		$(180.00)
		$ 1,620.00

* Quantity/Totals rounded to address a difference in invoicing.

FISCAL IMPACT:

The progress payment is within the Capital Improvement Program Budget for the Turf Renovation Laguna Hills Community Center and Sports Complex, CIP No. 238.

ATTACHMENTS:

- Notice of Completion

Recording Requested by and
When Recorded Mail to:

Peggy J. Johns, City Clerk
City of Laguna Hills
24035 El Toro Road
Laguna Hills, CA 92653

No Fee Exempt per GC§27383

By: _____

NOTICE OF COMPLETION

Notice is hereby given that the following public improvements have been completed and accepted by the City Council of the City of Laguna Hills on October 9, 2012.

Description of Improvements

Turf Renovation Laguna Hills Community Center and Sports Complex, CIP No. 238: consists of temporary fencing, clearing and grubbing, fine grading, sod installation, irrigation installation and repairs, and turf maintenance.

General Location

Community Center at 25555 Alicia Parkway, Laguna Hills, CA 92653.

Owner of Property Address

City of Laguna Hills
24035 El Toro Road
Laguna Hills, CA 92653

Contractor

CSA Holdings Inc., dba Sports Field
Installation Sports Field Services
Mr. Mannie Adams
8 Clydesdale Drive
Ladera Ranch, CA 92694

This Notice of Completion is executed under authority of a directive from the City Council of the City of Laguna Hills.

I, Kenneth H. Rosenfield, P.E., declare under penalty of perjury that I am the City Engineer of the City of Laguna Hills, that I am familiar with the facts stated in the foregoing Notice of Completion executed for and on its behalf, and that I have read the foregoing Notice of Completion and know the contents thereof to be true.

Dated: October 9, 2012

_____
Kenneth H. Rosenfield, P.E., Director of Public Works/City Engineer
City of Laguna Hills

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: OCTOBER 9, 2012

TO: MAYOR AND COUNCIL MEMBERS

FROM: KENNETH H . ROSENFIELD
PUBLIC SERVICES DIRECTOR/CITY ENGINEER

ISSUE: PROGRESS PAYMENT NO. 18 FOR LA PAZ ROAD WIDENING AT I-5 IMPROVEMENT PROJECT, CIP NO. 159

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE PROGRESS PAYMENT NO. 18, IN THE NET AMOUNT OF $280,167.44, AND CONTRACT CHANGE ORDER NO. 6 TO SEMA CONSTRUCTION, INC., FOR THE LA PAZ ROAD WIDENING AT I-5 IMPROVEMENT PROJECT, CIP NO. 159.

SUMMARY:

Work on the La Paz Road Widening at I-5 Improvement Project, CIP No. 159, began on April 7, 2011, and is being performed by SEMA Construction, Inc. Work performed in August 2012, included engineering, progress scheduling, site management, temporary fiber roll and inlet protection, street sweeping, storm water reporting, signage, traffic control, pavement marking, landscaping, irrigation, concrete pipe, asphalt concrete, signal and lighting, and electrical. The contractor has submitted the eighteenth progress payment request for approval. In addition, Contract Change Order No. 6 is presented for approval to address a variety of extra work and credits that have become necessary to complete the project. Many of the extra work items are related to underground work or pavement repair work items that could not be anticipated at the time of the bid. Approval of Contract Change Order No. 6 is recommended.

BACKGROUND:

A routine monthly action for capital improvement projects is the submission, review, and approval of the contractor's invoice. Procedurally, field staff verifies the contractor's quantities and matches them with the submitted invoice. The unit prices and total costs of the project are confirmed by the office staff and a progress payment is then processed. A ten (10) percent retention is withheld from each payment to assure final performance of the work. The contractor for the project, SEMA Construction, Inc., has submitted the eighteenth progress payment for the subject project as follows:

ITEM #	DESCRIPTION	QUANTITY	UNIT	$	AMOUNT
1	RE Office	.04	LS	$ 50,000.00	$ 2,000.00
2	Progress Schedule	.04	LS	$ 3,000.00	$ 120.00
4	Construction Site Mgmt	.04	LS	$ 10,000.00	$ 400.00
7	Temp Fiber Roll	1,875	LF	$ 2.20	$ 4,125.00
10	Temp Inlet Protection	11	EA	$ 86.00	$ 946.00
11	Street Sweeping	.04	LS	$ 25,000.00	$ 1,000.00
12	Temp Conc WO Bin	1	EA	$ 1,000.00	$ 1,000.00
15	Storm Water Report	1	EA	$ 500.00	$ 500.00
18	Construction Area Sign	.04	LS	$ 40,400.00	$ 1,616.00
19	Traffic Control System	.04	LS	$ 55,700.00	$ 2,228.00
20	Type III Barricade	82	EA	$ 73.00	$ 5,986.00
23	Channelizer	238	EA	$ 35.00	$ 8,330.00
24	Temp Pave Marker	420	EA	$ 5.50	$ 2,310.00
26	Portable Message Signs	.04	LS	$ 1,600.00	$ 64.00
36	Remove Pipe	24	LF	$ 21.00	$ 504.00
41	Cold Plane A/C Pave	18,141	SY	$ 1.20	$ 21,769.20
54	Highway Planting	.08	LS	$112,300.00	$ 8,984.00
62	Irrigation System	.25	LS	$176,581.34	$ 44,145.34
68	Hot Mix Asphalt	2,284.40	TN	$ 78.50	$179,325.40
69	Place Hot Mix	233	SY	$ 8.50	$ 1,980.50
126	Thermo Pave Marking	1,775	SF	$ 4.40	$ 7,810.00
127	Painted Traffic Markings	1	LS	$ 7,200.00	$ 7,200.00
128	Pavement Marker (NR)	136	EA	$ 5.50	748.00
129	Pavement Marker (R)	402	EA	$ 11.00	$ 4,422.00
130	Maintain TMS	.05	LS	$ 3,100.00	$ 155.00
133	Ramp Meter System (1)	.07	LS	$ 36,100.00	$ 2,527.00
CCO No. 4	B1 – Electrical Irrigation	.04	LS	$ 27,543.12	$ 1,101.72

Total To Date	$4,299,122.56	
Less Prior Billing	$3,987,825.40	
Total This Period	$ 311,297.16	$311,297.16
Less 10% Retention		$(31,129.72)
		$280,167.44

CONTRACT CHANGE ORDER

Contract Change Order No. 6, attached, is presented for approval to address a variety of extra work and credits that have become necessary to complete the project. Many of the extra work items are related to underground work or pavement repair work items that could not be anticipated at the time of the bid along with additional work required by Caltrans. Approval of Contract Change Order No. 6 is recommended.

FISCAL IMPACT:

The construction budget for this project is $6,000,000. Expenditures to date including Progress Payment No. 18 and the projected cost for Contract Change Orders are within the Capital Improvement Program Budget for the La Paz Road Widening at I-5 Improvement Project, CIP No. 159.

ATTACHMENTS:

- Contract Change Order No. 6

CITY OF LAGUNA HILLS
CONTRACT CHANGE ORDER

CONTRACT CHANGE ORDER NO. 6 SHEET 1 OF 8 SHEETS

PROJECT: La Paz Widening at I-5, CIP No. 159

CONTRACTOR: SEMA Construction

In accordance with contract provisions, the following changes in the contract and/or contract work are hereby authorized and as compensation therefore, the following addition to or deductions from the contract price are hereby approved.

Note: This change order is not effective until approved by the City Engineer.

Description of work to be done, estimate of quantities, and prices to be paid. Segregate between additional work at contract price, agreed price, and force account. Unless otherwise stated, rates for rental of equipment are actually used and no allowance will be made for idle time.

Change requested by: City

This change order provides compensation to SEMA Construction for the following extra work:

A1: Extra Work At Agreed Lump Sum:

Drainage System 1 Modifications: Modify Drainage System 1 as per the attached drawings dated March 20, 2012 (7 pages). Also, remove and dispose of the existing retaining wall at the location of Retaining Wall #1 in order to construct Retaining Wall #1 per plan.

Lump Sum Amount = $9,971.41

Total Contract Value Adjustment A1: **$9,971.41**

By reason of this order the time of completion will be adjusted as follows:

A1: No Time Extension

B1. Extra Work at Contract Unit Price/Agreed Lump Sum/Extra Work at Force Account:

SB Off Ramp Irrigation Cross-over Changes: Delete Bid Item #65, “10 Inch Welded Steel Pipe Conduit”, for a Credit of $20,000 per Contract Unit Price. Reduce Bid Item #66, “Extend 8 inch Conduit” by 40 lf for a Credit of $1,720.00. These two credits are at Contract Unit Price.

Install two new CHDPE pipes, one 10 inch and one 8 inch, to construct two new irrigation cross-overs. These two new irrigation cross-overs shall be in the approximate location of Cross-overs #5 and #9 on the contract plans. These two new cross-overs shall be installed for an agreed lump sum price of $33, 218.35.

Bid Item #65: Revised Quantity = 0
Bid Item #66: Revised Quantity = 140

Remove the old box culvert section encountered while installing the two new irrigation cross-overs, and provide additional shoring and crew time as directed in the field to accommodate the existing utilities encountered while constructing drainage system #4. This work shall be performed as Extra Work At Force Account, per Extra Work Bills #43, 44, ($2,095.15)

Rent Extra Shoring to work around the old cross-overs when installing Drainage System 4, per Extra Work Bills #46 and #47 (shoring rental only, $281.44)

This change order shall therefore adjust the final contract amount by

Contract Unit Price = ($21,720)
Agreed Lump Sum Amount = $33,218.35
Extra Work at Force Account =$2,376.59

Total Contact Value Adjustment for B1: $13,593.50

By reason of this order the time of completion will be adjusted as follows:

B1: No Adjustment

C1: Extra Work At Contract Unit Price:

Extension of Type 60R Barrier: The following Final Pay Bid Quantity is increased at contract unit price:

Bid Item #124, Concrete Barrier (Type 60R), increased 10 lf @ $47 per lf, = $470.00
(New Total Final Pay Quantity is 470 lf)

Total Final Pay Quantity Increase = $470.00

Total Contract Value Adjustment C1: **$470.00**

By reason of this order the time of completion will be adjusted as follows:

C1: No Time Extension

D1: Extra Work At Force Account:

Plug Box Culvert: Plug the box culvert for Drainage System 8 after removing an existing drainage structure. The work shall be done as Extra Work at Force Account, per Extra Work Bill #58:

Total Contract Increase, Extra Work at Force Account = $1,563.39

Total Contract Value Adjustment D1: **$1,563.39**

By reason of this order the time of completion will be adjusted as follows:

D1: No Time Extension

E1: Extra Work at Agreed Lump Sum:

Additional Roadside Signs: Provide the following additional roadside signs. (Sign numbers are per contract plan sign tables):

1. Provide new freeway entrance signs at the entrance to the NB Straight on-ramp. The new signs shall be similar to Sign 52 on the sign sheets. Remove and dispose of the existing signs.
2. Provide a new pedestrian crosswalk sign at the NB straight on-ramp similar to sign 80 on the sign sheets. Remove and dispose of the existing sign.
3. Replace Signs 26 and 40 instead of relocating them. Dispose of the existing signs. Follow the details on the attached drawings (signs "B" and "C" on the attached drawings.)
4. Replace Sign 6 instead of relocating it. The new sign shall be similar to Sign 10. Dispose of the existing sign.
5. Provide Two Sign "A" per the attached drawings. One sign shall be installed as on the attached drawings on the NB off ramp. A similar sign shall be provided for the SB off ramp.
6. Provide Sign #91 for a lump sum amount of $841.50, using 0.080" Framed sign

Total Agreed Lump Sum Increase = $7,865,76

Total Contract Value Adjustment E1: **$7,865.76**

By reason of this order the time of completion will be adjusted as follows:

E1: No Time Extension

F1: Extra Work at Force Account:

Miscellaneous Site Work and Traffic Control: Perform the following items of work as directed by the Inspector:

1. Sawcut/Clean for Irrigation X-Over, SB Loop Onramp: EWB #40
2. Sawcut/Remove Stage 2 Curb & Gutter: EWB #41
3. Relocate K-Rail, Stage 2: EWB 42
4. Removals, AC, NB Off Ramp Island to install Rock Blanket EWB 48,49
5. Remove Buried Concrete: EWB 52
6. Re-grade Curb for Drainage System 1: EWB 53
7. Remove Buried Concrete for RW #1 Construction: EWB 54
8. Removals, Headwall at NB Loop On Ramp per Caltrans: EWB 55
9. Extend Taper, EB La Paz for Stage 4A: EWB 56
10. Install 3 PCMS Boards in Mission Viejo (Labor Only): EWB 57
11. Install Traffic Control, Stage 4A: EWB 59
12. Sawcut Median Island Curb for Revisions: EWB 60
13. Remove 3 PCMS Boards Mission Viejo (Labor/Trucks Only): EWB 61
14. Install Traffic Control Stage 4A: EWB 62
15. Install Traffic Control, EWB 63
16. NB Off Ramp Island Complete Removals for Rock Blanket EWB 64
17. Retaining Curb Grading EWB 65
18. Traffic Control on La Paz Aug 2 EWB 66
19. Place Sidewalk Concrete NB Off Ramp Island EWB 67
20. NB Straight On-Ramp Sidewalk Grade Adjustments and Traffic Control: EWB 68
21. Retaining Curb Grading: EWB 69
22. Traffic Control for Median Island Adjustments: EWB 70,71
23. Remove Form Liners: EWB 72
24. Remove Buried Concrete: EWB 73
25. Curb Removals and Traffic Control: EWB 74
26. Sidewalk and Retaining Curb: EWB 75
27. Install PCMS Mission Viejo for Paving: EWB 76
28. Miscellaneous Sidewalk Grading: EWB 77
29. Repair Irrigation Line: EWB 78
30. Retaining Curb/Headwall replacement at NB off ramp: EWB 79
31. Provide Cleanout, RW #1: EWB 80
32. Traffic Control for Survey, SB Off Ramp: EWB 81
33. Sidewalk Grading, SB off ramp: EWB 82
34. Install PCMS Signs Mission Viejo: EWB 83
35. Pour Retaining Curbs: EWB 84
36. Traffic Control for Asphalt R&R on La Paz: EWB 85
37. Traffic Control During Paving: EWB 86
38. Sidewalk and Retaining Curb: EWB 87
39. Remove PCMS from Mission Viejo: EWB 88
40. Re-grade Median after Curb Removal: EWB 89
41. Dispose of Buried Concrete: EWB 90

Total Extra Work Bills Above: $63,677.73

Total Contract Value Adjustment, F1: **$63,677.73**

By reason of this order the time of completion will be adjusted as follows:

F1: No Time

G1: Extra Work At Force Account, Final Cost for Change Order #3 Part C, (Supplement 1):

Traffic Signal Crossing: The total compensation for CCO 3, part C for the Traffic Signal Crossing at the Muirlands Intersection shall be as follows:

1. SEMA EWB #21 $715.59
2. MSL EWB #2, #4, and #8: $16,336.03

Extra Work at Force Account (Total Final Amount) = $16,336.03

Change Order #3 provided $10,000 for this work, so this Change Order #6 shall include an additional $6,336.03.

Total Contract Value Adjustment G1: **$6,336.03**

By reason of this order the time of completion will be adjusted as follows:

G1: No Time Extension

H1: Extra Work At Force Account:

Miscellaneous Electrical Work: This change shall provide compensation for removing buried concrete, replacing an undersized breaker, and exploration for telephone cables as directed in the field. Compensation includes EWB # 1, 3, 5, 6, and 7 for MSL (EWB #1 was cancelled).

Extra Work at Force Account = $3,025.83

Total Contract Value Adjustment H1: **$3,025.83**

By reason of this order the time of completion will be adjusted as follows:

H1: No Time Extension

I1: Extra Work At Agreed Lump Sum:

New Electrical Equipment: Replace the signal interconnect cabinet at the NW corner of La Paz Road and the SB off ramp instead of relocating it. Provide a new, stainless steel cabinet. Replace the signal head at Traffic Signal Pole #E instead of relocating the existing pole.

Total Agreed Lump Sum Price: $4,045.17

Total Contract Value Adjustment I1: **$4,045.17**

By reason of this order the time of completion will be adjusted as follows:

I1: No Time Extension

J1: Extra Work At Agreed Lump Sum Price:

Remove and Replace Pavement: Grind 3" existing HMA as marked in the field and replace with approved ¾" HMA mix. Compensation provided in this Part J1 does not include traffic control. Compensation is based upon subcontractor price of $3.90 per SF plus prime contractor mark-up.

Agreed Lump Sum Price: $47,464.37

Total Contract Value Adjustment J1: **$47,464.37**

By reason of this order the time of completion will be adjusted as follows:

J1: No Time Extension

K1: Extra Work At Agreed Lump Sum:

Miscellaneous Irrigation Work: Perform the following work: Remove ice plant at SB gore area for irrigation work. Provide 4 additional valves for the SB straight on ramp to complete the irrigation system. Replace two existing irrigation lines, one at the SB gore area and one at the top of the SB straight on ramp instead of connecting to existing lines. Expose 6" water main for MNWD. Delete sod at the gas station property. Install and additional 140' of 6" water main in addition to the length installed under CCO #4 to complete this system. This lump sum compensation includes all work per the SEMA Cost proposal of 9/20/12 with corrected mark-ups.

Agreed Lump Sum Amount = $11,669.59

Total Contract Value Adjustment K1: **$11,669.59**

By reason of this order the time of completion will be adjusted as follows:

K1: No Time Extension

L1: Extra Work At Force Account: CCO #3 Parts A and B, CCO #4 Part D (Supplement 1):

Protect Monitoring Wells and Remove Concrete/Asphalt Debris: The final amount to be paid for this work shall be $24,888.59 per SEMA EWB 7-14, 15-20, 22-29. Change Orders #3 and #4 authorized up to $32,500 for this work. Therefore, the this Part L1 shall reduce the final contract amount by $7,611.41

Extra Work at Force Account Reduction in Previous Change Order Amounts: ($7,611.41)

Total Contract Value Adjustment: **($7,611.41)**

By reason of this order the time of completion will be adjusted as follows:

L1: No Time Extension

M1: Extra Work At Agreed Lump Sum Price:

Credit for Re-Staking, Re-Testing, Traffic Impact Fee, and Overtime Inspection: Provide a credit for this work as required by the Special Provisions and the break-down on the attached two pages:

Survey: 37 hours x $240 per hour = $8,880
Testing: 6.5 hours x $73 per hour = $474.50
Inspection: 23 hours x $110 per hour = $2,530
TIF: $500

Total Credit Due: ($12,384.50)

Total Contract Value Adjustment: ($12,384.50)

By reason of this order the time of completion will be adjusted as follows:

M1: No Time Extension

The compensation (time and cost) set forth in this Change Order comprises the total compensation due the Contractor, all Subcontractors and all suppliers, for the work or change defined in this Change Order, including all impact on any unchanged work. By signing this Change Order, the Contractor acknowledges and agrees, on behalf of himself, all Subcontractors, and all suppliers, that the stipulated compensation includes payment for all work contained in this Change Order, plus all payment for the interruption of schedules.

Extended overhead costs, delay, and all impact, ripple effect or cumulative impact on all other, work under this Contract. The signing of this Change Order shall indicate that the Change Order constitutes full mutual accord and satisfaction for the change, and that the time and/or cost under the Change Order constitutes the total equitable adjustment owed the Contractor, all

Subcontractors, and all suppliers, as a result of the change. The Contractor, on behalf of himself, all Subcontractors, and all suppliers, agrees to waive all rights, without exception or reservation of any kind whatsoever, to file any further claim or request for equitable adjustment of any type, for any reasonably foreseeable cause that shall arise out of or as a result of this Change Order or the impact of this Change Order on the remainder of the work under this Contract.

SUMMARY OF CONTRACT TIME

Original Contract Date:	April 7, 2011
Original Contract Time:	275
Original Completion Date:	May 18, 2012
Time Extension this C.O.:	0
Total Contract Time Extension:	11
Revised Contract Time:	286
Revised Final Completion Due Date:	See Weekly Statement of Working Days
Time Subject to Liquidated Damages:	None
Actual Final Completion Date:	TBD

Original Contract Price	$4,228,879.00
Prev. Authorized Changes	$ 245,041.99
This Change (Add)	$ 149,686.90
Amended Contract Price	$4,623,607.90

If the Contractor does not sign acceptance of this order, his attention to the requirements of the specifications as to proceeding with the order work and filing a written protest within the time therein specified.

Approved by:

Director of Public Services Date

Accepted by:

Contractor Date

Print Name: _____

4. CONSENT CALENDAR

MOTION TO APPROVE THE CONSENT CALENDAR, BY M/COUNCIL MEMBER BRESSETTE, S/MAYOR PRO TEMPORE LAUTENSCHLEGER. APPROVED BY A VOTE OF 5-0.

4.1 MOTION TO APPROVE THE READING BY TITLE OF ALL ORDINANCES AND RESOLUTIONS, SAID TITLES, WHICH APPEAR ON THE PUBLIC AGENDA, SHALL BE DETERMINED TO HAVE BEEN READ BY TITLE AND FURTHER READING WAIVED

THE CITY COUNCIL WAIVED READING OF ORDINANCES AND RESOLUTIONS.

4.2 APPROVAL OF WARRANT REGISTER FOR PERIOD ENDED SEPTEMBER 25, 2012

THE CITY COUNCIL APPROVED THE WARRANT REGISTER IN THE AMOUNT OF $2,214,770.16.

4.3 AUTHORIZATION TO ADVERTISE FOR BIDS FOR THE COMMUNITY CENTER BUILDING REFURBISHMENT, CIP NO. 513A

THE CITY COUNCIL APPROVED THE PLANS AND SPECIFICATIONS FOR THE COMMUNITY CENTER BUILDING REFURBISHMENT, CIP NO. 513A, AUTHORIZED THE ADVERTISEMENT FOR BIDS OF THE PROJECT, AND AUTHORIZED THE DIRECT PURCHASE OF WALL CAPS FROM QUICKCRETE CORPORATION.

4.4 PROGRESS PAYMENT NO. 2 FOR CITYWIDE PAVEMENT REHABILITATION PROJECT, CIP NO. 101-H

THE CITY COUNCIL APPROVED PROGRESS PAYMENT NO. 2, IN THE NET AMOUNT OF $1,177,371.79, TO ALL AMERICAN ASPHALT, FOR CITYWIDE PAVEMENT REHABILITATION PROJECT, CIP NO. 101-H.

5. PLANNING AGENCY

Mayor Carruth recessed the City Council meeting and acting in the capacity of Chair, called the regular meeting of the Planning Agency of the City of Laguna Hills, California, to order at 7:13 PM.

5.1 ROLL CALL OF PLANNING AGENCY MEMBERS

Present: Chair Carruth, Vice Chair Lautenschleger, Agency Member Bressette, Agency Member Kogerman, and Agency Member Songstad

5.2 PUBLIC COMMENTS

There were no Public Comments.

5.3 MINUTES

5.3.1 REGULAR MEETING, SEPTEMBER 11, 2012

MOTION TO APPROVE THE MINUTES OF THE SEPTEMBER 11, 2012, REGULAR MEETING, BY M/AGENCY MEMBER SONGSTAD, S/AGENCY MEMBER BRESSETTE.
APPROVED BY A VOTE OF 5-0.

5.4 PLANNING AGENCY PUBLIC HEARINGS

5.4.1 CONDITIONAL USE PERMIT NO. 08-12-2346, A REQUEST BY H2O PARTNERS, LLC., TO OPERATE AN INDOOR TRAMPOLINE PARK AT 23251 AVENIDA DE LA CARLOTA IN THE (FC) FREEWAY COMMERCIAL ZONING DISTRICT.

Chair Carruth opened the Public Hearing.

Joshua Hunter, Applicant, spoke on Conditional Use Permit No. 08-12-2345, a request by H20 Partners, LLC., to operate an indoor trampoline park.

Greg Briggs, representative of H20 Partners, spoke on Conditional Use Permit No. 08-12-2345, a request by H20 Partners, LLC., to operate an indoor trampoline park. Mr. Briggs indicated he read and agreed to all of the Conditions of Approval.

Chair Carruth closed the Public Hearing.

THE PLANNING AGENCY ADOPTED RESOLUTION NO. PA2012-09-25-1, A RESOLUTION OF THE PLANNING AGENCY OF THE CITY OF LAGUNA HILLS, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT NO. 08-12-2346, A REQUEST BY H20 PARTNERS, LLC., TO OPERATE AN INDOOR TRAMPOLINE PARK AT 23251 AVENIDA DE LA CARLOTA IN THE (FC) FREEWAY COMMERCIAL ZONING DISTRICT, BY M/AGENCY MEMBER BRESSETTE, S/AGENCY MEMBER KOGERMAN.
APPROVED BY A VOTE OF 5-0.

PLANNING AGENCY ADJOURNMENT

Mayor Carruth reconvened the City Council meeting at 7:22 PM. All Council Members were present.

6. CITY COUNCIL PUBLIC HEARINGS

There were no City Council Public Hearings.

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: **OCTOBER 9, 2012**

TO: **CHAIR AND AGENCY MEMBERS**

FROM: **DAVID CHANTARANGSU, AICP**
COMMUNITY DEVELOPMENT DIRECTOR

ISSUE: **MINOR SITE DEVELOPMENT PERMIT/PARKING USE PERMIT NO. 9-12-2372, A REQUEST BY WBSA ARCHITECTS INC., ON BEHALF OF SADDLEBACK MEMORIAL MEDICAL CENTER, A CALIFORNIA NON-PROFIT CORPORATION, FOR A JOINT USE PARKING PERMIT TO ESTABLISH OFF-SITE STAFF PARKING FOR USE BY MEMORIAL CARE CANCER TREATMENT CENTER, WHICH PLANS TO OCCUPY THE EXISTING BUILDING AT 24302 PASEO DE VALENCIA, AND FOR A MINOR SITE DEVELOPMENT PERMIT FOR A 3,160 SQUARE FOOT BUILDING ADDITION AND MINOR SITE IMPROVEMENTS**

RECOMMENDATION: **THAT THE PLANNING AGENCY: (1) CONDUCT A PUBLIC HEARING; AND (2) ADOPT A RESOLUTION ENTITLED, "A RESOLUTION OF THE PLANNING AGENCY OF THE CITY OF LAGUNA HILLS, CALIFORNIA, APPROVING MINOR SITE DEVELOPMENT PERMIT/PARKING USE PERMIT NO. 9-12-2372, A REQUEST BY WBSA ARCHITECTS INC., ON BEHALF OF SADDLEBACK MEMORIAL MEDICAL CENTER, A CALIFORNIA NON-PROFIT CORPORATION, FOR A JOINT USE PARKING PERMIT TO ESTABLISH OFF-SITE STAFF PARKING FOR USE BY MEMORIAL CARE CANCER TREATMENT CENTER, WHICH PLANS TO OCCUPY THE EXISTING BUILDING AT 24302 PASEO DE VALENCIA, AND FOR A MINOR SITE DEVELOPMENT PERMIT FOR A 3,160 SQUARE FOOT BUILDING ADDITION AND MINOR SITE IMPROVEMENTS."**

SUMMARY:

WBSA Architects Inc., on behalf of Saddleback Memorial Medical Center, a California Non-Profit Corporation (hereinafter referred to as “Applicant”), is requesting approval of Minor Site Development Permit/Parking Use Permit (SDPA/PUP) No. 9-12-2372, which would allow the future occupants of the subject site to utilize three off-site parking spaces to satisfy parking requirements and to permit a small first-floor addition to the existing building. The addition will eliminate 11 parking spaces from the subject site, and the additional building area will be used to house new medical equipment (referred to as linear

accelerators) for cancer radiation treatments. Due to the new building area and elimination of 11 parking spaces, an on-site parking deficiency is created. Therefore, the Applicant is requesting to utilize surplus parking at the nearby parking structure at Paseo de Valenica and Calle de la Magdalena on the Saddleback Hospital Campus which is also owned by the Applicant. The address of the off-site parking structure is 24451 Health Center Drive.

Staff has reviewed the project for compliance with the requirements of the Development Code and Urban Village Specific Plan, goals and strategies of the General Plan, and the California Environmental Quality Act (CEQA) and has determined that this project, subject to the conditions of approval, will not result in any significant adverse impacts to public health, safety, and general welfare.

BACKGROUND:

The project site is located at 24302 Paseo de Valencia near the corner of Calle de la Plata and Paseo de Valencia in the Village Commercial zone. The site is 0.79 acres and is developed with a two-story, approximately 17,277 square foot building currently housing the Saddleback Valley Outpatient Surgery Center. The site shares street access and internal circulation with the adjacent Farmers and Merchants Bank. While the parking lot also appears to be shared, no shared parking agreement exists and each property relies on its own parking. This arrangement was created by approval of the surgery center in 1985 by the County of Orange. At that time the building was approved as an outpatient surgery center and has remained a surgery center or similar medical use since 1985. The overall building square footage and available parking have remained largely unchanged since the original approval.

ANALYSIS:

The Applicant intends to purchase the property and occupy the existing 17,277 square-foot building and add a 3,200 square-foot first floor addition at the northeast corner of the property and a second floor mechanical penthouse. The new area will be used to house two linear accelerator vaults, which are constructed of reinforced concrete and are used in the treatment of cancer. Most of the first and second floors will be remodeled to accommodate the proposed cancer treatment center use. The first floor will be a radiation oncology use, including the new linear accelerators, patient dressing areas, conference rooms, and treatment planning rooms. The second floor will house a similar use or uses, which may act in conjunction with, or in support of, the first floor radiation oncology services.

The addition will result in the loss of 11 parking spaces from the subject site, leaving 37 parking spaces available. Parking on the subject site is clearly marked for use by the surgery center (future cancer treatment center) and the adjacent property's parking is clearly marked for use by Farmers and Merchants Bank. The Laguna Hills Municipal Code (LHMC) lists parking ratios for a variety of uses including medical office and hospitals.

However, the proposed use does not fit the definition of either of these uses nor is it expected to demand as much parking as these uses. LHMC Section 9-44.020 grants the authority to determine appropriate parking requirements not specifically set forth in the LHMC to the Community Development Director. To that end, Linscott, Law & Greenspan (a traffic engineering firm) has prepared a parking study to determine the expected parking demand for this type of use, taking into account the parking demand of similar uses, expected operations (i.e. maximum number of staff and patients), and field surveys. Based upon this analysis the parking demand for the cancer treatment center is 40 parking spaces, leaving an on-site parking deficiency of three spaces. The Applicant has requested the subject parking use permit in order to utilize a parking surplus in a nearby parking structure owned by the Applicant.

Laguna Hills Municipal Code Section 9-44.070 permits the use of off-site parking facilities provided such facilities are with 300 feet of the uses which they are intended to serve. The parking structure property is within 300 feet of the subject site; however, the parking structure itself is just beyond the 300-foot requirement. Laguna Hills Municipal Code Section 9-02.070 grants the Community Development Director the authority to grant minor deviations to standards in the development code provided such deviations do not exceed ten percent. In this case, the Director recommends this ten percent deviation (30 feet) be granted in order to put the parking structure well within the distance requirement for off-site parking. The subject parking structure is within a short walking distance of the proposed cancer treatment center, on the Saddleback Hospital campus. The parking structure is currently for use by the Applicant's employees only and has a demonstrated surplus of 151 spaces available.

The cancer treatment center will utilize the parking structure for staff parking only, leaving on-site parking for patients. Because the off-site property and parking structure is owned by the Applicant, no parking agreement is required for the cancer treatment center to make use of the off-site parking spaces. However, a condition of approval has been included that requires a covenant or easement to be recorded for the benefit of the subject property which cannot be removed except with the City's consent (Condition 23).

Additionally, the existing non-conforming disabled accessible parking stalls will be upgraded to meet current accessibility requirements. Other site changes propose the creation of three additional parking stalls; however, these parking stalls are actually located on the Farmers and Merchants Bank property, and at this time will not be used by the proposed cancer treatment center. Staff has reached out to Farmers and Merchants Bank and informed them of the proposed project. As of this writing, staff has not received any negative feedback from the bank and they are eager to work with the future property owner, as they have worked with Saddleback Valley Surgery Center in the past. The bank has expressed their continued desire to maintain parking on their property for use of the bank's employees and customers. All work on the bank's property (including the addition of the three parking spaces, slight modification of the Edison easement, and potential shared use of trash facilities) would require express agreement, in writing, from the owner of the bank property, and a condition of approval has been added to this effect (Condition 20). Private agreements, such as easements or covenants, may already exist which allow the Applicant to proceed with the work once approved by the City. Since the City is not party to the private agreements, the property owners must confer with each other to discuss the logistics of the site improvements on both properties. Even if the site improvements could not be made on the Farmers and Merchants Bank property, the addition to the building could move forward from the standpoint of the City's development code, as described in Condition 20.

The building addition, while largely made of reinforced concrete due to the nature of the use, will reflect the style of the existing building from the exterior. The building uses similar colors and materials and a roofline consistent with that of the existing building. A condition of approval has also been included to ensure that sufficient landscaping is installed to help soften the west building elevation, since windows are not an option in the linear accelerator addition (Condition 26). The proposed addition meets the development requirements of the Urban Village Specific Plan for setbacks and lot coverage providing a 10 foot rear setback (where a 10 foot minimum is required) and 3.5 foot and 12.5 foot north and south side setbacks respectively, where no side setback is required. With the addition, the property will also maintain a lot coverage of 36 percent whereas up to 70 percent is permitted. The addition is also well within the maximum permitted 75 foot building height – a building height of 32 feet is proposed for the project.

PUBLIC COMMENT:

Public hearing notices were mailed to all property owners within a 300-foot radius of the subject site. Notices were also sent to the City of Laguna Woods, the Farmers and Merchants bank local branch adjacent to the subject site, and the tenant of the subject site (Saddleback Valley Outpatient Surgery Center). As of the date of this writing, staff has received no comments from the public on this agenda item.

FISCAL IMPACT:

None

CEQA FINDINGS:

Staff has reviewed the proposed project for compliance with CEQA. Upon completion of this review, it has been determined that the proposed project is categorically exempt from CEQA, pursuant to CEQA Guidelines Section 15301 (Class 1, Existing Facilities). Categorical Exemptions are designated for classes of projects which have been determined not to have a significant effect on the environment and which have therefore been exempted from the requirements of CEQA. The Class 1 exemption applies to the permitting, licensing, and minor alteration of existing structures or facilities involving negligible expansion of use beyond that which is existing, including additions to existing structures in urbanized areas of less than 10,000 square feet. The proposed project would result in a 3,200 square-foot addition to an existing building in an urbanized area and permitting of off-site parking for the facility.

CONCLUSION:

The project will allow a use consistent with the medical-oriented nature of the surrounding area to locate at the subject site while making use of an existing under-utilized parking structure to meet the established parking requirement for the use. The design of the building addition is consistent with design guidelines in the Urban Village Specific Plan, and the project as a whole is consistent with the General Plan. Several conditions have been included in the proposed resolution of approval which are intended to ensure the building addition complements the site, and to ensure the off-site parking is utilized appropriately and is maintained for use by the subject property. Therefore, staff recommends approval of the project.

ATTACHMENTS:

- Attachment 1 – Resolution of Approval
- Attachment 2 – Letter of Justification
- Attachment 3 – Parking Study
- Attachment 4 – Plans

ATTACHMENT 1

RESOLUTION NO. PA2012-

A RESOLUTION OF THE PLANNING AGENCY OF THE CITY OF LAGUNA HILLS, CALIFORNIA, APPROVING MINOR SITE DEVELOPMENT PERMIT/PARKING USE PERMIT NO. 9-12-2372, A REQUEST BY WBSA ARCHITECTS INC., ON BEHALF OF SADDLEBACK MEMORIAL MEDICAL CENTER, A CALIFORNIA NON-PROFIT CORPORATION, FOR A JOINT USE PARKING PERMIT TO ESTABLISH OFF-SITE STAFF PARKING FOR USE BY MEMORIAL CARE CANCER TREATMENT CENTER, WHICH PLANS TO OCCUPY THE EXISTING BUILDING AT 24302 PASEO DE VALENCIA, AND FOR A MINOR SITE DEVELOPMENT PERMIT FOR A 3,160 SQUARE FOOT BUILDING ADDITION AND MINOR SITE IMPROVEMENTS

The Planning Agency of the City of Laguna Hills, California, hereby finds, determines, declares, and resolves as follows:

WHEREAS, an application for Site Development Permit/Parking Use Permit (SDPA/PUP) No. 9-12-2372 has been received to establish off-site parking and permit building and site improvements for an existing commercial property at 24302 Paseo de Valencia in the Village Commercial (VC) zone; and

WHEREAS, SDPA/PUP No. 9-12-2372 is hereby found to be Categorically Exempt from the California Environmental Quality Act (CEQA) based upon a Class 1 (CEQA Guidelines §15301, Existing Facilities) exemption; and

WHEREAS, the Planning Agency has considered evidence presented by the Community Development Department, the Applicant, and other interested parties with respect to the subject application at a public hearing held on October 9, 2012.

NOW, THEREFORE, THE PLANNING AGENCY OF THE CITY OF LAGUNA HILLS, CALIFORNIA, DOES RESOLVE, DECLARE, DETERMINE, AND ORDER AS FOLLOWS:

SECTION 1. The above recitals are true and correct, and are incorporated herein by reference.

SECTION 2. That the required findings by the City for approval of SDPA/PUP No. 9-12-2372 have been met and made as follows:

Site Development Permit

1. That the site design complies with standards of the development code.

The project involves an addition to an existing building on a commercially developed property. The addition meets all setback, height, and lot coverage requirements as described in the Community Development Department's staff report to the Planning Agency. With the additional floor area and resulting loss of eleven parking spaces, the site would be

deficient three parking spaces for the planned use. However, with the approval of the requested parking use permit, adequate parking would be provided by making use of existing available parking in a nearby parking structure at the corner of Calle de la Magdalena and Paseo de Valencia.

2. That the site is suitable for the proposed development.

   The site is an existing commercial property located in the Urban Village Specific Plan area. The Urban Village area has a high concentration of medical uses, including Saddleback Hospital. Since developed, the site has been a medical use, specifically a surgery center and associated uses. The proposed use would continue to be a medical use and the small addition can be accommodated by the subject site while still meeting all development standards as described in the Community Development Department's staff report to the Planning Agency. The Urban Village area is an ideal area to put the joint use parking into practice due to the higher density and close proximity of similar uses and available parking.

3. That the project is consistent with the General Plan and applicable design guidelines.

   The Urban Village Specific Plan contains specific design guidelines for the VC zone. While some do not apply due to the location of the building addition at the back of the structure, away from the street, the project satisfies applicable design guidelines. For example, the building addition mimics the style of the existing building, the roof line blends with the existing building, and new roof-mounted equipment is housed within a roof mechanical penthouse that screens the equipment from view. The General Plan identifies medical uses as a typical use for the Village Commercial land use designation. Additionally, the General Plan has several Policies related to shared parking and innovative parking solutions that foster development and maintain attractive uses, especially within the Urban Village core of the City. Specifically, shared surface lots or parking structures are encouraged to make the most efficient use of land.

4. That the site design and structural components are appropriate for the site and function of the proposed uses.

   Overall, the site design would not be significantly changed nor would the nature of the proposed uses as a result of this project. The building addition will be designed in accordance with the California Building Code and will be subject to plan check and inspections to ensure such compliance. Additionally, the area that will house the two proposed linear accelerators for radiation oncology treatment will be designed as two concrete vaults, with an approximate concrete wall thickness of three feet, which will allow radiation treatments for patients while preventing unintended exposure to radiation outside the vaults.

<u>Parking Use Permit</u>

1. That the proposed use is consistent with the General Plan.

The joint use of parking facilities proposed in this application is consistent with the General Plan because one of the goals of the General Plan is to ensure adequate parking is provided for all uses without unnecessarily impeding development. The General Plan also sets forth a policy to encourage parking in shared lots to make the most efficient use of land.

2. That the nature, condition and development of adjacent uses, buildings, and structures have been considered and the proposed conditional use will not adversely affect or be materially detrimental to the adjacent uses, buildings, or structures.

   The parking study has demonstrated that adequate parking is provided on the subject site by making use of a parking surplus at a nearby parking structure owned by the Applicant. The joint use of parking will not negatively impact surrounding businesses, including Farmers and Merchants Bank because there is enough parking provided for the proposed use (with the inclusion of the off-site parking) and all parking within the subject property is clearly marked for each business. Additionally, the Applicant must submit a parking management plan for employees, and any future property owner will be required to record a parking agreement for use of the off-site parking spaces or have uses for which on-site parking is sufficient.

3. That the proposed site is adequate in size and shape to accommodate the use and integrate it with the existing and planned uses in the vicinity.

   The subject site will provide 37 on-site parking spaces. While this is three parking spaces deficient for the proposed use(s), the Applicant owns an adjacent parking structure approximately 300 feet from the subject site, which has sufficient parking to provide the additional spaces parking spaces required. The off-site parking will be utilized by staff of the cancer treatment center, leaving sufficient on-site parking for patients and other visitors to the site. Additionally, on-site accessible parking for the disabled will be upgraded to meet current code, which is not only required by law, but also especially important for the proposed use. Parking between the proposed medical use and the adjacent Farmers and Merchants Bank site is clearly marked, so there will be no confusion regarding where the cancer treatment center visitors should park. Therefore this use can be accommodated on the subject site with little to no impact on surrounding uses.

4. That all required development standards prescribed by the Laguna Hills Development Code can be achieved.

   The Laguna Hills Development Code prescribes parking ratios for different types of uses including medical offices and hospitals. However, the Development Code states that for uses not specified in this chapter the Community Development Director shall have the authority to determine the appropriate parking requirements. Because the cancer treatment center does not function like a typical medical office, nor is it a hospital, the Applicant has prepared a parking study demonstrating the anticipated parking demand of the proposed use based upon the parking demand at

similar facilities as well as based upon operational plans and found that the parking demand for the use as proposed is 40 parking spaces. Furthermore, the Development Code allows for parking to be shared among building sites, such as the off-site parking proposed in this project.

5. That the conditions and limitations placed upon the use are necessary to insure compatibility with adjacent or abutting uses and the preservation of the public peace, safety, and welfare.

   Conditions of approval ensure the proposed joint use parking is compatible with adjacent or abutting uses and the preservation of public peace, safety and welfare. Condition 19 enables the Community Development Director to monitor the parking supply available on the site by requiring the conduct of future parking studies to ensure adequate parking continues to be provided on the site and ensure that the project does not contribute to any future parking issues in the area. Condition 23 requires a recorded easement or covenant for the provision of off-site parking. These conditions ensure that sufficient parking for the proposed use on the subject property is maintained.

6. That the proposed joint parking use permit is consistent with the intent and purpose of the development code.

   By establishing theoretical parking ratios for different types of uses, the development code intends to anticipate the amount of parking that will be needed to adequately serve proposed uses, thereby ensuring parking availability and relative ease of parking for patrons, which is consistent with goals of the General Plan. Through completion of a parking study, the Applicant has demonstrated that sufficient parking for the proposed use(s) is provided on site and by making use of off-site staff parking in a nearby parking structure owned by the Applicant without impacting surrounding businesses, thereby meeting the intent of the development code in establishing parking standards.

7. That the joint parking use permit provides a reasonable and enforceable means for all uses to share parking facilities.

   Currently, there is no "shared parking" on the subject site with Farmers and Merchants Bank. All parking spaces within the lot are clearly marked for each business. The off-site staff parking for the proposed use will be in an existing parking structure on the Saddleback Memorial Medical Center hospital campus, which is already designated for Saddleback Memorial Medical Center employees only, and which has a demonstrated parking surplus. Should the subject site be sold to another owner, a recorded parking agreement would be required between the two property owners (Saddleback Memorial Medical Center and any future owner of the subject site) to ensure continued availability of parking for the subject site. All future uses at the subject site will be permitted only subject to available parking. Further, prior to issuance of building permits, the Applicant must provide an employee parking management plan noting how the parking structure is utilized and what, if any, measures will be taken to ensure staff of the cancer center use the structure.

8. That the requirement for parking established by the joint parking use permit assures that parking demands for the participating uses are continually met:

   Because the Applicant is also the owner of the adjacent parking structure to be used, a recorded shared parking agreement is not required at this time. A parking management plan must be submitted to the City by the Applicant prior to issuance of building permits, wherein their parking plan is demonstrated. However, should the subject site be sold or transferred, the available on-site parking must be sufficient for said uses, or a shared parking agreement between the owner of the parking structure and the owner of the subject property must be recorded to ensure that parking is available to satisfy the parking demand of the uses on the subject site.

NOW, THEREFORE, based upon the above findings, the Planning Agency of the City of Laguna Hills does hereby approve SDPA/PUP No. 9-12-2372 subject to the following conditions:

Standard Conditions

1. This approval constitutes approval of the proposed project only to the extent that it complies with the City's Development Code and any other applicable zoning regulations. Approval does not include any action or findings as to compliance or approval of the project regarding any other applicable ordinance, regulation, or requirement.
2. Failure to abide by and faithfully comply with any and all conditions of approval shall constitute grounds for revocation of said Site Development Permit by the Laguna Hills Planning Agency.
3. As a condition of issuance of this approval, the Applicant/ Owner, hereby agrees, at its sole cost and expense and to the fullest extent permitted by law, to defend, indemnify, and hold harmless the City, its officers, employees, agents, and consultants, with legal counsel acceptable to the City, from any claim, action, or proceeding brought by a third party against the City, its officers, employees, agents, and consultants, which seeks to attack, challenge, set aside, void, or annul an approval of the City Council, Planning Agency, or other decision-making body, or staff action concerning this project. The City agrees to promptly notify the Applicant of any such claim filed against the City and to fully cooperate in the defense of any such action. The City may, but is not obligated to, at its sole cost and expense, elect to participate in the defense of any such action under this condition.
4. The Applicant shall agree in writing to these conditions of approval within 30 days of the Planning Agency's approval.
5. The Applicant shall reimburse the City for any outstanding staff time spent on the processing of SDPA/PUP No. 9-12-2372 within 60 days of the Planning Agency's approval.

6. The Parking Use Permit and associated entitlements shall expire and be of no further force or effect if the permit is not implemented within two years of the Planning Agency's approval.

7. Within 48 hours of project approval, the Applicant shall submit to the City a check in the amount of $50.00, made payable to the Orange County Clerk-Recorder, for filing the Notice of Exemption.

8. Pursuant to Government Code Section 66020, the Applicant is informed that the 90-day period in which the Applicant/Owner may protest any fees, dedications, reservation or other exaction imposed in connection with this project through these conditions of approval begins on the date that the Planning Agency adopts its resolution approving this project and related permits.

9. All signage (temporary and permanent), including any required approvals and permits, shall comply with L.H.M.C. Chapter 9-42. Signs shall be maintained to prevent deterioration, disrepair and shall be legible and in good condition.

10. Prior to commencement of any work for which a permit is required the Applicant shall be responsible for ensuring applicable building permits are obtained, as required by section 105 of the 2010 California Building code.

11. Any required documents submitted for the purpose of building permit issuance shall be accurately labeled and reflect all work, as required by section 107 of the 2010 California Building Code.

12. At time of permit issuance the Applicant shall submit Construction and Demolition Waste Recycling Program paperwork, if applicable, as required by the City of Laguna Hills Ordinance No. 2003-9 and to comply with mandates of the California Integrated Waste Management Board (CIWMB).

13. The Applicant shall comply with all general construction Water Quality Ordinances, as required by the City of Laguna Hills Ordinance No. 2003-12.

14. The Applicant shall demonstrate compliance with California Disabled Accessibility requirements, as required by chapter 11 of the California Building Code at the time of document submittal for the purpose of permit issuance.

15. At the time of document submittal for the purpose of permit issuance the Applicant shall demonstrate compliance with all requirements of the California Energy Commission.

16. All construction shall comply with 2010 California Building, Plumbing, Mechanical, and Electrical Codes with regard to I-2.1 occupancies.

Special Conditions

17. The Applicant shall comply with all requirements of the Orange County Fire Authority.

18. All noise generated by the project, including construction noise shall meet noise requirements pursuant to L.H.M.C. Chapter 5-24.

19. If at any time in the future the Community Development Director determines, in his or her sole discretion, that a parking and circulation study is necessary to address parking and/or circulation issues relative to any change in any use or any portion of any use (i.e., change in tenant mix) on the subject property, the Applicant shall, at its sole cost and expense, be responsible for the cost of a parking and circulation study prepared by a licensed consultant selected by the City. The Applicant shall, at its sole cost and expense, be responsible for implementation costs of any reasonable parking and circulation mitigation measures deemed appropriate by the Community Development Director related to such impacts based on the findings of such study.

20. All proposed improvements not located on the subject property require prior written authorization from the off-site property owner prior to commencement of work. In the event the prior written authorization of the owner cannot be obtained the Applicant shall provide landscape and curb improvements on its property in lieu of reconstructing off-site parking and landscape improvements as depicted on the project plans.

21. Prior to issuance of building permits, the Applicant shall provide proof of the existing Southern California Edison easement vacation or alteration and establishment of a new or revised Edison easement generally depicted by the project plans.

22. Prior to issuance of sign permits, the Applicant shall apply for a Master Sign Program. The Master Sign Program shall be submitted in accordance with the requirements set forth in the Laguna Hills Municipal Code Section 9-42.170 (Master Sign Program Inclusions).

23. Prior to the issuance of building permits, Applicant shall record an easement or covenant in the form approved by the City, on the property providing offsite parking, reserving three parking spaces for the benefit of the subject property. The easement or covenant shall stipulate that it cannot be removed or extinguished except with the consent by the City, provided that the subject property is no longer deficient in parking spaces for the uses thereon.

24. Prior to issuance of building permits the Applicant shall provide to the Community Development Director a parking management plan addressing the use of the off-site parking structure.

25. Pursuant to LHMC 9-40.070, a trash enclosure shall be provided on the subject site and shall be of sufficient size to accommodate the

trash generated and shall be designed in accordance with the City standards for trash enclosures.

26. The Applicant shall provide landscape screening adjacent to the addition's north elevation to reduce the visual bulk and mass of the addition's north wall. The Applicant shall provide a landscape and irrigation plan to the Department of Community Development prior to the issuance of building permits for the addition for review and approval. Landscape and irrigation improvements shall be installed prior to the issuance of a building permit final for the addition.

PASSED, APPROVED, AND ADOPTED this 9th day of October, 2012.

_____
MELODY CARRUTH, CHAIR

ATTEST:

_____
PEGGY J. JOHNS, CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LAGUNA HILLS)

I, Peggy J. Johns, City Clerk of the City of Laguna Hills, California, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. PA2012- adopted by the Planning Agency of the City of Laguna Hills, California, at a Regular Meeting thereof held on the 9th day of October, 2012, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
PEGGY J. JOHNS, CITY CLERK

ATTACHMENT 2

Letter of Justification

WBSA ARCHITECTS

To: David Chantarangsu
Community Development Director, City of Laguna Hills
From: Mark La Fontaine
Date: September 19, 2012
Re: Memorial Care - 24302 Paseo de Valencia
Project #: 12061

The Memorial Care project at 24302 Paseo de Valencia includes tenant improvements of and an addition to an existing two-story medical office building within the Village Commerical zoning district. The addition of approximately 3,160 square feet on the first floor will house two new linear accelerators for use in radiation treatment of patients diagnosed with cancer. This addition will necessitate the removal of eleven parking stalls and an existing emergency generator and the relocation of an existing electrical transformer behind the building. Also as a part of this project, the existing non-compliant accessible parking stalls will be upgraded to meet current accessibility requirements.

The proposed project is an existing facility, originally approved by the County of Orange and constructed in approximately 1985 under the guidelines for development at that time. The proposed project includes an addition to the building utilizing the same character defining elements as the originally approved building. The addition is shorter than the existing building height and maintains the same architectural vernacular. All mechanical and electrical equipment are screened from public view and architecturally treated in a manner consistent with the development standards. Additional landscaping will be provided along the Northerly property line. The signage area will be within the development standards maximum allowable surface area.

The site was originally approved for the development of a cancer treatment center. The building was converted to an ambulatory surgery center and will now be converted back to a cancer treatment center. Based on findings prepared by the traffic consultant, the site is parked adequately for the proposed use.

The project is consistent with the General Plan, Office Professional Uses – 'Medical Office'. The design team and staff have consulted on the design of the proposed addition and have found the design to be consistent with applicable design guidelines.

The original building and the proposed addition are appropriate uses and the structural components of the building will be of industry standard for a medical service of this type. The addition will largely be constructed of poured-in-placed reinforced concrete, but will be treated on the exterior in a manner that matches the existing architectural features.

The proposed parking use permit is consistent with the intent and purpose of the Laguna Hills Development code, and the Village Commercial zoning district. Traditional 'Medical Office' use would require parking well in excess of that which will be generated by the proposed project. The lower demands of this type of medical service mitigates the impact on the parking requirements, and will not negatively affect neighboring properties. Parking designated for use by the neighboring bank is readily identifiable with signage. The proposed project would have no impact on the parking on that parcel, and in fact provides three additional stalls. 'Off-site' parking (stalls located within the neighboring Memorial Care parking structure) is designated for staff use only and is enforced by the facility.

ATTACHMENT 3

LINSCOTT LAW & GREENSPAN
engineers

Engineers & Planners
Traffic
Transportation
Parking

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Pasadena
Irvine
San Diego
Woodland Hills

September 20, 2012

Ms. Katie Crockett
City of Laguna Hills Planning Division
24035 El Toro Road
Laguna Hills, CA 92653

LLG Reference: 2.12.3314.1

Subject: **Parking Demand and Trip Generation Assessment for Saddleback Valley Outpatient Surgery Center (SVOP)**
Laguna Hills, California

Dear Ms. Crockett:

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit the findings of a Parking Demand and Trip Generation Assessment we completed for the Saddleback Valley Outpatient Surgery Center (SVOP) building located at 24302 Paseo de Valencia in the City of Laguna Hills.

The existing two-story SVOP building consists of medical uses totaling 17,277 square feet (SF). The proposed expansion would add 4,161 SF of building area, of which approximately 3,160 SF would be for two linear accelerator vaults (i.e., radiation oncology equipment).

The proposed uses for SVOP would not be the same as a typical medical-dental office building that provides a wider variety of medical practices and specialty care services all concentrated within one building. SVOP's first floor is programmed for radiation oncology use, including support rooms such as patient dressing areas and conference/treatment planning rooms. The second floor would be dedicated to the diagnostics and treatment of cancer, and may act in conjunction with, or in support of, the first floor radiation oncology services to be provided by Memorial Care. Related medical uses for the proposed SVOP include: medical oncology, breast care/gynecology oncology (women's services), hematology oncology, radiation oncology, and nuclear medicine.

Briefly, our findings indicate that the proposed onsite supply for SVOP would be adequate in meeting SVOP's future parking demand, and that the expansion project would not impact parking for the adjoining Farmers and Merchants Bank (in fact, the SVOP project would add 3 spaces by extending a parking bay currently designated for the Bank). Requiring SVOP employees to park in Saddleback Memorial Medical Center's (SMMC's) employee-only parking structure along Calle de la Magdalena could easily be accommodated based on the structure's existing supply of 611 spaces

Philip M. Linscott, PE (1924-2000)
Jack M. Greenspan, PE (Ret.)
William A. Law, PE (Ret.)
Paul W. Wilkinson, PE
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE

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10/9/2012 ITEM NO. 5.4.1

and actual surplus of 151 spaces during the 10:00 AM peak hour (based on recent field studies). Additionally, based on the trip generation assessment conducted as part of this study, the SVOP project is expected to generate fewer trips than prior City approvals for the building as an Outpatient Surgery and Cancer Center; therefore, the proposed expansion will not require the preparation of a comprehensive traffic impact study.

PROJECT DESCRIPTION

Existing

As indicated above, the existing two-story SVOP building consists of medical uses totaling 17,277 SF. Prior City approvals for the building included development as an outpatient surgery center, cancer treatment center, arthritis center, and medical office.

Adjoining the SVOP building on the west, and sharing the same driveways on Paseo de Valencia and on Calle de la Plata, is the existing Farmers & Merchants Bank. The US Postal Service adjoins SVOP on the east, and SMMC's employee-only parking structure is located further to the east, along Calle de la Magdalena.

Proposed

The proposed expansion would add 4,161 SF of building area, of which approximately 3,160 SF would be for two linear accelerator vaults (i.e., radiation oncology equipment).

As described previously, the proposed uses for SVOP would not be the same as a typical medical-dental office building that provides a wider variety of medical practices and specialty care services all concentrated within one building.

SVOP's first floor is programmed for radiation oncology use, including support rooms such as patient dressing areas and conference/treatment planning rooms. The second floor would be dedicated to the diagnostics and treatment of cancer, and may act in conjunction with, or in support of, the first floor radiation oncology services to be provided by Memorial Care.

Related medical uses for the proposed SVOP include: medical oncology, breast care/gynecology oncology (women's services), hematology oncology, radiation oncology, and nuclear medicine.

Based on operational information provided by Memorial Care/SMMC, it is expected that the proposed SVOP would serve 24 employees (including 6 physicians) and 16 patients during the peak hour (or busiest time period for parking) of a typical weekday.

Parking-Based Gross Floor Area (GFA)

For the purposes of parking calculations, the City of Laguna Hills exempts areas for vertical shafts, restrooms, utility shafts and excess common area/open patios where no service or seating occurs, from the GFA calculation of the building. This calculation essentially uses GFA as the starting point, and after reducing for the above named components, results in the building's GFA that becomes the basis of the parking calculation.

The parking-based GFA for the SVOP project consists of 9,219 SF on the first floor, of which 2,862 SF would be for the two linear accelerator vaults that do not generate additive parking demand, and 7,326 SF on the second floor.

PARKING SUPPLY

Existing Supply

Based on our field inventory, the existing onsite parking supply for SVOP totals 48 spaces. To the east of the SVOP project site, SMMC's employee-only parking structure (along Calle de la Magdalena) has an existing supply of 611 spaces.

An additional 41 spaces have been designated on the project site for the Farmers and Merchants Bank.

Future Supply

As part of the expansion project, the 11 physician-only spaces that exist north of the SVOP building would be removed. This would result in a future onsite supply of 37 spaces (48 less 11 spaces).

The project would also extend an existing parking bay that adjoins the SVOP building on the west, and this row of parking is currently designated for bank parking only. This would add 3 new spaces on the northern limit of that parking bay. It has not been determined whether those 3 new spaces would be allocated for SVOP's use or the Bank's.

EXISTING PARKING DEMAND

Table 1 presents the results of the parking demand counts conducted on Thursday, August 9, 2012. As shown, the peak demand for the existing SVOP totaled 42 spaces at 10:00 AM. Compared against the existing SVOP supply of 48 spaces, the 42-space demand corresponds to an actual surplus of 6 spaces during the 10:00 AM peak (there are greater surpluses during the other survey periods). The empirical parking ratio

derived is 2.43 spaces per 1,000 SF (calculated by dividing 42 spaces by the existing building area of 17,277 SF).

On the same survey date, parking demand observations were also conducted along Calle de la Plata to determine the extent of SVOP-related on-street parking demand, plus any illegitimate parking in the Laguna Hills Mall parking lots located to the north. The survey results indicated that no SVOP visitor or employee parked along Calle de la Plata, or came from Mall parking lots. These results are validated by the fact that there are unoccupied spaces on the SVOP site.

Table 1 also shows the hourly parking demand for Farmers and Merchants Bank during the survey period, and indicates that the peak demand for the Bank was 36 spaces (occurred during the same 10:00 AM peak). The corresponding surplus is 5 spaces based on the 41-space supply for the Bank, and there were greater surpluses during the other hours of the day.

FUTURE PARKING DEMAND

Table 2 presents a summary of calculated parking demand based on prior City approvals (Items a. and b. *Table 2*), based on the application of empirical parking ratios to the parking-based GFA for the proposed SVOP (Items c. through f.), and based on a practical estimation from the number of employees and patients expected during the peak hour for the proposed SVOP (Item g.).

The top portion of *Table 2* indicates that parking studies completed in October 1984 and 1986 as part of prior project approvals by the City estimated a demand of 41 to 46 spaces for SVOP. The peak demand of 46 spaces was directly matched by the existing supply at that time.

The middle portion of *Table 2* presents the first step at estimating the parking needs of the proposed project. As previously discussed, an empirical parking ratio was derived in *Table 1* for the existing SVOP, corresponding to 2.43 spaces per 1,000 SF. When compared against the empirical ratio derived by LLG for similar facilities at Hoag Hospital of 2.31 spaces per 1,000 SF, it is evident that the SVOP-based ratio is a solid demand factor that can be applied in this study.

Application of the ratio of 2.43 spaces per 1,000 SF to the parking-based GFA for each floor yields a parking demand total of 33 spaces. It should be noted that the 2,862 SF of vaults for storing radiation oncology equipment on the first floor would not result in additive parking demand, and was therefore excluded from the calculations. To account for a 10% parking contingency, the demand was adjusted to 36 spaces. When compared against the future supply of 37 spaces, the 36-space demand corresponds to a surplus of 1 space. That surplus would be greater if the 3

new spaces to be added by the project due to the expansion of the bank-designated parking bay are allocated to SVOP and accounted for in the parking calculations.

A second step was conducted to estimate SVOP's future parking needs, as summarized on the bottom portion of *Table 2*. This second step was also undertaken to validate the demand results from the first step of applying the empirical ratio to parking-based GFA. Based on 24 employees and 16 patients expected during the peak hour, and presuming that each person would drive alone, the estimated demand would be 40 spaces. Comparing against the 37-space future supply, there is a shortfall of 3 spaces, which could be adequately addressed if the 3 new spaces to be added by the SVOP project are allocated to SVOP. The nominal shortfall could also be addressed by requiring SVOP employees to park in SMMC's employee-only parking structure along Calle de la Magdalena. SVOP employees could easily be accommodated in the SMMC structure because the parking facility is only available to SMMC employees (so any actual or perceived parking issues regarding SMMC patients would be unrelated), its existing supply of 611 spaces for employees is plentiful, and there is an actual surplus of 151 spaces in the structure during the 10:00 AM peak hour (based on recent field studies).

Based on the above findings, we conclude that the proposed onsite supply for SVOP would be adequate in meeting SVOP's future parking demand, and that the expansion project would not impact parking for the adjoining Farmers and Merchants Bank. Also, requiring SVOP employees to park in SMMC's employee-only parking structure along Calle de la Magdalena could easily be accommodated.

TRIP GENERATION ASSESSMENT

Table 3 presents the trip generation assessment for the project, and indicates that the SVOP project is expected to generate fewer trips than prior City approvals for the building as an Outpatient Surgery and Cancer Center; therefore, the proposed expansion will not require the preparation of a comprehensive traffic impact study (i.e., forecast would result in less than 50 net additional peak hour trips[1]).

• • • • •

[1] Per the City's criteria, the preparation of a traffic impact study for future developments that would generate 50 or more peak hour trips in the Laguna Hills Urban Village area is typically required. This study is intended for determining the potential, significant impacts of a Project, and the corresponding mitigation measures or physical improvements to streets and intersections in the vicinity of the Project.

10/9/2012 ITEM NO. 5.4.1

We appreciate the opportunity to provide this analysis. Please call us if you have any questions.

Sincerely,
Linscott, Law & Greenspan, Engineers

Trissa (de Jesus) Allen, P.E.
Senior Transportation Engineer

Attachments

LINSCOTT LAW & GREENSPAN engineers

TABLE 1
EXISTING PARKING DEMAND SUMMARY
(Thursday, 8/9/12 Survey)

Time	SVOP [a]						Farmers & Merchants Bank	
	Patients/Visitors		Physicians		SVOP Total			
	Supply =	37	Supply =	11	Supply =	48	Supply =	41
	Spaces Occupied	% Occupied	Spaces Occupied	% Occupied	Spaces Occupied	% Occupied	Spaces Occupied	% Occupied
8:00 AM	23	*62%*	5	*45%*	**28**	***58%***	12	*29%*
9:00 AM	34	*92%*	6	*55%*	**40**	***83%***	28	*68%*
10:00 AM	**36**	***97%***	**6**	***55%***	**42**	***88%***	**36**	***88%***
11:00 AM	32	*86%*	6	*55%*	**38**	***79%***	26	*63%*
12:00 PM	28	*76%*	4	*36%*	**32**	***67%***	22	*54%*
1:00 PM	21	*57%*	3	*27%*	**24**	***50%***	19	*46%*
2:00 PM	19	*51%*	2	*18%*	**21**	***44%***	24	*59%*
3:00 PM	17	*46%*	2	*18%*	**19**	***40%***	26	*63%*
4:00 PM	13	*35%*	2	*18%*	**15**	***31%***	19	*46%*

Existing SVOP Peak Parking Demand: **42**
Existing SVOP Parking Supply: **48**
Existing SVOP Surplus: **6**
Empirical Parking Ratio (42 spaces / 17,277 SF): **2.43**

Note:

[a] Parking counts were also conducted along Calle de la Plata to determine the extent of SVOP-related on-street parking demand, plus any illegitimate parkers in Laguna Hills Mall lots. The survey results indicated that no SVOP visitor or employee parked along Calle de la Plata, or came from Mall parking lots.

LINSCOTT LAW & GREENSPAN engineers

TABLE 2
PARKING SUMMARY

DESCRIPTION	SPACES
PRIOR CITY APPROVALS	
a. **Saddleback Outpatient Surgery and Cancer Treatment Center** (October 1984 Study prepared by Basmaciyan-Darnell, Inc.)	
Outpatient Surgery and Cancer Treatment Center	
Total of 16,768 SF GFA	
27 employees (physicians and staff) during peak hour	
14 patients during peak hour	
41 parking spaces required (demand)	**41**
47 spaces provided (supply)	
Home Federal Savings and Loan	
Total of 10,907 SF GFA	
44 parking spaces required per City Code (at 4 sp per 1,000 SF)	
40 spaces provided (supply)	
Total Demand:	**85**
Total Supply:	**87**
Total Surplus:	**2**
b. **Saddleback Outpatient Surgery, Arthritis Center, and Unleased Space** (October 1986 Study prepared by Basmaciyan-Darnell, Inc.)	
Outpatient Surgery Center: 22 spaces required	
Arthritis Treatment Center: 18 spaces required	
Unleased Space: 6 spaces required	
46 spaces total required	
SVOP Demand:	**46**
SVOP Supply:	**46**
Total Surplus:	**0**
PARKING DEMAND CALCULATION BASED ON SF GFA	
c. Empirical Parking Ratio for Existing SVOP (derived from *Table 1*) **2.43 spaces per 1,000 SF GFA**	
d. Empirical Parking Ratio from Similar Facilities at Hoag Hospital **2.31 spaces per 1,000 SF GFA**	
e. **Proposed SVOP Parking-Based GFA:**	
6,357 SF GFA of radiation oncology & ancillary uses on 1st floor	
2,862 SF GFA of vaults (storing radiation oncology equipment) on 1st floor	
7,326 SF GFA of cancer diagnostics/treatment & ancillary uses on 2nd floor	
16,545 SF GFA total	
f. **First Floor Parking Requirement:**	
2.43 spaces per 1,000 SF GFA x 6,357 SF GFA =	**15**
(2,862 SF GFA of vaults would not generate additive parking demand)	
Second Floor Parking Requirement:	
2.43 spaces per 1,000 SF GFA x 7,326 SF GFA =	**18**
Total Future Demand for Proposed SVOP:	**33**
Add 10% Contingency:	**3**
Adjusted Future Demand for Proposed SVOP:	**36**
Future Parking Supply (48 existing spaces less 11 spaces to be removed):	**37**
Parking Surplus (+) or Deficiency (-):	**1**
New Spaces Added Due to Expansion of Bank-Designated Parking Bay:	**3**
PARKING DEMAND CALCULATION BASED ON ANTICIPATED NUMBER OF EMPLOYEES AND PATIENTS	
g. **Anticipated Number of Persons for Proposed SVOP:**	
24 employees (including 6 physicians) during peak hour	
16 patients during peak hour	
SVOP Future Demand:	**40**
SVOP Future Supply:	**37**
Parking Surplus (+) or Deficiency (-):	**(3)**
New Spaces Added Due to Expansion of Bank-Designated Parking Bay:	**3**
Note: SVOP employees will be required to park in SMMC's employee-only 611-space parking structure; recent parking demand counts in that structure indicated an actual surplus of 151 spaces during the 10:00 AM peak hour	

LINSCOTT LAW & GREENSPAN engineers

TABLE 3
PROJECT TRIP GENERATION ESTIMATES

Description	Weekday (vehicle trips)					
	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Per Prior City Approval						
Saddleback Outpatient Surgery and Cancer Treatment Center (October 1984 Study prepared by Basmaciyan-Darnell, Inc.)	28	4	32	5	22	27
Proposed SVOP Project						
Employees (24 persons)	16	nom	16	nom	16	16
Patients (16 persons)	8	nom	8	2	4	6
Total Proposed:	**24**	**nom**	**24**	**2**	**20**	**22**
Proposed Minus Prior Approval (Net Vehicle Trips):	**(4)**	**(4)**	**(8)**	**(3)**	**(2)**	**(5)**
Exceeds 50 Peak Hour Trip Threshold? (Yes/No):	-	-	**No**	-	-	**No**

ATTACHMENT 4

10/9/2012 ITEM NO. 5.4.1

MEMORIAL CARE

TABLE OF CONTENTS

SK-0	TITLE SHEET
SK-1	SITE PLAN - PROPOSED
SK-2	FLOOR PLANS - EXISTING / DEMO
SK-3	FLOOR PLANS - PROPOSED
SK-4	EXTERIOR ELEVATIONS - PROPOSED

PROJECT INFORMATION

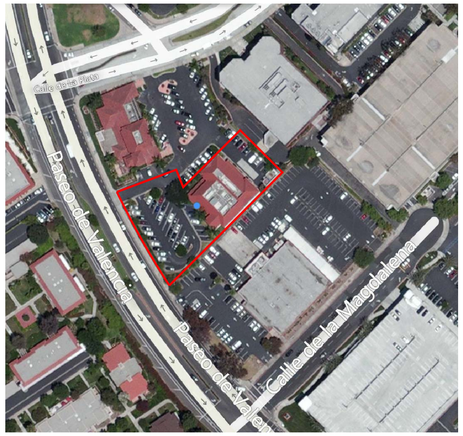
SITE AREA		± 34,658 S.F. (± .79 AC.)
BUILDING AREA		
EXISTING:	FIRST FLOOR:	± 9,392 S.F.
	SECOND FLOOR:	± 7,885 S.F.
	TOTAL FLOOR AREA :	± 17,277 S.F.
PROPOSED:	FIRST FLOOR:	± 12,597 S.F.
	SECOND FLOOR:	± 8,841 S.F.
	TOTAL FLOOR AREA:	± 21,438 S.F.
F.A.R.		
EXISTING:		.50
PROPOSED:		.62
LANDSCAPE COVERAGE PERCENTAGE		
PROPOSED:		15.4% (± 5,321 S.F.)
PARKING TABULATION:		
EXISTING:	STANDARD STALLS:	40
	ACCESSIBLE STALLS:	2 (NON-COMPLIANT)
	TOTAL STALLS:	42
PROPOSED:	STANDARD STALLS:	29
	ACCESSIBLE STALLS:	2
	TOTAL STALLS:	31

NOTE: 3 ADDITIONAL STALLS ARE PROVIDED ON ADJACENT PARCEL

PARKING BASED G.F.A.:	FIRST FLOOR:	± 9,219 S.F.
	SECOND FLOOR:	± 7,326 S.F
	TOTAL:	± 16,545 S.F.

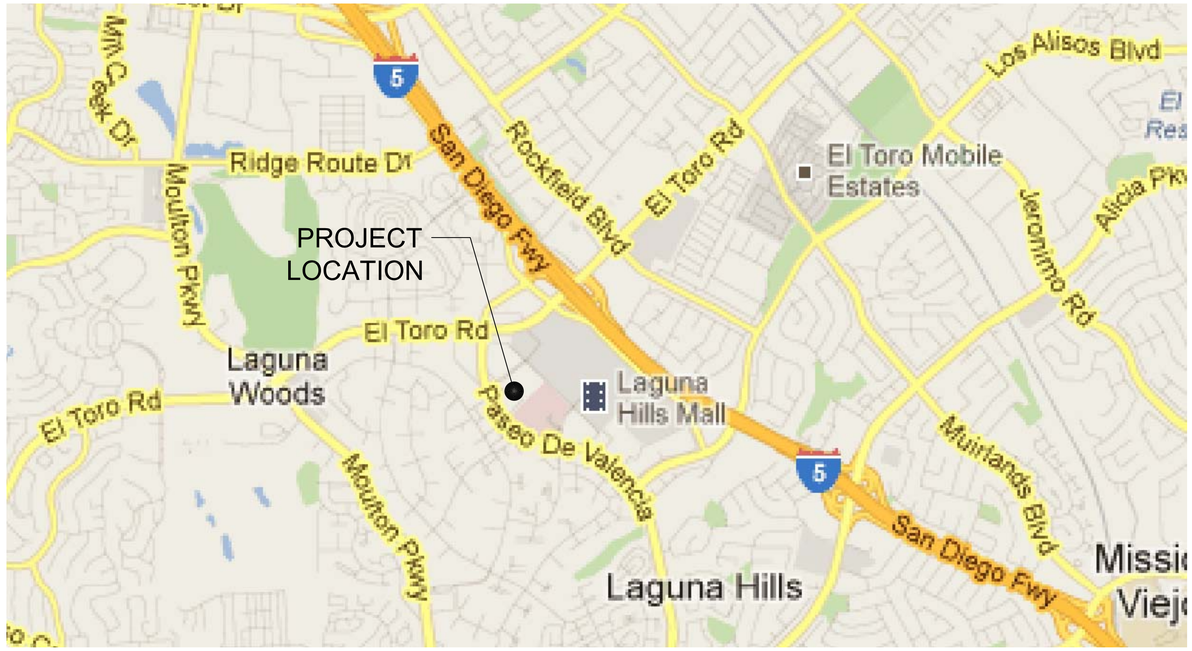
PROJECT DESCRIPTION

THIS PROJECT INCLUDES TENANT IMPROVEMENTS OF APPROXIMATELY 13,622 S.F. OF AN EXISTING TWO-STORY MEDICAL OFFICE BUILDING, THE ADDITION OF APPROXIMATELY 3,160 SF OF NEW BUILDING AREA FOR TWO LINEAR ACCELERATOR VAULTS AND SUPPORTING ROOMS, THE RELOCATION OF AN EXISTING ELECTRICAL TRANSFORMER THE REMOVAL OF AN EXISTING EMERGENCY BACK-UP GENERATOR, AND UPGRADES TO THE EXISTING ACCESSIBLE PARKING STALLS AND PATH OF TRAVEL TO COMPLY WITH CURRENT ACCESSIBILITY REQUIREMENTS.



AERIAL MAP

NOT TO SCALE



VICINITY MAP

SCALE: 1" = ¼ MILE

N

MEMORIALCARE HEALTH SYSTEM
Excellence in Health Care

TITLE SHEET

24302 Paseo de Valencia, Laguna Hills, CA 92653

SK-0

WBSA ARCHITECTS

EXISTING CONCRETE APRON TO REMAIN

EXISTING TRAFFIC CONTROL GATE TO REMAIN

EXISTING MONUMENT SIGN TO REMAIN -REVISE TO READ "MEMORIAL CARE CANCER CENTER"

EXISTING SIDEWALK TO REMAIN

EXISTING LANDSCAPE AREA TO REMAIN, TYPICAL

EXISTING CONCRETE CURB AND CUTTER TO REMAIN, TYP.

EXISTING SITE WALL TO REMAIN

EXISTING BUILDING
NOT A PART

EXISTING ASPHALT PAVING TO REMAIN, TYPICAL

EXISTING ASPHALT PAVING TO REMAIN, TYPICAL

EXISTING ASPHALT PAVING TO REMAIN, TYPICAL

EXISTING LIGHT POLE TO REMAIN, TYP.

EXISTING LOCATION OF SCE EASEMENT TO REMAIN

EXISTING FIRE DEPT. CONNECTION TO REMAIN

REMOVE EXISTING LANDSCAPE ISLAND

NEW PARKING STALLS

EXISTING LANDSCAPE AREA TO REMAIN

EXISTING TRASH ENCLOSURE TO REMAIN

REMOVE EXISTING CURB

NEW LANDSCAPE AREA

NEW LOCATION OF SCE EASEMENT

NEW TRANSFORMER LOCATION

AREA OF BUILDING ADDITION

EXISTING SITE WALL TO REMAIN

NEW MECHANICAL PENTHOUSE

REMOVE EXISTING PARKING STRIPING

NEW LANDSCAPE AREA

ABANDON SECTION OF EXISTING SCE EASEMENT

NEW CONCRETE WALKWAY

REMOVE EXISTING GENERATOR AND RELOCATE EXISTING TRANSFORMER

NEW SECTION OF 6' HIGH METAL FENCE TO MATCH EXISTING

EXISTING LANDSCAPE AREA TO REMAIN, TYP.

EXISTING CONCRETE WHEEL STOP TO REMAIN

REMOVE EXISTING STRIPING

NEW ACCESSIBLE RAMP

EXISTING PARKING STRIPING TO REMAIN, TYP.

NEW ACCESSIBLE PARKING STALLS

EXISTING MECHANICAL AREA TO REMAIN

PASEO DE VALENCIA

SLOPE DOWN

EXISTING BUILDING

10/9/2012 ITEM NO. 5.4.1

MEMORIALCARE HEALTH SYSTEM
Excellence in Health Care

SITE PLAN - PROPOSED

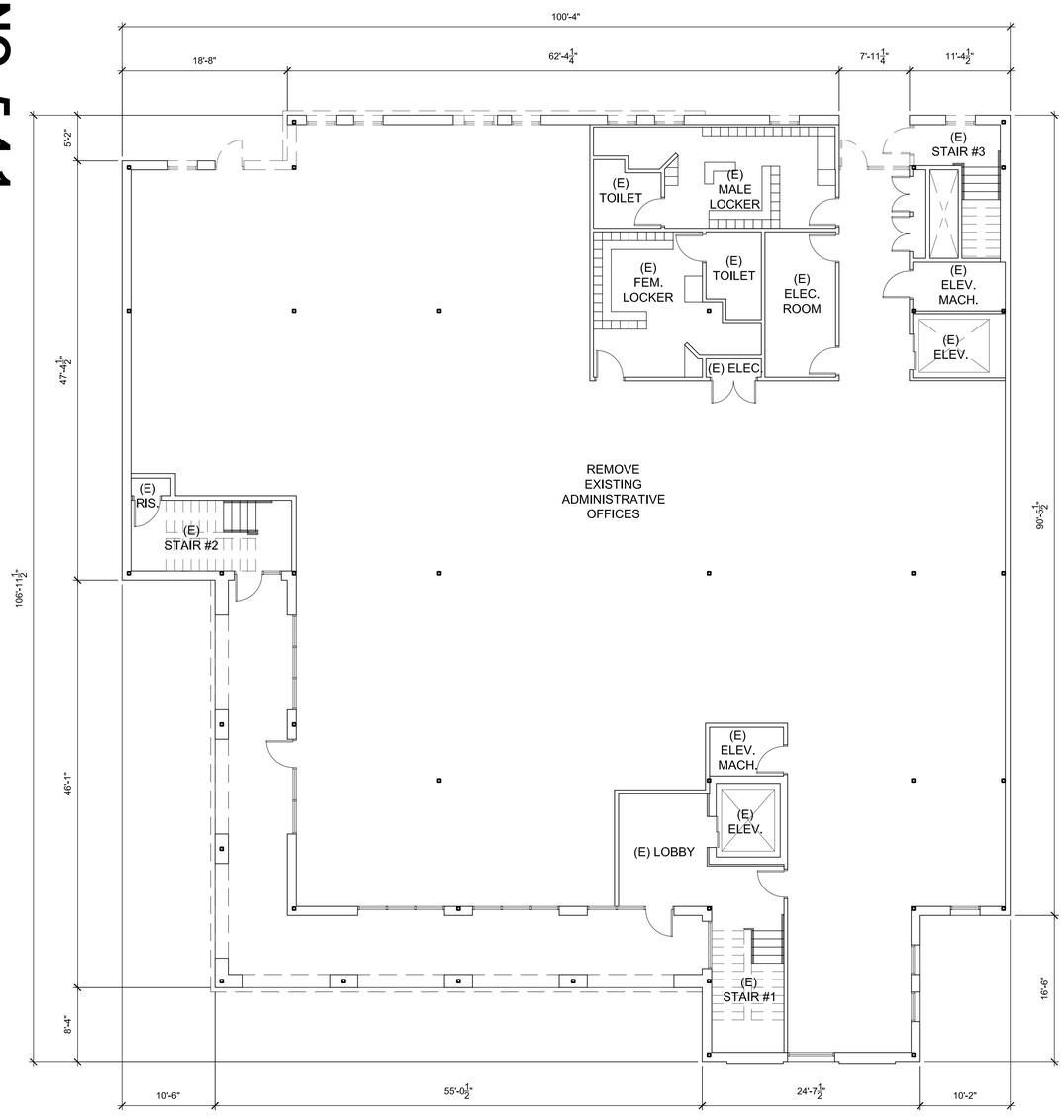
24302 Paseo de Valencia, Laguna Hills, CA 92653

SCALE: 1" = 10'

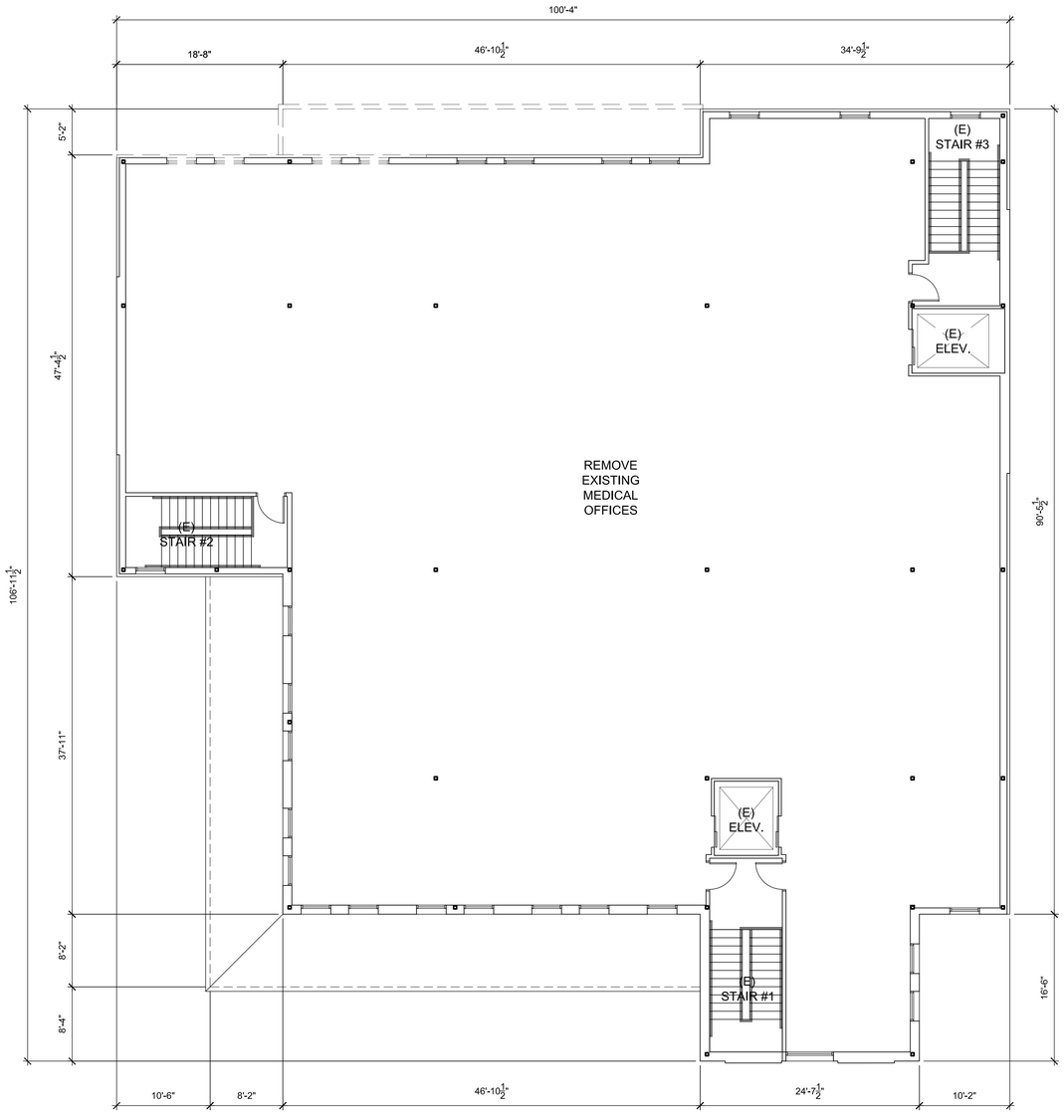
SK-1

WBSA ARCHITECTS

10/9/2012 ITEM NO. 5.4.1



FIRST FLOOR



SECOND FLOOR

MEMORIALCARE HEALTH SYSTEM
Excellence in Health Care

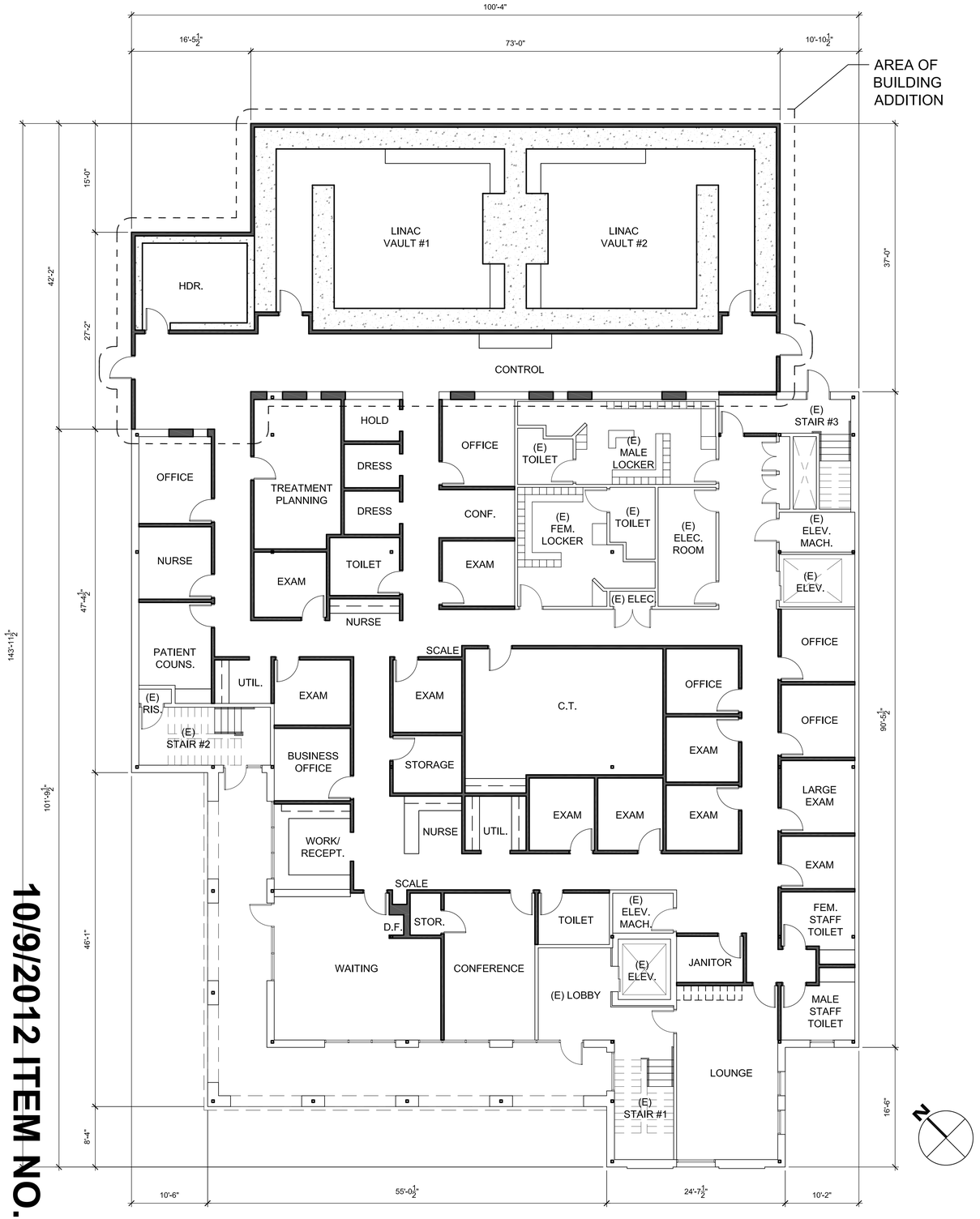
FLOOR PLANS - EXISTING / DEMO

24302 Paseo de Valencia, Laguna Hills, CA 92653

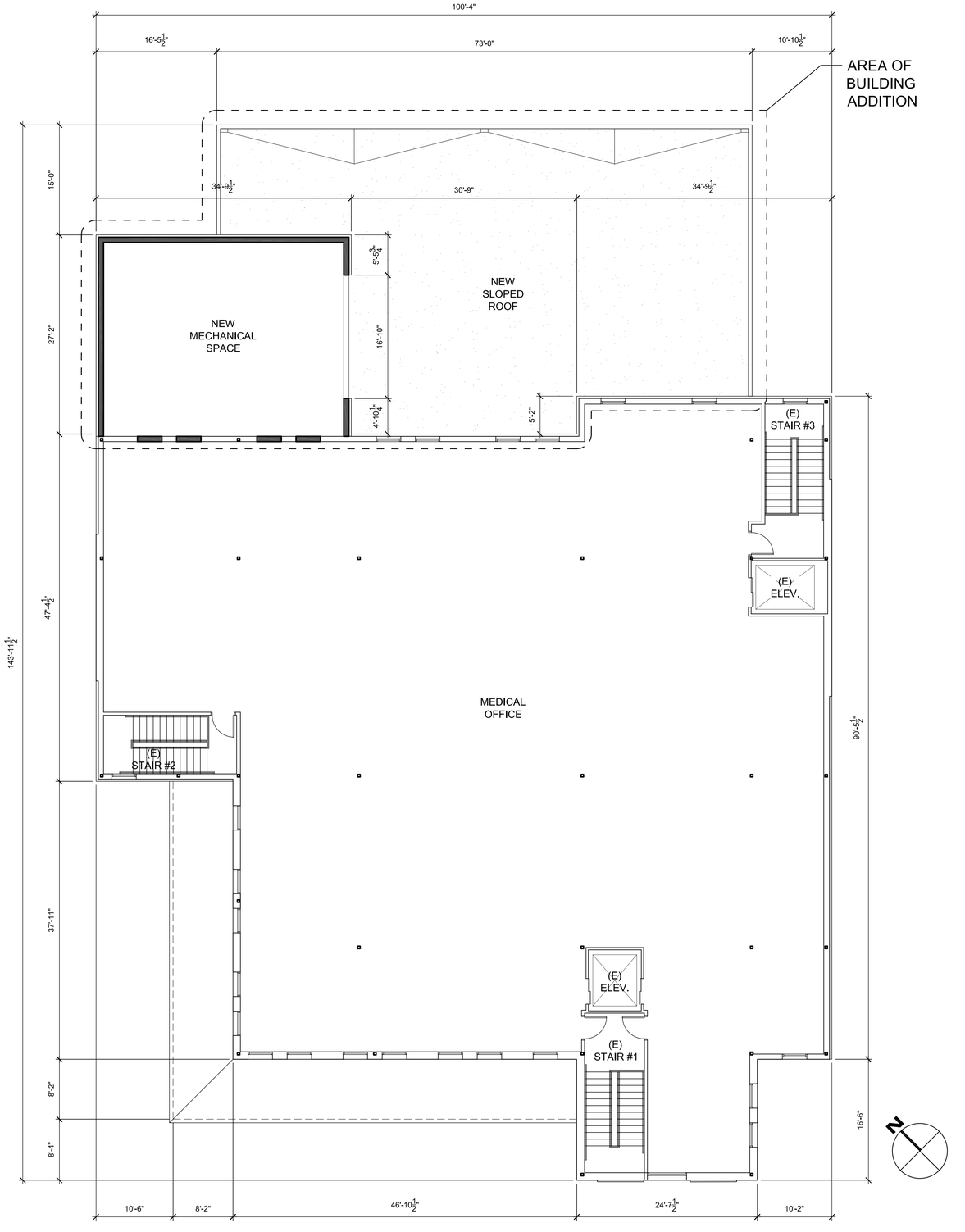
SCALE: ⅛" = 1'-0" (1 2 4 8 16)

SK-2

WBSA ARCHITECTS



FIRST FLOOR



SECOND FLOOR

10/9/2012 ITEM NO. 5.4.1

MemorialCare Health System
Excellence in Health Care

FLOOR PLANS - PROPOSED

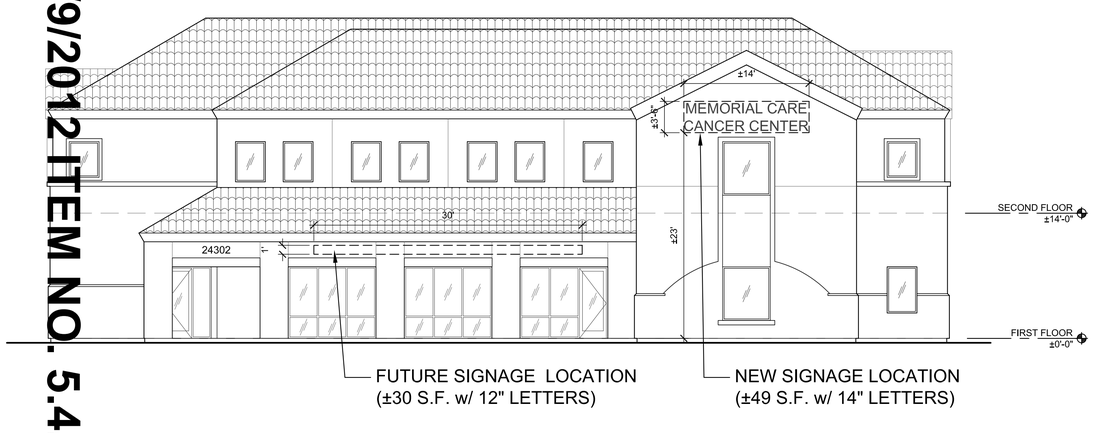
24302 Paseo de Valencia, Laguna Hills, CA 92653

SK-3

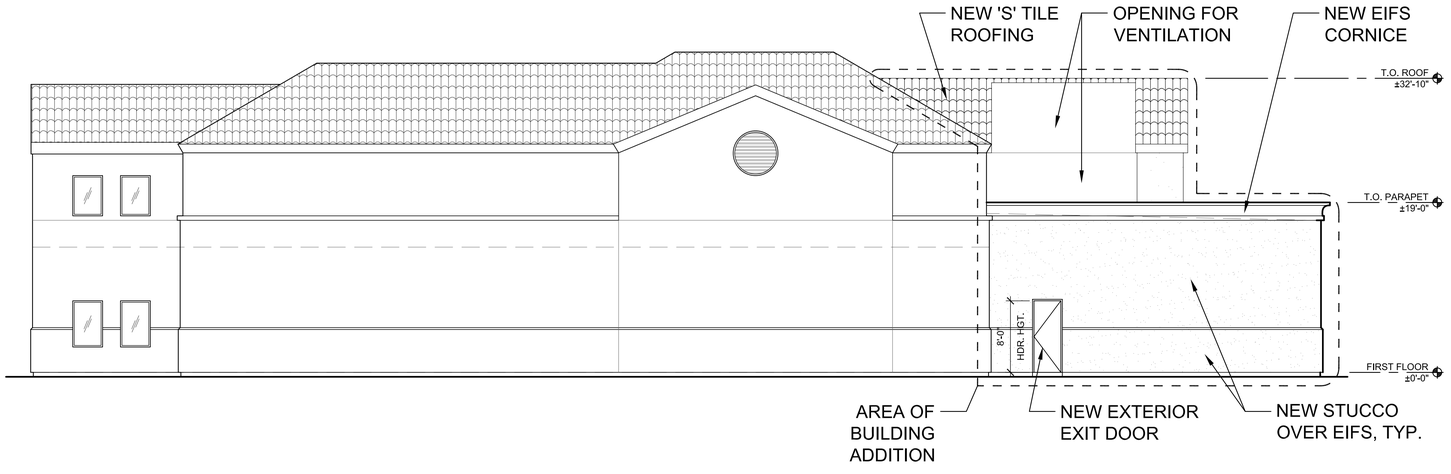
SCALE: ⅛" = 1'-0" 0 1 2 4 8 16

WBSA ARCHITECTS

10/9/2012 ITEM NO. 5.4.1

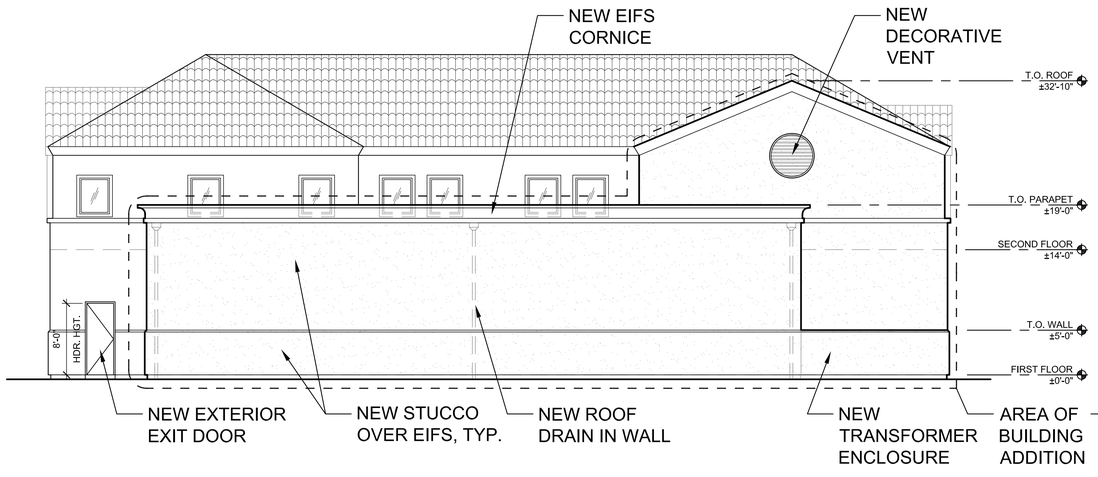


SOUTH ELEVATION - EXISTING / PROPOSED

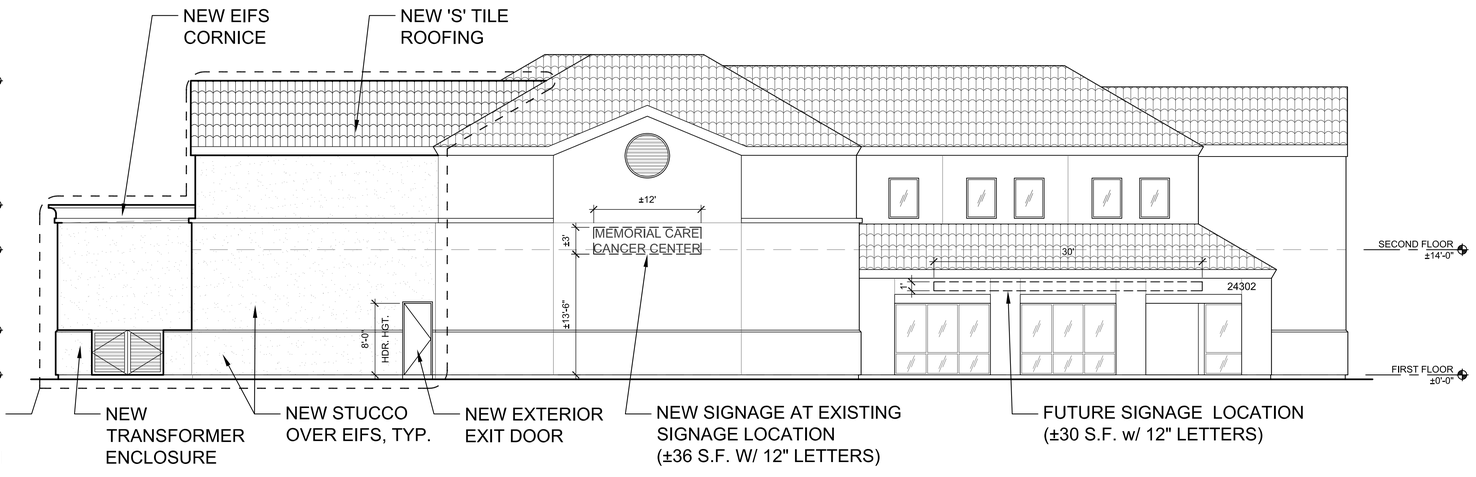


EAST ELEVATION - PROPOSED

TOTAL PROPOSED SIGNAGE: ±145 S.F.



NORTH ELEVATION - PROPOSED



WEST ELEVATION - PROPOSED

MEMORIALCARE HEALTH SYSTEM
Excellence in Health Care

EXTERIOR ELEVATIONS

24302 Paseo de Valencia, Laguna Hills, CA 92653

SCALE: ⅛" = 1'-0" 0 1 2 4 8 16

SK-4

WBSA ARCHITECTS

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: **OCTOBER 9, 2012**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **DONALD J. WHITE**
ASSISTANT CITY MANAGER

ISSUE: **LABOR NEGOTIATIONS PROCESS**

RECOMMENDATION: **THAT THE CITY COUNCIL RECEIVE AND FILE THIS REPORT.**

SUMMARY:

At the November 22, 2011, City Council meeting, the City Council adopted Resolution No. 2011-11-22-3 recognizing the Laguna Hills City Employees Association ("Association") as the exclusive representative of the City's full-time and extended part-time non-management and non-confidential employees. Once an employee association has been recognized, it is common practice to adopt procedural rules and regulations in the form of an Employer-Employee Relations Resolution ("EERR") to address issues between the City and the Association. At the January 24, 2012, City Council meeting, the City Council reviewed a draft EERR and directed the City Manager to consult with the Association pursuant to Government Code Section 3507(a). After consultation with the Association, the City Council approved an Employer-Employee Relations Resolution at its February 14, 2012, meeting. In early August of this year, management received a proposal from the Association for an inaugural Memorandum of Understanding. Management met with representatives of the Association on August 23, 2012, to review the proposal and clarify ambiguities within their proposal. Following this meeting, a revised proposal was issued by the Association and was presented to the City Council in Closed Session at the September 25, 2012, City Council meeting. The purpose of this report is to further explain the labor negotiation process and the roles of the City Council and its designated labor negotiator.

BACKGROUND:

On February 14, 2012, the City Council approved an Employer-Employee Relations Resolution ("EERR") which addresses, among other things, dispute resolution, meet and confer, and impasse procedures which will be used by the City during negotiations with the

Laguna Hills Employee Association. The EERR does not provide any compensation or benefits to the City's employees. This Resolution was approved in open session and the City invited its Labor Counsel to address any questions about the Resolution. In the Resolution, the City Council designated the City Manager, or his designee, as the individual(s) who will be responsible for representing the City in matters relating to labor relations. This includes negotiations for a Labor Agreement, or Memorandum of Understanding ("MOU"). The MOU is the Agreement between the City and the employees belonging to the Employee Associattion organization which sets forth such items as compensation, schedules, benefits and other terms and conditions of employment.

While these individuals would represent the City in negotiations, the City Council retains authority over offers and final decisions which will be made. The MOU must be approved by City Council before it becomes effective. In addition, the negotiators will provide periodic updates to the City Council in Closed Session regarding the progress of negotiations. The negotiators will be negotiating over employment terms which will be provided to those employees who are represented by the Laguna Hills Employees Associates. The negotiators will not be directly impacted by any of the terms which the City Council may choose to offer to the Association, nor will they be directly impacted by any terms that the City Council ultimately agrees to. Their positions are not included in the Association's bargaining unit and their contracts are not tied to the MOU which will be ultimately entered into. It would therefore be unnecessarily costly to hire an outside negotiator given that the City only has one bargaining unit with a fairly small number of employees and the current negotiators will not be financially impacted from the process.

For similar reasons, it is unnecessary to hire an outside financial analyst to prepare a cost analysis of the benefits currently being provided, any proposed changes to these benefits, and the benefits which are ultimately agreed to. The City has only one bargaining unit with twenty-seven represented employees. Moreover, the benefits being discussed are not as complex as those for police and fire employees (which the City does not have). Therefore, the cost analysis can be prepared more quickly and cost-effectively if done by the Assistant City Manager who has familiarity with the City's existing programs and benefits.

The labor negotiations will proceed in Closed Session as permitted by the Brown Act. The negotiators will be provided with specific bargaining authority by the City Council and the negotiators will, as often as reasonably possible, provide the City Council with updates on the progress of negotiations. The current Personnel and Salary Resolution, which is posted on the City's website, will be the starting point for negotiations. The Personnel and Salary Resolution is currently the only document which sets forth the rules of conduct, compensation, work schedules, benefits and other terms of employment for non-management City employees. Once a tentative Agreement is reached between the Council and the Association, the MOU will be placed on the open session agenda for final approval and ratification. The tentatively agreed to MOU will be available to the public prior to formal approval and the MOU, once approved, will be posted on the City's website. Once the MOU is approved, the Personnel and Salary Resolution will also be amended to

reflect that it no longer will apply to those non-management employees who are part of the Employee Association insofar as the MOU will be the controlling document going forward. Thereafter, the Personnel and Salary Resolution will only apply to the City Manager, Assistant City Manager, Executive Assistant to the City Manager, City Clerk, Public Services Director, Community Development Director, and Deputy City Manager/Director Community Services.

FISCAL IMPACT:

At this time in the negotiation process, the fiscal impact is unknown. For this fiscal year, the total personnel costs of all non-management employees is about 17% of the City's total operating budget. It is management's expectation that the negotiations and the final agreed to MOU will not vary markedly from this percentage as it relates to future budgets.

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: **OCTOBER 9, 2012**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **PEGGY J. JOHNS**
CITY CLERK

ISSUE: **CLARIFICATION OF MUNICIPAL CODE FOR TERMS OF OFFICE FOR THE PARKS AND RECREATION COMMISSION AND TRAFFIC COMMISSION**

RECOMMENDATION: **THAT THE CITY COUNCIL INTRODUCE AN ORDINANCE ENTITLED: AN ORDINANCE OF THE CITY OF LAGUNA HILLS, CALIFORNIA, AMENDING CHAPTER 2-28.070 OF THE LAGUNA HILLS MUNICIPAL CODE CONCERNING THE TERMS OF OFFICE FOR THE PARKS AND RECREATION COMMISSION AND THE TRAFFIC COMMISSION.**

SUMMARY:

The Parks and Recreation Commission and Traffic Commission are citizen-appointed Commissions that were established in 1992 by separate Resolutions of the City Council. In November 2005, the City Council adopted Resolutions No. 2005-09-13-1 and No. 2005-09-13-2 to revise the terms of office from two to four years, and also the meeting frequency from monthly to bi-monthly for the Parks and Recreation Commission and the Traffic Commission, respectively. Because Commissioners have staggered, four-year terms, the City conducts a biennial review and appointment schedule to appoint, or reappoint, Commissioners. Reappointment as a Commissioner in not automatic, but requires that each Commissioner reapply for the vacancy and be considered by the City Council. All Commissioners will continue to serve until the City Council appoints a successor.

The City's Municipal Code Section 2-28.070 needs to be amended to conform with the change in terms of office for the Parks and Recreation Commission and the Traffic Commission. It is recommended that the City Council introduce an Ordinance amending Municipal Code Section 2-28.070, changing the terms of office of Commission Members from two years to four years.

ATTACHMENTS:

- Ordinance

ORDINANCE NO. 2012-

AN ORDINANCE OF THE CITY OF LAGUNA HILLS, CALIFORNIA, AMENDING CHAPTER 2-28.070 OF THE LAGUNA HILLS MUNICIPAL CODE CONCERNING THE TERMS OF OFFICE FOR THE PARKS AND RECREATION COMMISSION AND THE TRAFFIC COMMISSION

THE CITY COUNCIL OF THE CITY OF LAGUNA HILLS, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Section 2-28.070 of the Laguna Hills Municipal Code is hereby amended to read as follows:

> "The term of each board or commission member shall be four years, with staggered terms, and expire on January 31st. When a commissioner's term expires, reappointment is not automatic."

SECTION 2. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more section, subsection, subdivision, sentence, clause, phrase, or portion thereof be declared invalid or unconstitutional.

SECTION 3. The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duly designated posting places within the City and published once within fifteen days after passage and adoption as may be required by law; or, in the alternative, the City Clerk may cause to be published a summary of this Ordinance and a certified copy of the text of this Ordinance shall be posted in the Office of the City Clerk five days prior to the date of adoption of this Ordinance; and, within fifteen days after adoption, the City Clerk shall cause to be published, the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

PASSED, APPROVED, AND ADOPTED this __ day of October 2012.

_____

MELODY CARRUTH, MAYOR

ATTEST:

_____
PEGGY J. JOHNS, CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LAGUNA HILLS)

I, Peggy J. Johns, City Clerk of the City of Laguna Hills, California, DO HEREBY CERTIFY that the foregoing Ordinance No. 2012- was duly introduced and placed upon its first reading at a Regular Meeting of the City Council on the 9TH day of October 2012, and that thereafter, said Ordinance was duly adopted and passed at a Regular Meeting of the City Council held on the 23rd day of October 2012, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

(SEAL)

_____
PEGGY J. JOHNS, CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss AFFIDAVIT OF POSTING
CITY OF LAGUNA HILLS) AND PUBLICATION

PEGGY J. JOHNS, being first duly sworn, deposes and says:

That she is the duly appointed and qualified City Clerk of the City of Laguna Hills;

That in compliance with State Laws of the State of California, ORDINANCE NO. 2012- , being:

> AN ORDINANCE OF THE CITY OF LAGUNA HILLS, CALIFORNIA, AMENDING CHAPTER 2-28.070 OF THE LAGUNA HILLS MUNICIPAL CODE CONCERNING THE TERMS OF OFFICE FOR THE PARKS AND RECREATION COMMISSION AND THE TRAFFIC COMMISSION

on the 2nd day of November 2012, was published in the Saddleback Valley News; and was, in compliance with City Resolution No. 2004-05-25-2, on the 24th day of October 2012, caused to be posted in three places in the City of Laguna Hills, to wit:

Laguna Hills City Hall
Laguna Hills Community Center
La Paz Center

_____
PEGGY J. JOHNS, CITY CLERK
Laguna Hills, California

City of Laguna Hills
City Council Meeting Agenda
Staff Report

DATE: OCTOBER 9, 2012

TO: MAYOR AND COUNCIL MEMBERS

FROM: KENNETH H. ROSENFIELD
PUBLIC SERVICES DIRECTOR/CITY ENGINEER

ISSUE: EQUESTRIAN TRAIL CROSSING EVALUATION

RECOMMENDATION: THAT THE CITY COUNCIL APPROVE: (1) THE ADDITION OF SIGNAGE AND STRIPING AS DEPICTED IN THE ATTACHED VICINITY MAPS AT THE EQUESTRIAN TRAIL CROSSINGS OF NELLIE GAIL ROAD EAST OF LOST COLT DRIVE AND NOTTINGHAM COURT SOUTH OF OSO PARKWAY; (2) IMPLEMENTATION OF ADDITIONAL TRAFFIC SPEED ENFORCEMENT WITH A REVIEW OF TRAFFIC CONDITIONS IN SIX MONTHS; AND (3) ESTABLISHMENT OF AN EQUESTRIAN AD HOC COMMITTEE TO PRIORITIZE AND EVALUATE OTHER EQUESTRIAN TRAIL CROSSING LOCATIONS IN THE COMMUNITY.

SUMMARY:

Recently, a community member approached the Traffic Commission with concerns about certain equestrian trail crossing locations in the Nellie Gail Ranch community. The primary concern presented was speeding vehicles not yielding to equestrians that are attempting to cross a public street. The resident suggested the installation of various traffic control devices at selected equestrian trail crossings. Staff subsequently implemented a standard traffic speed and volume data collection effort at the two locations initially requested by the resident (Nellie Gail Road at Lost Colt Drive and Nottingham Court at Oso Parkway) and presented the information to the Traffic Commission on September 19, 2012. The analysis and field review determined that traffic volumes are low, there is no traffic collision history at these locations, vehicular traffic speeds are above acceptable levels, and there is justification to enhance the traffic control signage and markings. In accordance with the Residential Streets Traffic Management Policy, staff is recommending an incremental approach to address vehicular speeding and improve the visibility of the equestrian crossings to motorists. Increased law enforcement, the use of the radar trailer, additional warning signs and pavement markings are recommended as detailed in this report. It is also recommended that an ad hoc equestrian committee be formed to expand the review of additional equestrian trail crossing locations. The Traffic Commission, at its meeting of

September 19, 2012, recommended to the City Council the approval of the above recommendations.

BACKGROUND:

At the Traffic Commission meeting of July 18, 2012, Ms. Bonnie Adams, a resident of Lost Colt Drive, addressed the Traffic Commission regarding equestrian trail crossing safety in the Nellie Gail Ranch community. She generally discussed crossing locations throughout the community but focused her concerns upon the locations of Nellie Gail Road east of Lost Colt Drive and Nottingham Court south of Oso Parkway. Ms. Adams' concerns included vehicular speed and vehicles failing to yield to equestrians attempting to cross a public street. In order to address these concerns, Ms. Adams suggested the installation of various traffic control devices including in-roadway crosswalk pavement lighting, speed bumps, rumble strips, painted crosswalks, flashing signage, etc. Subsequently, Staff provided Ms. Adams with a copy of the City's Residential Streets Traffic Management Policy and held a field meeting with her to discuss traffic control standards.

In 2007-2008, City staff met multiple times with an ad hoc committee of residents interested in equestrian trail crossings of public streets. Through this process, a dozen equestrian trail crossing locations were prioritized and reviewed. An "Equestrian Sign Package," attached, was created based upon the California Manual of Uniform Traffic Control Devices (MUTCD) and the comments received from the ad hoc committee through which enhanced traffic controls were implemented at the identified locations. A copy of the power point presentation presented at the April 10, 2007, City Council meeting is also included as an attachment to this report. In the past review, in addition to the sign package, staff recommended the equestrian crossing activity be shifted to nearby intersections, if feasible.

In response to the concerns expressed about current equestrian trail crossing safety, the City contracted the services of its Consulting Traffic Engineers, Hartzog & Crabill, Inc., to perform speed and traffic data collection efforts and field reviews at the two aforementioned locations in accordance with City policy. A full week of 24-hour speed and volume data was obtained, a radar spot speed study was performed, a field review was performed, and traffic collision histories were reviewed. Please see the attached September 12, 2012, report from Hartzog & Crabill. A Staff report presenting these results was presented to the Traffic Commission at the meeting of September 19, 2012.

In order to provide an overall picture of traffic speed trends, a seven-day data collection effort was undertaken as a part of the Traffic Engineer's report. This data collection effort provides information on traffic speeds in increments and is not a radar spot speed study. Accordingly, the speed data represents a trend and cannot be used, for example, to evaluate speed limits. Nevertheless, the data can be manipulated to estimate the 85th percentile speed, the speed at which 85 percent of the motorists are traveling at or below, also known as the "prevailing speed." The results of this data collection by location and direction are shown in the table below.

Locations	*Traffic Volume*	*85th Percentile Speed*
W/B Nellie Gail Road e/o Lost Colt Drive	667	38 mph
E/B Nellie Gail Road e/o Lost Colt Drive	741	35 mph
N/B Nottingham Court s/o Oso Parkway	586	35mph
S/B Nottingham Court s/o Oso Parkway	603	33mph

To confirm the findings of the speed increment data, a radar spot speed measurement was also taken at both equestrian trail crossing locations during one hour of one day. The prevailing speed at the Nellie Gail Road location was found to be 36 mph and at the Nottingham Drive locations was found to be 34 mph.

The City has performed numerous radar speed studies in the past on residential streets with 25 mph speed limits. The combination of these years of studies has found that the prevailing speed of traffic on residential streets is typically in the range of 32 to 34 mph and this prevailing speed does not result in traffic safety issues. The City's Residential Streets Management Policy recognizes this traffic speed range as typical and not one, in and of itself, which triggers the need for changes to traffic control. Based upon the table above, traffic speed enforcement is appropriate for both equestrian trail crossing locations discussed herein as the traffic speed is slightly above the expected range. The prevailing speed results from the radar speed study confirm the need for speed enforcement. A site specific review of the equestrian trail crossings follows:

Nellie Gail Road e/o Lost Colt Drive

Nellie Gail Road is a curvilinear two-lane residential roadway with both vertical and horizontal curves at the crossing location. On-street parking is not prohibited at or near this location and there is residential frontage. The posted speed limit is 25 mph. The equestrian crossing is not at an intersection. Upon crossing Nellie Gail Road, in the northerly direction, the equestrian needs to travel westerly over a Nellie Gail Ranch Owner's Association private equestrian trail easement to connect to the equestrian trail. Please see attached vicinity map. In reviewing the table above, traffic volumes are low; however, the prevailing speeds in both directions exceed the typical 32-34 mph prevailing speed for a residential roadway. Therefore, vehicular speed is a concern at this location. A review of the past three years of traffic collision history found no history of collisions at this location.

Current signage at the location in both directions includes a diamond Equestrian Warning Sign, Equestrian Crossing Sign, and an arrow sign pointing downward to the location of the crossing. In order to improve identification of the equestrian crossing, staff is recommending the following additions in accordance with the Equestrian Sign Package.

- Installation of advance "EQUESTRIAN" warning signs in both directions approximately 350 feet in advance of the crossing;

- Installation of "HORSE XING" pavement markings in both directions approximately 350 feet in advance of the crossing;
- Installation of white chevrons to delineate the crossing location.

In addition to the foregoing, trimming of private vegetation to optimize the site visibility, the use of the radar trailer, and increased law enforcement is recommended.

Nottingham Court s/o Oso Parkway

Nottingham Court is a curvilinear two-lane residential roadway with a vertical and horizontal curve at this location. On-street parking is not prohibited at or near this location and there is residential frontage southerly of this location. The posted speed limit is 25 mph. The equestrian crossing is not at an intersection. From the table above, traffic volumes are low and the prevailing speed is at the upper range of the typical prevailing speed for a residential roadway. A review of the past three years of traffic collision history found no history of traffic collisions at this location. Please see attached vicinity map.

Current signage at the location in both directions includes a diamond Equestrian Warning Sign, Equestrian Crossing Sign, and an arrow sign pointing downward to the location of the crossing. A diamond Equestrian Warning Sign is located in the northbound direction in advance of the crossing.

Prior to the recent pavement resurfacing on Nottingham Drive, there were also "Horse Xing" pavement markings in both directions. For northbound traffic, the legend is located at 350' southerly in advance of the crossing per the Equestrian Sign Package. A resident at the location of the "Horse" pavement legend has requested that the legend be moved northerly away from his property. Staff does not recommend the requested change as it would result in the pavement legends not being placed in conformance with the Equestrian Sign Package.

In order to improve identification of this equestrian crossing, staff is recommending the following in accordance with the Equestrian Sign Package.

- Installation of advance "EQUESTRIAN" warning sign in the southbound direction in advance of the crossing;
- Installation of white chevrons to delineate the crossing location.
- Re-installation of the "Horse Xing" pavement legends at 350' southerly of the equestrian crossing for northbound traffic and just south of Oso Parkway intersection for southbound traffic.

In addition, trimming of vegetation in order to optimize the site visibility, the use of the radar trailer, and increased law enforcement is recommended.

The additional signage and striping at these two locations will provide additional warnings to the motorist that will alert them to the equestrian crossings. It is recommended that these improvements be installed, along with implementation of speed enforcement, and then be reviewed in six months for their effectiveness.

Ad-hoc Committee

In order to review additional equestrian crossings as requested by Ms. Adams, it is also recommended that an ad hoc equestrian committee be formed with the assistance of the Nellie Gail Ranch Owners Association. By doing this, all of the equestrian community's concerns can be reviewed concurrently. Staff proposes that the Association seek up to five volunteers to meet with staff every few weeks to evaluate equestrian crossings. The Committee will be able to work with City staff and the City's Consulting Traffic Engineers, Hartzog & Crabill, Inc., in order to effectively and uniformly address safety concerns at other equestrian crossings.

The Traffic Commission, at the meeting of September 19, 2012, received comments from eight members of the community regarding equestrian trail crossing safety. The Commission recommended to the City Council the implementation of the Staff presented recommendations herein.

OTHER TRAFFIC CONTROL DEVICES

In addition to the standard traffic control devices described in this report, Hartzog & Crabill, Inc. was also requested to review other physical traffic control devices to determine their appropriateness for implementation at this time at the equestrian trail crossing locations. A detailed explanation is provided in the attached report and a summary is provided below:

Marked Crosswalks

In accordance with the California MUTCD, both of the aforementioned locations are not justified for installation of marked crosswalks due to low pedestrian activity. Furthermore, studies have clearly shown that marked mid-block crosswalks at uncontrolled locations (no signal or stop sign) have higher collision rates than at unmarked crosswalks. This is believed to be due to the false sense of security that pedestrians feel while in the crosswalk. No crosswalk markings are recommended at the studied locations.

In-Roadway Warning Lights

In accordance with the California MUTCD, both of the aforementioned locations are not justified for the installation of in-roadway warning lights due to low pedestrian activity and low vehicular volume.

Speed Humps

In accordance with the City's Residential Streets Management Policy speed humps cannot be justified at the locations due to the steep grade of the roadways (maximum allowed grade is 6%) and also due to low traffic volume (the minimum volume required is 1,500 vehicles per 24-hour period).

FISCAL IMPACT:

The installation of the recommended signage and markings has an estimated cost of $1,500 and funds are available for this work in the 2012-2013 Fiscal Year Public Works Maintenance Budget.

ATTACHMENTS:

- Equestrian Standard Sign Package
- Vicinity Maps
- Hartzog and Crabill, Inc. report, September 12, 2012
- April 10, 2007 Powerpoint Presentation

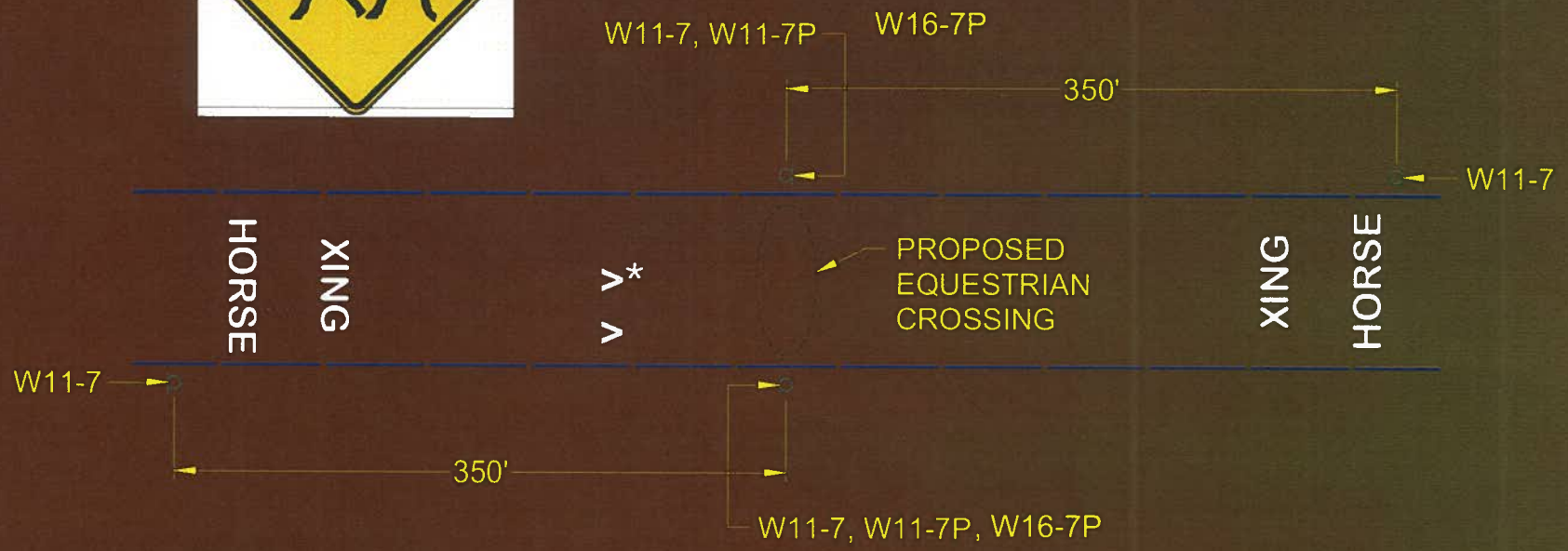
Typical Layout & Warning Signs

"Sign package"

W11-7

W11-7P

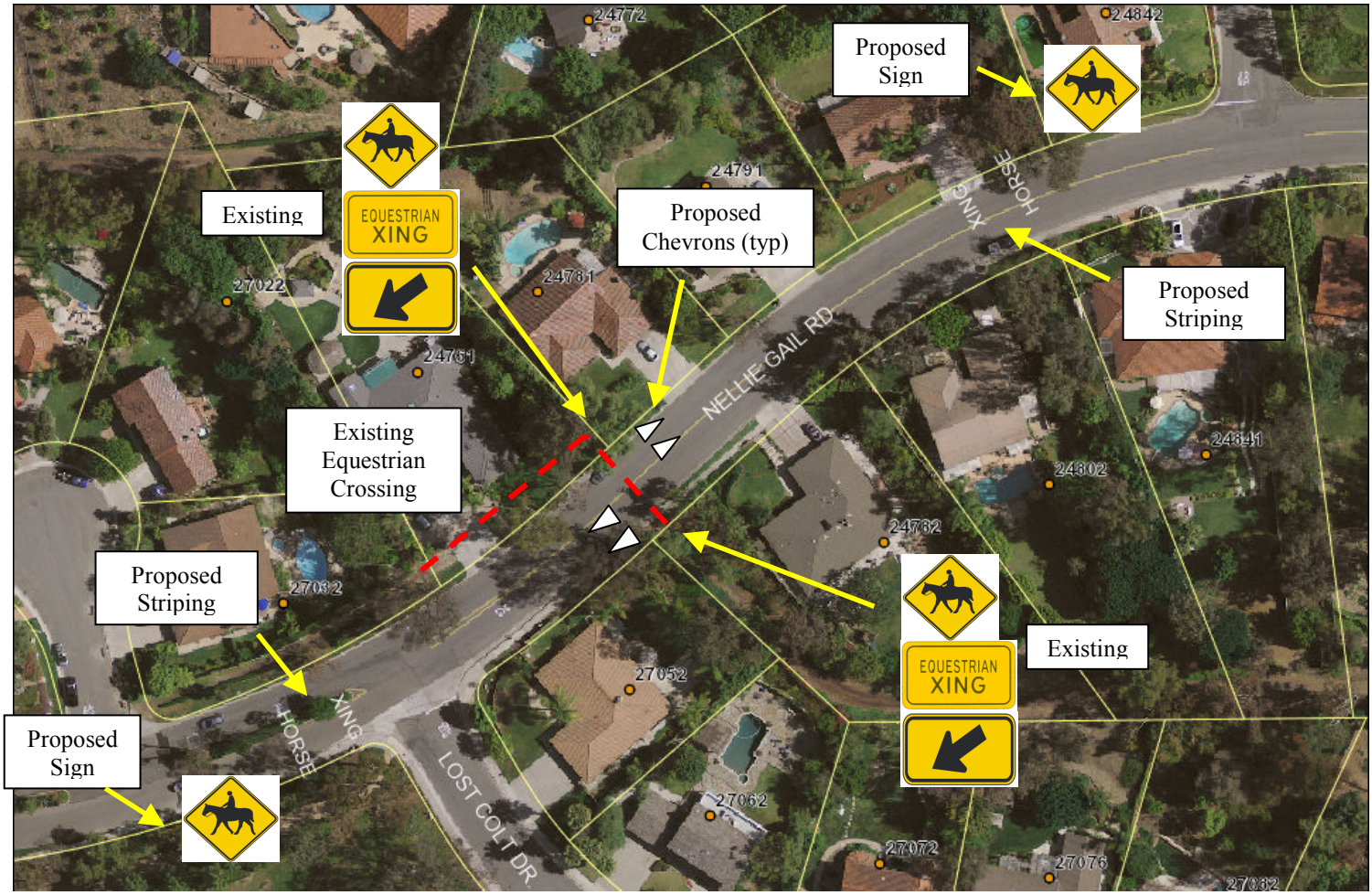
W16-7P



*Addition of Chevron or Arrow Head is an option to further point out the crossing location

VICINITY MAP

NELLIE GAIL RD. EAST OF LOST COLT DR.
EQUESTRIAN CROSSING IMPROVEMENTS



VICINITY MAP

NOTTINGHAM CT. SOUTH OF OSO PKWY.
EQUESTRIAN CROSSING IMPROVEMENTS

HARTZOG & CRABILL, Inc.

Trammell Hartzog, President
Jerry Crabill, P.E. (Retired)
Gerald J. Stock, P.E.,
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17772 E. 17th Street
Suite 101
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FAX: (714) 731-9498

www.hartzog-crabill.com

September 12, 2012

TO: **Ken Rosenfield PE, Director of Public Works**
City of Laguna Hills

FROM: **Jerry Stock PE, Consulting Traffic Engineer**
Hartzog & Crabill, Inc.

SUBJECT: **Equestrian Crossing Concerns at Two Locations –**
Nellie Gail Road at Lost Colt Drive
Nottingham Court Near Oso Parkway

BACKGROUND

The City recently received correspondence from a resident regarding equestrian safety at two existing equestrian crossings. The first crossing is located on Nellie Gail Road just east of Lost Colt Drive, and the second crossing is located on Nottingham Court just south of Oso Parkway.

The concerns presented are that motorists are failing to yield to equestrians at the subject crossings. In addition, concerns of vehicle speeding were also expressed. The resident suggested yellow YIELD pavement markings be painted accompanied by a painted "brightly colored cross hatched crosswalk". The resident also suggested installation of "blinking lights" at the Nellie Gail/Lost Colt crossing, and the possible use of rubber pavers, typically used as flooring in horse barns, to replace the concrete sidewalk on the equestrian trail.

In response to the concerns and suggestions presented, the City requested Hartzog & Crabill, Inc. (HCI) to complete an analysis at both locations.

Prior Equestrian Crossing Analysis

In recent years, an Equestrian Crossing Alternatives (ECA) analysis was completed by HCI and presented to the members of the Nellie Gail Equestrian Ad Hoc Committee. That analysis looked at 12 equestrian crossings in the City. The Nellie Gail/Lost Colt crossing was not considered problematic at that time and consequently was not included as one of the 12 study crossings; however, the Nottingham/Oso crossing was one of the 12 crossings evaluated.

The ECA identified several options for enhancing equestrian crossing safety. These options included clearing of vegetation to ensure clear sight lines, and installation of pavement markings and an advanced sign assembly.

ANALYSIS

Field Data:

Accompanied by Associate Civil Engineer, Humza Javed, P.E., HCI staff conducted a site visit at both equestrian crossing locations on Friday, August 3, 2012.

Nellie Gail Road E/o Lost Colt Drive
Our observations specific to the Nellie Gail/Lost Colt location noted an offset equestrian crossing. In other words, equestrians crossing Nellie Gail Rd in the northerly direction first cross the street and then travel westerly either in the street or along an equestrian easement under jurisdiction of the Nellie Gail Ranch Homeowners Association that connects to the equestrian trail. The opposite movement is associated with crossing in a southerly direction.

Nellie Gail Road is curvilinear with a downgrade in the westerly direction, and on-street parking is not prohibited at/near this location. The adjacent land use is primarily residential. Nellie Gail Road is posted 25 mph, accompanied by a "25" pavement marking near the crossing.

We also noted the posting of the following California MUTCD signs:

- W11-7 (a yellow diamond warning sign with an "EQUESTRIAN" symbol)
- W11-7P (yellow rectangular sign with "EQUESTRIAN XING")
- W16-7P (rectangular yellow sign with a black arrow pointing downward indicating the location of the crossing).

In the eastbound direction of Nellie Gail Road, vegetation partially obscures visibility of the subject signs and should be routinely trimmed. Moving the sign assembly a few feet in advance of the crossing may be considered for improved visibility.

Nottingham Court just south of Oso Parkway
Unlike the Nellie Gail/Lost Colt crossing, this crossing is in-line with the equestrian trail (not offset). Specific to Nottingham Court, our staff noted a curvilinear roadway with a downgrade in the northbound direction. On-street parking is not prohibited at/near the crossing and the adjacent land use is primarily residential. The street is posted 25 mph.

Staff noted the posting of the following California MUTCD signs/markings at this location:

- W11-7 (a yellow, diamond warning sign with an "EQUESTRIAN" symbol)
- W11-7P (yellow rectangular sign with "EQUESTRIAN XING")
- W16-7P (rectangular yellow sign with a black arrow pointing downward indicating the location of the crossing).
- W11-7 sign posted in advance of the crossing in the northbound direction only.
- "HORSE XING" pavement markings are painted on the street in advance of the crossing in both travel directions.

ANALYSIS ***(continued)***

Speeding:

HCI initiated the collection of speed and traffic volume data at both crossings to determine prevailing traffic speeds and traffic volumes. To ensure that data collected on only one day could be anomalous, HCI first collected (7) consecutive days of 24-hour speed profile and traffic volume (ADT) data that provides a trend of vehicular speed information throughout the day and week.

Nellie Gail Road E/o Lost Colt Drive
The speed profile study period for the Nellie Gail/Lost Colt location began on Friday, August 10 and was completed on Thursday, August 16, 2012.

The data for this location shows that the highest 85th percentile speed, or critical speed, recorded during the 7-day study period was 35 mph in the eastbound direction of Nellie Gail Road (all 7 study days reported a 35 mph critical speed). In the westbound direction of Nellie Gail Road, the highest 85th percentile speed reported was 38 mph, which occurred on three of the seven study days. The remaining four days reported a critical speed of 37 mph.

HCI also conducted a follow-up spot speed radar study at this location during the afternoon peak period of Thursday, September 6, 2012 in order to verify the speed profile machine data. The spot speed data did confirm the accuracy of the daily speed profile data as the 85th percentile speed resulted in 36 mph. In summary, the results show that speeding is occurring along this segment of Nellie Gail Road. Use of a portable radar trailer accompanied by increased law enforcement is recommended to reduce travel speeds.

Nottingham Court just south of Oso Parkway
The speed profile study period for the Nottingham/Oso location began on Wednesday, August 22 and was completed on Tuesday, August 28, 2012.

The data for this location shows that the highest 85th percentile speed recorded during the 7-day study period was 35 mph in the northbound direction of Nottingham Court, which occurred on three of the seven days. The remaining four days reported a critical speed of 34 mph. In the southbound direction of Nottingham Court, the highest 85th percentile speed reported was 33 mph, which occurred on one of the seven study days. The remaining six days reported a critical speed of 32 mph on five study days and 31 mph on the other day.

Similarly, HCI conducted a follow-up spot speed radar study at this location during the afternoon peak period of Thursday, September 6, 2012 in order to verify the speed profile machine data. The spot speed data did confirm the accuracy of the daily speed profile data as the 85th percentile speed resulted in 34 mph. In summary, the results show that speeding is occurring along this segment of Nottingham Court. Use of a portable radar trailer accompanied by increased law enforcement is recommended to reduce travel speeds.

ANALYSIS ***(continued)***

Traffic Volumes:

Nellie Gail Road E/o Lost Colt Drive
The 7-day ADT data collection determined that in the eastbound direction of Nellie Gail Road, the highest 24-hour traffic volume recorded was 741 vehicles on Thursday, August 16. In the westbound direction the peak 24-hour traffic volume was 667 vehicles, also on Thursday August 16.

Nottingham Court just south of Oso Parkway
The 7-day ADT data collection determined that in the northbound direction of Nottingham Court, the highest 24-hour traffic volume recorded was 586 vehicles on Monday, August 27. In the southbound direction the peak 24-hour traffic volume was 603 vehicles, on Friday, August 24.

In summary, the traffic volumes on the subject roadways are typical for residential streets of this character. National Data Surveying (NDS), a national traffic data collection company, collected the 7-day speed and traffic count data (attached).

Collisions:

A review of the most recent three-year collision history at the two equestrian crossings identified no reported collisions at either equestrian crossing location.

In regards to the vicinity of the Nellie Gail/Lost Colt location, two collisions were reported approximately 163 feet west of, and 217 feet east of the nearby intersection of Red Lodge Place. One collision was reported in 2008 and one collision reported in 2009. The 2009 collision is located closest to the equestrian crossing and involves a vehicle striking a fixed object. The City-provided collision data is attached.

Marked Crosswalks:

As stated previously the consideration of any specific traffic control device requires an engineering study to ensure compliance with established standards. The criteria for the use of marked crosswalks are contained in the CA MUTCD (guidelines attached).

The California MUTCD describes these markings as follows:

ANALYSIS (*continued*)

Section 3B.18 Crosswalk Markings

Guidance:

Crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, ***the pedestrian volumes and delays****, the average daily traffic (ADT), the posted or statutory speed limit or 85th percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.*

This following California MUTCD guideline is also stated under this same section:

Section 3B.18 Crosswalk Markings

Guidance:

Mid-block pedestrian crossings are generally unexpected by the motorist and should be discouraged unless, in the opinion of the engineer, there is strong justification in favor of such installation.

Marked crosswalks at uncontrolled locations may be considered where there are frequent pedestrian crossings. Given our observations of minimal pedestrian activity, the roadway geometry, and that both locations are uncontrolled, HCI does not recommend the installation of marked crosswalks at either equestrian crossing.

In-Roadway Warning Lights:

The criteria for the use of in-pavement lights are contained in the CA MUTCD (guidelines attached) and are summarized below:

Section 4N.01 Application of In-Roadway Lights

Support:

In-Roadway Lights are special types of highway traffic signals installed in the roadway surface to warn road users that they are approaching a condition on or adjacent to the roadway that might not be readily apparent and might require the road users to slow down and/or come to a stop.

ANALYSIS (*continued*)

This includes situations warning of marked school crosswalks, marked midblock crosswalks, marked crosswalks on uncontrolled approaches, marked crosswalks in advance of roundabouts as described in Chapter 3C, and other roadway situations involving ***pedestrian*** *crossings.*

On the next page are some of the applicable California MUTCD guidelines for this type of traffic control device:

Section 4N.02 In-Roadway Warning Lights at Crosswalks

Standard:

If used, In-Roadway Warning Lights at ***crosswalks shall be installed only at marked crosswalks*** *with applicable warning signs. They shall not be used at crosswalks controlled by YIELD signs, STOP signs, or traffic signals.*

- *If used, In-Roadway Warning Lights at crosswalks shall display a flashing yellow light when actuated.*
- ***At least 40 pedestrians regularly use the crossing during each of any two hours (not necessarily consecutive) during a 24-hour period.***
- ***The vehicular volume through the crossing exceeds 200 vehicles per hour in urban areas or 140 vehicles per hour in rural areas during peak-hour pedestrian usage.***
- *The critical approach speed (85^{th} percentile speed) is 45 MPH or less.*
- *In-Roadway Warning Lights are visible to drivers at the minimum stopping sight distance for the posted speed limit.*
- *Public education on In-Roadway Warning Lights is conducted for new installations.*

The above guidelines are not satisfied at either of these equestrian crossing locations due to the insufficient amount of pedestrians crossing the street and vehicles traveling through the crossing.

FINDINGS

In summary, field, speed, traffic volume, and collision data were gathered for both equestrian crossing locations. Speed profile data collected for Nellie Gail Road resulted in 35 mph critical speeds in the eastbound direction, which are higher than the posted 25 mph speed limit for this street. In the westbound direction, higher 85th percentile speeds of 37 and 38 mph were collected throughout the week. Speed data collected for Nottingham Court resulted in 35 mph critical speeds in the northbound direction, which are higher than the posted 25 mph speed limit for this street. In the southbound direction, 85th percentile speeds of 33, 32, and 31 mph were collected throughout the week. The speed profile data for both roadways were also confirmed by follow-up spot speed studies. It is noted, the Nottingham Court speeds are not considered unusual by the City for this type of roadway.

Traffic volume data was found typical for residential streets of this character. There were no reported collisions occurring at either of these equestrian crossings.

In regards to marked crosswalks and in-roadway warning lights, both of these devices are not recommended at either of these equestrian crossing locations due to the insufficient amount of pedestrians crossing the street and vehicles traveling through the crossing.

It was also suggested that a rubberized surface (i.e., rubber pavers) replace existing concrete sidewalk along the equestrian crossing. The rubber pavers suggested are designed for use in barns, horse stables, etc., not public sidewalks. The City uses established standards for sidewalks in the public right-of-way, specifically Portland Cement Concrete, and we do not recommend deviating from established standards.

RECOMMENDATIONS

HCI recommends an incremental approach be taken regarding the two equestrian crossings. Our recommendations for each location follow:

Nellie Gail Road Just East of Lost Colt Drive:

- The speed data results show that speeding is occurring along this segment of Nellie Gail Road. Use of a portable radar trailer accompanied by increased law enforcement is recommended to reduce travel speeds.
- Trim vegetation near warning signs to optimize sight distance.
- Install advance EQUESTRIAN warning signs in both directions of travel approximately 350' in advance of the crossing.
- Install HORSE XING pavement markings in both directions of travel approximately 305' in advance of the crossing.
- Install white arrowhead YIELD pavement markings just in advance of the crossing to more clearly delineate where vehicles are to stop when the crossing is in use.

RECOMMENDATIONS ***(continued)***

Nottingham Court South of Oso Parkway:

- The speed data results for this roadway show that speeding over the speed limit is occurring along this segment of Nottingham Court. Use of a portable radar trailer accompanied by increased law enforcement is recommended to reduce travel speeds.
- Trim vegetation near warning signs to optimize sight distance.
- Install advance EQUESTRIAN warning signs in the southbound direction of travel as far as possible in advance of the crossing.
- Install white arrowhead YIELD pavement markings just in advance of the crossing to more clearly delineate where vehicles are to stop when the crossing is in use.

7-Day Speed Profile and Traffic Volume Data

Nellie Gail Road at Lost Colt Drive

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Friday
Date: 8/10/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	1	0	0	0	0	0	0	0	0	2
06:00	0	2	2	2	3	0	0	0	0	0	0	0	0	9
07:00	3	5	3	5	11	4	0	0	0	0	0	0	0	31
08:00	5	6	5	10	15	3	2	0	0	0	0	0	0	46
09:00	4	3	3	15	18	4	2	0	0	0	0	0	0	49
10:00	2	2	4	9	7	10	1	0	0	0	0	0	0	35
11:00	3	9	4	7	10	6	0	0	0	0	0	0	0	39
12:00 PM	6	9	4	11	12	7	0	0	0	0	0	0	0	49
13:00	3	6	5	10	9	8	0	0	0	0	0	0	0	41
14:00	3	3	3	6	14	6	1	0	0	0	0	0	0	36
15:00	3	7	3	16	17	7	1	0	0	0	0	0	0	54
16:00	0	6	4	12	12	6	3	0	0	0	0	0	0	43
17:00	4	6	2	13	16	11	3	0	0	0	0	0	0	55
18:00	1	4	7	14	23	8	0	0	0	0	0	0	0	57
19:00	3	5	8	5	10	3	1	0	0	0	0	0	0	35
20:00	3	4	3	7	9	1	0	0	0	0	0	0	0	27
21:00	0	4	8	4	9	3	0	1	0	0	0	0	0	29
22:00	0	0	1	3	7	0	0	0	0	0	0	0	0	11
23:00	0	2	1	3	2	1	0	0	0	0	0	0	0	9
Totals	45	83	70	154	206	88	14	1						661
% of Totals	7%	13%	11%	23%	31%	13%	2%	0%						100%
AM Volumes	19	27	21	50	66	27	5	0	0	0	0	0	0	215
% AM	3%	4%	3%	8%	10%	4%	1%							33%
AM Peak Hour	08:00	11:00	08:00	09:00	09:00	10:00	08:00							09:00
Volume	5	9	5	15	18	10	2							49
PM Volumes	26	56	49	104	140	61	9	1	0	0	0	0	0	446
% PM	4%	8%	7%	16%	21%	9%	1%	0%						67%
PM Peak Hour	12:00	12:00	19:00	15:00	18:00	17:00	16:00	21:00						18:00
Volume	6	9	8	16	23	11	3	1						57

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	77		12%	90		14%	98		15%	396		60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	18	29	28	35	39	661
Nellie Gail Rd	West Bound	22	31	30	37	39	606

10/9/2012 ITEM NO. 7.4.1

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Friday
Date: 8/10/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	0	1	1	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
06:00	1	0	5	2	9	3	0	0	0	0	0	0	0	20
07:00	0	2	2	9	10	6	0	0	0	0	0	0	0	29
08:00	1	2	11	11	15	12	0	1	0	0	0	0	0	53
09:00	2	4	7	10	15	11	2	1	0	0	0	0	0	52
10:00	2	5	8	8	20	7	1	0	0	0	0	0	0	51
11:00	0	0	10	11	13	12	1	1	0	0	0	0	0	48
12:00 PM	0	6	6	1	14	10	0	0	0	0	0	0	0	37
13:00	4	2	7	9	20	10	0	0	0	0	0	0	0	52
14:00	0	0	6	7	16	4	0	0	0	0	0	0	0	33
15:00	1	3	2	7	19	4	2	0	0	0	0	0	0	38
16:00	1	2	4	6	12	6	0	0	0	0	0	0	0	31
17:00	0	1	4	8	5	6	1	0	0	0	0	0	0	25
18:00	0	1	7	14	13	8	0	0	0	0	0	0	0	43
19:00	0	1	6	10	15	5	3	0	0	0	0	0	0	40
20:00	0	1	0	3	4	6	0	1	0	0	0	0	0	15
21:00	0	0	6	3	3	3	1	0	0	0	0	0	0	16
22:00	0	0	4	2	2	2	0	0	0	0	0	0	0	10
23:00	0	0	2	1	3	1	0	0	0	0	0	0	0	7
Totals	12	30	98	123	210	118	11	4						606
% of Totals	2%	5%	16%	20%	35%	19%	2%	1%						100%

AM Volumes	6	13	44	52	84	53	4	3	0	0	0	0	0	259
% AM	1%	2%	7%	9%	14%	9%	1%	0%						43%
AM Peak Hour	09:00	10:00	08:00	08:00	10:00	08:00	09:00	08:00						08:00
Volume	2	5	11	11	20	12	2	1						53
PM Volumes	6	17	54	71	126	65	7	1	0	0	0	0	0	347
% PM	1%	3%	9%	12%	21%	11%	1%	0%						57%
PM Peak Hour	13:00	12:00	13:00	18:00	13:00	12:00	19:00	20:00						13:00
Volume	4	6	7	14	20	10	3	1						52

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	82		14%	89		15%	56		9%	379		63%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	18	29	28	35	39	661
Nellie Gail Rd	West Bound	22	31	30	37	39	606

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Friday
Date: 8/10/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	1	0	1	1	1	1	0	0	0	0	0	0	0	5
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	1	0	0	0	2	1	0	0	0	0	0	0	0	4
06:00	1	2	7	4	12	3	0	0	0	0	0	0	0	29
07:00	3	7	5	14	21	10	0	0	0	0	0	0	0	60
08:00	6	8	16	21	30	15	2	1	0	0	0	0	0	99
09:00	6	7	10	25	33	15	4	1	0	0	0	0	0	101
10:00	4	7	12	17	27	17	2	0	0	0	0	0	0	86
11:00	3	9	14	18	23	18	1	1	0	0	0	0	0	87
12:00 PM	6	15	10	12	26	17	0	0	0	0	0	0	0	86
13:00	7	8	12	19	29	18	0	0	0	0	0	0	0	93
14:00	3	3	9	13	30	10	1	0	0	0	0	0	0	69
15:00	4	10	5	23	36	11	3	0	0	0	0	0	0	92
16:00	1	8	8	18	24	12	3	0	0	0	0	0	0	74
17:00	4	7	6	21	21	17	4	0	0	0	0	0	0	80
18:00	1	5	14	28	36	16	0	0	0	0	0	0	0	100
19:00	3	6	14	15	25	8	4	0	0	0	0	0	0	75
20:00	3	5	3	10	13	7	0	1	0	0	0	0	0	42
21:00	0	4	14	7	12	6	1	1	0	0	0	0	0	45
22:00	0	0	5	5	9	2	0	0	0	0	0	0	0	21
23:00	0	2	3	4	5	2	0	0	0	0	0	0	0	16
Totals	57	113	168	277	416	206	25	5						1267
% of Totals	4%	9%	13%	22%	33%	16%	2%	0%						100%
AM Volumes	25	40	65	102	150	80	9	3	0	0	0	0	0	474
% AM	2%	3%	5%	8%	12%	6%	1%	0%						37%
AM Peak Hour	08:00	11:00	08:00	09:00	09:00	11:00	09:00	08:00						09:00
Volume	6	9	16	25	33	18	4	1						101
PM Volumes	32	73	103	175	266	126	16	2	0	0	0	0	0	793
% PM	3%	6%	8%	14%	21%	10%	1%	0%						63%
PM Peak Hour	13:00	12:00	18:00	18:00	15:00	13:00	17:00	20:00						18:00
Volume	7	15	14	28	36	18	4	1						100

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	159 ⟷	13%	179 ⟷	14%	154 ⟷	12%	775 ⟷	61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	21	30	29	36	39	1267

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Saturday
Date: 8/11/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	1	3	0	0	1	0	0	0	0	0	6
01:00	1	4	0	0	1	0	0	0	0	0	0	0	0	6
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	1	1	0	0	0	0	0	0	0	0	3
06:00	0	1	0	3	4	1	0	0	0	0	0	0	0	9
07:00	1	4	6	5	6	1	0	0	0	0	0	0	0	23
08:00	1	4	0	8	13	2	2	0	0	0	0	0	0	30
09:00	1	0	7	11	9	2	0	0	0	0	0	0	0	30
10:00	2	10	2	6	12	5	1	0	0	0	0	0	0	38
11:00	1	6	6	9	14	9	2	0	0	0	0	0	0	47
12:00 PM	1	1	2	16	18	5	0	0	0	0	0	0	0	43
13:00	1	4	2	12	9	8	0	0	0	0	0	0	0	36
14:00	4	5	5	9	8	6	1	0	0	0	0	0	0	38
15:00	3	7	2	5	13	7	1	0	0	0	0	0	0	38
16:00	2	5	4	13	20	6	0	0	0	0	0	0	0	50
17:00	1	3	1	7	8	5	0	1	0	0	0	0	0	26
18:00	1	0	3	9	7	5	1	0	0	0	0	0	0	26
19:00	0	5	3	5	8	1	1	0	0	0	0	0	0	23
20:00	0	1	2	2	5	2	0	0	0	0	0	0	0	12
21:00	1	3	4	8	7	0	0	0	0	0	0	0	0	23
22:00	1	5	3	3	4	1	0	0	0	0	0	0	0	17
23:00	1	5	2	3	3	2	0	0	0	0	0	0	0	16
Totals	23	74	55	136	173	68	9	2						540
% of Totals	4%	14%	10%	25%	32%	13%	2%	0%						100%
AM Volumes	7	30	22	44	63	20	5	1	0	0	0	0	0	192
% AM	1%	6%	4%	8%	12%	4%	1%	0%						36%
AM Peak Hour	10:00	10:00	09:00	09:00	11:00	11:00	08:00							11:00
Volume	2	10	7	11	14	9	2	1						47
PM Volumes	16	44	33	92	110	48	4	1	0	0	0	0	0	348
% PM	3%	8%	6%	17%	20%	9%	1%	0%						64%
PM Peak Hour	14:00	15:00	14:00	12:00	16:00	13:00	14:00	17:00						16:00
Volume	4	7	5	16	20	8	1	1						50

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	53		10%	79		15%	76		14%	332		61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	29	28	35	39	540
Nellie Gail Rd	West Bound	24	31	30	37	40	489

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Saturday
Date: 8/11/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	1	1	0	0	0	0	0	0	0	3
05:00	0	0	0	2	2	1	0	0	0	0	0	0	0	5
06:00	0	1	5	0	3	1	0	0	0	0	0	0	0	10
07:00	0	3	4	1	2	4	1	0	0	0	0	0	0	15
08:00	0	1	1	9	13	1	6	0	0	0	0	0	0	31
09:00	0	0	2	4	17	11	1	0	0	0	0	0	0	35
10:00	0	1	5	11	12	3	2	0	0	0	0	0	0	34
11:00	0	2	3	14	16	11	0	0	0	0	0	0	0	46
12:00 PM	0	1	4	14	13	8	4	0	0	0	0	0	0	44
13:00	1	0	6	4	13	8	2	0	0	0	0	0	0	34
14:00	0	0	3	9	12	2	1	0	0	0	0	0	0	27
15:00	0	0	3	8	9	6	0	0	0	0	0	0	0	26
16:00	0	5	9	8	14	5	2	0	0	0	0	0	0	43
17:00	2	2	5	15	10	5	1	0	0	0	0	0	0	40
18:00	0	0	2	9	8	3	2	0	0	0	0	0	0	24
19:00	0	0	2	6	7	2	1	0	0	0	0	0	0	18
20:00	0	0	3	3	4	2	1	0	0	0	0	0	0	13
21:00	0	2	3	4	5	0	0	0	0	0	0	0	0	14
22:00	0	0	2	6	3	2	0	1	0	0	0	0	0	14
23:00	0	0	4	0	5	0	0	0	0	0	0	0	0	9
Totals	3	18	68	128	170	77	24	1						489
% of Totals	1%	4%	14%	26%	35%	16%	5%	0%						100%

AM Volumes	0	8	22	42	67	34	10	0	0	0	0	0	0	183
% AM		2%	4%	9%	14%	7%	2%							37%
AM Peak Hour		07:00	06:00	11:00	09:00	09:00	08:00							11:00
Volume		3	5	14	17	11	6							46
PM Volumes	3	10	46	86	103	43	14	1	0	0	0	0	0	306
% PM	1%	2%	9%	18%	21%	9%	3%	0%						63%
PM Peak Hour	17:00	16:00	16:00	17:00	16:00	12:00	12:00	22:00						12:00
Volume	2	5	9	15	14	8	4	1						44

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	46		9%	78		16%	83		17%	282		58%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	29	28	35	39	540
Nellie Gail Rd	West Bound	24	31	30	37	40	489

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Saturday
Date: 8/11/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	2	1	3	0	0	1	0	0	0	0	0	7
01:00	1	4	0	0	1	1	0	0	0	0	0	0	0	7
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	1	1	0	0	0	0	0	0	0	3
05:00	0	1	0	3	3	1	0	0	0	0	0	0	0	8
06:00	0	2	5	3	7	2	0	0	0	0	0	0	0	19
07:00	1	7	10	6	8	5	1	0	0	0	0	0	0	38
08:00	1	5	1	17	26	3	8	0	0	0	0	0	0	61
09:00	1	0	9	15	26	13	1	0	0	0	0	0	0	65
10:00	2	11	7	17	24	8	3	0	0	0	0	0	0	72
11:00	1	8	9	23	30	20	2	0	0	0	0	0	0	93
12:00 PM	1	2	6	30	31	13	4	0	0	0	0	0	0	87
13:00	2	4	8	16	22	16	2	0	0	0	0	0	0	70
14:00	4	5	8	18	20	8	2	0	0	0	0	0	0	65
15:00	3	7	5	13	22	13	1	0	0	0	0	0	0	64
16:00	2	10	13	21	34	11	2	0	0	0	0	0	0	93
17:00	3	5	6	22	18	10	1	1	0	0	0	0	0	66
18:00	1	0	5	18	15	8	3	0	0	0	0	0	0	50
19:00	0	5	5	11	15	3	2	0	0	0	0	0	0	41
20:00	0	1	5	5	9	4	1	0	0	0	0	0	0	25
21:00	1	5	7	12	12	0	0	0	0	0	0	0	0	37
22:00	1	5	5	9	7	3	0	1	0	0	0	0	0	31
23:00	1	5	6	3	8	2	0	0	0	0	0	0	0	25
Totals	26	92	123	264	343	145	33	3						1029
% of Totals	3%	9%	12%	26%	33%	14%	3%	0%						100%
AM Volumes	7	38	44	86	130	54	15	1	0	0	0	0	0	375
% AM	1%	4%	4%	8%	13%	5%	1%	0%						36%
AM Peak Hour	10:00	10:00	07:00	11:00	11:00	11:00	08:00							11:00
Volume	2	11	10	23	30	20	8	1						93
PM Volumes	19	54	79	178	213	91	18	2	0	0	0	0	0	654
% PM	2%	5%	8%	17%	21%	9%	2%	0%						64%
PM Peak Hour	14:00	16:00	16:00	12:00	16:00	13:00	12:00	17:00						16:00
Volume	4	10	13	30	34	16	4	1						93

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	99		10%	157		15%	159		15%	614		60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	21	30	29	36	39	1029

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Sunday
Date: 8/12/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	1	1	0	3	1	2	0	0	0	0	0	0	0	8
01:00	0	2	1	2	0	1	0	0	0	0	0	0	0	6
02:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	2	2	4	2	0	0	0	0	0	0	0	10
07:00	3	3	1	4	4	1	0	0	0	0	0	0	0	16
08:00	1	1	3	10	10	5	1	0	0	0	0	0	0	31
09:00	1	1	2	7	8	1	0	0	0	0	0	0	0	20
10:00	1	8	3	4	9	4	0	0	0	0	0	0	0	29
11:00	1	6	1	7	8	3	1	0	0	0	0	0	0	27
12:00 PM	2	10	2	10	7	5	1	0	0	0	0	0	0	37
13:00	1	4	4	17	13	2	1	0	0	0	0	0	0	42
14:00	2	1	4	9	7	4	0	0	0	0	0	0	0	27
15:00	0	5	4	10	12	3	1	1	0	0	0	0	0	36
16:00	2	2	1	14	7	9	1	1	0	0	0	0	0	37
17:00	1	6	4	9	9	3	1	0	0	0	0	0	0	33
18:00	2	4	3	11	9	3	1	0	0	0	0	0	0	33
19:00	3	4	0	9	6	1	0	0	0	0	0	0	0	23
20:00	1	1	3	11	4	1	0	0	0	0	0	0	0	21
21:00	2	0	2	4	3	0	0	0	0	0	0	0	0	11
22:00	0	3	1	3	0	0	0	0	0	0	0	0	0	7
23:00	0	1	1	1	3	1	0	0	0	0	0	0	0	7
Totals	24	63	42	150	125	51	8	2						465
% of Totals	5%	14%	9%	32%	27%	11%	2%	0%						100%
AM Volumes	8	22	13	42	45	19	2	0	0	0	0	0	0	151
% AM	2%	5%	3%	9%	10%	4%	0%							32%
AM Peak Hour	07:00	10:00	08:00	08:00	08:00	08:00	08:00							08:00
Volume	3	8	3	10	10	5	1							31
PM Volumes	16	41	29	108	80	32	6	2	0	0	0	0	0	314
% PM	3%	9%	6%	23%	17%	7%	1%	0%						68%
PM Peak Hour	19:00	12:00	13:00	13:00	13:00	16:00	12:00	15:00						13:00
Volume	3	10	4	17	13	9	1	1						42

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	47		10%	79		17%	70		15%	269		58%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	28	28	35	39	465
Nellie Gail Rd	West Bound	24	31	31	38	41	454

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Sunday
Date: 8/12/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	2	1	1	0	0	0	0	0	0	0	5
01:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
02:00	0	0	2	0	1	1	0	0	0	0	0	0	0	4
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	3	1	3	0	1	0	0	0	0	0	0	8
07:00	0	0	3	4	5	1	0	0	0	0	0	0	0	13
08:00	0	1	2	8	9	2	1	0	0	0	0	0	0	23
09:00	0	2	4	6	8	5	3	0	0	0	0	0	0	28
10:00	0	0	2	2	15	7	4	0	0	0	0	0	0	30
11:00	0	0	4	7	14	12	3	0	0	0	0	0	0	40
12:00 PM	1	0	5	8	13	5	3	0	0	0	0	0	0	35
13:00	1	1	5	8	10	10	3	0	0	0	0	0	0	38
14:00	0	0	4	10	10	8	5	0	0	0	0	0	0	37
15:00	0	3	4	6	10	9	2	0	0	0	0	0	0	34
16:00	0	0	2	10	8	4	0	0	0	0	0	0	0	24
17:00	0	0	5	8	7	11	2	0	0	0	0	0	0	33
18:00	1	1	5	4	3	6	1	0	0	0	0	0	0	21
19:00	0	1	4	9	11	4	0	1	0	0	0	0	0	30
20:00	0	2	4	2	8	3	0	0	0	0	0	0	0	19
21:00	0	1	1	1	3	1	0	0	0	0	0	0	0	7
22:00	0	1	6	1	2	3	0	0	0	0	0	0	0	13
23:00	0	1	1	0	4	0	1	0	0	0	0	0	0	7
Totals	3	15	69	99	145	93	29	1						454
% of Totals	1%	3%	15%	22%	32%	20%	6%	0%						100%

AM Volumes	0	4	23	32	56	29	12	0	0	0	0	0	0	156
% AM		1%	5%	7%	12%	6%	3%							34%
AM Peak Hour		09:00	09:00	08:00	10:00	11:00	10:00							11:00
Volume		2	4	8	15	12	4							40
PM Volumes	3	11	46	67	89	64	17	1	0	0	0	0	0	298
% PM	1%	2%	10%	15%	20%	14%	4%	0%						66%
PM Peak Hour	12:00	15:00	22:00	14:00	12:00	17:00	14:00	19:00						13:00
Volume	1	3	6	10	13	11	5	1						38

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	36		8%	73		16%	57		13%	288		63%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	28	28	35	39	465
Nellie Gail Rd	West Bound	24	31	31	38	41	454

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Sunday
Date: 8/12/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	1	1	1	5	2	3	0	0	0	0	0	0	0	13
01:00	0	2	2	4	0	1	0	0	0	0	0	0	0	9
02:00	0	0	2	2	1	1	0	0	0	0	0	0	0	6
03:00	0	1	0	1	1	0	0	0	0	0	0	0	0	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	5	3	7	2	1	0	0	0	0	0	0	18
07:00	3	3	4	8	9	2	0	0	0	0	0	0	0	29
08:00	1	2	5	18	19	7	2	0	0	0	0	0	0	54
09:00	1	3	6	13	16	6	3	0	0	0	0	0	0	48
10:00	1	8	5	6	24	11	4	0	0	0	0	0	0	59
11:00	1	6	5	14	22	15	4	0	0	0	0	0	0	67
12:00 PM	3	10	7	18	20	10	4	0	0	0	0	0	0	72
13:00	2	5	9	25	23	12	4	0	0	0	0	0	0	80
14:00	2	1	8	19	17	12	5	0	0	0	0	0	0	64
15:00	0	8	8	16	22	12	3	1	0	0	0	0	0	70
16:00	2	2	3	24	15	13	1	1	0	0	0	0	0	61
17:00	1	6	9	17	16	14	3	0	0	0	0	0	0	66
18:00	3	5	8	15	12	9	2	0	0	0	0	0	0	54
19:00	3	5	4	18	17	5	0	1	0	0	0	0	0	53
20:00	1	3	7	13	12	4	0	0	0	0	0	0	0	40
21:00	2	1	3	5	6	1	0	0	0	0	0	0	0	18
22:00	0	4	7	4	2	3	0	0	0	0	0	0	0	20
23:00	0	2	2	1	7	1	1	0	0	0	0	0	0	14
Totals	27	78	111	249	270	144	37	3						919
% of Totals	3%	8%	12%	27%	29%	16%	4%	0%						100%
AM Volumes	8	26	36	74	101	48	14	0	0	0	0	0	0	307
% AM	1%	3%	4%	8%	11%	5%	2%							33%
AM Peak Hour	07:00	10:00	09:00	08:00	10:00	11:00	10:00							11:00
Volume	3	8	6	18	24	15	4							67
PM Volumes	19	52	75	175	169	96	23	3	0	0	0	0	0	612
% PM	2%	6%	8%	19%	18%	10%	3%	0%						67%
PM Peak Hour	12:00	12:00	13:00	13:00	13:00	17:00	14:00	15:00						13:00
Volume	3	10	9	25	23	14	5	1						80

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		%	Volume		%	Volume		%	Volume		%
	83	⟷	9%	152	⟷	17%	127	⟷	14%	557	⟷	61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	21	30	29	37	40	919

10/9/2012 ITEM NO. 7.4.1

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Monday
Date: 8/13/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	2	0	1	1	0	0	0	0	0	0	0	0	6
06:00	0	3	1	3	4	1	0	0	0	0	0	0	0	12
07:00	4	5	1	9	6	3	0	0	0	0	0	0	0	28
08:00	3	13	8	9	7	4	0	0	0	0	0	0	0	44
09:00	1	6	6	6	9	7	1	0	0	0	0	0	0	36
10:00	4	10	8	14	11	1	1	0	0	0	0	0	0	49
11:00	3	6	13	13	8	3	0	0	0	0	0	0	0	46
12:00 PM	3	6	3	12	13	4	3	0	0	0	0	0	0	44
13:00	2	4	2	8	9	5	0	0	0	0	0	0	0	30
14:00	2	2	6	11	11	7	1	0	0	0	0	0	0	40
15:00	1	3	6	22	16	5	2	0	0	0	0	0	0	55
16:00	3	4	3	16	15	12	1	0	0	0	0	0	0	54
17:00	0	12	2	19	19	12	0	0	0	0	0	0	0	64
18:00	2	5	5	19	21	4	2	0	0	0	0	0	0	58
19:00	0	8	3	11	11	2	0	0	0	0	0	0	0	35
20:00	0	1	2	6	3	5	1	0	0	0	0	0	0	18
21:00	1	0	2	3	9	0	0	0	0	0	0	0	0	15
22:00	1	3	1	7	1	3	0	0	0	0	0	0	0	16
23:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
Totals	32	95	72	190	176	79	12	1						657
% of Totals	5%	14%	11%	29%	27%	12%	2%	0%						100%

AM Volumes	17	45	37	56	47	20	2	1	0	0	0	0	0	225
% AM	3%	7%	6%	9%	7%	3%	0%	0%						34%
AM Peak Hour	07:00	08:00	11:00	10:00	10:00	09:00	09:00							10:00
Volume	4	13	13	14	11	7	1	1						49
PM Volumes	15	50	35	134	129	59	10	0	0	0	0	0	0	432
% PM	2%	8%	5%	20%	20%	9%	2%							66%
PM Peak Hour	12:00	17:00	14:00	15:00	18:00	16:00	12:00							17:00
Volume	3	12	6	22	21	12	3							64

Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Speeds	Volume	%	Volume	%	Volume	%	Volume	%
	72 ⟷	11%	74 ⟷	11%	118 ⟷	18%	393 ⟷	60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	28	28	35	39	657
Nellie Gail Rd	West Bound	23	30	30	37	40	600

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Monday
Date: 8/13/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	2
01:00	0	1	1	1	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
06:00	0	3	7	5	3	4	1	0	0	0	0	0	0	23
07:00	0	2	4	5	11	3	1	0	0	0	0	0	0	26
08:00	6	3	8	11	15	10	5	0	0	0	0	0	0	58
09:00	1	4	5	6	13	11	1	0	0	0	0	0	0	41
10:00	2	3	6	13	5	12	2	1	0	0	0	0	0	44
11:00	0	2	8	11	15	6	1	0	0	0	0	0	0	43
12:00 PM	1	1	2	9	12	10	0	0	0	0	0	0	0	35
13:00	0	2	1	9	12	9	4	0	0	0	0	0	0	37
14:00	1	3	4	10	7	4	2	0	0	0	0	0	0	31
15:00	0	0	3	12	14	12	2	0	0	0	0	0	0	43
16:00	0	4	7	15	13	12	2	1	0	0	0	0	0	54
17:00	0	0	7	9	14	10	0	1	0	0	0	0	0	41
18:00	0	0	8	6	11	5	1	0	0	0	0	0	0	31
19:00	2	2	2	11	2	4	0	0	0	0	0	0	0	23
20:00	2	1	2	7	10	4	0	1	0	0	0	0	0	27
21:00	0	1	2	9	5	1	1	0	0	0	0	0	0	19
22:00	0	0	3	4	2	0	1	0	0	0	0	0	0	10
23:00	0	0	0	3	2	0	2	0	0	0	0	0	0	7
Totals	15	32	80	158	167	118	26	4						600
% of Totals	3%	5%	13%	26%	28%	20%	4%	1%						100%

AM Volumes	9	18	39	54	63	47	11	1	0	0	0	0	0	242
% AM	2%	3%	7%	9%	11%	8%	2%	0%						40%
AM Peak Hour	08:00	09:00	08:00	10:00	08:00	10:00	08:00	10:00						08:00
Volume	6	4	8	13	15	12	5	1						58
PM Volumes	6	14	41	104	104	71	15	3	0	0	0	0	0	358
% PM	1%	2%	7%	17%	17%	12%	3%	1%						60%
PM Peak Hour	19:00	16:00	18:00	16:00	15:00	15:00	13:00	16:00						16:00
Volume	2	4	8	15	14	12	4	1						54

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	84		14%	72		12%	95		16%	349		58%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	28	28	35	39	657
Nellie Gail Rd	West Bound	23	30	30	37	40	600

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Monday
Date: 8/13/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	2	2	0	0	1	0	0	0	0	0	5
01:00	0	1	1	1	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	2	0	2	1	1	0	0	0	0	0	0	0	8
06:00	0	6	8	8	7	5	1	0	0	0	0	0	0	35
07:00	4	7	5	14	17	6	1	0	0	0	0	0	0	54
08:00	9	16	16	20	22	14	5	0	0	0	0	0	0	102
09:00	2	10	11	12	22	18	2	0	0	0	0	0	0	77
10:00	6	13	14	27	16	13	3	1	0	0	0	0	0	93
11:00	3	8	21	24	23	9	1	0	0	0	0	0	0	89
12:00 PM	4	7	5	21	25	14	3	0	0	0	0	0	0	79
13:00	2	6	3	17	21	14	4	0	0	0	0	0	0	67
14:00	3	5	10	21	18	11	3	0	0	0	0	0	0	71
15:00	1	3	9	34	30	17	4	0	0	0	0	0	0	98
16:00	3	8	10	31	28	24	3	1	0	0	0	0	0	108
17:00	0	12	9	28	33	22	0	1	0	0	0	0	0	105
18:00	2	5	13	25	32	9	3	0	0	0	0	0	0	89
19:00	2	10	5	22	13	6	0	0	0	0	0	0	0	58
20:00	2	2	4	13	13	9	1	1	0	0	0	0	0	45
21:00	1	1	4	12	14	1	1	0	0	0	0	0	0	34
22:00	1	3	4	11	3	3	1	0	0	0	0	0	0	26
23:00	0	2	0	3	3	0	2	0	0	0	0	0	0	10
Totals	47	127	152	348	343	197	38	5						1257
% of Totals	4%	10%	12%	28%	27%	16%	3%	0%						100%

AM Volumes	26	63	76	110	110	67	13	2	0	0	0	0	0	467
% AM	2%	5%	6%	9%	9%	5%	1%	0%						37%
AM Peak Hour	08:00	08:00	11:00	10:00	11:00	09:00	08:00							08:00
Volume	9	16	21	27	23	18	5	1						102
PM Volumes	21	64	76	238	233	130	25	3	0	0	0	0	0	790
% PM	2%	5%	6%	19%	19%	10%	2%	0%						63%
PM Peak Hour	12:00	17:00	18:00	15:00	17:00	16:00	13:00	16:00						16:00
Volume	4	12	13	34	33	24	4	1						108

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	156		12%	146		12%	213		17%	742		59%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	20	29	29	36	39	1257

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Tuesday
Date: 8/14/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
05:00	2	3	0	0	1	1	0	0	0	0	0	0	0	7
06:00	1	3	0	1	2	2	0	0	0	0	0	0	0	9
07:00	0	3	3	8	7	0	0	0	0	0	0	0	0	21
08:00	2	7	5	10	17	2	1	0	0	0	0	0	0	44
09:00	3	5	3	13	10	3	0	0	0	0	0	0	0	37
10:00	4	1	5	10	18	2	1	0	0	0	0	0	0	41
11:00	0	6	10	15	12	7	3	2	0	0	0	0	0	55
12:00 PM	4	1	4	10	14	1	0	0	0	0	0	0	0	34
13:00	4	5	2	9	9	8	1	0	0	0	0	0	0	38
14:00	2	3	3	17	14	3	1	0	0	0	0	0	0	43
15:00	2	10	7	18	19	7	1	0	0	0	0	0	0	64
16:00	3	3	4	9	21	6	0	0	0	0	0	0	0	46
17:00	4	5	8	24	23	8	0	1	0	0	0	0	0	73
18:00	3	5	3	19	18	4	1	0	0	0	0	0	0	53
19:00	1	5	5	13	11	4	0	0	0	0	0	0	0	39
20:00	0	4	3	3	8	3	1	0	0	0	0	0	0	22
21:00	1	2	1	4	6	1	0	0	0	0	0	0	0	15
22:00	1	9	2	4	3	3	0	0	0	0	0	0	0	22
23:00	0	0	0	2	4	2	0	0	0	0	0	0	0	8
Totals	37	80	69	190	218	68	10	3						675
% of Totals	5%	12%	10%	28%	32%	10%	1%	0%						100%
AM Volumes	12	28	27	58	68	18	5	2	0	0	0	0	0	218
% AM	2%	4%	4%	9%	10%	3%	1%	0%						32%
AM Peak Hour	10:00	08:00	11:00	11:00	10:00	11:00	11:00	11:00						11:00
Volume	4	7	10	15	18	7	3	2						55
PM Volumes	25	52	42	132	150	50	5	1	0	0	0	0	0	457
% PM	4%	8%	6%	20%	22%	7%	1%	0%						68%
PM Peak Hour	12:00	15:00	17:00	17:00	17:00	13:00	13:00	17:00						17:00
Volume	4	10	8	24	23	8	1	1						73

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	65 ⟷	10%	72 ⟷	11%	119 ⟷	18%	419 ⟷	62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	29	28	35	38	675
Nellie Gail Rd	West Bound	24	31	31	37	40	638

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Tuesday
Date: 8/14/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	1	0	1	0	2	1	0	0	0	0	0	0	0	5
06:00	0	0	3	7	6	1	0	0	0	0	0	0	0	17
07:00	0	0	5	7	14	5	1	0	0	0	0	0	0	32
08:00	0	0	5	10	21	11	3	0	0	0	0	0	0	50
09:00	0	1	5	5	15	9	2	0	0	0	0	0	0	37
10:00	1	0	3	12	17	11	3	2	0	0	0	0	0	49
11:00	0	1	3	20	15	12	2	0	0	0	0	0	0	53
12:00 PM	1	1	6	13	9	8	2	1	0	0	0	0	0	41
13:00	1	0	5	7	10	9	3	0	0	0	0	0	0	35
14:00	1	2	7	11	11	12	0	0	0	0	0	0	0	44
15:00	0	3	8	15	20	4	0	0	0	0	0	0	0	50
16:00	0	5	6	13	15	6	3	0	0	0	0	0	0	48
17:00	0	0	4	6	16	7	1	1	0	0	0	0	0	35
18:00	0	0	7	11	10	10	2	0	0	0	0	0	0	40
19:00	0	3	11	6	9	9	1	0	0	0	0	0	0	39
20:00	0	1	4	5	1	5	1	0	0	0	0	0	0	17
21:00	0	1	3	8	5	3	3	0	0	0	0	0	0	23
22:00	0	1	4	2	3	2	0	0	0	0	0	0	0	12
23:00	1	0	0	5	2	0	0	0	0	0	0	0	0	8
Totals	6	19	91	163	203	125	27	4						638
% of Totals	1%	3%	14%	26%	32%	20%	4%	1%						100%

AM Volumes	2	2	26	61	92	50	11	2	0	0	0	0	0	246
% AM	0%	0%	4%	10%	14%	8%	2%	0%						39%
AM Peak Hour	05:00	09:00	07:00	11:00	08:00	11:00	08:00	10:00						11:00
Volume	1	1	5	20	21	12	3	2						53
PM Volumes	4	17	65	102	111	75	16	2	0	0	0	0	0	392
% PM	1%	3%	10%	16%	17%	12%	3%	0%						61%
PM Peak Hour	12:00	16:00	19:00	15:00	15:00	14:00	13:00	12:00						15:00
Volume	1	5	11	15	20	12	3	1						50

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	82		13%	76		12%	83		13%	397		62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	19	29	28	35	38	675
Nellie Gail Rd	West Bound	24	31	31	37	40	638

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Tuesday
Date: 8/14/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
05:00	3	3	1	0	3	2	0	0	0	0	0	0	0	12
06:00	1	3	3	8	8	3	0	0	0	0	0	0	0	26
07:00	0	3	8	15	21	5	1	0	0	0	0	0	0	53
08:00	2	7	10	20	38	13	4	0	0	0	0	0	0	94
09:00	3	6	8	18	25	12	2	0	0	0	0	0	0	74
10:00	5	1	8	22	35	13	4	2	0	0	0	0	0	90
11:00	0	7	13	35	27	19	5	2	0	0	0	0	0	108
12:00 PM	5	2	10	23	23	9	2	1	0	0	0	0	0	75
13:00	5	5	7	16	19	17	4	0	0	0	0	0	0	73
14:00	3	5	10	28	25	15	1	0	0	0	0	0	0	87
15:00	2	13	15	33	39	11	1	0	0	0	0	0	0	114
16:00	3	8	10	22	36	12	3	0	0	0	0	0	0	94
17:00	4	5	12	30	39	15	1	2	0	0	0	0	0	108
18:00	3	5	10	30	28	14	3	0	0	0	0	0	0	93
19:00	1	8	16	19	20	13	1	0	0	0	0	0	0	78
20:00	0	5	7	8	9	8	2	0	0	0	0	0	0	39
21:00	1	3	4	12	11	4	3	0	0	0	0	0	0	38
22:00	1	10	6	6	6	5	0	0	0	0	0	0	0	34
23:00	1	0	0	7	6	2	0	0	0	0	0	0	0	16
Totals	43	99	160	353	421	193	37	7						1313
% of Totals	3%	8%	12%	27%	32%	15%	3%	1%						100%
AM Volumes	14	30	53	119	160	68	16	4	0	0	0	0	0	464
% AM	1%	2%	4%	9%	12%	5%	1%	0%						35%
AM Peak Hour	10:00	08:00	11:00	11:00	08:00	11:00	11:00	10:00						11:00
Volume	5	7	13	35	38	19	5	2						108
PM Volumes	29	69	107	234	261	125	21	3	0	0	0	0	0	849
% PM	2%	5%	8%	18%	20%	10%	2%	0%						65%
PM Peak Hour	12:00	15:00	19:00	15:00	15:00	13:00	13:00	17:00						15:00
Volume	5	13	16	33	39	17	4	2						114

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	147 ⟷	11%	148 ⟷	11%	202 ⟷	15%	816 ⟷	62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	22	30	29	36	39	1313

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Wednesday
Date: 8/15/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2
01:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
02:00	1	0	0	1	0	0	1	0	0	0	0	0	0	3
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	2	0	1	2	0	0	0	0	0	0	0	0	6
06:00	0	3	2	2	4	0	0	0	0	0	0	0	0	11
07:00	1	3	4	6	7	6	0	0	0	0	0	0	0	27
08:00	2	5	6	16	13	6	1	0	0	0	0	0	0	49
09:00	1	6	5	12	17	6	0	1	0	0	0	0	0	48
10:00	1	5	7	9	14	6	1	0	0	0	0	0	0	43
11:00	2	3	7	15	10	2	1	0	0	0	0	0	0	40
12:00 PM	3	4	6	10	13	2	1	0	0	0	0	0	0	39
13:00	1	8	6	5	13	1	0	0	0	0	0	0	0	34
14:00	0	12	9	7	17	4	2	0	0	0	0	0	0	51
15:00	1	4	4	17	19	8	0	0	0	0	0	0	0	53
16:00	3	8	2	18	22	9	1	0	0	0	0	0	0	63
17:00	2	6	5	23	25	7	2	0	0	0	0	0	0	70
18:00	2	6	4	24	14	2	0	0	0	0	0	0	0	52
19:00	2	4	3	11	16	4	0	0	0	0	0	0	0	40
20:00	1	3	3	8	10	5	1	0	0	0	0	0	0	31
21:00	0	1	1	9	6	1	0	0	0	0	0	0	0	18
22:00	1	1	4	3	3	0	0	0	0	0	0	0	0	12
23:00	0	1	0	4	3	1	0	0	0	0	0	0	0	9
Totals	25	85	80	202	228	72	11	1						704
% of Totals	4%	12%	11%	29%	32%	10%	2%	0%						100%
AM Volumes	9	27	33	63	67	28	4	1	0	0	0	0	0	232
% AM	1%	4%	5%	9%	10%	4%	1%	0%						33%
AM Peak Hour	08:00	09:00	10:00	08:00	09:00	07:00	02:00	09:00						08:00
Volume	2	6	7	16	17	6	1	1						49
PM Volumes	16	58	47	139	161	44	7	0	0	0	0	0	0	472
% PM	2%	8%	7%	20%	23%	6%	1%							67%
PM Peak Hour	12:00	14:00	14:00	18:00	17:00	16:00	14:00							17:00
Volume	3	12	9	24	25	9	2							70

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	76 ⟷	11%	73 ⟷	10%	133 ⟷	19%	422 ⟷	60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	20	29	28	35	38	704
Nellie Gail Rd	West Bound	24	32	31	38	40	650

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Wednesday
Date: 8/15/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	1	2	0	0	0	0	0	0	0	0	0	5
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	0	0	0	1	1	1	0	0	0	0	0	0	0	3
06:00	0	0	2	4	5	3	0	0	0	0	0	0	0	14
07:00	0	0	3	11	19	5	1	0	0	0	0	0	0	39
08:00	1	3	7	8	28	10	2	1	0	0	0	0	0	60
09:00	1	1	9	11	12	20	1	0	0	0	0	0	0	55
10:00	0	5	1	9	17	8	2	0	0	0	0	0	0	42
11:00	1	0	5	3	11	17	3	1	0	0	0	0	0	41
12:00 PM	0	4	4	10	16	7	2	0	0	0	0	0	0	43
13:00	0	2	3	6	10	7	2	0	0	0	0	0	0	30
14:00	1	0	4	6	10	8	5	0	0	0	0	0	0	34
15:00	0	0	3	16	12	15	1	0	0	0	0	0	0	47
16:00	0	2	6	9	14	10	2	0	0	0	0	0	0	43
17:00	0	2	6	10	17	15	1	2	0	0	0	0	0	53
18:00	0	3	5	11	14	8	3	0	0	0	0	0	0	44
19:00	0	1	5	5	11	7	0	0	0	0	0	0	0	29
20:00	1	0	3	10	5	7	0	0	0	0	0	0	0	26
21:00	0	0	5	9	6	0	1	0	0	0	0	0	0	21
22:00	0	0	4	4	4	0	1	0	0	0	0	0	0	13
23:00	0	0	2	1	2	0	0	0	0	0	0	0	0	5
Totals	5	25	78	147	215	149	27	4						650
% of Totals	1%	4%	12%	23%	33%	23%	4%	1%						100%
AM Volumes	3	11	28	50	94	65	9	2	0	0	0	0	0	262
% AM	0%	2%	4%	8%	14%	10%	1%	0%						40%
AM Peak Hour	08:00	10:00	09:00	07:00	08:00	09:00	11:00	08:00						08:00
Volume	1	5	9	11	28	20	3	1						60
PM Volumes	2	14	50	97	121	84	18	2	0	0	0	0	0	388
% PM	0%	2%	8%	15%	19%	13%	3%	0%						60%
PM Peak Hour	14:00	12:00	16:00	15:00	17:00	15:00	14:00	17:00						17:00
Volume	1	4	6	16	17	15	5	2						53

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	99	15%	73	11%	96	15%	382	59%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	20	29	28	35	38	704
Nellie Gail Rd	West Bound	24	32	31	38	40	650

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Wednesday
Date: 8/15/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	4
01:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
02:00	1	2	1	3	0	0	1	0	0	0	0	0	0	8
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	1	2	0	2	3	1	0	0	0	0	0	0	0	9
06:00	0	3	4	6	9	3	0	0	0	0	0	0	0	25
07:00	1	3	7	17	26	11	1	0	0	0	0	0	0	66
08:00	3	8	13	24	41	16	3	1	0	0	0	0	0	109
09:00	2	7	14	23	29	26	1	1	0	0	0	0	0	103
10:00	1	10	8	18	31	14	3	0	0	0	0	0	0	85
11:00	3	3	12	18	21	19	4	1	0	0	0	0	0	81
12:00 PM	3	8	10	20	29	9	3	0	0	0	0	0	0	82
13:00	1	10	9	11	23	8	2	0	0	0	0	0	0	64
14:00	1	12	13	13	27	12	7	0	0	0	0	0	0	85
15:00	1	4	7	33	31	23	1	0	0	0	0	0	0	100
16:00	3	10	8	27	36	19	3	0	0	0	0	0	0	106
17:00	2	8	11	33	42	22	3	2	0	0	0	0	0	123
18:00	2	9	9	35	28	10	3	0	0	0	0	0	0	96
19:00	2	5	8	16	27	11	0	0	0	0	0	0	0	69
20:00	2	3	6	18	15	12	1	0	0	0	0	0	0	57
21:00	0	1	6	18	12	1	1	0	0	0	0	0	0	39
22:00	1	1	8	7	7	0	1	0	0	0	0	0	0	25
23:00	0	1	2	5	5	1	0	0	0	0	0	0	0	14
Totals	30	110	158	349	443	221	38	5						1354
% of Totals	2%	8%	12%	26%	33%	16%	3%	0%						100%

AM Volumes	12	38	61	113	161	93	13	3	0	0	0	0	0	494
% AM	1%	3%	5%	8%	12%	7%	1%	0%						36%
AM Peak Hour	08:00	10:00	09:00	08:00	08:00	09:00	11:00	08:00						08:00
Volume	3	10	14	24	41	26	4	1						109
PM Volumes	18	72	97	236	282	128	25	2	0	0	0	0	0	860
% PM	1%	5%	7%	17%	21%	9%	2%	0%						64%
PM Peak Hour	12:00	14:00	14:00	18:00	17:00	15:00	14:00	17:00						17:00
Volume	3	12	13	35	42	23	7	2						123

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume		%	Volume		%	Volume		%	Volume		%
	175	⟷	13%	146	⟷	11%	229	⟷	17%	804	⟷	59%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	22	30	29	36	39	1354

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Thursday
Date: 8/16/2012

City: Laguna Hills
Project #: CA12_1158_001e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	2	2	0	1	1	1	0	0	0	0	0	0	0	7
06:00	0	4	1	5	3	2	0	0	0	0	0	0	0	15
07:00	2	3	2	7	12	2	0	0	0	0	0	0	0	28
08:00	1	5	0	11	10	2	0	0	0	0	0	0	0	29
09:00	4	7	5	11	14	5	0	0	0	0	0	0	0	46
10:00	3	4	6	13	17	6	1	1	0	0	0	0	0	51
11:00	3	6	5	9	15	4	0	0	0	0	0	0	0	42
12:00 PM	1	9	4	16	15	2	0	0	0	0	0	0	0	47
13:00	2	8	2	22	13	5	0	0	0	0	0	0	0	52
14:00	3	3	8	15	20	5	0	1	0	0	0	0	0	55
15:00	0	4	6	10	18	9	1	0	0	0	0	0	0	48
16:00	2	8	4	11	19	10	0	0	0	0	0	0	0	54
17:00	3	7	10	26	24	11	1	0	0	0	0	0	0	82
18:00	1	4	3	17	26	10	2	1	0	0	0	0	0	64
19:00	0	3	3	7	14	5	1	1	0	0	0	0	0	34
20:00	2	4	3	13	14	4	0	0	0	0	0	0	0	40
21:00	2	4	1	3	7	1	1	0	0	0	0	0	0	19
22:00	0	2	1	3	6	3	0	0	0	0	0	0	0	15
23:00	0	0	0	4	2	1	0	0	0	0	0	0	0	7
Totals	31	89	65	206	251	88	7	4						741
% of Totals	4%	12%	9%	28%	34%	12%	1%	1%						100%

AM Volumes	15	33	20	59	73	22	1	1	0	0	0	0	0	224
% AM	2%	4%	3%	8%	10%	3%	0%	0%						30%
AM Peak Hour	09:00	09:00	10:00	10:00	10:00	10:00	10:00	10:00						10:00
Volume	4	7	6	13	17	6	1	1						51
PM Volumes	16	56	45	147	178	66	6	3	0	0	0	0	0	517
% PM	2%	8%	6%	20%	24%	9%	1%	0%						70%
PM Peak Hour	14:00	12:00	17:00	17:00	18:00	17:00	18:00	14:00						17:00
Volume	3	9	10	26	26	11	2	1						82

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	57 ⟷	8%	99 ⟷	13%	136 ⟷	18%	449 ⟷	61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	20	30	28	35	39	741
Nellie Gail Rd	West Bound	24	31	31	38	41	667

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Thursday
Date: 8/16/2012

City: Laguna Hills
Project #: CA12_1158_001w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	0	1	0	2	0	0	0	0	0	0	0	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	2	1	2	0	0	0	0	0	0	0	5
06:00	0	0	4	8	5	2	1	0	0	0	0	0	0	20
07:00	0	0	1	7	13	6	1	0	0	0	0	0	0	28
08:00	1	1	4	8	19	11	4	0	0	0	0	0	0	48
09:00	2	2	3	11	10	11	2	0	0	0	0	0	0	41
10:00	1	1	9	11	19	10	2	0	0	0	0	0	0	53
11:00	0	2	10	11	18	9	2	0	0	0	0	0	0	52
12:00 PM	0	0	7	14	12	11	1	0	0	0	0	0	0	45
13:00	1	3	10	11	19	4	2	0	0	0	0	0	0	50
14:00	1	0	4	12	15	4	3	0	0	0	0	0	0	39
15:00	0	1	3	9	19	17	4	0	0	0	0	0	0	53
16:00	0	2	6	13	19	13	2	1	0	0	0	0	0	56
17:00	0	0	5	6	13	11	5	0	0	0	0	0	0	40
18:00	0	1	7	12	10	6	1	0	0	0	0	0	0	37
19:00	0	1	5	5	8	5	0	1	0	0	0	0	0	25
20:00	0	0	4	4	8	5	0	0	0	0	0	0	0	21
21:00	0	0	7	1	10	3	4	0	0	0	0	0	0	25
22:00	0	1	3	7	4	1	1	0	0	0	0	0	0	17
23:00	0	0	3	1	2	1	0	0	0	0	0	0	0	7
Totals	6	17	95	154	224	134	35	2						667
% of Totals	1%	3%	14%	23%	34%	20%	5%	0%						100%

AM Volumes	4	8	31	59	85	53	12	0	0	0	0	0	0	252
% AM	1%	1%	5%	9%	13%	8%	2%							38%
AM Peak Hour	09:00	09:00	11:00	09:00	08:00	08:00	08:00							10:00
Volume	2	2	10	11	19	11	4							53
PM Volumes	2	9	64	95	139	81	23	2	0	0	0	0	0	415
% PM	0%	1%	10%	14%	21%	12%	3%	0%						62%
PM Peak Hour	13:00	13:00	13:00	12:00	13:00	15:00	17:00	16:00						16:00
Volume	1	3	10	14	19	17	5	1						56

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	76		11%	95		14%	96		14%	400		60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	East Bound	20	30	28	35	39	741
Nellie Gail Rd	West Bound	24	31	31	38	41	667

Prepared by National Data & Surveying Services

SPEED

Nellie Gail Rd e/o Lost Colt Dr

Day: Thursday
Date: 8/16/2012

City: Laguna Hills
Project #: CA12_1158_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	2	1	2	0	2	0	0	0	0	0	0	0	7
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	2	2	0	3	2	3	0	0	0	0	0	0	0	12
06:00	0	4	5	13	8	4	1	0	0	0	0	0	0	35
07:00	2	3	3	14	25	8	1	0	0	0	0	0	0	56
08:00	2	6	4	19	29	13	4	0	0	0	0	0	0	77
09:00	6	9	8	22	24	16	2	0	0	0	0	0	0	87
10:00	4	5	15	24	36	16	3	1	0	0	0	0	0	104
11:00	3	8	15	20	33	13	2	0	0	0	0	0	0	94
12:00 PM	1	9	11	30	27	13	1	0	0	0	0	0	0	92
13:00	3	11	12	33	32	9	2	0	0	0	0	0	0	102
14:00	4	3	12	27	35	9	3	1	0	0	0	0	0	94
15:00	0	5	9	19	37	26	5	0	0	0	0	0	0	101
16:00	2	10	10	24	38	23	2	1	0	0	0	0	0	110
17:00	3	7	15	32	37	22	6	0	0	0	0	0	0	122
18:00	1	5	10	29	36	16	3	1	0	0	0	0	0	101
19:00	0	4	8	12	22	10	1	2	0	0	0	0	0	59
20:00	2	4	7	17	22	9	0	0	0	0	0	0	0	61
21:00	2	4	8	4	17	4	5	0	0	0	0	0	0	44
22:00	0	3	4	10	10	4	1	0	0	0	0	0	0	32
23:00	0	0	3	5	4	2	0	0	0	0	0	0	0	14
Totals	37	106	160	360	475	222	42	6						1408
% of Totals	3%	8%	11%	26%	34%	16%	3%	0%						100%
AM Volumes	19	41	51	118	158	75	13	1	0	0	0	0	0	476
% AM	1%	3%	4%	8%	11%	5%	1%	0%						34%
AM Peak Hour	09:00	09:00	10:00	10:00	10:00	09:00	08:00	10:00						10:00
Volume	6	9	15	24	36	16	4	1						104
PM Volumes	18	65	109	242	317	147	29	5	0	0	0	0	0	932
% PM	1%	5%	8%	17%	23%	10%	2%	0%						66%
PM Peak Hour	14:00	13:00	17:00	13:00	16:00	15:00	17:00	19:00						17:00
Volume	4	11	15	33	38	26	6	2						122

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	133		9%	194		14%	232		16%	849		60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nellie Gail Rd	Summary	22	30	30	36	39	1408

10/9/2012 ITEM NO. 7.4.1

Nottingham Court Near Oso Parkway

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Wednesday
Date: 8/22/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	2	1	1	0	0	0	0	0	0	0	4
02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	2	0	1	0	0	0	0	0	0	0	3
05:00	0	0	0	1	2	0	0	0	0	0	0	0	0	3
06:00	0	0	1	3	3	2	0	0	0	0	0	0	0	9
07:00	0	0	2	5	10	3	0	0	0	0	0	0	0	20
08:00	0	1	1	11	9	6	1	0	0	0	0	0	0	29
09:00	0	0	1	5	11	6	1	0	0	0	0	0	0	24
10:00	1	0	2	8	5	2	0	0	0	0	0	0	0	18
11:00	0	1	4	8	10	2	0	0	0	0	0	0	0	25
12:00 PM	0	1	4	8	9	0	0	0	0	0	0	0	0	22
13:00	0	0	2	8	10	2	0	0	0	0	0	0	0	22
14:00	1	3	3	7	7	0	0	0	0	0	0	0	0	21
15:00	0	0	4	5	12	2	0	0	0	0	0	0	0	23
16:00	0	0	4	7	12	1	0	0	0	0	0	0	0	24
17:00	0	1	6	7	7	0	0	0	0	0	0	0	0	21
18:00	0	4	8	4	3	0	0	0	0	0	0	0	0	19
19:00	0	2	4	6	3	0	0	0	0	0	0	0	0	15
20:00	1	1	3	5	0	0	0	0	0	0	0	0	0	10
21:00	0	0	3	9	2	1	1	0	0	0	0	0	0	16
22:00	0	0	2	2	1	0	0	0	0	0	0	0	0	5
23:00	0	0	0	1	2	1	0	0	0	0	0	0	0	4
Totals	3	14	54	116	119	31	3							340
% of Totals	1%	4%	16%	34%	35%	9%	1%							100%
AM Volumes	1	2	11	47	51	24	2	0	0	0	0	0	0	138
% AM	0%	1%	3%	14%	15%	7%	1%							41%
AM Peak Hour	10:00	08:00	11:00	08:00	09:00	08:00	08:00							08:00
Volume	1	1	4	11	11	6	1							29
PM Volumes	2	12	43	69	68	7	1	0	0	0	0	0	0	202
% PM	1%	4%	13%	20%	20%	2%	0%							59%
PM Peak Hour	14:00	18:00	18:00	21:00	15:00	13:00	21:00							16:00
Volume	1	4	8	9	12	2	1							24

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	49		14%	44		13%	45		13%	202		59%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	23	29	29	34	38	340
Nottingham Ct	South Bound	21	27	27	31	34	536

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Wednesday
Date: 8/22/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	0	1	0	1	0	0	0	0	0	0	3
01:00	0	0	2	2	0	1	0	0	0	0	0	0	0	5
02:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
06:00	0	0	2	3	2	0	0	0	0	0	0	0	0	7
07:00	0	0	1	7	3	0	0	0	0	0	0	0	0	11
08:00	0	2	5	7	6	1	0	0	0	0	0	0	0	21
09:00	0	0	6	16	3	2	0	0	0	0	0	0	0	27
10:00	0	1	2	13	3	1	0	0	0	0	0	0	0	20
11:00	0	1	8	12	5	2	0	0	0	0	0	0	0	28
12:00 PM	0	0	7	14	8	1	0	0	0	0	0	0	0	30
13:00	1	1	9	12	3	0	0	0	0	0	0	0	0	26
14:00	0	4	3	19	8	0	1	0	0	0	0	0	0	35
15:00	0	3	5	19	4	2	0	0	0	0	0	0	0	33
16:00	0	3	7	28	12	2	0	0	0	0	0	0	0	52
17:00	1	2	12	18	8	0	0	0	0	0	0	0	0	41
18:00	0	8	26	25	6	0	0	0	0	0	0	0	0	65
19:00	3	2	19	14	3	0	0	0	0	0	0	0	0	41
20:00	0	2	16	23	4	0	0	1	0	0	0	0	0	46
21:00	2	1	5	9	2	1	0	0	0	0	0	0	0	20
22:00	0	1	5	7	3	0	0	0	0	0	0	0	0	16
23:00	0	0	1	3	1	1	0	0	0	0	0	0	0	6
Totals	7	31	142	252	86	15	2	1						536
% of Totals	1%	6%	25%	47%	16%	3%	0%	0%						100%

AM Volumes	0	4	27	61	24	8	1	0	0	0	0	0	0	125
% AM		1%	5%	11%	4%	1%	0%							23%
AM Peak Hour		08:00	11:00	09:00	08:00	09:00								11:00
Volume		2	8	16	6	2	1							28
PM Volumes	7	27	115	191	62	7	1	1	0	0	0	0	0	411
% PM	1%	5%	21%	36%	12%	1%	0%	0%						77%
PM Peak Hour	19:00	18:00	18:00	16:00	16:00	15:00	14:00	20:00						18:00
Volume	3	8	26	28	12	2	1	1						65

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	32 ⟷	6%	56 ⟷	10%	93 ⟷	17%	355 ⟷	66%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	23	29	29	34	38	340
Nottingham Ct	South Bound	21	27	27	31	34	536

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Wednesday
Date: 8/22/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	1	1	0	1	0	0	0	0	0	0	4
01:00	0	0	2	4	1	2	0	0	0	0	0	0	0	9
02:00	0	0	0	1	1	2	0	0	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	2	0	1	0	0	0	0	0	0	0	3
05:00	0	0	0	2	2	0	0	0	0	0	0	0	0	4
06:00	0	0	3	6	5	2	0	0	0	0	0	0	0	16
07:00	0	0	3	12	13	3	0	0	0	0	0	0	0	31
08:00	0	3	6	18	15	7	1	0	0	0	0	0	0	50
09:00	0	0	7	21	14	8	1	0	0	0	0	0	0	51
10:00	1	1	4	21	8	3	0	0	0	0	0	0	0	38
11:00	0	2	12	20	15	4	0	0	0	0	0	0	0	53
12:00 PM	0	1	11	22	17	1	0	0	0	0	0	0	0	52
13:00	1	1	11	20	13	2	0	0	0	0	0	0	0	48
14:00	1	7	6	26	15	0	1	0	0	0	0	0	0	56
15:00	0	3	9	24	16	4	0	0	0	0	0	0	0	56
16:00	0	3	11	35	24	3	0	0	0	0	0	0	0	76
17:00	1	3	18	25	15	0	0	0	0	0	0	0	0	62
18:00	0	12	34	29	9	0	0	0	0	0	0	0	0	84
19:00	3	4	23	20	6	0	0	0	0	0	0	0	0	56
20:00	1	3	19	28	4	0	0	1	0	0	0	0	0	56
21:00	2	1	8	18	4	2	1	0	0	0	0	0	0	36
22:00	0	1	7	9	4	0	0	0	0	0	0	0	0	21
23:00	0	0	1	4	3	2	0	0	0	0	0	0	0	10
Totals	10	45	196	368	205	46	5	1						876
% of Totals	1%	5%	22%	42%	23%	5%	1%	0%						100%
AM Volumes	1	6	38	108	75	32	3	0	0	0	0	0	0	263
% AM	0%	1%	4%	12%	9%	4%	0%							30%
AM Peak Hour	10:00	08:00	11:00	09:00	08:00	09:00								11:00
Volume	1	3	12	21	15	8	1							53
PM Volumes	9	39	158	260	130	14	2	1	0	0	0	0	0	613
% PM	1%	4%	18%	30%	15%	2%	0%	0%						70%
PM Peak Hour	19:00	18:00	18:00	16:00	16:00	15:00	14:00	20:00						18:00
Volume	3	12	34	35	24	4	1	1						84

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		%	Volume		%	Volume		%	Volume		%
	81	⟷	9%	100	⟷	11%	138	⟷	16%	557	⟷	64%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	22	28	27	33	36	876

10/9/2012 ITEM NO. 7.4.1

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Thursday
Date: 8/23/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	3
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
05:00	1	0	1	2	2	0	0	0	0	0	0	0	0	6
06:00	0	0	0	2	5	2	0	0	0	0	0	0	0	9
07:00	0	1	3	15	7	2	0	0	0	0	0	0	0	28
08:00	0	0	3	12	4	2	0	0	0	0	0	0	0	21
09:00	0	2	3	10	9	1	0	0	0	0	0	0	0	25
10:00	1	1	1	7	7	3	0	0	0	0	0	0	0	20
11:00	0	0	4	7	14	0	0	0	0	0	0	0	0	25
12:00 PM	0	1	1	8	5	2	0	0	0	0	0	0	0	17
13:00	0	1	1	5	8	1	0	0	0	0	0	0	0	16
14:00	1	0	6	12	3	1	0	0	0	0	0	0	0	23
15:00	1	0	1	3	8	3	0	0	0	0	0	0	0	16
16:00	0	0	3	11	9	2	0	0	0	0	0	0	0	25
17:00	0	0	3	6	4	4	1	0	0	0	0	0	0	18
18:00	0	1	1	7	7	2	0	0	0	0	0	0	0	18
19:00	0	0	2	3	4	3	0	0	0	0	0	0	0	12
20:00	0	0	2	4	6	0	0	0	0	0	0	0	0	12
21:00	0	0	1	4	3	0	0	0	0	0	0	0	0	8
22:00	0	0	0	4	1	1	1	0	0	0	0	0	0	7
23:00	0	1	0	1	2	0	0	0	0	0	0	0	0	4
Totals	4	8	37	125	113	30	2							319
% of Totals	1%	3%	12%	39%	35%	9%	1%							100%

AM Volumes	2	4	16	57	53	11	0	0	0	0	0	0	0	143
% AM	1%	1%	5%	18%	17%	3%								45%
AM Peak Hour	05:00	09:00	11:00	07:00	11:00	10:00								07:00
Volume	1	2	4	15	14	3								28
PM Volumes	2	4	21	68	60	19	2	0	0	0	0	0	0	176
% PM	1%	1%	7%	21%	19%	6%	1%							55%
PM Peak Hour	14:00	12:00	14:00	14:00	16:00	17:00	17:00							16:00
Volume	1	1	6	12	9	4	1							25

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	49		15%	33		10%	43		13%	194		61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	25	29	29	34	38	319
Nottingham Ct	South Bound	22	27	27	32	34	560

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Thursday
Date: 8/23/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	3	3	0	0	0	0	0	0	0	0	6
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	1	3	0	0	0	0	0	0	0	0	0	4
07:00	1	1	7	5	1	0	0	0	0	0	0	0	0	15
08:00	0	1	6	4	1	0	0	0	0	0	0	0	0	12
09:00	1	5	5	8	3	0	0	0	0	0	0	0	0	22
10:00	0	3	6	15	8	0	0	0	0	0	0	0	0	32
11:00	0	1	7	15	6	0	0	0	0	0	0	0	0	29
12:00 PM	0	1	11	15	9	0	0	0	0	0	0	0	0	36
13:00	1	3	7	16	8	2	0	0	0	0	0	0	0	37
14:00	0	0	7	21	9	0	0	0	0	0	0	0	0	37
15:00	0	0	3	18	13	3	0	0	0	0	0	0	0	37
16:00	3	2	8	23	9	2	0	0	0	0	0	0	0	47
17:00	0	2	12	31	15	1	0	0	0	0	0	0	0	61
18:00	0	0	16	26	13	1	0	0	0	0	0	0	0	56
19:00	0	0	10	34	8	0	0	0	0	0	0	0	0	52
20:00	0	0	6	16	8	1	0	0	0	0	0	0	0	31
21:00	0	1	5	17	3	0	0	0	0	0	0	0	0	26
22:00	0	0	1	4	7	0	0	0	0	0	0	0	0	12
23:00	0	1	0	5	1	0	0	0	0	0	0	0	0	7
Totals	7	21	118	279	125	10								560
% of Totals	1%	4%	21%	50%	22%	2%								100%

AM Volumes	3	11	32	53	22	0	0	0	0	0	0	0	0	121
% AM	1%	2%	6%	9%	4%									22%
AM Peak Hour	05:00	09:00	07:00	10:00	10:00									10:00
Volume	1	5	7	15	8									32
PM Volumes	4	10	86	226	103	10	0	0	0	0	0	0	0	439
% PM	1%	2%	15%	40%	18%	2%								78%
PM Peak Hour	16:00	13:00	18:00	19:00	17:00	15:00								17:00
Volume	3	3	16	34	15	3								61

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	27 ⟷	5%	73 ⟷	13%	108 ⟷	19%	352 ⟷	63%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	25	29	29	34	38	319
Nottingham Ct	South Bound	22	27	27	32	34	560

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Thursday
Date: 8/23/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	4	4	1	0	0	0	0	0	0	0	9
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
05:00	2	0	1	2	2	0	0	0	0	0	0	0	0	7
06:00	0	0	1	5	5	2	0	0	0	0	0	0	0	13
07:00	1	2	10	20	8	2	0	0	0	0	0	0	0	43
08:00	0	1	9	16	5	2	0	0	0	0	0	0	0	33
09:00	1	7	8	18	12	1	0	0	0	0	0	0	0	47
10:00	1	4	7	22	15	3	0	0	0	0	0	0	0	52
11:00	0	1	11	22	20	0	0	0	0	0	0	0	0	54
12:00 PM	0	2	12	23	14	2	0	0	0	0	0	0	0	53
13:00	1	4	8	21	16	3	0	0	0	0	0	0	0	53
14:00	1	0	13	33	12	1	0	0	0	0	0	0	0	60
15:00	1	0	4	21	21	6	0	0	0	0	0	0	0	53
16:00	3	2	11	34	18	4	0	0	0	0	0	0	0	72
17:00	0	2	15	37	19	5	1	0	0	0	0	0	0	79
18:00	0	1	17	33	20	3	0	0	0	0	0	0	0	74
19:00	0	0	12	37	12	3	0	0	0	0	0	0	0	64
20:00	0	0	8	20	14	1	0	0	0	0	0	0	0	43
21:00	0	1	6	21	6	0	0	0	0	0	0	0	0	34
22:00	0	0	1	8	8	1	1	0	0	0	0	0	0	19
23:00	0	2	0	6	3	0	0	0	0	0	0	0	0	11
Totals	11	29	155	404	238	40	2							879
% of Totals	1%	3%	18%	46%	27%	5%	0%							100%

AM Volumes	5	15	48	110	75	11	0	0	0	0	0	0	0	264
% AM	1%	2%	5%	13%	9%	1%								30%
AM Peak Hour	05:00	09:00	11:00	10:00	11:00	10:00								11:00
Volume	2	7	11	22	20	3								54
PM Volumes	6	14	107	294	163	29	2	0	0	0	0	0	0	615
% PM	1%	2%	12%	33%	19%	3%	0%							70%
PM Peak Hour	16:00	13:00	18:00	17:00	15:00	15:00	17:00							17:00
Volume	3	4	17	37	21	6	1							79

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	76		9%	106		12%	151		17%	546		62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	23	28	28	33	35	879

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Friday
Date: 8/24/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	1	1	3	0	0	0	0	0	0	0	0	6
01:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	2	1	0	0	0	0	0	0	0	0	3
05:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	2	7	2	0	0	0	0	0	0	0	11
07:00	1	2	2	7	4	4	0	0	0	0	0	0	0	20
08:00	2	1	9	10	9	3	0	0	0	0	0	0	0	34
09:00	1	0	2	7	8	5	0	0	0	0	0	0	0	23
10:00	1	1	5	3	5	3	0	0	0	0	0	0	0	18
11:00	2	0	6	9	7	0	0	0	0	0	0	0	0	24
12:00 PM	0	0	2	8	9	4	1	0	0	0	0	0	0	24
13:00	1	0	8	11	5	1	0	0	0	0	0	0	0	26
14:00	0	2	5	10	8	0	0	0	0	0	0	0	0	25
15:00	1	4	2	10	5	2	1	0	0	0	0	0	0	25
16:00	1	1	4	7	10	4	1	0	0	0	0	0	0	28
17:00	0	1	2	5	7	1	0	0	0	0	0	0	0	16
18:00	0	2	0	7	7	1	0	0	0	0	0	0	0	17
19:00	0	0	3	8	10	1	0	0	0	0	0	0	0	22
20:00	0	2	1	2	2	0	0	0	0	0	0	0	0	7
21:00	0	2	1	3	2	1	0	0	0	0	0	0	0	9
22:00	0	0	0	5	2	1	0	0	0	0	0	0	0	8
23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Totals	10	20	53	118	115	33	3							352
% of Totals	3%	6%	15%	34%	33%	9%	1%							100%

AM Volumes	7	6	25	42	47	17	0	0	0	0	0	0	0	144
% AM	2%	2%	7%	12%	13%	5%								41%
AM Peak Hour	08:00	07:00	08:00	08:00	08:00	09:00								08:00
Volume	2	2	9	10	9	5								34
PM Volumes	3	14	28	76	68	16	3	0	0	0	0	0	0	208
% PM	1%	4%	8%	22%	19%	5%	1%							59%
PM Peak Hour	13:00	15:00	13:00	13:00	16:00	12:00	12:00							16:00
Volume	1	4	8	11	10	4	1							28

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	54		15%	50		14%	44		13%	204		58%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	22	29	28	34	38	352
Nottingham Ct	South Bound	22	27	27	32	34	603

10/9/2012 ITEM NO. 7.4.1

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Friday
Date: 8/24/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	3	0	0	0	0	0	0	0	0	0	4
01:00	0	0	1	2	1	1	0	0	0	0	0	0	0	5
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	0	0	2	0	0	0	0	0	0	0	0	0	3
07:00	0	2	3	9	5	0	0	0	0	0	0	0	0	19
08:00	3	1	10	8	1	0	0	0	0	0	0	0	0	23
09:00	0	3	5	13	5	0	0	0	0	0	0	0	0	26
10:00	1	2	6	15	10	1	0	0	0	0	0	0	0	35
11:00	0	1	6	14	8	0	0	0	0	0	0	0	0	29
12:00 PM	0	3	13	16	5	1	0	0	0	0	0	0	0	38
13:00	0	1	9	13	10	1	0	0	0	0	0	0	0	34
14:00	1	2	9	18	9	0	0	0	0	0	0	0	0	39
15:00	0	1	8	29	6	1	0	0	0	0	0	0	0	45
16:00	2	1	9	23	15	3	0	0	0	0	0	0	0	53
17:00	0	0	13	36	13	0	0	0	0	0	0	0	0	62
18:00	3	1	17	26	7	2	0	0	0	0	0	0	0	56
19:00	1	4	10	14	9	1	0	0	0	0	0	0	0	39
20:00	1	3	7	14	4	1	0	0	0	0	0	0	0	30
21:00	0	2	6	15	7	0	0	0	0	0	0	0	0	30
22:00	0	0	7	12	4	0	0	0	0	0	0	0	0	23
23:00	0	0	0	7	2	0	0	0	0	0	0	0	0	9
Totals	13	27	141	289	121	12								603
% of Totals	2%	4%	23%	48%	20%	2%								100%

AM Volumes	5	9	33	66	30	2	0	0	0	0	0	0	0	145
% AM	1%	1%	5%	11%	5%	0%								24%
AM Peak Hour	08:00	09:00	08:00	10:00	10:00	01:00								10:00
Volume	3	3	10	15	10	1								35
PM Volumes	8	18	108	223	91	10	0	0	0	0	0	0	0	458
% PM	1%	3%	18%	37%	15%	2%								76%
PM Peak Hour	18:00	19:00	18:00	17:00	16:00	16:00								17:00
Volume	3	4	17	36	15	3								62

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		%	Volume		%	Volume		%	Volume		%
	42	⟷	7%	72	⟷	12%	115	⟷	19%	374	⟷	62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	22	29	28	34	38	352
Nottingham Ct	South Bound	22	27	27	32	34	603

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Friday
Date: 8/24/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	2	4	3	0	0	0	0	0	0	0	0	10
01:00	0	0	1	2	3	1	0	0	0	0	0	0	0	7
02:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	2	1	0	0	0	0	0	0	0	0	3
05:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
06:00	1	0	0	4	7	2	0	0	0	0	0	0	0	14
07:00	1	4	5	16	9	4	0	0	0	0	0	0	0	39
08:00	5	2	19	18	10	3	0	0	0	0	0	0	0	57
09:00	1	3	7	20	13	5	0	0	0	0	0	0	0	49
10:00	2	3	11	18	15	4	0	0	0	0	0	0	0	53
11:00	2	1	12	23	15	0	0	0	0	0	0	0	0	53
12:00 PM	0	3	15	24	14	5	1	0	0	0	0	0	0	62
13:00	1	1	17	24	15	2	0	0	0	0	0	0	0	60
14:00	1	4	14	28	17	0	0	0	0	0	0	0	0	64
15:00	1	5	10	39	11	3	1	0	0	0	0	0	0	70
16:00	3	2	13	30	25	7	1	0	0	0	0	0	0	81
17:00	0	1	15	41	20	1	0	0	0	0	0	0	0	78
18:00	3	3	17	33	14	3	0	0	0	0	0	0	0	73
19:00	1	4	13	22	19	2	0	0	0	0	0	0	0	61
20:00	1	5	8	16	6	1	0	0	0	0	0	0	0	37
21:00	0	4	7	18	9	1	0	0	0	0	0	0	0	39
22:00	0	0	7	17	6	1	0	0	0	0	0	0	0	31
23:00	0	0	0	7	3	0	0	0	0	0	0	0	0	10
Totals	23	47	194	407	236	45	3							955
% of Totals	2%	5%	20%	43%	25%	5%	0%							100%

AM Volumes	12	15	58	108	77	19	0	0	0	0	0	0	0	289
% AM	1%	2%	6%	11%	8%	2%								30%
AM Peak Hour	08:00	07:00	08:00	11:00	10:00	09:00								08:00
Volume	5	4	19	23	15	5								57
PM Volumes	11	32	136	299	159	26	3	0	0	0	0	0	0	666
% PM	1%	3%	14%	31%	17%	3%	0%							70%
PM Peak Hour	16:00	15:00	13:00	17:00	16:00	16:00	12:00							16:00
Volume	3	5	17	41	25	7	1							81

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	96		10%	122		13%	159		17%	578		61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	22	28	27	33	35	955

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Saturday
Date: 8/25/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	3
01:00	0	0	0	1	2	0	0	0	0	0	0	0	0	3
02:00	0	0	1	0	0	1	0	0	0	0	0	0	0	2
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
05:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	2	4	1	0	0	0	0	0	0	0	7
07:00	0	1	0	3	3	3	0	0	0	0	0	0	0	10
08:00	0	1	1	3	6	5	0	0	0	0	0	0	0	16
09:00	1	0	5	1	7	3	0	0	0	0	0	0	0	17
10:00	0	0	3	3	8	4	0	0	0	0	0	0	0	18
11:00	0	1	1	6	9	3	0	0	0	0	0	0	0	20
12:00 PM	1	1	2	3	13	2	0	0	0	0	0	0	0	22
13:00	0	1	2	11	3	2	0	0	0	0	0	0	0	19
14:00	1	0	1	10	9	3	0	0	0	0	0	0	0	24
15:00	0	0	4	11	12	3	0	0	0	0	0	0	0	30
16:00	0	0	2	6	6	1	0	0	0	0	0	0	0	15
17:00	0	0	5	5	5	3	0	0	0	0	0	0	0	18
18:00	0	0	0	8	6	2	1	0	0	0	0	0	0	17
19:00	0	0	0	5	2	1	0	0	0	0	0	0	0	8
20:00	0	1	5	2	3	0	0	0	0	0	0	0	0	11
21:00	0	0	6	4	3	0	0	0	0	0	0	0	0	13
22:00	0	0	1	7	2	2	1	0	0	0	0	0	0	13
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
Totals	4	8	42	93	104	40	2							293
% of Totals	1%	3%	14%	32%	35%	14%	1%							100%

AM Volumes	2	5	13	21	39	21	0	0	0	0	0	0	0	101
% AM	1%	2%	4%	7%	13%	7%								34%
AM Peak Hour	05:00		09:00	11:00	11:00	08:00								11:00
Volume	1	1	5	6	9	5								20
PM Volumes	2	3	29	72	65	19	2	0	0	0	0	0	0	192
% PM	1%	1%	10%	25%	22%	6%	1%							66%
PM Peak Hour	12:00	12:00	21:00	13:00	12:00	14:00	18:00							15:00
Volume	1	1	6	11	13	3	1							30

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	26		9%	41		14%	33		11%	193		66%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	24	30	30	35	38	293
Nottingham Ct	South Bound	23	28	27	32	35	508

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Saturday
Date: 8/25/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	2	11	3	0	0	0	0	0	0	0	0	16
01:00	0	0	0	2	0	1	0	0	0	0	0	0	0	3
02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	2	0	1	0	0	0	0	0	0	0	3
07:00	0	1	2	4	0	0	0	0	0	0	0	0	0	7
08:00	0	1	4	6	0	0	0	0	0	0	0	0	0	11
09:00	0	2	4	12	3	0	0	0	0	0	0	0	0	21
10:00	1	1	3	22	10	0	0	0	0	0	0	0	0	37
11:00	0	1	5	20	6	2	0	0	0	0	0	0	0	34
12:00 PM	0	0	8	15	10	1	0	0	0	0	0	0	0	34
13:00	0	0	7	21	10	2	0	0	0	0	0	0	0	40
14:00	0	1	2	16	11	2	0	0	0	0	0	0	0	32
15:00	0	3	6	26	9	2	0	0	0	0	0	0	0	46
16:00	2	4	4	27	9	1	0	0	0	0	0	0	0	47
17:00	1	0	13	20	13	0	0	0	0	0	0	0	0	47
18:00	0	0	12	16	10	0	0	0	0	0	0	0	0	38
19:00	1	1	6	12	6	2	0	0	0	0	0	0	0	28
20:00	0	3	7	6	3	0	0	0	0	0	0	0	0	19
21:00	0	1	7	7	4	0	0	0	0	0	0	0	0	19
22:00	0	0	0	8	4	0	1	0	0	0	0	0	0	13
23:00	0	0	2	5	2	0	0	0	0	0	0	0	0	9
Totals	5	19	95	260	113	15	1							508
% of Totals	1%	4%	19%	51%	22%	3%	0%							100%

AM Volumes	1	6	21	81	22	5	0	0	0	0	0	0	0	136
% AM	0%	1%	4%	16%	4%	1%								27%
AM Peak Hour	10:00	09:00	11:00	10:00	10:00	11:00								10:00
Volume	1	2	5	22	10	2								37
PM Volumes	4	13	74	179	91	10	1	0	0	0	0	0	0	372
% PM	1%	3%	15%	35%	18%	2%	0%							73%
PM Peak Hour	16:00	16:00	17:00	16:00	17:00	13:00	22:00							16:00
Volume	2	4	13	27	13	2	1							47

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	18 ⟷	4%	74 ⟷	15%	94 ⟷	19%	322 ⟷	63%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	24	30	30	35	38	293
Nottingham Ct	South Bound	23	28	27	32	35	508

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Saturday
Date: 8/25/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	3	11	3	1	0	0	0	0	0	0	0	19
01:00	0	0	0	3	2	1	0	0	0	0	0	0	0	6
02:00	0	0	1	1	0	2	0	0	0	0	0	0	0	4
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
05:00	1	1	1	1	0	0	0	0	0	0	0	0	0	4
06:00	0	0	0	4	4	2	0	0	0	0	0	0	0	10
07:00	0	2	2	7	3	3	0	0	0	0	0	0	0	17
08:00	0	2	5	9	6	5	0	0	0	0	0	0	0	27
09:00	1	2	9	13	10	3	0	0	0	0	0	0	0	38
10:00	1	1	6	25	18	4	0	0	0	0	0	0	0	55
11:00	0	2	6	26	15	5	0	0	0	0	0	0	0	54
12:00 PM	1	1	10	18	23	3	0	0	0	0	0	0	0	56
13:00	0	1	9	32	13	4	0	0	0	0	0	0	0	59
14:00	1	1	3	26	20	5	0	0	0	0	0	0	0	56
15:00	0	3	10	37	21	5	0	0	0	0	0	0	0	76
16:00	2	4	6	33	15	2	0	0	0	0	0	0	0	62
17:00	1	0	18	25	18	3	0	0	0	0	0	0	0	65
18:00	0	0	12	24	16	2	1	0	0	0	0	0	0	55
19:00	1	1	6	17	8	3	0	0	0	0	0	0	0	36
20:00	0	4	12	8	6	0	0	0	0	0	0	0	0	30
21:00	0	1	13	11	7	0	0	0	0	0	0	0	0	32
22:00	0	0	1	15	6	2	2	0	0	0	0	0	0	26
23:00	0	0	3	5	3	0	0	0	0	0	0	0	0	11
Totals	9	27	137	353	217	55	3							801
% of Totals	1%	3%	17%	44%	27%	7%	0%							100%

AM Volumes	3	11	34	102	61	26	0	0	0	0	0	0	0	237
% AM	0%	1%	4%	13%	8%	3%								30%
AM Peak Hour	05:00	07:00	09:00	11:00	10:00	08:00								10:00
Volume	1	2	9	26	18	5								55
PM Volumes	6	16	103	251	156	29	3	0	0	0	0	0	0	564
% PM	1%	2%	13%	31%	19%	4%	0%							70%
PM Peak Hour	16:00	16:00	17:00	15:00	12:00	14:00	22:00							15:00
Volume	2	4	18	37	23	5	2							76

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	44		5%	115		14%	127		16%	515		64%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	23	28	28	34	37	801

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Sunday
Date: 8/26/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	2	1	2	1	1	1	0	0	0	0	0	0	8
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	1	2	1	2	0	0	0	0	0	0	0	0	6
07:00	0	0	1	2	3	1	0	0	0	0	0	0	0	7
08:00	0	0	2	6	9	2	0	0	0	0	0	0	0	19
09:00	0	1	1	5	4	4	0	0	0	0	0	0	0	15
10:00	0	2	2	5	8	3	0	0	0	0	0	0	0	20
11:00	0	1	3	3	6	3	1	0	0	0	0	0	0	17
12:00 PM	0	0	2	3	4	3	0	0	0	0	0	0	0	12
13:00	1	1	3	4	9	3	0	0	0	0	0	0	0	21
14:00	0	1	0	4	5	5	0	0	0	0	0	0	0	15
15:00	0	0	1	6	5	1	1	0	0	0	0	0	0	14
16:00	0	0	2	5	4	0	0	0	0	0	0	0	0	11
17:00	0	0	2	6	3	1	0	0	0	0	0	0	0	12
18:00	1	0	4	2	4	1	1	0	0	0	0	0	0	13
19:00	0	0	1	6	4	0	0	0	0	0	0	0	0	11
20:00	0	0	1	8	1	2	1	0	0	0	0	0	0	13
21:00	0	1	1	4	3	1	0	0	0	0	0	0	0	10
22:00	0	0	1	0	2	0	0	0	0	0	0	0	0	3
23:00	0	0	1	1	1	0	1	0	0	0	0	0	0	4
Totals	3	10	31	73	79	31	6							233
% of Totals	1%	4%	13%	31%	34%	13%	3%							100%

AM Volumes	1	7	12	24	34	14	2	0	0	0	0	0	0	94
% AM	0%	3%	5%	10%	15%	6%	1%							40%
AM Peak Hour	05:00		11:00	08:00	08:00	09:00								10:00
Volume	1	2	3	6	9	4	1							20
PM Volumes	2	3	19	49	45	17	4	0	0	0	0	0	0	139
% PM	1%	1%	8%	21%	19%	7%	2%							60%
PM Peak Hour	13:00	13:00	18:00	20:00	13:00	14:00	15:00							13:00
Volume	1	1	4	8	9	5	1							21

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	26		11%	33		14%	23		10%	151		65%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	24	30	30	35	39	233
Nottingham Ct	South Bound	22	27	27	32	35	491

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Sunday
Date: 8/26/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	6	1	1	0	0	0	0	0	0	0	9
01:00	0	0	2	2	1	0	1	0	0	0	0	0	0	6
02:00	0	0	0	0	1	0	1	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
07:00	0	1	2	2	0	0	0	0	0	0	0	0	0	5
08:00	0	0	5	8	5	0	0	0	0	0	0	0	0	18
09:00	0	1	2	9	2	0	0	0	0	0	0	0	0	14
10:00	0	1	6	8	7	2	0	0	0	0	0	0	0	24
11:00	0	0	4	20	5	0	0	0	0	0	0	0	0	29
12:00 PM	1	0	5	20	12	0	0	0	0	0	0	0	0	38
13:00	0	1	8	16	13	1	0	0	0	0	0	0	0	39
14:00	1	1	7	19	15	0	0	0	0	0	0	0	0	43
15:00	0	0	12	23	6	0	0	0	0	0	0	0	0	41
16:00	0	1	20	19	4	1	0	0	0	0	0	0	0	45
17:00	0	2	17	27	3	0	0	0	0	0	0	0	0	49
18:00	1	1	6	17	7	3	0	0	0	0	0	0	0	35
19:00	0	1	7	14	6	0	0	0	0	0	0	0	0	28
20:00	0	1	9	7	5	0	0	0	0	0	0	0	0	22
21:00	0	1	4	11	2	1	0	0	0	0	0	0	0	19
22:00	0	2	3	5	3	3	0	0	0	0	0	0	0	16
23:00	0	1	0	4	1	1	0	0	0	0	0	0	0	7
Totals	3	15	121	238	99	13	2							491
% of Totals	1%	3%	25%	48%	20%	3%	0%							100%

AM Volumes	0	3	23	56	22	3	2	0	0	0	0	0	0	109
% AM		1%	5%	11%	4%	1%	0%							22%
AM Peak Hour		07:00	10:00	11:00	10:00	10:00	01:00							11:00
Volume		1	6	20	7	2	1							29
PM Volumes	3	12	98	182	77	10	0	0	0	0	0	0	0	382
% PM	1%	2%	20%	37%	16%	2%								78%
PM Peak Hour	12:00	17:00	16:00	17:00	14:00	18:00								17:00
Volume	1	2	20	27	15	3								49

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	23		5%	77		16%	94		19%	297		60%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	24	30	30	35	39	233
Nottingham Ct	South Bound	22	27	27	32	35	491

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Sunday
Date: 8/26/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	2	2	8	2	2	1	0	0	0	0	0	0	17
01:00	0	0	2	2	1	0	1	0	0	0	0	0	0	6
02:00	0	0	0	0	2	0	1	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	1	3	2	2	0	0	0	0	0	0	0	0	8
07:00	0	1	3	4	3	1	0	0	0	0	0	0	0	12
08:00	0	0	7	14	14	2	0	0	0	0	0	0	0	37
09:00	0	2	3	14	6	4	0	0	0	0	0	0	0	29
10:00	0	3	8	13	15	5	0	0	0	0	0	0	0	44
11:00	0	1	7	23	11	3	1	0	0	0	0	0	0	46
12:00 PM	1	0	7	23	16	3	0	0	0	0	0	0	0	50
13:00	1	2	11	20	22	4	0	0	0	0	0	0	0	60
14:00	1	2	7	23	20	5	0	0	0	0	0	0	0	58
15:00	0	0	13	29	11	1	1	0	0	0	0	0	0	55
16:00	0	1	22	24	8	1	0	0	0	0	0	0	0	56
17:00	0	2	19	33	6	1	0	0	0	0	0	0	0	61
18:00	2	1	10	19	11	4	1	0	0	0	0	0	0	48
19:00	0	1	8	20	10	0	0	0	0	0	0	0	0	39
20:00	0	1	10	15	6	2	1	0	0	0	0	0	0	35
21:00	0	2	5	15	5	2	0	0	0	0	0	0	0	29
22:00	0	2	4	5	5	3	0	0	0	0	0	0	0	19
23:00	0	1	1	5	2	1	1	0	0	0	0	0	0	11
Totals	6	25	152	311	178	44	8							724
% of Totals	1%	3%	21%	43%	25%	6%	1%							100%
AM Volumes	1	10	35	80	56	17	4	0	0	0	0	0	0	203
% AM	0%	1%	5%	11%	8%	2%	1%							28%
AM Peak Hour	05:00	10:00	10:00	11:00	10:00	10:00								11:00
Volume	1	3	8	23	15	5	1							46
PM Volumes	5	15	117	231	122	27	4	0	0	0	0	0	0	521
% PM	1%	2%	16%	32%	17%	4%	1%							72%
PM Peak Hour	18:00	13:00	16:00	17:00	13:00	14:00	15:00							17:00
Volume	2	2	22	33	22	5	1							61

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	49		7%	110		15%	117		16%	448		62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	23	28	28	33	37	724

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Monday
Date: 8/27/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	1	0	0	0	0	0	0	0	2
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
05:00	0	0	0	3	0	1	0	0	0	0	0	0	0	4
06:00	2	0	0	1	6	0	0	0	0	0	0	0	0	9
07:00	0	1	4	4	8	3	0	0	0	0	0	0	0	20
08:00	0	3	3	6	10	5	0	0	0	0	0	0	0	27
09:00	0	1	1	5	10	5	0	0	0	0	0	0	0	22
10:00	2	0	3	7	8	3	0	0	0	0	0	0	0	23
11:00	0	1	4	5	10	0	0	0	0	0	0	0	0	20
12:00 PM	0	2	7	26	33	7	1	0	0	0	0	0	0	76
13:00	2	2	19	49	43	10	0	0	0	0	0	0	0	125
14:00	0	1	14	19	25	9	0	0	0	0	0	0	0	68
15:00	1	2	8	40	28	6	0	0	0	0	0	0	0	85
16:00	0	1	1	12	9	1	0	0	0	0	0	0	0	24
17:00	1	1	0	9	7	1	1	0	0	0	0	0	0	20
18:00	0	1	4	5	8	4	0	0	0	0	0	0	0	22
19:00	0	0	0	4	8	1	0	0	0	0	0	0	0	13
20:00	0	0	3	3	6	0	0	0	0	0	0	0	0	12
21:00	1	0	1	1	1	1	0	0	0	0	0	0	0	5
22:00	0	0	1	0	0	2	0	0	0	0	0	0	0	3
23:00	0	0	1	0	2	0	0	0	0	0	0	0	0	3
Totals	9	16	76	200	222	61	2							586
% of Totals	2%	3%	13%	34%	38%	10%	0%							100%

AM Volumes	4	6	17	32	52	19	0	0	0	0	0	0	0	130
% AM	1%	1%	3%	5%	9%	3%								22%
AM Peak Hour	06:00	08:00	07:00	10:00	08:00	08:00								08:00
Volume	2	3	4	7	10	5								27
PM Volumes	5	10	59	168	170	42	2	0	0	0	0	0	0	456
% PM	1%	2%	10%	29%	29%	7%	0%							78%
PM Peak Hour	13:00	12:00	13:00	13:00	13:00	13:00	12:00							13:00
Volume	2	2	19	49	43	10	1							125

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	47		8%	201		34%	44		8%	294		50%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	24	30	29	34	38	586
Nottingham Ct	South Bound	23	28	27	33	35	568

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Monday
Date: 8/27/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	1	3	0	0	0	0	0	0	0	0	0	4
06:00	1	0	1	1	1	0	0	0	0	0	0	0	0	4
07:00	0	1	5	7	1	0	0	0	0	0	0	0	0	14
08:00	1	1	2	6	3	0	0	0	0	0	0	0	0	13
09:00	1	1	3	17	6	0	0	0	0	0	0	0	0	28
10:00	1	2	1	16	8	1	0	0	0	0	0	0	0	29
11:00	0	1	5	16	5	1	0	0	0	0	0	0	0	28
12:00 PM	0	2	9	18	11	1	0	0	0	0	0	0	0	41
13:00	0	1	6	19	9	0	0	0	0	0	0	0	0	35
14:00	0	0	10	23	5	1	0	0	0	0	0	0	0	39
15:00	0	1	6	19	12	2	0	0	0	0	0	0	0	40
16:00	1	1	14	16	14	1	0	0	0	0	0	0	0	47
17:00	0	1	14	34	21	1	0	0	0	0	0	0	0	71
18:00	0	2	10	21	15	3	0	0	0	0	0	0	0	51
19:00	2	2	10	14	11	1	0	0	0	0	0	0	0	40
20:00	0	1	7	18	6	0	0	0	0	0	0	0	0	32
21:00	0	1	8	9	4	1	0	0	0	0	0	0	0	23
22:00	0	0	1	6	4	1	0	0	0	0	0	0	0	12
23:00	0	0	3	4	5	0	0	0	0	0	0	0	0	12
Totals	7	18	116	271	141	15								568
% of Totals	1%	3%	20%	48%	25%	3%								100%

AM Volumes	4	6	18	70	24	3	0	0	0	0	0	0	0	125
% AM	1%	1%	3%	12%	4%	1%								22%
AM Peak Hour	06:00	10:00	07:00	09:00	10:00	01:00								10:00
Volume	1	2	5	17	8	1								29
PM Volumes	3	12	98	201	117	12	0	0	0	0	0	0	0	443
% PM	1%	2%	17%	35%	21%	2%								78%
PM Peak Hour	19:00	12:00	16:00	17:00	17:00	18:00								17:00
Volume	2	2	14	34	21	3								71

Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	27	↔	5%	76	↔	13%	118	↔	21%	347	↔	61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	24	30	29	34	38	586
Nottingham Ct	South Bound	23	28	27	33	35	568

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Monday
Date: 8/27/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
02:00	0	0	1	0	0	1	0	0	0	0	0	0	0	2
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
05:00	0	0	1	6	0	1	0	0	0	0	0	0	0	8
06:00	3	0	1	2	7	0	0	0	0	0	0	0	0	13
07:00	0	2	9	11	9	3	0	0	0	0	0	0	0	34
08:00	1	4	5	12	13	5	0	0	0	0	0	0	0	40
09:00	1	2	4	22	16	5	0	0	0	0	0	0	0	50
10:00	3	2	4	23	16	4	0	0	0	0	0	0	0	52
11:00	0	2	9	21	15	1	0	0	0	0	0	0	0	48
12:00 PM	0	4	16	44	44	8	1	0	0	0	0	0	0	117
13:00	2	3	25	68	52	10	0	0	0	0	0	0	0	160
14:00	0	1	24	42	30	10	0	0	0	0	0	0	0	107
15:00	1	3	14	59	40	8	0	0	0	0	0	0	0	125
16:00	1	2	15	28	23	2	0	0	0	0	0	0	0	71
17:00	1	2	14	43	28	2	1	0	0	0	0	0	0	91
18:00	0	3	14	26	23	7	0	0	0	0	0	0	0	73
19:00	2	2	10	18	19	2	0	0	0	0	0	0	0	53
20:00	0	1	10	21	12	0	0	0	0	0	0	0	0	44
21:00	1	1	9	10	5	2	0	0	0	0	0	0	0	28
22:00	0	0	2	6	4	3	0	0	0	0	0	0	0	15
23:00	0	0	4	4	7	0	0	0	0	0	0	0	0	15
Totals	16	34	192	471	363	76	2							1154
% of Totals	1%	3%	17%	41%	31%	7%	0%							100%

AM Volumes	8	12	35	102	76	22	0	0	0	0	0	0	0	255
% AM	1%	1%	3%	9%	7%	2%								22%
AM Peak Hour	06:00	08:00	07:00	10:00	09:00	08:00								10:00
Volume	3	4	9	23	16	5								52
PM Volumes	8	22	157	369	287	54	2	0	0	0	0	0	0	899
% PM	1%	2%	14%	32%	25%	5%	0%							78%
PM Peak Hour	13:00	12:00	13:00	13:00	13:00	13:00	12:00							13:00
Volume	2	4	25	68	52	10	1							160

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	74		6%	277		24%	162		14%	641		56%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	23	29	28	34	36	1154

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Tuesday
Date: 8/28/2012

City: Laguna Hills
Project #: CA12_1158_002n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:00	0	0	0	1	0	0	1	0	0	0	0	0	0	2
04:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:00	0	0	1	2	3	1	0	0	0	0	0	0	0	7
06:00	1	0	1	3	2	0	0	0	0	0	0	0	0	7
07:00	1	1	3	6	8	2	0	0	0	0	0	0	0	21
08:00	1	2	6	18	17	2	1	0	0	0	0	0	0	47
09:00	1	1	2	10	8	6	0	0	0	0	0	0	0	28
10:00	0	1	3	6	7	1	0	0	0	0	0	0	0	18
11:00	0	1	3	7	8	1	0	0	0	0	0	0	0	20
12:00 PM	0	0	2	6	7	1	0	0	0	0	0	0	0	16
13:00	0	1	3	9	6	3	0	0	0	0	0	0	0	22
14:00	1	0	2	5	3	5	1	0	0	0	0	0	0	17
15:00	0	0	2	6	12	2	1	0	0	0	0	0	0	23
16:00	0	0	2	9	7	5	0	0	0	0	0	0	0	23
17:00	0	1	3	9	8	2	0	0	0	0	0	0	0	23
18:00	0	0	4	8	7	1	0	0	0	0	0	0	0	20
19:00	0	1	0	8	7	4	0	0	0	0	0	0	0	20
20:00	0	0	0	4	6	4	0	0	0	0	0	0	0	14
21:00	0	0	1	3	3	0	0	0	0	0	0	0	0	7
22:00	0	0	1	1	4	0	0	0	0	0	0	0	0	6
23:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Totals	5	10	40	123	126	41	4							349
% of Totals	1%	3%	11%	35%	36%	12%	1%							100%

AM Volumes	4	7	20	55	54	14	2	0	0	0	0	0	0	156
% AM	1%	2%	6%	16%	15%	4%	1%							45%
AM Peak Hour	06:00	08:00	08:00	08:00	08:00	09:00	03:00							08:00
Volume	1	2	6	18	17	6	1							47
PM Volumes	1	3	20	68	72	27	2	0	0	0	0	0	0	193
% PM	0%	1%	6%	19%	21%	8%	1%							55%
PM Peak Hour	14:00	13:00	18:00	13:00	15:00	14:00	14:00							15:00
Volume	1	1	4	9	12	5	1							23

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	68 ⟷	19%	38 ⟷	11%	46 ⟷	13%	197 ⟷	56%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	25	30	30	35	38	349
Nottingham Ct	South Bound	23	28	27	32	35	563

10/9/2012 ITEM NO. 7.4.1

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Tuesday
Date: 8/28/2012

City: Laguna Hills
Project #: CA12_1158_002s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
06:00	1	0	2	4	0	0	0	0	0	0	0	0	0	7
07:00	1	2	5	2	1	0	0	0	0	0	0	0	0	11
08:00	0	2	5	13	3	0	0	0	0	0	0	0	0	23
09:00	0	1	3	13	4	0	0	0	0	0	0	0	0	21
10:00	0	0	4	10	4	1	0	0	0	0	0	0	0	19
11:00	0	1	6	11	6	1	0	0	0	0	0	0	0	25
12:00 PM	0	0	8	13	7	0	0	0	0	0	0	0	0	28
13:00	1	0	10	19	12	0	0	0	0	0	0	0	0	42
14:00	1	1	6	17	9	1	0	0	0	0	0	0	0	35
15:00	1	0	6	15	5	1	0	0	0	0	0	0	0	28
16:00	1	0	10	27	6	1	1	0	0	0	0	0	0	46
17:00	1	2	10	31	14	0	0	0	0	0	0	0	0	58
18:00	0	3	12	34	23	2	0	0	0	0	0	0	0	74
19:00	0	1	6	25	14	1	0	0	0	0	0	0	0	47
20:00	0	1	15	26	6	1	0	0	0	0	0	0	0	49
21:00	0	1	5	12	8	0	1	0	0	0	0	0	0	27
22:00	0	0	2	7	5	2	0	0	0	0	0	0	0	16
23:00	0	1	0	2	1	2	0	0	0	0	0	0	0	6
Totals	7	16	115	281	128	14	2							563
% of Totals	1%	3%	20%	50%	23%	2%	0%							100%
AM Volumes	2	6	25	53	18	3	0	0	0	0	0	0	0	107
% AM	0%	1%	4%	9%	3%	1%								19%
AM Peak Hour	06:00	07:00	11:00	08:00	11:00	05:00								11:00
Volume	1	2	6	13	6	1								25
PM Volumes	5	10	90	228	110	11	2	0	0	0	0	0	0	456
% PM	1%	2%	16%	40%	20%	2%	0%							81%
PM Peak Hour	13:00	18:00	20:00	18:00	18:00	18:00	16:00							18:00
Volume	1	3	15	34	23	2	1							74

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	34		6%	70		12%	104		18%	355		63%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	North Bound	25	30	30	35	38	349
Nottingham Ct	South Bound	23	28	27	32	35	563

Prepared by National Data & Surveying Services

SPEED

Nottingham Ct s/o Oso Pkwy

Day: Tuesday
Date: 8/28/2012

City: Laguna Hills
Project #: CA12_1158_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:00	0	0	0	1	0	0	1	0	0	0	0	0	0	2
04:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:00	0	0	1	2	3	2	0	0	0	0	0	0	0	8
06:00	2	0	3	7	2	0	0	0	0	0	0	0	0	14
07:00	2	3	8	8	9	2	0	0	0	0	0	0	0	32
08:00	1	4	11	31	20	2	1	0	0	0	0	0	0	70
09:00	1	2	5	23	12	6	0	0	0	0	0	0	0	49
10:00	0	1	7	16	11	2	0	0	0	0	0	0	0	37
11:00	0	2	9	18	14	2	0	0	0	0	0	0	0	45
12:00 PM	0	0	10	19	14	1	0	0	0	0	0	0	0	44
13:00	1	1	13	28	18	3	0	0	0	0	0	0	0	64
14:00	2	1	8	22	12	6	1	0	0	0	0	0	0	52
15:00	1	0	8	21	17	3	1	0	0	0	0	0	0	51
16:00	1	0	12	36	13	6	1	0	0	0	0	0	0	69
17:00	1	3	13	40	22	2	0	0	0	0	0	0	0	81
18:00	0	3	16	42	30	3	0	0	0	0	0	0	0	94
19:00	0	2	6	33	21	5	0	0	0	0	0	0	0	67
20:00	0	1	15	30	12	5	0	0	0	0	0	0	0	63
21:00	0	1	6	15	11	0	1	0	0	0	0	0	0	34
22:00	0	0	3	8	9	2	0	0	0	0	0	0	0	22
23:00	0	1	0	2	3	2	0	0	0	0	0	0	0	8
Totals	12	26	155	404	254	55	6							912
% of Totals	1%	3%	17%	44%	28%	6%	1%							100%
AM Volumes	6	13	45	108	72	17	2	0	0	0	0	0	0	263
% AM	1%	1%	5%	12%	8%	2%	0%							29%
AM Peak Hour	06:00	08:00	08:00	08:00	08:00	09:00	03:00							08:00
Volume	2	4	11	31	20	6	1							70
PM Volumes	6	13	110	296	182	38	4	0	0	0	0	0	0	649
% PM	1%	1%	12%	32%	20%	4%	0%							71%
PM Peak Hour	14:00	17:00	18:00	18:00	18:00	14:00	14:00							18:00
Volume	2	3	16	42	30	6	1							94

Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	102 ⟷	11%	108 ⟷	12%	150 ⟷	16%	552 ⟷	61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Nottingham Ct	Summary	23	28	28	34	36	912

10/9/2012 ITEM NO. 7.4.1

Spot Speed Studies

Nellie Gail Road at Lost Colt Drive

Spot Speed Study

Prepared by: National Data & Surveying Services

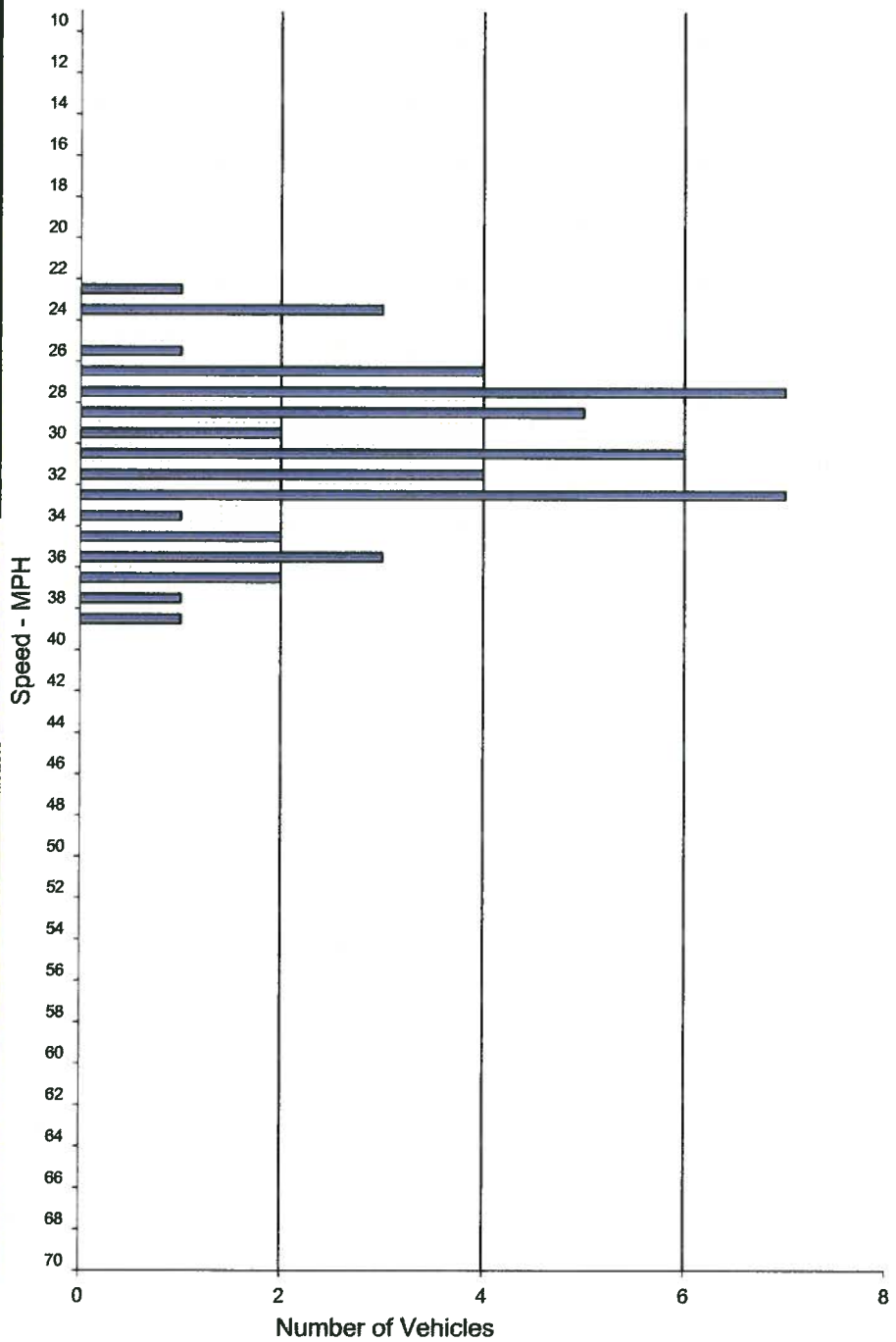
City of Laguna Hills

DATE: 9/6/2012 **Location:** Nellie Gail Rd e/o Lost Colt Dr

DAY: Thursday **Posted Speed:** 30 MPH **Project #:** 12-1172-001

Eastbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	1
24	3
25	
26	1
27	4
28	7
29	5
30	2
31	6
32	4
33	7
34	1
35	2
36	3
37	2
38	1
39	1
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
>=70	



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# In Pace	Percent In Pace	% / # Below Pace	% / # Above Pace
ALL	50	23 - 39	31 mph	35 mph	27 - 36	41	82%	10% / 5	8% / 4

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Laguna Hills

DATE: 9/6/2012 **Location:** Nellie Gail Rd e/o Lost Colt Dr

DAY: Thursday **Posted Speed:** 30 MPH **Project #:** 12-1172-001

Westbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
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22	2
23	1
24	2
25	3
26	1
27	5
28	2
29	3
30	5
31	4
32	6
33	1
34	1
35	4
36	1
37	5
38	2
39	2
40	1
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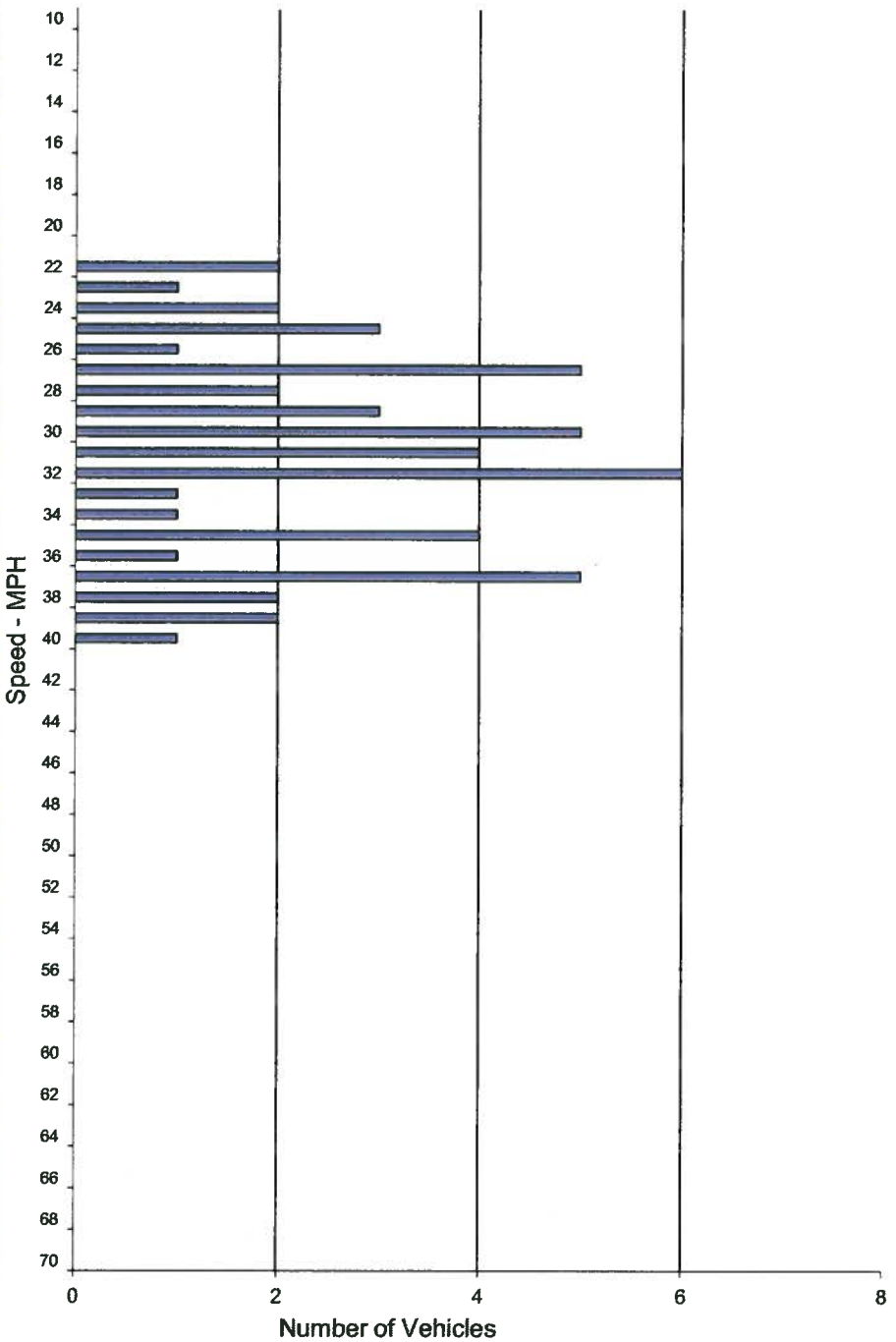

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# In Pace	Percent In Pace	% / # Below Pace	% / # Above Pace
ALL	51	22 - 40	31 mph	37 mph	23 - 32	32	63%	3% / 2	34% / 17

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Laguna Hills

DATE: 9/6/2012 Location: Nellie Gail Rd e/o Lost Colt Dr

DAY: Thursday Posted Speed: 30 MPH Project #: 12-1172-001

Eastbound & Westbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	2
23	2
24	5
25	3
26	2
27	9
28	9
29	8
30	7
31	10
32	10
33	8
34	2
35	6
36	4
37	7
38	3
39	3
40	1
41	
42	
43	
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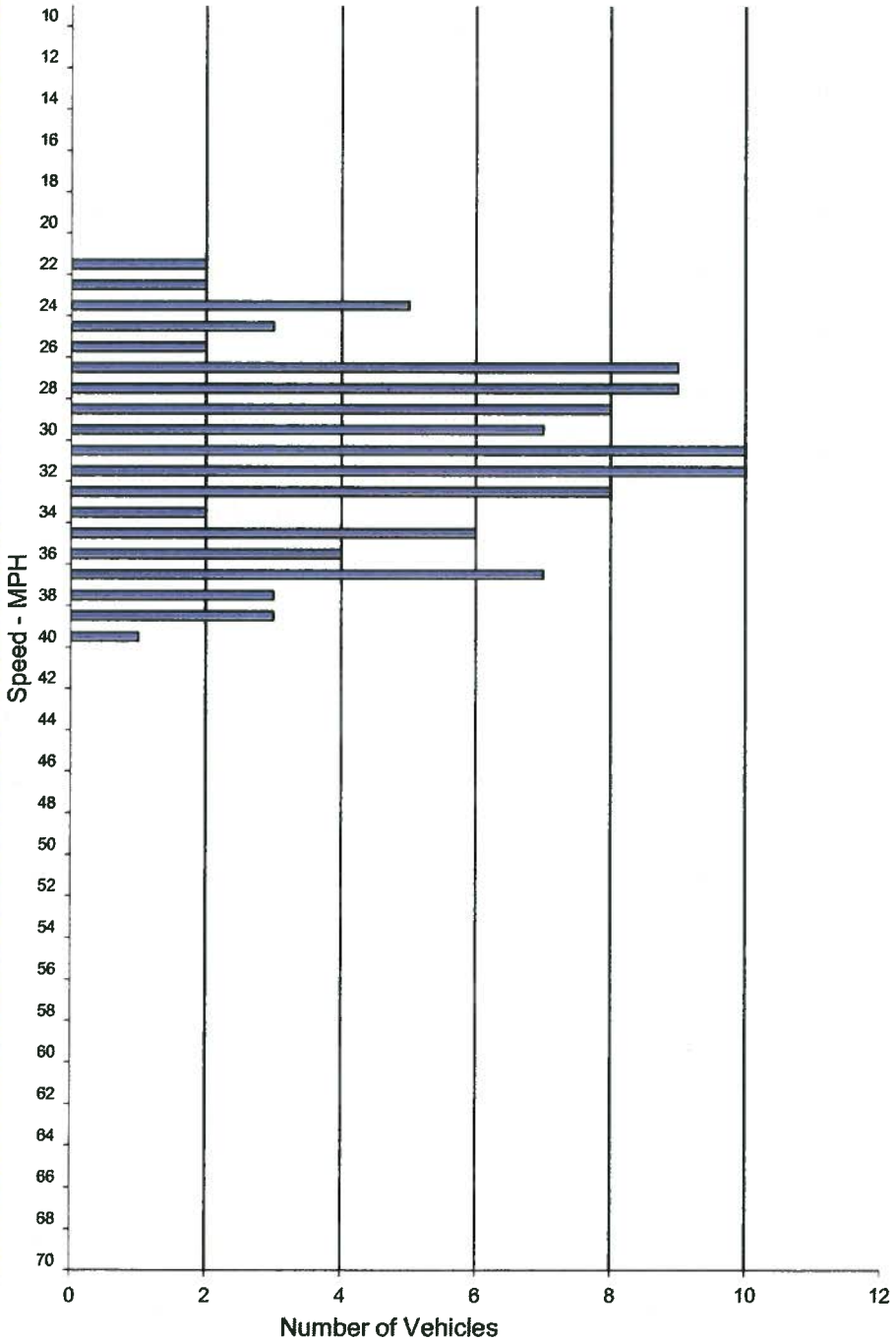

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# In Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	101	22 - 40	31 mph	36 mph	27 - 36	73	72%	13% / 14	14% / 14

Nottingham Court Near Oso Parkway

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Laguna Hills

DATE: 9/6/2012 **Location:** Nottingham Ct s/o Oso Parkway
DAY: Thursday **Posted Speed:** None **Project #:** 12-1172-002

Northbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	1
22	
23	1
24	
25	4
26	1
27	1
28	2
29	5
30	3
31	1
32	2
33	10
34	1
35	3
36	1
37	
38	2
39	
40	1
41	2
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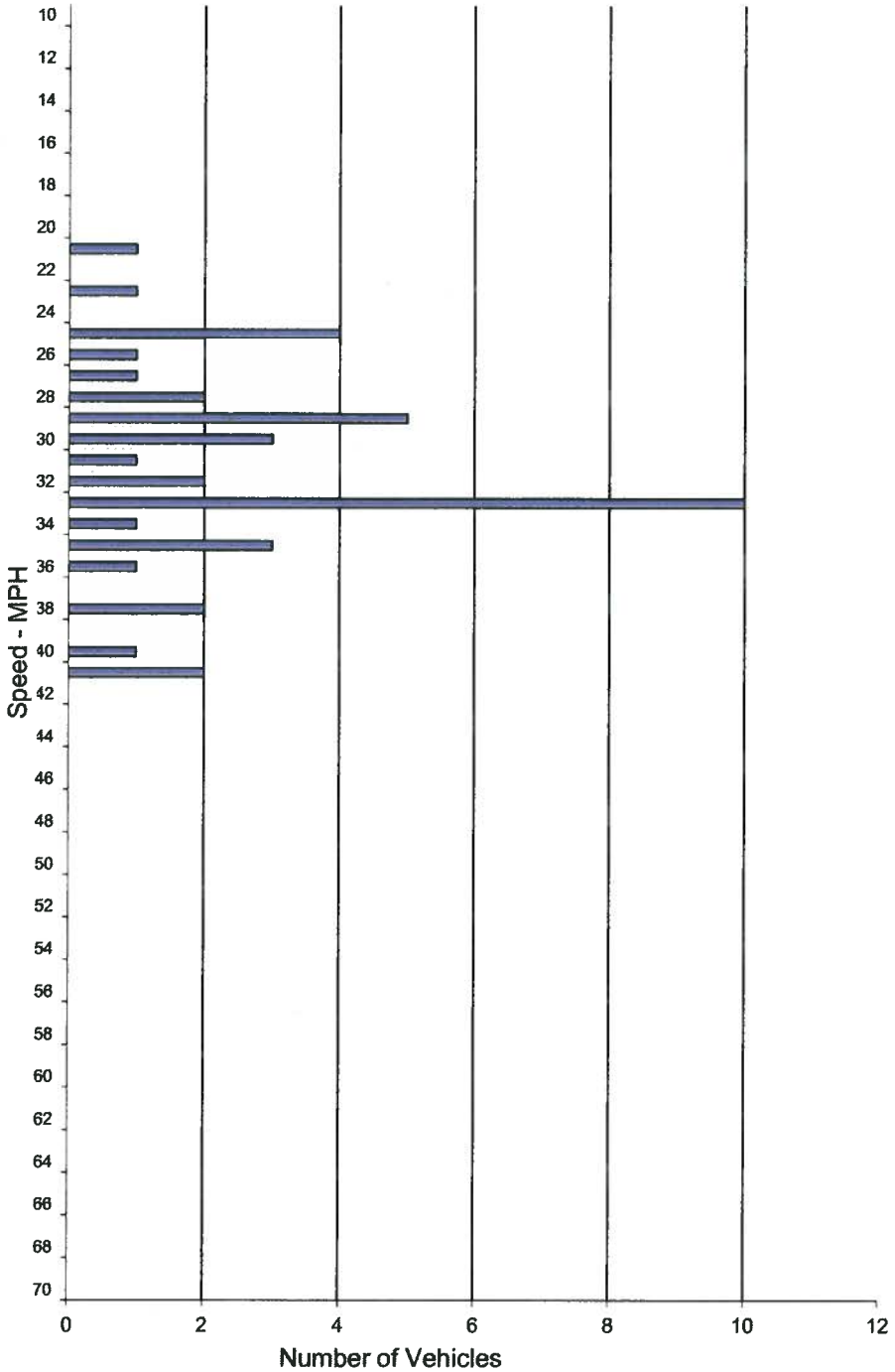
>=70	



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# In Pace	Percent In Pace	% / # Below Pace	% / # Above Pace
ALL	41	21 - 41	32 mph	35 mph	25 - 34	30	73%	4% / 2	22% / 9

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Laguna Hills

DATE: 9/6/2012 **Location:** Nottingham Ct s/o Oso Parkway
DAY: Thursday **Posted Speed:** None **Project #:** 12-1172-002

Southbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	1
19	
20	
21	1
22	3
23	
24	5
25	6
26	7
27	5
28	12
29	12
30	7
31	6
32	5
33	5
34	5
35	2
36	3
37	1
38	
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40	1
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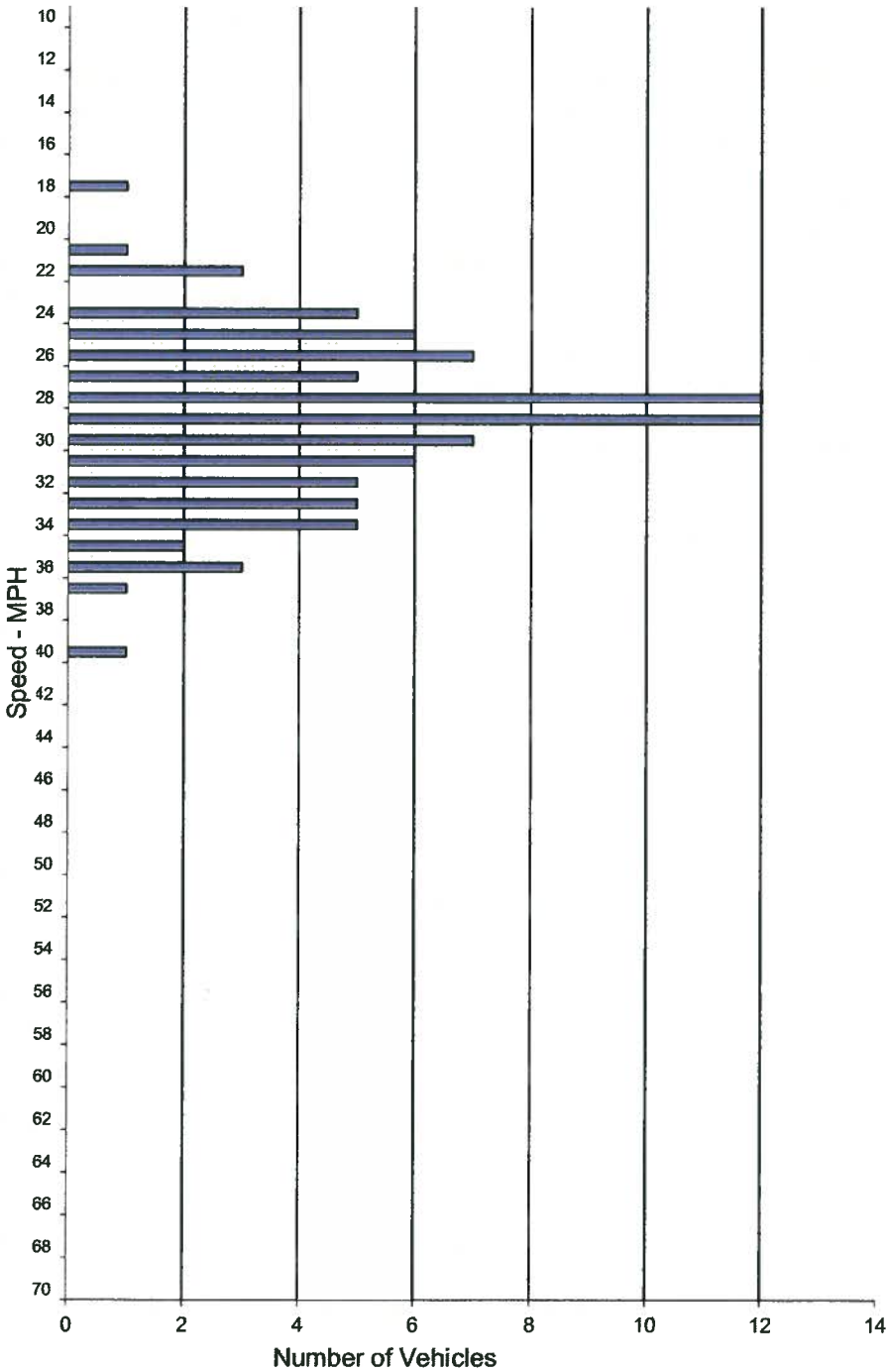

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# In Pace	Percent In Pace	% / # Below Pace	% / # Above Pace
ALL	87	18 - 40	29 mph	33 mph	24 - 33	70	80%	5% / 5	14% / 12

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Laguna Hills

DATE: 9/6/2012 **Location:** Nottingham Ct s/o Oso Parkway

DAY: Thursday **Posted Speed:** None **Project #:** 12-1172-002

Northbound & Southbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	1
19	
20	
21	2
22	3
23	1
24	5
25	10
26	8
27	6
28	14
29	17
30	10
31	7
32	7
33	15
34	6
35	5
36	4
37	1
38	2
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40	2
41	2
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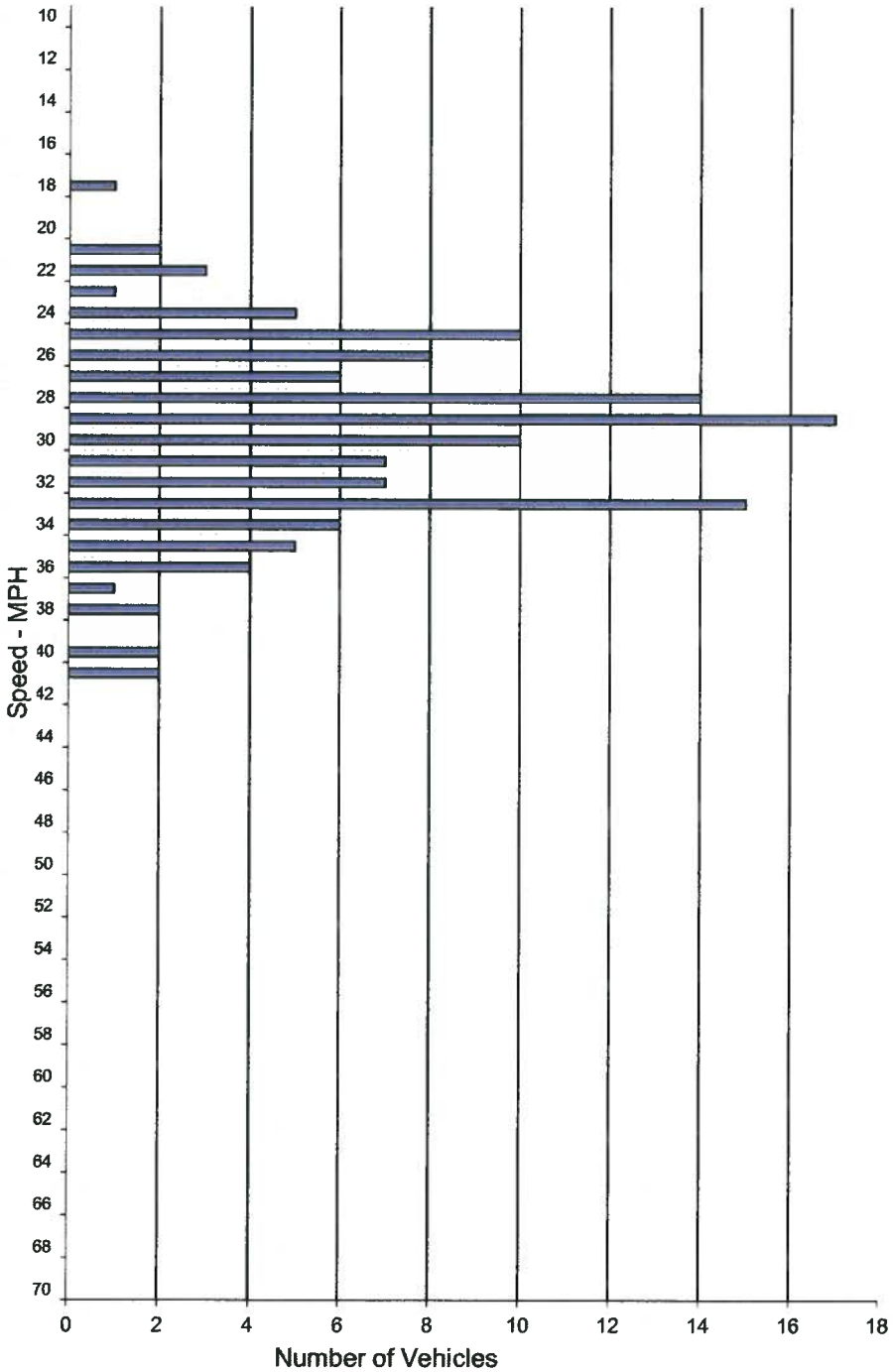

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	128	18 - 41	29 mph	34 mph	25 - 34	100	78%	9% / 12	13% / 16

Collision Data

Accident listing
03/20/2008 - 03/19/2011
Nellie Gail Rd & Red Lodge Pl
Sorted by <DATE;TIME;ACC#>

CASE ID	DATE	STREET 1	STREET 2	DIST	DIR FROM	VEH 1 MOV	VEH 1 DIR	VEH 2 MOV	VEH 2 DIR	COLL TYPE
3927940	09/05/2008	NELLIE GAIL RD	RED LODGE PL	163	West	Left turn	EAST	Not stated	WEST	Head on
4035811	01/26/2009	NELLIE GAIL RD	RED LODGE PL	217	East	Other Veh Mov	WEST	Not stated	Not stated	Hit object

Marked Crosswalk Guidelines

Option:

23 A limit line may be placed in advance of a crosswalk where vehicles are required to stop, in compliance with a STOP (R1-1) sign, traffic control signal or some other traffic control device.

Support:

24 If a marked crosswalk is in place, it would normally function as a limit line.

25 Typical limit line markings are shown in Figure 3B-103(CA).

Standard:

26 **The individual triangles comprising the yield line shall have a base of 2 feet wide and a height of 3 feet. The space between the triangles shall be 1 foot.**

Support:

27 Figure 3B-16(CA) shows typical yield line layout for streets and highways.

Section 3B.17 Do Not Block Intersection Markings

Support:

00 Refer to CVC 22526 for entering intersection, rail crossing or marked crosswalk.

Option:

01 Do Not Block Intersection markings may be used to mark the edges of an intersection area that is in close proximity to a signalized intersection, railroad crossing, or other nearby traffic control that might cause vehicles to stop within the intersection and impede other traffic entering the intersection. If authorized by law, Do Not Block Intersection markings with appropriate signs may also be used at other locations.

Standard:

02 **If used, Do Not Block Intersection markings (see Figure ~~3B-18~~ 3B-18(CA)) shall consist of one of the following alternatives:**

~~A. Wide solid white lines that outline the intersection area that vehicles must not block;~~

B. Wide solid white lines that outline the intersection area that vehicles must not block and a white word message such as DO NOT BLOCK or KEEP CLEAR;

~~C. Wide solid white lines that outline the intersection area that vehicles must not block and white cross-hatching within the intersection area; or~~

D. A white word message, such as DO NOT BLOCK or KEEP CLEAR, within the intersection area that vehicles must not block.

03 **Do Not Block Intersection markings shall be accompanied by one or more DO NOT BLOCK INTERSECTION (DRIVEWAY) (CROSSING) (R10-7) signs (see Section 2B.53), one or more DO NOT STOP ON TRACKS (R8-8) signs (see Section 8B.09), or one or more similar signs.**

Section 3B.18 Crosswalk Markings

Support:

01 Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

02 In conjunction with signs and other measures, crosswalk markings help to alert road users of a designated pedestrian crossing point across roadways at locations that are not controlled by traffic control signals or STOP or YIELD signs.

03 At non-intersection locations, crosswalk markings legally establish the crosswalk.

Standard:

04 **When crosswalk lines are used, they shall consist of solid white lines that mark the crosswalk. They shall not be less than ~~6~~ 12 inches or greater than 24 inches in width.**

Guidance:

05 *If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 6 feet. If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk should be not less than 6 feet wide.*

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06 *Crosswalk lines, if used on both sides of the crosswalk, should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks (see Figures 3B-17 and 3B-19).*

07 *At locations controlled by traffic control signals or on approaches controlled by STOP or YIELD signs, crosswalk lines should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s).*

08 *Crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.*

09 *New marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either:*

A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or

B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

Support:

10 Chapter 4F contains information on Pedestrian Hybrid Beacons. Section 4L.03 contains information regarding Warning Beacons to provide active warning of a pedestrian's presence. Section 4N.02 contains information regarding In-Roadway Warning Lights at crosswalks. Chapter 7D contains information regarding school crossing supervision.

Guidance:

11 *Because non-intersection pedestrian crossings are generally unexpected by the road user, warning signs (see Section 2C.50) should be installed for all marked crosswalks at non-intersection locations and adequate visibility should be provided by parking prohibitions.*

Support:

12 Section 3B.16 contains information regarding placement of stop line markings near crosswalk markings.

Option:

13 For added visibility, the area of the crosswalk may be marked with white diagonal lines at a 45-degree angle to the line of the crosswalk or with white longitudinal lines parallel to traffic flow as shown in Figure 3B-19.

14 When diagonal or longitudinal lines are used to mark a crosswalk, the transverse crosswalk lines may be omitted. This type of marking may be used at locations where substantial numbers of pedestrians cross without any other traffic control device, at locations where physical conditions are such that added visibility of the crosswalk is desired, or at places where a pedestrian crosswalk might not be expected.

Guidance:

15 *If used, the diagonal or longitudinal lines should be 12 to 24 inches wide and separated by gaps of 12 to 60 inches. The design of the lines and gaps should avoid the wheel paths if possible, and the gap between the lines should not exceed 2.5 times the width of the diagonal or longitudinal lines.*

Option:

16 When an exclusive pedestrian phase that permits diagonal crossing of an intersection is provided at a traffic control signal, a marking as shown in Figure 3B-20 may be used for the crosswalk.

Guidance:

17 *Crosswalk markings should be located so that the curb ramps are within the extension of the crosswalk markings.*

Support:

18 Detectable warning surfaces mark boundaries between pedestrian and vehicular ways where there is no raised curb. Detectable warning surfaces are required by 49 CFR, Part 37 and by the Americans with Disabilities Act (ADA) where curb ramps are constructed at the junction of sidewalks and the roadway, for marked and unmarked crosswalks. Detectable warning surfaces contrast visually with adjacent walking surfaces, either light-on-dark, or

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dark-on-light. The "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" (see Section 1A.11) contains specifications for design and placement of detectable warning surfaces.

Standard:

19 **Crosswalk markings near schools shall be yellow as provided in CVC 21368. See Part 7.**

Option:

20 Pedestrian crosswalk markings may be placed at intersections, representing extensions of the sidewalk lines, or on any portion of the roadway distinctly indicated for pedestrian crossing. Refer to CVC 275.

Guidance:

21 *In general, crosswalks should not be marked at intersections unless they are intended to channelize pedestrians. Emphasis is placed on the use of marked crosswalks as a channelization device.*

22 *The following factors may be considered in determining whether a marked crosswalk should be used:*

A. Vehicular approach speeds from both directions.
B. Vehicular volume and density.
C. Vehicular turning movements.
D. Pedestrian volumes.
E. Roadway width.
F. Day and night visibility by both pedestrians and motorists.
G. Channelization is desirable to clarify pedestrian routes for sighted or sight impaired pedestrians.
H. Discouragement of pedestrian use of undesirable routes.
I. Consistency with markings at adjacent intersections or within the same intersection.

Option:

23 Crosswalk markings may be established between intersections (mid-block) in accordance with CVC 21106(a).

Guidance:

24 *Mid-block pedestrian crossings are generally unexpected by the motorist and should be discouraged unless, in the opinion of the engineer, there is strong justification in favor of such installation. Particular attention should be given to roadways with two or more traffic lanes in one direction as a pedestrian may be hidden from view by a vehicle yielding the right-of-way to a pedestrian.*

Option:

25 When diagonal or longitudinal lines are used to mark a crosswalk, the transverse crosswalk lines may be omitted.

Standard:

26 **However, when the factor that determined the need to mark a crosswalk is the clarification of pedestrian routes for sight-impaired pedestrians, the transverse crosswalk lines shall be marked.**

Option:

27 At controlled approaches, limit lines (stop lines) help to define pedestrian paths and are therefore a factor the engineer may consider in deciding whether or not to mark the crosswalk.

28 Where it is desirable to remove a marked crosswalk, the removal may be accomplished by repaving or surface treatment.

Guidance:

29 *A marked crosswalk should not be eliminated by allowing it to fade out or be worn away.*

Support:

30 The worn or faded crosswalk retains its prominent appearance to the pedestrian at the curb, but is less visible to the approaching driver.

Standard:

31 **Notification to the public shall be given at least 30 days prior to the scheduled removal of an existing marked crosswalk. The notice of proposed removal shall inform the public how to provide input related to the scheduled removal and shall be posted at the crosswalk identified for removal. Refer to CVC 21950.5**

Option:

32 Signs may be installed at or adjacent to an intersection directing that pedestrians shall not cross in a crosswalk indicated at the intersection in accordance with CVC 21106(b).

33 White PED XING pavement markings may be placed in each approach lane to a marked crosswalk, except at intersections controlled by traffic signals or STOP or YIELD signs.

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In-Roadway Warning Light Guidelines

CHAPTER 4N. IN-ROADWAY LIGHTS

Section 4N.01 Application of In-Roadway Lights

Support:

01 In-Roadway Lights are special types of highway traffic signals installed in the roadway surface to warn road users that they are approaching a condition on or adjacent to the roadway that might not be readily apparent and might require the road users to slow down and/or come to a stop. This includes situations warning of marked school crosswalks, marked midblock crosswalks, marked crosswalks on uncontrolled approaches, marked crosswalks in advance of roundabouts as described in Chapter 3C, and other roadway situations involving pedestrian crossings.

Standard:

02 **In-Roadway Lights shall not be used for any application that is not described in this Chapter.**

03 **If used, In-Roadway Lights shall not exceed a height of 3/4 inch above the roadway surface.**

04 **When used, In-Roadway Lights shall be flashed and shall not be steadily illuminated.**

Support:

05 Steadily illuminated lights installed in the roadway surface are considered to be internally illuminated raised pavement markers (see Section 3B.11).

Option:

06 In-Roadway Lights may be flashed in a manner that includes a continuous flash of varying intensity and time duration that is repeated to provide a flickering effect (see Section 4N.02).

Section 4N.02 In-Roadway Warning Lights at Crosswalks

Option:

01 In-roadway lights may be installed at certain marked crosswalks, based on an engineering study or engineering judgment, to provide additional warning to road users.

Standard:

02 **If used, In-Roadway Warning Lights at crosswalks shall be installed only at marked crosswalks with applicable warning signs. They shall not be used at crosswalks controlled by YIELD signs, STOP signs, or traffic control signals.**

03 **If In-Roadway Warning Lights are used at a crosswalk, the following requirements shall apply:**

A. Except as provided in Paragraphs 7 and 8, they shall be installed along both sides of the crosswalk and shall span its entire length.

B. They shall initiate operation based on pedestrian actuation and shall cease operation at a predetermined time after the pedestrian actuation or, with passive detection, after the pedestrian clears the crosswalk.

C. They shall display a flashing yellow light when actuated. The flash rate shall be at least 50, but no more than 60, flash periods per minute. If they are flashed in a manner that includes a continuous flash of varying intensity and time duration that is repeated to provide a flickering effect, the flickers or pulses shall not repeat at a rate that is between 5 and 30 per second to avoid frequencies that might cause seizures.

D. They shall be installed in the area between the outside edge of the crosswalk line and 10 feet from the outside edge of the crosswalk.

E. They shall face away from the crosswalk if unidirectional, or shall face away from and across the crosswalk if bidirectional.

04 **If used on one-lane, one-way roadways, a minimum of two In-Roadway Warning Lights shall be installed on the approach side of the crosswalk. If used on two-lane roadways, a minimum of three In-Roadway Warning Lights shall be installed along both sides of the crosswalk. If used on roadways with more than two lanes, a minimum of one In-Roadway Warning Light per lane shall be installed along both sides of the crosswalk.**

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Guidance:

05 *If used, In-Roadway Warning Lights should be installed in the center of each travel lane, at the center line of the roadway, at each edge of the roadway or parking lanes, or at other suitable locations away from the normal tire track paths.*

06 *The location of the In-Roadway Warning Lights within the lanes should be based on engineering judgment.*

Option:

07 On one-way streets, In-Roadway Warning Lights may be omitted on the departure side of the crosswalk.

08 Based on engineering judgment, the In-Roadway Warning Lights on the departure side of the crosswalk on the left side of a median may be omitted.

09 Unidirectional In-Roadway Warning Lights installed at crosswalk locations may have an optional, additional yellow light indication in each unit that is visible to pedestrians in the crosswalk to indicate to pedestrians in the crosswalk that the In-Roadway Warning Lights are in fact flashing as they cross the street. These yellow lights may flash with and at the same flash rate as the light module in which each is installed.

Guidance:

10 *If used, the period of operation of the In-Roadway Warning Lights following each actuation should be sufficient to allow a pedestrian crossing in the crosswalk to leave the curb or shoulder and travel at a walking speed of 3.5 feet per second to at least the far side of the traveled way or to a median of sufficient width for pedestrians to wait. Where pedestrians who walk slower than 3.5 feet per second, or pedestrians who use wheelchairs, routinely use the crosswalk, a walking speed of less than 3.5 feet per second should be considered in determining the period of operation.*

Standard:

11 **If pedestrian pushbuttons are used to actuate the in-roadway lights, a Push Button To Turn On Warning Lights (with pushbutton symbol) (R10-25) sign (see Figure 2B-26) shall be mounted adjacent to or integral with each pedestrian pushbutton.**

12 **Where the period of operation is sufficient only for crossing from a curb or shoulder to a median of sufficient width for pedestrians to wait, median-mounted pedestrian actuators shall be provided.**

13 **In-Roadway Warning Lights (IRWLs) shall not be placed on or within the crosswalk markings. If the In-Roadway Warning Lights are activated by a push button, the PUSH BUTTON FOR PEDESTRIAN WARNING LIGHTS, CROSS WITH CAUTION (R62E(CA)) sign shall be used.**

14 **The following shall be considered when evaluating the need for In-Roadway Warning Lights:**

- **A. Whether the crossing is controlled or uncontrolled.**
- **B. An engineering traffic study to determine if In-Roadway Warning Lights are compatible with the safety and operation of nearby intersections, which may or may not be, controlled by traffic signals or STOP/YIELD signs.**
- **C. Standard traffic signs for crossings and crosswalk pavement markings are provided.**
- **D. At least 40 pedestrians regularly use the crossing during each of any two hours (not necessarily consecutive) during a 24-hour period.**
- **E. The vehicular volume through the crossing exceeds 200 vehicles per hour in urban areas or 140 vehicles per hour in rural areas during peak-hour pedestrian usage.**
- **F. The critical approach speed (85th percentile) is 45 mph or less.**
- **G. In-Roadway Warning Lights are visible to drivers at the minimum stopping sight distance for the posted speed limit.**
- **H. Public education on In-Roadway Warning Lights is conducted for new installations.**

Option:

15 Overhead or roadside Flashing Yellow Beacons may be installed in conjunction with In-Roadway Warning Lights. In-Roadway Warning Lights may be installed independently, but are not necessarily intended to be a substitute for standard flashing beacons. Engineering judgment should be exercised.

Guidance:

16 *Typical applications of In-Roadway Warning Lights are shown in Figure 4N-101(CA).*

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Section 4N.101(CA) In-Roadway Warning Lights at Crosswalks Financing and Maintenance-State Highways

Standard:

01 **When In-Roadway Warning Lights are proposed by Department of Transportation on State highways, the Department of Transportation shall pay the costs of installation and maintenance. When In-Roadway Warning Lights are proposed and installed by a local agency on State highways, the installation of In-Roadway Warning Lights shall be covered by an Encroachment Permit issued by the local District Director of Department of Transportation. The local agency shall be responsible for installation and maintenance of the In-Roadway Warning Lights.**

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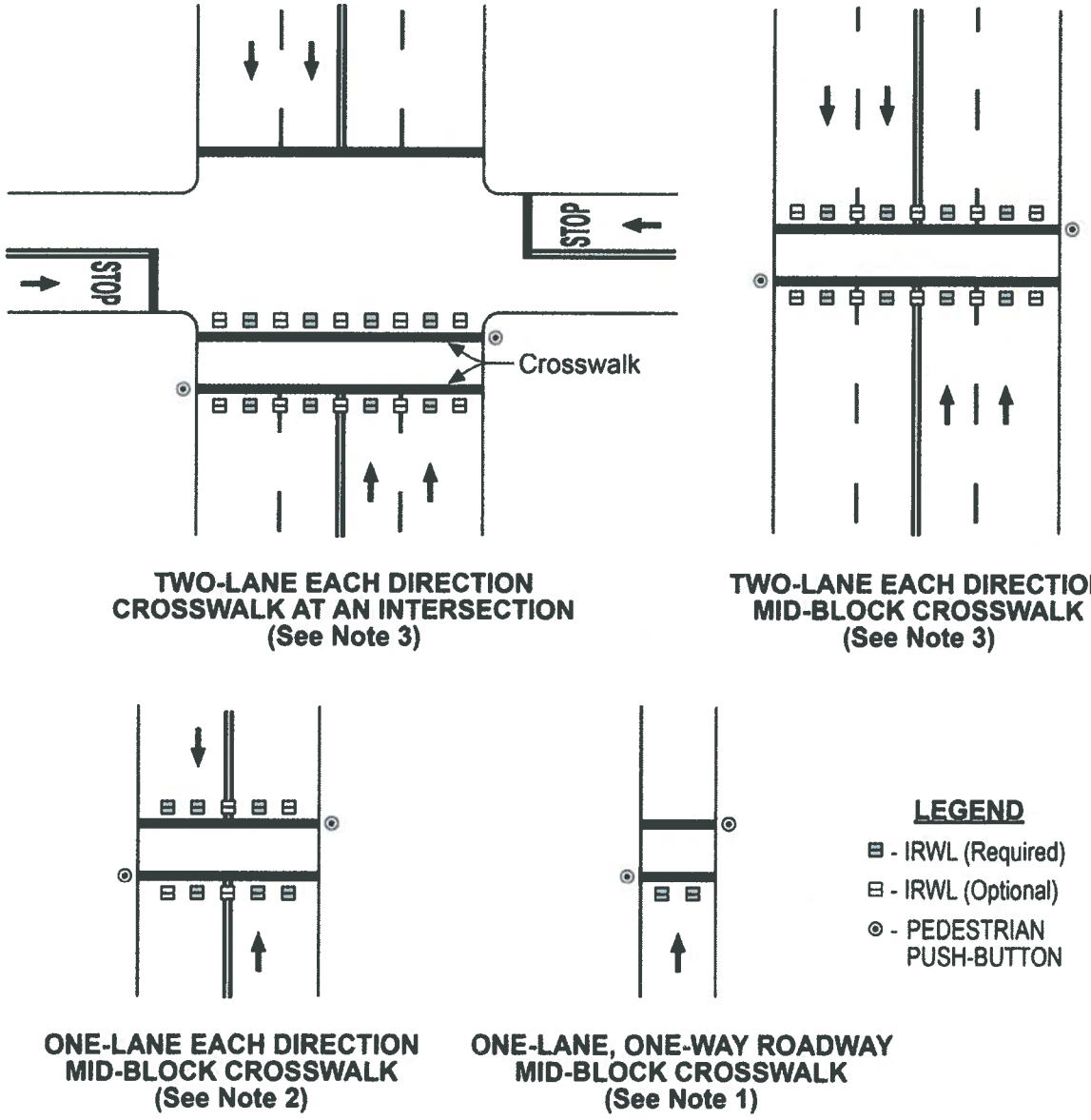
Figure 4N-101 (CA). Typical Layout for In-Roadway Warning Lights (IRWLs)



TWO-LANE EACH DIRECTION CROSSWALK AT AN INTERSECTION (See Note 3)

TWO-LANE EACH DIRECTION MID-BLOCK CROSSWALK (See Note 3)

ONE-LANE EACH DIRECTION MID-BLOCK CROSSWALK (See Note 2)

ONE-LANE, ONE-WAY ROADWAY MID-BLOCK CROSSWALK (See Note 1)

NOTES:
1. One-Lane, One-Way Roadways, a minimum of two IRWLs shall be installed on the approach side ot the crosswalk.
2. One-Lane each direction, a minimum of three IRWLs shall be installed along both sides of the crosswalk.
3. Two-Lanes each direction, a minimum of one IRWLs per lane, shall be installed along both sides of the crosswalk.
4. IRWLs should be located off the tire tracks.

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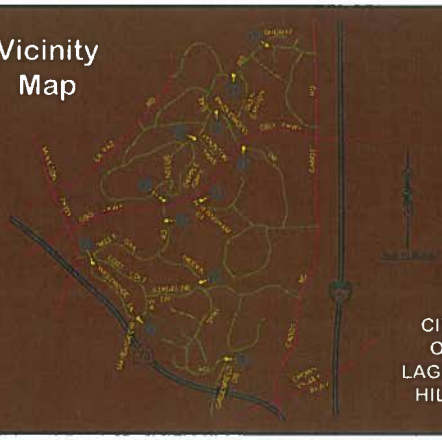
City of Laguna Hills

Selected Equestrian Crossing Review

Equestrian Crossing Locations

1. On Bridlewood Dr. ±200' east of the intersection of Bridlewood Dr. & Nellie Gail Rd.
2. On the knuckle corner of Greenfield Dr. at Hidden Trail Rd
3. On Hidden Trail Rd. ± 200' north of the intersection of Hidden Trail Rd. & Stageline Dr.
4. On Bridlewood Dr. ± 200' south of the intersection of Oso Pkwy. & Bridlewood Dr.
5. On Nottingham Ct. ± 100' south of the intersection of Oso Pkwy. & Nottingham Ct.
6. On Nellie Gail Rd. ± 600' south of the intersection of Oso Pkwy. & Nellie Gail Rd
7. On Nellie Gail Rd. ± 200' west of the intersection of Nellie Gail Rd. & Glen Canyon Dr.
8. On Nellie Gail Rd. between Dapple Grey Dr. & Houston Trail
9. On Westridge Ln. at Maverick Cir.
10. On Westridge Ln. ± 100' south of Lost Colt Dr.
11. On Nellie Gail Rd. at Sheriff Rd.
12. On Nellie Gail Rd. ± 200' north of Oso Pkwy.

Vicinity Map



Hierarchy of Traffic Engineering Solutions

(in order of preference)

1. Physically separate equestrian from vehicles
2. Utilize controlled crossings
3. Provide maximum Sight Distance and notice to motorists as feasible

Traffic Controls to be in accordance with C-MUTCD

Equestrian Characteristics

- Average horse is ±5 feet at the withers (where the saddle goes)
- A person sitting on an average horse is another 2.5 to 3 feet at top of head providing extended visibility
- Average "turning radius" is ±15 feet
- Horses need secure footing (slick concrete, asphalt, flagstone or marble make it slippery for a horse with steel shoes)
- For below grade crossings (tunnel) a horse needs to see the light at the end of the tunnel

Rider Characteristics

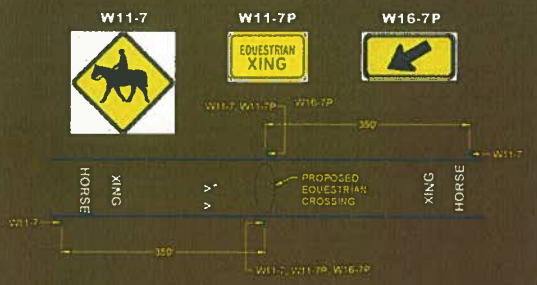
- Riders like to cross where line-of-site is excellent and the area is clear of obstacles
- High traffic volume locations are undesirable
- Horses are hard to see at dusk and at night – reflective gear should be worn by riders
- Riders should be trained to be able to control their horses in an urban setting

Traffic Engineering Tools for Equestrian Crossing Improvement

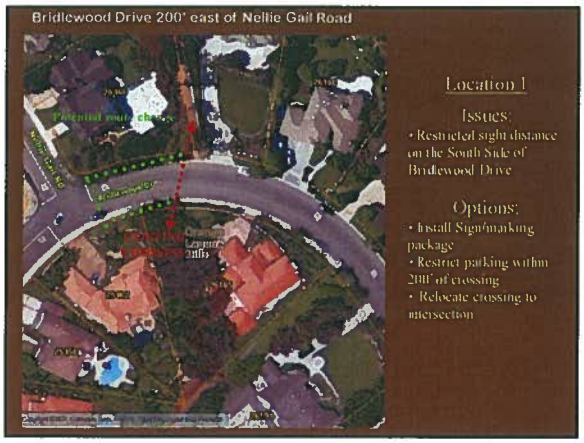
- Trim vegetation / remove trees
- Add crossing signs
- Install advance warning signs
- Install advance pavement legends
- Apply parking restrictions as needed
- Perform traffic enforcement (speed and parking)
- Evaluate crossing relocation - alternate location
- Install rumble strips
- Install flashing beacons / in-ground lights
- Evaluate tunnel construction
- Private improvements by others

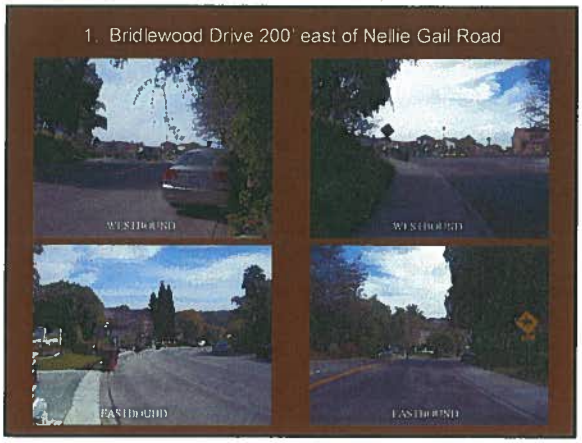
Typical Layout & Warning Signs

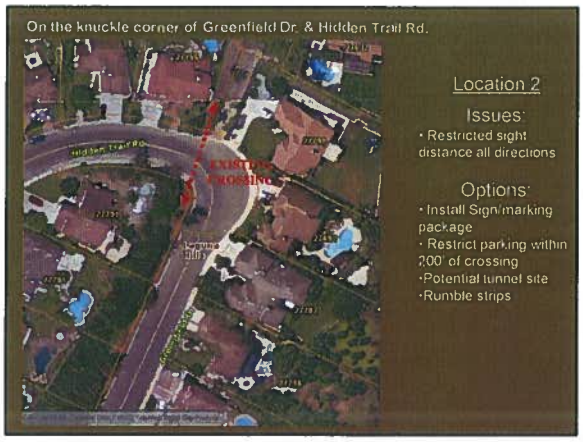
"Sign package"

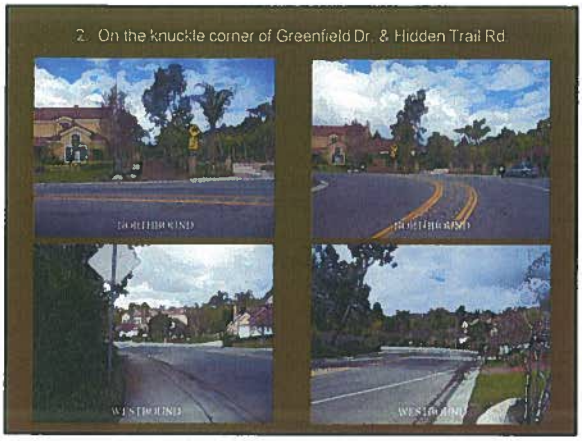


*Addition of Chevron or Arrow Head is an option to further point out the crossing location

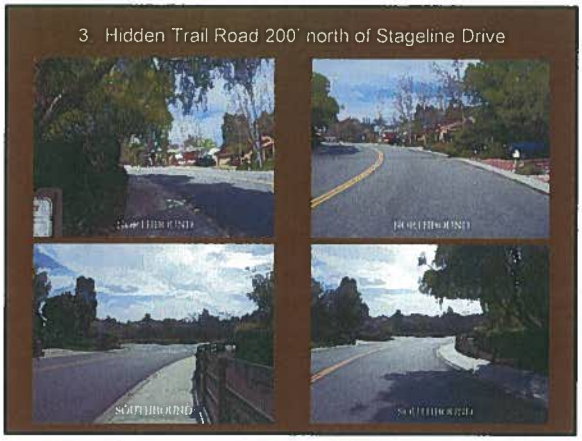


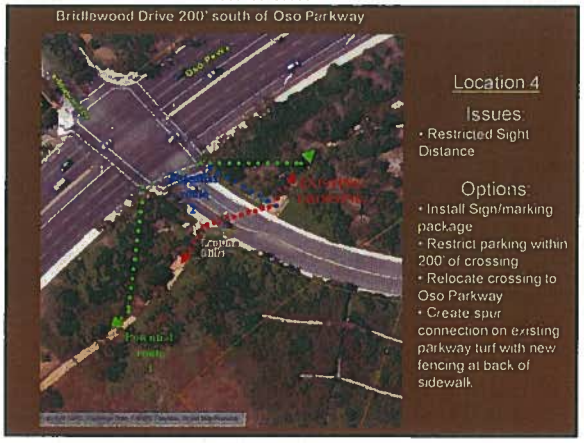


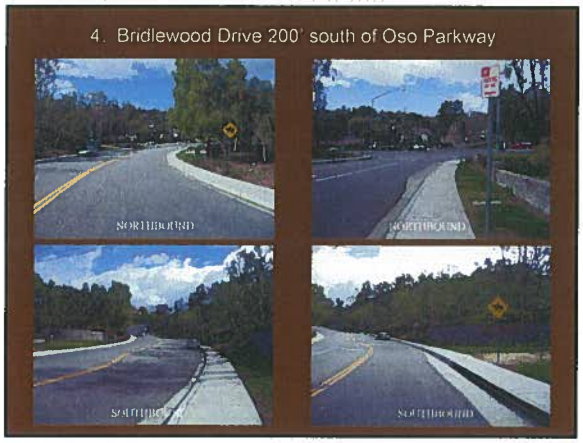

On the knuckle corner of Greenfield Dr. & Hidden Trail Rd.
Location 2
Issues:
• Restricted sight distance all directions
Options:
• Install Sign/marking package
• Restrict parking within 200' of crossing
•Potential tunnel site
•Rumble strips


2. On the knuckle corner of Greenfield Dr. & Hidden Trail Rd.
NORTHBOUND
NORTHBOUND
WESTBOUND
WESTBOUND

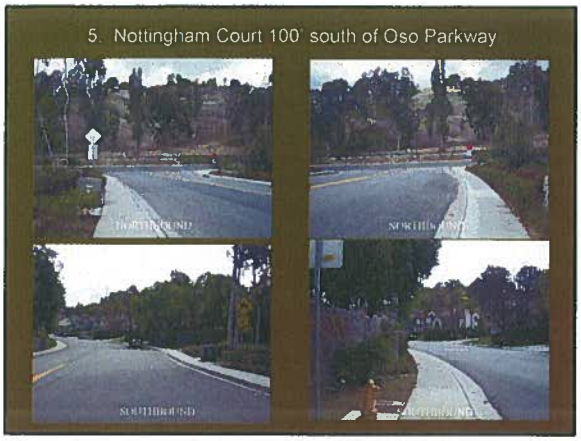
Hidden Trail Road 200' north of Stageline Drive
Location 3
Issues:
• Restricted sight distance on the West Side of Hidden Trail Road
Options:
• Install Sign/marking package
• Restrict parking within 200' of crossing
• Re-route crossing and abandon trail segment on west side.
• Restrict parking at 27212 & 27222 Hidden Trail Rd.

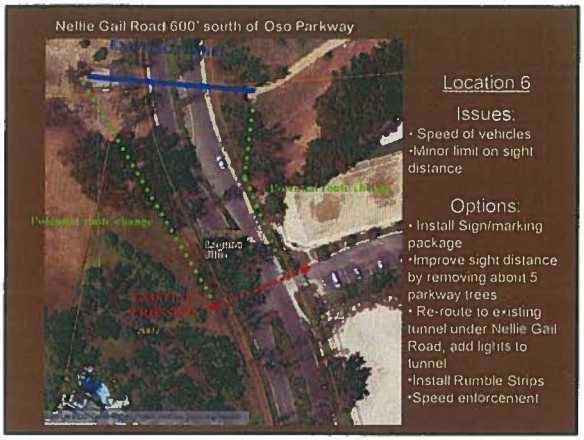

3. Hidden Trail Road 200' north of Stageline Drive
SOUTHBOUND

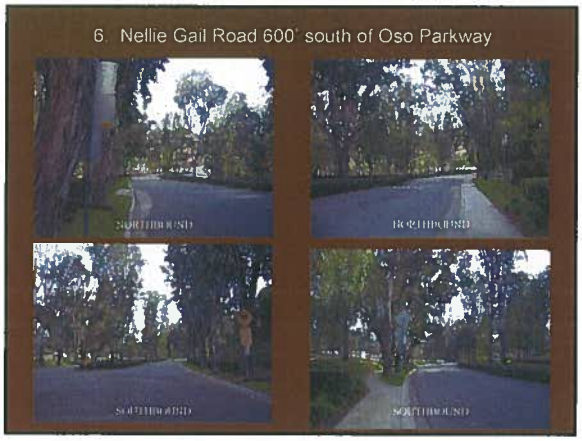

Bridlewood Drive 200' south of Oso Parkway
Location 4
Issues:
• Restricted Sight Distance
Options:
• Install Sign/marking package
• Restrict parking within 200' of crossing
• Relocate crossing to Oso Parkway
• Create spur connection on existing parkway turf with new fencing at back of sidewalk.


4. Bridlewood Drive 200' south of Oso Parkway
NORTHBOUND
NORTHBOUND
SOUTHBOUND
SOUTHBOUND

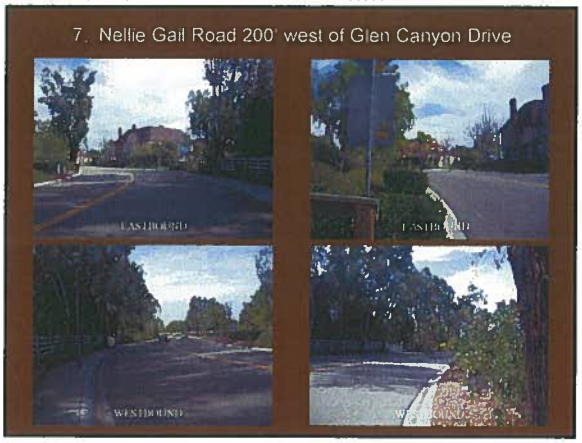
Nottingham Court 100' south of Oso Parkway
Location 5
Issues:
• Restricted Sight Distance
Options:
• Install Sign/marking package
• Restrict parking within 200' of crossing
•Re-Route crossing to Oso Parkway
•Potential tunnel site


5. Nottingham Court 100' south of Oso Parkway

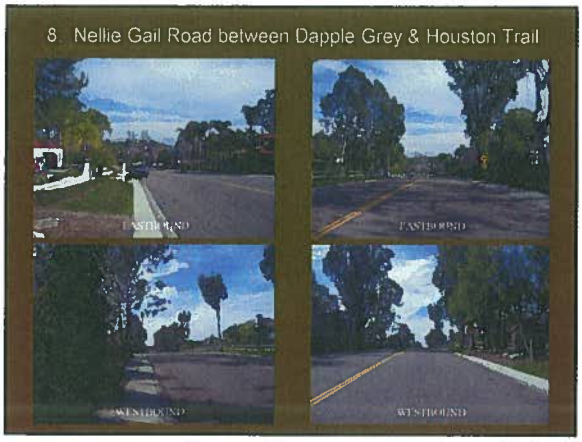

Nellie Gail Road 600' south of Oso Parkway
Location 6
Issues:
• Speed of vehicles
•Minor limit on sight distance
Options:
• Install Sign/marking package
•Improve sight distance by removing about 5 parkway trees
• Re-route to existing tunnel under Nellie Gail Road, add lights to tunnel
•Install Rumble Strips
•Speed enforcement


6. Nellie Gail Road 600' south of Oso Parkway

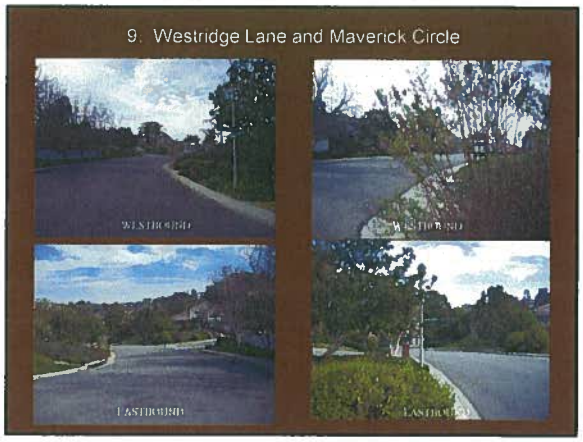
Nellie Gail Road 200' west of Glen Canyon Drive
Location 7
Issues:
• Restricted Sight Distance on the North Side of Nellie Gail Road
Options:
• Install Sign/marking package
• Restrict parking within 200' of crossing
•Rumble strips
• Potential tunnel site


7. Nellie Gail Road 200' west of Glen Canyon Drive

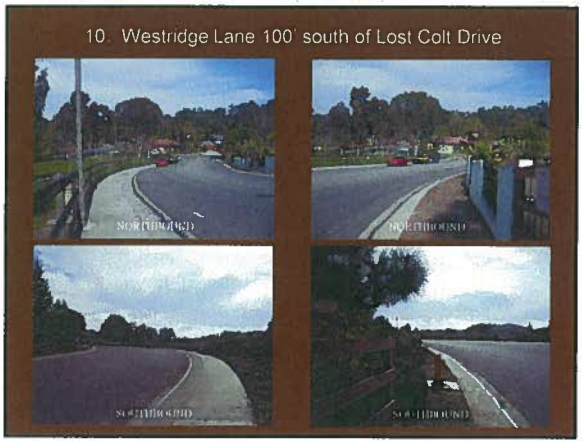
Nellie Gail Road between Dapple Grey & Houston Trail
Location 8
Issues:
• Crest curve - some limitation to sight distance
Options:
• Install Sign/marking package
•Trim parkway vegetation
• Restrict parking within 200' of crossing

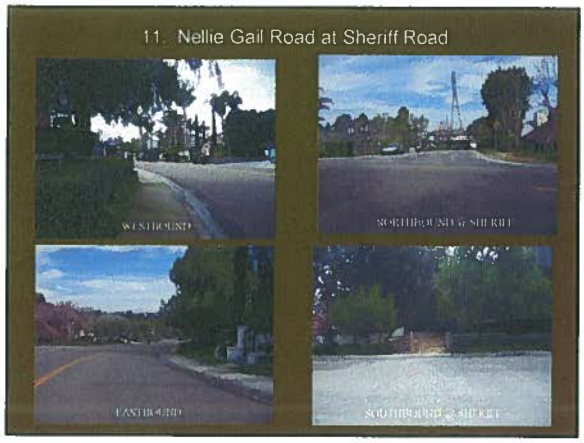

8. Nellie Gail Road between Dapple Grey & Houston Trail
EASTBOUND
EASTBOUND
WESTBOUND
WESTBOUND

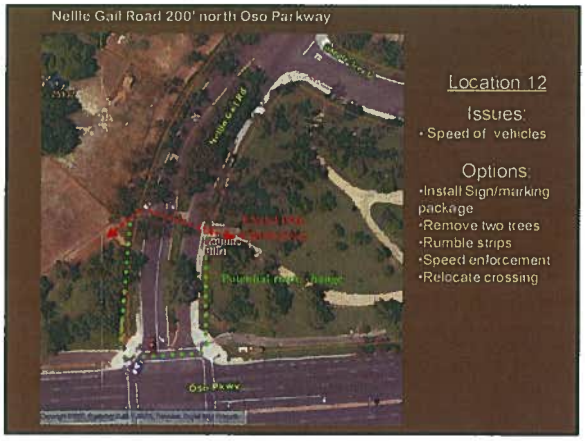
Westridge Lane and Maverick Circle
Location 9
Issues:
• Restricted Sight Distance
Options:
• Install Sign/marking package
•Trim vegetation
• Restrict parking within 200' of crossing
•Rumble strips

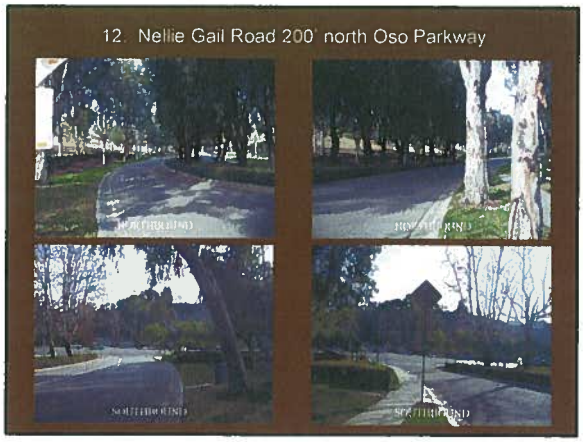

9. Westridge Lane and Maverick Circle
WESTBOUND
WESTBOUND
EASTBOUND
EASTBOUND

Westridge Lane 100' south of Lost Colt Drive
Location 10
Issues:
• Restricted Sight Distance on the East Side of Westridge Lane
Options:
• Install Sign/marking package
• Restrict parking within 200' of crossing
• Rumble strips
• Re-route crossing to Westridge Lane at Lost Colt Drive


10. Westridge Lane 100' south of Lost Colt Drive
NORTHBOUND
NORTHBOUND
SOUTHBOUND
SOUTHBOUND







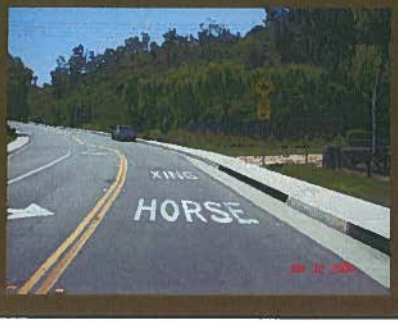
Cost of Options

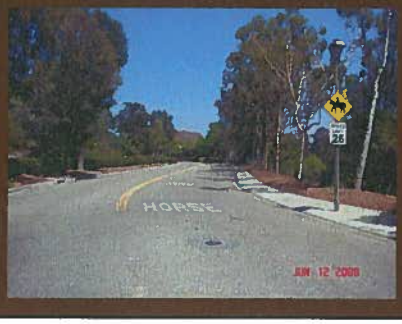
- Clear vegetation to optimize sight distance (est. $200 to $1000)
- Remove on-street parking within 200 feet of all crossings (est. $500)
- Install Sign/marking package (est. $750)
- Provide pavement markings or street print (est. $1000 to $4,000)
- Evaluate the need for flashing beacons or in-ground crossing lights, subject to warrants (est. $45,000-$60,000 each location)
- Evaluate the need for tunnel construction (est. $200,000 +, subject to length)

Recommendations

- Implement an incremental approach (low cost to high cost) to improve crossing visibility / comfort for both the equestrian and motorist. Install "Sign Package" and trim vegetation.
- Evaluate effectiveness of implemented options through field observation of conditions.
- Apply the effective options to all crossing locations over time and determined priority.

Existing June 2008
(Bridlewood s/o Oso)



Existing June 2008
(Nellie Gail n/o Oso)

Existing June 2008
(Nellie Gail w/o Glen Canyon)