

November 14, 2019

Chester Nakahara City of Piedmont 120 Vista Avenue Piedmont, CA 94611 (via email: <u>cnakahara@piedmont.ca.gov</u>)

RE: Piedmont Pathway Inventory

Dear Chester:

The City has requested an inventory of public paths and their condition for the purpose of developing a CIP project list and budgetary cost for needed pathway repairs. Towards this end, Coastland Engineering has conducted a field assessment of all City parks and public pathways, identified needed repairs, and compiled a priority ranking and cost estimate.

This letter provides a summary of the work completed, an inventory of path conditions, a prioritized ranking of proposed improvements, and a budgetary construction cost for the proposed improvements.

Summary of Work

Prior to conducting field work, Coastland prepared base maps of every public path in the City with an aerial photo background.

Field investigations were conducted for every City park path and public walkway (other than street sidewalks) to assess existing path conditions and identify any needed repairs. Typical path widths were measured. Overall path lengths were estimated from City base mapping.

Path conditions were evaluated on safety concerns, structural integrity and aesthetics. Each path site was given an overall condition rating of very good, good, fair, poor, or very poor. For each path site, the location, size and type of deficiencies were noted.

Needed repairs were field measured and recorded. Photos were taken of the recommended repair sites and are included in the appendix of this letter report. The sites were not evaluated for ADA compliance.

Santa Rosa 1400 Neotomas Avenue Santa Rosa, CA 95405 Tel: 707.571.8005 **Auburn** 11641 Blocker Dr., Suite 170 Auburn, CA 95603 Tel: 530.888.9929 Pleasant Hill 3478 Buskirk Avenue, Ste. 1000 Pleasant Hill, CA 94523 Tel: 925.233.5333 www.coastlandcivil.com Once condition assessments were completed, cost estimates were generated for making the needed repairs.

Inventory of Path Conditions

The path conditions inventory includes a summary table, exhibits, and a photo log.

The summary table, presented as Table 1, includes the path dimensions, path materials, overall condition, identified deficiencies, recommended improvements, repair costs and priority ranking for each type of repair. Multiple rows were used for paths with multiple types of recommended repairs.

Exhibits 1-51 show the location of each pathway and each identified repair site. A photo log is also attached providing images of many of the recommended repair sites.

Priority Ranking

Each repair site has been given a priority ranking of 1, 2, or 3, where 1 indicates a high priority repair site, and 2 and 3 indicate medium- and low-priority repair sites, respectively.

High priority projects typically involved uneven surface conditions that are potential trip hazards. Medium priority projects include cracked or broken concrete, degraded asphalt or other needed improvements that are not a safety concern but are in poor structural condition. Low priority projects are largely aesthetic in nature.

Cost Estimates

In compiling repair costs, we assumed that the paths would be replaced using the same surface materials as are currently present, with the exception that asphalt pavement will be replaced with pervious asphalt pavement, as requested by the City.

Unit costs were based on recent pricing obtained from bid summaries of public works or City projects. Costs are approximate and only include construction costs for individual pieces. It does not include preparation of any construction documents, contingencies, mobilization or construction inspection/management. Recommended repairs are meant to show locations and relative costs but are not intended to be final costs for the project.

The total budgetary-level construction cost for all recommended repairs is \$220,000. Path improvement costs broken out by priority are shown below.

Priority	Construction Cost
High priority	\$146,000
Medium priority	\$54,000
Low priority	\$20,000



Additional Work to be Considered

During the field investigation, we have noted additional work that the City may want to consider for increasing the long-term structural integrity of path surfaces and reduce ongoing maintenance costs. These repair considerations, addressing root damage, slope stabilization issues and drainage problems, are not currently included in the construction costs presented in this report.

<u>Root Damage to Paths.</u> There are many instances where concrete or asphalt paths are damaged by uplift from tree roots. In these cases, uplifted concrete is recommended for replacement with a new concrete panel, or repair by grinding down any resulting trip hazards. Additionally, root shaving may be necessary. The City may want to consider alternatives to in-kind pathway material replacement where tree root damage is likely to re-occur. An alternative solution is to meander the damaged section of path away from the roots, giving the tree more room to grow and thereby reducing the likelihood of future conflicts. Other options include using alternative paving materials, such as pavers which can flex with root growth and are easier to repair than concrete. Pervious concrete and decomposed granite may also be considered. These alternatives allow air and water to pass through the surface of a path more easily, encouraging roots to grow deeper under the surface.

<u>Slope Stabilization.</u> It was noted that slope stabilization is needed in some steep terrain, on the upslope or downslope sides of paths to address ongoing soil erosion. Erosion occurring on the upslope side of a path can cause soil and rocks to deposit on the pathways, potentially causing trip hazards or nuisance conditions. Erosion on the downslope side of a path can create a steep, vertical drop that impacts safety and can cause the subbase below the path to erode, ultimately causing the path to tilt, crack or fail. Slope stabilization measures can reduce or eliminate these problems.

The City may consider header board installation on the downslope sides of eroding paths to prevent further erosion of the path subbase. In most cases, additional slope stabilization measures further up or down the slope should be considered for long term path stability.

Strategies for slope stabilization include wood retaining walls to catch debris, stacked rock walls, terraces, riprap, plants with erosion control blankets and wattles. In steep, naturally vegetated areas, low-impact, biotechnical measures may be preferred, such as bundling branches and vegetative debris into long wattles, placing them on contour (half buried into the slope) and staking them into the ground. These wattles can trap eroding soil which will create natural micro-terraces and encourage native seedlings that can provide long term soil stabilization after the vegetative debris has decomposed. Live willow wattles probably won't be successful in shady ravines.

Slope stabilization measures should be selected on a case-by-case basis, depending on the level of erosion severity, the landscaping goals of the area, and safety and maintenance concerns. Input from geotechnical engineers for slope stabilization may also be necessary.



<u>Drainage Improvements.</u> Field investigations noted some areas needing drainage improvements to prevent ponding of water on or near paths. This can be remedied by localized regrading and installation of drainage features such as pipe, french drains, rock underdrains or rock-paved dips.

<u>Bridge Replacement.</u> A small concrete bridge in Piedmont Park is recommended for replacement. There are options for replacement including, but not limited to a pipe arch bridge (sometimes known as ConSpan) or culvert.



View of concrete bridge in Piedmont Park to be replaced (Project 36M)

Replacement costs for the bridge will need further investigation and will need to take into consideration potential environmental impacts.

<u>Other Park Improvements.</u> Wooden benches throughout the park system need maintenance (e.g. a coat of clear varnish), to reduce degradation and wear. Pipe railings on stairs also need painting or touch-up paint throughout the City. The cost of these efforts is not included in the improvement costs but can be included if so desired.

We are happy to discuss the park pathway inventory with you further, to answer any questions, make any changes, or to discuss additional work that the City would like to pursue.

Thank you,

Jenny Melman, P.E.



Table 1. Pathway Repair Inventory City of Piedmont November 2019

Path ID	Path Name	Path Facilities	Overall Condition A=Very Good B=Good C=Fair D=Poor E=Very Poor	Path Length (ft)	Path Width (ft)	Needed Repairs [See Exhibits for locations]	Repair Recommendations	Repair Qty	Repair Units	Unit Cost	Repair Cost	Priority High = 1 Med = 2 Low = 3
1	Arbor Dr to MacKinnon Pl Walkway & Stairway	conc stairs	В	116	4.5	Good condition	None					
2	Arroyo Ave to Ramona Ave Walkway & Stairway	conc stairs w/ pipe railing	А	26	5	Good condition	None					
3A	Arroyo Ave to Ramona Ave Walkway & Stairway	conc path	В	85	5	Conc panel vertical offset 1-2"	Grind concrete (1-2")	1	EA	\$150.00	\$150	1
4A	Atruna Ave to Park Way Walkway	conc path	D	171	5.0	Uneven conc path	Replace panel (5'x3')	15	SF	\$20.00	\$300	1
4B	Atruna Ave to Park Way Walkway	conc path	D	171	5.0	Uneven conc path;	Replace panel (9'x5')	45	SF	\$20.00	\$900	1
4C	Atruna Ave to Park Way Walkway	conc path	D	171	5.0	Conc panel vertical offset 2"	Grind concrete (2")	1	EA	\$150.00	\$150	1
5	Beach Playfield Walkway (Howard Ave to School)	conc path	В	58		Good condition	None					
5A	Beach Playfield Walkway (Howard Ave to School)	AC path	D	355	4.5	Longitudinal cracks <1" wide	Replace AC path (355'x4.5')	1598	SF	\$4.59	\$7,333	2
6A	Beach Playfield (Soccer Stairway)	conc stairs w/ pipe railing	В	23		Good condition	None					
7A	Beach Playfield (Tennis Stairway)	conc stairs	В	67	3.7	Soil eroding under conc walk at top of stairs	Install header boards on downslope edge of path	30	LF	\$18.00	\$540	1
8	Blair Park Walkway	dirt path	В	785		Good condition	None					
9A	Blair Ave to Scenic Ave Stairway	conc stairs w/ pipe railing	В	263	6	Cracked panel	Replace panel (6'x5')	30	SF	\$20.00	\$600	2
9B	Blair Ave to Scenic Ave Stairway	conc stairs w/ pipe railing	В	263	6	Stairway curb wall is separated from steps	Remove and replace stair curb (30'x0.5'x1.5')	22.5	CF	\$40.00	\$900	2
10	Boulevard Way to Sylvan Way Walkway	conc walkway	В	136	6	Good condition	None					
10A	Boulevard Way to Sylvan Way Walkway	conc step	D	136	6	Step has separated from walkway caused by tree root	Grind conc path above top step	1	EA	\$150.00	\$150	1
11A	Coaches Playfield	conc s/w	С	1043	6	Broken panel	Grind conc	1	EA	\$150.00	\$150	1
11B	Coaches Playfield	conc s/w	C	1043	6	Uneven conc panel	Grind conc (2")	1	EA	\$150.00	\$150	1
12	Crocker Park Walkways	conc s/w	А	121	4	Good condition	None					
12A	Crocker Park Walkways	AC path	С	698	4	Cracks, uneven surface	Replace AC path (698'x4')	2792	SF	\$4.59	\$12,815	1
13	Dracena Quarry Park	Conc path	А			Good condition						

Path ID	Path Name	Path Facilities	Overall Condition A=Very Good B=Good C=Fair D=Poor E=Very Poor	Path Length (ft)	Path Width (ft)	Needed Repairs [See Exhibits for locations]	Repair Recommendations	Repair Qty	Repair Units	Unit Cost	Repair Cost	Priority High = 1 Med = 2 Low = 3
13	Dracena Quarry Park	wood bridge and flagstone landing	В	24		Good condition						
13A	Dracena Quarry Park	AC path w/ eroding subbase	D	1455	4	Uneven and cracked AC paths	Replace AC path (1455'x4')	5820	SF	\$4.59	\$26,714	1
13B	Dracena Quarry Park	AC path w/ eroding subbase	D	288	4	Stabilize undermined path	Install header board on downslope side of path	288	LF	\$18.00	\$5,184	1
13C	Dracena Quarry Park	Conc path	С	42	3?	Cracks in concrete panel	Grind concrete	1	EA	\$150.00	\$150	1
13D	Dracena Quarry Park	conc stairs	С	265	6	Cracks/chips in conc stair tread and risers	Replace cracked steps	36	SF	\$40.00	\$1,440	2
14	Fairview Median Walkway	conc path	В			Good condition	None					
15	Grand Ave to Fairview Ave Walkway & Stairway					Not a public path - Not inventoried						
16	Hall Fernway	conc path	А	287		Very good condition	None					
17	Hampton Field Walkway	conc path	А	470		Very good condition	None					
17	Hampton Field Walkway	decomposed granite	А	404		Very good condition	None					
18	Hampton Field Stairway	conc stairs	А	55		Very good condition	None					
19A	Harvard Rd to Harvard Alley Walkway	conc path	В	98		Concrete with vertical offset (1")	Grind conc (1")	1	EA	\$150.00	\$150	1
19B	Harvard Rd to Harvard Alley Walkway	conc path	В	98		Broken conc panels	Replace conc panels	25	SF	\$20.00	\$500	2
20	Hazel Lane to Guilford Rd Walkway & Stairway	brick walk	А	77		Very good condition	None					
20	Hazel Lane to Guilford Rd Walkway & Stairway	conc stairs	В	74		Light cracks - no separation	None					
21A	Hazel Lane to Piedmont Park Stairway	conc stairs and path	С	94		Tree roots have lifted top step	Replace step (5'x2.5')	12.5	SF	\$150.00	\$1,875	1
21B	Hazel Lane to Piedmont Park Stairway	conc path	С	94		Crack at manhole	Patch concrete around manhole	1	EA	\$200.00	\$200	2
22A	Highland Ave Parkway Walkway	conc sidewalk	С	509	4	Uneven panel	Grind conc (1")	1	EA	\$150.00	\$150	1
22B	Highland Ave Parkway Walkway	conc sidewalk	С	509	4	Cracked panels	Replace panels (2'x2' and 10'x4')	44	SF	\$20.00	\$880	1
23	Kennelly Skate Park					(Also part of Site #11) Locked gate - no public access	Not inventoried					
24A	Linda Park Walkways and Stairway	conc path	С	561	5	Uneven panel	Grind conc (2")	1	EA	\$150.00	\$150	1
24B	Linda Park Walkways and Stairway	conc path	С	561	5	Uneven panel	Grind conc (2")	1	EA	\$150.00	\$150	1

Path ID	Path Name	Path Facilities	Overall Condition A=Very Good B=Good C=Fair D=Poor E=Very Poor	Path Length (ft)	Path Width (ft)	Needed Repairs [See Exhibits for locations]	Repair Recommendations	Repair Qty	Repair Units	Unit Cost	Repair Cost	Priority High = 1 Med = 2 Low = 3
24C	Linda Park Walkways and Stairway	conc path	С	561	5	Offset panel	Replace panel (10'x8')	80	SF	\$20.00	\$1,600	1
25A	Linda Park Walkways and Stairway	Conc path w/ pipe railing	С	561	5	Conc path is tilting to downslope side	Install header boards on downslope edge of path	80	LF	\$18.00	\$1,440	1
25B	Linda Park Walkways and Stairway	Conc path w/ pipe railing	С	561	5	Conc path is tilting to downslope side	Replace conc path (80'x5')	400	SF	\$20.00	\$8,000	1
26A	Linda Park Walkways (Linda Ave to Oakland Ave)	AC vehicle access	С	684	10-12	Fine cracks in AC pvmt	Slurry seal AC pavement (12'x684')	8208	SF	\$1.00	\$8,208	2
27	Moraga Ave to Abbot Way	wooden handrails	В	618		Good condition	None					
27	Moraga Ave to Abbot Way	wooden steps	В	618		Good condition	None					
27	Moraga Ave to Abbot Way	dirt path	В	618	varies	Good condition	None					
28	Oakmont Ave Island Walkway	conc path	С	14	5	Fine cracks	None					
29	Oakmont Ave to Wildwood Gardens					Not a public path - Not inventoried						
30A	Pacific Ave to Blair Ave Walkway & Stairway	conc path & stairway	С	204	6	Cracked curb at stairway in 2 places	Replace 2 sections of low curb at stairway edge	3	SF	\$40.00	\$120	2
30B	Pacific Ave to Blair Ave Walkway & Stairway	conc path & stairway	С	204	6	Cracked panels	Replace panels (total 5'x3')	15	SF	\$20.00	\$300	1
32A	Pala Ave to Scenic Stairs & Walkway	conc path & stairway	С	151	5	Longitudinal crack down stairway at railing (down center of stairway)	Repair chips/cracks with grout or epoxy cement	30	LF	\$40.00	\$1,200	2
32B	Pala Ave to Scenic Stairs & Walkway	conc path & stairway	С	151	5	Pipe railing of top flight of staircase is damaged (bent) and should be relocated out of the concrete sidewalk	Repair/relocate pipe railing of top flight staircase	8	LF	\$90.00	\$720	1
32C	Pala Ave to Scenic Stairs & Walkway	conc path & stairway	С	151	5	chips in concrete steps/ cracks in stairway curb	Repair chips/cracks with grout or epoxy cement	3	EA	\$40.00	\$120	2
33	Palm Dr to Magnolia Walkway and Stairway	conc path & stairway	А	249	5	Good condition	None					
34	Piedmont Ct Island Median	conc median & bench	В	13	varies	Good condition	None					
35A	Piedmont Ct to Mountain Ave Walkway	conc walkway	С	77	5	Broken conc panels	Replace panels (total 10'x5')	50	SF	\$20.00	\$1,000	1
35B	Piedmont Ct to Mountain Ave Walkway	conc walkway	С	77	5	Uneven panels (2 locations)	Grind (1" and 2")	2	EA	\$150.00	\$300	1
35C	Piedmont Ct to Mountain Ave Walkway	conc walkway	С	77	5	Broken conc panels	Replace panels (4'x2')	8	SF	\$20.00	\$160	1

Path ID	Path Name	Path Facilities	Overall Condition A=Very Good B=Good C=Fair D=Poor E=Very Poor	Path Length (ft)	Path Width (ft)	Needed Repairs [See Exhibits for locations]	Repair Recommendations	Repair Qty	Repair Units	Unit Cost	Repair Cost	Priority High = 1 Med = 2 Low = 3
36	Piedmont Park & Exedra Plaza: Path #1	brick stairs	В	37		Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #2	conc path	В	82	4	Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #3	conc path w/ wood steps	В	212		Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #4	conc path	В	74		Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #5	conc path	В	167		Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #6		В	128		Good condition	None					
36A	Piedmont Park & Exedra Plaza: Path #7	AC vehicle access	С	225	15	Cracks and potholes	Replace AC pavement (225'x15')	3,375	SF	\$4.59	\$15,491	2
36B	Piedmont Park & Exedra Plaza: Path #8	AC walkway	D	131	8	Cracked, uneven pavement	Replace AC pavement (40'x8')	320	SF	\$4.59	\$1,469	1
36C	Piedmont Park & Exedra Plaza: Path #9	AC vehicle access	С	100	20	Cracks and potholes	Replace AC pavement (100'x20')	2,000	SF	\$4.59	\$9,180	2
36D	Piedmont Park & Exedra Plaza: Path #10	conc/brick walkway	С	243	varies	Cracks in concrete, broken panels	Replace conc/brick path (~30'x30')	900	SF	\$20.00	\$18,000	3
36	Piedmont Park & Exedra Plaza: Path #11	conc path	В	226		Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #12	stone steps	В	50		Good condition	None					
36E	Piedmont Park & Exedra Plaza: Path #13	conc path	С	103	5	Broken concrete	Replace concrete (16'x5')	80	SF	\$20.00	\$1,600	1
36F	Piedmont Park & Exedra Plaza: Path #14	AC vehicle access	В	104	14	Minor cracks, no separation	Slurry seal AC pavement (104'x14')	1456	SF	\$1.00	\$1,456	3
36G	Piedmont Park & Exedra Plaza: Path #15	conc path/ AC pvmt	D	289	8	Cracked, uneven AC pavement	Replace AC pavement (45'x8')	360	SF	\$4.59	\$1,652	1
36H	Piedmont Park & Exedra Plaza: Path #16	conc path	В	146		Vertical offset in conc panel	Grind concrete (1-2")	1	EA	\$150.00	\$150	1
361	Piedmont Park & Exedra Plaza: Path #17	AC path	D	130	4	Major cracks	Replace AC pvmt (130'x4')	520	SF	\$4.59	\$2,387	1
36	Piedmont Park & Exedra Plaza: Path #18	conc stairs	В	132		Good condition	None					
36	Piedmont Park & Exedra Plaza: Path #19	conc stairs	В	170		Good condition	None					
36J	Piedmont Park & Exedra Plaza: Path #20	conc path	В	81		Vertical offset in conc panel	Grind conc (2 ea)	2	EA	\$150.00	\$300	1

Path ID	Path Name	Path Facilities	Overall Condition A=Very Good B=Good C=Fair D=Poor E=Very Poor	Path Length (ft)	Path Width (ft)	Needed Repairs [See Exhibits for locations]	Repair Recommendations	Repair Qty	Repair Units	Unit Cost	Repair Cost	Priority High = 1 Med = 2 Low = 3
36K	Piedmont Park & Exedra Plaza: Path #22	conc/AC path	С	85	8	AC pavement is uneven	Replace AC pavement (85'x8')	680	SF	\$4.59	\$3,121	2
36L	Piedmont Park & Exedra Plaza: Path #23	conc ramp	D	45	5	Cracked and broken concrete	Replace concrete ramp (45'x5')	225	SF	\$20.00	\$4,500	1
36M	Piedmont Park & Exedra Plaza: Path #24	conc bridge/ ramp	D	50	4	Cracked and undermined bridge, questionable structural integrity	Replace conc ramps/ Redesign and replace conc bridge (Cost not provided)	200	SF	\$40.00	\$8,000	1
36N	Piedmont Park & Exedra Plaza: Path #25	conc path	С	1661	5	Vertical offset in conc panel	Grind (1-2")	1	EA	\$150.00	\$150	1
360	Piedmont Park & Exedra Plaza: Path #25	conc stairs w/ wood risers and pipe stakes	E	50	4	Uneven stairs with rotting wood risers help in place with steel pipe stakes: major trip hazard	Remove and replace stairs	200	SF	\$40.00	\$8,000	1
36P	Piedmont Park & Exedra Plaza: Path #25	conc path	D	100	4	Undermined concrete from eroding soil on downslope edge	Install wooden header board and replace conc path (100'X4')	400	SF	\$18.00	\$7,200	1
36Q	Piedmont Park & Exedra Plaza: Path #25	conc path	D	10		Vertical offset in conc panel	Grind (1-2")	3	EA	\$150.00	\$450	1
36R	Piedmont Park & Exedra Plaza: Path #25	conc stairs	D			Broken concrete step	Replace concrete step	6	SF	\$40.00	\$240	1
365	Piedmont Park & Exedra Plaza: Path #26	conc path	D	10	4	Broken concrete panels	Replace conc panels (4' x 10')	40	SF	\$20.00	\$800	1
36T	Piedmont Park & Exedra Plaza: Path #26	AC path	D	53	5	Uneven pavement	Replace AC pavement (53'x5')	265	SF	\$4.59	\$1,216	1
36U	Piedmont Park & Exedra Plaza: Path #27	AC path	D	420	12	Broken, uneven pavement	Replace AC pavement (420'x12')	5,040	SF	\$4.59	\$23,134	1
36V	Piedmont Park & Exedra Plaza: Path #27	AC path	E	240	4	Broken, uneven pavement	Replace AC pavement (240'x4')	960	SF	\$4.59	\$4,406	1
36W	Piedmont Park & Exedra Plaza: Path #27	AC path	D	20	20	Broken, uneven pavement	Replace AC pavement (20'x20')	400	SF	\$4.59	\$1,836	1
36X	Piedmont Park & Exedra Plaza: Path #28	conc path	В			Vertical offset in conc panel	Grind (1")	1	EA	\$150.00	\$150	1
36Y	Piedmont Park & Exedra Plaza: Path #29	AC path	D	137	12	Broken, uneven pavement	Replace AC pavement (137'x12')	1,644	SF	\$4.59	\$7,546	1
38A	Ranleigh to Lower Wildwood Walkway	conc walkway	В	198	5	Cracked panel	Replace panel (5x2.5')	12.5	SF	\$20.00	\$250	2
39	Recreation Center Walkways	conc walkway				Under construction	Not inventoried					
40	Ronada at Ramon Triangle Walkway	flagstone walkway	А	85		Excellent condition	None					

Path ID	Path Name	Path Facilities	Overall Condition A=Very Good B=Good C=Fair D=Poor E=Very Poor	Path Length (ft)	Path Width (ft)	Needed Repairs [See Exhibits for locations]	Repair Recommendations	Repair Qty	Repair Units	Unit Cost	Repair Cost	Priority High = 1 Med = 2 Low = 3
41	San Carlos Median Stairs	conc stairway w/ railing	С	29	6	Fair condition	None					
42A	Sheridan at Caperton Triangle Walkway	conc walkway	С	188		Cracked panel near manhole	Grind (1")	1	EA	\$150.00	\$150	1
42B	Sheridan at Caperton Triangle Walkway	conc walkway	С	188		Broken conc at Sheridan Ave	Replace panel (7'x2')	14	SF	\$20.00	\$280	1
43A	Sierra to Mountain Walkway	conc walkway & steps	В	216		Small cracks on concrete panels near Sierra Ave (2 ea)	Grind (1")	2	EA	\$150.00	\$300	1
44A	St James to Cambrian Walkway & Stairway	conc walkway & stairway w/ railing	С	100	4	Cracks and chips in stairs and landings	Repair cracks with grout or epoxy cement	3	EA	\$200.00	\$600	1
44B	St James to Cambrian Walkway & Stairway	conc walkway & stairway w/ railing	С	100	4	Cracks and chips in stairway curb walls	Repair cracks with grout or epoxy cement	8	EA	\$200.00	\$1,600	2
45A	St James to Sandingham	conc stairway	С	210	4	Cracks in curb wall on path and cracks/chip in stairways	Repair cracks with grout or epoxy cement	5	EA	\$200.00	\$1,000	2
45B	St James to Sandingham	conc stairway	С	210	4	Cracked panel at St James at the base of the lowest stairway	Replace panel (9'x7')	63	SF	\$20.00	\$1,260	1
46A	Trestle Glen to St James Stairs	conc stairway	В	145	4	Cracks in stairway curb walls	Repair cracks with grout or epoxy cement	4	EA	\$40.00	\$160	2
47	Warfield to Wildwood Stairway	conc stairway	А	37		Good to fair condition	None					
48A	Wildwood to Lower Fairview Walkway	conc walkway	В	243	5	Cracked panels at Fairview Ave	Replace conc panels (10'x5')	50	SF	\$20.00	\$1,000	2
49	Wildwood Triangle Walkay	conc walkway	В	25		Good condition	None					
50	Witter Field Sports Complex		В			Good condition	None					
51A	York to Richard Walkway & Stairs	conc path w/ stairway	В	150	5	Cracked panels	Replace panels (5'x2.5')	12.5	SF	\$20.00	\$250	2
51B	York to Richard Walkway & Stairs	AC path	D	107	10	Cracks in AC pavement	Replace AC pavement (10'x 107')	1070	SF	\$4.59	\$4,911	1

Project ID	Park/Path Name	Repair Recommendations	Photos
3A	Arroyo Ave to Ramona Ave Walkway & Stairway	Grind concrete (1-2")	No photos taken
4A	Atruna Ave to Park Way Walkway	Replace panel (5'x3')	No photos taken
4B	Atruna Ave to Park Way Walkway	Replace panel (9'x5')	No photos taken
4C	Atruna Ave to Park Way Walkway	Grind concrete (2")	No photos taken
5A	Beach Playfield Walkway (Howard Ave to School)	Replace AC path (355'x4.5')	
7А	Beach Playfield (Tennis Stairway)	Install header boards on downslope edge of path	
9A	Blair Ave to Scenic Ave Stairway	Replace panel (6'x5')	No photos taken
9B	Blair Ave to Scenic Ave Stairway	Remove and replace stair curb (30'x0.5'x1.5')	No photos taken
10	Boulevard Way to Sylvan Way Walkway	None	No photos taken
10A	Boulevard Way to Sylvan Way Walkway	Grind conc path above top step	

Project ID	Park/Path Name	Repair Recommendations	Photos
11A	Coaches Playfield	Grind conc	
118	Coaches Playfield	Grind conc (2")	
12A	Crocker Park Walkways	Replace AC path (698'x4')	
13A	Dracena Quarry Park	Replace AC path (1455'x4')	

Project ID	Park/Path Name	Repair Recommendations	Photos
13B	Dracena Quarry Park	Install header board on downslope side of path	
13C	Dracena Quarry Park	Grind concrete	
13D	Dracena Quarry Park	Replace cracked steps	
19A	Harvard Rd to Harvard Alley Walkway	Grind conc (1")	

Project ID	Park/Path Name	Repair Recommendations	Photos
19B	Harvard Rd to Harvard Alley Walkway	Replace conc panels	
21A	Hazel Lane to Piedmont Park Stairway	Replace step (5'x2.5')	
218	Hazel Lane to Piedmont Park Stairway	Patch concrete around manhole	
22A	Highland Ave Parkway Walkway	Grind conc (1")	

Project ID	Park/Path Name	Repair Recommendations	Photos
228	Highland Ave Parkway Walkway	Replace panels (2'x2' and 10'x4')	
24A	Linda Park Walkways and Stairway	Grind conc (2")	
24B	Linda Park Walkways and Stairway	Grind conc (2")	
24C	Linda Park Walkways and Stairway	Replace panel (10'x8')	

Project ID	Park/Path Name	Repair Recommendations	Photos
25A	Linda Park Walkways and Stairway	Install header boards on downslope edge of path	
25B	Linda Park Walkways and Stairway	Replace conc path (80'x5')	
26A	Linda Park Walkways (Linda Ave to Oakland Ave)	Slurry seal AC pavement (12'x684')	
30A	Pacific Ave to Blair Ave Walkway & Stairway	Replace 2 sections of low curb at stairway edge	
30B	Pacific Ave to Blair Ave Walkway & Stairway	Replace panels (total 5'x3')	No photos taken

Project ID	Park/Path Name	Repair Recommendations	Photos
32A	Pala Ave to Scenic Stairs & Walkway	Repair chips/cracks with grout or epoxy cement	
32B	Pala Ave to Scenic Stairs & Walkway	Repair/relocate pipe railing of top flight staircase	
32C	Pala Ave to Scenic Stairs & Walkway	Repair chips/cracks with grout or epoxy cement	
35A	Piedmont Ct to Mountain Ave Walkway	Replace panels (total 10'x5')	

Project ID	Park/Path Name	Repair Recommendations	Photos
35B	Piedmont Ct to Mountain Ave Walkway	Grind (1" and 2")	
35C	Piedmont Ct to Mountain Ave Walkway	Replace panels (4'x2')	
36A	Piedmont Park: Path #7	Replace AC pavement (225'x15')	
36B	Piedmont Park: Path #8	Replace AC pavement (40'x8')	

Project ID	Park/Path Name	Repair Recommendations	Photos
36C	Piedmont Park: Path #9	Replace AC pavement (100'x20')	
36D	Piedmont Park: Path #10	Replace conc/brick path (~30'x30')	
36E	Piedmont Park: Path #13	Replace concrete (16'x5')	
36F	Piedmont Park: Path #14	Slurry seal AC pavement (104'x14')	

Project ID	Park/Path Name	Repair Recommendations	Photos
36G	Piedmont Park: Path #15	Replace AC pavement (45'x8')	
36H	Piedmont Park: Path #16	Grind concrete (1-2")	
361	Piedmont Park: Path #17	Replace AC pvmt (130'x4')	
36J	Piedmont Park: Path #20	Grind conc (2 ea)	No photos taken
36К	Piedmont Park: Path #22	Replace AC pavement (85'x8')	

Project ID	Park/Path Name	Repair Recommendations	Photos
36L	Piedmont Park: Path #23	Replace concrete ramp (45'x5')	
36M	Piedmont Park: Path #24	Redesign and replace conc bridge/ replace conc ramps	
36N	Piedmont Park: Path #25	Grind (1-2")	No photos taken
360	Piedmont Park: Path #25	Remove and replace stairs	
36P	Piedmont Park: Path #25	Install wooden header board and replace conc path (100'X4')	

Project ID	Park/Path Name	Repair Recommendations	Photos
36Q	Piedmont Park: Path #25	Grind (1-2")	
36R	Piedmont Park: Path #25	Replace concrete step	
365	Piedmont Park: Path #26	Replace conc panels (4' x 10')	No photos taken
36T	Piedmont Park: Path #26	Replace AC pavement (53'x5')	No photos taken
36U	Piedmont Park: Path #27	Replace AC pavement (420'x12')	
36V	Piedmont Park: Path #27	Replace AC pavement (240'x4')	
36W	Piedmont Park: Path #27	Replace AC pavement (20'x20')	No photos taken

Project ID	Park/Path Name	Repair Recommendations	Photos
36X	Piedmont Park: Path #28	Grind (1")	
36Y	Piedmont Park: Path #27	Replace AC pavement (137'x12')	No photos taken
38A	Ranleigh to Lower Wildwood Walkway	Replace panel (5x2.5')	
42A	Sheridan at Caperton Triangle Walkway	Grind (1")	
42B	Sheridan at Caperton Triangle Walkway	Replace panel (7'x2')	

Project ID	Park/Path Name	Repair Recommendations	Photos
43A	Sierra to Mountain Walkway	Grind (1")	
44A	St James to Cambrian Walkway & Stairway	Repair cracks with grout or epoxy cement	
44B	St James to Cambrian Walkway & Stairway	Repair cracks with grout or epoxy cement	
45A	St James to Sandingham	Repair cracks with grout or epoxy cement	

Project ID	Park/Path Name	Repair Recommendations	Photos
45B	St James to Sandingham	Replace panel (9'x7')	
46A	Trestle Glen to St James Stairs	Repair cracks with grout or epoxy cement	
48A	Wildwood to Lower Fairview Walkway	Replace conc panels (10'x5')	
51A	York to Richard Walkway & Stairs	Replace panels (5'x2.5')	

Project ID	Park/Path Name	Repair Recommendations	Photos
51B	York to Richard Walkway & Stairs	Replace AC pavement (10'x 107')	