

City of Johnson City
Public Works Department
Right-Of-Way Excavation Permit Policy

January 2009

I. Purpose

The purpose of this document is to establish a policy for excavating and repairing public transportation facilities, defined as roads, alleys, trails, bikeways, and sidewalks within the city right-of-way to ensure that the usability, structural integrity, ride quality, and life expectancy of these public transportation facilities is preserved.

II. Scope

This policy is intended to address the procedures for gaining approval to excavate within the right-of-way and to establish the requirements for digging and restoring the subsurface and surfaces of roads, alleys, trails, bikeways, and sidewalks. Policy elements are:

- Applicability
- Legal Authority
- Permit Process & Fees
 - Prior to excavating (planned work)
 - Emergency repairs for utilities
- Inspection Process
- Construction Methods and Materials
 - Open Cutting
 - Boring & Jacking
 - Streets, Alleys and other facilities subject to vehicular traffic
 - Sidewalks and pedestrian facilities
 - Landscaped Areas
- Overhead Utilities and Support Poles
- Warranties and Responsibilities for Continued Maintenance

III. Applicability

The requirements set forth in this policy will apply to any and all public or private utility companies, contractors, business owners, or homeowners desiring to excavate within any public right-of-way under the jurisdiction and control of the City of Johnson City. A public right-of-way is any common use public property established and dedicated for the purpose of transportation, recreation or utility distribution which includes, but is not necessarily limited to, streets, alleys, sidewalks, trails, bikeways, parks, parking lots and other public space.

IV. Legal Authority

Reference is hereby made to the Code of the City of Johnson City, Tennessee, Title 16, Chapter 1, Sections 16-111, 16-119 and 16-120 wherein it is stated that written permission from the city manager is a prerequisite to excavating within or installing a utility pole upon any city street, way or public place or lands of the city.

V. Permit Process & Fees

Any agency or individual planning to excavate within the City's right-of-way must first obtain a Right-Of-Way Excavation Permit. The Permit shall cover all excavations associated with a defined work order or project. Multiple excavations are allowed if pre-defined under the original permit. Permit applications are available from the Street Division of the Public Works Department and must be submitted for approval at least 1 business day prior to commencing work. Applicants must provide detailed information about the location, nature and extent of digging to be performed. The anticipated timeframe for the work will also be required on the application form.

Whenever excavation on a state highway right-of-way is planned, the agency or individual responsible shall obtain a Right-Of-Way Excavation Permit from the City in addition to meeting all the permitting and bond requirements of the Tennessee Department of Transportation. The construction methods and materials used on state highways shall be as directed by the Tennessee Department of Transportation. Work on state highway right-of-way is exempt from the permit fee.

Permits will be valid for 30 days or while construction is in continuous process and not interrupted for more than thirty days from the issue date. Permit renewals can be made up to 2 times during a six-month period following issuance without additional fees. Renewals will not be allowed after six months and a new permit application will be required with the standard fee applied.

For other than emergencies, no excavation shall take place until a permit has been issued. Failure to obtain a permit prior to digging will require an immediate cessation of work and may result in civil penalties. If work begins without first obtaining a permit, the permit fee shall be doubled.

A. Bonds

As stipulated in section 16-120 (3), a \$10,000 bond shall be required of any person or utility prior to receiving a permit to excavate in a public right-of-way.

B. Fees

The fee for a Right-Of-Way Excavation Permit is \$50.00 and due at the time of application submittal. Permit fees do not apply to any excavation performed on state highway right-of-way. Where an excavation is located within a paved area (asphalt or concrete) that is subject to vehicular or pedestrian traffic, an additional

fee of \$10.00 per square foot of disturbed surface will be assessed. This additional fee will **not** apply to concrete sidewalks. The amount of this additional fee will be determined at the time of application submittal on the basis of the extent of planned work. In the event that the actual disturbed area exceeds the planned area by more than 10%, fee adjustments based on actual disturbed area shall be calculated and due within 30 days from the completion of work.

C. Emergencies

When public safety requires it or the need for uninterrupted utility service is essential, a utility company may perform any necessary excavation without first obtaining a permit. However, a Right-Of-Way Excavation Permit must be obtained within 2 business days following the emergency excavation. All fees noted above will apply to emergency excavations.

D. Inspection Process

To ensure adherence to repair method requirements and the final product quality, all excavation in a city right-of-way shall be inspected at the time of repair. Permit holders must call the day prior to beginning the backfill operation and schedule an inspection. If the backfill operation does not commence at the time of scheduled inspection, a re-inspection fee of \$50.00 shall be required. Repairs completed without inspection may result in re-excavation to verify the quality of repair.

E. Penalties

All repairs and/or restorations as required in this policy shall be completed within a reasonable or stipulated time frame, whichever is applicable. Non-compliance shall result in a penalty of \$50.00 per day. In the event of a continued failure to complete repairs, the City will perform the repair work and bill all charges to the responsible party and/or deny future permits.

VI. Construction Methods & Materials

A. Methods

1. Open Cutting

The following minimum requirements apply to any excavation and repair in a paved area within the right-of-way.

- Saw cut the full depth of surface material **before** starting to dig.
- Provide a clean, **straight** edge along the trench perimeter.
- Backfill with **excavatable flowable fill** or compacted crush stone as pre-approved by the Director of Public Works, or his designee.
- Replace asphalt with an equivalent thickness or at least 3”.

Additionally, all city streets will have the following requirement:

- When applicable, provide an asphalt overlay in accordance with the Asphalt Overlay Requirements presented later in this document. A waiver of this requirement may be granted by the Director of Public Works if the street or public area involved is scheduled for resurfacing during the next 12 months.

2. Boring and Jacking

Wherever possible, the use of boring or jacking techniques is encouraged as the means to install utilities beneath the street. However, when piercing tools (either air or hydraulically operated) are used to push beneath a street, a minimum depth of 30” to 36” shall be maintained to prevent any heaving of the road surface. In the event of heaving, the permit holder will be required to grind off the high spot and apply an asphalt overlay in accordance with the Asphalt Overlay section of this policy. All push pit areas shall be restored in accordance with the Landscaped Areas section of this policy.

B. Materials

Excavatable Flowable Fill (Controlled Low Strength Material)

Excavatable flowable fill concrete shall be mixed in conformance to ACI 229R-94 – Controlled Low Strength Materials (CLSM). The mix design for flowable fill shall result in a finished product excavatable by machine equipment. Flowable fill backfill will be placed for the full depth of excavation up to 3” from the pavement surface.

Crushed Stone Backfill

Where excavated side walls maintain a high degree of stability, crushed stone backfill may be used. Its use shall be pre-approved by the Director of Public Works or his designee and noted on the permit. This backfill material shall be road base material (pug mill stone) with sufficient moisture content to achieve maximum compaction. When ambient moisture is below optimum for compaction, water should be added at the quarry. Crushed stone backfill will be placed for the full depth of excavation and up to the bottom of the existing asphalt pavement or at least 3” below the pavement surface. Crushed stone backfill shall be placed in maximum 8”-12” lifts and fully compacted by means of a vibratory roller or plate compactor.

Asphalt Material

Bituminous hot-mix asphalt shall be used for all permanent repairs to existing asphalt surfaces. High quality cold patch material may be used with prior approval for temporary patches when hot-mix asphalt is not available. Temporary cold patch repairs must be reconstructed as a permanent repair using hot-mix asphalt as soon as conditions allow but not more than 4 months after excavation is complete. The following requirements apply to permanent hot-mix asphalt repairs:

- Asphalt emulsion (tack material) should be applied to the edges of the existing asphalt prior to placing the new hot-mix material

- Where flowable fill is used, the asphalt thickness shall be a nominal 3”
- Where crushed stone is used, asphalt shall be an equal thickness to existing pavement material but not less than 3”
- TDOT Grade “E” surface mix may be used for the full depth of replacement asphalt up to 4” thickness
- Asphalt thicknesses greater than 4” must use a binder grade (TDOT “B” modified) for all but the top 1.5 inches.
- Binder asphalt layers must not exceed 4” per lift with sufficient time for cooling provided between each lift
- New asphalt must be thoroughly compacted and made flush with the existing road
- Patches should butt up against the old asphalt and not overlap it

VII. Asphalt Overlay Requirements

For long term stability and smoothness of ride, some excavation repairs on city streets and state highways maintained by the city will have a 1” thick surface grade asphalt overlay placed by means of a self-propelled asphalt paving machine. The following criteria establish the conditions under which the permittee will be required to apply a hot-mix asphalt overlay:

- When the disturbed area is of such dimensions that hand placement of asphalt is not likely nor expected to produce the desired smoothness or greater than 200 square feet
- When determined by the Director of Public Works, or his designee, during the permit application review to be in the best interest of the City. For example, multiple cuts performed in close proximity to one another may require an overlay.

All asphalt overlays will be installed to the following minimum dimensions:

- Transverse Cuts or Spot Repairs
 - 2-lane streets up to 25’ wide will be overlaid for the full width of the street and at least 15’ beyond the limits of the repair in each direction when the patch size exceeds 200 square feet
 - Streets with 3 lanes or more will be overlaid for the full width of the street on transverse cuts greater than 10 foot width or the full width of any individual lane or lanes impacted by a spot repair of at least 200 square feet and at least 15’ beyond the limits of the repair in each direction
- Longitudinal Cuts of 100 feet or greater length
 - 2-lane streets up to 25’ wide will be overlaid for the full width of the street and at least 15’ beyond the limits of the repair in each direction
 - Streets with 3 lanes or more will be overlaid the full width of the impacted lane and at least 15’ beyond the limits of repair in each direction

Prior to applying the overlay, an equal thickness of asphalt material shall be ground out and a clean edge created where the overlay and existing asphalt join.

VIII. Concrete Streets

Excavation and repair of concrete streets will be the same as described above with the following clarifications and/or exceptions:

- A concrete street with existing asphalt overlay must be saw-cut prior to excavation and backfilled with excavatable flowable fill up to the **top** of the existing concrete. Hot-mix asphalt shall be used to complete the repair up to the elevation of the existing asphalt surface. The asphalt overlay requirements will apply to these streets.
- A concrete street without any additional surfacing material (concrete riding surface) must be saw-cut prior to excavation and backfilled with excavatable flowable fill up to the **bottom** of the existing concrete slab. A quick setting, high early strength concrete material shall be placed for the full thickness of the existing concrete slab and screeded flush with the surrounding road surface. The asphalt overlay requirements will **not** apply to these streets.

IX. Sidewalks & Bikeways

A. Concrete

Where excavation within a sidewalk area is performed, the following requirements will apply:

- Saw cut the full concrete depth at the first transverse joint on each side of the work area
- Either flowable fill or compacted road base material are acceptable for backfill beneath a sidewalk
- Backfill material shall extend from the bottom of the trench up to the bottom of the existing concrete
- New concrete shall be poured 4" thick except at driveways which shall be 6" thick and extend for the full width of the sidewalk. Partial width sidewalk repairs will **not** be allowed
- All concrete for sidewalks shall have a mix design approved by the City Public Works Department
- Concrete repairs within the Central Business District are required to use a mix design that incorporates only natural brown sand for the fine aggregate and adjustments to the fly ash content to achieve the desired beige color

B. Asphalt

- Use the same repair requirements as for roadways
- The full width of pathway for the length of cut shall be overlaid

X. Grassed & Landscaped Areas

Excavations in right-of-way areas that are grassed or contain planted beds shall require a permit and must be restored within 20 days after the digging is completed. Proper

compaction of the subsoil shall be accomplished to prevent trench settlement. All disturbed areas shall be properly leveled and dressed to blend with adjacent contours and have at least 3” of topsoil applied to ensure a proper stand of grass is achieved. Seeding shall be with a common variety of fescue and have a fertilizer applied with sufficient mulch cover to prevent soil erosion and encourage seed germination. Planted beds shall be restored back to their original condition.

XI. Overhead Utilities and Support Poles

Installation of utility poles or pole foundations located within a public transportation facility as defined in Section I, shall require the issuance of a permit and shall be inspected upon completion of the work. Prior to issuance of a permit, the permittee shall justify that the location within an existing public facility is the only reasonable option available. Proposed locations will be assessed by city staff to ensure that new installations do not interfere with access to, or the safe use of, streets, alleys, sidewalks, trails or public areas. Disturbance of any surrounding ground surface that results from the drilling and installation process shall be repaired by the permit holder in accordance with the appropriate section of this policy. All spoil material from the drilling process must be removed from the right-of-way and the area properly dressed, seeded and mulched.

XII. Warranties and Responsibilities for Continued Maintenance

Each permit holder will be responsible for the monitoring and continued maintenance of their permitted area for a period of two years after completion.

During this time, if a permittee does not repair any subsequent failures within seven (7) days from the time of notification, the City shall proceed to make the necessary repairs and expense the same to the responsible party. Failure to properly maintain these areas in a satisfactory condition may result in the denial of future permits to the responsible party.



City Of Johnson City
Public Works Department

RIGHT-OF-WAY EXCAVATION PERMIT APPLICATION

All permits will be issued through the Street Division. Applications may be faxed to (423) 975-2710, e-mailed to digpermits@johnsoncitytn.org, or delivered to the office at the City Service Center at 209 Water Street.

Applicant Name: _____ Date: _____

City Department Utility Company Private Contractor Individual

Work Site Address: _____ State Highway?
(Please be accurate with the even/odd number for correct side of street)

Is the work site within an intersection? Yes No EMERGENCY REPAIR?

Estimated Start Date: _____ Estimated Completion Date: _____

Job Type Single Dig Multiple Dig/Project Project Name _____

Location Within Right-of-Way: (check all that apply)

Street Sidewalk Median Shoulder Grass strip/parkway
Driveway/apron Other _____

Surface Types: (check all that apply)

Asphalt Concrete Crushed Stone Grass Other _____

Request To Use Crushed Stone Backfill: Justification _____

(Flowable fill is required in all street cuts unless prior approval for crushed stone is granted)

Road Surface Repair Dimensions

Road: Length _____ x Width _____ = _____ sq.ft.

Total Area Subject to Disturbed Surface Fee: = _____ SQ. FT.

Reason for Excavation:

Line repair/maintenance Line replacement Pole Installation
Line extension/New system New service connection Other _____

Applicant's / Contact Person Name and Title: _____

Address: _____ Please Print

Phone No. _____ Emergency Phone No. _____

FAX No: _____ E-Mail Address _____

Signature: _____

(City Departments must include a budget charge code _____ - _____ - 55350 - _____)

FOR OFFICE USE ONLY

Payment Type: [] Bill to Account [] Cash (Receipt No. _____)

Customer Account No.: _____

Approved By _____ Date _____

rev. 1/22/09