



## Board of Alderman Request for Action

**MEETING DATE:** 5/17/2021

**DEPARTMENT:** Public Works

**AGENDA ITEM:** Resolution 1070, Amending the Backfill Specifications in the City for new subdivisions

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**REQUESTED BOARD ACTION:**

A motion to approve Resolution 1070, amending the Backfill Specifications in the City for new subdivisions.

**SUMMARY:**

At the Board Work Session, staff discussed amendments to the backfill requirements for street excavations. The proposed specifications still require flowable fill in narrow trenches as contractors do not have equipment small enough to properly compact narrow trenches. We are recommending AB-3 for medium trenches, which is a base rock material that compacts very well. For large trenches / crossings the contractor can use the excavated material and compact in 6" -8" lifts. Unless the trench is backfilled with Flowable Fill strict compaction testing by an independent testing firm will be required to be approved by the City prior to placement of any curb and gutter or street surface. Refer to Staff Memo and Exhibit 1.

**PREVIOUS ACTION:**

In May of 2020, the City adopted the 2017 KC Metro APWA Construction Standards with recommended modifications including concrete and asphalt mix designs, pavement subgrade treatment, and backfilling of excavations / trenches under pavements to be flowable fill.

**POLICY ISSUE:**

Maintaining infrastructure

**FINANCIAL CONSIDERATIONS:**

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**ATTACHMENTS:**

- ☐ Ordinance
- ☒ Resolution
- ☐ Staff Report
- ☒ Other: Staff report  
Exhibit 1

- ☐ Contract
- ☐ Plans
- ☐ Minutes

## **RESOLUTION 1070**

### **A RESOLUTION AMENDING THE BACKFILL SPECIFICATIONS WITHIN THE STREET FOR NEW SUBDIVISIONS**

**WHEREAS**, in May 2020, the City adopted the current version of the KC Metro American Public Works Association (APWA) construction standards with amendments; and

**WHEREAS**, one amendment was to require that all excavations within the street be backfilled with flowable fill; and

**WHEREAS**, through discussions with local developers, contractors, engineers and City staff, it is recommended to amend the flowable fill requirement for some larger excavations as detailed in Exhibit 1.

### **NOW THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF SMITHVILLE, MISSOURI, AS FOLLOWS:**

That the backfill requirements for excavations in the street be completed in accordance with Exhibit 1.

**PASSED AND ADOPTED** by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, the 17<sup>th</sup> day of May 2022.

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Damien Boley, Mayor

ATTEST:

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Linda Drummond, City Clerk

# EXHIBIT 1

## City of Smithville

### Excavation / Backfill Specifications

Engineer shall design subdivisions to minimize crossings / excavations in /under the street from back of curb to back of curb

	<u>Trench</u>	<u>Backfill Material</u>		<u>Placement</u>	<u>Compaction</u>	<u>Testing</u>
	Trench 0 - 24" wide	Flowable Fill	water service lines, grinder pump sewer service lines, force mains (assuming not more than 4ft deep)			
	Trenches less than 48" deep	Compacted AB-3 or MODot Type 1 or 5	Water mains	8" lifts	95%	test every lift each road crossing or every 50 ft of trench length
	Trench 24"- 48" wide	Flowable Fill or Aggregate Base Material AB-3 or MoDOT Type 1 of 5		8" lifts	95%	test every lift each road crossing or every 50 ft of trench length
	Wide Trench > 48"	Suitable Backfill		8" lifts	95%	test every lift each road crossing or every 50 ft of trench length

Developer / Contractor will have an approved testing firm on site during all compacted trench operations to perform compaction testing. Compaction test reports will be provided to City on weekly basis and at least one week prior to placing curbs or pavement for approval to proceed.

