CITY OF ORINDA



2020 PMP Update
P-TAP Round 21
Final Report
February 2021



THE CITY OF ORINDA 2020/21 Pavement Management System Update

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EXECUTIVE SUMMARY

The City of Orinda currently maintains approximately 91.83 centerline miles of roads representing 12,522,352 square feet of pavement with a replacement value of approximately \$104,948,000 as calculated by StreetSaver[®].

Pavement Engineering Inc. (PEI) updated all the streets in the City's Pavement Management System, using the Metropolitan Transportation Commission's (MTC) StreetSaver® program. The purpose of a Pavement Management System is to track inventory, store work history and furnish budget estimates to optimize funding for improving the city's pavement system.

INTRODUCTION

A Pavement Management System has several distinctive uses:

- As a budgeting tool, a Pavement Management System uses treatment costs that are based on recently bid projects, by the participating agency, so that budgets reflect historical costs for the area.
- As an inventory tool, a Pavement Management System provides a quick and easy reference for pavement areas and use.
- As a pavement condition record, a Pavement Management System provides age, load-related, non-load related and climate-related pavement condition and deterioration information. The Pavement Management System uses pavement deterioration curves, based on nationwide research, which allow the program to predict a pavement's future condition.

A Pavement Management System is not capable of providing detailed engineering designs for a street. The Pavement Management System instead helps the user identify candidate streets for potential repair and maintenance. Project level pavement analysis and engineering is an essential feature of future pavement maintenance and rehabilitation projects. Additional investigation, or project level analysis, can optimize the City's pavement management dollars. Project level engineering examines the pavements in significantly more detail than the visual evaluation required for the Pavement Management System Update and optimizes designs for all of the peculiar constraints of a set of project streets.



WORK PERFORMED

Pavement Distress Survey and Database Update

For this update, PEI performed inspections on approximately 91.83 centerline miles of road. Field inspections were completed in June 2020.

PEI measured the following distress types as part of our review: alligator cracking (fatigue), block cracking, distortions, longitudinal & transverse cracking, patching & utility cut patching, rutting / depressions, weathering, and raveling. All the collected data was entered into the City's StreetSaver® database.

As part of our field review, all the streets were measured to confirm lengths and widths. Lengths were measured using a vehicle-mounted electronic measuring device and widths were measured using a hand-held measuring wheel. Measurement discrepancies were tabulated and reviewed with the City to determine if corrections were needed.

PEI performed a quality control (QC) check on our work. PEI's QC check consists of performing a field review of any street segment where the PCI showed a decrease of 3 or more points per year, or an increase of 1 PCI without a documented M&R treatment, when compared to the last inspection for the same road segment in the StreetSaver® database. Each segment in the QC process was visually reviewed to determine if the StreetSaver® calculated PCI was representative of the observed overall pavement condition for that road segment. Variations found were re-inspected by a Senior Engineering Technician, or the Project Manager, and the segments' PCI was recalculated.

FINDINGS

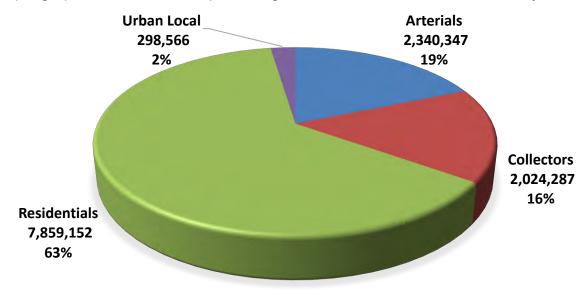
The updated Pavement Management System showed that the City's overall average PCI is 85.

The breakdown by functional classification is as follows:

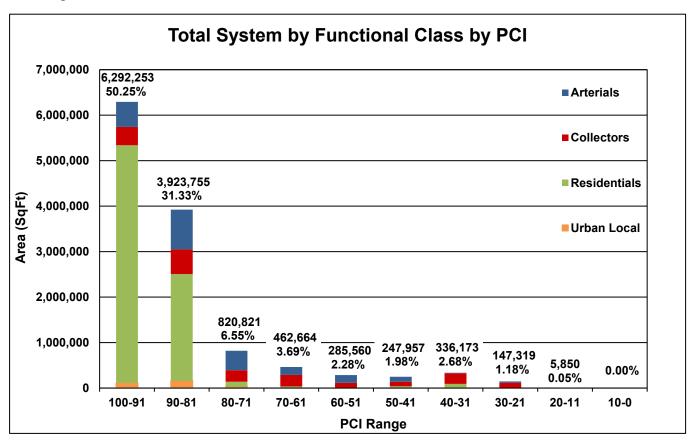
Functional Classification	Centerline Miles	Lane Miles	Pavement Area (sq. ft.)	Percent of System	Average PCI
Arterial	10.99	25.71	2,340,347	18.69%	77
Collector	14.96	29.93	2,024,287	16.17%	69
Residential	63.59	127.25	7,859,152	62.76%	90
Urban Local	2.29	4.59	298,566	2.38%	89
Totals	91.83	187.48	12,522,352	100.00%	85



The pie graph below shows the percentage of each functional classification, by area.



The bar graph below shows the City's street system broken down into 10-point PCI ranges.





The breakdown by Condition Category and corresponding PCI range is shown below:

Condition Category Breakdown								
Condition	Condition PCI Range % Of Total Square F							
Excellent	100-91	50.25%	6,292,253					
Good	90-71	37.89%	4,744,576					
Fair	70-51	5.98%	748,224					
Poor	50-31	4.66%	584,130					
Failed	30-0	1.22%	153,169					

The analysis shows that **88.14%** of the City's pavement are in **Excellent** to **Good** condition. Details of each street segment are provided in **Section IV: Reference Reports**.

BUDGET ANALYSIS

StreetSaver® uses a decision tree to model the decision-making process that agencies follow to select a maintenance or rehabilitation strategy. The decision tree contains "branches" for each functional classification, surface type and condition category. Jurisdictions can outline their maintenance and rehabilitation strategy by choosing a treatment for each branch.

The treatments listed in the decision tree are generalized to provide a range of treatments. Typical treatments within each generalized treatment range are listed below. The exact treatment would need to be determined during the design phase of the project.

StreetSaver® assigns a treatment action and estimated cost to each street segment based on the pavement's current PCI.



Treatment Category	Typical Treatment
Light Maintenance	Slurry Seal or Micro-SurfaceFog Seal or Scrub Seal
Heavy Maintenance	 Chip Seal, Cape Seal Slurry Seal or Micro-Surface with Digouts Thin Maintenance Overlay (TMO)
Light Rehab.	Overlay (2" and under) or Thin Mill and Fill
Heavy Rehab.	 Overlay (greater than 2") or Thick Mill and Fill Cold-In-Place Recycling Full Depth Reclamation Pulverize and Resurfacing
Reconstruct	Full Section Reconstruction

Decision Tree Unit Prices

As a minimum, recent bid tabulations should be used to determine the appropriate unit costs. Further, the unit costs include other costs such as design, construction management, contingencies, or other related construction costs (ADA ramps, curb & gutters, striping etc.) to form a more comprehensive unit cost for the selected treatments.

For the City of Orinda, the unit costs on the following table were used:

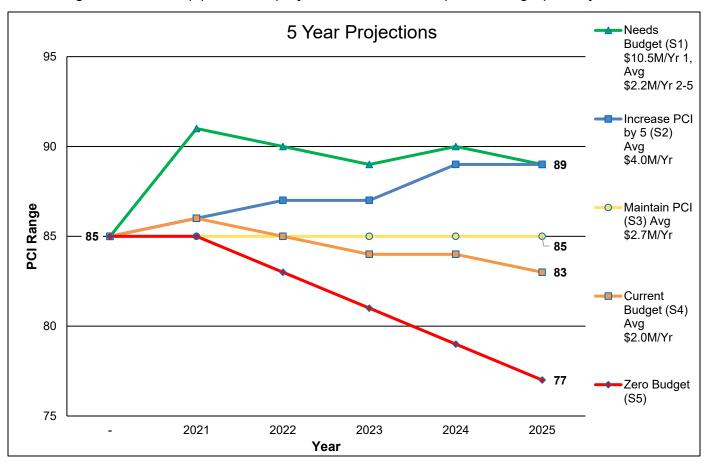
Treatment	Arterial	Collector	Residential					
Cost/ Sq Yd								
Crack Seal (\$\$/LF)	\$2.21	\$1.83	\$1.61					
Light Maintenance	\$7.76	\$7.76	\$7.76					
Heavy Maintenance	\$24.42	\$21.29	\$17.59					
Light Rehab	\$51.97	\$49.66	\$33.00					
Heavy Rehab	\$75.00	\$65.00	\$60.00					
Full Depth Reclamation	\$90.00	\$80.00	\$70.00					



For this update, PEI analyzed several scenarios, which are summarized below:

Budget Scenario Projections

PEI generated Five (5) scenario projections which are represented graphically below:



A summary of each of the scenario projections are as follows:

Scenario 1: Unconstrained Budget/ Funds Needed to obtain Optimum PCI

(\$10.5M for Year 1, \$2.2M/Yr Avg. for Years 2-5.)

Scenario 2: Amount of funding to increase PCI by 5 (Avg. \$4.0M/Yr.)

Scenario 3: Amount of funding to maintain PCI of 85 (Avg. \$2.7M/Yr.)

Scenario 4: Impact of the current funding amount (\$2.0M/Yr.) the current PCI

would decline from 85 to 83, a 2-point overall drop.

Scenario 5: Represents the impact to the PCI if Zero dollars are spent

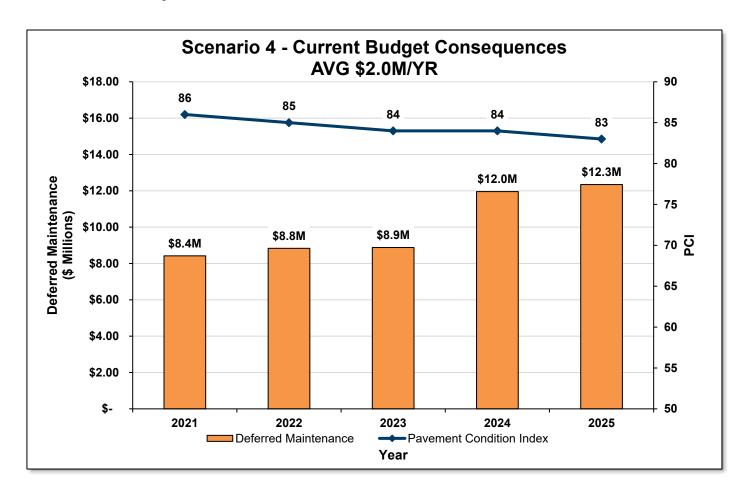
The full report for the various budget scenarios can be found in **Appendix B**.



Budget Consequences

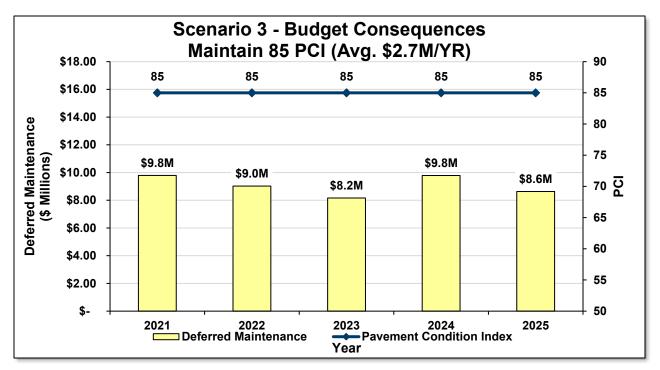
The following graphs illustrate the consequences to the City's overall weighted PCI and Deferred Maintenance Amount, based on the scenario projections:

At the current funding level of \$2M/Yr., the PCI of the entire system will deteriorate from 85 to 83, a 2 PCI point drop over the next 5 years. In addition, the backlog of deferred maintenance grows from \$8.4 million to \$12.3 million, an increase of 46%.

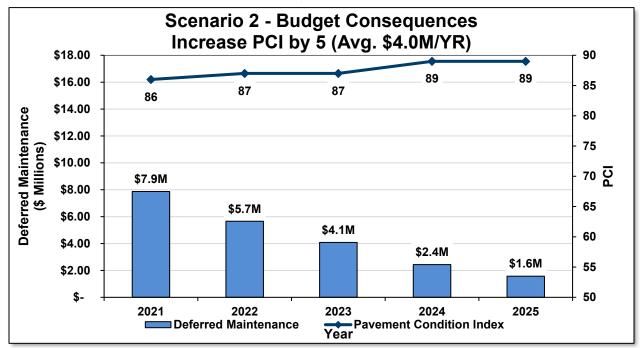


To maintain the current PCI of 85, it is projected that an average funding level of \$2.7M/YR is necessary. At this funding level the backlog of deferred maintenance declines from \$9.8 million to \$8.6 million, a decrease of 12%.





Because the City of Orinda has such a high PCI, the system is unable to increase the PCI 5 points from 85 to 90 because of the PCI cap. With that said, we were able to run the scenario and get as high as an 89. It is projected that an average funding level of \$4.0M/YR is necessary. At this funding level the backlog of deferred maintenance shrinks from \$7.9 million to \$1.6 million, a decrease of 80%.





CONCLUSIONS AND RECOMMENDATIONS

This Executive Summary provides a review of the 2020 Pavement Management System Update performed by PEI. PEI inspected all road segments in the City of Orinda. The average overall PCI for the City is 85. 88.14% of the City's pavement is in Excellent to Good condition.

To maintain the system at its current overall PCI of 85, the City will need to spend an average of \$2.7 million annually over the next 5 years. Maintaining the current funding level of approximately \$2.0 Million annually will result in a PCI loss of 2 points in 5 years to a PCI of 83.

A review of the City's street system, by functional classification, shows that the Residential streets have the highest average PCI of 91, the Collector streets have an average PCI of 70, and the Arterial streets have an average PCI of 78. As a general rule, agencies typically try to keep their arterials in the best condition because they carry the bulk of the traffic and loading, followed by collectors, then the residential/ local streets.

Moving forward, PEI recommends the City carefully evaluate the overall annual budget to determine the amount it wants to commit to pavement maintenance and rehabilitation projects. We recommend the City set priorities for each functional classification and perhaps certain streets within each classification.

This Pavement Management System will assist the City in its efforts to monitor treatments and track their effectiveness and help the City in setting future priorities and treatment policies. To ensure the city is evaluating accurate data, PEI suggests the City update its Pavement Management System on a regular basis and review the entire system every three years, this includes a thorough review of the Decision Tree and the unit costs contained within. As the City maintains and updates its Pavement Management System, the program will become a valuable tool in its efforts to maximize performance and minimize the spending for pavements.

Section II
Background



BACKGROUND

This section is intended to introduce important pavement design definitions and calculations as a background for understanding the Pavement Management System (PMS) assumptions.

PAVEMENT DESIGN BASICS

Pavements are a structural support system generally considered to act like a beam. But unlike beams in buildings, which generally have static loads, the pavement structure is flexed many times from traffic loading. Cars and light trucks have little impact on the pavement structure. Larger/Heavier trucks have very significant impacts on the pavement due to the high axle weights. The impact of trucks is measured in equivalent single 18,000-pound axle loads (EALs). The total EALs are converted into a design Traffic Index (TI). As an example, a design TI of 5 is equal to 7,160 EALs. A Design TI of 8 is equal to 372,000 EALs. Therefore, the design TI is the total number of EALs that the pavement will support before it begins to fail, regardless of the passage of time. Normally for a new pavement, the EALs over a 20-year period are used. For rehabilitation procedures such as overlays, 10 years is generally used.

The other element of pavement design is the support of the beam. The support is provided by the sub-grade soils. The support value is designated by the R-value test.

Using the design TI and R-value, the pavement designer chooses various materials to construct the structural section. The most common pavement section is a thin layer of asphalt concrete over aggregate base(s). Many options are available depending on specific project requirements and conditions.

The design methods used in California is based on a <u>50 percent</u> reliability. This means that the average pavement life of all pavements constructed using the design procedure will last the design life. It also means that about half will not last that long and the other half will last longer. To express this concept, a design life is often expressed in a span of years, such as 17 to 23 years for 20-year design life.

PAVEMENT DETERIORATION

Pavement deteriorates from two processes. There are **fatigue** and **aging**. The processes occur simultaneously. In a well-designed and constructed pavement, the two processes result in the need to rehabilitate the pavement at approximately the same time. This is called the design life. The design life for most new pavements is <u>20 years</u>. Each aging process has its own set of pavement defects, which are related to the process.

Fatigue

The first deterioration process is fatigue from heavy axle loads. As the pavement structure flexes or bends from heavy wheel loads, the asphalt concrete layer's ability to flex is consumed. With enough bending, the asphalt concrete layer begins to break at the bottom. These cracks progress upward until they reach the surface and appear as



alligator cracking. These areas are repaired by removal and replacement of the asphalt concrete in the affected areas. These repairs are commonly called digouts.

As the pavement structure, its supporting soils, and the precise loading from wheel loads vary, so does the time it takes for alligator cracking to appear. As alligator cracking appears, the pavement is repaired with digouts. Generally, when total cumulative quantity of digouts reaches approximately 10 percent, or more, of the total area, the pavement is considered to have reached its service life and requires major rehabilitation.

Aging

The major element of the pavement structure that ages is the asphalt concrete layer. To a minor extent, aggregate bases can age if contaminated by fine soil particles, which are transported from the subsoil into the aggregate base.

Asphalt concrete is composed of aggregates and asphalt cement. The aggregates used are generally of fair quality and do experience some breakdown over time. Aggregate aging problems need to be addressed in maintenance procedures. The asphalt concrete binder ages as well. As the asphalt binder ages, it loses volume through the loss of volatile components in the asphalt. As the volume decreases, the pavement will progressively crack from the resulting tensile strain in the layer. Normally, these cracks first show up as transverse cracks. They also show up in weak areas, such as paving joints. These cracks widen and increase over time until the pavement has a checkerboard appearance.

The aging process also causes the pavement to become more brittle. The increased stiffness results in additional cracking from loaded vehicles. This load induced cracking from the brittleness of the asphalt concrete is very similar to fatigue cracking in appearance.

The major agent for deterioration of the asphalt concrete binder is oxygen. The carrier of the oxygen is water. Water enters the pavement either from the surface or as water vapor from underneath

TYPICAL PAVEMENT DEFECTS

StreetSaver® identifies eight different Asphalt Concrete distress types. These are:

- 1. Alligator Cracking (Fatigue)
- Block Cracking
- Distortions
- 4. Longitudinal and Transverse Cracking
- 5. Patching and Utility Cut Patching
- 6. Rutting and Depression
- Raveling
- 8. Weathering

These defects are common to virtually the entire pavement as aging progresses.

Age cracking begins with longitudinal and transverse cracking and progresses to block shrinkage cracking.



For purposes of understanding the levels of these distresses, the condition level descriptions from the rating manual are included herein:

Alligator Cracking (Fatigue)

Description:

Alligator or fatigue cracking is a series of interconnecting cracks caused by fatigue failure of the asphalt concrete surface under repeated traffic loading. Cracking begins at the bottom of the asphalt surface (or stabilized base) where tensile stress and strain are highest under wheel load. The cracks propagate to the surface initially as a series of parallel longitudinal cracks. After repeated traffic loading, the cracks connect, forming many sided, sharp-angled pieces that develop a pattern resembling chicken wire or the skin of an alligator. The pieces are generally less than 0.6 m (2 ft) on the longest side. Alligator cracking occurs only in areas subjected to repeated traffic loading, such as wheel paths. Therefore, it would not occur over an entire area unless the entire area were subject to traffic loading (pattern-type cracking that occurs over an entire area not subjected to loading is called "block cracking," which is not a load-associated distress).

Severity Levels:

- L Fine, longitudinal hairline cracks running parallel to each other with no, or only a few interconnecting cracks. The cracks are not spalled.
- **M** Further development of light alligator cracks into a pattern or network of cracks that may be lightly spalled.
- **H** Network or pattern cracking has progressed so that the pieces are well defined and spalled at the edges. Some of the pieces may rock under traffic.

Block Cracking

Description:

Block cracks are interconnected cracks that divide the pavement into approximately rectangular pieces. The blocks may range in size from approximately 0.3 by 0.3 m (1 by 1 ft) to 3 by 3 m (10 by 10 ft). Block cracking is caused mainly by shrinkage of the asphalt concrete and daily temperature cycling (which results in daily stress/strain cycling). It is not load-associated. Block cracking usually indicates that the asphalt has hardened significantly. Block cracking normally occurs over a large portion of the pavement area, but sometimes will occur only in non-traffic areas. This type of distress differs from alligator cracking in that alligator cracks form smaller, many-sided pieces with sharp angles. Also, unlike block cracks, alligator cracks are caused by repeated traffic loadings and therefore found only in traffic areas (i.e., wheel paths).

Severity Levels: (*See definitions of longitudinal transverse cracking.)

- Blocks are defined by low-severity* cracks.
- **M** Blocks are defined by medium-severity* cracks.
- **H** Blocks are defined by high-severity* cracks.



Distortions

Description:

Distortions are usually caused by corrugations, bumps, sags and shoving. They are localized abrupt upward or downward displacements in the pavement surface, a series of closely spaced ridges and valley or localized longitudinal displacements of the pavement surface. Distortions affect ride quality.

Severity Levels:

- L Distortion produces vehicle vibrations, which are noticeable, but no reduction in speed is necessary for comfort or safety and/or individual distortions cause the vehicle to bounce slightly but create little discomfort.
- **M** Distortion produces vehicle vibrations, which are significant, and some reduction in speed is necessary for safety and comfort.
- **H** Distortion produces vehicle vibrations, which are so excessive that speed must be reduced considerably for safety and comfort.

Longitudinal and Transverse Cracking (Non-PCC Slab Joint Reflective)

Description:

Longitudinal cracks are parallel to the pavement's centerline or laydown direction. They may be caused by:

- 1. A poorly constructed paving lane joint.
- 2. Shrinkage of the AC surface due to low temperature or hardening of the asphalt and/or daily temperature cycling.
- 3. A reflective crack caused by cracking beneath the surface course, including crack in PCC slabs.
- 4. Decreased support or thickness near the edge of the pavement.

Transverse cracks extend across the pavement at approximately right angles to the pavement centerline or direction of laydown. These may be caused by conditions (2) and (3) above. These types of cracks are not usually load-associated.

Severity Levels:

- L One of the following conditions exists:
 - (1) non-filling crack width is less than 10 mm (3/8 in.) or
 - (2) filled crack of any width (filler in satisfactory condition).
- **M** One of the following conditions exists:
 - (1) non-filled crack width is greater than or equal to 10 mm and less than 75 mm (3/8 to 3 in.)
 - (2) non-filled crack is less than or equal to 75 mm (3 in.) surrounded by light and random cracking, or
 - (3) filled crack is of any width surrounded by light random cracking.



- **H** One of the following conditions exists:
 - (1) any crack filled or non-filled surrounded by medium or high severity random cracking,
 - (2) non-filled crack greater than 75 mm (3 in.) or
 - (3) A crack of any width where approximately 100 mm (4 in.) of pavement around the crack is severely broken.

Patching and Utility Cut Patching

Description:

A patch is an area of pavement that has been replaced with new material to repair the existing pavement. A patch is considered a defect no matter how well it is performed (a patched area or adjacent area usually does not perform as well as an original pavement section). Generally, some roughness is associated with this distress.

Severity Levels:

- **L** Patch is in good condition and satisfactory. Ride quality* is rated as low severity or better.
- **M** Patch is moderately deteriorated and/or ride quality* is rated as medium severity.
- **H** Patch is badly deteriorated and/or ride quality* is rated as high severity. Needs replacement soon.

*Ride quality is defined in the severity levels of distortions.

Rutting and Depressions

Description:

A rut is a surface depression in the wheel paths. Pavement uplift may occur along the sides of the rut, but in many instances, ruts are noticeable only after a rainfall when the paths are filled with water. Rutting stems from a permanent deformation in any of the pavement layers or sub-grades, usually caused by consolidated or lateral movement of the materials due to traffic load. Significant rutting can lead to major structural failure of the pavement.

Depressions are localized areas where the pavement structure is lower than the surrounding area, but the transition is not abrupt enough to be considered a distortion. They are often referred to as "bird baths".

Severity Levels: (Average Rut or Depression Depth)

- L 1/2" to less than 1" (13 to 25mm).
- **M** 1" to less than 2" (25 to 50mm).
- **H** equal to or greater than 2" (over 50mm).



Raveling

Description:

Raveling is the dislodging of coarse aggregate particles. Raveling may be caused by insufficient asphalt binder, poor mixture quality, insufficient compaction, segregation, or stripping.

Coarse aggregate refers to the predominant coarse aggregate size of the asphalt mix, and aggregate clusters refers to when more than one adjoining coarse aggregate piece is missing. If in doubt about a severity level, three representative areas of one square yard each (square meter) should be examined and the number of missing aggregate particles/clusters is counted.

Severity Levels:

- **M** Considerable loss of coarse aggregate greater than 20 per square yard (square meter), and/ or clusters of missing coarse aggregate are present.
- **H** Surface is rough and pitted, and it may be completely removed in places.

Weathering

Description:

Weathering is the wearing away of the asphalt binder and fine aggregate matrix.

Coarse aggregate refers to predominant coarse aggregate size of the asphalt mix. Loss or dislodging of coarse aggregate is covered under Raveling. Surface wear is normally caused by oxidation, inadequate compaction, insufficient asphalt content, excessive natural sand, surface water erosion, and traffic. Weathering occurs faster in areas with high solar radiation.

Severity Levels:

- Asphalt surface beginning to show signs of aging which may be accelerated by climatic conditions loss of fine aggregate mix is noticeable and may be accompanied by fading of the asphalt color. Edges of the aggregates are beginning to be exposed (less than 0.05 inches or 1 mm).
- **M** Loss of the fine aggregate matrix is noticeable and the edges of the coarse aggregate have been exposed up to 1/4th of the width (of the longest side) of the coarse aggregate due to the loss of fine aggregate matrix.
- H Edges of the coarse aggregate have been exposed greater than 1/4th of the width (of the longest side) of the coarse aggregate. There is considerable loss of fine aggregate matrix leading to potential or some loss of coarse aggregate.



PAVEMENT MAINTENANCE PROCEDURES

Pavement maintenance procedures are designed to slow the pavement aging process. Mainly, the procedures are designed to protect the pavement from the adverse effects of water and to some extent vehicle traffic.

Maintenance procedures, which protect the pavement from aging, are crack sealing, digouts, slurry seals, and cape seals. When pavements have extensive cracking and are beyond their design life, interim holding measures including skin patches and thin overlays are used as a stop gap prior to major rehabilitation.

The following outlines some of the more common types of maintenance procedures:

Crack Sealing

Crack sealing prevents surface water from getting beneath the asphalt concrete layer into the aggregate bases. Crack sealing is generally performed using hot rubberized crack sealing material. The procedure includes routing small cracks, cleaning and sealing.

Digouts

Digouts are small areas of deteriorated pavements, which are removed and replaced with new asphalt concrete. Pavement removal is accomplished by cold planning or saw cutting and excavation. New asphalt is installed in at least two lifts. The digout depth is determined depending on the street type and construction.

Slurry Seals

Slurry seals consist of a combination of fine aggregate and emulsified oil. A new type of slurry seal called Rubberized Asphalt Slurry (RAS) is in the development stage. Currently, the cost of RAS is 2 to 3 times as much as a conventional slurry seal, which makes the product economically unattractive. Slurry seals are used when the existing pavement surface is severely raveled.

Cape Seals

Cape seals consist of a chip seal over coated with a slurry seal. A chip seal is an application of small angular rock (chips) approximately 1/4" to 3/8" in a maximum size embedded into a thick application of asphalt emulsion. Most chip seals incorporate polymer modified binders.

Cape seals are used on residential and collector streets to maintain a pavement, which may need an overlay, but there are not sufficient funds available. Chip seals are placed over low to moderate alligator cracks and block shrinkage cracking. Due to the distress covered by the chip seal, small areas of disbanding or failure may occur and will require patching.



Cape sealed surfaces are fairly coarse compared to new paving. Due to this characteristic, they may not be acceptable to some segments of the public.

Interim Holding Measures (or "Stop Gap" in StreetSaver® Terms)

Interim holding measures or stop gap treatments are used to "hold" the pavement together until funds become available for major rehabilitation. The common holding measures used by City include skin patches and thin overlays.

Skin patches are thin lifts of fine asphalt concrete placed over deteriorated areas.

Thin maintenance overlays are placed to hold the surface together. The asphalt concrete layer is generally 1 to 1-1/2 inches thick. A 3/8 inch aggregate is used with a Terminally Blended Asphalt Rubber Binder.

PAVEMENT REHABILITATION PROCEDURES

Pavement rehabilitation consists of procedures used to restore the existing pavement quality or to add additional structural support to the pavement. Rehabilitation procedures include conventional overlays; pulverization and resurfacing; ARHM (asphalt rubber hot mix) overlays; AC removal and replacement (Mill and Fill); and reconstruction.

The following outlines some of the more common types of rehabilitation procedures:

Conventional Overlays

Conventional overlays generally consist of surface preparation, pavement fabric and varying thicknesses of asphalt concrete. Surface preparation can consist of crack filling, pavement repairs of base failures and leveling courses.

Pavement fabric is often used as a water inhibiting membrane and to retard reflective cracking. Care must be used with fabric to avoid intersections with heavy truck breaking, steep grades (generally over 8 percent), and areas where subsurface water might be trapped.

The overlay thickness is determined by the structural requirement of the deflection analysis and reflective cracking criteria. The reflective cracking criteria requires the thickness of the overlay to be a minimum 1/2 the thickness of the existing bonded layers. Pavement fabric can account for 0.10 ft of asphalt for reflective cracking criteria if the structural requirements from the deflection analysis are met.

Conventional overlays have an expected service life of 7 to 13 years if they are designed to meet structural and reflective cracking criteria and are well constructed.



Pulverization and Resurfacing

Pulverization and resurfacing is an alternative to conventional overlays for streets that are structurally adequate but exhibit sufficient cracking to warrant improvement to the asphalt surface.

Pulverization and resurfacing are an intermediate step between overlays and reconstruction. The existing asphalt concrete is recycled into aggregate base and the recycled base increases the total structural section. The surface is re-graded to conform to flush facilities similar to the way the pavement is keycut for overlays. The re-grading allows for some improvement to the cross section and profile. This method eliminates the stress history and cracking of the old asphalt concrete pavement, thus eliminating negative impacts on the new asphalt concrete surface.

Some instability can be encountered when the pulverization method is used. PEI typically recommends budgeting 5 to 10 percent of the pulverized sub-grade area for stabilization. Stabilization can be performed using 6-inch deep lift asphalt concrete.

Pulverization and resurfacing has a life expectancy of 13 to 18 years. The life expectancy is slightly less than full reconstruction because some residual deficiencies in thickness or quality of the unaffected layers may still exist. Additional testing is necessary to determine if pulverization is a viable alternative. This testing includes measuring the existing structural section and testing the native soil for bearing capacity (R-value).

RHMA Overlays

RHMA is the shortened reference for Rubberized Hot Mix Asphalt. This new material uses crumb rubber mixed with traditional asphalt binders to produce a more flexible paving material than conventional dense graded hot mix asphalt (HMA).

Caltrans has developed design criteria for use of this material based on accelerated performance testing using its dual wheel accelerated pavement testing equipment. The Caltrans criteria allows RHMA to be used in a one to two ratio to conventional hot mix asphalt. Thus 1 inch of RHMA is equal to two inches of conventional hot mix asphalt. This is true for both structural and reflective cracking criteria.

RHMA costs approximately 1-3/4 times as much as conventional asphalt and provides a similar service life to that of conventional hot mix asphalt, 7 to 13 years. RHMA is generally only feasible when vertical constraints such as curb and gutter restrict the thickness of the overlay. RHMA typically has more open surface than conventional hot mix asphalt and is more difficult to obtain a high quality finished product.



AC Removal and Replacement (Mill and Fill)

On some thick asphalt concrete pavements, the most economical approach to rehabilitating the pavement is to remove some of the existing asphalt concrete surface, which matches the existing profile. The replacement material can be either conventional hot mix asphalt (HMA) or RHMA, depending on the design criteria.

In other cases, due to drainage or other physical constraints, additional thickness cannot be placed. If the underlying base is sufficient to support anticipated loading, the asphalt layer can be removed and replaced. Depending on existing conditions, this method should have a life of 15 to 20 years.

Reconstruction

When the pavement has severe cross section deficiencies or requires significant structural strengthening, reconstruction may be the only alternative. Generally, existing pavement materials are recycled and incorporated into the new pavement structure. Structural section material alternatives include treated soils, full depth asphalt concrete, recycled materials and Portland cement concrete.

Section III Pavement Management System Specifics



PAVEMENT MANAGEMENT SYSTEM SPECIFICS

This section discusses the characteristics of the Pavement Management System and its application for The City of Orinda.

BACKGROUND (STREETSAVER®)

During the early years of Pavement Management software development, many companies developed private software packages focused on management of municipal street systems. Though these programs were versatile and sophisticated, the user was also dependent upon the software vendor for training, program updates, and software servicing. Many of the vendors had difficulty maintaining their software, leaving agencies stranded after making a substantial investment.

In 1982, the Metropolitan Transportation Commission (MTC) completed a study of local road and street maintenance needs and revenue short falls in the San Francisco Bay Area. The results of the study indicated that local jurisdictions were spending only 60 percent of funds required to maintain roads in a condition considered adequate. This indicated a need to improve pavement maintenance and rehabilitation techniques and practices. A committee was formed to evaluate pavement management efforts. At approximately the same time, six public works directors reviewed a proposal to develop a prototype Pavement Management System (PMS); however, it was felt that the proposed system was too complex. This group strongly emphasized that simplicity was the most important objective to be developed in a PMS if it was to be adopted and used by cities and counties.

In 1983, a consultant was retained to assist MTC in determining PMS needs, PMS resources, and problems. In addition, they were to develop three basic elements of a standardized prototype PMS: a pavement condition index (PCI), effective maintenance treatments for the Bay Area, and a network level assignment procedure. The result was the first version of the MTC PMS. Since that time the program has evolved into StreetSaver®.

Today, the Metropolitan Transportation Commission (MTC) for California's San Francisco Bay Area uses StreetSaver® to help local cities and counties better allocate resources, predict the future condition of their pavements at different levels of funding, and demonstrate the effects of underfunded road programs. The Bay Area was one of the first regions in the country to implement a pavement management system that is used by nearly all of its localities. Using StreetSaver®, cities and counties can plan and manage road improvement projects, document budget needs and shortfalls, and use the collected data to build support for additional transportation funding.



StreetSaver® manages a collection of related data organized for easy storage and retrieval. The StreetSaver® program includes a database comprised of several sets of related data ("tables") that contain information about the street network in the jurisdiction. This information includes pavement condition, the available maintenance/rehabilitation treatments and their costs, and the history of the network. Based on this information, budget analyses are performed. A budget analysis allows the user to project network maintenance and rehabilitation needs, and costs to evaluate the consequences of various budget allocation alternatives. Alternatives can be evaluated in terms of maintenance and rehabilitation that can actually be performed, future pavement condition, and deferred costs. For some agencies, use of the StreetSaver® program is cyclical. For others, pavement management is integrated into an ongoing effort to manage their street networks.

<u>Implementation</u>

There are several steps involved in implementing an effective Pavement Management System. These tasks should be completed on a periodic basis. These tasks include:

- 1. Collect pavement condition and maintenance/rehabilitation data.
- 2. Enter re-inspection data and/or applied maintenance and rehabilitation information.
- 3. Check/update maintenance treatment definitions and pavement category definitions.
- 4. Calculate Pavement Condition Index (PCI)
- 5. Evaluate system and current Maintenance/Rehabilitation strategies. Determine Budget needs and if necessary develop alternate Budget Summaries.
- 6. Present analysis outputs to funding bodies.
- 7. Acquire funds and apply maintenance/rehabilitation treatments.

SYSTEM ASSUMPTIONS

The goal of the Pavement Management System is to furnish budgetary amounts in order to achieve system wide improvements in the overall pavement condition. The goal of project engineering is to obtain the maximum economical affect for a given subset of the system to be maintained. Using the Pavement Management System, management is able to realistically budget for economically maintaining The City's pavement system. Annually updating maintenance activity and costs keeps the system current.



PAVEMENT MAINTENANCE AND REHABILITATION (M&R) UNIT COSTS

The reliability and accuracy of any PMS is based on the information contained in its Decision Tree. The listed treatments in the Decision Tree are generalized to provide a range of treatments. The exact treatment would need to be determined during the design phase of a project.

Typical treatments within each generalized treatment range are listed below.

Treatment Category	Typical Treatment
Light Maintenance	Slurry Seal or Micro-SurfaceFog Seal or Scrub Seal
Heavy Maintenance	 Chip Seal, Cape Seal Slurry Seal or Micro-Surface with Digouts Thin Maintenance Overlay (TMO)
Light Rehab.	 Overlay (2" and under) or Thin Mill and Fill
Heavy Rehab.	 Overlay (greater than 2") or Thick Mill and Fill Cold-In-Place Recycling Full Depth Reclamation Pulverize and Resurfacing
Reconstruct	Full Section Reconstruction

Based on a street segment's current PCI condition, StreetSaver[®] assigns a treatment action and estimated cost to perform the suggested treatment. This cost is not just what is paid to the contractor but should include all the "Soft Costs" incurred by The City.

Soft Costs can include the surface preparation, engineering cost, materials testing, and construction inspection. Even if these tasks are done "in-house", the inclusion in combination with the construction costs will tend to show the "true picture" of the cost of a specific project.

The following costs were used to develop the indicated budget numbers for each street segment PEI reviewed. The costs include miscellaneous work such as transitions, striping, dig outs, etc.

The costs are averages. Small systems will have higher unit costs and large systems will have lower unit costs. The larger the annual project size, the better the economies of scale. Timing is also important. Bidding the work in early spring will result in significantly lower prices than bids solicited in the late summer or fall. If small packages are used, costs could be 25 to 50 percent higher.

The unit costs include a 15% allowance to account for engineering design fees and inspection and a 10% contingency. These prices are in today's dollars (2020) and do not account for inflation.



TREATMENT	ARTERIAL	COLLECTOR	RESIDENTIAL					
Cost/ Sq Yd								
Crack Seal (\$\$/LF)	\$2.21	\$1.83	\$1.61					
Light Maintenance	\$7.76	\$7.76	\$7.76					
Heavy Maintenance	\$24.42	\$21.29	\$17.59					
Light Rehab.	\$51.97	\$49.66	\$33.00					
Heavy Rehab.	\$75.00	\$65.00	\$60.00					
Reconstruct	\$90.00	\$80.00	\$70.00					

Decision Trees / Treatment Strategies

The Decision Trees are broken down into two main areas; Preventive Maintenance (PM) and Rehabilitation. StreetSaver® makes preventive maintenance a top priority. The longer a segment can be kept in good condition the lower the overall cost of its treatments. Preventive Maintenance addresses the sections that have a PCI of 71 and greater. This area is further broken down to specific treatments that could be better termed as Crack Sealing, Surface Treating and Restoration Treatments.

The Decision Tree allows the user to program these treatments on a cyclical basis. As part of this cyclical process, once a road has reached the point where it can no longer be maintained by a crack seal or a surface seal the program will shift to a Restoration Treatment. The program uses this treatment to restore the pavement in long term budgeting scenarios to the Very Good category.

The Decision Tree for Preventive Maintenance and Rehabilitation was reviewed with The City of Orinda and updated by PEI. The decision tree customizes the logic for how and what maintenance and rehabilitation treatments StreetSaver® selects.

Five general pavement treatment categories were used to account for the various treatments in the decision tree: reconstruction, heavy overlays, light overlays, heavy maintenance, light maintenance and no action. Specifying a general treatment category allows the user to stay focused on a budget level analysis rather than moving to a project level analysis.

The PMS software assumes average construction and material quality. Pavement life is very sensitive to materials and workmanship quality. Poor quality new construction may result in up to a 50 percent loss in the pavement life. In other words, poor quality new construction may last 10 to 15 years, whereas excellent quality construction may last 20 to 30 years. Investing in quality, both in design and construction, provides significant returns in extended pavement life resulting in lowered annual maintenance costs.



The Decision Tree for The City of Orinda can be found in **Appendix A** of this report.

ANNUAL PAVEMENT MAINTENANCE / REHABILITATION PROGRAM

The PCI range of 0 to 100 is broken down into five condition categories for budget calculation purposes. StreetSaver® default PCI breakpoints were adjusted during the update of The City of Orinda's Pavement Management System.

The new breakpoints are as follows:

	PCI BREAKPOINTS								
	ArterialsCollectorsResidential								
100]	[100	I		100	I		
90	LIGHT MAIN	NTENANCE	90	LIGHT MAIN	NTENANCE	90	LIGHT MAIN	NTENANCE	
70	II (Non-Load)	III (Load)	70	II III (Non-Load) (Load)		II (Non-Load)	III (Load)		
50	HEAVY MAINT.	LIGHT REHAB.	50	HEAVY MAINT.	LIGHT REHAB.	50	HEAVY MAINT.	LIGHT REHAB.	
50	Γ	V	50	I	V	50	Γ	V	
	HEAVY	REHAB.		HEAVY	REHAB.	HEAV		REHAB.	
25	1	V		5 V		25	7	7	
0	RECONS	STRUCT	0	RECONS	STRUCT	0	RECONS	STRUCT	

When a pavement section is identified for maintenance or rehabilitation, a user defined network-level cost category for a pavement of that functional class, type and condition is used to determine the needed funds for that section. For sections falling within the preventive maintenance category, or category one (1), a time sequence is used to identify the appropriate treatment and cost.

For those sections falling into a rehabilitation category, or categories two (2), three (3), four (4), or five (5), the PCI is used to determine the repair category for a pavement section.

The repair category is combined with functional classification (as a surrogate for traffic index) and surface type (as a surrogate for structural adequacy) to identify the appropriate treatment and cost. The treatment and cost identified for the section is a network-level budget planning treatment and is generally considered as a cost category for budgeting purposes rather than an actual treatment. Some sections will require more money than



estimated, some will require less. A project-level analysis is used to determine the actual treatment to be used for a given section based on condition, structural capacity and other factors.

The funding needs are summed for all sections needing work for each year of the analysis period to determine the annual budget needs. The needs analysis provides a list of sections needing work over the selected analysis period and an estimate of the funds needed. In StreetSaver[®], this analysis period is 5 years. It identifies maintenance and rehabilitation needs without considering funding constraints, i.e. the Needs Analysis is unconstrained by the available budget. StreetSaver[®] identifies candidate sections and funds needed to provide the level of service to meet agency-defined goals.

When an agency has a considerable backlog of maintenance and repair needs, the first-year needs will include the bulk of sections needing work. From a funding standpoint, this may appear unrealistic; however, the needs analysis is only the first step in planning and programming. The information from the needs analysis is generally best presented to management as the total 5 year needs or the average needs per year of the 5-year period. Few agencies will be able to meet the first year needs as developed by the program.

The StreetSaver[®] Needs Analysis provides information on the condition of the network over the analysis period with and without application of the treatments. Since the application of treatments assume no limit on funds, this can be considered the upper limit of condition that could be reached by the agency and the condition without treatment can be considered the lower limit.

StreetSaver® uses a ranking process based on cost-effectiveness concepts. Basically, the longer a pavement is in good condition, the more benefit the user gets from the pavement. This can be approximated by the area under the PCI vs Time curve.

The larger that area, the longer the pavement provides the desired level of service. That area is divided by annualized costs per unit area. This ratio is weighted for different usage so that arterial streets are selected for repair before collectors in the same condition, which are selected for repair before residential/locals in the same condition. Sections of pavements that provide the best service for the least money are then selected as those that should be repaired first. StreetSaver® provides a ranked listing based on this cost-effectiveness analysis. StreetSaver® also shows the condition with and without treatment, the estimated costs for each section, the calculations used to determine the ranking, and a listing of sections not recommended for treatment.



VISUAL EVALUATIONS

PEI's technical staff evaluated all of the pavements. The streets were rated based on the StreetSaver® system described in the Background. Once the data was entered into the program, PEI completed a quality assurance review of the system and verified the results in the field. The street inventory was based on visual evaluations.

SYSTEM UPDATES

The Pavement Management System is a dynamic program. It is expected that The City will continue to visually rate the street network and update the database at least every three years. In addition to the visual review, The City should update the database by adding new streets incorporated into The City as well as new maintenance and rehabilitation work performed to any particular street segment.

Section IV Reference Reports



City of Orinda Desktop Reference - Alphabetical

Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
ABBOT COURT	1	MORGA VIA	CUL-DE-SAC	339	19	R	95
ACACIA DR.	1	MANZANITA DR.	CUL-DE-SAC	1,935	22	R	94
ALBO CT.	1	KENMORE CT.	CUL-DE-SAC	411	25	R	93
ALICE LANE	1C	GOODFELLOW DRIVE	ZANDER DRIVER	387	29	R	88
ALICE LANE	2	ZANDER DRIVE	1000' W ZANDER DRIVE	1,000	29	R	49
ALICE LANE	3	1000'W/ZANDER DRIVE	DONALD DRIVE	1,100	26	R	94
ALTAMOUNT DRIVE	1C	LA CRESTA ROAD	MORAGA WAY	1,215	21	R	93
ALTARINDA CR. (2545AD)	1	E. ALTARINDA DR.	CUL-DE-SAC	245	25	R	85
ALTARINDA RD.	1	SANTA MARIA WY	COP N/O SANTA MARIA WAY	800	37	C	83
ALTARINDA RD.	2	COP N/O SANTA MARIA WAY	ORINDA WOODS DR	452	37	C	39
AMBER VALLEY DR. (2555Y)	1	DALEWOOD DR.	CUL-DE-SAC	1,060	29	R	92
ARBOLADO CT. (2745AP)	1	MUTH DR.	CUL-DE-SAC	360	25	R	94
ARDILLA RD. (2345E)	1	CAMINO PABLO	NORTH LANE	1,800	21	R	89
ARDITH COURT	1	CORAL DRIVE	CUL-DE-SAC	279	25	R	94
ARDITH DRIVE	2C	CORAL DRIVE	TOTTERDELL COURT	1,242	33	R	94
ARDITH DRIVE	4	TOTTERDELL COURT	WESTOVER COURT	1,145	33	R	94
ARDITH DRIVE	5	WESTOVER COURT	IVY DRIVE	846	33	R	94
ARDOR DRIVE	1	CUL-DE-SAC	LOMA LINDA COURT	971	22	R	87
	1						
ARDON DRIVE	2	LOMA LINDA COURT	MORAGA WAY	268	26	R	89
ARROYO DRIVE	1	IVY DRIVE	CITY LIMITS	432	24	R	84
ASPINWALL COURT	1	EASTWOOD DRIVE	CUL-DE-SAC	610	25	R	94
AUSTIN CT. (2745AT)	1	MUTH DR.	CUL-DE-SAC	420	25	R	94
AVENIDA DE ORINDA	1	ORINDA WAY	END	314	39	R	94
AVIS COURT	1	DONALD DRIVE	CUL-DE-SAC	166	26	R	89
BARBARA RD.(2645D)	1	SPRING RD.	OAK RD.	1,200	20	R	94
BATES BLVD. (2745AW)	1A	DAVIS RD	MUTH DR (S)	991	32	R	94
BATES BLVD. (2745AW)	2	MUTH DR (S)	WARFORD TERR	1,573	32	R	94
BATES BLVD. (2745AW)	3	WARFORD TERR	MUTH DR (N)	2,179	32	R	82
BATES BLVD. (2745AW)	4	MUTH DR (N)	TAHOS RD	1,077	32	R	94
BATES CT.	1	TAHOS RD	END	394	29	R	95
BEACONSFIELD COURT	1	ARDITH DRIVE	CUL-DE-SAC	743	25	R	94
BEAR CREEK RD.	1	CAMINO PABLO	CITY LIMIT	3,300	26	С	34
BEL AIR CT. (2847K)	1	BEL AIR DR.	CUL-DE-SAC	145	22	R	89
BEL AIR DR. (2847 J)	1	PARKLANE DR.	CUL-DE-SAC	1,380	25	R	89
BERKELEY AVE (2345Y)	1	CLAREMONT AVE	END	752	22	R	90
BOBOLINK RD. (2354B)	1	MANZANITA DR.	LOS ALTOS	1,990	22	R	90
BROADVIEW TR. (2745AD)	1	OVERHILL RD.	CUL-DE-SAC	900	24	R	94
BROOKBANK RD. (2655A)	1	MINER RD.	CUL-DE-SAC	865	19	R	94
BROOKSIDE RD. (2643)	1A	ESTATES DR	ORCHARD RD	465	24	R	92
BROOKSIDE RD. (2643)	2	ORCHARD RD	MORAGA WAY	515	24	R	91
BROOKWOOD RD.(2744A)	1	SPRING RD.	CAMINO PABLO	2,100	26	С	63
BROOKWOOD RD.(2744A)	2	CAMINO PABLO	MORAGA WAY	335	47	A	79
BRYANT WAY	1	CUL-DE-SAC	MORAGA WAY	276	33	R	94
BRYANT WAY	2	MORAGA WAY	DAVIS ROAD	480	30	A	82
CALIFORNIA AVE. (2345J)	1	PROPERTY LINE AT #65/61	Claremont Ave	250	22	R	94
CALVIN COURT	1	CALVIN DRIVE	CUL-DE-SAC	396	30	R	94
CALVIN DRIVE	1C	RHEEM BLVD.	CALVIN COURT	1,092	24	R	92
CALVIN DRIVE	3	CALVIN COURT	END	360	30	R	95
CAMINO DEL DIABLO 2345B	1	EL TOYONAL	CHAPPARAL PLACE	1,790	19	R	86
CAMINO DON MIGUEL(2354D	1	MINER ROAD	CAMINO DON MIGUEL	4,485	20	R	94
CAMINO ENCINAS (2645E)	1	MORAGA WAY (N)	MORAGA WAY (S)	2,700	26	R	94
1 1	0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	, , ,	,	73		
CAMINO PABLO	0	MORAGA WAY	SANTA MARIA WAY	2,212	13	Α	83



City of Orinda Desktop Reference - Alphabetical

Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
CAMINO PABLO	1A	SANTA MARIA WAY	CAMINO SOBRANTE	1,979	65	А	83
CAMINO PABLO	2	CAMINO SOBRANTE	ORINDA WAY	938	65	Α	83
CAMINO PABLO	3	ORINDA WAY	MINER RD	1,058	64	Α	83
CAMINO PABLO	1A	MINER RD	ARDILLA ROAD/NORTH LN	1,600	43	Α	93
CAMINO PABLO	2	ARDILLA ROAD/NORTH LN	SOL BRAE WY	2,040	39	А	93
CAMINO PABLO	3	SOL BRAE WY	MONTE VISTA RD	1,045	39	А	93
CAMINO PABLO	1	MONTE VISTA RD.	BEAR CREEK RD.	1,600	44	Α	62
CAMINO SOBRANTE (2544C)	1	ORINDA WAY	EL RIBERO (SOUTH)	3,050	26	С	61
CAMINO SOBRANTE (2544C)	2A	EL RIBERO (SOUTH)	LA ESPIRAL	2,460	21	R	94
CAMINO SOBRANTE (2544C)	2B	LA ESPIRAL	EL RIBERO (NORTH)	2,190	21	R	87
CAMINO SOBRANTE (2544C)	3A	EL RIBERO (NORTH)	LA NORIA (SOUTH)	1,450	21	R	91
CAMINO SOBRANTE (2544C)	3B	LA NORIA (SOUTH)	LA ESPIRAL	1,946	21	R	92
CAMINO SOBRANTE (2544C)	4A	LA ESPIRAL	MINER ROAD	2,354	21	R	94
CAMINO SOBRANTE (2544C)	5	CAMINO PABLO	ORINDA WAY	430	38	A	75
CANDLE TR. (2555AA)	1	DALEWOOD DR.	CHANGE OF PAVEMENT	205	29	R	94
CANDLE TR. (2555AA)	2	CHANGE OF PAVEMENT	CUL-DE-SAC	295	29	R	85
CANDLESTICK RD.(2645H)	1	KNICKERBOCKER LANE	CUL-DE-SAC	780	25	R	93
CANON DR. (2345D)	1	EL TOYONAL	CUL-DE-SAC CUL-DE-SAC	3,650	15	R	92
1	1C	CORAL DRIVE	CUL-DE-SAC CUL-DE-SAC		25	R	93
CARISBROOK DRIVE CARMEN COURT	1 1	LA CRESTA ROAD		1,160 340	20	R	89
	1		CUL-DE-SAC		27		
CATHERINE COURT (2745H)	1	OVERHILL RD.	CUL-DE-SAC	540		R	94
CEDAR LANE	1	DONALD DRIVE	CUL-DE-SAC	859	27	R	93
CHAPPARAL PLACE	1	EL TOYONAL RD	CUL-DE-SAC	350	20	R	95
CHARLES HILL CR.(2755A)	1	CHARLES HILL RD. (S)	CHARLES HILL RD. (N)	2,800	20	R	89
CHARLES HILL PL(2545AK)	1	END	CHARLES HILL RD.	487	21	R	95
CHARLES HILL RD. (2444)	3	HONEY HILL ROAD	SOULE RD	1,980	21	R	82
CHARLES HILL RD. (2444)	4	SOULE RD	DIABLO VIEW DR	2,035	21	R	90
CHARLES HILL RD (2444A)	1C	EL NIDO RANCH RD.	CHARLES HILL PL	470	38	С	84
CHARLES HILL RD.(2444A)	1D	CHARLES HILL PL	HONEY HILL ROAD	1,380	21	С	59
CHELTON COURT	1	WHITEHALL DRIVE	CUL-DE-SAC	420	25	R	89
CIELO COURT	1	IVY DRIVE	CUL-DE-SAC	214	25	R	89
CLAREMONT AVE (2345G)	1	CAMINO PABLO	HOLLY LANE	1,930	22	R	94
COACHWOOD TR. (2555Z)	1	DALEWOOD DR.	CUL-DE-SAC	670	29	R	94
CORAL DRIVE	1C	MORAGA WAY	IVY DR	1,720	33	UL	90
CORAL DRIVE	4	IVY DRIVE	FIESTA CIRCLE	1,115	26	R	94
CORTE DEL REY	1	IVY DRIVE	CUL-DE-SAC	327	27	R	93
CORTE HOLGANZA	1	IVY DRIVE	CUL-DE-SAC	203	27	R	94
CORTE SOMBRITA	1	IVY DRIVE	CUL-DE-SAC	270	27	R	79
COURTNEY LANE	1	DONALD DRIVE	CUL-DE-SAC	828	20	R	95
CRANE CT. (2555P)	1	VAN TASSEL LANE	CUL-DE-SAC	315	24	R	86
CRESCENT DR	1	CLAREMONT AVE.	PIEDMONT AVE.	896	19	R	89
CREST VIEW DR.	1A	VALLEY VIEW DRIVE	CRESTVIEW COURT	1,901	22	R	85
CREST VIEW DR.	2	CREST VIEW COURT	CULVER COURT	1,394	22	R	93
CREST VIEW DR.	3	CULVER COURT	COP 2,305' W/O CULVER CT	2,305	22	R	91
CREST VIEW DR.	4	COP 2.305' W/O CULVER CT	CUL DE SAC	914	22	R	89
CROSS RIDGE TR.(2545AV)	1	KITE HILL RD.	END	240	25	R	85
CROSSRIDGE CT. (2545AT)	1	KITE HILL RD.	CUL-DE-SAC	160	23	R	85
CROSSRIDGE PL. (2545AU)	1	KITE HILL RD.	CUL-DE-SAC	147	23	R	81
CROWN COURT	1	IVY DRIVE	CUL-DE-SAC CUL-DE-SAC	285	25	R	81
CULVER CT.	1	CREST VIEW DR.	CUL-DE-SAC CUL-DE-SAC	691	20	R	93
DALE COURT	1	ALTAMOUNT DRIVE	CUL-DE-SAC CUL-DE-SAC	190	20	R	93
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DALEWOOD DR.(2555W)	1A	CUL-DE-SAC	LOMBARDY LN	843	33	R	94



City of Orinda Desktop Reference - Alphabetical

Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
DALEWOOD DR.(2555W)	2	LOMBARDY LN	AMBER VALLEY DR	1,635	36	R	94
DALEWOOD DR.(2555W)	3	AMBER VALLEY DR	SUNDOWN TERR.	1,047	36	R	94
DALEWOOD DR.(2555W)	4	SUNDOWN TERR.	CUL-DE-SAC (EAST)	950	33	R	94
DANZA COURT	1	IVY DRIVE	CUL-DE-SAC	208	27	R	84
DAPHNE CT.	1	CHARLES HILL ROAD	END	267	15	R	87
DARNBY COURT	1	ARDITH DRIVE	CUL-DE-SAC	471	25	R	90
DARYL DR. (2745 J)	1	GLORIETTA BLVD.	OVERHILL RD.	1,180	26	R	94
DAVIS RD. (2745W)	1C	BRYANT WAY	SOUTHWOOD DR	1,700	22	R	94
DE SOTO CT.	1	ST. STEVENS DR.	CUL-DE-SAC	140	26	R	94
DEBRA CT. (2745 AQ)	1	SCENIC DR.	CUL-DE-SAC	168	25	R	93
DEL MAR CT. (2445L)	1	VISTA DEL MAR	CUL-DE-SAC	430	25	R	94
DESCANSO DRIVE	1C	IVY DRIVE	END	1,498	30	R	93
DIABLO VIEW DR. (2655G)	10	MINER RD.	CHARLES HILL RD.		21	R	95
,	1	CAMINO SOBRANTE		4,310 719	17		87
DIAS DORADOS	10		LA CINTILLA			R R	_
DOLORES WAY	1C	CUL-DE-SAC	PRIVATE STREET	1,605	22		89
DON GABRIEL WAY	1	VALLEY VIEW DRIVE	LA CRESTA RD	1,406	25	UL	89
DON GABRIEL WAY	2	LA CRESTA RD	EL CAMINO MORAGA	661	25	UL	77
DONALD DRIVE	1C	CUL-DE-SAC	HALL DRIVE	2,587	29	R	93
DONALD DRIVE	4	HALL DRIVE	ALICE LANE	645	25	R	90
DONALD DRIVE	5	ALICE LANE	PRIVATE STREET	1,140	29	R	93
DONNA MARIA WAY	1	DOLORES WAY	RITA WAY	1,075	23	R	92
DONNA MARIA WAY	2	RITA WAY	EL CAMINO MORAGA	585	23	R	89
DONNA MARIA WAY	3	LAVENIDA	END @ 131 DONNA MARIA	325	24	R	93
DOS ENCINAS	1	EL CAMINO MORAGA	CUL-DE-SAC	1,202	27	R	93
DOUGLAS CT. (2847 H)	1	ROBERT RD.	CUL-DE-SAC	208	20	R	94
DOVER COURT	1	DONALD DRIVE	CUL-DE-SAC	436	25	R	92
DUNCAN COURT	1	DONALD DRIVE	CUL-DE-SAC	107	64	R	93
E. ALTARINDA DR(2545AC)	1	ORINDAWOODS DR.	EL NIDO RANCH RD.	1,190	30	С	85
E. ALTARINDA DR(2545AC)	2	ORINDAWOODS DR.	CUL-DE-SAC	1,090	29	R	94
EASTON COURT	1	HALL DRIVE	CUL-DE-SAC	1,010	25	R	85
EASTWOOD DRIVE	1	MORAGA WAY	CARISBROOK DRIVE	565	33	R	87
EASTWOOD DRIVE	2	CARISBROOK DRIVE	CORAL DRIVE	1,031	33	R	94
EDGEWOOD RD.	1	LOST VALLEY DR.	END	601	23	R	93
EL CAMINO MORAGA	1	DONNA MARIA WAY	DON GABRIEL WAY	693	26	R	80
EL CAMINO MORAGA	2	DON GABRIEL WAY	MORAGA WAY	737	26	UL	93
EL CORTE	1	MORAGA WAY	CUL-DE-SAC	135	25	R	93
EL GAVILAN (2545R)	1	LA ESPIRAL	END	2,700	18	R	89
EL NIDO COURT	1	LA CRESTA ROAD	CUL-DE-SAC	194	20	R	90
EL NIDO RANCH RD (2854)	1	ST. STEVENS DR.	CITY LIMITS	1,935	37	A	93
EL SERENO RD. (2545V)	1	LA ESPIRAL	CUL-DE-SAC	900	15	R	94
EL SUENO (2545U)	1	CAMINO SOBRANTE	CUL-DE-SAC	525	15	R	72
EL TOYONAL (2254)	10	3000FT W/O VISTA DEL ORINDA	END AT BARRICADE	1,112	18	R	95
EL TOYONAL (2254)	1A	CAMINO PABLO	460' W/O CAMINO PABLO	460	39	C	28
EL TOYONAL (2254)	1B	460' W/O CAMINO PABLO	LOMA VISTA (EAST)	1,321	24	C	21
EL TOYONAL (2254)	2	LOMA VISTA (EAST)	BONITA LN	1,106	18	R	34
1 1	3	BONITA LN	LA ENCINAL	1,676	18	R	69
EL TOYONAL (2254)							
EL TOYONAL (2254)	4	LA ENCINAL	LOMA VISTA (WEST)	1,220	18	R	35
EL TOYONAL (2254)	5	LOMA VISTA (WEST)	WIDTH CHANGE	1,121	20	C	39
EL TOYONAL (2254)	6	WIDTH CHANGE	CAMINO DEL CIELO	514	18	С	60
EL TOYONAL (2254)	7	CAMINO DEL CIELO	VISTA DEL ORINDA	2,800	18	С	71
EL TOYONAL (2254)	8	VISTA DEL ORINDA	1500FT W/O VISTA DEL ORINDA	1,500	18	R	86
EL TOYONAL (2254)	9	1500FT W/O VISTA DEL ORINDA	3000FT W/O VISTA DEL ORINDA	1,500	18	R	95



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
EL VERANO (2545P)	1	LAS VEGAS	CUL-DE-SAC	620	18	R	95
ELLEN CT. (2545AB)	1	E. ALTARINDA DR.	CUL-DE-SAC	516	25	R	94
ESTABUENO	1	LAVENIDA	CUL-DE-SAC	387	24	R	89
ESTABUENO	2	LAVENIDA	MORAGA WAY	1,029	24	R	89
ESTATES DR. (2745 F)	1	ORCHARD ROAD	BROOKSIDE ROAD	1,600	21	R	83
ESTATES DR. (2745 F)	2	BROOKSIDE ROAD	SCENIC DRIVE	2,803	27	R	94
EVANS PLACE	1	KEITH DRIVE	CUL-DE-SAC	322	24	R	93
EVERGREEN DR. (2745AY)	1	TARABROOK DR.	CUL-DE-SAC	1,650	29	R	94
FAIRWAY DR.	1	HACIENDA CIR.	END	103	18	R	31
FALLEN LEAF TR. (2555AC	1	DALEWOOD DR.	CUL-DE-SAC	845	29	R	91
FIESTA CIRCLE	1C	IVY DRIVE (N)	IVY DRIVE (S)	2,344	33	R	88
FLEETWOOD COURT	1C	HALL DRIVE	CUL-DE-SAC	723	25	R	94
FRANCISCO COURT	1	LA CRESTA ROAD	CUL-DE-SAC	660	20	R	88
GLORIETTA BLVD (2731 B)	1A	MORAGA WAY	SHADOW CREEK LN	1,585	30	A	93
GLORIETTA BLVD (2731 B)	2	SHADOW CREEK LN	RHEEM BLVD	1,475	30	A	93
GLORIETTA BLVD (2731 B)	3	RHEEM BLVD.	MARTHA RD.	1,314	32	A	88
GLORIETTA BLVD (2731 B)	4	MARTHA RD.	OVERHILL RD.	1,151	31	A	87
GLORIETTA BLVD (2731 B)	5	OVERHILL RD	CITY LIMITS	2,275	32	A	74
GLORIETTA COURT	1	GLORIETTA BLVD	CUL-DE-SAC	742	22	R	89
GOODFELLOW DRIVE	1	ALICE LN	CITY LIMITS	709	29	R	89
GREAT OAK CR. (2745 AB)	1	ORCHARD RD.	CUL-DE-SAC	155	22	R	89
GREENWOOD COURT	1	CALVIN DRIVE	CUL-DE-SAC	1,315	20	R	86
GREYSTONE TR. (2545AP)	1	ORINDAWOODS DR.	GREYSTONE TR	360	25	R	89
GREYSTONE TR. (2545AP)	2	EAST END	WEST END	410	29	R	86
HACIENDA CIRCLE	1	ACACIA DR (N)	HACIENDA CIRCLE	1,200	22	R	94
HACIENDA CIRCLE	2	ACACIA DR (N)	END	425	23	R	94
HALL DR.	1	DONALD DR.	END	164	24	R	79
HALL DRIVE	1A	MORAGA WAY	FLEETWOOD CT	1,257	25	C	96
HALL DRIVE	2	FLEETWOOD CT	DONALD DR	1,707	27	C	93
HALL DRIVE	6C	Rhemm Blvd.	200'+/- S/EASTON COURT END	1,400	25	R	82
HAPPY VALLEY RD.(2851)	1	CITY LIMIT (SOUTH)	CITY LIMIT (NORTH)	2,200	23	C	36
HARRAN CR. (2545AE)	1	E. ALTARINDA DR.	CUL-DE-SAC	267	26	R	71
	1		END	400	15	R	95
HARTFORD RD. (2755D)	1	CHARLES HILL CIRCLE					
HAWKRIDGE TR.(2545AL) HAWKRIDGE TR.(2545AL)	1	ORINDAWOODS DR. EAST END	HAWKRIDGE TR WEST END	210	25 29	R R	94 94
1	2	WEST END	EAST END	320 775	29		90
HEATHER LN. HEATHER LN.	1			520	25	R	90
	2	Scenic Drive	Private Street			R	
HIDDEN VALLEY	· ·	ST STEPHENS DRIVE	SR 24 ON RAMP	950	32	С	68
HIDDEN VALLEY	2	PAVEMENT CHANGE	CITY LIMIT	800	32	R	94
HIGHLAND CT, (2745 AE)	1	OVERHILL RD.	CUL-DE-SAC	420	19	R	94
HILLCREST DR. (2745K)	1	MARTHA RD.	OVERHILL ROAD	1,610	23	UL	89
HILLCREST DR. (2745K)	2	OVERHILL ROAD	END	1,820	23	R	94
HONEY HILL RD.	1	CHARLES HILL RD.	MINER RD.	2,048	22	С	63
ICHABOD LN. (2555S)	1	SLEEPY HOLLOW LANE	BERRY BROOK HOLLOW (PVT)	1,155	21	R	93
IDYLL COURT	1	MORAGA VIA	CUL-DE-SAC	230	31	R	94
IRONBARK CR. (2545AQ)	1	ORINDAWOODS DR. (W)	ORINDAWOODS DR. (E)	1,988	28	R	94
IRONBARK CT. (2545AR)	1	IRONBARK CR.	CUL-DE-SAC	466	29	R	94
IRONBARK PL.(2545AS)	1	IRONBARK CR.	CUL-DE-SAC	365	29	R	94
IRVING CT. (2555D)	1	IRVING LANE	CUL-DE-SAC	208	21	R	94
IRVING LANE	1 1	LOMBARDY LANE	VAN RIPPER LANE	1,296	21	R	94
IRWIN WAY	1	ORINDA WAY	END	379	22	R	93
IVY DRIVE	1C	MORAGA WAY	RISA COURT	2,716	35	С	81



Street Name	Section ID	From	То	Length	Width	Functional Class	Current
IVY DRIVE	4	RISA COURT	DANZA COURT	916	35	С	PCI 87
IVY DRIVE	5	DANZA COURT	PUEBLO COURT	1,081	35	C	87
IVY DRIVE	6C	PUEBLO COURT	MORAGA WAY	1,870	33	C	86
IVY DRIVE	8C	MORAGA WAY	END	1,042	32	R	86
KATRINA CT. (2555Q)	1	VAN TASSEL LANE	CUL-DE-SAC	275	21	R	94
KEITH DRIVE	1	WEST END	EVANS PL	460	24	R	95
KEITH DRIVE	2	EVANS PL	DONALD DRIVE	537	24	R	90
KELLIE ANN CT. (2745BA)	1	MEADOW VIEW RD.	CUL-DE-SAC	320	29	R	85
KENMORE CT.	1	LOST VALLEY DR.	CUL-DE-SAC CUL-DE-SAC	492	25	R	93
	1 1	ORINDAWOODS DR.		1,765	25		93
KITE HILL RD. (2545AN)	1	MANZANITA DR.	LA CUESTA CUL-DE-SAC	335	20	R R	95
KITTIWAKE RD. (2445G)	1 1						
KNICKERBOCKER LN(2645G)	1	SPRING RD.	STEIN WAY	1,300	30	R	90
LA CAMPANA (2545K)	1	LA ESPIRAL (E)	LA ESPIRAL (W)	2,600	18	R	94
LA CINTILLA	1	DIAS DORADOS	CUL-DE-SAC	860	17	R	94
LA CRESTA ROAD	1C	DON GABRIEL WAY	EL NIDO COURT	1,701	21	R	96
LA CRESTA ROAD	3C	EL NIDO COURT	WOODLAND RIOAD	1,576	21	R	93
LA CUESTA (2545E)	1	CAMINO SOBRANTE	END	3,080	15	R	88
LA ESPIRAL (2544D)	1A	CAMINO SOBRANTE SOUTH	2,400' COP	2,400	20	R	37
LA ESPIRAL (2544D)	1B	2,400' COP	LAS VEGAS ROAD	2,100	20	R	94
LA ESPIRAL (2544D)	2	LAS VEGAS ROAD	VIA HERMOSA	2,881	20	R	93
LA ESPIRAL (2544D)	3	VIA HERMOSA	CAMINO SOBRANTE NORTH	1,094	20	R	94
LA NORIA (2545F)	1	CAMINO SOBRANTE (S)	CAMINO SOBRANTE (N)	1,530	15	R	94
LA SENDA (2545W)	1	LA NORIA	CUL-DE-SAC	330	16	R	87
LA SOMBRA COURT	1	ARDOR DRIVE	CUL-DE-SAC	505	25	R	94
LA VUELTA	1	LA ESPIRAL (S)	LA ESPIRAL (N)	1,610	16	R	92
LAS PIEDRAS (2244B)	1	VISTA DEL ORINDA	LOMAS CANTADAS	885	22	С	50
LAS VEGAS (2544E)	1	LA ESPIRAL	MIRA FLORES	1,189	19	R	95
LAS VEGAS (2544E)	2	MIRA FLORES	VIA LAS CRUCES	1,000	19	R	95
LAS VEGAS (2544E)	3	VIA LAS CRUCES	ST. STEPHENS DRIVE	320	31	С	93
LAS VEGAS (2544E)	4	ST. STEPHENS DRIVE	LA ESPIRAL ROAD	1,050	19	R	95
LAVENIDA	1	MORAGA WAY	B.C. @ 90 DEGREE	932	24	R	89
LAVINA COURT	1	IVY DRIVE	CUL-DE-SAC	675	24	R	91
LIND COURT	1	CALVIN DRIVE	CUL-DE-SAC	781	26	R	89
LINDA VISTA (2545C)	1	MIRA LOMA	END	1,330	17	R	90
LOMA LINDA COURT	1	ARDOR DRIVE	END	580	24	R	93
LOMA VISTA DR. (2345C)	1A	EL TOYONAL (WEST)	EL DORADO LN	1,360	19	С	80
LOMA VISTA DR. (2345C)	2	EL DORADO LN	EL TOYONAL (EAST)	1,586	18	C	97
LOMAS CANTADAS	1A	CITY LIMITS	TRES MESAS	2,028	22	C	35
LOMAS CANTADAS	2	TRES MESAS	LAS PIEDRAS	1,367	22	C	41
LOMBARDY LN. (2554)	1A	MINER ROAD	TARRY LANE	1,136	25	C	93
LOMBARDY LN. (2554)	2	TARRY LANE	VAN RIPPER (S)	1,367	26	C	67
LOMBARDY LN. (2554)	3	VAN RIPPER (S)	VAN RIPPER (N)	1,369	26	C	59
LOMBARDY LN. (2554)	4	VAN RIPPER (N)	DALEWOOD DR	1,238	25	C	43
LONGVIEW TERRACE	1	ORCHARD ROAD	CUL-DE-SAC	331	20	R	89
LOS ALTOS (2354C)	1	CAMINO DON MIGUEL	BOBOLINK RD.	385	22	R	87
LOS AMIGOS (2345L)	1	CAMINO PABLO	CUL-DE-SAC	484	22	R	91
LOST VALLEY DRIVE	10C	EDGEWOOD RD	CUL-DE-SAC CUL-DE-SAC	932	24	R	91
LOST VALLEY DRIVE LOST VALLEY DRIVE	5	PGE SUBSTATION	700' W OF PGE SUBSTATION	700	24	R	87
	6	700' W OF PGE SUBSTATION	PL BET. 17/19 LOST VALLEY DR	1,020	24	R	85
LOST VALLEY DRIVE	7C	PL BET. 17/19 LOST VALLEY DR	EDGEWOOD RD	1,577	24	R	87
MANZANITA DR. (2354A)	2	CREEK BRIDGE	END (PRIVATE ST.)	3,360	20	R	88
MANZANITA DR. (2445F)	1	CAMINO PABLO	CREEK BRIDGE	580	24	R	92



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
MARSTON RD. (2345N)	1	MONTE VISTA RD.	CUL-DE-SAC	1,025	16	R	94
MARTHA RD.(2745H)	1	GLORIETTA BLVD.	HILLCREST RD.	500	29	UL	89
MARTHA RD.(2745H)	2	HILLCREST RD.	CUL DE SAC	1,645	33	R	93
MEADOW CT. (2745 D)	1	MEADOW LN.	CUL-DE-SAC	365	21	R	94
MEADOW LN. (2745 N)	1	GLORIETTA BLVD.	MEADOW VIEW RD.	1,380	25	R	94
MEADOW PARK CT. (2835Z)	1	GLORIETTA BLVD.	END	1,200	22	R	85
MEADOW VIEW RD. (2745Q)	1	CUL DE SAC EAST OF GLORIETTA BLVD	GLORIETTA BLVD	1,575	22	R	95
MEADOW VIEW RD. (2745Q)	2	GLORIETTA BLVD	CUL DE SAC WEST OF GLORIETTA BLVD	1,800	22	R	87
MEADOWLANDS COURT	1	MORAGA WAY	CUL-DE-SAC	128	24	R	89
MINER RD. (2444C)	1A	CAMINO PABLO	BIEN VENIDA	1,480	27	A	93
MINER RD. (2444C)	1B	BIEN VENIDA	CAMINO DON MIGUEL	1,895	27	A	93
MINER RD. (2444C)	1C	CAMINO DON MIGUEL	LOMBARDY LN	1,950	26	A	93
MINER RD. (2444C)	2A	LOMBARDY LN	TIGERTAIL CT	2,345	23	C	32
MINER RD. (2444C)	2B	TIGERTAIL CT	SYCAMORE RD	2,075	23	C	28
MINER RD. (2444C)	2C	SYCAMORE RD	PAVT CHANGE	920	23	C	93
MINER RD. (2444C)	3A	PAVT CHANGE	GARDINER CT.	1,630	21	C	97
MINER RD. (2444C)	3B	GARDINER CT.	HONEY HILL RD.	700	23	C	72
MINER RD. (2444C)	4A	HONEY HILL RD.	LONGWORTH	1,050	22	R	83
1 1		LONGWORTH	DIABLO VIEW DR				
MINER RD. (2444C)	4B		-	1,430	20 18	R	83 92
MIRA FLORES	1	LAS VEGAS	EL GAVILAN	227		R	
MIRA LOMA (2545G)	1	CAMINO SOBRANTE	LINDA VISTA	1,010	19	R	90
MONTE VISTA RD (2345M)	1 1	CAMINO PABLO	PRIVATE STREET	2,700	20	R	93
MORAGA CT. (2745 AA)	1	MORAGA WAY	CUL-DE-SAC	180	24	R	95
MORAGA VIA	1	VIRGINIA DRIVE	WOODCREST DRIVE (PVT)	601	20	R	87
MORAGA VIA	2	WOODCREST DRIVE	RUSTIC WAY	695	22	R	91
MORAGA VIA	3	RUSTIC WAY	RHEEM BLVD	834	19	R	90
MORAGA VIA	4	GLORIETTA BLVD.	VIRGINIA DRIVE	911	21	R	90
MORAGA WAY	1AAC	BRYANT WAY	CAMINO PABLO	870	63	A	85
MORAGA WAY	1C	CAMINO PABLO	OVERHILL RD	510	50	A	73
MORAGA WAY	2	OVERHILL RD	CAMINO ENCINAS (N)	1,385	40	A	92
MORAGA WAY	3	CAMINO ENCINAS	LLOYD LN	1,445	38	A	82
MORAGA WAY	4	LLOYD LN	BROOKSIDE RD	1,518	38	Α	87
MORAGA WAY	5	BROOKSIDE RD	GLORIETTA BLVD	2,058	38	A	84
MORAGA WAY	1	GLORIETTA BLVD	ORCHARD RD	1,849	44	A	71
MORAGA WAY	2	ORCHARD RD	VALLEY VIEW DR	1,667	42	A	82
MORAGA WAY	3	VALLEY VIEW DR	WOODLAND RD	1,082	44	A	88
MORAGA WAY	4	WOODLAND RD	IVY DR (WEST)	1,092	42	A	74
MORAGA WAY	5	IVY DR (WEST)	SOUTHWAITE CT	1,013	42	Α	76
MORAGA WAY	6	SOUTHWAITE CT	CAMINO MORAGA	1,425	42	А	75
MORAGA WAY	1A	CAMINO MORAGA	CORAL DR	1,824	37	Α	66
MORAGA WAY	2	CORAL DR	IVY DR (EAST)	1,776	38	А	71
MUTH DR. (2745AM)	1A	BATES BLVD (W)	WARFORD TERR	2,367	26	R	94
MUTH DR. (2745AM)	2	WARFORD TERR	WANDA LN	1,852	26	R	94
MUTH DR. (2745AM)	3	WANDA LN	BATES BLVD (E)	1,126	26	R	94
NONIE RD.	1	TARA RD	END	185	15	R	83
NORMANDY LN.(2555M)	1	SLEEPY HOLLOW LN.	RIDGE LN.	1,290	20	R	91
NORTH LANE	1	CAMINO PABLO	ARDILLA ROAD	830	21	R	86
NORTHWOOD CT. (2745X)	1	NORTHWOOD DR.	CUL-DE-SAC	235	22	R	80
NORTHWOOD DR. (2744D)	1	MORAGA WAY	DAVIS RD.	860	24	R	95
OAK DRIVE	1	MORAGA WAY	1000' W/MORAGA WAY	1,000	20	R	83
OAK DRIVE	2	1000' W/MORAGA WAY	CUL-DE-SAC	1,421	18	R	94
OAK FLAT RD. (2755C)	1	CHARLES HILL RD.	CUL-DE-SAC	390	15	R	15
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Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
OAK LANE (2655C)	1	MINER RD.	END	230	17	R	89
OAKRIDGE COURT (2745AU)	1	TAHOS RD.	CUL-DE-SAC	480	22	R	93
OAKWOOD RD.	1	ORCHARD RD.	CUL-DE-SAC	1,600	22	R	85
OLD CAMINO PABLO	1	END - WEST OF CLAREMONT	END - EAST OF CLAREMONT	394	18	R	87
OLD CAMINO PABLO	2	NORTH LANE	ARDILLA ROAD	1,139	20	R	89
ORCHARD CT. (2745 Z)	1	MORAGA WAY	CUL-DE-SAC	165	27	R	88
ORCHARD RD. (2945 D)	1A	MORAGA WAY	BROOKSIDE ROAD	2,609	23	R	87
ORCHARD RD. (2945 D)	2C	BROOKSIDE ROAD	GLORIETTA BLVD	2,071	23	R	94
ORCHARD ROAD	1C	GLORIETTA BLVD	CORTE BOMBERO	1,906	21	R	90
ORCHARD ROAD	3	CORTE BOMBERO	MORAGA WAY	382	21	R	88
ORINDA WAY	1	END	SANTA MARIA WAY	195	55	R	46
ORINDA WAY	2	SANTA MARIA WAY	540 FT N/O SANTA MARIA WAY	540	50	A	42
ORINDA WAY	3	540 FT N/O SANTA MARIA WAY	IRWIN WAY	1,150	45	A	56
ORINDA WAY	4	IRWIN WAY	CAMINO PABLO	1,104	44	A	41
ORINDAWOODS DR.(2545AM)	1A	ALTARINDA RD	KITE HILL RD	1,760	25	C	93
ORINDAWOODS DR.(2545AM)	2	KITE HILL RD	GREYSTONE TERR.	1,470	25	C	93
ORINDAWOODS DR.(2545AM)	3	GREYSTONE TERR.	E. ALTARINDA	1,019	25	C	93
ORIOLE RD. (2445E)	1	BOBOLINK RD.	CUL-DE-SAC	200	21	R	93
OVERHILL COURT	1	OVERHILL RD.	CUL-DE-SAC	240	20	R	93
OVERHILL RD. (2744G)	1A	MORAGA WAY	WESTWOOD CT	1,186	25	C	88
OVERHILL RD. (2744G)	2	WESTWOOD CT	HIGHLAND COURT	1,775	24	C	85
OVERHILL RD. (2744G)	3	HIGHLAND COURT	BROADVIEW TERR	1,775	23	C	88
					23	C	86
OVERHILL RD. (2744G)	4	BROADVIEW TERR	TARA RD	1,066		C	
OVERHILL RD. (2744G)	5	TARA RD	241 OVERHILL RD	1,003	25		78 78
OVERHILL RD. (2744G)	6	241 OVERHILL RD	GLORIETTA BLVD	1,175	25	С	
OWL HILL CT. (2745 AH)	1	OWL HILL RD.	CUL-DE-SAC	180	22	R	94
OWL HILL RD. (2745 AF)	1	OAK WOOD RD.	ESTATES DR.	1,655	22	R	93
PARKLANE DR. (2847 C)	1 1	GLORIETTA BLVD. (W)	GLORIETTA BLVD. (E)	1,800	25	R	89
PARKWAY CT. (2847 B)	1	GLORIETTA BLVD.	END	960	22	R	95
PICO COURT	1	LA CRESTA ROAD	CUL-DE-SAC	285	20	R	94
PIEDMONT AVENUE	1 1	CRESCENT DR.	CLAREMONT AVE.	365	18	R	89
PUEBLO COURT	1 1	IVY DRIVE	CUL-DE-SAC	247	24	R	89
RAE COURT	1 1	FIESTA CIRCLE	CUL-DE-SAC	115	26	R	93
RAE DRIVE	1	FIESTA CIRCLE	CUL-DE-SAC	292	34	R	93
RAMONA DRIVE	1	IVY DRIVE	ARROYO DRIVE	1,063	23	R	86
RANCH RD. (2655D)	1	MINER RD.	END	700	18	R	94
REDCOACH LN. (2555X)	1	DALEWOOD DR.	CUL-DE-SAC	390	29	R	93
RHEEM BLVD	1	CITY LIMITS	ZANDER DRIVE	834	39	Α	56
RHEEM BLVD	2	ZANDER DRIVE	1066' W/ZANDER DRIVE	1,066	29	A	52
RHEEM BLVD	3	1066' W/ZANDER DRIVE	CAROLYN COURT	1,048	31	A	49
RHEEM BLVD	4C	CAROLYN COURT	MORAGA VIA	1,771	31	A	57
RHEEM BLVD	6	MORAGA VIA	GLORIETA BLVD	1,338	26	Α	63
RICHARD COURT	1	VALLEY VIEW DRIVE	CUL-DE-SAC	278	18	R	75
RIDGE GATE ROAD	1	VILLAGE GATE ROAD	CUL-DE-SAC	580	25	R	85
RIDGE LN. (2555N)	1	EAST END	WEST END	740	18	R	91
RISA COURT	1	IVY DRIVE	CUL-DE-SAC	670	27	R	84
RITA WAY	1	DONNA MARIA WAY	DOLORES WAY	585	23	R	93
ROBERT RD. (2847 G)	1	GLORIETTA BLVD.	CITY LIMITS	1,230	21	R	94
RUSTIC WAY	1	MORAGA VIA	CUL-DE-SAC	563	16	R	87
RYDAL COURT	1	EASTWOOD DRIVE	CUL-DE-SAC	143	25	R	93
SAGER COURT	1	DONNA MARIA WAY	CUL-DE-SAC	357	25	R	77
SALLY ANN RD. (2847 A)	1	GLORIETTA BLVD.	PARKWAY CT.	900	22	R	93
1 1		•	•		•	•	

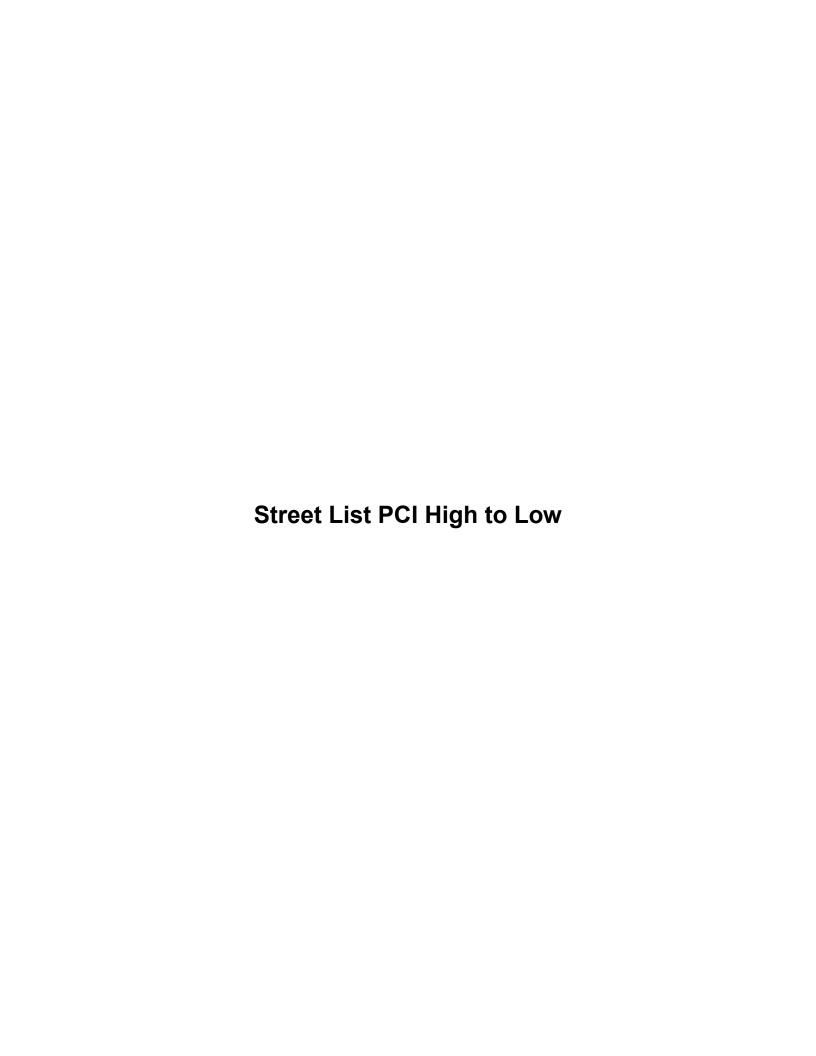


Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
SANTA LUCIA (2445H)	1	CAMINO DON MIGUEL	CUL-DE-SAC	435	20	R	88
SANTA MARIA WY.	2	CAMINO PABLO	ORINDA WAY	190	50	A	38
SANTA MARIA WY. (2544B)	1	ORINDA WAY	ALTARINDA RD	426	50	C	81
SANTA MARIA WY. (2544B)	3	ALTARINDA ROAD	SANTA MARIA WAY (PRIVATE)	327	38	R	89
SCENIC CT. (2745 O)	1	SCENIC DR.	CUL-DE-SAC	240	21	R	89
SCENIC DR. (2745 C)	1A	OVERHILL ROAD	NORTHERLY PROP LINE 68 SCENIC	2,995	26	R	94
SCENIC DR. (2745 C)	2	NORTHERLY PROP LINE 68 SCENIC	ORCHARD ROAD	1,685	26	R	94
SILVEROAK TR(2555AE)	1 1	SUNDOWN TR.	CUL-DE-SAC	657	29	R	94
SILVERWOOD CT.(2745AX)	1	TAHOS RD.	CUL-DE-SAC	300	29	R	94
SILVERWOOD RD.	1 1	TAHOS RD	CITY LIMIT	242	29	R	89
SINGINGWOOD LN.(2555AB)	1	AMBER VALLEY DR.	CUL-DE-SAC	635	29	R	93
SLEEPY HOLLOW LN (2555K)	1A	LOMBARDY LANE	SOUTHERLY EDGE NORMANDY LANE	2,750	22	UL	89
SLEEPY HOLLOW LN (2555K)	2	SOUTHERLY EDGE NORMANDY LANE	TARRY LANE	1,693	22	UL	94
SNOW COURT	1	LOST VALLEY DR	CUL-DE-SAC	600	30	R	92
SNOWBERRY LN.(2555R)	1	TARRY LN	CUL-DE-SAC	670	20	R	87
SOUTHWAITE COURT	1	MORAGA WAY	CUL-DE-SAC	822	33	R	89
SOUTHWOOD CT. (2745T)	1	SOUTHWOOD DR.	CUL-DE-SAC	360	23	R	94
SOUTHWOOD DR.(2745AZ)	1A	NORTHWOOD DR	TARA RD	1,600	20	C	93
SOUTHWOOD DR.(2745AZ)	2	TARA RD	COP 1,150'	1,150	22	R	94
SOUTHWOOD DR.(2745AZ)	3	Bates Blvd.	End	180	35	R	90
SPRING RD.(2645B)	1	BROOKWOOD RD.	WEST END	1,670	23	R	95
ST. JAMES CT. (2555E)	1	VAN RIPPER LANE	CUL-DE-SAC	790	19	R	95
ST. STEPHENS DR.	1	HIDDEN VALLEY RD	EL NIDO RANCH RD	716	40		23
ST. STEPHENS DR.	2	EL NIDO RANCH RD	LA ESPIRAL	2,315	33	A C	91
	4	STANTON CT.	CLAREMONT	560	30	R	89
STANTON AVE. (2345H)	1 1 1	CLAREMONT	CUL-DE-SAC	422	25	R	89
STANTON AVE. (2345H)	1A 2			535	25		87
STANTON CT.	<u>Z</u>	STANTON AVE.	CUL-DE-SAC OAK RD.	1,210	30	R R	82
STEIN WAY	1	MORAGA WAY					
STEIN WAY STRAWBERRY HOLLOW	2	OAK RD. CHARLES HILL ROAD	KNICKERBOCKER LN.	1,530	30 17	R	94
	1 1		END	248		R	90
SUNDOWN TR. (2555AD)	1 2	DALEWOOD DR. (PRIVATE ST.)	SILVER OAK	1,035	33	R	93
SUNDOWN TR. (2555AD)	2	SILVER OAK	HAPPY VALLEY RD	815	38	R	92
SUNNYSIDE CT. (2555U)	1	SUNNYSIDE LANE	CUL-DE-SAC	360	26	R	93
SUNNYSIDE LN. (2555T)	1	VAN TASSEL LANE	END NORTHER WAR TALLOG	1,780	23	R	94
TAHOS RD. (2745AS)	1	WANDA LANE	NORTHERLY PROP LINE 445 TAHOS	1,789	29	R	88
TAHOS RD. (2745AS)	2	NORTHERLY PROP LINE 445 TAHOS	NORTHERLY PROP LINE 565 TAHOS	1,698	29	R	92
TAHOS RD. (2745AS)	3	CHANGE OF PAVEMENT	CUL DE SAC	1,613	29	R	94
TAPPAN CT. (2555J)	1 1	TAPPAN LN.	CUL-DE-SAC	568	24	R	87
TAPPAN LN. (2555G)	1	TARRY LN.	PVT. SECT. TAPPAN LN.	3,450	23	R	86
TARA RD. (2744F)	1A	SOUTHWOOD DR	TARABROOK DR	940	25	C	82
TARA RD. (2744F)	2	TARABROOK DR	NONIE RD	1,409	25	C	79
TARA RD. (2744F)	3	NONIE RD	OVERHILL RD	937	23	С	85
TARABROOK DR. (2745AZ)	1	TARA RD.	CUL-DE-SAC	1,360	26	R	94
TARRY LN. (2555H)	1A	LOMBARDY LN	SLEEPY HOLLOW LN.	500	21	UL	76
TARRY LN. (2555H)	1B	SLEEPY HOLLOW LN.	COP N/O 52 TARRY LN	2,133	21	R	94
TARRY LN. (2555H)	2	COP N/O 52 TARRY LN	VAN TASSEL LN.	1,562	23	R	95
TOTTERDELL COURT	1	ARDITH DRIVE	CUL-DE-SAC	538	25	R	94
UNDERHILL RD.(2645C)	1	SPRING RD.	CAMINO ENCINAS	1,600	18	R	94
VALENCIA ROAD	1C	DON GABRIEL WAY	ALTAMOUNT DRIVE	1,730	21	R	94
VALLEY CT. (2745 BC)	1	VALLEY DR.	CUL-DE-SAC	240	29	R	95
VALLEY DR. (2835 B)	1	SCENIC DR.	HEATHER LN.	2,500	23	R	87
VALLEY VIEW DRIVE	1C	MORAGA WAY	840' W/WOODLAND ROAD	2,150	28	С	81



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
VALLEY VIEW DRIVE	4	840' W/WOODLAND ROAD	PGE SUBSTATION	1,020	28	С	85
VALLEY VIEW RD.	1	MINER RD.	CUL-DE-SAC	1,685	24	R	92
VAN RIPPER LN. (2555B)	1	LOMBARDY LANE	VAN TASSEL LANE	3,840	19	R	93
VAN TASSEL LN. (2555F)	1A	LOMBARDY LANE	VAN RIPPER	1,635	24	R	94
VAN TASSEL LN. (2555F)	2	VAN RIPPER	SUNNYSIDE	1,271	20	R	94
VAN TASSEL LN. (2555F)	3	SUNNYSIDE	TARRY LANE	874	20	R	94
VASHELL WAY	1	Moraga Way	Davis Road	380	18	R	94
VIA CALLADOS (2555V)	1	SUNNYSIDE LANE	CUL-DE-SAC	340	26	R	94
VIA FARALLON (2545D)	1	MIRA LOMA	LA CUESTA	1,220	16	R	93
VIA FLOREADO 2545Q	2	VIA FLOREADO STA. 2890	LAS VEGAS	1,070	17	R	95
VIA FLOREADO 2545Q)	1	ST. STEPHENS DR.	VIA FLOREADO STA. 2890	2,890	25	R	95
VIA HERMOSA (2545J)	1	LA ESPIRAL	LOOP END	2,000	18	R	93
VIA LAS CRUCES	1	HONEY HILL RD.	LAS VEGAS RD.	730	29	С	93
VIANNE CT. (2745Y)	1	HILLCREST DR.	CUL-DE-SAC	300	22	R	94
VILLAGE GATE ROAD	1	ORINDA WOODS DR.	VILLAGE GATE/WATCHWOOD RD.	1,960	25	R	79
VIRGINIA DRIVE	1	GLORIETTA BLVD	MORAGA VIA	766	24	R	93
VISTA DEL MAR(2445K)	1	CAMINO DON MIGUEL	DEL MAR COURT	815	25	R	87
VISTA DEL MAR(2445K)	2	DEL MAR COURT	PRIVATE ROAD	725	25	R	91
VISTA DEL ORINDA	1	EL TOYONAL	LAS PIEDRAS	380	22	С	78
WANDA LANE (2745AR)	1	HIDDEN VALLEY RD.	MUTH DR.	1,020	25	R	89
WANFLETE CT	1	CORAL DRIVE	CUL-DE-SAC	397	25	R	93
WARFORD TR. (2745AN)	1	MUTH DR.	BATES BLVD	999	33	R	93
WARFORD TR. (2745AN)	2	BATES BLVD	CUL-DE-SAC	870	20	R	92
WASHINGTON LN. (2555L)	1	SLEEPY HOLLOW LANE	END	533	21	UL	90
WATCHWOOD CT.	1	WATCHWOOD RD.	END OF WATCHWOOD CT.	270	21	R	69
WESTOVER COURT	1	ARDITH DRIVE	CUL-DE-SAC	385	25	R	93
WHITEHALL DRIVE	1	MORAGA WAY	735' E/O MORAGA WAY	735	33	R	93
WHITEHALL DRIVE	2	735' E/O MORAGA WAY	ARDITH DRIVE	651	33	R	94
WHITEOAK DR.	1	CITY LIMIT	CUL-DE-SAC	1,080	26	R	92
WILDER RD.	1	ORINDA FIELDS LANE	HWY 24 EB ON-RAMP	526	27	С	84
WILDER RD.	2	HWY 24 EB ON-RAMP	BRIDGE DECKING (S)	357	40	С	21
WILDER RD.	3	BRIDGE DECKING (S)	BRIDGE DECKING (N)	300	28	C	89
WILDER RD.	4	BRIDGE DECKING (N)	190' N. AT FENCE CORNER	190	37	С	26
WOODLAND ROAD	1	MORAGA WAY	VALLEY VIEW DRIVE	1,000	21	R	88
ZANDER DRIVE	1	RHEEM BLVD.	ZANDER COURT	979	29	R	94
ZANDER DRIVE	2	ZANDER COURT	ALICE LANE	1,339	29	R	93





Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
LOMA VISTA DR. (2345C)	2	EL DORADO LN	EL TOYONAL (EAST)	1,586	18	С	97
MINER RD. (2444C)	3A	PAVT CHANGE	GARDINER CT.	1,630	21	С	97
HALL DRIVÈ	1A	MORAGA WAY	FLEETWOOD CT	1,257	25	С	96
LA CRESTA ROAD	1C	DON GABRIEL WAY	EL NIDO COURT	1,701	21	R	96
ABBOT COURT	1	MORGA VIA	CUL-DE-SAC	339	19	R	95
BATES CT.	1	TAHOS RD	END	394	29	R	95
CALVIN DRIVE	3	CALVIN COURT	END	360	30	R	95
CHAPPARAL PLACE	1	EL TOYONAL RD	CUL-DE-SAC	350	20	R	95
CHARLES HILL PL(2545AK)	1	END	CHARLES HILL RD.	487	21	R	95
COURTNEY LANE	1	DONALD DRIVE	CUL-DE-SAC	828	20	R	95
DIABLO VIEW DR. (2655G)	1	MINER RD.	CHARLES HILL RD.	4,310	21	R	95
EL TOYONAL (2254)	9	1500FT W/O VISTA DEL ORINDA	3000FT W/O VISTA DEL ORINDA	1,500	18	R	95
EL TOYONAL (2254)	10	3000FT W/O VISTA DEL ORINDA	END AT BARRICADE	1,112	18	R	95
EL VERANO (2545P)	10	LAS VEGAS	CUL-DE-SAC	620	18	R	95
HARTFORD RD. (2755D)	1	CHARLES HILL CIRCLE	END	400	15	R	95
KEITH DRIVE	1	WEST END	EVANS PL	460	24	R	95
	1 1	MANZANITA DR.	CUL-DE-SAC	335	20	R	95
KITTIWAKE RD. (2445G)	1						
LAS VEGAS (2544E)	1	LA ESPIRAL	MIRA FLORES	1,189	19	R	95
LAS VEGAS (2544E)	2	MIRA FLORES	VIA LAS CRUCES	1,000	19	R	95
LAS VEGAS (2544E)	4	ST. STEPHENS DRIVE	LA ESPIRAL ROAD	1,050	19	R	95
MEADOW VIEW RD. (2745Q)	1	CUL DE SAC EAST OF GLORIETTA BLVD	GLORIETTA BLVD	1,575	22	R	95
MORAGA CT. (2745 AA)	1 1	MORAGA WAY	CUL-DE-SAC	180	24	R	95
NORTHWOOD DR. (2744D)	1	MORAGA WAY	DAVIS RD.	860	24	R	95
PARKWAY CT. (2847 B)	1	GLORIETTA BLVD.	END	960	22	R	95
SPRING RD.(2645B)	1	BROOKWOOD RD.	WEST END	1,670	23	R	95
TARRY LN. (2555H)	2	COP N/O 52 TARRY LN	VAN TASSEL LN.	1,562	23	R	95
VALLEY CT. (2745 BC)	1	VALLEY DR.	CUL-DE-SAC	240	29	R	95
VIA FLOREADO 2545Q	2	VIA FLOREADO STA. 2890	LAS VEGAS	1,070	17	R	95
VIA FLOREADO 2545Q)	1	ST. STEPHENS DR.	VIA FLOREADO STA. 2890	2,890	25	R	95
ACACIA DR.	1	MANZANITA DR.	CUL-DE-SAC	1,935	22	R	94
ALICE LANE	3	1000'W/ZANDER DRIVE	DONALD DRIVE	1,100	26	R	94
ARBOLADO CT. (2745AP)	1	MUTH DR.	CUL-DE-SAC	360	25	R	94
ARDITH COURT	1	CORAL DRIVE	CUL-DE-SAC	279	25	R	94
ARDITH DRIVE	4	TOTTERDELL COURT	WESTOVER COURT	1,145	33	R	94
ARDITH DRIVE	5	WESTOVER COURT	IVY DRIVE	846	33	R	94
ARDITH DRIVE	2C	CORAL DRIVE	TOTTERDELL COURT	1,242	33	R	94
ASPINWALL COURT	1	EASTWOOD DRIVE	CUL-DE-SAC	610	25	R	94
AUSTIN CT. (2745AT)	1	MUTH DR.	CUL-DE-SAC	420	25	R	94
AVENIDA DE ORINDA	1	ORINDA WAY	END	314	39	R	94
BARBARA RD.(2645D)	1	SPRING RD.	OAK RD.	1,200	20	R	94
BATES BLVD. (2745AW)	2	MUTH DR (S)	WARFORD TERR	1,573	32	R	94
BATES BLVD. (2745AW)	1	MUTH DR (N)	TAHOS RD	1,077	32	R	94
BATES BLVD. (2745AW)	1A	DAVIS RD	MUTH DR (S)	991	32	R	94
BEACONSFIELD COURT	1	ARDITH DRIVE	CUL-DE-SAC	743	25	R	94
BROADVIEW TR. (2745AD)	1	OVERHILL RD.	CUL-DE-SAC	900	24	R	94
	1			865	19		
BROOKBANK RD. (2655A)	1	MINER RD.	CUL-DE-SAC		33	R R	94
BRYANT WAY	1	CUL-DE-SAC	MORAGA WAY	276			94
CALIFORNIA AVE. (2345J)	1 1	PROPERTY LINE AT #65/61	Claremont Ave	250	22	R	94
CALVIN COURT	1	CALVIN DRIVE	CUL-DE-SAC	396	30	R	94
CAMINO DON MIGUEL (2354D	1	MINER ROAD	CAMINO DON MIGUEL	4,485	20	R	94
CAMINO ENCINAS (2645E)	1	MORAGA WAY (N)	MORAGA WAY (S)	2,700	26	R	94
CAMINO SOBRANTE (2544C)	2A	EL RIBERO (SOUTH)	LA ESPIRAL	2,460	21	R	94



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
CAMINO SOBRANTE (2544C)	4A	LA ESPIRAL	MINER ROAD	2,354	21	R	94
CANDLE TR. (2555AA)	1	DALEWOOD DR.	CHANGE OF PAVEMENT	205	29	R	94
CATHERINE COURT (2745H)	1	OVERHILL RD.	CUL-DE-SAC	540	27	R	94
CLAREMONT AVE (2345G)	1	CAMINO PABLO	HOLLY LANE	1,930	22	R	94
COACHWOOD TR. (2555Z)	1	DALEWOOD DR.	CUL-DE-SAC	670	29	R	94
CORAL DRIVE	4	IVY DRIVE	FIESTA CIRCLE	1,115	26	R	94
CORTE HOLGANZA	1	IVY DRIVE	CUL-DE-SAC	203	27	R	94
DALE COURT	1	ALTAMOUNT DRIVE	CUL-DE-SAC	190	20	R	94
DALEWOOD DR.(2555W)	2	LOMBARDY LN	AMBER VALLEY DR	1,635	36	R	94
DALEWOOD DR.(2555W)	3	AMBER VALLEY DR	SUNDOWN TERR.	1,047	36	R	94
DALEWOOD DR.(2555W)	4	SUNDOWN TERR.	CUL-DE-SAC (EAST)	950	33	R	94
DALEWOOD DR.(2555W)	1A	CUL-DE-SAC	LOMBARDY LN	843	33	R	94
DARYL DR. (2745 J)	1	GLORIETTA BLVD.	OVERHILL RD.	1,180	26	R	94
DAVIS RD. (2745W)	1C	BRYANT WAY	SOUTHWOOD DR	1,700	22	R	94
DE SOTO CT.	1	ST. STEVENS DR.	CUL-DE-SAC	140	26	R	94
DEL MAR CT. (2445L)	1	VISTA DEL MAR	CUL-DE-SAC	430	25	R	94
DOUGLAS CT. (2847 H)	1	ROBERT RD.	CUL-DE-SAC	208	20	R	94
E. ALTARINDA DR(2545AC)	2	ORINDAWOODS DR.	CUL-DE-SAC	1,090	29	R	94
EASTWOOD DRIVE	2	CARISBROOK DRIVE	CORAL DRIVE	1,031	33	R	94
EL SERENO RD. (2545V)	1	LA ESPIRAL	CUL-DE-SAC	900	15	R	94
ELLEN CT. (2545AB)	1 1	E. ALTARINDA DR.	CUL-DE-SAC	516	25	R	94
	1						
ESTATES DR. (2745 F)	2	BROOKSIDE ROAD	SCENIC DRIVE	2,803	27	R	94
EVERGREEN DR. (2745AY)	10	TARABROOK DR.	CUL-DE-SAC	1,650	29	R	94
FLEETWOOD COURT	1C	HALL DRIVE	CUL-DE-SAC	723	25	R	94
HACIENDA CIRCLE	l l	ACACIA DR (N)	HACIENDA CIRCLE	1,200	22	R	94
HACIENDA CIRCLE	2	ACACIA DR (S)	END	425	23	R	94
HAWKRIDGE TR.(2545AL)	1	ORINDAWOODS DR.	HAWKRIDGE TR	210	25	R	94
HAWKRIDGE TR.(2545AL)	2	EAST END	WEST END	320	29	R	94
HIDDEN VALLEY	2	PAVEMENT CHANGE	CITY LIMIT	800	32	R	94
HIGHLAND CT, (2745 AE)	1 1	OVERHILL RD.	CUL-DE-SAC	420	19	R	94
HILLCREST DR. (2745K)	2	OVERHILL ROAD	END	1,820	23	R	94
IDYLL COURT	1	MORAGA VIA	CUL-DE-SAC	230	31	R	94
IRONBARK CR. (2545AQ)	1	ORINDAWOODS DR. (W)	ORINDAWOODS DR. (E)	1,988	28	R	94
IRONBARK CT. (2545AR)	1	IRONBARK CR.	CUL-DE-SAC	466	29	R	94
IRONBARK PL.(2545AS)	1	IRONBARK CR.	CUL-DE-SAC	365	29	R	94
IRVING CT. (2555D)	1	IRVING LANE	CUL-DE-SAC	208	21	R	94
IRVING LANE	1	LOMBARDY LANE	VAN RIPPER LANE	1,296	21	R	94
KATRINA CT. (2555Q)	1	VAN TASSEL LANE	CUL-DE-SAC	275	21	R	94
LA CAMPANA (2545K)	1	LA ESPIRAL (E)	LA ESPIRAL (W)	2,600	18	R	94
LA CINTILLA	1	DIAS DORADOS	CUL-DE-SAC	860	17	R	94
LA ESPIRAL (2544D)	3	VIA HERMOSA	CAMINO SOBRANTE NORTH	1,094	20	R	94
LA ESPIRAL (2544D)	1B	2,400' COP	LAS VEGAS ROAD	2,100	20	R	94
LA NORIA (2545F)	1	CAMINO SOBRANTE (S)	CAMINO SOBRANTE (N)	1,530	15	R	94
LA SOMBRA COÚRT	1	ARDOR DRIVE	CUL-DE-SAC	505	25	R	94
MARSTON RD. (2345N)	1	MONTE VISTA RD.	CUL-DE-SAC	1,025	16	R	94
MEADOW CT. (2745 D)	1	MEADOW LN.	CUL-DE-SAC	365	21	R	94
MEADOW LN. (2745 N)	1	GLORIETTA BLVD.	MEADOW VIEW RD.	1,380	25	R	94
MUTH DR. (2745AM)	2	WARFORD TERR	WANDA LN	1,852	26	R	94
MUTH DR. (2745AM)	3	WANDA LN	BATES BLVD (E)	1,126	26	R	94
MUTH DR. (2745AM)	1A	BATES BLVD (W)	WARFORD TERR	2,367	26	R	94
OAK DRIVE	2	1000' W/MORAGA WAY	CUL-DE-SAC	1,421	18	R	94
ORCHARD RD. (2945 D)	2C	BROOKSIDE ROAD	GLORIETTA BLVD	2,071	23	R	94



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
OWL HILL CT. (2745 AH)	1	OWL HILL RD.	CUL-DE-SAC	180	22	R	94
PICO COURT	1	LA CRESTA ROAD	CUL-DE-SAC	285	20	R	94
RANCH RD. (2655D)	1	MINER RD.	END	700	18	R	94
ROBERT RD. (2847 G)	1	GLORIETTA BLVD.	CITY LIMITS	1,230	21	R	94
SCENIC DR. (2745 C)	2	NORTHERLY PROP LINE 68 SCENIC	ORCHARD ROAD	1,685	26	R	94
SCENIC DR. (2745 C)	1A	OVERHILL ROAD	NORTHERLY PROP LINE 68 SCENIC	2,995	26	R	94
SILVEROAK TR(2555AE)	1	SUNDOWN TR.	CUL-DE-SAC	657	29	R	94
SILVERWOOD CT.(2745AX)	1	TAHOS RD.	CUL-DE-SAC	300	29	R	94
SLEEPY HOLLOW LN (2555K)	2	SOUTHERLY EDGE NORMANDY LANE	TARRY LANE	1,693	22	UL	94
SOUTHWOOD CT. (2745T)	1	SOUTHWOOD DR.	CUL-DE-SAC	360	23	R	94
SOUTHWOOD DR.(2745AZ)	2	TARA RD	COP 1,150'	1,150	22	R	94
ST. JAMES CT. (2555E)	1	VAN RIPPER LANE	CUL-DE-SAC	790	19	R	94
STEIN WAY	2	OAK RD.	KNICKERBOCKER LN.	1,530	30	R	94
SUNNYSIDE LN. (2555T)	1	VAN TASSEL LANE	END	1,780	23	R	94
TAHOS RD. (2745AS)	3	CHANGE OF PAVEMENT	CUL DE SAC	1,613	29	R	94
TARABROOK DR. (2745AZ)	1	TARA RD.	CUL-DE-SAC	1,360	26	R	94
TARRY LN. (2555H)	1B	SLEEPY HOLLOW LN.	COP N/O 52 TARRY LN	2,133	21	R	94
TOTTERDELL COURT	1	ARDITH DRIVE	CUL-DE-SAC	538	25	R	94
UNDERHILL RD.(2645C)	1	SPRING RD.	CAMINO ENCINAS	1,600	18	R	94
VALENCIA ROAD	1C	DON GABRIEL WAY	ALTAMOUNT DRIVE	1,730	21	R	94
VAN TASSEL LN. (2555F)	2	VAN RIPPER	SUNNYSIDE	1,271	20	R	94
VAN TASSEL LN. (2555F)	3	SUNNYSIDE	TARRY LANE	874	20	R	94
VAN TASSEL LN. (2555F)	1A	LOMBARDY LANE	VAN RIPPER	1,635	24	R	94
VASHELL WAY	1	Moraga Way	Davis Road	380	18	R	94
VIA CALLADOS (2555V)	1	SUNNYSIDE LANE	CUL-DE-SAC	340	26	R	94
VIANNE CT. (2745Y)	1 1	HILLCREST DR.	CUL-DE-SAC	300	22	R	94
WHITEHALL DRIVE	2	735' E/O MORAGA WAY	ARDITH DRIVE	651	33	R	94
ZANDER DRIVE	1	RHEEM BLVD.	ZANDER COURT	979	29	R	94
ALBO CT.	1	KENMORE CT.	CUL-DE-SAC	411	25	R	93
ALTAMOUNT DRIVE	1C	LA CRESTA ROAD	MORAGA WAY	1,215	21	R	93
CAMINO PABLO	2	ARDILLA ROAD/NORTH LN	SOL BRAE WY	2,040	39	A	93
CAMINO PABLO	3	SOL BRAE WY	MONTE VISTA RD	1,045	39	A	93
CAMINO PABLO	1A	MINER RD	ARDILLA ROAD/NORTH LN	1,600	43	A	93
CANDLESTICK RD.(2645H)	1	KNICKERBOCKER LANE	CUL-DE-SAC	780	25	R	93
CARISBROOK DRIVE	1C	CORAL DRIVE	CUL-DE-SAC	1,160	25	R	93
CEDAR LANE	10	DONALD DRIVE	CUL-DE-SAC	859	27	R	93
CORTE DEL REY	1	IVY DRIVE	CUL-DE-SAC	327	27	R	93
CREST VIEW DR.	2	CREST VIEW COURT	CULVER COURT		22	R	93
	4		CUL-DE-SAC	1,394	20		
CULVER CT.	1 1	CREST VIEW DR.		691		R	93
DEBRA CT. (2745 AQ)	1 10	SCENIC DR.	CUL-DE-SAC	168	25	R	93
DESCANSO DRIVE	1C	IVY DRIVE	END PRIVATE OTREET	1,498	30	R	93
DONALD DRIVE	5	ALICE LANE	PRIVATE STREET	1,140	29	R	93
DONALD DRIVE	1C	CUL-DE-SAC	HALL DRIVE	2,587	29	R	93
DONNA MARIA WAY	3	LAVENIDA	END @ 131 DONNA MARIA	325	24	R	93
DOS ENCINAS	1	EL CAMINO MORAGA	CUL-DE-SAC	1,202	27	R	93
DUNCAN COURT	1 1	DONALD DRIVE	CUL-DE-SAC	107	64	R	93
EDGEWOOD RD.	1	LOST VALLEY DR.	END	601	23	R	93
EL CAMINO MORAGA	2	DON GABRIEL WAY	MORAGA WAY	737	26	UL	93
EL CORTE	1	MORAGA WAY	CUL-DE-SAC	135	25	R	93
EL NIDO RANCH RD (2854)	1	ST. STEVENS DR.	CITY LIMITS	1,935	37	A	93
EVANS PLACE	1	KEITH DRIVE	CUL-DE-SAC	322	24	R	93
GLORIETTA BLVD (2731 B)	2	SHADOW CREEK LN	RHEEM BLVD	1,475	30	Α	93



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
GLORIETTA BLVD (2731 B)	1A	MORAGA WAY	SHADOW CREEK LN	1,585	30	А	93
HALL DRIVE	2	FLEETWOOD CT	DONALD DR	1,707	27	С	93
ICHABOD LN. (2555S)	1	SLEEPY HOLLOW LANE	BERRY BROOK HOLLOW (PVT)	1,155	21	R	93
IRWIN WAY	1	ORINDA WAY	END	379	22	R	93
KENMORE CT.	1	LOST VALLEY DR.	CUL-DE-SAC	492	25	R	93
LA CRESTA ROAD	3C	EL NIDO COURT	WOODLAND RIOAD	1,576	21	R	93
LA ESPIRAL (2544D)	2	LAS VEGAS ROAD	VIA HERMOSA	2,881	20	R	93
LAS VEGAS (2544E)	3	VIA LAS CRUCES	ST. STEPHENS DRIVE	320	31	C	93
LOMA LINDA COURT	1	ARDOR DRIVE	END	580	24	R	93
LOMBARDY LN. (2554)	1A	MINER ROAD	TARRY LANE	1,136	25	C	93
MARTHA RD.(2745H)	2	HILLCREST RD.	CUL DE SAC	1,645	33	R	93
MINER RD. (2444C)	1A	CAMINO PABLO	BIEN VENIDA	1,480	27	A	93
MINER RD. (2444C)	1B	BIEN VENIDA	CAMINO DON MIGUEL	1,895	27	A	93
MINER RD. (2444C)	1C	CAMINO DON MIGUEL	LOMBARDY LN	1,950	26	A	93
MINER RD. (2444C)	2C	SYCAMORE RD	PAVT CHANGE	920	23	C	93
MONTE VISTA RD (2345M)	1	CAMINO PABLO	PRIVATE STREET	2,700	20	R	93
OAKRIDGE COURT (2745AU)	1	TAHOS RD.	CUL-DE-SAC	480	22	R	93
ORINDAWOODS DR.(2545AM)	2	KITE HILL RD	GREYSTONE TERR.	1,470	25	C	93
	3	GREYSTONE TERR.			25	C	93
ORINDAWOODS DR. (2545AM)			E. ALTARINDA	1,019		C	
ORINDAWOODS DR.(2545AM)	1A	ALTARINDA RD	KITE HILL RD	1,760	25 21		93
ORIOLE RD. (2445E)	1 1	BOBOLINK RD.	CUL-DE-SAC	200		R	93
OVERHILL COURT	1	OVERHILL RD.	CUL-DE-SAC	240	20	R	93
OWL HILL RD. (2745 AF)	1	OAK WOOD RD.	ESTATES DR.	1,655	22	R	93
RAE COURT	1	FIESTA CIRCLE	CUL-DE-SAC	115	26	R	93
RAE DRIVE	1	FIESTA CIRCLE	CUL-DE-SAC	292	34	R	93
REDCOACH LN. (2555X)	1	DALEWOOD DR.	CUL-DE-SAC	390	29	R	93
RITA WAY	1	DONNA MARIA WAY	DOLORES WAY	585	23	R	93
RYDAL COURT	1	EASTWOOD DRIVE	CUL-DE-SAC	143	25	R	93
SALLY ANN RD. (2847 A)	1	GLORIETTA BLVD.	PARKWAY CT.	900	22	R	93
SINGINGWOOD LN.(2555AB)	1	AMBER VALLEY DR.	CUL-DE-SAC	635	29	R	93
SOUTHWOOD DR.(2745AZ)	1A	NORTHWOOD DR	TARA RD	1,600	20	С	93
SUNDOWN TR. (2555AD)	1	DALEWOOD DR. (PRIVATE ST.)	SILVER OAK	1,035	33	R	93
SUNNYSIDE CT. (2555U)	1	SUNNYSIDE LANE	CUL-DE-SAC	360	26	R	93
VAN RIPPER LN. (2555B)	1	LOMBARDY LANE	VAN TASSEL LANE	3,840	19	R	93
VIA FARALLON (2545D)	1	MIRA LOMA	LA CUESTA	1,220	16	R	93
VIA HERMOSA (2545J)	1	LA ESPIRAL	LOOP END	2,000	18	R	93
VIA LAS CRUCES	1	HONEY HILL RD.	LAS VEGAS RD.	730	29	С	93
VIRGINIA DRIVE	1	GLORIETTA BLVD	MORAGA VIA	766	24	R	93
WANFLETE CT	1	CORAL DRIVE	CUL-DE-SAC	397	25	R	93
WARFORD TR. (2745AN)	1	MUTH DR.	BATES BLVD	999	33	R	93
WESTOVER COURT	1	ARDITH DRIVE	CUL-DE-SAC	385	25	R	93
WHITEHALL DRIVE	1	MORAGA WAY	735' E/O MORAGA WAY	735	33	R	93
ZANDER DRIVE	2	ZANDER COURT	ALICE LANE	1,339	29	R	93
AMBER VALLEY DR. (2555Y)	<u> </u>	DALEWOOD DR.	CUL-DE-SAC	1,060	29	R	92
BROOKSIDE RD. (2643)	1A	ESTATES DR	ORCHARD RD	465	24	R	92
CALVIN DRIVE	1C	RHEEM BLVD.	CALVIN COURT	1,092	24	R	92
CAMINO SOBRANTE (2544C)	3B	LA NORIA (SOUTH)	LA ESPIRAL	1,946	21	R	92
CANON DR. (2345D)	1	EL TOYONAL	CUL-DE-SAC	3,650	15	R	92
DONNA MARIA WAY	1	DOLORES WAY	RITA WAY	1,075	23	R	92
DOVER COURT	1	DONALD DRIVE	CUL-DE-SAC	436	25	R	92
KITE HILL RD. (2545AN)	1	ORINDAWOODS DR.	LA CUESTA	1,765	25	R	92
, ,	1			·			
LA VUELTA	I	LA ESPIRAL (S)	LA ESPIRAL (N)	1,610	16	R	92



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
LOST VALLEY DRIVE	10C	EDGEWOOD RD	CUL-DE-SAC	932	24	R	92
MANZANITA DR. (2445F)	1	CAMINO PABLO	CREEK BRIDGE	580	24	R	92
MIRA FLORES	1	LAS VEGAS	EL GAVILAN	227	18	R	92
MORAGA WAY	2	OVERHILL RD	CAMINO ENCINAS (N)	1,385	40	А	92
SNOW COURT	1	LOST VALLEY DR	CUL-DE-SAC	600	30	R	92
SUNDOWN TR. (2555AD)	2	SILVER OAK	HAPPY VALLEY RD	815	38	R	92
TAHOS RD. (2745AS)	2	NORTHERLY PROP LINE 445 TAHOS	NORTHERLY PROP LINE 565 TAHOS	1,698	29	R	92
VALLEY VIEW RD.	1	MINER RD.	CUL-DE-SAC	1,685	24	R	92
WARFORD TR. (2745AN)	2	BATES BLVD	CUL-DE-SAC	870	20	R	92
WHITEOAK DR.	1	CITY LIMIT	CUL-DE-SAC	1,080	26	R	92
BROOKSIDE RD. (2643)	2	ORCHARD RD	MORAGA WAY	515	24	R	91
CAMINO SOBRANTE (2544C)	3A	EL RIBERO (NORTH)	LA NORIA (SOUTH)	1,450	21	R	91
CREST VIEW DR.	3	CULVER COURT	COP 2,305' W/O CÚLVER CT	2,305	22	R	91
FALLEN LEAF TR. (2555AC	1	DALEWOOD DR.	CUL-DE-SAC	845	29	R	91
LAVINA COURT	1	IVY DRIVE	CUL-DE-SAC	675	24	R	91
LOS AMIGOS (2345L)	1	CAMINO PABLO	CUL-DE-SAC	484	22	R	91
MORAGA VIA	2	WOODCREST DRIVE	RUSTIC WAY	695	22	R	91
NORMANDY LN.(2555M)	1	SLEEPY HOLLOW LN.	RIDGE LN.	1,290	20	R	91
RIDGE LN. (2555N)	1	EAST END	WEST END	740	18	R	91
ST. STEPHENS DR.	2	EL NIDO RANCH RD	LA ESPIRAL	2,315	33	C	91
VISTA DEL MAR(2445K)	2	DEL MAR COURT	PRIVATE ROAD	725	25	R	91
BERKELEY AVE (2345Y)	1	CLAREMONT AVE	END	752	22	R	90
BOBOLINK RD. (2354B)	1	MANZANITA DR.	LOS ALTOS	1,990	22	R	90
CHARLES HILL RD. (2444)	4	SOULE RD	DIABLO VIEW DR	2,035	21	R	90
CORAL DRIVE	1C	MORAGA WAY	IVY DR	1,720	33	UL	90
DARNBY COURT	1	ARDITH DRIVE	CUL-DE-SAC	471	25	R	90
DONALD DRIVE	4	HALL DRIVE	ALICE LANE	645	25	R	90
EL NIDO COURT	1	LA CRESTA ROAD	CUL-DE-SAC	194	20	R	90
HEATHER LN.	1	WEST END	EAST END	775	26	R	90
HEATHER LN.	2	Scenic Drive	Private Street	520	25	R	90
KEITH DRIVE	2	EVANS PL	DONALD DRIVE	537	24	R	90
KNICKERBOCKER LN(2645G)	1	SPRING RD.	STEIN WAY	1,300	30	R	90
LINDA VISTA (2545C)	1	MIRA LOMA	END END	1,330	17	R	90
MIRA LOMA (2545G)	1	CAMINO SOBRANTE	LINDA VISTA	1,010	19	R	90
MORAGA VIA	1				19		90
MORAGA VIA	3 4	RUSTIC WAY GLORIETTA BLVD.	RHEEM BLVD VIRGINIA DRIVE	834 911	21	R R	90
			CORTE BOMBERO			R	90
ORCHARD ROAD	1C	GLORIETTA BLVD		1,906	21		
SOUTHWOOD DR.(2745AZ)	3	Bates Blvd.	End	180	35	R	90
STRAWBERRY HOLLOW	1	CHARLES HILL ROAD	END	248	17	R	90
WASHINGTON LN. (2555L)	1 1	SLEEPY HOLLOW LANE	END	533	21	UL	90
ARDILLA RD. (2345E)	1	CAMINO PABLO	NORTH LANE	1,800	21	R	89
ARDOR DRIVE	2	LOMA LINDA COURT	MORAGA WAY	268	26	R	89
AVIS COURT	1	DONALD DRIVE	CUL-DE-SAC	166	26	R	89
BEL AIR CT. (2847K)	1 1	BEL AIR DR.	CUL-DE-SAC	145	22	R	89
BEL AIR DR. (2847 J)	1	PARKLANE DR.	CUL-DE-SAC	1,380	25	R	89
CARMEN COURT	1 1	LA CRESTA ROAD	CUL-DE-SAC	340	20	R	89
CHARLES HILL CR.(2755A)	1	CHARLES HILL RD. (S)	CHARLES HILL RD. (N)	2,800	20	R	89
CHELTON COURT	1	WHITEHALL DRIVE	CUL-DE-SAC	420	25	R	89
CIELO COURT	1	IVY DRIVE	CUL-DE-SAC	214	25	R	89
CRESCENT DR	1	CLAREMONT AVE.	PIEDMONT AVE.	896	19	R	89
CREST VIEW DR.	4	COP 2,305' W/O CULVER CT	CUL DE SAC	914	22	R	89
DOLORES WAY	1C	CUL-DE-SAC	PRIVATE STREET	1,605	22	R	89



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
DON GABRIEL WAY	1	VALLEY VIEW DRIVE	LA CRESTA RD	1,406	25	UL	89
DONNA MARIA WAY	2	RITA WAY	EL CAMINO MORAGA	585	23	R	89
EL GAVILAN (2545R)	1	LA ESPIRAL	END	2,700	18	R	89
ESTABUENO	1	LAVENIDA	CUL-DE-SAC	387	24	R	89
ESTABUENO	2	LAVENIDA	MORAGA WAY	1,029	24	R	89
GLORIETTA COURT	1	GLORIETTA BLVD	CUL-DE-SAC	742	22	R	89
GOODFELLOW DRIVE	1	ALICE LN	CITY LIMITS	709	29	R	89
GREAT OAK CR. (2745 AB)	1	ORCHARD RD.	CUL-DE-SAC	155	22	R	89
GREYSTONE TR. (2545AP)	1	ORINDAWOODS DR.	GREYSTONE TR	360	25	R	89
HILLCREST DR. (2745K)	1	MARTHA RD.	OVERHILL ROAD	1,610	23	UL	89
LAVENIDA	1	MORAGA WAY	B.C. @ 90 DEGREE	932	24	R	89
LIND COURT	1	CALVIN DRIVE	CUL-DE-SAC	781	26	R	89
LONGVIEW TERRACE	1	ORCHARD ROAD	CUL-DE-SAC	331	20	R	89
MARTHA RD.(2745H)	1	GLORIETTA BLVD.	HILLCREST RD.	500	29	UL	89
MEADOWLANDS COURT	1	MORAGA WAY	CUL-DE-SAC	128	24	R	89
OAK LANE (2655C)	1	MINER RD.	END	230	17	R	89
OLD CAMINO PABLO	2	NORTH LANE	ARDILLA ROAD	1,139	20	R	89
PARKLANE DR. (2847 C)	1	GLORIETTA BLVD. (W)	GLORIETTA BLVD. (E)	1,800	25	R	89
PIEDMONT AVENUE	1	CRESCENT DR.	CLAREMONT AVE.	365	18	R	89
PUEBLO COURT	1	IVY DRIVE	CUL-DE-SAC	247	24	R	89
SANTA MARIA WY. (2544B)	3	ALTARINDA ROAD	SANTA MARIA WAY (PRIVATE)	327	38	R	89
SCENIC CT. (2745 O)	1	SCENIC DR.	CUL-DE-SAC	240	21	R	89
SILVERWOOD RD.	1	TAHOS RD	CITY LIMIT	242	29	R	89
SLEEPY HOLLOW LN (2555K)	1A	LOMBARDY LANE	SOUTHERLY EDGE NORMANDY LANE	2,750	29	UL	89
	IA 1				33		89
SOUTHWAITE COURT	1 1	MORAGA WAY	CUL-DE-SAC	822		R	
STANTON AVE. (2345H)	1	STANTON CT.	CLAREMONT	560	30	R	89
STANTON AVE. (2345H)	1A 1	CLAREMONT	CUL-DE-SAC	422	25	R	89
WANDA LANE (2745AR)	· ·	HIDDEN VALLEY RD.	MUTH DR.	1,020	25	R	89
WILDER RD.	3	BRIDGE DECKING (S)	BRIDGE DECKING (N)	300	28	С	89
ALICE LANE	1C	GOODFELLOW DRIVE	ZANDER DRIVER	387	29	R	88
FIESTA CIRCLE	1C	IVY DRIVE (N)	IVY DRIVE (S)	2,344	33	R	88
FRANCISCO COURT	1	LA CRESTA ROAD	CUL-DE-SAC	660	20	R	88
GLORIETTA BLVD (2731 B)	3	RHEEM BLVD.	MARTHA RD.	1,314	32	A	88
LA CUESTA (2545E)	1	CAMINO SOBRANTE	END	3,080	15	R	88
MANZANITA DR. (2354A)	2	CREEK BRIDGE	END (PRIVATE ST.)	3,360	20	R	88
MORAGA WAY	3	VALLEY VIEW DR	WOODLAND RD	1,082	44	A	88
ORCHARD CT. (2745 Z)	1	MORAGA WAY	CUL-DE-SAC	165	27	R	88
ORCHARD ROAD	3	CORTE BOMBERO	MORAGA WAY	382	21	R	88
OVERHILL RD. (2744G)	3	HIGHLAND COURT	BROADVIEW TERR	1,242	23	С	88
OVERHILL RD. (2744G)	1A	MORAGA WAY	WESTWOOD CT	1,186	25	С	88
SANTA LUCIA (2445H)	1	CAMINO DON MIGUEL	CUL-DE-SAC	435	20	R	88
TAHOS RD. (2745AS)	1	WANDA LANE	NORTHERLY PROP LINE 445 TAHOS	1,789	29	R	88
WOODLAND ROAD	1	MORAGA WAY	VALLEY VIEW DRIVE	1,000	21	R	88
ARDOR DRIVE	1	CUL-DE-SAC	LOMA LINDA COURT	971	22	R	87
CAMINO SOBRANTE (2544C)	2B	LA ESPIRAL	EL RIBERO (NORTH)	2,190	21	R	87
DAPHNE CT.	1	CHARLES HILL ROAD	END	267	15	R	87
DIAS DORADOS	1	CAMINO SOBRANTE	LA CINTILLA	719	17	R	87
EASTWOOD DRIVE	1	MORAGA WAY	CARISBROOK DRIVE	565	33	R	87
GLORIETTA BLVD (2731 B)	4	MARTHA RD.	OVERHILL RD.	1,151	31	A	87
IVY DRIVE	4	RISA COURT	DANZA COURT	916	35	C	87
IVY DRIVE	5	DANZA COURT	PUEBLO COURT	1,081	35	C	87
LA SENDA (2545W)	1	LA NORIA	CUL-DE-SAC	330	16	R	87



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
LOS ALTOS (2354C)	1	CAMINO DON MIGUEL	BOBOLINK RD.	385	22	R	87
LOST VALLEY DRIVE	5	PGE SUBSTATION	700' W OF PGE SUBSTATION	700	24	R	87
LOST VALLEY DRIVE	7C	PL BET. 17/19 LOST VALLEY DR	EDGEWOOD RD	1,577	24	R	87
MEADOW VIEW RD. (2745Q)	2	GLORIETTA BLVD	CUL DE SAC WEST OF GLORIETTA BLVD	1,800	22	R	87
MORAGA VIA	1	VIRGINIA DRIVE	WOODCREST DRIVE (PVT)	601	20	R	87
MORAGA WAY	4	LLOYD LN	BROOKSIDE RD	1,518	38	A	87
OLD CAMINO PABLO	1	END - WEST OF CLAREMONT	END - EAST OF CLAREMONT	394	18	R	87
ORCHARD RD. (2945 D)	1A	MORAGA WAY	BROOKSIDE ROAD	2,609	23	R	87
RUSTIC WAY	1	MORAGA VIA	CUL-DE-SAC	563	16	R	87
SNOWBERRY LN.(2555R)	1	TARRY LN	CUL-DE-SAC	670	20	R	87
STANTON CT.	2	STANTON AVE.	CUL-DE-SAC	535	25	R	87
TAPPAN CT. (2555J)	1	TAPPAN LN.	CUL-DE-SAC	568	24	R	87
VALLEY DR. (2835 B)	1	SCENIC DR.	HEATHER LN.	2,500	23	R	87
VISTA DEL MAR(2445K)	1	CAMINO DON MIGUEL	DEL MAR COURT	815	25	R	87
CAMINO DEL DIABLO 2345B	1	EL TOYONAL	CHAPPARAL PLACE	1,790	19	R	86
	1	VAN TASSEL LANE	CUL-DE-SAC	315	24	R	86
CRANE CT. (2555P)	8		1500FT W/O VISTA DEL ORINDA		18	R	86
EL TOYONAL (2254)	8	VISTA DEL ORINDA		1,500			
GREENWOOD COURT	1	CALVIN DRIVE	CUL-DE-SAC	1,315	20	R	86
GREYSTONE TR. (2545AP)	2	EAST END	WEST END	410	29	R	86
IVY DRIVE	6C	PUEBLO COURT	MORAGA WAY	1,870	33	С	86
IVY DRIVE	8C	MORAGA WAY	END	1,042	32	R	86
NORTH LANE	1	CAMINO PABLO	ARDILLA ROAD	830	21	R	86
OVERHILL RD. (2744G)	4	BROADVIEW TERR	TARA RD	1,066	22	C	86
RAMONA DRIVE	1	IVY DRIVE	ARROYO DRIVE	1,063	23	R	86
TAPPAN LN. (2555G)	1	TARRY LN.	PVT. SECT. TAPPAN LN.	3,450	23	R	86
ALTARINDA CR. (2545AD)	1	E. ALTARINDA DR.	CUL-DE-SAC	245	25	R	85
CANDLE TR. (2555AA)	2	CHANGE OF PAVEMENT	CUL-DE-SAC	295	29	R	85
CREST VIEW DR.	1A	VALLEY VIEW DRIVE	CRESTVIEW COURT	1,901	22	R	85
CROSS RIDGE TR.(2545AV)	1	KITE HILL RD.	END	240	25	R	85
CROSSRIDGE CT. (2545AT)	1	KITE HILL RD.	CUL-DE-SAC	160	23	R	85
E. ALTARINDA DR(2545AC)	1	ORINDAWOODS DR.	EL NIDO RANCH RD.	1,190	30	С	85
EASTON COURT	1	HALL DRIVE	CUL-DE-SAC	1,010	25	R	85
KELLIE ANN CT. (2745BA)	1	MEADOW VIEW RD.	CUL-DE-SAC	320	29	R	85
LOST VALLEY DRIVE	6	700' W OF PGE SUBSTATION	PL BET. 17/19 LOST VALLEY DR	1,020	24	R	85
MEADOW PARK CT. (2835Z)	1	GLORIETTA BLVD.	END	1,200	22	R	85
MORAGA WAY	1AAC	BRYANT WAY	CAMINO PABLO	870	63	Α	85
OAKWOOD RD.	1	ORCHARD RD.	CUL-DE-SAC	1,600	22	R	85
OVERHILL RD. (2744G)	2	WESTWOOD CT	HIGHLAND COURT	1,775	24	С	85
RIDGE GATE ROAD	1	VILLAGE GATE ROAD	CUL-DE-SAC	580	25	R	85
TARA RD. (2744F)	3	NONIE RD	OVERHILL RD	937	23	С	85
VALLEY VIÈW DRIVE	4	840' W/WOODLAND ROAD	PGE SUBSTATION	1,020	28	С	85
ARROYO DRIVE	1	IVY DRIVE	CITY LIMITS	432	24	R	84
CHARLES HILL RD.(2444A)	1C	EL NIDO RANCH RD.	CHARLES HILL PL	470	38	C	84
DANZA COURT	1	IVY DRIVE	CUL-DE-SAC	208	27	R	84
MORAGA WAY	5	BROOKSIDE RD	GLORIETTA BLVD	2,058	38	A	84
RISA COURT	1	IVY DRIVE	CUL-DE-SAC	670	27	R	84
WILDER RD.	1	ORINDA FIELDS LANE	HWY 24 EB ON-RAMP	526	27	C	84
ALTARINDA RD.	1	SANTA MARIA WY	COP N/O SANTA MARIA WAY	800	37	C	83
CAMINO PABLO	0	MORAGA WAY	SANTA MARIA WAY	2,212	73	A	83
CAMINO PABLO	2	CAMINO SOBRANTE	ORINDA WAY	938	65		83
CAMINO PABLO	3	ORINDA WAY	MINER RD	1,058	64	A	83
						A	
CAMINO PABLO	1A	SANTA MARIA WAY	CAMINO SOBRANTE	1,979	65	Α	83



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
ESTATES DR. (2745 F)	1	ORCHARD ROAD	BROOKSIDE ROAD	1,600	21	R	83
MINER RD. (2444C)	4A	HONEY HILL RD.	LONGWORTH	1,050	22	R	83
MINER RD. (2444C)	4B	LONGWORTH	DIABLO VIEW DR	1,430	20	R	83
NONIE RD.	1	TARA RD	END	185	15	R	83
OAK DRIVE	1	MORAGA WAY	1000' W/MORAGA WAY	1,000	20	R	83
BATES BLVD. (2745AW)	3	WARFORD TERR	MUTH DR (N)	2,179	32	R	82
BRYANT WAY	2	MORAGA WAY	DAVIS ROAD	480	30	А	82
CHARLES HILL RD. (2444)	3	HONEY HILL ROAD	SOULE RD	1,980	21	R	82
HALL DRIVE	6C	Rhemm Blvd.	200'+/- S/EASTON COURT END	1,400	25	R	82
MORAGA WAY	2	ORCHARD RD	VALLEY VIEW DR	1,667	42	А	82
MORAGA WAY	3	CAMINO ENCINAS	LLOYD LN	1,445	38	А	82
STEIN WAY	1	MORAGA WAY	OAK RD.	1,210	30	R	82
TARA RD. (2744F)	1A	SOUTHWOOD DR	TARABROOK DR	940	25	С	82
CROSSRIDGE PL. (2545AU)	1	KITE HILL RD.	CUL-DE-SAC	147	23	R	81
CROWN COURT	1	IVY DRIVE	CUL-DE-SAC	285	25	R	81
IVY DRIVE	1C	MORAGA WAY	RISA COURT	2,716	35	С	81
SANTA MARIA WY. (2544B)	1	ORINDA WAY	ALTARINDA RD	426	50	С	81
VALLEY VIEW DRIVE	1C	MORAGA WAY	840' W/WOODLAND ROAD	2,150	28	С	81
EL CAMINO MORAGA	1	DONNA MARIA WAY	DON GABRIEL WAY	693	26	R	80
LOMA VISTA DR. (2345C)	1A	EL TOYONAL (WEST)	EL DORADO LN	1,360	19	С	80
NORTHWOOD CT. (2745X)	1	NORTHWOOD DR.	CUL-DE-SAC	235	22	R	80
BROOKWOOD RD.(2744A)	2	CAMINO PABLO	MORAGA WAY	335	47	А	79
CORTE SOMBRITA	1	IVY DRIVE	CUL-DE-SAC	270	27	R	79
HALL DR.	1	DONALD DR.	END	164	24	R	79
TARA RD. (2744F)	2	TARABROOK DR	NONIE RD	1,409	25	C	79
VILLAGE GATE ROAD	1	ORINDA WOODS DR.	VILLAGE GATE/WATCHWOOD RD.	1,960	25	R	79
OVERHILL RD. (2744G)	5	TARA RD	241 OVERHILL RD	1,003	25	C	78
OVERHILL RD. (2744G)	6	241 OVERHILL RD	GLORIETTA BLVD	1,175	25	C	78
VISTA DEL ORINDA	1	EL TOYONAL	LAS PIEDRAS	380	22	C	78
DON GABRIEL WAY	2	LA CRESTA RD	EL CAMINO MORAGA	661	25	UL	77
SAGER COURT	1	DONNA MARIA WAY	CUL-DE-SAC	357	25	R	77
MORAGA WAY	5	IVY DR (WEST)	SOUTHWAITE CT	1,013	42	A	76
TARRY LN. (2555H)	1A	LOMBARDY LN	SLEEPY HOLLOW LN.	500	21	UL	76
CAMINO SOBRANTE (2544C)	5	CAMINO PABLO	ORINDA WAY	430	38	A	75
MORAGA WAY	6	SOUTHWAITE CT	CAMINO MORAGA	1,425	42	A	75
RICHARD COURT	1	VALLEY VIEW DRIVE	CUL-DE-SAC	278	18	R	75
GLORIETTA BLVD (2731 B)	5	OVERHILL RD	CITY LIMITS	2,275	32	A	74
MORAGA WAY	4	WOODLAND RD	IVY DR (WEST)	1,092	42	A	74
MORAGA WAY	1C	CAMINO PABLO	OVERHILL RD	510	50	A	73
EL SUENO (2545U)	1	CAMINO SOBRANTE	CUL-DE-SAC	525	15	R	72
MINER RD. (2444C)	3B	GARDINER CT.	HONEY HILL RD.	700	23	C	72
EL TOYONAL (2254)	7	CAMINO DEL CIELO	VISTA DEL ORINDA	2,800	18	C	71
HARRAN CR. (2545AE)	1	E. ALTARINDA DR.	CUL-DE-SAC	267	26	R	71
MORAGA WAY	1	GLORIETTA BLVD	ORCHARD RD	1,849	44	A	71
MORAGA WAY	2	CORAL DR	IVY DR (EAST)	1,776	38	A	71
EL TOYONAL (2254)	3	BONITA LN	LA ENCINAL	1,676	18	R	69
WATCHWOOD CT.	1	WATCHWOOD RD.	END OF WATCHWOOD CT.	270	21	R	69
HIDDEN VALLEY	1	ST STEPHENS DRIVE	SR 24 ON RAMP	950	32	C	68
LOMBARDY LN. (2554)	2	TARRY LANE	VAN RIPPER (S)	1,367	26	C	67
MORAGA WAY	1A	CAMINO MORAGA	CORAL DR	1,824	37	A	66
BROOKWOOD RD.(2744A)	1	SPRING RD.	CAMINO PABLO	2,100	26	C	63
HONEY HILL RD.	1	CHARLES HILL RD.	MINER RD.	2,048	22	C	63
HONET HILLIND.	1	JOHANLES HILL IND.		2,0 4 0		U	US



Street Name	Section ID	From	То	Length	Width	Functional Class	Current PCI
RHEEM BLVD	6	MORAGA VIA	GLORIETA BLVD	1,338	26	Α	63
CAMINO PABLO	1	MONTE VISTA RD.	BEAR CREEK RD.	1,600	44	Α	62
CAMINO SOBRANTE (2544C)	1	ORINDA WAY	EL RIBERO (SOUTH)	3,050	26	С	61
EL TOYONAL (2254)	6	WIDTH CHANGE	CAMINO DEL CIELO	514	18	С	60
CHARLES HILL RD.(2444A)	1D	CHARLES HILL PL	HONEY HILL ROAD	1,380	21	С	59
LOMBARDY LN. (2554)	3	VAN RIPPER (S)	VAN RIPPER (N)	1,369	26	С	59
RHEEM BLVD	4C	CAROLYN COURT	MORAGA VIA	1,771	31	A	57
ORINDA WAY	3	540 FT N/O SANTA MARIA WAY	IRWIN WAY	1,150	45	А	56
RHEEM BLVD	1	CITY LIMITS	ZANDER DRIVE	834	39	А	56
RHEEM BLVD	2	ZANDER DRIVE	1066' W/ZANDER DRIVE	1,066	29	А	52
LAS PIEDRAS (2244B)	1	VISTA DEL ORINDA	LOMAS CANTADAS	885	22	С	50
ALICE LANE	2	ZANDER DRIVE	1000' W ZANDER DRIVE	1,000	29	R	49
RHEEM BLVD	3	1066' W/ZANDER DRIVE	CAROLYN COURT	1,048	31	A	49
ORINDA WAY	1	END	SANTA MARIA WAY	195	55	R	46
LOMBARDY LN. (2554)	4	VAN RIPPER (N)	DALEWOOD DR	1,238	25	С	43
ORINDA WAY	2	SANTA MARIA WAY	540 FT N/O SANTA MARIA WAY	540	50	Α	42
LOMAS CANTADAS	2	TRES MESAS	LAS PIEDRAS	1,367	22	С	41
ORINDA WAY	4	IRWIN WAY	CAMINO PABLO	1,104	44	Α	41
ALTARINDA RD.	2	COP N/O SANTA MARIA WAY	ORINDA WOODS DR	452	37	С	39
EL TOYONAL (2254)	5	LOMA VISTA (WEST)	WIDTH CHANGE	1,121	20	С	39
SANTA MARIA WY.	2	CAMINO PABLO	ORINDA WAY	190	50	Α	38
LA ESPIRAL (2544D)	1A	CAMINO SOBRANTE SOUTH	2,400' COP	2,400	20	R	37
HAPPY VALLEY RD.(2851)	1	CITY LIMIT (SOUTH)	CITY LIMIT (NORTH)	2,200	23	С	36
EL TOYONAL (2254)	4	LA ENCINAL	LOMA VISTA (WEST)	1,220	18	R	35
LOMAS CANTADAS	1A	CITY LIMITS	TRES MESAS	2,028	22	С	35
BEAR CREEK RD.	1	CAMINO PABLO	CITY LIMIT	3,300	26	С	34
EL TOYONAL (2254)	2	LOMA VISTA (EAST)	BONITA LN	1,106	18	R	34
MINER RD. (2444C)	2A	LOMBARDY LN	TIGERTAIL CT	2,345	23	С	32
FAIRWAY DR.	1	HACIENDA CIR.	END	103	18	R	31
EL TOYONAL (2254)	1A	CAMINO PABLO	460' W/O CAMINO PABLO	460	39	С	28
MINER RD. (2444C)	2B	TIGERTAIL CT	SYCAMORE RD	2,075	23	С	28
WILDER RD.	4	BRIDGE DECKING (N)	190' N. AT FENCE CORNER	190	37	С	26
ST. STEPHENS DR.	1	HIDDEN VALLEY RD	EL NIDO RANCH RD	716	40	Α	23
EL TOYONAL (2254)	1B	460' W/O CAMINO PABLO	LOMA VISTA (EAST)	1,321	24	С	21
WILDER RD.	2	HWY 24 EB ON-RAMP	BRIDGE DECKING (S)	357	40	С	21
OAK FLAT RD. (2755C)	1	CHARLES HILL RD.	CUL-DE-SAC	390	15	R	15



City of Orinda 2020 PMP Update (PTAP Round 21)

Data Quality Management Report

For the 2020 Pavement Management Program update for the City of Orinda, Pavement Engineering Inc. (PEI) rated about 92 centerline miles of Arterial, Collector, and Residential roadways. Those 92 centerline miles are broken down into 452 different management segments of varying lengths and widths. PEI completed their initial rating assessment in June 2020.

Once the initial ratings were completed, the field crew then preformed a 2nd rating on a randomly selected 10% of segments. This 2nd rating is intended as a consistency check, which ensures that our raters are performing evaluations consistent with our allowable range of +/- 5 PCI points. Of the 46 segments that were part of the 10% QC, 5 were found to be outside of the allowable range. Those 5 segments were re-rated by The Project Manager. Following the 10% Field Crew QC, an additional randomly selected 5% of segments were reviewed by The Project Manager.

Furthermore, an analysis was performed on the initial ratings to see how each segment's PCI has changed since the last rating was performed. Any segment found to have deteriorated more than 3 PCI points per year, or a total of 6 or 12 PCI points (since the City of Orinda's PCIs were last updated in 2016 for Residentials and 2018 for Arterials and Collectors) or have increased more than 1 PCI point without a documented M&R treatment, was then reviewed by The Project Manager.

Of the 452 segments reviewed, a total of 31.0%, or 140 segments, were outside of the allowable range. These segments were then reviewed by The Project Manager. We found that of the 31.0% (140 segments), 87.1% (122 segments) were deemed to be accurate in the amount they had deteriorated. 7.9% (11 segments) were found to be rated harsher than deemed necessary, and 5.0% (7 segments) were rated too leniently. Those segments' PCIs were re-rated and now reflect the proper deterioration amount and coinciding PCI.



Section V GIS Toolbox



GIS TOOLBOX

This section is intended to introduce the new feature in StreetSaver[®]. The GIS portion of the program is specifically designed for those agencies that do not have "in-house" GIS departments.

GIS TOOLBOX

The GIS toolbox is a new feature available within StreetSaver[®]. This is one of the most powerful tools available in StreetSaver[®]. The ability to link the existing road segments to a base map and produce maps displaying the Current Condition, Age of Pavement, Needs Treatments, Scenario Treatments, Last Treatment and Last Year Inspected are now available with just a few key strokes. No longer does an agency need to access "outside resources" or "wait" for graphical representations of their road system.

Maps that reflect the current condition of an agency's road system are a valuable asset when meeting with City Councils and the general public. A map of future maintenance treatments can be used to inform the residents when future work is scheduled on their road.

A basic "shapefile" is already loaded into the StreetSaver® system. From this shapefile it is just a matter of "linking" or "assigning" the beginning location and ending location of each management section found in the database.

There are a few cautions that the City of Orinda should be aware of in regard to the GIS mapping. GIS is a "node" to "node" application. It uses intersections or nodes as its way to pinpoint a specific location. This means that each of the City's management sections needs to begin and end at a point that can be defined or found by the GIS link. Using house numbers or change in pavements will need to be defined as "feet" from the nearest "node". This will produce a more precise map. Next the Street Names will need to match and that will mean a more precise accounting of "street tags". The difference between calling a tag a "drive" or an "avenue" can hinder the linking process.

TERMINOLOGY

Once the GIS Toolbox is opened there will be two master items that can be accessed.

First there is the "GIS Reporting". This screen is used to "mine" StreetSaver® data for display in GIS format. Queries can be performed using the standard StreetSaver® filter screen, using pre-defined criteria defined by the system, or by selecting an area of the map. If Section data is returned those shapes can be exported to GIS shapefiles or printed out in a map format.

GIS Toolbox Page | 1



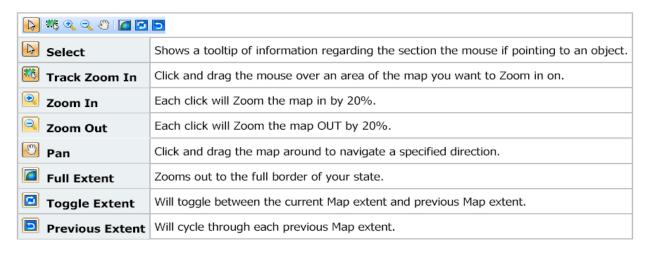
Then there is the "Section Link" screen which will match segments in the basemap based on street name, type (street tag) and/or direction. Each Section can be linked to a segment or segments in the basemap.

Explanations of the toolbars and the buttons available on the GIS Reporting screen are outlined below:

Navigation Toolbar

Select Sections from Map (Area Filter)	Click and Drag the mouse over an area on the map to search and retrieve sections within that area. Note: This works in conjunction with an applied Filter
Clear Area Filter	Clears the current selected area filter
Filter	Loads the Filter screen and retrieves sections based on the filter defined
	Note: This works in conjunction with an applied Area Filter
Clear Filter	Restores the shape to it's state before any Add or Edits had occurred
Export Shapefiles	For each shape type currently showing on the map, a shapefile is created and stuffed in a ZIP file for download. This file will contain 3 files for every shape type. Those 3 files make up the Shapefile that can be used in other GIS applications
Print Map	Launches a Print Preview screen of the current Map and will resize based on the type of printer you choose

Reporting Toolbar



BASE MAP IMPLEMENTATION

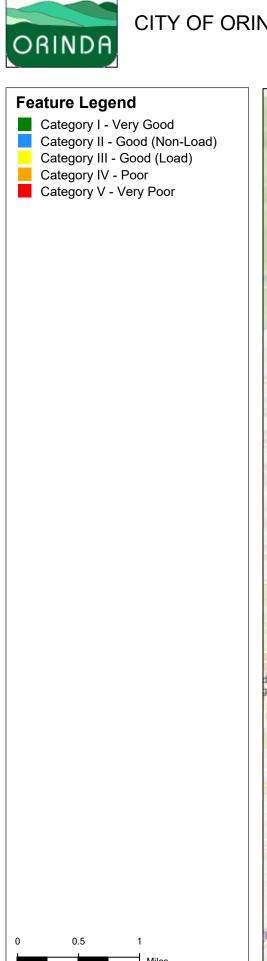
Pavement Engineering Inc. reviewed the base map included with StreetSaver[®] and the automatic linking process. The review found most of the segments were linked correctly. Any of the segments that were not previously linked were fixed so they were linked.

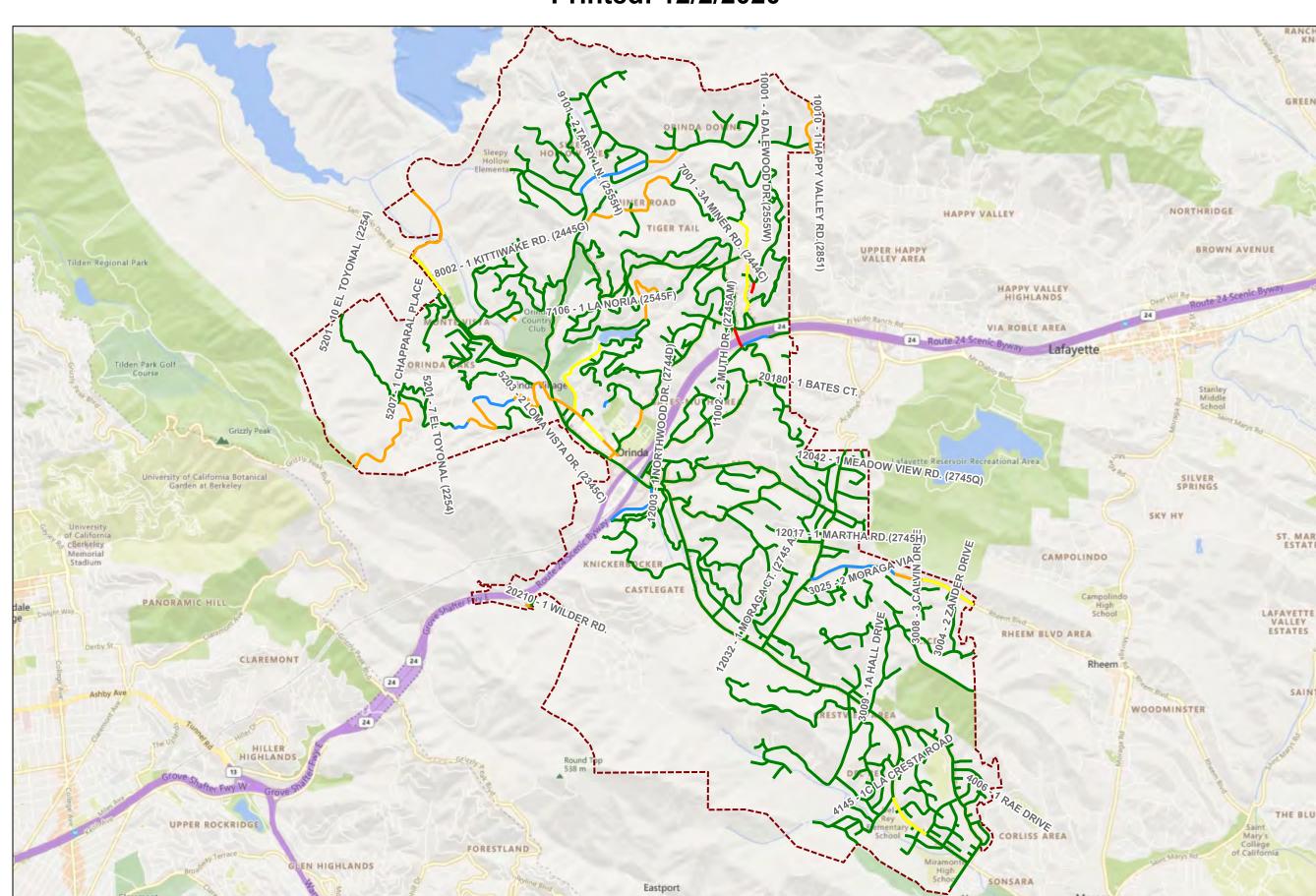
GIS Toolbox Page | 2



Current PCI Condition

Printed: 12/2/2020





Appendix A Summarized System Information



CITY OF ORINDA

Network Summary Statistics

Printed: 10/15/2020

	Total Sections	Total Center Miles	Total Lane Miles	Total Area (sq. ft.)	PCI		
Arterial	44	10.99	25.71	2,340,347	78		
Collector	60	14.96	29.93	2,024,287	70		
Residential/Local	338	63.59	127.25	7,859,152	91		
Urban Local (7)	10	2.29	4.59	298,566	90		
Total	452	91.83	187.48	12,522,352			
Overall Network PCI as of 9/26/2020:							



CITY OF ORINDA

Network Replacement Cost

Printed: 11/16/2020

Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area/ Square Feet	Cost To Replace (in thousands)
Arterial	AC	2.0	\$10.00	200,254	\$2,003
	AC/AC	23.7	\$10.00	2,140,093	\$21,401
Collector	AC	12.6	\$8.89	829,819	\$7,376
	AC/AC	17.3	\$8.89	1,186,068	\$10,543
	PCC	0.1	\$21.12	8,400	\$177
Residential/Local	AC	75.2	\$7.78	4,596,335	\$35,749
	AC/AC	52.1	\$7.78	3,262,817	\$25,377
Urban Local (7)	AC	1.3	\$7.78	81,337	\$633
	AC/AC	3.3	\$7.78	217,229	\$1,690
	Grand Total:	187.5		12,522,352	\$104,948



Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$2.21	3		
			Surface Treatment	LIGHT MAINTENANCE	\$7.76		5	
			Restoration Treatment	LIGHT REHAB	\$51.97			2
		II - Good, Non-Load Related		HEAVY MAINTENANCE	\$24.42		5	
		III - Good, Load Related		LIGHT REHAB	\$51.97			
		IV - Poor		HEAVY REHAB	\$75.00			
		V - Very Poor		FULL DEPTH RECLAMATION	\$90.00			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$2.21	3		
			Surface Treatment	LIGHT MAINTENANCE	\$7.76		5	
			Restoration Treatment	LIGHT REHAB	\$51.97			99
		II - Good, Non-Load Related		HEAVY MAINTENANCE	\$6.16		5	
		III - Good, Load Related		LIGHT REHAB	\$51.97			
		IV - Poor		HEAVY REHAB	\$75.00			
		V - Very Poor		FULL DEPTH RECLAMATION	\$90.00			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	3		
			Surface Treatment	DO NOTHING	\$0.00		8	
			Restoration Treatment	DO NOTHING	\$0.00			2
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal



Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	112 Detween	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	99		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			
	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	99		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

CITY OF ORINDA

Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$1.83	3		
			Surface Treatment	LIGHT MAINTENANCE	\$7.76		5	
			Restoration Treatment	LIGHT REHAB	\$49.66			99
		II - Good, Non-Load Related		HEAVY MAINTENANCE	\$21.29		5	
		III - Good, Load Related		LIGHT REHAB	\$49.66			
		IV - Poor		HEAVY REHAB	\$65.00			
		V - Very Poor		FULL DEPTH RECLAMATION	\$80.00			
	AC/AC	I - Very Good II - Good, Non-Load Related	Crack Treatment	SEAL CRACKS	\$1.83	3		
			Surface Treatment	LIGHT MAINTENANCE	\$7.76		5	
			Restoration Treatment	LIGHT REHAB	\$49.66			99
				HEAVY MAINTENANCE	\$21.29		5	
		III - Good, Load Related		LIGHT REHAB	\$49.66			
		IV - Poor		HEAVY REHAB	\$65.00			
		V - Very Poor		FULL DEPTH RECLAMATION	\$80.00			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	4		
			Surface Treatment	DO NOTHING	\$0.00		7	
			Restoration Treatment	DO NOTHING	\$0.00			3
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal



Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	99		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		SLAB REPLACEMENTS	\$20.00			
		V - Very Poor		RECONST	\$190.11			
	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	99		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

CITY OF ORINDA

Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$1.61	3		
			Surface Treatment	LIGHT MAINTENANCE	\$7.76		5	
			Restoration Treatment	LIGHT REHAB	\$33.00			99
		II - Good, Non-Load Related		HEAVY MAINTENANCE	\$17.59		5	
		III - Good, Load Related		LIGHT REHAB	\$33.00			
		IV - Poor		HEAVY REHAB	\$60.00			
		V - Very Poor		FULL DEPTH RECLAMATION	\$70.00			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$1.61	3		
			Surface Treatment	LIGHT MAINTENANCE	\$7.76		5	
			Restoration Treatment	LIGHT REHAB	\$33.00			99
		II - Good, Non-Load Related		HEAVY MAINTENANCE	\$17.59		5	
		III - Good, Load Related IV - Poor		LIGHT REHAB	\$33.00			
				HEAVY REHAB	\$60.00			
		V - Very Poor		FULL DEPTH RECLAMATION	\$70.00			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	4		
			Surface Treatment	DO NOTHING	\$0.00		8	
			Restoration Treatment	DO NOTHING	\$0.00			8
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

ORINDA

CITY OF ORINDA

Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	112 Detween	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	8		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			
	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	99		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used



Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Other	AC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	3		
			Surface Treatment	DO NOTHING	\$0.00		5	
			Restoration Treatment	DO NOTHING	\$0.00			99
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			
	AC/AC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	3		
			Surface Treatment	DO NOTHING	\$0.00		5	
			Restoration Treatment	DO NOTHING	\$0.00			99
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			
	AC/PCC	C I - Very Good	Crack Treatment	DO NOTHING	\$0.00	8		
			Surface Treatment	DO NOTHING	\$0.00			
			Restoration Treatment	DO NOTHING	\$0.00			1
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

ORINDA

Decision Tree

Printed: 12/02/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Other	PCC	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	9		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			
	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	9		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$0.00			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor	DO NOTHING	DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

Functional Class and Surface combination not used

Appendix B Budget Scenarios



Needs Analysis & Zero Budget (\$19.2 Million over 5 Years)

• Projected PCI/Cost Summary



CITY OF ORINDA

Needs - Projected PCI/Cost Summary

Inflation Rate = 3.00 % Printed: 12/01/2020

Year	PCI Treated	PCI Untreated	PM Cost	Rehab Cost	Cost
2021	91	85	\$1,946,747	\$8,572,239	\$10,518,986
2022	90	83	\$929,025	\$1,125,798	\$2,054,823
2023	89	81	\$1,499,995	\$49,151	\$1,549,146
2024	90	79	\$3,614,119	\$12,110	\$3,626,229
2025	89	77	\$1,380,138	\$56,082	\$1,436,220
		% PM	PM Total Cost	Rehab Total Cost	Total Cost
		48 84%	\$9 370 024	\$9.815.380	\$19 185 404



Maintain PCI

(\$13.6 Million over 5 Years)

- Pavement Network Condition Lane Miles
- Network Condition Summary
- Cost Summary



Target-Driven Scenarios
Pavement Network Condition Lane Miles

Interest: .00% Inflation: 3.00% Printed: 12/02/2020

Scenario: MAINTAIN 85

Objective: Minimum Network Average PCI Target: Overall 85

Annual bu	idget needs to me	et target objecti	Preventative			
Year	Arterial	Collector	Res/Loc	Other	Maintenance	Total
2021	\$515,433	\$158,803	\$52,921	\$0	\$727,157	\$727,157
2022	\$1,094,247	\$513,635	\$1,718,635	\$0	\$2,142,243	\$3,326,517
2023	\$995,022	\$310,161	\$1,698,022	\$0	\$1,544,242	\$3,003,205
2024	\$2,842	\$57,486	\$3,237,971	\$0	\$3,298,299	\$3,298,299
2025	\$1.595.720	\$1.046.771	\$625.696	\$0	\$1.701.848	\$3.268.187

Average Yearly Total: \$2,724,673

Grand Total: \$13,623,365

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	78	14.8%	1.2%	21
Collector	70	9.8%	3.8%	16
Residential	90	63.8%	1.1%	36

Pavement Network after schedulable treatments applied in lane miles.

2021		Percentage of the	Percentage of the Network in Poor or	Remaining
Functional Class	PCI	Network in Very Good Condition	Very Poor Condition	Life
Arterial	80	14.8%	1.2%	22
Collector	71	9.8%	3.8%	17
Residential	90	63.8%	1.1%	36

2022 Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	81	14.8%	1.4%	22
Collector	70	9.3%	3.8%	17
Residential	90	64.1%	0.8%	37

Pavement Network after schedulable treatments applied in lane miles.

Pomaining	Percentage of the	Percentage of the		2023
Remaining Life	Network in Poor or Very Poor Condition	Network in Very Good Condition	PCI	Functional Class
23	0.9%	15.2%	81	Arterial
17	3.6%	9.6%	69	Collector
36	0.7%	64.4%	90	Residential
Remaining	Percentage of the Network in Poor or	Percentage of the		2024
Life	Very Poor Condition	Network in Very Good Condition	PCI	Functional Class
22	2.0%	15.2%	79	Arterial
16	4.3%	9.6%	67	Collector
37	0.7%	64.4%	91	Residential
Domeining	Percentage of the	Percentage of the		2025
Remaining Life	Network in Poor or Very Poor Condition	Network in Very Good Condition	PCI	Functional Class
24	1.3%	16.5%	82	Arterial
17	4.1%	10.4%	68	Collector
37	0.7%	64.4%	91	Residential



CITY OF ORINDA

Target-Driven Scenarios Network Condition Summary

Inflation: 3% Printed: 12/01/2020

Interest: 0%

Scenario: MAINTAIN 85

Objective: Minimum Network Average PCI Target: Overall 85

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2021	85	85
2022	83	85
2023	81	85
2024	79	85
2025	77	85

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2021, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	14.8%	9.8%	63.8%	0.0%	88.4%
II / III	2.7%	2.5%	0.3%	0.0%	5.6%
IV	0.9%	3.4%	1.0%	0.0%	5.4%
V	0.2%	0.4%	0.0%	0.0%	0.6%
Total	18.7%	16.2%	65.1%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	14.8%	9.8%	63.8%	0.0%	88.4%
II / III	2.7%	2.5%	0.3%	0.0%	5.6%
IV	0.9%	3.4%	1.0%	0.0%	5.4%
V	0.2%	0.4%	0.0%	0.0%	0.6%
Total	18 7%	16.2%	65.1%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
	16.5%	10.4%	64.4%	0.0%	91.2%
II / III	0.8%	1.7%	0.0%	0.0%	2.6%
IV	1.0%	0.8%	0.4%	0.0%	2.2%
V	0.3%	3.3%	0.3%	0.0%	4.0%
Total	18.7%	16.2%	65.1%	0.0%	100.0%



Target-Driven Scenarios - Cost Summary

Interest: 0%

Inflation: 3%

Printed: 12/01/2020

Scenario: MAINTAIN 85

Objective: Minimum Network Average PCI Target: Overall 85

Year	Re	Rehabilitation		Maintenance	Total Cost	Deferred
2021	II	\$0	Non-	\$727,157	\$727,157	\$9,791,790
	III	\$0	Project	# 0		
	IV	\$0	Project	\$0		
	V	\$0				
	Total	\$0				
	Project	\$0				
2022	II	\$0	Non-	\$2,142,243	\$3,326,517	\$9,020,142
	III	\$911,495	Project			
	IV	\$272,779	Project	\$0		
	V	\$0				
	Total	\$1,184,274				
	Project	\$0				
2023	II	\$81,070	Non-	\$1,544,242	\$3,003,205	\$8,164,843
	III	\$538,320	Project	•		
	IV	\$709,708	Project	\$0		
	V	\$129,865				
	Total	\$1,458,963				
	Project	\$0				
2024	II	\$0	Non-	\$3,298,299	\$3,298,299	\$9,785,212
	III	\$0	Project	40		
	IV	\$0	Project	\$0		
	V	\$0				
	Total	\$0				
	Project	\$0				
2025	II	\$56,082	Non-	\$1,701,848	\$3,268,187	\$8,627,453
	III	\$0	Project	Ф.		
	IV	\$1,510,257	Project	\$0		
	V	\$0				
	Total	\$1,566,339				
	Project	\$0				

Functional Class		Rehabilitation	Prev. Maint.	Summary
Arterial		\$2,724,288	\$1,478,976	
Collector		\$1,029,534	\$1,057,322	
Residential/Local		\$455,754	\$6,877,491	
-	Total:	\$4,209,576	\$9,413,789	Grand Total: \$13,623,365



Current Funding

(\$9.9 Million over 5 Years)

- Network Condition Summary
- Cost Summary
- Sections Selected for Treatment
- GIS Maps of Treatments by year



Scenarios - Network Condition Summary

Interest: 0%

Inflation: 3%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2021	\$2,100,000	10%	2023	\$2,100,000	10%	2025	\$1,800,000	10%
2022	\$2,100,000	10%	2024	\$1,800,000	10%			

Projecte	d Network Averag	e PCI by year			
Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles	
2021	85	86	9.14	18.34	
2022	83	86	15.49	34.16	
2023	81	86	12.62	25.79	
2024	79	85	5.35	10.69	
2025	77	84	6.68	13.52	

Percent Network Area by Functional Class and Condition Category

Condition in base year 2021, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	14.8%	9.8%	63.8%	0.0%	88.4%
II / III	2.7%	2.5%	0.3%	0.0%	5.6%
IV	0.9%	3.4%	1.0%	0.0%	5.4%
V	0.2%	0.4%	0.0%	0.0%	0.6%
Total	18.7%	16.2%	65.1%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	15.8%	12.2%	63.8%	0.0%	91.8%
II / III	2.3%	1.5%	0.3%	0.0%	4.1%
IV	0.6%	2.2%	1.0%	0.0%	3.9%
V	0.0%	0.3%	0.0%	0.0%	0.3%
Total	18.7%	16.2%	65.1%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	15.7%	14.5%	64.8%	0.0%	95.0%
II / III	2.1%	1.5%	0.0%	0.0%	3.6%
IV	0.9%	0.1%	0.4%	0.0%	1.4%
Total	18.7%	16.2%	65.1%	0.0%	100.0%



Functional Class

CITY OF ORINDA

Scenarios - Cost Summary

Interest: .00% Inflation: 3.00% Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year	PM	Budget	Re	ehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2021	10%	\$2,100,000	Ш	\$0	Non-	\$34,638	\$0	\$4,827,601	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$380,103				
			٧	\$0						
			otal	\$0						
		Proj	ect	\$1,683,465						
2022	10%	\$2,100,000	II	\$0	Non-	\$6,687	\$0	\$6,599,859	Funded	\$0
			Ш	\$26,218	Project				Unmet	\$0
			IV	\$0	Project	\$659,954				
			V	\$0						
		To	otal	\$26,218						
		Proj	ect	\$1,405,634						
2023	10%	\$2,100,000	II	\$207,555	Non-	\$455,253	\$0	\$6,345,765	Funded	\$0
			Ш	\$623,277	Project				Unmet	\$0
			IV	\$280,963	Project	\$0				
			V	\$531,725						
		To	otal	\$1,643,520						
		Proj	ect	\$0						
2024	10%	\$1,800,000	II	\$12,110	Non-	\$501,918	\$0	\$8,586,525	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$544,256	Project	\$0				
			V	\$741,647						
		To	otal	\$1,298,013						
		Proj	ect	\$0						
2025	10%	\$1,800,000	II	\$56,082	Non-	\$897,786	\$0	\$8,531,521	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V	\$843,977						
		To	otal =	\$900,059						
		Proj	ect	\$0						
	Suma	oorv.								
	Sumn	ıaıy					Funded	U	Inmet	

Rehabilitation

Prev. Maint.

Stop Gap

Year PM Budget Rehabilitation Preventative Maintenance Surplus PM Deferred Stop Gap

Grand Total: \$6,956,909 \$2,936,339 \$0 \$0 \$0



CITY OF ORINDA

Scenarios - Sections Selected for Treatment

Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2021	\$2,100,000	10%	2023	\$2,100,000	10%	2025	\$1,800,000	10%
2022	\$2,100,000	10%	2024	\$1,800,000	10%			

Year: 2021												Treatm	ent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
**WILDER RD.	HWY 24 EB ON- RAMP	BRIDGE DECKING (S)	20210	2	357	40	14,280	С	AC	ArtCol	19	20	100	\$114,256	10,421	FULL DEPTH RECLAMATION
**WILDER RD.	BRIDGE DECKING (N)	190' N. AT FENCE CORNER	20210	4	190	37	7,030	С	AC	ArtCol	25	25	100	\$56,248	10,418	FULL DEPTH RECLAMATION
											Treatm	nent Total		\$170,504		
**LAS PIEDRAS (2244B)	VISTA DEL ORINDA	LOMAS CANTADAS	5205	1	885	22	19,470	С	AC/AC	ArtCol	49	49	100	\$129,281	12,739	HEAVY REHAB
**LOMBARDY LN. (2554)	VAN RIPPER (N)	DALEWOOD DR	9201	4	1,238	25	30,950	С	AC/AC	ArtCol	42	42	100	\$205,508	13,396	HEAVY REHAB
**LOMAS CANTADAS	CITY LIMITS	TRES MESAS	A17001	1A	2,028	22	44,616	С	AC	ArtCol	34	34	100	\$296,251	13,858	HEAVY REHAB
**LOMAS CANTADAS	TRES MESAS	LAS PIEDRAS	A17001	2	1,367	22	30,074	С	AC	ArtCol	40	40	100	\$199,692	13,655	HEAVY REHAB
											Treatm	nent Total		\$830,732		
**HIDDEN VALLEY	ST STEPHENS DRIVE	SR 24 ON RAMP	20030	1	950	32	30,400	С	AC/AC	ArtCol	67	67	77	\$32,022	19,608	HEAVY MAINTENANCE
**RHEEM BLVD	CITY LIMITS	ZANDER DRIVE	3023	1	834	39	32,526	Α	AC/AC	ArtCol	55	55	67	\$34,261	23,690	HEAVY MAINTENANCE
**RHEEM BLVD	CAROLYN COURT	MORAGA VIA	3023	4C	1,771	31	54,901	Α	AC/AC	ArtCol	56	56	68	\$57,830	24,380	HEAVY MAINTENANCE
**SANTA MARIA WY.	CAMINO PABLO	ORINDA WAY	6015	2	190	50	9,500	Α	AC	ArtCol	37	37	56	\$10,007	17,962	HEAVY MAINTENANCE
**MORAGA WAY	CAMINO MORAGA	CORAL DR	A12003	1A	1,824	37	67,488	Α	AC/AC	ArtCol	65	65	75	\$71,088	26,468	HEAVY MAINTENANCE
											Treatm	nent Total		\$205,208		
**RHEEM BLVD	ZANDER DRIVE	1066' W/ZANDER DRIVE	3023	2	1,066	29	30,914	Α	AC/AC	ArtCol	51	51	100	\$149,040	23,977	LIGHT REHAB
**RHEEM BLVD	1066' W/ZANDER DRIVE	CAROLYN COURT	3023	3	1,048	31	32,488	Α	AC/AC	ArtCol	48	48	100	\$156,629	24,625	LIGHT REHAB
**LOMBARDY LN. (2554)	TARRY LANE	VAN RIPPER (S)	9201	2	1,367	26	35,542	С	AC/AC	ArtCol	66	66	100	\$171,352	13,278	LIGHT REHAB
											Treatm	nent Total		\$477,021		
**BROOKWOOD RD. (2744A)	CAMINO PABLO	MORAGA WAY	14002	2	335	47	15,745	Α	AC/AC	ArtCol	78	78	86	\$9,465	45,297	LIGHT MAINTENANCE
**BRYANT WAY	MORAGA WAY	DAVIS ROAD	20120	2	480	30	14,400	Α	AC/AC	ArtCol	82	82	89	\$8,656	82,645	LIGHT MAINTENANCE
**WILDER RD.	ORINDA FIELDS LANE	HWY 24 EB ON- RAMP	20210	1	526	27	14,202	С	AC	ArtCol	84	84	90	\$8,537	38,991	LIGHT MAINTENANCE
**ALTARINDA RD.	COP N/O SANTA MARIA WAY	ORINDA WOODS DR	20300	2	452	37	16,724	С	AC	ArtCol	38	38	57	\$10,053	17,045	LIGHT MAINTENANCE
DONNA MARIA WAY	RITA WAY	EL CAMINO MORAGA	4144	2	585	23	13,455	R	AC/AC	Local	89	89	94	\$11,602	21,877	LIGHT MAINTENANCE

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2021												Treatm	nent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
LOMA VISTA DR. (2345C)	EL TOYONAL (WEST)	EL DORADO LN	5203	1A	1,360	19	25,840	С	AC/AC	ArtCol	80	80	87	\$22,280	37,930	LIGHT MAINTENANCE
**VISTA DEL ORINDA	EL TOYONAL	LAS PIEDRAS	5206	1	380	22	8,360	С	AC	ArtCol	77	77	85	\$5,026	28,640	LIGHT MAINTENANCE
**SANTA MARIA WY. (2544B)	ORINDA WAY	ALTARINDA RD	6015	1	426	50	21,300	С	AC/AC	ArtCol	81	81	88	\$12,804	39,895	LIGHT MAINTENANCE
**ST. STEPHENS DR.	HIDDEN VALLEY RD	EL NIDO RANCH RD	6101	1	716	40	28,640	Α	AC	ArtCol	22	22	51	\$17,216	19,410	LIGHT MAINTENANCE
**ST. STEPHENS DR.	EL NIDO RANCH RD	LAS VEGAS ROAD	6101	2	2,315	33	76,395	С	AC/AC	ArtCol	90	91	95	\$45,922	18,019	LIGHT MAINTENANCE
**CHARLES HILL RD. (2444A)	EL NIDO RANCH RD.	CHARLES HILL PL	6201	1C	470	38	17,860	С	AC/AC	ArtCol	83	83	90	\$10,736	56,821	LIGHT MAINTENANCE
**CHARLES HILL RD. (2444A)	CHARLES HILL PL	HONEY HILL ROAD	6201	1D	1,380	21	28,980	С	AC/AC		58	58	69	\$17,421	29,112	LIGHT MAINTENANCE
**CHARLES HILL RD. (2444)	SOULE RD	DIABLO VIEW DR	6201	4	2,035	21	42,735	R	AC	Local	90	90	95	\$25,689	32,449	LIGHT MAINTENANCE
**CAMINO SOBRANTE (2544C)	ORINDA WAY	EL RIBERO (SOUTH)	7101	1	3,050	26	79,300	С	AC	ArtCol	60	60	71	\$47,669	23,057	LIGHT MAINTENANCE
**CAMINO SOBRANTE (2544C)	CAMINO PABLO	ORINDA WAY	7101	5	430	38	16,340	Α	AC/AC	ArtCol	75	75	83	\$9,823	58,090	LIGHT MAINTENANCE
**LOMBARDY LN. (2554)	VAN RIPPER (S)	VAN RIPPER (N)	9201	3	1,369	26	35,594	С	AC/AC	ArtCol	58	58	69	\$21,396	34,005	LIGHT MAINTENANCE
**MORAGA WAY	WOODLAND RD	IVY DR (WEST)	A12002	4	1,092	42	45,864	Α	AC/AC	ArtCol	74	74	82	\$27,570	62,320	LIGHT MAINTENANCE
**MORAGA WAY	IVY DR (WEST)	SOUTHWAITE CT	A12002	5	1,013	42	42,546	Α	AC/AC	ArtCol	76	76	84	\$25,575	67,610	LIGHT MAINTENANCE
**MORAGA WAY	SOUTHWAITE CT	CAMINO MORAGA	A12002	6	1,425	42	59,850	Α	AC/AC	ArtCol	75	75	83	\$35,977	64,798	LIGHT MAINTENANCE
**MORAGA WAY	CORAL DR	IVY DR (EAST)	A12003	2	1,776	38	67,488	Α	AC/AC	ArtCol	71	71	80	\$40,568	55,396	LIGHT MAINTENANCE
											Treatm	ent Tota	l	\$413,985		
TAHOS RD. (2745AS)	WANDA LANE	NORTHERLY PROP LINE 445 TAHOS	11007	1	1,789	29	51,881	R	AC	Local	88	88	88	\$142	1,610,849	SEAL CRACKS
ORCHARD RD. (2945 D)	MORAGA WAY	BROOKSIDE ROAD	12029	1A	2,609	23	60,007	R	AC	Local	86	87	88	\$181	1,371,391	SEAL CRACKS
ORCHARD ROAD	GLORIETTA BLVD	CORTE BOMBERO	3028	1C	1,906	21	40,026	R	AC	Local	89	89	90	\$91	1,945,199	SEAL CRACKS
DON GABRIEL WAY	VALLEY VIEW DRIVE	LA CRESTA RD	4135	1	1,406	25	35,150	UL	AC	Local	89	89	89	\$87	1,728,149	SEAL CRACKS
EL TOYONAL (2254)	VISTA DEL ORINDA	1500FT W/O VISTA DEL ORINDA	5201	8	1,500	18	27,000	R	AC	Local	85	85	86	\$93	1,071,936	SEAL CRACKS
ARDILLA RD. (2345E)	CAMINO PABLO	NORTH LANE	5301	1	1,800	21	37,800	R	AC	Local	88	88	89	\$96	1,593,524	SEAL CRACKS
TARRY LN. (2555H)	LOMBARDY LN	SLEEPY HOLLOW LN.	9101	1A	500	21	10,500	UL	AC	Local	76	76	78	\$66	1,002,315	SEAL CRACKS
											Treatm	ent Tota	1	\$756		

** - Treatment from Project Selection



PGE

SUBSTATION

RISA COURT

DANZA COURT

MORAGA WAY

SANTA MARIA

WAY

CAMINO

SOBRANTE

ORINDA WAY

PUEBLO COURT

W/WOODLAND

MORAGA WAY

DANZA COURT

MORAGA WAY

SANTA MARIA

PUEBLO COURT

LA CRESTA ROAD CUL-DE-SAC

RISA COURT

ROAD

3138

4031

4031

4031

4031

4139

A11002

A11002

A11002

4

1C

4

5

6C

1

0

1A

2

1,020

2,716

1,081

1,870

2,212

1,979

938

194

916

28

35

35

35

33

20

73

65

65

28,560

89,612

32,060

37,835

61,710

3,880

161,476

128,635

60,970

C AC

С

C AC

C AC

C AC

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AC/AC

AC/AC

AC/AC

AC/AC ArtCol

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78

84

84

83

88

80

80

80

90

86

91

91

90

94

88

88

88

\$19,579

\$61,432

\$21,978

\$25,937

\$42,304

\$3,446

\$110,696

\$88,183

\$41,797



Scenarios - Sections Selected for Treatment

Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year 2021 Area Total

1,374,161

Year 2021 Total

\$2,098,206

Year: 2022																
TCai. ZUZZ												Treatm	nent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
**HAPPY VALLEY RD. (2851)	CITY LIMIT (SOUTH)	CITY LIMIT (NORTH)	10010	1	2,200	23	50,600	С	AC/AC	ArtCol	35	31	100	\$373,455	12,494	HEAVY REHAB
**BEAR CREEK RD.	CAMINO PABLO	CITY LIMIT	A19001	1	3,300	26	85,800	С	AC	ArtCol	33	28	100	\$633,249	12,530	HEAVY REHAB
											Treatm	ent Tota	I \$	51,006,704		
**OVERHILL RD. (2744G)	TARA RD	241 OVERHILL RD	12010	5	1,003	25	25,075	С	AC	ArtCol	77	75	100	\$125,550	12,533	LIGHT REHAB
**BROOKWOOD RD. (2744A)	SPRING RD.	CAMINO PABLO	14002	1	2,100	26	54,600	С	AC/AC	ArtCol	62	60	100	\$273,380	14,910	LIGHT REHAB
HARRAN CR. (2545AE)	E. ALTARINDA DR.	. CUL-DE-SAC	6011	1	267	26	6,942	R	AC	Local	71	69	100	\$26,218	15,884	LIGHT REHAB
											Treatm	ent Tota	l	\$425,148		
**TARA RD. (2744F)	SOUTHWOOD DR	TARABROOK DR	12006	1A	940	25	23,500	С	AC/AC	ArtCol	82	81	88	\$16,110	48,426	LIGHT MAINTENANCE
**TARA RD. (2744F)	TARABROOK DR	NONIE RD	12006	2	1,409	25	35,225	С	AC/AC	ArtCol	79	77	85	\$24,148	42,550	LIGHT MAINTENANCE
**TARA RD. (2744F)	NONIE RD	OVERHILL RD	12006	3	937	23	21,551	С	AC/AC	ArtCol	85	84	90	\$14,774	43,052	LIGHT MAINTENANCE
**OVERHILL RD. (2744G)	MORAGA WAY	WESTWOOD CT	12010	1A	1,186	25	29,650	С	AC	ArtCol	87	85	92	\$20,326	32,461	LIGHT MAINTENANCE
**OVERHILL RD. (2744G)	WESTWOOD CT	HIGHLAND COURT	12010	2	1,775	24	42,600	С	AC	ArtCol	84	82	89	\$29,204	28,619	LIGHT MAINTENANCE
**OVERHILL RD. (2744G)	HIGHLAND COURT	Γ BROADVIEW TERR	12010	3	1,242	23	28,566	С	AC	ArtCol	87	85	92	\$19,583	32,461	LIGHT MAINTENANCE
**OVERHILL RD. (2744G)	BROADVIEW TERR	TARA RD	12010	4	1,066	22	23,452	С	AC	ArtCol	85	83	90	\$16,077	29,844	LIGHT MAINTENANCE
**OVERHILL RD. (2744G)	241 OVERHILL RD	GLORIETTA BLVI	D12010	6	1,175	25	29,375	С	AC	ArtCol	77	75	83	\$20,138	26,006	LIGHT MAINTENANCE
**VALLEY VIEW DRIVE	MORAGA WAY	840' W/WOODLAND ROAD	3138	1C	2,150	28	60,200	С	AC/AC	ArtCol	81	79	87	\$41,269	46,291	LIGHT MAINTENANCE

WAY

CAMINO

SOBRANTE

MTC StreetSaver

26,136 LIGHT MAINTENANCE

30,073 LIGHT MAINTENANCE

28,437 LIGHT MAINTENANCE

28,437 LIGHT MAINTENANCE

27,124 LIGHT MAINTENANCE

19,348 LIGHT MAINTENANCE

45.708 LIGHT MAINTENANCE

45,708 LIGHT MAINTENANCE

45,708 LIGHT MAINTENANCE

**VALLEY VIEW DRIVE 840'

**IVY DRIVE

**IVY DRIVE

**IVY DRIVE

**IVY DRIVE

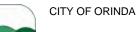
EL NIDO COURT

**CAMINO PABLO

**CAMINO PABLO

**CAMINO PABLO

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

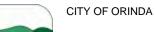
Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2022

Year: 2022												Treatm	ent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
**CAMINO PABLO	ORINDA WAY	MINER RD	A11002	3	1,058	64	67,712	Α	AC/AC	ArtCol	82	80	88	\$46,419	45,708	LIGHT MAINTENANC
										•	Treatm	nent Tota		\$663,400		
CANDLE TR. (2555AA)	CHANGE OF PAVEMENT	CUL-DE-SAC	10004	2	295	29	8,555	R	AC	Local	85	83	84	\$36	746,385	SEAL CRACKS
BATES BLVD. (2745AW)	WARFORD TERR	MUTH DR (N)	11001	3	2,179	32	69,728	R	AC	Local	82	80	82	\$353	739,826	SEAL CRACKS
WANDA LANE (2745AR)	HIDDEN VALLEY RD.	MUTH DR.	11006	1	1,020	25	25,500	R	AC/AC	Local	89	87	88	\$26	3,566,392	SEAL CRACKS
NORTHWOOD CT. (2745X)	NORTHWOOD DR.	CUL-DE-SAC	12004	1	235	22	5,170	R	AC/AC	Local	79	78	80	\$30	1,505,124	SEAL CRACKS
HILLCREST DR. (2745K)	MARTHA RD.	OVERHILL ROAD	12015	1	1,610	23	37,030	UL	AC/AC	Local	88	87	88	\$26	12,256,059	SEAL CRACKS
MARTHA RD.(2745H)	GLORIETTA BLVD.	HILLCREST RD.	12017	1	500	29	14,500	UL	AC/AC	Local	89	87	88	\$15	6,217,075	SEAL CRACKS
SCENIC CT. (2745 O)	SCENIC DR.	CUL-DE-SAC	12021	1	240	21	5,040	R	AC	Local	88	87	88	\$16	680,840	SEAL CRACKS
ORCHARD CT. (2745 Z)	MORAGA WAY	CUL-DE-SAC	12031	1	165	27	4,455	R	AC/AC	Local	88	86	87	\$8	3,587,420	SEAL CRACKS
GREAT OAK CR. (2745 AB)	ORCHARD RD.	CUL-DE-SAC	12033	1	155	22	3,410	R	AC	Local	88	87	88	\$11	680,840	SEAL CRACKS
PARKLANE DR. (2847 C)	GLORIETTA BLVD. (W)	GLORIETTA BLVD. (E)	12036	1	1,800	25	45,000	R	AC/AC	Local	89	87	88	\$45	3,560,255	SEAL CRACKS
BEL AIR DR. (2847 J)	PARKLANE DR.	CUL-DE-SAC	12037	1	1,380	25	34,500	R	AC/AC	Local	89	87	88	\$34	3,560,255	SEAL CRACKS
BEL AIR CT. (2847K)	BEL AIR DR.	CUL-DE-SAC	12038	1	145	22	3,190	R	AC/AC	Local	89	87	88	\$4	2,903,191	SEAL CRACKS
MEADOW PARK CT. (2835Z)	GLORIETTA BLVD.	END	12041	1	1,200	22	26,400	R	AC/AC	Local	84	83	85	\$89	1,977,028	SEAL CRACKS
KELLIE ANN CT. (2745BA)	MEADOW VIEW RD.	CUL-DE-SAC	12043	1	320	29	9,280	R	AC	Local	85	83	84	\$39	746,392	SEAL CRACKS
STEIN WAY	MORAGA WAY	OAK RD.	14010	1	1,210	30	36,300	R	AC/AC	Local	82	80	82	\$175	1,476,671	SEAL CRACKS
DAPHNE CT.	CHARLES HILL ROAD	END	20020	1	267	15	4,005	R	AC	Local	87	85	86	\$15	1,734,476	SEAL CRACKS
DIAS DORADOS	CAMINO SOBRANTE	LA CINTILLA	20050	1	719	17	12,223	R	AC/AC	Local	87	85	86	\$27	2,977,484	SEAL CRACKS
NONIE RD.	TARA RD	END	20190	1	185	15	2,775	R	AC/AC	Local	82	81	83	\$13	1,611,662	SEAL CRACKS
SILVERWOOD RD.	TAHOS RD	CITY LIMIT	20200	1	242	29	7,018	R	AC	Local	88	87	88	\$22	884,375	SEAL CRACKS
CREST VIEW DR.	VALLEY VIEW DRIVE	CRESTVIEW COURT	20260	1A	1,901	22	41,822	R	AC/AC	Local	84	83	84	\$148	2,403,662	SEAL CRACKS
CREST VIEW DR.	COP 2,305' W/O CULVER CT	CUL DE SAC	20260	4	914	22	20,108	R	AC	Local	88	87	88	\$62	1,616,746	SEAL CRACKS
HALL DR.	DONALD DR.	END	20310	1	164	24	3,936	R	AC/AC	Local	79	77	79	\$24	1,264,009	SEAL CRACKS
VILLAGE GATE ROAD	ORINDA WOODS DR.	VILLAGE GATE/WATCHWC OD RD.	20320	1	1,960	25	49,000	R	AC	Local	79	77	79	\$294	702,571	SEAL CRACKS
RIDGE GATE ROAD	VILLAGE GATE ROAD	CUL-DE-SAC	20330	1	580	25	14,500	R	AC	Local	85	83	84	\$61	746,385	SEAL CRACKS

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2022

Year: 2022												Treatn	nent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
EASTON COURT	HALL DRIVE	CUL-DE-SAC	3010	1	1,010	25	25,250	R	AC	Local	85	83	84	\$105	746,423	SEAL CRACKS
RUSTIC WAY	MORAGA VIA	CUL-DE-SAC	3011	1	563	16	9,008	R	AC	Local	86	85	86	\$33	726,942	SEAL CRACKS
AVIS COURT	DONALD DRIVE	CUL-DE-SAC	3015	1	166	26	4,316	R	AC	Local	88	87	88	\$14	680,941	SEAL CRACKS
LONGVIEW TERRACE	ORCHARD ROAD	CUL-DE-SAC	3019	1	331	20	6,620	R	AC/AC	Local	88	87	88	\$7	5,769,200	SEAL CRACKS
ARDOR DRIVE	CUL-DE-SAC	LOMA LINDA COURT	3020	1	971	22	21,362	R	AC/AC	Local	87	85	86	\$48	2,706,441	SEAL CRACKS
GLORIETTA COURT	GLORIETTA BLVD	CUL-DE-SAC	3027	1	742	22	16,324	R	AC	Local	88	87	88	\$51	681,041	SEAL CRACKS
RICHARD COURT	VALLEY VIEW DRIVE	CUL-DE-SAC	3132	1	278	18	5,004	R	AC	Local	75	73	75	\$36	639,032	SEAL CRACKS
OAK DRIVE	MORAGA WAY	1000' W/MORAGA WAY	3139	1	1,000	20	20,000	R	AC/AC	Local	83	81	83	\$88	1,585,463	SEAL CRACKS
CORTE SOMBRITA	IVY DRIVE	CUL-DE-SAC	4002	1	270	27	7,290	R	AC/AC	Local	79	77	79	\$44	1,285,390	SEAL CRACKS
PUEBLO COURT	IVY DRIVE	CUL-DE-SAC	4005	1	247	24	5,928	R	AC	Local	88	87	88	\$19	681,148	SEAL CRACKS
DANZA COURT	IVY DRIVE	CUL-DE-SAC	4008	1	208	27	5,616	R	AC/AC	Local	84	82	84	\$22	1,775,245	SEAL CRACKS
RISA COURT	IVY DRIVE	CUL-DE-SAC	4010	1	670	27	18,090	R	AC	Local	84	82	84	\$81	749,787	SEAL CRACKS
CIELO COURT	IVY DRIVE	CUL-DE-SAC	4011	1	214	25	5,350	R	AC/AC	Local	88	87	88	\$6	2,841,132	SEAL CRACKS
EASTWOOD DRIVE	MORAGA WAY	CARISBROOK DRIVE	4015	1	565	33	18,645	R	AC/AC	Local	87	85	86	\$42	2,737,015	SEAL CRACKS
CHELTON COURT	WHITEHALL DRIVE	CUL-DE-SAC	4022	1	420	25	10,500	R	AC/AC	Local	88	87	88	\$11	3,482,064	SEAL CRACKS
SOUTHWAITE COURT	MORAGA WAY	CUL-DE-SAC	4028	1	822	33	27,126	R	AC/AC	Local	88	87	88	\$28	3,482,064	SEAL CRACKS
CROWN COURT	IVY DRIVE	CUL-DE-SAC	4030	1	285	25	7,125	R	AC/AC	Local	81	79	81	\$38	1,416,426	SEAL CRACKS
CORAL DRIVE	MORAGA WAY	IVY DR	4046	1C	1,720	33	56,760	UL	AC/AC	Local	89	87	88	\$67	4,101,338	SEAL CRACKS
FIESTA CIRCLE	IVY DRIVE (N)	IVY DRIVE (S)	4047	1C	2,344	33	77,352	R	AC/AC	Local	88	86	87	\$126	2,319,218	SEAL CRACKS
_AVENIDA	MORAGA WAY	B.C. @ 90 DEGREE	4118	1	932	24	22,368	R	AC/AC	Local	88	87	88	\$23	4,435,769	SEAL CRACKS
ESTABUENO	LAVENIDA	CUL-DE-SAC	4119	1	387	24	9,288	R	AC/AC	Local	88	87	88	\$10	4,435,769	SEAL CRACKS
ESTABUENO	LAVENIDA	MORAGA WAY	4119	2	1,029	24	24,696	R	AC/AC	Local	88	87	88	\$25	4,431,244	SEAL CRACKS
MEADOWLANDS COURT	MORAGA WAY	CUL-DE-SAC	4121	1	128	24	3,072	R	AC/AC	Local	88	87	88	\$4	2,841,132	SEAL CRACKS
SAGER COURT	DONNA MARIA WAY	CUL-DE-SAC	4133	1	357	25	8,925	R	AC	Local	77	75	77	\$59	672,001	SEAL CRACKS
CARMEN COURT	LA CRESTA ROAD	CUL-DE-SAC	4140	1	340	20	6,800	R	AC	Local	88	87	88	\$21	681,010	SEAL CRACKS
STANTON AVE. (2345H	STANTON CT.	CLAREMONT	5102	1	560	30	16,800	R	AC/AC	Local	88	87	88	\$17	4,458,554	SEAL CRACKS
STANTON AVE. (2345H)CLAREMONT	CUL-DE-SAC	5102	1A	422	25	10,550	R	AC/AC		88	87	88	\$11	2,238,975	SEAL CRACKS
STANTON CT.	STANTON AVE.	CUL-DE-SAC	5102	2	535	25	13,375	R	AC/AC	Local	87	85	86	\$30	2,236,887	SEAL CRACKS
CRESCENT DR	CLAREMONT AVE.	PIEDMONT AVE.	5105	1	896	19	17,024	R	AC	Local	88	87	88	\$53	680,941	SEAL CRACKS
PIEDMONT AVENUE	CRESCENT DR.	CLAREMONT AVE.	5107	1	365	18	6,570	R	AC/AC	Local	88	87	88	\$7	4,458,554	SEAL CRACKS



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2022

Year: 2022												Treatm	nent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
CROSSRIDGE PL. (2545AU)	KITE HILL RD.	CUL-DE-SAC	6003	1	147	23	3,381	R	AC/AC	Local	81	79	81	\$18	958,506	SEAL CRACKS
CROSSRIDGE CT. (2545AT)	KITE HILL RD.	CUL-DE-SAC	6004	1	160	23	3,680	R	AC	Local	85	83	84	\$16	746,385	SEAL CRACKS
CROSS RIDGE TR. (2545AV)	KITE HILL RD.	END	6005	1	240	25	6,000	R	AC	Local	85	83	84	\$25	746,385	SEAL CRACKS
ALTARINDA CR. (2545AD)	E. ALTARINDA DR.	CUL-DE-SAC	6012	1	245	25	6,125	R	AC	Local	85	83	84	\$26	746,383	SEAL CRACKS
GREYSTONE TR. (2545AP)	ORINDAWOODS DR.	GREYSTONE TR	6014	1	360	25	9,000	R	AC	Local	88	87	88	\$28	680,182	SEAL CRACKS
SANTA MARIA WY. (2544B)	ALTARINDA ROAD	SANTA MARIA WAY (PRIVATE)	6015	3	327	38	12,426	R	AC/AC	Local	89	87	88	\$12	2,322,129	SEAL CRACKS
OAK LANE (2655C)	MINER RD.	END	7003	1	230	17	3,910	R	AC/AC	Local	89	87	88	\$4	6,015,303	SEAL CRACKS
LA CUESTA (2545E)	CAMINO SOBRANTE	END	7105	1	3,080	15	46,200	R	AC	Local	87	84	85	\$177	1,178,330	SEAL CRACKS
LA SENDA (2545W)	LA NORIA	CUL-DE-SAC	7107	1	330	16	5,280	R	AC/AC	Local	87	85	86	\$12	1,271,161	SEAL CRACKS
VISTA DEL MAR(2445K)) CAMINO DON MIGUEL	DEL MAR COURT	Γ 8102	1	815	25	20,375	R	AC/AC	Local	87	85	86	\$45	1,829,494	SEAL CRACKS
SANTA LUCIA (2445H)	CAMINO DON MIGUEL	CUL-DE-SAC	8105	1	435	20	8,700	R	AC/AC	Local	88	86	87	\$14	2,352,006	SEAL CRACKS
SNOWBERRY LN. (2555R)	TARRY LN	CUL-DE-SAC	9104	1	670	20	13,400	R	AC	Local	87	85	86	\$48	813,015	SEAL CRACKS
CRANE CT. (2555P)	VAN TASSEL LANE	CUL-DE-SAC	9204	1	315	24	7,560	R	AC/AC	Local	85	84	86	\$21	2,320,851	SEAL CRACKS
OLD CAMINO PABLO	END - WEST OF CLAREMONT	END - EAST OF CLAREMONT	A11005	1	394	18	7,092	R	AC	Local	86	85	86	\$26	726,955	SEAL CRACKS
OLD CAMINO PABLO	NORTH LANE	ARDILLA ROAD	A11005	2	1,139	20	22,780	R	AC	Local	88	87	88	\$70	680,941	SEAL CRACKS
										_	Treatm	nent Tota		\$3,241		

Year 2022 Area Total Year 2022 Total \$2,098,493 2,336,074

Year: 2023												Treatm	nent		
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating Treatment
FAIRWAY DR.	HACIENDA CIR.	END	20010	1	103	18	1,854	R	AC	Local	30	24	100	\$15,299	9,639 FULL DEPTH RECLAMATION
EL TOYONAL (2254)	CAMINO PABLO	460' W/O CAMINO PABLO	5201	1A	460	39	17,940	С	AC/AC	ArtCol	27	20	100	\$169,179	8,842 FULL DEPTH RECLAMATION
EL TOYONAL (2254)	460' W/O CAMINO PABLO	LOMA VISTA (EAST)	5201	1B	1,321	24	31,704	С	AC/AC		20	11	100	\$298,976	8,842 FULL DEPTH RECLAMATION
OAK FLAT RD. (2755C)	CHARLES HILL RD.	CUL-DE-SAC	6203	1	390	15	5,850	R	AC/AC	Local	14	8	100	\$48,271	9,639 FULL DEPTH RECLAMATION

Treatment Total \$531,725

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2023

Year: 2023												Treatm	ent		
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating Treatment
ALICE LANE	ZANDER DRIVE	1000' W ZANDER DRIVE	3002	2	1,000	29	29,000	R	AC		48	44	100	\$205,108	11,960 HEAVY REHAB
ORINDA WAY	END	SANTA MARIA WAY	A15001	1	195	55	10,725	R	AC	Local	45	40	100	\$75,855	12,212 HEAVY REHAB
										•	Treatm	nent Total		\$280,963	
EL TOYONAL (2254)	BONITA LN	LA ENCINAL	5201	3	1,676	18	30,168	R	AC/AC	Local	69	66	75	\$62,553	10,344 HEAVY MAINTENANC
EL TOYONAL (2254)	CAMINO DEL CIELO	VISTA DEL ORINDA	5201	7	2,800	18	50,400	С	AC	ArtCol	70	64	74	\$126,485	6,259 HEAVY MAINTENANC
MORAGA WAY	CAMINO PABLO	OVERHILL RD	A12001	1C	510	50	25,500	Α	AC/AC	ArtCol	73	69	78	\$18,517	46,291 HEAVY MAINTENANC
											Treatm	nent Total		\$207,555	
MINER RD. (2444C)	GARDINER CT.	HONEY HILL RD.	7001	3B	700	23	16,100	С	AC	ArtCol	71	66	100	\$94,247	12,648 LIGHT REHAB
EL SUENO (2545U)	CAMINO SOBRANTE	CUL-DE-SAC	7108	1	525	15	7,875	R	AC/AC	Local	72	69	100	\$30,634	14,400 LIGHT REHAB
MORAGA WAY	GLORIETTA BLVD	ORCHARD RD	A12002	1	1,849	44	81,356	Α	AC/AC	ArtCol	70	65	100	\$498,396	15,574 LIGHT REHAB
										-	Treatm	nent Total		\$623,277	
AMBER VALLEY DR. (2555Y)	DALEWOOD DR.	CUL-DE-SAC	10005	1	1,060	29	30,740	R	AC	Local	91	89	95	\$28,119	24,695 LIGHT MAINTENANCE
BROOKSIDE RD. (2643)	ORCHARD RD	MORAGA WAY	12030	2	515	24	12,360	R	AC/AC	Local	90	89	94	\$11,307	27,084 LIGHT MAINTENANCE
GLORIETTA BLVD (2731 B)	RHEEM BLVD.	MARTHA RD.	13000	3	1,314	32	42,048	Α	AC/AC	ArtCol	87	84	91	\$38,463	28,773 LIGHT MAINTENANCE
GLORIETTA BLVD (2731 B)	MARTHA RD.	OVERHILL RD.	13000	4	1,151	31	35,681	Α	AC/AC	ArtCol	86	83	90	\$32,639	30,422 LIGHT MAINTENANCE
KNICKERBOCKER LN(2645G)	SPRING RD.	STEIN WAY	14007	1	1,300	30	39,000	R	AC/AC	Local	90	87	93	\$35,675	25,996 LIGHT MAINTENANCE
WHITEOAK DR.	CITY LIMIT	CUL-DE-SAC	20040	1	1,080	26	28,080	R	AC	Local	91	89	94	\$25,686	25,805 LIGHT MAINTENANCE
MIRA FLORES	LAS VEGAS	EL GAVILAN	20080	1	227	18	4,086	R	AC	Local	91	89	94	\$3,738	21,113 LIGHT MAINTENANCE
KEITH DRIVE	EVANS PL	DONALD DRIVE	3003	2	537	24	12,888	R	AC	Local	90	88	93	\$11,790	24,691 LIGHT MAINTENANCE
MORAGA VIA	GLORIETTA BLVD.	. VIRGINIA DRIVE	3025	4	911	21	19,131	R	AC/AC	Local	90	87	93	\$17,500	25,968 LIGHT MAINTENANCE
LOST VALLEY DRIVE	EDGEWOOD RD	CUL-DE-SAC	3138	10C	932	24	22,368	R	AC	Local	91	89	94	\$20,461	25,755 LIGHT MAINTENANCE
LOST VALLEY DRIVE	PGE SUBSTATION	700' W OF PGE SUBSTATION	3138	5	700	24	16,800	R	AC	Local	87	85	91	\$15,368	26,816 LIGHT MAINTENANCE
DONNA MARIA WAY	DOLORES WAY	RITA WAY	4144	1	1,075	23	24,725	R	AC	Local	91	89	95	\$22,617	24,675 LIGHT MAINTENANCE
BERKELEY AVE (2345Y)	CLAREMONT AVE	END	5104	1	752	22	16,544	R	AC	Local	90	88	93	\$15,134	24,691 LIGHT MAINTENANCE
VALLEY VIEW RD.	MINER RD.	CUL-DE-SAC	7004	1	1,685	24	40,440	R	AC	Local	91	89	95	\$36,992	24,707 LIGHT MAINTENANCE
CAMINO SOBRANTE (2544C)	EL RIBERO (NORTH)	LA NORIA (SOUTH)	7101	3A	1,450	21	30,450	R	AC	Local	91	89	94	\$27,854	26,995 LIGHT MAINTENANCE
MIRA LOMA (2545G)	CAMINO SOBRANTE	LINDA VISTA	7102	1	1,010	19	19,190	R	AC/AC	Local	90	87	93	\$17,554	25,999 LIGHT MAINTENANCE

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2023

Year: 2023												Treatm	ent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
SLEEPY HOLLOW LN (2555K)	LOMBARDY LANE	SOUTHERLY EDGE NORMANDY LANE	9001	1A	2,750	22	60,500	UL	AC/AC	Local	88	86	93	\$55,342	36,488	LIGHT MAINTENANCE
NORMANDY LN. (2555M)	SLEEPY HOLLOW LN.	RIDGE LN.	9002	1	1,290	20	25,800	R	AC/AC	Local	91	89	94	\$23,601	27,103	LIGHT MAINTENANCE
RIDGE LN. (2555N)	EAST END	WEST END	9003	1	740	18	13,320	R	AC	Local	91	89	94	\$12,185	26,998	LIGHT MAINTENANCE
										•	Treatm	nent Total		\$452,025		
SOUTHWOOD DR. (2745AZ)	NORTHWOOD DR	TARA RD	12001	1A	1,600	20	32,000	С	AC/AC	ArtCol	92	87	88	\$35	6,070,784	SEAL CRACKS
DARYL DR. (2745 J)	GLORIETTA BLVD.	OVERHILL RD.	12018	1	1,180	26	30,680	R	AC	Local	93	89	89	\$82	1,722,782	SEAL CRACKS
GLORIETTA BLVD (2731 B)	MORAGA WAY	SHADOW CREEK LN	13000	1A	1,585	30	47,550	Α	AC/AC	ArtCol	92	87	88	\$52	6,675,962	SEAL CRACKS
GLORIETTA BLVD (2731 B)	SHADOW CREEK LN	RHEEM BLVD	13000	2	1,475	30	44,250	Α	AC/AC	ArtCol	92	87	88	\$49	6,675,962	SEAL CRACKS
HALL DRIVE	MORAGA WAY	FLEETWOOD CT	3009	1A	1,257	25	31,425	С	AC/AC	ArtCol	94	88	89	\$11	19,051,465	SEAL CRACKS
HALL DRIVE	FLEETWOOD CT	DONALD DR	3009	2	1,707	27	46,089	С	AC/AC	ArtCol	92	87	88	\$42	5,686,889	SEAL CRACKS
MORAGA VIA	RUSTIC WAY	RHEEM BLVD	3025	3	834	19	15,846	R	AC/AC	Local	89	86	87	\$27	2,425,343	SEAL CRACKS
ORCHARD ROAD	CORTE BOMBERO	MORAGA WAY	3028	3	382	21	8,022	R	AC/AC	Local	87	85	86	\$22	1,692,602	SEAL CRACKS
MARSTON RD. (2345N)	MONTE VISTA RD.	CUL-DE-SAC	5002	1	1,025	16	16,400	R	AC	Local	93	88	89	\$44	1,814,108	SEAL CRACKS
ORINDAWOODS DR. (2545AM)	ALTARINDA RD	KITE HILL RD	6001	1A	1,760	25	44,000	С	AC/AC	ArtCol	92	87	88	\$41	5,686,889	SEAL CRACKS
ORINDAWOODS DR. (2545AM)	KITE HILL RD	GREYSTONE TERR.	6001	2	1,470	25	36,750	С	AC/AC	ArtCol	92	87	88	\$34	5,686,889	SEAL CRACKS
ORINDAWOODS DR. (2545AM)	GREYSTONE TERR.	E. ALTARINDA	6001	3	1,019	25	25,475	С	AC/AC	ArtCol	92	87	88	\$24	5,686,889	SEAL CRACKS
E. ALTARINDA DR(2545AC)	ORINDAWOODS DR.	EL NIDO RANCH RD.		1	1,190	30	35,700	С	AC/AC	ArtCol	85	81	83	\$186		SEAL CRACKS
VIA LAS CRUCES	HONEY HILL RD.	LAS VEGAS RD.	6207	1	730	29	21,170	С	AC/AC	ArtCol	92	87	88	\$23	5,715,435	SEAL CRACKS
LA NORIA (2545F)	CAMINO SOBRANTE (S)	CAMINO SOBRANTE (N)	7106	1	1,530	15	22,950	R	AC	Local	93	89	89	\$61	1,767,998	SEAL CRACKS
LAS VEGAS (2544E)	VIA LAS CRUCES	ST. STEPHENS DRIVE	7203	3	320	31	9,920	С	AC/AC	ArtCol	92	87	88	\$11	5,715,435	SEAL CRACKS
MANZANITA DR. (2445F)	CAMINO PABLO	CREEK BRIDGE	8001	1	580	24	13,920	R	AC/AC	Local	91	88	88	\$9	7,733,304	SEAL CRACKS
WASHINGTON LN. (2555L)	SLEEPY HOLLOW LANE	END	9004	1	533	21	11,193	UL	AC/AC	Local	89	88	89	\$6	16,980,581	SEAL CRACKS
LOMBARDY LN. (2554)	MINER ROAD	TARRY LANE	9201	1A	1,136	25	28,400	С	AC/AC	ArtCol	92	87	88	\$31	5,802,922	SEAL CRACKS
CAMINO PABLO	MINER RD	ARDILLA ROAD/NORTH LN	A11003	1A	1,600	43	68,800	Α	AC/AC	ArtCol	92	87	88	\$70	7,162,806	SEAL CRACKS
CAMINO PABLO	ARDILLA ROAD/NORTH LN	SOL BRAE WY	A11003	2	2,040	39	79,560	Α	AC/AC	ArtCol	92	87	88	\$87	6,675,962	SEAL CRACKS

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2023

											Treatme	ent Total		\$3,228	
MORAGA WAY	VALLEY VIEW DR	WOODLAND RD	A12002	3	1,082	44	47,608	Α	AC/AC	ArtCol	87	85	86	\$161	2,966,161 SEAL CRACKS
MORAGA WAY	ORCHARD RD	VALLEY VIEW DF	R A12002	2	1,667	42	70,014	Α	AC/AC	ArtCol	82	79	80	\$548	1,314,651 SEAL CRACKS
MORAGA WAY	BROOKSIDE RD	GLORIETTA BLVI	DA12001	5	2,058	38	78,204	Α	AC/AC	ArtCol	83	80	82	\$528	1,523,759 SEAL CRACKS
MORAGA WAY	LLOYD LN	BROOKSIDE RD	A12001	4	1,518	38	57,684	Α	AC/AC	ArtCol	86	84	85	\$238	2,447,390 SEAL CRACKS
MORAGA WAY	CAMINO ENCINAS	LLOYD LN	A12001	3	1,445	38	54,910	Α	AC/AC	ArtCol	82	79	80	\$430	1,314,651 SEAL CRACKS
MORAGA WAY	BRYANT WAY	CAMINO PABLO	A12001	1AAC	870	63	54,810	Α	AC/AC	ArtCol	85	82	83	\$331	2,095,678 SEAL CRACKS
CAMINO PABLO	SOL BRAE WY	MONTE VISTA RD	A11003	3	1,045	39	40,755	Α	AC/AC	ArtCol	92	87	88	\$45	6,675,962 SEAL CRACKS
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating Treatment
1 Cai. 2020												Treatm	ent		

Year 2023 Area Total 1,876,708 Year 2023 Total \$2,098,773

Year: 2024												_				
												Treatm	ent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
EL TOYONAL (2254)	LOMA VISTA (WEST)	WIDTH CHANGE	5201	5	1,121	20	22,420	С	AC	ArtCol	38	23	100	\$217,769	8,585	FULL DEPTH RECLAMATION
MINER RD. (2444C)	LOMBARDY LN	TIGERTAIL CT	7001	2A	2,345	23	53,935	С	AC/AC	ArtCol	31	19	100	\$523,878	8,585	FULL DEPTH RECLAMATION
											Treatm	ent Total		\$741,647		
EL TOYONAL (2254)	WIDTH CHANGE	CAMINO DEL CIELO	5201	6	514	18	9,252	С	AC	ArtCol	59	48	100	\$73,017	11,125	HEAVY REHAB
ORINDA WAY	540 FT N/O SANTA MARIA WAY	IRWIN WAY	A15001	3	1,150	45	51,750	A	AC	ArtCol	55	48	100	\$471,239	13,058	HEAVY REHAB
											Treatm	ent Total		\$544,256		
WATCHWOOD CT.	WATCHWOOD RD.	END OF WATCHWOOD CT.	20340	1	270	21	5,670	R	AC	Local	69	63	73	\$12,110	7,323	HEAVY MAINTENANCE
											Treatm	ent Total		\$12,110		
FALLEN LEAF TR. (2555AC	DALEWOOD DR.	CUL-DE-SAC	10007	1	845	29	24,505	R	AC	Local	90	87	93	\$23,088	24,906	LIGHT MAINTENANCE
WARFORD TR. (2745AN)	MUTH DR.	BATES BLVD	11003	1	999	33	32,967	R	AC	Local	92	89	95	\$31,061	28,368	LIGHT MAINTENANCE
NORTHWOOD CT. (2745X)	NORTHWOOD DR.	CUL-DE-SAC	12004	1	235	22	5,170	R	AC/AC	Local	79	79	86	\$4,872	34,940	LIGHT MAINTENANCE
HILLCREST DR. (2745K)	MARTHA RD.	OVERHILL ROAD	12015	1	1,610	23	37,030	UL	AC/AC	Local	88	87	93	\$34,889	36,744	LIGHT MAINTENANCE
SALLY ANN RD. (2847 A)	GLORIETTA BLVD.	PARKWAY CT.	12034	1	900	22	19,800	R	AC	Local	92	89	95	\$18,656	28,368	LIGHT MAINTENANCE
MEADOW PARK CT. (2835Z)	GLORIETTA BLVD.	END	12041	1	1,200	22	26,400	R	AC/AC	Local	84	83	90	\$24,874	36,553	LIGHT MAINTENANCE

^{** -} Treatment from Project Selection



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2024

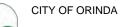
real. 2024												Treatn	nent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
CANDLESTICK RD. (2645H)	KNICKERBOCKER LANE	CUL-DE-SAC	14008	1	780	25	19,500	R	AC	Local	92	89	95	\$18,373	28,371	LIGHT MAINTENANCE
NONIE RD.	TARA RD	END	20190	1	185	15	2,775	R	AC/AC	Local	82	81	88	\$2,615	33,604	LIGHT MAINTENANCE
CREST VIEW DR.		CRESTVIEW COURT	20260	1A	1,901	22	41,822	R	AC/AC	Local	84	83	90	\$39,404	31,005	LIGHT MAINTENANCE
CALVIN DRIVE	RHEEM BLVD.	CALVIN COURT	3008	1C	1,092	24	26,901	R	AC	Local	91	89	94	\$25,346	29,440	LIGHT MAINTENANCE
CEDAR LANE	DONALD DRIVE	CUL-DE-SAC	3017	1	859	27	23,193	R	AC	Local	92	89	95	\$21,852	28,353	LIGHT MAINTENANCE
MORAGA VIA	WOODCREST DRIVE	RUSTIC WAY	3025	2	695	22	15,290	R	AC	Local	90	87	93	\$14,406	24,867	LIGHT MAINTENANCE
WHITEHALL DRIVE		735' E/O MORAGA WAY	4023	1	735	33	24,255	R	AC	Local	92	89	95	\$22,853	28,347	LIGHT MAINTENANCE
RITA WAY	DONNA MARIA WAY	DOLORES WAY	4134	1	585	23	13,455	R	AC	Local	92	89	95	\$12,677	28,350	LIGHT MAINTENANCE
MINER RD. (2444C)	CAMINO PABLO	BIEN VENIDA	7001	1A	1,480	27	39,960	Α	AC/AC	ArtCol	92	85	92	\$37,650	27,496	LIGHT MAINTENANCE
MINER RD. (2444C)		CAMINO DON MIGUEL	7001	1B	1,895	27	51,165	Α	AC/AC	ArtCol	92	85	92	\$48,207	27,496	LIGHT MAINTENANCE
MINER RD. (2444C)	CAMINO DON MIGUEL	LOMBARDY LN	7001	1C	1,950	26	50,700	Α	AC/AC	ArtCol	92	85	92	\$47,769	27,496	LIGHT MAINTENANCE
CAMINO SOBRANTE (2544C)	LA NORIA (SOUTH)	LA ESPIRAL	7101	3B	1,946	21	40,866	R	AC	Local	91	89	94	\$38,503	29,455	LIGHT MAINTENANCE
VISTA DEL MAR(2445k) DEL MAR COURT	PRIVATE ROAD	8102	2	725	25	18,125	R	AC	Local	90	87	93	\$17,077	24,906	LIGHT MAINTENANCE
WASHINGTON LN. (2555L)	SLEEPY HOLLOW LANE	END	9004	1	533	21	11,193	UL	AC/AC	Local	89	88	94	\$10,546	35,571	LIGHT MAINTENANCE
CRANE CT. (2555P)	VAN TASSEL LANE	CUL-DE-SAC	9204	1	315	24	7,560	R	AC/AC	Local	85	84	91	\$7,123	38,232	LIGHT MAINTENANCE
											Treatm	nent Tota		\$501,841		
LOMA VISTA DR. (2345C)	EL TOYONAL (WEST)	EL DORADO LN	5203	1A	1,360	19	25,840	С	AC/AC	ArtCol	80	85	86	\$77	3,164,444	SEAL CRACKS
											Treatm	nent Tota		\$77		
					Year 2	2024 Ar	ea Tota	al _	7	01,499	Year 20	024 Tota		\$1,799,931		

Year 2024 Area Tota	701,499	Year 2024 Total	\$1,799,931
Teal 2024 Alea Tota	701,499	16ai 2024 10tai	ψ1,199,931

										_	Treatm	ent Total		\$843,977	
MINER RD. (2444C)	TIGERTAIL CT	SYCAMORE RD	7001	2B	2,075	23	47,725	С	AC/AC	ArtCol	28	11	100	\$477,466	8,335 FULL DEPTH RECLAMATION
EL TOYONAL (2254)	LA ENCINAL	LOMA VISTA (WEST)	5201	4	1,220	18	21,960	R	AC/AC	Local	34	24	100	\$192,237	9,086 FULL DEPTH RECLAMATION
EL TOYONAL (2254)	LOMA VISTA (EAST)	BONITA LN	5201	2	1,106	18	19,908	R	AC/AC	Local	33	23	100	\$174,274	9,086 FULL DEPTH RECLAMATION
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating Treatment
Year: 2025												Treatm	ent		

^{** -} Treatment from Project Selection

10



Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

Year: 2025

Year: 2025												Treatm	nent			
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
GLORIETTA BLVD (2731 B)	OVERHILL RD	CITY LIMITS	13000	5	2,275	32	72,800	Α	AC/AC	ArtCol	73	65	75	\$56,082	36,500	HEAVY MAINTENANC
											Treatm	nent Tota	l	\$56,082		
SINGINGWOOD LN. (2555AB)	AMBER VALLEY DR.	CUL-DE-SAC	10006	1	635	29	18,415	R	AC	Local	92	89	94	\$17,871	28,708	LIGHT MAINTENANCE
OAKRIDGE COURT (2745AU)	TAHOS RD.	CUL-DE-SAC	11009	1	480	22	10,560	R	AC	Local	92	88	94	\$10,248	25,895	LIGHT MAINTENANCE
MARTHA RD.(2745H)	HILLCREST RD.	CUL DE SAC	12017	2	1,645	33	54,285	R	AC	Local	92	88	94	\$52,681	25,860	LIGHT MAINTENANCE
DEBRA CT. (2745 AQ)	SCENIC DR.	CUL-DE-SAC	12020	1	168	25	4,200	R	AC	Local	92	88	94	\$4,076	25,839	LIGHT MAINTENANCE
CREST VIEW DR.	CREST VIEW COURT	CULVER COURT	20260	2	1,394	22	30,668	R	AC/AC	Local	92	89	95	\$29,762	27,866	LIGHT MAINTENANCE
ZANDER DRIVE	ZANDER COURT	ALICE LANE	3004	2	1,339	29	38,831	R	AC/AC	Local	92	89	95	\$37,684	32,239	LIGHT MAINTENANCE
DONALD DRIVE	CUL-DE-SAC	HALL DRIVE	3018	1C	2,587	29	75,023	R	AC/AC	Local	92	89	95	\$72,806	27,870	LIGHT MAINTENANCE
VIRGINIA DRIVE	GLORIETTA BLVD	MORAGA VIA	3026	1	766	24	18,384	R	AC	Local	92	89	94	\$17,841	28,673	LIGHT MAINTENANCE
RAE DRIVE	FIESTA CIRCLE	CUL-DE-SAC	4006	1	292	34	9,928	R	AC	Local	92	88	94	\$9,635	25,786	LIGHT MAINTENANCE
RAE COURT	FIESTA CIRCLE	CUL-DE-SAC	4007	1	115	26	2,990	R	AC	Local	92	88	94	\$2,902	25,786	LIGHT MAINTENANCE
CORTE DEL REY	IVY DRIVE	CUL-DE-SAC	4009	1	327	27	8,829	R	AC	Local	92	88	94	\$8,569	25,786	LIGHT MAINTENANCE
RYDAL COURT	EASTWOOD DRIVE	CUL-DE-SAC	4014	1	143	25	3,575	R	AC	Local	92	88	94	\$3,470	25,789	LIGHT MAINTENANCE
WANFLETE CT	CORAL DRIVE	CUL-DE-SAC	4016	1	397	25	9,925	R	AC	Local	92	88	94	\$9,632	25,792	LIGHT MAINTENANCE
WESTOVER COURT	ARDITH DRIVE	CUL-DE-SAC	4026	1	385	25	9,625	R	AC	Local	92	88	94	\$9,341	25,786	LIGHT MAINTENANCE
DESCANSO DRIVE	IVY DRIVE	END	4049	1C	1,498	30	44,940	R	AC	Local	92	89	94	\$43,612	28,730	LIGHT MAINTENANCE
EL CAMINO MORAGA	DON GABRIEL WAY	MORAGA WAY	4132	2	737	26	19,162	UL	AC	Local	92	88	94	\$18,596	25,831	LIGHT MAINTENANCE
ALTAMOUNT DRIVE	LA CRESTA ROAD	MORAGA WAY	4143	1C	1,215	21	25,515	R	AC	Local	92	89	94	\$24,761	28,669	LIGHT MAINTENANCE
EL NIDO RANCH RD (2854)	ST. STEVENS DR.	CITY LIMITS	6208	1	1,935	37	71,595	Α	AC/AC	ArtCol	92	89	94	\$69,479	49,395	LIGHT MAINTENANCE
MINER RD. (2444C)	SYCAMORE RD	PAVT CHANGE	7001	2C	920	23	21,160	С	AC/AC	ArtCol	93	89	94	\$20,535	35,466	LIGHT MAINTENANCE
VIA FARALLON (2545D)) MIRA LOMA	LA CUESTA	7104	1	1,220	16	19,520	R	AC	Local	92	89	94	\$18,943	28,708	LIGHT MAINTENANCE
SUNNYSIDE CT. (2555U)	SUNNYSIDE LANE	CUL-DE-SAC	9207	1	360	26	9,360	R	AC	Local	92	88	94	\$9,084	26,019	LIGHT MAINTENANCE
MORAGA WAY	BRYANT WAY	CAMINO PABLO	A12001	1AAC	870	63	54,810	Α	AC/AC	ArtCol	85	81	89	\$53,190	36,099	LIGHT MAINTENANCE
MORAGA WAY	OVERHILL RD	CAMINO ENCINAS (N)	A12001	2	1,385	40	55,400	Α	AC/AC	ArtCol	91	87	93	\$53,763	48,055	LIGHT MAINTENANCE
MORAGA WAY	CAMINO ENCINAS	LLOYD LN	A12001	3	1,445	38	54,910	Α	AC/AC	ArtCol	82	78	86	\$53,287	35,537	LIGHT MAINTENANCE
MORAGA WAY	LLOYD LN	BROOKSIDE RD	A12001	4	1,518	38	57,684	Α	AC/AC	ArtCol	86	83	90	\$55,979	41,404	LIGHT MAINTENANCE
MORAGA WAY	BROOKSIDE RD	GLORIETTA BLV	DA12001	5	2,058	38	78,204	Α	AC/AC	ArtCol	83	80	87	\$75,893	37,571	LIGHT MAINTENANCE
MORAGA WAY	ORCHARD RD	VALLEY VIEW DR	A12002	2	1,667	42	70,014	Α	AC/AC	ArtCol	82	78	86	\$67,945	35,537	LIGHT MAINTENANCE
MORAGA WAY	VALLEY VIEW DR	WOODLAND RD	A12002	3	1,082	44	47,608	Α	AC/AC	ArtCol	87	84	91	\$46,201	42,326	LIGHT MAINTENANCE

^{** -} Treatment from Project Selection



CITY OF ORINDA

Scenarios - Sections Selected for Treatment

Interest: .00%

Inflation: 3.00%

Printed: 01/15/2021

Scenario: Budget Scenario (10% PM)

		Treatment Total	\$897,786	
Year 2025 Area Total	1,087,513	Year 2025 Total	\$1,797,845	
Total Section Area:	7.375.955	Grand Total	\$9.893.248	



Budget Scenario (10% PM) - 2021 Project Period - Printed: 2/12/2021

NORTHRIDGE

SILVER

WOODMINSTER

Saint Mary

HAPPY VALLEY

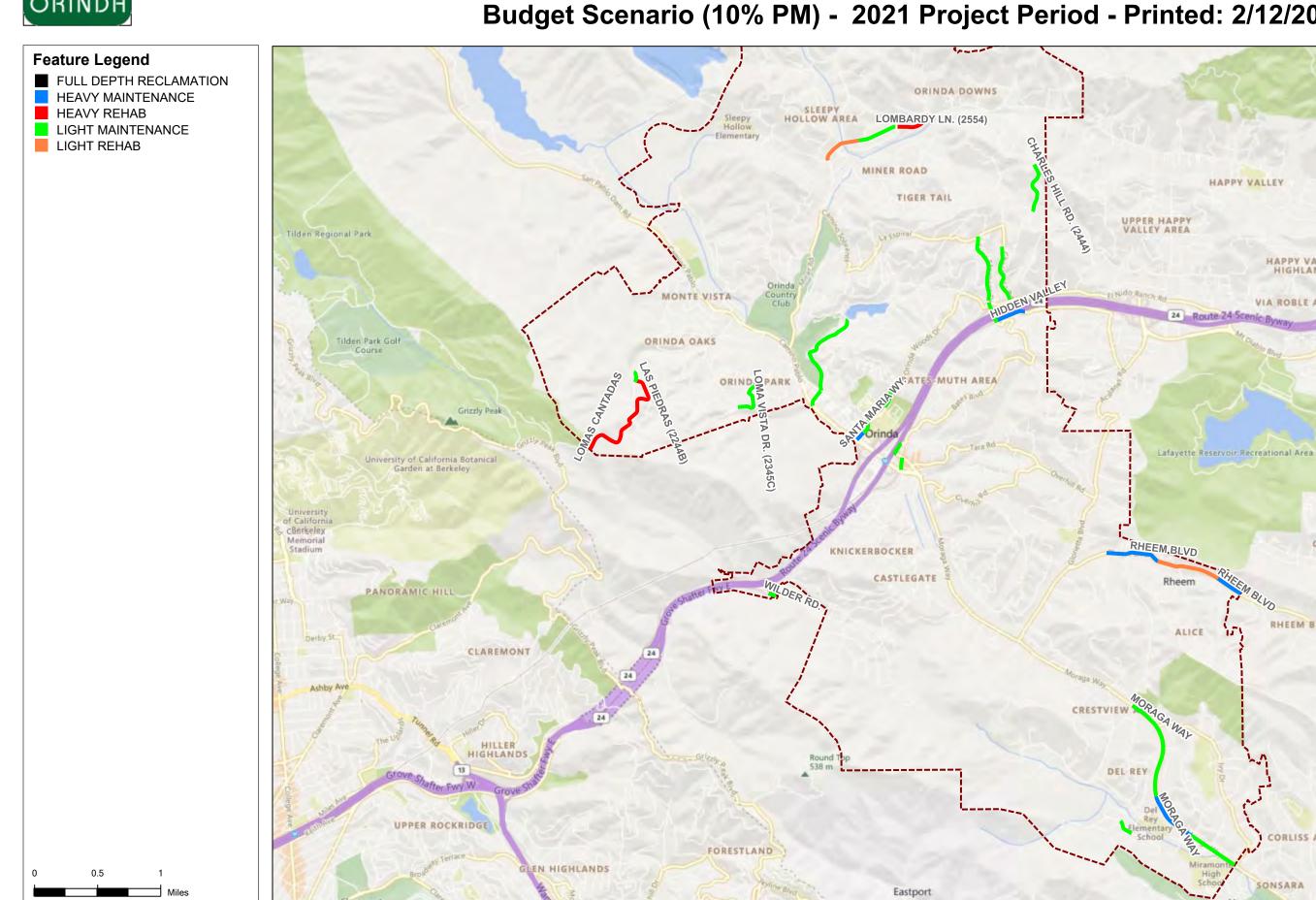
CAMPOLINDO

RHEEM BLVD AREA

CORLISS AREA

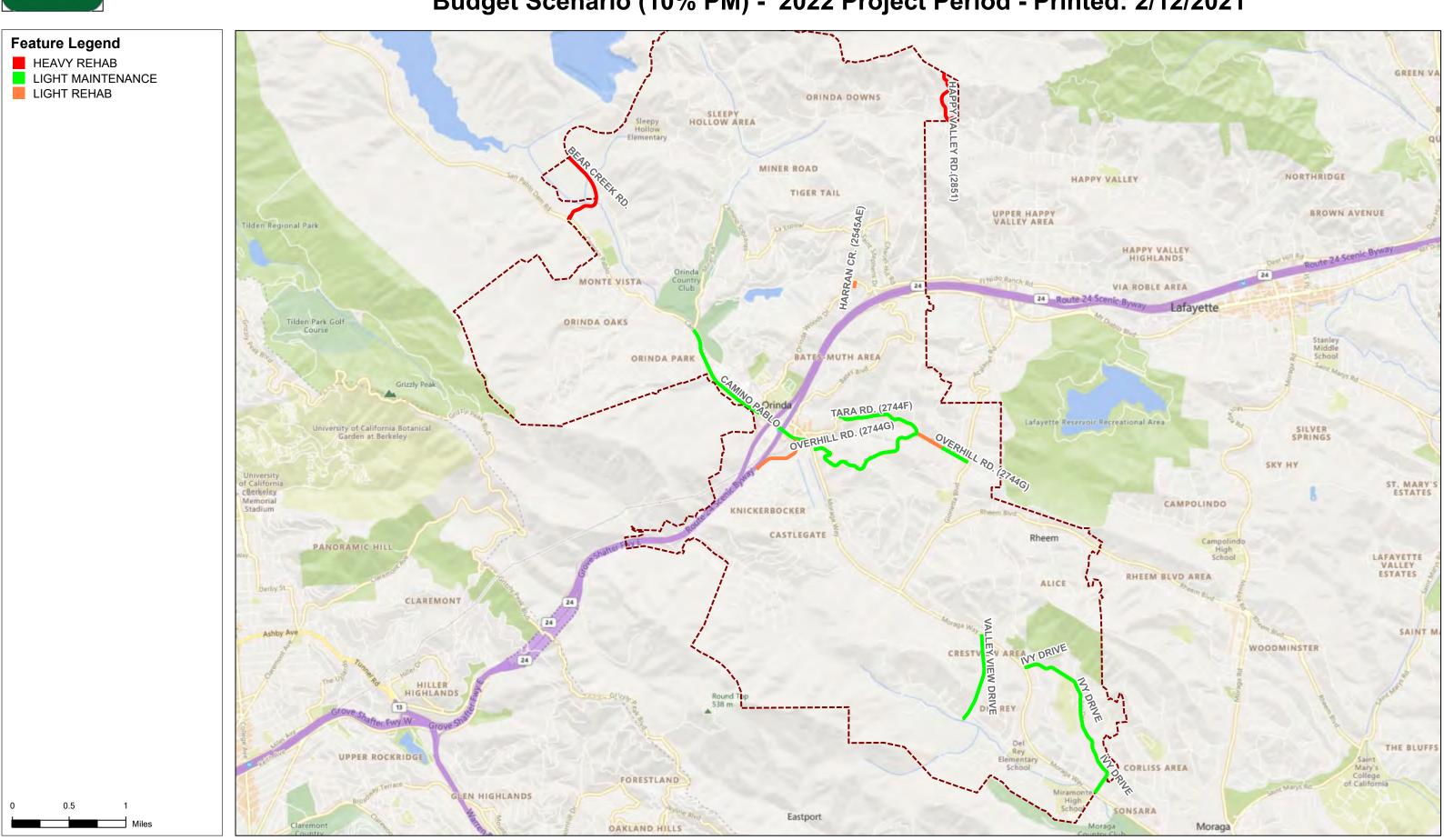
SONSARA

BROWN AVENU





Budget Scenario (10% PM) - 2022 Project Period - Printed: 2/12/2021





Budget Scenario (10% PM) - 2023 Project Period - Printed: 2/12/2021

NORTHR

SILVER

SKY HY

WOODMINSTER

HAPPY VALLEY

HAPPY VALLEY

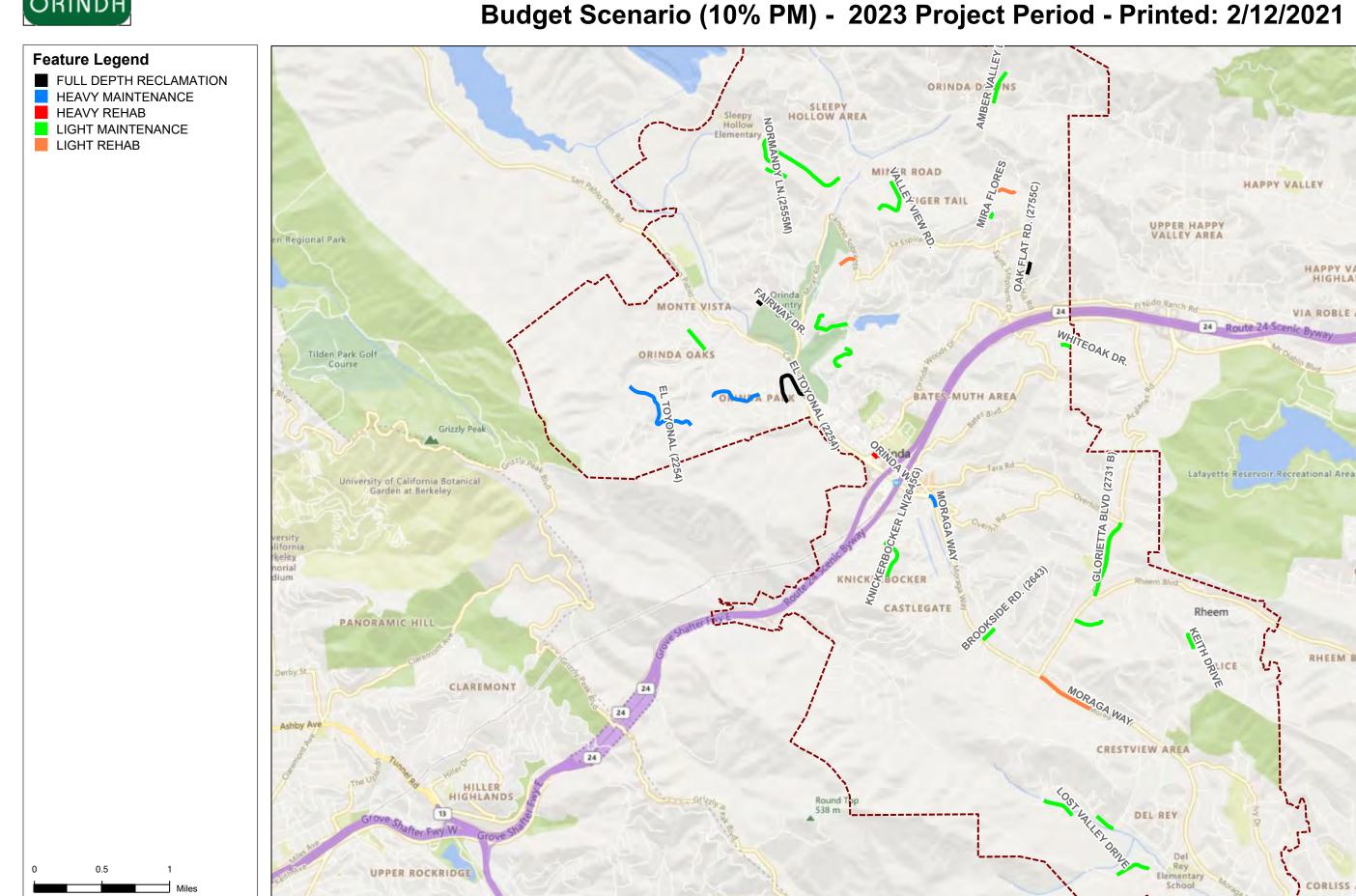
VIA ROBLE AREA

CAMPOLINDO

RHEEM BLVD AREA

CORLISS AREA

Route 24 Scenic Byway Lafayette





NORTHRIDGE

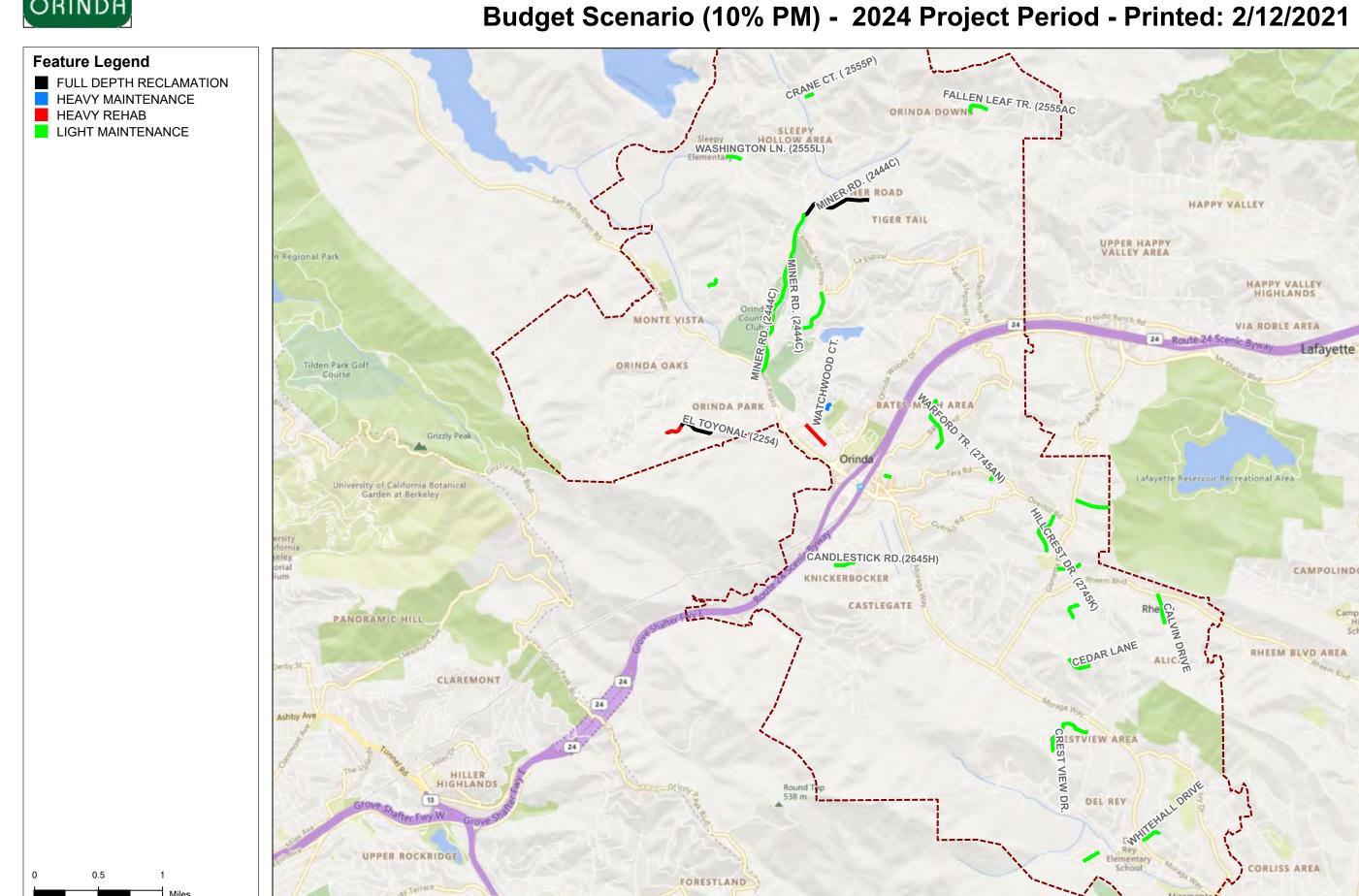
SILVER

SKY HY

WOODMINSTER

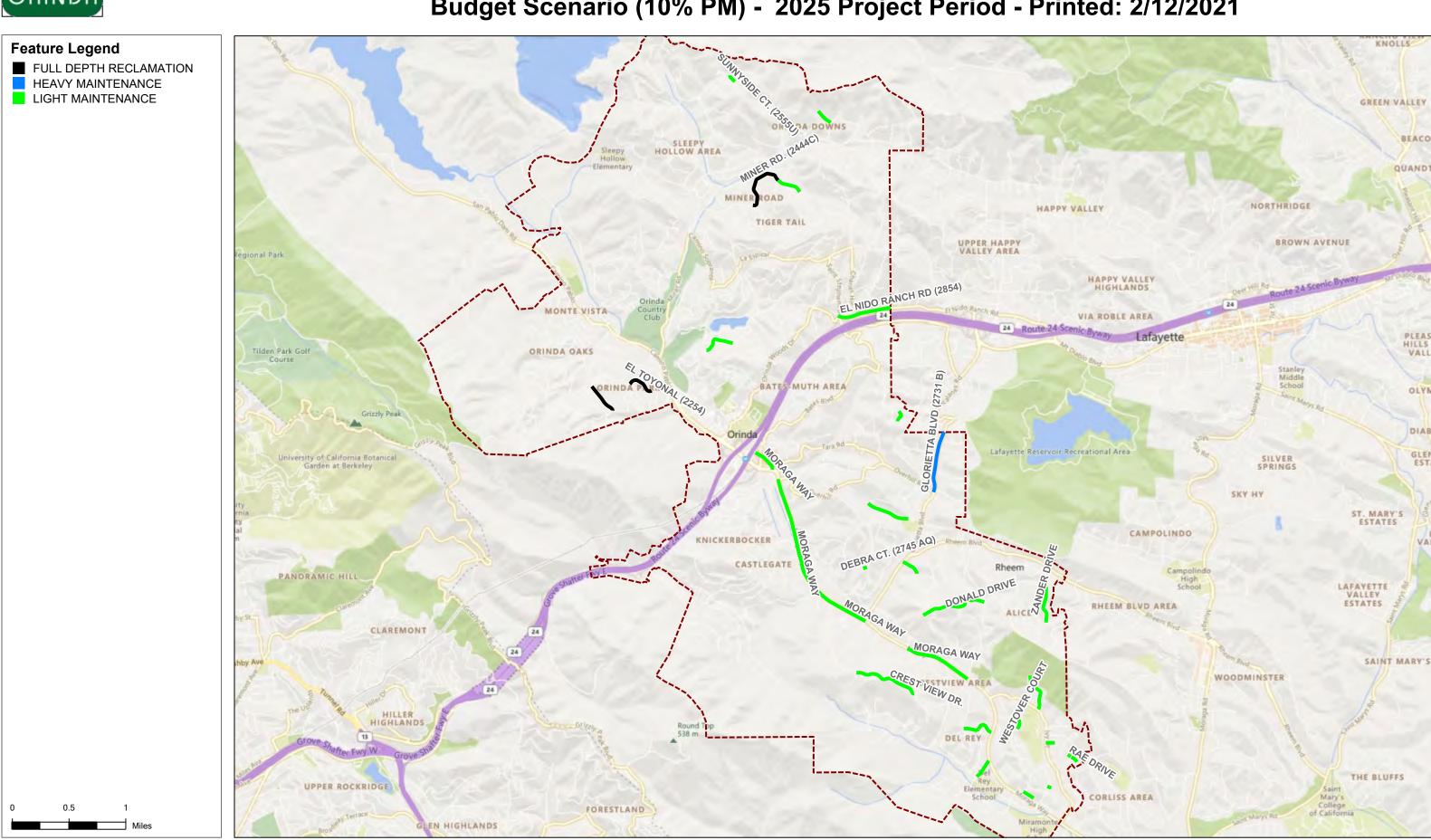
CAMPOLINDO

BROWN AVENUE





Budget Scenario (10% PM) - 2025 Project Period - Printed: 2/12/2021





Increase PCI by 5 (\$20.2 Million over 5 Years)

- Pavement Network Condition Lane Miles
- Network Condition Summary
- Cost Summary



Year 5

CITY OF ORINDA **Target-Driven Scenarios** Pavement Network Condition Lane Miles

> Printed: 12/02/2020 Interest: .00% Inflation: 3.00%

Scenario.	Increase by	, 5	(85-90)
ocenano.	IIICI Ease Di	<i>/</i> 0	(00-90)

Objective: Mi	inimum Netwo	rk Averag	e PCI				Target: By Year
Year	Value	Year	Value	Year	Value	Year	Value
Year 1	86	Year 2	87	Year 3	88	Year 4	89

Annual budget needs to meet target objectives

Annual bud	get needs to mee	Preventative				
Year	Arterial	Collector	Res/Loc	Other	Maintenance	Total
2021	\$1,392,256	\$591,609	\$663,881	\$0	\$1,851,519	\$2,647,746
2022	\$1,850,427	\$1,646,826	\$1,212,396	\$0	\$999,605	\$4,709,649
2023	\$21,056	\$2,030,886	\$1,571,281	\$0	\$1,528,325	\$3,623,223
2024	\$1,270,776	\$1,686,157	\$3,492,086	\$0	\$3,611,120	\$6,449,019
2025	\$912,150	\$1,092,685	\$743,303	\$0	\$1,380,369	\$2,748,138

Average Yearly Total: \$4,035,555

Grand Total: \$20,177,775

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	78	14.8%	1.2%	21
Collector	70	9.8%	3.8%	16
Residential	90	63.8%	1.1%	36

Pavement Network after schedulable treatments applied in lane miles.

2021		Percentage of the Network in Very	Percentage of the Network in Poor or	Remaining
Functional Class	PCI	Good Condition	Very Poor Condition	Life
Arterial	82	15.9%	1.2%	23
Collector	72	9.8%	3.8%	18
Residential	91	63.8%	1.1%	37

2022 Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	85	16.6%	0.7%	24
Collector	77	10.9%	2.7%	19
Residential	90	64.4%	0.7%	37

Pavement Network after schedulable treatments applied in lane miles.

Pomoining	Percentage of the	Percentage of the		2023
Remaining Life	Network in Poor or Very Poor Condition	Network in Very Good Condition	PCI	Functional Class
24	0.7%	16.0%	82	Arterial
21	1.2%	13.3%	81	Collector
36	0.7%	64.4%	90	Residential
Remaining	Percentage of the Network in Poor or	Percentage of the Network in Very		2024
Life	Very Poor Condition	Good Condition	PCI	Functional Class
25	0.7%	17.2%	84	Arterial
22	0.5%	14.7%	85	Collector
37	0.7%	64.4%	91	Residential
Remaining	Percentage of the Network in Poor or	Percentage of the Network in Very		2025
Life	Very Poor Condition	Good Condition	PCI	Functional Class
26	0.6%	17.8%	85	Arterial
23	0.2%	15.2%	87	Collector
37	0.4%	64.8%	91	Residential



CITY OF ORINDA

Target-Driven Scenarios Network Condition Summary

Interest: 0% Inflation: 3% Printed: 12/01/2020

Scenario: Increase by 5 (85-90)							
Objective: Minimum Network Average PCI Target: By Yea						Target: By Year	
Year	Value	Year	Value	Year	Value	Year	Value
Year 1	86	Year 2	87	Year 3	88	Year 4	89
Year 5	90						

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2021	85	86
2022	83	87
2023	81	87
2024	79	89
2025	77	89

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2021, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	14.8%	9.8%	63.8%	0.0%	88.4%
II / III	2.7%	2.5%	0.3%	0.0%	5.6%
IV	0.9%	3.4%	1.0%	0.0%	5.4%
V	0.2%	0.4%	0.0%	0.0%	0.6%
Total	18 7%	16.2%	65.1%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
	15.9%	9.8%	63.8%	0.0%	89.5%
II / III	1.6%	2.5%	0.3%	0.0%	4.5%
IV	0.9%	3.4%	1.0%	0.0%	5.4%
V	0.2%	0.4%	0.0%	0.0%	0.6%
Total	18.7%	16.2%	65.1%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
l	17.8%	15.2%	64.8%	0.0%	97.8%
II / III	0.3%	0.7%	0.0%	0.0%	1.0%
IV	0.6%	0.2%	0.4%	0.0%	1.2%
Total	18.7%	16.2%	65.1%	0.0%	100.0%



CITY OF ORINDA Target-Driven Scenarios - Cost Summary

Interest: 0% Inflation: 3% Printed: 12/01/2020

	nimum Network	_				Target: By Year
Year Year 1 Year 5		′ear ′ear 2	Value 87	Year Year 3		Year Value Year 4 89
Year	Re	ehabilitation	Preventive	Maintenance	Total Cost	Deferred
2021	II	\$0	Non-	\$1,851,519	\$2,647,746	\$7,871,222
	III	\$796,227	Project	\$0		
	IV	\$0	Project	\$0		
	V	\$0				
	Total	\$796,227				
	Project	\$0				
2022	II	\$60,731	Non-	\$999,605	\$4,709,649	\$5,658,812
	III	\$1,259,065	Project Project	\$0		
	IV	\$961,817		ΦΟ		
	V	\$1,428,431				
	Total	\$3,710,044				
	Project	\$0				
2023	II	\$310,492	Non-	\$1,528,325	\$3,623,223	\$4,082,653
	III	\$30,634	Project Project	\$0		
	IV	\$0		ΨΟ		
		\$1,753,772				
	Total	\$2,094,898				
	Project	\$0				
2024	II	\$0	Non-	\$3,611,120	\$6,449,019	\$2,434,107
	III	\$0	Project	\$0		
	IV	\$1,966,202	Project	ΦΟ		
	V	\$871,697				
	Total	\$2,837,899				
	Project	\$0				
2025	II	\$68,555	Non-	\$1,380,369	\$2,748,138	\$1,572,199
	III	\$0	Project	r.c.		
	IV	\$524,902	Project	\$0		
	V	\$774,312				
	Total	\$1,367,769				
	Project	\$0				

Functional Class		Rehabilitation	Prev. Maint.	Summary
Arterial		\$3,969,576	\$1,477,089	
Collector		\$6,005,751	\$1,042,412	
Residential/Local		\$831,510	\$6,851,437	
	Total:	\$10,806,837	\$9,370,938	Grand Total: \$20,177,775

Appendix C Definitions



DEFINITIONS

This section is intended to define important pavement design acronyms and terms used when discussing a Pavement Management System (PMS).

GENERAL TERMS

PMS - Pavement Management System - A program to aid in tracking the condition of roads and a means to help quantify the cost of maintaining the roads in a given area.

TI - Traffic Index - Cars and light trucks have little impact on the pavement structure. Larger/Heavier trucks have very significant impacts on the pavement due to the high axle weights. The total EALs is converted into a design Traffic Index (TI). The design TI is the total number of EALs that the pavement will support before it begins to fail, regardless of the passage of time. Normally for a new pavement, the EALs over a 20_year period are used. For rehabilitation procedures such as overlays, 10 years is generally used.

PCI - Pavement Condition Index - A rating scale for the condition of a road segment. 100 represents no defects and recent major rehabilitation.

CRITICAL PCI - The PCI value at which the rate of loss increases with time, or the cost of applying a maintenance treatment increases significantly.

CLS / FC - Functional Classification is the process by which streets and highways are grouped into classes, or systems, according to the character of traffic service that they are intended to provide. There are three highway functional classifications: arterial, collector, and local roads. All streets and highways are grouped into one of these classes, depending on the character of the traffic.

Arterials - provide the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.

Collectors - provide a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.

Residential/Local - consists of all roads not defined as arterials or collectors and primarily provides access to land with little or no through movement.

• (Excerpted from the U.S. Department of Transportation, Federal Highway Administration web site on "Functional Classification".)

EMULSION - A chemical added to water and asphalt that keeps the asphalt in a stable suspension in the water.

AC - Asphaltic Concrete - A plant mixed asphalt binder (asphalt cement that is classified according to the Standard Specification for Performance Graded Asphalt Binder) and aggregate (rocks) thoroughly mixed and compacted into a mass.



PCC - Portland Cement Concrete

OVERLAY - The placement of asphaltic concrete mix over an existing asphaltic concrete or portland cement concrete surface.

Light Overlay - would include any overlay of less than 2 inches of asphalt.

Heavy Overlay - is a thicker layer of asphalt and might include such items/operations as, but not limited to fabric, milling/grinding and reconstruction.

PREVENTIVE MAINTENANCE - Provides budget dollars for localized pavement repairs such as digouts and crack filling.

SLURRY SEAL - Includes a graded aggregate along with emulsion and water. Generally squeegeed and generally consists of two layers.

REFLECTIVE CRACKING - Cracks that occur in new "thin" overlays that are identical to the cracks that were present in the existing pavement.

ALLIGATOR CRACKING - Alligator or fatigue cracking is a series of interconnecting cracks caused by fatigue failure of the asphalt concrete surface under repeated traffic loading. Cracking begins at the bottom of the asphalt surface (or stabilized base) where the stress and strain are highest under a wheel load. The cracks propagate to the surface initially as a series of parallel longitudinal cracks. After repeated traffic loading, the cracks connect, forming many sided, sharp-angled pieces that develop a pattern resembling chicken wire or the skin of an alligator. Alligator cracking occurs only in areas subjected to repeated traffic loading, such as wheel paths. (Pattern-type cracking that occurs over an entire area not subjected to loading is called "block cracking," which is not a load-associated distress.)

BLOCK CRACKING - Block cracks are interconnected cracks that divide the pavement into approximately rectangular pieces. Block cracking is caused mainly by shrinkage of the asphalt concrete and daily temperature cycling (which results in daily stress/strain cycling). It is not load-associated. Block cracking usually indicates that the asphalt has hardened significantly. Block cracking normally occurs over a large portion of the pavement area, but sometimes will occur only in non-traffic areas. This type of distress differs from alligator cracking in that alligator cracks form smaller, many-sided pieces with sharp angles. Also, unlike block, alligator cracks are caused by repeated traffic loadings, and are therefore found only in traffic areas (i.e., wheel paths).

LONGITUDINAL / TRANSVERSE CRACKING - Longitudinal cracks are parallel to the pavement's centerline or laydown direction. Transverse cracks extend across the pavement at approximately right angles to the pavement centerline or direction of laydown. These types of cracks are not usually load-associated.



WEATHERING & RAVELING - Weathering and raveling is the wearing away of the pavement surface due to a loss of asphalt or tar and dislodged aggregate particles. These distresses indicate that either the asphalt binder has hardened appreciably or that a poor quality mixture is present. In addition, raveling may be caused by certain types of traffic, i.e., tracked vehicles. Softening of the surface and dislodging of the aggregates due to oil spillage are also included under raveling.

BUMPS & SAGS - Bumps are small, localized, upward displacements of the pavement surface. They are different from shoves in that shoves are caused by unstable pavement. Sags are small, abrupt, downward displacements of the pavement surface. If bumps appear in pattern perpendicular to traffic flow and are spaced at less than 3 m (10 ft), the distress is called corrugation. Distortion and displacement that occur over large areas of the pavement surface causing large and/or long dips in the pavement should be recorded at "swelling."

RUTTING / SHOVING - A rut is a surface depression in the wheel paths. Pavement uplift may occur along the sides of the rut, but, in many instances, ruts are noticeable only after a rainfall when the paths are filled with water. Rutting stems from a permanent deformation in any of the pavement layers or subgrades, usually caused by consolidated or lateral movement of the materials due to traffic load.

Shoving is a permanent, longitudinal displacement of a localized area of the pavement surface caused by traffic loading. When traffic pushes against the pavement, it produces a short, abrupt wave in the pavement surface. This distress normally occurs only in unstable liquid asphalt mix (cutback or emulsion) pavements.

PATCHING & UTILITY CUTS - A patch is an area of pavement that has been replaced with new material to repair the existing pavement. A patch is considered a defect no matter how well it is performing (a patched area or adjacent area usually does not perform as well as an original pavement section). Generally, some roughness is associated with this distress.

POTHOLES - Most often are structurally related distresses and should not be confused with raveling and weathering.

PAVEMENT PRESERVATION - Applying the <u>Right Treatment</u> to the <u>Right Pavement</u> at the <u>Right Time</u> using the <u>Right Materials</u>.

R-VALUE - A test to evaluate the base, subbase and subgrades of an area to be used in pavement designing for thickness of asphalt.

ESAL - The impact of trucks is measured in equivalent single 18,000 pound axle loads (EALs).



STREETSAVER DEFINITIONS

MANAGEMENT SECTION - This is used to maintain an inventory of all the roads and road sections in your jurisdiction.

EVENTS – This provides for viewing and maintaining of Events or changes that have been made on a management section. The Events that are included are:

- Management Section Creation.
- Results from Maintenance and Rehabilitation treatments that have been applied to the Management Section.
- Results from Visual Inspections of Management Sections.
- Listing of changes/edits of information on a Management Section.

DETERIORATION CURVE - This provides a graphical representation of the current pavement condition index and the historical PCIs for each section of road in your jurisdiction.

MAINTENANCE/REHABILITATION - This is used to review the proposed maintenance, new maintenance, and rehabilitation for any road section in your jurisdiction.

BRANCH - Generally a road name or a road name with a direction of travel.

SECTION - Usually a branch or road is large and needs to be divided into smaller pieces to maintain. These smaller pieces are labeled as "sections" and designated with a number and a beginning and ending location.

DISTRESSES - Defects found in asphalt concrete pavements or portland cement concrete. These defects degrade the condition of the road.

RATING - The rating is the weight cost - effectiveness ratio of the recommended treatment.

% OF ENVIRONMENT - The percentage of the pavement distress in a management section that is an environment related distress.

% LOAD RELATED - The percentage of the pavement distress in a management section that is load related distress (caused by excessive weight on the pavement surface). **% OTHER** - Is the percentage of the pavement section that is not a load related or environment related distress.

ACTIVE - Indicates whether or not the current record is active.



AREA - Contains the area of a section in square feet. This is automatically calculated using the values that are entered in the Length and Width fields. However, if the section is irregularly shaped the area can be entered by the user.

AREA ID - Is an optional, jurisdiction defined field to identify the area in which the section is located. For example, each neighborhood or subdivision, or each geographic type (mountain, valley, coast, etc.) in the jurisdiction may be assigned a letter of the alphabet.

BASE BUDGET - Provides an area for you to enter the dollar amount of your base budget.

BASE BUDGET INCREASE FACTOR - Stores the percent that the base budget will increase each year.

BASE PM SPLIT - Percent of the base budget that has been set aside for preventive maintenance.

BEGINNING LOCATION - Identifies the point that defines the beginning of the section. This is generally the name of a cross road or other landmark.

CONDITION - Column lists the condition levels (2-5) that require stop-gap treatments.

COST/ SQ YD - Indicates the cost per square yard of road for the suggested treatment.

CURRENT PCI - Calculated from either a visual inspection or a maintenance treatment.

DESCRIPTION - Displays a description of the item named in the previous column in a grid.

DISTRESS - Contains the type of distress present on a section of a road.

END LOCATION - Identifies the point that defines the end of the section. This is generally the name of a cross road or other landmark.

EVENT ACTIVE - Indicates whether an Event is currently part of the active history for the current Section.

EVENT PCI - The PCI after the selected Event occurred.

EVENT TRANSACTION TYPE - Includes: Creation, Inspection, Treatment, Split, Combine, Attribute Change and Core Data Change.

EVENT VALID - Indicates if an Event can be activated and made part of the valid events for the current section.

FUNDING SOURCE - Is an optional, jurisdiction defined field to identify the funding source for the section; an example might be G for general fund.



GENERAL CODE - Is an optional, jurisdiction defined field used to identify sections of pavement sharing common characteristics, i.e., drainage type.

INFLATION RATE - Is the inflation used throughout your jurisdiction. You may wish to consult your financial department with this value.

INSPECTION AREA - Is the total area of the inspection unit.

INTEREST RATE - Contains the interest rate used throughout your jurisdiction.

LIFE EXTENSION - Is the number of years that a maintenance treatment extends the life of a pavement surface.

MAINTENANCE DATE - Displays the date the maintenance was completed.

MANAGEMENT UNIT - Relates a project to a management unit.

MILEPOSTS - Display the beginning and ending points of a management section.

NEW PCI - Stores the PCI value that was calculated after a treatment was applied.

NUMBER OF SURFACE SEALS BEFORE OVERLAY - Displays the recommended number of surface seals before the application of an overlay.

OLD PCI - Displays the pavement condition index before a treatment was applied.

OTHER - Displays the weighting factor applied to management sections with functional classes other than arterial, collector, and residential.

OVERLAY - Displays the overlay code that corresponds to an overlay procedure.

OVERLAY CODE - Is an identifier for the treatment type; use one of the six codes from the pop-up list that appears when this is activated.

PCI CAP - Stores the maximum PCI value that will be included in needs and scenario calculations. If a PCI value is larger than the PCI Cap value, it will not be included.

PCI EFFECTIVENESS CUT-OFF - Contains the minimum PCI value used in calculating the area under the projected performance curve. That area is used in ranking sections needing work, and the area below the PCI Cut-Off value is not included in that area. It should generally be the lowest PCI value that defines the minimum acceptable condition for all of the pavement types and functional classification groupings.



PCI HIGH - LOW > 25 - Is marked if the difference between the high and low PCI values is greater than 25.

PCI HIGH VALUE - Is the maximum PCI value for an inspection unit used in the last PCI calculation for a management unit.

PCI LOW VALUE - Is the minimum PCI value for an inspection unit used in the last PCI calculation for a management unit.

PM% - Scenarios based on a yearly budget, this column stores the percent that has been set aside for preventive maintenance.

REPLACEMENT COST - Is the cost per square yard to install a new pavement surface.

RESIDENTIAL \$ - Indicates the cost of a stop-gap treatment per square yard when applied to a road with a residential functional class and a given condition.

ROAD ID - Contains a two-character identifier that was assigned to the road. The combination of Road Number, Road Name, and Road ID must be unique for each road section.

ROAD NAME - Displays the name of the road that corresponds to the road number and road ID. The combination of Road Number, Road Name, and Road ID must be unique for each road section

ROAD NUMBER - Contains the number that was assigned to a road. The combination of Road Number, Road Name, and Road ID must be unique for each road section.

SECTION ID - Is an identifier that is unique for each section of a given street. Note that the Street ID and the Section ID combined describe the individual section. Therefore, that combination must be unique. The same Section ID can be reused as long as it is used in conjunction with a different Street ID each time.

SEGMENT LENGTH - Is the length in feet of the management section.

SELECT MANAGEMENT SECTIONS - Allows you to calculate PCI values based on selected management sections. If this button is marked, the management sections that have had records updated since the last calculations are displayed in a grid. Select the management sections you want included in the calculations from this grid.

SPECIAL - Check box is marked if the displayed inspection unit is non-representative of a section as a whole.



SPECIAL UNIT - The information will either be Y or blank. Y is an indication that this inspection unit is in some way non-representative of the section as a whole, and would receive a different maintenance/rehabilitation treatment from the rest of the section.

STANDARD INSPECTION UNITS - Is the typical number of inspection units that would be used for a particular management section.

STOP-GAP APPLICATION INTERVAL - Indicates the number of years between the applications of stop-gap treatments.

STREET ID - Is an identifier that is unique for each street. The Street ID usually bears some similarity to the actual street name.

STREET NAME - Is the full name of the street including "Street", "Way", "Court" etc.

SURFACE - Describes the type of surface for a specific section of road. The options for this field are:

- A AC for asphalt concrete,
- C AC/PCC for asphalt concrete over Portland cement concrete,
- O AC/AC for overlays of asphalt concrete over asphalt concrete,
- **P PCC** for Portland cement concrete.
- **S ST** for surface treatment (This Surface Type is not used very often, as it refers to roads that have neither AC or PCC, but have a surface treatment over dirt or gravel.)

TREATMENT - Contains the type of treatment the road received or will receive.

TREATMENT COST - Is an optional field giving the cost in dollars and cents of the treatment.

UNIT OF MEASURE - Displays the units of measure used to measure an item.

UNIT PRICE - Displays the price paid for an inventory item.

VISUAL PCI - Used to identify PCI calculations that have been determined based upon a visual inspection. If this check box is blank, then the PCI was extrapolated based upon the maintenance treatment that has been applied to a management section.

WEIGHTING FACTORS - Section displays the weighting factors established by your jurisdiction for the functional classes.

YEAR OF MAINTENANCE - Stores the proposed year of a treatment.

YEARS BETWEEN CRACK SEALS - Displays the number of years between the application of crack seals for the functional class with a specific severity.



YEARS BETWEEN SURFACE SEALS - Displays the recommended number of years that should come between surface seal application for the functional class with the indicated severity.

YEARS TO CALCULATE - Stores the number of years you want to include in the Budget Needs calculation. The number of years cannot be less than 5 or more than 20.

REPORT DEFINITIONS

ZONES - Geographical areas of the city defined by city staff to aid in the development of a maintenance plan for residential roads.

CL - Centerline Mile - a measuring of the length of a road regardless of the width of the road.

LM - Lane Mile - a measurement of the length of all the lanes for a given FC or area.

ACTION / TREATMENT - A proposed type of rehabilitation work that should be used on a given road segment, based on PCI, FC and engineering evaluation.

ANNUAL BUDGET - The amount of money that is available each year to be used for pavement maintenance. These funds can come from various sources and can vary from year to year, although it is generally a fixed figure.