



**REPORT TO MAYOR AND CITY COUNCIL**

AGENDA ITEM

TO: THE HONORABLE MAYOR  
AND CITY COUNCIL

DATE: January 27, 2009

SUBJECT: 2009 Prop 1B Road Maintenance, Project No. 08-67; Approve Plans  
and Specifications and Authorize Bid Advertisement

**Report in Brief**

The 2009 Prop 1B Road Maintenance Project No. 08-67, is a road maintenance project utilizing Proposition 1B funds to repair, maintain and extend the life of the Woodland streets infrastructure. This project was added to the Capital Budget on November 18, 2008. The engineer's estimate for construction is \$594,000. The total project budget, including design and project management is \$800,000. To ensure the project bids are not above the approved funding, the project will be bid with additive alternates. Plans and specifications for the project are complete and ready for bidding upon Council authorization.

Staff recommends City Council approve the plans and specifications for the 2009 Prop 1B Road Maintenance, Project No. 08-67, and authorize bid advertisement.

**Background**

The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by California voters as Proposition 1B on November 7, 2006, authorized the state to sell approximately \$20 billion in general obligation bonds. The bond proceeds are for the Local Street and Road Improvement, Congestion Relief and Traffic Safety Account and allocated \$2 Billion to cities and counties.

With the passage of the FY 2008/09 state budget, an additional \$187 million allocation of Proposition 1B funds was authorized as AB 88 (Budget Trailer Bill). This appropriation is available on a first-come, first-served basis to cities that have already received their full allocation in FY 2007/08.

The City applied for our remaining Proposition 1B funding on November 19, 2008. On December 15 the City Finance Department confirmed that the full request totaling \$803,674.45 was received and deposited into the City's bank account. This funding was received just before the State halted all

payments of any bond proceeds due to the current state budget issues. Staff has verified with the state that the City is free to use the funding.

### **Discussion**

Road system repair requirements are identified through an objective defect rating process and modeling system called MicroPaver, developed by the U.S. Army Corps of Engineers. MicroPaver uses computer modeling to help prioritize work needs based on road classification and use characteristics, visual inspection of road conditions and an objective rating of existing defects. After producing MicroPaver generated system needs, staff refines the needs and establishes priorities and various maintenance and repair methods, materials and techniques to meet the needs of each pavement section and to maximize return on investment.

In the process, staff considers various additional factors as warranted, including future plans involving other City or development projects, school zones and calendars, incident histories, and efficiency and cost-effectiveness through the combining and zoning of repair needs for economy of scale.

The current project is in conformance with the Road Report in that the work is being completed in one zone of the City to minimize public inconvenience. This project scope is entirely in Zone 3, the area bound by Main Street, Gibson Road, County Road 98 and West Street. The work is primarily on local streets with contract additive alternates to include work on some collectors in the zone.

The project plans and specifications are available for review at the CDD Engineering counter in City Hall and explanations of project details and repair methods and treatment types are available from CDD Transportation staff at 661-5961.

Upon Council authorization, the bids will be solicited with a projected opening on March 4, 2009. If one or more bids are responsive and within the project budget, staff anticipates the bid award will be scheduled for the April 7, 2009 Council meeting and construction could begin in early May.

The roadway segments where work will be performed, and treatments they will receive are summarized in the Project Street Listing included as Attachment No. 1 of this report.

Types of Surface Seals used in the project include:

Slurry Sealing is the process of applying a mixture of asphalt, rock additives such as lime or Portland cement and water to an existing road surface forming a thin impervious surface layer. Slurry seals need approximately six hours to fully cure depending on weather conditions. Parking and access to the street is limited on the day of application but streets are rarely closed overnight for slurry seal work. The average thickness of a slurry seal is 3/8 inch. Slurry seals are used throughout the City for streets in good condition that are beginning to show early signs of deterioration.

Chip Seals spread a layer of hot asphalt oil on the pavement surface and cover it with rock “chips” which are compressed with a rubber tire roller. The oil holds the chips in place and also seals the surface of the existing pavement to prevent water intrusion. Chip seals can be driven on at slow speeds immediately after the roller is finished but roads are typically kept closed for approximately six hours to allow further curing before reopening to traffic. Chip seals are used in combination with slurry, cape and Micro surfacing and are seldom used in residential areas of the City due to their unpopularity because of loose rock and the need for excessive, slow speeds when driving over them in the first few weeks after placement. The average thickness of a chip seal is 3/8 inch. Chip seals are used for streets that are beginning to show more advanced signs of aging and more severe distress that Slurry can not repair.

Scrub Cape Sealing is a two-day combination surface treatment that includes the chip and slurry seals and the application of a rejuvenating emulsion – a polymer modified asphalt rejuvenating agent, mixed with water. Scrub cape seals are used as an alternative to chip seals. The emulsified oil is sprayed on the surface of the pavement and then a specially designed drag broom scrubs the oil in to the pavement, which fills the voids and cracks in the pavement. This is followed by a layer of rock chips as it is done in the chip seal application. The average thickness of a scrub cape seal is 3/4 inch. The treatment is more advanced than a chip seal and is sufficient even for roads with mild to severe distresses.

Fabric Cape Sealing is a two-day combination treatment similar to the scrub cape seal. On the first day, before the first layer of oil is placed, hot asphalt oil is spread on the pavement immediately followed by the placement of paving fabric which becomes fully embedded in the oil. This is followed by a standard chip seal process. This chip rolling ends day one and the roads can be reopened. On the second day of application – often separated by a few days to a few weeks – a slurry seal is applied over the rock chips. Both days of treatment will have road closures during the work day. The composite thickness of the fabric cape seal is approximately 3/4 inch.

Micro Surfacing is a one day treatment unless rut filling is required. It is similar in application and cure-time to a slurry seal and will also require road closures and parking restrictions. Micro surfacing cures into a harder surface and as a result is less susceptible to power steering tire scuffs. It is also good for use in areas with higher traffic volumes. The average thickness of micro surfacing is 3/8 to 5/8 inch.

### **Fiscal Impact**

The project is fully funded by Proposition 1B funds as per the Council action of November 18, 2008 adding the project and associated funding to the Capital Budget. The total project budget is \$775,000. There is no impact to the General Fund.

### **Public Contact**

Posting of the City Council agenda.

**SUBJECT:** 2008 Road Maintenance, Project No. 07-42; Approve Plans and Specifications and Authorize Bid Advertisement

**PAGE:** 4

**ITEM:**

**Recommendation for Action**

Staff recommends City Council approve the plans and specifications for the 2009 Prop 1B Road Maintenance, Project No. 08-67, and authorize bid advertisement.

Prepared by: Katie Wurzel, PE  
Associate Civil Engineer

Reviewed by: Brent Meyer, PE, SE, TE  
Senior Civil Engineer

Reviewed by: Barry Munowitch, AICP  
Assistant City Manager

---

Mark G. Deven  
City Manager

Attachments: Project Street Listing

**Base Bid - Zone 3**

<b>Name</b>	<b>Limits</b>	<b>Treatment</b>
Ambort Wy	Southwood (W) Dr To N End	Cape
Columbia Dr	Gibson (W) Rd To Notre Dame Dr	Cape
Community Ln	Cross (W) St To Lincoln Av	Cape
Fordham Dr	Columbia Dr To Ashley Av	Cape
Harley Dr	(Elbow) To California St	Cape
Harley Dr	Casa Linda Dr To (Elbow)	Cape
Harley Dr	Gibson (W) Rd To Casa Linda Dr	Cape
Juniper Ct	W End To Sycamore Ln	Cape
Linden Pl	Sycamore St To N End	Cape
Midway Dr	Gibson (W) Rd To Casa Linda (W) Dr	Cape
Palomar Pl	W End To West St	Cape
Poplar Ln	Knuckle W/Willow To Boxwood Rd	Cape
Rancho Wy	Casa Linda (W) Dr To Ranch Pl (Elbow)	Cape
Rancho Wy	Gibson (W) Rd To Casa Linda (W) Dr	Cape
Rancho Wy	Ranch Pl (Elbow) To Westway Dr	Cape
Summertree Ln	Cross (W) St To 276' N/ Cross St	Cape
Sycamore Ln	Greenwood Dr To Juniper Ct	Cape
Sycamore Ln	Juniper Ct To Southwood (W) Dr	Cape
Tufts Pl	W End To Columbia Dr	Cape
West Cr	W End To West St	Cape
Westway Dr	Casa Linda (W) Dr To Rancho Wy	Cape
Westway Dr	Gibson (W) Rd To Casa Linda (W) Dr	Cape
Westway Dr	Rancho Wy To Hays (W) St	Cape
Westway Pl	Westway Dr To E End	Cape
Heather Ln	Ashley Av To Daniels St	Double Chip Cape Micro
Acacia Wy	Gary Wy To Cottonwood St	Fabric
Ambort Wy	Greenwood Dr To Southwood (W) Dr	Fabric
Boxwood Rd	Poplar Ln To Cottonwood St	Fabric
Casa Linda (W) Dr	Rancho Wy To Westway Dr	Fabric
Casa Linda (W) Dr	Westway Dr To West St	Fabric
Colby Ct	Ashley Av To W End	Fabric
Marshall (W) Av	Westway Dr To West St	Fabric
Poplar Ln	Willow Wy To Knuckle W/Willow	Fabric
Southwood (W) Dr	Ambort Wy To West St	Fabric
Southwood (W) Dr	Wendell Place To Ambort Wy	Fabric
Southwood (W) Dr	Sycamore Ln To California St	Fabric
Walnut Woods Ct	S End To Southwood (W) Dr	Fabric
Westway Dr	Hays (W) St To Marshall (W) Av	Fabric
Community Ln	Lincoln Av To Main (W) St	Micro
Beckett Ln	Ashley Av To Farrel St	Slurry
Boxwood Rd	Ashley Av To Poplar Ln	Slurry
Casa Linda (W) Dr	W End To Rancho Wy	Slurry
Chapman Cr	Sycamore Ln To W End	Slurry
Conner Ln	Cross (W) St To Farrel St	Slurry
Cordoza Ct	Fairview Dr To W End	Slurry
Elizabeth Wy	Cottonwood St To Sycamore Ln	Slurry
Elizabeth Wy	Sycamore Ln To California St	Slurry
Fairview Dr	Cross St To Wildwood Wy	Slurry
Fairview Dr	Silverado Dr To Southwood Dr	Slurry
Fairview Dr	Southwood Dr To Cross St	Slurry
Faria Ct	S End To Fairview Dr	Slurry
Farrel Pl	W End To Ashley Av	Slurry

**Base Bid - Zone 3**

<b>Name</b>	<b>Limits</b>	<b>Treatment</b>
Farrel St	Ashley Av To Daniels St	Slurry
Farrel St	Daniels St To Cottonwood St	Double Chip Cape Micro
Fordham Pl	Ashley Av To E End	Slurry
Gary Wy	Gibson (W) Rd To Evergreen Wy	Slurry
Heather Pl	W End To Ashley Av	Slurry
Ivie Pl	Ashley Av To E End	Slurry
Jordan Cr	Fairview Dr To N End	Slurry
Maple Wy	Cottonwood St To Greenwood Dr	Slurry
McNeill Ct	W End To Fairview Dr	Slurry
Midway Dr	Casa Linda (W) Dr To Rancho Wy	Slurry
Ridgeview Dr	Silverado Dr To Ashley Av	Slurry
Ridgeview Pl	S End To Ridgeview Dr	Slurry
Sequoia Pl	W End To Greenwood Dr	Slurry
Silverado Dr	Ridgeview Dr To Southwood (W) Dr	Slurry
Southwood (W) Dr	Ashley Av To Willow Wy	Slurry
Southwood (W) Dr	California St To Wendell Place	Slurry
Southwood (W) Dr	Cottonwood St To Sycamore Ln	Slurry
Southwood (W) Dr	Fairview Dr To Ashley Av	Slurry
Southwood (W) Dr	Silverado Dr To Fairview Dr	Slurry
Southwood (W) Dr	Willow Wy To Cottonwood St	Slurry
Summertree Ln	276' N/ Cross St To N End (Summerwood)	Slurry
Sycamore Ln	Southwood (W) Dr To Elizabeth Wy	Slurry
Tufts Ct	Columbia Dr To E End	Slurry
Wildwood Wy	Cross (W) St To Fairview Dr	Slurry
Winifred Ct	S End To Marshall (W) Av	Slurry

**Add Alt A - California Street - Fabric Micro**

<b>Name</b>	<b>Limits</b>	<b>Treatment</b>
California St	Gibson Rd To Greenwood Dr	Fabric Micro
California St	Cross St To Summerwood Drive	Fabric Micro

**Add Alt B - California Street - Micro**

<b>Name</b>	<b>Limits</b>	<b>Treatment</b>
California St	Greenwood Dr To Cross St	Micro
California St	Summerwood Dr To Main St	Micro

**Add Alt C - Cross St - Micro**

<b>Name</b>	<b>Limits</b>	<b>Treatment</b>
Cross (W) St	CR 98 To West St	Micro

**Add Alt D - Cottonwood St - Micro**

<b>Name</b>	<b>Limits</b>	<b>Treatment</b>
Cottonwood St	Gibson Rd To Main St	Micro