



SUMMARY REPORT

Agenda Date: 9/17/2019

To: Board of Supervisors

Department or Agency Name(s): Transportation and Public Works / Permit Sonoma

Staff Name and Phone Number: Johannes J. Hoevertsz 707-565-2231

Vote Requirement: Majority

Supervisorial District(s): Fourth

Title:

Ordinance for Alternate Road Re-Pavement Requirement and Road Trenching Activities- First Read

Recommended Action:

- A) Adopt a resolution to introduce and waive the reading of an Ordinance to adopt the OnePave program for certain alternate road re-pavement requirements and to collect an in-lieu fee for resulting savings for roadway trenching in the Larkfield-Wikiup area to facilitate fire recovery efforts and support a one-time, final, comprehensive re-pavement of roads in the program area.
- B) Accept and adopt certain alternative road re-pavement design details and requirements to be utilized in connection with said trench work. ☐

(Fourth District)

Executive Summary:

The Department of Transportation and Public Works (TPW) and Permit Sonoma are requesting the adoption of a resolution to introduce and waive reading of an ordinance to adopt a program relating to trenching activities in the public rights of way in the Larkfield-Wikiup area, to accept certain alternate road re-pavement requirements and collect an in-lieu portion of resulting savings. Under current requirements, when trenches are cut into roadways for laying utilities such as water, sewer, gas, electric and communication services, a permit is required and permit holders must comply with the general road paving construction standard (Road Construction Standard 219) to, among other things, protect the life span of the pavement. In the fire damaged area of Larkfield-Wikiup, a high volume of road-cutting and trenching is expected based on numerous individual projects (i.e., by different utilities and individual property owners) over the course of the lengthy rebuild process. As a whole, this activity would result in a patchwork of piecemeal repaving, resulting in degraded, poor-quality road surface and reduced pavement longevity.

In an effort to provide for better-quality, longer-lasting roads once most trenching activity is completed in the area, the County proposes a program entitled "OnePave" where trench permit holders would avoid the costs of repaving their trenches in full compliance with existing County re-pavement requirements. The OnePave program will be mandatory for all those performing trenching work in the program area. In exchange for waiving the existing re-pavement requirements and instead requiring compliance with an alternative standard for temporary, interim patching, trench permit holders would pay the County a portion of the savings they would incur as a result of this less expensive process. By only patching trenches to the proposed temporary-level standard, trench permit holders would avoid costs such as material, labor, time, and contractor

mobilization, that they might otherwise incur for full, permanent trench repaving. The resulting savings (and the amount to be paid) thus reflect amounts that will be in lieu of the costs, expenses, and obligations that would typically occur when performing required trenching re-pavement work. The amounts collected through this program would be designated for a County-initiated, final, one-time pavement (OnePave) in the program area once most trenching activity is complete.

Discussion:

Purpose

The wildfires of October 2017 caused severe damage to many infrastructure elements throughout the County. Some areas were particularly affected, with high concentrations of utilities being destroyed or entirely new utilities being needed as part of the rebuilding process. The OnePave program will focus on the densely populated Larkfield-Wikiup areas within the burn area, which contain densities and subdivisions built to a more urban standard. The existence of curb and gutter is an identifying feature of a more urban setting. Due to the higher concentration of utilities in this more urban-type setting, utility replacement and rebuilding will entail a large amount of various types of utility work in these neighborhood roadways. Installing underground utilities involves cutting the existing pavement and trenching in the roadways. Utility work will involve installation of main distribution lines, such as undertaken by public utilities, and installation of lateral connections to such mains. All such work requires obtaining an encroachment permit from the County. Once the utility installation is complete, the individual trench area is required to be repaved in order to maintain the structural integrity and surface quality of the roads. Road Construction Standard 219 dictates the amount and location of paving required to repair all trench cuts in the public right of way. These standards require repaving both within the trench area and to specified areas beyond the trench.

The high, concentrated volume of post-wildfire utility work in Larkfield-Wikiup could, under existing requirements, result in roadways with excessive individual trench patches. Rather than have each individual trench repaved piecemeal on a per-project basis, TPW is proposing a program to achieve roadways that are paved once and comprehensively (“OnePave”), once roadway utility work is done and no further trenching (and patch repaving) is needed. This can be achieved by allowing a temporary (and thus cheaper) trench cap to be used for utility work, and with the cost savings achieved, using that saved money from all the projects to pay for a final, permanent repave once most utility work is done.

Encroachment permit holders will pay a fee that reflects the difference between costs for surface material to repave to normal (full) Road Construction Standard 219 specifications and the reduced costs of repaving to the less-extensive, alternative OnePave patching specification (OnePave Fee). The OnePave Fee, accordingly, reflects an amount that is in lieu of (and, less than) costs the encroachment permit holder would ordinarily incur to satisfy existing retrenching requirements. Also, in that the OnePave Fee is based on market rates for roadway surfacing materials, the amount to be collected reflects a portion of the costs the County will incur to ultimately repave over those same trenches. As such, this proposed fee would recover the reasonable cost to perform this service and provide this benefit to the fee payors.

OnePave will have many benefits to encroachment permit fee payors. Benefits include eliminating the road surface quality impacts of piecemeal trench work, reducing overall costs by not requiring full (permanent repavement) compliance with Standard 219, and minimizing and avoiding construction congestion by eliminating the full repavement component of trench work projects. The OnePave Fee revenue would be

designated and only be expended for the maintenance, rehabilitation, resurfacing and protection of the public right of way in the OnePave Area (and associated project and administrative costs). The OnePave resurfacing is expected to be completed no later than fiscal year 21-22. This program will result in a final paving effort to be performed once, rather than the subject roadways containing multiple patch paving sections from the various individual trenching activities as would result under current requirements.

Overall, OnePave will result in lower trenching-related costs to encroachment permit holders performing trenching work in the OnePave area. Also, better and longer-lasting road surfaces in that area will be achieved.

OnePave Fee

TPW proposes charging encroachment permit holders a fee that would reflect the reasonable cost of performing this service and providing this specific benefit to the encroachment permit fee payors. The OnePave Fee reflects the cost difference between repaving to normal (full) Road Construction Standard 219 specifications and the reduced costs of repaving to the alternative, temporary OnePave patching specification. Under Standard 219, actual repaving costs for any particular project depend on numerous factors, including linear feet of trench, existing pavement depths, and trench location in the roadway. Accordingly, the OnePave Fee calculation therefore will be done on a per-project basis, to tailor the OnePave Fee to account for each project's variables. First, the cubic footage of project resurfacing material (asphaltic concrete) will be calculated, based on the depth and square footage of repaving that ordinarily would be required under Standard 219. Then, the cost of the surfacing material to temporarily patch the trench (per the OnePave patching specification) will be subtracted. The net result will be one of the cost savings of the OnePave program and will constitute the OnePave Fee. The specific formula (and price/dimension values, based on current and predicted market rates for resurfacing materials) is as follows:

OnePave Fee = "Construction Standard 219 Costs" *minus* "OnePave Alt. Spec. Costs"

Where:

- A. "AC Cost" = $\$125/\text{ton} \times 0.075 \text{ ton}/\text{ft}^3 = \$9.38/\text{ft}^3$
- B. "Construction Standard 219 Costs" = [(trench width + 6'-wide T patch) x trench linear feet] *plus* [Locational additions square footage-see Construction Standards 219A and 219C] x [existing road surface depth or required min. AC depth] x "AC Cost"
- C. "OnePave Alt. Spec. Costs" = [(trench width x [trench linear feet])] x [existing road surface depth or required min. AC depth] x "AC Cost"

Notes:

- 1. "AC Costs" means the market cost of Asphaltic Concrete, per cubic foot.
- 2. All trenches under OnePave to be temporary repaved within trench width area only.
- 3. Under Standard 219, a T-patch is required for each trench, consisting of a patch of the trench width in addition to a 3-foot lateral patch on each side.

When an encroachment permit is applied for, those performing work will submit an exhibit indicating, consistent with the above formula and the requirements of Standard 219, the estimated cubic footage of surface material needed to repave for the trench work to be done. An estimate of the OnePave Fee would then be provided by the utility, based on the above formula. Upon completion of work, a final exhibit would be required to show final cubic footage for the actual work performed. Once actual cubic footage is confirmed by Permit Sonoma field inspection, the OnePave Fee would become due.

While the alternative OnePave specifications would allow trench permit holders to avoid various other expenses associated with full repaving (e.g., less labor, equipment, mobilization, and project duration), the OnePave Fee is calculated based solely on the costs of surface material (asphaltic concrete) avoided. Accordingly, even when coupled with the costs of the temporary fill and cap measures that will be required, encroachment permit fee payors will overall pay less under OnePave than they ordinarily would for their roadway projects and the required compliance with Standard 219.

As part of the OnePave program, payors will use alternative (temporary) trench patching measures to ensure trenched roadways are useable and protected until OnePave is completed (estimated by end of fiscal year 21-22). These temporary standards have been designed by County road engineers to provide for adequate trench fill and surface patching and are based on common standards for comparable, temporary roadway repairs.

The roadways included in OnePave are shown on the attached map titled 'OnePave Roads Map'.

In addition to providing a specific benefit to the encroachment permit fee payors, OnePave will provide community benefits and facilitate fire recovery efforts. The sheer volume of trenching work, combined with the current requirement to repave only surface areas immediately proximate to the direct trench cut (*i.e.*, not the entire roadway surface), will result in the subject roadways becoming a patchwork of trench cuts and repavements. Under current requirements, not only could the new pavement areas overlap, but the paving would be performed by multiple contractors, and occur at different times. The resulting multiple patch paving would not be in the best interest for the preservation of the roadways. Additionally, this could be very disturbing to the residents in these locations. Moreover, being able to forego the permanent repaving aspects of work will avoid coordination issues with those paving contractors in the field and lead to earlier timelines for finalizing and closing-out encroachment permits. The one-time, comprehensive solution afforded by OnePave will eliminate a multiplicity of patch-paving and roadwork activities and result in better quality, longer-lasting roadways.

To pay for the community benefit of better-preserved public roadways and facilitate fire recovery efforts, on May 21, 2019, the Board of Supervisors approved the 2020/21 Pavement Preservation Program (PPP), which includes all of the roads within the OnePave area. The County will contribute to the final paving to make up any difference needed, reflecting the general benefit derived from the roadways to be improved by the final OnePave paving. Prior to the expenditure of the PPP funds in the OnePave area, TPW will provide a financial update to the Board in the Spring of 2021 regarding the fees collected with this program.

Prior Board Actions:

None

FISCAL SUMMARY

Expenditures	FY 19-20 Adopted	FY20-21 Projected	FY 21-22 Projected
Budgeted Expenses			
Additional Appropriation Requested			
Total Expenditures			
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other			
Use of Fund Balance			
Contingencies			
Total Sources			

Narrative Explanation of Fiscal Impacts:

Actual costs are unknown at this time and will be determined by the amount of trench work required. In lieu fees charged to the encroachment permit holder will cover a portion of the repaving costs. The funding collected will be added to the County contribution to the annual PPP and included in the FY 2020-21 Roads Capital Projects recommended budget. Paving costs in excess of the fees collected will be funded by the PPP. Prior to the expenditure of the PPP funds in the OnePave area, TPW will provide a financial update to the Board in the Spring of 2021 regarding the fees collected with this program.

Staffing Impacts:			
Position Title (Payroll Classification)	Monthly Salary Range (A-I Step)	Additions (Number)	Deletions (Number)

Narrative Explanation of Staffing Impacts (If Required): None

Attachments:

OnePave Roads Maps, Resolution, Ordinance, OnePave Construction Detail

Related Items "On File" with the Clerk of the Board: None