CITY OF MORRO BAY
PUBLIC WORKS ADVISORY BOARD (PWAB)
AGENDA

The City of Morro Bay provides essential public services and infrastructure to maintain a safe, clean and healthy place for residents and visitors to live, work and play.

Regular Meeting
Wednesday, September 16, 2020 – 5:30 P.M.
Held Via Teleconference

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE
PLEDGE OF ALLEGIANCE
BOARD MEMBER'S ANNOUNCEMENTS & PRESENTATIONS

PUBLIC COMMENT
Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, this Meeting will be conducted telephonically through Zoom and broadcast live on Cable Channel 20 and streamed on the City website (click here to view). Please be advised that pursuant to the Executive Order, and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Veterans' Hall will not be open for the meeting.

Public Participation:
In order to prevent and mitigate the effects of the COVID-19 pandemic, and limit potential spread within the City of Morro Bay, in accordance with Executive Order N-29-20, the City will not make available a physical location from which members of the public may observe the meeting and offer public comment. Remote public participation is allowed in the following ways:

- *Community members are encouraged to submit agenda correspondence in advance of the meeting via email to the Public Works' office at PWAB@morrobayca.gov prior to the meeting and will be published on the City website with a final update one hour prior to the meeting start time. Agenda correspondence received less than an hour before the meeting start time may not be posted until after the meeting.*

- *Members of the public may watch the meeting either on cable Channel 20 or as streamed on the City website.*

- *Alternatively, members of the public may watch the meeting and speak during general Public Comment or on a specific agenda item by logging in to the Zoom webinar using the information provided below. Please use the "raise hand" feature to indicate your desire to provide public comment. Each speaker will be allowed three minutes to provide input.*

  Please click the link below to join the webinar:
  - *https://us02web.zoom.us/j/82722747698?pwd=aWZpTzcwTHlRTk9xaTlmWVNWRWFUQT09*
    Password: 135692

  - *Or Telephone Attendee: (408) 638-0968 or (669) 900 6833 or (346) 248 7799; Webinar ID: 827 2274 7698; Password: 135692; Press * 9 to "Raise Hand" for Public Comment*

A. CONSENT AGENDA - NONE

Unless an item is pulled for separate action by the Public Works Advisory Board, the following actions are approved without discussion. The public will also be provided an opportunity to comment on consent agenda items.

B. BUSINESS ITEMS

B-1 DIRECTORS REPORT - INFORMATIONAL SUMMARY OF CURRENT PUBLIC WORKS ACTIVITIES

RECOMMENDATION: No action.

B-2 REVIEW OF UPDATED PAVEMENT MANAGEMENT PLAN PLANNING DOCUMENT

RECOMMENDATION: PWAB to provide input to staff and Council regarding the updated Pavement Management Plan (PMP) planning document.

C. BOARD MEMBERS CONCERNS AND INTEREST

D. FUTURE AGENDA ITEMS

E. ADJOURNMENT

The next Regular Meeting will be held on **October 21, 2020 at 5:30 p.m.** via teleconference.

THIS AGENDA IS SUBJECT TO AMENDMENT UP TO 72 HOURS PRIOR TO THE DATE AND TIME SET FOR THE MEETING. PLEASE REFER TO THE AGENDA POSTED AT THE PUBLIC WORKS DEPARTMENT, 955 SHASTA AVENUE, FOR ANY REVISIONS OR CALL THE DEPARTMENT AT 772-6261 FOR FURTHER INFORMATION.

MATERIALS RELATED TO AN ITEM ON THIS AGENDA SUBMITTED TO THE PUBLIC WORKS ADVISORY BOARD AFTER DISTRIBUTION OF THE AGENDA PACKET ARE AVAILABLE FOR PUBLIC INSPECTION UPON REQUEST BY CALLING THE PUBLIC WORKS OFFICE AT 805-772-6261.

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN A CITY MEETING, PLEASE CONTACT THE CITY CLERK'S OFFICE AT LEAST 24 HOURS PRIOR TO THE MEETING TO INSURE REASONABLE ARRANGEMENTS CAN BE MADE TO PROVIDE ACCESSIBILITY TO THE MEETING.

AGENDA NO: B-1

MEETING DATE: September 16, 2020

MEMORANDUM

TO: **Public Works Advisory Board**

CC: **City Manager**

DATE: **September 11, 2020**

FROM: **Jennifer Callaway - Acting Public Works Director**

SUBJECT: Director's Report / Information Items

Please contact the individual staff members prior to the meeting for more detailed information.

Notify Me: Sign up for Notify Me on the City's Website www.morrobayca.gov/notifyme to be notified by email when Council, Board's and Commission's agendas and minutes are posted on the website.

Service Requests: Citizens can report a concern to the City for predetermined issues without the need to phone the City during business hours (for example: reporting a pothole) by using a feature on the City's website, Service Requests www.morrobayca.gov/905/Service-Requests, or the mobile App (available on both Android and IOS operating systems).

Staff can also add Service Requests for someone over the phone or in the office if they do not have access to a computer. Each category in Service Requests is assigned to the appropriate staff member to handle so citizens don't have to figure out what department to contact for an issue they need to report on.

CONSOLIDATED MAINTENANCE
COMPLETED SERVICE REQUESTS AND WORK ORDERS
8/12/2020 TO 9/9/2020

Staff Contact: Matt Bishop

Monthly Service Requests Completed

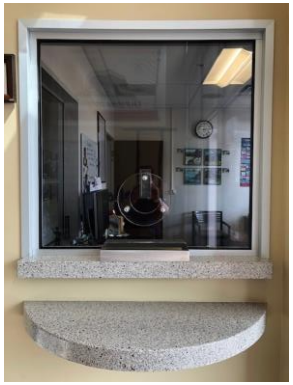
CM	# of SR
Bike Path Issues	1
Safety Issue	1
# SR in Category	**2**
Total Service Requests Completed	**2**

Monthly Work Orders Completed

CM	# of Work Orders
Facilities	
ADA Work	1
Electrical	4
General Maintenance	2
Plumbing	3
Window	1
Parking Lots	
Other	1
Parks	
Haul Debris	1
Irrigation Repair	3
Maintenance	1
Other	1
Tree Hazard Reduction	1
Restrooms and Trash	
Electrical	1
Maintenance	1
Other	1
Repair	3
Sidewalks-Paths	
Weed Abatement	1
Street Trees	
Hazard Reduction	2
Install	1
Streets	
Berm Repair	2
HMA Patch	1
Install	1
Other	3
Right of Way Obstruction	1
Weed Abatement	1
# Work Orders in Category	**38**

CONSOLIDATED MAINTENANCE

Staff Contact: Matt Bishop



<u>Trash Heroes</u>

Maintenance staff added garbage and recycling cans along with Trash Heroes banners to identify receptacle locations at the Rock parking lot and other locations along the Waterfront.

<u>Labor Day Weekend</u>

Maintenance staff turned Trash Heroes working day and night to keep up with the Labor Day weekend crowds.

<u>Fire Department</u>

Maintenance staff installed a new security window in the Fire Department lobby.

<u>Harbor Restrooms</u>

Maintenance staff installed new urinal and plumbing at the Harbor restroom.

<u>Shasta Avenue</u>

Streets crew did a hot mix asphalt skin patch repair and several berm repairs.

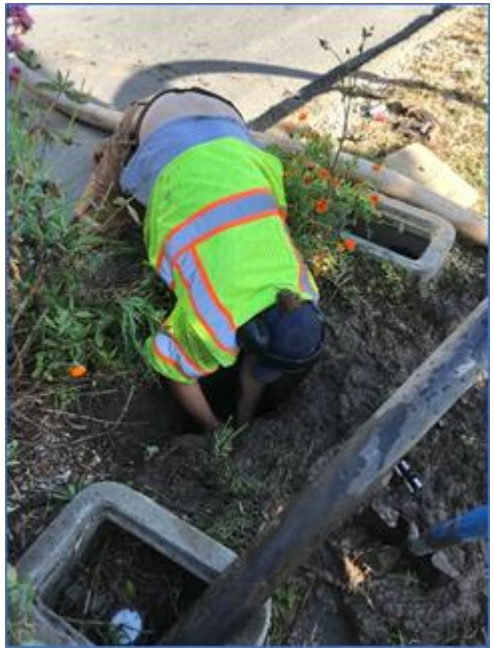
WATER – OPERATIONS

Staff Contacts: Joe Mueller
Damaris Hanson

Operations and Maintenance August 2020

- Exercised 8 mainline water valves throughout the city.
- Responded to 3 after-hour callouts:
    - 1409 Teresa Drive – leak on customer side
    - 1145 Morro Avenue – service line leak
    - 2560 Laurel Avenue – water coming up from spring on hill
- Performed 25 water service turn-offs and 62 water service turn-ons.
- Replaced 3 water meters throughout town.
- Installed 2 new water service lines
- Located and marked 57 Underground Service Alerts.
- Investigated distribution issues ranging from meter re-reads, meter high reads, pressure issues, and water quality concerns.
- Investigated and resolved 6 potential water leaks.
- Pressure washed and painted 36 fire hydrants
- Replaced fire hydrants at Radcliffe avenue and Sandpiper court.
- Logged water distribution assets using GPS equipment.
- Test run emergency generators at booster stations.
- Alpha Electric cleaned the RO system Variable Frequency Drives (VFD's).
- Cleaned customer meter boxes on re-read list.
- Replaced leaky curb stops and water meters at 180 Orcas way, 859 Main street and 450 Kern Avenue.
- Installed an additional sample tap and shutoff valve at Atascadero road and Highway 1.
- Removed power cables from abandoned well motor on Errol street.
- Poured new concrete repair and fill pads at the RO facility.
- Assisted in the cleaning of the Desal RO pressure filter tank to facilatate removal.
- Due to safety concerns secured through the use of barricades the Canet Road water distribution pipe bridge.
- Replaced one motor and rebuilt the remaining three on the RO treatment trains.
- Continued demolition of the desalination facility.

RO System motor rebuild



Service line repair

Fire hydrant repair

Inspecting calcium tanks

Concrete finishing in the RO facility

Submitted reports to the State, electronically: No Violations

- August 2020 Monthly Monitoring Report
- August 2020 Monthly Water Rights Extraction Report
- August 2020 Monthly Water Conservation Report

STORMWATER MANAGEMENT

Staff Contacts: Damaris Hanson

Tidelands Park –

Stormwater Pocket Park

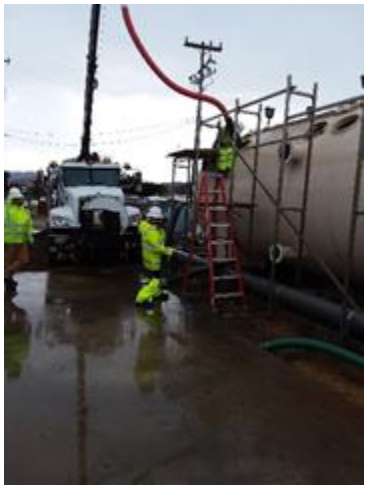
Plants and irrigation have been added to the Tidelands Pocket Park. The semi-circle bench is in the process of being ordered and mulch will be added to the park by the end of September.

WASTEWATER – COLLECTIONS

Staff Contacts: Joe Mueller
John Gunderlock

Operations and Maintenance August 2020:

- Hydro cleaned approximately 29,770 feet of city main line.
- Video inspected (CCTV) 6,430 feet of gravity main line.
- On-call staff received 1 afterhours callout: Lift Station #2 Pump number 3 overcurrent, pump tested and reset.
- Sampled pH levels at Mission Linen.
- Tested all lift station generators and alarms.
- Pulled pumps at lift station #2 resetting the tolerances between the pump impeller and bottom plate.
- Performed 7 restaurant source control inspections for Fats, Oils and Grease (FOG).
- Replaced a Manhole lid that was found to be too small in diameter and was “rocking” with vehicle traffic.
- Assisted in the removal of filter media from the old Desal filter tank using the hydro vac truck.
- Potholed using hydro excavation to install a sample port for the RO outfall line.
- Electrical troubleshoot equipment in the RO Plant and in the WWTP.
- Staff Initiated and / or Received 0 Service Request:



Desal Filter

Lift Station #2

Hydo Excavation

WASTEWATER – TREATMENT

Staff Contacts: Joe Mueller
John Gunderlock

Operation & Maintenance August 2020

- Flow for the month of August averaged 1.116 Million Gallons per Day (MGD) and totaled 34.582 million gallons.
- 0.01 inches of precipitation was recorded in the month of August.
- Responded to one after hour callout in August for plant chlorine adjustments.
- Tested all plant alarms.
- Ran emergency generator for monthly inspections.
- Drove the solar drying beds with front-end loader to speed drying time.
- Moved dried sludge from drying beds to sludge storage area and cleaned gates.
- Performed daily electrical conductivity (EC) and total dissolved solids (TDS) testing at the grit chamber and secondary clarifier for future IPR permiting.
- Performed Bromide testing on secondary effluent twice a week for future IPR permitting.
- Replaced PVC fill line on the sodium hypochlorite tank.
- Sampled biosolids for annual pathogens and chemistry analysis.
- Replaced seal water tubing on sludge circulation pump #2.
- Troubleshoted grit pump failure and found loose wiring in the electrical cabinet.
- Replaced the on/off toggle switch on boiler #2.
- Adjusted ferrous chloride pump down due to low hydrogen sulfide test results.
- Replaced leaking hoses and fittings on the headworks screen compactor.
- Inspected the facility for safety issues and completed the visual observation log with no issues found.
- Replaced failed valve on primary #1 air tank.
- Re-calibrated the effluent composite sampler for sample volume taken.
- Replaced the chemical feed tubing on the sodium hypochlorite pumps and the chemical discharge tubing on the sodium bisulfite pumps.
- Cleaned floating debris from the effluent flow meter vault.
- Installed a 2-inch repair clamp on pipe leak on digester #3.
- Performed routine monthly equipment maintenance work orders.

Utilities Staff attended the following training:

- In-house briefings to address Covid-19 social distancing and safety precautions
- EPA Webinar on Best Management Practices for Wastewater Treatment Compliance
- Laboratory chlorine residual testing and meter calibration
- Personal Protective Equipment (PPE) safety video

Submitted reports to the State, electronically:

- July 2020 Monthly Discharge-Monitoring Report (eDMR)
- July 2020 Monthly Self-Monitoring Report (eSMR)
- 2020 Annual Effluent Chemical and Bioassay Analysis Results

Replacing chemical fill line

Troubleshooting grit pump

ENGINEERING/CAPITAL PROJECTS

Staff Contact: Rob Livick

Highway 41/Main/Highway 1
- Project construction is still financially constrained
- The City Council authorized submission of an $3.75M Active Transportation Program (ATP) grant application for the project
- Staff is working on the various grant application requirements to meet the submission deadline of September 15, 2020
- Contract completed with GHD formerly Omni-Means to complete Pre-Design and Environmental Determination on track for December 2020
- Working with City's funding partners the San Luis Obispo Council of Governments (SLOCOG) & Caltrans on funding and design options

Pavement Management
- No major maintenance work in FY 2019/20 and perhaps not 2020/21 depending on revenue.
- Pavement Management Plan Update on current agenda

Water System Improvements – Nutmeg Pressure Zone Fire Flow Improvements
- Design of various components underway
- Preparation of the environmental document has begun. The document is for compliance with the California Environmental Quality Act (CEQA) and will be heard at the City's Planning commission later this fall.
- This phase of the project will bring the project to 30-percent design, complete the CEQA determination and permitting through the County and City; and property acquisition.

Collection System Repairs – Beachcomber, Main Street and Atascadero Road Sewer Main R/R
- Design alternative are being prepared, ie moving sewer mains into the street vs in place replacement in the existing back/side yard easements
- Design to be complete Spring 2021
- Construction proposed for Summer/Fall 2021

Misc. Small CIPs
- North Point Parking Lot: Project canceled due lack of funds available in the assessment district accumulation. Work will be performed with funding from Homeowners Association
- Boat Rinse Off WQ/Tidelands Pocket Park: Substantially Complete
- Bocce Ball/Greenhouse on Shasta and Dunes: "Volunteer in conjunction with City Staff. On hold until after COVID restrictions. City Reassessing use and potential sale of the property

Cloisters Landscaping Improvements – Landscape Plan and Installation
- Median replanting and irrigation rehab work is substantially complete

Sequoia Storm Drain Repair/Replacement
- No change
- Awaiting resource availability to commence project

Laurel Easement Storm Drain Repair
- 1950's vintage CMP storm drain leaking and caused erosion and exposed sewer main
- No change
- Awaiting resource availability to commence project

Adopted Operating and Capital Improvement Program is online at: Adopted FY2020/21 Budget

ENGINEERING/DEVELOPMENT REVIEW
Staff Contact: Rob Livick

Staff is working on the following projects:

- 405 Atascadero, 35-unit multi-family low income housing: In Plan check
- 535 Atascadero, Parcel Map (MB 15-0103) with Public Improvements: In Plan check and Map Check
- Paula/Ironwood two lot subdivision (675 Paula St.): Map Check
- Harborview Hotel/Commercial (205 Harbor St.): Planning Review
- Hotel Development – (295 Atascadero Road) NW corner Atascadero Road West and Highway 1: In Plan check
- Sonic Restaurant – (1840 Main St.) Main and Highway 41: In Plan check – Permit Extended to March 2021
- Rose's Landing Upstairs (725 Embarcadero) 10-Room Hotel: Under Construction
- US Coast Guard Addition (1275 Embarcadero): Pending Construction
- Morro Bay Landing (1215 Embarcadero): Complete
- Three Stacks and a Rock Brewery at Former Aquarium Building (595 Embarcadero): In Plan check
- Rhapsody In View (2790 Main St.), 8-Room Hotel : In Plan check
- Residential remodels and construction: 18 Projects in various stages of review
- Encroachment Permits Issued: 20 in August (and 5 Blanket Encroachment Permits)

WASTEWATER – NEW WRF
Staff Contact: Rob Livick

- Work continues in accordance with City Council direction.
- Additional Information at http://morrobaywrf.com/
  - Factsheet
  - Dashboard

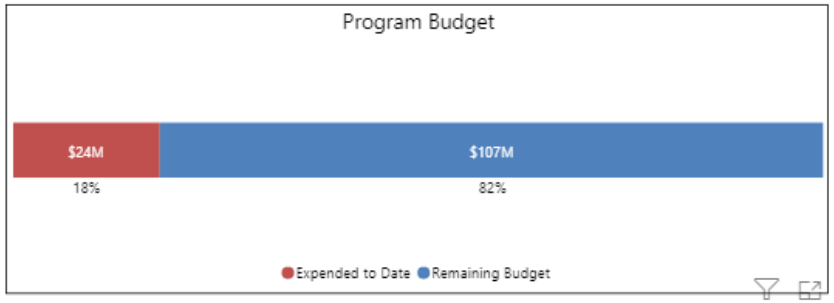
MORRO BAY
OUR WATER
RELIABLE. CLEAN. FOR LIFE.

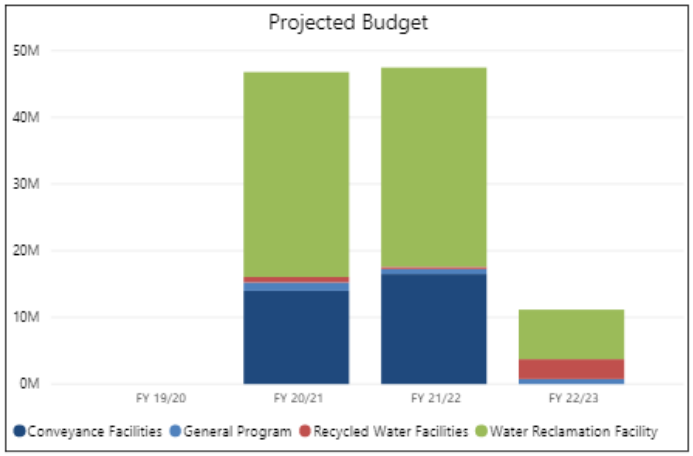
Program Summary

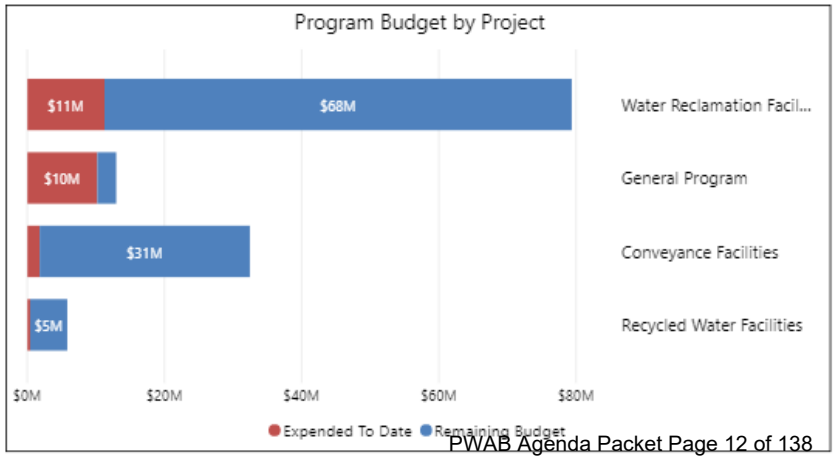
Last Updated:
8/6/2020

$130.6M
Total Program Budget

$106.9M
Remaining Program Budget







AGENDA NO: B-2
MEETING DATE: September 16, 2020

Staff Report

TO: **Public Works Advisory Board** **DATE: September 10, 2020**

FROM: **Rob Livick, PE/PLS –City Engineer**

SUBJECT: **Review of updated Pavement Management Plan Planning Document**

RECOMMENDATION

PWAB to provide input to staff and Council regarding the updated Pavement Management Plan (PMP) planning document.

BACKGROUND

The City's PMP outlines the processes in place for the planning, preventative maintenance, and repair of City's streets. The PMP analyzes pavement life cycles, assess overall system performance costs, and serves as a tool to assist the City in determining pavement maintenance strategies and cost estimates necessary to maintain the City's roadways. The City's first PMP was adopted by City Council in 2011 and has served the City well in guiding expenditures of its limited resources. This is the first update to that plan.

Why Prepare a Pavement Management Plan?

The pavement manager's first responsibility is to make the best possible use of public funds. The manager must manage the pavement system to serve society's needs while maintaining the system in a safe and serviceable condition. This task would be easy if pavements did not deteriorate, but the serviceability of all pavements begins to decrease the day they are placed in service. Cracks and ruts form under traffic load, utility trench and patch across roadways, and asphalt binder becomes brittle and cracks from exposure to the environment. As the pavement deteriorates, action must be taken to restore or prevent the loss of pavement serviceability. When adequate funds are not available to meet demands, the manager must decide which needs are most important. Pavement management is an important tool in the decision process. Pavement management is a systematic method to assess pavement condition, to identify maintenance and rehabilitation (M&R) needs, and to plan these activities. A pavement management system or plan (PMP) is a tool to track pavement inventory and condition, estimate future condition, determine M&R requirements and costs, and develop and prioritize M&R projects.

The Updated Plan

Earlier this year, using the City's consultant selection process, the City of Morro Bay contracted with Pavement Engineering Inc (PEI) to update its Pavement Management Plan.

PEI updated all the streets in the City's Pavement Management Plan, using the StreetSaver program. The purpose of this Pavement Management Software is to track inventory, store work history and furnish budget estimates to optimize funding for improving the city's pavement system.

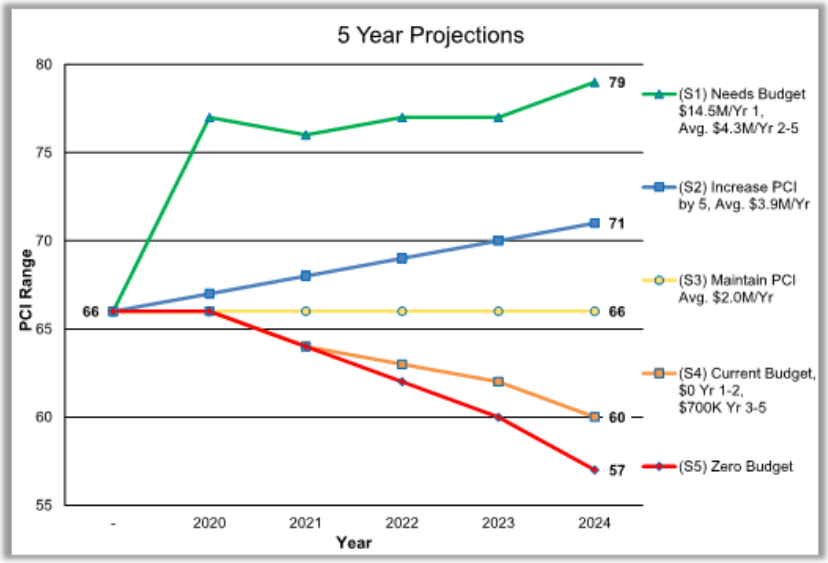
The City currently maintains approximately 54 miles of roads representing 8,722,754 square feet of pavement with a replacement value of approximately $145,595,000.

Prepared By: RL	Dept Review:

PEI inspected all road segments in the City of Morro Bay. The average overall PCI for the City is 66. 87.02% of the City's pavement is in Good to Fair condition. To maintain the system at its current overall PCI of 66, the City will need to spend an average of $2 million annually over the next 5 years. Maintaining the current funding level of $0/Yr. for years 1 & 2, and approximately $700K/Yr. for years 3-5, will result in a PCI loss of 6 points in 5 years to a PCI of 60. A review of the City's street system, by functional classification, shows that the Arterial streets have the highest average PCI of 68, the Collector streets have an average PCI of 66, and the Residential streets have an average PCI of 66. This is summarized in the following figure excerpted from the report.

Budget Scenario Projections

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



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

Scenario 1:	Unconstrained Budget/ Funds Needed to obtain Optimum PCI ($15.1M for Year 1, $4.4M/Yr Avg. for Years 2-5.)
Scenario 2:	Amount of funding to increase PCI by 5 (Avg. $3.9M/Yr.)
Scenario 3:	Amount of funding to maintain PCI of 66 (Avg. $2.0M/Yr.)
Scenario 4:	Impact of the current funding amount ($0/Yr, for years 1 and 2, $700K/ Yr, years 3-5) the current PCI would decline from 66 to 60, a 6-point overall drop.
Scenario 5:	Represents the impact to the PCI if Zero dollars are spent

Typically the City's annual pavement maintenance and rehabilitation budget is comprised of a portion of Measure Q funds, State SB1 funds and recycled tire derived asphalt grant funds and range between $500 to $1000K, depending on Measure Q fund balance after allocations to Fire and Police.

Most agencies typically try to keep their arterials in the best condition because they carry the bulk of the traffic and loading, followed by collectors, then the residential/ local streets. PEI recommends the City carefully evaluate the overall annual budget to determine the amount it wants to commit to pavement maintenance and rehabilitation projects. The PMP will assist the City in its efforts to monitor treatments and track their effectiveness and help the City in setting future priorities and treatment policies. To ensure the city is evaluating accurate data, PEI suggests the City update its PMP on a regular basis and review the entire system every three years, this includes a thorough review of the Decision Tree and the unit costs contained within. As the City maintains and updates its Pavement Management System, the program will become a valuable tool in its efforts to maximize performance and minimize the spending for pavements.

ATTACHMENT

1. *2019/2020 Pavement Management Plan Update Final Report*, Pavement Engineering Inc, June 2020

CITY OF MORRO BAY

2019/2020 Pavement Management Plan Update Final Report June 2020

Pavement Engineering Inc.

You can ride on our reputation

Table of Contents

Section I
Executive Summary

EXECUTIVE SUMMARY

The City of Morro Bay currently maintains approximately 53.52 centerline miles of roads representing 8,722,754 square feet of pavement with a replacement value of approximately $145,595,000 as calculated by StreetSaver®.

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

INTRODUCTION

A Pavement Management System has several distinctive uses:

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

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

WORK PERFORMED

Pavement Distress Survey and Database Update

For this update, PEI performed inspections on approximately 53.52 centerline miles of road. Field inspections were completed in January 2020.

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

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

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

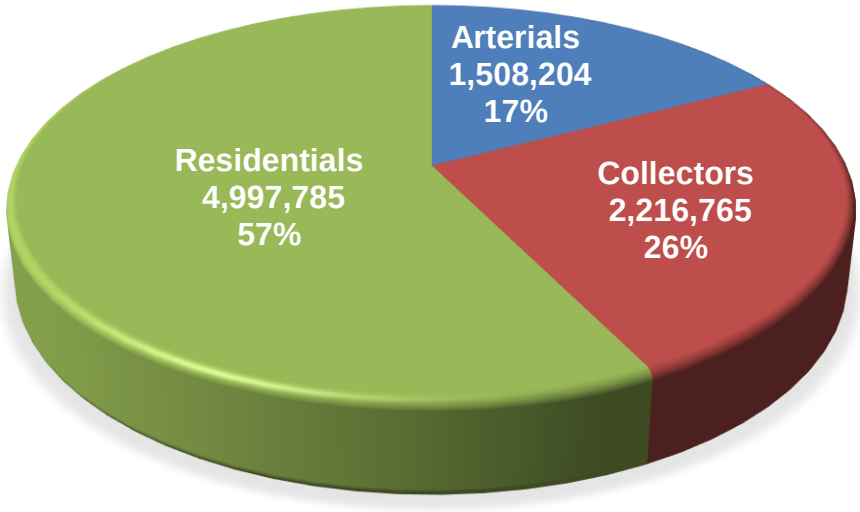
FINDINGS

The updated Pavement Management System showed that the City's overall average PCI is 66.

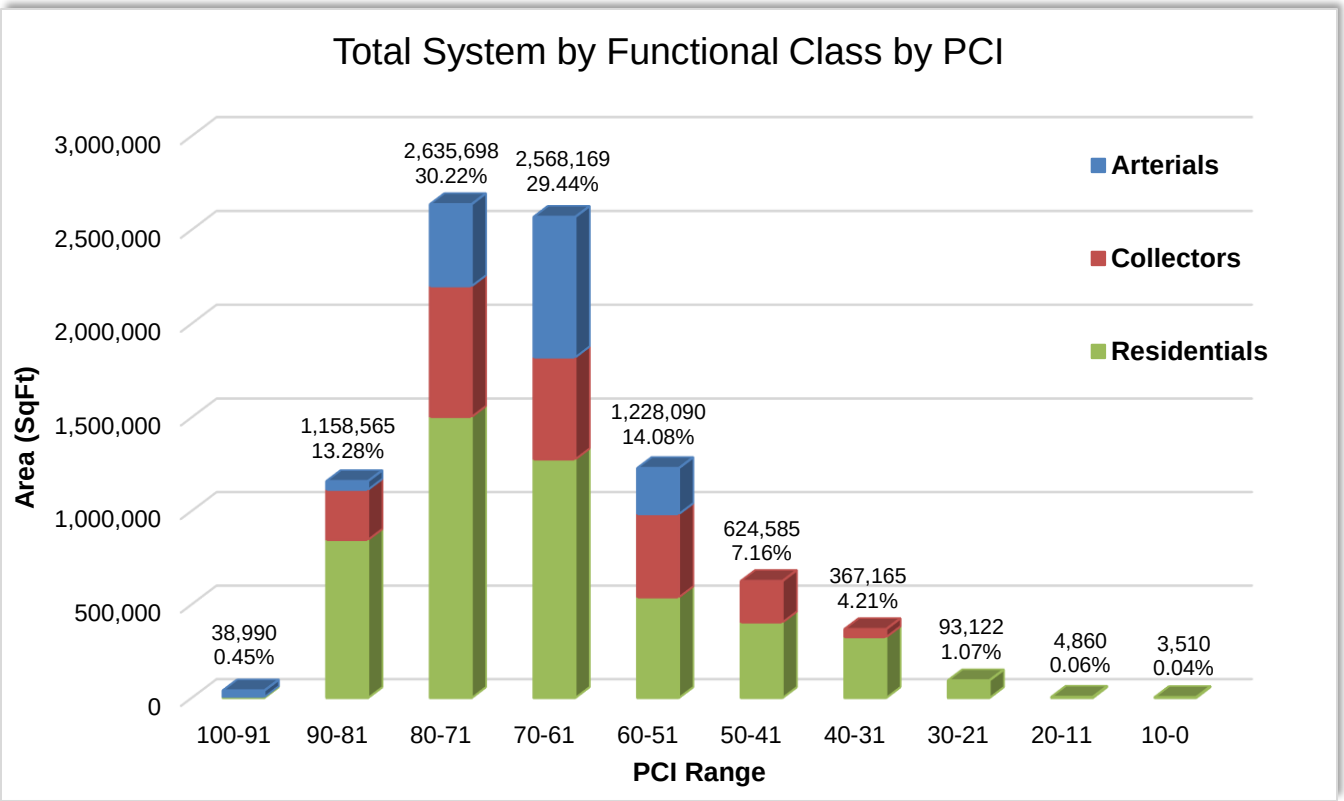
The breakdown by functional classification is as follows:

Functional Classification	Centerline Miles	Lane Miles	Pavement Area (sq. ft.)	Percent of System	Average PCI
Arterial	7.43	14.86	1,508,204	17.29%	68
Collector	12.07	24.15	2,216,765	25.41%	66
Residential	34.02	67.82	4,997,785	57.30%	66
Totals	53.52	106.83	8,722,754	100.00%	66

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



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



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

Condition Category Breakdown			
Condition	**PCI Range**	**% Of Total**	**Square Feet**
Excellent	100-91	0.45%	38,990
Good	90-71	43.50%	3,794,263
Fair	70-51	43.52%	3,796,259
Poor	50-31	11.37%	991,750
Failed	30-0	1.16%	101,492

The analysis shows that **87.02%** the City's pavement are in **Good** to **Fair** condition. Details of each street segment are provided in ***Section IV: Reference Reports***.

BUDGET ANALYSIS

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

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

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

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

Decision Tree Unit Prices

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

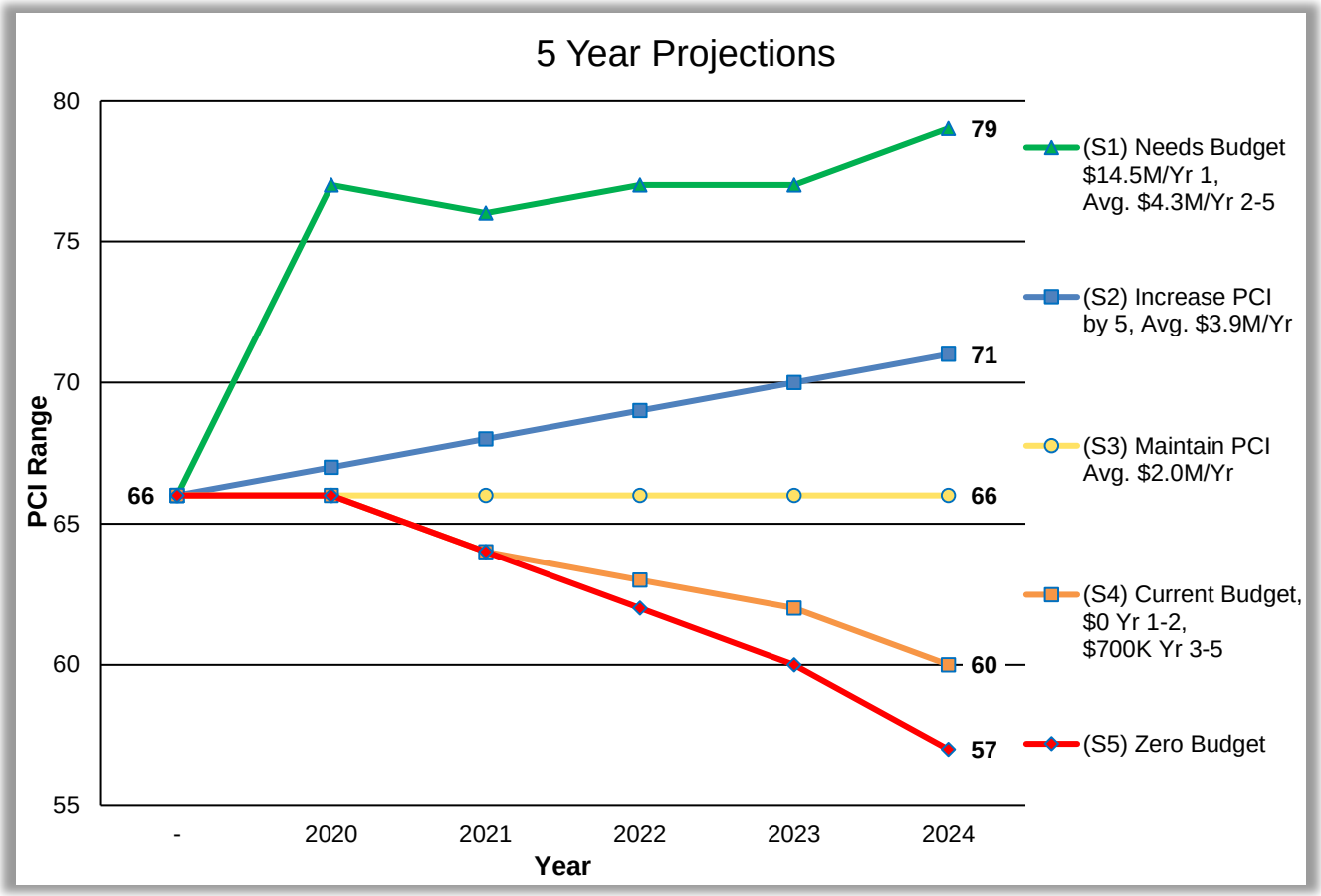
For the City of Morro Bay, the unit costs on the following table were used:

Treatment	Arterial	Collector	Residential
Cost/ Sq Yd			
Crack Seal **($$/LF)**	$1.27	$1.27	$1.27
Light Maintenance	$7.40	$3.79	$3.79
Heavy Maintenance	$31.87	$31.87	$31.87
Light Rehab	$44.40	$44.40	$44.40
Heavy Rehab	$88.04	$88.04	$88.04
Reconstruct	$210.64	$156.29	$129.30

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

Budget Scenario Projections

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



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

Scenario 1: Unconstrained Budget/ Funds Needed to obtain Optimum PCI ($15.1M for Year 1, $4.4M/Yr Avg. for Years 2-5.)

Scenario 2: Amount of funding to increase PCI by 5 (Avg. $3.9M/Yr.)

Scenario 3: Amount of funding to maintain PCI of 66 (Avg. $2.0M/Yr.)

Scenario 4: Impact of the current funding amount ($0/Yr, for years 1 and 2, $700K/ Yr, years 3-5) the current PCI would decline from 66 to 60, a 6-point overall drop.

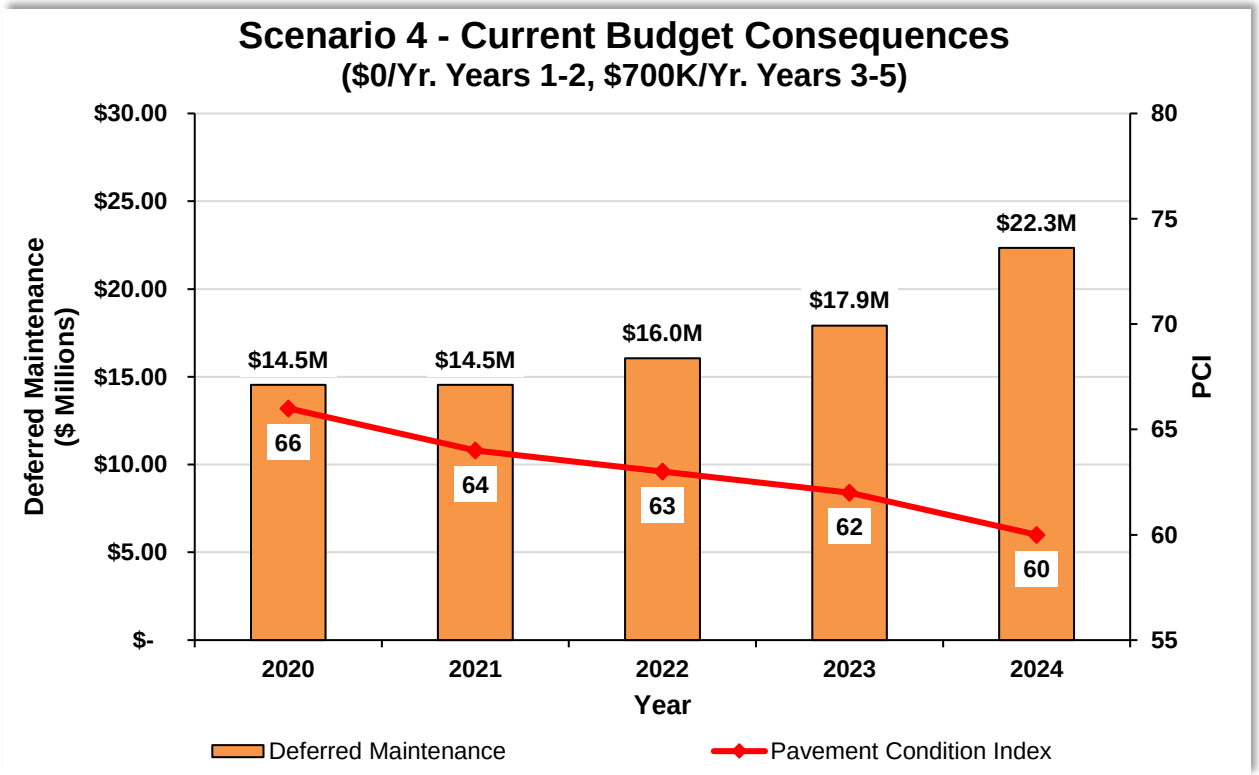
Scenario 5: Represents the impact to the PCI if Zero dollars are spent

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

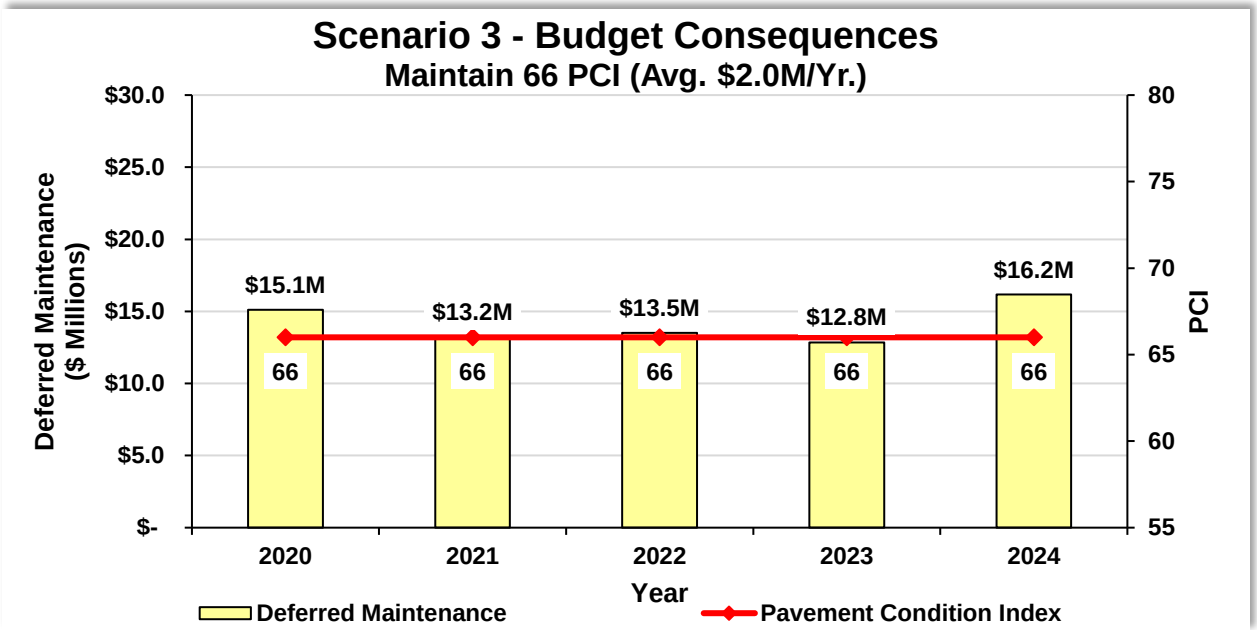
Budget Consequences

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

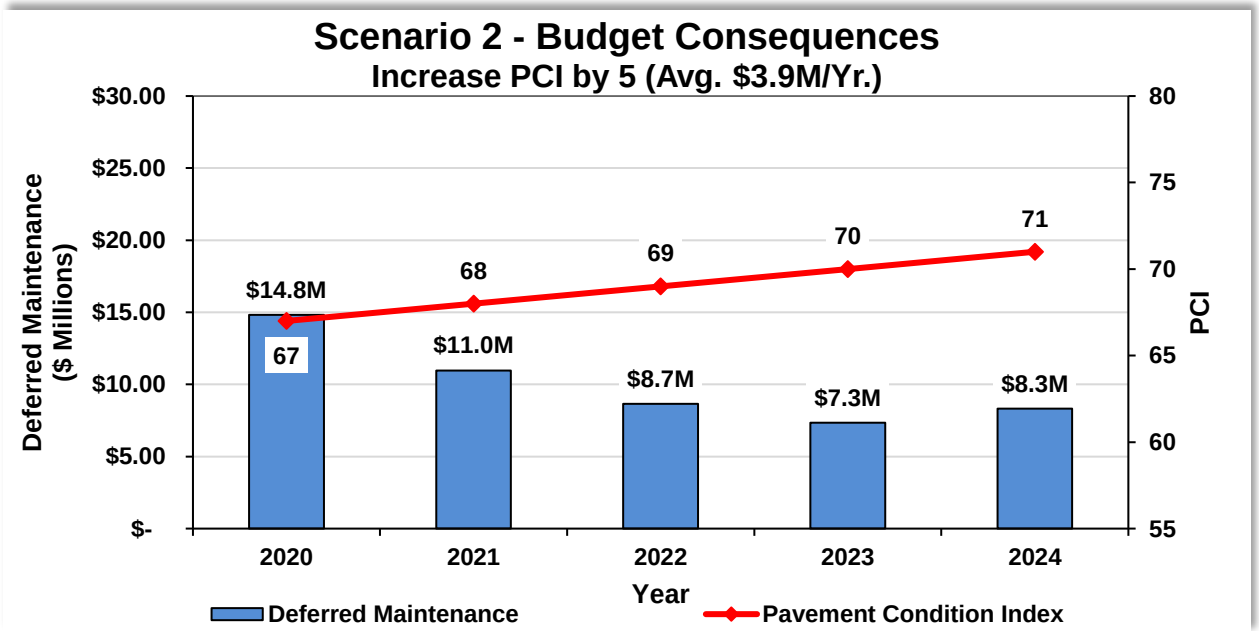
At the current funding level of $0/Yr. for years 1 and 2, and about $700K/Yr. for years 3-5., the PCI of the entire system will deteriorate from 66 to 60, a 6 PCI point drop over the next 5 years. In addition, the backlog of deferred maintenance grows from $14.5 million to $22.3 million, an increase of 54%.



To maintain the current PCI of 66, it is projected that an average funding level of $2M/YR is necessary. At this funding level the backlog of deferred maintenance grows from $15.1 million to $16.2 million, an increase of 7%.



To increase the PCI 5 points from 66 to 71, it is projected that an average funding level of $3.9M/YR is necessary. At this funding level the backlog of deferred maintenance shrinks from $14.8 million to $8.3 million, a decrease of 44%.



CONCLUSIONS AND RECOMMENDATIONS

This Executive Summary provides a review of the 2019/2020 Pavement Management System Update performed by PEI. PEI inspected all road segments in the City of Morro Bay. The average overall PCI for the City is 66. 87.02% of the City's pavement is in Good to Fair condition.

To maintain the system at its current overall PCI of 66, the City will need to spend an average of $2 million annually over the next 5 years. Maintaining the current funding level of $0/Yr. for years 1 & 2, and approximately $700K/Yr. for years 3-5, will result in a PCI loss of 6 points in 5 years to a PCI of 60.

A review of the City's street system, by functional classification, shows that the Arterial streets have the highest average PCI of 68, the Collector streets have an average PCI of 66, and the Residential streets have an average PCI of 66. As a general rule, agencies typically try to keep their arterials in the best condition because they carry the bulk of the traffic and loading, followed by collectors, then the residential/ local streets.

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

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

Section II
Background

BACKGROUND

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

PAVEMENT DESIGN BASICS

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

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

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

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

PAVEMENT DETERIORATION

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

Fatigue

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

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

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

Aging

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

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

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

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

TYPICAL PAVEMENT DEFECTS

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

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

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

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

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

Alligator Cracking (Fatigue)

Description:

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

Severity Levels:

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

Block Cracking

Description:

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

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

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

Distortions

Description:

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

Severity Levels:

L Distortion produces vehicle vibrations, which are noticeable, but no reduction in speed is necessary for comfort or safety and/or individual distortions cause the vehicle to bounce slightly but create little discomfort.

M Distortion produces vehicle vibrations, which are significant, and some reduction in speed is necessary for safety and comfort.

H Distortion produces vehicle vibrations, which are so excessive that speed must be reduced considerably for safety and comfort.

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

Description:

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

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

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

Severity Levels:

L One of the following conditions exists:
- (1) non-filling crack width is less than 10 mm (3/8 in.) or
- (2) filled crack of any width (filler in satisfactory condition).

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

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

Patching and Utility Cut Patching

Description:

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

Severity Levels:

L Patch is in good condition and satisfactory. Ride quality* is rated as low severity or better.

M Patch is moderately deteriorated and/or ride quality* is rated as medium severity.

H Patch is badly deteriorated and/or ride quality* is rated as high severity. Needs replacement soon.

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

Rutting and Depressions

Description:

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

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

Severity Levels: (Average Rut or Depression Depth)

L 1/2" to less than 1” (13 to 25mm).

M 1” to less than 2” (25 to 50mm).

H equal to or greater than 2” (over 50mm).

Raveling

Description:

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

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

Severity Levels:

M Considerable loss of coarse aggregate greater than 20 per square yard (square meter), and/ or clusters of missing coarse aggregate are present.

H Surface is rough and pitted, and it may be completely removed in places.

Weathering

Description:

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

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

Severity Levels:

L Asphalt surface beginning to show signs of aging which may be accelerated by climatic conditions loss of fine aggregate mix is noticeable and may be accompanied by fading of the asphalt color. Edges of the aggregates are beginning to be exposed (less than 0.05 inches or 1 mm).

M Loss of the fine aggregate matrix is noticeable and the edges of the coarse aggregate have been exposed up to $1/4^{th}$ of the width (of the longest side) of the coarse aggregate due to the loss of fine aggregate matrix.

H Edges of the coarse aggregate have been exposed greater than $1/4^{th}$ of the width (of the longest side) of the coarse aggregate. There is considerable loss of fine aggregate matrix leading to potential or some loss of coarse aggregate.

PAVEMENT MAINTENANCE PROCEDURES

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

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

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

Crack Sealing

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

Digouts

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

Slurry Seals

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

Cape Seals

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

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

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

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

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

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

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

PAVEMENT REHABILITATION PROCEDURES

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

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

Conventional Overlays

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

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

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

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

Pulverization and Resurfacing

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

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

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

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

RHMA Overlays

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

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

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

AC Removal and Replacement (Mill and Fill)

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

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

Reconstruction

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

Section III

Pavement Management System Specifics

PAVEMENT MANAGEMENT SYSTEM SPECIFICS

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

BACKGROUND (STREETSAVER®)

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

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

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

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

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

Implementation

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

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

SYSTEM ASSUMPTIONS

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

PAVEMENT MAINTENANCE AND REHABILITATION (M&R) UNIT COSTS

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

Typical treatments within each generalized treatment range are listed below.

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

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

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

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

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

The unit costs include a 10% increase to account for potential PCC repairs that may be triggered by applying a maintenance or rehabilitation treatment to a street section. The unit costs also include a 15% allowance to account for engineering design fees and inspection. As well as a 10% contingency. These prices are in today's dollars (2020) and do not account for inflation.

TREATMENT	ARTERIAL	COLLECTOR	RESIDENTIAL
Cost/ Sq Yd			
Crack Seal ($$/LF)	$1.27	$1.27	$1.27
Light Maintenance	$7.40	$3.79	$3.79
Heavy Maintenance	$31.87	$31.87	$31.87
Light Rehab.	$44.40	$44.40	$44.40
Heavy Rehab.	$88.04	$88.04	$88.04
Reconstruct	$210.64	$156.29	$129.30

Decision Trees / Treatment Strategies

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

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

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

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

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

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

ANNUAL PAVEMENT MAINTENANCE / REHABILITATION PROGRAM

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

The new breakpoints are as follows:

PCI BREAKPOINTS

	Arterials		Collectors		Residential	
100	I		I		I	
90	LIGHT MAINTENANCE		LIGHT MAINTENANCE		LIGHT MAINTENANCE	
85			LIGHT MAINTENANCE			
80					LIGHT MAINTENANCE	
70	II (Non-Load)	III (Load)	II (Non-Load)	III (Load)	II (Non-Load)	III (Load)
	HEAVY MAINT.	LIGHT REHAB.	HEAVY MAINT.	LIGHT REHAB.	HEAVY MAINT.	LIGHT REHAB.
50	IV		IV		IV	
	HEAVY REHAB.		HEAVY REHAB.		HEAVY REHAB.	
25	V		V		V	
0	RECONSTRUCT		RECONSTRUCT		RECONSTRUCT	

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

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

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

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

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

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

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

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

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

VISUAL EVALUATIONS

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

SYSTEM UPDATES

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

Section IV
Reference Reports

Street List Alphabetical

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 4	Acacia Street	10	Main Street	Shasta Ave	R	720	21	15120	12/26/2019	**62**	04/28/2017	MICRO SURFACING
Zone 2	Alder Street	10	Sequoia Street	San Jacinto Street	R	595	36	21420	12/31/2019	**68**	11/15/2017	RUBBERIZED CHIP SEAL
Zone 2	Alder Street	20	San Jacinto Street	San Joaquin Street	R	630	36	22680	12/31/2019	**52**	11/15/2017	SLURRY SEAL
Zone 2	Alder Street	30	San Joaquin Street	Elena Street	R	635	36	22860	12/31/2019	**75**	11/15/2017	MICRO SURFACING
Zone 4	Allesandro Street	10	Las Tunas Street	La Loma Avenue	R	1475	26	38350	12/26/2019	**55**	11/16/2017	SLURRY SEAL
Zone 4	Alta Ct	10	Piney Way	East End	R	350	30	10500	12/26/2019	**75**	10/16/2012	MICRO SURFACING
Zone 4	Anchor Street	10	Madera Avenue	Kern Avenue	R	895	21	18795	12/26/2019	**71**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Anchor Street	20	Kern Avenue	Piney Avenue	R	1125	20	22500	12/26/2019	**72**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Anchor Street	30	Piney Way	Main Street	R	1310	34	44540	12/26/2019	**74**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Anchor Street	40	Main Street	West End	R	485	38	18430	12/26/2019	**71**	09/07/2018	SHALLOW PATCH
Zone 1	Andros Street	10	Sandalwood Avenue	Coral Ave	R	350	20	7000	12/27/2019	**83**	11/29/2013	RECONSTRUCT STRUCTURE (AC)
Zone 1	Andros Street	20	Coral Ave	EOS	R	300	20	6000	12/27/2019	**37**		
Zone 4	Arbutus Avenue	10	Carmel St	Ridgeway St	R	600	31	18600	12/27/2019	**69**	10/15/2001	SLURRY SEAL
Zone 4	Arbutus Avenue	20	Ridgeway St	EOS (South End)	R	550	26	14300	12/27/2019	**74**		
Zone 4	Arcadia Avenue	10	South End	Carmel Street	R	1200	30	36000	12/27/2019	**69**	11/16/2018	SHALLOW PATCH
Zone 3	Atascadero Road	10	Embarcadero	Park Street	C	1260	32	40320	01/03/2020	**75**	11/14/2017	MICRO SURFACING
Zone 3	Atascadero Road	20	Park Street	SB Off Ramp Hwy 1	C	770	54	41580	01/03/2020	**76**	01/01/2015	SLURRY SEAL
Zone 2	Avalon Street	10	Main Street	Ironwood Avenue	C	1420	30	42600	01/02/2020	**77**	04/28/2017	3 LAYER CAPE
Zone 2	Avalon Street	20	Ironwood Aveune	Laurel Avenue	R	290	33	9570	01/02/2020	**71**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 1	Azure Street	10	Coral Street	Sandalwood Avenue	R	505	38	19190	12/27/2019	**64**		
Zone 4	Balboa Street	10	Butte Avenue	La Loma Avenue	R	1930	22	42460	12/26/2019	**70**	10/16/2012	MICRO SURFACING
Zone 1	Bali Street	10	Sandalwood Avenue	End	R	640	20	12800	12/27/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 4	Barlow Lane	10	Main Street	End	R	565	26	14690	12/23/2019	**37**	11/13/2017	SLURRY SEAL
Zone 4	Bay Avenue	10	Marina Street	Pacific Street	R	375	27	10125	12/27/2019	**69**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Bayshore Drive	10	Main Street (N)	Main Street (E)	R	1005	22	22110	12/23/2019	**72**	04/28/2017	MICRO SURFACING
Zone 2	Bayview Avenue	10	Hill Street	Hillview Street	R	930	25	23250	01/02/2020	**83**	11/10/2017	3 LAYER CAPE
Zone 3	Beach Street	10	Embarcadero	Main Street	MiA	1190	46	54740	01/03/2020	**58**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Beach Street	20	Main Street	Monterey Aveune	R	290	46	13340	01/03/2020	**78**	01/03/2013	SLURRY SEAL
Zone 1	Beachcomber Street	10	Sienna Street	Hatteras Street	R	1200	20	24000	12/27/2019	**51**	11/02/2018	SHALLOW PATCH
Zone 1	Beachcomber Street	20	Java Street	Yerba Buena Street	C	2190	33	72270	12/27/2019	**65**	09/21/2018	SHALLOW PATCH
Zone 1	Beachcomber Street	30	Yerba Buena Street	North End	R	220	22	4840	12/27/2019	**40**		

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 4	Bella Vista Drive	10	Balboa Street	Allesandro St	R	545	20	10900	12/26/2019	**71**	05/15/2003	SLURRY SEAL
Zone 4	Bella Vista Drive	20	Allesandro St	Quintana St	R	235	32	7520	12/26/2019	**73**		
Zone 4	Bernardo Avenue	10	Luisita Street	Ridgeway Street	R	555	20	11100	12/24/2019	**76**	10/16/2012	MICRO SURFACING
Zone 4	Bernardo Avenue	20	Ridgeway Street	Olive Street	R	510	21	10710	12/24/2019	**76**	10/16/2012	MICRO SURFACING
Zone 4	Bernardo Avenue	30	Olive Street	Pacific Street	R	1600	20	32000	12/24/2019	**78**	10/16/2012	MICRO SURFACING
Zone 4	Bernardo Avenue	40	Pacific Street	Morro Bay Blvd	R	315	34	10710	12/24/2019	**80**	10/16/2012	MICRO SURFACING
Zone 3	Berwick Drive	10	Radcliff Street	Norwich Avenue	R	760	33	25080	12/31/2019	**62**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Berwick Drive	20	Norwich Avenue	Downing Street	R	500	33	16500	12/31/2019	**67**		
Zone 2	Birch Avenue	10	Sequoia Street	San Jacinto Street	R	620	35	21700	12/31/2019	**56**	11/14/2017	MICRO SURFACING
Zone 2	Birch Avenue	20	San Jacinto Street	San Joaquin Street	R	620	36	22320	12/31/2019	**80**	11/14/2017	MICRO SURFACING
Zone 2	Birch Avenue	30	San Joaquin Street	Elena Street	R	615	36	22140	12/31/2019	**82**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 1	Blanca Street	10	Panorama Drive	Tuscan Avenue	R	650	20	13000	12/30/2019	**62**	04/08/2015	SLURRY SEAL
Zone 3	Bolton Drive	10	Radcliff Street	Norwich Avenue	R	700	37	25900	12/31/2019	**58**	04/28/2017	3 LAYER CAPE
Zone 3	Bolton Drive	20	Norwich Avenue	Downing Street	R	770	37	28490	12/31/2019	**69**	04/28/2017	3 LAYER CAPE
Zone 2	Bonita Street	10	Greenwood Avenue	Main Street	C	970	44	42680	01/02/2020	**62**	04/01/2015	SLURRY SEAL
Zone 4	Bradley Avenue	10	Kern Avenue	Luisita Street	R	1400	20	28000	12/27/2019	**64**	11/16/2018	SHALLOW PATCH
Zone 4	Butte Avenue	10	Las Tunas Street	End	R	350	38	13300	12/26/2019	**73**	11/20/2017	RUBBERIZED CHIP SEAL
Zone 4	Cabrillo Place	10	Main Street	Bradley Avenue	R	600	20	12000	12/27/2019	**71**	11/16/2018	SHALLOW PATCH
Zone 1	Capri Street	10	Sandalwood Avenue	End	R	610	20	12200	12/27/2019	**47**	09/15/2003	SLURRY SEAL
Zone 4	Carmel Street	10	End	Kings Avenue	R	245	20	4900	12/26/2019	**79**	03/15/2019	SHALLOW PATCH
Zone 4	Carmel Street	20	Kings Avenue	Arbutus Avenue	R	910	26	23660	12/26/2019	**83**	03/14/2019	SLURRY SEAL
Zone 4	Carmel Street	30	Arbutus Avenue	Pecho Street	R	320	30	9600	12/26/2019	**67**	08/10/2018	SHALLOW PATCH
Zone 2	Casitas Street	10	Laurel Avenue	Nutmeg Avenue	R	250	21	5250	01/02/2020	**66**	04/28/2017	MICRO SURFACING
Zone 2	Cedar Avenue	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**34**	11/15/2017	SLURRY SEAL
Zone 2	Cedar Avenue	20	San Jacinto Street	San Joaquin Street	R	620	40	24800	12/31/2019	**80**	11/15/2017	MICRO SURFACING
Zone 2	Cedar Avenue	30	San Joaquin Street	Elena Street	R	590	31	18290	12/31/2019	**74**	11/15/2017	SLURRY SEAL
Zone 4	Center Court	10	Piney Way	East End	R	350	30	10500	12/27/2019	**75**	10/16/2012	MICRO SURFACING
Zone 4	Cerrito Place	10	Olive Street	Shasta Avenue	R	530	21	11130	12/26/2019	**67**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Clarabelle Drive	I10	Radcliff Street	Downing Street	R	1370	35	47950	12/31/2019	**78**	04/28/2017	MICRO SURFACING
Zone 3	Coleman Drive	10	West End	Embarcadero Rd	MiA	2200	23	50600	12/31/2019	**66**		
Zone 2	Conejo Street	10	Koa Avenue	Laurel Ave	R	185	23	4255	01/02/2020	**64**	04/28/2017	MICRO SURFACING

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Coral Avenue	10	Emerald Circle (South End)	Emerald Circle (North)	R	580	37	21460	12/27/2019	**83**	07/15/2005	SLURRY SEAL
Zone 1	Coral Avenue	30	Indigo Cir	San Jacinto St	C	495	45	22275	12/27/2019	**85**	03/13/2019	SLURRY SEAL
Zone 1	Coral Avenue	40	San Jacinto Street	Island St. (North End)	R	1720	20	34400	12/27/2019	**78**	04/28/2017	3 LAYER CAPE
Zone 1	Coral Avenue	50	Paul Creek	Java Street	R	270	18	4860	12/27/2019	**15**	05/15/2003	SLURRY SEAL
Zone 1	Coral Avenue (NB)	010	Emerald Cir	Indigo Ave	R	2145	17	36465	12/27/2019	**54**		
Zone 1	Coral Avenue (SB)	010	Indigo Ave	Emerald Cir	R	2100	17	35700	12/27/2019	**53**		
Zone 2	Cuesta Street	10	Laurel Avenue	Nutmeg Avenue	R	400	23	9200	01/02/2020	**45**	05/15/2003	SLURRY SEAL
Zone 4	Cypress Avenue	10	Main Street	North End	R	155	18	2790	12/26/2019	**69**	03/15/2019	SHALLOW PATCH
Zone 1	Damar Street	10	Sandalwood Avenue	End	R	595	20	11900	12/27/2019	**65**	11/13/2017	SLURRY SEAL
Zone 4	Dana Way	10	Cabrillo Place	Kern Avenue	R	410	17	6970	12/27/2019	**69**	10/15/2012	SLURRY SEAL
Zone 1	Dawson Street	10	Tuscan Avenue	Panorama Drive	R	590	23	13570	12/30/2019	**74**	12/18/2013	MICRO SURFACING
Zone 2	Dogwood Avenue	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**33**	07/27/2018	SHALLOW PATCH
Zone 2	Dogwood Avenue	20	San Jacinto Street	San Joaquin Street	R	620	40	24800	12/31/2019	**26**	10/15/2001	SLURRY SEAL
Zone 2	Dogwood Avenue	30	San Joaquin Street	Elena Street	R	575	36	20700	12/31/2019	**71**	11/20/2017	MICRO SURFACING
Zone 3	Downing Street	10	Bolton Dr	North End	R	745	38	28310	12/31/2019	**67**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Driftwood Street	10	Morro Ave	Main Street	R	325	48	15600	12/26/2019	**72**	03/15/2019	SHALLOW PATCH
Zone 4	Driftwood Street	20	Main Street	Piney Way	R	1320	36	47520	12/26/2019	**63**	10/15/2001	SLURRY SEAL
Zone 3	Dunbar Street	10	Prescott Drive	End	R	255	33	8415	12/31/2019	**35**	11/02/2018	SHALLOW PATCH
Zone 3	Dunes Street	10	West End	Main Street	R	925	46	42550	01/03/2020	**72**	04/28/2017	MICRO SURFACING
Zone 3	Dunes Street	20	Main Street	Kennedy Way	R	1030	46	47380	01/03/2020	**66**	04/28/2017	MICRO SURFACING
Zone 1	Easter Street	10	Highway 1	West End	R	1010	20	20200	12/27/2019	**50**	07/27/2018	SHALLOW PATCH
Zone 2	Elena Street	10	Main Street	Greenwood Avenue	C	960	42	40320	01/02/2020	**83**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Elena Street	20	Greenwood Avenue	Koa Avenue	C	885	32	28320	01/02/2020	**75**	04/28/2017	3 LAYER CAPE
Zone 2	Elm Street	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**61**	12/18/2013	MICRO SURFACING
Zone 2	Elm Street	20	San Jacinto Street	San Joaquin Street	R	625	36	22500	12/31/2019	**82**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Elm Street	30	San Joaquin Street	Elena Street	R	550	36	19800	12/31/2019	**82**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Elm Street	40	Bonita Street	Pico St (North End)	R	1000	33	33000	01/02/2020	**79**	03/12/2019	SLURRY SEAL
Zone 1	Emerald Circle	10	Emerald Circle (Round About)	Emerald Cir	R	2300	36	82800	12/27/2019	**86**	03/12/2019	SLURRY SEAL
Zone 3	Errol Street	10	Main Street	End	R	590	29	17110	12/30/2019	**44**	08/10/2018	SHALLOW PATCH
Zone 4	Estero Avenue	10	Piney Way	Olive Street	R	410	21	8610	12/27/2019	**70**	10/15/2012	SLURRY SEAL
Zone 4	Estero Avenue	20	Olive Street	Pacific Street	R	1580	21	33180	12/27/2019	**65**	10/15/2012	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 4	Fairview Avenue	10	South End	Kings Avenue	R	1170	25	29250	12/26/2019	**42**	08/10/2018	SHALLOW PATCH
Zone 4	Fig Street	10	Main Street	End	R	150	17	2550	12/26/2019	**27**		
Zone 2	Fir Avenue	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**43**	12/18/2013	MICRO SURFACING
Zone 2	Fir Avenue	20	San Jacinto Street	San Joaquin Street	R	625	36	22500	12/31/2019	**72**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Fir Avenue	30	San Joaquin Street	Elena Street	R	525	36	18900	12/31/2019	**77**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 1	Formosa Street	10	Sandalwood Avenue	End	R	545	20	10900	12/27/2019	**56**	10/15/2001	SLURRY SEAL
Zone 4	Fresno Avenue	10	Luisita Street	Ridgeway Street	R	545	20	10900	12/24/2019	**66**	10/16/2012	MICRO SURFACING
Zone 4	Fresno Avenue	20	Ridgeway Street	Olive Street	R	455	20	9100	12/24/2019	**67**	10/16/2012	MICRO SURFACING
Zone 4	Fresno Avenue	30	Olive Street	Pacific Street	R	1605	21	33705	12/24/2019	**71**	10/15/2012	SLURRY SEAL
Zone 3	Front Street	10	Harbor Street	Embarcadero Rd (N)	R	380	48	18240	01/03/2020	**63**	11/13/2017	SLURRY SEAL
Zone 3	Front Street	20	Harbor Street	Embarcadero Rd (S)	R	430	37	15910	01/03/2020	**76**	11/13/2017	SLURRY SEAL
Zone 1	Gilbert Street	10	Sandalwood Avenue	End	R	520	20	10400	12/27/2019	**47**	12/18/2013	MICRO SURFACING
Zone 2	Greenwood Avenue	10	End	San Jacinto Street	R	620	36	22320	01/02/2020	**57**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Greenwood Avenue	20	San Jacinto Street	San Joaquin Street	C	625	36	22500	01/02/2020	**53**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Greenwood Avenue	30	San Joaquin Street	Elena Street	C	500	36	18000	01/02/2020	**58**	04/28/2017	3 LAYER CAPE
Zone 2	Greenwood Avenue	40	Elena Street (North)	Avalon Street	C	1985	40	79400	01/02/2020	**56**	04/28/2017	3 LAYER CAPE
Zone 3	Harbor Street	10	Morro Bay Blvd	Piney Way	C	665	37	24605	01/03/2020	**81**	04/28/2017	3 LAYER CAPE
Zone 3	Harbor Street	20	Piney Way	Main Street	C	1345	47	63215	01/03/2020	**67**	04/01/2015	SLURRY SEAL
Zone 3	Harbor Street	30	Main Street	Market Street	C	690	47	32430	01/03/2020	**66**	04/01/2015	SLURRY SEAL
Zone 3	Harbor Street	40	Market Street	Embarcadero	C	305	47	14335	01/03/2020	**83**	01/03/2013	SLURRY SEAL
Zone 1	Hatteras Street	10	Beachcomber Drive	End	R	795	21	16695	12/27/2019	**77**	04/15/2015	SLURRY SEAL
Zone 2	Hemlock Avenue	10	Sequoia Street	San Jacinto Street	R	625	32	20000	01/02/2020	**40**	12/18/2013	MICRO SURFACING
Zone 2	Hemlock Avenue	20	San Jacinto Street	San Joaquin Street	R	625	32	20000	01/02/2020	**38**	07/15/2002	SLURRY SEAL
Zone 2	Hemlock Avenue	30	San Joaquin Street	Elena Street	R	480	32	15360	01/02/2020	**85**	03/12/2019	SLURRY SEAL
Zone 2	Hemlock Avenue	40	Elena Street	Avalon Street	R	1855	36	66780	01/02/2020	**41**	07/15/2002	SLURRY SEAL
Zone 2	Hill Street	10	Main Street	Sunset Court	R	785	24	18840	01/02/2020	**85**	04/12/2019	SHALLOW PATCH
Zone 2	Hill Street	20	Sunset Court	Atascadero	R	675	30	20250	01/02/2020	**34**	05/15/2003	SLURRY SEAL
Zone 3	Hillcrest Drive	10	Radcliff Avenue	Downing Street	R	1210	38	45980	12/31/2019	**65**	06/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Hillview Street	10	Bayview Avenue	Sunset Avenue	R	490	25	12250	01/02/2020	**85**	04/28/2017	3 LAYER CAPE
Zone 1	Indigo Circle	10	Coral Avenue	Indigo Cir	R	1360	37	50320	12/27/2019	**78**	07/15/2005	SLURRY SEAL
Zone 2	Ironwood Avenue	10	Del Mar Park	Sequoia Ct	R	550	32	17600	01/02/2020	**68**	07/15/2002	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	Ironwood Avenue	20	Sequoia Ct	San Jacinto Street	C	750	32	24000	01/02/2020	**71**	04/15/2015	SLURRY SEAL
Zone 2	Ironwood Avenue	30	San Jacinto Street	San Joaquin Street	C	655	32	20960	01/02/2020	**72**	04/01/2015	SLURRY SEAL
Zone 2	Ironwood Avenue	40	San Joaquin Street	Elena Street	C	545	32	17440	01/02/2020	**54**	04/01/2015	SLURRY SEAL
Zone 2	Ironwood Avenue	50	Elena Street	Avalon Street	C	1855	36	66780	01/02/2020	**71**	04/13/2018	SHALLOW PATCH
Zone 2	Ironwood Avenue	60	Avalon Street	Mimosa Street	C	870	42	36540	01/02/2020	**82**	11/15/2017	MICRO SURFACING
Zone 2	Ironwood Avenue	70	Mimosa Street	Highway 41	C	490	27	13230	01/02/2020	**82**	11/15/2017	RUBBERIZED CHIP SEAL
Zone 2	Ironwood Court	10	Ironwood Avenue	EOS	R	325	33	10725	01/02/2020	**63**		
Zone 1	Island Street	10	Panorama Drive	Main Street	R	910	22	20020	12/30/2019	**38**	12/18/2013	MICRO SURFACING
Zone 1	Island Street	20	Sandalwood Avenue	Coral Avenue	R	350	20	7000	12/27/2019	**73**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 1	Jamaica Street	15	Panorama Drive	Main St	R	880	22	21040	12/30/2019	**47**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 1	Java Street	15	Panorama Drive	Main St	R	885	20	19400	12/30/2019	**35**		
Zone 1	Java Street	30	Coral Street	Beachcomber Drive	R	650	28	18200	12/27/2019	**60**	11/02/2018	SHALLOW PATCH
Zone 2	Juniper Avenue	10	North End	Elena Street	R	1840	37	68080	01/02/2020	**81**	03/12/2019	SLURRY SEAL
Zone 2	Juniper Avenue	20	Elena St	Avalon St	R	1890	28	52920	01/02/2020	**85**	03/13/2019	SLURRY SEAL
Zone 3	Kennedy Way	10	Quintana Road	Shasta Avenue	R	825	35	28875	01/03/2020	**74**	04/28/2017	3 LAYER CAPE
Zone 4	Kern Avenue	10	Morro Bay Blvd	Pacific Street	C	380	38	14440	12/23/2019	**62**	09/07/2018	SHALLOW PATCH
Zone 4	Kern Avenue	15	Pacific St	Ridgeway St	C	2050	22	45100	12/23/2019	**61**	11/16/2018	SHALLOW PATCH
Zone 4	Kern Avenue	20	Ridgeway Street	Main Street	C	2480	22	54560	12/23/2019	**67**	10/16/2012	MICRO SURFACING
Zone 4	Kings Avenue	05	Quintana	Las Tunas	C	380	39	14820	12/26/2019	**62**		
Zone 4	Kings Avenue	10	Las Tunas Street	Balboa Street	C	285	37	10545	12/26/2019	**40**		
Zone 4	Kings Avenue	15	Balboa Street	Pacific Street	C	300	24	7200	12/26/2019	**83**	11/20/2017	MICRO SURFACING
Zone 4	Kings Avenue	20	Pacific Street	Carmel Street	C	925	22	20350	12/26/2019	**83**	11/29/2013	RECONSTRUCT STRUCTURE (AC)
Zone 4	Kings Avenue	30	Carmel Street	Ridgeway Street	C	675	24	16200	12/26/2019	**83**	11/29/2013	RECONSTRUCT STRUCTURE (AC)
Zone 4	Kings Avenue	40	Ridgeway Street	South End	R	545	20	10900	12/26/2019	**41**	02/23/2018	SHALLOW PATCH
Zone 2	Koa Avenue	10	Laurel Avenue	North End	R	1480	23	34040	01/02/2020	**72**	04/28/2017	MICRO SURFACING
Zone 1	Kodiak Street	15	Panorama Drive	Main St	R	880	20	19700	12/30/2019	**69**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 1	Kodiak Street	30	Beachcomber Drive	End	R	655	21	13755	12/30/2019	**77**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 2	La Jolla Street	10	Main Street	Greenwood Avenue	R	970	36	34920	01/02/2020	**66**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 4	La Loma Street	10	Balboa Street	Quintana Road	R	975	27	26325	12/26/2019	**55**	11/16/2017	SLURRY SEAL
Zone 4	Las Tunas Street	10	Butte Ave	Kings Ave	R	912	35	31920	12/26/2019	**72**	10/15/2012	SLURRY SEAL
Zone 4	Las Tunas Street	20	Kings Ave	La Loma Dr	R	1143	25	28575	12/26/2019	**61**		

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	Las Vegas Street	10	Elm Avenue	Main Street	R	700	22	15400	01/02/2020	**46**	08/10/2018	SHALLOW PATCH
Zone 2	Laurel Avenue	10	North End	South End	R	2260	22	49720	01/02/2020	**57**	04/28/2017	MICRO SURFACING
Zone 3	Little Morro Creek Road	10	Radcliff	Bike Park	R	460	19	8740	01/03/2020	**57**	03/13/2019	SLURRY SEAL
Zone 3	Little Morro Creek Road	15	Bike Park	End of Curve	R	1740	19	33060	01/03/2020	**82**	03/14/2019	SLURRY SEAL
Zone 3	Little Morro Creek Road	20	End of Curve	County COP	R	1800	19	34200	01/03/2020	**28**	05/15/2003	SLURRY SEAL
Zone 4	Luista Street	10	Kern Avenue	Piney Way	R	875	20	17500	12/27/2019	**50**		
Zone 1	Luzon Street	15	Panorama Drive	Main St	R	885	22	20320	12/30/2019	**64**	04/28/2017	3 LAYER CAPE
Zone 1	Luzon Street	30	Beachcomber Drive	End	R	640	21	13440	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 4	Madera Avenue	10	Pecho Street	Pacific Street	R	780	20	15600	12/26/2019	**54**	05/15/2003	SLURRY SEAL
Zone 4	Main Street	100	Walnut St	Piney Ln (Trailer Park)	MiA	917	32	29344	12/23/2019	**61**		
Zone 4	Main Street	110	Piney Ln (Trailer Park)	State Park Entrance	MiA	900	37	33300	12/23/2019	**74**		
Zone 1	Main Street	15	Yerba Buena Street	Vashon Street	MiA	375	35	13125	12/23/2019	**80**	03/12/2019	SLURRY SEAL
Zone 1	Main Street	20	Vashon Street	San Jacinto Street	MiA	4030	36	145080	12/23/2019	**66**	12/10/2010	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Main Street	30	San Jacinto Street	Atascadero Rd	MiA	5225	37	193325	12/23/2019	**70**	12/10/2010	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Main Street	40	Atascadero Rd	Radcliff	MiA	2550	35	89250	12/23/2019	**60**	12/10/2010	MICRO SURFACING
Zone 1	Main Street	5	Zanzibar Street	Yerba Buena Street	MiA	200	31	6200	12/23/2019	**72**	05/15/2003	SLURRY SEAL
Zone 3	Main Street	50	Radcliff	Quintana Place	MiA	860	52	44720	12/23/2019	**64**	01/01/2012	MILL AND THICK OVERLAY
Zone 3	Main Street	60	Quintana Place	Surf Street (S)	MiA	640	52	33280	12/23/2019	**80**	11/20/2017	MICRO SURFACING
Zone 3	Main Street	65	Surf Street	Beach Street	MiA	515	52	26780	12/23/2019	**58**	12/10/2010	MICRO SURFACING
Zone 3	Main Street	70	Beach Street	Morro Bay Blvd	MiA	1050	52	54600	12/23/2019	**67**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Main Street	80	Morro Bay Blvd	Olive Street	MiA	2130	47	100110	12/23/2019	**74**		
Zone 4	Main Street	90	Olive Street	Walnut St	MiA	1220	26	31720	12/23/2019	**66**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Maple Avenue	10	Cuesta Street	End	R	580	20	11600	01/02/2020	**82**	03/21/2019	SLURRY SEAL
Zone 4	Marengo Drive	10	Bella Vista Drive	La Loma Avenue	R	520	25	13000	12/26/2019	**66**	10/16/2012	MICRO SURFACING
Zone 4	Marina Street	10	Madera Avenue	Kern Avenue	R	885	21	18585	12/26/2019	**74**	10/15/2012	SLURRY SEAL
Zone 4	Marina Street	20	Kern Avenue	Piney Way	R	1130	20	22600	12/26/2019	**78**	10/15/2012	SLURRY SEAL
Zone 4	Marina Street	30	Piney Way	Main Street	R	1315	44	57860	12/26/2019	**78**	01/03/2013	SLURRY SEAL
Zone 4	Marina Street	40	Main Street	Embarcadero	C	750	45	33750	01/03/2020	**78**	01/03/2013	SLURRY SEAL
Zone 3	Market Avenue	10	Surf Street	Beach Street	R	490	46	22540	12/31/2019	**60**	04/01/2015	SLURRY SEAL
Zone 3	Market Avenue	20	Beach Street	Harbor Street	C	650	46	29900	12/31/2019	**66**	04/08/2015	SLURRY SEAL
Zone 3	Market Avenue	30	Harbor Street	Pacific Street	C	640	45	28800	12/31/2019	**62**	04/08/2015	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 4	Mesa Street	10	Kern Avenue	Madera Avenue	R	885	20	17700	12/27/2019	**73**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Mimosa Street	10	Hill Street	Ironwood Avenue	R	640	33	21120	01/02/2020	**80**	01/01/2013	SLURRY SEAL
Zone 1	Mindoro Street	15	Panorama Drive	Main St	R	890	24	21360	12/30/2019	**43**	04/28/2017	3 LAYER CAPE
Zone 1	Mindoro Street	30	Beachcomber Drive	End	R	620	21	13020	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 1	Mindoro Way	10	Beachcomber Drive	Mindoro Street	R	325	21	6825	12/30/2019	**59**	11/13/2017	SLURRY SEAL
Zone 3	Monterey Alley	10	Surf Street	End	R	200	20	4000	01/03/2020	**74**		
Zone 3	Monterey Avenue	10	Surf Street	Beach Street	R	470	37	17390	01/03/2020	**81**	04/28/2017	MICRO SURFACING
Zone 3	Monterey Avenue	20	Beach Street	Harbor Street	R	665	46	30590	01/03/2020	**61**	04/28/2017	MICRO SURFACING
Zone 3	Monterey Avenue	30	Harbor Street	Morro Bay Blvd	R	295	46	13570	01/03/2020	**64**	04/28/2017	MICRO SURFACING
Zone 3	Monterey Avenue	40	Morro Bay Blvd	Pacific Street	R	295	46	13570	01/03/2020	**70**	11/13/2017	SLURRY SEAL
Zone 4	Monterey Avenue	50	Pacific Street	Marina Street	R	300	45	13500	12/26/2019	**78**	11/13/2017	SLURRY SEAL
Zone 4	Monterey Avenue	60	Marina Street	Olive Street	R	1415	35	49525	12/26/2019	**65**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Avenue	10	Scott Street	Surf Street	R	430	27	11610	12/31/2019	**60**	09/15/2003	SLURRY SEAL
Zone 3	Morro Avenue	20	Surf Street	Beach Street	R	700	31	21700	12/31/2019	**67**	10/15/2012	SLURRY SEAL
Zone 3	Morro Avenue	30	Beach Street	Harbor Street	R	645	46	29670	12/31/2019	**71**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Avenue	40	Harbor Street	Morro Bay Blvd	R	295	46	13570	12/31/2019	**71**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Avenue	50	Morro Bay Blvd	Pacific Street	R	300	46	13800	12/31/2019	**85**	03/13/2019	SLURRY SEAL
Zone 3	Morro Avenue	60	Pacific Street	Marina Street	R	300	46	13800	12/31/2019	**87**	03/13/2019	SLURRY SEAL
Zone 3	Morro Avenue	70	Marina St.	South St	R	910	40	36400	12/31/2019	**45**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Avenue	80	South St	Olive St	R	560	37	20720	12/31/2019	**75**		
Zone 3	Morro Bay BLVD	10	Market Avenue	Main Street	MiA	670	46	30820	12/31/2019	**70**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	20	Main Street	Piney Way	MiA	1360	46	62560	12/31/2019	**70**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	30	Piney Way	Round-About	MiA	1295	52	67340	12/31/2019	**73**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	40	Round-About	Round-About	MiA	290	20	5800	12/31/2019	**70**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	50	Round-About	Bridge Deck	MiA	410	40	16400	12/31/2019	**51**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD Alley	10	Piney Way	Bernardo Ave	R	565	15	8475	01/03/2020	**21**		
Zone 3	Morro Bay BLVD Alley	20	Bernardo Ave	Kern Ave	R	430	13	5590	01/03/2020	**47**		
Zone 3	Napa Avenue	10	North End	Harbor Street	R	475	46	21850	01/03/2020	**56**	04/28/2017	MICRO SURFACING
Zone 3	Napa Avenue	20	Harbor Street	Morro Bay Blvd	R	295	46	13570	01/03/2020	**85**	03/14/2019	SLURRY SEAL
Zone 3	Napa Avenue	30	Morro Bay Blvd	Pacific Street	R	295	41	12095	01/03/2020	**83**	03/14/2019	SLURRY SEAL
Zone 4	Napa Avenue	40	Pacific Street	Marina Street	R	295	36	10620	12/26/2019	**85**	03/14/2019	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 4	Napa Avenue	50	Marina Street	Olive Street	R	1435	38	54530	12/26/2019	**85**	03/13/2019	SLURRY SEAL
Zone 1	Nassau Street	10	Panorama Drive	Tide Avenue	R	455	24	10920	12/30/2019	**67**	12/20/2013	MICRO SURFACING
Zone 1	Nassau Street	20	Tide Avenue	Main Street	R	440	34	14960	12/30/2019	**70**	12/20/2013	MICRO SURFACING
Zone 1	Nevis Street	15	Panorama Drive	Nassau St	R	825	25	20625	12/30/2019	**65**	06/01/2018	DIGOUTS
Zone 3	Norwich Street	10	Hillcrest Drive	Clarabelle Drive	R	405	33	13365	12/31/2019	**54**	12/20/2013	MICRO SURFACING
Zone 3	Norwich Street	20	Clarabelle Drive	Prescott Drive	R	405	33	13365	12/31/2019	**66**	12/20/2013	MICRO SURFACING
Zone 2	Nutmeg Avenue	10	South End	North End	R	2295	23	52785	01/02/2020	**74**	04/28/2017	MICRO SURFACING
Zone 1	Oahu Street	10	Panorama Drive	Tide Avenue	R	580	22	12760	12/30/2019	**30**	12/18/2013	MICRO SURFACING
Zone 1	Oahu Street	20	Tide Avenue	Main Street	R	420	22	9240	12/30/2019	**50**	12/18/2013	MICRO SURFACING
Zone 4	Oak Street	10	Main Street	Shasta Avenue	R	155	26	4030	12/26/2019	**82**	10/15/2012	SLURRY SEAL
Zone 4	Olive Street	10	Kern Avenue	Piney Way	R	1110	20	22200	12/26/2019	**57**		
Zone 4	Olive Street	20	Piney Way	Main Street	R	1335	37	49395	12/26/2019	**80**	01/02/2013	SLURRY SEAL
Zone 4	Olive Street	30	Main Street	Morro Avenue	R	300	49	14700	12/26/2019	**75**	10/16/2012	MICRO SURFACING
Zone 1	Orcas Street	15	Panorama Drive	Main St	R	1020	20	20400	12/30/2019	**82**	02/15/2019	SHALLOW PATCH
Zone 1	Orcas Street	30	Highway 1	End	R	515	21	10815	12/30/2019	**36**	11/20/2017	SLURRY SEAL
Zone 1	Orcus Way	10	Orcas Street	End	R	360	21	7560	12/30/2019	**40**	11/13/2017	SLURRY SEAL
Zone 3	Orton Street	10	Prescott Drive	End	R	185	33	6105	12/31/2019	**44**	05/15/2003	SLURRY SEAL
Zone 4	Pacific Street	10	Kings Street	Kern Avenue	C	1355	20	27100	12/27/2019	**77**	04/28/2017	3 LAYER CAPE
Zone 4	Pacific Street	20	Kern Avenue	Piney Way	C	1130	32	36160	12/27/2019	**42**	05/18/2018	SHALLOW PATCH
Zone 3	Pacific Street	30	Piney Way	Main Street	C	1320	45	59400	01/03/2020	**56**	05/18/2018	SHALLOW PATCH
Zone 3	Pacific Street	40	Main Street	Embarcadero	C	840	45	37800	01/03/2020	**73**	01/03/2013	SLURRY SEAL
Zone 4	Palm Avenue	10	Acacia Street	Walnut Street	R	315	24	7560	12/26/2019	**64**	03/15/2019	SHALLOW PATCH
Zone 1	Panay Street	15	Panorama Drive	Main St	R	990	21	23310	12/30/2019	**31**	08/17/2018	DIGOUTS
Zone 1	Panay Street	30	Beachcomber Street	End	R	465	21	9765	12/30/2019	**85**	03/12/2019	SLURRY SEAL
Zone 1	Panorama Drive	10	Blanca Street	Zanzibar Street	R	300	22	6600	12/30/2019	**75**	03/12/2019	SLURRY SEAL
Zone 1	Panorama Drive	20	Zanzibar Street	Trinidad Street	R	890	25	22250	12/30/2019	**85**	04/01/2015	RECONSTRUCT STRUCTURE (AC)
Zone 1	Panorama Drive	30	Trinidad Street	Nevis Street	R	1010	20	20200	12/30/2019	**65**	04/28/2017	3 LAYER CAPE
Zone 1	Panorama Drive	40	Nevis Street	Mindoro Street	R	420	14	5880	12/30/2019	**78**	04/28/2017	3 LAYER CAPE
Zone 1	Panorama Drive	50	COP at Mindoro St	Luzon St	R	170	14	2380	12/30/2019	**76**		
Zone 1	Panorama Drive	60	Luzon St	Jamaica St	R	513	11	5643	12/30/2019	**75**		
Zone 1	Panorama Drive	70	Jamaica St	Island St	R	157	11	1727	12/30/2019	**30**		

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 3	Park Street	10	Atascadero Road	End	R	470	27	12690	12/30/2019	**58**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Paula Street	10	Greenwood Avenue	Juniper Avenue	R	600	35	21000	01/02/2020	**35**	07/15/2002	SLURRY SEAL
Zone 3	Pelican Drive	10	Market Avenue	Dunes Street	R	280	26	7280	01/03/2020	**64**		
Zone 2	Pico Street	10	East End	Main Street	R	825	21	17325	01/02/2020	**85**	11/20/2017	RUBBERIZED CHIP SEAL
Zone 4	Piney Lane	10	Piney Way	End	R	365	17	6205	12/26/2019	**83**	03/14/2019	SLURRY SEAL
Zone 4	Piney Way	10	Main Street	Luisita Street	C	880	38	33440	12/27/2019	**75**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 4	Piney Way	20	Luisita Street	Olive Street	C	730	22	16060	12/27/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 4	Piney Way	30	Olive Street	South Street	C	600	28	16800	12/27/2019	**85**	04/28/2017	3 LAYER CAPE
Zone 4	Piney Way	40	South Street	Morro Bay Blvd	C	1565	43	67295	12/27/2019	**77**	04/28/2017	3 LAYER CAPE
Zone 3	Piney Way	50	Morro Bay Blvd	Harbor Street	C	285	40	11400	01/03/2020	**52**	07/15/2002	SLURRY SEAL
Zone 3	Piney Way	60	Harbor Street	Kennedy Way	C	400	30	12000	01/03/2020	**81**	07/15/2002	SLURRY SEAL
Zone 2	Ponderosa Street	10	Ironwood Avenue	End	R	880	23	20240	01/02/2020	**82**	04/28/2017	DOUBLE CHIP SEAL
Zone 3	Prescott Drive	10	Radcliff Street	South End	R	815	33	26895	12/31/2019	**77**	04/28/2017	3 LAYER CAPE
Zone 3	Preston Lane	10	Main Street	End	R	480	33	15840	12/30/2019	**36**		
Zone 3	Quintana Place	10	Main Street	End	R	150	34	5100	01/03/2020	**34**	04/01/2015	SLURRY SEAL
Zone 3	Quintana Road	10	Main Street	Morro Bay BLVD	C	3300	37	122100	01/03/2020	**72**	10/15/2012	SLURRY SEAL
Zone 4	Quintana Road	20	Morro Bay Blvd	La Loma Avenue	C	2340	41	95940	12/24/2019	**48**	12/18/2013	MICRO SURFACING
Zone 4	Quintana Road	30	La Loma Avenue	South Bay Blvd	C	2910	34	98940	12/24/2019	**57**	12/18/2013	MICRO SURFACING
Zone 4	Quintana Road	40	South Bay Blvd	City Limit	R	1600	30	48000	12/24/2019	**63**	04/15/2015	SLURRY SEAL
Zone 3	Radcliff Street	10	Main Street	East End	C	1330	39	51870	12/31/2019	**49**	11/02/2018	SHALLOW PATCH
Zone 1	Rennell Street	15	Panorama Drive	Main St	R	1015	20	20725	12/30/2019	**80**	03/13/2019	SLURRY SEAL
Zone 1	Rennell Street	30	Beachcomber Drive	End	R	410	21	8610	12/30/2019	**22**	10/15/2001	SLURRY SEAL
Zone 2	Reno Court	10	Bonita Street	End	R	400	33	13200	12/31/2019	**41**	05/15/2003	SLURRY SEAL
Zone 4	Ridgeway Street	10	Fairview (East End)	Kings Ave	R	425	22	9350	12/27/2019	**79**	11/16/2017	SLURRY SEAL
Zone 4	Ridgeway Street	15	Kings Ave	Arbutus Ave	C	775	22	17050	12/27/2019	**58**	11/16/2017	SLURRY SEAL
Zone 4	Ridgeway Street	20	Arbutus Avenue	Kern Avenue	C	295	21	6195	12/27/2019	**69**	11/16/2018	SHALLOW PATCH
Zone 4	Ridgeway Street	30	Kern Avenue	Piney Way	R	1130	21	23730	12/27/2019	**73**	10/15/2012	SLURRY SEAL
Zone 2	Rockview Street	10	Hill Street	West End	R	365	30	10950	01/02/2020	**75**		
Zone 2	Rockview Street	20	Conform	Sunset Avenue	R	270	13	3510	08/26/2016	**4**		
Zone 1	San Jacinto Street	10	Sandalwood Avenue	Highway 1	C	675	37	24975	12/27/2019	**45**	04/15/2015	SLURRY SEAL
Zone 2	San Jacinto Street	20	Main St	COP at Alder Ave	C	170	60	10200	01/02/2020	**71**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	San Jacinto Street	30	COP at Alder Ave	COP East of Birch	C	155	32	4960	01/02/2020	**82**		
Zone 2	San Jacinto Street	40	COP East of Birch Ave	Ironwood Ave	C	1100	36	39600	01/02/2020	**65**	11/02/2018	SHALLOW PATCH
Zone 2	San Joaquin Street	10	Main Street	Juniper Avenue	R	1655	35	57925	01/02/2020	**62**	04/08/2015	SLURRY SEAL
Zone 2	San Joaquin Street	20	Juniper Avenue	East End	R	135	38	5130	01/02/2020	**61**	04/01/2015	SLURRY SEAL
Zone 2	San Juan Street	10	Ironwood Avenue	Koa Avenue	R	485	25	12125	01/02/2020	**74**	04/28/2017	3 LAYER CAPE
Zone 1	Sandalwood Avenue	10	Azure Street	San Jacinto Street	R	265	28	7420	12/30/2019	**65**	04/08/2015	SLURRY SEAL
Zone 1	Sandalwood Avenue	20	San Jacinto Street	Java Street	C	1930	28	54040	12/30/2019	**78**	04/01/2015	SLURRY SEAL
Zone 3	Scott Street	10	Morro Avenue	Surf Street	R	815	28	22820	12/31/2019	**70**	10/16/2012	MICRO SURFACING
Zone 3	Scott Street	20	Surf Street	Beach Street	R	490	21	10290	01/03/2020	**74**	01/01/2012	SLURRY SEAL
Zone 2	Seaview Avenue	10	Hill Street	Avalon Street	R	1010	24	24240	01/02/2020	**85**	11/20/2017	MICRO SURFACING
Zone 3	Selby Street	10	Prescott Drive	End	R	105	33	3465	12/31/2019	**41**	11/02/2018	SHALLOW PATCH
Zone 2	Sequoia Court	10	Ironwood Avenue	End	R	680	38	25840	01/02/2020	**76**	09/15/2003	SLURRY SEAL
Zone 2	Sequoia Street	10	Main Street	Hemlock Avenue	R	1190	38	45220	01/02/2020	**67**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Shasta Avenue	10	Main Street	Acacia Street	C	755	22	16610	12/26/2019	**56**	10/19/2018	SHALLOW PATCH
Zone 4	Shasta Avenue	15	Acacia St	Olive St	C	730	32	23360	12/26/2019	**82**		
Zone 4	Shasta Avenue	20	Olive Street	South Street	C	570	31	17670	12/26/2019	**79**	11/20/2017	RUBBERIZED CHIP SEAL
Zone 4	Shasta Avenue	25	South St	Marina St	C	905	35	31675	12/26/2019	**37**		
Zone 4	Shasta Avenue	30	Marina Street	Pacific Street	C	300	38	11400	12/26/2019	**45**	10/19/2018	SHALLOW PATCH
Zone 3	Shasta Avenue	40	Pacific Street	Morro Bay Blvd	C	295	37	10915	01/03/2020	**52**	10/15/2001	SLURRY SEAL
Zone 3	Shasta Avenue	50	Morro Bay Blvd	Harbor Street	C	295	47	13865	01/03/2020	**54**	10/15/2001	SLURRY SEAL
Zone 3	Shasta Avenue	60	Harbor Street	Dunes Street	C	295	47	13865	01/03/2020	**58**	10/15/2001	SLURRY SEAL
Zone 1	Sicily Street	15	Panorama Drive	Main St	R	1000	21	21000	12/30/2019	**39**	07/27/2018	DIGOUTS
Zone 1	Sicily Street	30	Beachcomber Drive	End	R	350	21	7350	12/30/2019	**83**	11/20/2017	MICRO SURFACING
Zone 1	Sienna Street	10	Beachcomber Drive	Terra Street	R	1100	20	22000	12/27/2019	**66**	04/28/2017	3 LAYER CAPE
Zone 4	Sierra Court	10	Piney Way	East End	R	350	30	10500	12/27/2019	**78**	10/16/2012	MICRO SURFACING
Zone 4	South Bay BLVD	10	Teresa Way	Quintana Road	MiA	1015	34	34510	12/26/2019	**91**	04/15/2015	RECONSTRUCT SURFACE (AC)
Zone 4	South Bay BLVD	20	Quintana Road	Twin Bridges	MiA	3045	32	97440	12/26/2019	**75**	11/21/2017	RUBBERIZED CHIP SEAL
Zone 4	South Bay BLVD	30	Twin Bridges	City Limits	MiA	2030	34	69020	12/26/2019	**71**	11/21/2017	SLURRY SEAL
Zone 4	South Street	10	Morro Avenue	Main Street	R	300	36	10800	12/26/2019	**75**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 4	South Street	20	Main Street	Monterey Avenue	R	310	36	11160	12/26/2019	**78**	10/15/2012	SLURRY SEAL
Zone 4	South Street	40	Napa Avenue	Piney Way	R	650	30	19500	12/26/2019	**69**	06/15/2000	THIN AC OVERLAY(1.5 INCHES)

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	Sunset Avenue	15	Rockview	Crest Street	R	140	32	4480	01/02/2020	**93**	10/02/2017	RECONSTRUCT STRUCTURE (AC)
Zone 2	Sunset Avenue	20	Crest Street	Hill Street	R	410	34	13940	01/02/2020	**75**		
Zone 2	Sunset Avenue	30	Hill Street	Hillview Street	R	715	22	15730	01/02/2020	**85**	04/28/2017	3 LAYER CAPE
Zone 2	Sunset Avenue	8	Atascadero	Rockview Street	R	230	27	6210	01/02/2020	**64**	10/02/2017	RECONSTRUCT STRUCTURE (AC)
Zone 2	Sunset Court	10	Hill Street	End	R	450	33	14850	01/02/2020	**64**		
Zone 3	Surf Alley	10	Main Street	East End	R	610	20	12200	01/03/2020	**73**		
Zone 3	Surf Street	10	East End	Main Street	R	515	31	15965	12/31/2019	**32**	06/01/2018	SHALLOW PATCH
Zone 3	Surf Street	20	Main Street	Market Avenue	R	780	33	25740	12/31/2019	**36**		
Zone 3	Surf Street	30	Market Avenue	West End	R	500	48	24000	12/31/2019	**49**	07/15/2002	SLURRY SEAL
Zone 1	Tahiti Street	15	Panorama Drive	Main St	R	945	24	21840	12/30/2019	**74**		
Zone 1	Tahiti Street	30	Beachcomber Drive	End	R	300	20	6000	12/30/2019	**85**	03/12/2019	SLURRY SEAL
Zone 4	Teresa Ave	10	South Bay Blvd	EOS	R	750	31	23250	12/24/2019	**63**		
Zone 1	Terra Street	10	Sandalwood Avenue	Sienna St	R	700	20	14000	12/27/2019	**82**	11/14/2017	MICRO SURFACING
Zone 3	The Embarcadero	10	South End	COP @ 910'	C	910	40	36400	12/31/2019	**57**	05/15/2003	SLURRY SEAL
Zone 3	The Embarcadero	20	COP @ 910"	Beach Street	C	2790	36	100440	12/31/2019	**67**	05/15/2003	SLURRY SEAL
Zone 3	The Embarcadero	30	Beach Street	Power Plant Entrance	MiA	1840	54	99360	12/31/2019	**70**	10/16/2012	MICRO SURFACING
Zone 3	The Embarcadero	40	Power Plant Entrance	Coleman Drive	MiA	700	23	16100	12/31/2019	**72**		
Zone 3	The Embarcadero	60	Morro Creek	Atascadero Road	C	935	31	28985	01/03/2020	**54**	05/15/2003	SLURRY SEAL
Zone 1	Tide Avenue	10	Island Street	Nevis Street	R	1130	20	22600	12/30/2019	**50**	11/02/2018	SHALLOW PATCH
Zone 1	Tide Avenue	20	Nevis Street	Vashon Street	R	1370	20	27400	12/30/2019	**75**	06/29/2018	DIGOUTS
Zone 1	Tide Avenue	30	Vashon Street	Zanzibar Street	R	535	20	10700	12/30/2019	**62**	03/14/2019	SLURRY SEAL
Zone 1	Toro Lane	10	Yerba Buena Street	North End	R	420	23	9660	12/30/2019	**63**		
Zone 1	Trinidad Street	15	Panorama Drive	Main St	R	950	21	21630	12/30/2019	**55**	04/12/2019	DIGOUTS
Zone 1	Trinidad Street	30	Beachcomber Drive	End	R	320	20	6400	12/30/2019	**64**	06/15/1995	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Tulare Avenue	10	South End	Carmel Street	R	1200	26	31200	12/27/2019	**73**		
Zone 1	Tuscan Avenie	10	Blanca Street	Whidbey Street	R	700	20	14000	12/30/2019	**53**	04/28/2017	3 LAYER CAPE
Zone 1	Vashon Street	10	Tide Avenue	Main Street	R	385	24	9240	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 1	Vashon Street	20	Beachcomber Drive	End	R	265	20	5300	12/30/2019	**61**	03/12/2019	SLURRY SEAL
Zone 1	Verdon Street	10	Sandalwood Avenue	Coral Avenue	R	430	20	8600	12/27/2019	**83**	03/12/2019	SLURRY SEAL
Zone 4	Vista Street	10	Piney Way	Shasta Avenue	R	310	29	8990	12/26/2019	**83**	04/28/2017	MICRO SURFACING
Zone 4	Walnut Street	10	Main Street	Shasta Avenue	R	420	20	8400	12/26/2019	**83**	04/28/2017	MICRO SURFACING

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 3	West Avenue	10	Beach Street	Surf Street	R	490	30	14700	01/03/2020	**85**	03/14/2019	SLURRY SEAL
Zone 1	Whidbey Street	10	Tuscan Avenue	Panorama Dr	R	255	20	5100	12/30/2019	**67**	04/01/2015	SLURRY SEAL
Zone 1	Whidbey Street	15	Panorama Dr	Tide Ave	R	590	22	12980	12/30/2019	**59**	12/22/2017	DIGOUTS
Zone 1	Whidbey Street	20	Beachcomber Drive	EOS	R	250	20	5000	12/30/2019	**56**	09/15/2003	SLURRY SEAL
Zone 1	Whidbey Way	10	Whidbey Street	Panorama Drive	R	490	20	9800	12/30/2019	**44**	12/18/2013	MICRO SURFACING
Zone 1	Yerba Buena Street	10	Tuscan Avenue	Panorama Drive	R	380	17	6460	12/30/2019	**55**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Yerba Buena Street	20	Panorama Drive	Highway 1	C	945	22	20790	12/30/2019	**73**	12/18/2013	MICRO SURFACING
Zone 1	Yerba Buena Street	30	Highway 1	Beachcomber Drive	C	200	40	8000	12/30/2019	**74**	12/18/2013	MICRO SURFACING
Zone 1	Zanzibar Street	10	Tuscan Avenue	Panorama Drive	R	540	20	10800	12/30/2019	**55**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Zanzibar Street	20	Panorama Drive	Main Street	R	900	20	18000	12/30/2019	**83**	04/28/2017	3 LAYER CAPE

Street List PCI High to Low

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	Sunset Avenue	15	Rockview	Crest Street	R	140	32	4480	01/02/2020	**93**	10/02/2017	RECONSTRUCT STRUCTURE (AC)
Zone 4	South Bay BLVD	10	Teresa Way	Quintana Road	MiA	1015	34	34510	12/26/2019	**91**	04/15/2015	RECONSTRUCT SURFACE (AC)
Zone 3	Morro Avenue	60	Pacific Street	Marina Street	R	300	46	13800	12/31/2019	**87**	03/13/2019	SLURRY SEAL
Zone 1	Emerald Circle	10	Emerald Circle (Round About)	Emerald Cir	R	2300	36	82800	12/27/2019	**86**	03/12/2019	SLURRY SEAL
Zone 1	Coral Avenue	30	Indigo Cir	San Jacinto St	C	495	45	22275	12/27/2019	**85**	03/13/2019	SLURRY SEAL
Zone 2	Hemlock Avenue	30	San Joaquin Street	Elena Street	R	480	32	15360	01/02/2020	**85**	03/12/2019	SLURRY SEAL
Zone 2	Hill Street	10	Main Street	Sunset Court	R	785	24	18840	01/02/2020	**85**	04/12/2019	SHALLOW PATCH
Zone 2	Hillview Street	10	Bayview Avenue	Sunset Avenue	R	490	25	12250	01/02/2020	**85**	04/28/2017	3 LAYER CAPE
Zone 2	Juniper Avenue	20	Elena St	Avalon St	R	1890	28	52920	01/02/2020	**85**	03/13/2019	SLURRY SEAL
Zone 3	Morro Avenue	50	Morro Bay Blvd	Pacific Street	R	300	46	13800	12/31/2019	**85**	03/13/2019	SLURRY SEAL
Zone 3	Napa Avenue	20	Harbor Street	Morro Bay Blvd	R	295	46	13570	01/03/2020	**85**	03/14/2019	SLURRY SEAL
Zone 4	Napa Avenue	40	Pacific Street	Marina Street	R	295	36	10620	12/26/2019	**85**	03/14/2019	SLURRY SEAL
Zone 4	Napa Avenue	50	Marina Street	Olive Street	R	1435	38	54530	12/26/2019	**85**	03/13/2019	SLURRY SEAL
Zone 1	Panay Street	30	Beachcomber Street	End	R	465	21	9765	12/30/2019	**85**	03/12/2019	SLURRY SEAL
Zone 1	Panorama Drive	20	Zanzibar Street	Trinidad Street	R	890	25	22250	12/30/2019	**85**	04/01/2015	RECONSTRUCT STRUCTURE (AC)
Zone 2	Pico Street	10	East End	Main Street	R	825	21	17325	01/02/2020	**85**	11/20/2017	RUBBERIZED CHIP SEAL
Zone 4	Piney Way	30	Olive Street	South Street	C	600	28	16800	12/27/2019	**85**	04/28/2017	3 LAYER CAPE
Zone 2	Seaview Avenue	10	Hill Street	Avalon Street	R	1010	24	24240	01/02/2020	**85**	11/20/2017	MICRO SURFACING
Zone 2	Sunset Avenue	30	Hill Street	Hillview Street	R	715	22	15730	01/02/2020	**85**	04/28/2017	3 LAYER CAPE
Zone 1	Tahiti Street	30	Beachcomber Drive	End	R	300	20	6000	12/30/2019	**85**	03/12/2019	SLURRY SEAL
Zone 3	West Avenue	10	Beach Street	Surf Street	R	490	30	14700	01/03/2020	**85**	03/14/2019	SLURRY SEAL
Zone 1	Andros Street	10	Sandalwood Avenue	Coral Ave	R	350	20	7000	12/27/2019	**83**	11/29/2013	RECONSTRUCT STRUCTURE (AC)
Zone 1	Bali Street	10	Sandalwood Avenue	End	R	640	20	12800	12/27/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 2	Bayview Avenue	10	Hill Street	Hillview Street	R	930	25	23250	01/02/2020	**83**	11/10/2017	3 LAYER CAPE
Zone 4	Carmel Street	20	Kings Avenue	Arbutus Avenue	R	910	26	23660	12/26/2019	**83**	03/14/2019	SLURRY SEAL
Zone 1	Coral Avenue	10	Emerald Circle (South End)	Emerald Circle (North)	R	580	37	21460	12/27/2019	**83**	07/15/2005	SLURRY SEAL
Zone 2	Elena Street	10	Main Street	Greenwood Avenue	C	960	42	40320	01/02/2020	**83**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 3	Harbor Street	40	Market Street	Embarcadero	C	305	47	14335	01/03/2020	**83**	01/03/2013	SLURRY SEAL
Zone 4	Kings Avenue	15	Balboa Street	Pacific Street	C	300	24	7200	12/26/2019	**83**	11/20/2017	MICRO SURFACING
Zone 4	Kings Avenue	20	Pacific Street	Carmel Street	C	925	22	20350	12/26/2019	**83**	11/29/2013	RECONSTRUCT STRUCTURE (AC)
Zone 4	Kings Avenue	30	Carmel Street	Ridgeway Street	C	675	24	16200	12/26/2019	**83**	11/29/2013	RECONSTRUCT STRUCTURE (AC)

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Luzon Street	30	Beachcomber Drive	End	R	640	21	13440	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 1	Mindoro Street	30	Beachcomber Drive	End	R	620	21	13020	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 3	Napa Avenue	30	Morro Bay Blvd	Pacific Street	R	295	41	12095	01/03/2020	**83**	03/14/2019	SLURRY SEAL
Zone 4	Piney Lane	10	Piney Way	End	R	365	17	6205	12/26/2019	**83**	03/14/2019	SLURRY SEAL
Zone 4	Piney Way	20	Luisita Street	Olive Street	C	730	22	16060	12/27/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 1	Sicily Street	30	Beachcomber Drive	End	R	350	21	7350	12/30/2019	**83**	11/20/2017	MICRO SURFACING
Zone 1	Vashon Street	10	Tide Avenue	Main Street	R	385	24	9240	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 1	Verdon Street	10	Sandalwood Avenue	Coral Avenue	R	430	20	8600	12/27/2019	**83**	03/12/2019	SLURRY SEAL
Zone 4	Vista Street	10	Piney Way	Shasta Avenue	R	310	29	8990	12/26/2019	**83**	04/28/2017	MICRO SURFACING
Zone 4	Walnut Street	10	Main Street	Shasta Avenue	R	420	20	8400	12/26/2019	**83**	04/28/2017	MICRO SURFACING
Zone 1	Zanzibar Street	20	Panorama Drive	Main Street	R	900	20	18000	12/30/2019	**83**	04/28/2017	3 LAYER CAPE
Zone 2	Birch Avenue	30	San Joaquin Street	Elena Street	R	615	36	22140	12/31/2019	**82**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Elm Street	20	San Jacinto Street	San Joaquin Street	R	625	36	22500	12/31/2019	**82**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Elm Street	30	San Joaquin Street	Elena Street	R	550	36	19800	12/31/2019	**82**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Ironwood Avenue	60	Avalon Street	Mimosa Street	C	870	42	36540	01/02/2020	**82**	11/15/2017	MICRO SURFACING
Zone 2	Ironwood Avenue	70	Mimosa Street	Highway 41	C	490	27	13230	01/02/2020	**82**	11/15/2017	RUBBERIZED CHIP SEAL
Zone 3	Little Morro Creek Road	15	Bike Park	End of Curve	R	1740	19	33060	01/03/2020	**82**	03/14/2019	SLURRY SEAL
Zone 2	Maple Avenue	10	Cuesta Street	End	R	580	20	11600	01/02/2020	**82**	03/21/2019	SLURRY SEAL
Zone 4	Oak Street	10	Main Street	Shasta Avenue	R	155	26	4030	12/26/2019	**82**	10/15/2012	SLURRY SEAL
Zone 1	Orcas Street	15	Panorama Drive	Main St	R	1020	20	20400	12/30/2019	**82**	02/15/2019	SHALLOW PATCH
Zone 2	Ponderosa Street	10	Ironwood Avenue	End	R	880	23	20240	01/02/2020	**82**	04/28/2017	DOUBLE CHIP SEAL
Zone 2	San Jacinto Street	30	COP at Alder Ave	COP East of Birch	C	155	32	4960	01/02/2020	**82**		
Zone 4	Shasta Avenue	15	Acacia St	Olive St	C	730	32	23360	12/26/2019	**82**		
Zone 1	Terra Street	10	Sandalwood Avenue	Sienna St	R	700	20	14000	12/27/2019	**82**	11/14/2017	MICRO SURFACING
Zone 3	Harbor Street	10	Morro Bay Blvd	Piney Way	C	665	37	24605	01/03/2020	**81**	04/28/2017	3 LAYER CAPE
Zone 2	Juniper Avenue	10	North End	Elena Street	R	1840	37	68080	01/02/2020	**81**	03/12/2019	SLURRY SEAL
Zone 3	Monterey Avenue	10	Surf Street	Beach Street	R	470	37	17390	01/03/2020	**81**	04/28/2017	MICRO SURFACING
Zone 3	Piney Way	60	Harbor Street	Kennedy Way	C	400	30	12000	01/03/2020	**81**	07/15/2002	SLURRY SEAL
Zone 4	Bernardo Avenue	40	Pacific Street	Morro Bay Blvd	R	315	34	10710	12/24/2019	**80**	10/16/2012	MICRO SURFACING
Zone 2	Birch Avenue	20	San Jacinto Street	San Joaquin Street	R	620	36	22320	12/31/2019	**80**	11/14/2017	MICRO SURFACING
Zone 2	Cedar Avenue	20	San Jacinto Street	San Joaquin Street	R	620	40	24800	12/31/2019	**80**	11/15/2017	MICRO SURFACING

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Main Street	15	Yerba Buena Street	Vashon Street	MiA	375	35	13125	12/23/2019	**80**	03/12/2019	SLURRY SEAL
Zone 3	Main Street	60	Quintana Place	Surf Street (S)	MiA	640	52	33280	12/23/2019	**80**	11/20/2017	MICRO SURFACING
Zone 2	Mimosa Street	10	Hill Street	Ironwood Avenue	R	640	33	21120	01/02/2020	**80**	01/01/2013	SLURRY SEAL
Zone 4	Olive Street	20	Piney Way	Main Street	R	1335	37	49395	12/26/2019	**80**	01/02/2013	SLURRY SEAL
Zone 1	Rennell Street	15	Panorama Drive	Main St	R	1015	20	20725	12/30/2019	**80**	03/13/2019	SLURRY SEAL
Zone 4	Carmel Street	10	End	Kings Avenue	R	245	20	4900	12/26/2019	**79**	03/15/2019	SHALLOW PATCH
Zone 2	Elm Street	40	Bonita Street	Pico St (North End)	R	1000	33	33000	01/02/2020	**79**	03/12/2019	SLURRY SEAL
Zone 4	Ridgeway Street	10	Fairview (East End)	Kings Ave	R	425	22	9350	12/27/2019	**79**	11/16/2017	SLURRY SEAL
Zone 4	Shasta Avenue	20	Olive Street	South Street	C	570	31	17670	12/26/2019	**79**	11/20/2017	RUBBERIZED CHIP SEAL
Zone 3	Beach Street	20	Main Street	Monterey Aveune	R	290	46	13340	01/03/2020	**78**	01/03/2013	SLURRY SEAL
Zone 4	Bernardo Avenue	30	Olive Street	Pacific Street	R	1600	20	32000	12/24/2019	**78**	10/16/2012	MICRO SURFACING
Zone 3	Clarabelle Drive	I10	Radcliff Street	Downing Street	R	1370	35	47950	12/31/2019	**78**	04/28/2017	MICRO SURFACING
Zone 1	Coral Avenue	40	San Jacinto Street	Island St. (North End)	R	1720	20	34400	12/27/2019	**78**	04/28/2017	3 LAYER CAPE
Zone 1	Indigo Circle	10	Coral Avenue	Indigo Cir	R	1360	37	50320	12/27/2019	**78**	07/15/2005	SLURRY SEAL
Zone 4	Marina Street	20	Kern Avenue	Piney Way	R	1130	20	22600	12/26/2019	**78**	10/15/2012	SLURRY SEAL
Zone 4	Marina Street	30	Piney Way	Main Street	R	1315	44	57860	12/26/2019	**78**	01/03/2013	SLURRY SEAL
Zone 4	Marina Street	40	Main Street	Embarcadero	C	750	45	33750	01/03/2020	**78**	01/03/2013	SLURRY SEAL
Zone 4	Monterey Avenue	50	Pacific Street	Marina Street	R	300	45	13500	12/26/2019	**78**	11/13/2017	SLURRY SEAL
Zone 1	Panorama Drive	40	Nevis Street	Mindoro Street	R	420	14	5880	12/30/2019	**78**	04/28/2017	3 LAYER CAPE
Zone 1	Sandalwood Avenue	20	San Jacinto Street	Java Street	C	1930	28	54040	12/30/2019	**78**	04/01/2015	SLURRY SEAL
Zone 4	Sierra Court	10	Piney Way	East End	R	350	30	10500	12/27/2019	**78**	10/16/2012	MICRO SURFACING
Zone 4	South Street	20	Main Street	Monterey Avenue	R	310	36	11160	12/26/2019	**78**	10/15/2012	SLURRY SEAL
Zone 2	Avalon Street	10	Main Street	Ironwood Avenue	C	1420	30	42600	01/02/2020	**77**	04/28/2017	3 LAYER CAPE
Zone 2	Fir Avenue	30	San Joaquin Street	Elena Street	R	525	36	18900	12/31/2019	**77**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 1	Hatteras Street	10	Beachcomber Drive	End	R	795	21	16695	12/27/2019	**77**	04/15/2015	SLURRY SEAL
Zone 1	Kodiak Street	30	Beachcomber Drive	End	R	655	21	13755	12/30/2019	**77**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 4	Pacific Street	10	Kings Street	Kern Avenue	C	1355	20	27100	12/27/2019	**77**	04/28/2017	3 LAYER CAPE
Zone 4	Piney Way	40	South Street	Morro Bay Blvd	C	1565	43	67295	12/27/2019	**77**	04/28/2017	3 LAYER CAPE
Zone 3	Prescott Drive	10	Radcliff Street	South End	R	815	33	26895	12/31/2019	**77**	04/28/2017	3 LAYER CAPE
Zone 3	Atascadero Road	20	Park Street	SB Off Ramp Hwy 1	C	770	54	41580	01/03/2020	**76**	01/01/2015	SLURRY SEAL
Zone 4	Bernardo Avenue	10	Luisita Street	Ridgeway Street	R	555	20	11100	12/24/2019	**76**	10/16/2012	MICRO SURFACING

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 4	Bernardo Avenue	20	Ridgeway Street	Olive Street	R	510	21	10710	12/24/2019	**76**	10/16/2012	MICRO SURFACING
Zone 3	Front Street	20	Harbor Street	Embarcadero Rd (S)	R	430	37	15910	01/03/2020	**76**	11/13/2017	SLURRY SEAL
Zone 1	Panorama Drive	50	COP at Mindoro St	Luzon St	R	170	14	2380	12/30/2019	**76**		
Zone 2	Sequoia Court	10	Ironwood Avenue	End	R	680	38	25840	01/02/2020	**76**	09/15/2003	SLURRY SEAL
Zone 2	Alder Street	30	San Joaquin Street	Elena Street	R	635	36	22860	12/31/2019	**75**	11/15/2017	MICRO SURFACING
Zone 4	Alta Ct	10	Piney Way	East End	R	350	30	10500	12/26/2019	**75**	10/16/2012	MICRO SURFACING
Zone 3	Atascadero Road	10	Embarcadero	Park Street	C	1260	32	40320	01/03/2020	**75**	11/14/2017	MICRO SURFACING
Zone 4	Center Court	10	Piney Way	East End	R	350	30	10500	12/27/2019	**75**	10/16/2012	MICRO SURFACING
Zone 2	Elena Street	20	Greenwood Avenue	Koa Avenue	C	885	32	28320	01/02/2020	**75**	04/28/2017	3 LAYER CAPE
Zone 3	Morro Avenue	80	South St	Olive St	R	560	37	20720	12/31/2019	**75**		
Zone 4	Olive Street	30	Main Street	Morro Avenue	R	300	49	14700	12/26/2019	**75**	10/16/2012	MICRO SURFACING
Zone 1	Panorama Drive	10	Blanca Street	Zanzibar Street	R	300	22	6600	12/30/2019	**75**	03/12/2019	SLURRY SEAL
Zone 1	Panorama Drive	60	Luzon St	Jamaica St	R	513	11	5643	12/30/2019	**75**		
Zone 4	Piney Way	10	Main Street	Luisita Street	C	880	38	33440	12/27/2019	**75**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Rockview Street	10	Hill Street	West End	R	365	30	10950	01/02/2020	**75**		
Zone 4	South Bay BLVD	20	Quintana Road	Twin Bridges	MiA	3045	32	97440	12/26/2019	**75**	11/21/2017	RUBBERIZED CHIP SEAL
Zone 4	South Street	10	Morro Avenue	Main Street	R	300	36	10800	12/26/2019	**75**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Sunset Avenue	20	Crest Street	Hill Street	R	410	34	13940	01/02/2020	**75**		
Zone 1	Tide Avenue	20	Nevis Street	Vashon Street	R	1370	20	27400	12/30/2019	**75**	06/29/2018	DIGOUTS
Zone 4	Anchor Street	30	Piney Way	Main Street	R	1310	34	44540	12/26/2019	**74**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Arbutus Avenue	20	Ridgeway St	EOS (South End)	R	550	26	14300	12/27/2019	**74**		
Zone 2	Cedar Avenue	30	San Joaquin Street	Elena Street	R	590	31	18290	12/31/2019	**74**	11/15/2017	SLURRY SEAL
Zone 1	Dawson Street	10	Tuscan Avenue	Panorama Drive	R	590	23	13570	12/30/2019	**74**	12/18/2013	MICRO SURFACING
Zone 3	Kennedy Way	10	Quintana Road	Shasta Avenue	R	825	35	28875	01/03/2020	**74**	04/28/2017	3 LAYER CAPE
Zone 4	Main Street	110	Piney Ln (Trailer Park)	State Park Entrance	MiA	900	37	33300	12/23/2019	**74**		
Zone 3	Main Street	80	Morro Bay Blvd	Olive Street	MiA	2130	47	100110	12/23/2019	**74**		
Zone 4	Marina Street	10	Madera Avenue	Kern Avenue	R	885	21	18585	12/26/2019	**74**	10/15/2012	SLURRY SEAL
Zone 3	Monterey Alley	10	Surf Street	End	R	200	20	4000	01/03/2020	**74**		
Zone 2	Nutmeg Avenue	10	South End	North End	R	2295	23	52785	01/02/2020	**74**	04/28/2017	MICRO SURFACING
Zone 2	San Juan Street	10	Ironwood Avenue	Koa Avenue	R	485	25	12125	01/02/2020	**74**	04/28/2017	3 LAYER CAPE
Zone 3	Scott Street	20	Surf Street	Beach Street	R	490	21	10290	01/03/2020	**74**	01/01/2012	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Tahiti Street	15	Panorama Drive	Main St	R	945	24	21840	12/30/2019	**74**		
Zone 1	Yerba Buena Street	30	Highway 1	Beachcomber Drive	C	200	40	8000	12/30/2019	**74**	12/18/2013	MICRO SURFACING
Zone 4	Bella Vista Drive	20	Allesandro St	Quintana St	R	235	32	7520	12/26/2019	**73**		
Zone 4	Butte Avenue	10	Las Tunas Street	End	R	350	38	13300	12/26/2019	**73**	11/20/2017	RUBBERIZED CHIP SEAL
Zone 1	Island Street	20	Sandalwood Avenue	Coral Avenue	R	350	20	7000	12/27/2019	**73**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 4	Mesa Street	10	Kern Avenue	Madera Avenue	R	885	20	17700	12/27/2019	**73**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	30	Piney Way	Round-About	MiA	1295	52	67340	12/31/2019	**73**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Pacific Street	40	Main Street	Embarcadero	C	840	45	37800	01/03/2020	**73**	01/03/2013	SLURRY SEAL
Zone 4	Ridgeway Street	30	Kern Avenue	Piney Way	R	1130	21	23730	12/27/2019	**73**	10/15/2012	SLURRY SEAL
Zone 3	Surf Alley	10	Main Street	East End	R	610	20	12200	01/03/2020	**73**		
Zone 4	Tulare Avenue	10	South End	Carmel Street	R	1200	26	31200	12/27/2019	**73**		
Zone 1	Yerba Buena Street	20	Panorama Drive	Highway 1	C	945	22	20790	12/30/2019	**73**	12/18/2013	MICRO SURFACING
Zone 4	Anchor Street	20	Kern Avenue	Piney Avenue	R	1125	20	22500	12/26/2019	**72**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Bayshore Drive	10	Main Street (N)	Main Street (E)	R	1005	22	22110	12/23/2019	**72**	04/28/2017	MICRO SURFACING
Zone 4	Driftwood Street	10	Morro Ave	Main Street	R	325	48	15600	12/26/2019	**72**	03/15/2019	SHALLOW PATCH
Zone 3	Dunes Street	10	West End	Main Street	R	925	46	42550	01/03/2020	**72**	04/28/2017	MICRO SURFACING
Zone 2	Fir Avenue	20	San Jacinto Street	San Joaquin Street	R	625	36	22500	12/31/2019	**72**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Ironwood Avenue	30	San Jacinto Street	San Joaquin Street	C	655	32	20960	01/02/2020	**72**	04/01/2015	SLURRY SEAL
Zone 2	Koa Avenue	10	Laurel Avenue	North End	R	1480	23	34040	01/02/2020	**72**	04/28/2017	MICRO SURFACING
Zone 4	Las Tunas Street	10	Butte Ave	Kings Ave	R	912	35	31920	12/26/2019	**72**	10/15/2012	SLURRY SEAL
Zone 1	Main Street	5	Zanzibar Street	Yerba Buena Street	MiA	200	31	6200	12/23/2019	**72**	05/15/2003	SLURRY SEAL
Zone 3	Quintana Road	10	Main Street	Morro Bay BLVD	C	3300	37	122100	01/03/2020	**72**	10/15/2012	SLURRY SEAL
Zone 3	The Embarcadero	40	Power Plant Entrance	Coleman Drive	MiA	700	23	16100	12/31/2019	**72**		
Zone 4	Anchor Street	10	Madera Avenue	Kern Avenue	R	895	21	18795	12/26/2019	**71**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Anchor Street	40	Main Street	West End	R	485	38	18430	12/26/2019	**71**	09/07/2018	SHALLOW PATCH
Zone 2	Avalon Street	20	Ironwood Aveune	Laurel Avenue	R	290	33	9570	01/02/2020	**71**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 4	Bella Vista Drive	10	Balboa Street	Allesandro St	R	545	20	10900	12/26/2019	**71**	05/15/2003	SLURRY SEAL
Zone 4	Cabrillo Place	10	Main Street	Bradley Avenue	R	600	20	12000	12/27/2019	**71**	11/16/2018	SHALLOW PATCH
Zone 2	Dogwood Avenue	30	San Joaquin Street	Elena Street	R	575	36	20700	12/31/2019	**71**	11/20/2017	MICRO SURFACING
Zone 4	Fresno Avenue	30	Olive Street	Pacific Street	R	1605	21	33705	12/24/2019	**71**	10/15/2012	SLURRY SEAL
Zone 2	Ironwood Avenue	20	Sequoia Ct	San Jacinto Street	C	750	32	24000	01/02/2020	**71**	04/15/2015	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	Ironwood Avenue	50	Elena Street	Avalon Street	C	1855	36	66780	01/02/2020	**71**	04/13/2018	SHALLOW PATCH
Zone 3	Morro Avenue	30	Beach Street	Harbor Street	R	645	46	29670	12/31/2019	**71**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Avenue	40	Harbor Street	Morro Bay Blvd	R	295	46	13570	12/31/2019	**71**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 2	San Jacinto Street	20	Main St	COP at Alder Ave	C	170	60	10200	01/02/2020	**71**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	South Bay BLVD	30	Twin Bridges	City Limits	MiA	2030	34	69020	12/26/2019	**71**	11/21/2017	SLURRY SEAL
Zone 4	Balboa Street	10	Butte Avenue	La Loma Avenue	R	1930	22	42460	12/26/2019	**70**	10/16/2012	MICRO SURFACING
Zone 4	Estero Avenue	10	Piney Way	Olive Street	R	410	21	8610	12/27/2019	**70**	10/15/2012	SLURRY SEAL
Zone 2	Main Street	30	San Jacinto Street	Atascadero Rd	MiA	5225	37	193325	12/23/2019	**70**	12/10/2010	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Monterey Avenue	40	Morro Bay Blvd	Pacific Street	R	295	46	13570	01/03/2020	**70**	11/13/2017	SLURRY SEAL
Zone 3	Morro Bay BLVD	10	Market Avenue	Main Street	MiA	670	46	30820	12/31/2019	**70**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	20	Main Street	Piney Way	MiA	1360	46	62560	12/31/2019	**70**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Bay BLVD	40	Round-About	Round-About	MiA	290	20	5800	12/31/2019	**70**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Nassau Street	20	Tide Avenue	Main Street	R	440	34	14960	12/30/2019	**70**	12/20/2013	MICRO SURFACING
Zone 3	Scott Street	10	Morro Avenue	Surf Street	R	815	28	22820	12/31/2019	**70**	10/16/2012	MICRO SURFACING
Zone 3	The Embarcadero	30	Beach Street	Power Plant Entrance	MiA	1840	54	99360	12/31/2019	**70**	10/16/2012	MICRO SURFACING
Zone 4	Arbutus Avenue	10	Carmel St	Ridgeway St	R	600	31	18600	12/27/2019	**69**	10/15/2001	SLURRY SEAL
Zone 4	Arcadia Avenue	10	South End	Carmel Street	R	1200	30	36000	12/27/2019	**69**	11/16/2018	SHALLOW PATCH
Zone 4	Bay Avenue	10	Marina Street	Pacific Street	R	375	27	10125	12/27/2019	**69**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Bolton Drive	20	Norwich Avenue	Downing Street	R	770	37	28490	12/31/2019	**69**	04/28/2017	3 LAYER CAPE
Zone 4	Cypress Avenue	10	Main Street	North End	R	155	18	2790	12/26/2019	**69**	03/15/2019	SHALLOW PATCH
Zone 4	Dana Way	10	Cabrillo Place	Kern Avenue	R	410	17	6970	12/27/2019	**69**	10/15/2012	SLURRY SEAL
Zone 1	Kodiak Street	15	Panorama Drive	Main St	R	880	20	19700	12/30/2019	**69**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 4	Ridgeway Street	20	Arbutus Avenue	Kern Avenue	C	295	21	6195	12/27/2019	**69**	11/16/2018	SHALLOW PATCH
Zone 4	South Street	40	Napa Avenue	Piney Way	R	650	30	19500	12/26/2019	**69**	06/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 2	Alder Street	10	Sequoia Street	San Jacinto Street	R	595	36	21420	12/31/2019	**68**	11/15/2017	RUBBERIZED CHIP SEAL
Zone 2	Ironwood Avenue	10	Del Mar Park	Sequoia Ct	R	550	32	17600	01/02/2020	**68**	07/15/2002	SLURRY SEAL
Zone 3	Berwick Drive	20	Norwich Avenue	Downing Street	R	500	33	16500	12/31/2019	**67**		
Zone 4	Carmel Street	30	Arbutus Avenue	Pecho Street	R	320	30	9600	12/26/2019	**67**	08/10/2018	SHALLOW PATCH
Zone 4	Cerrito Place	10	Olive Street	Shasta Avenue	R	530	21	11130	12/26/2019	**67**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Downing Street	10	Bolton Dr	North End	R	745	38	28310	12/31/2019	**67**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Fresno Avenue	20	Ridgeway Street	Olive Street	R	455	20	9100	12/24/2019	**67**	10/16/2012	MICRO SURFACING

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 3	Harbor Street	20	Piney Way	Main Street	C	1345	47	63215	01/03/2020	**67**	04/01/2015	SLURRY SEAL
Zone 4	Kern Avenue	20	Ridgeway Street	Main Street	C	2480	22	54560	12/23/2019	**67**	10/16/2012	MICRO SURFACING
Zone 3	Main Street	70	Beach Street	Morro Bay Blvd	MiA	1050	52	54600	12/23/2019	**67**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Morro Avenue	20	Surf Street	Beach Street	R	700	31	21700	12/31/2019	**67**	10/15/2012	SLURRY SEAL
Zone 1	Nassau Street	10	Panorama Drive	Tide Avenue	R	455	24	10920	12/30/2019	**67**	12/20/2013	MICRO SURFACING
Zone 2	Sequoia Street	10	Main Street	Hemlock Avenue	R	1190	38	45220	01/02/2020	**67**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 3	The Embarcadero	20	COP @ 910"	Beach Street	C	2790	36	100440	12/31/2019	**67**	05/15/2003	SLURRY SEAL
Zone 1	Whidbey Street	10	Tuscan Avenue	Panorama Dr	R	255	20	5100	12/30/2019	**67**	04/01/2015	SLURRY SEAL
Zone 2	Casitas Street	10	Laurel Avenue	Nutmeg Avenue	R	250	21	5250	01/02/2020	**66**	04/28/2017	MICRO SURFACING
Zone 3	Coleman Drive	10	West End	Embarcadero Rd	MiA	2200	23	50600	12/31/2019	**66**		
Zone 3	Dunes Street	20	Main Street	Kennedy Way	R	1030	46	47380	01/03/2020	**66**	04/28/2017	MICRO SURFACING
Zone 4	Fresno Avenue	10	Luisita Street	Ridgeway Street	R	545	20	10900	12/24/2019	**66**	10/16/2012	MICRO SURFACING
Zone 3	Harbor Street	30	Main Street	Market Street	C	690	47	32430	01/03/2020	**66**	04/01/2015	SLURRY SEAL
Zone 2	La Jolla Street	10	Main Street	Greenwood Avenue	R	970	36	34920	01/02/2020	**66**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Main Street	20	Vashon Street	San Jacinto Street	MiA	4030	36	145080	12/23/2019	**66**	12/10/2010	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Main Street	90	Olive Street	Walnut St	MiA	1220	26	31720	12/23/2019	**66**	03/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Marengo Drive	10	Bella Vista Drive	La Loma Avenue	R	520	25	13000	12/26/2019	**66**	10/16/2012	MICRO SURFACING
Zone 3	Market Avenue	20	Beach Street	Harbor Street	C	650	46	29900	12/31/2019	**66**	04/08/2015	SLURRY SEAL
Zone 3	Norwich Street	20	Clarabelle Drive	Prescott Drive	R	405	33	13365	12/31/2019	**66**	12/20/2013	MICRO SURFACING
Zone 1	Sienna Street	10	Beachcomber Drive	Terra Street	R	1100	20	22000	12/27/2019	**66**	04/28/2017	3 LAYER CAPE
Zone 1	Beachcomber Street	20	Java Street	Yerba Buena Street	C	2190	33	72270	12/27/2019	**65**	09/21/2018	SHALLOW PATCH
Zone 1	Damar Street	10	Sandalwood Avenue	End	R	595	20	11900	12/27/2019	**65**	11/13/2017	SLURRY SEAL
Zone 4	Estero Avenue	20	Olive Street	Pacific Street	R	1580	21	33180	12/27/2019	**65**	10/15/2012	SLURRY SEAL
Zone 3	Hillcrest Drive	10	Radcliff Avenue	Downing Street	R	1210	38	45980	12/31/2019	**65**	06/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Monterey Avenue	60	Marina Street	Olive Street	R	1415	35	49525	12/26/2019	**65**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Nevis Street	15	Panorama Drive	Nassau St	R	825	25	20625	12/30/2019	**65**	06/01/2018	DIGOUTS
Zone 1	Panorama Drive	30	Trinidad Street	Nevis Street	R	1010	20	20200	12/30/2019	**65**	04/28/2017	3 LAYER CAPE
Zone 2	San Jacinto Street	40	COP East of Birch Ave	Ironwood Ave	C	1100	36	39600	01/02/2020	**65**	11/02/2018	SHALLOW PATCH
Zone 1	Sandalwood Avenue	10	Azure Street	San Jacinto Street	R	265	28	7420	12/30/2019	**65**	04/08/2015	SLURRY SEAL
Zone 1	Azure Street	10	Coral Street	Sandalwood Avenue	R	505	38	19190	12/27/2019	**64**		
Zone 4	Bradley Avenue	10	Kern Avenue	Luisita Street	R	1400	20	28000	12/27/2019	**64**	11/16/2018	SHALLOW PATCH

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 2	Conejo Street	10	Koa Avenue	Laurel Ave	R	185	23	4255	01/02/2020	**64**	04/28/2017	MICRO SURFACING
Zone 1	Luzon Street	15	Panorama Drive	Main St	R	885	22	20320	12/30/2019	**64**	04/28/2017	3 LAYER CAPE
Zone 3	Main Street	50	Radcliff	Quintana Place	MiA	860	52	44720	12/23/2019	**64**	01/01/2012	MILL AND THICK OVERLAY
Zone 3	Monterey Avenue	30	Harbor Street	Morro Bay Blvd	R	295	46	13570	01/03/2020	**64**	04/28/2017	MICRO SURFACING
Zone 4	Palm Avenue	10	Acacia Street	Walnut Street	R	315	24	7560	12/26/2019	**64**	03/15/2019	SHALLOW PATCH
Zone 3	Pelican Drive	10	Market Avenue	Dunes Street	R	280	26	7280	01/03/2020	**64**		
Zone 2	Sunset Avenue	8	Atascadero	Rockview Street	R	230	27	6210	01/02/2020	**64**	10/02/2017	RECONSTRUCT STRUCTURE (AC)
Zone 2	Sunset Court	10	Hill Street	End	R	450	33	14850	01/02/2020	**64**		
Zone 1	Trinidad Street	30	Beachcomber Drive	End	R	320	20	6400	12/30/2019	**64**	06/15/1995	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Driftwood Street	20	Main Street	Piney Way	R	1320	36	47520	12/26/2019	**63**	10/15/2001	SLURRY SEAL
Zone 3	Front Street	10	Harbor Street	Embarcadero Rd (N)	R	380	48	18240	01/03/2020	**63**	11/13/2017	SLURRY SEAL
Zone 2	Ironwood Court	10	Ironwood Avenue	EOS	R	325	33	10725	01/02/2020	**63**		
Zone 4	Quintana Road	40	South Bay Blvd	City Limit	R	1600	30	48000	12/24/2019	**63**	04/15/2015	SLURRY SEAL
Zone 4	Teresa Ave	10	South Bay Blvd	EOS	R	750	31	23250	12/24/2019	**63**		
Zone 1	Toro Lane	10	Yerba Buena Street	North End	R	420	23	9660	12/30/2019	**63**		
Zone 4	Acacia Street	10	Main Street	Shasta Ave	R	720	21	15120	12/26/2019	**62**	04/28/2017	MICRO SURFACING
Zone 3	Berwick Drive	10	Radcliff Street	Norwich Avenue	R	760	33	25080	12/31/2019	**62**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Blanca Street	10	Panorama Drive	Tuscan Avenue	R	650	20	13000	12/30/2019	**62**	04/08/2015	SLURRY SEAL
Zone 2	Bonita Street	10	Greenwood Avenue	Main Street	C	970	44	42680	01/02/2020	**62**	04/01/2015	SLURRY SEAL
Zone 4	Kern Avenue	10	Morro Bay Blvd	Pacific Street	C	380	38	14440	12/23/2019	**62**	09/07/2018	SHALLOW PATCH
Zone 4	Kings Avenue	05	Quintana	Las Tunas	C	380	39	14820	12/26/2019	**62**		
Zone 3	Market Avenue	30	Harbor Street	Pacific Street	C	640	45	28800	12/31/2019	**62**	04/08/2015	SLURRY SEAL
Zone 2	San Joaquin Street	10	Main Street	Juniper Avenue	R	1655	35	57925	01/02/2020	**62**	04/08/2015	SLURRY SEAL
Zone 1	Tide Avenue	30	Vashon Street	Zanzibar Street	R	535	20	10700	12/30/2019	**62**	03/14/2019	SLURRY SEAL
Zone 2	Elm Street	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**61**	12/18/2013	MICRO SURFACING
Zone 4	Kern Avenue	15	Pacific St	Ridgeway St	C	2050	22	45100	12/23/2019	**61**	11/16/2018	SHALLOW PATCH
Zone 4	Las Tunas Street	20	Kings Ave	La Loma Dr	R	1143	25	28575	12/26/2019	**61**		
Zone 4	Main Street	100	Walnut St	Piney Ln (Trailer Park)	MiA	917	32	29344	12/23/2019	**61**		
Zone 3	Monterey Avenue	20	Beach Street	Harbor Street	R	665	46	30590	01/03/2020	**61**	04/28/2017	MICRO SURFACING
Zone 2	San Joaquin Street	20	Juniper Avenue	East End	R	135	38	5130	01/02/2020	**61**	04/01/2015	SLURRY SEAL
Zone 1	Vashon Street	20	Beachcomber Drive	End	R	265	20	5300	12/30/2019	**61**	03/12/2019	SLURRY SEAL

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Java Street	30	Coral Street	Beachcomber Drive	R	650	28	18200	12/27/2019	**60**	11/02/2018	SHALLOW PATCH
Zone 3	Main Street	40	Atascadero Rd	Radcliff	MiA	2550	35	89250	12/23/2019	**60**	12/10/2010	MICRO SURFACING
Zone 3	Market Avenue	10	Surf Street	Beach Street	R	490	46	22540	12/31/2019	**60**	04/01/2015	SLURRY SEAL
Zone 3	Morro Avenue	10	Scott Street	Surf Street	R	430	27	11610	12/31/2019	**60**	09/15/2003	SLURRY SEAL
Zone 1	Mindoro Way	10	Beachcomber Drive	Mindoro Street	R	325	21	6825	12/30/2019	**59**	11/13/2017	SLURRY SEAL
Zone 1	Whidbey Street	15	Panorama Dr	Tide Ave	R	590	22	12980	12/30/2019	**59**	12/22/2017	DIGOUTS
Zone 3	Beach Street	10	Embarcadero	Main Street	MiA	1190	46	54740	01/03/2020	**58**	08/15/2002	THIN AC OVERLAY(1.5 INCHES)
Zone 3	Bolton Drive	10	Radcliff Street	Norwich Avenue	R	700	37	25900	12/31/2019	**58**	04/28/2017	3 LAYER CAPE
Zone 2	Greenwood Avenue	30	San Joaquin Street	Elena Street	C	500	36	18000	01/02/2020	**58**	04/28/2017	3 LAYER CAPE
Zone 3	Main Street	65	Surf Street	Beach Street	MiA	515	52	26780	12/23/2019	**58**	12/10/2010	MICRO SURFACING
Zone 3	Park Street	10	Atascadero Road	End	R	470	27	12690	12/30/2019	**58**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 4	Ridgeway Street	15	Kings Ave	Arbutus Ave	C	775	22	17050	12/27/2019	**58**	11/16/2017	SLURRY SEAL
Zone 3	Shasta Avenue	60	Harbor Street	Dunes Street	C	295	47	13865	01/03/2020	**58**	10/15/2001	SLURRY SEAL
Zone 2	Greenwood Avenue	10	End	San Jacinto Street	R	620	36	22320	01/02/2020	**57**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 2	Laurel Avenue	10	North End	South End	R	2260	22	49720	01/02/2020	**57**	04/28/2017	MICRO SURFACING
Zone 3	Little Morro Creek Road	10	Radcliff	Bike Park	R	460	19	8740	01/03/2020	**57**	03/13/2019	SLURRY SEAL
Zone 4	Olive Street	10	Kern Avenue	Piney Way	R	1110	20	22200	12/26/2019	**57**		
Zone 4	Quintana Road	30	La Loma Avenue	South Bay Blvd	C	2910	34	98940	12/24/2019	**57**	12/18/2013	MICRO SURFACING
Zone 3	The Embarcadero	10	South End	COP @ 910'	C	910	40	36400	12/31/2019	**57**	05/15/2003	SLURRY SEAL
Zone 2	Birch Avenue	10	Sequoia Street	San Jacinto Street	R	620	35	21700	12/31/2019	**56**	11/14/2017	MICRO SURFACING
Zone 1	Formosa Street	10	Sandalwood Avenue	End	R	545	20	10900	12/27/2019	**56**	10/15/2001	SLURRY SEAL
Zone 2	Greenwood Avenue	40	Elena Street (North)	Avalon Street	C	1985	40	79400	01/02/2020	**56**	04/28/2017	3 LAYER CAPE
Zone 3	Napa Avenue	10	North End	Harbor Street	R	475	46	21850	01/03/2020	**56**	04/28/2017	MICRO SURFACING
Zone 3	Pacific Street	30	Piney Way	Main Street	C	1320	45	59400	01/03/2020	**56**	05/18/2018	SHALLOW PATCH
Zone 4	Shasta Avenue	10	Main Street	Acacia Street	C	755	22	16610	12/26/2019	**56**	10/19/2018	SHALLOW PATCH
Zone 1	Whidbey Street	20	Beachcomber Drive	EOS	R	250	20	5000	12/30/2019	**56**	09/15/2003	SLURRY SEAL
Zone 4	Allesandro Street	10	Las Tunas Street	La Loma Avenue	R	1475	26	38350	12/26/2019	**55**	11/16/2017	SLURRY SEAL
Zone 4	La Loma Street	10	Balboa Street	Quintana Road	R	975	27	26325	12/26/2019	**55**	11/16/2017	SLURRY SEAL
Zone 1	Trinidad Street	15	Panorama Drive	Main St	R	950	21	21630	12/30/2019	**55**	04/12/2019	DIGOUTS
Zone 1	Yerba Buena Street	10	Tuscan Avenue	Panorama Drive	R	380	17	6460	12/30/2019	**55**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Zanzibar Street	10	Tuscan Avenue	Panorama Drive	R	540	20	10800	12/30/2019	**55**	10/15/2000	THIN AC OVERLAY(1.5 INCHES)

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Coral Avenue (NB)	010	Emerald Cir	Indigo Ave	R	2145	17	36465	12/27/2019	**54**		
Zone 2	Ironwood Avenue	40	San Joaquin Street	Elena Street	C	545	32	17440	01/02/2020	**54**	04/01/2015	SLURRY SEAL
Zone 4	Madera Avenue	10	Pecho Street	Pacific Street	R	780	20	15600	12/26/2019	**54**	05/15/2003	SLURRY SEAL
Zone 3	Norwich Street	10	Hillcrest Drive	Clarabelle Drive	R	405	33	13365	12/31/2019	**54**	12/20/2013	MICRO SURFACING
Zone 3	Shasta Avenue	50	Morro Bay Blvd	Harbor Street	C	295	47	13865	01/03/2020	**54**	10/15/2001	SLURRY SEAL
Zone 3	The Embarcadero	60	Morro Creek	Atascadero Road	C	935	31	28985	01/03/2020	**54**	05/15/2003	SLURRY SEAL
Zone 1	Coral Avenue (SB)	010	Indigo Ave	Emerald Cir	R	2100	17	35700	12/27/2019	**53**		
Zone 2	Greenwood Avenue	20	San Jacinto Street	San Joaquin Street	C	625	36	22500	01/02/2020	**53**	04/28/2017	CHIP SEAL AND SLURRY SEAL
Zone 1	Tuscan Avenie	10	Blanca Street	Whidbey Street	R	700	20	14000	12/30/2019	**53**	04/28/2017	3 LAYER CAPE
Zone 2	Alder Street	20	San Jacinto Street	San Joaquin Street	R	630	36	22680	12/31/2019	**52**	11/15/2017	SLURRY SEAL
Zone 3	Piney Way	50	Morro Bay Blvd	Harbor Street	C	285	40	11400	01/03/2020	**52**	07/15/2002	SLURRY SEAL
Zone 3	Shasta Avenue	40	Pacific Street	Morro Bay Blvd	C	295	37	10915	01/03/2020	**52**	10/15/2001	SLURRY SEAL
Zone 1	Beachcomber Street	10	Sienna Street	Hatteras Street	R	1200	20	24000	12/27/2019	**51**	11/02/2018	SHALLOW PATCH
Zone 3	Morro Bay BLVD	50	Round-About	Bridge Deck	MiA	410	40	16400	12/31/2019	**51**	07/05/2008	THIN AC OVERLAY(1.5 INCHES)
Zone 1	Easter Street	10	Highway 1	West End	R	1010	20	20200	12/27/2019	**50**	07/27/2018	SHALLOW PATCH
Zone 4	Luista Street	10	Kern Avenue	Piney Way	R	875	20	17500	12/27/2019	**50**		
Zone 1	Oahu Street	20	Tide Avenue	Main Street	R	420	22	9240	12/30/2019	**50**	12/18/2013	MICRO SURFACING
Zone 1	Tide Avenue	10	Island Street	Nevis Street	R	1130	20	22600	12/30/2019	**50**	11/02/2018	SHALLOW PATCH
Zone 3	Radcliff Street	10	Main Street	East End	C	1330	39	51870	12/31/2019	**49**	11/02/2018	SHALLOW PATCH
Zone 3	Surf Street	30	Market Avenue	West End	R	500	48	24000	12/31/2019	**49**	07/15/2002	SLURRY SEAL
Zone 4	Quintana Road	20	Morro Bay Blvd	La Loma Avenue	C	2340	41	95940	12/24/2019	**48**	12/18/2013	MICRO SURFACING
Zone 1	Capri Street	10	Sandalwood Avenue	End	R	610	20	12200	12/27/2019	**47**	09/15/2003	SLURRY SEAL
Zone 1	Gilbert Street	10	Sandalwood Avenue	End	R	520	20	10400	12/27/2019	**47**	12/18/2013	MICRO SURFACING
Zone 1	Jamaica Street	15	Panorama Drive	Main St	R	880	22	21040	12/30/2019	**47**	11/14/2017	RUBBERIZED CHIP SEAL
Zone 3	Morro Bay BLVD Alley	20	Bernardo Ave	Kern Ave	R	430	13	5590	01/03/2020	**47**		
Zone 2	Las Vegas Street	10	Elm Avenue	Main Street	R	700	22	15400	01/02/2020	**46**	08/10/2018	SHALLOW PATCH
Zone 2	Cuesta Street	10	Laurel Avenue	Nutmeg Avenue	R	400	23	9200	01/02/2020	**45**	05/15/2003	SLURRY SEAL
Zone 3	Morro Avenue	70	Marina St.	South St	R	910	40	36400	12/31/2019	**45**	05/15/2003	THIN AC OVERLAY(1.5 INCHES)
Zone 1	San Jacinto Street	10	Sandalwood Avenue	Highway 1	C	675	37	24975	12/27/2019	**45**	04/15/2015	SLURRY SEAL
Zone 4	Shasta Avenue	30	Marina Street	Pacific Street	C	300	38	11400	12/26/2019	**45**	10/19/2018	SHALLOW PATCH
Zone 3	Errol Street	10	Main Street	End	R	590	29	17110	12/30/2019	**44**	08/10/2018	SHALLOW PATCH

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 3	Orton Street	10	Prescott Drive	End	R	185	33	6105	12/31/2019	**44**	05/15/2003	SLURRY SEAL
Zone 1	Whidbey Way	10	Whidbey Street	Panorama Drive	R	490	20	9800	12/30/2019	**44**	12/18/2013	MICRO SURFACING
Zone 2	Fir Avenue	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**43**	12/18/2013	MICRO SURFACING
Zone 1	Mindoro Street	15	Panorama Drive	Main St	R	890	24	21360	12/30/2019	**43**	04/28/2017	3 LAYER CAPE
Zone 4	Fairview Avenue	10	South End	Kings Avenue	R	1170	25	29250	12/26/2019	**42**	08/10/2018	SHALLOW PATCH
Zone 4	Pacific Street	20	Kern Avenue	Piney Way	C	1130	32	36160	12/27/2019	**42**	05/18/2018	SHALLOW PATCH
Zone 2	Hemlock Avenue	40	Elena Street	Avalon Street	R	1855	36	66780	01/02/2020	**41**	07/15/2002	SLURRY SEAL
Zone 4	Kings Avenue	40	Ridgeway Street	South End	R	545	20	10900	12/26/2019	**41**	02/23/2018	SHALLOW PATCH
Zone 2	Reno Court	10	Bonita Street	End	R	400	33	13200	12/31/2019	**41**	05/15/2003	SLURRY SEAL
Zone 3	Selby Street	10	Prescott Drive	End	R	105	33	3465	12/31/2019	**41**	11/02/2018	SHALLOW PATCH
Zone 1	Beachcomber Street	30	Yerba Buena Street	North End	R	220	22	4840	12/27/2019	**40**		
Zone 2	Hemlock Avenue	10	Sequoia Street	San Jacinto Street	R	625	32	20000	01/02/2020	**40**	12/18/2013	MICRO SURFACING
Zone 4	Kings Avenue	10	Las Tunas Street	Balboa Street	C	285	37	10545	12/26/2019	**40**		
Zone 1	Orcus Way	10	Orcas Street	End	R	360	21	7560	12/30/2019	**40**	11/13/2017	SLURRY SEAL
Zone 1	Sicily Street	15	Panorama Drive	Main St	R	1000	21	21000	12/30/2019	**39**	07/27/2018	DIGOUTS
Zone 2	Hemlock Avenue	20	San Jacinto Street	San Joaquin Street	R	625	32	20000	01/02/2020	**38**	07/15/2002	SLURRY SEAL
Zone 1	Island Street	10	Panorama Drive	Main Street	R	910	22	20020	12/30/2019	**38**	12/18/2013	MICRO SURFACING
Zone 1	Andros Street	20	Coral Ave	EOS	R	300	20	6000	12/27/2019	**37**		
Zone 4	Barlow Lane	10	Main Street	End	R	565	26	14690	12/23/2019	**37**	11/13/2017	SLURRY SEAL
Zone 4	Shasta Avenue	25	South St	Marina St	C	905	35	31675	12/26/2019	**37**		
Zone 1	Orcas Street	30	Highway 1	End	R	515	21	10815	12/30/2019	**36**	11/20/2017	SLURRY SEAL
Zone 3	Preston Lane	10	Main Street	End	R	480	33	15840	12/30/2019	**36**		
Zone 3	Surf Street	20	Main Street	Market Avenue	R	780	33	25740	12/31/2019	**36**		
Zone 3	Dunbar Street	10	Prescott Drive	End	R	255	33	8415	12/31/2019	**35**	11/02/2018	SHALLOW PATCH
Zone 1	Java Street	15	Panorama Drive	Main St	R	885	20	19400	12/30/2019	**35**		
Zone 2	Paula Street	10	Greenwood Avenue	Juniper Avenue	R	600	35	21000	01/02/2020	**35**	07/15/2002	SLURRY SEAL
Zone 2	Cedar Avenue	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**34**	11/15/2017	SLURRY SEAL
Zone 2	Hill Street	20	Sunset Court	Atascadero	R	675	30	20250	01/02/2020	**34**	05/15/2003	SLURRY SEAL
Zone 3	Quintana Place	10	Main Street	End	R	150	34	5100	01/03/2020	**34**	04/01/2015	SLURRY SEAL
Zone 2	Dogwood Avenue	10	Sequoia Street	San Jacinto Street	R	625	36	22500	12/31/2019	**33**	07/27/2018	SHALLOW PATCH
Zone 3	Surf Street	10	East End	Main Street	R	515	31	15965	12/31/2019	**32**	06/01/2018	SHALLOW PATCH

Area ID	Street Name	Sec. ID	Begin Location	End Location	FC	L	W	A	Last Insp. Date	Last Insp. PCI	Last M&R Date	Last M&R Treatment
Zone 1	Panay Street	15	Panorama Drive	Main St	R	990	21	23310	12/30/2019	**31**	08/17/2018	DIGOUTS
Zone 1	Oahu Street	10	Panorama Drive	Tide Avenue	R	580	22	12760	12/30/2019	**30**	12/18/2013	MICRO SURFACING
Zone 1	Panorama Drive	70	Jamaica St	Island St	R	157	11	1727	12/30/2019	**30**		
Zone 3	Little Morro Creek Road	20	End of Curve	County COP	R	1800	19	34200	01/03/2020	**28**	05/15/2003	SLURRY SEAL
Zone 4	Fig Street	10	Main Street	End	R	150	17	2550	12/26/2019	**27**		
Zone 2	Dogwood Avenue	20	San Jacinto Street	San Joaquin Street	R	620	40	24800	12/31/2019	**26**	10/15/2001	SLURRY SEAL
Zone 1	Rennell Street	30	Beachcomber Drive	End	R	410	21	8610	12/30/2019	**22**	10/15/2001	SLURRY SEAL
Zone 3	Morro Bay BLVD Alley	10	Piney Way	Bernardo Ave	R	565	15	8475	01/03/2020	**21**		
Zone 1	Coral Avenue	50	Paul Creek	Java Street	R	270	18	4860	12/27/2019	**15**	05/15/2003	SLURRY SEAL
Zone 2	Rockview Street	20	Conform	Sunset Avenue	R	270	13	3510	08/26/2016	**4**		

Section V
GIS Toolbox

GIS TOOLBOX

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

GIS TOOLBOX

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

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

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

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

TERMINOLOGY

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

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

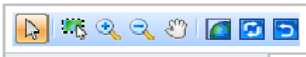
Then there is the “Section Link” screen which will match segments in the basemap based on street name, type (street tag) and/or direction. Each Section can be linked to a segment or segments in the basemap.

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

Navigation Toolbar

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

Reporting Toolbar



Select	Shows a tooltip of information regarding the section the mouse if pointing to an object.
Track Zoom In	Click and drag the mouse over an area of the map you want to Zoom in on.
Zoom In	Each click will Zoom the map in by 20%.
Zoom Out	Each click will Zoom the map OUT by 20%.
Pan	Click and drag the map around to navigate a specified direction.
Full Extent	Zooms out to the full border of your state.
Toggle Extent	Will toggle between the current Map extent and previous Map extent.
Previous Extent	Will cycle through each previous Map extent.

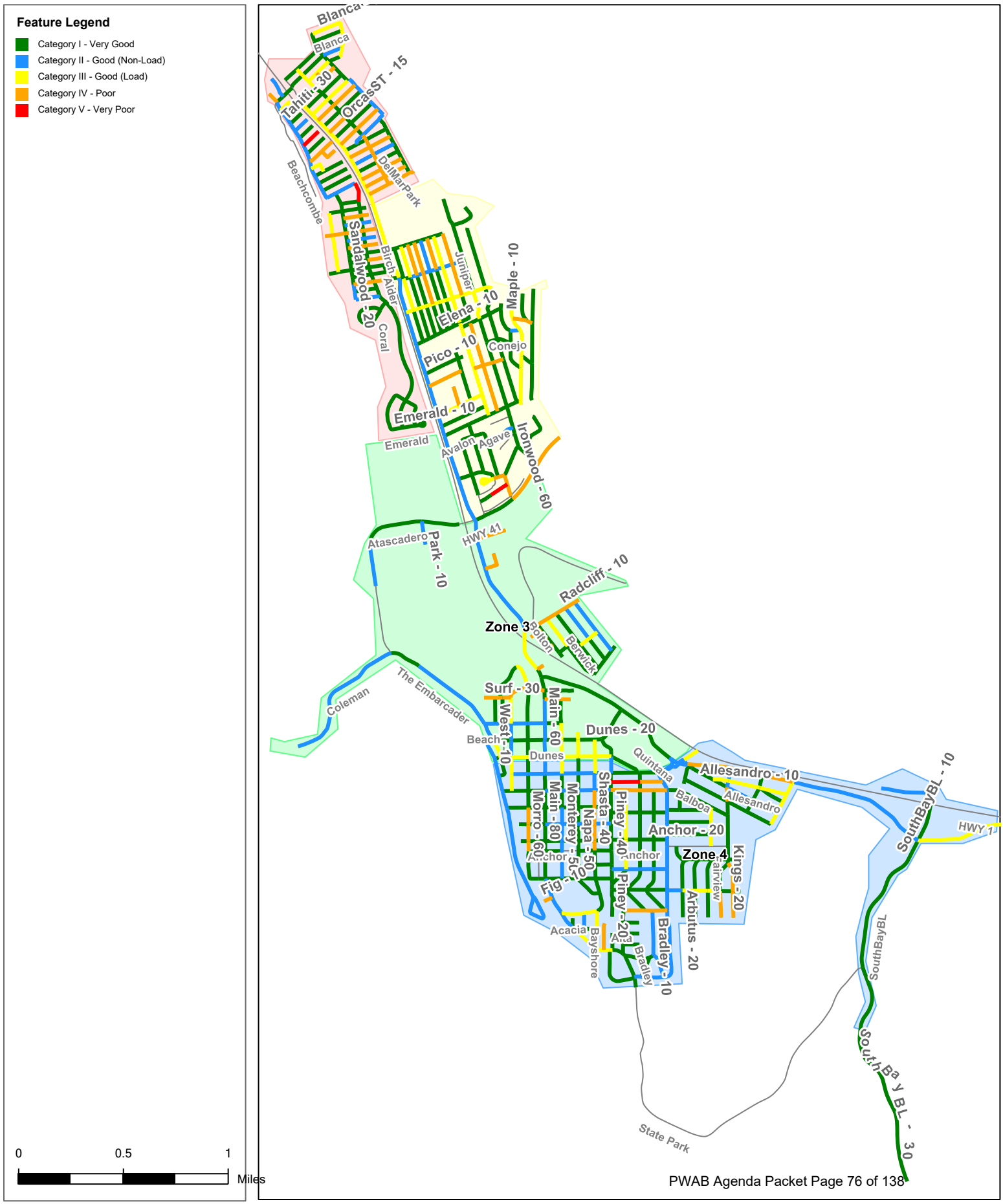
BASE MAP IMPLEMENTATION

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

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Current PCI Condition

Printed: 2/20/2020



Appendix A
Summarized System Information

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Network Summary Statistics

Printed: 02/11/2020

	Total Sections	Total Center Miles	Total Lane Miles	Total Area (sq. ft.)	PCI
Collector	66	12.07	24.15	2,216,765	66
Residential/Local	260	34.02	67.82	4,997,785	66
Minor Arterial (4)	27	7.43	14.86	1,508,204	68
Total	353	53.52	106.83	8,722,754	
				Overall Network PCI as of 2/11/2020:	66
**Combined	2	0.29	0.58	32,090	N/A
Gravel	2	0.29	0.58	32,090	N/A

** Combined Sections are excluded from totals. These Sections do not have a PCI Date - they have not been inspected or had a Treatment applied.

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Network Replacement Cost

Printed: 02/11/2020

Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area/ Square Feet	Cost To Replace (in thousands)
Collector	AC	19.0	$17.37	1,732,275	$30,082
	AC/AC	4.9	$17.37	442,910	$7,691
	AC/PCC	0.3	$17.37	41,580	$722
Minor Arterial (4)	AC	6.1	$23.40	589,145	$13,789
	AC/AC	8.8	$23.40	919,059	$21,510
Residential/Local	AC	56.6	$14.37	4,135,360	$59,411
	AC/AC	11.2	$14.37	862,425	$12,390
	Grand Total:	106.8		8,722,754	$145,595

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	3		
			Surface Treatment	LIGHT MAINTENANCE	$7.40		7	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			1
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$210.64			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	3		
			Surface Treatment	LIGHT MAINTENANCE	$7.40		5	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			1
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$210.64			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	3		
			Surface Treatment	LIGHT MAINTENANCE	$7.40		5	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			2
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		6	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$210.64			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	3		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$210.64			
	ST	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	9		
			Surface Treatment	LIGHT MAINTENANCE	$7.40		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			8
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		6	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$210.64			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		7	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$156.29			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		7	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			1
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$156.29			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		7	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			1
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$156.29			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$1.11			
		III - Good, Load Related		DO NOTHING	$1.51			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$156.29			
	ST	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	9		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		6	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			6
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		6	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$156.29			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	5		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		7	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	5		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		7	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	4		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$1.11			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			
	ST	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	9		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Other	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	4		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Decision Tree

Printed: 02/20/2020

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Other	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$1.11			
		III - Good, Load Related		DO NOTHING	$1.51			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			
	ST	I - Very Good	Crack Treatment	SEAL CRACKS	$1.27	9		
			Surface Treatment	LIGHT MAINTENANCE	$3.79		8	
			Restoration Treatment	LIGHT REHABILITATION	$44.40			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$31.87		8	
		III - Good, Load Related		LIGHT REHABILITATION	$44.40			
		IV - Poor		HEAVY REHABILITATION	$88.04			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$129.30			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

Appendix B
Budget Scenarios

Needs Analysis
&
Zero Budget
($15.1 Million for Year 1
$4.4M/Yr Avg. for Years 2-5)

- Projected PCI/Cost Summary

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Needs - Projected PCI/Cost Summary

Inflation Rate = 0.00 %

Printed: 02/11/2020

Year	PCI Treated	PCI Untreated	PM Cost	Rehab Cost	Cost
2020	77	66	$404,267	$14,706,036	$15,110,303
2021	76	64	$10,059	$3,204,010	$3,214,069
2022	77	62	$45,637	$5,161,092	$5,206,729
2023	77	60	$396,354	$4,327,300	$4,723,654
2024	79	57	$1,046,518	$3,263,320	$4,309,838

% PM	PM Total Cost	Rehab Total Cost	Total Cost
5.84%	$1,902,835	$30,661,758	$32,564,593

Maintain PCI

($2.0 Million Avg. over 5 Years)

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

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Target-Driven Scenarios
Pavement Network Condition Lane Miles

Interest: .00% Inflation: .00% Printed: 02/11/2020

Scenario: Maintain 66

Objective: Minimum Network Average PCI Target: Overall 66

Annual budget needs to meet target objectives

Year	Arterial	Collector	Res/Loc	Other	Preventative Maintenance	Total
2020	$0	$0	$0	$0	$0	$0
2021	$963,790	$47,688	$339,195	$0	$414,326	$1,350,673
2022	$368,874	$641,309	$1,265,423	$0	$45,637	$2,275,606
2023	$160,429	$2,636,723	$659,420	$0	$175	$3,456,572
2024	$797,671	$1,837,226	$303,702	$0	$402,799	$2,938,599

Average Yearly Total: $2,004,290
Grand Total: $10,021,450

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	5.9%	0.7%	14
Collector	66	11.1%	3.0%	11
Residential	66	33.7%	9.5%	19

Pavement Network after schedulable treatments applied in lane miles.

2020

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	5.9%	0.7%	14
Collector	66	11.1%	3.0%	11
Residential	66	33.7%	9.5%	19

2021

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	71	7.0%	0.8%	16
Collector	64	9.7%	3.5%	11
Residential	66	32.0%	10.1%	19

Pavement Network after schedulable treatments applied in lane miles.

2022

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	69	4.3%	0.8%	16
Collector	63	7.8%	6.0%	11
Residential	66	32.7%	11.4%	19

2023

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	67	4.5%	0.7%	15
Collector	67	11.1%	5.2%	13
Residential	65	33.3%	13.2%	19

2024

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	5.4%	0.7%	15
Collector	68	12.9%	4.8%	15
Residential	65	32.9%	14.9%	19

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Target-Driven Scenarios
Network Condition Summary

Interest: 0% Inflation: 0% Printed: 02/11/2020

Scenario: Maintain 66

Objective: Minimum Network Average PCI Target: Overall 66

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2020	66	66
2021	64	66
2022	62	66
2023	60	66
2024	57	66

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2020, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	5.9%	11.1%	33.7%	0.0%	50.7%
II / III	10.7%	11.3%	14.1%	0.0%	36.1%
IV	0.7%	3.0%	9.2%	0.0%	12.9%
V	0.0%	0.0%	0.3%	0.0%	0.3%
Total	17.3%	25.4%	57.3%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	5.9%	11.1%	33.7%	0.0%	50.7%
II / III	10.7%	11.3%	14.1%	0.0%	36.1%
IV	0.7%	3.0%	9.2%	0.0%	12.9%
V	0.0%	0.0%	0.3%	0.0%	0.3%
Total	17.3%	25.4%	57.3%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	5.4%	12.9%	32.9%	0.0%	51.2%
II / III	11.2%	7.7%	9.5%	0.0%	28.4%
IV	0.7%	3.9%	11.3%	0.0%	15.9%
V	0.0%	0.9%	3.6%	0.0%	4.5%
Total	17.3%	25.4%	57.3%	0.0%	100.0%

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Target-Driven Scenarios - Cost Summary

Interest: 0% Inflation: 0% Printed: 02/11/2020

Scenario: Maintain 66

Objective: Minimum Network Average PCI Target: Overall 66

Year	Rehabilitation		Preventive Maintenance		Total Cost	Deferred
2020	II	$0	Non-Project	$0	$0	$15,110,242
	III	$0				
	IV	$0	Project	$0		
	V	$0				
	Total	**$0**				
	Project	$0				
2021	II	$0	Non-Project	$414,326	$1,350,673	$13,186,975
	III	$936,347				
	IV	$0	Project	$0		
	V	$0				
	Total	**$936,347**				
	Project	$0				
2022	II	$0	Non-Project	$45,637	$2,275,606	$13,501,117
	III	$2,229,969				
	IV	$0	Project	$0		
	V	$0				
	Total	**$2,229,969**				
	Project	$0				
2023	II	$0	Non-Project	$175	$3,456,572	$12,836,143
	III	$799,054				
	IV	$2,657,343	Project	$0		
	V	$0				
	Total	**$3,456,397**				
	Project	$0				
2024	II	$0	Non-Project	$402,799	$2,938,599	$16,164,064
	III	$0				
	IV	$2,535,800	Project	$0		
	V	$0				
	Total	**$2,535,800**				
	Project	$0				

Summary

Functional Class	Rehabilitation	Prev. Maint.
Arterial	$2,234,722	$56,042
Collector	$5,016,288	$146,658
Residential/Local	$1,907,503	$660,237
Total:	$9,158,513	$862,937

Grand Total: $10,021,450

Current Funding

($0/Yr. Years 1-2, $700K/Yr. Years 3-5)

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

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenarios - Network Condition Summary

Interest: 0% Inflation: 0% Printed: 6/11/2020

Scenario: Current Budget w/ $0 Years 1&2

Year	Budget	PM
2020	$0	5%
2021	$0	5%

Year	Budget	PM
2022	$697,435	5%
2023	$709,424	5%

Year	Budget	PM
2024	$721,693	5%

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	67	67	0	0
2021	64	64	0	0
2022	62	63	7.32	14.64
2023	60	62	1.64	3.27
2024	57	60	2.05	4.10

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	5.5%	11.2%	34.1%	0.0%	50.8%
II / III	10.8%	11.5%	14.2%	0.0%	36.6%
IV	0.0%	3.0%	9.3%	0.0%	12.4%
V	0.0%	0.0%	0.3%	0.0%	0.3%
Total	16.3%	25.7%	58.0%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	5.5%	11.2%	34.1%	0.0%	50.8%
II / III	10.8%	11.5%	14.2%	0.0%	36.6%
IV	0.0%	3.0%	9.3%	0.0%	12.4%
V	0.0%	0.0%	0.3%	0.0%	0.3%
Total	16.3%	25.7%	58.0%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	1.7%	5.8%	30.6%	0.0%	38.2%
II / III	13.4%	10.0%	12.3%	0.0%	35.8%
IV	1.1%	9.0%	11.4%	0.0%	21.5%
V	0.0%	0.9%	3.6%	0.0%	4.5%
Total	16.3%	25.7%	58.0%	0.0%	100.0%

Scenarios Criteria:

Criteria:

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenarios - Cost Summary

Interest: 0.00% Inflation: 0.00% Printed: 6/11/2020

Scenario: Current Budget w/ $0 Years 1&2

Year	PM	Budget	Rehabilitation			Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	5%	$0	II	$0	Non-Project	$0	$0	$14,546,786	Funded	$0
			III	$0					Unmet	$42,117
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2021	5%	$0	II	$0	Non-Project	$0	$0	$14,537,621	Funded	$0
			III	$0					Unmet	$11,775
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2022	5%	$697,435	II	$0	Non-Project	$45,116	$0	$16,049,731	Funded	$0
			III	$652,337					Unmet	$14,647
			IV	$0	Project	$0				
			V	$0						
			Total	$652,337						
			Project	$0						
2023	5%	$709,424	II	$9,880	Non-Project	$38,810	$0	$17,920,591	Funded	$0
			III	$660,649					Unmet	$16,620
			IV	$0	Project	$0				
			V	$0						
			Total	$670,529						
			Project	$0						
2024	5%	$721,693	II	$0	Non-Project	$42,574	$0	$22,345,709	Funded	$0
			III	$629,988					Unmet	$17,536
			IV	$48,912	Project	$0				
			V	$0						
			Total	$678,900						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$340,499	$0	$0	$15,673
Collector	$0	$1,324	$0	$25,674
Residential/Local	$1,661,267	$125,176	$0	$61,347
Grand Total:	$2,001,766	$126,500	$0	$102,695

Scenarios Criteria:

Criteria:

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenarios - Sections Selected for Treatment

Interest: 0.00% Inflation: 0.00% Printed: 6/11/2020

Scenario: Current Budget w/ $0 Years 1&2

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2020	$0	5%	2022	$697,435	5%	2024	$721,693	5%
2021	$0	5%	2023	$709,424	5%			

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
Acacia Street	Main Street	Shasta Ave	Acacia	10	720	21	15,120	R	AC	Zone 4	61	58	100	$74,592	19,274	LIGHT REHABILITATION
Blanca Street	Panorama Drive	Tuscan Avenue	Blanca	10	650	20	13,000	R	AC	Zone 1	61	57	100	$64,134	19,526	LIGHT REHABILITATION
Front Street	Harbor Street	Embarcadero Rd (N)	Front	10	380	48	18,240	R	AC	Zone 3	62	59	100	$89,984	18,983	LIGHT REHABILITATION
Market Avenue	Surf Street	Beach Street	Market	10	490	46	22,540	R	AC	Zone 3	59	56	100	$111,198	19,798	LIGHT REHABILITATION
Monterey Avenue	Beach Street	Harbor Street	Monterey	20	665	46	30,590	R	AC	Zone 3	60	57	100	$150,911	19,538	LIGHT REHABILITATION
Morro Avenue	Scott Street	Surf Street	Morro	10	430	27	11,610	R	AC	Zone 3	59	56	100	$57,276	19,798	LIGHT REHABILITATION
San Joaquin Street	Juniper Avenue	East End	SanJoaquin	20	135	38	5,130	R	AC	Zone 2	60	57	100	$25,308	19,540	LIGHT REHABILITATION
Tide Avenue	Vashon Street	Zanzibar Street	Tide	30	535	20	10,700	R	AC	Zone 1	61	58	100	$52,787	19,268	LIGHT REHABILITATION
Vashon Street	Beachcomber Drive	End	Vashon	20	265	20	5,300	R	AC	Zone 1	60	57	100	$26,147	19,543	LIGHT REHABILITATION
											Treatment Total			$652,337		
Dawson Street	Tuscan Avenue	Panorama Drive	Dawson	10	590	23	13,570	R	AC/AC	Zone 1	73	71	80	$5,715	80,527	LIGHT MAINTENANCE
Marina Street	Madera Avenue	Kern Avenue	Marina	10	885	21	18,585	R	AC/AC	Zone 4	73	71	80	$7,827	80,481	LIGHT MAINTENANCE
Oak Street	Main Street	Shasta Avenue	Oak	10	155	26	4,030	R	AC	Zone 4	81	78	86	$1,698	58,551	LIGHT MAINTENANCE
Scott Street	Surf Street	Beach Street	Scott	20	490	21	10,290	R	AC/AC	Zone 3	73	71	80	$4,334	80,574	LIGHT MAINTENANCE
Tahiti Street	Panorama Drive	Main St	Tahiti	15	945	24	21,840	R	AC/AC	Zone 1	73	71	80	$9,198	74,617	LIGHT MAINTENANCE
Tide Avenue	Nevis Street	Vashon Street	Tide	20	1,370	20	27,400	R	AC/AC	Zone 1	74	72	81	$11,539	77,810	LIGHT MAINTENANCE
											Treatment Total			$40,311		
Avalon Street	Main Street	Ironwood Avenue	Avalon	10	1,420	30	42,600	C	AC	Zone 2	75	72	74	$248	1,217,739	SEAL CRACKS
Bali Street	Sandalwood Avenue	End	Bali	10	640	20	12,800	R	AC	Zone 1	82	79	81	$52	1,805,438	SEAL CRACKS
Bayshore Drive	Main Street (N)	Main Street (E)	Bayshore	10	1,005	22	22,110	R	AC	Zone 4	71	68	71	$143	1,206,991	SEAL CRACKS
Birch Avenue	San Joaquin Street	Elena Street	Birch	30	615	36	22,140	R	AC	Zone 2	81	78	80	$95	1,738,835	SEAL CRACKS
Bolton Drive	Norwich Avenue	Downing Street	Bolton	20	770	37	28,490	R	AC	Zone 3	68	65	68	$199	1,071,641	SEAL CRACKS
Cedar Avenue	San Joaquin Street	Elena Street	Cedar	30	590	31	18,290	R	AC	Zone 2	73	70	73	$112	1,303,396	SEAL CRACKS
Clarabelle Drive	Radcliff Street	Downing Street	Clarabelle	I10	1,370	35	47,950	R	AC/AC	Zone 3	77	75	78	$241	2,143,783	SEAL CRACKS

** - Treatment from Project Selection

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenarios - Sections Selected for Treatment

Interest: 0.00% Inflation: 0.00% Printed: 6/11/2020

Scenario: Current Budget w/ $0 Years 1&2

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
Coral Avenue	San Jacinto Street	Island St. (North End)	Coral	40	1,720	20	34,400	R	AC	Zone 1	77	74	77	$180	1,511,585	SEAL CRACKS
Driftwood Street	Morro Ave	Main Street	Driftwood	10	325	48	15,600	R	AC	Zone 4	71	68	71	$101	1,207,545	SEAL CRACKS
Dunes Street	West End	Main Street	Dunes	10	925	46	42,550	R	AC/AC	Zone 3	71	69	72	$252	1,592,384	SEAL CRACKS
Elena Street	Main Street	Greenwood Avenue	Elena	10	960	42	40,320	C	AC	Zone 2	82	78	80	$175	1,682,459	SEAL CRACKS
Elm Street	San Jacinto Street	San Joaquin Street	Elm	20	625	36	22,500	R	AC	Zone 2	81	78	80	$97	1,738,835	SEAL CRACKS
Elm Street	San Joaquin Street	Elena Street	Elm	30	550	36	19,800	R	AC	Zone 2	81	78	80	$85	1,738,835	SEAL CRACKS
Fir Avenue	San Jacinto Street	San Joaquin Street	Fir	20	625	36	22,500	R	AC	Zone 2	71	68	71	$146	1,208,518	SEAL CRACKS
Fir Avenue	San Joaquin Street	Elena Street	Fir	30	525	36	18,900	R	AC	Zone 2	76	73	76	$103	1,458,337	SEAL CRACKS
Front Street	Harbor Street	Embarcadero Rd (S)	Front	20	430	37	15,910	R	AC	Zone 3	75	72	75	$91	1,405,126	SEAL CRACKS
Harbor Street	Morro Bay Blvd	Piney Way	Harbor	10	665	37	24,605	C	AC	Zone 3	80	76	78	$120	1,509,454	SEAL CRACKS
Kennedy Way	Quintana Road	Shasta Avenue	Kennedy	10	825	35	28,875	R	AC	Zone 3	73	70	73	$176	1,303,990	SEAL CRACKS
Koa Avenue	Laurel Avenue	North End	Koa	10	1,480	23	34,040	R	AC/AC	Zone 2	71	69	72	$202	1,592,229	SEAL CRACKS
Kodiak Street	Panorama Drive	Main St	Kodiak	15	880	20	19,700	R	AC	Zone 1	68	65	68	$138	1,071,448	SEAL CRACKS
Luzon Street	Beachcomber Drive	End	Luzon	30	640	21	13,440	R	AC	Zone 1	82	79	81	$55	1,805,894	SEAL CRACKS
Mindoro Street	Beachcomber Drive	End	Mindoro	30	620	21	13,020	R	AC	Zone 1	82	79	81	$53	1,805,894	SEAL CRACKS
Monterey Avenue	Surf Street	Beach Street	Monterey	10	470	37	17,390	R	AC	Zone 3	80	77	79	$79	1,685,585	SEAL CRACKS
Monterey Avenue	Morro Bay Blvd	Pacific Street	Monterey	40	295	46	13,570	R	AC	Zone 3	69	66	69	$93	1,117,232	SEAL CRACKS
Monterey Avenue	Pacific Street	Marina Street	Monterey	50	300	45	13,500	R	AC/AC	Zone 4	77	75	78	$68	2,142,367	SEAL CRACKS
Nutmeg Avenue	South End	North End	Nutmeg	10	2,295	23	52,785	R	AC	Zone 2	73	70	73	$321	1,303,767	SEAL CRACKS
Pacific Street	Kings Street	Kern Avenue	Pacific	10	1,355	20	27,100	C	AC	Zone 4	75	72	74	$158	1,216,210	SEAL CRACKS
Panorama Drive	Nevis Street	Mindoro Street	Panorama	40	420	14	5,880	R	AC	Zone 1	77	74	77	$31	1,512,383	SEAL CRACKS
Piney Way	Luisita Street	Olive Street	Piney	20	730	22	16,060	C	AC	Zone 4	82	78	80	$70	1,680,076	SEAL CRACKS
Piney Way	Olive Street	South Street	Piney	30	600	28	16,800	C	AC	Zone 4	84	80	82	$65	1,876,049	SEAL CRACKS
Piney Way	South Street	Morro Bay Blvd	Piney	40	1,565	43	67,295	C	AC	Zone 4	75	72	74	$391	1,216,210	SEAL CRACKS
Ponderosa Street	Ironwood Avenue	End	Ponderosa	10	880	23	20,240	R	AC	Zone 2	81	78	80	$87	1,739,469	SEAL CRACKS
Prescott Drive	Radcliff Street	South End	Prescott	10	815	33	26,895	R	AC	Zone 3	76	73	76	$147	1,458,337	SEAL CRACKS
Ridgeway Street	Fairview (East End)	Kings Ave	Ridgeway	10	425	22	9,350	R	AC	Zone 4	78	75	78	$47	1,566,872	SEAL CRACKS
San Juan Street	Ironwood Avenue	Koa Avenue	SanJuan	10	485	25	12,125	R	AC	Zone 2	73	70	73	$74	1,303,767	SEAL CRACKS
Vashon Street	Tide Avenue	Main Street	Vashon	10	385	24	9,240	R	AC	Zone 1	82	79	81	$38	1,805,894	SEAL CRACKS
Vista Street	Piney Way	Shasta Avenue	Vista	10	310	29	8,990	R	AC	Zone 4	82	79	81	$37	1,805,268	SEAL CRACKS
Walnut Street	Main Street	Shasta Avenue	Walnut	10	420	20	8,400	R	AC	Zone 4	82	79	81	$35	1,805,268	SEAL CRACKS

** - Treatment from Project Selection

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenarios - Sections Selected for Treatment

Interest: 0.00% Inflation: 0.00% Printed: 6/11/2020

Scenario: Current Budget w/ $0 Years 1&2

													Treatment Total		$4,805	
							Year 2022 Area Total		1,114,105				Year 2022 Total		$697,453	

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
Dana Way	Cabrillo Place	Kern Avenue	Dana	10	410	17	6,970	R	AC	Zone 4	68	63	100	$34,386	17,627	LIGHT REHABILITATION
San Joaquin Street	Main Street	Juniper Avenue	SanJoaquin	10	1,655	35	57,925	R	AC	Zone 2	61	56	100	$285,764	19,770	LIGHT REHABILITATION
South Bay BLVD	Twin Bridges	City Limits	SouthBayBL	30	2,030	34	69,020	MiA	AC	Zone 4	69	63	100	$340,499	20,219	LIGHT REHABILITATION
													Treatment Total		$660,649	
Cypress Avenue	Main Street	North End	Cypress	10	155	18	2,790	R	AC	Zone 4	68	63	73	$9,880	6,183	HEAVY MAINTENANCE
													Treatment Total		$9,880	
Anchor Street	Piney Way	Main Street	Anchor	30	1,310	34	44,540	R	AC/AC	Zone 4	73	70	79	$18,757	73,906	LIGHT MAINTENANCE
Mesa Street	Kern Avenue	Madera Avenue	Mesa	10	885	20	17,700	R	AC/AC	Zone 4	72	69	78	$7,454	70,826	LIGHT MAINTENANCE
Monterey Alley	Surf Street	End	MontereyAl	10	200	20	4,000	R	AC	Zone 3	73	69	78	$1,685	56,104	LIGHT MAINTENANCE
Olive Street	Main Street	Morro Avenue	Olive	30	300	49	14,700	R	AC/AC	Zone 4	74	71	80	$6,191	71,877	LIGHT MAINTENANCE
South Street	Morro Avenue	Main Street	South	10	300	36	10,800	R	AC/AC	Zone 4	74	71	80	$4,548	71,877	LIGHT MAINTENANCE
													Treatment Total		$38,635	
Coral Avenue	Indigo Cir	San Jacinto St	Coral	30	495	45	22,275	C	AC	Zone 1	84	78	80	$97	1,019,128	SEAL CRACKS
Zanzibar Street	Panorama Drive	Main Street	Zanzibar	20	900	20	18,000	R	AC/AC	Zone 1	82	78	80	$78	2,276,448	SEAL CRACKS
													Treatment Total		$175	
							Year 2023 Area Total		268,720				Year 2023 Total		$709,339	

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
Whidbey Street	Beachcomber Drive	EOS	Whidbey	20	250	20	5,000	R	AC	Zone 1	55	47	100	$48,912	10,838	HEAVY REHABILITATION
													Treatment Total		$48,912	
Estero Avenue	Olive Street	Pacific Street	Estero	20	1,580	21	33,180	R	AC	Zone 4	64	57	100	$163,688	19,468	LIGHT REHABILITATION
Marengo Drive	Bella Vista Drive	La Loma Avenue	Marengo	10	520	25	13,000	R	AC	Zone 4	65	58	100	$64,134	19,175	LIGHT REHABILITATION

** - Treatment from Project Selection

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenarios - Sections Selected for Treatment

Interest: 0.00% Inflation: 0.00% Printed: 6/11/2020

Scenario: Current Budget w/ $0 Years 1&2

Year: 2024

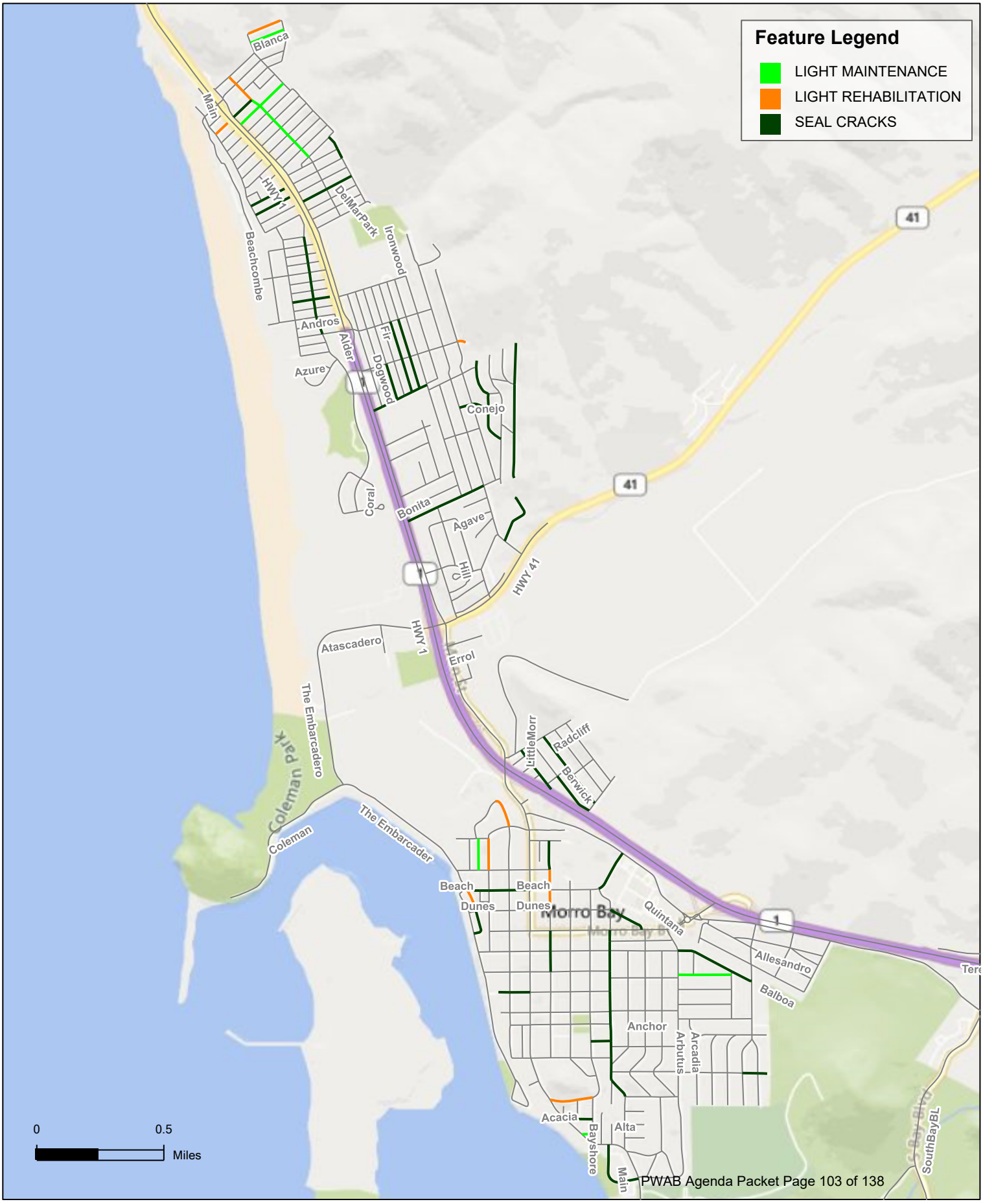
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
Monterey Avenue	Harbor Street	Morro Bay Blvd	Monterey	30	295	46	13,570	R	AC	Zone 3	63	56	100	$66,946	19,730	LIGHT REHABILITATION
Quintana Road	South Bay Blvd	City Limit	Quintana	40	1,600	30	48,000	R	AC	Zone 4	62	55	100	$236,800	20,011	LIGHT REHABILITATION
Sunset Court	Hill Street	End	SunsetCt	10	450	33	14,850	R	AC	Zone 2	63	56	100	$73,260	19,731	LIGHT REHABILITATION
Whidbey Street	Tuscan Avenue	Panorama Dr	Whidbey	10	255	20	5,100	R	AC/AC	Zone 1	66	60	100	$25,160	18,096	LIGHT REHABILITATION
											Treatment Total			$629,988		
Carmel Street	End	Kings Avenue	Carmel	10	245	20	4,900	R	AC	Zone 4	78	72	81	$2,064	58,344	LIGHT MAINTENANCE
Clarabelle Drive	Radcliff Street	Downing Street	Clarabelle	I10	1,370	35	47,950	R	AC/AC	Zone 3	77	76	84	$20,193	89,570	LIGHT MAINTENANCE
Koa Avenue	Laurel Avenue	North End	Koa	10	1,480	23	34,040	R	AC/AC	Zone 2	71	70	79	$14,335	69,871	LIGHT MAINTENANCE
Monterey Avenue	Pacific Street	Marina Street	Monterey	50	300	45	13,500	R	AC/AC	Zone 4	77	76	84	$5,685	89,510	LIGHT MAINTENANCE
											Treatment Total			$42,277		
Morro Avenue	Morro Bay Blvd	Pacific Street	Morro	50	300	46	13,800	R	AC	Zone 3	84	78	80	$60	1,726,848	SEAL CRACKS
Panorama Drive	Blanca Street	Zanzibar Street	Panorama	10	300	22	6,600	R	AC/AC	Zone 1	74	70	73	$39	1,672,366	SEAL CRACKS
Piney Lane	Piney Way	End	PineyLn	10	365	17	6,205	R	AC	Zone 4	82	76	78	$30	1,617,022	SEAL CRACKS
Rennell Street	Panorama Drive	Main St	Rennell	15	1,015	20	20,725	R	AC/AC	Zone 1	79	75	78	$104	1,991,545	SEAL CRACKS
West Avenue	Beach Street	Surf Street	West	10	490	30	14,700	R	AC	Zone 3	84	78	80	$64	1,727,673	SEAL CRACKS
											Treatment Total			$297		
					Year 2024 Area Total		295,120				Year 2024 Total			$721,474		
					Grand Total Section Area:		1,677,945				Grand Total			$2,128,266		

** - Treatment from Project Selection

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenario Treatments

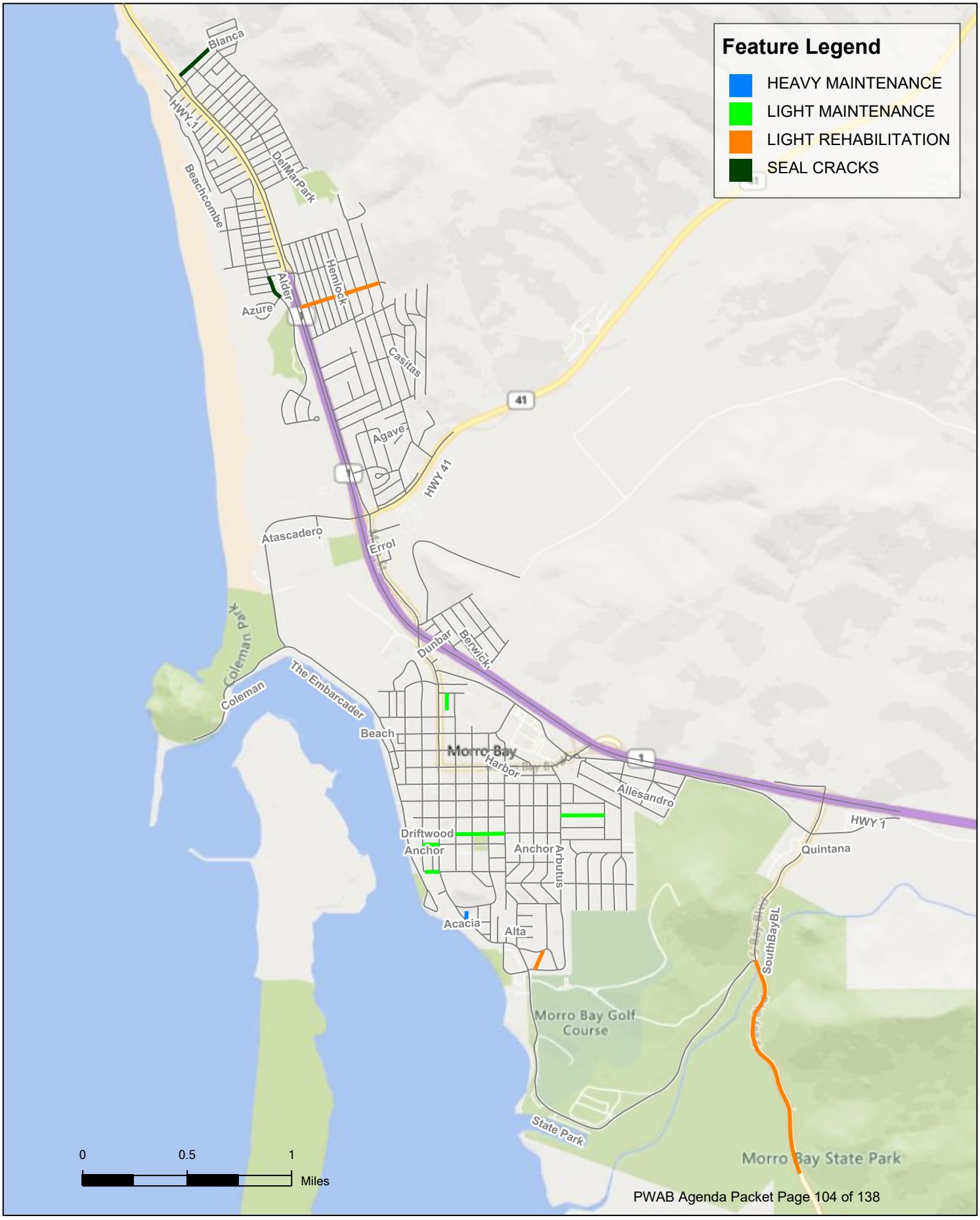
Current Budget w/ $0 Years 1&2 - 2022 Project Period - Printed: 6/11/2020



City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenario Treatments

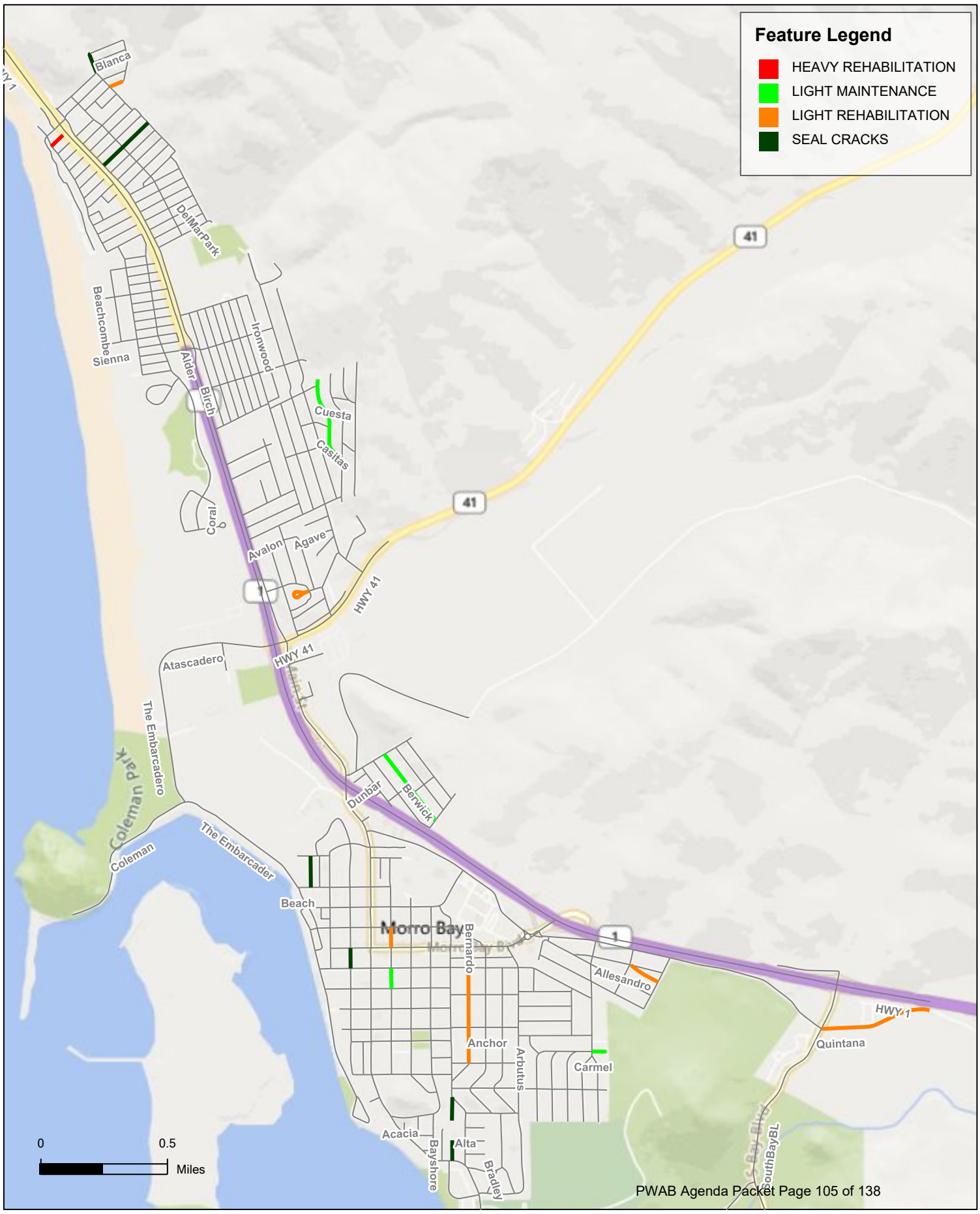
Current Budget w/ $0 Years 1&2 - 2023 Project Period - Printed: 6/11/2020



City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Scenario Treatments

Current Budget w/ $0 Years 1&2 - 2024 Project Period - Printed: 6/11/2020



Increase PCI by 5

($3.9 Million Avg. over 5 Years)

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

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Target-Driven Scenarios
Pavement Network Condition Lane Miles

Interest: .00% Inflation: .00% Printed: 02/11/2020

Scenario: Increase PCI

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	67	Year 2	68	Year 3	69	Year 4	70
Year 5	71						

Annual budget needs to meet target objectives

Year	Arterial	Collector	Res/Loc	Other	Preventative Maintenance	Total
2020	$0	$34,659	$255,401	$0	$290,060	$290,060
2021	$1,304,289	$814,326	$1,157,390	$0	$124,266	$3,276,005
2022	$427,263	$3,195,534	$1,673,365	$0	$45,637	$5,296,162
2023	$0	$1,802,522	$3,617,699	$0	$175	$5,420,221
2024	$1,833,548	$1,525,824	$1,910,144	$0	$403,190	$5,269,516
					Average Yearly Total:	$3,910,393
					Grand Total:	$19,551,964

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	5.9%	0.7%	14
Collector	66	11.1%	3.0%	12
Residential	66	33.7%	9.5%	19

Pavement Network after schedulable treatments applied in lane miles.

2020

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	5.9%	0.7%	14
Collector	66	11.1%	3.0%	12
Residential	67	33.7%	9.5%	19

2021

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	72	7.8%	0.8%	16
Collector	66	11.5%	3.5%	12
Residential	67	34.5%	10.1%	20

Pavement Network after schedulable treatments applied in lane miles.

2022

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	70	5.2%	0.7%	16
Collector	71	12.1%	2.4%	15
Residential	68	35.4%	10.7%	20

2023

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	5.2%	0.7%	15
Collector	72	14.2%	2.4%	16
Residential	70	38.8%	8.3%	22

2024

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	70	9.5%	0.7%	16
Collector	73	15.7%	2.4%	17
Residential	71	40.3%	7.8%	23

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Target-Driven Scenarios
Network Condition Summary

Interest: 0% Inflation: 0% Printed: 02/11/2020

Scenario: Increase PCI

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	67	Year 2	68	Year 3	69	Year 4	70
Year 5	71						

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2020	66	67
2021	64	68
2022	62	69
2023	60	70
2024	57	71

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2020, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	5.9%	11.1%	33.7%	0.0%	50.7%
II / III	10.7%	11.3%	14.1%	0.0%	36.1%
IV	0.7%	3.0%	9.2%	0.0%	12.9%
V	0.0%	0.0%	0.3%	0.0%	0.3%
Total	17.3%	25.4%	57.3%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	5.9%	11.1%	33.7%	0.0%	50.7%
II / III	10.7%	11.3%	14.1%	0.0%	36.1%
IV	0.7%	3.0%	9.2%	0.0%	12.9%
V	0.0%	0.0%	0.3%	0.0%	0.3%
Total	17.3%	25.4%	57.3%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	9.5%	15.7%	40.3%	0.0%	65.5%
II / III	7.1%	7.3%	9.3%	0.0%	23.7%
IV	0.7%	1.5%	4.2%	0.0%	6.3%
V	0.0%	0.9%	3.6%	0.0%	4.5%
Total	17.3%	25.4%	57.3%	0.0%	100.0%

City of Morro Bay
955 Shasta Ave
Morro Bay, CA 93442
(805) 772-6261

Target-Driven Scenarios - Cost Summary

Interest: 0% Inflation: 0% Printed: 02/11/2020

Scenario: Increase PCI

Objective: Minimum Network Average PCI **Target: By Year**

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	67	Year 2	68	Year 3	69	Year 4	70
Year 5	71						

Year		Rehabilitation	Preventive Maintenance		Total Cost	Deferred
2020	II	$0	Non-Project	$290,060	$290,060	$14,820,197
	III	$0				
	IV	$0	Project	$0		
	V	$0				
	Total	**$0**				
	Project	$0				
2021	II	$0	Non-Project	$124,266	$3,276,005	$10,971,588
	III	$3,151,739				
	IV	$0	Project	$0		
	V	$0				
	Total	**$3,151,739**				
	Project	$0				
2022	II	$238,459	Non-Project	$45,637	$5,296,162	$8,650,643
	III	$1,199,098				
	IV	$3,812,968	Project	$0		
	V	$0				
	Total	**$5,250,525**				
	Project	$0				
2023	II	$0	Non-Project	$175	$5,420,221	$7,344,436
	III	$0				
	IV	$5,420,046	Project	$0		
	V	$0				
	Total	**$5,420,046**				
	Project	$0				
2024	II	$1,035,795	Non-Project	$403,190	$5,269,516	$8,323,252
	III	$0				
	IV	$3,830,531	Project	$0		
	V	$0				
	Total	**$4,866,326**				
	Project	$0				

Year	Rehabilitation	Preventive Maintenance	Total Cost	Deferred

Summary

Functional Class	Rehabilitation	Prev. Maint.
Arterial	$3,508,976	$56,124
Collector	$7,225,898	$146,967
Residential/Local	$7,953,762	$660,237
Total:	$18,688,636	$863,328

Grand Total: $19,551,964

Appendix C
Definitions

DEFINITIONS

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

GENERAL TERMS

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

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

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

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

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

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

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

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

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

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

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

PCC - Portland Cement Concrete

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PAVEMENT PRESERVATION - Applying the Right Treatment to the Right Pavement at the Right Time using the Right Materials.

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

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

STREETSAVER DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EVENT PCI - The PCI after the selected Event occurred.

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

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

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

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

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

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

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

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

MAINTENANCE DATE - Displays the date the maintenance was completed.

MANAGEMENT UNIT - Relates a project to a management unit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

REPORT DEFINITIONS

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

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

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

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

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

Appendix D
Stop-Gap Plan

STOP-GAP AND PAVEMENT PRESERVATION

This section contains the exhibits and quantities for the Stop-Gap plan, as well as a brief description of why it is necessary.

Description:

As part of the City of Morro Bay's 2019/2020 Pavement Management Plan update, the city requested that PEI assess the City's critical and immediate pavement need. As well as, help them put together a plan, or potential project, aimed at addressing those needs.

Our assessment found that there was a significant amount of pavement failures on the some of the City's most heavily traveled streets. Specifically, **Main Street** (from Hwy 41 to Morro Bay State Park), **South Bay Boulevard** (from Quintana Road to the City/ County limit), **Harbor Street** (from Embarcadero Road to Piney Way), and **Pacific Street** (from Embarcadero Road to Kern Avenue). It was determined that the estimated cost to perform a full rehabilitation treatment, on any one of those streets was more than the City's budget allowed for.

In discussion with City staff about these streets, PEI recommended addressing just the localized failures. By addressing the localized failures, at a minimum, it would extend the life of these streets, by preserving their structural integrity. This would also help mitigate any potential hazard to drivers and would allow the City Staff the time necessary to create a plan to address these streets over the long term.

PEI then measured and quantified the amount of Base Failures, areas where the underlying structure of the pavement was no longer supporting the pavement and the loading it received. This was evident by the cracking pattern of the pavement and the corresponding rutting or depressions. We also quantified areas where the pavement structure had failed, but there was no indication that the underlying structure was compromised. These were areas where the pavement exhibited alligator cracking, but no rutting or depressions.

The following pages contain the list of street sections, their measured digout quantities, and exhibits that show the locations of the digouts on the various streets.

Additionally, PEI identified a list of streets that would be good candidates for a pavement preservation treatment, to keep them from deteriorating into the next PCI Condition Category. Specifically, **Beach Street** (from Embarcadero Rd to Main St.), **Embarcadero Road** (from Beach St. to South St.), **Main Street** (from Zanzibar St. to San Jacinto St, & Surf St. to Park Entrance), and **Morro Bay Boulevard** (from Market St. to Hwy 1).

CITY OF MORRO BAY
2020 STOP-GAP PAVEMENT REPAIR PROJECT
ESTIMATED DIGOUT QUANTITIES

Main Street (Hwy 41 to COP South of Hwy 101) (~106,050 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	12,562	SF	$6.50/SF	$ 81,653
Base Failure = ~	11,384	SF	$6.50/SF	$ 73,996

Main Street (COP South of Hwy 101 to Olive Street) (~242,882 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	2,248	SF	$6.50/SF	$ 14,612
Base Failure = ~	4,220	SF	$6.50/SF	$ 27,430

Main Street (Olive Street to Morro Bay State Park) (~94,364 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	722	SF	$6.50/SF	$ 4,693
Base Failure = ~	4,536	SF	$6.50/SF	$ 29,484

South Bay Boulevard (Quintana Road to PCC Bridge Deck) (~97,440 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	1,768	SF	$6.50/SF	$ 11,492
Base Failure = ~	1,170	SF	$6.50/SF	$ 7,605

South Bay Boulevard (PCC Bridge Deck to County Limit) (~69,020 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	4,580	SF	$6.50/SF	$ 29,770
Base Failure = ~	3,900	SF	$6.50/SF	$ 25,350

Harbor Street (Embarcadero Road to Piney Way) (~109,980 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	20,131	SF	$6.50/SF	$ 130,852
Base Failure = ~	1,532	SF	$6.50/SF	$ 9,958

Pacific Street (Embarcadero Road to Shasta Avenue) (~82,350 SF)

			UNIT PRICE	COST
Alligator Cracking = ~	12,880	SF	$6.50/SF	$ 83,720
Base Failure = ~	3,341	SF	$6.50/SF	$ 21,717

Pacific Street (Shasta Avenue to Kern Avenue) (~46,720 SF)

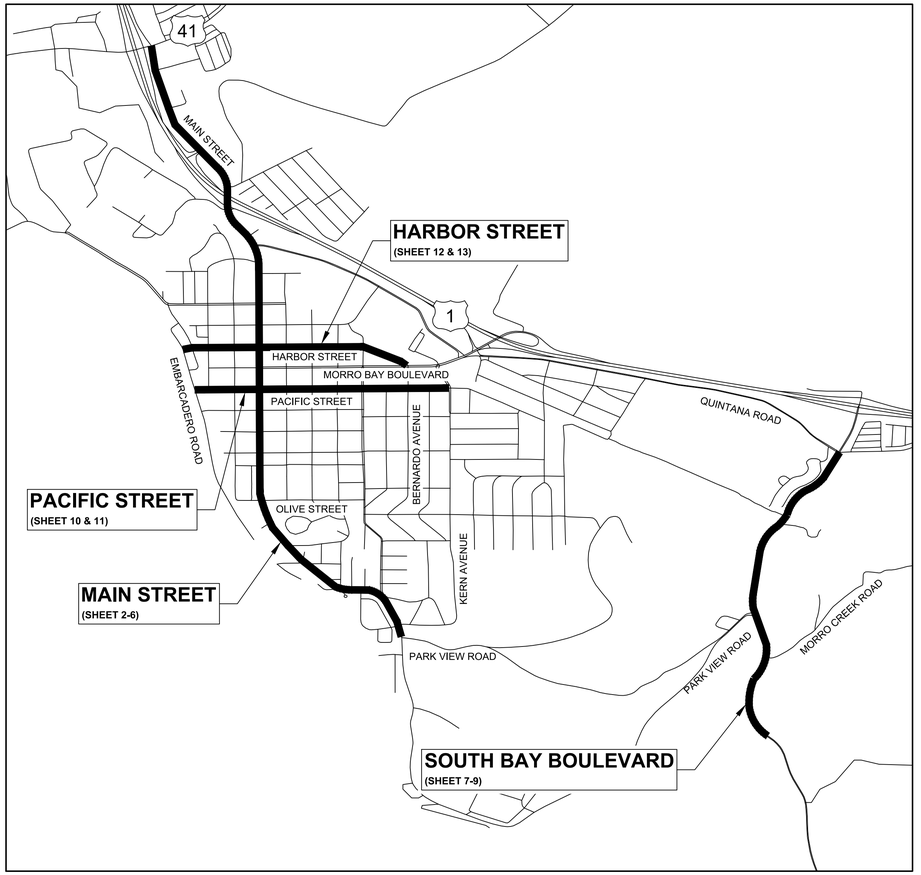
			UNIT PRICE	COST
Base Failure = ~	18,832	SF	$6.50/SF	$ 122,408

TOTAL	$ 674,739

CITY OF MORRO BAY

HOT SPOT REPAIR PROJECT
PROJECT # XXXXXX

SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
1	TITLE SHEET
2	MAIN STREET - HIGHWAY 41 TO ~2,000' SOUTH OF HIGHWAY 41
3	MAIN STREET - ~2,000' SOUTH OF HIGHWAY 41 TO ~50' NORTH OF SURF STREET
4	MAIN STREET - ~50' NORTH OF SURF STREET TO ~25' NORTH OF MARINA STREET
5	MAIN STREET - ~25' NORTH OF MARINA STREET TO ~250' NORTH OF ACACIA STREET
6	MAIN STREET - ~250' NORTH OF ACACIA STREET TO PINEY WAY
7	SOUTH BAY BOULEVARD - QUINTANA ROAD TO ~1,800' SOUTH OF QUINTANA ROAD
8	SOUTH BAY BOULEVARD - ~1,800' SOUTH OF QUINTANA ROAD TO ~1,000' SOUTH OF PARK VIEW ROAD
9	SOUTH BAY BOULEVARD - ~1,000' SOUTH OF PARK VIEW ROAD TO CITY LIMIT
10	PACIFIC STREET - EMBARCADERO ROAD TO ~50' WEST OF PINEY WAY
11	PACIFIC STREET - ~50' WEST OF PINEY WAY TO KERN AVENUE
12	HARBOR STREET - EMBARCADERO ROAD TO SHASTA AVENUE
13	HARBOR STREET - SHASTA AVENUE TO MORRO BAY BOULEVARD



VICINITY MAP
NTS

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE WORK.
2. FOR AREAS TO BE REMOVED & REPLACED, THE CONTRACTOR SHALL ONLY REMOVE MATERIAL QUANTITIES THAT CAN BE REPLACED DURING THE SAME WORK DAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING DAMAGE TO ANY PUBLIC OR PRIVATE UTILITIES AND/OR STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES BEFORE STARTING WORK (48 HOURS NOTICE REQUIRED).
4. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT AT 811 AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ALLOW UTILITY OWNERS TO MARK THE LOCATION OF THEIR RESPECTIVE UNDERGROUND FACILITIES/UTILITIES, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN ON THESE PLANS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL RELATIONS (CAL-OSHA) SAFETY STANDARDS, IN ACCORDANCE WITH SECTION 7-10.4 OF THE SSPWC. IF REQUESTED BY THE INSPECTOR, THE CONTRACTOR SHALL PROVIDE PROOF OF A PERMIT FROM CAL-OSHA.
6. CONTRACTOR IS RESPONSIBLE FOR TRIMMING ALL VEGETATION WITHIN WORK ZONE THAT WILL INTERFERE WITH WORK. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS.
7. CONTRACTOR SHALL DISPOSE OF ALL CONSTRUCTION WASTE IN A LEGAL MANNER.

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
TITLE SHEET

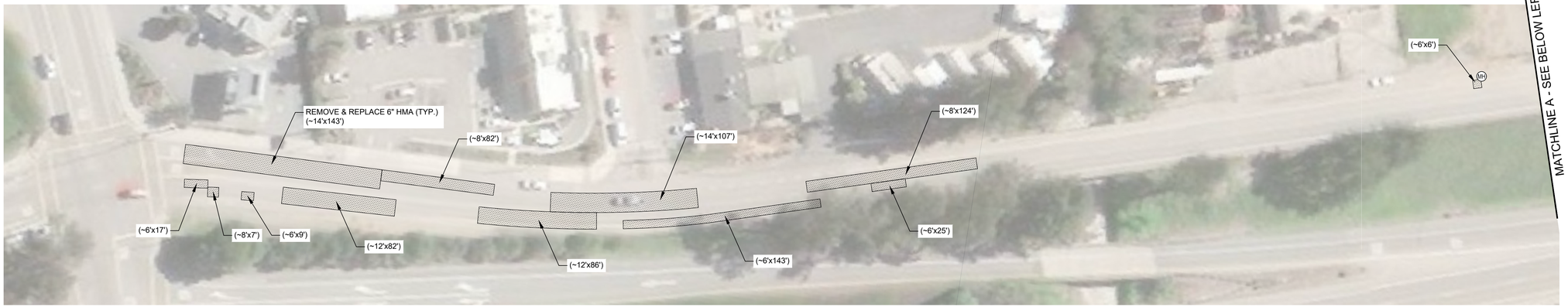
DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: NO SCALE
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 1 of 13

811 Know what's below. Call before you dig.

HIGHWAY 41

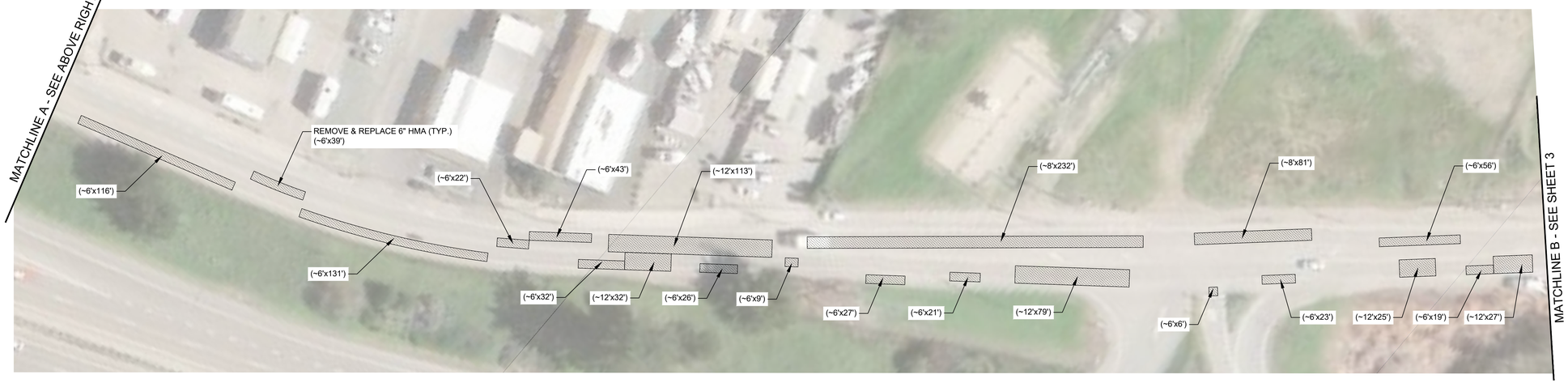
ERROL STREET

PRESTON LANE



MAIN STREET

1"=40'



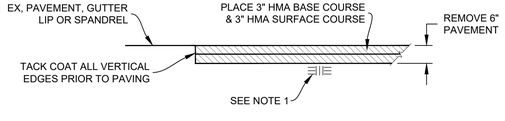
HIGHWAY 1
ON / OFF RAMPS

MAIN STREET

1"=40'

NOTES:

1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA

NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation

Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY

HOT SPOT REPAIR PROJECT

MAIN STREET

(HIGHWAY 41 TO ~2,000' SOUTH OF HIGHWAY 41)

DRAWN BY: **SH**

PROJECT NUMBER: **190388**

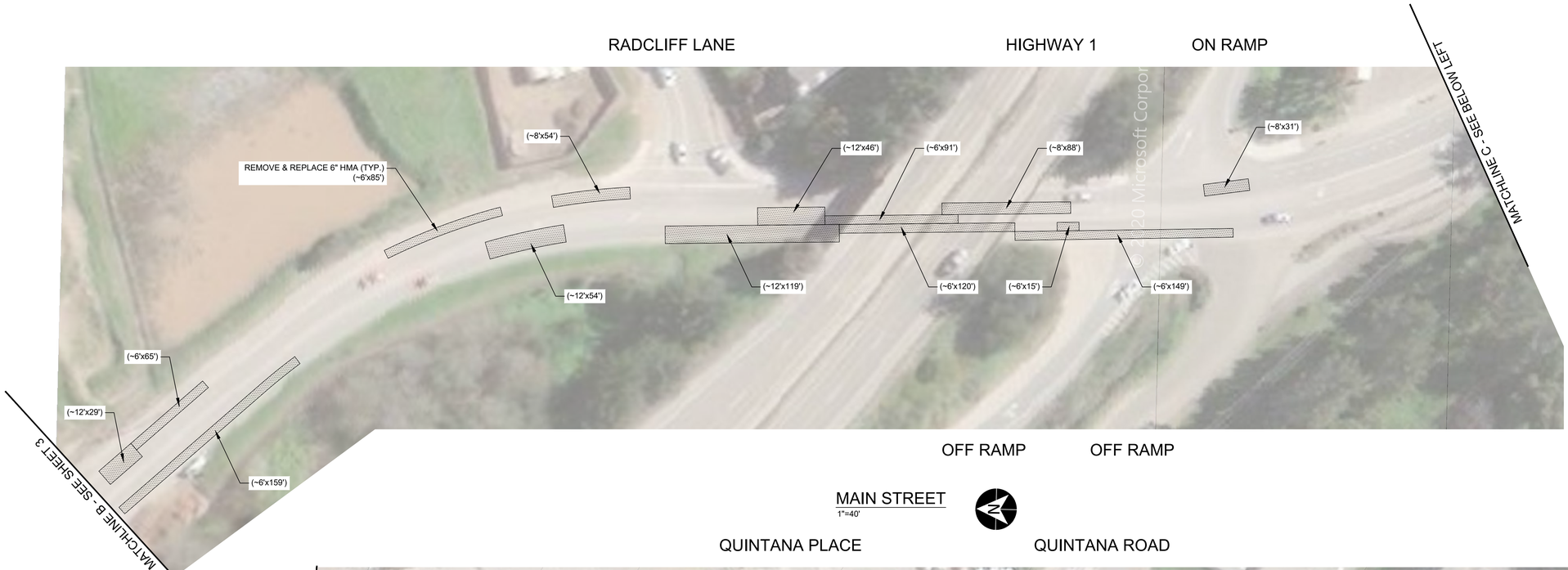
SCALE: **1"= 40'**

VERIFY SCALE
BAR REPRESENTS
1" ON ORIGINAL

DATE: **APRIL 2020**

SHEET NUMBER:

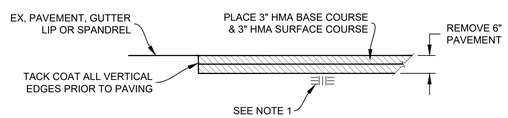
2 of 13



MAIN STREET
1"=40'

MAIN STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
MAIN STREET
(~2,000' SOUTH OF HIGHWAY 41 TO ~50' NORTH OF SURF STREET)

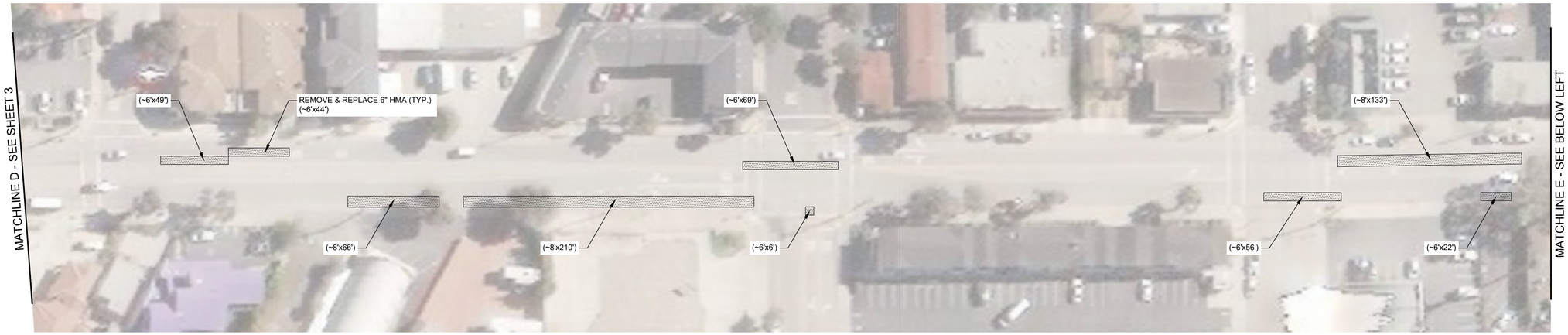
DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 3 of 13

Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM

SURF STREET

BEACH STREET

DUNES STREET



MAIN STREET
1"=40'

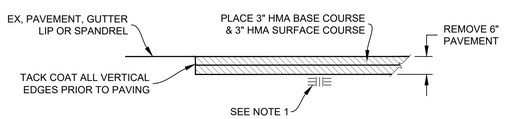
HARBOR STREET

MORRO BAY BOULEVARD

PACIFIC STREET

MAIN STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY

HOT SPOT REPAIR PROJECT

MAIN STREET

(~50' NORTH OF SURF STREET TO ~25' NORTH OF MARINA STREET)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 4 of 13

Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM

MARINA STREET

DRIFTWOOD STREET

ANCHOR STREET

SOUTH STREET

MATCHLINE F - SEE SHEET 4

MATCHLINE G - SEE BELOW LEFT

MAIN STREET
1"=40'

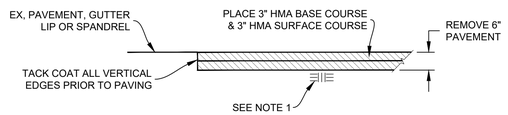
OLIVE STREET

MATCHLINE H - SEE SHEET 6

MATCHLINE G - SEE ABOVE RIGHT

MAIN STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation

Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY

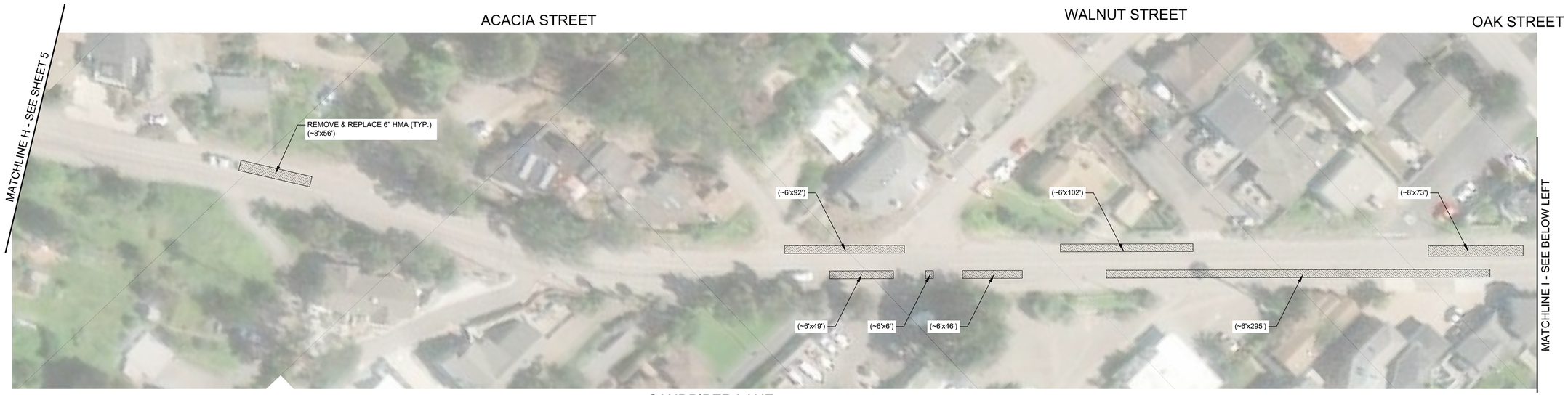
HOT SPOT REPAIR PROJECT

MAIN STREET

(~25' NORTH OF MARINA STREET TO ~250' NORTH OF ACACIA STREET)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 5 of 13

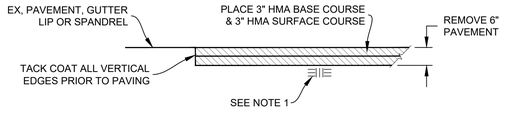
Path: Z:\SHARED\DR DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM



MAIN STREET
1"=40'

MAIN STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT

MAIN STREET
(~250' NORTH OF ACACIA STREET TO PINEY WAY)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 6 of 13

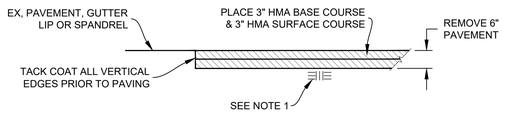
Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM

QUINTANA ROAD

SOUTH BAY BOULEVARD
1"=40'

SOUTH BAY BOULEVARD
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation

Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
SOUTH BAY BOULEVARD
(QUINTANA ROAD TO ~1,800' SOUTH OF QUINTANA ROAD)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 7 of 13

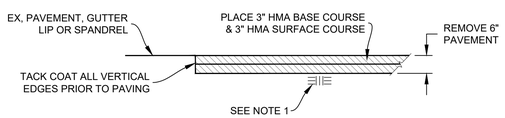
Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM

PARK VIEW ROAD

SOUTH BAY BOULEVARD
1"=40'

SOUTH BAY BOULEVARD
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

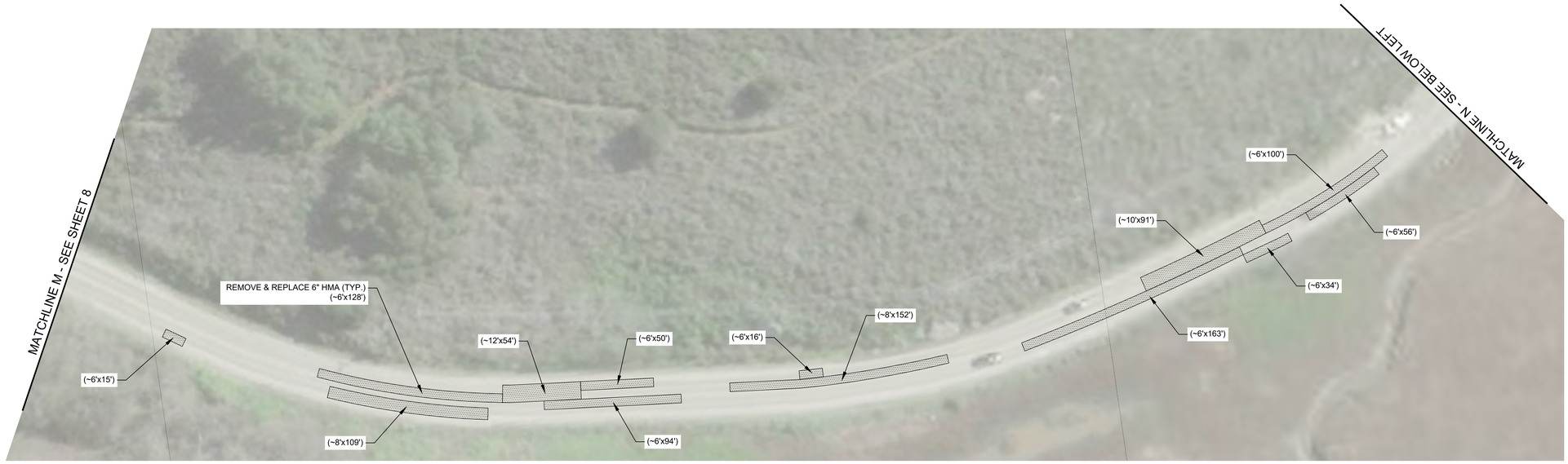
MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

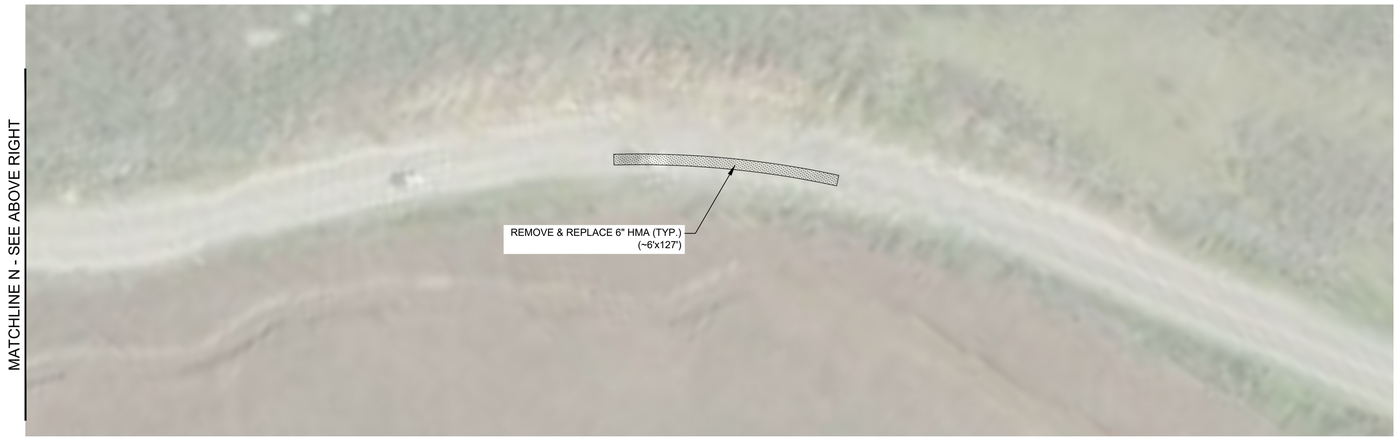
CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
SOUTH BAY BOULEVARD
(~1,800' SOUTH OF QUINTANA ROAD TO ~1,000' SOUTH OF PARK VIEW ROAD)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 8 of 13

Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM

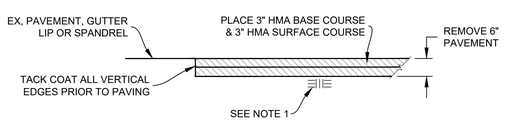


SOUTH BAY BOULEVARD
1"=40'



SOUTH BAY BOULEVARD
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT

SOUTH BAY BOULEVARD
(~1,000' SOUTH OF PARK VIEW ROAD TO CITY LIMIT)

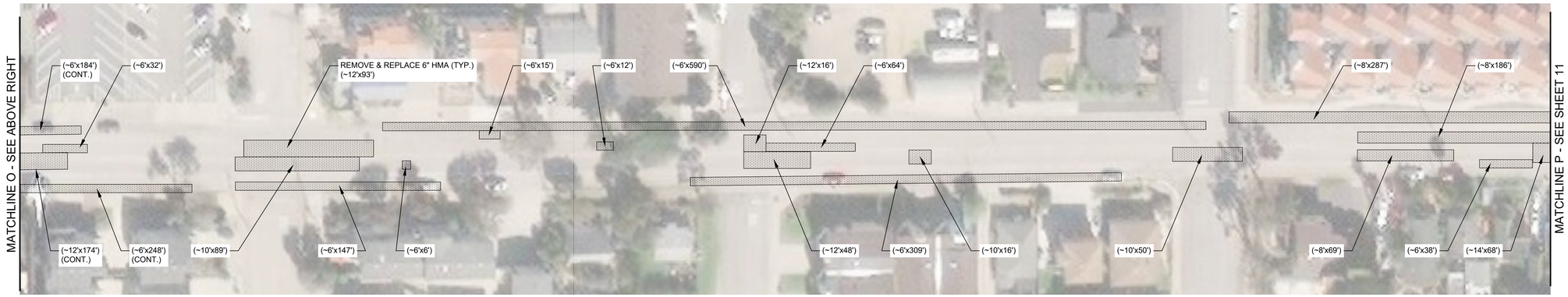
DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 9 of 13

Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE02_BASE MAP.DWG Plot Date: 4/8/2020 4:11 PM

EMBARCADERO ROAD | MARKET AVENUE | MORRO AVENUE | MAIN STREET

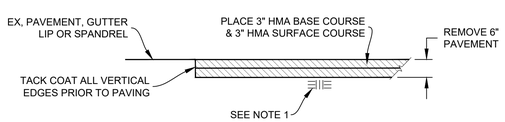
PACIFIC STREET
1"=40'

MONTEREY AVENUE | NAPA AVENUE | SHASTA AVENUE



PACIFIC STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
PACIFIC STREET
(EMBARCADERO ROAD TO ~50' WEST OF PINEY WAY)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 10 of 13

Path: Z:\SHARED\DR DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE01_BASE MAP.DWG Plot Date: 4/8/2020 4:21 PM

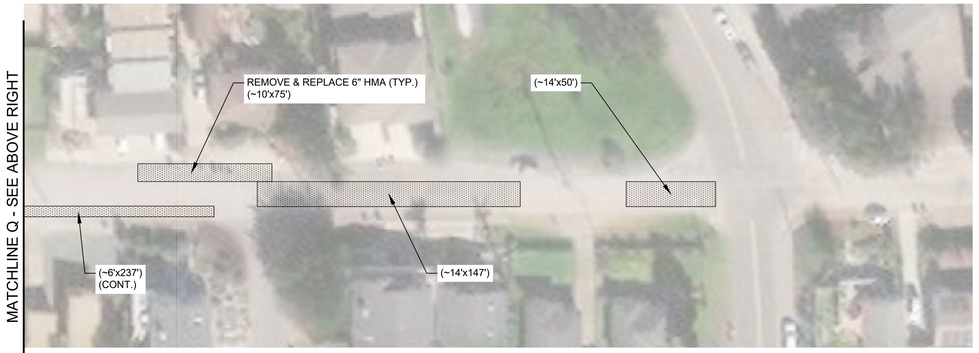
PINEY WAY

BERNARDO AVENUE

ESTERO AVENUE

PACIFIC STREET
1"=40'

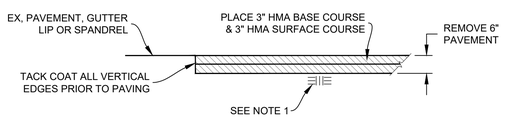
KERN AVENUE



FRESNO AVENUE

PACIFIC STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

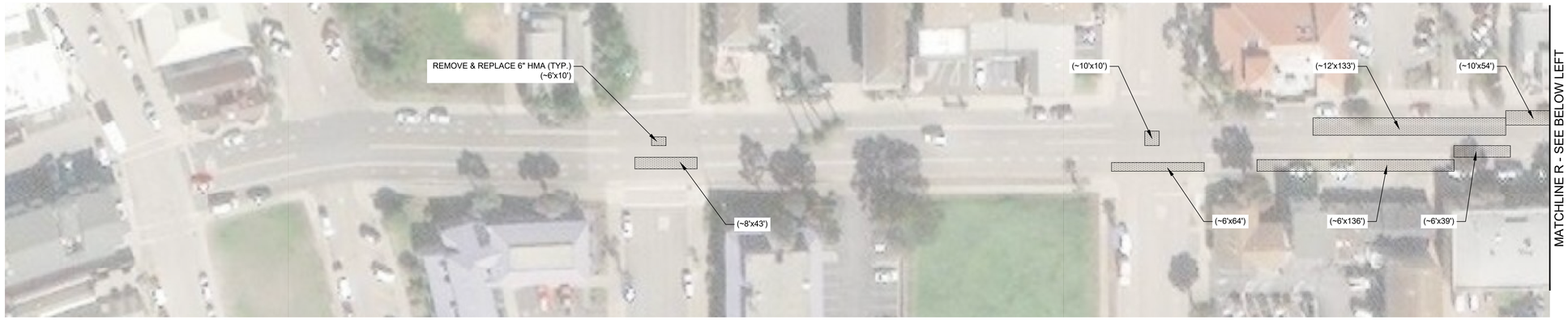
Pavement Engineering Inc.
You can ride on our reputation

Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
PACIFIC STREET
(~50' WEST OF PINEY WAY TO KERN AVENUE)

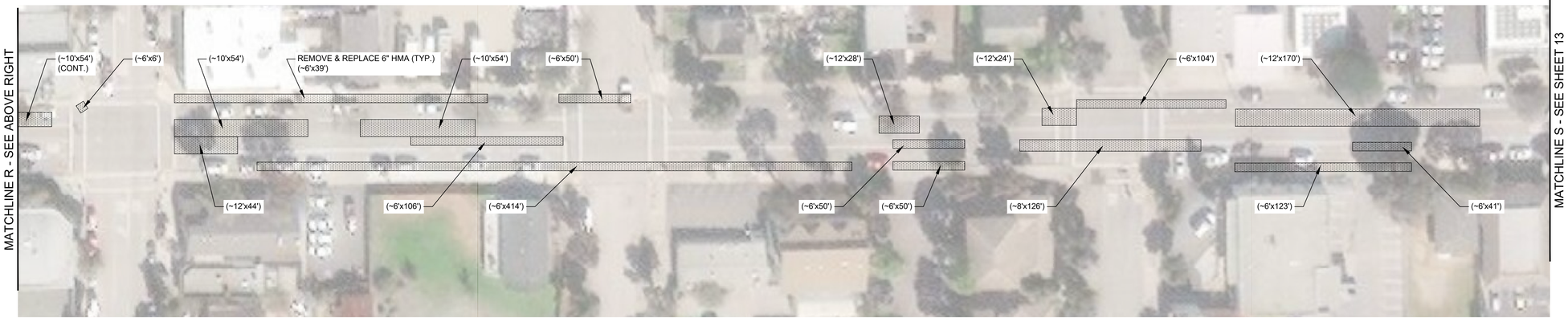
DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 11 of 13

EMBARCADERO ROAD FRONT STREET MARKET AVENUE MORRO AVENUE



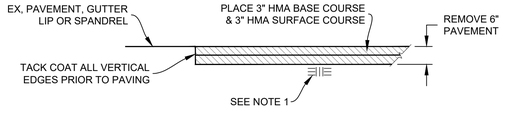
HARBOR STREET
1"=40'

MAIN STREET MONTEREY AVENUE NAPA AVENUE



HARBOR STREET
1"=40'

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

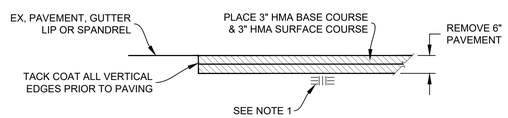
Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
HARBOR STREET
(EMBARCADERO ROAD TO SHASTA AVENUE)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 12 of 13

Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY, CITY OF\190388\DRAWING\190388_SITE01_BASE MAP.DWG Plot Date: 4/8/2020 4:22 PM

NOTES:
1. RECOMPACT LOOSENED MATERIAL AT SURFACE. IF CONTRACTOR DISTURBS MORE THAN 1-1/2" OF MATERIAL, SUBGRADE SHALL BE RECOMPACTED TO 95% R.C.



REMOVE & REPLACE 6" HMA
NTS

LEGEND

REMOVE & REPLACE 6" HMA

MH MANHOLE (STORM DRAIN, SANITARY SEWER, TELEPHONE)

Pavement Engineering Inc.
You can ride on our reputation
Corporate Office:
3485 Sacramento Drive, Suite A
San Luis Obispo, CA 93401
805.781.2265

CITY OF MORRO BAY
HOT SPOT REPAIR PROJECT
HARBOR STREET
(SHASTA AVENUE TO MORRO BAY BOULEVARD)

DRAWN BY: SH
PROJECT NUMBER: 190388
SCALE: 1"= 40'
VERIFY SCALE
BAR REPRESENTS 1" ON ORIGINAL
DATE: APRIL 2020
SHEET NUMBER: 13 of 13

Path: Z:\SHARED\R DRIVE\ACTIVE PROJECTS\MORRO BAY; CITY OF\190388\DRAWINGS\190388_SITE01_BASE MAP.DWG Plot Date: 4/8/2020 4:22 PM

PAVEMENT PRESERVATION PROJECT

LIST OF POTENTIAL STREETS

Street	Street Segments	Estimated Area (SF)	% Digout	Estimated Cost
Beach Street	Embarcadero Road to Main Street	54,740	5%	$ 41,055.00
Embarcadero Road	Beach Street to South Street	101,088	0%	$ 35,380.80
Main Street	Zanzibar Street to San Jacinto Street	164,405	0%	$ 57,541.75
Main Street	Surf Street to Olive Street	181,490	0%	$ 63,521.50
Main Street	Olive Street to Park Entrance	94,364	0%	$ 33,027.40
Morro Bay Boulevard	Market Street to Hwy 1	182,920	2%	$ 93,289.20

Total : $ 323,815.65