

- **DATE:** July 2, 2019
- **TO:** Peter Zanoni, City Manager
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- FROM: Jeff H. Edmonds, P. E., Director of Engineering Services jeffreye@cctexas.com (361) 826-3851

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### City Council Policy 28 Award Guidelines for Arterial and Collector Streets Concrete or Asphalt Pavement

#### CAPTION:

Resolution amending the City Council Policies to add Policy 28 - Award Guidelines for Arterial and Collector Streets with Concrete or Asphalt Pavement specifying concrete pavement alternative will be used if construction cost is not more than \$125,000 per lane mile of the asphalt pavement alternative.

#### PURPOSE:

To establish a City Council policy that confirms recommendation guidelines when determining type of pavement covering to be awarded on an arterial or collector roadway.

#### **BACKGROUND AND FINDINGS**:

Prior to November 2008, the City would typically design and construct arterial roadways with Hot Mix Asphalt Concrete (HMAC) as it was assumed to be the more affordable pavement alternative. With the November 2008 Bond Election, the City began to bid certain arterial streets with both HMAC and Portland Cement Concrete (PCC) pavement designs resulting in mixed construction awards for either HMAC or PCC pavement. In 2013, the City upgraded pavement design standards to a 30-year design life using the Association of State Highway Transportation Officials (AASHTO) Guide for Design of Pavement Structures. The change in design criteria, combined with market forces, created an environment where PCC became much more competitive with HMAC. In early 2017, at the request of the City Council, Engineering Services' staff performed life cycle cost analysis (LCCA) comparing a proposed PCC maintenance plan with the City's

existing HMAC maintenance plan. The results of that LCCA validated the belief that PCC offered reduced maintenance costs over HMAC. Freese and Nichols, Inc. (FNI) was tasked with reevaluating the LCCA between HMAC and PCC pavements and providing a letter report with recommendations resulting in three cost range options for bid award recommendations. Engineering staff believed FNI's analysis warranted raising the \$100,000 per lane mile used in the current staff bid award recommendation policy.

During the September 11, 2018 City Council meeting, Council requested a review of the policy regarding bidding street reconstruction projects in both Hot Mix Asphalt Concrete (HMAC) pavement and Portland Cement Concrete (PCC) pavement, staff is recommending City Council adopt a policy that states, "*The concrete pavement will be used if cost for concrete pavement is not more than* \$125,000 per lane mile (\$17.75/square yard) of the asphalt pavement alternative."

# ALTERNATIVES:

- 1. Approve City Council Policy 28 Award Guidelines for Arterial or Collector Streets. (Recommended)
- 2. Do not approve Ćity Council Policy 28 Award Guidelines for Arterial or Collector Streets (Not Recommended)

# **OTHER CONSIDERATIONS:**

N/A

# **CONFORMITY TO CITY POLICY:**

Complies with statutory requirements for City Council Policies.

# EMERGENCY / NON-EMERGENCY:

Non-Emergency

# DEPARTMENTAL CLEARANCES:

N/A

# FINANCIAL IMPACT:

Operating	Revenue	Capital	x Not applicable	
Fiscal Year 2018-2019	Project to Date Expenditures (CIP only)	Current Year	Future Years	TOTALS
Budget				
Encumbered / Expended Amount				
This item				
Future Anticipated Expenditures This Project				
BALANCE				

Fund(s): N/A

#### **COMMENTS:**

N/A

#### **RECOMMENDATION:**

Staff recommends approval to add City Council Policy 28 - Award Guidelines for Arterial and Collector Streets with Concrete or Asphalt Pavement specifying concrete pavement will be recommended if construction cost is not more than \$125,000 per lane mile of the asphalt pavement alternative.

#### LIST OF SUPPORTING DOCUMENTS:

CAARs Memo dated April 22, 2019 Presentation Resolution