City of Brookings

WORKSHOP Agenda

City Council

Monday May 6, 2013, 4:00pm
City Hall Council Chambers, 898 Elk Drive, Brookings, OR 97415

A. Call to Order

B. Roll Call

C. Topics

1. Meeting with Curry Health District Administrator. [City Manager, pg. 2]
2. Pavement Management Plan Update & Deferred Improvement Agreements. [PWDS, pg. 3]
   a. Scope of Work [pg. 5]
   b. Plan [pg. 12]
   c. Map (to be provided at meeting)
3. ODOT Highway Shoulder Maintenance Agreement. [PWDS, pg. 30]

D. Council Member Requests for Workshop Topics

E. Adjournment

All public City meetings are held in accessible locations. Auxiliary aids will be provided upon request with advance notification. Please contact 469-1102 if you have any questions regarding this notice.

CITY OF BROOKINGS

COUNCIL WORKSHOP REPORT

Meeting Date: May 6, 2013

Originating Dept: City Manager

Signature (submitted by)

City Manager Approval

Subject: Meeting with Curry Hospital District Administrator

Background/Discussion:
At the April City Council workshop, several questions were raised about the future of the Brookings Clinic and the relationship of the possible development of an Emergency Department at the clinic and improvements to the Brookings Airport.

Hospital District Administrator Adam Blair has been invited to the May workshop to discuss this matter with the City Council.

CITY OF BROOKINGS

Council WORKSHOP Report

Workshop Date: May 6, 2013

Originating Dept: PW/DS

Public Works/Development Services Director

City Manager Approval

Subject: Pavement Management Plan (PMP) Update and Deferred Improvement Agreements (DIA)

Recommendation: To include DIAs in the PMP implementation to "cash out" the DIAs. Staff has reviewed and recommends the PMP update which reduces the amount of sub grade work, reduces the tonnage of asphalt to be applied, and allows for the use of an asphalt additive called high tensile fiber to increase the strength of asphalt. Staff further recommends a contract for design and bid specifications for the annual street pavement project to Willdan Engineering in an amount not to exceed $22,800.

Financial Impact: The PMP presents options for paving that will reduce the costs such that all streets recommended for paving maintenance would be accomplished within 5 years with an $250,000 annual budget. By requiring DIAs to participate in the cost when the fronting street is being paved or slurry sealed will also allow for a way to cash out the DIA at the time of the street resurfacing application.

Background/Discussion: Willdan Engineering was retained by the City in 2008/09 to provide a PMP for the City of Brookings. At that time, the City was not satisfied with the PMP and it was not used as a resource for annual street improvement projects. Although a full PMP was provided with sound technical data, there was a breakdown in communication and the Willdan contract was cancelled before updating the report to include a 5-year capital improvement plan. Willdan was recently contacted and allowed to finish the original scope of work. Roxanne Hughes is a principal engineer and paving expert for Willdan who reviewed and updated the City's PMP. Ms. Hughes is considered one of the top pavement engineers for her company.

Ms. Hughes verified that the pavement condition rating provided to Brookings in 2008/09 was credible and also updated the database to incorporate recent paving that the City had completed after the 2009 street rating was documented. Ms. Hughes investigated the use of local contractors and materials to confirm that paving convention changes that she recommended could be accomplished in this area. It is Ms. Hughes professional opinion, based on a site visit to Brookings and evaluating the pavement condition assessment indices, that a majority of Brookings streets are not in need of major reconstruction involving extensive subgrade work. A majority of streets can be rehabilitated by milling and paving with AC overlay or maintained in current condition with a slurry seal application. A major discovery in the PMP update is that because most of the streets in town aren't showing actual wheel path cracking and failure, these streets do not need the extent of paving and subgrade work that had formerly been a standard for

City street paving design. This finding is in concurrence with the 2009 PMP technical report as well.

The PMP update does not include a sidewalk plan which would need to be evaluated before finalizing the extent of the street improvement costs and DIA costs. The City should identify where it plans to extend sidewalks, and where it does not. Any owner with a DIA recorded on their property could then readily understand the extent of their obligations and have a timeframe of for implementing the improvements.

Policy Considerations: The City Attorney has indicated that a DIA "cash out" plan can only apply the funds to the street frontage of the DIA property. Therefore any cash out plan would create a more complicated accounting system to track fund expenditures to location.

Staff recommends identifying all locations for future sidewalks and requiring the DIA to participate in the cost of the annual paving cost and sidewalk where required.

Attachment(s):
a. Willdan's Scope of Work for Engineering Design Services
b. PMP and DIA map

Attachment b

WILLDAN Engineering | extending your reach

April 12, 2013

Mrs. Loree Pryce, PE
Public Works Director
City of Brookings
898 Elk Drive
Brookings, OR 97415

Subject: **Proposal to Prepare PS&E to Implement Recommendations in the 2012 PMS Update for the Budget Year 1 Pavement Repairs**

Dear Loree:

Willdan Engineering (Willdan) is pleased to submit this proposal to the to provide engineering services relating to the implementation of the 2012 PMS Update Report's Budget Year 1 Major Maintenance street improvement project. We are prepared and dedicated to provide the City of Brookings with the extension of staff necessary to expeditiously prepare plans, specifications, and engineer's estimate of probable construction costs (PS&E) for the proposed street rehabilitation project.

Willdan is the ideal consultant to provide the desired services because of our extensive knowledge of the City of Brooking's streets. Our Project Manager recently completed the City of Brooking's 2012 PMS Update Report, resulting in a critical knowledge of the City of Brooking's street system and an understanding of the design expectations for successful implementation of the recommendations.

Willdan has an outstanding team of experts ready to serve the City Brookings. We have gathered a team who has previously worked together to successfully complete similar scope of work and schedule as being requested by the City.

Ms. Roxanne Hughes, PE, will be the project manager for street rehabilitation design project. She was responsible for preparation of the City of Brooking's 2012 PMS Update Report and has extensive experience in street design and pavement management systems.

The enclosed proposal includes Willdan's proposed project team members, approach, scope of work, schedule and fee as we see is necessary to provide the City with the requested services, based on our depth of experience completing similar services.

If you have any questions, please contact Ms. Roxanne Hughes at (805) 653-6597 or rhughes@willdan.com.

Respectfully submitted,

Willdan Engineering

Roxanne C. Hughes, PE
Principal Project Manager

William C. Pagett, PE
Senior Vice President

Project Team

The Willdan team will provide the City of Brookings with the professional expertise to ensure the project is well executed and meets local needs. Our project team for this assignment is as follows:

Ms. Roxanne Hughes, P.E. will be the Project Manager and lead for this assignment including full responsibility for successful completion of all deliverables. She will personally perform the field work, scheduling the timing in order to be present for the May 6th workshop and also accomplish the site visit in the same trip. Ms. Hughes recently completed the 2012 PMS Update report and has a thorough understanding of the recommendations. She will work with the City to do the project-level analysis necessary to finalize the project street list and construction materials and methods. Her depth of understanding of the fundamentals of pavement design, the necessity of economical rehabilitation strategy and pavement management system expertise provide the exact skill set required to deliver a successful street rehabilitation project, on time and within budget. Her recent involvement in preparation of the City's 2012 PMS Update Report provides her with the background knowledge of City's street system, construction history, design requirements, staff, procedures, and goals, necessary to complete the desired services quickly and cost-effectively.

Mr. Mike Bustos, P.E. will support Ms. Hughes with design drafting, as well as preparation of the technical specifications and estimate of cost. Mr. Bustos is an experienced Associate Engineer, having worked at Willdan Engineering for over 12 years. He has in-depth expertise in preparation of roadway rehabilitation PS&E for projects similar in size and scope to this assignment.

Scope of Work

Task 1 – Project Management

Ms. Roxanne Hughes, Willdan's proposed Project Manager, will serve as the only contact for the City of Brookings. She will also personally communicate progress reporting and schedule updates with the City staff. In addition, Ms. Hughes will attend the May 6th PMS Workshop, being available to answer any questions that may arise regarding the recommendations presented in the 2012 PMS Update Report.

Ms. Hughes will attend a project kick-off meeting with City staff to review the project goals, timeline, and scope of work. Each aspect of the project will be discussed, including the design criteria, utility coordination, plan preparation and specifications, cost estimates, submittal reviews, and anticipated construction issues. Items covered will also include, but not be limited to, pavement engineering, utility adjustment and/or relocation, traffic control, and any other special concerns of the City.

Task 2 –Field Review

While in Brookings, Ms. Hughes will conduct a field review of each of the selected street segments to ascertain details of the quantities for repair methods that were

recommended. Willdan's services will include field location of survey monuments as required to develop quantities for inclusion in the project bid schedule. The tying off, re-setting, and filing of corner records for survey monuments will be specified to be provided by the Contractor. This approach places the responsibility of preservation of existing survey monuments entirely on one party, providing clear lines of control and liability for monument preservation.

Task 3 – Utility Notice and Coordination

Willdan does not take utility coordination lightly. Identifying and avoiding utilities during our design will minimize the potential for costly delays during construction. During the initial information gathering task of this project, Willdan will mail utility notices using a project location map as a basis for information requests. We request that the City provide an updated list of utility companies to aid in our utility research. Follow-up correspondence and coordination with utilities will be ongoing and will be incorporated into our design at all stages. A second utility notice will be sent out at the 100 percent design milestone with an 11-inch by 17-inch set of the plan sheet layouts showing the utility base plan to ensure confidence in the location of documented utilities.

Willdan will be responsible for the following:

- Notify and coordinate with the utility agencies regarding the project-related modification of their facilities. Determine special requirements for utility facilities, including protection, right-of-way, and construction methods within the vicinity of the utility.
- Submit a preliminary and final set of plans to each utility company that provides the location, elevation of the utility, and the conflict area clouded to show the utility companies the areas that conflict.
- Verify that the project's final design is compatible with known utilities in the project area to be installed, relocated, adjusted, or otherwise modified, including adding utility relocation windows into the construction schedule as necessary.

Task 4 – Plans, Specifications and Engineer's Estimate of Costs (PS&E)

The City will furnish to Willdan copies of any available public works improvement plans within the project limits, including street, storm drain, and sewer, if any are available.

In order to minimize plan preparation costs, this proposal assumes that a ground survey will not be required. Instead, Willdan will utilize our GIS of the City street system, along with Mapquest, Google Maps, and available aerial images from the City's database, to create a large scale key map showing the proposed street segments within the community to be rehabilitated. The construction plans will include typical street cross sections showing the existing improvements and proposed rehabilitation strategies. Should areas requiring ground survey be identified, it is assumed that the City will furnish required survey data to Willdan.

Willdan will prepare a set of biddable and constructible plans for the proposed improvements. The street rehabilitation plans will be designed in ACAD2011. Plans will be prepared on 11" x 17" layout. Willdan's engineering drawings will include notes to replace all existing pavement striping and markings in kind. Plans will be submitted on

bond and electronically in Adobe .pdf. Plans will be submitted at the 95-percent design stage for City review and comment. Final approved drawings will incorporate the City's comments stamped and signed by the engineer.

1. Street Rehabilitation Construction Plans

The plans will include large scale (roughly 1"=500') plan view of the street segments with typical cross-sections, notes and details sufficient to support bid and construction. The street rehabilitation plans will identify the proposed limits and depths of grinding, overlay, patch repairs and affected utilities. Quantity sheets will include tabulated quantities based on field verified data and calculations. As a cost saving measure, pavement delineation will be indicated as a "replace in kind" on the plans and no separate signing and striping plans will be provided.

Street resurfacing projects typically require traffic control plans (TCP) to be furnished by the contractor as part of the construction contract. The City maintains control over the traffic handling through appropriate specifications in the contract documents and requiring TCP approval by the City. This approach is the most economical and also allows the traffic handling to be adapted with specificity for the final order of work that the contractor will implement. However, if the City would like to include engineered TCP in the bid set for particular areas of concern, additional scope and fees can be provided for Willdan to prepare them.

2. Specifications

Willdan will prepare a full set of technical specifications, as required for the street rehabilitation, which can be added to the City's boilerplate bidding and contract documents. The final Project Specifications will be complete and ready for bidding purposes using a combination of existing City of Brookings, Curry County and Oregon DOT Standard Specifications, as appropriate.

Willdan's specifications will support the selected rehabilitation strategies. A full set of printed and electronic (.pdf) specifications will be provided at 95 percent and Final design levels. Willdan will address traffic control requirements in the contract documents and specifications to construct the improvements. In addition, the pavement delineation specifications will require the contractor to submit documentation of all existing striping prior to commencement of any work that will damage or remove the striping. This documentation will be used to confirm that the striping is properly replaced in-kind during construction. Preservation of survey monuments within the project areas will be specified to be provided by the Contractor and a separate bid line item will be created for this task.

3. Engineer's Cost Estimate

Willdan Engineering will prepare a detailed engineer's estimate of probable construction costs in Microsoft Excel spreadsheet format. The items will be arranged in chronological order of construction. The estimate will be based upon recent bid prices for similar street construction projects in the vicinity of Brookings, as available. Backup quantity calculations will be provided showing detailed computations for accuracy of the quantities upon request. The engineer's construction cost estimate will be based on plan sheet quantities and will be furnished at 95-percent and final design milestones.

Task 5 - Bidding and Construction Phase Assistance

Willdan will be available to field questions via telephone during the pre-bid and pre-construction meetings. It is assumed that the City will prepare the agendas, conduct the meeting, and prepare minutes for each meeting. Willdan's role at these meetings will be as the Designer, and Willdan's representative will address any design-related questions presented at either meeting.

Schedule

Milestone Description	Completion Date
Task 1 – PM: Kick-off Meeting	5/6/13
Task 2 – Field Review	5/8/13
Task 3 – Utility Notice and Coordination First Notice Final Notice	 5/15/13
Task 4 – Prepare PS&E 95% Review Submittal City Review and Comment 100% PS&E	 6/10/13 6/17/13 6/27/13
Task 5 – Bidding and Construction Phase Assistance	As needed

Fee

The estimated fees for Professional Engineering Services are as follows:

Milestone Description	Fee
Task 1 – PM: Kick-off Meeting	$3,570
Task 2 – Field Review	$2,300
Task 3 – Utility Notice and Coordination	$1,710
Task 4 – Prepare PS&E	$14,500
Task 5 – Bidding and Construction Phase Assistance	$720
TOTAL NOT TO EXCEED FEE:	$22,800

Compensation will be on a time-and-material not to exceed basis. Our rates are those specified in the hourly rates schedule attached.

WILLDAN ENGINEERING
Schedule of Hourly Rates
Effective July 1, 2012 to June 30, 2013

ENGINEERING	
Principal Engineer	$200.00
Director	180.00
Deputy Director	180.00
Prinicipal Project Manager	180.00
City Engineer	180.00
Project Manager	180.00
Program Manager	180.00
Supervising Engineer	160.00
Senior Engineer	145.00
Senior Design Manager	145.00
Design Manager	135.00
Associate Engineer	135.00
Senior Designer	130.00
Senior Design Engineer II	130.00
Senior Design Engineer I	125.00
Designer II	120.00
Designer I	115.00
Design Engineer II	120.00
Design Engineer I	115.00
GIS Analyst III	150.00
GIS Analyst II	130.00
GIS Analyst I	115.00
Senior Drafter	110.00
Drafter II	100.00
Drafter I	95.00
Technical Aide	85.00

CONSTRUCTION MANAGEMENT	
Director	180.00
Deputy Director	180.00
Project Manager	180.00
Senior Construction Manager	155.00
Construction Manager	145.00
Assistant Construction Manager	120.00
Utility Coordinator	125.00
Labor Compliance Manager	120.00
Labor Compliance Specialist	95.00

INSPECTION SERVICES	
Supervising Public Works Observer	120.00
Senior Public Works Observer	110.00
Public Works Observer	**100.00/110.00
Assistant Public Works Observer	**100.00/110.00

MAPPING AND EXPERT SERVICES	
Principal Project Manager	180.00
Supervisor - Survey & Mapping	155.00
Senior Survey Analyst	130.00
Senior Calculator	120.00
Calculator II	110.00
Calculator I	100.00
Survey Analyst II	115.00
Survey Analyst I	100.00

LANDSCAPE ARCHITECTURE	
Principal Project Manager	180.00
Principal Landscape Architect	150.00
Senior Landscape Architect	125.00
Associate Landscape Architect	115.00
Assistant Landscape Architect	100.00

BUILDING AND SAFETY	
Director	180.00
Deputy Director	180.00
Principal Project Manager	180.00
Supervising Plan Check Engineer	150.00
Building Official	150.00
Plan Check Engineer	140.00
Deputy Building Official	140.00
Inspector of Record	140.00
Senior Plans Examiner	125.00
Supervising Building Inspector	125.00
Plans Examiner	115.00
Senior Building Inspector	115.00
Supervisor Code Enforcement	115.00
Building Inspector	**105.00/110.00
Supervising Construction Permit Specialist	105.00
Senior Construction Permit Specialist	100.00
Senior Code Enforcement Officer	95.00
Assistant Building Inspector	**95.00/110.00
Code Enforcement Officer	80.00
Construction Permit Specialist	80.00
Assistant Construction Permit Specialist	85.00
Plans Examiner Aide	75.00
Assistant Code Enforcement Officer	70.00

PLANNING	
Director	180.00
Deputy Director	180.00
Principal Planner	150.00
Principal Community Development Planner	150.00
Senior Planner	130.00
Senior Community Development Planner	130.00
Associate Planner	115.00
Associate Community Development Planner	115.00
Assistant Community Development Planner	105.00
Assistant Planner	105.00
Planning Technician	85.00
Community Development Technician	85.00

ADMINISTRATIVE	
Computer Data Entry	65.00
Clerical	65.00
Word Processing	65.00
Personal Computer Time	30.00

Mileage reimbursement will be charged at the current Federal guideline rate at the time of billing. Vehicles will be charged at a monthly rate of $500.00.

** Prevailing Wage Project, Use $110.00

Additional billing classifications may be added to the above listing during the year as new positions are created. Consultation in connection with litigation and court appearances will be quoted separately. The above schedule is for straight time. Overtime will be charged at 1.25 times, and Sundays and holidays, 1.70 times the standard rates. Blueprinting, reproduction, messenger services, and printing will be invoiced at cost plus fifteen percent (15%). A sub consultant management fee of fifteen percent (15%) will be added to the direct cost of all sub consultant services to provide for the cost of administration, consultation, and coordination. Valid July 1, 2012 thru June 30, 2013, thereafter, the rates may be raised once per year to the value of change of the Consumer Price Index for the Los Angeles/Orange County/Sacramento area, but not more than five percent per year.

Attachment a

WILLDAN Engineering

Memorandum

TO: Loree Pryce, Public Works Director
City of Brookings

FROM: Roxanne Hughes

DATE: 4/2/13

SUBJECT: 2012 PMS Update Technical Memo

This Technical Memorandum summarizes the City of Brookings 2012 Pavement Management System Update. There are now 31.71 miles of paved streets in the Brookings PMS system, covering 4,475,650 square feet of roadway surface. It should be noted that, with respect to street condition assessment, the 2012 PMS Update was limited to adding construction history to update PCI/SI values on streets that were paved since the 2009 PMS was prepared. Therefore, the distress data and related PCI/SI values listed are based on the 2009 street rating survey. In addition, the PMS is a network-level tool that is designed to prioritize needs relative to the overall street system. This update includes preparation of the following documents for use by the City in implementing capital improvements projects for targeting street repairs that will make the best use of the public works funds:

1) Five Year CIP (Budget Report): Street projects identified based on desired budget of $250K/Year
2) Logic Tree: Identifies 9 different strategies, including "do nothing" and minor maintenance (slurry seal) and 7 different overlay alternatives.
3) Cost Matrix: Provides unit cost calculation for each strategy, documenting assumptions and detailing what work is included in each repair alternative.
4) Example Unit Price Breakdown: Provides examples of how the Cost Matrix calculates the unit prices
5) Overall List of Streets: Alphabetical index of all City streets in the PMS network, including segment details, PCI and SI value, and identified repair strategy with estimated cost.
6) Slurry Street List: Alphabetical index of the City streets recommended for Slurry Seal (Strategy 2)
7) Major Maintenance Lists (Alpha and Priority): Index of City streets recommended for Overlay stratefies; one sorted alphabetically and the other sorted by SI in ascending order.
8) The Treatment Strategy Map: GIS-based map that highlights all of the recommended strategies in different colors per the legend. The mapped data also includes Section ID and SI values adjacent to each segment for quick reference back to the street indexes.

The proposed projects for the next five years were developed based on the City furnished data establishing an annual street maintenance and rehabilitation budget of $250K and applying this to the recommended rehabilitation strategies identified in the Updated PMS. The resulting citywide Major and Minor Maintenance Five Year CIP are included in the attached 2012 PMS Update. It is important that upon implementation of recommended street repairs, a project-level analysis is performed along with appropriate engineering for preparation of the Plans, Technical Specifications and Estimate of Cost (PS&E) in order to advertise a construction bid. The project scoping will include incorporating knowledge of other CIP projects, community events and priorities, funding mechanisms such as DIAs, and specific quantification of necessary repairs based on a current field review of the selected street segments.

There are two condition indexes utilized to gauge the relative condition of the streets in this report. One index is the PCI (pavement condition index), which is the conventional overall deterioration index provided in conformance with standard protocols of the U.S. Army Corps of Engineers (USACOE). The other is the SI (structural index), which is similar to the PCI but focused solely on structural conditions. The SI provides a different perspective on street condition; it is a useful way to evaluate the cracking that usually drives the final decision to provide a structural upgrade (which normally takes the form of an overlay). The structural index often does not correspond very closely with the PCI because other distresses—such as surface texture, bumps, and utility cuts—can have a disproportionate

impact on the PCI as compared to the SI. For example, a street with a midrange SI value of 68 may have a very low PCI value of 19. This means that this street segment does not have a lot of structural cracking; however it has significant levels of utility patching, surface raveling and/or poor ride quality which have lowered the PCI value. Using both PCI and SI indexes together in our decision process, it is apparent that a structural upgrade is a lower priority for this segment over another segment that has both a low SI and a low PCI.

SI values are computed by starting with a nominal value of 100 to represent a street with no cracking in the wheel path area, then subtracting the percentage of cracked wheel paths in a target segment. The results are arrayed as follows:

SI	From	To
Excellent	100	98
Very Good	97	95
Good	94	90
Fair	89	70
Poor	69	30
Very Poor	29	11
Failed	10	0

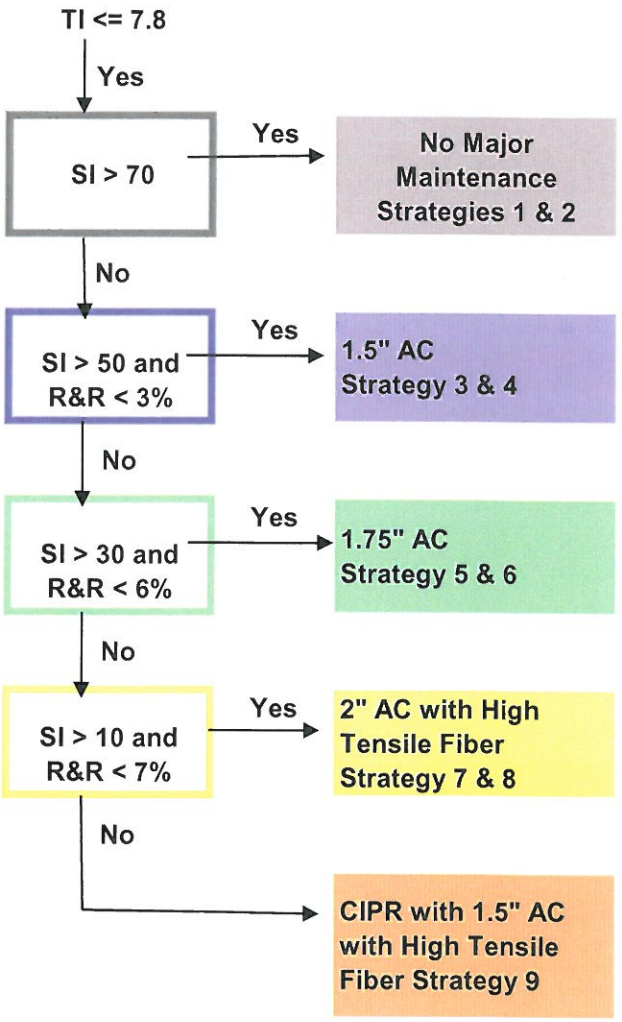
The current structural conditions of pavements in the street network can be represented by an average SI that ranges 0 to 100, and is normalized among all the streets in Brookings by area of pavement. The overall average SI for the streets in Brookings is at 89.7, which is considered at the very bottom of "Good" condition. The more cracking that occurs, the lower the structural index becomes. In comparison, the overall weighted average PCI is at 56.7 (Good) for the current conditions, which is reflective of the incorporation of non-structural distresses that are prevalent in the street system today. For the 2012 PMS Update, a Logic Tree was prepared that utilizes the SI value to assign repair Strategies. Of note; the Logic Tree establishes and overlay cut-off value at SI=70. This means that streets can have up to 30% of the wheel path areas cracked, and still be scheduled for a slurry seal. Given the years that have elapsed since the last field rating of the streets, it is recommended that the streets that are listed with SI values between 71 and 79 be reviewed in the field before a final decision is made to limit repairs to a slurry seal. If the cracking has expanded significantly in the last few years, the streets may need to be scheduled for overlay instead. The following table provides a list of these streets (alphabetically).

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI
1013	5 ST	5TH ST FORK	BARBRA LN DIRT	210	32	2	6.5	27	72
1019	5 ST	HELEN LN	ARCH LN	1690	33	2	6.5	35	71
1030	ALDER ST	PINE ST	REDWOOD ST	290	26	2	5	1	73
1032	ALDER ST	SPRUCE DR	RAILROAD ST	230	36	2	5	29	73
1088	DAWSON RD	HWY 101	PASSLEY RD DIRT	320	26	2	6	11	73
1099	EASY ST	FERN AV	PIONEER RD	1170	45	2	6.5	12	71
1101	ELK DR	FRONTAGE RD	FERN AV	1190	34	2	5	31	72
1122	GLENWOOD DR	HARRIS HTS RD	SEACREST LN	240	36	2	5	30	78
1157	HIGHLAND WY	HASSETT ST	RANSOM AV	720	32	2	5	12	74
1160	HOMESTEAD RD	RANSOM AV	VIEW CT	500	32	2	5	13	79
1161	HUB ST	ARNOLD LN	CULDESAC	890	13	2	4.5	2	73
1170	KINDEL	MEMORY LN	CULDESAC	230	19	2	4.5	12	77
1237	PACIFIC AV	COTTAGE ST	RAILROAD ST	520	45	2	5	40	76
1241	PACIFIC AV	AZALEA PK RD	FERN AV	1240	42	2	6	26	73
1267	RAILROAD ST	WHARF ST	OAK ST	1630	27	2	5.5	34	78

1287	RICHARD ST	EASY ST	RICHARD ST	160	21	2	5	2	72
1314	SPRUCE DR	SPRUCE ST	LINDEN LN	1570	30	2	5	11	78
1331	TRUMAN LN	BARCLAY LN	CULDESAC	180	9	2	4.5	1	78

CITY OF BROOKINGS
2012 PAVEMENT MANAGEMENT SYSTEM UPDATE
STRATEGY AND LOGIC TREE

STRATEGY LOGIC TREE FOR MAJOR MAINTENANCE



LEGEND

TI = Traffic Index. Indicates level of traffic loading. Typical range is 4.5 (low loading/cul-de-sac) to 11 (high loading/arterial).

PCI = Pavement Condition Index
Indicates overall pavement condition based on observed distresses.
0 = Failed to 100 = Excellent

SI = Structural Index
Indicates amount of wheelpath that is cracked.
100 = no wheelpath cracking.
Calculation: 100-% wheelpath cracked
Example: SI =60 indicates that 40% of the wheelpath is cracked (100-40 = 60)

LC = 1/2" Leveling Course

High Tensile Fiber= Reinforcing fibers added to hot mix at AC plant during production. Fibers strengthen pavement matrix, extending pavement life. (ie: Forta-fi)

CIPR = Cold In-Place Recycling which includes

MAJOR AND MINOR MAINTENANCE BUDGET REPORT - 5 YEAR CIP @ $250K/YR

Budget Year	Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Cumlative Cost	Strategy
1	1229	OLD COUNTY RD	PACIFIC AV	ROSICHELLI LN	250	27	2	6	1	1	1.5	$ 30,744.14	$ 30,744.14	9
1	1226	OLD COUNTY RD	LUNDEEN RD	PACIFIC AV	340	29	2	5	8	69	1.5	$ 20,213.00	$ 50,957.14	3
1	1279	RANSOM AV	FAWN DR	PIONEER RD	580	32	2	6	1	1	1.5	$ 84,535.00	$ 135,492.14	9
1	1118	FRONTAGE RD	ROSS RD	ELK DR	90	30	2	5	1	5	1.5	$ 12,297.66	$ 147,789.80	9
1	1280	RANSOM AV	FERN AV	KEVIN PL	320	32	2	5	1	17	2	$ 31,914.67	$ 179,704.46	8
1	1276	RANSOM AV	6 ST	FERN AV	520	32	2	6	4	30	2	$ 49,365.33	$ 229,069.80	7
1	1196	MENDY ST	PACIFIC AV	CULDESAC	490	21	2	4.5	3	55	1.5	$ 22,380.75	**$ 251,450.55**	4
2	1315	SPRUCE ST	ALDER ST	OAK ST	420	25	2	5	3	21	2	$ 31,150.00	$ 31,150.00	7
2	1194	MEMORY LN	RAILROAD ST	TANBARK RD	810	28	2	6.5	1	32	1.75	$ 57,668.63	$ 88,818.63	6
2	1027	ALDER ST	HEMLOCK ST	SPRUCE DR	90	29	2	5	25	40	1.75	$ 6,636.47	$ 95,455.09	6
2	1152	HEMLOCK ST	ALDER ST	OAK ST	400	27	2	5	2	43	1.75	$ 26,381.25	$ 121,836.34	5
2	1155	HEMLOCK ST	WILLOW ST	FERN AV	430	19	2	5	1	50	1.75	$ 19,956.93	$ 141,793.27	5
2	1062	CENTER ST	CHETCO AV	RAILROAD ST	690	48	2	6	7	56	1.5	$ 72,036.00	**$ 213,829.27**	4
3	CITYWIDE SLURRY SEAL - DO ALL STREETS IDENTIFIED ON SLURRY SEAL STREET LIST												**$ 301,879.40**	
4	1014	5 ST	BARBRA LN DIRT	RANSOM AV	360	32	2	6.5	11	15	2	$ 35,904.00	$ 35,904.00	8
4	1018	5 ST	ELK DR	EASY ST	1320	35	2	6.5	6	31	1.75	$ 117,473.13	$ 153,377.13	6
4	1020	5 ST	RANSOM AV	LIMBAUGH WY	280	25	2	6.5	4	58	1.5	$ 15,225.00	$ 168,602.13	4
4	1023	7 ST	PIONEER LN	MEADOW LN	530	18	2	5	2	54	1.5	$ 20,749.50	$ 189,351.63	4
4	1302	SEACREST LN	GLENWOOD DR	ARCH LN	100	35	2	5	27	69	1.5	$ 7,175.00	$ 196,526.63	3
4	1143	HASSETT ST	JOSHUA CT	PIONEER RD	150	21	2	5	9	61	1.5	$ 6,457.50	$ 202,984.13	3
4	1332	VALLEY ST	HILLSIDE DR	CHETCO AV	350	14	2	5	1	65	1.5	$ 10,045.00	$ 213,029.13	3
4	1001	1 ST	RANSOM AV	EASY ST	850	18	2	5	3	57	1.5	$ 33,277.50	**$ 246,306.63**	4
5	1169	KEVIN PL	HASSETT ST	RANSOM AV	770	32	2	5	3	54	1.5	$ 53,592.00	$ 53,592.00	4
5	1282	RANSOM AV	KEVIN PL	FAWN DR	430	32	2	6	2	70	1.5	$ 28,208.00	$ 81,800.00	3
5	1193	MECHELLE LN	KEVIN PL	FAWN DR	430	32	2	5	8	55	1.5	$ 29,928.00	$ 111,728.00	4
5	1095	EASY MANOR DR	EASY ST	EASY ST	920	21	2	5	1	43	1.75	$ 47,193.13	$ 158,921.13	5
5	1106	FERN AV	ELK DR	EASY ST	850	28	2	5	10	62	1.5	$ 48,790.00	$ 207,711.13	3
5	1071	CHETCO LN	CHETCO AV	CULDESAC	460	30	2	4.5	29	57	1.5	$ 30,015.00	$ 237,726.13	4
5	1308	SEASCAPE CT	TANBARK RD	CULDESAC	430	11	2	4.5	1	66	1.5	$ 9,696.50	**$ 247,422.63**	3
											Total all 5 Years =		**$ 1,260,888.47**	
BEYOND	1041	ARNOLD LN	IRIS ST	ROWLAND LN	360	22	2	5	5	69	1.5	$ 16,236.00	$ 16,236.00	3
	1297	SANDY LN	MACKLYN COVE DR	CULDESAC	370	33	2	4.5	1	1	1.5	$ 55,612.73	$ 71,848.73	9
	1200	MILL BEACH RD	ALLEN LN	MACKLYN COVE DR	20	33	2	5	1	1	1.5	$ 3,006.09	$ 74,854.83	9
	1034	ALLEN LN	MILL BEACH RD	CULDESAC	300	25	2	4.5	24	43	1.75	$ 18,320.31	$ 93,175.14	5

CITY OF BROOKINGS
PAVEMENT MANAGEMENT SYSTEM
2012 COST MATRIX

Legend:

AC	Convential Asphalt Concrete hot mix
Slurry	Type II or Recycled Asphalt Pavement (RAP) emulsion aggregate slurry seal
HTF	High Tensile Fiber Reinforcement added to AC matrix as fibers during hot mix production (ie: Forta-fi)
CIPR	Cold In Place Recycling
Geofabric Patch	Removal and replacement of 10" subbase with geofabric and either PMB or asphalt grindings; in addition to regular R&R
R&R	Point repairs for failed pavement, removal and replacement of existing AC and base section
TC, SS, MH's	Traffic Control, Signing/Striping and Manhole raising

Base Rates:	$/sf	Notes
1" AC	$0.62	Hot Mix Asphalt Concrete; at $100/ton
Geofabric Patch	$4.00	Add to R&R for replacement of subbase
R&R	$6.00	remove and replace - subbase OK
CIPR	$1.50	cold in place recycling
HTF, per 1" AC	$0.09	High Tensile Fiber additive; at $15/Ton
Edge Grind	$0.08	assume 1/4 sf grind/sf of street
Full Grind	$0.40	full width grind
Type II or RAP Slurry	$0.25	$375/ELT
Crack Seal	$0.08	Assumes $7K/day at 90K sf/day
TC, SS, MH's =	$0.58	Overlays only

Residential, Minor Collectors and Rural (TI ≤7.8)

MAINTENANCE TREATMENT

Strategy	SI Value	Street Condition	Treatment	Construction Unit Cost ($/sf)	Engineering & Inspection	Total Unit Cost ($/sf)	Total Unit Cost ($/Lane Mile)	Assumptions
1	90-100	AC dry surface.	No Action	$0.00	0%	$0.00	$0	
2	70-89	AC raveled or polished aggregate.	Slurry Seal	$0.33	20%	$0.39	$24,922	No R&R required

REHABILITATION TREATMENT

Strategy	SI Value	Street Condition	Treatment	Construction Unit Cost ($/sf)	Engineering & Inspection	Total Unit Cost ($/sf)	Total Unit Cost ($/Lane Mile)	Assumptions
3			1.5" AC Overlay	$1.64	25%	$2.05	$129,888	1% R&R Required
4	51-69	Wheel Path Alligator Cracking Less Than Approx. 3% of Total Area	1.5" AC Overlay	$1.74	25%	$2.18	$137,808	2% R&R Required + 1% subbase replaced
5		Wheel Path Alligator Cracking <6% of Total Area; Block Cracks smaller than 6' diameter or severe edge cracking over 40%	1.75" AC Overlay	$1.95	25%	$2.44	$154,770	3% R&R Required + 1% subbase replaced
6	31-49		1.75" AC Overlay	$2.03	25%	$2.54	$161,106	3% R&R Required with all subbase replaced
7			2" AC Overlay w/HTF	$2.37	25%	$2.97	$187,968	3% R&R Required w/subbase replaced
8	10-20	Extensive Wheel Path Base Failure > 3.5% But < 7% of Total Area.	2" AC Overlay w/HTF	$2.49	25%	$3.12	$197,472	5% R&R Required w/3% subbase replaced
9	0-9	Serious Overall Structural Failure; Wheel Path Base Failure Greater Than 7% of Total Area	CIPR+1.5" AC w/HTF	$3.64	25%	$4.55	$288,585	1% R&R required w/subbase replaced

CITY OF BROOKINGS PAVEMENT MANAGEMENT SYSTEM - 2012
EXAMPLE UNIT COST BREAKDOWN

The construction unit costs indicated on the "2012 Cost Matrix" spreadsheet combine several cost factors to come up with one price per square foot that includes everything that will be needed to accomplish the chosen treatment strategy. The following are example calculations to show how the Unit Cost figures are obtained:

EXAMPLE NO. 1

Treatment Strategy 7 = 2" AC Overlay w/HTF **(SI 10-20)**

This strategy includes placement of an overlay of 2" thick asphalt concrete (AC) that is modified to include Forta-fi fiber reinforcement in the hot mix production. The unit cost breakdown includes items for the AC hot mix, addition of the Forta-fi fibers to the hot mix, edge grinding of the street, removal and replacement of failed areas (R&R), geofabric for subbase replacement, traffic control during construction (TC), raising of manholes (MHs) and restriping (SS).

Item Description	Unit Cost $/sf	Notes
Grinding	$0.08	Assumes edge grinding, estimated at 25% of street surface
2" AC	$1.23	2 times the 1" AC $/sf (based on $100/ton)
HTF	$0.19	2 times the HTF, per 1" AC $/sf (based on $15/Ton)
3% R&R	$0.18	Assumes 3% of pavement area is failed and requires removal and replacement (.03 times $/sf for R&R line item)
Geofabric Patch	$0.12	Assumes all R&R will require subbase replacement and geofabric installation (.03 times $/sf for geofabric line item)
TC, SS, MHs	$0.58	Based on cost of approx. $16 per linear foot of street
TOTAL =	**$2.37**	Estimated construction unit cost per square foot of street pavement

EXAMPLE NO. 2

Treatment Strategy 9 = CIPR+1.5" AC w/Forta-fi **(SI 0-9)**

This strategy includes performing cold-in-place recycling (CIPR) of the existing failed pavement and adding a 1.5" thick asphalt-concrete with Forta-fi overlay top course. The unit cost breakdown includes items for the CIPR, AC hot mix, addition of the Forta-fi fibers to the hot mix, full width grinding of the street, removal and replacement of failed areas (R&R), geofabric for subbase replacement, traffic control during construction (TC), raising of manholes (MHs) and restriping (SS).

Item Description	Unit Cost $/sf	Notes
Grinding	$0.40	Assumes full width grinding, needed to make room for the AC overlay
CIPR	$1.50	Cold in-place recycling, full street width and length
1.5" AC	$0.93	1.5 times the 1" AC $/sf (based on $100/ton)
HTF	$0.14	1.5 times the HTF, per 1" AC $/sf (based on $15/Ton)
1% R&R	$0.06	Assumes 3% of pavement area is failed and requires removal and
Geofabric Patch	$0.04	Assumes all R&R will require subbase replacement and geofabric
TC, SS, MHs	$0.58	Based on cost of approx. $16 per linear foot of street
TOTAL =	**$3.64**	Estimated construction unit cost per square foot of street pavement

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1001	1 ST	RANSOM AV	EASY ST	850	18	2	5	3	57	1.5	$33,278	4
1002	2 ST	MARVISTA	EASY ST	160	22	2	4.5	87	100	0	$0	1
1003	2 ST	RANSOM AV	MARVISTA	640	22	2	5	87	100	0	$0	1
1004	2 ST	RANSOM AV	CULDESAC	660	23	2	4.5	20	95	0	$0	1
1006	2ND ST UNNAMED	2 ST	CULDESAC	120	21	2	4.5	21	100	0	$0	1
1007	3 ST	CORAL CT	EASY ST	570	30	2	6.5	58	94	0	$0	1
1008	3 ST	HASSETT ST	MIDLAND ST	750	33	2	6.5	61	96	0	$0	1
1009	3 ST	HIDDEN CT	TIMBERLINE DR	590	33	2	6.5	82	100	0	$0	1
1010	3 ST	RANSOM AV	HASSETT ST	720	34	2	6.5	25	81	0	$9,629	2
1011	3 ST	RANSOM AV	CORAL CT	200	20	2	5	86	100	0	$0	1
1012	4 ST	RANSOM AV	EASY ST	780	17	2	5	63	100	0	$0	1
1013	5 ST	5TH ST FORK	BARBRA LN DIRT	210	32	2	6.5	27	72	0	$2,643	2
1014	5 ST	BARBRA LN DIRT	RANSOM AV	360	32	2	6.5	11	15	2	$35,904	8
1015	5 ST	CHETCO AV	ELK DR	230	34	2	6.5	91	100	0	$0	1
1016	5 ST	CHETCO AV	RAILROAD ST	750	41	2	6.5	91	100	0	$0	1
1017	5 ST	EASY ST	5 ST	240	32	2	6.5	91	100	0	$0	1
1018	5 ST	ELK DR	EASY ST	1320	35	2	6.5	6	31	1.75	$117,473	6
1019	5 ST	HELEN LN	ARCH LN	1690	33	2	6.5	35	71	0	$21,936	2
1020	5 ST	RANSOM AV	LIMBAUGH WY	280	25	2	6.5	4	58	1.5	$15,225	4
1021	6 ST	JASMINE CT	EASY ST	320	24	2	5	100	100	0	$0	1
1022	6 ST	RANSOM AV	JASMINE CT	470	19	2	5	13	90	0	$3,512	2
1023	7 ST	PIONEER LN	MEADOW LN	530	18	2	5	2	54	1.5	$20,750	4
1354	7 ST	HASSETT ST	PIONEER RD	640	18	2	5	36	87	0	$4,531	2
1024	ALDER ST	BIRCH ST	MAPLE ST	310	21	2	5	100	100	0	$0	1
1025	ALDER ST	CHETCO AV	SPRUCE DR	230	35	2	5	64	95	0	$0	1
1026	ALDER ST	HAZEL ST	MEMORY LN	400	20	2	5	100	100	0	$0	1
1027	ALDER ST	HEMLOCK ST	SPRUCE DR	90	29	2	5	25	40	1.75	$6,636	6
1028	ALDER ST	MAPLE ST	NORTH HAZEL ST	260	20	2	5	100	100	0	$0	1
1029	ALDER ST	NORTH HAZEL ST	HAZEL ST	260	20	2	5	100	100	0	$0	1
1030	ALDER ST	PINE ST	REDWOOD ST	290	26	2	5	1	73	0	$2,966	2
1031	ALDER ST	RAILROAD ST	BIRCH ST	330	21	2	5	62	97	0	$0	1
1032	ALDER ST	SPRUCE DR	RAILROAD ST	230	36	2	5	29	73	0	$3,257	2
1033	ALDER ST	SPRUCE DR	HEMLOCK ST	230	21	2	5	87	100	0	$0	1
1034	ALLEN LN	MILL BEACH RD	CULDESAC	300	25	2	4.5	24	43	1.75	$18,320	5
1035	ALTA LN	DEL NORTE	CULDESAC	170	22	2	4.5	47	98	0	$0	1
1036	ANDRUSS DR	PASSLEY RD	CULDESAC	240	16	2	4.5	100	100	0	$0	1
1037	ARCH LN	5 ST	ARCH LN	430	20	2	5	91	100	0	$0	1
1038	ARCH LN	SEACREST LN	UNNAMED DIRT	530	30	2	5	54	94	0	$0	1
1039	ARNOLD LN	CHETCO AV	MOORE ST	380	19	2	5	74	100	0	$0	1
1040	ARNOLD LN	MOORE ST	IRIS ST	590	19	2	5	4	80	0	$4,409	2
1041	ARNOLD LN	IRIS ST	ROWLAND LN	360	22	2	5	5	69	1.5	$16,236	3
1044	AZALEA PARK RD	PACIFIC AV	OLD COUNTY RD	850	37	2	6.5	62	95	0	$0	1
1045	BARCLAY LN	COLLIS LN	CULDESAC	320	9	2	4.5	27	84	0	$1,133	2
1049	BIRCH ST	ALDER ST	DEL NORTE	660	20	2	5	58	96	0	$0	1
1050	BLUEBERRY DR	DAWSON RD	BLUEBERRY DR	420	28	2	5	91	100	0	$0	1

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1051	BLUEBERRY DR	HOLMES DR	BLUEBERRY DR	290	28	2	5	91	100	0	$0	1
1053	BOYER CT	2 ST	CULDESAC	250	31	2	4.5	58	100	0	$0	1
1054	BRIDGE RD	CHETCO AV	CULDESAC	860	22	2	4.5	9	90	0	$0	1
1055	BROOKE LN	5 ST	3 ST	1030	33	2	5	82	100	0	$0	1
1056	BUENA VISTA	BUENA VISTA	MEMORY LN	960	28	2	5	22	100	0	$0	1
1059	CAMEO CT	RANSOM AV	CULDESAC	460	32	2	4.5	20	94	0	$0	1
1061	CEDAR ST	MAPLE ST	MEMORY LN	910	30	2	5	58	100	0	$0	1
1062	CENTER ST	CHETCO AV	RAILROAD ST	690	48	2	6	7	56	1.5	$72,036	4
1071	CHETCO LN	CHETCO AV	CULDESAC	460	30	2	4.5	29	57	1.5	$30,015	4
1072	CLAIR LN	EASY ST	CULDESAC	240	21	2	4.5	82	100	0	$0	1
1073	COLLIS LN	ARNOLD LN	ROWLAND LN	140	28	2	5	62	96	0	$0	1
1074	COLLIS LN	ROWLAND LN	CULDESAC	490	18	2	4.5	38	96	0	$0	1
1079	CORAL CT	3 ST	CULDESAC	240	30	2	4.5	20	100	0	$0	1
1080	COTTAGE ST	PACIFIC AV	MILL ST	660	27	2	5	32	83	0	$7,009	2
1081	COVE RD	RAILROAD ST	CULDESAC	1030	33	2	4.5	35	93	0	$0	1
1082	CRESTWOOD PL	RANSOM AV	CULDESAC	410	30	2	4.5	100	100	0	$0	1
1083	CRISSEY LP	CRISSEY LP	CHETCO AV	650	14	2	5	91	100	0	$0	1
1084	CUSHING CT	TANBARK RD	CULDESAC	450	21	2	4.5	47	100	0	$0	1
1085	CYPRESS ST	MAPLE ST	MEMORY LN	920	35	2	5	20	97	0	$0	1
1086	DAWSON RD	BLUEBERRY DR	GARVIN CT	660	33	2	5	61	96	0	$0	1
1087	DAWSON RD	HOLMES DR	SPINDRIFT RD	220	25	2	5	48	100	0	$0	1
1088	DAWSON RD	HWY 101	PASSLEY RD DIRT	320	26	2	6	11	73	0	$3,273	2
1089	DAWSON RD	OCEANSIDE DR	OCEAN PARK DR	870	26	2	5	91	100	0	$0	1
1090	DAWSON RD	PASSLEY RD	ZIA CT	370	26	2	5	89	100	0	$0	1
1091	DAWSON RD	SPINDRIFT RD	OCEANSIDE DR	630	20	2	5	89	100	0	$0	1
1094	DEL NORTE	WOODLAND	MEMORY LN	1610	21	2	6.5	100	100	0	$0	1
1095	EASY MANOR DR	EASY ST	EASY ST	920	21	2	5	1	43	1.75	$47,193	5
1096	EASY ST	3 ST	FERN AV	2430	24	2	6.5	91	100	0	$0	1
1097	EASY ST	CHETCO AV	2ND ST	790	20	2	6.5	39	86	0	$6,215	2
1098	EASY ST	2ND ST	3 ST	590	22	2	6.5	38	95	0	$0	1
1099	EASY ST	FERN AV	PIONEER RD	1170	45	2	6.5	12	71	0	$20,709	2
1100	ELK DR	5 ST	FRONTAGE RD	250	33	2	5	61	96	0	$0	1
1101	ELK DR	FRONTAGE RD	FERN AV	1190	34	2	5	31	72	0	$15,914	2
1102	ENGLISH CT	1 ST	CULDESAC	250	32	2	4.5	20	100	0	$0	1
1103	FAWN DR	MECHELLE LN	KEVIN PL	720	32	2	5	100	100	0	$0	1
1104	FERN AV	CHETCO AV	SPRUCE ST	200	39	2	5	100	100	0	$0	1
1105	FERN AV	EASY ST	RANSOM AV	770	23	2	5	79	100	0	$0	1
1106	FERN AV	ELK DR	EASY ST	850	28	2	5	10	62	1.5	$48,790	3
1107	FERN AV	HEMLOCK ST	RAILROAD ST	210	29	2	5	100	100	0	$0	1
1108	FERN AV	PACIFIC AV	ELK DR	910	25	2	5	64	97	0	$0	1
1109	FERN AV	PINE ST	FLEET ST	740	42	2	5	18	91	0	$0	1
1110	FERN AV	SPRUCE ST	HEMLOCK ST	230	29	2	5	100	100	0	$0	1
1111	FIFIELD ST	DIRT	SMITH DR	1130	20	2	5	100	100	0	$0	1
1112	FIR ST	OAK ST	OLD COUNTY RD	1230	25	2	5	100	100	0	$0	1
1116	FOUNTAIN	DEL NORTE	CULDESAC	130	24	2	4.5	79	98	0	$0	1

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1117	FRONTAGE RD	CHETCO AV	ROSS RD	570	50	2	5	91	100	0	$0	1
1118	FRONTAGE RD	ROSS RD	ELK DR	90	30	2	5	1	5	1.5	$12,298	9
1119	GARVIN CT	DAWSON RD	CULDESAC	550	22	2	4.5	91	100	0	$0	1
1121	GLENWOOD DR	HWY 101	SEACREST LN	130	30	2	6	80	100	0	$0	1
1122	GLENWOOD DR	HARRIS HTS RD	SEACREST LN	240	36	2	5	30	78	0	$3,398	2
1123	GLENWOOD DR	SEACREST LN	GLENWOOD DR DIRT	980	35	2	5	82	100	0	$0	1
1125	HAMPTON RD	200' E/HAMPTON RD	CULDESAC	260	11	2	4.5	82	100	0	$0	1
1126	HAMPTON RD	HAMPTON RD	CULDESAC	320	11	2	4.5	80	100	0	$0	1
1127	HAMPTON RD	OAKWOOD CT	200' E/HAMPTON RD	200	24	2	5	87	100	0	$0	1
1128	HAMPTON RD	PARKVIEW DR	OAKWOOD CT	520	20	2	5	68	96	0	$0	1
1130	HARRIS HGTS RD	UNNAMED DIRT	HARRIS HGTS RD	600	24	2	5	58	96	0	$0	1
1005	HASSETT ST	MIDLAND ST	3 ST	280	33	2	5	60	94	0	$0	1
1138	HASSETT ST	3 ST	2ND ST	20	33	2	5	60	94	0	$0	1
1139	HASSETT ST	5 ST	HIGHLAND WY	820	33	2	5	57	93	0	$0	1
1140	HASSETT ST	5 ST	CULDESAC	630	33	2	4.5	59	97	0	$0	1
1141	HASSETT ST	7 ST DIRT	CULDESAC	290	13	2	4.5	49	100	0	$0	1
1142	HASSETT ST	HIGHLAND WY	MIDLAND ST	260	33	2	5	82	100	0	$0	1
1143	HASSETT ST	JOSHUA CT	PIONEER RD	150	21	2	5	9	61	1.5	$6,458	3
1144	HASSETT ST	KEVIN PL	WEAVER LN	1030	21	2	5	10	91	0	$0	1
1145	HASSETT ST	OLD COUNTY RD	JOSHUA CT	380	32	2	5	35	90	0	$0	1
1146	HASSETT ST	3RD ST	CULDESAC	590	33	2	5	91	100	0	$0	1
1148	HAZEL ST	DEL NORTE	NORTH HAZEL ST	260	19	2	5	91	100	0	$0	1
1149	HAZEL ST	NORTH HAZEL ST	ALDER ST	660	20	2	5	96	100	0	$0	1
1150	HEATHER LN	CHETCO AV	CULDESAC	320	32	2	4.5	22	100	0	$0	1
1151	HELEN LN	JODEE LN	5 ST	1680	33	2	5	82	100	0	$0	1
1152	HEMLOCK ST	ALDER ST	OAK ST	400	27	2	5	2	43	1.75	$26,381	5
1153	HEMLOCK ST	FERN AV	WHARF ST	690	35	2	5	31	80	0	$9,499	2
1154	HEMLOCK ST	OAK ST	WILLOW ST	400	20	2	5	20	97	0	$0	1
1155	HEMLOCK ST	WILLOW ST	FERN AV	430	19	2	5	1	50	1.75	$19,957	5
1156	HIDDEN CT	3 ST	CULDESAC	230	24	2	4.5	91	100	0	$0	1
1157	HIGHLAND WY	HASSETT ST	RANSOM AV	720	32	2	5	12	74	0	$9,062	2
1158	HILLSIDE DR	VALLEY ST	PACIFIC AV	680	40	2	6.5	24	91	0	$0	1
1159	HOLMES DR	DAWSON RD	BLUEBERRY DR	1390	12	2	5	39	91	0	$0	1
1160	HOMESTEAD RD	RANSOM AV	VIEW CT	500	32	2	5	13	79	0	$6,293	2
1161	HUB ST	ARNOLD LN	CULDESAC	890	13	2	4.5	2	73	0	$4,551	2
1164	IRIS ST	ARNOLD LN	CULDESAC	830	21	2	4.5	58	97	0	$0	1
1165	JASMINE CT	6 ST	CULDESAC	180	27	2	4.5	91	100	0	$0	1
1166	JODEE LN	5 ST	KRISTA LN	1220	33	2	5	82	100	0	$0	1
1167	JOSHUA CT	HASSETT ST	CULDESAC	230	32	2	4.5	91	100	0	$0	1
1168	JULIE DR	RANSOM AV	VIEW CT	530	33	2	5	91	100	0	$0	1
1169	KEVIN PL	HASSETT ST	RANSOM AV	770	32	2	5	3	54	1.5	$53,592	4
1170	KINDEL	MEMORY LN	CULDESAC	230	19	2	4.5	12	77	0	$1,719	2
1171	KING ST	WHARF ST	RAILROAD ST	960	25	2	5	13	87	0	$9,440	2
1172	KNOLL LN	ROWLAND LN	CULDESAC	210	35	2	4.5	24	100	0	$0	1
1173	KRISTA LN	JODEE LN	5 ST	910	33	2	5	91	100	0	$0	1

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1174	LILAC CT	MEMORY LN	CULDESAC	250	32	2	4.5	22	100	0	$0	1
1175	LIMBAUGH WY	5 ST	CULDESAC	210	22	2	4.5	91	100	0	$0	1
1176	LINDA LN	TANBARK RD	CULDESAC	200	20	2	4.5	86	100	0	$0	1
1177	LINDEN LN	MULBERRY LN	SPRUCE DR	400	30	2	5	82	100	0	$0	1
1178	LUCKY LN	CHETCO AV	CULDESAC	270	27	2	4.5	91	100	0	$0	1
1179	LUMBERVIEW DR	PASSLEY RD	CULDESAC	280	18	2	4.5	89	100	0	$0	1
1180	LUNDEEN RD	OLD COUNTY RD	CULDESAC	960	20	2	4.5	69	100	0	$0	1
1181	MACKLYN COVE DR	SANDY LN	CULDESAC	420	22	2	4.5	18	82	0	$3,634	2
1182	MAGNOLIA CT	EASY ST	CULDESAC	320	33	2	4.5	82	100	0	$0	1
1183	MAPLE ST	ALDER ST	DEL NORTE	770	20	2	5	88	100	0	$0	1
1184	MAPLE ST	OXFORD ST	ALDER ST	790	32	2	5	20	100	0	$0	1
1185	MAR VISTA LN	1 ST	CULDESAC	210	16	2	4.5	84	100	0	$0	1
1186	MARDON CT	EASY ST	CULDESAC	350	34	2	4.5	20	100	0	$0	1
1187	MARINA HEIGHTS RD	OLD COUNTY RD	PACIFIC TERRACE DR	2920	20	2	5	39	92	0	$0	1
1188	MARINE DR	MARINE DR	CULDESAC	610	10	2	4.5	27	92	0	$0	1
1189	MARINE DR	OLD COUNTY RD	MARINE DR	2190	17	2	5	35	93	0	$0	1
1190	MARVISTA	2 ST	CULDESAC	220	12	2	4.5	16	95	0	$0	1
1191	MATOT ST	RAILROAD ST	CULDESAC	330	21	2	4.5	82	100	0	$0	1
1192	MEADOW LN	7 ST	MEADOW LN DIRT	960	17	2	5	78	100	0	$0	1
1193	MECHELLE LN	KEVIN PL	FAWN DR	430	32	2	5	8	55	1.5	$29,928	4
1194	MEMORY LN	RAILROAD ST	TANBARK RD	810	28	2	6.5	1	32	1.75	$57,669	6
1195	MEMORY LN	TANBARK RD	ALDER STREET	1540	21	2	6.5	52	93	0	$0	1
1195a	MEMORY LN	ALDER ST	DEL NORTE	1080	21	2	6.5	100	100	0	$0	1
1196	MENDY ST	PACIFIC AV	CULDESAC	490	21	2	4.5	3	55	1.5	$22,381	4
1197	MIDLAND ST	2ND ST	RANSOM AV	720	32	2	5	9	88	0	$9,062	2
1198	MIDLAND ST	3 ST	HASSETT ST	1050	27	2	5	56	100	0	$0	1
1199	MIDLAND ST	MIDLAND ST S	MIDLAND ST S	200	27	2	5	81	100	0	$0	1
1356	MIDLAND ST	MIDLAND ST N	MIDLAND ST N	200	27	2	5	81	100	0	$0	1
1200	MILL BEACH RD	ALLEN LN	MACKLYN COVE DR	20	33	2	5	1	1	1.5	$3,006	9
1201	MILL BEACH RD	CHETCO AV	CULDESAC	480	28	2	4.5	73	100	0	$0	1
1202	MILL BEACH RD	MILL BEACH RD DIRT	RAILROAD ST	470	28	2	5	49	96	0	$0	1
1203	MILL BEACH RD	RAILROAD ST	SMITH DR	470	24	2	5	84	100	0	$0	1
1204	MILL BEACH RD	SMITH DR	ALLEN LN	630	24	2	5	56	95	0	$0	1
1205	MILL ST	CHETCO AV	RAILROAD ST	580	38	2	5	91	100	0	$0	1
1206	MOORE ST	ARNOLD LN	CULDESAC	860	36	2	4.5	35	84	0	$12,178	2
1207	MULBERRY LN	LINDEN LN	SPRUCE DR	420	24	2	5	20	98	0	$0	1
1208	MUSSER	DEL NORTE	MEMORY LN	580	16	2	5	5	82	0	$3,650	2
1211	NO NAME FERN E	FERN AV	NO NAME FERN W	160	34	2	5	89	100	0	$0	1
1212	NO NAME FERN W	NO NAME FERN E	CHETCO AV	640	17	2	5	91	100	0	$0	1
1213	NORTH DR	DAWSON RD	CULDESAC	320	20	2	4.5	96	100	0	$0	1
1214	NORTH HAZEL ST	HAZEL ST	ALDER ST	770	20	2	5	89	100	0	$0	1
1215	OAK ST	CHETCO AV	SPRUCE ST	200	38	2	6.5	80	100	0	$0	1
1216	OAK ST	PACIFIC ST	CHETCO AV	1050	42	2	6.5	64	94	0	$0	1
1217	OAK ST	HEMLOCK ST	RAILROAD ST	160	39	2	6.5	41	82	0	$2,454	2
1218	OAK ST	SPRUCE ST	HEMLOCK ST	230	38	2	6.5	91	100	0	$0	1

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1219	OAKWOOD CT	HAMPTON RD	CULDESAC	290	23	2	4.5	91	100	0	$0	1
1220	OCEAN PARK CT	OCEAN PARK DR	CULDESAC	200	28	2	4.5	91	100	0	$0	1
1221	OCEAN PARK DR	OCEAN PARK CT	DAWSON RD	350	33	2	5	91	100	0	$0	1
1222	OCEANSIDE DR	DAWSON RD	CULDESAC	720	19	2	4.5	91	100	0	$0	1
1223	OLD COUNTY RD	AZALEA PARK RD	LUNDEEN RD	280	27	2	5	24	90	0	$2,974	2
1224	OLD COUNTY RD	AZALEA PARK RD	CONSTITUTION WY	1100	27	2	5	61	96	0	$0	1
1225	OLD COUNTY RD	HASSETT ST	MARINE DR	1840	27	2	6	20	95	0	$0	1
1226	OLD COUNTY RD	LUNDEEN RD	PACIFIC AV	340	29	2	5	8	69	1.5	$20,213	3
1227	OLD COUNTY RD	MARINA HEIGHTS RD	PACIFIC TERRACE DR	630	27	2	5	83	100	0	$0	1
1229	OLD COUNTY RD	PACIFIC AV	ROSICHELLI LN	250	27	2	6	1	1	1.5	$30,744	9
1230	OLD COUNTY RD UNNAMED	OLD COUNTY RD	CULDESAC	180	20	2	4.5	79	100	0	$0	1
1233	OVERGLEN CT	TIMBERLINE DR	CULDESAC	210	33	2	4.5	100	100	0	$0	1
1234	OXFORD ST	FLORAL DR	MAPLE ST	410	32	2	5	20	100	0	$0	1
1235	OXFORD ST	RAILROAD ST	FLORAL DR	80	32	2	5	20	100	0	$0	1
1236	PACIFIC AV	CHETCO AV	COTTAGE ST	150	41	2	5	63	93	0	$0	1
1237	PACIFIC AV	COTTAGE ST	RAILROAD ST	520	45	2	5	40	76	0	$9,204	2
1238	PACIFIC AV	PARK AV	CHETCO AV	900	24	2	6	84	100	0	$0	1
1239	PACIFIC AV	AZALEA PK RD	OLD COUNTY RD	1060	21	2	6	89	100	0	$0	1
1240	PACIFIC AV	PARK AV	FERN AV	340	40	2	6	77	96	0	$0	1
1241	PACIFIC AV	AZALEA PK RD	FERN AV	1240	42	2	6	26	73	0	$20,485	2
1242	PACIFIC HGTS ST	DAWSON RD	RIDGEWAY DR	280	33	2	5	91	100	0	$0	1
1243	PACIFIC HGTS ST	RIDGEWAY DR	CULDESAC	200	24	2	4.5	91	100	0	$0	1
1246	PARADISE LN	RANSOM AV	CULDESAC	550	32	2	4.5	22	100	0	$0	1
1247	PARK AV	PACIFIC AV	FERN AV	540	29	2	5	51	90	0	$0	1
1252	PARKVIEW DR	HAMPTON RD	VISTA RIDGE RD	3250	22	2	5	100	100	0	$0	1
1253	PARKVIEW DR	HWY 101	HAMPTON RD	1430	21	2	6	24	82	0	$11,812	2
1254	PASSLEY RD	ANDRUSS DR	WEST CLIFF DR	300	22	2	5	91	100	0	$0	1
1255	PASSLEY RD	PASSLEY RD DIRT	SUSAN PL	290	18	2	5	86	100	0	$0	1
1256	PASSLEY RD	SUSAN PL	ANDRUSS DR	360	22	2	5	67	100	0	$0	1
1257	PASSLEY RD	WEST CLIFF DR	OCEAN PARK CT	590	33	2	5	91	100	0	$0	1
1258	PINE ST	ALDER ST	OAK ST	820	19	2	5	88	100	0	$0	1
1259	PINE ST	FERN AV	CULDESAC	460	22	2	4.5	89	100	0	$0	1
1260	PIONEER LN	7 ST	CULDESAC	340	15	2	4.5	11	88	0	$2,006	2
1261	PIONEER RD	PACIFIC AV	EASY ST	680	52	2	6.5	100	100	0	$0	1
1262	PIONEER RD	RANSOM AV	HASSETT ST	1500	21	2	6	34	93	0	$0	1
1263	RAILROAD ST	MILL BEACH RD	PACIFIC AV	1070	41	2	5.5	91	100	0	$0	1
1264	RAILROAD ST	DEL NORTE	ALDER ST	530	27	2	6.5	100	100	0	$0	1
1265	RAILROAD ST	OAK ST	ALDER ST	500	27	2	5.5	100	100	0	$0	1
1266	RAILROAD ST	RAILROAD ST	END	1980	27	2	6.5	20	91	0	$0	1
1267	RAILROAD ST	WHARF ST	OAK ST	1630	27	2	5.5	34	78	0	$17,311	2
1268	RAILROAD ST	PACIFIC AV	CENTER ST	940	26	2	5.5	46	89	0	$9,613	2
1269	RAILROAD ST	WHARF ST	CENTER ST	340	26	2	6.5	89	100	0	$0	1
1270	RAILROAD UNNAMED	RAILROAD ST	5 ST	720	24	2	5	100	100	0	$0	1
1271	RANSOM AV	2 ST	3 ST	470	19	2	6	57	96	0	$0	1
1272	RANSOM AV	2 ST	2 ST	180	19	2	6	43	89	0	$1,345	2

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1273	RANSOM AV	3 ST	MIDLAND ST	270	23	2	6	100	100	0	$0	1
1274	RANSOM AV	4 ST	BARBRA LN DIRT	490	35	2	6	100	100	0	$0	1
1275	RANSOM AV	5 ST	310' E/O 5 ST	310	32	2	6	100	100	0	$0	1
1276	RANSOM AV	6 ST	FERN AV	520	32	2	6	4	30	2	$49,365	7
1277	RANSOM AV	BARBRA LN DIRT	5 ST	220	21	2	6	42	89	0	$1,817	2
1278	RANSOM AV	CHETCO AV	JULIE DR	440	29	2	6	100	100	0	$0	1
1279	RANSOM AV	FAWN DR	PIONEER RD	580	32	2	6	1	1	1.5	$84,535	9
1280	RANSOM AV	FERN AV	KEVIN PL	320	32	2	5	1	17	2	$31,915	8
1281	RANSOM AV	JULIE DR	2 ST	920	29	2	6	57	94	0	$0	1
1282	RANSOM AV	KEVIN PL	FAWN DR	430	32	2	6	2	70	1.5	$28,208	3
1283	RANSOM AV	MIDLAND ST	4 ST	360	35	2	6	100	100	0	$0	1
1275a	RANSOM AV	310' E/O 5 ST	6 ST	310	32	2	6	100	100	0	$0	1
1284	REDWOOD ST	ALDER ST	MYRTLE ST	410	9	2	5	11	93	0	$0	1
1285	REDWOOD ST	FERN AV	OAK ST	710	22	2	5	3	81	0	$6,144	2
1286	REDWOOD ST	OAK ST	ALDER ST	430	18	2	5	82	100	0	$0	1
1287	RICHARD ST	EASY ST	RICHARD ST	160	21	2	5	2	72	0	$1,322	2
1288	RICHARD ST	RICHARD ST	RICHARD ST	570	12	2	5	80	100	0	$0	1
1289	RIDGEWAY DR	PACIFIC HGTS ST	CULDESAC	510	27	2	4.5	91	100	0	$0	1
1290	RIVIERA CT	MARINA HEIGHTS RD	CULDESAC	580	22	2	4.5	91	100	0	$0	1
1291	ROSICHELLI LN	OLD COUNTY RD	CULDESAC	450	27	2	4.5	91	100	0	$0	1
1292	ROSS RD	FRONTAGE RD	CULDESAC	380	17	2	4.5	35	88	0	$2,541	2
1293	ROWLAND LN	COLLINS LN	CULDESAC	660	28	2	4.5	62	96	0	$0	1
1294	ROWLAND LN	KNOLL LN	ARNOLD LN	330	33	2	5	91	100	0	$0	1
1295	ROWLAND LN	SMITH DR	KNOLL LN	460	34	2	5	20	100	0	$0	1
1296	RUTH LN	4 ST	CULDESAC	170	32	2	4.5	91	100	0	$0	1
1297	SANDY LN	MACKLYN COVE DR	CULDESAC	370	33	2	4.5	1	1	1.5	$55,613	9
1299	SEACREST LN	ARCH LN	BURGESS LN	690	35	2	5	61	95	0	$0	1
1300	SEACREST LN	BURGESS LN	CULDESAC	330	35	2	4.5	91	100	0	$0	1
1301	SEACREST LN	SEACREST LN	CULDESAC	230	35	2	4.5	91	100	0	$0	1
1302	SEACREST LN	GLENWOOD DR	ARCH LN	100	35	2	5	27	69	1.5	$7,175	3
1303	SEACREST LN	GLENWOOD DR	HARRIS HGTS RD	630	28	2	5	91	100	0	$0	1
1308	SEASCAPE CT	TANBARK RD	CULDESAC	430	11	2	4.5	1	66	1.5	$9,697	3
1309	SHOREWOOD TR	PACIFIC HGTS ST	CULDESAC	760	27	2	4.5	91	100	0	$0	1
1310	SMITH DR	FIFIELD ST	MILL BEACH RD	690	34	2	5	22	100	0	$0	1
1312	SPINDRIFT RD	DAWSON RD	CULDESAC	210	14	2	4.5	91	100	0	$0	1
1313	SPRUCE DR	LINDEN LN	ALDER ST	350	30	2	5	42	98	0	$0	1
1314	SPRUCE DR	SPRUCE ST	LINDEN LN	1570	30	2	5	11	78	0	$18,526	2
1315	SPRUCE ST	ALDER ST	OAK ST	420	25	2	5	3	21	2	$31,150	7
1316	SPRUCE ST	FERN AV	WHARF ST	620	26	2	5	36	89	0	$6,341	2
1317	SPRUCE ST	OAK ST	WILLOW ST	410	21	2	5	100	100	0	$0	1
1318	SPRUCE ST	WHARF ST	CENTER ST	240	35	2	5	100	100	0	$0	1
1319	SPRUCE ST	WILLOW ST	FERN AV	420	22	2	5	100	100	0	$0	1
1320	SUNRIDGE TR	PASSLEY RD	CULDESAC	340	16	2	4.5	91	100	0	$0	1
1321	SUSAN PL	PASSLEY RD	CULDESAC	170	18	2	4.5	82	100	0	$0	1
1322	TANBARK CR	TANBARK RD	CULDESAC	180	36	2	4.5	91	100	0	$0	1

OVERALL LIST OF STREETS

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy
1323	TANBARK RD	CUSHING CT	SEASCAPE CT	130	34	2	5	91	100	0	$0	1
1324	TANBARK RD	MEMORY LN	CUSHING CT	700	20	2	5	81	98	0	$0	1
1325	TANBARK RD	RAILROAD ST	MEMORY LN	730	26	2	5	89	100	0	$0	1
1326	TANBARK RD	SEASCAPE CT	TANBARK CR	440	33	2	5	39	82	0	$5,711	2
1327	TANBARK RD	TANBARK CR	CULDESAC	140	20	2	4.5	91	100	0	$0	1
1328	TIMBERLINE DR	3 ST	OVERGLEN CT	1160	33	2	5	82	100	0	$0	1
1329	TIMBERLINE DR	CULDESAC	TIMBERLINE DR	190	23	2	4.5	91	100	0	$0	1
1330	TIMBERLINE DR	OVERGLEN CT	HASSETT ST	620	33	2	5	82	100	0	$0	1
1331	TRUMAN LN	BARCLAY LN	CULDESAC	180	9	2	4.5	1	78	0	$637	2
1332	VALLEY ST	HILLSIDE DR	CHETCO AV	350	14	2	5	1	65	1.5	$10,045	3
1333	VELOPA CT	TANBARK RD	CULDESAC	380	33	2	4.5	82	100	0	$0	1
1334	VIEW CT	HOMESTEAD RD	CULDESAC	160	32	2	4.5	33	86	0	$2,014	2
1335	VIEW CT	JULIE DR	HOMESTEAD RD	380	33	2	5	91	100	0	$0	1
1336	VISTA CT	VISTA RIDGE RD	CULDESAC	340	33	2	4.5	91	100	0	$0	1
1337	VISTA RIDGE RD	VISTA CT	GOWMAN LN	1670	33	2	5	84	100	0	$0	1
1338	W HARRIS HTS	GLENWOOD DR	CULDESAC	1130	17	2	4.5	77	100	0	$0	1
1355	WEAVER LN	HASSETT	END	450	18	2	4.5	83	100	0	$0	1
1340	WELCH CT	PARKVIEW DR	CULDESAC	140	27	2	4.5	82	100	0	$0	1
1341	WEST CLIFF DR	PASSLEY RD	CULDESAC	270	16	2	4.5	91	100	0	$0	1
1342	WEST PARK CT	PARKVIEW DR	CULDESAC	390	27	2	4.5	91	100	0	$0	1
1343	WHARF ST	CHETCO AV	SPRUCE ST	280	39	2	5	100	100	0	$0	1
1345	WHARF ST	RAILROAD ST	WHARF ST	1290	29	2	5	89	100	0	$0	1
1347	WHARF ST	SPRUCE ST	RAILROAD ST	430	38	2	6	100	100	0	$0	1
1348	WHITNEY WY	PASSLEY RD	CULDESAC	250	18	2	4.5	51	98	0	$0	1
1349	WILLOW ST	CHETCO AV	SPRUCE ST	200	26	2	5	100	100	0	$0	1
1350	WILLOW ST	HEMLOCK ST	RAILROAD ST	210	21	2	5	100	100	0	$0	1
1351	WILLOW ST	SPRUCE ST	HEMLOCK ST	230	26	2	5	100	100	0	$0	1
1352	WOODLAND	DEL NORTE	CULDESAC	220	18	2	4.5	100	100	0	$0	1
1353	ZIA CT	DAWSON RD	CULDESAC	230	27	2	4.5	91	100	0	$0	1
				Weighted Average =				**56.7**	**89.7**		$1,354,064	

SLURRY INVENTORY - Alphabetic Listing

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Cost	Cumul Cost	Strategy
1010	3 ST	RANSOM AV	HASSETT ST	720	34	2	6.5	25	81	$ 9,629	$ 9,629	2
1013	5 ST	5TH ST FORK	BARBRA LN DIRT	210	32	2	6.5	27	72	$ 2,643	$ 12,272	2
1019	5 ST	HELEN LN	ARCH LN	1690	33	2	6.5	35	71	$ 21,936	$ 34,208	2
1022	6 ST	RANSOM AV	JASMINE CT	470	19	2	5	13	90	$ 3,512	$ 37,721	2
1354	7 ST	HASSETT ST	PIONEER RD	640	18	2	5	36	87	$ 4,531	$ 42,252	2
1030	ALDER ST	PINE ST	REDWOOD ST	290	26	2	5	1	73	$ 2,966	$ 45,218	2
1032	ALDER ST	SPRUCE DR	RAILROAD ST	230	36	2	5	29	73	$ 3,257	$ 48,474	2
1040	ARNOLD LN	MOORE ST	IRIS ST	590	19	2	5	4	80	$ 4,409	$ 52,884	2
1045	BARCLAY LN	COLLIS LN	CULDESAC	320	9	2	4.5	27	84	$ 1,133	$ 54,016	2
1080	COTTAGE ST	PACIFIC AV	MILL ST	660	27	2	5	32	83	$ 7,009	$ 61,026	2
1088	DAWSON RD	HWY 101	PASSLEY RD DIRT	320	26	2	6	11	73	$ 3,273	$ 64,298	2
1097	EASY ST	CHETCO AV	2ND ST	790	20	2	6.5	39	86	$ 6,215	$ 70,513	2
1099	EASY ST	FERN AV	PIONEER RD	1170	45	2	6.5	12	71	$ 20,709	$ 91,222	2
1101	ELK DR	FRONTAGE RD	FERN AV	1190	34	2	5	31	72	$ 15,914	$ 107,136	2
1122	GLENWOOD DR	HARRIS HTS RD	SEACREST LN	240	36	2	5	30	78	$ 3,398	$ 110,535	2
1153	HEMLOCK ST	FERN AV	WHARF ST	690	35	2	5	31	80	$ 9,499	$ 120,034	2
1157	HIGHLAND WY	HASSETT ST	RANSOM AV	720	32	2	5	12	74	$ 9,062	$ 129,096	2
1160	HOMESTEAD RD	RANSOM AV	VIEW CT	500	32	2	5	13	79	$ 6,293	$ 135,389	2
1161	HUB ST	ARNOLD LN	CULDESAC	890	13	2	4.5	2	73	$ 4,551	$ 139,940	2
1170	KINDEL	MEMORY LN	CULDESAC	230	19	2	4.5	12	77	$ 1,719	$ 141,659	2
1171	KING ST	WHARF ST	RAILROAD ST	960	25	2	5	13	87	$ 9,440	$ 151,099	2
1181	MACKLYN COVE DR	SANDY LN	CULDESAC	420	22	2	4.5	18	82	$ 3,634	$ 154,733	2
1197	MIDLAND ST	2ND ST	RANSOM AV	720	32	2	5	9	88	$ 9,062	$ 163,796	2
1206	MOORE ST	ARNOLD LN	CULDESAC	860	36	2	4.5	35	84	$ 12,178	$ 175,973	2
1208	MUSSER	DEL NORTE	MEMORY LN	580	16	2	5	5	82	$ 3,650	$ 179,624	2
1217	OAK ST	HEMLOCK ST	RAILROAD ST	160	39	2	6.5	41	82	$ 2,454	$ 182,078	2
1223	OLD COUNTY RD	AZALEA PARK RD	LUNDEEN RD	280	27	2	5	24	90	$ 2,974	$ 185,052	2
1237	PACIFIC AV	COTTAGE ST	RAILROAD ST	520	45	2	5	40	76	$ 9,204	$ 194,256	2
1241	PACIFIC AV	AZALEA PK RD	FERN AV	1240	42	2	6	26	73	$ 20,485	$ 214,740	2
1253	PARKVIEW DR	HWY 101	HAMPTON RD	1430	21	2	6	24	82	$ 11,812	$ 226,552	2
1260	PIONEER LN	7 ST	CULDESAC	340	15	2	4.5	11	88	$ 2,006	$ 228,558	2
1267	RAILROAD ST	WHARF ST	OAK ST	1630	27	2	5.5	34	78	$ 17,311	$ 245,869	2
1268	RAILROAD ST	PACIFIC AV	CENTER ST	940	26	2	5.5	46	89	$ 9,613	$ 255,482	2
1272	RANSOM AV	2 ST	2 ST	180	19	2	6	43	89	$ 1,345	$ 256,827	2
1277	RANSOM AV	BARBRA LN DIRT	5 ST	220	21	2	6	42	89	$ 1,817	$ 258,644	2
1285	REDWOOD ST	FERN AV	OAK ST	710	22	2	5	3	81	$ 6,144	$ 264,788	2
1287	RICHARD ST	EASY ST	RICHARD ST	160	21	2	5	2	72	$ 1,322	$ 266,110	2
1292	ROSS RD	FRONTAGE RD	CULDESAC	380	17	2	4.5	35	88	$ 2,541	$ 268,651	2
1314	SPRUCE DR	SPRUCE ST	LINDEN LN	1570	30	2	5	11	78	$ 18,526	$ 287,177	2
1316	SPRUCE ST	FERN AV	WHARF ST	620	26	2	5	36	89	$ 6,341	$ 293,517	2
1326	TANBARK RD	SEASCAPE CT	TANBARK CR	440	33	2	5	39	82	$ 5,711	$ 299,228	2
1331	TRUMAN LN	BARCLAY LN	CULDESAC	180	9	2	4.5	1	78	$ 637	$ 299,866	2
1334	VIEW CT	HOMESTEAD RD	CULDESAC	160	32	2	4.5	33	86	$ 2,014	$ 301,879	2

MAJOR MAINTENANCE INVENTORY - Alphabetic Listing

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy	Cumul Cost
1001	1 ST	RANSOM AV	EASY ST	850	18	2	5	3	57	1.5	$ 33,278	4	$ 33,278
1014	5 ST	BARBRA LN DIRT	RANSOM AV	360	32	2	6.5	11	15	2	$ 35,904	8	$ 69,182
1018	5 ST	ELK DR	EASY ST	1320	35	2	6.5	6	31	1.75	$ 117,473	6	$ 186,655
1020	5 ST	RANSOM AV	LIMBAUGH WY	280	25	2	6.5	4	58	1.5	$ 15,225	4	$ 201,880
1023	7 ST	PIONEER LN	MEADOW LN	530	18	2	5	2	54	1.5	$ 20,750	4	$ 222,629
1027	ALDER ST	HEMLOCK ST	SPRUCE DR	90	29	2	5	25	40	1.75	$ 6,636	6	$ 229,266
1034	ALLEN LN	MILL BEACH RD	CULDESAC	300	25	2	4.5	24	43	1.75	$ 18,320	5	$ 247,586
1041	ARNOLD LN	IRIS ST	ROWLAND LN	360	22	2	5	5	69	1.5	$ 16,236	3	$ 263,822
1062	CENTER ST	CHETCO AV	RAILROAD ST	690	48	2	6	7	56	1.5	$ 72,036	4	$ 335,858
1071	CHETCO LN	CHETCO AV	CULDESAC	460	30	2	4.5	29	57	1.5	$ 30,015	4	$ 365,873
1095	EASY MANOR DR	EASY ST	EASY ST	920	21	2	5	1	43	1.75	$ 47,193	5	$ 413,066
1106	FERN AV	ELK DR	EASY ST	850	28	2	5	10	62	1.5	$ 48,790	3	$ 461,856
1118	FRONTAGE RD	ROSS RD	ELK DR	90	30	2	5	1	5	1.5	$ 12,298	9	$ 474,154
1143	HASSETT ST	JOSHUA CT	PIONEER RD	150	21	2	5	9	61	1.5	$ 6,458	3	$ 480,611
1152	HEMLOCK ST	ALDER ST	OAK ST	400	27	2	5	2	43	1.75	$ 26,381	5	$ 506,992
1155	HEMLOCK ST	WILLOW ST	FERN AV	430	19	2	5	1	50	1.75	$ 19,957	5	$ 526,949
1169	KEVIN PL	HASSETT ST	RANSOM AV	770	32	2	5	3	54	1.5	$ 53,592	4	$ 580,541
1193	MECHELLE LN	KEVIN PL	FAWN DR	430	32	2	5	8	55	1.5	$ 29,928	4	$ 610,469
1194	MEMORY LN	RAILROAD ST	TANBARK RD	810	28	2	6.5	1	32	1.75	$ 57,669	6	$ 668,138
1196	MENDY ST	PACIFIC AV	CULDESAC	490	21	2	4.5	3	55	1.5	$ 22,381	4	$ 690,519
1200	MILL BEACH RD	ALLEN LN	MACKLYN COVE DR	20	33	2	5	1	1	1.5	$ 3,006	9	$ 693,525
1226	OLD COUNTY RD	LUNDEEN RD	PACIFIC AV	340	29	2	5	8	69	1.5	$ 20,213	3	$ 713,738
1229	OLD COUNTY RD	PACIFIC AV	ROSICHELLI LN	250	27	2	6	1	1	1.5	$ 30,744	9	$ 744,482
1276	RANSOM AV	6 ST	FERN AV	520	32	2	6	4	30	2	$ 49,365	7	$ 793,847
1279	RANSOM AV	FAWN DR	PIONEER RD	580	32	2	6	1	1	1.5	$ 84,535	9	$ 878,382
1280	RANSOM AV	FERN AV	KEVIN PL	320	32	2	5	1	17	2	$ 31,915	8	$ 910,297
1282	RANSOM AV	KEVIN PL	FAWN DR	430	32	2	6	2	70	1.5	$ 28,208	3	$ 938,505
1297	SANDY LN	MACKLYN COVE DR	CULDESAC	370	33	2	4.5	1	1	1.5	$ 55,613	9	$ 994,118
1302	SEACREST LN	GLENWOOD DR	ARCH LN	100	35	2	5	27	69	1.5	$ 7,175	3	$ 1,001,293
1308	SEASCAPE CT	TANBARK RD	CULDESAC	430	11	2	4.5	1	66	1.5	$ 9,697	3	$ 1,010,989
1315	SPRUCE ST	ALDER ST	OAK ST	420	25	2	5	3	21	2	$ 31,150	7	$ 1,042,139
1332	VALLEY ST	HILLSIDE DR	CHETCO AV	350	14	2	5	1	65	1.5	$ 10,045	3	$ 1,052,184

MAJOR MAINTENANCE INVENTORY - Priority Listing (SI)

Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Strategy	Cumul Cost
1200	MILL BEACH RD	ALLEN LN	MACKLYN COVE DR	20	33	2	5	1	1	1.5	$ 3,006	9	$ 3,006
1229	OLD COUNTY RD	PACIFIC AV	ROSICHELLI LN	250	27	2	6	1	1	1.5	$ 30,744	9	$ 33,750
1279	RANSOM AV	FAWN DR	PIONEER RD	580	32	2	6	1	1	1.5	$ 84,535	9	$ 118,285
1297	SANDY LN	MACKLYN COVE DR	CULDESAC	370	33	2	4.5	1	1	1.5	$ 55,613	9	$ 173,898
1118	FRONTAGE RD	ROSS RD	ELK DR	90	30	2	5	1	5	1.5	$ 12,298	9	$ 186,196
1014	5 ST	BARBRA LN DIRT	RANSOM AV	360	32	2	6.5	11	15	2	$ 35,904	8	$ 222,100
1280	RANSOM AV	FERN AV	KEVIN PL	320	32	2	5	1	17	2	$ 31,915	8	$ 254,014
1315	SPRUCE ST	ALDER ST	OAK ST	420	25	2	5	3	21	2	$ 31,150	7	$ 285,164
1276	RANSOM AV	6 ST	FERN AV	520	32	2	6	4	30	2	$ 49,365	7	$ 334,530
1018	5 ST	ELK DR	EASY ST	1320	35	2	6.5	6	31	1.75	$ 117,473	6	$ 452,003
1194	MEMORY LN	RAILROAD ST	TANBARK RD	810	28	2	6.5	1	32	1.75	$ 57,669	6	$ 509,671
1027	ALDER ST	HEMLOCK ST	SPRUCE DR	90	29	2	5	25	40	1.75	$ 6,636	6	$ 516,308
1152	HEMLOCK ST	ALDER ST	OAK ST	400	27	2	5	2	43	1.75	$ 26,381	5	$ 542,689
1034	ALLEN LN	MILL BEACH RD	CULDESAC	300	25	2	4.5	24	43	1.75	$ 18,320	5	$ 561,009
1095	EASY MANOR DR	EASY ST	EASY ST	920	21	2	5	1	43	1.75	$ 47,193	5	$ 608,203
1155	HEMLOCK ST	WILLOW ST	FERN AV	430	19	2	5	1	50	1.75	$ 19,957	5	$ 628,159
1023	7 ST	PIONEER LN	MEADOW LN	530	18	2	5	2	54	1.5	$ 20,750	4	$ 648,909
1169	KEVIN PL	HASSETT ST	RANSOM AV	770	32	2	5	3	54	1.5	$ 53,592	4	$ 702,501
1193	MECHELLE LN	KEVIN PL	FAWN DR	430	32	2	5	8	55	1.5	$ 29,928	4	$ 732,429
1196	MENDY ST	PACIFIC AV	CULDESAC	490	21	2	4.5	3	55	1.5	$ 22,381	4	$ 754,810
1062	CENTER ST	CHETCO AV	RAILROAD ST	690	48	2	6	7	56	1.5	$ 72,036	4	$ 826,846
1001	1 ST	RANSOM AV	EASY ST	850	18	2	5	3	57	1.5	$ 33,278	4	$ 860,123
1071	CHETCO LN	CHETCO AV	CULDESAC	460	30	2	4.5	29	57	1.5	$ 30,015	4	$ 890,138
1020	5 ST	RANSOM AV	LIMBAUGH WY	280	25	2	6.5	4	58	1.5	$ 15,225	4	$ 905,363
1143	HASSETT ST	JOSHUA CT	PIONEER RD	150	21	2	5	9	61	1.5	$ 6,458	3	$ 911,821
1106	FERN AV	ELK DR	EASY ST	850	28	2	5	10	62	1.5	$ 48,790	3	$ 960,611
1332	VALLEY ST	HILLSIDE DR	CHETCO AV	350	14	2	5	1	65	1.5	$ 10,045	3	$ 970,656
1308	SEASCAPE CT	TANBARK RD	CULDESAC	430	11	2	4.5	1	66	1.5	$ 9,697	3	$ 980,352
1302	SEACREST LN	GLENWOOD DR	ARCH LN	100	35	2	5	27	69	1.5	$ 7,175	3	$ 987,527
1041	ARNOLD LN	IRIS ST	ROWLAND LN	360	22	2	5	5	69	1.5	$ 16,236	3	$ 1,003,763
1226	OLD COUNTY RD	LUNDEEN RD	PACIFIC AV	340	29	2	5	8	69	1.5	$ 20,213	3	$ 1,023,976
1282	RANSOM AV	KEVIN PL	FAWN DR	430	32	2	6	2	70	1.5	$ 28,208	3	$ 1,052,184

MAJOR AND MINOR MAINTENANCE BUDGET REPORT - 5 YEAR CIP @ $250K/YR

Budget Year	Sec ID	Name	From	To	Length	Width	Lanes	TI	PCI	SI	Overlay	Cost	Cumlative Cost	Strategy
1	1229	OLD COUNTY RD	PACIFIC AV	ROSICHELLI LN	250	27	2	6	1	1	1.5	$ 30,744.14	$ 30,744.14	9
1	1226	OLD COUNTY RD	LUNDEEN RD	PACIFIC AV	340	29	2	5	8	69	1.5	$ 20,213.00	$ 50,957.14	3
1	1279	RANSOM AV	FAWN DR	PIONEER RD	580	32	2	6	1	1	1.5	$ 84,535.00	$ 135,492.14	9
1	1118	FRONTAGE RD	ROSS RD	ELK DR	90	30	2	5	1	5	1.5	$ 12,297.66	$ 147,789.80	9
1	1280	RANSOM AV	FERN AV	KEVIN PL	320	32	2	5	1	17	2	$ 31,914.67	$ 179,704.46	8
1	1276	RANSOM AV	6 ST	FERN AV	520	32	2	6	4	30	2	$ 49,365.33	$ 229,069.80	7
1	1196	MENDY ST	PACIFIC AV	CULDESAC	490	21	2	4.5	3	55	1.5	$ 22,380.75	**$ 251,450.55**	4
2	1315	SPRUCE ST	ALDER ST	OAK ST	420	25	2	5	3	21	2	$ 31,150.00	$ 31,150.00	7
2	1194	MEMORY LN	RAILROAD ST	TANBARK RD	810	28	2	6.5	1	32	1.75	$ 57,668.63	$ 88,818.63	6
2	1027	ALDER ST	HEMLOCK ST	SPRUCE DR	90	29	2	5	25	40	1.75	$ 6,636.47	$ 95,455.09	6
2	1152	HEMLOCK ST	ALDER ST	OAK ST	400	27	2	5	2	43	1.75	$ 26,381.25	$ 121,836.34	5
2	1155	HEMLOCK ST	WILLOW ST	FERN AV	430	19	2	5	1	50	1.75	$ 19,956.93	$ 141,793.27	5
2	1062	CENTER ST	CHETCO AV	RAILROAD ST	690	48	2	6	7	56	1.5	$ 72,036.00	**$ 213,829.27**	4
3	CITYWIDE SLURRY SEAL - DO ALL STREETS IDENTIFIED ON SLURRY SEAL STREET LIST												**$ 301,879.40**	
4	1014	5 ST	BARBRA LN DIRT	RANSOM AV	360	32	2	6.5	11	15	2	$ 35,904.00	$ 35,904.00	8
4	1018	5 ST	ELK DR	EASY ST	1320	35	2	6.5	6	31	1.75	$ 117,473.13	$ 153,377.13	6
4	1020	5 ST	RANSOM AV	LIMBAUGH WY	280	25	2	6.5	4	58	1.5	$ 15,225.00	$ 168,602.13	4
4	1023	7 ST	PIONEER LN	MEADOW LN	530	18	2	5	2	54	1.5	$ 20,749.50	$ 189,351.63	4
4	1302	SEACREST LN	GLENWOOD DR	ARCH LN	100	35	2	5	27	69	1.5	$ 7,175.00	$ 196,526.63	3
4	1143	HASSETT ST	JOSHUA CT	PIONEER RD	150	21	2	5	9	61	1.5	$ 6,457.50	$ 202,984.13	3
4	1332	VALLEY ST	HILLSIDE DR	CHETCO AV	350	14	2	5	1	65	1.5	$ 10,045.00	$ 213,029.13	3
4	1001	1 ST	RANSOM AV	EASY ST	850	18	2	5	3	57	1.5	$ 33,277.50	**$ 246,306.63**	4
5	1169	KEVIN PL	HASSETT ST	RANSOM AV	770	32	2	5	3	54	1.5	$ 53,592.00	$ 53,592.00	4
5	1282	RANSOM AV	KEVIN PL	FAWN DR	430	32	2	6	2	70	1.5	$ 28,208.00	$ 81,800.00	3
5	1193	MECHELLE LN	KEVIN PL	FAWN DR	430	32	2	5	8	55	1.5	$ 29,928.00	$ 111,728.00	4
5	1095	EASY MANOR DR	EASY ST	EASY ST	920	21	2	5	1	43	1.75	$ 47,193.13	$ 158,921.13	5
5	1106	FERN AV	ELK DR	EASY ST	850	28	2	5	10	62	1.5	$ 48,790.00	$ 207,711.13	3
5	1071	CHETCO LN	CHETCO AV	CULDESAC	460	30	2	4.5	29	57	1.5	$ 30,015.00	$ 237,726.13	4
5	1308	SEASCAPE CT	TANBARK RD	CULDESAC	430	11	2	4.5	1	66	1.5	$ 9,696.50	**$ 247,422.63**	3
											Total all 5 Years =		**$ 1,260,888.47**	
BEYOND	1041	ARNOLD LN	IRIS ST	ROWLAND LN	360	22	2	5	5	69	1.5	$ 16,236.00	$ 16,236.00	3
	1297	SANDY LN	MACKLYN COVE DR	CULDESAC	370	33	2	4.5	1	1	1.5	$ 55,612.73	$ 71,848.73	9
	1200	MILL BEACH RD	ALLEN LN	MACKLYN COVE DR	20	33	2	5	1	1	1.5	$ 3,006.09	$ 74,854.83	9
	1034	ALLEN LN	MILL BEACH RD	CULDESAC	300	25	2	4.5	24	43	1.75	$ 18,320.31	$ 93,175.14	5

CITY OF BROOKINGS

Council WORKSHOP Report

Workshop Date: May 6, 2013

Originating Dept: PW/DS

Public Works/Development Services Director

City Manager Approval

Subject: ODOT Highway Maintenance Agreement

Recommendation:
To authorize staff to proceed with finalizing an annual maintenance agreement with Oregon Department of Transportation (ODOT) and utilize the funds to hire a part time hourly employee.

Financial Impact:
ODOT has agreed to reimburse the City of Brookings $12,500 per year for the maintenance services. The funding would cover the entire cost to hire a 1,000 hour a year part- time temporary support employee.

Background/Discussion:
It has been an ongoing concern that the City's appearance could be improved by increased landscaping and weed abatement along highway 101. Oregon Department of Transportation (ODOT) management has expressed willingness to enter into a reimbursement agreement with the City for these services, thereby reducing the time spent by ODOT crews traveling from Port Orford to Brookings. ODOT has been providing weed abatement and mowing twice a year, similar to any typical highway maintenance. Staff and ODOT have explored other ways the City could assist them in providing local maintenance functions.

The proposed terms of the reimbursement maintenance agreement include;

- Brush mowing at least twice a year inside City limits
- Grass mowing inside City limits and at one location south of Chetco River bridge at least twice a year
- Street sweeping from Carpenterville Road to Benham Lane at least every other month
- Storm drain vactoring at least twice a year

Staff would use the reimbursement funding to hire additional part-time, temporary support to perform these services more regularly inside City limits, thereby achieving a higher standard of appearance along the Highway 101 corridor. ODOT has only a handful of similar interagency maintenance agreements. This agreement is a tremendous opportunity for the City of Brookings.

Attachment(s): None