May 3rd, 2018
Project #237.03.55
City of Belmont
Public Works Department
One Twin Pines Lane, Suite 385
Belmont, CA 94002

Five-Year Paving Capital Improvement Program Development Report (DRAFT)
Belmont, California

Dear Ms. Alvarez:

NCE is pleased to present this report summarizing the street selection criteria and process used to assist the City in developing the City of Belmont's (City) Five-Year Capital Improvement Program for resurfacing and repairing local roads.

Background

The City of Belmont successfully passed an important ½ cent sales tax measure in November 2016 to provide funding for maintaining City of Belmont services and facilities, including over 69 miles of City streets and storm drains. The new funding measure will provide annual funding estimated to be between $1.3 to $1.5 million over thirty years, of which $1 million has been dedicated to annual paving maintenance. This additional funding, in combination with projected Senate Bill 1 (SB-1): The Road Repair and Accountability Act funding, will create approximately $1.6 to $1.7 million for annual paving maintenance. This will now allow the City to repair more streets that were not able to be addressed historically, as the City had limited funding used for residential surface seal programs, filling potholes, and paving on arterial streets with Federal Grants. Moving forward, the City would like to develop a five-year Capital Improvement Program (CIP) for streets to be constructed over a five-year period, 2019 through 2023. The City currently has a slurry seal program developed for construction in 2018.

Approach

CIP Objectives and Criteria

Current Conditions

The City completed an update to its pavement management program, StreetSaver, in spring 2018, as a part of P-TAP 18. The update included the inspection of all City streets, updating its pavement maintenance and rehabilitation decision tree of treatments, strategies, and costs, and running budget scenarios at various funding levels. The costs built in to the decision tree include costs for concrete and ADA improvements, design, construction, and typical soft costs.

According to the City's P-TAP 18 Pavement Management Program Update report, the City's network PCI in 2017 was 59. Figure 1 shows that approximately two-thirds (66%) of the current pavement network is in Fair or Good condition, while one-third (34%) is in Poor to Very Poor condition.

As shown in Figure 2, the City has significantly more residential streets (more than 65 percent), by area, than any other classification. The residential streets also have a lower average 2018 PCI (55) than that of arterials (65) and

collectors (66). This is typical for many City networks all throughout California where greater funding and priority is given to arterial streets that serve as the backbone to public transportation and commerce, generally have higher traffic volumes, and are eligible for Federal Grant funding.

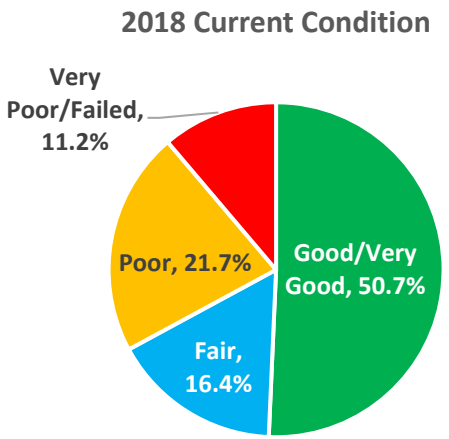


Figure 1. 2018 Pavement Condition Breakdown by Area (Entire Network)

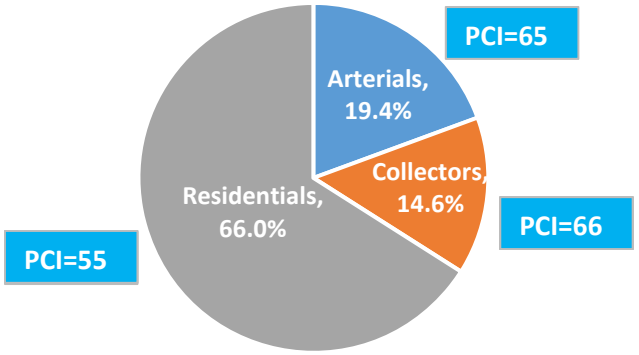


Figure 2. Pavement Network Area Breakdown by Functional Classification

Objectives

The objective of the City was to develop a logical, well planned, and cost effective five-year Paving Capital Improvement Program to stretch public funding and allow more streets to be repaired. This was achieved by using an optimally determined candidate list from the City's pavement management program, StreetSaver. Then practical cost considerations were applied such as geographic groupings. The street segments were aggregated, where possible, to allow for construction of continuous sections at the same time, while minimizing concentrated disruption to residents and traffic. Distribution of improvements throughout the City were also considered to help

provide equity of pavement improvements through various neighborhoods and commercial districts.

The Paving CIP was also grouped by pavement treatments by type to be constructed in annual cycles for efficiency in design and bidding. For example, in 2018 the City will be constructing a surface seal project, while in 2019 it may design and build an overlay project, followed by a reconstruction project in 2020. Final street candidates were then reviewed in the field to validate selected streets and treatments and develop a multi-year plan.

Another objective of the City was to allocate a portion of the funds available to be dedicated to streets in poor condition that otherwise may not be selected by StreetSaver due to funding constraints, focusing on higher volume streets and those that serve community schools and businesses.

The final objective was, to the extent possible, develop a street list considering planned maintenance or improvement projects by utilities. Coordination of paving projects with known utility improvement projects is likely to be an ongoing process and requires flexibility in the street selection year to year.

While the current street selection process is complete, the list prepared thus far is meant for planning level purposes and may be subject to change based on utility conflicts, unplanned maintenance projects, and escalation in construction costs, as construction pricing changes and which may negatively impact the number of streets treated. Further, the street list has not been shared with utility companies for review, such as PG&E. The final street list for each year will also be filtered through any known CIP and Development projects that may conflict.

Pavement Maintenance Strategies

As previously mentioned, the City completed a Pavement Management Program Update Report in spring 2018, as a part of P-TAP 19. The update included updating its pavement maintenance and rehabilitation decision tree of treatments, strategies, and costs, and running budget scenarios at various funding levels to evaluate the impact to the condition of the street network. The costs built in to the decision tree include costs for concrete and ADA improvements, design, construction, and typical soft costs. The treatments and typical costs from the City's updated Decision Tree were used in the street selection process and assumptions.

The City's pavement and rehabilitation strategies include the following treatments by treatment category listed in Table 1 and were the basis for pavement maintenance strategies.

Table 1. Treatment Descriptions

Treatment Category	Typical Treatment
Light Maintenance	• Slurry Seal • Micro-Surface • Fog Seal • Scrub Seal
Heavy Maintenance	• Chip Seal • Cape Seal • Slurry Seal with Digouts • Micro-Surface with Digouts • Thin Maintenance Overlay (TMO)
Light Rehabilitation	• Overlay (2" and under) • Thin Mill and Fill
Heavy Rehabilitation	• Overlay (greater than 2") • Thick Mill and Fill • Cold-In-Place Recycling • Full Depth Reclamation

Treatment Category	Typical Treatment
	• Pulverize and Resurfacing
Reconstruct	• Full Section Reconstruction

Funding Sources

The draft paving CIP assumes funding will come from various sources, specifically Measure I at $1 million per year, $600-700k per year from SB-1. This amounts to approximately $8.5 million over five years or approximately $1.7 million per year, between 2019 and 2023. The City Council has allocated an additional $2 million in City Infrastructure Funds towards pavement, amounting to an average of $2.1 million per year, or a total of $10.5 million over five years.

Street Selection Process

The overall street selection process included collecting historical data and planned work, developing street candidate lists based on StreetSaver budget analysis, consideration of street paving distribution throughout the City, conducting a field review to validate pavement conditions and pavement treatments, and aggregating streets into annual projects.

Data Collection

Historical maintenance and rehabilitation (M&R) records from StreetSaver were reviewed to identify streets that were paved in recent years are deferred to preserve a minimum seven-year surface seal cycle. The City's 2018 slurry seal project was incorporated into the plan and eliminated from the list of candidate streets. Streets identified by the Mid-Peninsula Water District for utility improvements were also deferred until the work is planned to be completed.

Field Review and Findings

Using current Pavement Condition Index (PCI) and historical maintenance data from the City's recently updated StreetSaver database, NCE conducted a field review to verify preliminary treatment assignments and select paving project candidates for the CIP. In March 2018, NCE visited every pavement section in the City. Distress types, pavement conditions, previous treatments, and potential subgrade issues were reviewed to validate or revise recommended treatments for each section.

The primary focus of this field survey was the general condition of the streets, the specific distresses observed, and the state of any preservation treatments, if applicable. Overall conditions ranged markedly from well performing streets requiring only preservation treatments to failing streets requiring reconstruction. The five general treatment categories used by the City are: Light Maintenance, Heavy Maintenance, Light Rehabilitation, Heavy Rehabilitation, and Reconstruction. The photos and accompanying text below detail some of these conditions, proposed treatment recommendations, and rationale behind these decisions.

Figure 3. Light Maintenance Candidate Streets

The photos in Figure 3 illustrate two streets that can be well served by application of light maintenance treatments such as slurry seal, Microsurfacing, or if thoroughly evaluated – fog seal. The photo on the left shows a commonly observed situation in Belmont - a slurry seal that is weathered and raveled and needs to be replaced. The street shows only minor longitudinal cracking, which may be addressed with crack sealing and additional slurry seal. The photo on the right shows an un-cracked street whose surface is raveling and weathering away due to hardening and aging of the asphalt. A light maintenance treatment will help secure the aggregate in the street and provide protection against environmental exposure and help the street last its expected life.

Figure 4. Heavy Maintenance Candidate Streets

Figure 4 shows streets that can be addressed with heavy maintenance treatments. The photo at the left is a street that exhibits a combination of fatigue cracking (truck load induced) and some minor distortion cracking from sliding that is starting to occur. At this point in the pavement life, treatments such as base repairs (digouts) with Microsurfacing or slurry seal or just a stand-alone cape seal can be used. This distress is expected to progress and eventually require more significant repair. The photo on the right shows aged and environmentally damaged asphalt concrete. Crack sealing is an effective application and, in combination with a cape seal, can help to keep cracks from propagating through to the surface, though it's not likely to be 100 percent effective. Simple slurry or Microsurfacing can be used to protect the asphalt concrete, but the cracks will come through very quickly without a crack sealant.

Figure 5. Light Rehabilitation Candidate Streets

Photos of potential light rehabilitation candidates, which the City defines as thin overlays or thin mill and overlays, are shown in Figure 5. The first two photos are more heavily travelled pavements where additional structure will help keep the cracking down and restore ride and increase overall life. Base repairs can be done on any areas showing structural failure. The cracks visible in the first two photos appear to be a combination of structural failure, construction joint failure, and age cracking. These cannot readily be repaired with base repairs and will likely reflect through a new overlay, which is difficult to avoid. Alternatively, these streets can be crack sealed and treated with light maintenance such as slurry seals or Microsurfacing to keep costs down.

The third photo in Figure 5 shows a street that has been treated with a slurry seal and extensive crack sealing. The structural failure observed under the crack seal application could be treated with base repairs and heavy maintenance or base repairs and a light rehabilitation treatment, depending on the prevalence of this failure. Alternatively, in place of the costly and extensive crack sealing (and potential low friction surface from the crack sealant), light maintenance may be applied following base repairs. Many options exist in this case.

Figure 6. Heavy Rehabilitation or Reconstruction Candidate Streets

The two photos in Figure 6, above, are streets that can be properly treated with heavy rehabilitation or reconstruction methods. The photo at the left shows a street that is exhibiting significant age related distress, but not necessarily structural failure. In this case, a treatment such as full depth recycling (FDR) may replace the cracked asphalt concrete with a bound base material, which is then covered with a thin overlay or light or heavy maintenance treatment. Full reconstruction would be costly here and likely unnecessary. However, the City may consider surface reconstruction in this case by milling off the entire asphalt concrete section, re-compacting the base material, and repaving at a cost a bit above that of FDR. Where the existing asphalt concrete section is very thin (i.e. 2 inches or less), a conventional mill and overlay is not an option as the pavement is too thin to mill, making reconstruction of the asphalt surface a cost effective solution. The photo at the right shows a street that is exhibiting significant structural failure. Note the cracking in the wheel path and presence of fines from base or subgrade materials on the surface of the cracks, particularly on the right side. This street is also a candidate for FDR or more costly conventional full depth reconstruction.

Figure 7. Reconstruction Candidate Streets with Subgrade Issues

The photo above shows a street with closely spaced longitudinal cracking indicative of slope movement/creep that at a minimum should be addressed with full reconstruction. To properly address this, the earth movement might need to be stabilized, both within and outside of the pavement area, and the pavement section reconstructed, which can be very costly. As a less substantial but more economical alternative, the City may elect to perform heavy rehabilitation with isolated subgrade stabilization repairs (e.g. over-excavation of subgrade and replacement with geogrid and compacted base rock materials) to address more severely cracked pavement and help slow down

propagation of cracking back up through the pavement section. The City should then monitor the cracks, which will inevitably come back, and crack seal in a timely manner.

Aggregation of Data and StreetSaver Analysis

Following the data collection and field review, NCE calculated a budget scenario in StreetSaver to be used as a tool to prioritize those streets from the CIP candidate list that are most cost effective to repair. The scenario used a baseline budget of $3 million per year to allow for consideration of more costly street treatments (e.g. reconstruction) to be identified in the selection and to allow StreetSaver to group more streets throughout the City that are eligible for paving.

The first two years of streets selected by StreetSaver in this scenario were then used to begin aggregating streets to identify $10.5 million worth of paving projects. At this step, StreetSaver analysis, results from NCE's field review, and planned work from the City and utilities were combined for final considerations. The process included grouping street segments in neighborhoods where a higher density of streets selected by StreetSaver, hand selecting additional segments to help elongate shorter street segments selected by StreetSaver and revising the selected pavement treatment based on the field review, where applicable. There was also a focus on distributing the work throughout four quadrants in the City, where Ralston Avenue and Alameda de las Pulgas serve as the delineators.

Once $10.5 million worth of paving projects were identified, the treatments were grouped by type and location over the course of five years. Note that the street list assumes project costs in 2018 dollars and no inflation was considered at this time.

An additional list of more expensive rehabilitation and reconstruction projects, approximately $5.2 million, were identified as additional or alternative projects from the draft street list.

Streets proposed for surface or full depth reconstruction are currently scheduled for 2020 or beyond, due to the lead time required for planning, coordination, and design for such projects. Such coordination would include that with residents and utility companies, and design considerations include assessing drainage improvements, underground utility clearance, and curb ramp designs.

The draft five-year paving CIP street list is provided in the attached Table 2 and a map of the selected streets is provided in Appendix A.

Findings

The project costs each year for the draft street list aim to evenly distribute the funding throughout the five-year period, at approximately $2.1 million per year. Approximately 78 percent of funding is currently allocated for residential streets, and 14 percent for arterial streets.

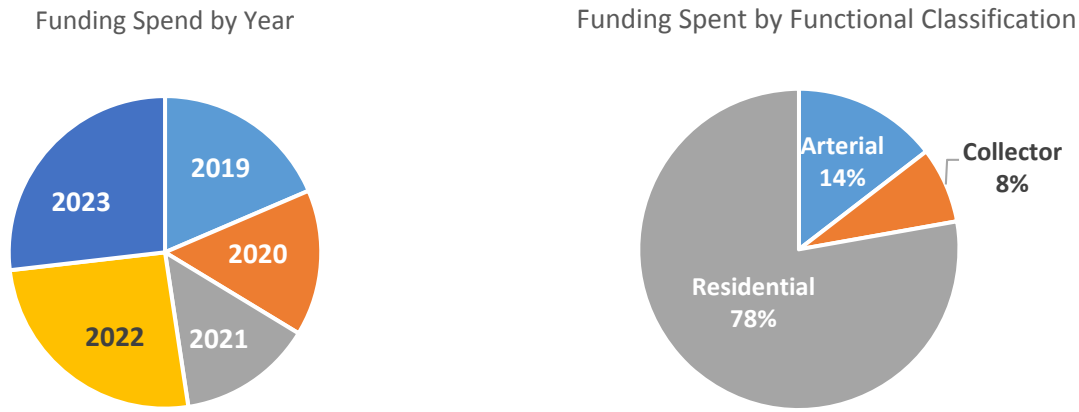


Figure 8. Funding Spent by Year and Functional Classifications

With a total of $10.5 million in funding over five years, 14 percent is currently allocated for surface seal projects (light and heavy maintenance), 15 percent for mill and overlay projects (light rehabilitation), and 71 percent in surface reconstruction or reconstruction streets (heavy rehabilitation and reconstruction). A total of 25.8 centerline miles are currently identified for paving during this period. As illustrated in Figure 9, below, approximately 14 percent of the total funding will go towards 67 percent (16.8 miles) of City streets for surface seal projects, while another 32 percent is allocated to only 6 percent of the streets (1.5 miles) for more costly reconstruction. This illustrates the cost effectiveness and importance of applying preventative maintenance treatments to preserve the City's streets while in fair or good condition as the cost to heavy rehabilitation of one street is equivalent to light maintenance of 16 streets.

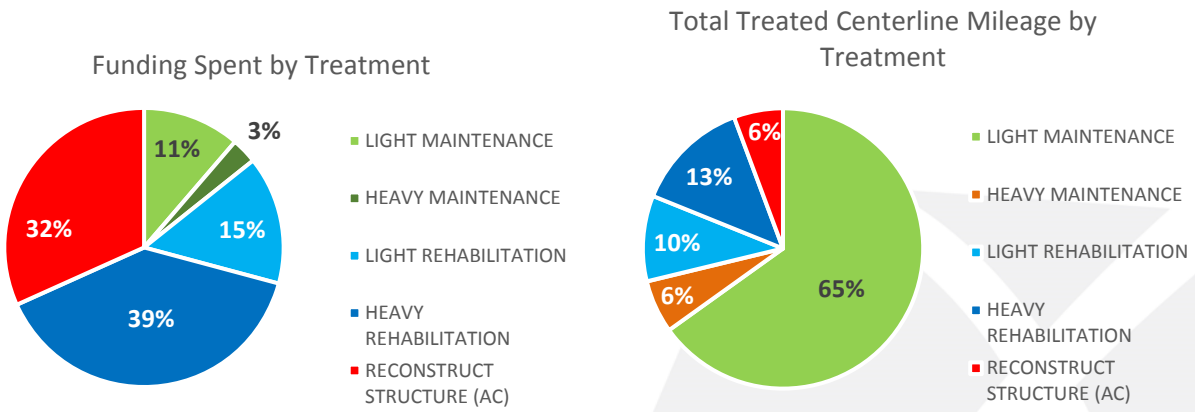


Figure 9. Funding Spent and Total Treated Mileage by Treatment

Following the completion of the pre-programmed 2018 and 2019 surface seal and resurfacing projects, the OBAG 2 LSR maintenance in 2022, and the first four years of the draft paving plan, the overall network PCI will improve to

62 by 2022. With only six street segments identified for reconstruction in 2023, the overall PCI will ultimately increase to a value of 61 from 58 in 2017.

In the City's P-TAP 18 report, Scenario 3 modeled the funding needs to maintain an overall PCI at 59 with $2.7 million per year (from 2018 to 2022). With a total $13.5 million over the 5-year analysis period, 24.3 percent of funding was allocated to arterials, 9.2 percent on collectors, and 66.5 percent on residential streets. Meanwhile, the draft CIP five-year paving plan identified a total of $10.5 million (in 2018 dollars, or $11.8 million with 3.5% inflation rate) between 2019 and 2023 to improve the overall PCI to 61 by 2023, and 78 percent of funding is allocated to less expensive residential streets with 14 percent to arterials. The budget scenario in the P-TAP report was used as a planning level tool using a Target-Driven budget scenario model in StreetSaver, which optimizes the streets selection process to reach target PCIs by year, where funding allocations and paving projects were selected based on inspected PCI values and a maintenance decision tree. The draft CIP street selection process identified customized candidate treatments based on general pavement conditions and typical distresses, determined during a field review. Additionally, because unit costs to repair arterials are higher than collectors or residentials, the draft street list reaches more streets, contributing to the overall improvement of the network PCI.

In Figure 10, the projected network PCIs include the results from additional pre-programmed projects including 2018 and 2019 surface seal and resurfacing projects, and OBAG 2 LSR in 2022.

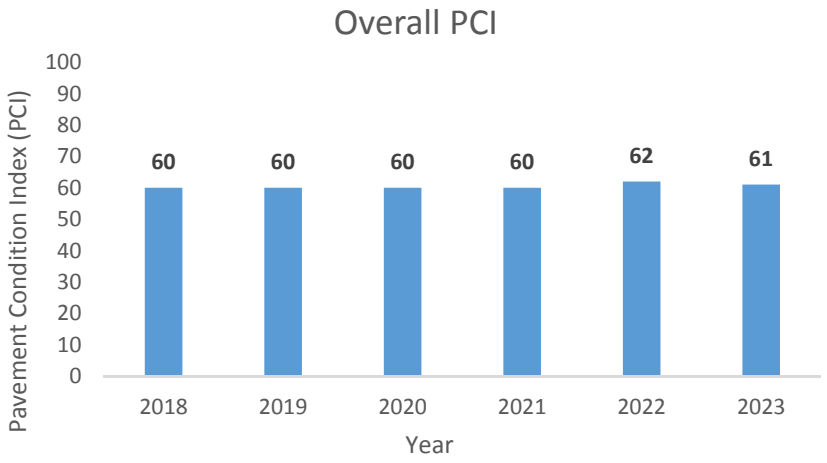


Figure 10. Overall PCI between 2018 and 2023

With the draft five-year paving plan, almost 76 percent of the pavement will be in the "Good/Very Good" or "Fair" condition categories, while over 16 percent of the entire network will be in the "Very Poor/Failed" condition by 2023. Figure 11 illustrates the impacts of the current projected funding levels on the current network conditions, with more streets headed into the "Good/Very Good" or "Fair" condition categories as more streets leave the "Poor" and "Very Poor/Failed" condition categories.

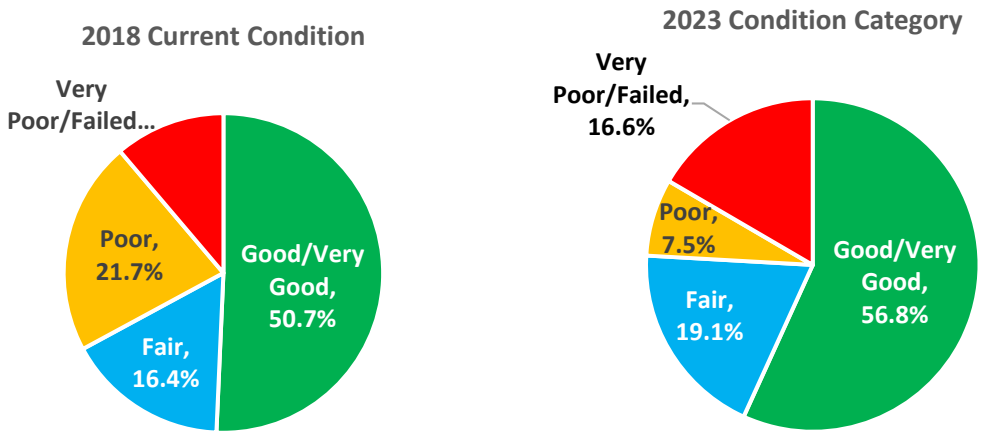


Figure 11. 2018 and 2023 Pavement Condition by Area (Entire Network)

CLOSURE

We trust this letter report provides the necessary information at this time. If you have any further questions, please contact us at (510) 215-3620.

Yours very truly,
Nichols Consulting Engineers, Chtd.

Mei-Hui Lee, Ph.D., P.E.
Senior Engineer

James Signore, Ph.D., P.E.
Associate Engineer

Jenny Van Dyke, P.E.
Senior Engineer

Attachments:
Table 2. Draft Five-Year CIP Street List
Appendix A – Draft Paving CIP Five-Year Map

Table 2.
City of Belmont
Draft Five-Year CIP Street List

Table 2. City of Belmont Preliminary Five-Year CIP Street List

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
ALHAMB	ALHA2	ALHAMBRA DRIVE	DEAD END	MONTE CRESTA DRIVE	2	R	500	22	11,000	8/14/2017	39	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 52,274
BAYVIE	BAYV2	BAYVIEW AVENUE	MILLER AVENUE	FPREST AVENUE	2	R	1200	19	22800	8/15/2017	45	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 108,351
BELLE	BELLE	BELLE MONTE AVEUNE	NOTRE DAME AVENUE	ALAMEDA DE LAS PULGAS	2	R	950	20	19,000	8/15/2017	63	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2019	$ 66.83	$ 141,086
BELMON	BELM2	BELMONT CANYON ROAD	RALSTON AVENUE MIDDLE INT	HILLCREST DRIVE	2	R	425	29	12,325	8/10/2017	27	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 58,571
CARLMO	CARL4	CARLMONT DRIVE	LAKE ROAD	2601 CARLMONT DR	2	R	1,550	40	62,000	8/15/2017	50	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 294,638
CONTIN	CONT1	CONTINENTAL WAY	LYALL WAY	CIPRIANI BOULEVARD	2	R	700	40	28,000	8/15/2017	23	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2019	$ 66.83	$ 207,916
CORONE	CORO4	CORONET BOULEVARD	PRINDLE ROAD	RALSTON AVENUE	2	R	1,400	22	30,800	8/15/2017	52	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 146,368
FAIRWA	FAIRWA	FAIRWAY DRIVE	NOTRE DAME AVENUE	ARBOR AVENUE	2	R	1,400	20	28,000	8/15/2017	41	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 133,062
LINCOL	LINC1	LINCOLN AVENUE	CIPRIANI BOULEVARD	MONSERAT AVENUE	2	R	700	23	16,100	8/14/2017	68	SLURRY SEAL	LIGHT MAINTENANCE	2019	$ 4.16	$ 7,442
LINCOL	LINC2	LINCOLN AVENUE	MONSERAT AVENUE	ALL VIEW WAY	2	R	1,060	23	24,380	8/14/2017	59	SLURRY SEAL	LIGHT MAINTENANCE	2019	$ 4.16	$ 11,269
LINCOL	LINC3	LINCOLN AVENUE	ALL VIEW WAY	NEWLANDS AVENUE	2	R	925	23	21,275	8/14/2017	64	SLURRY SEAL	LIGHT MAINTENANCE	2019	$ 4.16	$ 9,834
LYALL	LYAL2	LYALL WAY	LAKE ROAD	CONTINENTALS WAY	2	R	750	32	24,000	8/15/2017	26	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 114,053
MASONI	MASO1	MASONIC WAY	HILLER STREET	610 MASONIC WAY / COP	2	R	400	44	17,600	8/17/2017	15	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 83,639
PONCE	PONC1	PONCE AVENUE	PRINDLE ROAD	READ AVENUE	2	R	1,450	18	26,100	8/15/2017	56	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 124,033
PONCE	PONC2	PONCE AVENUE	READ AVENUE	CIPRIANI BOULEVARD	2	R	450	22	9,900	8/15/2017	58	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 47,047
RUTH	RUTH	RUTH AVENUE	EL CAMINO REAL	NORTH ROAD	2	R	1,325	25	33,125	8/16/2017	34	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 157,417
SANAR	SANAR	SAN ARDO WAY	MONTE CRESTA DRIVE	BARCLAY WAY	2	R	800	22	17,600	8/14/2017	68	SLURRY SEAL	LIGHT MAINTENANCE	2019	$ 4.16	$ 8,135
SEMERI	SEMERI	SEMERIA AVENUE	CIPRIANI BOULEVARD	CASA BONA AVENUE	2	R	1,350	18	24,300	8/15/2017	36	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 115,479
VILLA	VILLA2	VILLA AVENUE	BELBURN DRIVE	RALSTON AVENUE	2	R	345	29	10,005	8/16/2017	31	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 47,546
WOOSTE	WOOSTE	WOOSTER AVENUE	SAN MATEO CITY LIMIT	CIPRIANI BOULEVARD	2	R	900	18	16,200	8/14/2017	36	MILL AND OVERLAY	LIGHT REHABILITATION	2019	$ 42.77	$ 76,986
															2019 Subtotal:	**$ 1,945,146**
BERESF	BERESF	BERESFORD AVENUE	HILLCREST DRIVE	LOWER LOCK AVENUE	2	R	1,000	26	26,000	8/11/2017	23	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 193,064
BIDDUL	BIDDUL	BIDDULPH WAY	HILLER STREET	ENTRANCE TO MAE NESBIT SCHOOL	2	R	110	29	3,190	8/17/2017	22	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 23,688
BUENA	BUEN4	BUENA VISTA AVENUE	CIPRIANI BOULEVARD	2511 BUENA VISTA AVENUE	2	R	400	32	12,800	8/14/2017	17	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 95,047
BUENA	BUEN5	BUENA VISTA AVENUE	2511 BUENA VISTA AVENUE	MONSERAT AVENUE	2	R	450	45	20,250	8/14/2017	11	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 150,368
KIMMIE	KIMMIE	KIMMIE COURT	CORONET BOULEVARD	END OF CUL DE SAC	2	R	500	34	17,000	8/15/2017	27	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 126,234
PINE	PINE	PINE KNOLL DRIVE	END OF CUL DE SAC	HILLMAN AVENUE	2	R	1,510	20	30,200	8/15/2017	43	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 224,252
ROBBIN	ROBBIN	ROBBIN WHIPPLE WAY	BELBURN DRIVE	END OF CUL DE SAC	2	R	1,150	29	33,350	8/16/2017	25	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 247,642
SUSSEX	SUSSEX	SUSSEX COURT	HILLER STREET	END OF CUL DE SAC	2	R	150	33	4,950	8/17/2017	13	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 36,757
TERRAC	TERR2	TERRACE DRIVE	HILLMAN AVENUE	MEZES AVENUE	2	R	375	21	7,875	8/15/2017	29	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 58,476
VALERG	VALERG	VALERGA DRIVE	Alameda de las Pulgas	Dead End	2	R	600	40	24,000	8/15/2017	10	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 178,213
WESSEX	WESS1	WESSEX WAY	END OF CUL DE SAC	HILLER STREET	2	R	600	34	20,400	8/17/2017	15	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 151,481
WESSEX	WESS3	WESSEX WAY	GRANADA STREET	ENTRANCE TO POST OFFICE	2	R	400	34	13,600	8/17/2017	18	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2020	$ 66.83	$ 100,988
															2020 Subtotal:	**$ 1,586,210**
ACAAV	ACAAV2	ACADEMY AVENUE	s/o BELBURN DRIVE	s/o ALDEN DRIVE	2	R	540	29	15,660	8/16/2017	77	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,238
ACAAV	ACAAV3	ACADEMY AVENUE	s/o ALDEN ST	END OF ONE WAY	2	R	1,225	23	28,175	8/16/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 13,023
ACACT	ACACT	ACADEMY COURT	ACADEMY AVENUE	ACADEMY AVENUE	2	R	365	16	5,840	8/16/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,699
ALDCT	ALDCT	ALDEN COURT	ALDEN STREET	END OF CUL DE SAC	2	R	190	25	4,750	8/16/2017	79	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,196
ALDST	ALDST	ALDEN STREET	AVON STREET	ALAMEDA DE LAS PULGAS	2	R	1,300	29	37,700	8/16/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 17,426
ALLVI	ALL1	ALL VIEW WAY	LINCOLN AVENUE	SEQUOIA AVENUE	2	R	250	23	5,750	8/14/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,658

Table 2. City of Belmont Preliminary Five-Year CIP Street List

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
ARBOR	ARBO2	ARBOR AVENUE	FAIRWAY DRIVE	ALAMEDA DE LAS PULGAS	2	R	1,200	21	25,200	8/15/2017	64	SLURRY SEAL W/BR	HEAVY MAINTENANCE	2021	$ 14.26	$ 39,928
ARTHUR	ARTHUR	ARTHUR AVENUE	ALAMEDA DE LAS PULGAS	CORONET BOULEVARD	2	R	1,000	22	22,000	8/15/2017	67	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 10,169
AVON	AVON2	AVON AVENUE	BELBURN DRIVE	FAIRWAY DRIVE	2	R	750	29	21,750	8/16/2017	77	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 10,053
BAY	BAY	BAY COURT	EAST LAUREL CREEK ROAD	LONGFELLOW DRIVE	2	R	250	22	5,500	8/14/2017	67	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,542
BAYVIE	BAYV1	BAYVIEW AVENUE	END OF CUL DE SAC	MILLER AVENUE	2	R	650	19	12350	8/15/2017	60	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,708
BELMON	BELM1	BELMONT CANYON ROAD	RALSTON AVENUE EAST INT	BELMONT CANYON ROAD	2	R	2,640	24	63,360	8/10/2017	49	SLURRY SEAL W/BR	HEAVY MAINTENANCE	2021	$ 14.26	$ 100,390
BETTIN	BETTIN	BETTINA AVENUE	SAN MATEO CITY LIMIT	THURM AVENUE	2	R	450	22	9,900	8/14/2017	54	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,576
BISHOP	BISHOP	BISHOP ROAD	ROBERT AVENUE	BISHOP ROAD	2	R	1,850	26	48,100	8/10/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 22,233
BRIARF	BRIARF	BRIARFIELD WAY	CHESTERTON AVENUE	HILLER STREET	2	R	425	34	14,450	8/17/2017	85	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 6,679
BRIARW	BRIARW	BRIARWOOD WAY	SEAGATE WAY	OXFORD WAY	2	R	385	33	12,705	8/17/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,873
BROADW	BROA1	BROADWAY	EL CAMINO REAL	SIXTH AVENUE	2	R	500	50	25,000	8/16/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 11,556
BUENA	BUEN1	BUENA VISTA AVENUE	CIPRIANI BOULEVARD	2329 BUENA VISTA AVENUE	2	R	800	20	16,000	8/14/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,396
BUENA	BUEN2	BUENA VISTA AVENUE	2329 BUENA VISTA AVENUE	NEWLANDS AVENUE	2	R	400	20	8,000	8/14/2017	70	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,698
BUENA	BUEN3	BUENA VISTA AVENUE	NEWLANDS AVENUE	CIPRIANI BOULEVARD	2	R	570	22	12,540	8/14/2017	42	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,796
CARLMO	CARL 2	CARLMONT DRIVE	HASTINGS DRIVE	MERRY MOPPET LN	2	C	600	40	24,000	8/15/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 12,347
CARLMO	CARL 3	CARLMONT DRIVE	MERRY MOPPET LN	LAKE RD	2	R	800	40	32,000	8/15/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 14,791
CARLMO	CARL1	CARLMONT DRIVE	ALAMEDA DE LAS PULGAS	HASTINGS DRIVE	2	C	800	40	32,000	8/15/2017	82	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 16,462
CARLMO	CARL5	CARLMONT DRIVE	2601 CARLMONT DR	HIDDEN CANYON PARK	2	R	940	40	37,600	8/15/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 17,380
CARMEL	CARM1	CARMELITA AVENUE	READ AVENUE	CIPRIANI BOULEVARD	2	R	1,300	22	28,600	8/14/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 13,220
CARMEL	CARM2	CARMELITA AVENUE	CIPRIANI BOULEVARD	PALMER AVE	2	R	200	32	6,400	8/14/2017	65	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,958
CASA	CASA	CASA BONA AVENUE	CORONET BOULEVARD	PONCE AVENUE	2	R	2,300	22	50,600	8/15/2017	51	SLURRY SEAL W/BR	HEAVY MAINTENANCE	2021	$ 14.26	$ 80,173
CHESTE	CHES1	CHESTERTON AVENUE	HILLER STREET	MARINE VIEW AVENUE	2	R	1,750	33	57,750	8/17/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 26,693
CHESTE	CHES2A	CHESTERTON AVENUE	MARINE VIEW AVENUE	540 CHESTERTON AVENUE / COP	2	R	1,050	33	34,650	8/17/2017	79	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 16,016
CHESTE	CHES2B	CHESTERTON AVENUE	540 CHESTERTON AVENUE / COP	OXFORD WAY	2	R	670	33	22,110	8/17/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 10,220
CHRCT	CHRCT	CHRISTIAN COURT	CHRISTIAN DRIVE	END OF CUL DE SAC	2	R	390	32	12,480	8/10/2017	67	SLURRY SEAL W/BR	HEAVY MAINTENANCE	2021	$ 14.26	$ 19,774
CHRDR	CHRDR	CHRISTIAN DRIVE	RALSTON AVENUE	MARSTEN AVENUE	2	C	1,050	32	33,600	8/10/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 17,285
CIPRIA	CIPR2	CIPRIANI BOULEVARD	NEWLANDS AVENUE	PONCE AVENUE	2	C	1,600	25	40,000	8/14/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 20,578
CLIFFS	CLIFFS	CLIFFSIDE COURT	HASTINGS DRIVE	DEAD END	2	R	850	23	19,550	8/15/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 9,036
CONTIN	CONT2A	CONTINENTAL WAY	CIPRIANI BOULEVARD	1040 CONTINENTAL WAY(WEST)	2	R	600	40	24,000	8/15/2017	83	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 11,093
CONTIN	CONT2B	CONTINENTAL WAY	1040 CONTINENTAL WAY(WEST)	1048 CONTINENTAL WAY	2	R	400	40	16,000	8/15/2017	83	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,396
CONTIN	CONT2C	CONTINENTAL WAY	1048 CONTINENTAL WAY	LYALL WAY	2	R	400	40	16,000	8/15/2017	84	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,396
CORNIS	CORNIS	CORNISH WAY	CHESTERTON AVENUE	HILLER STREET	2	R	550	34	18,700	8/17/2017	84	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 8,644
COURTL	COURTL	COURTLAND ROAD	VINE STREET	DEAD END	2	R	800	26	20,800	8/16/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 9,614
DALE	DALE1	DALE VIEW AVENUE	DEAD END	HILLER STREET	2	R	150	34	5,100	8/17/2017	85	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,357
EASTL	EAST3	EAST LAUREL CREEK ROAD	3138 EAST LAUREL CREEK ROAD	BAY COURT	2	C	140	21	2,940	8/14/2017	56	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 1,512

Table 2. City of Belmont Preliminary Five-Year CIP Street List

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
EASTL	EAST4	EAST LAUREL CREEK ROAD	BAY COURT	HASKINS DRIVE	2	C	1,000	21	21,000	8/14/2017	47	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 10,803
ELDER	ELDER	ELDER DRIVE	WAKEFIELD DRIVE (W)	WAKEFIELD DRIVE (E)	2	R	700	29	20,300	8/11/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 9,383
EMMETT	EMMETT	EMMETT AVENUE	EL CAMINO REAL	SIXTH AVENUE	2	R	530	38	20,140	8/16/2017	79	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 9,309
ENCLIN	ENCLIN	ENCLINE WAY	BELMONT CANYON ROAD	NAUGHTON AVENUE	2	R	550	31	17,050	8/10/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,881
ESCOND	ESCOND	ESCONDIDO WAY	CHULA VISTA DRIVE	END OF CUL DE SAC	2	R	1,450	29	42,050	8/15/2017	56	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 19,436
EWELL	EWELL	EWELL ROAD	PULLMAN AVENUE	CORONET BOULEVARD	2	R	650	19	12,350	8/15/2017	54	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,708
FOLGER	FOLGER	FOLGER DRIVE	NOTRE DAME AVENUE (N)	NOTRE DAME AVENUE (S)	2	R	1,050	18	18,900	8/15/2017	65	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 8,736
GARDEN	GARDEN	GARDEN COURT	ALAMEDA DE LAS PULGAS	END OF CUL DE SAC	2	R	225	36	8,100	8/15/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,744
GERALD	GERALD	GERALDINE WAY	VILLAGE DRIVE	VALERGA DRIVE	2	R	300	36	10,800	8/15/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,992
GRANAD	GRAN1	GRANADA STREET	RALSTON AVENUE	DEAD END	2	R	570	27	15,390	8/17/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,114
HASKIN	HASKIN	HASKINS DRIVE	EAST LAUREL CREEK ROAD	MONTE CRESTA DRIVE	2	R	1,400	22	30,800	8/14/2017	55	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 14,236
HAYDON	HAYDON	HAYDON COURT	SHERBORNE DRIVE	END OF CUL DE SAC	2	R	250	32	8,000	8/10/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,698
HIGHLA	HIGHLA	HIGHLANDS COURT	SOMERSET DRIVE	END OF CUL DE SAC	2	R	300	32	9,600	8/10/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,437
HCRES	HCRES	HILLCREST DRIVE	BELMONT CANYON ROAD	LOWER LOCK AVE	2	R	2,450	28	68,600	8/10/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 31,708
LANE	LANE1	LANE STREET	SIXTH AVENUE	SUNNYSLOPE AVENUE	2	R	300	23	6,900	8/16/2017	69	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,189
LASSEN	LASS010	LASSEN DRIVE	RALSTON AVENUE	1117 LASSEN DRIVE	2	R	1,150	28	32,200	8/11/2017	79	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 14,884
LEIGH	LEIGH	LEIGH WAY	HALLMARK DRIVE	SOMERSET DRIVE	2	R	250	32	8,000	8/11/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,698
LODGE	LODG1	LODGE DRIVE	BELMONT CANYON ROAD	END OF CUL DE SAC	2	R	350	22	7,700	8/10/2017	71	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,559
LYALL	LYAL1	LYALL WAY	RALSTON AVENUE	LAKE ROAD	2	R	850	32	27,200	8/15/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 12,572
MARINE	MARI1	MARINE VIEW AVENUE	DEAD END	W/C 400' S/O DEAD END	2	R	400	40	16,000	8/17/2017	69	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,396
MARINE	MARI2	MARINE VIEW AVENUE	W/C 400' S/O DEAD END	HILLER STREET	2	R	350	34	11,900	8/17/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,500
MARINE	MARI3	MARINE VIEW AVENUE	HILLER STREET	OLD COUNTY ROAD	2	R	1,075	34	36,550	8/17/2017	69	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 16,894
MARSTE	MARSTE	MARSTEN AVENUE	CHRISTIAN DRIVE	ROBERT AVENUE	2	C	1,350	22	29,700	8/11/2017	60	SLURRY SEAL W/BR	HEAVY MAINTENANCE	2021	$ 14.97	$ 49,401
MERRY	MERR020	MERRY MOPPET LANE	CARLMONT DR	RALSTON AVE	1	R	465	16	7,440	8/15/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,439
MIDDLE	MIDD1	MIDDLE ROAD	NOTRE DAME AVENUE	DAVEY GLEN ROAD	2	C	975	31	30,225	8/16/2017	20	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 15,549
MONROE	MONROE	MONROE AVENUE	MILLER AVENUE	ALAMEDA DE LAS PULGAS	2	R	1450	18	26100	8/15/2017	60	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 12,064
MUIR	MUIR	MUIR WAY	YOSEMITE DRIVE	TAHOE DRIVE	2	R	335	28	9,380	8/11/2017	77	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,336
MULBER	MULBER	MULBERRY COURT	CARLMONT DRIVE	END OF CUL DE SAC	2	R	300	31	9,300	8/15/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,299
NAUGHT	NAUG1	NAUGHTON AVENUE	HILLCREST DRIVE	ENCLINE WAY	2	R	510	26	13,260	8/10/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 6,129
NAUGHT	NAUG2	NAUGHTON AVENUE	ENCLINE WAY	CULDESAC	2	R	610	28	17,080	8/10/2017	68	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,895
NEWLAN	NEWL1	NEWLANDS AVENUE	CASA BONA AVENUE	CIPRIANI BOULEVARD	2	R	600	22	13,200	8/14/2017	71	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 6,101
NEWLAN	NEWL2	NEWLANDS AVENUE	CIPRIANI BOULEVARD	SAN MATEO CITY LIMIT	2	R	1,500	23	34,500	8/14/2017	77	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 15,947
OAKCT	OAKCT	OAK COURT	EAST LAUREL CREEK ROAD	END OF CUL DE SAC	2	R	200	22	4,400	8/14/2017	38	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,034
ONEIL	ONE020	ONEILL AVE	100' WEST OF FIFTH AVE	SIXTH AVE (W)	2	R	170	35	5,950	8/16/2017	87	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,750
OXFORD	OXFO1A	OXFORD WAY	192 OXFORD WAY	OXFORD (CIRCLE)	2	R	840	33	27,720	8/17/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 12,813
OXFORD	OXFO1B	OXFORD WAY	192 OXFORD WAY	301 OXFORD WAY	2	R	775	33	25,575	8/17/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 11,821
OXFORD	OXFO2	OXFORD WAY	301 OXFORD WAY	HILLER STREET	2	R	1,135	40	45,400	8/17/2017	79	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 20,985
PALM	PALM020	PALM AVENUE (FIFTH)	COP 100' N/O ONIEL AVE	WALTERMIRE ST	2	R	143	14	2,002	8/16/2017	69	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 925

Table 2. City of Belmont Preliminary Five-Year CIP Street List

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
PALMER	PALMER	PALMER AVENUE	CARMELITA AVENUE	BUENA VISTA DRIVE	2	R	440	32	14,080	8/14/2017	65	SLURRY SEAL W/BR	HEAVY MAINTENANCE	2021	$ 14.26	$ 22,309
PONCE	PONC3	PONCE AVENUE	CIPRIANI BOULEVARD	END OF CUL DE SAC	2	R	600	31	18,600	8/14/2017	64	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 8,597
RALSE EB	RALS010	RALSTON AVENUE, EB	CHRISTIAN DRIVE	HALLMARK DRIVE	2	A	2,150	25	53,750	8/16/2017	81	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 5.35	$ 31,951
RALSE EB	RALS020	RALSTON AVENUE, EB	HALLMARK DRIVE	BELMONT CANYON ROAD	2	A	1,050	23	24,150	8/16/2017	81	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 5.35	$ 14,356
RALSE WB	RALS180	RALSTON AVENUE, WB	BELMONT CANYON ROAD	HALLMARK DRIVE	2	A	1,075	25	26,875	8/16/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 5.35	$ 15,976
RALSE WB	RALS190	RALSTON AVENUE, WB	HALLMARK DRIVE	CHRISTIAN DRIVE	2	A	2,150	25	53,750	8/16/2017	71	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 5.35	$ 31,951
READ	READ1	READ AVENUE	CASA BONA AVENUE	CARMELITA AVENUE	2	R	700	18	12,600	8/15/2017	46	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,824
READ	READ2	READ AVENUE	CARMELITA AVENUE	PONCE AVENUE	2	R	790	22	17,380	8/15/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 8,033
READ	READ3	READ AVENUE	PONCE AVENUE	END OF CUL DE SAC	2	R	650	22	14,300	8/15/2017	61	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 6,610
REPOSO	REPOSO	REPOSO WAY	HILLCREST DRIVE	ENCLINE WAY	2	R	600	26	15,600	8/10/2017	81	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,211
SEAPL	SEAPL	SEAGATE PLACE	SEAGRATE WAY	END OF CUL DE SAC	2	R	140	33	4,620	8/17/2017	74	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,135
SEAWY	SEAWY	SEAGATE WAY	DEAD END	OXFORD WAY	2	R	750	33	24,750	8/17/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 11,440
SHERBO	SHERBO	SHERBORNE DRIVE	SOMERSET DRIVE (W)	SOMERSET DRIVE (S)	2	R	1,120	32	35,840	8/11/2017	69	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 16,566
SIXTH	SIXT3	SIXTH AVENUE	EMMETT AVENUE	WALTERMIRE STREET	2	A	300	52	15,600	8/16/2017	66	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 5.35	$ 9,273
SIXTH	SIXT5	SIXTH AVENUE	O'NEILL AVENUE	HARBOR BOULEVARD	2	A	1,100	40	44,000	8/16/2017	82	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 5.35	$ 26,156
SOMCT	SOMCT	SOMERSET COURT	SOMERSET DRIVE	END OF CUL DE SAC	2	R	200	32	6,400	8/10/2017	71	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,958
SOMDR	SOM1	SOMERSET DRIVE	SOMERSET COURT	LEIGH WAY	2	R	700	32	22,400	8/11/2017	79	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 10,354
SOMDR	SOM2	SOMERSET DRIVE	LEIGH WAY	WAKEFIELD DRIVE	2	R	1,150	32	36,800	8/11/2017	68	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 17,010
SOUTH	SOUT3	SOUTH ROAD	HOLLY ROAD	RALSTON AVENUE	2	C	1,950	20	39,000	8/16/2017	58	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.63	$ 20,063
SPRING	SPRING	SPRING LANE	VINE STREET	END OF CUL DE SAC	2	R	270	25	6,750	8/16/2017	67	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,120
STERLI	STERLI	STERLING VIEW AVENUE	HILLER STREET	OLD COUNTY ROAD	2	R	425	34	14,450	8/17/2017	64	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 6,679
SUNNYS	SUNN2B	SUNNYSLOPE AVENUE	1572 SUNNYSLOPE AVENUE	LANE STREET	2	R	200	22	4,400	8/16/2017	57	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 2,034
TAHOE	TAHOE	TAHOE DRIVE	RALSTON AVENUE	LASSEN DRIVE	2	R	1,900	28	53,200	8/10/2017	78	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 24,590
THURM	THURM	THURM AVENUE	SAN MATEO CITY LIMIT	WOOSTER AVENUE	2	R	750	22	16,500	8/14/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 7,627
TIOGA	TIOGA	TIOGA WAY	YOSEMITE DRIVE	END OF CUL DE SAC	2	R	300	29	8,700	8/10/2017	73	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,021
VALLEY	VALL1	VALLEY VIEW AVENUE	NOTRE DAME AVENUE	1727 VALLEY VIEW AVENUE	2	R	1,050	22	23,100	8/15/2017	62	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 10,677
VALLEY	VALL2	VALLEY VIEW AVENUE	1727 VALLEY VIEW AVENUE	OAK KNOLL DRIVE	2	R	1,150	20	23,000	8/15/2017	85	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 10,631
VILLA	VILLA1	VILLA AVENUE	ACADEMY AVENUE	BELBURN DRIVE	2	R	1,150	29	33,350	8/16/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 15,415
VILCT	VILCT	VILLAGE COURT	VILLAGE DRIVE	END OF CUL DE SAC	2	R	350	36	12,600	8/15/2017	69	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 5,824
VILDR	VILDR	VILLAGE DRIVE	CARLMONT DRIVE	DEAD END	2	R	1,000	36	36,000	8/15/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 16,640
VINE	VINE2	VINE STREET	1537 VINE STREET / COP	SAN CARLOS CITY LIMIT / COP	2	R	955	25	23,875	8/16/2017	77	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 11,036
WAKCT	WAKCT	WAKEFIELD COURT	WAKEFIELD DRIVE	END OF CUL DE SAC	2	R	250	32	8,000	8/10/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,698
WAKDR	WAK1	WAKEFIELD DRIVE	HALLMARK DRIVE	SOMERSET DRIVE	2	R	600	32	19,200	8/11/2017	75	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 8,875
WAKDR	WAK2	WAKEFIELD DRIVE	SOMERSET DRIVE	WAKEFIELD DRIVE	2	R	2,800	32	89,600	8/10/2017	68	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 41,415
WALTER	WALT2	WALTERMIRE STREET	FIFTH AVENUE	EL CAMINO REAL	2	R	241	32	7,712	8/16/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 3,565
WALTER	WALT3	WALTERMIRE STREET - WALTER	SIXTH AVENUE	FIFTH AVENUE	2	R	259	38	9,842	8/16/2017	71	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 4,549
WESSEX	WESS2	WESSEX WAY	HILLER STREET	GRANADA STREET	2	R	400	34	13,600	8/17/2017	76	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 6,286
YOSEMI	YOSEMI	YOSEMITE DRIVE	TAHOE DRIVE	LASSEN DRIVE	2	R	1,100	28	30,800	8/10/2017	72	SLURRY SEAL	LIGHT MAINTENANCE	2021	$ 4.16	$ 14,236
															2021 Subtotal:	**$ 1,461,841**
HMAN	HMA3	HILLMAN AVENUE	NOTRE DAME AVENUE	TERRACE DRIVE	2	R	1,300	20	26,000	8/15/2017	24	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 193,064

Table 2. City of Belmont Preliminary Five-Year CIP Street List

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
HOLLY	HOLL2B	HOLLY ROAD	SOUTH ROAD	EASEMENT TO MIRAMAR TERRACE	2	R	500	20	10,000	8/16/2017	17	FDR	RECONSTRUCT STRUCTURE (AC)	2022	$ 178.20	$ 198,000
HOLLY	HOLL2C	HOLLY ROAD	EASEMENT TO MIRAMAR TERRACE	SOUTH ROAD	2	R	800	20	16,000	8/16/2017	17	FDR	RECONSTRUCT STRUCTURE (AC)	2022	$ 178.20	$ 316,800
MASONI	MASO2	MASONIC WAY	610 MASONIC WAY / COP	OLD COUNTY ROAD	2	R	650	42	27,300	8/17/2017	13	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 202,718
MEZES	MEZE1	MEZES AVENUE	DEAD END	NOTRE DAME AVENUE	2	R	1,015	22	22,330	8/15/2017	31	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 165,813
MEZES	MEZE2	MEZES AVENUE	NOTRE DAME AVENUE	ALAMEDA DE LAS PULGAS	2	R	1,400	20	28,000	8/15/2017	43	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 207,916
OLD	OLD1	OLD COUNTY ROAD	SAN MATEO CITY LIMIT	DALE VIEW AVENUE	2	A	350	42	14,700	8/17/2017	28	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 109,156
OLD	OLD2	OLD COUNTY ROAD	DALE VIEW AVENUE	MARINE VIEW AVENUE	2	A	1,900	40	76,000	8/17/2017	36	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 564,342
OLD	OLD3	OLD COUNTY ROAD	MARINE VIEW AVENUE	MASONIC WAY	2	A	2,000	40	80,000	8/17/2017	40	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 594,044
OLD	OLD4	OLD COUNTY ROAD	MASONIC WAY	1020 OLD COUNTY ROAD	2	A	436	40	17,440	8/17/2017	63	SURFACE RECONSTRUCT	HEAVY REHABILITATION	2022	$ 66.83	$ 129,502
															2022 Subtotal:	**$ 2,681,354**
ARBOR	ARBO1	ARBOR AVENUE	NOTRE DAME AVENUE	FAIRWAY DRIVE	2	R	950	20	19,000	8/15/2017	15	FDR	RECONSTRUCT STRUCTURE (AC)	2023	$ 178.20	$ 376,200
HMAN	HMA1	HILLMAN AVENUE	NORTH RDAD	MILLS AVENUE	2	R	800	23	18,400	8/15/2017	38	FDR (SUBGRADE MOVEMENT)	RECONSTRUCT STRUCTURE (AC)	2023	$ 178.20	$ 364,320
LASSEN NB	LASS020	LASSEN DRIVE NB	1117 LASSEN DRIVE	TAHOE AVENUE	1	R	650	20	13,000	8/10/2017	45	FDR	RECONSTRUCT STRUCTURE (AC)	2023	$ 178.20	$ 257,400
LASSEN SB	LASS010	LASSEN DRIVE SB	TAHOE AVENUE	1117 LASSEN DRIVE	1	R	650	17	11,050	8/10/2017	82	FDR	RECONSTRUCT STRUCTURE (AC)	2023	$ 178.20	$ 218,790
OAKKN	OAK1	OAK KNOLL DRIVE	PINE KNOLL DRIVE	VALLEY VIEW AVENUE	2	R	1,000	20	20,000	8/15/2017	45	FDR	RECONSTRUCT STRUCTURE (AC)	2023	$ 178.20	$ 396,000
SOUTH	SOUT2	SOUTH ROAD	COLLEGE VIEW WAY	HOLLY ROAD	2	C	1,200	23	27,600	8/16/2017	42	FDR (SUBGRADE MOVEMENT)	RECONSTRUCT STRUCTURE (AC)	2023	$ 207.90	$ 637,560
UPPER	UPPER	UPPER LOCK AVENUE	BELMONT CANYON ROAD	3242 UPPER LOCK AVENUE	2	R	1,185	24	28,440	8/10/2017	17	FDR	RECONSTRUCT STRUCTURE (AC)	2023	$ 178.20	$ 563,112
															2023 Subtotal:	**$ 2,813,382**
															Total	**$ 10,487,934**

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
BROADW	BROA2	BROADWAY	SIXTH AVENUE	SUNNYSLOPE AVENUE	2	R	300	30	9,000	8/16/2017	18	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 66,830
BROADW	BROA3	BROADWAY	SUNNYSLOPE AVENUE	PALOMA AVENUE	2	R	300	23	6,900	8/16/2017	19	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 51,236
EST	EST	E STREET	FIFTH AVENUE	SIXTH AVENUE	2	R	300	32	9,600	8/16/2017	13	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 71,285
FIFTH	FIFT1A	FIFTH AVENUE	O'NEIL AVENUE	BROADWAY	2	R	500	50	25,000	8/16/2017	18	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 185,639
KING	KING	KING STREET	SIXTH AVENUE	SAN CARLOS CITY LIMIT / SOUTH END	2	R	425	23	9,775	8/16/2017	24	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 72,585
LANE	LANE2	LANE STREET	MOLITOR ROAD	PROSPECT STREET	2	R	350	23	8,050	8/16/2017	25	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 59,776
LYON	LYON1	LYON AVENUE	MEZES AVENUE	ALAMEDA DE LAS PULGAS	2	R	1,875	22	41,250	8/15/2017	17	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 306,304
LYON	LYON2	LYON AVENUE	ALAMEDA DE LAS PULGAS	CORONET BOULEVARD	2	R	1,125	22	24,750	8/15/2017	80	SLURRY SEAL	LIGHT MAINTENANCE	OPT	$ 4.16	$ 11,440
PALM	PALM010	PALM AVENUE (FIFTH)	ONEIL AVE	COP 100' N/O ONEIL AVE	2	R	100	14	1,400	8/16/2017	30	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 10,396
PALOMA	PALOMA	PALOMA AVENUE	DEAD END	VINE STREET	2	R	850	24	20,400	8/16/2017	31	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 151,481
PROSPE	PROSPE	PROSPECT STREET	LANE STREET	SAN CARLOS CITY LIMIT / COP	2	R	500	22	11,000	8/16/2017	28	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 81,681
SUNNYS	SUNN1	SUNNYSLOPE AVENUE	O'NEILL AVENUE	HARBOR BOULEVARD	2	R	870	30	26,100	8/16/2017	14	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 193,807
SUNNYS	SUNN2A	SUNNYSLOPE AVENUE	HARBOR BOULEVARD	1572 SUNNYSLOPE AVENUE	2	R	600	200	120,000	8/16/2017	27	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 891,067

Table 2. City of Belmont Preliminary Five-Year CIP Street List

StreetID	SectionID	Street Name	Begin Location	End Location	Ln	FC	Length (ft)	Width (ft)	Area (sf)	PCIDate	PCI	Recommended Treatment	Decision Tree Treatment	Year	Unit cost ($/sy)	Total Cost
SUNNYS	SUNN2C	SUNNYSLOPE AVENUE	LANE STREET	SAN CARLOS CITY LIMIT	2	R	860	22	18,920	8/16/2017	23	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 140,492
COLLEG	COLLEG	COLLEGE VIEW WAY	SOUTH ROAD	END OF TURN A ROUND	2	R	1,050	24	25,200	8/16/2017	35	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 187,124
KORBEL	KORBEL	KORBEL WAY	SOUTH ROAD	END OF CUL DE SAC	2	R	220	22	4,840	8/16/2017	18	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 35,940
MIDDLE	MIDD2	MIDDLE ROAD	DAVEY GLEN ROAD	CYPRESS AVE	2	R	2,350	28	65,800	8/16/2017	26	FDR	RECONSTRUCT STRUCTURE (AC)	OPT	$ 178.20	$ 1,302,840
MIDDLE	MIDD3	MIDDLE ROAD	CYPRESS AVE	EL CAMINO REAL	2	A	150	28	4,200	8/16/2017	26	FDR	RECONSTRUCT STRUCTURE (AC)	OPT	$ 237.60	$ 110,880
PHYLLI	PHYLLI	PHYLLIS COURT	COLLEGE VIEW WAY	END OF CUL DE SAC	2	R	200	27	5,400	8/16/2017	22	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 40,098
VANNIE	VANNIE	VANNIER DRIVE	SOUTH ROAD (W)	SOUTH ROAD (E)	2	R	875	23	20,125	8/16/2017	34	SURFACE RECONSTRUCT	HEAVY REHABILITATION	OPT	$ 66.83	$ 149,439
VIRGIN	VIRGIN	VIRGINIA AVENUE	MIDDLE ROAD	DEAD END	2	R	630	23	14,490	8/16/2017	13	FDR	RECONSTRUCT STRUCTURE (AC)	OPT	$ 178.20	$ 286,902
HMAN	HMA2	HILLMAN AVENUE	MILLS AVENUE	NOTRE DAME AVENUE	2	C	1,200	27	32,400	8/15/2017	24	FDR (SUBGRADE MOVEMENT)	RECONSTRUCT STRUCTURE (AC)	OPT	$ 207.90	$ 748,440
															Total	**$ 5,155,682**

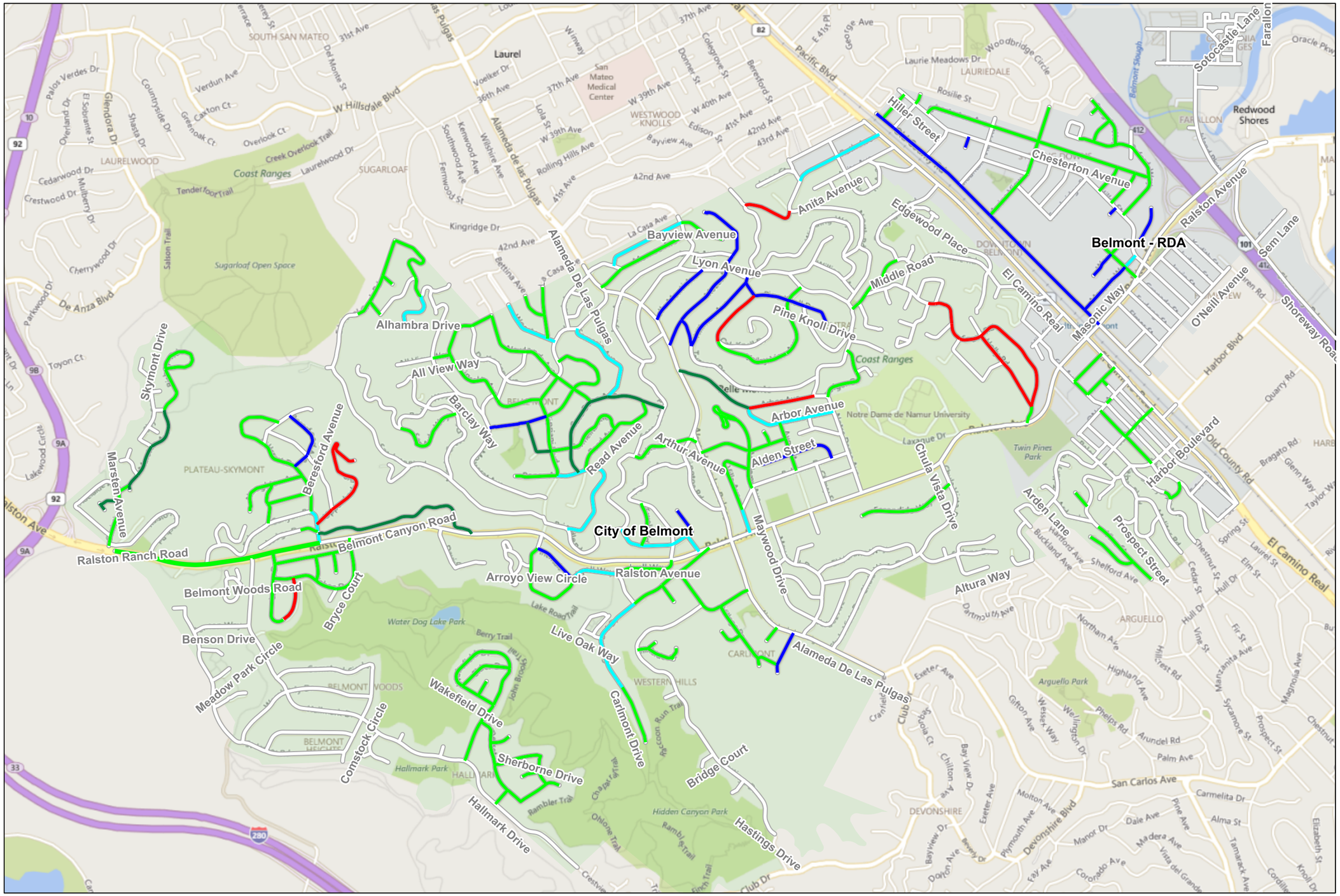
Note:

1. Green highlighted year indicates street is on SB-1 2018 list.
2. Street list excludes 2018 and 2019 surface seal projects already programmed by the City.
3. Street list excludes OBAG 2 LSR streets assigned for light rehabilitation in 2022.
4. AC - asphalt concrete, FDR - full depth reclamation, BR - more than 10% base repairs, A - arterial, C - collector, R - residential.

Appendix A
Draft Paving CIP Five-Year Map

CITY OF BELMONT

5-Year CIP Work Plan (2019-2023)

Feature Legend

- HEAVY MAINTENANCE
- HEAVY REHABILITATION
- LIGHT MAINTENANCE
- LIGHT REHABILITATION
- RECONSTRUCT STRUCTURE (AC)