

Air Resources Board Southern California Consolidation Project

Solicitation 136676



RIVERSIDE, CA



April 23, 2015

Maureen Geeter
Senior Real Estate Officer
Acquisitions Unit
Real Estate Services Division
Department of General Services
707 Third Street, 5th Floor
West Sacramento, CA 95605

RE: ARB RFI

Dear Ms. Geeter:

On behalf of the County of Riverside (County), the University of California Riverside (UCR), UCR's College of Engineering-Center for Environmental Research and Technology (CE-CERT), the City of Riverside and Riverside Public Utilities (RPU), I am pleased to offer our response to the RFI for ARB's Southern California Consolidation Project.

Please see attached documents.

Sincerely,

Robert Field, Assistant County Executive Officer/EDA

Attachment: ARB RFI Proposal



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I. ADVANTAGES OF ARB CONSOLIDATION IN RIVERSIDE

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ARB CONSOLIDATION IN RIVERSIDE: BEST FIT, LEAST COST, QUICKEST ACTIVATION

Nowhere else in California can one find better accommodations for the world's most advanced air quality research at the greatest convenience and lowest cost than in Riverside, California.

In an effort to assist the Air Resources Board's (ARB) effort to establish the world's leading emissions research facility, the County of Riverside (County), the University of California Riverside (UCR), UCR's College of Engineering-Center for Environmental Research and Technology (CE-CERT), the City of Riverside and Riverside Public Utilities (RPU) are pleased to offer the attached proposal in response to the RFI for ARB's Southern California Consolidation Project.

By collocating with CE-CERT laboratories, ARB can expedite its mission at the highest levels of professionalism while expending the least amount of time and money to activate ARB. Consolidating ARB research facilities in Riverside offers the most cost-effective scenario by delivering all of the following:

- Suitable clean land provided for non-monetary consideration
- Ability to have an ARB advance team housed on site within one year
- Delivery of facilities at least 1 year sooner and at least 20% less expensive than current estimates
- Over \$25 million in capital outlay savings through joint use of existing laboratory space and equipment at CE-CERT
- Research synergies with CE-CERT and UCR, which received 114 National Science Foundation awards in 2014
- Utility cost reductions through RPU estimated to be \$610,000 in year one and \$275,000 in subsequent years
- Immediately available meeting and conference space in Riverside (County Board Chambers, Bourns Conference Center, Riverside Convention Center)
- Commuter friendly mass transit with a new Metrolink station behind CE-CERT (0.5 miles from proposed site)
- 17% lower cost of living and 20% lower cost of housing in the region
- Pipeline of future employees for ARB

II. EXECUTIVE SUMMARY

**Riverside is the ideal location for the
California Air Resources Board**

Riverside is the ideal location for the California Air Resources Board

The Inland Empire is an unrivaled laboratory for studying a wide range of quality-of-life issues, including air and water quality, population growth, employment, educational quality and the environment. Riverside County, with its world class, clean-tech research facilities, diverse and abundant renewable energy resources and sustainable building policies offers the ideal environment for the Air Resources Board (ARB) relocation to thrive.

Through a direct partnership with the County of Riverside (County), the University of California Riverside (UCR), Riverside Public Utilities (RPU) and others, ARB will find that Riverside also provides the most fiscally-prudent location for expanding its programs.



CE-CERT is home to the world's largest atmospheric chamber for AQ testing

The proposed relocation to Riverside provides the most cost-effective scenario by offering:

- Lower operation and research costs due to colocation near existing research and technology infrastructure at UCR's main campus and the College of Engineering's off-campus facility, Center for Environmental Research and Technology (CE-CERT)
- Unique world class research facilities that can enhance the efficiency and effectiveness of ARB
- An existing 35,000 SF modern office building with near-immediate occupancy
- County provided turn-key facilities that are less expensive and delivered quickly with better life-cycle costs
- Construction and financing of new facilities handled by County
- Lower utility costs from Riverside Public Utilities
- Access to the Sustainable Integrated Grid Initiative (SIGI) Testbed
- Immediately available meeting and conference space in Riverside
- Commuter friendly mass transit, including a new train station directly behind CE-CERT and within walking distance from the proposed relocation site
- Lower cost of living

The close proximity to UCR and CE-CERT will assist ARB in expanding its goals of promoting public health, reducing harmful air pollutants, and creating innovative policies based on the best available scientific information, while strengthening the state's economy.

The University Research Park in the City of Riverside has been producing cutting edge, breakthrough research and innovation for decades. The premier tenant of this park is UCR's CE-CERT facility. Here, the County controls 7.47 acres of land that is ideally suited for ARB's use. An additional 11.47 acres are available adjacent to the County-owned parcels. Located within a mile of the proposed site, CE-CERT has a large-scale, broad-based, integrated research operation concentrating on:

- Emissions measurement, analysis, and control
- Advanced vehicle technologies



Work inside mobile emissions laboratory

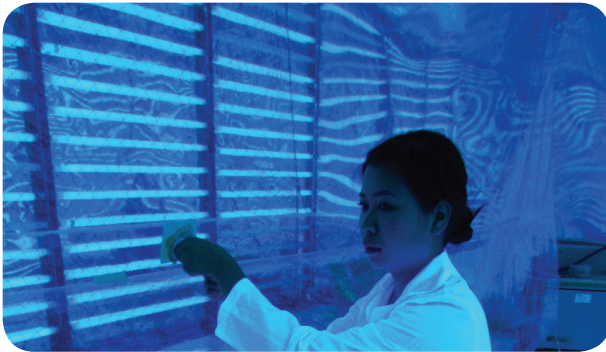
- Transportation systems
- Smart grid research
- Renewable energy

CE-CERT is well recognized for its Sustainable Integrated Grid Initiative (SIGI) project. Located on site, it is the largest renewable energy project of its kind in the state. The utility-scale facility has been built specifically to research the integration of intermittent renewable energy, energy storage, and all types of electric and hybrid electric vehicles. The SIGI testbed puts UCR at the forefront of smart grid and electric vehicle research, providing a unique platform for engineers and utilities to identify and solve potential problems at scale. The newly relocated ARB facilities would have access to the Sustainable Integrated Grid Initiative testbed in Riverside.

Additionally, ARB’s facility and equipment costs can be reduced by tens of millions of dollars by making use of existing facilities and laboratories available at CE-CERT, as shown below:

**ATMOSPHERIC CHAMBER
AND TESTING**

(\$10 MILLION) The Only One Of Its Kind



**HEAVY DUTY CHASSIS DYNAMOMETER
AND TESTING LABORATORY**

(\$2.5 MILLION)



**HEAVY DUTY ENGINE DYNAMOMETER
AND TESTING LABORATORY**

(\$2 MILLION)



**LIGHT DUTY VEHICLE CHASSIS
DYNAMOMETER & TESTING LABORATORY**

(\$1.5 MILLION)



**MOTOR TESTING AND EFFICIENCY
LABORATORY**

(\$500,000)



UCR CE-CERT Laboratories Available for ARB Joint Use	Approximate Capital Cost
Heavy Duty Chassis Dynamometer and Testing Laboratory	\$2,500,000
Heavy Duty Engine Dynamometer and Testing Laboratory	\$2,000,000
Light Duty Vehicle Chassis Dynamometer and Testing Laboratory	\$1,500,000
Small Engine Dynamometer and Testing Laboratory (to be built)	\$250,000
Atmospheric Chamber and Testing Laboratory	\$10,000,000
Exposure and Health Impact Assessment Laboratory (to be built)	\$1,000,000
Motor Testing and Efficiency Laboratories (small and mid-sized)	\$500,000
Motor Testing and Efficiency Laboratories (Large) (to be built)	\$800,000
Energy Efficiency Optimization & Building Use Laboratory	\$200,000
Sustainable Integrated Grid Initiative (SIGI) Testbed	\$7,000,000
GRAND TOTAL	\$25,750,000



UCR College of Engineering Center for Environmental Research & Technology Faculty and Students (CE-CERT)

The best faculty members pursue groundbreaking research and push their fields in new directions. Along with research staff, they also challenge students to take risks, ask difficult questions, and search for answers. CE-CERT has a wealth of eminent professors and researchers who daily tackle the complexity of identifying and implementing novel technologies designed to effectively deal with pollutant and greenhouse gas emissions, diversifying energy supplies, and more efficient and cleaner transportation systems.

- Akua Asa-Awuku, Ph.D.: Assistant Professor of Chemical Engineering, National Science Foundation CA-REER Award
- Matthew Barth, Ph.D.: Director of CE-CERT, Professor of Electrical Engineering
- David Cocker, Ph. D.: Professor, Chemical and Environmental Engineering, National Science Foundation Early Development CAREER Award
- Tom Durbin, Ph.D.: Research Engineer, Adjunct Professor of Chemical and Environmental Engineering
- Kent Johnson, Ph.D.: Assistant Research Engineer, Ph.D. Chemical and Environmental Engineering
- Wayne Miller, Ph.D.: Manager, Emissions & Fuels Research Laboratory
- Charles Wyman, Ph.D., MBA: Ford Motor Company Chair (CE-CERT) and Professor of Chemical and Environmental Engineering

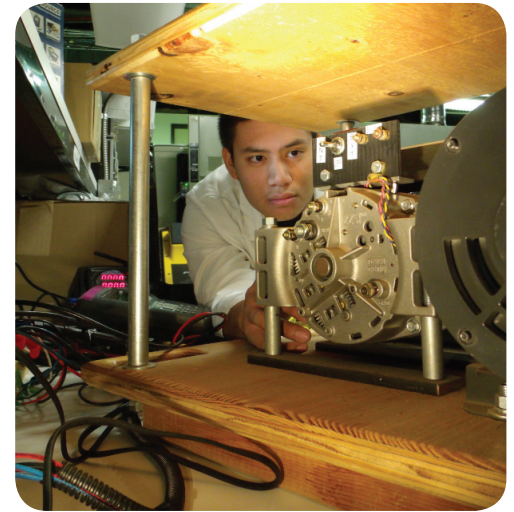
Additionally, the center is comprised of 27 faculty, 33 scientists, postdocs, and technicians, as well as 50 Ph.D. students. CE-CERT will also produce a pipeline of future employees for ARB.

As a result of great facilities and equipment, CE-CERT has received over \$37 million in grant funding from 77 agencies since 2010. Since 2003, CE-CERT has received over \$88.9 million from 177 different sponsors. Some recent examples are shown below:

Institution	Funding 2010-2015	CARB	SCAQMD	CEC	ORN Lab
CE-CERT	\$37.3M	\$6.5M	\$4.3M	\$5.9M	\$3.2M

Additional synergies with UCR and ARB can be realized:

- UCR is one of ten University of California campuses with a mission that includes Ph.D. education and research. UCR has announced a major expansion of its research activities with the goal of hiring 300 additional faculty in the next five years. Most of these faculty positions will be in the areas of science, engineering, and medicine. Several of these faculty will be recruited as part of a "cluster-hire" designed to work collaboratively on areas of environmental research and policy shared by all disciplines.
- UCR has unique academic programs and research centers. In addition to CE-CERT, the following UCR entities pursue teaching and research related to ARB areas of interest.
 - Bourns College of Engineering Research Centers:
 - Winston Chung Global Energy Center
 - Southern California Research Initiative for Solar Energy (SC-RISE)
 - School of Medicine: One research emphasis is on the health effect of air quality
 - School of Public Policy: Focuses include environmental policy, energy security, climate change and sustainable communities
 - College of Natural and Agricultural Sciences: One research emphasis is on the emission of pollutants in soil
 - Department of Earth Science: One research area is climate change from aerosols



In addition to savings from colocating, ARB can realize additional time and costs savings by reducing the scope of the ARB project as follows:

- **Immediate Opportunity**—Within 45 miles of the current El Monte location, the County owns acreage poised for development. The County acreage in conjunction with privately owned acreage offers ARB the opportunity to acquire a minimum of 16.7 acres up to 19 acres for a State Capital Project. Additionally, an office building adjacent to County owned acreage (known locally as the Surado building) is available for sale and ready to receive tenant improvements immediately. The County could acquire, improve, and lease the Surado building to ARB, thus expediting the initial phases of the relocation process. This would allow an advance team of ARB employees the opportunity to be more closely involved with the development of additional facilities. The site is located less than one mile from CE-CERT.
- **Cost and Schedule Control**— There are several options the County can provide. The primary County proposal would transfer acreage to the State. The State would plan, entitle, and construct the Project as a State Capital Project. Alternatively, the County could provide turn-key facilities that meet State's Preferred Site Option. In addition to, the County could acquire and provide an existing privately owned office building as part of the overall project for state's immediate occupancy. This provides ARB an onsite presence while the County plans, entitles and constructs the project on the acreage. Furthermore, the County could plan, entitle, and construct the project on the acreage, excluding the existing office building. The County has successfully implemented this type of arrangement in the past with both the State of California and the Federal Government. In this scenario, the parties would execute a long term lease. The lease would serve as security for the project financing and the project costs would be reimbursed to the County through lease payments thus alleviating the reliance on debt financing. The lease would also provide an option for ARB to purchase the facility at specified intervals. Examples of previous turn-key projects include the State of California Court of Appeals, the U.S. District Court and the U.S. Bankruptcy Court located in downtown Riverside. All are still owned and operated by the County for the benefit of the courts. The proposed site for ARB's relocation in this scenario requires no remediation.



- LEED Experience**—The County project team has extensive relevant experience enabling it to meet the State’s LEED Platinum requirement. The County has LEED experience and recently opened a LEED Platinum facility Indio – four months early and \$2 million under budget -- through a public-private partnership. LEED certification in all County-constructed facilities has been mandated since 2009 by the Board of Supervisors Policy H-29 (Sustainable Building Policy). The County also boasts the only known LEED Gold Sheriff Station. For the ARB turn-key facilities, the County is targeting the LEED Platinum level, subject to mutual agreement with ARB. Additionally, the County is currently under construction for 12.25 MW of PV solar systems. When completed, this project will place the county as the top county in the nation with the highest installed solar generating capacity on county property.



Riverside County's first LEED Platinum facility

- Economic Development Potential**—Land and buildings are available in nearby industrial and commercial areas that would be available to commercial companies (e.g. automobile manufacturers) that want or need to work with ARB.

Furthermore, additional operational and other cost savings can be realized by locating in the City of Riverside. The City, designated as an “Emerald City” has received many awards. Voted one of the world’s most “Livable Communities” in 2010, the City was recently rated the “Most Intelligent Community in the World” (Intelligent Community Forum). The City offers additional savings as follows:

- Operational Cost Reductions**—Because the City of Riverside has its own municipal utility (RPU), electricity and water rates are much lower than the rates of investor owned utilities. Based on electric consumption figures previously provided by ARB for the existing ARB facility in El Monte, RPU has estimated that a similar facility with similar operating hours located within RPU’s service territory would save approximately \$275,000 per year in electricity costs. If ARB is able to take advantage of RPU’s current rates and programs such as the new construction energy efficiency rebate program, custom energy technology grant, and commercial photovoltaic incentive program, the estimated total incentive package from RPU is approximately \$610,000 in the first year of facility operation.



RPU's Natural Gas Peaker Plant

- Proximity** - Riverside is centrally located in Southern California. This provides ARB and its constituents with better



A new Metrolink station is under construction at the CE-CERT campus where ARB facilities would be co-located

access. The proposed location will position ARB at the apex of three major arterial freeways. This can lead to increased opportunities for partnership and technology exchange on research projects. Furthermore, a new training station is under construction directly behind CE-CERT which is within 0.5 of a mile from the proposed site. This station will connect commuters to both the downtown Riverside and San Bernardino Metrolink stations.

- **Existing Conference & Meeting Space**

Riverside offers numerous modern facilities for conferences and meetings either on site or in close proximity to future ARB facilities:

- **Riverside Convention Center**

Set among the Spanish Revival architecture of historic downtown Riverside, the new convention center offers more than 20 meeting rooms with over 66,000 square feet of flexible space, and can accommodate groups ranging from 25 to 3,000 for conventions, meetings, tradeshows, competitions, and weddings. The multi-million dollar center also features sustainable design that boasts high-efficiency LED lighting, occupant sensors for energy management, recycled materials and drought-tolerant landscaping. Healthy food service is also offered by the convention center, planned in partnership with Loma Linda University.



Convention Center is newly remodeled with modern amenities and seating for up to 3,000

- **Bourns Conference Room and Classroom**

The Bourns conference room located at the CE-CERT facility is a state-of-the-art venue with built in AV technology, capacity for hosting 750 people, free parking, sponsor booths, and multi-sided classrooms for breakout sessions or other activities. CE-CERT is well-versed in facilitating these conferences, from training the workforce to technical conferences. A unique conference offered and facilitated by CE-CERT is the recent Portable Emissions Measurement Systems (PEMS) workshop on March 26-27, 2015.



New state-of-the-art conference room seats 750, located on CE-CERT campus

- **Riverside County Board of Supervisors Board Chambers**

Located at the County Administrative Center in downtown Riverside, the County would be glad to host ARB meetings in the Board Chambers. The facility provides ample seating and parking for the public and a modern meeting chamber with the most current audio/visual equipment. The board room has a seating capacity of 270. The dais also seats 30, so it should be able to accommodate the entire ARB Board.



Riverside County Board of Supervisors Chamber

Summary Statement:

Selecting Riverside will provide many benefits for ARB, its employees, and the constituents of California. The examples listed above demonstrate the breadth of possibilities ARB would realize immediately through fiscal efficiencies, as well as benefits extending far into the future. These benefits include expanding ARB's ability to provide cost effective, innovative approaches for complying with air pollution rules and regulation, based on the best possible scientific and economic information. Riverside is the best location to support ARB's continued leadership in air quality standards and policies benefiting all of California.

III. PROPOSED SITE/ OPTIONS

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Proposed Site/Options

The County is offering a Primary Proposal with two alternatives. In the Primary Proposal, the County transfers the acreage (16.70 acres) to the State, and the State plans, entitles and constructs the Project as a State Capital Project.

In Alternative One, the County acquires and provides an existing free-standing, two level Class “A” 35,776 SF office building as part of the overall project for state’s immediate occupancy. The acreage (19.04 acres) and the office building are conveniently located within 0.5 mile from UC, Riverside’s Center for Environmental Research and Technology facility (CE-CERT). The office building boasts state-of-the-art design

and construction, with fantastic 360° views of Box Springs Mountain Park and the Riverside area. This provides ARB an onsite presence while the County plans, entitles and constructs the project on the acreage based on the State’s Preferred Site Option.

In Alternative Two, the County plans, entitles, and constructs the project on the acreage (16.70 acres) based on the State’s Preferred Site Option, excluding the existing office building. The turn-key construction has the potential to achieve Leadership in Energy and Environmental Design (LEED) points and certification. Riverside County has previously built LEED facilities at all levels including Platinum. For both Alternatives, the County is targeting the LEED Platinum level for the turn-key facilities, subject to mutual agreement with ARB. There may be opportunities for small wind

generation on the site in addition to solar generation. According to the California Office of Environmental Health Hazard Assessment CalEnviroScreen 2.0 tool, the proposed site falls within the 71-80% pollution burden index.

The proposed site location is nestled within the prestigious University Research Park area of Riverside and is located 45 miles from ARB’s current location. The University Research Park (URP) is a hub which has been developed through a partnership between the city and county of Riverside and UC Riverside for emerging and rising science and technology businesses. Land use zoning for the URP area supports office space, test facilities, and the ability to store fuels and hazardous waste. According to the Federal Emergency Management Agency’s 100-year flood zone map, the proposed facility is located outside a 100-year flood zone. There are utilities on site for immediate utilization by the Surado building, as well as nearby. University Research Park’s surface roads are currently being utilized by fully-loaded semi-trucks, buses, and light and medium-duty vehicles. There is excellent ingress/egress in URP, and the new site location can be built to satisfy any additional ingress/egress requirements by ARB. Furthermore, the proposed site is situated more than 500 feet from a heavily trafficked roadway, and more than 1000 feet from a rail yard and distribution center.





*Hunter Park Metrolink Station
currently under construction*

The proposed site is commuter friendly with good access to the 91/60/215 interchange. A new Perris Valley Line-Hunter Park Metrolink stop is expected to open by end of 2015, and is adjacent to CE-CERT. The Perris Valley Metrolink Line will offer greater access to the University Research Park area. Additionally, there are designated bicycle paths and two bus stops located within a mile of the new facility. Beginning Fall 2015, an electric trolley will provide service from CE-CERT to UCR's main campus (every 20 minutes, 5:00 am to 9:00 am) as well as downtown Riverside. Furthermore, the City of Riverside's Corporation Yard offers alternative fueling

options for natural gas and hydrogen. The hydrogen fueling station proposed opening date is October 2015.

The City of Riverside offers a rare blend of historical charm with a commitment to green and sustainable living. The city is home to 51 parks, 14 community centers, and 7 pools. Riverside offers year round sports, senior activities, kid's activities, skating, boating, hiking, biking, golf, botanic gardens, and even model trains. Housing in El Monte is 124% more expensive than housing in Riverside (median value of owner-occupied housing units, 2007-2011 Census). Riverside's cost of living is 17% less than El Monte (Sperling's Best Places). In addition to being less expensive, Riverside has 26 unique neighborhoods and a diverse housing stock ranging from brand new to historic, from traditional craftsman to downtown condos, from starter homes to large estates. Moreover, the Riverside area offers a lower population density compared to El Monte (2010 Census).

An affordable housing development is currently under construction within 1.5 miles of the proposed site. Additionally, future retail development is planned for a parcel that is 0.5 miles from the proposed site. Within 4 miles of the proposed location is University Neighborhood. This neighborhood offers a unique mix of amenities including eateries, entertainment, child care facilities, gyms, and UCR's main campus. Home ownership is high in the University Neighborhood, with a large residential neighborhood that occupies a quarter of this region. Crime in the University Neighborhood including UCR's campus is low. The number of total crimes, year over year, in the City of Riverside at large has decreased by 3%.

Location Map



IV. TERM SHEET

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Term Sheet

Air Resources Board Emissions Testing Facility

Thank you for considering Riverside County as the ideal potential location for the Air Resources Board's (ARB) emissions testing facilities.

The County of Riverside is hereby responding to the Request For Information (RFI) by providing information on properties available which meet the project criteria and satisfy the requirements of the proposed Air Resources Board Southern California Consolidation Project (Project). The properties available are located within the Hunter Park area of the City of Riverside, and also within the University of California Riverside's Research Park. University Research Park is a research park which has been producing world class technological breakthroughs for more than two decades. Allowable uses include a full range of purposes to meet ARB needs: office projects, R & D laboratories, pilot plants, and other technology-related uses as provided for under the Business and Manufacturing Park (BMP) zoning.

The County hereby provides a Primary Proposal with two alternatives. In the Primary Proposal, the County transfers the acreage to the State, and the State plans, entitles and constructs the Project as a State Capital Project. In Alternative One, the County acquires and/or leases and provides an existing privately owned office building as part of the overall project for state's immediate occupancy. This provides ARB an onsite presence while the County plans, entitles and constructs the project on the acreage based on the State's Preferred Site Option. In Alternative Two, the County plans, entitles, and constructs the project on the acreage based on the State's Preferred Site Option, excluding the existing office building.

Although the primary proposal and alternatives are provided, it should be stated that the County is open to other alternatives and deal structures as the State may deem necessary.

The County will provide a minimum of 16.7 acres for the Project made up of separate parcels. The County has the ability, however, to provide up to 19 acres for the Project. Of this, approximately 7.47 acres are currently owned by the County of Riverside and the other parcels are privately owned. If selected, County will initiate the process to acquire the privately owned parcels to attain the total acreage desired to support the California Department of General Services (DGS) capital design build project.

The vacant land is consistent with the statutory requirements of California Assembly Bill 857 and the Governor's Office of Planning and Research--Environmental Goals and Policy Report. The vacant land use zoning promotes the efficient development of existing infrastructure in an area appropriately planned for growth, and it is served by adequate transportation and services. The proposed project site helps preserve the state's natural resources, while supporting the development of healthy and sustainable communities. The project site provides the opportunity for collaboration efforts through the colocation near existing research and technology infrastructure at UCR's College of Engineering Center for Environmental Research and Technology. With the colocation near an academic institution, the proposed site will offer fiscal efficiencies while minimizing cost to taxpayers.

The County is also prepared to provide turn-key facilities. In this scenario, the Parties will execute a long term ground lease and facilities lease, after which the County will plan, entitle, construct and finance the Project in accordance with ARB's needs and requirements. The project costs would then be reimbursed to the County through the lease payments from ARB to the County. This project option affords the State the opportunity for pay-as-you-go spending rather than reliance on debt financing.

The County hereby provides the requested property information and basic terms as set forth below and also as set forth in the attached Site Characteristics/Criteria Matrix, see pp. 86-88.

1. **Parties:** The County of Riverside, a political subdivision of the state of California, as County, and the State of California Department of General Services on behalf of ARB.

County of Riverside Contact: Mr. Steve Gilbert, EDA Development Manager
951.955.4824 (o) sdgilbert@rivcoeda.org

2. **Site:** The County provides a primary proposal with two alternatives:

Primary Proposal - Land Only. The Primary Proposal provides land of approximately 16.7 acres. In this proposal, the County will transfer title of the land to the State (See attached Primary Proposal Site Plan, page 79). It is contemplated that the consideration for this transaction would be nonmonetary. The State will then plan, entitle and construct the Project as a State Capital Project. County will act to assist State in any manner necessary to facilitate the development of the State Capital Project consistent with Project guidelines. This will include, but is not limited to supporting the Project by:

- Acquiring the property including but not limited to due diligence, site investigations, environmental and appraisal process.
- Managing the CEQA process, including partnering and lobbying with the applicable local jurisdiction and other applicable agencies to obtain CEQA approvals necessary for the project.
- Marketing the project to the local business community and the public to raise awareness.
- Creating flexible real estate agreement timelines, providing for successful acquisition by the State of the property.
- Interacting with the local jurisdiction for successful Fire Department planning, construction inspections, and final approvals, as well as any other applicable jurisdictions.

Proposal Parcels.

The Proposal Parcels are as follows:

<u>Ownership</u>	<u>Acreage</u>	<u>APN</u>
County of Riverside/RDA	3.15 Acres	257-030-012
County of Riverside/RDA	4.32 Acres	257-030-014
Privately Owned	3.99 Acres	257-030-016
Privately Owned	3.94 Acres	257-030-042
Privately Owned	<u>1.30 Acres</u>	257-060-002
Total Acreage	16.70 Acres	

Alternative One - County Turn-Key Facilities & Existing Building. Alternative One consists of 19 acres and includes an existing two level office building of approximately 35,776 square feet on a 2.34 acre parcel as part of the overall project. The County will acquire and improve the building to suit ARB and provide immediate occupancy if desired while the remainder of the project is constructed. The balance of the Project will then be planned and constructed by the county on five additional parcels based on the program square footage requirements for the Preferred Site Option. The County will construct an additional office building of approximately 36,926 square feet to meet the total office and shared facilities requirement of 72,702 square feet in the final Project (See attached Alternative One Site Plan, page 80).

Alternative One Parcels. The Alternative One Parcels are as follows:

<u>Ownership</u>	<u>Acreage</u>	<u>APN</u>
County of Riverside/RDA	3.15 Acres	257-030-012
County of Riverside/RDA	4.32 Acres	257-030-014
Privately Owned	3.99 Acres	257-030-016
Privately Owned	3.94 Acres	257-030-042
Privately Owned	1.30 Acres	257-060-002
Privately Owned	<u>2.34 Acres</u>	257-030-013
Total Acreage	19.04 Acres	

As stated, Alternative One includes an existing two level office building of 35,776 square feet. Of this, approximately 10,000 square feet of the building is improved and the balance is shell space. The building was built in 2008 and is concrete tilt up construction with an elevator. County will provide improvements to the building to suit ARB’s requirements. The parking ratio is 4:1. (See attached Building Listing Sheet)

It should be noted that the County is including this building in Alternative One as part of the final project. However, if ARB desires, the County will improve the building for occupancy by ARB on a temporary basis while the full project is constructed in accordance with Alternative Two below. The County is open to various other options as ARB may propose for this building on a sale or lease basis and would also consider incorporation of this building into the Primary Proposal.

Alternative Two - County Turn-Key Facilities. Alternative Two consists of 16.7 acres and excludes the existing office building parcel in the final project and provides for a completely new development based on the square footage requirements for the Preferred Site Option (See Alternative Two Site Plan, page 81).

Alternative Two Parcels. The Alternative Two Parcels are as follows:

<u>Ownership</u>	<u>Acreage</u>	<u>APN</u>
County of Riverside/RDA	3.15 Acres	257-030-012
County of Riverside/RDA	4.32 Acres	257-030-014
Privately Owned	3.99 Acres	257-030-016
Privately Owned	3.94 Acres	257-030-042
Privately Owned	<u>1.30 Acres</u>	257-060-002
Total Acreage	16.70	

3. Property Information:

- Zoning. The zoning for the parcels is BMP, the Business and Manufacturing Park Zone, city of Riverside, providing for office projects, R&D laboratories, pilot projects, light manufacturing, and other technology-related uses.
- Preliminary Title Reports. See attached preliminary title reports for each parcel listed above, pp. 89-152.
- CC&R’s. See attached Research Tech Park CC&R’s, pp. 153-187. Although CC&R’s are referenced in the title reports, they are expired and will be removed from title.

4. Project Planning, Entitlement, Construction and Financing: For Alternatives One and Two, the County will plan, entitle, construct, and finance the turn-key Project. The Project financing shall be through a County public bond offering in which the total Project costs including capitalized interest and the cost of financing (including costs of issuance of the bond) shall be included in the total offering. This will be an open book transparent process to provide the ARB a complete understanding of all costs. A construction management fee of five (5%) of the total project costs shall be paid to County by ARB through the bond offering for County’s work in planning, entitling, and constructing the project. The site plans presented for the Primary Proposal and Alternatives One and Two are concepts only. The County is open to modifications by the State to achieve the desired result.

The Estimated County Cost to plan, entitle, and construct these facilities is as follows:

<u>Program Area</u>	<u>Sq. Ft.</u>	<u>County Cost/SF</u>	<u>Estimated Cost</u>
Light-Duty Testing	91,171	\$287	\$26,166,077
Heavy Duty Testing	62,316	\$287	\$17,884,692
PEMS	6,683	\$329	\$ 2,198,707
Chemistry Laboratory	48,016	\$694	\$33,323,104
Offices and Shared Space	72,702	\$591	\$42,966,882
Administrative Services	18,365	\$591	\$10,853,715
Parking Structure	184,000	\$63	\$11,592,000
Sitework	829,382	\$4.22	<u>\$ 3,500,000</u>
Total			\$148,485,177

As a comparison, the State is forecasting a total of \$189,191,000 as the estimated construction cost. This represents a net savings to the State of California of over \$40,705,823. The estimated time frame to complete this project is three and one-half years.

Riverside County maintains a progressive Sustainable Building Policy and routinely constructs buildings meeting LEED standards. Most recently, the County opened a LEED Platinum building in Indio, delivered on time and under budget through a public-private partnership. For the ARB turn-key facilities the County is targeting the LEED Platinum level, subject to mutual agreement with ARB. By 2016, Riverside County will also lead all counties in the nation with the highest power generating capacity of solar PV facilities located on county property.

5. Real Estate Agreements:

Primary Proposal

Purchase and Sale Agreement. The Parties shall enter into a Purchase and Sale Agreement to facilitate the transfer of the acreage from the County to the State. In the event ARB desires to acquire, lease, or lease with purchase option the existing office building, the parties shall enter into a separate Purchase and Sale agreement or Lease, or, Lease with Option to Purchase Agreement. The price and terms of the building are set forth on the attached Building Data Sheet and are negotiable.

Alternative One and Two Agreements

- **Ground Lease.** The Parties shall execute a Ground lease for a term of 30 years on the property.

Consideration for the Ground Lease shall include a nominal rental payment as well as nonmonetary consideration. The Ground Lease agreement shall provide for subsequent options to renew which shall be negotiated between the Parties prior to execution of the Ground Lease.

- **Facilities Lease.** The Parties shall execute a Facilities Lease for a term of 30 years which shall provide that the County plan, entitle, construct and finance the Project through a public bond offering. The term of the bond shall be for a period of thirty (30) years. The monthly rent payable by ARB shall equate to the monthly bond payments plus a fee of one half of one percent of each bond payment to County for County's services in administering the Ground and Facilities leases. The Facilities Lease agreement shall provide for rental adjustments during the term and subsequent options to renew which shall be negotiated between the Parties prior to execution of the Facilities Lease.

6. Operating Expenses: Lessee shall be responsible for all Operating Expenses on the property including maintenance, janitorial, utilities and all direct and indirect expenses during the Facilities Lease Term and any subsequent term extensions. Any additional improvements requested by Lessee shall be at Lessee's sole cost and expense.

7. Purchase Option: The Facilities Lease shall provide that ARB shall have the option to purchase the property annually based on the unamortized balance of the bond. At the end of thirty (30) years, in the event ARB has not elected to purchase the property, and the bond is paid in full, title of the property shall be transferred to the State of California.

V. CE-CERT & UC RIVERSIDE

Unique CE-CERT facilities that can enhance efficiency and effectiveness of ARB capabilities





Heavy Duty Chassis Dynamometer and Testing Laboratory

This high performance, 48” Electric Chassis Dynamometer has Dual Direct Connected, 300 HP AC Motors individually attached to each roll set. The dynamometer is capable of simulating exacting road load & inertia forces to a vehicle operating over a range of driving conditions including highway cruise and urban driving and can continuously absorb/motor loads in excess of 600 HP from 45 to 80 mph and intermittently absorb/motor loads in the range of 1,200 HP. The dynamometer is able perform vehicle inertia simulation

across a vehicle weight range of 10,000 to 80,000 lbs. CE-CERT’s Mobile Emissions Laboratory (MEL) is used directly in conjunction with this facility for certification-type emissions measurements.

Heavy Duty Engine Dynamometer and Testing Laboratory

CE-CERT’s Heavy-Duty Engine Dynamometer Test Facility is designed for a variety of applications including verification of diesel aftertreatment devices, certification of alternative diesel fuels, and fundamental research in diesel emissions and advanced diesel technologies. The engine dynamometer facility components were provided as a turnkey system by Dyne Systems of Wisconsin. CE-CERT’s Mobile Emissions Laboratory (MEL) is used directly in conjunction with this facility for certification type emissions measurements. The facility is recognized by ARB for conducting engine dynamometer testing, and has been the cornerstone of ARB’s recent study of biodiesel as part of the Low Carbon Fuel Standard (LCSF).



Light Duty Vehicle Chassis Dynamometer and Testing Laboratory

The Vehicle Emissions Research Laboratory (VERL) at CE-CERT is a state-of-the-art laboratory for measuring exhaust emissions under conditions that are representative of real-world driving conditions. An advanced 48-inch electric chassis dynamometer capable of simulating dynamic, high-speed accelerations and decelerations is a key component of the laboratory. The facility also contains separate dilution tunnels for sampling gasoline and diesel exhaust, an analytical system for sampling both regulated and unregulated gaseous emissions, and a particulate collection system. It is equipped with a Fourier Transform Infrared (FTIR) analytical system to quantify thirty low-level and toxic compounds in vehicle exhaust, including N₂O and NH₃.

Atmospheric Chamber and Testing

This is the world's largest and most accurate chamber for conducting air pollution measurements and understanding how smog and cancer-causing particles form in the atmosphere. The laboratory enables the following research activities:

- Studying the role of secondary organic aerosol (SOA) formation from various sources such as natural gas, gasoline, and diesel combustion.
- Developing mechanisms for predictions of SOA on PM formation in the atmosphere and the role in atmospheric warming.
- Studying the impact of SOA, brown and black ARBon on the formation of aerosol droplets and cloud formation

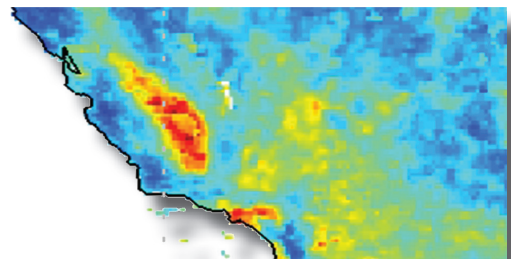


Sustainable Integrated Grid Testbed

This is a unique integrated renewable energy system which couples energy generation, storage, smart grid protocols, and electric transportation, allowing for students and researchers to develop improved energy systems for the future. The system incorporates 4 MW of photovoltaics, 2 MW of energy storage, smart-grid protocols, and a 20 unit city-wide electric transportation system.

Air Pollution Modeling Tools

The SAPRC mechanism developed by Dr. William Carter on how quickly smog forms in the atmosphere is the basis of a prime mechanism still being used today throughout the world to model ozone and particulate matter. The Regional Atmospheric Chemistry Mechanism, Version 2 (Goliff et al, 2013) is a research-grade mechanism that was recently implemented into the Community Multi-scale Air Quality (CMAQ) modeling system. Other modeling tools at CE-CERT include the Weather Research and Forecasting (WRF) Model, the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System and the Comprehensive Air Quality Model with Extensions (CAMx).



Other modeling tools at CE-CERT include the Weather Research and Forecasting (WRF) Model, the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System and the Comprehensive Air Quality Model with Extensions (CAMx).

Biofuels Pre-Treatment Technology & Commercialization

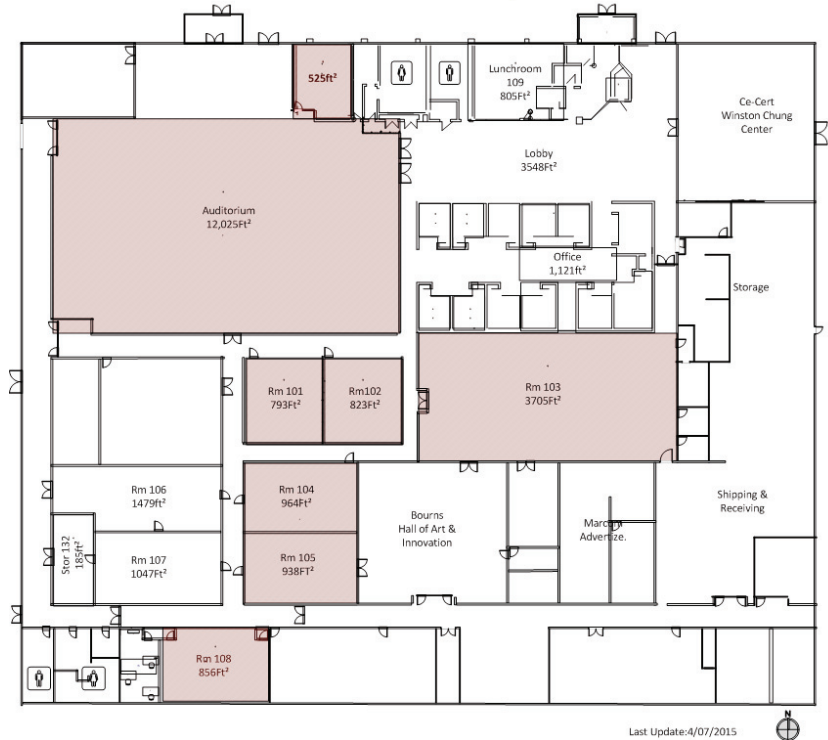
Dr. Wyman developed a novel lignocellulosic biomass pretreatment technology called CELF or 'co-solvent

enhanced lignocellulosic fractionation that can efficiently remove and extract over 90% of the lignin fraction from multiple agricultural and woody feedstocks with relatively low temperature and short contact times. CELF enhances both biological and catalytic pathways from all biomass types to fuels and is an easy process to scale because it involves only one fluid phase and applies homogeneous catalysis on the biomass.

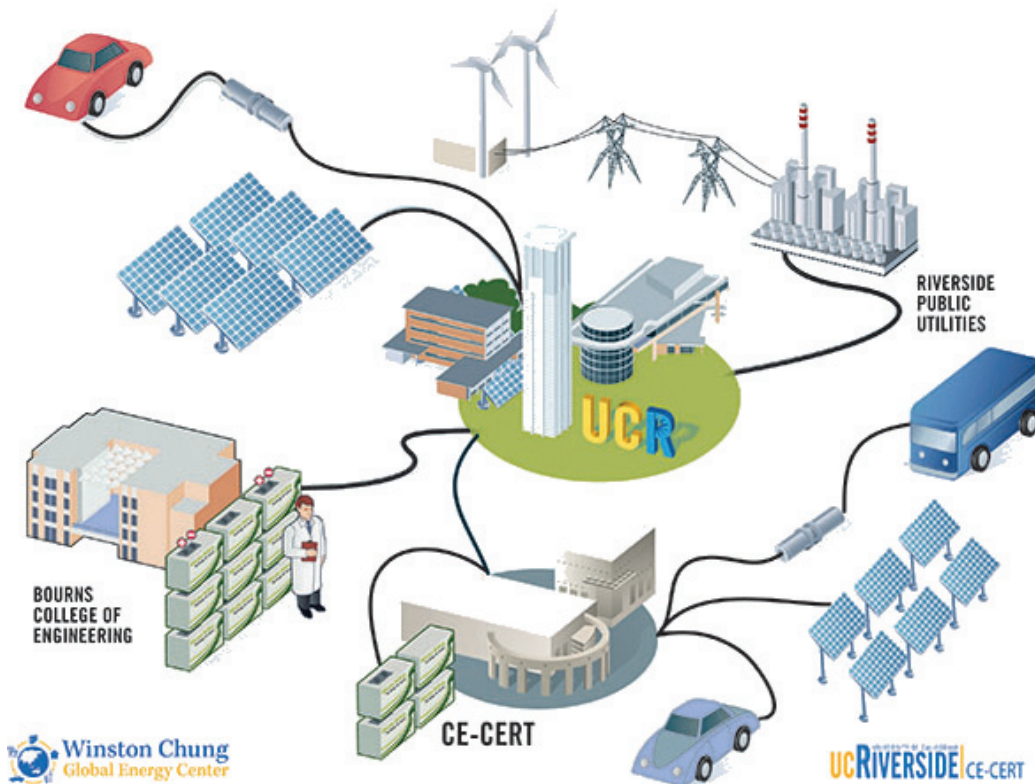
Bourns Conference Room & Classrooms

The Bourns conference room, located at the CE-CERT facility, is a state of the art venue with built in AV capabilities, capacity for 750 people, free parking, sponsor booths, and available multi-sided classrooms for breakout sessions or other activities. CE-CERT is well-versed in facilitating these conferences, from training the workforce to technical conferences.

Bourns Technology Center
1200 Columbia Ave. Riverside, Ca. 92507



The SIGI Facility



“The SIGI testbed puts UCR at the forefront of smart grid and electric vehicle research, providing a unique platform for engineers and utilities to identify and solve potential problems at scale.”

Matthew Barth, lead investigator of the initiative and director of UCR CE-CERT

The Sustainable Integrated Grid Initiative (SIGI), located at the University of California, Riverside, CE-CERT, is the largest renewable energy project of its kind in the state. The utility-scale facility has been built specifically to research the integration of intermittent renewable energy, energy storage, and all types of electric and hybrid

electric vehicles. The SIGI facility is designed to achieve the following objectives:

- Provide a unique research platform for scientists and utility companies to identify and solve potential energy problems at scale, accelerating successful integration of renewable generation technologies and saving untold future dollars.
- Promote collaborative projects that highlight the long-standing collaboration between academia, industry and the regulatory community.

Research Goals

The system will provide the UC Riverside with renewable energy while serving as a platform to learn how new technologies can be applied in the real-world. Specific research goals are to:

- Integrate utility scale renewable energy, energy storage, and EV charging
- Demonstrate the functionality of Smart Grid protocols
- Provide EV charging demand without increased grid loads
- Provide real world Smart Grid test-bed platform for emerging technologies
- Evaluate efficiency of energy storage in various settings
- Evaluate power quality issues
- Demonstrate battery electric bus transit operating in the Riverside community

The SIGI research agenda is established in part by a consortium that encompasses many agencies and disciplines. Current consortium members include technology companies, utility companies, and energy and air quality agencies.

Policy Relevance

On average, California derives two-thirds of its electricity from fossil fuels such as coal and natural gas, and the majority of vehicles in the state are powered by imported oil. Introducing renewable electricity generation and electric vehicle technologies such as plug-in hybrids are two key priorities in California's strategy to move toward domestic energy diversity and to meet air quality and greenhouse gas goals.

To meet these priorities utility providers need to ensure that bringing a significant number of fast charging electric vehicles onto the existing grid system will not impact the local electricity demand and reliability. A key component of the UC Riverside project is to demonstrate that electric vehicles can be seamlessly introduced into the existing grid system through "smart integration" of renewable energy, storage and advanced dispatch controls.

Helping to Achieve UC's Goal of Net Zero

The project is one step by UC Riverside to meet the University of California's President's Initiative to make the University of California ARBon neutral by 2025:

University of California President's Initiative:

The First Research University to Achieve ARBon Neutrality

The University of California is a national leader in sustainability and effective actions to reduce greenhouse gases to mitigate climate change. The University galvanized its position for environmental stewardship in 2007 when all ten Chancellors became signatories to the American College & Universities Presidents' Climate Commitment. To reach our next goal, which is to bring the University to ARBon-neutrality in its operations by 2025, we will need to take bold efforts to change the fundamental profile of our energy sources.

SIGI Components

Key components of the facility are described on the following pages, along with examples of the capability of the integrated testbed. Major components consist of:

- Solar Generation Systems
- Storage Systems
- Electric and Hybrid Electric Transportation
- Electric Vehicle Chargers
- Energy Monitoring and System Integration



500 KW Solar Carport

SOLAR GENERATION SYSTEMS

500 KW Solar Carport and Inverter System

This solar system is used to generate power to supply the grid, various buildings, or a battery bank depending on how it's configured.

- Provide a platform for determining PV and inverter efficiency
- Provide generation to battery system for grid integration
- See: http://live.deckmonitoring.com/?id=uc_riverside%20
- Location: CE-CERT, Riverside, CA

3.5 MW Solar System

The Solar Farm covers 11 acres of UCR campus lands with an estimated generation of 6.6 million kWh of annual output from its single axis tracking system. Operational September 2014.

- 100% of the electricity generated will be used on campus
- Providing 3.5% of annual electricity consumption
- Location: University of California, Riverside, Main Campus



Solar Farm Aerial View



Solar Tracking System

Solar Tracker Systems

Multiple solar tracking systems are being developed and tested as part of the efficiency research.

- Tracking software development and efficiency measurement
- https://www.youtube.com/watch?v=G1b4ak_jrXY
- Location: Laboratory Scale Portable Test Units at CE-CERT, Riverside, CA

STORAGE SYSTEMS

1 MW Stationary Battery System

The 480V 3-phase system of Li-ion batteries store electricity from the grid for distribution to two floors of the Bourns College of Engineering during periods when there is high demand to the building.

- Battery research of daily cycling
- Load leveling demonstrations
- Testing of advanced Battery Management Systems (BMS)
- Location: Winston Chung Hall, University of California, Riverside



1MW Stationary Battery



0.5MW Stationary Battery

0.5 MW Stationary Battery System

The batteries store solar energy for distribution during periods when there is insufficient solar power generation to provide the building.

- State-of-charge (SOC) estimation
- Characterize the voltage and capacity performance
- Research various balancing methods
- Location: CE-CERT, Riverside, CA

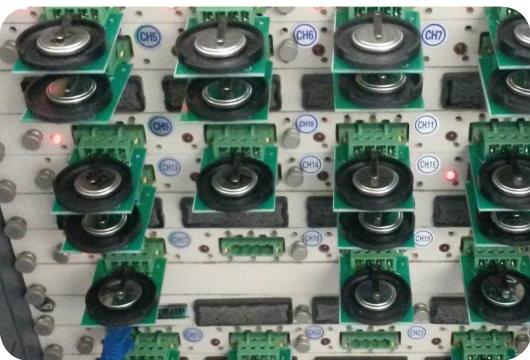


0.5MW Mobile Battery System

0.5 MW Mobile Battery System

The trailer is equipped with Li-ion batteries and an inverter for storing and distributing electricity to a specific grid at specific times of day.

- Load leveling
- System Performance and Integration
- Niche Applications
- Location: Can be located anywhere. Currently at CE-CERT, Riverside



2-40 Channel Coin Cell ArbinSystem

2- 40 Channel Coin Cell Arbin battery test systems

Li-ion, lion-sulfur, and other batteries can be extensively tested on these systems.

- Electrochemical characterization by carrying out CV profiles
- Galvanostatic charge/discharge profiles
- Cycling performance at various current rates
- Can locate anywhere. Currently at CE-CERT, Riverside, CA

Smart Charge and Discharge Cycling

Via CAN-bus communication link with the BMS, 16 resistors are utilized as a discharge load bank. Three sets of six 0.12 Ohm are connected in parallel, with each resistor dissipating 300W of power. With a 9 battery pack, the load pulls an average of 100A, and takes typically 12 hours to discharge a 32kwh pack. 4 cooling fans work to mitigate the increase in resistance as power dissipation causes an increase in temperature.

- Location: CE-CERT, Riverside, CA

Thermal Energy Storage (TES) systems

Two TES tanks with a combined capacity of 4.6 million gallons allows for the accumulation and storage of chilled water that is used to cool the campus's academic buildings during peak energy-use hours.

- Peak shaving demonstrations at municipal utility scales (10 MW)
- Development of a performance-based rate making
- Location: UCR main campus, Riverside, CA



UCR Thermal Energy Storage (TES) Tanks

ELECTRIC AND HYBRID ELECTRIC TRANSPORTATION

Electric Trolley

This trolley was converted from a diesel engine to an electric drivetrain. The electric trolley will service UCR and downtown Riverside beginning Fall 2014.

- Demonstration of battery and vehicle performance in real-world electric transport situations
- Operates throughout Riverside; Charging location: CE-CERT, Riverside, CA



Electric Trolley



Hybrid & Electric Vehicle Chargers

Hybrid and Electric Vehicles (Operates throughout Southern CA; Charging location: CE-CERT, Riverside, CA)
All types of EV and HEVs -- from neighborhood vehicles to port trucks -- are researched at CE-CERT, where they become part of the testbed along with other local HEV/EV drivers.

- Demonstration of vehicles in real-world situations
- Optimization of Eco-driving strategies with electric drive
- Vehicle to grid applications

ELECTRIC VEHICLE CHARGERS

Level-2 Chargers (26)

Placed all throughout the city of Riverside, the chargers will service fleet and private vehicles.

- Impact of use on grid
- User behavior
- Vehicle to grid impacts
- Functionality of various chargers and charger software
- Public Access throughout Riverside, CA



Level 2 Charger

Level-3 Chargers

Chargers will be installed in the Fall of 2014 and service the electric trolley and other fast charging vehicles.

- Impact of use on grid
- User behavior
- Vehicle to grid impacts
- Functionality of various chargers and charger software
- Public Access at CE-CERT, Riverside, CA



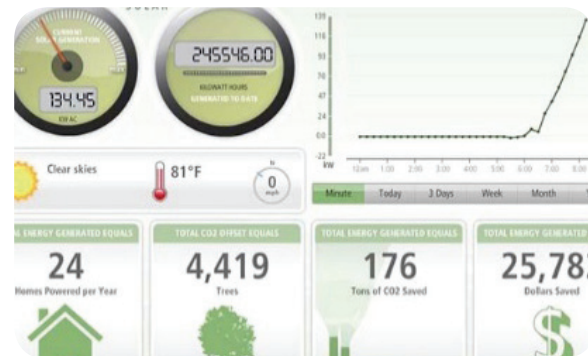
Level 3 Charger

ENERGY MONITORING AND INTEGRATION

System Integration Software

Adapted by UC Riverside engineering students to ensure energy grid stability, reliability and efficiency, this system tracks real time power production from the solar systems.

- Implementation, reporting and analysis
- Works with supervisory control and optimal operation
- Location: CE-CERT, Riverside, CA and via internet

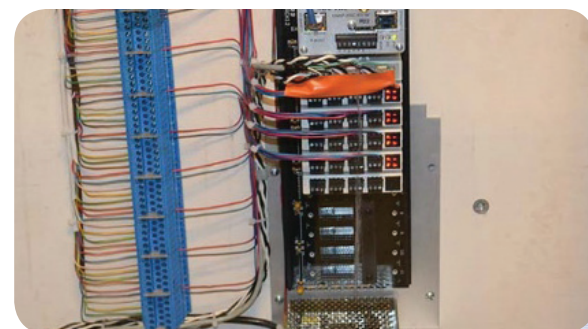


Energy Monitoring and Integration Software

Building Energy Management System

This system, currently installed in a laboratory research building and an office building, allows researchers to curtail electricity usage at predetermined setpoints.

- Energy use reduction
- Demand management and load shifting
- Peak demand redirection strategies
- Location: CE-CERT, Riverside, CA



Construction of a Energy Management System

Energy Management System for EV Charging via Charge-point

Real-Time Networking information system

- Energy efficiently reduction strategies
- Impact of ramping on grid
- Location: CE-CERT, Riverside, CA

TESTING CAPABILITIES

Net Zero Building Scenarios

Renewable Generation coupled with storage is used to fully power the administration building 24 hours a day, demonstrating a net zero energy use scenario.

Peak-Load Shaving

The operation of storage units and controllable loads are optimized for peak load shaving and lowering energy cost of buildings with storage.

Integration of Renewable Energy Resources

The SIGI system can optimize the charging and discharging schedules of storage units to absorb the power generation fluctuations of solar generation. Using a power flow analysis, the best sizes and sites for installing storage systems can be determined.

Renewable Generation coupled with storage is used to fully power the administration building 24 hours a day, demonstrating a net zero energy use scenario.

Voltage Regulation

The operation of a four quadrant battery charger system was optimized to regulate voltage in power distribution networks

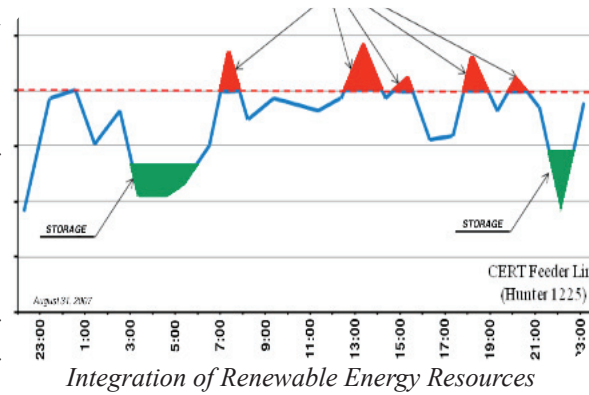
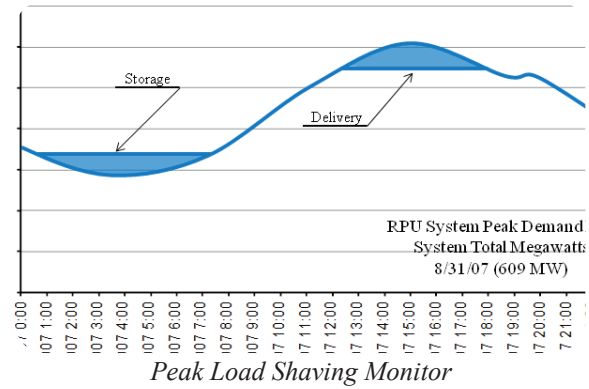
Frequency Regulation

The use of stationary as well as EV batteries is assessed for the purpose of conducting frequency regulation for the grid.

ADDITIONAL 'SIMULATION' CAPABILITIES

Price prediction Conduct load control and storage device charging & discharging scheduling in presence of real-time electricity prices.

RTDS Simulator (www.rtds.com) that is the world's benchmark for performing real time simulations of power systems and power infrastructure - to test the impact of an actual storage unit on the operation of actual distribution networks. Since the worst-case power system conditions are rare but dangerous and costly to induce in the real-world, the RTDS Simulator is used to provide research labs with a controlled and safe environment for various tests and prognostic analysis.



SIGI in Operation

Initial funding was awarded in 2011, with the first battery bay becoming operational in 2012. The commissioning of the first solar system and charging stations occurred in April of 2014. Other components, including the level 3 chargers and campus solar array, came online during the Fall of 2014.

Interested parties can see SIGI in operation at: www.cert.ucr.edu/newgrid

November 2014 - 3.5 MW Commissioned



April 2014- Solar Carport Commissioned



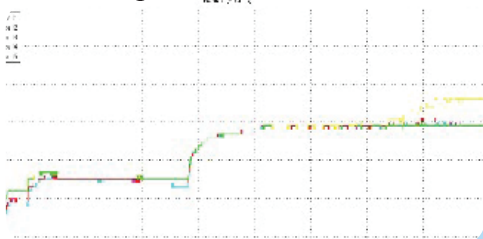
March 2014 – Inverters Installed



November 2013
Solar Carport Construction Begins



Cell Voltage
Normal Operation of Balanced Cells



September 2014

SIGI Assisted Riverside Public Utilities in lowering peak during a record-high demand day of 610MW. SIGI's testbed provided flexibility to curtail nominal power consumption of 365KW, while also providing 225KW to the grid.

	Cumulative Generation (kWh)	Peak Power
May 2014	134,246	463.536
June 2014	226,051	451.703
July 2014	284,056	414.171

May 2014 EV Trolley Converted



August 2013 - Level II EV Chargers Installed



May 5, 2012 - 1 MW Winston Chung Battery Commissioned



January 6, 2012 - SCAQMD awards CE-CERT \$2 million for Sustainable Integrated Grid Initiative



Center for Environmental Research and Technology (CE-CERT) Areas of Research

Our Vision...

CE-CERT's vision is to be a recognized leader in education, an honest broker in research, a creative source of new technology, and a strong contributor to solving societal environmental issues.

Our Mission...

- Pursue a large-scale, broad-based, integrated research agenda in emissions measurement, analysis, and control; atmospheric measurements and modeling; advanced vehicle technologies and transportation systems; and renewable energy.
- At both the undergraduate and graduate levels, contribute to overall excellence in education, which includes instruction, research and outreach activities at UCR.
- Make significant contributions through research and technology development to the quality of life, the economy, and sustainability in California, the nation, and the world.
- Remain flexible and responsive as an honest broker to the research, education and outreach needs of the local community, state and national governmental entities, industrial partners, and academia.

ARB and CE-CERT Research Synergies

- Achieving the Goal of Clean Air
 1. Measuring and quantifying emissions
 2. Characterizing formation of secondary pollutants
 3. Developing innovative approaches and technology
- Addressing Toxic Air Pollutants
 1. Improving tools and protocols for measuring emissions of toxics, advanced fuels, and advanced low emissions technologies.
 2. Health impacts
- Addressing Global Climate Change
 1. Transportation Approaches (vehicles, fuels, VMT, system operations)
 2. Understanding formation and impacts of GHGs
 3. Sustainable Energy Research (waste-to-energy, solar, smartgrid)
- Developing Innovative Approaches
- Providing Educational Opportunities

Summary of Research Vision in Key Areas

- Criteria and Toxic Emissions Measurement and Characterization
 1. Continue our leadership in the measurement of emissions in-use (PEMS on off road sources) and at low levels (PM emissions)
 2. Development, demonstration, and optimization of advanced clean energy vehicle technologies (heavy-duty hybrid/electric vehicles, natural gas, portoelectrification)
 3. Expand health effects studies from advanced low ARB on fuels and technologies
- Transportation and the Environment
 1. Develop the capability for vehicles to store and/or broadcast their emissions using on-board engine data coupled with predictive modeling to diminish the need to measure emissions directly
 2. Advance partial-automation vehicle technology, allowing for improved traffic mobility, safety, and lower emissions
 3. Provide research on use of electric-drive technology to promote accelerated deployment to reduce our dependency on internal combustion engines while improving air quality
- Atmospheric Processes
 1. Improve understanding of the formation and modeling of PM and ozone
 2. Increase knowledge of the formation and impact of black ARB on and SOA on air quality, cloud formation, and climate change
- Renewable Electricity Generation and Storage
 1. Implement smartgrid protocols and technologies on an industrial-scale testbed to optimize PV power production, battery delivery and EV use for peak load reductions
 2. Serve as an independent bench-scale and field-scale laboratory for optimization of motors, battery and fuel cell and PV formulations in Southern California
 3. Educate utilities, industry and researchers in deployment and use of advanced smartgrid and solar technology and efficient utilization of electricity
- Sustainable Fuels
 1. Develop a cost effective thermochemical process to produce renewable fuels (synthetic diesel, synthetic gasoline or RNG) from various waste material
 2. Improve the efficiency and costs of pretreatment, chemical hydrolysis and dehydration, fermentation, and catalytic conversion

UCR CE-CERT Grant Awards

The University of California Riverside’s Center for Environmental Research and Technology (CE-CERT) is excited to be a part of reinventing the future of California. CE-CERT has spent the last few years heavily investing in their laboratories and equipment in critical areas, including:

- Atmospheric processes laboratory
- Emissions and fuels research
- Renewable fuel development and use
- Advanced electric, hybrid, and fuel cell
- Solar energy and Smartgrid technologies

As a result of great facilities and equipment, CE-CERT has received over \$37 million in grant funding from 77 agencies since 2010. Some examples are shown below:

Institution	Funding 2010-2015	CARB	SCAQMD	CEC	ORN Lab
CE-CERT	\$37.3M	\$6.5M	\$4.3M	\$5.9M	\$3.2M

In addition to these agency awards, CE-CERT has received awards from the following agencies:

- Environmental Protection Agency
- California Department of Transportation Division of Research and Innovation
- California Institute for Energy and Environment
- California Environmental Integrated Waste Management Board
- Department of Energy
- National Science Foundation
- Electric Power Research Institute
- University of California, Berkeley
- University of California, Davis
- University of California, Los Angeles

Since 2003, CE-CERT has been awarded over \$88.9 million in grant funding from over 170 various agencies.

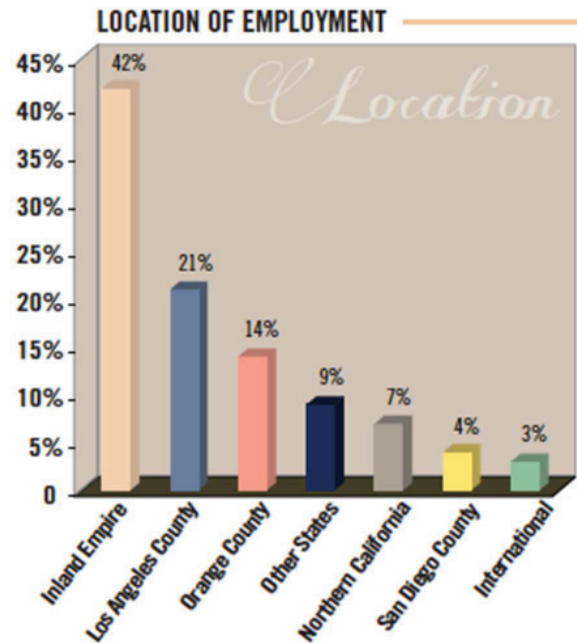
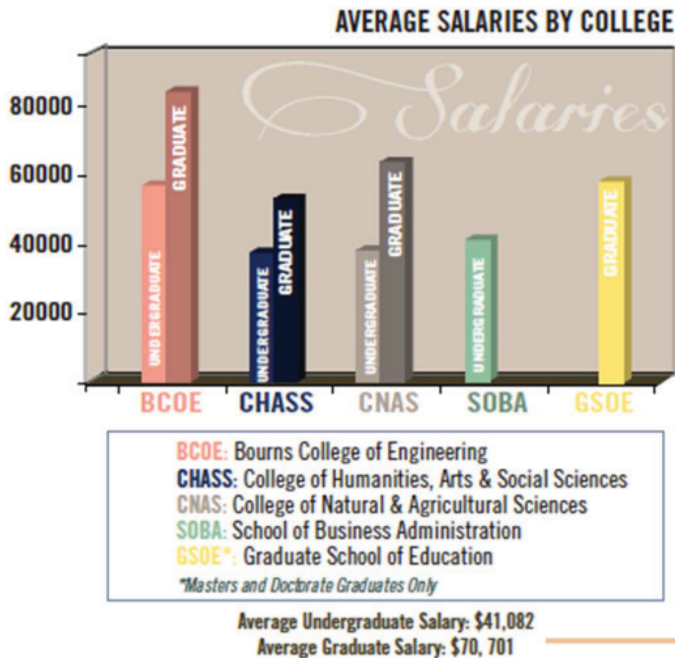
The implementation of new technologies in the real-world has required more than ever before strong partnerships from industry, government and academia. This past year, CE-CERT has expanded its collaborations with other UC campuses, industries, and state and local government agencies. Finally, CE-CERT is embracing its role in helping carry out the new UC initiative to be net zero energy user by 2025.

CE-CERT Student Pipeline for ARB Employment

Given its aging workforce, especially in the area of research, ARB can leverage local employment resources. UCR and CE-CERT graduates provide an ideal pool of candidates equipped to further the mission and goals of ARB. The Bourns College of Engineering produces undergraduates with starting salaries of around \$60,000 and graduates with starting salaries of around \$80,000. Forty-two percent of UCR graduates live and work in the Inland Empire. Approximately 12 UCR graduates already work for ARB or AQMD.

Additionally, Riverside colleges and universities graduate over 8,000 students per year. Even more currently employed residents commute to Los Angeles and Orange Counties every day for work. Utilizing local employee sectors in the greater Riverside area would provide ARB with a wealth of potential employees.

Regional Resource for a Highly Skilled Workforce



Bourns College of Engineering
January 17, 2013

Degrees Related to ARBs Mission - University of California, Riverside (UCR)

Major UCR Colleges and Schools

- BCOE – Although scarcely 25 years old, BCOE was ranked #1 among public research universities of comparable size by US News & World Report and in the top quartile by the National Research Council.
- CHASS – Theme “At Home in the World” prepares students for our increasingly globalized society.
- CNAS – Unique in that it combines the agricultural, life, physical, and mathematical sciences in one administrative structure.
- GSOE – Shapes ideas, aspiring leaders, and ultimately the future of education through a thoughtful, results-oriented approach.
- SoBA – Offers the largest undergraduate business program in the UC system, as well as advanced degrees and as of this fall, a flexible MBA program.
- SOM – For 30 years UCR has taught the first two years of medical students who go on to UCLA to complete their M.D.s. Now, with accreditation, these students and others will be able to receive their degrees here.
- SPP – Launching this fall, this school is focused on the theme of thinking globally and acting locally. It’s four principle areas are the environment, healthcare, immigration, and higher education.

Degree Programs Offered

- 80 Bachelor’s degree programs
- 46 Master’s degree programs
- 38 Ph.D. programs
- 17 state teaching credentials

Program Types

Undergraduate Degrees

Engineering:

- Biochemical Engineering
- Chemical Engineering
- Nanotechnology
- Computer Science and Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Environmental Engineering (two concentrations) Air Pollution Control Water Pollution Control
- Materials Science and Engineering
- Mechanical Engineering
- Mechanical Engineering (four concentrations) Materials and Structures, Energy and Environment, Design and Manufacturing, General Mechanical Engineering

Life Sciences majors

- Biochemistry: Options: Biology, Chemistry, Medical Sciences
- Biological Sciences: Tracks: Bioinformatics and Genomics; Biology; Cell, Molecular, and Developmental Biology; Conservation Biology; Entomology; Environmental Toxicology; Evolution and Ecology; Medical Biology; Microbiology; Plant Biology.
- Biology
- Cell, Molecular, and Developmental Biology
- Entomology
- Microbiology
- Neuroscience
- Plant Biology

Mathematical Sciences majors

- Mathematics: Options: Biology, Chemistry, Economics, Environmental Sciences, Physics, Statistics.
- Statistics: Options: Quantitative Management, Statistical Computing

Public Policy:

- Health/Population Policy
- Social/Cultural/Family Policy
- Economic Policy
- Urban/Environmental Policy
- Policy Institutions and Processes
- International/Foreign Policy

Physical Sciences majors

- Chemistry: Options: Chemical Physics, Environmental Chemistry, Pure Chemistry
- Environmental Sciences: Options: Environmental Education, Environmental Toxicology, Natural Science, Social Science, Soil Science
- Geology: Options: General Geology, Geobiology, Global Climate Change, Geophysics
- Geophysics
- Physics

Graduate Degrees (most have both M.S. and Ph.D. options)

- Bioengineering
- Biochemistry and Molecular Biology
- Botany, Plant Science, Plant Biology
- Cell, Molecular and Developmental Biology
- Chemistry
- Chemical & Environmental Engineering
- Computer Science
- Electrical Engineering
- Entomology
- Environmental Sciences
- Environmental Toxicology
- Evolution, Ecology and Organismal Biology
- Genetics, Genomics and Bioinformatics
- Geological Sciences
- Materials Science and Engineering
- Mathematics
- Mechanical Engineering
- Microbiology
- Neuroscience
- Physics
- Plant Pathology
- Public Policy
- Soil and Water Science
- Statistics
- Applied Statistics

UCR Areas of Research

1. College of Natural and Agricultural Sciences

a. Mission-

- Emission of Pollutants for Soil
- Field-relevant measurements
- Mitigation technology
- Computer simulation & prediction

b. ARB Experiment Project (2005-2010)-Reducing VOC Emissions from Soil Fumigation

2. Center for Conservation Biology

a. Mission-

- Proactively identify new research priorities in conservation biology and inaugurate new collaborative research programs.
- Develop research programs in response to existing needs in conservation biology.
- Assist in the conservation and restoration of species and ecosystems by facilitating the collection, evaluation and dissemination of scientific information

3. School of Public Policy

a. Mission-

- To train a cadre of students who could become the future policy planners and policy leaders in Inland Southern California and other parts of the world.
- To facilitate evidence-based, translational research by multi-disciplinary teams at UCR on the grand challenges facing society today (e.g., environmental degradation, climate change, energy/food/water security, poverty)
- To engage in a dialogue with local, state, and federal policy-makers and policy-practitioners, so that the evidence-based policy research conducted at the SPP can help shape public policy.

b. Areas of Focus-

- Environmental policy, energy security, climate change, sustainable communities
- Health policy – access and diversity
- Education policy – access and diversity
- Social/family policy – immigration, youth violence, demographic change

4. Center for Sustainable Suburban Development

a. Mission-

- To encourage and promote multi-disciplinary, policy-focused research and analysis on a wide range of community sustainability issues.

b. Sustainability Measures

- Living within the limits imposed by available resources and the carrying capacity of our environment.
- Examining the interconnections among the economy, social well-being, and the environment.
- Equitably distributing resources and opportunities for advancement across places and among generations.

5. Department of Earth Sciences

a. Research Mission-

- Climate change with a focus on aerosols with mechanisms for graduate students and undergrads to engage in research (climate change major, minor and track).

b. Outreach and Teaching Mission

- Engaging the community - seamless integration of research to communicating that research to UCR students, Riverside leaders, RUSD k-12 students and the Riverside Community at large.

6. Bourns College of Engineering

a. Mission

- Produce engineers with the educational foundation and adaptive skills to serve rapidly evolving technology industries
- Conduct nationally recognized engineering research focused on providing a technical edge for the U.S.
- Contribute to knowledge of both fundamental and applied areas of engineering
- Provide diverse curricula that will instill in our students the imagination, talents, creativity and skills necessary for the varied and rapidly changing requirements of modern life
- Enable our graduates to serve in a wide variety of other fields that require leadership, teamwork, decision making and problem solving abilities
- Be a catalyst for industrial growth in the Inland Empire

b. Departments and Programs

- Bioengineering
- Chemical and Environmental Engineering
- Computer Science and Engineering
- Electrical Engineering
- Mechanical Engineering
- Materials Science and Engineering program (college-wide)

c. Research Centers

- Center for Bioengineering Research
- Center for Environmental Research Technology (CE-CERT)
- Center for Nanoscale Science and Engineering (CNSE)
- Center for Research in Intelligent Systems (CRIS)
- Center for Ubiquitous Communication by Light (UC-Light)
- Southern California Research Initiative for Solar Energy (SC-RISE)
- Winston Chung Global Energy Center

VI. COUNTY OF RIVERSIDE

EDA Experience & Awards





County of Riverside

Riverside County's Economic Development Agency - Project Management Office provides comprehensive project management with project managers overseeing projects from inception through construction. Services include the following:

- Project Development
- Project Management
- Environmental Compliance
- Facility Enhancements and Restorations
- Design Development
- Bid and Award Construction Management
- Plan Check and Construction Inspection

Projects range in value from \$1,000 to over \$300 million and include turn-key projects as well as construction of new county facilities such as health care facilities, sheriff and fire stations, libraries, building renovations, and additions. Examples of previous turn-key projects are as follows:

Indio County Law Library

The Indio County Law Building is a three-floor Class "A" 90,000-square-foot facility that brings together the district attorney, the public defender, county counsel and the Indio branch of the Law Library under one roof. It was completed four months early and \$2 million under budget. The County Law Building incorporates many energy-efficient and water-saving features that will generate significant savings to the county on operations. The County has applied for a Platinum-level Leadership in Energy and Environmental Design (LEED) designation for the facility, the U.S. Green Building Council's highest level of certification. In addition, the building is a candidate for the Southern California Association of Governments' Sustainability Award. For the ARB turn-key facilities, the County is targeting the LEED Platinum level, subject to the mutual agreement with ARB.





U.S. Bankruptcy Court

The U.S. Bankruptcy Court was constructed in 1997 and consists of a three level Class “A” office building including 68,143 square feet and designed for occupancy by the U.S. Courts. The building was designed to connect to the U.S. District Court building which was constructed in 2001 located directly adjacent to the Bankruptcy building on the east. The U.S. Bankruptcy court building includes four courtrooms, judge’s chambers, a large public filing room, administrative offices, and a loading dock. An attractive feature and point of connection between the buildings is the outdoor enclosed plaza with a water feature and shaded areas.



U.S. District Court

The U.S. District Court was constructed in 2001 and consists of a four level Class “A” office building including 59,630 square feet and designed for occupancy by the U.S. Courts. The U.S. District court building includes four courtrooms, judge’s chambers, administrative offices, a detention facility and a subterranean sallyport for inmate transportation. The subterranean level also includes the regional U.S. Marshal’s office.



State Court of Appeals

The State Court of Appeals was constructed in 1998 and consists of a two level Class “A” office buildings including approximately 42,000 square feet and designed for occupancy by the State courts. The building includes an appeals court hearing room, judge’s chambers, and offices.

Riverside County Awards

- County qualified for Platinum level Leadership in Energy and Environmental Design certification from the U.S. Green Building Council for the Indio Law Building in 2015.
- County received Gold level Leadership in Energy and Environmental Design certification from the U.S. Green Building Council for the Palm Desert Sheriff Station in 2011.
- County received Silver level Leadership in Energy and Environmental Design certification from the U.S. Green Building Council for the Downtown Law Library in 2010.
- County received Leadership in Energy and Environmental Design certification from the U.S. Green Building Council for the Woodcrest Library in 2009.
- County Economic Development Agency Office of Foreign Trade received the 2014 Award of Merit from the California Association for Local Economic Development for Innovation in Economic Development.
- County Office of Foreign Trade received the 2014 Red Tape to Red Carpet award from the Inland Empire Economic Development Partnership.
- County received an Award of Excellence from the California Association for Local Economic Development for its Retail Growth Program.
- County Workforce Development Centers received the 2013 Prospector for Performance Excellent Award from the California Council for Excellence.
- County received the 2008 Award of Excellence sponsored by the California Association for Local Economic Development.
- County received an honorable mention in 2001 from the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc. for the County Administrative Center Annex in Riverside.

VII. CITY OF RIVERSIDE

Awards

Public Utilities



City of Riverside Awards

2014

- Coolest California City by California Air Resources Board
- American City and County - Crown Communities Award, 2014 Drought Efforts
- California Association for Local Economic Development - Award of Merit, Temporary Economic Development Rate

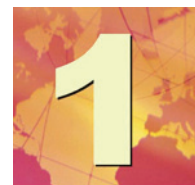


2013

- American Public Power Association -DEED Energy Innovator Award, In-Pipe water turbine pilot project
- California Municipal Utilities Association - 2013 Resource Efficiency & Community Service Awards, Green Power Report
- Bicycle Friendly City Award

2012

- Riverside Named #1 Intelligent Community of the Year 2012
- California Green Communities Challenge - Silver, sustainability programs
- The International Davey Awards - GreenRiverside.com



**Intelligent
Community
of the Year
2012**

2011

- 3rd Top Performing City in the Nation - Newsweek (2011)
- American Water Works Association (AWWA) – Outstanding Energy Management Award, In Line Turbine System
- American Public Power Association (APPA) – Platinum Award, Reliable Public Power Provider (RP3) Designation

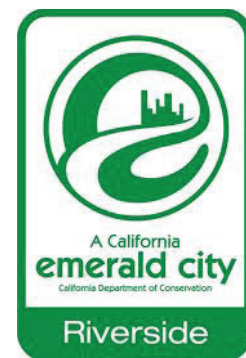


2010

- U.S. Department of Energy – Annual Award for Sustainable Development
- International Awards for Livable Communities – Silver Whole City Award
- Riverside Named as a Top 25 City for Business by Executive Outlook Magazine. Riverside is identified as a bright spot in a tough economy

2009

- State of California Department of Conservation, Emerald City designation - the first ever given for sustainable green initiatives and renewable energy
- California Municipal Utilities Association (CMUA) for Blue Riverside program out as winner of the Best Management Practices category





R I V E R S I D E P U B L I C U T I L I T I E S

Riverside Public Utilities (RPU) is the City of Riverside’s source of electric power and water. RPU is a customer owned water and electric utility that is locally governed and managed. It serves the 12th largest city in California, and has a \$400 million annual electric and water operating revenue. With an energy portfolio that utilizes 20% renewable energy, RPU possesses some of the lowest water and electric rates in the region.

2014/15 Department Goals

1. To contribute to the City of Riverside’s economic development while preserving RPU’s financial strength
2. To maximize the use of technology to improve utility operations.
3. To impact positively legislation and regulations at all levels of government.
4. To develop and implement electric and water resource plans.
5. To create and implement a workforce development plan.

2013/14 Department Accomplishments

Accomplishment	Related Goal	Related City Council
Received City Council approval for extension of Water Conservation surcharge to continue financial incentives for water conservation and efficiency efforts.	Goal #1	Livable Communities/ Environmental Leadership
Received City Council approval for Tequesquite solar projects, adding 7MW of renewable energy to RPU’s portfolio.	Goal #1	Livable Communities/ Environmental Leadership
Completed the Canyon Creek Cable Replacement Project	Goal #1	Livable Communities
Energized 12 kV campus reliability loop at RCC prior to the start of the school year.	Goal #1	Livable Communities
Added 3 MW of solar energy to RPU’s electric grid	Goal #1	Livable Communities/ Environmental Leadership
Completed construction of the final phase of STP for continued reliability.	Goal #1	Livable Communities
Completed the Mockingbird Lake Sediment Removal Project.	Goal #1	Livable Communities
Completed the Gage Well Construction Project	Goal #1	Livable Communities
Implemented the RPU IT Governance Oversight Committee	Goal #2	Arts and Innovation
Presented the Integrated Resource Plan to RPU General Manager.	Goal #4	Livable Communities/ Environmental Leadership

RIVERSIDE PUBLIC UTILITIES PROGRAM AND INCENTIVES

New Construction Energy Efficiency Rebate Program

- i) Funding is available for new commercial construction projects that exceed Title 24 baseline standards for energy efficiency.
- ii) This program applies to new commercial construction projects and major tenant improvements or retrofits of existing buildings.
- iii) Incentives are paid at a rate of \$0.05 per kWh of annual energy savings in excess of Title 24 baseline standards for electricity-saving measures.
- iv) Incentives are capped at a total of \$150,000 or 50% of project costs whichever is less, per customer per year.
- v) Incentive amounts increase to \$0.06 per kWh of annual energy savings or 50% of project cost, whichever is less with a program cap of \$180,000 per customer per year for those new construction projects designed and constructed to LEED-certified designation.

Custom Energy Technology Grants

- i) RPU is willing to work with ARB staff to explore any potential grant opportunities for ARB through RPU's Custom Energy Technology Grant Program. This grant program can address customer or industry specific solutions to energy efficiency, demand reduction or renewable power generation.
- ii) Custom Energy Technology grants cover up to 75% of project costs (Requires a 25% customer match) with a maximum of \$100,000 per customer per year.
- iii) This grant program also offers project feasibility study grants up to \$5000 per project per year.

Commercial Photovoltaic (PV) Incentive Program

- i) RPU offers rebates for the installation of commercial solar PV projects in the amount of \$0.50 per AC Watt up to \$50,000 per commercial customer account, not to exceed 50% of project costs.
- ii) Leased systems and Power Purchase Agreements (PPA's) are not eligible to receive rebates under this program.
- iii) All projects must secure a rebate reservation from RPU prior to project construction in order to be eligible for a rebate.

RPU Electric Rate Advantages and Incentives

- i) RPU currently offers some the lowest electric and water rates in Southern California.
- ii) RPU customers enjoy stable and predictable electric rates with the last rate increase having occurred in 2010.
- iii) RPU rates currently average approximately 20-40% less than surrounding Investor Owned Utility (IOU) rates for Time of Use Customers like ARB.
- iv) Based on electric consumption figures previously provided by ARB for the existing ARB facility in El Monte, RPU has estimated that a similar facility with similar operating hours located within RPU's service territory would save approximately \$275,000 per year in electricity costs.
- v) With additional information concerning the proposed ARB Southern California Consolidation Project's projected electric load, the new facility may qualify for special incentive rate discounts subject to applicable cost of service studies and Utility Board and City Council approval.

RPU Total Incentive Package Summary

If ARB is able to take advantage of all or most of these RPU programs and incentives and meet program requirements, the estimated total incentive package from RPU is approximately \$610,000 in the first year of facility operation.

VIII. APPENDIX

The background features a low-poly, faceted blue pattern in the upper half, transitioning into a series of overlapping, wavy lines that create a sense of depth and movement. The lines are composed of many thin, parallel blue lines, giving them a mesh-like appearance. The overall color palette is various shades of blue, from light to dark.

Center for Environmental Research and Technology Staff Biographies



Matthew Barth, Ph.D.
Director, CE-CERT
Professor of Electrical Engineering

Matthew Barth (Member 1990, Senior Member 2000, Fellow 2014) is the Yeager Families Professor at the College of Engineering, University of California-Riverside. He is part of the intelligent systems faculty in Electrical Engineering and is also serving as the Director for the Center for Environmental Research and Technology (CE-CERT), UCR's largest multi-disciplinary research center. He received his B.S. degree in Electrical Engineering/Computer Science from the University of Colorado in 1984, and M.S. (1985) and Ph.D. (1990) degrees in Electrical and Computer Engineering from the University of California, Santa Barbara. Dr. Barth joined the University of California-Riverside in 1991, conducting research in Intelligent Systems.



Charles E. Wyman, Ph.D., MBA
Ford Motor Company Chair in Environmental Engineering Center for Environmental Research and Technology (CE-CERT) and Professor of Chemical and Environmental Engineering

Charles Wyman has devoted most of his career to leading advancement of technology for biological conversion of cellulosic biomass to ethanol and other products. In the fall of 2005, he joined the University of California at Riverside as a Professor of Chemical and Environmental Engineering and the Ford Motor Company Chair in Environmental Engineering with a research focus on pretreatment, enzymatic hydrolysis, and dehydration of cellulosic biomass to produce reactive intermediates for conversion to fuels and chemicals. Wyman has a BS degree in chemical engineering from the University of Massachusetts, MA and PhD degrees in chemical engineering from Princeton University, and an MBA from the University of Denver.



David Cocker, Ph.D.
Professor, Chemical and Environmental Engineering

Professor David Cocker's research focuses on secondary organic aerosol (SOA) formation. The major thrust of the SOA work is the study of gas-particle partitioning and improving predictions of SOA formation. Dr. Cocker is the recipient of the National Science Foundation Early Development CAREER award. Dr. Cocker earned his Ph.D. in Environmental Engineering (with a minor in Chemical Engineering) from the California Institute of Technology in 2000. He earned his M.S. in Environmental Engineering from Caltech in 1998, and his B.S. in Environmental Engineering and Chemistry from the University of California, Riverside, in 1996.



Tom Durbin, Ph.D.
Research Engineer

Dr. Durbin is a Research Engineer in the emissions from advanced vehicles and fuels research group of CE-CERT and an adjunct professor in the Chemical and Environmental Engineering Department. He is conducting research in the area of vehicle emissions with an emphasis on studying fuels, advanced technology vehicles, and particle and in-use emissions.

Prior to joining the vehicle emissions group, Dr. Durbin was involved in several other areas of research at CE-CERT including renewable energy and fuel sources and advanced vehicle technologies. Dr. Durbin received his doctorate degree in Physics from the University of California, Riverside, in 1994.



Joe Norbeck, Ph.D.
Professor Emeritus
Director of the Environmental Research Institute

Dr. Norbeck's primary areas of research include development of air pollution control technology for both mobile and stationary sources and development and evaluation of alternative fuels for transportation. His current focus has been in the development of a novel thermal chemical process (steam hydrogasification) for highly efficient conversion of ARBaceous matter to synthetic transportation fuels. Dr. Norbeck received his Ph.D. and B.S in Chemistry at the University of Nebraska.



Kent Johnson, Ph.D.
Assistant Research Engineer

Dr. Johnson joined CE-CERT's research faculty in 2009 after serving on the Center's staff as Principal Development Engineer and manager of the Mobile Emissions Laboratory (MEL). He received his Ph.D. in Chemical and Environmental Engineering from UC Riverside where his doctoral research focused on the impact of emissions on ambient air quality.

Dr. Johnson created a comprehensive program for the evaluation of portable emissions monitoring systems (PEMS) that has had impacts at both the national and international levels. Dr. Johnson joined CE-CERT in January 1993 and was involved in CE-CERT's solar hydrogen production facilities. He was also the lead CE-CERT engineer on the biomass to fuels gasification pilot plant. Since 2000, Dr. Johnson has been the lead design engineer responsible for the development of the on-road portable MEL. Dr. Johnson has been involved in five student competitions. The competitions involved solar energy and vehicle conversion to ethanol and propane fuels.



Heejung Jung, Ph.D.
Associate Professor
Mechanical Engineering

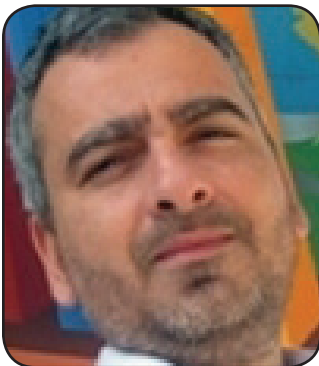
Professor Heejung Jung received his Ph.D. from the University of Minnesota, and received both his M.S. and B.S. degrees from Seoul National University in Mechanical Engineering. Upon completion of his masters, he joined Hyundai as a research engineer. He later completed his postdoc research at UC Davis before joining UCR and CE-CERT.

His current research focus areas are diesel PM emissions, nanoparticle synthesis, and air quality. He is also interested in fuel and additives, as they are the source of power and emissions through the combustion process. Specific research topics include alternative fuels & additives, aftertreatment system, physical and chemical characterization of combustion generated gas & particle emissions, toxicity of nanomaterials & atmospheric nanoparticles, kinetics of reacting particle, and nanomaterial synthesis via aerosol & combustion route.



John Pisano
Senior Development Engineer

Mr. Pisano received his Bachelor's degree in Applied Physics from McMaster University in Hamilton, Ontario, Canada, and his M.Sc. in Atmospheric Physics from York University in Toronto, Ontario, Canada. He recently joined CE-CERT as Senior Development Engineer to work on the design of the next-generation atmospheric chamber. Mr. Pisano had been employed at Unisearch Associates for the past 15 years.



George Karavalakis, Ph.D.
Assistant Research Engineer

Dr. Karavalakis received his Ph.D. in Chemical Engineering from the National Technical University of Athens in 2009. He received his MSc in Environmental Engineering and his BEng in Engineering both from the University of Portsmouth in 2001 and 2000, respectively.

Dr. Karavalakis holds a dual appointment in the Center for Environmental Research and Technology and the Department of Chemical and Environmental Engineering. His research examines the impacts of emissions from emerging combustion systems and alternative fuels on air quality.



Wayne Miller, Ph.D.

Manager, Emissions & Fuels Research Laboratory

Dr. Miller joined CE-CERT in December 2000 after a distinguished career with UNOCAL and retiring from Sunoco as Vice President of Technology and Development. He holds a Ph.D. in Chemical Engineering from the California Institute of Technology and a B.S. in Chemical Engineering from Worcester Polytechnic Institute. His experience over 35 years ranges from strategic technology planning to research on the physical and chemical nature and impact of emissions from mobile and stationary sources with an emphasis on control technology. While at UCR, the research findings of Dr. Miller and his students were included as part of the technical support documents for one federal and six California regulations aimed at cleaner air.



Michael F. Allen, Ph.D.

Professor and Chair of Biology

Director of Center for Conservation Biology

Professor of Plant Pathology & Microbiology

Dr. Allen's research is concentrated on understanding the effects of human activities on ecosystem biodiversity and functioning. As the human population expands, population centers emerge and shift, and resources are extracted and utilized. He has undertaken efforts to describe the impacts of human activities on wildlands, from land disturbance, transportation, and agriculture to the changing global environment. In addition, he has worked to document how natural succession proceeds to learn lessons that can be applied in ecosystem restoration. Finally, he is working on developing ways to bring ecological science into the decision-making process. He has worked on interagency efforts to incorporate ecosystem management approaches into environmental decisions at the federal level, and recently, with the County of Riverside and southern California regional agencies on multiple species habitat conservation (MSHCP) planning efforts.



Akua Asa-Awuku, Ph.D.

Assistant Professor

Akua Asa-Awuku received her Ph.D. in Chemical Engineering from the Georgia Institute of Technology in 2008. She also earned her M.S. in Chemical Engineering at Georgia Tech in 2006. She received her B.S. in Chemical Engineering from the Massachusetts Institute of Technology in 2003. In 2008, Dr. Asa-Awuku also served as a Camille and Henry Dreyfus Postdoctoral Fellow at the Center for Atmospheric Particle Studies at Carnegie Mellon University. Recently, The National Science Foundation has awarded its prestigious Career Award to Dr. Asa-Awuku to support her research on atmospheric aerosol particles and their role in air pollution and climate change.



Marko Princevac, Ph.D.

Associate Professor

Marko Princevac is interested in fundamental and applied fluid mechanics research -- in particular, the application of fundamental turbulence concepts to studies in environmental flows. During his graduate studies and a short post-doctoral period afterward, he gained a strong background in laboratory and field experimental work. This helped him identify some physical phenomena and build simple physical (laboratory) models that can successfully explain complex field observations or a part thereof. He also has experience in developing idealized theoretical models to explain fluid dynamic processes. His approach has been to cross-fertilize field measurements with carefully designed laboratory experiments and simple theoretical analysis.

Currently, he is focusing on field experimental research on urban flows, specifically on urban dispersion (pollutants or toxic releases, industrial disasters or terrorist attacks) and parameterizations of turbulence within urban canyons. He plans to extend this to encompass numerical work, especially in the area of urban dispersion.



Akula Venkatram, Ph.D.

Professor

Professor Akula Venkatram received his B.S. in Mechanical Engineering in 1971 from the Indian Institute of Technology, Madras, India, and his Ph.D. degree in Mechanical Engineering from Purdue University, West Lafayette, Indiana. He comes to the University of California, Riverside after eleven years at ENSR Consulting and Engineering.

Research and current projects include:

- Comprehensive modeling of systems governing air quality.
- Theoretical aspects of small-scale dispersion.
- Application of micrometeorology to dispersion problems.
- Development of simplified models for complex systems.
- Validation of Concentrations Estimated from Air Dispersion Modeling for Source-Receptor Distances of less than 100 Meters.
- Development of Short-Range Dispersion Models to Estimate Air Toxics Risk in Urban Environments.
- Improvement of Short Range Dispersion Models to Estimate Air Quality Impact of Power Plants in Urban Environments.
- Validation of Concentrations Estimated from Air Dispersion Modeling for Source-Receptor Distances of less than 100 Meters.



Mary Droser, Ph.D.

Professor

As one of the biggest issues facing society today, climate change will have adverse effects on everything, from sea level rise that will impact coastal communities to economic implications in the wake of disasters such as Hurricane Sandy, as well as disturbing food resources in cases of droughts and extreme weather circumstances. Addressing this global economic problem, Mary Droser's program bridges the gap between what scientists understand and what communities and citizens know, creating seamless climate change education in the Riverside community from kindergarten through UC Riverside graduates.



Kurt Schwabe, Ph.D.

Associate Professor of Environmental Economics and Policy

Kurt Schwabe, an Environmental Economics and Policy professor at the University of California Riverside and director of the Water Science and Policy Center in California



Ron Loveridge

Director, UCR Center for Sustainable Suburban Development

Former Mayor, City of Riverside

Ronald O. Loveridge has 33 years of public service – as a Riverside Councilmember beginning in 1979 and as Mayor from 1994 to 2012. He is a highly regarded regional, state and national leader. At the national level, he was very involved on the Executive Committee and Board of the National League of Cities, making policy calls and decisions on behalf of some 19,000 cities and towns across the nation. He also served as President of the National League of Cities in 2010. Mayor Loveridge is a member of the National Academy of Public Policy. His statewide and regional service has included Board roles on the broadest array of important organizations: the California Air Resources Board, California Forward Action Fund, California Competes, South Coast Air Quality Management District, Southern California Association of Governments, Western Riverside Council of Governments, and Inland Empire Economic Partnership.

A Stanford doctoral graduate, Mayor Loveridge teaches an extremely popular political science course at UC Riverside. Loveridge's research investigates urban politics and public policy, particularly environmental policy. He is the author of *City Managers in Legislative Politics* (Bobbs-Merrill, 1971). His research has appeared in *Polity*, *Environment and Behavior*, *California Air Environment*, and *Cry California*, as well as several edited volumes.



Juliann Allison
Associate Director

Juliann Allison is Associate Director of the Center and Associate Professor of Political Science at UCR. She received her Ph.D from the University of California, Los Angeles and joined the UCR faculty in 1997. As Associate Director, Dr. Allison seeks to strengthen ties between the Center and UCR's faculty by aiding research efforts, finding funding for graduate students and their research and identifying faculty members interested in the Center's research projects.

Her teaching interests include international political economy and environmental politics. Her research efforts have been supported by the California Energy Commission and the National Science Foundation.

Dr. Allison's recent publications include: *Creating Distributed Generation Policy to Improve Air Quality: "Can We Have Our Cake and Eat it Too?"* *Energy Policy Journal* (forthcoming, written with former Center Director James Lents); "Information and International Politics: an Overview," in *Technology, Development and Democracy: International Conflict and Cooperation in the Information Age*. Albany: SUNY Press (2002); and *Technology, Development and Democracy: International Conflict and Cooperation in the Information Age*, ed.



Sundararajan Venkatadriagaram, Ph.D.

Dr. Sundararajan's research interests lie in the broad area of manufacturing systems. During his Ph.D. days at Berkeley, he worked on the CyberCut system - a networked system for Mechanical Engineering designers to rapidly design and machine parts. He developed the feature recognition module and contributed heavily to the process planning engine of CyberCut. During his post-doctoral research, he has worked with Ford Motor Company to develop advisory systems for gear designers of automotive transmissions. His software for the prediction of transmission error and noise in transmissions is currently being tested at Ford. His current research interests include Computer-Aided Design, Process Planning, Computer-Aided Manufacturing, Manufacturing System Integration, Sensor Networks Application for Automotive Applications, Embedded Systems, Distributed Computing and Control.



Roya Bahreini, Ph.D.
Assistant Professor of Atmospheric Science & Chemistry CFM

Our research projects are aimed at understanding processes that result in formation of atmospheric aerosol particles. Aerosol particles can deteriorate air quality, reduce visibility, affect cloud formation and lifetime, and change the radiation balance of the earth. These particles may be emitted directly into the atmosphere ("primary aerosol", such as sea-salt, dust, and soot) or formed by secondary processes such as gas to particle conversion, heterogeneous reactions, or aqueous phase reactions ("secondary aerosol", such as sulfate, nitrate, and organic particles). Depending on the ambient conditions (e.g., relative humidity) and types of precursors and oxidants available in an area, certain processes may be more important than others for secondary aerosol formation.

ARB Related Grant and Publications

Particles

Particles continue to be one of the most important emissions components with respect to health effects. The anticipated growth of gasoline direct injection (GDI) in the light-duty vehicle fleet is creating increased emphasis in this area. CE-CERT has a strong background in this area, since CE-CERT has conducted several programs with ARB to evaluate the European Particle Measurement Program (PMP) methodologies, and is current working with ARB on an integrated particle size distribution (IPSD) methodology, and with ARB and CRC on the E-99 program for low particle emissions measurements. CE-CERT has also conducted major programs looking at particle emissions from forest fires and cooking emissions, evaluating fundamental secondary organic aerosol (SOA) formation in our world class smog chamber, collaborating with UCLA to conduct more detailed studies of the health effects of vehicular particles.

ARB Related Contracts and Grants

- ARB, “Measurement of Diesel Solid Nanoparticle Emissions using a Catalytic Stripper for Comparison with Europe’s PMP Protocol,” 7/09-12/11, \$170,000.
- ARB, “Evaluation of the Proposed New European Methodology for Determination of Particle Number Emissions and its Potential in California for In-use Screening”, 6/06-9/07, \$250,000.
- ARB, “Evaluate High PM Emitters on Highway,” \$249,826.
- ARB, “Literature Searches for Internal Combustion Engine Air Toxic Emissions and Particulate Matter Mass Measurement and Physical Characterization,” 3/03-6/04, \$64,519.

ARB Related Journal Articles/Technical Reports

- Zheng, Z., Durbin, T.D., Johnson, K.C., Hu, S., Huai, T., Kittelson, D.B. and Jung, H.S., 2012. Comparison of Particle Mass and Particle Number Emissions from a heavy-Duty Diesel Vehicle Under On-Road Driving Conditions and a Standard Testing Cycle. To Be submitted to Environ. Sci. Technol.
- Zheng, Z., Durbin, T.D., Karavalakis, G., Johnson, K.C., Chaudhary, A., Cocker III, D.R., Herner, J.D., Robertson, W.H., Huai, T., Ayala, A., Kittelson, D.B., and Jung, H.S.. 2012. Nature of Sub-23-nm Particles Downstream of the European Particle Measurement Programme (PMP)-Compliant System: A Real-time Data Perspective, *Aerosol Sci. Technol.*, 46, 886-896.
- Zheng, Z., Johnson, K.C., Liu, Z., Durbin, T.D., Hu, S., Huai, T. Kittelson, D.B, and Jung., H.S., 2011. Investigation of solid particle number measurement: Existence and nature of sub-23 nm particles under PMP methodology. *Journal of Aerosol Science*, Vol. 42, pp. 883-897.
- Pisano, J.T., Durbin, T.D., Karavalakis, G., John Collins, Tao Huai, Alberto Ayala, Pablo Cicero-Fernandez, Mang Zhang, Alvaro Gutierrez, Darey Huo, Thu Vo 2011. Characterization of PM and PM instruments for High Emitting Light-Duty Gasoline Vehicles. JSAE/SAE International Powertrain, Fuels and Lubricants Conference, Kyoto, Japan, August 30 – September 2, JSAE 20119114, SAE 2011-01-2056.
- Durbin, T.D. and Pisano, J.T. 2010. Light Duty Gasoline PM: Characterization of High Emitters and Valuation of Repairs for Emission Reduction - Phase 3 -. Final Report by UC Riverside to the California Air Resources Board under contract No. 05-323, August.
- Johnson, K.C., Durbin, T.D., Jung, H., Chaudhary, A., Cocker III, D.R., Herner, J.D., Robertson, W.H., Huai, T., Ayala, A., and Kittelson, D. 2009. Evaluation of the European PMP Methodologies during On-Road and Chassis Dynamometer Testing for DPF Equipped Heavy Duty Diesel Vehicles. *Aerosol Science and Technology*, Vol. 43, pp. 962-969.
- Durbin, T.D., Jung, H., Cocker, D.R., Johnson, K., and Chaudhary, A. 2008. Evaluation of the Proposed New European Methodology for Determination of Particle Number Emissions and Its Potential for In-Use Screening. California Air Resources Board, August.
- Li, W., J. Collins, T.D. Durbin, T. Huai, A. Ayala, G. Full, C. Mazzoleni, N. Nussbaum, D. Obrist, D. Zhu, H. Kuhns, H. Moosmuller. 2007. Detection of Gasoline Vehicles with Gross PM Emissions. Society of Automotive Engineers, Society of Automotive Engineers, SAE Paper No. 2007-01-1113, Detroit, MI, March.

- Zhu, X., T.D. Durbin, J.M. Norbeck, D.R. Cocker. 2004. Internal Combustion Engine (ICE) Air Toxic Emissions. Final report submitted to the California Air Resources Board, July.
- Durbin, T.D., J.M. Norbeck, D.R. Cocker, T. Younglove. 2004. Particulate Matter Mass Measurement and Physical Characterization – Techniques and Instrumentation for Laboratory Source Testing. Final report submitted to the California Air Resources Board, July.

Fuels

Research in the area of emissions from different fuels is one of the existing strengths of CE-CERT. The group has done extensive research in this area, and also has several researchers within extensive experience in the petroleum industry. CE-CERT has been the coordinating research team for the most of ARB's studies of biodiesel for its Low ARB on Fuel Standard (LCFS), has been studying the effects of different natural gas blends for various agencies, and has conducted a number of studies for industry groups such as the Coordinating Research Council (CRC), and is currently studying of alcohol blends and infrastructure issues for the California Energy Commission (CEC).

ARB Related Contracts and Grants

- ARB, "Evaluation of Fuel Additives as Certified Biodiesel B20 NOx Mitigation Strategies," 6/12-6/14, \$300,000.
- ARB, "Biodiesel Emissions Characterization Study of Engines Fueled with B5 Biodiesel Blends," 6/12-6/14, \$480,000.
- ARB, "Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends," 7/10-8/13, \$280,000.
- ARB (from National Biodiesel Board), "Assessment of Emissions from Use of Biodiesel as a Motor Vehicle Fuel in California: Biodiesel Characterization and NOx Formation and Mitigation Study," 3/09-6/11, \$50,000.
- ARB, "Biodiesel Certification Testing," 3/11-6/13, \$300,000.
- ARB, "Assessment of Emissions from Use of California Air Resources Board Qualified Diesel in Comparison with Federal Diesel," 6/08-5/10, \$1,000,000.
- ARB, "Assessment of Emissions from Use of Biodiesel as a Motor Vehicle Fuel in California: Biodiesel Characterization and NOx Formation and Mitigation Study," 6/07-6/09, \$1,360,000.
- ARB, "Assessment of the Emissions from the Use of Biodiesel as a Fuel in California," 6/06-5/08, \$100,000.
- ARB, "Evaluation of the Performance and Air Pollutant Emissions of Vehicle Operating on Various Natural Gas Blends- Phase 2". 6/2013-3/2015. \$120,000.
- ARB, "Evaluation of the Impact of Emissions averaging and Flexibility Programs for all Tier 4 Final off-road diesel engines". 8/2014-8/2016. \$300,000.
- ARB Related Journal Articles/Technical Reports
- Hajbabaie, M., Johnson, K.C., Okamoto, R., Durbin, T.D., 2012. Evaluation of the impacts of Biofuels on Emissions for a California-Certified Diesel Fuel from Heavy-Duty Engines. SAE Technical Paper 13PFL-0187.
- Karavalakis, G., Gysel, N., Hajbabaie, M., Durbin, T.D., Johnson, K.C., Miller, J.W., 2012, Influence of Different Natural Gas Compositions on the Regulated Emissions, Aldehydes, and Particle Emissions from a Transit Bus, SAE Technical Paper 13PFL-0569.
- Karavalakis, G., Hajbabaie, M., Johnson, K.C., Durbin, T.D., Zheng, Z., Miller, J.W., 2012. The effect of natural gas composition on the regulated emissions, gaseous toxic pollutants, and ultrafine particle number emissions from a refuse hauler vehicle, In Press Energy.
- Karavalakis, G., Hajbabaie, M., Durbin, T.D., Zheng, Z., Johnson, K.C., 2012. Influence of different Natural Gas Blends on the Regulated Emissions, Particle Number and Size Distribution Emissions from a Refuse Hauler Truck, SAE Technical Paper 2012-01-1583.
- Hajbabaie, M., Johnson, K.C., Okamoto, R., Mitchell, A., Pullman, M., Durbin, T.D., 2012. Evaluation of the Impacts of Biodiesel and Second Generation Biofuels on NOx Emissions for ARB Diesel Fuels. Environmental Sci. Technol., 46, 9163-9173.

- M. Hajbabaie, K.C. Johnson, J. Guthrie, T.D. Durbin, 2012. Assessment of the Emissions from the Use of California Air Resources Board Qualified Diesel Fuels in Comparison with Federal Diesel Fuels. Int. J. of Engine Research.
- Durbin, T.D., Miller, J.W., Johnson, K.C., Hajbabaie, M., Kado N.Y., Kobayashi, R., Liu, X., Vogel, C.F.A., Matsumura, F., Wong, P.S., and Cahill, T. (2011) Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California - Biodiesel Characterization and NOx Mitigation Study, Final report for the California Air Resources Board by the University of California at Riverside, the University of California at Riverside, and Arizona State University, October.
- Durbin, T.D., Miller, J.W., Johnson, K.C., and Hajbabaie, (2011) Assessment of the Emissions from the Use of California Air Resources Board qualified Diesel Fuel in Comparison with Federal Diesel Fuels, Draft final report for the California Air Resources Board by the University of California at Riverside, August.
- Karavalakis, G., Durbin, T.D., Shrivastava, M., Zheng, Z., Villela, M., Jung, H., 2011. Air pollutant emissions of light-duty vehicles operating on various natural gas compositions. In Press, Journal of Natural Gas Science & Engineering.
- Durbin, T.D., Miller, J.W., Jiang, M. 2010. Biodiesel Fleet Durability Study. Draft Final Report by UC Riverside to the California Air Resources Board, August.

Construction/off-road

CE-CERT is playing a major role in evaluating new control strategies for construction equipment and studying emissions from construction equipment. This includes a study for the Air Quality Improvement Program to evaluate hybrid construction equipment and a program to study the emissions from 20 pieces of construction equipment under in-use conditions.

ARB Related Contracts and Grants

- ARB, “Air Quality Improvement Program (AQIP): Hybrid Deployment and Testing Evaluation,” 6/11-6/13, \$2,000,000.
- ARB, “Study of In-Use Engine Deterioration in Diesel Off-Road Equipment,” 11/09-5/11, \$300,000.
- ARB, “Determination of Non-Registration Rates for On-Road Vehicles in California,” 4/00-11/01, \$210,000.
- ARB, “Off-Highway Motorcycle/All Terrain Vehicle Activity-Data Collection; Personal Watercraft Activity-Data Collection; and Test Cycle Development,” 6/99-12/00, \$220,000.
- ARB, “Emissions Testing of Low-Emitting Utility Engines,” 3/98-3/99, \$49,994.
- ARB, “Collection of Activity Data from On-Road Heavy-Duty Diesel Vehicles”. 4/2014-4/2016. \$134,849.00

ARB Related Journal Articles/Technical Reports

- Younglove, T., C. Malcolm, T.D. Durbin, and M.R. Smith. 2004. Non-registration Rates for On-Road Light-Duty Vehicles. Journal of Transportation and Statistics, vol. 7, p. 1-12.
- Durbin, T.D., Smith, M.R., Wilson, R.D., and Rhee, S.H. 2004. In-Use Activity Measurements for Off-Highway Motorcycles and All-Terrain Vehicles. Transportation Research D: Transport and Environment, vol. 9, 209-219.
- Durbin, T. D., M. R. Smith, R. D. Wilson, T. Younglove, J. Jones, and M.P.H. Barnett. 2003. Off Highway/ All-Terrain Vehicle Activity-Data Collection; and Personal Watercraft Activity-Data Collection; Test-Cycle Development and Emissions Tests, California Air Resources Board, CE-CERT Technical Report No. 03-VE-18399-04-FR, June.
- Durbin, T. D., T. Younglove, C. Malcolm and M. R. Smith. Determination of Non-Registration Rates for On-Road Vehicles in California. 2002. California Air Resources Board, March.

PEMS

Testing under realistic driving conditions is rapidly superseding more traditional laboratory dynamometer testing as a means of characterizing vehicle emissions. CE-CERT has a strong presence in this area. The group played a key role in the in-use validation of the Portable Emissions Measurement Systems (PEMS) measurement allowance for ARB and the US EPA. We have recently developed one of the most advanced PEMS based on technology from AVL and are implementing this system in studies of construction equipment for ARB and CalTrans.

ARB Related Contracts and Grants

- ARB, “Development of a Portable In-Use Reference PM Measurement System,”4/11-9/13, \$300,000.
- ARB, “Very Low PM Mass Measurement” 10/2012-12/2014. \$434,617.00
- ARB, “PM PEMS Validation Testing with a 1065 Compliant PM Laboratory for the PM-PEMS Measurement Allowance Determination for the HDIUT Program,”5/09-12/10, \$573,113.
- ARB, “Comparison of PM PEMS for the HDIUT Program with a 1065 Compliant PM Mobile Laboratory,”12/07-6/09, \$284,667.
- ARB, “Measurement Allowance Project,” 7/04-1/08, \$500,000.
- ARB, “Evaluation of the Feasibility, cost-effectiveness, and necessity of equipping small off road diesel engines with advanced PM and/or Nox aftertreatment”8/2014-8/2016. \$800,000

ARB Related Journal Articles/Technical Reports

- Khan, M.Y., Johnson, K.C., Durbin, T.D., Jung, H., Cocker III, D., Bishnu, D., and Giannelli, R. 2011. Characterization of PM-PEMS for In-Use Measurements – Validation Testing for the PM-PEMS Measurement Allowance Program. *Atmospheric Environment*, 55, 311-318.
- Johnson, K.C., Durbin, T.D., Jung, H., Cocker III, D.R., Giannelli, R., Bishnu, D., 2010. Quantifying In-Use PM Measurements for Heavy Duty Diesel Vehicles. *Environ. Sci. Technol.*, Vol. 45, pp. 6073-6079.
- Johnson, K., Durbin, T.D., Jung, H., Cocker, D.R., Yusuf Khan, M. 2010. Validation Testing for the PM-PEMS Measurement Allowance Program. Draft Final Report by UC Riverside to the California Air Resources Board under Contract No. 07-620, September.
- Johnson, K.C., Durbin, T.D., Cocker III, D.R., Miller, J.W., Bishnu D.K., Maldonado H., Moynahan N., Ensfield C., Laroo C.A.. 2009. On-Road Comparison of a Portable Emission Measurement System with a Mobile Reference Laboratory for a Heavy Duty Diesel Vehicle. *Atmospheric Environment*. Vol. 43, pp. 2877-2883.
- Durbin, T.D., Jung, H., Cocker, D.R., and Johnson, K. 2009. PM PEM’s Pre-Measurement Allowance – On-Road Evaluation and Investigation. Final by UC Riverside to the Measurement Allowance Steering Committee, January.
- Durbin, T.D., K. Johnson, D.R. Cocker, J.W. Miller, H. Maldonado, A. Shah, C. Ensfield, C. Weaver, M. Akkard, N. Harvey, J. Symon, T. Lanni, W.D. Bachalo, G. Payne, G. Smallwood, M. Linke, 2007. Evaluation and Comparison of Portable Emissions Measurement Systems and Federal Reference Methods for Emissions from a Back-up Generator and a Diesel Truck Operated on a Chassis Dynamometer. *Environ. Sci. & Technol.*, vol. 41, 6199-6204.
- Miller, J.W., T.D. Durbin, K. Johnson, D.R. Cocker. 2008. Measurement Allowance Project – On-Road Validation. California Air Resources Board, January.
- Miller, J.W., T.D. Durbin, K. Johnson, D.R. Cocker. 2007. Measurement Allowance Project – On-Road Validation. Measurement Allowance Steering Committee, August.
- Miller, J.W., T.D. Durbin, K. Johnson, D.R. Cocker. 2006. Evaluation of Portable Emissions Monitors (PEMS) for the Heavy-Duty Engine Not-To-Exceed Regulation. California Air Resources Board, July.

Other

CE-CERT has conducted a range of other studies for ARB that have included the development of advanced spectroscopy techniques for measuring specialized emissions components, evaluating the effectiveness of OBDII systems, and working with the ARB laboratory that was formerly in Stockton, CA.

ARB Related Contracts and Grants

- ARB, “Construction of a Low-Level SO₂ DOAS for Installation at a ARB Emissions Test Facility,” 4/11-9/12, \$90,000.
- ARB, “Update and Documentation of the SAPRC Mechanism and Associated Software and Data Files”. 1/2012-6/2015. \$249,819.00.
- ARB, “Evaluation of On-Board Diagnostic II (OBD-11) and Tailpipe Test for Use in Smog Check,” 6/03-6/05, \$325,666.
- Cal EPA Integrated Waste Management Board, “Yosemite Closing the Loop,” 12/02-5/03, \$27,500.

ARB Related Journal Articles/Technical Reports

- Durbin, T.D., Johnson, K., Miller, J.W., Maldonado, H., and Chernich, D., 2008. Emissions from heavy-duty vehicles under actual on-road driving conditions. *Atmospheric Environment*. vol. 42, 4812-4821.
- J.W. Miller, T.D. Durbin, K.J. Johnson. 2007. Evaluation of On-Road Results from a Test Fleet of Heavy-Duty Trucks. California Air Resources Board, April.
- Klausmeier, R., Durbin, T. D. 2005. Analysis of Data on the Effectiveness of OBDII Inspections as a Screening Tool in the Smog Check Program. California Air Resources Board, April.
- Durbin, T.D. 2005. Yosemite Closing the Loop Project. Final report to the California Integrated Waste Management Board, August.
- Huai, T., T.D. Durbin, and J.M. Norbeck. 2003. Analysis of N₂O and NH₃ Emissions from Motor Vehicles. Final report submitted to the California Air Resources Board, CE-CERT Technical Report No. 03-VE-18599-01, October.

AWARD EXECUTION DATE	FISCAL YEAR	AWARD AMOUNT	SPONSOR	TITLE
4/17/2013	2013	\$189,158	AdaptiveARC	Evaluation of Gasification Processing of Municipal Solid Waste to Generate Electricity
6/30/2010	2010	\$150,000	AIR RESOURCES BOARD	Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends
3/16/2011	2011	\$300,000	AIR RESOURCES BOARD	CARB Biodiesel Certification Testing
4/6/2011	2011	\$90,004	AIR RESOURCES BOARD	Construction of a Low-Level SO2 DOAS for Installation at a CARB Emissions Testing Facility
5/19/2011	2011	\$300,000	AIR RESOURCES BOARD	Development of a Portable in-Use Reference PM Measurement System
6/29/2011	2011	\$912,922	AIR RESOURCES BOARD	Air Quality Improvement Program (AQIP): Hybrid Deployment and Testing Evaluation
7/14/2011	2012	\$100,000	AIR RESOURCES BOARD	Emission Testing of Port Engines and Other Sources of Diesel Particulate Matter
8/15/2011	2012	\$80,000	AIR RESOURCES BOARD	ARB EMFAC Redesign Review
10/24/2011	2012	\$1,087,078	AIR RESOURCES BOARD	Air Quality Improvement Program (AQIP): Hybrid Deployment and Testing Evaluation
12/27/2011	2012	\$130,400	AIR RESOURCES BOARD	Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends
3/29/2012	2012	\$149,902	AIR RESOURCES BOARD	Update and Documentation of the SAPRC Mechanism and Associated Software and Data Files
7/20/2012	2013	\$300,000	AIR RESOURCES BOARD	Evaluation of Fuel Additives as Certified Biodiesel B20 NOx Mitigation Strategies
7/27/2012	2013	\$480,000	AIR RESOURCES BOARD	Biodiesel Emissions Characterization Study of Engines Fueled with B5 Biodiesel Blends
2/7/2013	2013	\$100,000	AIR RESOURCES BOARD	Very Low PM Measurements for Light-Duty Vehicles (E-99)
7/15/2013	2014	\$120,000	AIR RESOURCES BOARD	Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends - Phase 2
7/15/2013	2014	\$250,000	AIR RESOURCES BOARD	Emission Testing and Evaluation of Premixing Control
8/16/2013	2014	\$99,917	AIR RESOURCES BOARD	Update and Documentation of the SAPRC Mechanism and Associated Software and Data Files
9/10/2013	2014	\$405,338	AIR RESOURCES BOARD	AIR QUALITY IMPACTS OF LOW VAPOR PRESSURE-VOLATILE ORGANIC COMPOUNDS
2/7/2014	2014	\$323,715	AIR RESOURCES BOARD	Collection of Activity Data from On-Road Heavy-Duty Diesel Vehicles
8/15/2014	2015	\$300,000	AIR RESOURCES BOARD	Evaluation of the impacts of emissions averaging and flexibility programs for all Tier 4 Final off-road diesel engines
9/4/2014	2015	\$800,000	AIR RESOURCES BOARD	Evaluation of the feasibility, cost-effectiveness, and necessity of equipping small off road diesel engines with advanced PM and/or NOx aftertreatment
10/17/2014	2015	\$20,000	AIR RESOURCES BOARD	Long Term Measurements of Ultrafine Particle Concentrations in Built Environments
12/1/2011	2012	\$75,000	ALLIANCE FOR SUSTAINABLE ENERGY, LLC	Characterization and Conversion of Xylooligomers Released During Hydrothermal (HT) and Low Severity Dilute Acid (LS-DA) Pretreatments
8/6/2012	2013	\$74,500	ALLIANCE FOR SUSTAINABLE ENERGY, LLC	Characterization and Conversion of Xylooligomers Released During Hydrothermal (HT) and Low Severity Dilute Acid (LS-DA) Pretreatments
4/3/2013	2013	\$239,409	ALLIANCE FOR SUSTAINABLE ENERGY, LLC	Conventional and Hybrid heavy duty on-highway chassis evaluation
2/3/2012	2012	\$264,768	AMERICAN PETROLEUM INSTITUTE	Impacts of Aromatics in Late Model Vehicles
2/18/2010	2010	\$238,269	ARMY ENGINEERS/HUMPHREYS ENGINEER CENTER	New Tools for Estimating and Managing Local/Regional Air Quality Impacts of Prescribed Burns
1/7/2013	2013	\$19,184	BAY AREA AIR QUALITY MANAGEMENT DISTRICT	Development and Operation of a Lab for Determination of Cooking Emissions Control Efficiency
10/31/2011	2012	\$156,000	BOOZ ALLEN HAMILTON INC.	Mapping Technology Assessment for Connected Vehicle Highway Network Applications
12/23/2011	2012	\$144,000	BOOZ ALLEN HAMILTON INC.	Mapping Technology Assessment for Connected Vehicle Highway Network Applications
3/26/2012	2012	\$25,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
4/19/2012	2012	\$25,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
6/8/2012	2012	\$25,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
9/26/2012	2013	\$125,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
2/14/2013	2013	\$17,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
6/5/2013	2013	\$10,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
6/27/2013	2013	\$300,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
7/31/2013	2014	\$10,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
10/4/2013	2014	\$10,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
10/7/2013	2014	\$251,021	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
12/4/2013	2014	\$15,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
12/4/2013	2014	\$20,000	BOOZ ALLEN HAMILTON INC.	US/EU Connected Vehicle Sustainability Working Group Joint Research Whitepapers and Workshop
9/16/2014	2015	\$10,000	BOOZ ALLEN HAMILTON INC.	US/EU Connected Vehicle Sustainability Working Group Joint Research Whitepapers and Workshop
11/2/2014	2015	\$58,979	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
11/23/2010	2011	\$250,295	BP GROUP (BP AMERICA, BP EXPLORATION, BRITISH PETROLEUM)	Comparison of emission characteristics (regulated and toxics) of 4 fuels using late model vehicles
10/5/2012	2013	\$89,664	Bristol Harbor Group, Inc.	Measurement of Criteria Pollutant Emissions from Vessels Operated by the US Army Corps of Engineers and using Advanced Fuels
1/27/2014	2014	\$17,220	Bristol Harbor Group, Inc.	Measurement of Criteria Pollutant Emissions from Vessels Operated by the US Army Corps of Engineers and using Advanced Fuels
6/22/2010	2010	\$107,756	CALIFORNIA DEPT OF TRANSPORTATION DIVISION OF RESEARCH	High Occupancy Vehicle (HOV) System Analysis Tools District 8 HOV Facility Performance Analysis
11/18/2010	2011	\$44,101	CALIFORNIA DEPT OF TRANSPORTATION DIVISION OF RESEARCH	High Occupancy Vehicle (HOV) System Analysis Tools District 8 HOV Facility Performance Analysis
1/3/2012	2012	\$62,884	CALIFORNIA DEPT OF TRANSPORTATION DIVISION OF RESEARCH	High Occupancy Vehicle (HOV) System Analysis Tools District 8 HOV Facility Performance Analysis
7/28/2010	2011	\$1,200,000	CALIFORNIA ENERGY COMMISSION	Alternative Transportation Fuels Research Testing Program
6/7/2011	2011	\$680,000	CALIFORNIA ENERGY COMMISSION	Evaluation and Improvement of Particulate Matter Measurement from NG Power Plants
10/12/2011	2012	\$649,214	CALIFORNIA ENERGY COMMISSION	Production of Substituted Natural Gas from the Wet Organic Waste by utilizing PDU-scale Steam Hydrogasification Process.

AWARD EXECUTION DATE	FISCAL YEAR	AWARD AMOUNT	SPONSOR	TITLE
4/17/2013	2013	\$189,158	AdaptiveARC	Evaluation of Gasification Processing of Municipal Solid Waste to Generate Electricity
6/30/2010	2010	\$150,000	AIR RESOURCES BOARD	Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends
3/16/2011	2011	\$300,000	AIR RESOURCES BOARD	CARB Biodiesel Certification Testing
4/6/2011	2011	\$90,004	AIR RESOURCES BOARD	Construction of a Low-Level SO2 DOAS for Installation at a CARB Emissions Testing Facility
5/19/2011	2011	\$300,000	AIR RESOURCES BOARD	Development of a Portable in-Use Reference PM Measurement System
6/29/2011	2011	\$912,922	AIR RESOURCES BOARD	Air Quality Improvement Program (AQIP): Hybrid Deployment and Testing Evaluation
7/14/2011	2012	\$100,000	AIR RESOURCES BOARD	Emission Testing of Port Engines and Other Sources of Diesel Particulate Matter
8/15/2011	2012	\$80,000	AIR RESOURCES BOARD	ARB EMFAC Redesign Review
10/24/2011	2012	\$1,087,078	AIR RESOURCES BOARD	Air Quality Improvement Program (AQIP): Hybrid Deployment and Testing Evaluation
12/27/2011	2012	\$130,400	AIR RESOURCES BOARD	Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends
3/29/2012	2012	\$149,902	AIR RESOURCES BOARD	Update and Documentation of the SAPRC Mechanism and Associated Software and Data Files
7/20/2012	2013	\$300,000	AIR RESOURCES BOARD	Evaluation of Fuel Additives as Certified Biodiesel B20 NOx Mitigation Strategies
7/27/2012	2013	\$480,000	AIR RESOURCES BOARD	Biodiesel Emissions Characterization Study of Engines Fueled with B5 Biodiesel Blends
2/7/2013	2013	\$100,000	AIR RESOURCES BOARD	Very Low PM Measurements for Light-Duty Vehicles (E-99)
7/15/2013	2014	\$120,000	AIR RESOURCES BOARD	Evaluation of the Performance and Air Pollutant Emissions of Vehicles Operating on Various Natural Gas Blends - Phase 2
7/15/2013	2014	\$250,000	AIR RESOURCES BOARD	Emission Testing and Evaluation of Premising Control
8/16/2013	2014	\$99,917	AIR RESOURCES BOARD	Update and Documentation of the SAPRC Mechanism and Associated Software and Data Files
9/10/2013	2014	\$405,338	AIR RESOURCES BOARD	AIR QUALITY IMPACTS OF LOW VAPOR PRESSURE-VOLATILE ORGANIC COMPOUNDS
2/7/2014	2014	\$323,715	AIR RESOURCES BOARD	Collection of Activity Data from On-Road Heavy-Duty Diesel Vehicles
8/15/2014	2015	\$300,000	AIR RESOURCES BOARD	Evaluation of the impacts of emissions averaging and flexibility programs for all Tier 4 Final off-road diesel engines
9/4/2014	2015	\$800,000	AIR RESOURCES BOARD	Evaluation of the feasibility, cost-effectiveness, and necessity of equipping small off road diesel engines with advanced PM and/or NOx aftertreatment
10/17/2014	2015	\$20,000	AIR RESOURCES BOARD	Long Term Measurements of Ultrafine Particle Concentrations in Built Environments
12/1/2011	2012	\$75,000	ALLIANCE FOR SUSTAINABLE ENERGY, LLC	Characterization and Conversion of Xylooligomers Released During Hydrothermal (HT) and Low Severity Dilute Acid (LSDA) Pretreatments
8/6/2012	2013	\$74,500	ALLIANCE FOR SUSTAINABLE ENERGY, LLC	Characterization and Conversion of Xylooligomers Released During Hydrothermal (HT) and Low Severity Dilute Acid (LSDA) Pretreatments
4/3/2013	2013	\$239,409	ALLIANCE FOR SUSTAINABLE ENERGY, LLC	Conventional and Hybrid heavy duty on-highway chassis evaluation
2/3/2012	2012	\$264,768	AMERICAN PETROLEUM INSTITUTE	Impacts of Aromatics in Late Model Vehicles
2/18/2010	2010	\$238,269	ARMY ENGINEERS/HUMPHREYS ENGINEER CENTER	New Tools for Estimating and Managing Local/Regional Air Quality Impacts of Prescribed Burns
1/7/2013	2013	\$19,184	BAY AREA AIR QUALITY MANAGEMENT DISTRICT	Development and Operation of a Lab for Determination of Cooking Emissions Control Efficiency
10/31/2011	2012	\$156,000	BOOZ ALLEN HAMILTON INC.	Mapping Technology Assessment for Connected Vehicle Highway Network Applications
12/23/2011	2012	\$144,000	BOOZ ALLEN HAMILTON INC.	Mapping Technology Assessment for Connected Vehicle Highway Network Applications
3/26/2012	2012	\$25,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
4/19/2012	2012	\$25,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
6/8/2012	2012	\$25,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
9/26/2012	2013	\$125,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
2/14/2013	2013	\$17,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
6/5/2013	2013	\$10,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
6/27/2013	2013	\$300,000	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
7/31/2013	2014	\$10,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
10/4/2013	2014	\$10,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
10/7/2013	2014	\$251,021	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
12/4/2013	2014	\$15,000	BOOZ ALLEN HAMILTON INC.	Technical Support for AERIS International Joint Research Activities
12/4/2013	2014	\$20,000	BOOZ ALLEN HAMILTON INC.	US/EU Connected Vehicle Sustainability Working Group Joint Research Whitepapers and Workshop
9/16/2014	2015	\$10,000	BOOZ ALLEN HAMILTON INC.	US/EU Connected Vehicle Sustainability Working Group Joint Research Whitepapers and Workshop
11/2/2014	2015	\$58,979	BOOZ ALLEN HAMILTON INC.	AERIS - Identification and Evaluation of Transformative Environmental Applications and Strategies
11/23/2010	2011	\$250,295	BP GROUP (BP AMERICA, BP EXPLORATION, BRITISH PETROLEUM	Measurement of emission characteristics (regulated and toxics) of 4 fuels using late model vehicles
10/5/2012	2013	\$89,664	Bristol Harbor Group, Inc.	Measurement of Criteria Pollutant Emissions from Vessels Operated by the US Army Corps of Engineers and using Advanced Fuels
1/27/2014	2014	\$17,220	Bristol Harbor Group, Inc.	Measurement of Criteria Pollutant Emissions from Vessels Operated by the US Army Corps of Engineers and using Advanced Fuels
6/22/2010	2010	\$107,756	CALIFORNIA DEPT OF TRANSPORTATION DIVISION OF RESEARCH	High Occupancy Vehicle (HOV) System Analysis Tools District 8 HOV Facility Performance Analysis
11/18/2010	2011	\$44,101	CALIFORNIA DEPT OF TRANSPORTATION DIVISION OF RESEARCH	High Occupancy Vehicle (HOV) System Analysis Tools District 8 HOV Facility Performance Analysis
1/3/2012	2012	\$62,884	CALIFORNIA DEPT OF TRANSPORTATION DIVISION OF RESEARCH	High Occupancy Vehicle (HOV) System Analysis Tools District 8 HOV Facility Performance Analysis
7/28/2010	2011	\$1,200,000	CALIFORNIA ENERGY COMMISSION	Alternative Transportation Fuels Research Testing Program
6/7/2011	2011	\$680,000	CALIFORNIA ENERGY COMMISSION	Evaluation and Improvement of Particulate Matter Measurement from NG Power Plants
10/12/2011	2012	\$649,214	CALIFORNIA ENERGY COMMISSION	Production of Substituted Natural Gas from the Wet Organic Waste by utilizing PDU-scale Steam Hydrogasification Process.

8/13/2013	2014	\$14,995	ENVIRONMENTAL PROTECTION AGENCY	Test Protocol for Evaluating Smog Eating Roof Tiles
8/11/2014	2015	\$15,000	ENVIRONMENTAL PROTECTION AGENCY	NOx-Out: Selective Catalytic Reduction System
8/21/2014	2015	\$15,000	ENVIRONMENTAL PROTECTION AGENCY	Technology for the Reducing BBQ Particulate Matter
9/24/2010	2011	\$40,000	FEDERAL HIGHWAY ADMINISTRATION	ECO-ITS: ITS Applications to Improve Environmental Performance
11/10/2011	2012	\$91,575	FOSS MARITIME COMPANY	Development of Emission Factors for Foss Tug Boat for EPA verification
10/18/2010	2011	\$3,000	FOSSIL ENERGY RESEARCH CORP.	Control Strategies and Technologies for Particulate Matter Under 2.5 Microns (PM2.5) and Ultrafine Particulate Emissions from Natural Gas-Fired Gas Tu
6/26/2013	2013	\$94,855	FOSSIL ENERGY RESEARCH CORP.	Control Strategies and Technologies for Particulate Matter Under 2.5 Microns (PM2.5) and Ultrafine Particulate Emissions from Natural Gas-Fired Gas Tu
7/27/2010	2011	\$74,297	GEM POWER, LLC	Phase 2: Electronics Evaluation for Aircraft Battery SOC and Integrity Estimation
1/31/2011	2011	\$45,063	GEM POWER, LLC	Phase 2: Electronics Evaluation for Aircraft Battery SOC and Integrity Estimation
8/4/2011	2012	\$22,129	GEM POWER, LLC	Phase 2: Electronics Evaluation for Aircraft Battery SOC and Integrity Estimation
2/20/2014	2014	\$154,119	HUG FILTERSYSTEMS	Emission Verification Testing of Diesel Particulate Filter (DPF) Selective Catalytic Reduction (SCR) Systems for Two Tugboats
9/26/2014	2015	\$109,428	HUG FILTERSYSTEMS	Emission Verification Testing of Diesel Particulate Filter (DPF) Selective Catalytic Reduction (SCR) Systems for Two Tugboats
3/12/2010	2010	\$89,239	ICF INCORPORATED	On-Board C3 Marine Engine Measurement of Emission Reductions from Fuel Switching at the Port of Houston and a Mexican Port
2/27/2013	2013	\$34,898	INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION	Measuring Black Carbon Emissions from the Main Propulsion Engine of a ship and the Efficiency of a Scrubber System for Removing Black Carbon from the
3/22/2011	2011	\$102,458	INTERNATIONAL SUSTAINABLE SYSTEMS RESEARCH CEN.	Evaluation of Air Pollutant Emissions and Fuel Economy of Liquefied Petroleum Gas (LPG) Powered Buses/Trucks
7/21/2014	2015	\$49,439	LEIDOS, INC	GlidePath Algorithm, Documentation, Evaluation, and Integrity
10/23/2014	2015	\$45,432	LEIDOS, INC	Fundamental Research in Freeway Lateral Maneuvers
12/8/2014	2015	\$49,438	LEIDOS, INC	GlidePath Algorithm, Documentation, Evaluation, and Integrity
3/19/2010	2010	\$91,802	LOGOS TECHNOLOGIES, INC. (GREAT BRITAIN)	Production of JP-8 range Alkanes from Lignocellulosic Biomass
11/30/2010	2011	\$13,744	LOGOS TECHNOLOGIES, INC. (GREAT BRITAIN)	Production of JP-8 range Alkanes from Lignocellulosic Biomass
5/19/2011	2011	\$100,000	LOGOS TECHNOLOGIES, INC. (GREAT BRITAIN)	Phase II: Production of Sugars and Conversion to TAG
4/23/2010	2010	\$282,657	LOS ALAMOS NATIONAL SECURITY, LLC	Fuel Technology Project
6/4/2012	2012	\$61,948	LOS ALAMOS NATIONAL SECURITY, LLC	Fuel Technology Project
9/17/2010	2011	\$25,000	MASCOMA CORPORATION	Mascoma Pretreatment and Enzymatic Hydrolysis
4/11/2011	2011	\$36,639	MEMON AND ASSOCIATES, INC.	Process Improvements in Pretreatments to Improve Final Yields of Biofuel Production Through Biological Conversions
12/11/2014	2015	\$499,748	NATIONAL INSTITUTE FOR FOOD AND AGRICULTURE	Coupling Highly Efficient Bioprocessing with Catalytic Conversion for Conversion of Agricultural Wastes into Drop-In Fuel Additives
8/30/2010	2011	\$15,000	NATIONAL SCIENCE FOUNDATION	REACTIONS AND FATE OF AMINES IN THE ATMOSPHERE EMITTED FROM ANIMAL FEEDING OPERATIONS
2/2/2012	2012	\$197,750	NATIONAL SCIENCE FOUNDATION	CAREER: Toward an understanding of secondary aerosol formation, particle ageing in droplets, and cloud processing
7/11/2014	2015	\$105,947	NATIONAL SCIENCE FOUNDATION	CAREER: Toward an understanding of secondary aerosol formation, particle ageing in droplets, and cloud processing
10/28/2011	2012	\$82,192	NISSAN MOTOR CO., LTD. (JAPAN)	Research, Development, and Evaluation of ECO-ITS Technology to Support Off-Cycle CO2 Reductions
10/18/2012	2013	\$109,996	NISSAN MOTOR CO., LTD. (JAPAN)	Phase 2 Research, Development, and Evaluation of ECO-ITS Technology to Support Off-Cycle CO2 Reductions
10/30/2013	2014	\$100,000	NISSAN MOTOR CO., LTD. (JAPAN)	Phase 4 Research, Development, and Evaluation of ECO-ITS Technology to Support Off-Cycle CO2 Reductions
2/16/2015	2015	\$94,800	NISSAN MOTOR CO., LTD. (JAPAN)	Biomass Characterization Pretreatment Research
3/4/2010	2010	\$395,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
7/28/2010	2011	\$60,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
11/15/2010	2011	\$60,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
1/14/2011	2011	\$200,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
5/19/2011	2011	\$89,350	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
6/17/2011	2011	\$50,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
9/1/2011	2012	\$75,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
12/15/2011	2012	\$325,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
6/21/2012	2012	\$125,000	OAK RIDGE NATIONAL LABORATORY	Biomass Characterization Pretreatment Research
10/19/2012	2013	\$105,000	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader: C. Wyman, UCR)
11/26/2012	2013	\$209,667	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader: C. Wyman, UCR)
4/19/2013	2013	\$52,417	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader: C. Wyman, UCR)
5/3/2013	2013	\$261,916	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader: C. Wyman, UCR)
9/30/2013	2014	\$104,833	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
12/19/2013	2014	\$104,833	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
3/4/2014	2014	\$100,160	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
4/17/2014	2014	\$401,917	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
9/25/2014	2015	\$99,000	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
1/16/2015	2015	\$148,500	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
2/27/2015	2015	\$311,500	OAK RIDGE NATIONAL LABORATORY	Identification of Optimal Pretreatment and Conversion Conditions (Activity leader:34330 C. Wyman, UCR)
10/25/2011	2012	\$105,055	OREGON STATE UNIVERSITY	Enhanced Production of Reactive Intermediates from Cellulosic Biomass for Aqueous-Phase Catalytic Processing to Drop-In Fuels
8/24/2012	2013	\$89,413	OREGON STATE UNIVERSITY	Enhanced Production of Reactive Intermediates from Cellulosic Biomass for Aqueous-Phase Catalytic Processing to Drop-In Fuels

UCR, CE-CERT GRANT AWARDS

12/21/2011	2012	\$35,184	PACIFIC SOUTHWEST RESEARCH STATION	Secondary Pollutant Formation in the Lake Tahoe Basin
7/16/2010	2011	\$66,321	POWER WASTE GASIFICATION, LLC	Proposal to Evaluate a Waste-To-Energy Gasification Process
6/29/2011	2011	\$58,578	POWER WASTE GASIFICATION, LLC	Proposal to Evaluate a Waste-To-Energy Gasification Process
2/4/2010	2010	\$213,000	PROPANE EDUCATION AND RESEARCH COUNCIL	Ozone-Forming Potential of Propane and Propane-Powered Combustion Sources
10/14/2010	2011	\$100,000	RIVERSIDE, CITY OF	Southern California Research Initiative for Solar Energy (SC-RISE)
7/29/2013	2014	\$99,722	RIVERSIDE, CITY OF	Hybrid Nanostructure of ZnO Nanowires and TiO2 Nanoparticles and its Applications for Dye-Sensitized Solar Cells
10/15/2010	2011	\$67,338	SENSORS, INC.	Supplemental Testing of PPMd at CE-CERT to Resolve Issues with the PPMd Observed During the HDIUT PM MA Program
4/22/2010	2010	\$32,823	SOCAL SHIP SERVICES	Proposal to Measure the Emission Factors for a DDC 12V71 T1 Engine with the Clean Cam Technology Systems (CCTS) Emissions Control Technology
6/17/2011	2011	\$9,624	SOCAL SHIP SERVICES	Measurement of the Effectiveness of Containment Hoods
6/18/2010	2010	\$45,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Performance Evaluation of Devices to Remove Particulate Matter in Classrooms
8/6/2010	2011	\$60,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Development and Operation of a Test Facility for Determination of Emissions Control Efficiency for Commercial Cooking Operations
12/23/2010	2011	\$47,425	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Evaluation of a Protocol for Measuring VOC Emissions from Cleaning Paint Brushes with Solvent
8/26/2011	2012	\$689,742	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	In-Use Emissions Testing and Demonstration of Retrofit Technology for Control of On-Road Heavy-Duty Engines
1/6/2012	2012	\$150,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Characterization of the Physical, Chemical, and Biological Properties of PM Emissions, VOCs, and Carbonyl Groups from Under-fired Charbroilers
1/13/2012	2012	\$207,500	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Health Effects of PM Particles Emitted from Heavy-Duty Vehicles - A Comparison Between Different Biodiesel Fuels
1/20/2012	2012	\$175,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Determining the Physical and Chemical Composition and Associated Health Effects of Tailpipe PM Emissions
1/20/2012	2012	\$235,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Identification of Biomass Feedstocks for Production of Reactive Intermediates for Conversion to Liquid Fuels in California
2/3/2012	2012	\$216,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Development and Operation of a Test Facility for Determination of Emissions Control Efficiency for Commercial Cooking Operations
5/18/2012	2012	\$80,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Activity, Durability, and Emissions Reductions from Cordless Electric Lawn and Garden Equipment
8/24/2012	2013	\$76,638	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	In-Use Emissions Testing and Demonstration of Retrofit Technology for Control of On-Road Heavy-Duty Engines
10/26/2012	2013	\$2,000,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	The New Grid: Integrating Photovoltaics, Energy Storage, and a Local Utility for Electric Transportation
2/27/2013	2013	\$45,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Activity, Durability, and Emissions Reductions from Cordless Electric Lawn and Garden Equipment
3/7/2013	2013	\$72,916	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PDU Scale Demonstration of Substituted Natural Gas Production from Wet Wastes Using Steam Hydrogasification Process
2/14/2014	2014	\$45,700	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Development and Operation of a Test Facility for Determination of Emissions Control Efficiency for Commercial Cooking Operations
6/13/2014	2014	\$75,000	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	South Coast Air Quality Management District RFP #2012-01: Technical Assistance for Advanced, Low- and Zero-Emissions Mobile and Stationary Source Tec
8/26/2011	2012	\$43,586	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Effects of Sound Barriers on Dispersion from Roadways - Numerical and Laboratory Study
8/26/2011	2012	\$69,682	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Effects of Sound Barriers on Dispersion from Roadways - Numerical and Laboratory Study
11/21/2012	2013	\$117,612	SOUTHEAST MISSOURI REGIONAL PLANNING COMM.	Development of Emission Factors for Repowered Towboat for MARAD Project
2/24/2010	2010	\$50,000	SOUTHWEST RESEARCH INSTITUTE	PM PEMS In-Use Validation: Augmented Measurements and Analysis
6/16/2010	2010	\$4,500	TERRAFORE, INC.	Thermal Trough Assembly Design, Assembly, and Evaluation
4/13/2011	2011	\$67,119	TERRAFORE, INC.	Using Encapsulated Phase Change Material for Thermal Energy Storage for Baseload Concentrating Solar Power Plants
12/7/2011	2012	\$5,000	TERRAFORE, INC.	Using Encapsulated Phase Change Material for Thermal Energy Storage for Baseload Concentrating Solar Power Plants
8/26/2013	2014	\$34,611	THE CONSUMER SPECIALTY PRODUCTS ASSOCIATION	Review of VOC Emissions Inventory for Consumer Products and Architectural Coatings For Potential Alternative Fate Corrections
9/14/2010	2011	\$90,000	UC BERKELEY	UC Riverside Transportation Fellowships 2010-2011
11/18/2010	2011	\$72,698	UC BERKELEY	Advanced Traffic Signal Control Algorithms
1/26/2011	2011	\$2,000	UC BERKELEY	Transportation Research Board Conference and Meeting Travel
1/26/2011	2011	\$7,000	UC BERKELEY	Eco-ITS Program Support
2/7/2011	2011	\$72,020	UC BERKELEY	Development and Evaluation of Intelligent Energy Management Strategies for Plug-in Hybrid Electric Vehicles
2/7/2011	2011	\$77,986	UC BERKELEY	Eco-Friendly Navigation System Research for Heavy-Duty Trucks
3/1/2011	2011	\$6,038	UC BERKELEY	Engaging the International Community - Research on Intelligent Transportation Systems (ITS) Applications to Improve Environmental Performance
6/24/2011	2011	\$520	UC BERKELEY	Transportation Research Board Conference and Meeting Travel
6/24/2011	2011	\$1,300	UC BERKELEY	UCTC Project Oversight and Reporting
6/24/2011	2011	\$1,820	UC BERKELEY	Eco-ITS Program Support
11/26/2011	2012	\$5,000	UC BERKELEY	UCTC Project Oversight and Reporting
4/18/2012	2012	\$128,000	UC BERKELEY	Region 9 University Transportation Center: University of California Transportation Center (UCTC)
5/11/2012	2012	\$94,000	UC BERKELEY	University of California Transportation Center - Riverside Campus
7/2/2012	2013	\$10,000	UC BERKELEY	Near-Term Transportation Energy and Climate Change Strategies
1/11/2013	2013	\$145,413	UC BERKELEY	Eco-Driving Technology and Behavior Research for Heavy-Duty Trucks
8/7/2013	2014	\$299,985	UC BERKELEY	EXTENDING ECO-APPROACH RESEARCH TO ACTUATED TRAFFIC SIGNALS
11/19/2013	2014	\$136,912	UC BERKELEY	University of California Center ON Economic Competitiveness in Transportation: UCCONNECT
3/4/2014	2014	\$88,667	UC BERKELEY	University of California Center ON Economic Competitiveness in Transportation: UCCONNECT
9/30/2014	2015	\$70,934	UC BERKELEY	University of California Center ON Economic Competitiveness in Transportation: UCCONNECT
7/18/2013	2014	\$31,023	UC DAVIS	Co-Production of Gluconic Acid and Isobutanol from Cellulosic Biomass
12/20/2013	2014	\$58,083	UC DAVIS	Co-Production of Gluconic Acid and Isobutanol from Cellulosic Biomass
3/19/2014	2014	\$282,820	UC DAVIS	National Center for Sustainable Transportation
7/8/2014	2015	\$280,440	UC DAVIS	National Center for Sustainable Transportation

UCR, CE-CERT GRANT AWARDS

9/25/2014	2015	\$136,000	UC DAVIS	Environmentally-Friendly Driving Feedback Systems Research and Development for Heavy-Duty Trucks
10/22/2014	2015	\$150,000	UC DAVIS	Eco-Friendly Intelligent Transportation System Technology for Freight Vehicles
12/18/2014	2015	\$62,500	UC DAVIS	NCST NG Infrastructure Study
12/20/2014	2015	\$60,893	UC DAVIS	Co-Production of Gluconic Acid and Isobutanol from Cellulosic Biomass
1/7/2015	2015	\$124,994	UC DAVIS	The Development of Lifecycle Data for Hydrogen Fuel Production and Delivery
5/6/2011	2011	\$40,861	UC DISCOVERY GRANT	Process Integration of Hydrothermolytic Decomposition and Steam Hydrogasification in Producing Biofuel from Biowastes
8/27/2012	2013	\$14,000	UC MEXUS	Dye-Sensitized Solar Cells Based on a ZnO NW-TiO2 NP Photo-Anode and a Solvent Free PEG-TiO2 Composite
6/4/2010	2010	\$46,352	UC TRANSPORTATION CENTER (BERKELEY)	An Aggregative Model of Downtown Parking and Traffic Congestion Incorporating Mass Transit
6/4/2010	2010	\$64,080	UC TRANSPORTATION CENTER (BERKELEY)	An Aggregative Model of Downtown Parking and Traffic Congestion Incorporating Mass Transit
11/2/2011	2012	\$41,000	UC TRANSPORTATION CENTER (BERKELEY)	Temporal and spatial variations of particulate emissions on major highways: Lagrangian approach using mobile monitoring system.
10/31/2011	2012	\$30,113	UNIVERSITY OF CALIFORNIA, LOS ANGELES	Closing the loop between traffic/pollution sensing and vehicle route control using traffic lights and navigators
8/16/2012	2013	\$60,609	UNIVERSITY OF CALIFORNIA, LOS ANGELES	The Development of Quantitative Cellular Assays for Use in Understanding the Chemical Basis of Air Pollutant Toxicity
4/22/2010	2010	\$202,113	UNIVERSITY OF MASSACHUSETTS	Production of JP-8 range Alkanes from Lignocellulosic Biomass
7/19/2010	2011	\$202,113	UNIVERSITY OF MASSACHUSETTS	Production of JP-8 range Alkanes from Lignocellulosic Biomass
9/1/2011	2012	\$7,500	UNIVERSITY OF TEXAS-AUSTIN	Implementation of Modified Carbon Bond Mechanisms in CAMx
2/28/2013	2013	\$101,765	UNIVERSITY OF TEXAS-AUSTIN	Environmental chamber experiments and CMAQ modeling to improve mechanisms to model ozone formation from HRVOCs
6/23/2014	2014	\$35,314	UNIVERSITY OF TEXAS-AUSTIN	Sources of Organic Particulate Matter in Houston: Evidence from DISCOVER-AQ data, Modeling and Experiments
12/1/2014	2015	\$150,000	UNIVERSITY OF VIRGINIA	Cooperative Transportation Systems Pooled Fund Study
3/8/2010	2010	\$13,719	URS CORPORATION	UCR/BNSF Truck Activity Survey
6/29/2010	2010	\$18,632	URS CORPORATION	Proposal to Measure the Effectiveness of the CCST Emissions Control Technology on a Rubber Tyre Gantry Crane
9/23/2010	2011	\$98,192	VIRESCO ENERGY, LLC	Viresco Pilot Plant Design Support 1
12/2/2010	2011	\$51,165	VISION MOTOR CORPORATION	Heavy Duty Fuel Cell Vehicle CAN Bus Development
8/30/2010	2011	\$36,052	WATTENBERG INDUSTRIES, LLC	Evaluation of a Novel Low Profile Vertical Axis Wind Electric Machine
10/10/2011	2012	\$100,000	WINSTON GLOBAL ENERGY LIMITED	Battery and Energy Research
2/26/2013	2013	\$100,000	WINSTON GLOBAL ENERGY LIMITED	Battery and Energy Research
	Total:	\$37,311,726		

Demographics

City of Riverside - Profile

Riverside is a rapidly growing city of 300,351, which currently ranks as the 12th largest city in California. The citizens of Riverside are represented by elected members of the City Council in a Charter City form of government. City Manager, Lee McDougal, sets the City's policies, establishes City goals and oversees and recommends the annual budget with the approval of Riverside's seven City Council members and Mayor. The City is home to four internationally-recognized colleges and universities, including the prestigious University of California, Riverside, with an expanding student population of over 17,700. Riverside is a large and diverse economy with the Inland Empire's largest number of businesses and total jobs. Incorporated in 1883, Riverside is a unique blend of historic charm and modern city features.

Population: 300,351

Population Growth, 2001-2005: 45,185

Population Growth Percent, 2000-2005: 15%

Population per Square Mile: 3,826

Median Age: 30

Income

Average Household Income, 2005: \$65,274

Median Household Income, 2005: \$48,578

Total Personal Income, 2003: \$5.3 Billion

Retail Sales

Taxable Sales, 2004: \$4.1 Billion

Taxable Sales Growth, 2003-2004: 11%

Taxable Sales Per Capita, 2004: \$14,475

Labor Force

Employment: 143,800

Unemployment Rate (February 2015) 6.8%

Existing Home Sales

Home Sales, 2005: 6,016

Median Home Price, 2014, 4th Quarter: \$294,750

New Home Sales

Home Sales, 2005: 1,084

Median Home Price, 2015, 1st Quarter \$357,000

Leading Employers Total Employment

1. County of Riverside 17,000, Industry: Government
2. University of California, Riverside 6,294, Industry: Higher Education
3. Kaiser Permanente 4,000, Industry: Healthcare
4. Riverside Community College 3,350, Industry: Higher Education
5. Riverside Unified School District 2,924, Industry: Education
6. City of Riverside 2,460, Industry: Government
7. Riverside County Office of Education 1,782, Industry: Education
8. Riverside Community Hospital 1,641, Industry: Healthcare

Demographics

County of Riverside





















Population (2014)	2,357,087
Jobs (2014)	918,176
Average Earnings (2014)	\$42,008
Unemployed (11/2014)	82,121
Completions (2013)	19,481
GRP (2013)	\$62,016,027,629
Exports (2013)	\$70,373,285,756
Imports (2013)	\$93,153,934,168

Disadvantaged Communities

- Beaumont
 - Blythe
 - Coachella
 - Corona
 - Hemet
 - Indio
 - Lake Elsinore
 - March Air Reserve Base
 - Mecca
 - Mira Loma
 - Moreno Valley
 - Perris
 - Riverside
 - San Jacinto
 - Thermal
-






















Population

2,357,087 2014 Population 6.1% of State	9.8% Population Growth for the Last 5 Years State Growth 4.9%
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Age Group	2014 Population	% of Population	
Under 5 years	170,446	7.2%	
5 to 9 years	173,247	7.4%	
10 to 14 years	181,697	7.7%	
15 to 19 years	178,341	7.6%	
20 to 24 years	181,932	7.7%	
25 to 29 years	161,774	6.9%	
30 to 34 years	155,479	6.6%	
35 to 39 years	147,116	6.2%	
40 to 44 years	151,981	6.4%	
45 to 49 years	152,468	6.5%	
50 to 54 years	151,537	6.4%	
55 to 59 years	136,893	5.8%	
60 to 64 years	116,495	4.9%	
65 to 69 years	97,204	4.1%	
70 to 74 years	73,506	3.1%	
75 to 79 years	52,972	2.2%	
80 to 84 years	38,793	1.6%	
85 years and over	35,205	1.5%	

Jobs by Industry

918,176 Total Jobs (2014)	52.8% Male (National: 52.7%)	47.2% Female (National: 47.3%)
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NAICS	Industry	2014 Jobs	
11	Crop and Animal Production	16,261	
21	Mining, Quarrying, and Oil and Gas Extraction	707	
22	Utilities	1,706	
23	Construction	65,637	
31	Manufacturing	44,585	
42	Wholesale Trade	27,583	
44	Retail Trade	108,483	
48	Transportation and Warehousing	34,278	
51	Information	9,719	
52	Finance and Insurance	40,334	
53	Real Estate and Rental and Leasing	61,790	
54	Professional, Scientific, and Technical Services	44,962	
55	Management of Companies and Enterprises	3,380	
56	Administrative and Support and Waste Management and Remediation Services	68,899	
61	Educational Services	11,663	
62	Health Care and Social Assistance	100,835	
71	Arts, Entertainment, and Recreation	20,877	
72	Accommodation and Food Services	74,112	
81	Other Services (except Public Administration)	55,824	
90	Government	124,671	
99	Unclassified Industry	1,871	

Average Earnings by Industry

\$42,008

Avg. Earnings (2014)






















79% of Nation Avg.

NAICS	Industry	Avg. Earnings (2014)	
11	Crop and Animal Production	\$29,645	
21	Mining, Quarrying, and Oil and Gas Extraction	\$45,244	
22	Utilities	\$107,800	
23	Construction	\$45,628	
31	Manufacturing	\$59,831	
42	Wholesale Trade	\$58,609	
44	Retail Trade	\$31,696	
48	Transportation and Warehousing	\$43,376	
51	Information	\$54,332	
52	Finance and Insurance	\$44,882	
53	Real Estate and Rental and Leasing	\$22,948	
54	Professional, Scientific, and Technical Services	\$40,877	
55	Management of Companies and Enterprises	\$80,705	
56	Administrative and Support and Waste Management and Remediation Services	\$26,982	
61	Educational Services	\$27,433	
62	Health Care and Social Assistance	\$43,633	
71	Arts, Entertainment, and Recreation	\$23,390	
72	Accommodation and Food Services	\$21,241	
81	Other Services (except Public Administration)	\$24,130	
90	Government	\$78,057	
99	Unclassified Industry	\$43,646	

Unemployment by Industry











82,121

Total Unemployment (11/2014)

NAICS	Industry	Unemployed (11/2014)	% of Regional Unemployment	
11	Crop and Animal Production	2,127	3%	
21	Mining, Quarrying, and Oil and Gas Extraction	62	0%	
22	Utilities	326	0%	
23	Construction	9,026	11%	
31	Manufacturing	5,439	7%	
42	Wholesale Trade	863	1%	
44	Retail Trade	11,343	14%	
48	Transportation and Warehousing	2,193	3%	
51	Information	1,129	1%	
52	Finance and Insurance	1,100	1%	
53	Real Estate and Rental and Leasing	512	1%	
54	Professional, Scientific, and Technical Services	586	1%	
55	Management of Companies and Enterprises	0	0%	
56	Administrative and Support and Waste Management and Remediation Services	8,462	10%	
61	Educational Services	1,276	2%	
62	Health Care and Social Assistance	4,797	6%	
71	Arts, Entertainment, and Recreation	2,008	2%	
72	Accommodation and Food Services	7,433	9%	
81	Other Services (except Public Administration)	3,452	4%	
90	Government	5,570	7%	
99	No Previous Work Experience/Unspecified	14,416	18%	


















NAICS	Industry	Unemployed (11/2014)	% of Regional Unemployment
-------	----------	-------------------------	----------------------------------





Top Program Completions

CIP	Program	Completions (2013)	
51	Health professions and related programs	3,220	
24	Liberal arts and sciences, general studies and humanities	2,721	
12	Personal and culinary services	1,923	
52	Business, management, marketing, and related support services	1,780	
45	Social sciences	1,599	
30	Multi/interdisciplinary studies	1,000	
26	Biological and biomedical sciences	793	
42	Psychology	727	
43	Homeland security, law enforcement, firefighting and related protective services	505	
50	Visual and performing arts	503	

Gross Regional Product (GRP)

\$38,221,690,288	\$19,528,337,944	\$4,265,999,396	\$62,016,027,629
Earnings (2013)	Property Income (2013)	Taxes on Production (2013)	Total GRP (2013)

NAICS	Industry	GRP (2013)	% of Total
11	Crop and Animal Production	\$738,006,539.86	1% 
21	Mining, Quarrying, and Oil and Gas Extraction	\$91,806,961.02	0% 
22	Utilities	\$692,672,743.69	1% 
23	Construction	\$4,145,368,285.67	7% 
31	Manufacturing	\$5,037,701,518.14	8% 
42	Wholesale Trade	\$3,379,680,396.18	5% 
44	Retail Trade	\$5,025,499,566.37	8% 
48	Transportation and Warehousing	\$1,970,671,922.49	3% 
51	Information	\$1,516,136,992.54	2% 
52	Finance and Insurance	\$2,836,224,229.18	5% 
53	Real Estate and Rental and Leasing	\$5,534,005,678.98	9% 
54	Professional, Scientific, and Technical Services	\$2,197,516,760.31	4% 
55	Management of Companies and Enterprises	\$321,289,141.12	1% 
56	Administrative and Support and Waste Management and Remediation Services	\$2,371,865,439.71	4% 
61	Educational Services	\$346,277,677.35	1% 
62	Health Care and Social Assistance	\$4,678,227,824.84	8% 
71	Arts, Entertainment, and Recreation	\$679,787,751.66	1% 

NAICS	Industry	GRP (2013)	% of Total
72	Accommodation and Food Services	\$2,369,050,243.28	4% 
81	Other Services (except Public Administration)	\$1,521,783,947.27	2% 
90	Government	\$11,083,569,454.82	18% 
	Other Non-Industries	\$5,478,884,554.06	9% 

Region Exports

\$70,373,285,756.09

Exports (2013)

63% of Supply

NAICS	Industry	Exports (2013)
11	Crop and Animal Production	\$1,326,071,293.30
21	Mining, Quarrying, and Oil and Gas Extraction	\$72,913,778.43
22	Utilities	\$687,645,710.73
23	Construction	\$3,863,137,794.34
31	Manufacturing	\$10,085,364,322.50
42	Wholesale Trade	\$3,478,298,753.85
44	Retail Trade	\$4,097,464,085.67
48	Transportation and Warehousing	\$2,703,269,203.01
51	Information	\$1,621,923,383.63
52	Finance and Insurance	\$3,279,198,494.29
53	Real Estate and Rental and Leasing	\$4,475,215,271.96
54	Professional, Scientific, and Technical Services	\$2,038,268,984.01
55	Management of Companies and Enterprises	\$365,212,981.63
56	Administrative and Support and Waste Management and Remediation Services	\$2,143,123,557.86
61	Educational Services	\$219,871,265.56
62	Health Care and Social Assistance	\$3,099,779,317.40
71	Arts, Entertainment, and Recreation	\$780,139,774.49
72	Accommodation and Food Services	\$2,256,855,684.55
81	Other Services (except Public Administration)	\$1,422,752,696.76
90	Government	\$22,356,779,402.12

Region Imports

\$93,153,934,168.0











Imports (2013)

69% of Demand

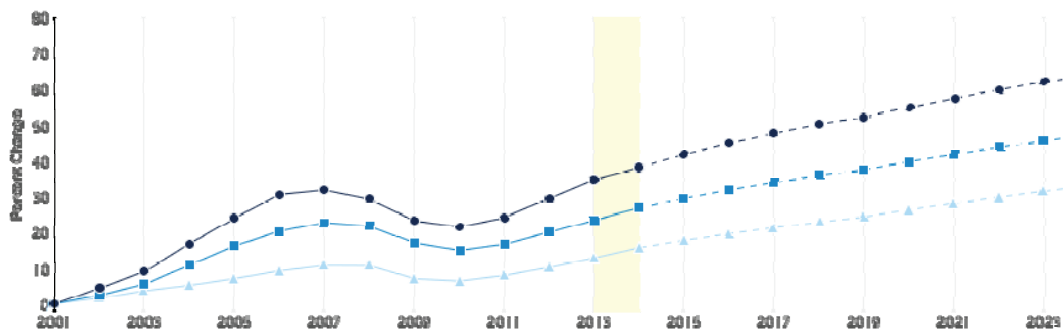
\$42,074,471,437.7

Locally Produced & Consumed (2013)

31% of Demand

NAICS	Industry	Imports (2013)
11	Crop and Animal Production	\$664,940,505.77 
21	Mining, Quarrying, and Oil and Gas Extraction	\$1,137,961,555.85 
22	Utilities	\$1,366,063,622.75 
23	Construction	\$2,693,354,199.44 
31	Manufacturing	\$17,537,915,319.15 
42	Wholesale Trade	\$3,975,023,199.07 
44	Retail Trade	\$2,961,078,696.28 
48	Transportation and Warehousing	\$2,246,539,954.61 
51	Information	\$4,339,199,268.01 
52	Finance and Insurance	\$6,725,103,727.45 
53	Real Estate and Rental and Leasing	\$4,763,514,651.97 
54	Professional, Scientific, and Technical Services	\$5,024,383,428.00 
55	Management of Companies and Enterprises	\$1,480,145,532.80 
56	Administrative and Support and Waste Management and Remediation Services	\$1,365,343,913.30 
61	Educational Services	\$1,261,684,850.63 
62	Health Care and Social Assistance	\$5,105,936,567.55 
71	Arts, Entertainment, and Recreation	\$855,822,975.17 
72	Accommodation and Food Services	\$1,550,156,235.42 
81	Other Services (except Public Administration)	\$1,293,391,307.81 
90	Government	\$26,806,374,656.97 

Regional Trends



	Region	2013 Jobs	2014 Jobs	% Change
●	Region	895,312	918,176	2.6%
●	San Bernardino County, CA	890,692	914,043	2.6%
●	San Diego County, CA	1,907,139	1,955,610	2.5%

2014 Educational Attainment



	Education Level	2014 Population	2014 Percent
●	Less Than 9th Grade	161,573	11.0%
●	9th Grade to 12th Grade	160,340	10.9%
●	High School Diploma	377,565	25.7%
●	Some College	368,836	25.1%
●	Associate's Degree	110,430	7.5%
●	Bachelor's Degree	189,378	12.9%
●	Graduate Degree and Higher	103,301	7.0%

Growing & Declining Occupations

Occupation	Change in Jobs (2013-2014)
Combined Food Preparation and Serving Workers, Including Fast Food	1,557
Retail Salespersons	1,026
Cashiers	672
Directors, Religious Activities and Education	-47
Operating Engineers and Other Construction Equipment Operators	-62
Clergy	-78
Limited-Service Restaurants	2,505
Services for the Elderly and Persons with Disabilities	1,208
Temporary Help Services	913
All Other Specialty Trade Contractors	-341
Hotels (except Casino Hotels) and Motels	-408
Religious Organizations	-619

PARTNERSHIP MEMBERS CONTACT INFORMATION

Riverside County



1. Kevin D. Jeffries
Riverside County Board of Supervisors, 1st District
kjeffries@rcbos.org
(951) 955-1010
2. Jay Orr
Riverside County Executive Officer
ceo@rceo.org
(951) 955-1110
3. Robert Field
Assistant County Executive Officer/Economic Development Agency
rfield@rivcoeda.org
(951) 955-4861

University of California, Riverside & CE-CERT



1. Michael Pazzani
Vice Chancellor for Research & Economic Development
michael.pazzani@ucr.edu
(951) 827-4800
2. Rebecca Goldware
Chief of Staff, Research and Economic Development
rebecca.goldware@ucr.edu
(951) 827-6411



City of Riverside

1. Lee McDougal
Interim City Manager
lmcDougal@riversidca.gov
(951) 826-5427

Riverside Public Utilities



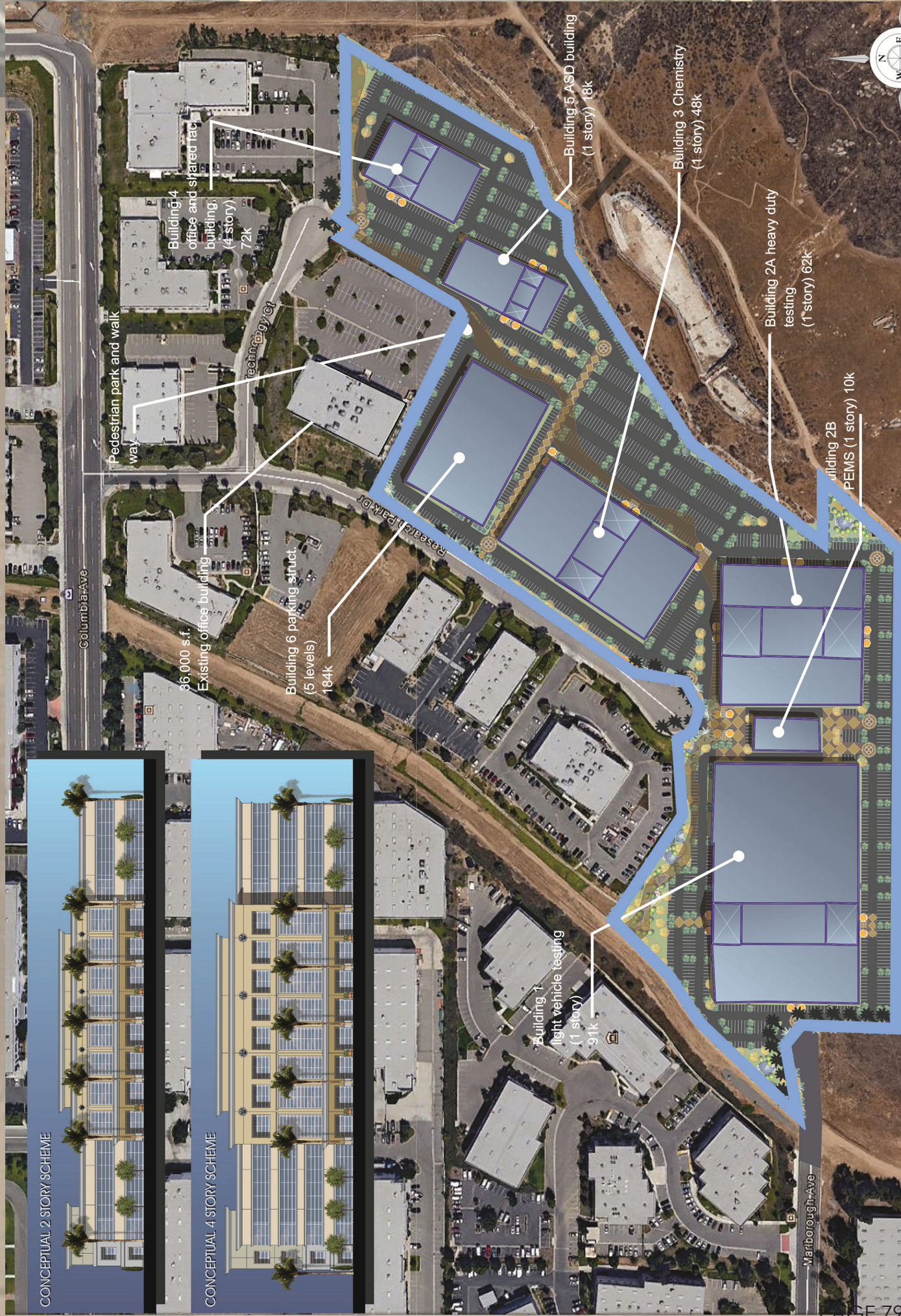
1. Girish Balachandran
General Manager, Riverside Public Utilities
girish@riversideca.gov
(951) 826-5422
2. Kevin Palmer
Business Relations Manager
kpalmer@riversideca.gov
(951) 826-2144

ARB - Riverside Campus - Primary Proposal

CONCEPTUAL 2 STORY SCHEME



CONCEPTUAL 4 STORY SCHEME



ARB - Riverside Campus - Alternative One

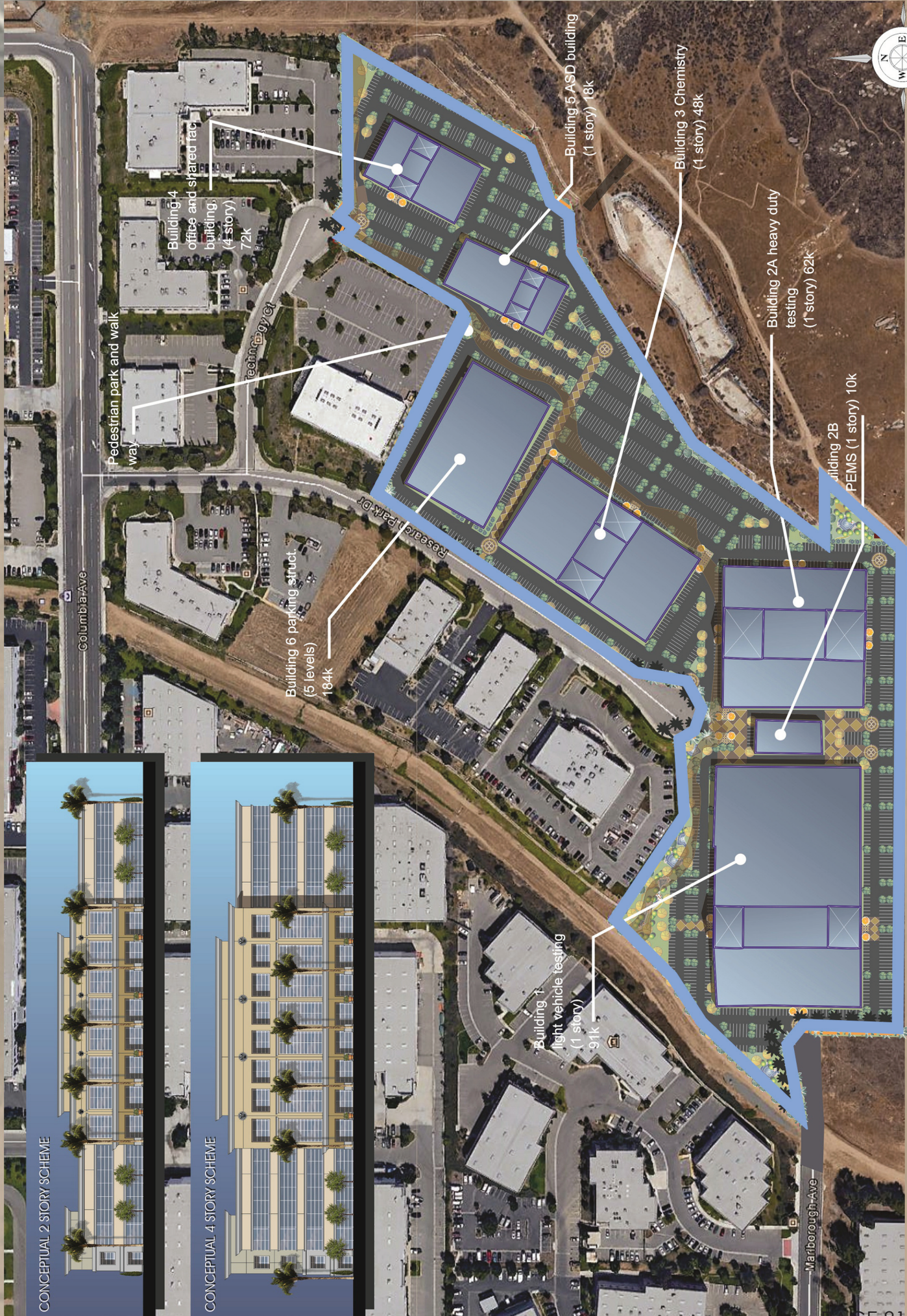
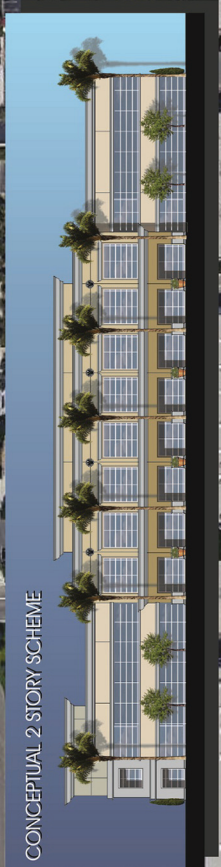
CONCEPTUAL 2 STORY SCHEME



CONCEPTUAL 4 STORY SCHEME



ARB - Riverside Campus - Alternative Two



IN THE CITY OF RIVERSIDE CALIFORNIA AIR RESOURCES BOARD APRIL 20, 2015

1/8 MILES
N 45° E
1/8 MILES



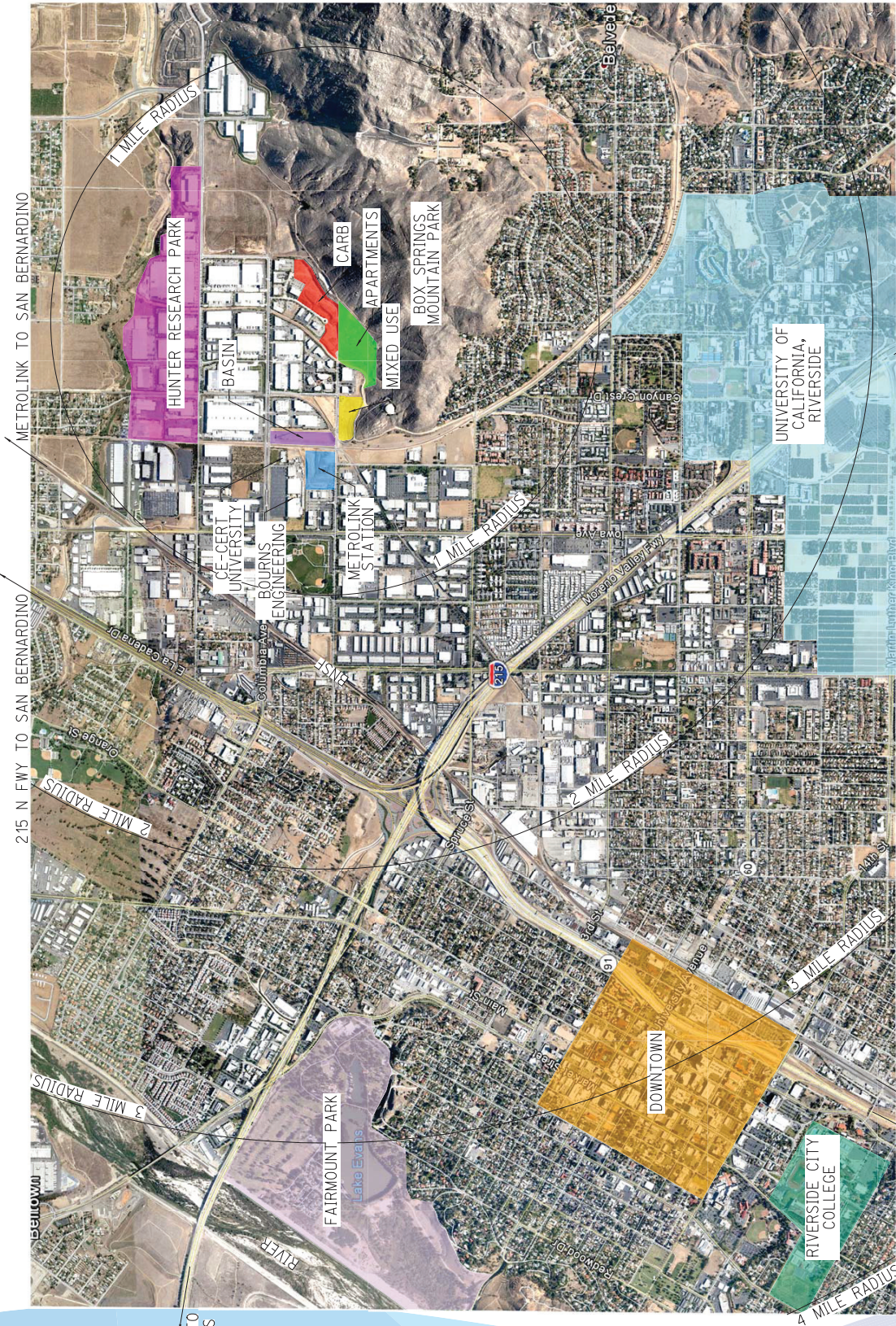
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N 45° E
1/8 MILES

PARCEL LINE DATA SOURCE:
PARCEL LINES SHOWN HEREON WERE DERIVED FROM RIVERSIDE COUNTY GIS COVERAGE DATED JULY 2013.

IMAGE DATA SOURCE:
IMAGERY SHOWN HEREON WAS ACQUIRED FROM GOOGLE EARTH AND IS DATED NOV. 2012. IT WAS STRETCHED
PRECISION OF BASE LINE 400M.



IN THE CITY OF RIVERSIDE CALIFORNIA AIR RESOURCES BOARD APRIL 20, 2015



215 N FWY TO SAN BERNARDINO

215 S FWY TO SAN DIEGO
60 E FWY TO INDIO

91 W FWY TO ORANGE COUNTY / METROLINK TO LOS ANGELES/ORANGE COUNTY

METROLINK TO PERRIS

60 W FWY TO LOS ANGELES

METROLINK TO PERRIS

215 S FWY TO SAN DIEGO
60 E FWY TO INDIO

91 W FWY TO ORANGE COUNTY / METROLINK TO LOS ANGELES/ORANGE COUNTY

METROLINK TO PERRIS

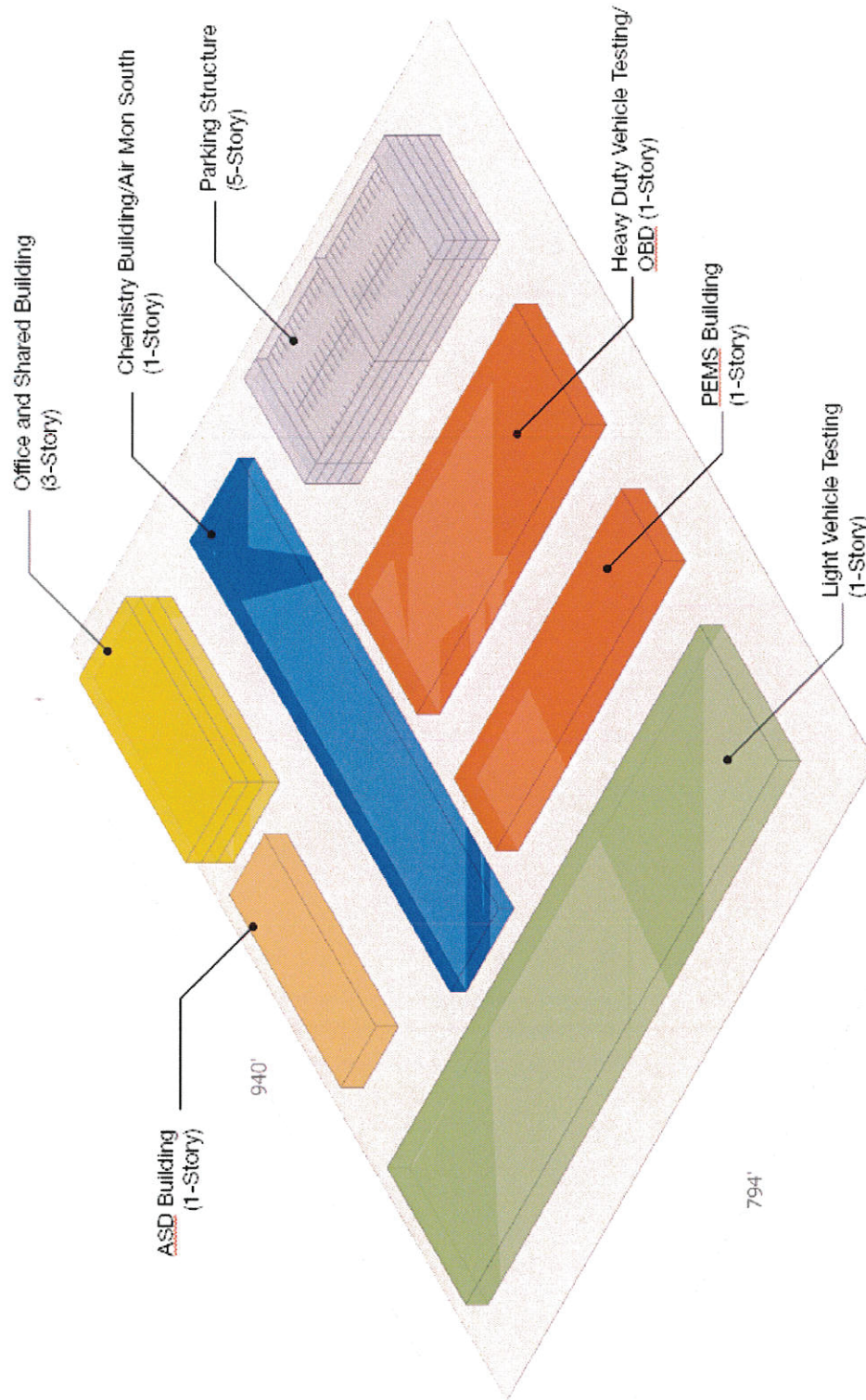


IMAGE DATA SOURCE:
IMAGERY SHOWN HEREON WAS ACQUIRED FROM GOOGLE EARTH AND IS DATED NOV. 2012. IT WAS STRETCHED TO FIT THE MAP'S COORDINATE LINES. THE SCALE MAY NOT BE EXACT DUE TO IMAGE DISTORTION AND PRECISION OF BASE LINE WORK.



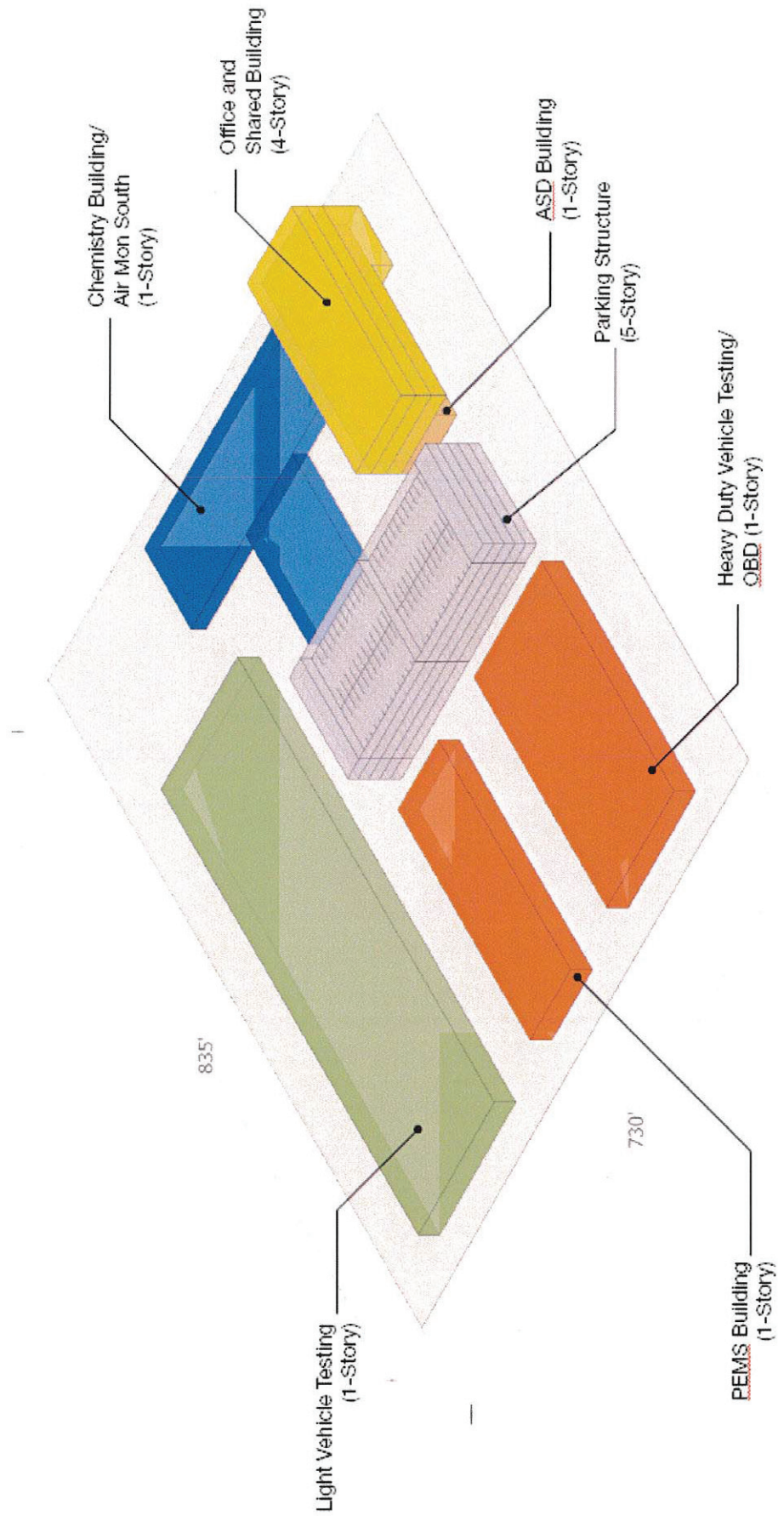
Hypothetical Site

Site Concept Options 1



Hypothetical Site

Site Concept Options 2 Preferred Option



Properties for Sale

1 588 Technology Court, Riverside, CA 92507



Property Details

Price	\$5,000,000
Building Size	35,776 SF
Price/SF	\$139.76 /SF
Property Type	Office
Property Sub-type	Office Building
Property Use Type	Vacant/Owner-User
Occupancy	0%
Building Class	B
Status	Active

Property Notes

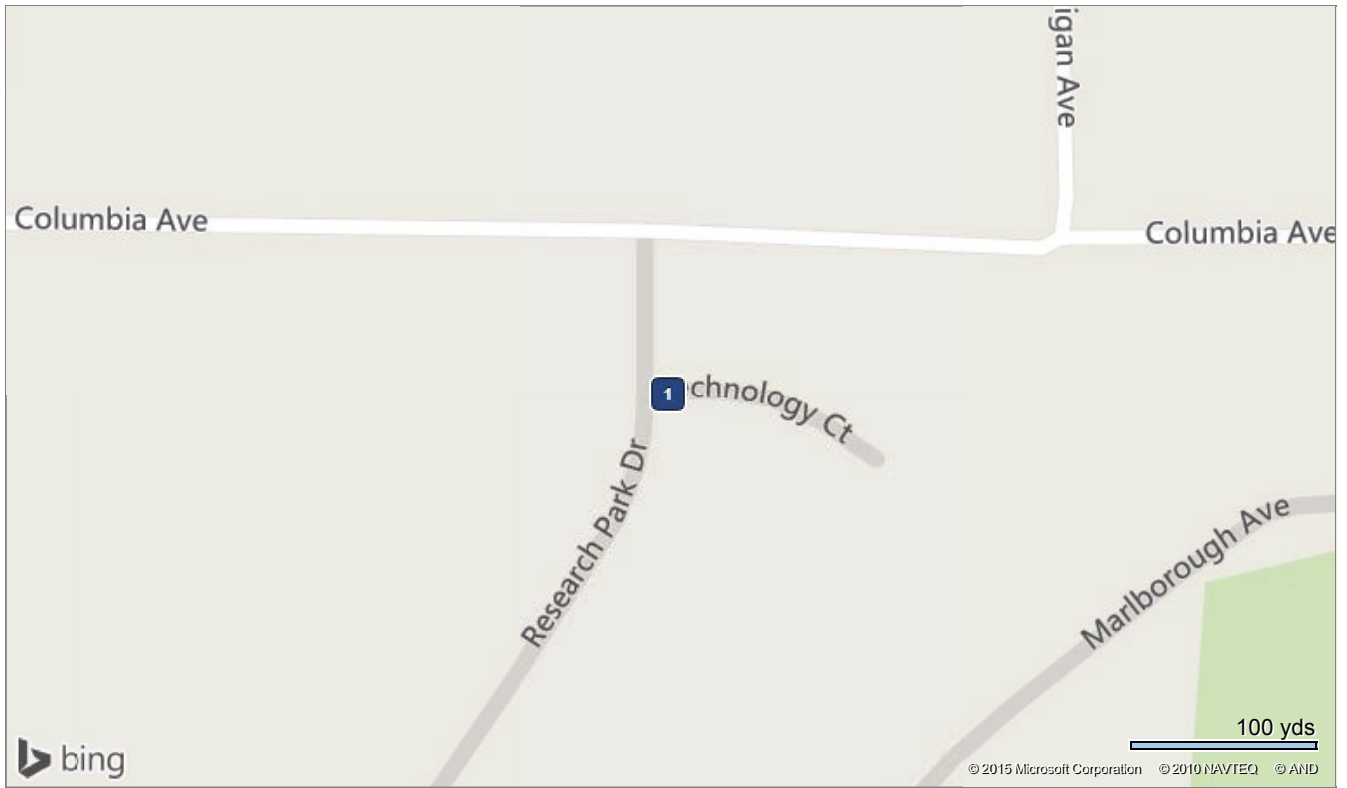
Property Description

High quality, two-story, Class A office building. Approx. 10,000 square feet is already improved with high quality construction materials. Four (4) cars per 1,000 square feet of leased area. State-of-the-art design and construction. Signage rights available. Pre-wired fiber optics connectivity. Outdoor patio areas / employee break areas.

Location Description

Fantastic views. Located within the University Park Research area. Close proximity to University of California Riverside with good access to the 91/60/215 interchange

Map



1 588 Technology Court
Riverside, CA 92507

CARB SITE CHARACTERISTICS/CRITERIA MATRIX

REQUIRED SITE CHARACTERISTICS/CRITERIA	PROPERTY STATUS
Land use zoning that supports test facility, office space and the ability to store fuels and hazardous waste.	Compliant
Free of encumbrances, restrictions, or clouds on title that would preclude construction and operation of the proposed project.	Compliant
Utilities on-site or nearby.	Compliant
Located outside the 100 year flood zone.	Compliant
Surface roads that will accommodate fully-loaded semi-trucks, truck cabs, buses, and light and medium-duty vehicles.	Compliant
DESIRED SITE FEATURES	PROPERTY STATUS
Located within a 50 mile radius from ARB's existing facility at 9528 Telstar Avenue, El Monte, CA	Compliant
Good access to mass transit, major and minor highways.	Compliant
Highly Safe and Secure Area.	Compliant
Located in a High Quality Transit Area, which is within ½ mile of a well-serviced transit stop or transit corridor, or located within a ¼ mile of existing or planned bus, streetcar or rideshare stops, or within a ½ mile of existing or planned bus rapid transit stops, light/commuter rail stations or ferry terminals.	Within 1/2 mile of new Metro Link Station, need bus stop in front of project.
Located more than 500 feet from a heavily trafficked roadway.	Compliant
Located more than 1,000 feet from a heavily trafficked rail line using diesel-powered locomotives.	Compliant
Located more than 1,000 feet from a rail yard, distribution center, or other toxic air contaminant sources.	Compliant
Rectangular in shape and level grade.	Irregular in shape with two levels, however, conducive to design and construction of the Project preferred option two.
Close proximity to academic institution with potential to collaborate.	Compliant
Vacant land preferred but will consider suitable improved property.	Compliant
Availability of affordable housing.	Immediately adjacent to new apartment project, approx. 1.5 miles from new home development.
Potential for LEED points (urban infill, high quality transit area, sensitive land protection, neighborhood development, non-agricultural, non-residential).	Compliant
Close proximity (within ½ mile walking distance) to eating establishments, public services, or access to suitable services that achieve the same objective.	Compliant
Quality access streets, designated for truck route, lower level congestion.	Compliant
DESIRED SITE FEATURES	PROPERTY STATUS
Distance from major pollution sources, good+ air pollution index.	Compliant
Availability of employee support facilities/amenities (child care, shuttle, exercise, bicycling infrastructure, etc.).	Compliant
Siting to support Zero Net Energy Status (local climate, wind resources, air quality).	Potential opportunity for small wind generation & solar generation depending on final project scope.
Within ten miles of alternative fueling stations (hydrogen/natural gas).	Compliant



Lawyers Title Company
 3480 Vine Street Suite 300
 Riverside, CA 92507
 Phone: (951) 774-0825
 Fax: ()

County of Riverside EDA
 3403 10th Street Suite 400
 Riverside, CA 92501

Title Officer: **Special Projects/ Joe Lardieri-So**
 email: **jlardieri@ltic.com**
 Phone No.:
 Fax No.:
 File No.: **615600100**

Attn: **Bonnie Perez**

Your Reference No:

Property Address: **1500 Research Park Drive, City of Riverside, California**

PRELIMINARY REPORT

Dated as of **April 6, 2015 at 7:30 a.m.**

In response to the application for a policy of title insurance referenced herein, Lawyers Title Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitation on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

The policy(s) of title insurance to be issued hereunder will be policy(s) of **Commonwealth Land Title Insurance Company.**

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered. It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

SCHEDULE A

The form of policy of title insurance contemplated by this report is:

A Preliminary Report Only

The estate or interest in the land hereinafter described or referred to covered by this report is:

A FEE

Title to said estate or interest at the date hereof is vested in:

Guthrie – Richter, LLC, a California limited liability company

The land referred to herein is situated in the County of Riverside, State of California, and is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"

All that certain real property situated in the County of Riverside, State of California, described as follows:

Parcel 1: (Assessor's Parcel No: 257-030-016)

Parcel 7, as shown by Parcel Map No. 29161, on file in [Book 195, Pages 20, 21, 22 and 23](#) of Parcel Maps, records of Riverside County, California.

Together with that portion of Marlborough Avenue vacated by Resolution of the Board of Supervisors of San Bernardino County, California, Resolution No. 19504, recorded November 2, 2001 as [Instrument No. 01-544636](#), adjoining said property on the South, which would pass by operation of law by a conveyance of said property.

Parcel 2: (Assessor's Parcel No: 257-030-042)

Parcel B of that certain Lot Line Adjustment No. LL-P07-0153, in the City of Riverside, County of Riverside, State of California, recorded June 21, 2007 as [Instrument No. 2007-0407241](#) of Official Records, described as follows:

Parcel 8 of Parcel Map 29161, as shown by map on file in [Book 195, Pages 20 through 22](#), inclusive of Parcel Maps, Records of Riverside County, California.

Except therefrom that portion described as follows:

Beginning at the most Northerly corner of said Parcel 8, being on the Southeasterly line of Gage Canal as shown on said Parcel Map 29161;

Thence South 55°38'28" East along the Northeasterly line of said Parcel 8, a distance of 308.11 feet to an angle point in said Northeasterly line, said angle point being the Southwesterly terminus of that certain course having a bearing and distance of North 88°27'51" East, 28.10 feet;

Thence South 88°27'51" West along the Westerly prolongation of said course, a distance of 114.87 feet;

Thence North 55°38'28" West, a distance of 223.34 feet to the Northwesterly line of said Parcel 8;

Thence North 41°22'56" East along said Northwesterly line, a distance of 67.86 feet to the point of beginning.

Parcel 3: (Assessor's Parcel No: 257-060-002)

That portion of the South West Quarter of Section 17, Township 2 South, Range 4 West, San Bernardino Base and Meridian, described as follows:

Beginning at the intersection of the North line of said Southwest Quarter of Section 17, with the Southeasterly line of the right of way of the Gage Canal, the same being a distance of 698 feet due East from the Northwest corner of said Southwest Quarter of said Section 17;

Thence due East, 1,186.2 feet;

Thence South 45°0' West, 594.7 feet;

Thence South 49°44' West, 522.9 feet;

Thence North 89°54' West 797.7 feet;

Thence North 19°3' West, 250.4 feet, to the right of way of the Gage Canal;

CLTA Preliminary Report Form – Modified (11-17-06)

Thence North 72°0' East, 131.55 feet;
Thence North 77°58' East, 108.5 feet;
Thence North 47°48' East, 94.4 feet;
Thence North 26°10' East, 122.7 feet;
Thence North 19°40' East, 212.8 feet;
Thence North 27°48' East, 183 feet, to the point of beginning.

Excepting a roadway 20 feet in width along the North end, measured at a right angle to the North line and running due East and West and parallel with the said North boundary line;

Together with that portion of the South half of Marlborough Avenue lying within the City limits of the City of Riverside and Easterly of a line parallel and 26 feet Easterly, as measured at right angles, from the centerline of the Gage Canal as said centerline is shown by Parcel Map on file in Book 20, Page 15 of Parcel Maps, Records of Riverside County, California, as vacated by Resolution No. 19582 of the City of Riverside and recorded October 25, 1999 as [Instrument No. 468782](#) and vacated by Resolution No. 19535 recorded November 2, 2001 as [Instrument No. 2001-544636](#) both of Official Records of Riverside County, California.

SCHEDULE B – Section A

The following exceptions will appear in policies when providing standard coverage as outlined below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

SCHEDULE B – Section B

At the date hereof Exceptions to coverage in addition to the printed exceptions and exclusions in said policy form would be as follows:

A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2015-2016.

B. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

Tax Identification No.:	257-030-016-4
Fiscal Year:	2014-2015
1 st Installment:	\$9,527.11, paid.
2 nd Installment:	\$9,527.11, (Open) (Delinquent after April 10)
Penalty and Cost:	\$991.31
Homeowners Exemption:	\$-0-
Code Area:	009-135

C. An assessment by the improvement district shown below:

Assessment (or Bond) No:	Not Set Out
Series:	Riverside Co
District:	Riverside City
For:	Riverside Hunter Park AD
Bond issued:	June 30, 2004
Original Amount:\$	Not Set Out

Said assessment is collected with the county/city property taxes.

D. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

Tax Identification No.:	257-030-042-7
Fiscal Year:	2014-2015
1 st Installment:	\$8,260.62, paid.
2 nd Installment:	\$8,260.62, (Open) (Delinquent after April 10)
Penalty and Cost:	\$864.67
Homeowners Exemption:	\$-0-
Code Area:	009-135

E. An assessment by the improvement district shown below:

Assessment (or Bond) No:	Not Set Out
Series:	Riverside Co
District:	Riverside City
For:	Riverside Hunter Park AD
Bond issued:	June 3, 2004
Original Amount:\$	Not Set Out

Said assessment is collected with the county/city property taxes.

F. Assessment Apportionment Hunter Park Assessment District

Recording Date: March 20, 2009
Recording No.: as [Instrument No. 2009-0136017](#) of Official Records

Reference is hereby made to said document for full particulars.

Affects: Parcel 2

G. Property taxes, including any personal property taxes and any assessments collected with taxes, are as follows:

Tax Identification No.: 257-060-002-4
Fiscal Year: 2014-2015
1st Installment: \$23,442.33, paid.
2nd Installment: \$23,442.33, (Open) (Delinquent after April 10)
Penalty and Cost: \$2,382.84
Homeowners Exemption: \$-0-
Code Area: 009-079

H. An assessment by the improvement district shown below:

Assessment (or Bond) No: Not Set Out
Series: Riverside Co
District: Riverside City
For: [Riverside Hunter park AD](#)
Bond issued: June 3, 2004
Original Amount:\$ Not Set Out

Said assessment is collected with the county/city property taxes.

I. A Special Tax as disclosed by a "Notice of Special Tax Lien" pursuant to Government Code Section 53328.3 and Streets and Highways Code Section 3114.5

Recorded: January 6, 2006
District Name: as [Instrument No. 2006-0014205](#) of Official Records

Said special tax may be collected with the property taxes.

Affects: All Parcels

J. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.

K. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A; or as a result of changes in ownership or new construction occurring prior to date of policy.

1. Water rights, claims or title to water, whether or not disclosed by the public records.
2. Easement(s) in favor of the public over any existing roads lying within said Land.

3. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

In favor of: E.A. Chase
Purpose: Not Set Out
Recording Date: April 6, 1898
Recording No: in [Book 67, Page 394](#) of Deeds
Affects: said land more particularly described therein

Affects: Parcels 1 and 2

4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as delineated on or as offered for dedication on

Recording No: in [Book 3, Page 19](#) of Record of Surveys
Purpose: ingress and egress
Affects: as shown on said map

5. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

In favor of: The Nevada-California Electric Power Company
Purpose: either or both pole lines, conduits or underground facilities
Recording Date: July 16, 1940
Recording No: in [Book 469, Page 82](#) of Official Records
Affects: said land more particularly described therein

Affects: Parcels 1 and 2

6. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

In favor of: Riverside Highland Water Company
Purpose: pipelines
Recording Date: November 8, 1946
Recording No: in [Book 798, Page 351](#) of Official Records
Affects: said land more particularly described therein

Affects: Parcels 1 and 2

7. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

In favor of: Riverside Highland Water Company
Purpose: sewer, storm drain, gas line, telephone, telegraph communication, electrical and water facilities
Recording Date: October 25, 1999
Recording No: as [Instrument No. 99-468782](#) of Official Records
Affects: said land more particularly described therein

Affects: Parcels 1, 2 and 3

8. Matters contained in the dedication statement or elsewhere on the tract or parcel map shown below, which among the things provide:

Tract/Parcel Map: Parcel Map No. 29161
Provisions: as follows:

A right of way over the herein described property for all ditches, pipe lines, and other appliances, for the distribution of water for domestic and irrigating purposes, as reserved to East Riverside Land Company, its successors or assigns.

Reference is made to said map for full particulars.

The exact location and extent of said easement is not disclosed of record.

Affects: Parcels 1 and 2

9. The effect of a Declaration of Dedication as shown by the Owners Certificate on said map, purporting to irrevocably dedicate in perpetuity for public road purposes, public utility and public services, the property described therein.

Affects: Parcels 1 and 2

10. Easement(s) for the purpose(s) shown below and rights incidental thereto, as delineated on or as offered for dedication on

Map/Plat: Parcel Map No. 29161
Recording No: in Book 195, Pages 20 through 23 of Parcel Maps
Purpose: Public utilities
Affects: as shown on said map

Affects: Parcels 1 and 2

11. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: October 25, 1999
Recording No: as Instrument No. 99-468785 of Official Records

Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or deed of trust made in good faith and for value.

Affects: Parcels 1 and 2

12. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: October 25, 1999
Recording No: as Instrument No. 99-468786 of Official Records

Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or deed of trust made in good faith and for value.

Affects: Parcels 1 and 2

13. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Riverside Highland Water Company
Purpose: electrical energy distribution facilities, sanitary sewer facilities, storm drain facilities, gas line facilities, aerial and underground telephone, telegraph and communication facilities, water distribution facilities

Recording Date: November 2, 2001
Recording No: as [Instrument No. 01-544636](#) of Official Records
Affects: said land more particularly described therein

Affects: Parcels 1 and 3

14. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

Redevelopment Agency: The Hunter Park/Northside Redevelopment Project
Recording Date: June 27, 2003
Recording No: as [Instrument No. 2003-478348](#) of Official Records

Affects: All Parcels

15. A lien for the amount shown below and any other amounts due,

Amount: \$278.00
Claimant: City of Riverside
Nature of Claim: abatement of weeds
Recording Date: August 12, 2004
Recording No: as [Instrument No. 2004-0632789](#) of Official Records

Affects: Parcel 3

16. A lien for the amount shown below and any other amounts due,

Amount: \$712.00
Claimant: City of Riverside
Nature of Claim: abatement of weeds
Recording Date: August 8, 2005
Recording No: as [Instrument No. 2005-0639472](#) of Official Records

Affects: Parcel 2

REQUIREMENTS SECTION:

Req. No. 1: In order to complete this report, the Company requires a Statement of Information to be completed by the following party(s),

Party(s): Buyers/Sellers

The Company reserves the right to add additional items or make further requirements after review of the requested Statement of Information.

NOTE: The Statement of Information is necessary to complete the search and examination of title under this order. Any title search includes matters that are indexed by name only, and having a completed Statement of Information assists the Company in the elimination of certain matters which appear to involve the parties but in fact affect another party with the same or similar name. Be assured that the Statement of Information is essential and will be kept strictly confidential to this file.

Req. No. 2: The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below:

Limited Liability Company: Guthrie – Richter, LLC, a California limited liability company

a) A copy of its operating agreement, if any, and any and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member

b) If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendments thereto with the appropriate filing stamps

c) If the Limited Liability Company is member-managed, a full and complete current list of members certified by the appropriate manager or member

d) If the Limited Liability Company was formed in a foreign jurisdiction, evidence, satisfactory to the Company, that it was validly formed, is in good standing and authorized to do business in the state of origin

e) If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

INFORMATIONAL NOTES SECTION

- Note No. 1: The information on the attached plat is provided for your convenience as a guide to the general location of the subject property. The accuracy of this plat is not guaranteed, nor is it a part of any policy, report or guarantee to which it may be attached.
- Note No. 2: California insurance code section 12413.1 regulates the disbursement of escrow and sub-escrow funds by title companies. The law requires that funds be deposited in the title company escrow account and available for withdrawal prior to disbursement. Funds deposited with the company by wire transfer may be disbursed upon receipt. Funds deposited with the company via cashier's check or teller's check drawn on a California based bank may be disbursed on the next business day after the day of deposit. If funds are deposited with the company by other methods, recording and/or disbursement may be delayed. All escrow and sub-escrow funds received by the company will be deposited with other escrow funds in one or more non-interest bearing escrow accounts of the company in a financial institution selected by the company. The company may receive certain direct or indirect benefits from the financial institution by reason of the deposit of such funds or the maintenance of such accounts with such financial institution, and the company shall have no obligation to account to the depositing party in any manner for the value of, or to pay to such party, any benefit received by the company. Those benefits may include, without limitation, credits allowed by such financial institution on loans to the company or its parent company and earnings on investments made with the proceeds of such loans, accounting, reporting and other services and products of such financial institution. Such benefits shall be deemed additional compensation of the company for its services in connection with the escrow or sub-escrow.

For wiring Instructions please contact your Title Officer or Title Company Escrow officer.

- Note No. 3: Lawyers Title is a division of Commonwealth Land Title Insurance Company. The insurer in policies of title insurance, when issued in this transaction, will be Commonwealth Land Title Insurance Company.

- Note No. 4: None of the items shown in this report will cause the Company to decline to attach CLTA Endorsement Form 100 to an ALTA Loan Policy, when issued.
- Note No. 5: The following information will be included in the CLTA Form 116 or ALTA Form 22-06 Endorsement to be issued pursuant to this order:
- There is located on said Land: commercial/industrial property
Known as: 1500 Research Park Drive, City of Riverside, California
- And
- There is located on said land: Vacant Land, as to Parcels 2 and 3
Known as: City of Riverside, California
- Note No. 6: There are no conveyances affecting said Land recorded within 24 months of the date of this report.
- Note No. 7: The Company requires current beneficiary demands prior to closing. If the demand is expired and a current demand cannot be obtained, our requirements will be as follows:
- a) If the Company accepts a verbal update on the demand, we may hold an amount equal to one monthly mortgage payment. This hold will be in addition to the verbal hold the lender may have stipulated.
 - b) If the Company cannot obtain a verbal update on the demand, we will either pay off the expired demand or wait for the amended demand, at our discretion.
 - c) All payoff figures are verified at closing. If the customer's last payment was made within 15 days of closing, our Payoff Department may hold one month's payment to insure the check has cleared the bank (unless a copy of the cancelled check is provided, in which case there will be no hold).

Processor: [cph](#)
Date Typed: [April 14, 2015](#)

Attachment One (Revised 06-05-14)**CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990****EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE—SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

Attachment One (6-5-14)

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**CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE**

EXCLUSIONS

- In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:
1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.

This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
 2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
 3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
 4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
 5. Failure to pay value for Your Title.
 6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
 7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
 8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$5,000.00

Attachment One (6-5-14)

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2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13 or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

Except as provided in Schedule B - Part II, this policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

PART I

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:

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2006 ALTA OWNER'S POLICY (06-17-06)**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown in the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and that are not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.
7. Variable exceptions such as taxes, easements, CC&R's, etc. shown here.

Attachment One (6-5-14)

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ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (12-02-13)**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

Attachment One (6-5-14)**© California Land Title Association. All rights reserved.**

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Lawyers Title Company
3480 Vine Street Suite 300
Riverside, CA 92507
Phone: (951) 774-0825
Fax: ()

Order No. 615600100

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

FNF Underwritten Title Company
LTC – Lawyers Title Company

FNF Underwriter
CLTIC – Commonwealth Land Title Insurance Co.

Available Discounts

DISASTER LOANS (CLTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within 24 months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be 50% of the appropriate title insurance rate.

EMPLOYEE RATE (LTC and CLTIC)

No charge shall be made to employees (including employees on approved retirement) of the Company or its underwritten, subsidiary or affiliated title companies for policies or escrow services in connection with financing, refinancing, sale or purchase of the employees' bona fide home property. Waiver of such charges is authorized only in connection with those costs which the employee would be obligated to pay, by established custom, as a party to the transaction.

FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Fidelity National Financial, Inc. and its majority-owned subsidiary companies providing real estate- and loan-related services (collectively, “FNF”, “our” or “we”) respect and are committed to protecting your privacy. This Privacy Notice lets you know how and for what purposes your Personal Information (as defined herein) is being collected, processed and used by FNF. We pledge that we will take reasonable steps to ensure that your Personal Information will only be used in ways that are in compliance with this Privacy Notice. The provision of this Privacy Notice to you does not create any express or implied relationship, or create any express or implied duty or other obligation, between Fidelity National Financial, Inc. and you. See also **No Representations or Warranties** below.

This Privacy Notice is only in effect for any generic information and Personal Information collected and/or owned by FNF, including collection through any FNF website and any online features, services and/or programs offered by FNF (collectively, the “Website”). This Privacy Notice is not applicable to any other web pages, mobile applications, social media sites, email lists, generic information or Personal Information collected and/or owned by any entity other than FNF.

How Information is Collected

The types of personal information FNF collects may include, among other things (collectively, “Personal Information”): (1) contact information (e.g., name, address, phone number, email address); (2) demographic information (e.g., date of birth, gender marital status); (3) Internet protocol (or IP) address or device ID/UDID; (4) social security number (SSN), student ID (SIN), driver’s license, passport, and other government ID numbers; (5) financial account information; and (6) information related to offenses or criminal convictions.

In the course of our business, we may collect Personal Information about you from the following sources:

- Applications or other forms we receive from you or your authorized representative;
- Information we receive from you through the Website;
- Information about your transactions with or services performed by us, our affiliates, or others; and
- From consumer or other reporting agencies and public records maintained by governmental entities that we either obtain directly from those entities, or from our affiliates or others.

Additional Ways Information is Collected Through the Website

Browser Log Files. Our servers automatically log each visitor to the Website and collect and record certain information about each visitor. This information may include IP address, browser language, browser type, operating system, domain names, browsing history (including time spent at a domain, time and date of your visit), referring/exit web pages and URLs, and number of clicks. The domain name and IP address reveal nothing personal about the user other than the IP address from which the user has accessed the Website.

Cookies. From time to time, FNF or other third parties may send a “cookie” to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer’s hard drive and that can be re-sent to the serving website on subsequent visits. A cookie, by itself, cannot read other data from your hard disk or read other cookie files already on your computer. A cookie, by itself, does not damage your system. We, our advertisers and

other third parties may use cookies to identify and keep track of, among other things, those areas of the Website and third party websites that you have visited in the past in order to enhance your next visit to the Website. You can choose whether or not to accept cookies by changing the settings of your Internet browser, but some functionality of the Website may be impaired or not function as intended. See the Third Party Opt Out section below.

Web Beacons. Some of our web pages and electronic communications may contain images, which may or may not be visible to you, known as Web Beacons (sometimes referred to as “clear gifs”). Web Beacons collect only limited information that includes a cookie number; time and date of a page view; and a description of the page on which the Web Beacon resides. We may also carry Web Beacons placed by third party advertisers. These Web Beacons do not carry any Personal Information and are only used to track usage of the Website and activities associated with the Website. See the Third Party Opt Out section below.

Unique Identifier. We may assign you a unique internal identifier to help keep track of your future visits. We may use this information to gather aggregate demographic information about our visitors, and we may use it to personalize the information you see on the Website and some of the electronic communications you receive from us. We keep this information for our internal use, and this information is not shared with others.

Third Party Opt Out. Although we do not presently, in the future we may allow third-party companies to serve advertisements and/or collect certain anonymous information when you visit the Website. These companies may use non-personally identifiable information (e.g., click stream information, browser type, time and date, subject of advertisements clicked or scrolled over) during your visits to the Website in order to provide advertisements about products and services likely to be of greater interest to you. These companies typically use a cookie or third party Web Beacon to collect this information, as further described above. Through these technologies, the third party may have access to and use non-personalized information about your online usage activity. You can opt-out of certain online behavioral services through any one of the ways described below. After you opt-out, you may continue to receive advertisements, but those advertisements will no longer be as relevant to you.

- You can opt-out via the Network Advertising Initiative industry opt-out at <http://www.networkadvertising.org>.
- You can opt-out via the Consumer Choice Page at <http://www.aboutads.info>.
- For those in the U.K., you can opt-out via the IAB UK’s industry opt-out at <http://www.youonlinechoices.com>.
- You can configure your web browser (Chrome, Firefox, Internet Explorer, Safari, etc.) to delete and/or control the use of cookies.

More information can be found in the Help system of your browser. Note: If you opt-out as described above, you should not delete your cookies. If you delete your cookies, you will need to opt-out again.

Use of Personal Information

Information collected by FNF is used for three main purposes:

- To provide products and services to you or one or more third party service providers (collectively, “Third Parties”) who are obtaining services on your behalf or in connection with a transaction involving you.
- To improve our products and services that we perform for you or for Third Parties.

To communicate with you and to inform you about FNF's, FNF's affiliates and third parties' products and services.

When Information Is Disclosed By FNF

We may provide your Personal Information (excluding information we receive from consumer or other credit reporting agencies) to various individuals and companies, as permitted by law, without obtaining your prior authorization. Such laws do not allow consumers to restrict these disclosures. Disclosures may include, without limitation, the following:

- To agents, brokers, representatives, or others to provide you with services you have requested, and to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure in connection with an insurance transaction;
- To third-party contractors or service providers who provide services or perform marketing services or other functions on our behalf;
- To law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders; and/or
- To lenders, lien holders, judgment creditors, or other parties claiming an encumbrance or an interest in title whose claim or interest must be determined, settled, paid or released prior to a title or escrow closing.

In addition to the other times when we might disclose information about you, we might also disclose information when required by law or in the good-faith belief that such disclosure is necessary to: (1) comply with a legal process or applicable laws; (2) enforce this Privacy Notice; (3) respond to claims that any materials, documents, images, graphics, logos, designs, audio, video and any other information provided by you violates the rights of third parties; or (4) protect the rights, property or personal safety of FNF, its users or the public.

We maintain reasonable safeguards to keep the Personal Information that is disclosed to us secure. We provide Personal Information and non-Personal Information to our subsidiaries, affiliated companies, and other businesses or persons for the purposes of processing such information on our behalf and promoting the services of our trusted business partners, some or all of which may store your information on servers outside of the United States. We require that these parties agree to process such information in compliance with our Privacy Notice or in a similar, industry-standard manner, and we use reasonable efforts to limit their use of such information and to use other appropriate confidentiality and security measures. The use of your information by one of our trusted business partners may be subject to that party's own Privacy Notice. We do not, however, disclose information we collect from consumer or credit reporting agencies with our affiliates or others without your consent, in conformity with applicable law, unless such disclosure is otherwise permitted by law.

We also reserve the right to disclose Personal Information and/or non-Personal Information to take precautions against liability, investigate and defend against any third-party claims or allegations, assist government enforcement agencies, protect the security or integrity of the Website, and protect the rights, property, or personal safety of FNF, our users or others.

We reserve the right to transfer your Personal Information, as well as any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets. We also cannot make any representations regarding the

use or transfer of your Personal Information or other information that we may have in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors, and you expressly agree and consent to the use and/or transfer of your Personal Information or other information in connection with a sale or transfer of some or all of our assets in any of the above described proceedings. Furthermore, we cannot and will not be

Information From Children

We do not collect Personal Information from any person that we know to be under the age of thirteen (13). Specifically, the Website is not intended or designed to attract children under the age of thirteen (13). You affirm that you are either more than 18 years of age, or an emancipated minor, or possess legal parental or guardian consent, and are fully able and competent to enter into the terms, conditions, obligations, affirmations, representations, and warranties set forth in this Privacy Notice, and to abide by and comply with this Privacy Notice. In any case, you affirm that you are over the age of 13, as **THE WEBSITE IS NOT INTENDED FOR CHILDREN UNDER 13 THAT ARE UNACCOMPANIED BY HIS OR HER PARENT OR LEGAL GUARDIAN.**

Parents should be aware that FNF's Privacy Notice will govern our use of Personal Information, but also that information that is voluntarily given by children – or others – in email exchanges, bulletin boards or the like may be used by other parties to generate unsolicited communications. FNF encourages all parents to instruct their children in the safe and responsible use of their Personal Information while using the Internet.

Privacy Outside the Website

The Website may contain various links to other websites, including links to various third party service providers. FNF is not and cannot be responsible for the privacy practices or the content of any of those other websites. Other than under agreements with certain reputable organizations and companies, and except for third party service providers whose services either we use or you voluntarily elect to utilize, we do not share any of the Personal Information that you provide to us with any of the websites to which the Website links, although we may share aggregate, non-Personal Information with those other third parties. Please check with those websites in order to determine their privacy policies and your rights under them.

European Union Users

If you are a citizen of the European Union, please note that we may transfer your Personal Information outside the European Union for use for any of the purposes described in this Privacy Notice. By providing FNF with your Personal Information, you consent to both our collection and such transfer of your Personal Information in accordance with this Privacy Notice.

Choices With Your Personal Information

Whether you submit Personal Information to FNF is entirely up to you. You may decide not to submit Personal Information, in which case FNF may not be able to provide certain services or products to you.

You may choose to prevent FNF from disclosing or using your Personal Information under certain circumstances ("opt out"). You may opt out of any disclosure or use of your Personal Information for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you subsequently gave authorization by notifying us by one of

the methods at the end of this Privacy Notice. Furthermore, even where your Personal Information is to be disclosed and used in accordance with the stated purposes in this Privacy Notice, you may elect to opt out of such disclosure to and use by a third party that is not acting as an agent of FNF. As described above, there are some uses from which you cannot opt-out.

Please note that opting out of the disclosure and use of your Personal Information as a prospective employee may prevent you from being hired as an employee by FNF to the extent that provision of your Personal Information is required to apply for an open position.

If FNF collects Personal Information from you, such information will not be disclosed or used by FNF for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you disclosure and use.

You may opt out of online behavioral advertising by following the instructions set forth above under the above section "Additional Ways That Information Is Collected Through the Website," subsection "Third Party Opt Out."

Access and Correction

To access your Personal Information in the possession of FNF and correct inaccuracies of that information in our records, please contact us in the manner specified at the end of this Privacy Notice. We ask individuals to identify themselves and the information requested to be accessed and amended before processing such requests, and we may decline to process requests in limited circumstances as permitted by applicable privacy legislation.

Your California Privacy Rights

Under California's "Shine the Light" law, California residents who provide certain personally identifiable information in connection with obtaining products or services for personal, family or household use are entitled to request and obtain from us once a calendar year information about the customer information we shared, if any, with other businesses for their own direct marketing uses. If applicable, this information would include the categories of customer information and the names and addresses of those businesses with which we shared customer information for the immediately prior calendar year (e.g., requests made in 2015 will receive information regarding 2014 sharing activities).

To obtain this information on behalf of FNF, please send an email message to privacy@fnf.com with "Request for California Privacy Information" in the subject line and in the body of your message. We will provide the requested information to you at your email address in response.

Please be aware that not all information sharing is covered by the "Shine the Light" requirements and only information on covered sharing will be included in our response.

Additionally, because we may collect your Personal Information from time to time, California's Online Privacy Protection Act requires us to disclose how we respond to "do not track" requests and other similar mechanisms. Currently, our policy is that we do not recognize "do not track" requests from Internet browsers and similar devices.

No Representations or Warranties

By providing this Privacy Notice, Fidelity National Financial, Inc. does not make any representations or warranties whatsoever concerning any products or services provided to you by its majority-owned subsidiaries. In addition, you also expressly agree that your use of the Website is at your own risk. Any services provided to you by Fidelity National Financial, Inc. and/or the Website are provided "as is" and "as available" for your use, without representations or warranties of any kind, either express or implied, unless such warranties are legally incapable of exclusion. Fidelity National Financial, Inc. makes no representations or warranties that any services provided to you by it or the Website, or any services offered in connection with the Website are or will remain uninterrupted or error-free, that defects will be corrected, or that the web pages on or accessed through the Website, or the servers used in connection with the Website, are or will remain free from any viruses, worms, time bombs, drop dead devices, Trojan horses or other harmful components. Any liability of Fidelity National Financial, Inc. and your exclusive remedy with respect to the use of any product or service provided by Fidelity National Financial, Inc. including on or accessed through the Website, will be the re-performance of such service found to be inadequate.

Your Consent To This Privacy Notice

By submitting Personal Information to FNF, you consent to the collection and use of information by us as specified above or as we otherwise see fit, in compliance with this Privacy Notice, unless you inform us otherwise by means of the procedure identified below. If we decide to change this Privacy Notice, we will make an effort to post those changes on the Website. Each time we collect information from you following any amendment of this Privacy Notice will signify your assent to and acceptance of its revised terms for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you may submit in any manner that we may choose without notice or compensation to you.

If you have additional questions or comments, please let us know by sending your comments or requests to:
Fidelity National Financial, Inc.

601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer
(888) 934-3354
privacy@fnf.com

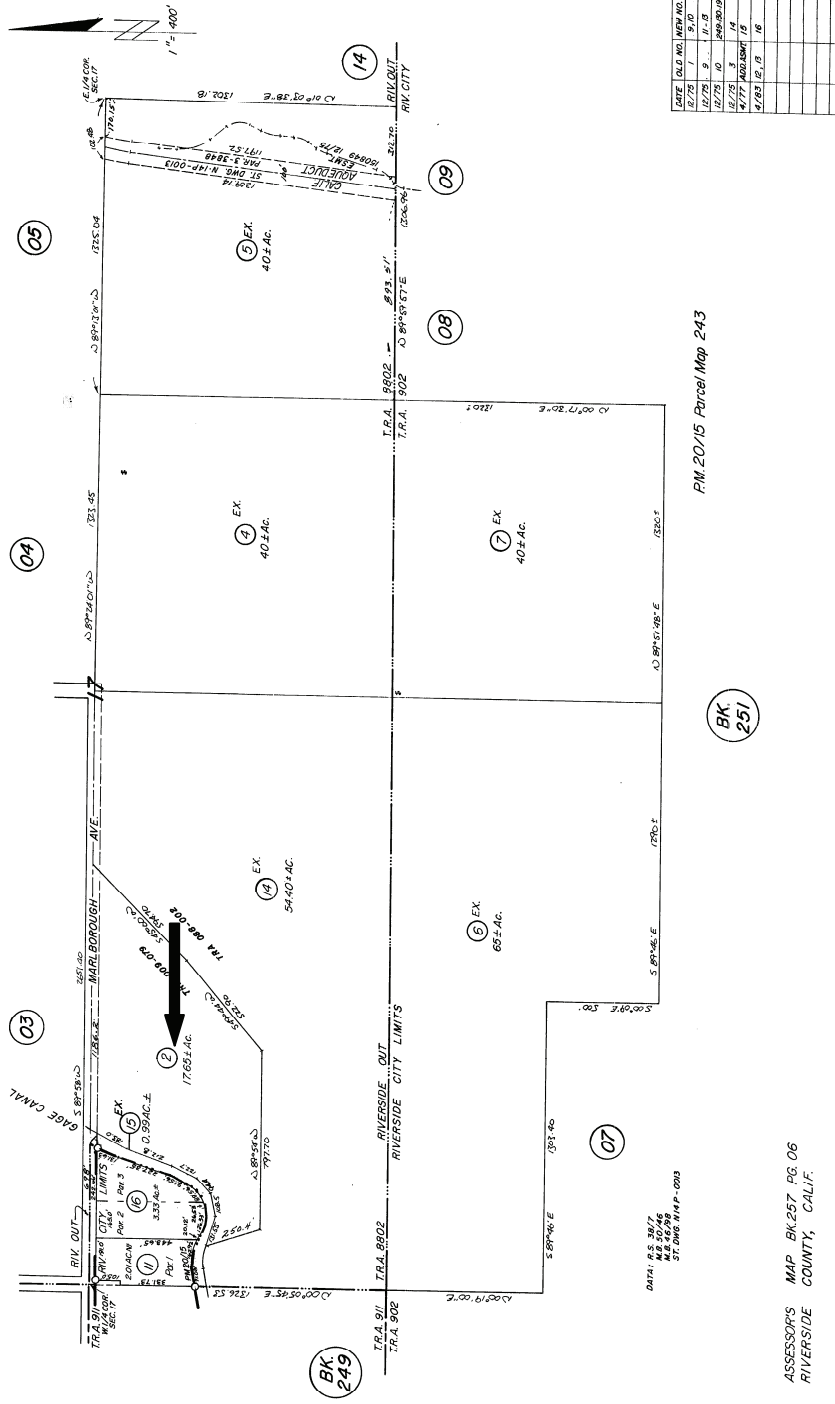
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PRIVACY NOTICE EFFECTIVE AS OF: JANUARY 6, 2015

THIS MAP SHOULD BE USED FOR REFERENCE PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

T.R.A. 088-002
009-002
009-011
009-019

12-27
12-27
257-06



PM 2015 Parcel Map 243

BK 251

ASSESSOR'S MAP BK257 PG. 06
RIVERSIDE COUNTY, CALIF.

BK 249



Lawyers Title Company
 3480 Vine Street Suite 300
 Riverside, CA 92507
 Phone: (951) 774-0825
 Fax: ()

County of Riverside EDA
 3403 10th Street Suite 400
 Riverside, CA 92501

Title Officer: **Special Projects/ Joe Lardieri-So**
 email: **jlardieri@ltic.com**
 Phone No.:
 Fax No.:
 File No.: **615600099**

Attn: **Bonnie Perez**

Your Reference No:

Property Address: **532 Technology Court and 1400 Research Park Drive, City of Riverside, California**

PRELIMINARY REPORT

Dated as of **April 6, 2015 at 7:30 a.m.**

In response to the application for a policy of title insurance referenced herein, Lawyers Title Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitation on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

The policy(s) of title insurance to be issued hereunder will be policy(s) of **Commonwealth Land Title Insurance Company.**

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered. It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

SCHEDULE A

The form of policy of title insurance contemplated by this report is:

ALTA Owners 2006

The estate or interest in the land hereinafter described or referred to covered by this report is:

A FEE

Title to said estate or interest at the date hereof is vested in:

Redevelopment Agency for the County of Riverside, public body, corporate and politic, organized and existing under, and by virtue of the State of California, a dissolved public body, subject to Section 34173 of the California Health and Safety Code, subject to Item No. 12

The land referred to herein is situated in the County of Riverside, State of California, and is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"

All that certain real property situated in the County of Riverside, State of California, described as follows:

Parcels 4 and 6 of Parcel Map 29161, in the City of Riverside, County of Riverside, State of California, as per map recorded in Book 195, pages 20, 21 and 22, of Parcel Maps, in the Office of the County Recorder of said County.

Assessor's Parcel No: 257-030-012 and 014

SCHEDULE B – Section A

The following exceptions will appear in policies when providing standard coverage as outlined below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

SCHEDULE B – Section B

At the date hereof Exceptions to coverage in addition to the printed exceptions and exclusions in said policy form would be as follows:

A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2015-2016.

B. There were no taxes levied for the fiscal year 2014-2015 as the property was vested in a public entity.

Assessor's Parcel No: 257-030-012-0

C. There were no taxes levied for the fiscal year 2014-2015 as the property was vested in a public entity.

Assessor's Parcel No: 257-030-014-2

D. A Special Tax as disclosed by a "Notice of Special Tax Lien" pursuant to Government Code Section 53328.3 and Streets and Highways Code Section 3114.5

Recorded: January 6, 2006 as Instrument No. 2006-0014205 of Official Records

District Name: Hunter Park Assessment District, City of Riverside, County of Riverside, State of California

Said special tax may be collected with the property taxes.

E. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.

F. The lien of supplemental taxes, if any, assessed pursuant to the provisions of Chapter 3.5 (Commencing with Section 75) of the Revenue and Taxation Code of the State of California.

1. Water rights, claims or title to water, whether or not disclosed by the public records.

2. An easement for the purpose shown below and rights incidental thereto as reserved in a document

Purpose: irrigating and domestic water pipes, flumes

Recorded: March 23, 1892, in Book 150, Page 347, of Deeds, Records of San Bernardino, California

The exact location and extent of said easement is not disclosed of record.

3. An easement for the purpose shown below and rights incidental thereto as set forth in a document

Granted to: The Riverside Highland Water Company

Purpose: pipelines with the right of ingress and egress

Recorded: April 30, 1929 in Book 806, Page 510 of Deeds

The exact location and extent of said easement is not disclosed of record.

4. The fact that said land is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment law (such redevelopment to proceed only after the adoption of the redevelopment plan) as disclosed by a document.

Redevelopment Agency: Redevelopment Project No. 5-1996 (Highgrove Project)
Recorded: November 25, 1998 as Instrument No. 514098, Official Records

- 5. The fact that said land is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment law (such redevelopment to proceed only after the adoption of the redevelopment plan) as disclosed by a document.

Redevelopment Agency: The Redevelopment Project Area No. 9-1986, Amendment No. 1, Highgrove Sub-Area
Recorded: December 18, 1998 as Instrument No. 549221, Official Records

- 6. An easement for the purpose shown below and rights incidental thereto as set forth in a document
Granted to: City of Riverside
Purpose: sewer, storm drain, gas line, telephone, telegraph communication, electrical and water facilities
Recorded: October 25, 1999 as Instrument No. 1999-468782, Official Records
Affects: Parcel 4 within the vacated portions of Michigan Avenue
- 7. A document entitled "Covenant, Agreement and Declaration of Restrictions," dated October 6, 1999 executed by the Redevelopment Agency for the County of Riverside, a public body (Declarant); subject to all the terms, provisions and conditions therein contained, recorded October 25, 1999 as Instrument No. 1999-468785, Official Records.

- 8. Declaration of covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the below document, which, among other things, may contain or provide for easements; assessments, liens and the subordination thereof; said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or deed of trust made in good faith and for value:

Recording Date: October 25, 1999
Recording No: as Instrument No. 1999-468786 of Official Records

- 9. Easements and rights of way reserved by the City of Riverside in Resolution No. 19535 of the City Council of said City, vacating portion of said land lying within Michigan Avenue, recorded November 2, 2001 as Instrument No. 2001-544636, Official Records.

Also reserving within said Avenue an easement for water facilities in favor of Riverside Highland Water Company.

Reference is made to said document for full particulars.

- 10. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

Redevelopment Agency: Hunter Park/Northside Redevelopment Project
Recording Date: June 27, 2003
Recording No: as Instrument No. 2003-478348 of Official Records

11. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

Redevelopment Agency: Riverside County Economic Redevelopment Agency
Recording Date: July 24, 2007
Recording No: as Instrument No. 2007-0477880 of Official Records

12. Any claim that the transaction vesting the Title as shown in Schedule A or creating the lien of the Insured Mortgage, or any other transaction occurring on or prior to Date of Policy in which Redevelopment Agency for the County of Riverside or its successors transferred, acquired, or made any agreement affecting the title to or any interest in the Land, is void or voidable, or subject to termination, renegotiation, or judicial review, under California Assembly Bill 26 (Chapter 5, Statutes of 2011-12, First Extraordinary Session) and California Assembly Bill 1484 (Chapter 26, Statutes of 2011-12).
13. Approval of the policy or commitment of title insurance anticipated by this report by Regional Counsel of the Company is required prior to the recordation of the instruments required to complete this transaction and the issuance of such policy or commitment. The right is reserved to make additional exceptions and/or requirements upon such review.
14. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.
15. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.
16. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

17. Any easements not disclosed by the public records as to matters affecting title to real property, whether or not said easements are visible and apparent.
18. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other matters which a correct survey would disclose and which are not shown by the public records.

END OF SCHEDULE B EXCEPTIONS

PLEASE REFER TO THE "NOTES AND REQUIREMENTS SECTION" WHICH FOLLOWS FOR INFORMATION NECESSARY TO COMPLETE THIS TRANSACTION

REQUIREMENTS SECTION:

Req. No. 1: The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below:

Name of Corporation: [Redevelopment Agency for the County of Riverside, public body, corporate and politic, organized and existing under, and by virtue of the State of California, a dissolved public body](#)

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

Req. No. 2: The Company requires a Statement of Information from the parties named below in order to complete this report, based on the effect of documents, proceedings, liens, decrees, or other matters which do not specifically describe said Land, but which, if any do exist, may affect the title or impose liens or encumbrances thereon. After review of the requested Statement(s) of Information, the Company may have additional requirements before the issuance of any policy of title insurance.

No names were furnished with the application. Please have the buyers furnish the Statement of Information as soon as possible.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

NOTE: The Statement of Information is necessary to complete the search and examination of title under this order. Any title search includes matters that are indexed by name only, and having a completed Statement of Information assists the Company in the elimination of certain matters which appear to involve the parties but in fact affect another party with the same or similar name. Be assured that the Statement of Information is essential and will be kept strictly confidential to this file.

INFORMATIONAL NOTES SECTION

- Note No. 1: The information on the attached plat is provided for your convenience as a guide to the general location of the subject property. The accuracy of this plat is not guaranteed, nor is it a part of any policy, report or guarantee to which it may be attached.
- Note No. 2: California insurance code section 12413.1 regulates the disbursement of escrow and sub-escrow funds by title companies. The law requires that funds be deposited in the title company escrow account and available for withdrawal prior to disbursement. Funds deposited with the company by wire transfer may be disbursed upon receipt. Funds deposited with the company via cashier's check or teller's check drawn on a California based bank may be disbursed on the next business day after the day of deposit. If funds are deposited with the company by other methods, recording and/or disbursement may be delayed. All escrow and sub-escrow funds received by the company will be deposited with other escrow funds in one or more non-interest bearing escrow accounts of the company in a financial institution selected by the company. The company may receive certain direct or indirect benefits from the financial institution by reason of the deposit of such funds or the maintenance of such accounts with such financial institution, and the company shall have no obligation to account to the depositing party in any manner for the value of, or to pay to such party, any benefit received by the company. Those benefits may include, without limitation, credits allowed by such financial institution on loans to the company or its parent company and earnings on investments made with the proceeds of such loans, accounting, reporting and other services and products of such financial institution. Such benefits shall be deemed additional compensation of the company for its services in connection with the escrow or sub-escrow.

For wiring Instructions please contact your Title Officer or Title Company Escrow officer.

- Note No. 3: Lawyers Title is a division of Commonwealth Land Title Insurance Company. The insurer in policies of title insurance, when issued in this transaction, will be Commonwealth Land Title Insurance Company.

- Note No. 4: None of the items shown in this report will cause the Company to decline to attach CLTA Endorsement Form 100 to an ALTA Loan Policy, when issued.
- Note No. 5: The following information will be included in the CLTA Form 116 or ALTA Form 22-06 Endorsement to be issued pursuant to this order:
- There is located on said Land: Vacant and Commercial
Known as: 532 Technology Court and 1400 Research Park Drive, City of
Riverside, California
- Note No. 6: There are no conveyances affecting said Land recorded within 24 months of the date of this report.
- Note No. 7: The Company requires current beneficiary demands prior to closing. If the demand is expired and a current demand cannot be obtained, our requirements will be as follows:
- a) If the Company accepts a verbal update on the demand, we may hold an amount equal to one monthly mortgage payment. This hold will be in addition to the verbal hold the lender may have stipulated.
 - b) If the Company cannot obtain a verbal update on the demand, we will either pay off the expired demand or wait for the amended demand, at our discretion.
 - c) All payoff figures are verified at closing. If the customer's last payment was made within 15 days of closing, our Payoff Department may hold one month's payment to insure the check has cleared the bank (unless a copy of the cancelled check is provided, in which case there will be no hold).

Processor: [cph](#)
Date Typed: [April 14, 2015](#)

Attachment One (Revised 06-05-14)**CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990****EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE—SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

Attachment One (6-5-14)

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**CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE**

EXCLUSIONS

- In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:
1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.

This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
 2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
 3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
 4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
 5. Failure to pay value for Your Title.
 6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
 7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
 8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$5,000.00

Attachment One (6-5-14)

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2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13 or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

Except as provided in Schedule B - Part II, this policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

PART I

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:

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2006 ALTA OWNER'S POLICY (06-17-06)**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown in the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and that are not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.
7. Variable exceptions such as taxes, easements, CC&R's, etc. shown here.

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ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (12-02-13)**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

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Lawyers Title Company
3480 Vine Street Suite 300
Riverside, CA 92507
Phone: (951) 774-0825
Fax: ()

Order No. 615600099

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

FNF Underwritten Title Company
LTC – Lawyers Title Company

FNF Underwriter
CLTIC – Commonwealth Land Title Insurance Co.

Available Discounts

DISASTER LOANS (CLTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within 24 months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be 50% of the appropriate title insurance rate.

EMPLOYEE RATE (LTC and CLTIC)

No charge shall be made to employees (including employees on approved retirement) of the Company or its underwritten, subsidiary or affiliated title companies for policies or escrow services in connection with financing, refinancing, sale or purchase of the employees' bona fide home property. Waiver of such charges is authorized only in connection with those costs which the employee would be obligated to pay, by established custom, as a party to the transaction.

FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Fidelity National Financial, Inc. and its majority-owned subsidiary companies providing real estate- and loan-related services (collectively, “FNF”, “our” or “we”) respect and are committed to protecting your privacy. This Privacy Notice lets you know how and for what purposes your Personal Information (as defined herein) is being collected, processed and used by FNF. We pledge that we will take reasonable steps to ensure that your Personal Information will only be used in ways that are in compliance with this Privacy Notice. The provision of this Privacy Notice to you does not create any express or implied relationship, or create any express or implied duty or other obligation, between Fidelity National Financial, Inc. and you. See also **No Representations or Warranties** below.

This Privacy Notice is only in effect for any generic information and Personal Information collected and/or owned by FNF, including collection through any FNF website and any online features, services and/or programs offered by FNF (collectively, the “Website”). This Privacy Notice is not applicable to any other web pages, mobile applications, social media sites, email lists, generic information or Personal Information collected and/or owned by any entity other than FNF.

How Information is Collected

The types of personal information FNF collects may include, among other things (collectively, “Personal Information”): (1) contact information (e.g., name, address, phone number, email address); (2) demographic information (e.g., date of birth, gender marital status); (3) Internet protocol (or IP) address or device ID/UDID; (4) social security number (SSN), student ID (SIN), driver’s license, passport, and other government ID numbers; (5) financial account information; and (6) information related to offenses or criminal convictions.

In the course of our business, we may collect Personal Information about you from the following sources:

- Applications or other forms we receive from you or your authorized representative;
- Information we receive from you through the Website;
- Information about your transactions with or services performed by us, our affiliates, or others; and
- From consumer or other reporting agencies and public records maintained by governmental entities that we either obtain directly from those entities, or from our affiliates or others.

Additional Ways Information is Collected Through the Website

Browser Log Files. Our servers automatically log each visitor to the Website and collect and record certain information about each visitor. This information may include IP address, browser language, browser type, operating system, domain names, browsing history (including time spent at a domain, time and date of your visit), referring/exit web pages and URLs, and number of clicks. The domain name and IP address reveal nothing personal about the user other than the IP address from which the user has accessed the Website.

Cookies. From time to time, FNF or other third parties may send a “cookie” to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer’s hard drive and that can be re-sent to the serving website on subsequent visits. A cookie, by itself, cannot read other data from your hard disk or read other cookie files already on your computer. A cookie, by itself, does not damage your system. We, our advertisers and

other third parties may use cookies to identify and keep track of, among other things, those areas of the Website and third party websites that you have visited in the past in order to enhance your next visit to the Website. You can choose whether or not to accept cookies by changing the settings of your Internet browser, but some functionality of the Website may be impaired or not function as intended. See the Third Party Opt Out section below.

Web Beacons. Some of our web pages and electronic communications may contain images, which may or may not be visible to you, known as Web Beacons (sometimes referred to as “clear gifs”). Web Beacons collect only limited information that includes a cookie number; time and date of a page view; and a description of the page on which the Web Beacon resides. We may also carry Web Beacons placed by third party advertisers. These Web Beacons do not carry any Personal Information and are only used to track usage of the Website and activities associated with the Website. See the Third Party Opt Out section below.

Unique Identifier. We may assign you a unique internal identifier to help keep track of your future visits. We may use this information to gather aggregate demographic information about our visitors, and we may use it to personalize the information you see on the Website and some of the electronic communications you receive from us. We keep this information for our internal use, and this information is not shared with others.

Third Party Opt Out. Although we do not presently, in the future we may allow third-party companies to serve advertisements and/or collect certain anonymous information when you visit the Website. These companies may use non-personally identifiable information (e.g., click stream information, browser type, time and date, subject of advertisements clicked or scrolled over) during your visits to the Website in order to provide advertisements about products and services likely to be of greater interest to you. These companies typically use a cookie or third party Web Beacon to collect this information, as further described above. Through these technologies, the third party may have access to and use non-personalized information about your online usage activity. You can opt-out of certain online behavioral services through any one of the ways described below. After you opt-out, you may continue to receive advertisements, but those advertisements will no longer be as relevant to you.

- You can opt-out via the Network Advertising Initiative industry opt-out at <http://www.networkadvertising.org>.
- You can opt-out via the Consumer Choice Page at <http://www.aboutads.info>.
- For those in the U.K., you can opt-out via the IAB UK’s industry opt-out at <http://www.youronlinechoices.com>.
- You can configure your web browser (Chrome, Firefox, Internet Explorer, Safari, etc.) to delete and/or control the use of cookies.

More information can be found in the Help system of your browser. Note: If you opt-out as described above, you should not delete your cookies. If you delete your cookies, you will need to opt-out again.

Use of Personal Information

Information collected by FNF is used for three main purposes:

- To provide products and services to you or one or more third party service providers (collectively, “Third Parties”) who are obtaining services on your behalf or in connection with a transaction involving you.
- To improve our products and services that we perform for you or for Third Parties.

To communicate with you and to inform you about FNF's, FNF's affiliates and third parties' products and services.

When Information Is Disclosed By FNF

We may provide your Personal Information (excluding information we receive from consumer or other credit reporting agencies) to various individuals and companies, as permitted by law, without obtaining your prior authorization. Such laws do not allow consumers to restrict these disclosures. Disclosures may include, without limitation, the following:

- To agents, brokers, representatives, or others to provide you with services you have requested, and to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure in connection with an insurance transaction;
- To third-party contractors or service providers who provide services or perform marketing services or other functions on our behalf;
- To law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders; and/or
- To lenders, lien holders, judgment creditors, or other parties claiming an encumbrance or an interest in title whose claim or interest must be determined, settled, paid or released prior to a title or escrow closing.

In addition to the other times when we might disclose information about you, we might also disclose information when required by law or in the good-faith belief that such disclosure is necessary to: (1) comply with a legal process or applicable laws; (2) enforce this Privacy Notice; (3) respond to claims that any materials, documents, images, graphics, logos, designs, audio, video and any other information provided by you violates the rights of third parties; or (4) protect the rights, property or personal safety of FNF, its users or the public.

We maintain reasonable safeguards to keep the Personal Information that is disclosed to us secure. We provide Personal Information and non-Personal Information to our subsidiaries, affiliated companies, and other businesses or persons for the purposes of processing such information on our behalf and promoting the services of our trusted business partners, some or all of which may store your information on servers outside of the United States. We require that these parties agree to process such information in compliance with our Privacy Notice or in a similar, industry-standard manner, and we use reasonable efforts to limit their use of such information and to use other appropriate confidentiality and security measures. The use of your information by one of our trusted business partners may be subject to that party's own Privacy Notice. We do not, however, disclose information we collect from consumer or credit reporting agencies with our affiliates or others without your consent, in conformity with applicable law, unless such disclosure is otherwise permitted by law.

We also reserve the right to disclose Personal Information and/or non-Personal Information to take precautions against liability, investigate and defend against any third-party claims or allegations, assist government enforcement agencies, protect the security or integrity of the Website, and protect the rights, property, or personal safety of FNF, our users or others.

We reserve the right to transfer your Personal Information, as well as any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets. We also cannot make any representations regarding the

use or transfer of your Personal Information or other information that we may have in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors, and you expressly agree and consent to the use and/or transfer of your Personal Information or other information in connection with a sale or transfer of some or all of our assets in any of the above described proceedings. Furthermore, we cannot and will not be

Information From Children

We do not collect Personal Information from any person that we know to be under the age of thirteen (13). Specifically, the Website is not intended or designed to attract children under the age of thirteen (13). You affirm that you are either more than 18 years of age, or an emancipated minor, or possess legal parental or guardian consent, and are fully able and competent to enter into the terms, conditions, obligations, affirmations, representations, and warranties set forth in this Privacy Notice, and to abide by and comply with this Privacy Notice. In any case, you affirm that you are over the age of 13, as **THE WEBSITE IS NOT INTENDED FOR CHILDREN UNDER 13 THAT ARE UNACCOMPANIED BY HIS OR HER PARENT OR LEGAL GUARDIAN.**

Parents should be aware that FNF's Privacy Notice will govern our use of Personal Information, but also that information that is voluntarily given by children – or others – in email exchanges, bulletin boards or the like may be used by other parties to generate unsolicited communications. FNF encourages all parents to instruct their children in the safe and responsible use of their Personal Information while using the Internet.

Privacy Outside the Website

The Website may contain various links to other websites, including links to various third party service providers. FNF is not and cannot be responsible for the privacy practices or the content of any of those other websites. Other than under agreements with certain reputable organizations and companies, and except for third party service providers whose services either we use or you voluntarily elect to utilize, we do not share any of the Personal Information that you provide to us with any of the websites to which the Website links, although we may share aggregate, non-Personal Information with those other third parties. Please check with those websites in order to determine their privacy policies and your rights under them.

European Union Users

If you are a citizen of the European Union, please note that we may transfer your Personal Information outside the European Union for use for any of the purposes described in this Privacy Notice. By providing FNF with your Personal Information, you consent to both our collection and such transfer of your Personal Information in accordance with this Privacy Notice.

Choices With Your Personal Information

Whether you submit Personal Information to FNF is entirely up to you. You may decide not to submit Personal Information, in which case FNF may not be able to provide certain services or products to you.

You may choose to prevent FNF from disclosing or using your Personal Information under certain circumstances ("opt out"). You may opt out of any disclosure or use of your Personal Information for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you subsequently gave authorization by notifying us by one of

the methods at the end of this Privacy Notice. Furthermore, even where your Personal Information is to be disclosed and used in accordance with the stated purposes in this Privacy Notice, you may elect to opt out of such disclosure to and use by a third party that is not acting as an agent of FNF. As described above, there are some uses from which you cannot opt-out.

Please note that opting out of the disclosure and use of your Personal Information as a prospective employee may prevent you from being hired as an employee by FNF to the extent that provision of your Personal Information is required to apply for an open position.

If FNF collects Personal Information from you, such information will not be disclosed or used by FNF for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you disclosure and use.

You may opt out of online behavioral advertising by following the instructions set forth above under the above section “Additional Ways That Information Is Collected Through the Website,” subsection “Third Party Opt Out.”

Access and Correction

To access your Personal Information in the possession of FNF and correct inaccuracies of that information in our records, please contact us in the manner specified at the end of this Privacy Notice. We ask individuals to identify themselves and the information requested to be accessed and amended before processing such requests, and we may decline to process requests in limited circumstances as permitted by applicable privacy legislation.

Your California Privacy Rights

Under California’s “Shine the Light” law, California residents who provide certain personally identifiable information in connection with obtaining products or services for personal, family or household use are entitled to request and obtain from us once a calendar year information about the customer information we shared, if any, with other businesses for their own direct marketing uses. If applicable, this information would include the categories of customer information and the names and addresses of those businesses with which we shared customer information for the immediately prior calendar year (e.g., requests made in 2015 will receive information regarding 2014 sharing activities).

To obtain this information on behalf of FNF, please send an email message to privacy@fnf.com with “Request for California Privacy Information” in the subject line and in the body of your message. We will provide the requested information to you at your email address in response.

Please be aware that not all information sharing is covered by the “Shine the Light” requirements and only information on covered sharing will be included in our response.

Additionally, because we may collect your Personal Information from time to time, California’s Online Privacy Protection Act requires us to disclose how we respond to “do not track” requests and other similar mechanisms. Currently, our policy is that we do not recognize “do not track” requests from Internet browsers and similar devices.

No Representations or Warranties

By providing this Privacy Notice, Fidelity National Financial, Inc. does not make any representations or warranties whatsoever concerning any products or services provided to you by its majority-owned subsidiaries. In addition, you also expressly agree that your use of the Website is at your own risk. Any services provided to you by Fidelity National Financial, Inc. and/or the Website are provided “as is” and “as available” for your use, without representations or warranties of any kind, either express or implied, unless such warranties are legally incapable of exclusion. Fidelity National Financial, Inc. makes no representations or warranties that any services provided to you by it or the Website, or any services offered in connection with the Website are or will remain uninterrupted or error-free, that defects will be corrected, or that the web pages on or accessed through the Website, or the servers used in connection with the Website, are or will remain free from any viruses, worms, time bombs, drop dead devices, Trojan horses or other harmful components. Any liability of Fidelity National Financial, Inc. and your exclusive remedy with respect to the use of any product or service provided by Fidelity National Financial, Inc. including on or accessed through the Website, will be the re-performance of such service found to be inadequate.

Your Consent To This Privacy Notice

By submitting Personal Information to FNF, you consent to the collection and use of information by us as specified above or as we otherwise see fit, in compliance with this Privacy Notice, unless you inform us otherwise by means of the procedure identified below. If we decide to change this Privacy Notice, we will make an effort to post those changes on the Website. Each time we collect information from you following any amendment of this Privacy Notice will signify your assent to and acceptance of its revised terms for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you may submit in any manner that we may choose without notice or compensation to you.

If you have additional questions or comments, please let us know by sending your comments or requests to:
Fidelity National Financial, Inc.

601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer
(888) 934-3354
privacy@fnf.com

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PRIVACY NOTICE EFFECTIVE AS OF: JANUARY 6, 2015

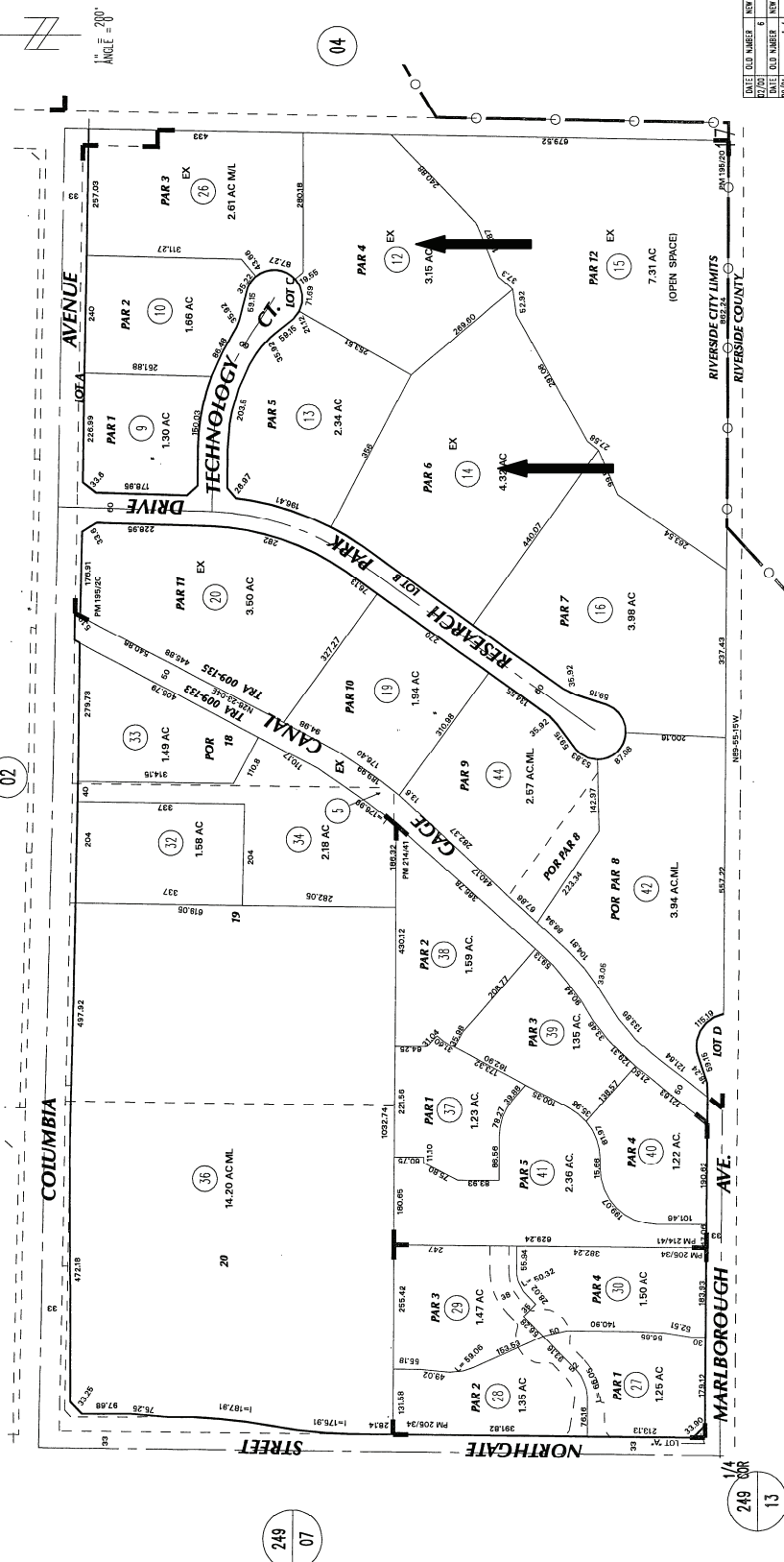
257-03
12-28

T.R.A. 009-133

POR. SEC 17 T. 2S., R. 4W
CITY OF RIVERSIDE

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAP NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

AUG 1 6 2007



DATE	OLD NUMBER	NEW NUMBER
09/01	1-4	21-24, 31
09/01	5-8	25
09/01	9-12	26
09/01	13-16	27-30
09/01	17-20	31
09/01	21-24	32-35
09/01	25-28	36-39
09/01	29-32	40-43
09/01	33-36	44

MB 6/44 SB. EAST RIVERSIDE LAND CO.
PM 195/20-33 PARCEL MAP NO. 29161
PM 209/34-36 PARCEL MAP 30547
PM 214/41-42 PARCEL MAP 31936

DRAWN: S.L. 8/4/05-01
6/27/05

ASSESSOR'S MAP BK257 PG.33
Riverside County, Calif.

COPY



Lawyers Title Company
3480 Vine Street Suite 300
Riverside, CA 92507
Phone: (951) 774-0825
Fax: ()

County of Riverside EDA
3403 10th Street Suite 400
Riverside, CA 92501

Title Officer: Special Projects/ Joe Lardieri-So
email: jlardieri@ltic.com
Phone No.:
Fax No.:
File No.: 615600098

Attn: Bonnie Perez

Your Reference No:

Property Address: 588 Technology Court, City of Riverside, California

PRELIMINARY REPORT

Dated as of April 7, 2015 at 7:30 a.m.

In response to the application for a policy of title insurance referenced herein, Lawyers Title Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitation on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

The policy(s) of title insurance to be issued hereunder will be policy(s) of **Commonwealth Land Title Insurance Company**.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered. It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

SCHEDULE A

The form of policy of title insurance contemplated by this report is:

ALTA Owners 2006
ALTA Loan 2006

The estate or interest in the land hereinafter described or referred to covered by this report is:

A FEE

Title to said estate or interest at the date hereof is [vested in](#):

Graham Financial, LLC

The land referred to herein is situated in the County of Riverside, State of California, and is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"

All that certain real property situated in the County of Riverside, State of California, described as follows:

Parcel 5 as shown by Parcel Map No. 29161, in the City of Riverside, County of Riverside, State of California, on file in [Book 195, Pages 20](#) through 22, inclusive of Parcel Maps, Records of Riverside County, California.

Assessor's Parcel No: 257-030-013-1

SCHEDULE B – Section A

The following exceptions will appear in policies when providing standard coverage as outlined below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

SCHEDULE B – Section B

At the date hereof Exceptions to coverage in addition to the printed exceptions and exclusions in said policy form would be as follows:

- A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2015-2016.
- B. CONTACT TITLE TAX FOR ADDITIONAL POWER TO SELL FEES OPEN TAX ORDER NUMBER REQUIRED FOR ADDITIONAL INFORMATION 1915 ACT BOND IS COLLECTED WITH TAXES CALL TITLE-TAX FOR WRITTEN REPORT ON PAYMENT PLAN. NO VERBAL QUOTE.

- C. An assessment by the improvement district shown below:

Assessment (or Bond) No:	Not Set Out
Series:	Riverside Co
District:	Riverside City
For:	Riverside Hunter Park AD
Bond issued:	June 3, 2004
Original Amount:\$	Not Set Out

Said assessment is collected with the county/city property taxes.

- D. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A; or as a result of changes in ownership or new construction occurring prior to date of policy.

- 1. Water rights, claims or title to water, whether or not disclosed by the public records.
- 2. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

Purpose:	ditches and flumes
Recording Date:	April 6, 1898
Recording No:	in Book 67, Page 394 of Deeds

The exact location and extent of said easement is not disclosed of record.

- 3. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

Purpose:	pipelines
Recording Date:	November 8, 1946
Recording No:	in Book 798, Page 351 of Official Records

The exact location and extent of said easement is not disclosed of record.

4. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: October 25, 1999
Recording No: as [Instrument No. 468785](#) of Official Records

5. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: October 25, 1999
Recording No: as [Instrument No. 468786](#) of Official Records

6. A lien in favor of the City/Town of Riverside ,

For: abatement of weeds
Name of Owner: City of Riverside
Amount: \$671.00
Recording Date: August 8, 2005
Recording No: as [Instrument No. 2005-0639472](#) of Official Records

7. A lien in favor of the City/Town of Riverside ,

For: abatement of weeds
Name of Owner: City of Riverside
Amount: \$650.00
Recording Date: September 1, 2006
Recording No: as [Instrument No. 2006-0649648](#) of Official Records

8. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

Redevelopment Agency: Redevelopment Agency for the County of Riverside
Recording Date: July 24, 2007
Recording No: as [Instrument No. 2007-0477880](#) of Official Records

9. A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$2,500,000.00
Dated: August 20, 2012
Trustor/Grantor: Graham Financial, LLC, a Delaware limited liability company
Trustee: Chicago Title
Beneficiary: Preferred Bank, a California Banking Corporation
Loan No.: Not Set Out
Recording Date: August 15, 2013
Recording No: as [Instrument No. 2013-0398425](#) of Official Records

An agreement to modify the terms and provisions of said deed of trust as therein provided

Executed by: Graham Financial LLC, a Delaware limited liability company, Ronald H. Semler, an individual, Lisa Anne Semler, an individual and Ronald H. Semler and Lisa Anne Semler, as Trustees of the Ronald and Lisa Semler Family Trust under the provisions of a Trust Agreement dated September 1, 1999 and Preferred Bank, a California banking corporation

Recording Date: July 10, 2014

Recording No: as [Instrument No. 2014-0256052](#) of Official Records

10. An assignment of all the moneys due, or to become due as rental, as additional security for the obligations secured by deed of trust shown

Recording Date: August 15, 2013

Recording No: as [Instrument No. 2013-0398426](#) of Official Records

Assigned to: Preferred Bank, a California banking corporation

11. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.
12. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

13. Any easements not disclosed by the public records as to matters affecting title to real property, whether or not said easements are visible and apparent.
14. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other matters which a correct survey would disclose and which are not shown by the public records.

END OF SCHEDULE B EXCEPTIONS

PLEASE REFER TO THE "NOTES AND REQUIREMENTS SECTION" WHICH FOLLOWS FOR INFORMATION NECESSARY TO COMPLETE THIS TRANSACTION

REQUIREMENTS SECTION:

Req. No. 1: In order to complete this report, the Company requires a Statement of Information to be completed by the following party(s),

Party(s): Buyers/Sellers

The Company reserves the right to add additional items or make further requirements after review of the requested Statement of Information.

NOTE: The Statement of Information is necessary to complete the search and examination of title under this order. Any title search includes matters that are indexed by name only, and having a completed Statement of Information assists the Company in the elimination of certain matters which appear to involve the parties but in fact affect another party with the same or similar name. Be assured that the Statement of Information is essential and will be kept strictly confidential to this file.

INFORMATIONAL NOTES SECTION

- Note No. 1: The information on the attached plat is provided for your convenience as a guide to the general location of the subject property. The accuracy of this plat is not guaranteed, nor is it a part of any policy, report or guarantee to which it may be attached.
- Note No. 2: California insurance code section 12413.1 regulates the disbursement of escrow and sub-escrow funds by title companies. The law requires that funds be deposited in the title company escrow account and available for withdrawal prior to disbursement. Funds deposited with the company by wire transfer may be disbursed upon receipt. Funds deposited with the company via cashier's check or teller's check drawn on a California based bank may be disbursed on the next business day after the day of deposit. If funds are deposited with the company by other methods, recording and/or disbursement may be delayed. All escrow and sub-escrow funds received by the company will be deposited with other escrow funds in one or more non-interest bearing escrow accounts of the company in a financial institution selected by the company. The company may receive certain direct or indirect benefits from the financial institution by reason of the deposit of such funds or the maintenance of such accounts with such financial institution, and the company shall have no obligation to account to the depositing party in any manner for the value of, or to pay to such party, any benefit received by the company. Those benefits may include, without limitation, credits allowed by such financial institution on loans to the company or its parent company and earnings on investments made with the proceeds of such loans, accounting, reporting and other services and products of such financial institution. Such benefits shall be deemed additional compensation of the company for its services in connection with the escrow or sub-escrow.
- For wiring Instructions please contact your Title Officer or Title Company Escrow officer.**
- Note No. 3: Lawyers Title is a division of Commonwealth Land Title Insurance Company. The insurer in policies of title insurance, when issued in this transaction, will be Commonwealth Land Title Insurance Company.

- Note No. 4: None of the items shown in this report will cause the Company to decline to attach CLTA Endorsement Form 100 to an ALTA Loan Policy, when issued.
- Note No. 5: The following information will be included in the CLTA Form 116 or ALTA Form 22-06 Endorsement to be issued pursuant to this order:
- There is located on said Land: commercial/industrial property
Known as: 588 Technology Court, City of Riverside, California
- Note No. 6: There are no conveyances affecting said Land recorded within 24 months of the date of this report.
- Note No. 7: The Company requires current beneficiary demands prior to closing. If the demand is expired and a current demand cannot be obtained, our requirements will be as follows:
- a) If the Company accepts a verbal update on the demand, we may hold an amount equal to one monthly mortgage payment. This hold will be in addition to the verbal hold the lender may have stipulated.
 - b) If the Company cannot obtain a verbal update on the demand, we will either pay off the expired demand or wait for the amended demand, at our discretion.
 - c) All payoff figures are verified at closing. If the customer's last payment was made within 15 days of closing, our Payoff Department may hold one month's payment to insure the check has cleared the bank (unless a copy of the cancelled check is provided, in which case there will be no hold).

Processor: cph
Date Typed: April 15, 2015

Attachment One (Revised 06-05-14)
CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE—SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

Attachment One (6-5-14)

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**CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE**

EXCLUSIONS

- In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:
1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.

This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
 2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
 3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
 4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
 5. Failure to pay value for Your Title.
 6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
 7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
 8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$5,000.00

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2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13 or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

Except as provided in Schedule B - Part II, this policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

PART I

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:

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2006 ALTA OWNER'S POLICY (06-17-06)**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown in the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and that are not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.
7. Variable exceptions such as taxes, easements, CC&R's, etc. shown here.

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ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (12-02-13)**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

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Lawyers Title Company
3480 Vine Street Suite 300
Riverside, CA 92507
Phone: (951) 774-0825
Fax: ()

Order No. 615600098

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

FNF Underwritten Title Company
LTC – Lawyers Title Company

FNF Underwriter
CLTIC – Commonwealth Land Title Insurance Co.

Available Discounts

DISASTER LOANS (CLTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within 24 months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be 50% of the appropriate title insurance rate.

EMPLOYEE RATE (LTC and CLTIC)

No charge shall be made to employees (including employees on approved retirement) of the Company or its underwritten, subsidiary or affiliated title companies for policies or escrow services in connection with financing, refinancing, sale or purchase of the employees' bona fide home property. Waiver of such charges is authorized only in connection with those costs which the employee would be obligated to pay, by established custom, as a party to the transaction.

FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Fidelity National Financial, Inc. and its majority-owned subsidiary companies providing real estate- and loan-related services (collectively, “FNF”, “our” or “we”) respect and are committed to protecting your privacy. This Privacy Notice lets you know how and for what purposes your Personal Information (as defined herein) is being collected, processed and used by FNF. We pledge that we will take reasonable steps to ensure that your Personal Information will only be used in ways that are in compliance with this Privacy Notice. The provision of this Privacy Notice to you does not create any express or implied relationship, or create any express or implied duty or other obligation, between Fidelity National Financial, Inc. and you. See also **No Representations or Warranties** below.

This Privacy Notice is only in effect for any generic information and Personal Information collected and/or owned by FNF, including collection through any FNF website and any online features, services and/or programs offered by FNF (collectively, the “Website”). This Privacy Notice is not applicable to any other web pages, mobile applications, social media sites, email lists, generic information or Personal Information collected and/or owned by any entity other than FNF.

How Information is Collected

The types of personal information FNF collects may include, among other things (collectively, “Personal Information”): (1) contact information (e.g., name, address, phone number, email address); (2) demographic information (e.g., date of birth, gender marital status); (3) Internet protocol (or IP) address or device ID/UDID; (4) social security number (SSN), student ID (SIN), driver’s license, passport, and other government ID numbers; (5) financial account information; and (6) information related to offenses or criminal convictions.

In the course of our business, we may collect Personal Information about you from the following sources:

- Applications or other forms we receive from you or your authorized representative;
- Information we receive from you through the Website;
- Information about your transactions with or services performed by us, our affiliates, or others; and
- From consumer or other reporting agencies and public records maintained by governmental entities that we either obtain directly from those entities, or from our affiliates or others.

Additional Ways Information is Collected Through the Website

Browser Log Files. Our servers automatically log each visitor to the Website and collect and record certain information about each visitor. This information may include IP address, browser language, browser type, operating system, domain names, browsing history (including time spent at a domain, time and date of your visit), referring/exit web pages and URLs, and number of clicks. The domain name and IP address reveal nothing personal about the user other than the IP address from which the user has accessed the Website.

Cookies. From time to time, FNF or other third parties may send a “cookie” to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer’s hard drive and that can be re-sent to the serving website on subsequent visits. A cookie, by itself, cannot read other data from your hard disk or read other cookie files already on your computer. A cookie, by itself, does not damage your system. We, our advertisers and

other third parties may use cookies to identify and keep track of, among other things, those areas of the Website and third party websites that you have visited in the past in order to enhance your next visit to the Website. You can choose whether or not to accept cookies by changing the settings of your Internet browser, but some functionality of the Website may be impaired or not function as intended. See the Third Party Opt Out section below.

Web Beacons. Some of our web pages and electronic communications may contain images, which may or may not be visible to you, known as Web Beacons (sometimes referred to as “clear gifs”). Web Beacons collect only limited information that includes a cookie number; time and date of a page view; and a description of the page on which the Web Beacon resides. We may also carry Web Beacons placed by third party advertisers. These Web Beacons do not carry any Personal Information and are only used to track usage of the Website and activities associated with the Website. See the Third Party Opt Out section below.

Unique Identifier. We may assign you a unique internal identifier to help keep track of your future visits. We may use this information to gather aggregate demographic information about our visitors, and we may use it to personalize the information you see on the Website and some of the electronic communications you receive from us. We keep this information for our internal use, and this information is not shared with others.

Third Party Opt Out. Although we do not presently, in the future we may allow third-party companies to serve advertisements and/or collect certain anonymous information when you visit the Website. These companies may use non-personally identifiable information (e.g., click stream information, browser type, time and date, subject of advertisements clicked or scrolled over) during your visits to the Website in order to provide advertisements about products and services likely to be of greater interest to you. These companies typically use a cookie or third party Web Beacon to collect this information, as further described above. Through these technologies, the third party may have access to and use non-personalized information about your online usage activity. You can opt-out of certain online behavioral services through any one of the ways described below. After you opt-out, you may continue to receive advertisements, but those advertisements will no longer be as relevant to you.

- You can opt-out via the Network Advertising Initiative industry opt-out at <http://www.networkadvertising.org>.
- You can opt-out via the Consumer Choice Page at <http://www.aboutads.info>.
- For those in the U.K., you can opt-out via the IAB UK’s industry opt-out at <http://www.youonlinechoices.com>.
- You can configure your web browser (Chrome, Firefox, Internet Explorer, Safari, etc.) to delete and/or control the use of cookies.

More information can be found in the Help system of your browser. Note: If you opt-out as described above, you should not delete your cookies. If you delete your cookies, you will need to opt-out again.

Use of Personal Information

Information collected by FNF is used for three main purposes:

- To provide products and services to you or one or more third party service providers (collectively, “Third Parties”) who are obtaining services on your behalf or in connection with a transaction involving you.
- To improve our products and services that we perform for you or for Third Parties.

To communicate with you and to inform you about FNF's, FNF's affiliates and third parties' products and services.

When Information Is Disclosed By FNF

We may provide your Personal Information (excluding information we receive from consumer or other credit reporting agencies) to various individuals and companies, as permitted by law, without obtaining your prior authorization. Such laws do not allow consumers to restrict these disclosures. Disclosures may include, without limitation, the following:

- To agents, brokers, representatives, or others to provide you with services you have requested, and to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure in connection with an insurance transaction;
- To third-party contractors or service providers who provide services or perform marketing services or other functions on our behalf;
- To law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders; and/or
- To lenders, lien holders, judgment creditors, or other parties claiming an encumbrance or an interest in title whose claim or interest must be determined, settled, paid or released prior to a title or escrow closing.

In addition to the other times when we might disclose information about you, we might also disclose information when required by law or in the good-faith belief that such disclosure is necessary to: (1) comply with a legal process or applicable laws; (2) enforce this Privacy Notice; (3) respond to claims that any materials, documents, images, graphics, logos, designs, audio, video and any other information provided by you violates the rights of third parties; or (4) protect the rights, property or personal safety of FNF, its users or the public.

We maintain reasonable safeguards to keep the Personal Information that is disclosed to us secure. We provide Personal Information and non-Personal Information to our subsidiaries, affiliated companies, and other businesses or persons for the purposes of processing such information on our behalf and promoting the services of our trusted business partners, some or all of which may store your information on servers outside of the United States. We require that these parties agree to process such information in compliance with our Privacy Notice or in a similar, industry-standard manner, and we use reasonable efforts to limit their use of such information and to use other appropriate confidentiality and security measures. The use of your information by one of our trusted business partners may be subject to that party's own Privacy Notice. We do not, however, disclose information we collect from consumer or credit reporting agencies with our affiliates or others without your consent, in conformity with applicable law, unless such disclosure is otherwise permitted by law.

We also reserve the right to disclose Personal Information and/or non-Personal Information to take precautions against liability, investigate and defend against any third-party claims or allegations, assist government enforcement agencies, protect the security or integrity of the Website, and protect the rights, property, or personal safety of FNF, our users or others.

We reserve the right to transfer your Personal Information, as well as any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets. We also cannot make any representations regarding the

use or transfer of your Personal Information or other information that we may have in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors, and you expressly agree and consent to the use and/or transfer of your Personal Information or other information in connection with a sale or transfer of some or all of our assets in any of the above described proceedings. Furthermore, we cannot and will not be

Information From Children

We do not collect Personal Information from any person that we know to be under the age of thirteen (13). Specifically, the Website is not intended or designed to attract children under the age of thirteen (13). You affirm that you are either more than 18 years of age, or an emancipated minor, or possess legal parental or guardian consent, and are fully able and competent to enter into the terms, conditions, obligations, affirmations, representations, and warranties set forth in this Privacy Notice, and to abide by and comply with this Privacy Notice. In any case, you affirm that you are over the age of 13, as **THE WEBSITE IS NOT INTENDED FOR CHILDREN UNDER 13 THAT ARE UNACCOMPANIED BY HIS OR HER PARENT OR LEGAL GUARDIAN.**

Parents should be aware that FNF's Privacy Notice will govern our use of Personal Information, but also that information that is voluntarily given by children – or others – in email exchanges, bulletin boards or the like may be used by other parties to generate unsolicited communications. FNF encourages all parents to instruct their children in the safe and responsible use of their Personal Information while using the Internet.

Privacy Outside the Website

The Website may contain various links to other websites, including links to various third party service providers. FNF is not and cannot be responsible for the privacy practices or the content of any of those other websites. Other than under agreements with certain reputable organizations and companies, and except for third party service providers whose services either we use or you voluntarily elect to utilize, we do not share any of the Personal Information that you provide to us with any of the websites to which the Website links, although we may share aggregate, non-Personal Information with those other third parties. Please check with those websites in order to determine their privacy policies and your rights under them.

European Union Users

If you are a citizen of the European Union, please note that we may transfer your Personal Information outside the European Union for use for any of the purposes described in this Privacy Notice. By providing FNF with your Personal Information, you consent to both our collection and such transfer of your Personal Information in accordance with this Privacy Notice.

Choices With Your Personal Information

Whether you submit Personal Information to FNF is entirely up to you. You may decide not to submit Personal Information, in which case FNF may not be able to provide certain services or products to you.

You may choose to prevent FNF from disclosing or using your Personal Information under certain circumstances ("opt out"). You may opt out of any disclosure or use of your Personal Information for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you subsequently gave authorization by notifying us by one of

the methods at the end of this Privacy Notice. Furthermore, even where your Personal Information is to be disclosed and used in accordance with the stated purposes in this Privacy Notice, you may elect to opt out of such disclosure to and use by a third party that is not acting as an agent of FNF. As described above, there are some uses from which you cannot opt-out.

Please note that opting out of the disclosure and use of your Personal Information as a prospective employee may prevent you from being hired as an employee by FNF to the extent that provision of your Personal Information is required to apply for an open position.

If FNF collects Personal Information from you, such information will not be disclosed or used by FNF for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you disclosure and use.

You may opt out of online behavioral advertising by following the instructions set forth above under the above section "Additional Ways That Information Is Collected Through the Website," subsection "Third Party Opt Out."

Access and Correction

To access your Personal Information in the possession of FNF and correct inaccuracies of that information in our records, please contact us in the manner specified at the end of this Privacy Notice. We ask individuals to identify themselves and the information requested to be accessed and amended before processing such requests, and we may decline to process requests in limited circumstances as permitted by applicable privacy legislation.

Your California Privacy Rights

Under California's "Shine the Light" law, California residents who provide certain personally identifiable information in connection with obtaining products or services for personal, family or household use are entitled to request and obtain from us once a calendar year information about the customer information we shared, if any, with other businesses for their own direct marketing uses. If applicable, this information would include the categories of customer information and the names and addresses of those businesses with which we shared customer information for the immediately prior calendar year (e.g., requests made in 2015 will receive information regarding 2014 sharing activities).

To obtain this information on behalf of FNF, please send an email message to privacy@fnf.com with "Request for California Privacy Information" in the subject line and in the body of your message. We will provide the requested information to you at your email address in response.

Please be aware that not all information sharing is covered by the "Shine the Light" requirements and only information on covered sharing will be included in our response.

Additionally, because we may collect your Personal Information from time to time, California's Online Privacy Protection Act requires us to disclose how we respond to "do not track" requests and other similar mechanisms. Currently, our policy is that we do not recognize "do not track" requests from Internet browsers and similar devices.

No Representations or Warranties

By providing this Privacy Notice, Fidelity National Financial, Inc. does not make any representations or warranties whatsoever concerning any products or services provided to you by its majority-owned subsidiaries. In addition, you also expressly agree that your use of the Website is at your own risk. Any services provided to you by Fidelity National Financial, Inc. and/or the Website are provided "as is" and "as available" for your use, without representations or warranties of any kind, either express or implied, unless such warranties are legally incapable of exclusion. Fidelity National Financial, Inc. makes no representations or warranties that any services provided to you by it or the Website, or any services offered in connection with the Website are or will remain uninterrupted or error-free, that defects will be corrected, or that the web pages on or accessed through the Website, or the servers used in connection with the Website, are or will remain free from any viruses, worms, time bombs, drop dead devices, Trojan horses or other harmful components. Any liability of Fidelity National Financial, Inc. and your exclusive remedy with respect to the use of any product or service provided by Fidelity National Financial, Inc. including on or accessed through the Website, will be the re-performance of such service found to be inadequate.

Your Consent To This Privacy Notice

By submitting Personal Information to FNF, you consent to the collection and use of information by us as specified above or as we otherwise see fit, in compliance with this Privacy Notice, unless you inform us otherwise by means of the procedure identified below. If we decide to change this Privacy Notice, we will make an effort to post those changes on the Website. Each time we collect information from you following any amendment of this Privacy Notice will signify your assent to and acceptance of its revised terms for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you may submit in any manner that we may choose without notice or compensation to you.

If you have additional questions or comments, please let us know by sending your comments or requests to:
Fidelity National Financial, Inc.

601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer
(888) 934-3354
privacy@fnf.com

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PRIVACY NOTICE EFFECTIVE AS OF: JANUARY 6, 2015

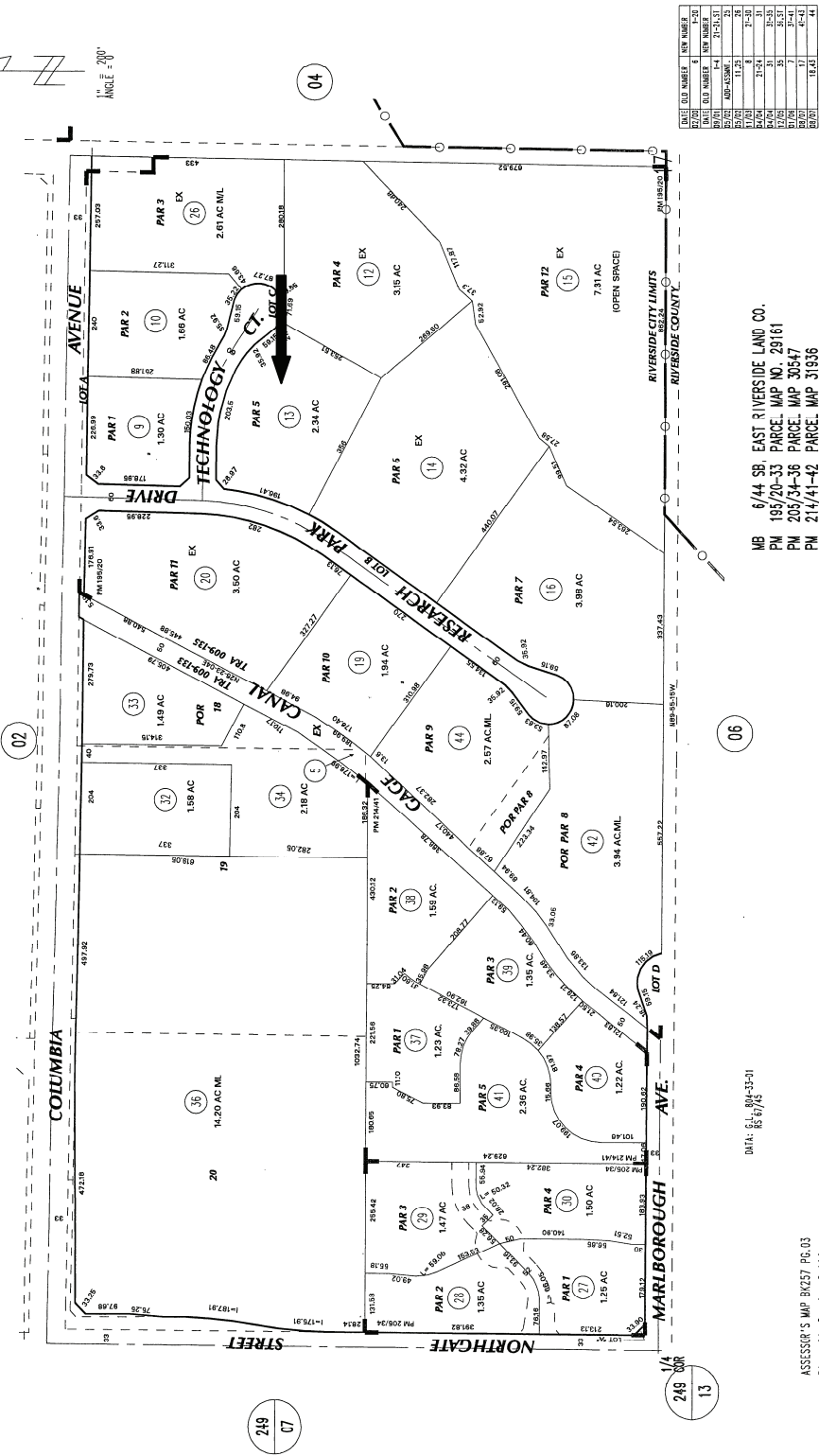
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THIS MAP SHOULD BE USED FOR REFERENCE PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. PARCELS MAY NOT COMPLY WITH LOCAL ORDINANCES.

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

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MB 6/44 SB, EAST RIVERSIDE LAND CO.
PM 195/20-33 PARCELS MAP NO. 29161
PM 205/34-36 PARCELS MAP 30547
PM 214/41-42 PARCELS MAP 31936

ASSESSOR'S MAP BK457 PG.03
Riverside County, Calif.

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RECORDING REQUESTED BY
GORDON F. HARRIS AND MARY ANN HARRIS AND
WHEN RECORDED RETURN TO:

Executive Director
Redevelopment Agency for the
County of Riverside
3525 Fourteenth Street
Riverside, CA 92501-3813

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS
AND
GRANT OF EASEMENTS

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DECLARATION OF COVENANTS, CONDITIONS AND
RESTRICTIONS
AND GRANT OF EASEMENTS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS AND GRANT OF EASEMENTS ("Declaration") is made as of this _____ day of _____ 1999, by the REDEVELOPMENT AGENCY FOR THE COUNTY OF RIVERSIDE (referred to herein as "Declarant") and is made with reference to the following facts:

RECITALS

A. Declarant has acquired certain real property located in the City of Riverside (the "City"), Riverside County, California, east of the Gage Canal and south of Columbia Avenue.

B. Declarant intends that the property (hereafter the "Property") be developed as a quality, architecturally consistent, planned and integrated research and product development, high technology business park. The Property is described in Exhibit "A" attached hereto.

C. On July 27, 1999, Item Number 4.4, the Board of Directors of the Declarant vested in its Executive Director, the authority to sign the Declaration.

NOW, THEREFORE, Declarant hereby declares and does hereby

establish, for the protection and benefit of the Property, the following protective covenants, conditions and restrictions upon each and every ownership interest in the Property, under and pursuant to which covenants, conditions and restrictions each ownership interest in the Property shall be hereafter held, used, occupied, leased, sold, encumbered, conveyed and transferred. Each and all of the covenants, conditions and restrictions set forth herein are for the purpose of protecting the value and desirability of and shall inure to the benefit of all of the Property and shall run with and be binding upon and pass with the Property and each and every ownership interest therein and shall inure to the benefit of, apply to and bind the respective successors in title or interest of Declarants. Declarant acknowledges and agrees that nothing in this Declaration shall constitute a waiver of the design, development, review and permitting requirements and standards of the City of Riverside. In the event that there is a conflict between the terms of the Declaration and the requirements of the City of Riverside, the City of Riverside's requirements and standards shall prevail.

ARTICLE I

DEFINITIONS

1.1 Design Committee. "Design Committee" shall mean and refer to the committee described in Section 3.2 below.

1.2 Building. "Building" shall mean and refer to any structural improvement on any Parcel which is enclosed by exterior walls, floor and roof, and which is designed for the conduct within of the activities and business of the

Owner or Occupant of such Parcel.

1.3 City. "City" shall mean and refer to the City of Riverside.

1.4 Declarant. ADeclarant@ shall mean and refer to the Redevelopment Agency for the County of Riverside.

1.5 Improvements. "Improvements" shall mean and refer to all Buildings, out Buildings, parking or loading areas, parking garages, roadways, walkways, curbs, gutters, storage areas, trash enclosures, security gates, fences, walls, poles, signs, exterior lighting, exterior air conditioning equipment, hedges, berms, landscaping, trees, shrubs, sewer lines and sewer pipes, waterlines and water pipes, electrical lines and electrical conduit and other utility lines, pipes and conduits, lighting standards and fixtures, stairways, ramps and all other structures of any kind or appurtenances thereto located above or below the ground within the exterior boundaries of the Property, and all replacements, additions, repairs or alterations thereto.

1.6 Majority of Owners. "Majority of Owners" shall mean and refer to Owners (including Declarant to the extent that it is an Owner) of greater than fifty percent (50%) of the land=s square footage of all Parcels within the Property.

1.7 Manager. "Manager" shall mean and refer to the person or entity designated as such from time to time pursuant to Section 7.1 below.

1.8 Mortgage. "Mortgage" shall mean and refer to any duly recorded Mortgage or deed of trust encumbering an Owner's interest in a Parcel.

1.9 Mortgagee. "Mortgagee@" shall mean and refer to the Mortgagee or beneficiary under any Mortgage or deed of trust. A "First Mortgagee" shall mean the holder of a Mortgage that

has priority over any other Mortgage encumbering a Parcel.

1.10 Occupant. "Occupant" shall mean and refer to any person from time to time entitled under any lease or sublease (other than a ground lease, as described below) to the use and occupancy of any portion of the Building area within the Property.

1.11 Owner. "Owner" shall mean and refer to any person (including Declarant) who from time to time holds fee title to any portion of the Property; provided, however, that in the case of ground leases, the ground lessee shall be deemed to be the "Owner" of the affected portion of the Property for purposes of this Declaration.

1.12 Parcel. "Parcel" shall mean and refer to any legal lot or parcel which is a portion of the Property. Any lot or parcel of real property created after the recordation hereof comprising a portion of the Property which is created by a legal subdivision or parcelization thereof shall be included in the definition of Parcel for purposes of this Declaration when such lot or parcel becomes legally effective.

1.13 Person. "Person" shall mean and refer to an individual partnership, firm association, corporation, trust, governmental agency, administrative tribunal or any other form of business or legal entity.

1.14 Property. "Property" shall mean and refer to that real property located in the City of Riverside, Riverside County, California, described in Exhibit "A" attached hereto.

ARTICLE 11

USE RESTRICTIONS

2.1 Permitted Uses. The uses on the Property shall be in accordance with Exhibit AB@ attached hereto (hereafter APermitted Uses@).

2.2 Outside Activities; Outside Storage. All business operations within the Property

shall be performed and carried out entirely within Buildings in such a manner that the enclosed operations and uses do not cause or produce a nuisance to other portions of the Property. Any outdoor storage or any other uses or operations proposed to be conducted outside must be approved by the Manager and screening satisfactory to the Manager must be provided for all such outdoor uses, storage and operations. Additionally, no outdoor storage or loading docks shall be visible from a public street on lots 1, 2, and 3 of Parcel Map No. 29161, as further described in Exhibit AA@.

2.3 Nuisance Activities. No noxious or offensive activities shall be carried on within any Parcel or any part of the Property, nor shall anything be done thereon which may be or become an annoyance or nuisance to surrounding Owners or which shall in any way increase the rate of insurance for any other Parcel. Electrical reflectors, spotlights, floodlights and other methods of elimination may be used to illuminate Buildings, landscaping areas, signs and parking areas, provided that such devices are equipped with proper lenses concentrating the illumination upon such structures and areas preventing any bright or direct illumination upon adjacent parcels or upon any street, and provided further that any such illumination shall first be approved by the Design Committee (described below). No livestock, poultry or animals (other than lab animals for scientific research) shall be raised, bred or kept upon any portion of the Property. A "nuisance" shall include, without limitation, any of the following conditions:

(a) Emission of dust sweepings, odors, dirt or cinders into the atmosphere, or discharges of liquid, solid wastes, or other harmful matter if such emission or discharge may adversely affect the use or intended use of any property or may adversely affect the health, safety, or comfort of persons in the vicinity or discharge of waste or any substance or material of any kind into any sewer serving the Property, or any part thereof, in violation of any law, rule, or regulation

of any public body having jurisdiction thereof,

(b) Escape or discharge of fumes, odors, gases, vapors, acids, or other substances into the atmosphere if such escape or discharge may be detrimental to the health, safety, or welfare of persons, may interfere with the comfort of persons within the vicinity, or may be harmful to property or vegetation.

2.4 Hazardous Materials. No Owners or Occupants shall release, generate, use, store, dump, transport, handle or dispose of any hazardous materials within the Property or otherwise permit the presence of any hazardous materials on, under, or about the Property or transport any hazardous material to or from the Property, except in accordance with all applicable laws, ordinances, rules and regulations now or hereafter promulgated by any governmental authority having jurisdiction thereof. Any Owner in breach or violation of the foregoing, or in the event of a breach or violation of the foregoing by an Occupant, any Occupant and the Owner whose Parcel is utilized by such Occupant in breach or violation of the foregoing, shall indemnify, defend and hold harmless Declarant, Manager and all other Owners and Occupants from and against any and all claims, judgments, damages, penalties, fines, costs, losses, expenses, and liabilities arising therefrom. As used herein "hazardous materials" shall mean and refer to those hazardous or toxic substances which are or become regulated by or subject to or governed under any local, state or federal governmental authority.

2.5 No Discrimination. There shall be no discrimination against or segregation of any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin or ancestry in the sale, lease, sublease, transfer, use, occupancy, tenure or enjoyment of any portion of the Property, nor shall any Owner or Occupant or any grantees of any Owner or any persons claiming under or through any Owner establish or permit any practice or practices of

discrimination or segregation with reference to the selection, location, number, use or occupancy of tenants, lessees, subtenants, sublessees, or vendees in that portion of the Property to be conveyed.

2.6 Vehicles/Recreational Equipment.

(a) No recreational vehicle or equipment shall be permitted to remain upon the Property except in areas upon an Owner's Parcel approved in writing by the Manager and upon such conditions as the Manager may impose.

(b) No automobile, recreational vehicle or equipment or commercial vehicle or any other motorized vehicle may be dismantled, rebuilt, repaired, serviced, stored or repainted on or about the Property, except for research development or manufacturing purpose. The foregoing restriction shall not be deemed to prevent temporary parking for loading or unloading of vehicles.

(c) As used in this section, "recreational vehicle or equipment" shall include without limitation, trailers, boats, air craft, hang gliders, campers, trailer coaches, buses, house cars, camp cars, motor homes or any other similar type of equipment or vehicle.

(d) As used in this section, "commercial vehicle" shall be defined as a truck of greater than three-quarter (3/4) ton capacity and any vehicle with a sign displayed on any part thereof advertising any kind of business or on which racks, materials and/or tools are visible. The type of motor vehicle license plate shall not be material to the foregoing definition.

(e) The Manager may adopt other rules for the regulation of the admission and parking of vehicles including, without limitation, commercial vehicles and employee and Owner parking within the Property, including the assessment of charges to Owners who violate or whose invitees violate, such rules. Any charges so assessed shall be special assessments. Such rules adopted by the Manager shall take into consideration the need for certain businesses operated upon

the Property to have parking available for customers.

2.7 Loading Areas. There shall be maintained on each Parcel facilities for loading and unloading sufficient to serve the business or activity conducted thereon without using the adjacent street therefor. Loading docks shall be set back and screened to minimize the visual effect from external public streets and neighboring buildings.

2.8 Screening. Unless specifically approved in writing by the Manager, no materials, supplies, inventory, equipment or any other personal property shall be stored on any portion of a Parcel except inside a Building. All mechanical equipment, utility meters, storage tanks, air conditioning equipment and similar items shall be screened and located in such manner so as to minimize visibility from the ground level of the Property or from public streets and walkways within the Property. All roof-mounted mechanical equipment, utility installations, duct work, radar equipment, radio or television antenna or any other devices which project vertically above the roof or roof parapet shall be screened by a solid visual barrier which is detailed consistent with the Building, or as approved in writing by the Manager.

2.9 Signs. Exterior signs of any type which are visible from the neighboring properties or public streets shall first be approved in writing by the Manager. Said approval shall not be unreasonably withheld provided that plans for the proposed sign or signs and the location of the same on the Parcel or Building are submitted to the Manager and the Manager determines that the design, type and location conform to any sign standards as may be then established by the Manager and in effect with respect to the Property. Such signs, and the construction and installation thereof, must also comply with any and all applicable government rules, laws, ordinances, regulations and statutes including, but not limited to, the requirements of the City.

2.10 Modification of Grades. Unless specifically approved in writing by the Manager,

the grade of any Parcel shall not be substantially modified, altered or otherwise changed. No grade of a Parcel may be changed if it would change or impact the drainage of such Parcel or any other Parcels in the Property. Such modification of grades must also comply with the requirements of the City.

2.11 Subdivision. Unless specifically approved by the Declarant or Manager (which approval may be withheld in their sole, absolute and subjective discretion), no Parcel shall be further subdivided. Such subdivision must also comply with the requirements of the City.

2.12 Utility Lines and Antennae. No sewer, drainage or utility lines or wires or other devices for the communication or transmission of electric current or power, including telephone, television, radio or microwave signals, shall be constructed, placed or maintained anywhere in or upon any portion of the Property other than within Buildings or other structures unless the same shall be contained in conduits of cables constructed, placed or maintained underground or concealed in or under Buildings or other structures or unless otherwise permitted by Manager in accordance with standards adopted by Manager and any ordinances pertaining to the subject devices adopted by the City, if any. No antenna, satellite dish or similar item used for the transmission or reception of telephone, television, radio or microwave signals shall be placed on any Improvement within the Property unless such antenna shall be so located that it cannot be seen from any point at the ground level of the Property or from adjacent Buildings, and streets, walkways and driveways within the Property or unless otherwise permitted by Manager in accordance with standards adopted by Manager and any ordinances pertaining to the subject devices adopted by the City. Nothing contained herein shall be deemed to forbid the erection or use of temporary power or telephone facilities incidental to the construction or repair of Improvements on the Property.

2.13 Unsightly Items. All weeds, rubbish, debris, or unsightly material or objects of any kind shall be regularly removed from the Parcels and shall not be allowed to accumulate thereon. All refuse containers, trash cans, woodpiles, storage areas, machinery and equipment shall be prohibited upon any Parcels except if contained in an enclosed, fenced side yard not visible from the street towards which the Improvements located on such Parcel face.

2.14 Window Covers. No window shall be covered with aluminum foil, newspapers, signs of any kind or other material not designed for use as a window cover. No Owner may modify any window covering originally installed or required to be installed by Declarant and visible from the exterior of a Building, without prior approval of the Manager. All windows shall be covered with standard window covers, unless otherwise approved by the Manager.

2.15 Mineral Exploration. No oil development operations, oil refining, quarrying or mining operations of any kind shall be permitted upon or in any portion of the Property, nor shall oil wells, tanks, tunnels or mineral excavations or shafts be permitted upon the surface of any portion of the Property or within five hundred (500) feet below the surface of the Property. No derrick or other structure designed for use in boring for water, oil, natural gas, or other minerals shall be erected, maintained or permitted on any portion of the Property.

ARTICLE III

ARCHITECTURAL AND CONSTRUCTION PROVISIONS

3.1 Statement of Intention. Declarant desires that each Building to be erected upon the Property and any reconstruction, remodeling or alteration of any Building within the Property shall be of quality construction and architecturally designed so that the exterior Building elevations (including materials and colors) and any exterior signage will be aesthetically compatible and architecturally harmonious with all other Buildings in the Property.

3.2 Design Committee. Declarant hereby establishes a design committee ("Design Committee") composed of designated representatives from the City of Riverside, the Regents of the University of California, and the Redevelopment Agency for the County of Riverside. Throughout the term of this Declaration, Declarant or any successor entity designated by the Declarant, shall have full power and authority to release and appoint new members of the Design Committee and to change the number of members thereof. The Design Committee will have the rights, powers and responsibilities set forth in this Article III and elsewhere in this Declaration. All notices and submittals given to the Design Committee shall be addressed to the Manager in accordance with Section 8.2(a) below.

3.3 Submission of Plans.

(a) No fence, wall, Building, Improvement, sign, structure, art form, display or other exterior Improvement, or exterior addition to or change or alteration thereof (including painting unless of the same color and type as previously approved), or parking lot or structure, walkway, driveway, external lighting landscaping or any other such external Improvement or planting shall be commenced, constructed, erected, installed, placed, planted, altered, maintained or permitted to remain on any Parcel until not less than four (4) complete sets of plans and specifications showing the precise nature, kind, shape, height, quality and type of materials, and color of such Improvements, and a plot plan showing the specific location of such Improvements, shall have been submitted to and approved in writing by the Design Committee. The requirement of approval set forth in this Section is in addition to, and not in substitution for, any and all other restrictions contained in this Declaration or as may be imposed by applicable law. Preliminary plans and specifications may be submitted to the Design Committee for tentative approval.

(b) All such plans and specifications shall be submitted in a completed form and

in writing over the signature of the Owner and must be prepared by a licensed architect, unless the Design Committee waives such requirement in writing. As a means of defraying its expenses, the Design Committee may require a reasonable filing fee to accompany the submission of plans or other matters to it in an amount to be fixed from time to time. Plans and specifications not accompanied by payment of the required fee, if any, shall be deemed to have not been submitted. One (1) set of said plans and specifications, details or other written requests for approvals, with the approval or disapproval of the Design Committee endorsed thereon, shall be returned to the Owner submitting them and the other copy thereof shall be retained by the Design Committee. Upon completion of any Improvement work approved by the Design Committee, Owner shall promptly deliver to the Design Committee "as built" plans and specifications for such Improvements.

(c) If the Design Committee fails to either approve or disapprove such plans and specifications on or before thirty (30) days after the same have been received by it in full compliance with the provisions of this section, it shall be deemed to have conclusively approved such plans and specifications only after further inaction by the Design Committee following fifteen (15) days from the delivery of written notice to the Design Committee of its failure to approve or disapprove such plans and specifications within the initial thirty (30) day period.

(d) An Owner shall promptly commence the construction of all Improvements which have been approved by the Design Committee, and as soon as construction of such Improvements has commenced, such Owner shall diligently pursue completion of the same. If the Owner whose plans and specifications have been approved by the Design Committee has not commenced construction in accordance with such plans and specifications within twelve (12) months following the Design Committee's approval thereof, such plans and specifications shall no

longer be deemed approved and must be resubmitted to the Design Committee for its approval in accordance with the provisions of this Declaration. An Owner shall be deemed to have commenced construction for purposes of this section upon the pouring of foundation footings in the case of Buildings or other structures requiring same or, in the case of Improvements not contemplating foundation footings, upon commencement of actual physical work on the real property to be improved. The approval by the Design Committee of any plans and specifications submitted by an Owner shall be personal to such Owner, and may not be transferred or assigned by such Owner to any other person or entity (except to an Occupant on whose behalf the Owner has submitted such plans and specifications) without the prior written consent of the Design Committee. Landscaping as approved by the Design Committee shall be installed prior to occupancy or concurrently with substantial completion of the Building, whichever occurs first.

(e) The Design Committee shall not be liable in damages or otherwise by reason of any mistake in judgment, negligence, or nonfeasance arising out of or in connection with the approval or disapproval or failure to approve or disapprove any such plans and specifications or plot plans. Every person who submits plans and specifications to the Design Committee for approval agrees by submission of such plans and specifications, and every Owner of any interest in the Property agrees by acquiring title thereto or interest therein, that he will not bring any action or suit against the Design Committee or its members to recover any such damages. In addition, each Owner hereby agrees to defend, indemnify and hold harmless the Design Committee from and against any and all costs and expenses it may incur in connection with or as a result of any actions or claims brought against the Design Committee on account of its approval or disapproval of any plans and specifications submitted to it by or on behalf of such Owner, including but not limited to reasonable attorneys' fees.

(f) In reviewing and approving plans and specifications pursuant to this Declaration, the Design Committee's decisions may be based solely on aesthetic grounds, and the Design Committee shall not be deemed to have made any representation or warranty regarding the suitability, adequacy or completeness of such plans and specifications. No approval shall be considered an approval of the plans from an engineering perspective or a determination that the

plans are suitable to meet Building, environment or engineering design standards or that the Improvements have been built in accordance with such plans and specifications. Members of the Design Committee need not be licensed engineers or architects. Neither the Design Committee nor its members shall be liable for any damage, loss or prejudice suffered or claimed on account of or in connection with (i) the approval or disapproval of any plans, drawings and specifications whether or not defective; (ii) the construction or performance of any work whether or not pursuant to approved plans, drawings and specifications; or (iii) the development of any part of land within the Property.

3.4 Architectural, Landscape and Sign Standards. From time to time, the Design Committee may promulgate a detailed set of Architectural, Landscape and Sign Standards which shall serve as a general guideline to be utilized by designers in the creation of their project designs as well as by the Design Committee and the Manager in reviewing proposed Buildings, graphics, signs, lighting, grading and any other proposed Improvements, alterations or additions to be constructed, installed or planted upon the Property, which shall set forth among other things, an approved landscape species list and standards for the design, color, appearance, quality and type of materials and location of any proposed Improvements and the design, location and type of monument and any other signs that may be constructed. All plans and specifications submitted to the Design Committee must comply with the Architectural, Landscape and Sign Standards, unless the Design Committee consents to any deviations in writing. Notwithstanding any other provision of this Declaration to the contrary, so long as there is a Design Committee, such Architectural, Landscape and Sign Standards may not be amended or modified without the prior written consent of the Design Committee, as the case may be, which consent it may withhold in its sole discretion. The Design Committee shall cause certified copies of the Architectural, Landscape and Sign

Standards to be made available to prospective or existing Owners or Occupants upon the payment of a reasonable fee, as established by the Design Committee from time to time. No such copy shall be deemed a formal statement of the limitations and restrictions of the Architectural, Landscape and Sign Standards.

3.5 Evidence of Approval. Any person having an interest in any Parcel may rely upon any instrument of record signed by the Design Committee purporting to grant an approval or to waive or vary the restrictions herein contained in particular respects.

3.6 Time During Which to Raise Objection. Any construction, other than exterior signs, art in public places, driveways, parking areas, grading, landscaping, fences and screens, completed for more than one (1) year following the final binding approval of the Improvements by the applicable governmental authority, shall be deemed approved, unless prior to the expiration of such period a suit for enforcement has been commenced and notice thereof duly recorded.

ARTICLE IV

MAINTENANCE AND INSURANCE

4.1 Owner's Duties. Each Owner shall maintain in good order, repair and condition all fences, walls or other structures, driveways, parking areas, lawns, landscaping, irrigation systems, utilities lines (to the extent not maintained by the City or a utility company, sanitation district or other governmental authority), Buildings or any other Improvements, all exterior lighting, all exterior signs and all other areas located on such Owner's Parcel in a first class condition. Each Owner shall be specifically required to maintain any parkway area located, within or adjacent to each Owner's Parcel (i.e., the area between the curb of any street and the adjoining sidewalk). All repairs shall be at least of equivalent quality and design as the original work. All windows and exterior surfaces of any Building or any other Improvements shall be washed and cleaned regularly.

All Buildings shall be repainted as needed, but not more than five (5) years shall pass between repainting. All trash and rubbish shall be kept in enclosed containers in locations indicated on plans previously approved by the Design Committee. All landscaping shall be regularly and properly irrigated, trimmed and maintained. All sidewalks shall be kept free from hazards to pedestrian use. All driveways and parking areas shall be recoated as necessary in order to maintain the integrity of any asphalt paving surface, shall be restriped, provided with appropriate signage, lighting and kept free from potholes or other hazards to vehicular use. Subject to the foregoing, the standard for maintenance and repair of all Improvements on each Owner's Parcel shall be that which is in effect from time to time for similar projects of the highest quality in Riverside County, California.

4.2 Maintenance of Drainage Facilities. The Owner of each Parcel upon which any drainage facilities are located shall keep and maintain same, together with any Improvements constructed thereon or which may hereafter be constructed thereon, in a reasonable condition according to their design, purpose and/or function, including, but not limited to, the removal of all obstructions not otherwise part of the design of such Improvements which may or reasonably might cause redirection or impedance of the proper flow of the drainage thereon, regardless of the source or cause of such obstructions or impedance, and shall maintain such drainage facilities in a neat, orderly and safe condition and in such a manner as to prevent erosion or sliding problems and to facilitate the orderly discharge of water throughout the drainage systems and patterns established from time to time upon the Property.

4.3 Failure to Maintain; Declarant's Rights. If an Owner or Occupant fails to maintain its Parcel and the Improvements thereon in accordance with the provisions of this Declaration, the Manager shall give written notice to the Owner or Occupant specifying in detail the exact nature

of the deficiency (A Deficiency Notice"). Deficiency Notices will be sent to the current address for such Owner or Occupant on the records of the Manager and to the business address of the Parcel. An Owner or Occupant will take appropriate corrective action within twenty (20) days following receipt of such a Deficiency Notice unless there exists a hazardous condition creating an immediate possibility of serious injury to persons or property, in which case the time for correction may be reduced to a minimum of five (5) days. If the Owner or Occupant, within the time set forth in the Deficiency Notice, does not commence and diligently pursue the corrective work required in the Deficiency Notice, the Manager may undertake and complete such corrective measures and assess the cost thereof against the Owner as a special assessment, in the manner described in Article VI below. Pursuant to Section 5.1 below, the Manager is granted such rights of access, ingress and egress upon and across the Property as may be necessary in order to complete any such work.

4.4 Right and Duty of Owners to Insure. Each Owner shall obtain or cause to be obtained full replacement cost all risk casualty insurance, without deduction for depreciation or co-insurance, for all of the structural portions of the Building and any other Improvements on such Owner's Parcel. Each Owner shall also obtain or cause to be obtained fire and extended coverage insurance on all personal property and fixtures within all Buildings and any other structure located on such Owner's Parcel, which shall be in a form satisfactory to the Manager. Each Owner shall carry or cause to be carried public liability insurance for damage to persons or property occurring upon such Owner's Parcel or elsewhere upon the Property, in any manner arising out of the use of such Owner's Parcel. Such insurance shall be in an amount not less than One Million Dollars (\$1,000,000.00), combined single limit, or in such other minimum amount as the Manager may from time to time determine, such coverage to be in a comprehensive general liability form with at least the following endorsements: (a) deleting any employee exclusion from personal injury

coverage; (b) including employees as additional insureds; (c) providing for blanket contractual coverage and broad form property damage coverage; (d) deleting any liquor liability exclusion; and (e) providing for coverage of an employer's automobile non-ownership liability. All such policies shall contain waivers of subrogation of claims against the Manager, the Declarant and all the other Owners, which shall be in a form satisfactory to the Manager. Each Owner shall review annually the limits of such Owner's insurance coverage and increase such limits as appropriate. Notwithstanding the requirement for annual review, the insurance policies carried or caused to be carried by each Owner shall to the maximum extent possible, provide for automatic adjustments of coverage levels to reflect changes in costs resulting from inflation. Each policy shall name the Declarant and the Manager as an additional named insured. Each Owner shall furnish the Manager with a current certificate of such insurance at all times. Such policies shall not adversely affect or diminish any coverage under any insurance obtained by the Manager. If any loss intended to be covered by insurance carried by the Manager shall occur and the proceeds payable thereunder shall be reduced by reason of insurance carried by any Owner, such Owner shall assign the proceeds of such insurance carried by such Owner to the Manager, to the extent of such reduction.

4.5 Notice of Expiration. All of the policies of insurance maintained or caused to be maintained by the Owners shall contain a provision that said policy or policies shall not be canceled or terminated, nor expire by their terms, without thirty (30) days prior written notice to the Manager. If an Owner fails to maintain or cause to be maintained such insurance coverage, the Manager may obtain such insurance and levy a special assessment against such Owner and such Owner's Parcel for the amount of the premium therefor.

4.6 Destruction of Owner's Building or Other Structures. If any Building, structure or other Improvement, located on an Owner's Parcel is destroyed by any casualty, the Owner of such

Parcel shall either promptly restore such Building or other structure at such Owner's sole cost to its original condition in as fast and efficient a means as possible, or to the extent the Owner of such Parcel elects not to restore such Building or other structure following such damage or destruction, such Owner shall promptly raze such damaged or destroyed Building or other structure and shall forthwith grade, pave, and/or landscape the area on which such Building or other structure was located in a safe, sightly and attractive condition. In the event Owner elects to restore such Building or other structure, it shall deliver to the Manager plans and specifications for such restoration in accordance with Section 3.3, and the Manager must approve of such plans in accordance with Section 3.3 before Owner may commence such restoration.

4.7 Required Waiver. All policies of physical damage insurance required under this Article shall provide, if reasonably possible, for waiver of the following rights, to the extent that the respective insurers would have the rights without such waivers: (a) subrogation of claims against the tenants of the Owners; (b) any defense based on co-insurance; (c) any right of set-off, counterclaim, apportionment, proration or contribution by reason of other insurance not carried by the Manager; (d) any invalidity or other adverse effect or defense on account of any breach of warranty or condition caused by the Manager, any Owner or any tenant of any Owner, or arising from any act, neglect, or omission of any named insured or the respective agents, contractors and employees of any insured; (e) any right of the insurer to repair, rebuild or replace, and, in the event any Improvements are not repaired, rebuilt or replaced following loss, any right to pay under the insurance, an amount less than the replacement value of the Improvements insured or the fair market value thereof; (f) notice of the assignment of any Owner of its interest in the insurance by virtue of a conveyance of any Parcel; and (g) any right to require any assignment of any Mortgage to the insurer.

ARTICLE V

EASEMENTS

5.1 Grant of Easement in Favor of Manager. Declarant hereby grants to Manager, together with the right to grant and transfer the same to its successors and assigns, a non-exclusive easement for ingress and egress, construction and maintenance purposes over such portions of the Property as may be reasonably necessary for the Manager to discharge its obligations as described in this Declaration, including, without limitation, those maintenance activities described in Section 4.3 above, and inspection of the Buildings or other structures or Improvements on each Owner's Parcel to insure compliance with the Architectural and Landscape Standards and other restrictions contained in or promulgated pursuant to this Declaration.

5.2 Drainage Easements; Cross Lot Drainage Easements. Declarant hereby grants to Owners of Parcels within the Property, non-exclusive easements for surface drainage over the Property through the drainage patterns and systems as are established from time to time upon the Property. Nothing herein shall prevent an Owner from relocating the drainage patterns established upon such Owner's Parcel provided such relocation does not unreasonably interfere with the drainage of other Parcels within the Property. Additionally, cross lot drainage easements shall be reserved along the rear of parcels 8, 9, and 10 of Parcel Map No. 29161, as further described in Exhibit AA@.

5.3 Emergency Vehicle Access. Declarant hereby grants to the City and/or any public or private entities, a non-exclusive easement for public emergency vehicles and personnel acting in a public emergency over all portions of each Owner's Parcel designed for vehicular or pedestrian traffic.

5.4 Dominant and Servient Estates. Each appurtenant easement reserved pursuant to the provision hereof is expressly for the benefit of each Parcel and the Parcel so benefitted shall be the dominant estate and the Parcel upon which each such appurtenant easement is located shall be the

servient estate and each such easement shall run with the land and shall inure to the benefit of and be binding upon the successors and assigns of the Declarant.

ARTICLE VI

DEFAULT BY OWNER

6.1 Statement of Intention. As set forth in Section 4.1 above, each Owner shall be responsible for all maintenance of Buildings and Improvements located upon its Parcel. Owners shall also be solely liable for real and personal property taxes, insurance and all other expenses pertaining to the use and enjoyment of their Parcels and Improvements located thereon. The special assessments described below shall apply only in the event an Owner or Occupant fails to maintain its Parcel, Buildings and Improvements located thereon in accordance with this Declaration, fails to cure such deficiency following the notice described in Section 4.3 above, and the Manager thereafter effects such maintenance.

6.2 Amount of Assessment. Any special assessment levied in accordance with this Declaration shall be in an amount equal to the cost incurred by the Manager in curing a maintenance deficiency by an Owner or Occupant. Such assessment shall also include interest at the rate of twelve percent (12%) per annum from the date such costs were incurred by Manager, together with late charges, attorneys' fees and other costs of collection incurred by Declarant or Manager with respect to the collection of such assessment.

6.3 Notice of Assessment. A written Notice of Assessment will be provided to Owners and/or Occupants of Parcels which become subject to assessment hereunder. A copy of any such notice will also be provided to the business address of the Parcel. Assessments will be valid and payable whether or not such notices are actually received by Owners and/or Occupants. All such assessments, together with interest thereon, shall be payable within thirty (30) days following the

date of such notice. Any assessments which are not paid prior to the expiration of such thirty (30) day period shall incur a late charge equal to ten percent (10%) of the assessment amount.

6.4 Creation of Lien and Personal Obligation of Assessments. Each Owner, by acceptance of a deed, ground lease or other conveyance creating in such Owner the interest required to be deemed an Owner, whether or not it shall be so expressed in any such deed or other conveyance, is deemed to covenant and agree to pay to the Manager any and all assessments levied against such Owner's Parcel. Each Owner shall be entitled to require payment of assessments by the Occupants of such Owner's Parcel, provided, however, that each Owner shall remain primarily liable for payment of any and all assessments hereunder. Any and all assessments, together with interest thereon, late charges, attorneys' fees and court costs and other costs of collection as hereinafter provided, shall be a continuing lien upon the Parcel against which such assessment is made and may be enforced by suit or by sale under power of sale (which power is hereby granted), judicial foreclosure or any other manner allowed by law. Any such lien shall be subject and subordinate to any bona fide Mortgage encumbering any portion of such Owner's Parcel, and any purchaser at any foreclosure or trustee's sale (as well as any grantee or assignee by deed in lieu of foreclosure or trustee's sale) under any such bona fide Mortgage shall take title free and clear of any such lien, but otherwise subject to these covenants, conditions and restrictions as more particularly set forth in Section 6.10 below. Any exercise of the power of sale provided for above shall be conducted in accordance with Sections 2924 of the California Civil Code applicable to the exercise of powers of sale in Mortgages or deeds of trust or in any manner permitted or provided by law. Manager is hereby appointed the trustee for purposes of exercising such power of sale, with full right of substitution. Each such assessment, together with such interest, late charges, court costs, attorneys' fees and other costs of collection, shall also be the personal obligation of the Owner of such Parcel

at the time when the assessment becomes due. The personal obligation shall not pass to the successors in title of an Owner unless expressly assumed by such successors.

6.5 Abatement. The violation or breach of any covenant, condition or restriction herein contained by an Owner shall give to the Manager and its successors and assigns, the right to (i) enter such Owner's Parcel and to summarily abate and remove, at the expense of the Owner of such Parcel, any structure, thing or condition that may exist thereon contrary to the intent and meaning of the provisions hereof, provided, however, that the foregoing remedy shall not be exercisable until twenty (20) days following written notice of such breach to such Owner, and only if the breach has not been cured during said twenty (20) day period or if the nature of such breach or default is not capable of cure within said twenty (20) day period, such cure is commenced within said twenty (20) day period and diligently pursued to completion; and/or (ii) prosecute proceedings at law or in equity against the person or persons who have violated or are attempting to violate any of these covenants, conditions or restrictions, to enjoin or prevent them from doing so, and to cause such violation to be remedied. Should any of the provisions hereof be violated, it will be difficult or impossible to determine the amount of damages resulting therefrom. Therefore, in addition to any other remedies set forth herein, Manager shall be entitled to seek a temporary and/or a permanent injunction by any court of competent jurisdiction against the breach of any such provisions.

6.6 Nuisances. The result of every action or omission whereby any covenant, condition or restriction herein contained, by reference or otherwise, is violated in whole or in part is hereby declared to be and to constitute a nuisance, and every remedy allowed by law or equity against any Owner, either in public or private, shall be applicable against every such nuisance and may be exercised by the Manager.

6.7 Attorneys' Fees. In any legal or equitable proceeding for the enforcement, or to

restrain the violation of these restrictions or any provisions hereof, the losing party shall pay to the prevailing party the prevailing party's reasonable attorneys' fees, costs and expenses incurred in connection with the prosecution or defense of such action. All remedies provided herein or at law or in equity shall be cumulative and not exclusive.

6.8 No Waiver: Enforcement by Owners. The failure of Declarant or the Manager to enforce any provision of this Declaration or to seek redress for any breach of the provisions hereof shall in no event be deemed a waiver of the right to do so thereafter; provided, however, if the Manager shall fail to take affirmative steps to enforce the provisions hereof within thirty (30) days after the delivery to the Manager of a written demand from a Majority of the Owners specifying in detail the alleged default and required compliance, any Owner shall be authorized to enforce the provisions of this Declaration. The Manager shall in no way be liable to the Owners or any other person or entity for its refusal or failure to enforce any of the provisions of this Declaration or for its waiver of such provisions or any violations thereof.

6.9 Protection of Mortgagees. A breach of any of the restrictions, conditions, covenants or reservations herein contained shall not defeat or render invalid the lien of any Mortgage made in good faith and for value as to any Parcel, or any portion or portions thereof, but such restrictions, conditions, covenants and reservations shall be binding upon and effective against any Owner or Owners of any such Parcel, or any portion or portions thereof, whose title is acquired by foreclosure, trustee's sale or otherwise.

6.10 Effect of Foreclosure. If any Parcel subject to a monetary lien created by any provision hereof shall be subject to the lien of a bona fide Mortgage: (a) the foreclosure of any lien created by anything set forth in this Declaration shall not operate to affect or impair the lien of such Mortgage; and (b) the foreclosure of the lien of such Mortgage, the acceptance of a deed in lieu of

foreclosure of such Mortgage or a sale under a power of sale included in such Mortgage (such events being hereinafter referred to as "Events of Foreclosure") shall not operate to affect or impair the lien hereof, except that any persons who obtain an interest through any of the Events of Foreclosure, and their successors in interest, shall take title free of the lien hereof or any personal obligation for said charges as shall have accrued up to the time of any of the Events of Foreclosure, but subject to the lien hereof for all said charges that shall accrue subsequent to the Events of Foreclosure. Nothing in this section shall be construed to release any Owner from its personal obligation to pay any assessment levied pursuant hereto.

ARTICLE VII

DUTIES AND POWERS OF THE MANAGER

7.1 Appointment of Manager. The Manager shall be appointed from time to time by the Declarant. The Manager may be an individual employed by or affiliated with Declarant or may be an individual or entity in the business of providing property management services. The initial Manager appointed by Declarant hereunder is the Executive Director of the Redevelopment Agency for the County of Riverside, or his designee, whose address is noted in Section 8.2(a) below. Declarant will notify the Owners in writing of any changes in the individual or entity designated as Manager hereunder.

7.2 Duties and Powers. The Manager shall be the authorized agent of Declarant with respect to all matters over which Declarant may exercise control or authority pursuant to this Declaration. Manager's duties shall include, without limitation, the following:

(a) Such architectural approval authority as may be delegated to Manager by the Design Committee;

(b) The right and duty to enforce this Declaration, specifically including the

obligation of Owners to maintain their Parcels, including all Improvements and landscaping located thereon; and

(c) Such other duties as Declarant or the Design Committee may from time to time direct.

7.3 Rules and Regulations. The Manager may from time to time adopt and promulgate reasonable rules and regulations as necessary in order to assure proper coordination of the activities of Owners, Occupants and their business visitors (i.e., with respect to the flow of traffic, parking and similar matters.

ARTICLE XIII

GENERAL PROVISIONS

8.1 Covenants to Run with the Land; Term. The covenants, conditions and restrictions of this Declaration shall run with and bind the Property and shall inure to the benefit of and be enforceable for a term commencing upon the date hereof and terminating on the date which is ten (10) years from the date hereof. Notwithstanding the fact that the covenants, conditions and restrictions set forth herein are terminated pursuant to this section, all of the easements set forth in Article V above shall remain in full force and effect and shall run with the land and be binding upon and inure to the benefit of the successors and assigns of Declarant in accordance with the provisions of Article V.

8.2 Notices. Any notice to be given to the Manager, an Owner or a Mortgagee under the provisions of this Declaration shall be in writing and shall be delivered as follows:

(a) Notice to the Manager shall be deemed to have been properly delivered when delivered personally or sent by certified mail, postage prepaid,

return receipt requested to the

Manager at the following address:

Executive Director
Redevelopment Agency for the
County of Riverside
3525 Fourteenth Street
Riverside, CA 92501-3813

or as changed by notice properly delivered in accordance with this section.

(b) Notice to an Owner or a Mortgagee shall be deemed to have been properly delivered when delivered personally or placed in the first class United States mail, postage prepaid to the most recent address furnished by such Owner or Mortgagee in writing to Manager for the purpose of giving notice, or if no such address shall have been furnished, then to the street address of such Owner's Parcel. Any notice so deposited in the mail within the County in which the Property is located, shall be deemed delivered forty-eight (48) hours after such deposit.

8.3 Construction by Declarant. Nothing in this Declaration shall limit the right of Declarant to alter the Parcels owned by Declarant, or to construct such additional Improvements as Declarant deems necessary or advisable. Such right shall include but shall not be limited to erecting, constructing and maintaining on the Property such structures and displays as may be reasonably necessary for the conduct of the business of completing the work and disposing of the same by sale, lease or otherwise. This Declaration shall not limit the right of Declarant at any time to establish on the Property additional licenses,

reservations and rights-of-way to itself, to utility companies, or to others as may from time to time be reasonably necessary for the proper development and disposal of portions of the Property owned by Declarant. Declarant reserves the right to alter its construction plans and designs as it deems appropriate in its discretion.

8.4 Declarants and Manager Held Harmless. Each and every Owner and Occupant of any portion of, or any interest in, the Property shall and does, by accepting title to its interest in the Property, agree to indemnify, defend, and hold harmless Declarant, Manager, the Design Committee and their respective members, agents, employees, successors and assigns, against and from all claims for injury or death to persons, or damages to or loss of property, arising out of the construction, use, and/or operation of the Improvements on the Parcel occupied by, owned by, or under the control of such Owner or Occupant; the use and/or possession of such portion of the Property; and the conduct of business or any other activities by such Owner or Occupant on any portion of the Property. To the fullest extent permitted by law, Declarant, Manager, the Design Committee, and any and all of their respective members, agents, employees, successors and assigns shall not be liable to any Owner for any damage, loss, or prejudice suffered or claimed on account of any decision, approval or disapproval made pursuant to Article III or any other provision set forth herein, course of action, act, omission, error, negligence, or the like made in good faith and reasonably believed to be within the scope of its or their duties. In addition to, and not in limitation

of, the foregoing, Declarant, Manager, and the Design Committee shall not be liable to any Owner for any loss, claim, demand, cause of action, liability, or expense, except to the extent of Declarant=s, Manager's, and/or the Design Committee's respective interest in and to the Property, if any.

8.5 Amendments. Until such time as there is an Owner of any portion of the Property other than Declarant, this Declaration may be amended and such amendment shall be effective when (i) executed by Declarant and (ii) recorded in the Official Records of Riverside County, California. From and after the date that there is an Owner of any portion of the Property other than Declarant, this Declaration may be amended and such amendment shall be effective when executed by Declarant and a Majority of Owners (including Declarant to the extent it is an Owner) of the Parcels within the Property and the first Mortgagees holding Mortgages encumbering a majority of the Parcels within the Property encumbered by Mortgages. Notwithstanding anything to the contrary herein above, this Declaration may not be amended without the prior written consent of Declarant. If any Mortgagees have filed a written request with the Manager to receive a copy of any such amendments, the Manager shall deliver a copy of such amendments to such Mortgagees at the address specified in their request.

8.6 Invalidity of Provision. If any provision of this Declaration, or the application thereof to any person or any circumstance, shall be held by a court of competent jurisdiction to be invalid, void or illegal, the remaining provisions hereof and the application of such provision to any person and any circumstance

other than those as to which it is held to be invalid, void or illegal, shall nevertheless remain in full force and effect to the maximum extent permitted by law and not be affected thereby.

8.7 Headings. The provisions of this Declaration shall be liberally construed to effect its purpose; the section headings have been inserted for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction.

8.8 Dedications. The provisions of this Declaration shall not be deemed to constitute a dedication for public use nor create any rights to the general public.

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IN WITNESS WHEREOF, Declarant has executed this Declaration on the date first herein above written.

DECLARANT:

REDEVELOPMENT AGENCY FOR THE
COUNTY OF RIVERSIDE

By: _____
Executive Director

APPROVED AS TO FORM:

AGENCY COUNSEL

By: _____
Deputy

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