



# City of Pflugerville

## Legislation Text

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File #: ORD-0573, Version: 2

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Approving an ordinance on second reading with the caption reading: An Ordinance of the City of Pflugerville amending Section 2 - Street Subsection DG2.4 Pavement Design of the 2014 Engineering Design Manual and Construction Standards, replacing all Engineering and Construction Standards in conflict; containing a savings clause, containing a severability clause; and providing for publication and an effective date.

In accordance with Section 3.14 of the City charter which requires an ordinance for the adoption or amendments to an administrative code or regulations pertaining to land use or development, Section 2 of the Engineering Design Manual has been updated to reflect current industry engineering and construction standards.

The City of Pflugerville recognizes the need to revise and upgrade the pavement design section of the City's Engineering Design Manual to meet current industry standards. The proposed standards are based upon the Capital Area Pavement Engineering Council (CAPEC) findings for pavement designs associated with high plasticity index clay soils. The Engineering Design Manual (EDM) will serve as a Guiding document for civil and geotechnical designs related to pavement thicknesses based on the functional classifications for Pflugerville. The proposed pavement design principles will be applicable for design of all public streets within Pflugerville's city limits.

The structural design of a pavement system must be done with a clear understanding of the factors that affect the life and serviceability of the pavement. The objective is to obtain the best quality pavement system considering factors such as: subgrade, traffic loads, pavement material and future maintenance. The City of Pflugerville pavement revisions developed based on the CAPEC study and provide design guidelines to obtain the best quality pavements for Pflugerville.

Staff proposes the request for City Council approval of the Ordinance upon first reading to update Section 2, Streets of the Engineering Design Manual, in subsection 2.4 PAVEMENT DESIGN. The proposed revisions will replace the existing subsection 2.4, as a purpose provide consultant engineers and geotechnical engineers with pavement design criteria input values for the design approach to street pavement and subgrade design to meet current industry standards. Guidelines will be applicable to new roadways as well as re-construction or upgrades to existing roadways.

The items presented in subsection 2.4 of updated pavement design criteria include geotechnical investigations, traffic loading, subgrade design, pavement design process, design life, pavement material.

### **Prior City Council Action**

The City Council approved the ordinance on first reading on March 9, 2021.

### **Deadline for City Council Action**

Action on second and final reading is requested on March 23, 2021.

**Funding Expected:** Revenue  Expenditure  N/A

**Budgeted Item:** Yes  No  N/A

**Amount:** N/A

**1295 Form Required?** Yes  No

**Legal Review Required:** N/A  Required  Date Completed: 2/26/21

**Supporting documents attached:**

Proposed Ordinance  
Pavement Design Report  
Record of Revisions  
Draft Presentation

**Recommended Action**

Approve an ordinance on the second reading with the caption reading: An Ordinance of the City of Pflugerville amending Section 2 - Street Subsection DG2.4 Pavement Design of the 2014 Engineering Design Manual and Construction Standards, replacing all Engineering and Construction Standards in conflict; containing a severability clause; and providing for publication and an effective date.