

	TECHNICAL POLICY for MICRO-TRENCH ENGINEERING APPROVED PRODUCT LIST (APL)	☒ TECHNICAL GUIDELINE ☐ CODE INTERPRETATION ☐ CODE MODIFICATION
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Issue Date:	August 17, 2026
Developed by:	Engineering Department
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PURPOSE:

The purpose of this Approved Products List (APL) is to establish pre-approved materials and systems permitted for use in micro-trenching construction within the City of Glendale public right-of-way (ROW). This document is intended to:

- Ensure long-term performance of pavement and infrastructure,
- Maintain consistency with City of Glendale Engineering Standards and MAG Specifications,
- Prevent the use of untested or non-approved materials, and
- Provide a clear approval pathway for new or alternative products.

OVERVIEW:

This Approved Products List (APL) applies to all micro-trenching activities performed within the City of Glendale public right-of-way (ROW).

The City shall maintain and periodically update the Approved Products List (APL) for:

- Sealants,
- Conduit Systems, and
- Backfill Materials.

Only materials listed in this APL shall be permitted for use unless otherwise approved in writing by the City prior to installation. Inclusion on the APL does not eliminate the requirement for project-specific submittals, nor does it constitute automatic approval for use on a specific project.

The City reserves the right to:

- Remove products from the APL,
- Update this APL at any time (it is the responsibility of the permittee to ensure use of the most current version),
- Require additional testing or documentation, and
- Reject materials that do not perform as intended in field conditions.

PRE-APPROVAL PROCESS:

Manufacturers, contractors, or permittees may request approval of products not currently listed in the APL. All products must undergo review and approval by the City of Glendale Engineering Department prior to use. The pre-approval process shall include:

- Submission of complete product documentation,
- Review of compliance with City standards and MAG specifications
- Evaluation of constructability and long-term performance, and
- Field demonstration or pilot installation if required by the City.

Approval is granted at the sole discretion of the City of Glendale Engineering Department. Products shall not be used until written approval is issued and the product is in the latest edition of the APL.

CITY OF GLENDALE

Engineering Services Department • 5850 West Glendale Avenue, 2nd Floor • Glendale, Arizona 85301 • Phone (623) 930-3630

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SUBMITTALS:

This Approved Products List (APL) does not replace project-specific submittal requirements. For each project, the permittee shall submit::

- Manufacturer technical data sheets,
- Installation procedures and requirements,
- Material safety data sheets (MSDS) – if applicable,
- Product performance specifications, and certification of compliance with applicable standards.

Submittals shall clearly identify the APL-listed product being used. Incomplete submittals may result in permit delays or rejection.

APPROVED PRODUCT LIST:

1. SEALANTS:

All sealants used for micro-trenching shall be compatible with asphalt pavement, and:

- Provide long-term flexibility and adhesion,
- Be resistant to weathering, traffic loading, and thermal movement,
- Be installed in accordance with manufacturer specifications

Approved products:

Product Type	Product Name	Manufacturer	Notes
Asphaltic Sealer	Mastic One	Crafco	Part No. 33339/Per manufacturer specs
Asphaltic Sealer	Mastic One Micro	Crafco	Part No. 33341/Per manufacturer specs
Asphaltic Sealer	GAP Mastic D	Maxwell Products	Per manufacturer specs
Asphaltic Sealer	GAP Mastic Q	Maxwell Products	Per manufacturer specs

Additional products may be approved through the pre-approval process.

2. CONDUIT SYSTEMS:

All conduit systems shall:

- Be designed for underground installation via micro-trenching,
- Provide adequate protection for fiber optic infrastructure,
- Be compatible with installation methods for backfill materials, and meet applicable industry standards.

Approved Systems:

System Type	Product Name	Manufacturer	Applicable Standards
Micro-duct System	Micro Duct	Dura-Line	ASTM F2160 and NEMA TC-7
HDPE Conduit	FiberTel Innerduct	IPEX	ASTM F2160 and UL 651A
HDPE Conduit	Smoothwall Conduit	Dura-Line	ASTM F2160/D3350, UL 651A, NEMA TC-7
Microduct System	MicroDuct Bundles	IPEX	ASTM F2160

Tracer wire or detectable conduit shall be required for all underground installations.

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3. BACKFILL MATERIALS:

All backfill materials shall:

- Provide structural support to pavement section,
- Prevent settlement and cracking,
- Be compatible with surrounding pavement materials, and
- Meet City of Glendale and MAG specifications.

Approved Materials:

Material Type	Product Name	Manufacturer	Applicable Standards
Flowable Fill	3 sack slurry mix	Ready-Mix	MAG Section 212
Rapid-Set Flowable Fill	Low strength grout	CTS cement	ASTM C928 / MAG 212
Cementitious Grout	Non-shrink Flowable Grout	Sika/Master Builders	ASTM C1107
Polymer Modified Slurry	Polymer Flowable Fill	Various	Per manufacturer specs

Aggregate Base Course (ABC) shall **not be permitted** as backfill material for micro-trenching applications due to inability to achieve proper compaction within narrow trench widths.

4. GENERAL REQUIREMENTS:

- All materials shall be installed in accordance with manufacturer specifications and City or MAG standards,
- Improper installation may result in removal and replacement at the contractor's expense,
- The City may reject any product that fails in the field, regardless of APL inclusion, and
- APL approval does not relieve the contractor of responsibility for performance.