

Pavement Condition Assessment for Saddle Creek Community Services District
June 2016

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I. Introduction

Saddle Creek Community Services District owns and operates the infrastructure for the subdivision surrounding the Saddle Creek Resort and Golf Course in Copperopolis, California. Of particular interest to this report is the road network that serves the subdivision and it's residents.

There are a total of just under 8 miles of asphalt roadways within the Saddle Creek subdivision. The oldest roads in the Saddle Creek subdivision were built in 1995 with the construction of the entrance road off of Little John Road, Saddle Creek Drive and Oak Creek Drive. In 1998 the roads within the Knolls neighborhood and the Mitchell Lakes neighborhood were added, followed by the roads within the Rockridge neighborhood in 2001, the Oak Creek and Oak Meadow neighborhoods in 2004, the Glens neighborhood in 2007 and the most recent addition of the roads in the Hawkrige neighborhood in 2011.

It has now been more than 20 years since the construction of the original asphalt roads and their age is beginning to show. The purpose of this report is to examine the current condition of all of the roadways within the Saddle Creek subdivision, develop several roadway maintenance and rehabilitation strategies to address the current and future roadway maintenance needs and provide current and future budget recommendations to the Saddle Creek Community Services District Board and General Manager.

II. Executive Summary

The goal of pavement management is to devise an ongoing program of pavement preventative maintenance which maintains the roadways in the most cost-effective manner over time. If scheduled effectively these treatments can dramatically increase the quality of pavement conditions and decrease the yearly expenditures necessary to maintain those improved pavement conditions over time.

The metric that is used in pavement management is called the Pavement Condition Index. The PCI is number between 0 and 100 which attempts to capture the current condition of a roadway pavement for a specific section. A score of 100 indicates a brand new pavement that has just been constructed. Over time the forces of weathering and loading, primarily from heavier vehicles, begin to degrade all pavements. The PCI score measures the extent of this degradation as a reduction in the score from the original score of 100.

Figure 1 depicts the typical Pavement decay curve which represents the condition (PCI score) of pavements as they age. New pavements normally perform well for the first few years after they are constructed. However, as time goes on they begin to degrade. This degradation accelerates if the pavements are not provided with preventative maintenance treatments after the 5-8 years.

As the degradation continues the cost to repair the degradation, and return the pavement to a “very good” condition continues to rise. The cost to perform preventative maintenance treatments on relatively new pavements (PCI of 70 to 100) is in the range of \$2-4 per square yard. However, the cost to repair severely damaged pavements (PCI of 25 or lower) can range from \$70-100 per square yard. The old saying “you can pay me now or pay me a whole lot more later” accurately describe the result of not committing to an ongoing pavement management program that maintains the PCI at a level of 70 or above.

From discussions with current Saddle Creek Community Services District management and line employees it was learned that no significant pavement maintenance has been done over the life of the subdivision. With the exception of some very minor patching and crack sealing the pavements are essentially untouched from their original construction.

The existing average PCI value for the roads within the Saddle Creek Community Services District is calculated to be 62 as of May 2016, with 31.4% of the roadways classified in poor or very poor condition. The average PCI for all of the Saddle Creek roadways was quoted to be 78 in an August 2006 report by Jon Lynch P.E. to the District Manager of the Saddle Creek Community Services District. The drop in PCI from 78 in 2006 to 62 in 2016 is very significant and represents a very large increase in the current and future cost of maintaining the roadways in an acceptable condition. Immediate attention to addressing the pavement conditions of the roadways is now essential to reverse this continuing decline in pavement conditions.

Based on the recent inspections and analysis the current estimated cost of the unmet needs to repair all of the roadways within the Saddle Creek subdivision is approximately \$560,000 in 2016 dollars. This cost represents the amount of money needed to return all roadways within the subdivision up to a “very good” condition (PCI of 70 or above).

If nothing is done to address the ongoing deterioration of pavement conditions the average PCI for all roadways within the subdivision is projected to deteriorate from the current value of 62 to a value of 52 by the year 2021. The reduction in PCI score directly correlates to the ongoing deterioration of the pavement condition caused by weathering and continued use of the roadways by vehicles, particularly heavily loaded vehicles such as garbage trucks, propane trucks, moving vans etc.

A yearly budget of \$50,000 per year is needed to raise the average PCI of the subdivision roads from it’s current value of 62 (31.4% of pavement in poor or very poor condition) to a value of 66 by the year 2021 (19.3% of pavement in poor or very poor condition).

A yearly budget of \$100,000 per year is needed to raise the average PCI of the subdivision roads from it’s current value of 62 (31.4% of pavement in poor or very poor condition) to a value of 79 by the year 2021 (4.6% of pavement in poor or very poor condition).



Figure 1 – Pavement Decay Curve

III. Data Collection Methodology

Pavement condition data was collected over a period of three weeks in May 2016 using the Pavement Condition Index Distress Identification Manual For Flexible Pavements and the Streetsaver Pavement Management program both published by the Metropolitan Transportation Commission. The Streetsaver program is the most widely used pavement management program in California and is used to manage over 340,000 miles of roadways throughout the state.

Each street was divided up into 100 foot sections. Each roadway section was measured to confirm the width of the roadway in order to accurately calculate the total area of pavement for that section.

Each roadway section was then carefully evaluated for the following pavement distresses:

1. Alligator Cracking

Longitudinal and transverse cracks running parallel to each other. Normally caused by repeated heavy traffic loading. Measured by the square foot as Low, Medium or High severity

2. Block Cracking

Longitudinal and transverse cracks that divide a pavement into approximately rectangular pieces. Normally caused by shrinkage of pavement from heating and cooling over extended periods of time. Measured by the square foot as Low, Medium or High severity.

3. Vertical Pavement Distortions

Abrupt upward or downward displacements in the pavement surface. Normally caused by unstable pavement materials, lack of adequate roadway support or tree roots. Measured by the square foot as Low, Medium or High severity.

4. Longitudinal and Transverse Cracking

Cracks that are parallel or perpendicular to the pavement's centerline. Normally caused by shrinkage of the pavement from heating and cooling over extended periods of time or poor construction joints. Measured by the linear foot as Low, Medium or High severity.

5. Patching/Utility Cuts

An area of pavement that has been replaced or covered with new pavement material to repair the existing pavement or a cut in the pavement due to the placement or maintenance of sub-surface utilities. Measured by the square foot as Low, Medium or High severity.

6. Rutting/Depressions

Surface depressions in the wheel paths. Normally caused by weaknesses in the substructure of the road and repeated heavy loading from vehicles. Measured by the square foot as Low, Medium or High severity.

7. Raveling

The dislodging of coarse rock aggregate particles from the asphalt binder material. Normally caused by insufficient asphalt binder in the pavement or poor compaction of the pavement during construction. Measured by the square foot as Medium or High severity.

8. Weathering

The wearing away of the asphalt binder holding the rock aggregate together. Normally caused by oxidization from repeated exposure to the elements, particularly sunlight, poor compaction during construction or insufficient asphalt content. Measured by the square foot as Low, Medium or High severity.

IV. Data Analysis Methodology

All collected pavement distress data was input into the Metropolitan Transportation Commission Streetsaver program for analysis. The outputs of the Streetsaver program include the PCI calculations for each 100 foot section of roadway pavement and an associated pavement condition score (PCI).

Collector Roads vs. Local Roads

The analyzed data is summarized by type of roadway. In the case of the Saddle Creek subdivision two categories of roadway were used. Saddle Creek Drive and Oak Creek Drive were classified as collector roads. The remainder of the roadways were classified as local roads. This allows the program to place a slightly higher emphasis on collector roads in recognition that these roads normally carry greater volumes of traffic and experience a greater amount of heavy loads. Thus, they are more likely to deteriorate faster than are the local roads. This distinction is used later in the selection of roadway rehabilitation projects to place a greater importance to repairs to these roadway sections.

Summary of Current Roadway Pavement Conditions by PCI

The collector roadways average PCI was calculated to have a score of 53

The local roadways average PCI was calculated to have a score of 69

The overall average PCI for all roadways combined was calculated to have a score of 62.

Summary of Current Roadway Pavement Conditions by Category

| | |
|------------------------------|-------------|
| Very Good – PCI of 70 to 100 | 51.7% |
| Good – PCI of 50 to 70 | 16.9% |
| Poor – PCI of 25 to 50 | 28.0% |
| Very Poor – PCI of 0-24 | <u>3.4%</u> |
| Total | 100.0% |

V. Summary of Current Road Network System Conditions and Deferred Maintenance Backlog

Summary of Current Conditions

These results indicate that only 51.7% of the roadways within the subdivision are in Very Good condition. These are mostly the roadway constructed in the past 5-7 years. These roadway pavements are excellent candidates for preventative maintenance treatments such as crack sealing, slurry sealing and chip seals to prolong their life at a high PCI and to also prevent them from requiring more costly rehabilitation in the future if they continue to deteriorate.

16.9% of the roadways within the subdivision are within the Good category. These roadway pavements are prime candidates for pavement rehabilitation treatments such as thin overlays and site-specific dig-outs of old failed pavements. Continued deterioration of these pavements without rehabilitation in the very near future will result in greatly increased costs to eventually repair these pavements to acceptable levels.

3.4 % of the existing pavements have already fallen below a score of 50 into the Poor or Very Poor category. These pavements are now sufficiently compromised that they will require more involved and expensive pavement rehabilitation treatments such as wider area removal and replacement of pavements, thicker overlays and possibly the addition of pavement fabric in conjunction with thicker overlays to provide more support for load related distresses.

Summary of Costs to improve the condition of distressed pavement to a Very Good condition

Using the data from the Streetsaver analysis the cost of repairing the current pavement conditions and returning all of those distressed pavements to a Very Good condition is estimated to be approximately \$560,000 in 2016 dollars. This amount is based on current construction costs for pavement preventative maintenance and pavement restoration projects in Northern California. The costs include a combination of project design, bidding, construction contract, and construction management expenses.

The \$560,000 backlog is further subdivided to include \$510,000 in pavement rehabilitation costs and \$50,000 in pavement preventative maintenance costs.

VI. Budget Scenarios

Using the calculated backlog figure of \$560,000 a series of possible budget scenarios are offered for consideration. All of these budget scenarios include a yearly inflation factor of 3.0 percent. This figure is representative of the Cost of Construction index published in the Engineering News Record for Northern California over the past 20 years.

The budget scenarios also include an interest figure of 5.0%, as recommended by the Streetsaver program, to account for the cost of money over time.

1. Do Nothing

This alternative assumes that there will be no effort to address the current pavement needs. The estimated 5-year cost of this scenario is obviously \$0. The calculated result of this scenario for the five year period from 2016-2020 is summarized below:

| <u>Year</u> | <u>Average PCI</u> | <u>% of Roadway Sections In Poor or Very Poor condition</u> | <u>Deferred Maintenance</u> |
|-------------|--------------------|---|-----------------------------|
| 2017 | 62 | 30.4% | \$192,921 |
| 2018 | 60 | | |
| 2019 | 57 | | |
| 2020 | 54 | | |
| 2021 | 52 | 41.0% | \$495,714 |

2. Status Quo – PCI of 62

This alternative assumes that there will be an effort prevent the current roadway conditions from deteriorating further. However, there will not be an improvement in the average overall pavement conditions within the subdivision as a whole. The estimated 5-year cost of this scenario is \$ 154,175. The calculated result of this scenario for the five year period from 2016-2020 is summarized below:

| <u>Year</u> | <u>Average PCI</u> | <u>% of Roadway Sections In Poor or Very Poor condition</u> | <u>Deferred Maintenance</u> |
|-------------|--------------------|---|-----------------------------|
| 2017 | 62 | 30.4% | \$192,921 |
| 2018 | 62 | | |
| 2019 | 62 | | |
| 2020 | 62 | | |
| 2021 | 62 | 32.2% | \$424,390 |

3. Budget of \$ 50,000 per year

This alternative assumes that there will be a budget of \$50,000 per year established to devote to pavement preventative maintenance and rehabilitation. The 5-year cost of this scenario is \$250,000. The calculated result of this scenario for the five year period from 2016-2020 is summarized below:

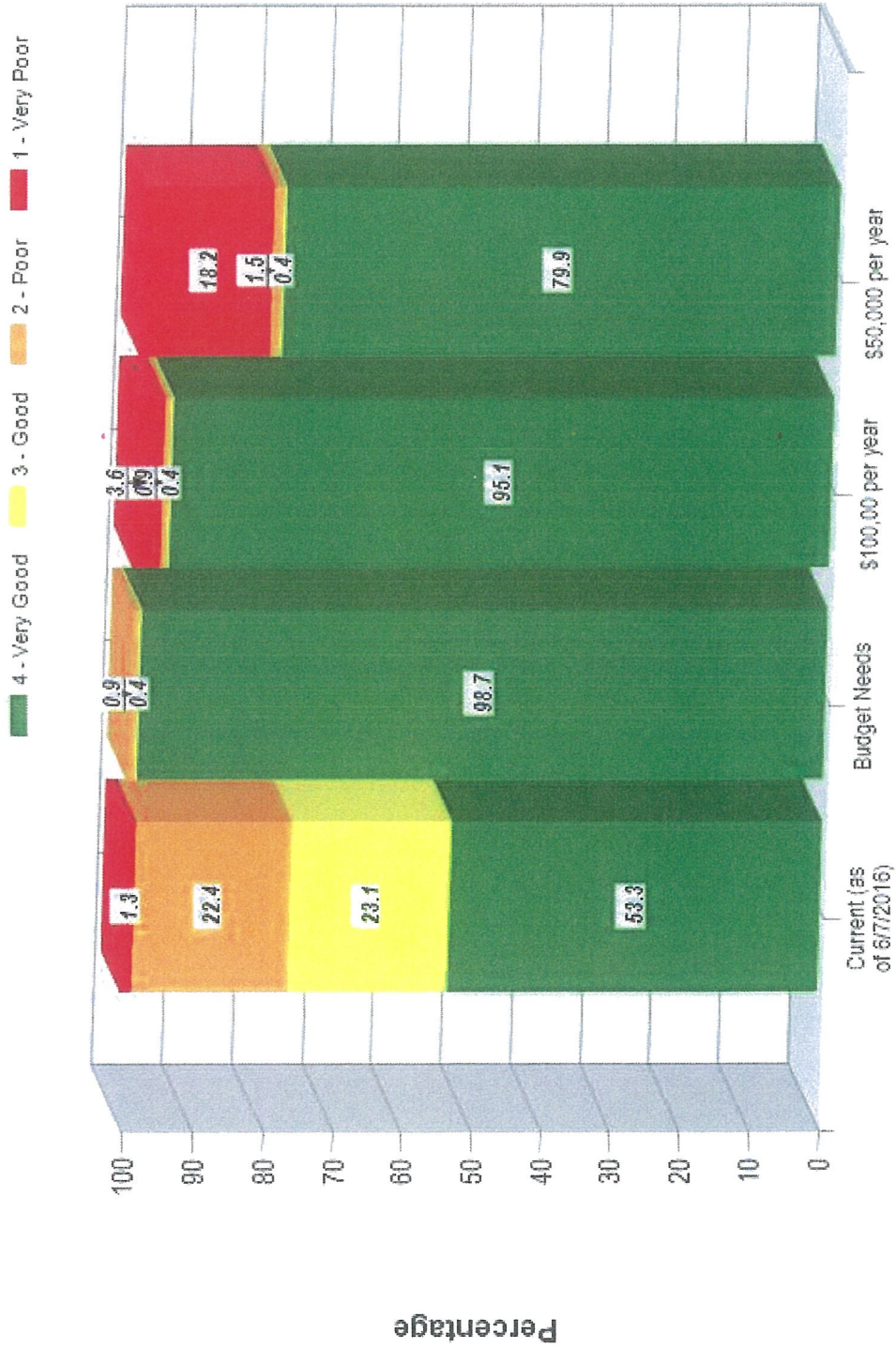
| <u>Year</u> | <u>Average PCI</u> | <u>% of Roadway Sections In Poor or Very Poor condition</u> | <u>Deferred Maintenance</u> |
|-------------|--------------------|---|-----------------------------|
| 2017 | 65 | 30.4% | \$192,921 |
| 2018 | 66 | | |
| 2019 | 66 | | |
| 2020 | 66 | | |
| 2021 | 66 | 19.7% | \$353,065 |

4. Budget of \$100,000 per year

This alternative assumes that there will be a budget of \$100,000 per year established to devote to pavement preventative maintenance and rehabilitation. The 5-year cost of this scenario is \$500,000. The calculated result of this scenario for the five year period from 2016-2020 is summarized below:

| <u>Year</u> | <u>Average PCI</u> | <u>% of Roadway Sections In Poor or Very Poor condition</u> | <u>Deferred Maintenance</u> |
|-------------|--------------------|---|-----------------------------|
| 2017 | 68 | 31.4% | \$96,616 |
| 2018 | 71 | | |
| 2019 | 74 | | |
| 2020 | 76 | | |
| 2021 | 79 | 4.6% | \$91,329 |

Pavement Condition Changes under Budget Scenarios



VII. Budget Recommendations

Based on the four options analyzed it is the recommendation of this report that a budget of \$100,000 per year be established. This amount will be sufficient to allow yearly improvements to the overall average pavement condition of all roadways within the subdivision. The expected increase in PCI from the current value of 62 to the projected PCI value of 79 in 2021 is significant and will bring all roadways within the subdivision up to a Very Good condition within the 5 year period.

Once the overall average condition of the subdivision roadways is improved it will be far less expensive on a yearly basis to maintain that improved condition assuming continued pavement preventative maintenance treatments are applied. In fact, it may even be possible to consider lowering the annual budget amount once the overall average condition of the roadways is above 75 as there will be less expensive pavement rehabilitation needing to be done and more inexpensive preventative maintenance.

IX Project Lists for FY 2017-2020

The projects shown below are based on a \$100,000 per year budget using the Streetsaver analysis of the best use of funding to improve the overall condition of the subdivision roadways. If the actual budget is smaller than \$100,000 per year some of these recommended projects will need to be delayed. Not all roadways in the subdivision are recommended for treatments in the first three years. This is due to many factors but primarily is driven by the cost-effectiveness of treatments to particular roadways when trying to maximize the effectiveness on the overall subdivision PCI based on the funding available. It is likely that any roadways not listed on the recommended list for 2017-2020 will be scheduled for treatments in later years.

It is also important to realize that all roadway sections on a given roadway do not require the same treatment. Some sections may need more involved rehabilitation than other sections do on the same roadway due to localized roadway distresses. For ease of construction it makes sense to combine all sections on the same roadway with the same pavement treatment. This tends to increase the cost of roadway treatments somewhat but results in a much more aesthetically pleasing project as opposed to a haphazard series of spot treatments.

Other factors which may be appropriate to consider in the selection of projects include combining similar treatments into one yearly contract. For example, if it is desirable to perform chip sealing on multiple roadways it will be much more cost-effective to combine all of the chip sealing operations into one contract in a particular year rather than do several small contracts each year.

Additional project selection criterion could include the desires of local elected representatives (political considerations) or other factors. Those considerations are beyond the scope of this report and are not included in the recommended project lists.

Recommended projects for 2017

Hawkridge Drive (Oakwood Place to Hawkridge Court) - Crack Sealing
Hawkridge Court – Crack Sealing
Quail Covey Court – Crack Sealing
Quail Creek Drive – Crack Sealing

Glen View Court – Chip Seal
Knolls Court – Chip Seal
Knolls Drive – Chip Seal
Oak Creek Drive (Saddle Creek Drive Intersection to end) – Chip Seal
Quail Meadows Lane – Chip Seal
Resort Roundabout – Chip Seal

Blue Oak Court – Thick Overlay
Copper Glen Court – Thick Overlay
Flagstone Court – Thick Overlay
Oak Creek Drive (Oakwood Place to Saddle Creek Drive) – Thick Overlay
Quail Meadows Court – Thick Overlay
Red Tail Court – Thick Overlay
Saddle Creek Drive (Gate to Resort Roundabout) – Thick Overlay
White Oak Court – Thick Overlay
Wood Duck Court – Thick Overlay

Recommended projects for 2018

Grandview Court – Chip Seal
Leaf Crest Court – Chip Seal
Mossy Woods Court – Chip Seal

Falcon Court – Thick Overlay
Greenstone Court – Thick Overlay
Hawkridge Drive (Hawkridge Court to Oak Creek Drive) – Thick Overlay
Summit Court – Thick Overlay
Summit Lane – Thick Overlay
Vista Knolls Court – Thick Overlay

Recommended projects for 2019

Falling Leaf Lane – Chip Seal
Mitchell Lake Court – Chip Seal
Mitchell Lake Lane – Chip Seal
Wildflower Court – Chip Seal

Copper Glen Terrace – Reconstruct
Rockridge Court – Reconstruct
Rockridge Lane – Reconstruct

Recommended projects for 2020

Saddle Creek Drive (Resort Roundabout to Oak Creek Drive) - Reconstruct

Note: Various other projects are scheduled for either 2020 or 2021. The original scope of work for this report included a requirement to list the projects for 2017, 2018 and 2019. However, Saddle Creek Drive is shown as it is a major project for 2020. Other projects for 2020 and 2021 were not shown in this list, but would be shown on future lists in coming years.

X

Attachments

Scenarios - Network Condition Summary

Interest: 5%

Inflation: 3%

Printed: 06/07/2016

Scenario: \$100,00 per year

| Year | Budget | PM | Year | Budget | PM | Year | Budget | PM |
|------|-----------|----|------|-----------|----|------|-----------|----|
| 2017 | \$100,000 | 5% | 2019 | \$100,000 | 5% | 2021 | \$100,000 | 5% |
| 2018 | \$100,000 | 5% | 2020 | \$100,000 | 5% | | | |

Projected Network Average PCI by year

| Year | Never Treated | With Selected Treatment | Treated Centerline Miles | Treated Lane Miles |
|------|---------------|-------------------------|--------------------------|--------------------|
| 2017 | 62 | 68 | 2.57 | 5.08 |
| 2018 | 60 | 71 | 1.23 | 2.42 |
| 2019 | 57 | 74 | 1.23 | 2.44 |
| 2020 | 54 | 76 | 0.82 | 1.62 |
| 2021 | 52 | 79 | 2.36 | 4.63 |

Percent Network Area by Functional Class and Condition Category

Condition in base year 2017, prior to applying treatments.

| Condition | Arterial | Collector | Res/Loc | Other | Total |
|--------------|-------------|--------------|--------------|-------------|---------------|
| I | 0.0% | 7.2% | 44.5% | 0.0% | 51.7% |
| II / III | 0.0% | 1.8% | 15.1% | 0.0% | 16.9% |
| IV | 0.0% | 17.7% | 10.3% | 0.0% | 28.0% |
| V | 0.0% | 1.1% | 2.2% | 0.0% | 3.3% |
| Total | 0.0% | 27.9% | 72.1% | 0.0% | 100.0% |

Condition in year 2017 after schedulable treatments applied.

| Condition | Arterial | Collector | Res/Loc | Other | Total |
|--------------|-------------|--------------|--------------|-------------|---------------|
| I | 0.0% | 13.0% | 55.4% | 0.0% | 68.4% |
| II / III | 0.0% | 0.7% | 9.2% | 0.0% | 9.9% |
| IV | 0.0% | 13.1% | 5.3% | 0.0% | 18.4% |
| V | 0.0% | 1.1% | 2.2% | 0.0% | 3.3% |
| Total | 0.0% | 27.9% | 72.1% | 0.0% | 100.0% |

Condition in year 2021 after schedulable treatments applied.

| Condition | Arterial | Collector | Res/Loc | Other | Total |
|--------------|-------------|--------------|--------------|-------------|---------------|
| I | 0.0% | 24.3% | 70.8% | 0.0% | 95.1% |
| II / III | 0.0% | 0.0% | 0.4% | 0.0% | 0.4% |
| IV | 0.0% | 0.0% | 0.9% | 0.0% | 0.9% |
| V | 0.0% | 3.6% | 0.0% | 0.0% | 3.6% |
| Total | 0.0% | 27.9% | 72.1% | 0.0% | 100.0% |

August 11, 2006

Mr. Charles Martin
District Manager
Saddle Creek Community Services District.
1000 Saddle Creek Drive
Copperopolis, CA 95228

Subject: Pavement Evaluation for Saddle Creek Resort

Dear Mr. Martin:

Thank you for providing me this opportunity for submitting a report on the condition of the pavements in Saddle Creek Resort. As an engineer with over 40 years of experience in the field, and having worked my last 20 plus years as City Engineer for Redwood City, I am pleased to bring my experience and training to bear on this application.

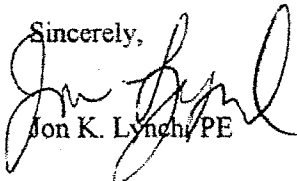
The roads at Saddle Creek generally are in very good shape, mostly because they are relatively new. However, several streets came in with ratings that are not acceptable. Included with this report is a Technical Memorandum which describes the methodology for evaluating the street pavements, along with the ratings of each of the streets within the subdivision. The report shows that Saddle Creek Drive, with a Pavement Condition Index of 52, needs an asphalt overlay. The other major streets constructed in the earlier stages of the development (Oak Creek Drive, Hawkridge Court, and accompanying side streets) are in need of a slurry seal.

The "Management Strategies" portion of this Technical Memorandum shows the cost associated with these treatments. I have also included some cost estimates for future planning purposes on the other major streets of concern. The Management Strategies Numbers 1 and 2 should be done as soon as possible, so as not to permit further deterioration of the roadways. Management Strategy No. 3 can be programmed for future treatment. By following these three strategies, the roadways will be brought up to a minimum standard which I feel is adequate for acceptance by the District. The strategies I have outlined will bring all the streets up to a Condition Index of at least 90 or better, which in laymen's terms is new or nearly new condition.

When it comes time for the slurry seal application, I would like the opportunity to provide the technical specifications for the product that we have used in Redwood City. Our product specification has proven successful over the years in restoring many of our aging streets, and these specifications are "tried and true".

I will be pleased to discuss any of the aspects of this report with you or any of the Board Members if you need me to make a presentation.

Sincerely,



Jon K. Lynch/PE

TECHNICAL MEMORANDUM

PAVEMENT EVALUATION FOR SADDLE CREEK RESORT

By: Jon K Lynch, PE.
August 9, 2006

Background

The purpose of this report is to provide the Saddle Creek Community Services District (CSD) with an evaluation of the pavement condition of the roadways within the Development for which it is responsible for maintaining. It is our understanding that the roadways have not officially been turned over to the CSD for maintenance, but that they are still under the responsibility of the master developer of the project. This report will be a "snap shot" in time as to the present condition of the pavement.

Asphalt concrete is a product that deteriorates over time because of many factors, the most important of which is the repeated application of wheel loads. Secondly, the asphalt binders in the roadway break down with time due to exposure to ultraviolet rays of the sun. The climate in Copperopolis is a bit harsher on the pavement than other areas because of the heat of the summer, and even the best pavements can break down unless a preventative maintenance program is followed. This report will summarize the results of the pavement inspection, and provide some guidelines and recommendations on what preventative maintenance is best for the condition of the pavement as observed on August 8, 2006.

Pavement Condition Index Method

The most widely accepted method of rating pavement is the Pavement Condition Index (PCI) Method. The PCI method was developed by the Construction Engineering Research Laboratory of the Corps of Engineers. The method was subsequently adopted by the Federal Aviation Administration to determine pavement condition of its airfield pavements. The PCI method is currently being used in the majority of the cities throughout the nine bay area counties, and has been adopted by the Metropolitan Transportation Commission as a management standard. It is now the most readily accepted method of rating pavements in California.

This method consists of the following three steps: dividing the roadway into sections and selecting sample units for inspection; identifying and recording pavement distress by types; computing the PCI from the survey data using the quantities of distress and the

area of the inspection units. Charts and graphs are provided to determine the loss of effectiveness for each of the many kinds of distress.

Basically, the differing pavement distresses are then given a "deduct value" based on the severity of the condition, and the deduct values are added together to come up with an adjusted value. The PCI is then calculated by subtracting from 100 the total deduct value. In other words, a new pavement would have no deduct values and would receive a PCI of 100. Older pavement would receive an appropriately lower PCI, depending on the amount and severity of the distress recorded in the inspection.

Typical distress patterns are alligator cracking, block cracking, distortions, longitudinal and transverse cracking, patching and utility cuts, rutting and depressions, and weathering and raveling. A person experienced in asphalt pavements is needed to verify the varying degrees of intensity of these conditions so that a uniform basis is used to compare one street to the next. Once the overall PCI index of the street is determined, then an evaluation can be made of its condition. The evaluation will lead to the development of an appropriate management strategy

Evaluating Pavement Life

Asphalt road surfaces have a lifetime of approximately 20 years. Attachment 1 shows the graph of the life span of a typical pavement compared to the cost of repairs. The graph shows PCI versus the life span of a typical pavement. Without maintenance, in the first 12-15 years the road quality can drop by as much as 40%. After this point the rate of deterioration dramatically increases, so that in just the next three years the quality will drop another 40%, after which the roadway will fail completely and require complete reconstruction. At this point the cost of restoring the pavement to a good condition becomes the most expensive.

The PCI will determine the rating of the pavement. Attachment 2 to this report shows a summary of the range of condition indexes, along with the rating corresponding to the index. As stated, a new pavement would have an index of 100, and a pavement with a 0 rating would indicate a totally failed pavement. Any street with a PCI of 70 or above is considered in very good condition. The best long term strategy for any agency is to keep the condition of your pavement such that the index is 80 or better.

Pavement Condition Index for Saddle Creek Subdivision

There are over 3.7 miles of streets that were rated in this program. The Attachment 3 shows the summary of the survey results of the streets in Saddle Creek. It is important to note that the newest streets (Copper Highlands, Copper Ridge, the Bungalows, and the "New Country Collection") were not rated as they are really new and therefore would not have any deduct values.

As a result of the survey performed on August 6, 2006, the overall PCI of the streets in Saddle Creek was determined to be 78, which is very good. However, the older streets which were constructed with the original development are rated lower, mainly due to age. The worst street is Saddle Creek Drive, which is rated at a PCI of 52. This street is the one which receives the most amount of traffic since it serves as the central artery of all the traffic in the development. It was found to have quite a number of low to moderate alligator cracking, many patches and utility cuts, rutting and depressions of low to moderate value, and quite a few longitudinal and transverse cracks. Also, even without the surface distress, it was apparent that the pavement was experiencing the light to moderate weathering and the beginning of raveling. This latter condition is the result of the evaporation loss of the asphalt binder in the mix due to aging.

As the aging of Saddle Creek Drive continues, the asphalt binder will wear away and the aggregate will start to pop out of the mix (more advanced cases of raveling), and the pavement will become very brittle. Repeated wheel loads will cause more alligating, rutting, possible block cracking, and eventual failure. The resulting stress will be almost impossible to repair without a total reconstruction. This pavement is at the point where a simple slurry seal coat will not suffice to protect the surface of the pavement. An overlay is recommended for this street, consisting of the placement of a reinforcing fabric over the existing surface, grinding the edge of the pavement along the gutter to provide an edge to pave, and overlaying with a minimum of 1-1/2 inches of asphalt concrete. The costs for this work are covered under the section on Pavement Management Strategies, management strategy No. 1.

The next most heavily aged section is Oak Creek Drive, between lots 98 and 26, which are the original construction limits for this street. Oak Creek Drive has a PCI of 70. It suffers from minor alligating, a large number of utility trenches and miscellaneous patches, minor longitudinal and transverse cracking, and a few ruts or depressions. This street is on the verge of getting worse, and as the graphs show, now is the time to treat this street before it deteriorates into a fair-to-poor condition and it becomes more costly to repair. However, it is recommended that the simple treatment of a Polymer Modified Asphalt Slurry Seal (PASS) will bring this section up to acceptable standards. See management strategy No. 2.

The remainder of the streets that were built 7-10 years ago (Greenstone Ct., Blue Oak Ct., White Oak Ct., Wood Duck Ct., Hawkridge Ct., and Red Tail Ct.) should receive the same slurry seal treatment. Although they have a very good to excellent structural rating, they are beginning to show the same weathering and raveling as the other streets in the same age bracket. Hawkridge Court, especially, will start to deteriorate more rapidly if not treated because of the additional traffic imposed by the newer development now taking place adjacent to that area.

The streets in the Knolls area, the newer sections of Oak Creek Drive, and the Mitchell Lake Courts are all in excellent condition, and no rehabilitation is recommended at this time. However, as these pavements reach the 8-10 year age mark, they should be scheduled for slurry seal treatment, just to keep them from raveling in the future.

Pavement Management Strategies

As a result of the condition assessment, three management strategies are recommended at this time.

- Strategy No. 1: Overlay of Saddle Creek Drive. The cost of this item consists of:
 - a. 1-1/2" AC overlay;
 - b. Wedge cutting along the edge of pavement;
 - c. Petromat reinforcing fabric over the existing roadway;
 - d. Striping.

Total Estimated Cost: \$137,300

- Strategy No. 2: Slurry Seal of Oak Creek Drive, Hawkridge Court, and side streets. The Cost of this item consists of:
 - a. Polymer-modified Asphalt Slurry Seal (PASS);
 - b. Striping.

Total Estimated Cost \$45,376

- Strategy No 3: Slurry Seal of remainder of development in 2008/2009:
 - a. PASS;
 - b. Striping.

Total Estimated Cost \$89,972

It should be noted that these are budgeting figures, and cost estimates may vary from time to time. Prices are lower in the spring and the beginning of the summer, and are going to be higher in late fall as contractors fill up their bid quotas.

Summary and Conclusions

In summary, the pavements at Saddle Creek, although generally in good to excellent condition, need to be maintained. At this point in time the maintenance costs are reasonable and can be managed with proper planning. Proper planning and budgeting is the heart of good pavement management program. However, if the planned maintenance is not done, then the roadway system deteriorates to an unacceptable condition. This

adds immensely to the cost of repair. Now is the time to perform that maintenance if the CSD expects to keep the cost of its program to a reasonable range.

The key time frame for reacting to any maintenance program is at the 7-10 year span of the pavement's life. Most of the earlier roadways in the Saddle Creek Subdivision fall into that category. As this development continues to grow, the larger amount of cars and trucks using the two major streets (Saddle Creek Drive, Hawkridge Court, and Oak Creek Drive) will increase the rate of deterioration of the pavement.

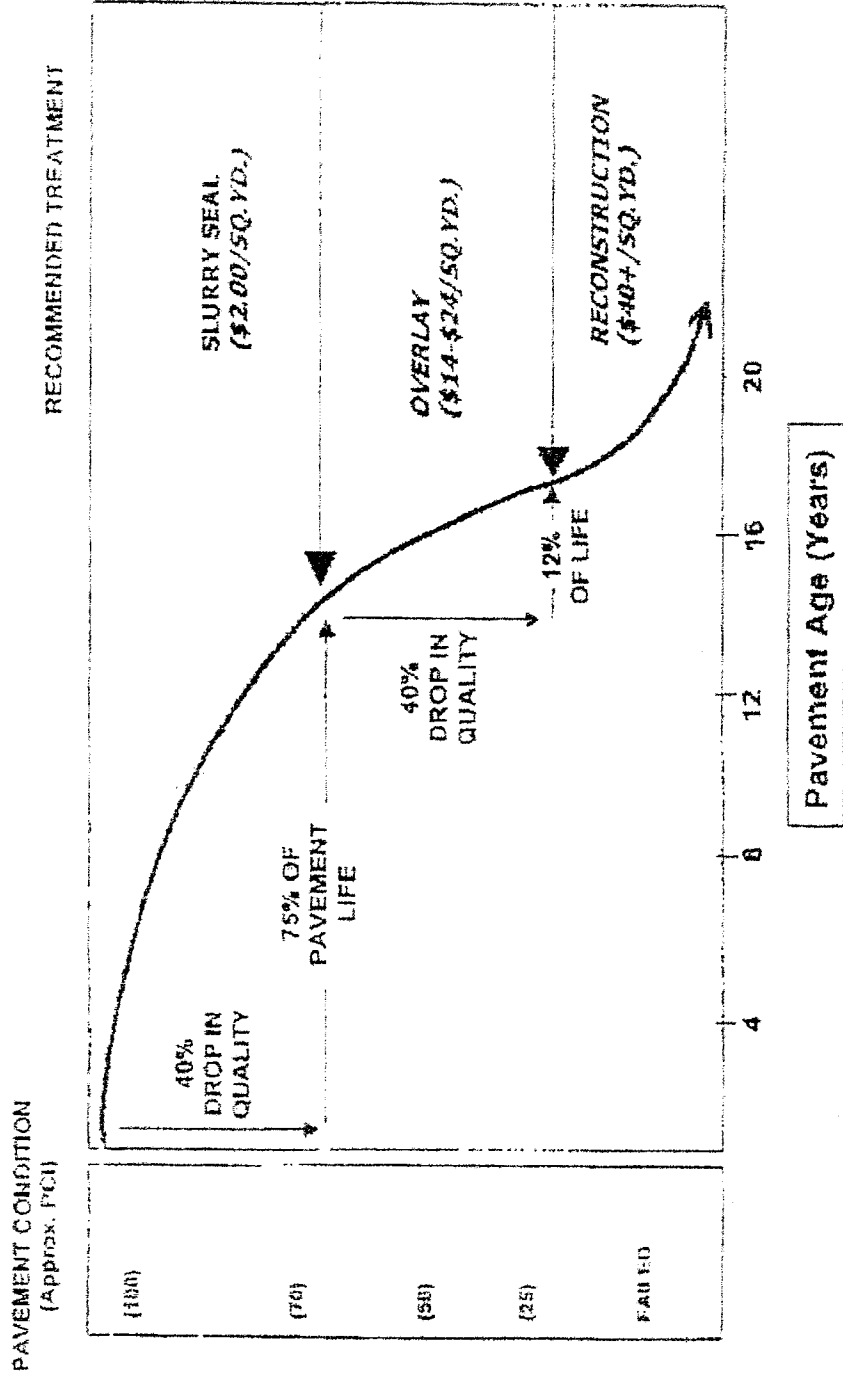
The summer months are the best time to do this kind of work, because paving is subject to limitations on the air temperature (usually air temperatures of 70 degrees and rising are the required criteria). Therefore, the decision cannot be made to put this decision off until the winter.

Finally, the best pavement management program includes periodic resurveying of the streets approximately every five years. CSD staff is also encouraged to monitor the streets throughout the year to keep an eye on problem areas and conditions that might have changed since the last PCI inspection. Included in this report is a copy of the "Pavement Condition Index, Distress Identification Manual for Asphalt and Surface Treatment Pavements", published by the Metropolitan Transportation Commission. This document may assist staff in doing this annual inspection.

ATTACHMENT 1: PAVEMENT LIFE CYCLE

STRATEGY

Pay Now...Or Much More Later



PCI Calculation - Summary

Printed: 06/07/2016

Peter Rei

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|---------------------|------------------------------------|------------------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| BOC | 010 | BLUE OAK COURT | INTX OAK CREEK DRIVE | 20 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| BOC | 020 | BLUE OAK COURT | 10 | 30 | 5/14/2016 | 0 | 34 | 34 | 34 | 39.29 | 57.15 | 3.56 |
| BOC | 030 | BLUE OAK COURT | 20 | 40 | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| BOC | 040 | BLUE OAK COURT | 30 | 50 | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| BOC | 050 | BLUE OAK COURT | 040 | COURT | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| BOC | COURT | BLUE OAK COURT | 50 | END | 5/14/2016 | 0 | 52 | 52 | 52 | 1.09 | 97.83 | 1.09 |
| CGC | 010 | COPPER GLEN COURT | INTX SADDLE CREEK LANE | 20 | 5/14/2016 | 0 | 60 | 60 | 60 | 32.73 | 67.27 | 0.00 |
| CGC | COURT | COPPER GLEN COURT | 10 | END | 5/14/2016 | 0 | 49 | 49 | 49 | 25.83 | 60.77 | 13.40 |
| CGT | 010 | COPPER GLEN TERRACE | INTX SADDLE CREEK LANE | 20 | 5/14/2016 | 0 | 69 | 69 | 69 | 55.48 | 43.41 | 1.12 |
| CGT | 020 | COPPER GLEN TERRACE | 10 | 30 | 5/14/2016 | 0 | 20 | 20 | 20 | 0.70 | 98.61 | 0.70 |
| CGT | 030 | COPPER GLEN TERRACE | 20 | 40 | 5/14/2016 | 0 | 26 | 26 | 26 | 0.00 | 100.00 | 0.00 |
| CGT | 040 | COPPER GLEN TERRACE | 30 | 50 | 5/14/2016 | 0 | 20 | 20 | 20 | 0.42 | 99.16 | 0.42 |
| CGT | 050 | COPPER GLEN TERRACE | 40 | COURT | 5/14/2016 | 0 | 61 | 61 | 61 | 0.00 | 100.00 | 0.00 |
| CGT | COURT | COPPER GLEN TERRACE | 50 | END | 5/14/2016 | 0 | 57 | 57 | 57 | 6.10 | 87.81 | 6.10 |
| ENTRYIN | 005 | ENTRY ROAD IN | LITTLE JOHN SOUTHBOUND INTO RESORT | SECTION 20 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| ENTRYIN | 010 | ENTRY ROAD IN | LITTLE JOHN ROAD | SECTION 10 | 5/14/2016 | 0 | 64 | 64 | 64 | 0.00 | 100.00 | 0.00 |
| ENTRYIN | 020 | ENTRY ROAD IN | SECTION 10 | GATE | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| ENTRYOUT | 010 | ENTRY ROAD OUT | GATE | SECTION 20 | 5/14/2016 | 0 | 64 | 64 | 64 | 0.00 | 100.00 | 0.00 |
| ENTRYOUT | 020 | ENTRY ROAD OUT | SECTION 10 | LITTLE JOHN | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| ENTRYOUT | 030 | ENTRY ROAD OUT | SECTION 10 | RIGHT ONTO LITTLE JOHN | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| FC | 010 | FALCON COURT | INTX HAWKRIDGE DRIVE | COURT | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| FC | COURT | FALCON COURT | 010 | END | 5/14/2016 | 0 | 54 | 54 | 54 | 0.41 | 99.17 | 0.41 |
| FLL | 010 | FALLING LEAF LANE | INTX OAK CRREK DRIVE | 20 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.37 | 97.25 | 1.37 |
| FLL | 020 | FALLING LEAF LANE | 10 | 30 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| FLL | 030 | FALLING LEAF LANE | 20 | 40 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.51 | 96.98 | 1.51 |
| FLL | 040 | FALLING LEAF LANE | 30 | 50 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| FLL | 050 | FALLING LEAF LANE | 40 | 60 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| FLL | 060 | FALLING LEAF LANE | 50 | 70 | 5/14/2016 | 0 | 79 | 79 | 79 | 3.48 | 93.03 | 3.48 |
| FLL | 070 | FALLING LEAF LANE | 60 | 80 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| FLL | 080 | FALLING LEAF LANE | 70 | 90 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.68 | 96.65 | 1.68 |
| FLL | COURT | FALLING LEAF LANE | 80 | END | 5/14/2016 | 0 | 81 | 81 | 81 | 2.56 | 94.88 | 2.56 |
| FSC | 010 | FLAGSTONE COURT | INTX OAK CREEK DRIVE | COURT | 5/14/2016 | 0 | 68 | 68 | 68 | 67.52 | 32.48 | 0.00 |
| FSC | COURT | FLAGSTONE COURT | 010 | END | 5/14/2016 | 0 | 54 | 54 | 54 | 1.03 | 97.94 | 1.03 |

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|------------------|----------------------------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| GRVC | 010 | GRANDVIEW COURT | INTX OAK CREEK DRIVE | COURT | 5/14/2016 | 0 | 77 | 77 | 77 | 0.00 | 100.00 | 0.00 |
| GRVC | COURT | GRANDVIEW COURT | 010 | END | 5/14/2016 | 0 | 73 | 73 | 73 | 7.97 | 84.07 | 7.97 |
| GSC | 010 | GLEN SIDE COURT | INTX SADDLE CREEK LANE | 20 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.41 | 97.18 | 1.41 |
| GSC | 020 | GLEN SIDE COURT | 10 | 30 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| GSC | 030 | GLEN SIDE COURT | 20 | 40 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.51 | 96.98 | 1.51 |
| GSC | 040 | GLEN SIDE COURT | 30 | 50 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| GSC | 050 | GLEN SIDE COURT | 40 | 60 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.51 | 96.98 | 1.51 |
| GSC | 060 | GLEN SIDE COURT | 50 | COURT | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| GSC | COURT | GLEN SIDE COURT | 60 | END | 5/14/2016 | 0 | 80 | 80 | 80 | 0.00 | 100.00 | 0.00 |
| GSTC | 010 | GREENSTONE COURT | INTX OAK CREEK DRIVE | 20 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| GSTC | 020 | GREENSTONE COURT | 10 | 30 | 5/14/2016 | 0 | 46 | 46 | 46 | 15.38 | 69.25 | 15.38 |
| GSTC | COURT | GREENSTONE COURT | 020 | END | 5/14/2016 | 0 | 54 | 54 | 54 | 1.24 | 97.52 | 1.24 |
| GVC | 010 | GLEN VIEW COURT | INTX SADDLE CREEK LANE | 20 | 5/14/2016 | 0 | 59 | 59 | 59 | 0.84 | 98.32 | 0.84 |
| GVC | 020 | GLEN VIEW COURT | 10 | 30 | 5/14/2016 | 0 | 73 | 73 | 73 | 0.00 | 100.00 | 0.00 |
| GVC | 030 | GLEN VIEW COURT | 20 | 40 | 5/14/2016 | 0 | 73 | 73 | 73 | 0.00 | 100.00 | 0.00 |
| GVC | 040 | GLEN VIEW COURT | 30 | 50 | 5/14/2016 | 0 | 77 | 77 | 77 | 0.00 | 97.58 | 2.42 |
| GVC | 050 | GLEN VIEW COURT | 40 | COURT | 5/14/2016 | 0 | 61 | 61 | 61 | 1.01 | 97.99 | 1.01 |
| GVC | COURT | GLEN VIEW COURT | 50 | END | 5/14/2016 | 0 | 66 | 66 | 66 | 0.00 | 100.00 | 0.00 |
| HRC | 010 | HAWKRIDGE COURT | INTX HAWKRIDGE DRIVE | 020 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRC | 020 | HAWKRIDGE COURT | 010 | 030 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRC | 030 | HAWKRIDGE COURT | 020 | 040 | 5/14/2016 | 0 | 82 | 82 | 82 | 2.19 | 95.63 | 2.19 |
| HRC | 040 | HAWKRIDGE COURT | 030 | COURT | 5/14/2016 | 0 | 81 | 81 | 81 | 14.27 | 71.47 | 14.27 |
| HRC | COURT | HAWKRIDGE COURT | 040 | END | 5/14/2016 | 0 | 82 | 82 | 82 | 1.79 | 96.43 | 1.79 |
| HRD | 010 | HAWKRIDGE DRIVE | END CUL-DE-SAC AT OAK WOOD PLACE | 020 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 020 | HAWKRIDGE DRIVE | 010 | 030 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 030 | KNOLLS COURT | 020 | 040 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 040 | HAWKRIDGE DRIVE | 030 | 050 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 050 | HAWKRIDGE DRIVE | 040 | 060 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| HRD | 060 | HAWKRIDGE DRIVE | 050 | 070 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.97 | 88.07 | 5.97 |
| HRD | 070 | HAWKRIDGE DRIVE | 060 | 080 | 5/14/2016 | 0 | 82 | 82 | 82 | 3.15 | 93.71 | 3.15 |
| HRD | 080 | HAWKRIDGE DRIVE | 070 | 090 | 5/14/2016 | 0 | 82 | 82 | 82 | 2.16 | 95.68 | 2.16 |
| HRD | 090 | HAWKRIDGE DRIVE | 080 | 100 | 5/14/2016 | 0 | 81 | 81 | 81 | 8.24 | 83.51 | 8.24 |
| HRD | 100 | HAWKRIDGE DRIVE | 090 | 110 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 110 | HAWKRIDGE DRIVE | 100 | 120 | 5/14/2016 | 0 | 82 | 82 | 82 | 2.19 | 95.63 | 2.19 |
| HRD | 120 | HAWKRIDGE DRIVE | 110 | 130 | 5/14/2016 | 0 | 81 | 81 | 81 | 6.32 | 87.35 | 6.32 |

PCI Calculation - Summary

Printed: 06/07/2016

Peter Rei

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|-----------------|-------------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| HRD | 130 | HAWKRIDGE DRIVE | 120 | 140 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 140 | HAWKRIDGE DRIVE | 130 | 150 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 150 | HAWKRIDGE DRIVE | 140 | 160 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.22 | 89.57 | 5.22 |
| HRD | 160 | HAWKRIDGE DRIVE | 150 | 170 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 170 | HAWKRIDGE DRIVE | 160 | 180 | 5/14/2016 | 0 | 81 | 81 | 81 | 7.32 | 85.37 | 7.32 |
| HRD | 180 | HAWKRIDGE DRIVE | 170 | 190 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 190 | HAWKRIDGE DRIVE | 180 | 200 | 5/14/2016 | 0 | 81 | 81 | 81 | 8.24 | 83.51 | 8.24 |
| HRD | 200 | HAWKRIDGE DRIVE | 190 | 210 | 5/14/2016 | 0 | 79 | 79 | 79 | 3.48 | 93.03 | 3.48 |
| HRD | 210 | HAWKRIDGE DRIVE | 200 | 220 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.97 | 88.07 | 5.97 |
| HRD | 220 | HAWKRIDGE DRIVE | 210 | 230 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 230 | HAWKRIDGE DRIVE | 220 | 240 | 5/14/2016 | 0 | 79 | 79 | 79 | 10.20 | 79.61 | 10.20 |
| HRD | 240 | HAWKRIDGE DRIVE | 230 | 250 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| HRD | 250 | HAWKRIDGE DRIVE | 240 | 260 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 260 | HAWKRIDGE DRIVE | 250 | 270 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.28 | 89.44 | 5.28 |
| HRD | 270 | HAWKRIDGE DRIVE | 260 | 280 | 5/14/2016 | 0 | 81 | 81 | 81 | 7.32 | 85.37 | 7.32 |
| HRD | 280 | HAWKRIDGE DRIVE | 270 | 290 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 290 | HAWKRIDGE DRIVE | 280 | 300 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 300 | HAWKRIDGE DRIVE | 290 | 310 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| HRD | 310 | HAWKRIDGE DRIVE | 300 | 320 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 320 | HAWKRIDGE DRIVE | 310 | 330 | 5/14/2016 | 0 | 81 | 81 | 81 | 7.08 | 85.84 | 7.08 |
| HRD | 330 | HAWKRIDGE DRIVE | 320 | 340 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 340 | HAWKRIDGE DRIVE | 330 | 350 | 5/14/2016 | 0 | 81 | 81 | 81 | 15.63 | 68.75 | 15.63 |
| HRD | 350 | HAWKRIDGE DRIVE | 340 | 360 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.10 | 89.79 | 5.10 |
| HRD | 360 | HAWKRIDGE DRIVE | 350 | 370 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 370 | HAWKRIDGE DRIVE | 360 | 380 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 380 | HAWKRIDGE DRIVE | 370 | 390 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| HRD | 390 | HAWKRIDGE DRIVE | 380 | 400 | 5/14/2016 | 0 | 65 | 65 | 65 | 1.94 | 96.13 | 1.94 |
| HRD | 400 | HAWKRIDGE DRIVE | 390 | 420 | 5/14/2016 | 0 | 40 | 40 | 40 | 36.12 | 62.11 | 1.78 |
| HRD | 410 | HAWKRIDGE DRIVE | 400 | 420 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| HRD | 420 | HAWKRIDGE DRIVE | 410 | 430 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| HRD | 430 | HAWKRIDGE DRIVE | 420 | 440 | 5/14/2016 | 0 | 52 | 52 | 52 | 6.34 | 87.32 | 6.34 |
| HRD | 440 | HAWKRIDGE DRIVE | 430 | 450 | 5/14/2016 | 0 | 53 | 53 | 53 | 0.00 | 100.00 | 0.00 |
| HRD | 450 | HAWKRIDGE DRIVE | 440 | 460 | 5/14/2016 | 0 | 40 | 40 | 40 | 37.61 | 60.64 | 1.76 |
| HRD | 460 | HAWKRIDGE DRIVE | 450 | 470 | 5/14/2016 | 0 | 52 | 52 | 52 | 25.15 | 74.34 | 0.52 |
| HRD | 470 | HAWKRIDGE DRIVE | 460 | 480 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| HRD | 480 | HAWKRIDGE DRIVE | 470 | END | 5/14/2016 | 0 | 42 | 42 | 42 | 33.67 | 66.33 | 0.00 |
| KC | 010 | KNOLLS COURT | INTX KNOLLS DRIVE | 020 | 5/14/2016 | 0 | 67 | 67 | 67 | 22.71 | 73.51 | 3.78 |
| KC | 020 | KNOLLS COURT | 010 | 030 | 5/14/2016 | 0 | 72 | 72 | 72 | 22.36 | 77.64 | 0.00 |
| KC | 030 | KNOLLS COURT | 020 | 040 | 5/14/2016 | 0 | 68 | 68 | 68 | 33.49 | 61.34 | 5.17 |
| KC | 040 | KNOLLS COURT | 030 | 050 | 5/14/2016 | 0 | 75 | 75 | 75 | 10.50 | 79.00 | 10.50 |

MTC StreetSaver

Criteria:

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|--------------|----------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| KC | 050 | KNOLLS COURT | 040 | 060 | 5/14/2016 | 0 | 78 | 78 | 78 | 0.00 | 100.00 | 0.00 |
| KC | 060 | KNOLLS COURT | 050 | COURT | 5/14/2016 | 0 | 78 | 78 | 78 | 0.00 | 100.00 | 0.00 |
| KC | COURT | KNOLLS COURT | 060 | END | 5/14/2016 | 0 | 60 | 60 | 60 | 46.53 | 50.36 | 3.12 |
| KD | 030 | KNOLLS DRIVE | 020/021 | 040 | 5/14/2016 | 0 | 51 | 51 | 51 | 7.47 | 85.06 | 7.47 |
| KD | 040 | KNOLLS DRIVE | 030 | 050 | 5/14/2016 | 0 | 75 | 75 | 75 | 0.00 | 100.00 | 0.00 |
| KD | 050 | KNOLLS DRIVE | 040 | 060 | 5/14/2016 | 0 | 79 | 79 | 79 | 13.09 | 73.81 | 13.09 |
| KD | 060 | KNOLLS DRIVE | 050 | 070 | 5/14/2016 | 0 | 79 | 79 | 79 | 11.95 | 76.09 | 11.95 |
| KD | 070 | KNOLLS DRIVE | 060 | 080 | 5/14/2016 | 0 | 63 | 63 | 63 | 46.45 | 53.55 | 0.00 |
| KD | 080 | KNOLLS DRIVE | 070 | 090 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 090 | KNOLLS DRIVE | 080 | 100 | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 100.00 | 0.00 |
| KD | 100 | KNOLLS DRIVE | 090 | 110 | 5/14/2016 | 0 | 74 | 74 | 74 | 10.87 | 78.26 | 10.87 |
| KD | 110 | KNOLLS DRIVE | 100 | 120 | 5/14/2016 | 0 | 76 | 76 | 76 | 11.66 | 76.68 | 11.66 |
| KD | 120 | KNOLLS DRIVE | 110 | 130 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 130 | KNOLLS DRIVE | 120 | 140 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 140 | KNOLLS DRIVE | 130 | 150 | 5/14/2016 | 0 | 77 | 77 | 77 | 12.23 | 75.54 | 12.23 |
| KD | 150 | KNOLLS DRIVE | 140 | 160 | 5/14/2016 | 0 | 79 | 79 | 79 | 9.30 | 81.39 | 9.30 |
| KD | 160 | KNOLLS DRIVE | 150 | 170 | 5/14/2016 | 0 | 72 | 72 | 72 | 16.90 | 66.20 | 16.90 |
| KD | 170 | KNOLLS DRIVE | 160 | 180 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 180 | KNOLLS DRIVE | 170 | 190 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 190 | KNOLLS DRIVE | 180 | 200 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 200 | KNOLLS DRIVE | 190 | 210 | 5/14/2016 | 0 | 77 | 77 | 77 | 12.24 | 75.51 | 12.24 |
| KD | 210 | KNOLLS DRIVE | 200 | 220 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 220 | KNOLLS DRIVE | 210 | 230 | 5/14/2016 | 0 | 64 | 64 | 64 | 18.60 | 62.80 | 18.60 |
| KD | 230 | KNOLLS DRIVE | 220 | 240 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 240 | KNOLLS DRIVE | 230 | 250 | 5/14/2016 | 0 | 77 | 77 | 77 | 12.23 | 75.54 | 12.23 |
| KD | 250 | KNOLLS DRIVE | 240 | 260 | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 100.00 | 0.00 |
| KD | 260 | KNOLLS DRIVE | 250 | 270 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 270 | KNOLLS DRIVE | 260 | 280 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 280 | KNOLLS DRIVE | 270 | 290 | 5/14/2016 | 0 | 78 | 78 | 78 | 15.24 | 69.52 | 15.24 |
| KD | 290 | KNOLLS DRIVE | 280 | 300 | 5/14/2016 | 0 | 79 | 79 | 79 | 12.97 | 74.06 | 12.97 |
| KD | 300 | KNOLLS DRIVE | 290 | 310 | 5/14/2016 | 0 | 71 | 71 | 71 | 15.79 | 68.43 | 15.79 |
| KD | 310 | KNOLLS DRIVE | 300 | 320 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 320 | KNOLLS DRIVE | 310 | 330 | 5/14/2016 | 0 | 79 | 79 | 79 | 13.36 | 73.28 | 13.36 |
| KD | 330 | KNOLLS DRIVE | 320 | 340 | 5/14/2016 | 0 | 79 | 79 | 79 | 8.89 | 82.21 | 8.89 |
| KD | 340 | KNOLLS DRIVE | 330 | 350 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 350 | KNOLLS DRIVE | 340 | 360 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 360 | KNOLLS DRIVE | 350 | 370 | 5/14/2016 | 0 | 78 | 78 | 78 | 12.42 | 75.16 | 12.42 |
| KD | 370 | KNOLLS DRIVE | 360 | 380 | 5/14/2016 | 0 | 76 | 76 | 76 | 10.62 | 78.76 | 10.62 |
| KD | 380 | KNOLLS DRIVE | 370 | 390 | 5/14/2016 | 0 | 78 | 78 | 78 | 0.00 | 100.00 | 0.00 |
| KD | 390 | KNOLLS COURT | 380 | 400 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|---------------------|-------------------------|-------------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| KD | 400 | KNOLLS DRIVE | 390 | 410 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KD | 410 | KNOLLS DRIVE | 40 | 420 | 5/14/2016 | 0 | 76 | 76 | 76 | 11.66 | 76.68 | 11.66 |
| KD | 420 | KNOLLS DRIVE | 410 | 430 | 5/14/2016 | 0 | 78 | 78 | 78 | 10.97 | 78.05 | 10.97 |
| KD | 430 | KNOLLS DRIVE | 420 | 440 | 5/14/2016 | 0 | 75 | 75 | 75 | 11.39 | 77.23 | 11.39 |
| KD | 440 | KNOLLS DRIVE | 430 | 450 | 5/14/2016 | 0 | 77 | 77 | 77 | 12.32 | 75.36 | 12.32 |
| KD | 450 | KNOLLS DRIVE | 440 | 460 | 5/14/2016 | 0 | 78 | 78 | 78 | 5.51 | 88.98 | 5.51 |
| KD | 460 | KNOLLS COURT | 450 | 470 | 5/14/2016 | 0 | 68 | 68 | 68 | 35.78 | 59.62 | 4.60 |
| KD | 470 | KNOLLS DRIVE | 460 | INTX KNOLLS DRIVE | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| KDJN | 010 | KNOLLS DRIVE | INTX OAK CREEK ROAD | 20 | 5/14/2016 | 0 | 63 | 63 | 63 | 35.92 | 63.32 | 0.76 |
| KDJN | 020 | KNOLLS DRIVE | 10 | 30 | 5/14/2016 | 0 | 74 | 74 | 74 | 0.00 | 100.00 | 0.00 |
| KDOUT | 011 | KNOLLS DRIVE | INTX OAK CREEK DRIVE | 021 | 5/14/2016 | 0 | 66 | 66 | 66 | 16.03 | 67.93 | 16.03 |
| KDOUT | 021 | KNOLLS DRIVE | 10 | 30 | 5/14/2016 | 0 | 77 | 77 | 77 | 0.00 | 100.00 | 0.00 |
| LCC | 010 | LEAF CREST COURT | INTX OAK CREEK DRIVE | 20 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| LCC | 020 | LEAF CREST COURT | 10 | 30 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| LCC | 030 | LEAF CREST COURT | 20 | 40 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.28 | 89.44 | 5.28 |
| LCC | 040 | LEAF CREST COURT | 30 | COURT | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| LCC | COURT | LEAF CREST COURT | 040 | END | 5/14/2016 | 0 | 81 | 81 | 81 | 4.60 | 90.80 | 4.60 |
| MLC | 010 | MITCHELL LAKE COURT | INTX MITCHELL LAKE LANE | 20 | 5/14/2016 | 0 | 76 | 76 | 76 | 17.60 | 64.79 | 17.60 |
| MLC | 020 | MITCHELL LAKE COURT | 10 | 30 | 5/14/2016 | 0 | 77 | 77 | 77 | 5.97 | 88.06 | 5.97 |
| MLC | 030 | MITCHELL LAKE COURT | 20 | 40 | 5/14/2016 | 0 | 73 | 73 | 73 | 0.00 | 100.00 | 0.00 |
| MLC | 040 | MITCHELL LAKE COURT | 30 | COURT | 5/14/2016 | 0 | 72 | 72 | 72 | 5.50 | 88.99 | 5.50 |
| MLC | COURT | MITCHELL LAKE COURT | 040 | END | 5/14/2016 | 0 | 73 | 73 | 73 | 7.33 | 85.34 | 7.33 |
| MLR | 010 | MITCHELL LAKE LANE | INTX OAK CREEK ROAD | 20 | 5/14/2016 | 0 | 72 | 72 | 72 | 5.52 | 88.96 | 5.52 |
| MLR | 020 | MITCHELL LAKE LANE | 10 | 30 | 5/14/2016 | 0 | 76 | 76 | 76 | 0.00 | 100.00 | 0.00 |
| MLR | 030 | MITCHELL LAKE LANE | 20 | 40 | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 100.00 | 0.00 |
| MLR | 040 | MITCHELL LAKE LANE | 30 | 50 | 5/14/2016 | 0 | 75 | 75 | 75 | 11.26 | 77.48 | 11.26 |
| MLR | 050 | MITCHELL LAKE LANE | 40 | COURT | 5/14/2016 | 0 | 46 | 46 | 46 | 55.05 | 44.95 | 0.00 |
| MLR | COURT | MITCHELL LAKE LANE | 50 | END | 5/14/2016 | 0 | 71 | 71 | 71 | 26.79 | 67.70 | 5.51 |
| MWC | 010 | MOSSY WOODS COURT | INTX KNOLLS DRIVE | 020 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| MWC | 020 | MOSSY WOODS COURT | 010 | 030 | 5/14/2016 | 0 | 77 | 77 | 77 | 8.15 | 83.71 | 8.15 |
| MWC | 030 | MOSSY WOODS COURT | 020 | COURT | 5/14/2016 | 0 | 72 | 72 | 72 | 0.00 | 100.00 | 0.00 |
| MWC | COURT | MOSSY WOODS COURT | 030 | END | 5/14/2016 | 0 | 79 | 79 | 79 | 14.94 | 70.12 | 14.94 |
| OCD | 010 | OAK CREEK DRIVE | END | 20 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| OCD | 020 | OAK CREEK DRIVE | 10 | 30 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| OCD | 030 | OAK CREEK DRIVE | 20 | 40 | 5/14/2016 | 0 | 81 | 81 | 81 | 3.16 | 93.68 | 3.16 |

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|-----------------|----------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| OCD | 040 | OAK CREEK DRIVE | 30 | 50 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 050 | OAK CREEK DRIVE | 40 | 60 | 5/14/2016 | 0 | 72 | 72 | 72 | 5.34 | 89.32 | 5.34 |
| OCD | 060 | OAK CREEK DRIVE | 50 | 70 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 070 | OAK CREEK DRIVE | 60 | 80 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.44 | 97.12 | 1.44 |
| OCD | 080 | OAK CREEK DRIVE | 70 | 90 | 5/14/2016 | 0 | 78 | 78 | 78 | 3.42 | 93.16 | 3.42 |
| OCD | 090 | OAK CREEK DRIVE | 80 | 100 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 100 | OAK CREEK DRIVE | 90 | 110 | 5/14/2016 | 0 | 79 | 79 | 79 | 3.59 | 92.81 | 3.59 |
| OCD | 110 | OAK CREEK DRIVE | 100 | 20 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 120 | OAK CREEK DRIVE | 110 | 130 | 5/14/2016 | 0 | 79 | 79 | 79 | 6.85 | 86.29 | 6.85 |
| OCD | 130 | OAK CREEK DRIVE | 120 | 140 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 140 | OAK CREEK DRIVE | 130 | 150 | 5/14/2016 | 0 | 79 | 79 | 79 | 6.85 | 86.29 | 6.85 |
| OCD | 150 | OAK CREEK DRIVE | 140 | 160 | 5/14/2016 | 0 | 79 | 79 | 79 | 8.63 | 82.74 | 8.63 |
| OCD | 160 | OAK CREEK DRIVE | 150 | 170 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 170 | OAK CREEK DRIVE | 160 | 180 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.28 | 89.44 | 5.28 |
| OCD | 180 | OAK CREEK DRIVE | 170 | 190 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 190 | OAK CREEK DRIVE | 180 | 200 | 5/14/2016 | 0 | 81 | 81 | 81 | 4.98 | 90.04 | 4.98 |
| OCD | 200 | OAK CREEK DRIVE | 190 | 210 | 5/14/2016 | 0 | 81 | 81 | 81 | 2.05 | 95.89 | 2.05 |
| OCD | 210 | OAK CREEK DRIVE | 200 | 220 | 5/14/2016 | 0 | 81 | 81 | 81 | 6.75 | 86.51 | 6.75 |
| OCD | 220 | OAK CREEK DRIVE | 210 | 230 | 5/14/2016 | 0 | 58 | 58 | 58 | 0.00 | 100.00 | 0.00 |
| OCD | 230 | OAK CREEK DRIVE | 220 | 240 | 5/14/2016 | 0 | 56 | 56 | 56 | 1.56 | 96.89 | 1.56 |
| OCD | 240 | OAK CREEK DRIVE | 230 | 250 | 5/14/2016 | 0 | 26 | 26 | 26 | 40.07 | 48.00 | 11.94 |
| OCD | 250 | OAK CREEK DRIVE | 240 | 260 | 5/14/2016 | 0 | 47 | 47 | 47 | 11.06 | 77.87 | 11.06 |
| OCD | 260 | OAK CREEK DRIVE | 250 | 270 | 5/14/2016 | 0 | 32 | 32 | 32 | 35.62 | 56.37 | 8.01 |
| OCD | 270 | OAK CREEK DRIVE | 260 | 280 | 5/14/2016 | 0 | 34 | 34 | 34 | 38.69 | 61.31 | 0.00 |
| OCD | 280 | OAK CREEK DRIVE | 270 | 290 | 5/14/2016 | 0 | 54 | 54 | 54 | 1.00 | 98.00 | 1.00 |
| OCD | 290 | OAK CREEK DRIVE | 280 | 300 | 5/14/2016 | 0 | 52 | 52 | 52 | 2.50 | 94.99 | 2.50 |
| OCD | 300 | OAK CREEK DRIVE | 290 | 310 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| OCD | 310 | OAK CREEK DRIVE | 300 | 320 | 5/14/2016 | 0 | 53 | 53 | 53 | 1.57 | 96.85 | 1.57 |
| OCD | 320 | OAK CREEK DRIVE | 310 | 330 | 5/14/2016 | 0 | 53 | 53 | 53 | 0.00 | 100.00 | 0.00 |
| OCD | 330 | OAK CREEK DRIVE | 320 | 340 | 5/14/2016 | 0 | 27 | 27 | 27 | 48.77 | 48.41 | 2.82 |
| OCD | 340 | OAK CREEK DRIVE | 330 | 350 | 5/14/2016 | 0 | 52 | 52 | 52 | 2.56 | 94.88 | 2.56 |
| OCD | 350 | OAK CREEK DRIVE | 340 | 360 | 5/14/2016 | 0 | 32 | 32 | 32 | 39.92 | 59.18 | 0.90 |
| OCD | 360 | OAK CREEK DRIVE | 350 | 370 | 5/14/2016 | 0 | 53 | 53 | 53 | 0.00 | 100.00 | 0.00 |
| OCD | 370 | OAK CREEK DRIVE | 360 | 380 | 5/14/2016 | 0 | 34 | 34 | 34 | 37.16 | 60.85 | 1.99 |
| OCD | 380 | OAK CREEK DRIVE | 370 | 390 | 5/14/2016 | 0 | 30 | 30 | 30 | 40.24 | 59.76 | 0.00 |
| OCD | 390 | OAK CREEK DRIVE | 380 | 400 | 5/14/2016 | 0 | 32 | 32 | 32 | 39.16 | 59.90 | 0.94 |
| OCD | 400 | OAK CREEK DRIVE | 390 | 410 | 5/14/2016 | 0 | 33 | 33 | 33 | 38.73 | 61.27 | 0.00 |
| OCD | 410 | OAK CREEK DRIVE | 400 | 420 | 5/14/2016 | 0 | 47 | 47 | 47 | 25.52 | 74.48 | 0.00 |
| OCD | 420 | OAK CREEK DRIVE | 410 | 430 | 5/14/2016 | 0 | 24 | 24 | 24 | 48.37 | 50.88 | 0.75 |
| OCD | 430 | OAK CREEK DRIVE | 420 | 440 | 5/14/2016 | 0 | 36 | 36 | 36 | 46.13 | 53.87 | 0.00 |

PCI Calculation - Summary

Printed: 06/07/2016

Peter Rei

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|-----------------|----------------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| OCD | 440 | OAK CREEK DRIVE | 430 | 450 | 5/14/2016 | 0 | 38 | 38 | 38 | 36.00 | 61.91 | 2.09 |
| OCD | 450 | OAK CREEK DRIVE | 440 | 460 | 5/14/2016 | 0 | 43 | 43 | 43 | 27.70 | 72.30 | 0.00 |
| OCD | 460 | OAK CREEK DRIVE | 450 | 470 | 5/14/2016 | 0 | 33 | 33 | 33 | 39.40 | 59.65 | 0.95 |
| OCD | 470 | OAK CREEK DRIVE | 460 | 480 | 5/14/2016 | 0 | 28 | 28 | 28 | 42.04 | 57.96 | 0.00 |
| OCD | 480 | OAK CREEK DRIVE | 470 | 490 | 5/14/2016 | 0 | 43 | 43 | 43 | 28.12 | 68.07 | 3.82 |
| OCD | 490 | OAK CREEK DRIVE | 480 | 510 | 5/14/2016 | 0 | 55 | 55 | 55 | 0.00 | 100.00 | 0.00 |
| OCD | 500 | OAK CREEK DRIVE | 500 | 520 | 5/14/2016 | 0 | 37 | 37 | 37 | 32.19 | 66.22 | 1.58 |
| OCD | 510 | OAK CREEK DRIVE | 510 | 530 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| OCD | 520 | OAK CREEK DRIVE | 520 | 540 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| OCD | 530 | OAK CREEK DRIVE | 530 | 550 | 5/14/2016 | 0 | 46 | 46 | 46 | 29.58 | 70.42 | 0.00 |
| OCD | 540 | OAK CREEK DRIVE | 540 | 560 | 5/14/2016 | 0 | 49 | 49 | 49 | 23.32 | 76.68 | 0.00 |
| OCD | 550 | OAK CREEK DRIVE | 550 | 570 | 5/14/2016 | 0 | 52 | 52 | 52 | 3.78 | 92.43 | 3.78 |
| OCD | 560 | OAK CREEK DRIVE | 560 | 580 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| OCD | 570 | OAK CREEK DRIVE | 570 | 590 | 5/14/2016 | 0 | 33 | 33 | 33 | 37.14 | 61.91 | 0.94 |
| OCD | 580 | OAK CREEK DRIVE | 580 | 600 | 5/14/2016 | 0 | 52 | 52 | 52 | 2.35 | 95.29 | 2.35 |
| OCD | 590 | OAK CREEK DRIVE | 590 | 610 | 5/14/2016 | 0 | 65 | 65 | 65 | 0.00 | 100.00 | 0.00 |
| OCD | 600 | OAK CREEK DRIVE | 600 | 620 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 610 | OAK CREEK DRIVE | 610 | 630 | 5/14/2016 | 0 | 79 | 79 | 79 | 14.16 | 71.67 | 14.16 |
| OCD | 620 | OAK CREEK DRIVE | 620 | 640 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| OCD | 630 | OAK CREEK DRIVE | 630 | 650 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 640 | OAK CREEK DRIVE | 640 | 660 | 5/14/2016 | 0 | 79 | 79 | 79 | 3.82 | 92.37 | 3.82 |
| OCD | 650 | OAK CREEK DRIVE | 650 | 670 | 5/14/2016 | 0 | 66 | 66 | 66 | 0.00 | 100.00 | 0.00 |
| OCD | 660 | OAK CREEK DRIVE | 660 | 680 | 5/14/2016 | 0 | 68 | 68 | 68 | 43.01 | 56.99 | 0.00 |
| OCD | 670 | OAK CREEK DRIVE | 670 | 690 | 5/14/2016 | 0 | 79 | 79 | 79 | 3.56 | 92.89 | 3.56 |
| OCD | 680 | OAK CREEK DRIVE | 680 | 700 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 690 | OAK CREEK DRIVE | 690 | 710 | 5/14/2016 | 0 | 69 | 69 | 69 | 16.87 | 66.26 | 16.87 |
| OCD | 700 | OAK CREEK DRIVE | 700 | 720 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| OCD | 710 | OAK CREEK DRIVE | 710 | END | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 720 | OAK CREEK DRIVE | 720 | END | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 010 | OAKWOOD COURT | INTX OAKWOOD PLACE | 20 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 020 | OAKWOOD COURT | 10 | 30 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 030 | OAKWOOD COURT | 20 | 40 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 040 | OAKWOOD COURT | 30 | 50 | 5/14/2016 | 0 | 82 | 82 | 82 | 1.32 | 97.35 | 1.32 |
| OCD | 050 | OAKWOOD COURT | 40 | 60 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 060 | OAKWOOD COURT | 50 | 70 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 070 | OAKWOOD COURT | 60 | COURT | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| OCD | COURT | OAKWOOD COURT | 70 | END | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 010 | OAKWOOD PLACE | INTX OAK CREEK DRIVE | 20 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OCD | 020 | OAKWOOD PLACE | 10 | 30 | 5/14/2016 | 0 | 81 | 81 | 81 | 9.13 | 81.73 | 9.13 |
| OCD | 030 | OAKWOOD PLACE | 20 | 40 | 5/14/2016 | 0 | 92 | 92 | 92 | 0.00 | 100.00 | 0.00 |

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|---------------------|---------------------------|-----------------------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| OWP | 040 | OAKWOOD PLACE | 30 | 50 | 5/14/2016 | 0 | 79 | 79 | 79 | 4.62 | 90.75 | 4.62 |
| OWP | 050 | OAKWOOD PLACE | 40 | 60 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| OWP | 060 | OAKWOOD PLACE | 50 | 70 | 5/14/2016 | 0 | 79 | 79 | 79 | 4.34 | 91.32 | 4.34 |
| OWP | 070 | OAKWOOD PLACE | 60 | COURT | 5/14/2016 | 0 | 73 | 73 | 73 | 0.00 | 100.00 | 0.00 |
| OWP | COURT | OAKWOOD PLACE | 70 | END/BEGIN HAWKRIDGE ROAD | 5/14/2016 | 0 | 79 | 79 | 79 | 6.07 | 87.87 | 6.07 |
| PC | 010 | PEBBLE COURT | INTX ROCKRIDGE LANE | COURT | 5/14/2016 | 0 | 91 | 91 | 91 | 0.00 | 100.00 | 0.00 |
| PC | COURT | PEBBLE COURT | 10 | END | 5/14/2016 | 0 | 79 | 79 | 79 | 5.49 | 89.02 | 5.49 |
| QCC | 010 | QUAIL COVEY COURT | INTX QUAIL CREEK DRIVE | COURT | 5/14/2016 | 0 | 82 | 82 | 82 | 2.27 | 95.47 | 2.27 |
| QCC | COURT | QUAIL COVEY COURT | 010 | END | 5/14/2016 | 0 | 82 | 82 | 82 | 1.79 | 96.43 | 1.79 |
| QCD | 010 | QUAIL CREEK DRIVE | INTX HAWKRIDGE DRIVE | 020 | 5/14/2016 | 0 | 82 | 82 | 82 | 0.00 | 100.00 | 0.00 |
| QCD | 020 | QUAIL CREEK DRIVE | 010 | 030 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 030 | QUAIL CREEK DRIVE | 020 | 040 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| QCD | 040 | QUAIL CREEK DRIVE | 030 | 050 | 5/14/2016 | 0 | 82 | 82 | 82 | 2.19 | 95.63 | 2.19 |
| QCD | 050 | QUAIL CREEK DRIVE | 040 | 060 | 5/14/2016 | 0 | 82 | 82 | 82 | 2.19 | 95.63 | 2.19 |
| QCD | 060 | QUAIL CREEK DRIVE | 050 | 070 | 5/14/2016 | 0 | 81 | 81 | 81 | 8.24 | 83.51 | 8.24 |
| QCD | 070 | QUAIL CREEK DRIVE | 060 | 080 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 080 | QUAIL CREEK DRIVE | 070 | 090 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 090 | QUAIL CREEK DRIVE | 080 | 100 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.28 | 89.44 | 5.28 |
| QCD | 100 | QUAIL CREEK DRIVE | 090 | 110 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 110 | QUAIL CREEK DRIVE | 100 | 120 | 5/14/2016 | 0 | 82 | 82 | 82 | 2.19 | 95.63 | 2.19 |
| QCD | 120 | QUAIL CREEK DRIVE | 110 | 130 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 130 | QUAIL CREEK DRIVE | 120 | 140 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 140 | QUAIL CREEK DRIVE | 130 | 150 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 150 | QUAIL CREEK DRIVE | 140 | 160 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.28 | 89.44 | 5.28 |
| QCD | 160 | QUAIL CREEK DRIVE | 150 | 170 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| QCD | 170 | QUAIL CREEK DRIVE | 160 | 180 | 5/14/2016 | 0 | 81 | 81 | 81 | 5.28 | 89.44 | 5.28 |
| QCD | 180 | QUAIL CREEK DRIVE | 170 | END | 5/14/2016 | 0 | 81 | 81 | 81 | 8.24 | 83.51 | 8.24 |
| QMC | 010 | QUAIL MEADOWS COURT | INTX ROCKRIDGE LANE | 20 | 5/14/2016 | 0 | 52 | 52 | 52 | 4.41 | 91.17 | 4.41 |
| QMC | 020 | QUAIL MEADOWS COURT | 10 | 30 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| QMC | 030 | QUAIL MEADOWS COURT | 20 | 40 | 5/14/2016 | 0 | 54 | 54 | 54 | 3.89 | 92.22 | 3.89 |
| QMC | 40 | QUAIL MEADOWS COURT | 30 | COURT | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| QMC | COURT | QUAIL MEADOWS COURT | 40 | END | 5/14/2016 | 0 | 52 | 52 | 52 | 5.17 | 89.65 | 5.17 |
| QML | 010 | QUAIL MEADOWS LANE | INTX ROCKRIDGE LANE | 20 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| QML | 020 | QUAIL MEADOWS LANE | 10 | 30 | 5/14/2016 | 0 | 79 | 79 | 79 | 4.11 | 91.78 | 4.11 |
| QML | 030 | QUAIL MEADOWS LANE | 20 | 40 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| QML | 040 | QUAIL MEADOWS LANE | 30 | 50 | 5/14/2016 | 0 | 73 | 73 | 73 | 4.53 | 90.94 | 4.53 |

PCI Calculation - Summary

Peter Rei

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|--------------------|-------------------------|------------------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| QML | 050 | QUAIL MEADOWS LANE | 40 | 60 | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 100.00 | 0.00 |
| QML | 060 | QUAIL MEADOWS LANE | 50 | COURT1 | 5/14/2016 | 0 | 79 | 79 | 79 | 1.10 | 97.79 | 1.10 |
| QML | COURT1 | QUAIL MEADOWS LANE | 60 | MIDDLE | 5/14/2016 | 0 | 64 | 64 | 64 | 1.80 | 96.40 | 1.80 |
| QML | COURT2 | QUAIL MEADOWS LANE | MIDDLE | END | 5/14/2016 | 0 | 67 | 67 | 67 | 8.14 | 83.71 | 8.14 |
| QML | MIDDLE | QUAIL MEADOWS LANE | COURT1 | COURT2 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| RR | 010 | RESORT ROUNDABOUT | INTX SADDLECREEK DRIVE | 020 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| RR | 020 | RESORT ROUNDABOUT | 010 | 030 | 5/14/2016 | 0 | 75 | 75 | 75 | 0.00 | 100.00 | 0.00 |
| RR | 030 | RESORT ROUNDABOUT | 020 | 040 | 5/14/2016 | 0 | 75 | 75 | 75 | 0.00 | 100.00 | 0.00 |
| RR | 040 | RESORT ROUNDABOUT | 030 | INTX SADDLECREEK DRIVE | 5/14/2016 | 0 | 81 | 81 | 81 | 13.60 | 72.81 | 13.60 |
| RR | EB10 | RESORT ROUNDABOUT | ROUNDABOUT | SADDLECREEK DRIVE | 5/14/2016 | 0 | 67 | 67 | 67 | 49.30 | 50.70 | 0.00 |
| RR | NB10 | RESORT ROUNDABOUT | PARKING LOT | ROUNDABOUT | 5/14/2016 | 0 | 75 | 75 | 75 | 0.00 | 100.00 | 0.00 |
| RR | SB10 | RESORT ROUNDABOUT | ROUNDABOUT | PARKING LOT | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| RR | WB10 | RESORT ROUNDABOUT | ROUNDABOUT | SADDLECREEK DRIVE | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| RRC | 010 | ROCKRIDGE COURT | INTX ROCKRIDGE LANE | COURT | 5/14/2016 | 0 | 24 | 24 | 24 | 1.22 | 97.56 | 1.22 |
| RRC | COURT | ROCKRIDGE COURT | 10 | END | 5/14/2016 | 0 | 28 | 28 | 28 | 0.00 | 100.00 | 0.00 |
| RRL | 010 | ROCKRIDGE LANE | INTX SADDLE CREEK DRIVE | 20 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| RRL | 020 | ROCKRIDGE LANE | 10 | 30 | 5/14/2016 | 0 | 35 | 35 | 35 | 43.86 | 53.65 | 2.48 |
| RRL | 030 | ROCKRIDGE LANE | 20 | 40 | 5/14/2016 | 0 | 61 | 61 | 61 | 26.88 | 73.12 | 0.00 |
| RRL | 040 | ROCKRIDGE LANE | 30 | 50 | 5/14/2016 | 0 | 50 | 50 | 50 | 1.54 | 96.92 | 1.54 |
| RRL | 050 | ROCKRIDGE LANE | 40 | 60 | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| RRL | 060 | ROCKRIDGE LANE | 50 | 70 | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| RRL | 070 | ROCKRIDGE LANE | 60 | 80 | 5/14/2016 | 0 | 36 | 36 | 36 | 47.51 | 49.81 | 2.69 |
| RRL | 080 | ROCKRIDGE LANE | 70 | 90 | 5/14/2016 | 0 | 40 | 40 | 40 | 39.55 | 60.45 | 0.00 |
| RRL | 090 | ROCKRIDGE LANE | 80 | 100 | 5/14/2016 | 0 | 67 | 67 | 67 | 41.40 | 43.56 | 15.04 |
| RRL | 100 | ROCKRIDGE LANE | 90 | 110 | 5/14/2016 | 0 | 26 | 26 | 26 | 21.55 | 78.45 | 0.00 |
| RRL | 110 | ROCKRIDGE LANE | 100 | 120 | 5/14/2016 | 0 | 50 | 50 | 50 | 24.27 | 75.73 | 0.00 |
| RRL | 120 | ROCKRIDGE LANE | 110 | 130 | 5/14/2016 | 0 | 52 | 52 | 52 | 2.01 | 95.98 | 2.01 |
| RRL | 130 | ROCKRIDGE LANE | 120 | 140 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| RRL | 140 | ROCKRIDGE LANE | 130 | 150 | 5/14/2016 | 0 | 52 | 52 | 52 | 17.73 | 80.99 | 1.28 |
| RRL | 150 | ROCKRIDGE LANE | 140 | 160 | 5/14/2016 | 0 | 52 | 52 | 52 | 1.83 | 96.34 | 1.83 |
| RRL | 160 | ROCKRIDGE LANE | 150 | 170 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| RRL | 170 | ROCKRIDGE LANE | 160 | 180 | 5/14/2016 | 0 | 54 | 54 | 54 | 1.44 | 97.11 | 1.44 |
| RRL | 180 | ROCKRIDGE LANE | 170 | 190 | 5/14/2016 | 0 | 52 | 52 | 52 | 1.88 | 96.24 | 1.88 |
| RRL | 190 | ROCKRIDGE LANE | 180 | 200 | 5/14/2016 | 0 | 34 | 34 | 34 | 0.99 | 98.02 | 0.99 |

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|--------------------|----------------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| RRL | 200 | ROCKRIDGE LANE | 190 | 210 | 5/14/2016 | 0 | 19 | 19 | 19 | 21.77 | 75.20 | 3.03 |
| RRL | 210 | ROCKRIDGE LANE | 200 | 220 | 5/14/2016 | 0 | 31 | 31 | 31 | 15.79 | 79.53 | 4.68 |
| RRL | 220 | ROCKRIDGE LANE | 210 | 230 | 5/14/2016 | 0 | 35 | 35 | 35 | 0.76 | 98.49 | 0.76 |
| RRL | 230 | ROCKRIDGE LANE | 220 | 240 | 5/14/2016 | 0 | 24 | 24 | 24 | 3.63 | 92.73 | 3.63 |
| RRL | 240 | ROCKRIDGE LANE | 230 | 250 | 5/14/2016 | 0 | 28 | 28 | 28 | 0.90 | 98.20 | 0.90 |
| RRL | 250 | ROCKRIDGE LANE | 240 | 260 | 5/14/2016 | 0 | 26 | 26 | 26 | 0.00 | 100.00 | 0.00 |
| RRL | 260 | ROCKRIDGE LANE | 250 | 270 | 5/14/2016 | 0 | 32 | 32 | 32 | 5.09 | 89.82 | 5.09 |
| RRL | 270 | ROCKRIDGE LANE | 260 | 280 | 5/14/2016 | 0 | 30 | 30 | 30 | 2.70 | 94.59 | 2.70 |
| RRL | 280 | ROCKRIDGE LANE | 270 | END | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| RTC | 010 | RED TAIL COURT | INTX HAWKRIDGE DRIVE | COURT | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| RTC | COURT | RED TAIL COURT | 010 | END | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| SC | 10 | SUMMIT COURT | INTX SUMMIT LANE | 20 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SC | 20 | SUMMIT COURT | 10 | 30 | 5/14/2016 | 0 | 52 | 52 | 52 | 2.16 | 95.69 | 2.16 |
| SC | 30 | SUMMIT COURT | 20 | COURT | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SC | COURT | SUMMIT COURT | 30 | END | 5/14/2016 | 0 | 54 | 54 | 54 | 2.53 | 94.94 | 2.53 |
| SCD | 070 | SADDLE CREEK DRIVE | 060 | 080 | 5/14/2016 | 0 | 41 | 41 | 41 | 44.24 | 55.39 | 0.37 |
| SCD | 080 | SADDLE CREEK DRIVE | 70 | 90 | 5/14/2016 | 0 | 27 | 27 | 27 | 54.56 | 44.01 | 1.43 |
| SCD | 090 | SADDLE CREEK DRIVE | 80 | 100 | 5/14/2016 | 0 | 12 | 12 | 12 | 28.29 | 71.71 | 0.00 |
| SCD | 100 | SADDLE CREEK DRIVE | 90 | 110 | 5/14/2016 | 0 | 33 | 33 | 33 | 47.18 | 51.95 | 0.87 |
| SCD | 110 | SADDLE CREEK DRIVE | 100 | 120 | 5/14/2016 | 0 | 40 | 40 | 40 | 31.29 | 65.02 | 3.69 |
| SCD | 120 | SADDLE CREEK DRIVE | 110 | 130 | 5/14/2016 | 0 | 36 | 36 | 36 | 35.33 | 64.67 | 0.00 |
| SCD | 130 | SADDLE CREEK DRIVE | 120 | 140 | 5/14/2016 | 0 | 12 | 12 | 12 | 62.41 | 37.59 | 0.00 |
| SCD | 140 | SADDLE CREEK DRIVE | 130 | 150 | 5/14/2016 | 0 | 3 | 3 | 3 | 50.55 | 49.45 | 0.00 |
| SCD | 150 | SADDLE CREEK DRIVE | 140 | 160 | 5/14/2016 | 0 | 3 | 3 | 3 | 38.56 | 61.44 | 0.00 |
| SCD | 160 | SADDLE CREEK DRIVE | 150 | ROUNDABOUT | 5/14/2016 | 0 | 3 | 3 | 3 | 47.13 | 52.53 | 0.34 |
| SCD | 180 | SADDLE CREEK DRIVE | ROUNDABOUT | 190 | 5/14/2016 | 0 | 17 | 17 | 17 | 60.66 | 26.98 | 12.36 |
| SCD | 190 | SADDLE CREEK DRIVE | 180 | 200 | 5/14/2016 | 0 | 26 | 26 | 26 | 20.02 | 79.98 | 0.00 |
| SCD | 200 | SADDLE CREEK DRIVE | 190 | 210 | 5/14/2016 | 0 | 25 | 25 | 25 | 62.19 | 37.81 | 0.00 |
| SCD | 210 | SADDLE CREEK DRIVE | 200 | 220 | 5/14/2016 | 0 | 38 | 38 | 38 | 39.34 | 60.66 | 0.00 |
| SCD | 220 | SADDLE CREEK DRIVE | 210 | 230 | 5/14/2016 | 0 | 44 | 44 | 44 | 34.54 | 65.46 | 0.00 |
| SCD | 230 | SADDLE CREEK DRIVE | 220 | 240 | 5/14/2016 | 0 | 50 | 50 | 50 | 3.77 | 92.46 | 3.77 |
| SCD | 240 | SADDLE CREEK DRIVE | 230 | 250 | 5/14/2016 | 0 | 52 | 52 | 52 | 7.16 | 85.68 | 7.16 |
| SCD | 250 | SADDLE CREEK DRIVE | 240 | 260 | 5/14/2016 | 0 | 6 | 6 | 6 | 31.39 | 63.62 | 4.99 |
| SCD | 260 | SADDLE CREEK DRIVE | 250 | 270 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SCD | 270 | SADDLE CREEK DRIVE | 260 | 280 | 5/14/2016 | 0 | 34 | 34 | 34 | 6.74 | 86.52 | 6.74 |
| SCD | 280 | SADDLE CREEK DRIVE | 270 | 290 | 5/14/2016 | 0 | 38 | 38 | 38 | 33.25 | 60.29 | 6.46 |
| SCD | 290 | SADDLE CREEK DRIVE | 280 | 300 | 5/14/2016 | 0 | 54 | 54 | 54 | 1.31 | 97.38 | 1.31 |
| SCD | 300 | SADDLE CREEK DRIVE | 290 | 310 | 5/14/2016 | 0 | 41 | 41 | 41 | 12.25 | 75.49 | 12.25 |
| SCD | 310 | SADDLE CREEK DRIVE | 300 | 320 | 5/14/2016 | 0 | 53 | 53 | 53 | 0.00 | 100.00 | 0.00 |

PCI Calculation - Summary

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Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|--------------------|-------------------------|-------------------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| SCD | 320 | SADDLE CREEK DRIVE | 310 | 330 | 5/14/2016 | 0 | 9 | 9 | 9 | 63.63 | 27.75 | 8.62 |
| SCD | 330 | SADDLE CREEK DRIVE | 320 | 340 | 5/14/2016 | 0 | 8 | 8 | 8 | 67.08 | 30.00 | 2.93 |
| SCD | 340 | SADDLE CREEK DRIVE | 330 | 350 | 5/14/2016 | 0 | 13 | 13 | 13 | 62.92 | 37.08 | 0.00 |
| SCD | 350 | SADDLE CREEK DRIVE | 340 | 360 | 5/14/2016 | 0 | 45 | 45 | 45 | 28.62 | 60.24 | 11.14 |
| SCD | 360 | SADDLE CREEK DRIVE | 350 | 370 | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| SCD | 370 | SADDLE CREEK DRIVE | 360 | 380 | 5/14/2016 | 0 | 52 | 52 | 52 | 2.22 | 95.55 | 2.22 |
| SCD | 380 | SADDLE CREEK DRIVE | 370 | 390 | 5/14/2016 | 0 | 35 | 35 | 35 | 44.72 | 53.86 | 1.41 |
| SCD | 390 | SADDLE CREEK DRIVE | 380 | 400 | 5/14/2016 | 0 | 50 | 50 | 50 | 14.32 | 84.64 | 1.04 |
| SCD | 395 | SADDLE CREEK DRIVE | 390 | 400 | 5/14/2016 | 0 | 54 | 54 | 54 | 5.89 | 88.23 | 5.89 |
| SCD | 400 | SADDLE CREEK DRIVE | 390 | 410 | 5/14/2016 | 0 | 52 | 52 | 52 | 7.08 | 85.84 | 7.08 |
| SCD | 410 | SADDLE CREEK DRIVE | 400 | 420 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SCD | 420 | SADDLE CREEK DRIVE | 410 | 430 | 5/14/2016 | 0 | 47 | 47 | 47 | 33.20 | 62.97 | 3.83 |
| SCD | 430 | SADDLE CREEK DRIVE | 420 | INTX OAK CREEK ROAD | 5/14/2016 | 0 | 52 | 52 | 52 | 2.05 | 95.91 | 2.05 |
| SCDIN | 010 | SADDLE CREEK DRIVE | GATE | SECTION 20 | 5/14/2016 | 0 | 52 | 52 | 52 | 4.18 | 91.63 | 4.18 |
| SCDIN | 020 | SADDLE CREEK DRIVE | SECTION 10 | SECTION 30 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SCDIN | 030 | SADDLE CREEK DRIVE | SECTION 20 | SECTION 35 | 5/14/2016 | 0 | 47 | 47 | 47 | 4.91 | 76.93 | 18.16 |
| SCDIN | 035 | SADDLE CREEK DRIVE | APPX 260 FEET FROM GATE | APPX 330 FEET FROM GATE | 5/14/2016 | 0 | 56 | 56 | 56 | 0.00 | 100.00 | 0.00 |
| SCDIN | 040 | SADDLE CREEK DRIVE | SECTION 35 | SECTION 50 | 5/14/2016 | 0 | 53 | 53 | 53 | 0.00 | 100.00 | 0.00 |
| SCDIN | 050 | SADDLE CREEK DRIVE | SECTION 40 | SECTION 60 | 5/14/2016 | 0 | 56 | 56 | 56 | 0.00 | 100.00 | 0.00 |
| SCDIN | 060 | SADDLE CREEK DRIVE | SECTION 50 | INTX SADDLE CREEK LANE | 5/14/2016 | 0 | 2 | 2 | 2 | 42.93 | 39.20 | 17.87 |
| SCDIN | 065 | SADDLE CREEK DRIVE | SECTION 60 | SECTION 70 | 5/14/2016 | 0 | 27 | 27 | 27 | 39.51 | 60.09 | 0.40 |
| SCDOUT | 011 | SADDLE CREEK DRIVE | GATE | SECTION 21 | 5/14/2016 | 0 | 56 | 56 | 56 | 0.00 | 100.00 | 0.00 |
| SCDOUT | 021 | SADDLE CREEK DRIVE | SECTION 11 | SECTION 31 | 5/14/2016 | 0 | 50 | 50 | 50 | 23.43 | 76.57 | 0.00 |
| SCDOUT | 031 | SADDLE CREEK DRIVE | SECTION 21 | SECTION 35 | 5/14/2016 | 0 | 13 | 13 | 13 | 13.45 | 73.11 | 13.45 |
| SCDOUT | 041 | SADDLE CREEK DRIVE | SECTION 35 | SECTION 51 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SCDOUT | 051 | SADDLE CREEK DRIVE | SECTION 41 | SECTION 61 | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| SCDOUT | 061 | SADDLE CREEK DRIVE | SECTION 51 | INTX SADDLE CREEK LANE | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| SCL | 010 | SADDLE CREEK LANE | SADDLE CREEK DRIVE | 20 | 5/14/2016 | 0 | 33 | 33 | 33 | 52.07 | 47.93 | 0.00 |
| SCL | 020 | SADDLE CREEK LANE | 10 | 30 | 5/14/2016 | 0 | 59 | 59 | 59 | 38.97 | 61.03 | 0.00 |
| SCL | 030 | SADDLE CREEK LANE | 20 | 40 | 5/14/2016 | 0 | 73 | 73 | 73 | 36.81 | 63.19 | 0.00 |
| SCL | 040 | SADDLE CREEK LANE | 30 | 50 | 5/14/2016 | 0 | 81 | 81 | 81 | 1.05 | 97.90 | 1.05 |
| SCL | 050 | SADDLE CREEK LANE | 40 | 60 | 5/14/2016 | 0 | 69 | 69 | 69 | 49.01 | 50.99 | 0.00 |
| SCL | 060 | SADDLE CREEK LANE | 50 | 70 | 5/14/2016 | 0 | 72 | 72 | 72 | 46.80 | 52.24 | 0.96 |
| SCL | 070 | SADDLE CREEK LANE | 60 | 80 | 5/14/2016 | 0 | 72 | 72 | 72 | 0.00 | 100.00 | 0.00 |
| SCL | 080 | SADDLE CREEK LANE | 70 | 90 | 5/14/2016 | 0 | 71 | 71 | 71 | 48.01 | 51.99 | 0.00 |
| SCL | 090 | SADDLE CREEK LANE | 80 | 100 | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| SCL | 100 | SADDLE CREEK LANE | 90 | 110 | 5/14/2016 | 0 | 77 | 77 | 77 | 25.80 | 67.95 | 6.25 |

PCI Calculation - Summary

Printed: 06/07/2016

| Street ID | Section ID | Road Name | Begin Location | End Location | PCI Date | PCI Before | PCI After | PCI High | PCI Low | Pct Load | Pct Envr | Pct Other |
|-----------|------------|--------------------|----------------------|--------------|-----------|------------|-----------|----------|---------|----------|----------|-----------|
| SCL | 110 | SADDLE CREEK LANE | 100 | 120 | 5/14/2016 | 0 | 69 | 69 | 69 | 0.00 | 100.00 | 0.00 |
| SCL | 120 | SADDLE CREEK LANE | 110 | 130 | 5/14/2016 | 0 | 70 | 70 | 70 | 0.00 | 100.00 | 0.00 |
| SCL | 130 | SADDLE CREEK LANE | 120 | 140 | 5/14/2016 | 0 | 83 | 83 | 83 | 0.00 | 100.00 | 0.00 |
| SCL | 140 | SADDLE CREEK LANE | 130 | COURT | 5/14/2016 | 0 | 81 | 81 | 81 | 0.00 | 100.00 | 0.00 |
| SCL | COURT | SADDLE CREEK LANE | 140 | END | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 87.05 | 12.95 |
| SL | 010 | SUMMIT LANE | INTX ROCKRIDGE LANE | 20 | 5/14/2016 | 0 | 54 | 54 | 54 | 1.62 | 96.76 | 1.62 |
| SL | 020 | SUMMIT LANE | 10 | 30 | 5/14/2016 | 0 | 48 | 48 | 48 | 31.92 | 66.08 | 0.00 |
| SL | 030 | SUMMIT LANE | 20 | 40 | 5/14/2016 | 0 | 52 | 52 | 52 | 25.35 | 74.65 | 0.00 |
| SL | 040 | SUMMIT LANE | 30 | 50 | 5/14/2016 | 0 | 50 | 50 | 50 | 25.59 | 73.01 | 1.39 |
| SL | 050 | SUMMIT LANE | 40 | 60 | 5/14/2016 | 0 | 54 | 54 | 54 | 1.48 | 97.04 | 1.48 |
| SL | 060 | SUMMIT LANE | 50 | 70 | 5/14/2016 | 0 | 52 | 52 | 52 | 3.79 | 92.42 | 3.79 |
| SL | 070 | SUMMIT LANE | 60 | 80 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SL | 080 | SUMMIT LANE | 70 | 90 | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SL | 090 | SUMMIT LANE | 80 | 100 | 5/14/2016 | 0 | 54 | 54 | 54 | 1.43 | 97.14 | 1.43 |
| SL | 100 | SUMMIT LANE | 90 | COURT | 5/14/2016 | 0 | 54 | 54 | 54 | 0.00 | 100.00 | 0.00 |
| SL | COURT | SUMMIT LANE | 100 | END | 5/14/2016 | 0 | 55 | 55 | 55 | 0.00 | 100.00 | 0.00 |
| VKC | 010 | VOSTA KNOLLS COURT | INTX KNOLLS DRIVE | 020 | 5/14/2016 | 0 | 76 | 76 | 76 | 7.61 | 84.78 | 7.61 |
| VKC | 020 | VOSTA KNOLLS COURT | 101 | 030 | 5/14/2016 | 0 | 78 | 78 | 78 | 0.00 | 100.00 | 0.00 |
| VKC | 030 | VOSTA KNOLLS COURT | 020 | 040 | 5/14/2016 | 0 | 74 | 74 | 74 | 10.98 | 78.04 | 10.98 |
| VKC | 040 | VOSTA KNOLLS COURT | 030 | 050 | 5/14/2016 | 0 | 76 | 76 | 76 | 0.00 | 100.00 | 0.00 |
| VKC | 050 | VOSTA KNOLLS COURT | 040 | 060 | 5/14/2016 | 0 | 73 | 73 | 73 | 14.68 | 70.64 | 14.68 |
| VKC | 060 | VOSTA KNOLLS COURT | 050 | 070 | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 100.00 | 0.00 |
| VKC | 070 | VOSTA KNOLLS COURT | 060 | 080 | 5/14/2016 | 0 | 77 | 77 | 77 | 0.00 | 100.00 | 0.00 |
| VKC | 080 | VOSTA KNOLLS COURT | 070 | 090 | 5/14/2016 | 0 | 77 | 77 | 77 | 11.47 | 77.06 | 11.47 |
| VKC | COURT | VOSTA KNOLLS COURT | 090 | END | 5/14/2016 | 0 | 72 | 72 | 72 | 53.40 | 33.27 | 13.33 |
| WDC | 010 | WOOD DUCK COURT | INTX OAK CREEK DRIVE | COURT | 5/14/2016 | 0 | 52 | 52 | 52 | 0.00 | 100.00 | 0.00 |
| WDC | COURT | WOOD DUCK COURT | 10 | END | 5/14/2016 | 0 | 50 | 50 | 50 | 1.05 | 97.90 | 1.05 |
| WFC | 010 | WILDFLOWER COURT | INTX KNOLLS DRIVE | 020 | 5/14/2016 | 0 | 65 | 65 | 65 | 39.85 | 60.15 | 0.00 |
| WFC | 020 | WILDFLOWER COURT | 010 | 030 | 5/14/2016 | 0 | 74 | 74 | 74 | 39.91 | 60.09 | 0.00 |
| WFC | 030 | WILDFLOWER COURT | 020 | COURT | 5/14/2016 | 0 | 79 | 79 | 79 | 0.00 | 100.00 | 0.00 |
| WFC | COURT | WILDFLOWER COURT | 030 | END | 5/14/2016 | 0 | 72 | 72 | 72 | 14.67 | 85.33 | 0.00 |
| WOC | 010 | WHITE OAK COURT | INTX BLUE OAK COURT | COURT | 5/14/2016 | 0 | 41 | 41 | 41 | 29.89 | 70.11 | 0.00 |
| WOC | COURT | WHITE OAK COURT | 10 | END | 5/14/2016 | 0 | 48 | 48 | 48 | 13.58 | 85.56 | 0.87 |