CHAPTER 4

EXCAVATIONS1

SECTION

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- 16-401. <u>Application</u>. This chapter shall cover all types of excavations that could be performed within the City of Sevierville. (1996 Code, § 16-401)
- 16-402. <u>Excavations on private property</u>. This section covers excavations that will be performed on private property:
- (1) Excavation and grading code adopted. Pursuant to authority granted by Tennessee Code Annotated § 6-54-501, and for the purpose of setting forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments, the Standard Excavation and Grading Code, ² 1975 edition, as prepared and adopted by the International Code Council, is hereby adopted and incorporated by reference as a part of this code, and is hereinafter referred to as the excavation and grading code.
- (2) <u>Modifications</u>. <u>Definitions</u>. Whenever the excavation and grading code refers to the "Building Official" it shall, for the purposes of the excavation

This chapter was patterned substantially after the ordinance upheld by the Tennessee Supreme Court in the case of <u>City of Paris</u>, <u>Tennessee v. Paris-Henry County Public Utility District</u>, 207 Tenn. 388, 340 S.W.2d 885 (1960).

¹State law reference

²Copies of this code (and any amendments) may be purchased from International Code Council, 4051 W. Flossmoor Road, Country Club Hills, Illinois 60478.

and grading code, mean such person as the Board of Mayor and Aldermen has pointed or designated to administer and enforce the provisions of the excavation and grading code.

- (3) <u>Available for inspection</u>. Pursuant to the requirements of <u>Tennessee Code Annotated</u> § 6-54-502, one (1) copy of the excavation and grading code has been placed on file in the Department of Code Enforcement or Building Official's office and shall be kept there for the use and inspection of the public.
- (4) <u>Violations</u>. It shall be unlawful for any person to violate or fail to comply with any provision of the excavation and grading code as herein adopted by reference and modified. (1996 Code, § 16-402, modified)
- 16-403. Excavations and other land disturbance activity within public rights-of-way. Any and all work performed by any person, firm, corporation, association, or other entity within any publicly owned street right-of-way shall be performed as set out in subsections (1)-(5) below. These shall be considered minimum requirements. The City Engineer may make modifications due to unusual site conditions or public safety issues.
- (1) <u>Work areas--general</u>. In addition to the standards set out in this subsection, all reconstruction and restoration work conducted within the pavement or outside the pavement areas of a street right-of-way shall be preformed in accordance with subsection (4) below.
 - (a) Disturbed areas shall be limited to no more than three hundred (300) linear feet of open trench before temporary repairs are initiated.
 - (b) No work will be permitted (except for emergencies) on certain streets during special City events. Requests to continue work during such events will be considered and acted upon by the City Engineer on a case by case basis.
 - (c) Care should be taken in job site parking to avoid damage to sidewalks and landscaping. Parked vehicles and equipment shall not restrict access points to private property, block access to fire hydrants, nor cause unsafe sight distances for traffic. No vehicles shall be permitted to block any portion of the right-of-way other than that covered in the work permit.
 - (d) All traffic control around construction sites shall be in accordance with the <u>Manual for Uniform Traffic Control Devices</u> (MUTCD), subject to modification for specific locations by the Department of Engineering. Traffic cones are not acceptable as the sole means of traffic control; Type II barricades and barrels with lights are required by the MUTCD. Should the contractor's work be of several days' duration, the contractor shall be responsible for the maintenance and condition of all signs and their appurtenances, twenty-four (24) hours a day, seven (7)

days a week. All signs shall be removed from the work site immediately after work is completed.

(e) Erosion and sediment control at work sites shall be in accordance with Tennessee Department of Environment and Conservation (TDEC) and applicable ordinances and policies of the City. Under no circumstances shall material be washed into storm drains. Excess material/sediment shall be allowed to dry and then be removed by vacuum sweeper or shoveling and thereafter removed from the site. Street washing shall be allowed only after sediment is removed in this manner. Effluent from dewatering operations shall be filtered and/or passed through an approved sediment-trapping device and discharged in a manner that does not adversely affect adjacent property.

(2) Work performed within the pavement.

- (a) Arterial streets. Arterial streets are major thoroughfares designed to carry traffic to and through the City. As such, no work may be performed within the pavement of arterial streets during peak traffic hours, as determined by the City Engineer. Due to consistently higher traffic volumes on weekends, no new major work shall begin on Friday (unless work will be continued during the weekend). Lane closures will be restricted to the lane within which work is being performed and two-way traffic shall be maintained at all times. At the end of each daily work period (usually in the evening), all openings in the pavement shall be covered by a road plate or an asphalt patch. The permanent asphalt patch shall be placed within four (4) days after completion of the backfilling operation. When notified by the City of an unsafe opening, the responsible person, firm, corporation, association, or others shall respond and make safe within four (4) hours of such notification.
- (b) Collector streets. Collectors are those streets that connect residential and other local streets to arterials. Collectors generally have rights-of-way sixty feet (60') to eighty feet (80') in width with two (2) lanes of alternating traffic with parking on both sides or have four (4) lanes of alternating traffic. Generally, there will be no restriction on work hours or workdays for work within the pavement of collectors. Two-way traffic shall be maintained at all times. At the end of each daily work period (usually the evening), all openings or patches in collector streets shall be closed and covered by a road plate or be surfaced with a temporary asphalt patch. A permanent asphalt patch shall be completed as soon as possible, but no later than seventy-two (72) hours from the time repair work is initiated. When notified by the City of an unsafe opening, the responsible person, firm, corporation, association, or others shall respond and repair said patch within twenty-four (24) hours of such notification.
- (c) Residential and local streets. These streets, including cul-de-sacs, provide direct access to adjacent property or homes. Residential and local streets generally have a fifty foot (50') right-of-way,

with two (2) travel lanes and may have parking on both sides of the street. Except for emergency work, construction hours shall be limited to 7:00 A.M. to dusk to be sensitive to the impact of construction noise on surrounding properties. At least a single lane shall be provided for two-way traffic with a flagger available for control. Excavations in residential streets shall be protected each night. This may be achieved by stone backfill to grade or by placement of lighted barricades and fencing. A permanent asphalt patch shall be completed as soon as possible, but no later than one hundred twenty (120) hours from the time repair work is initiated. When notified by the City of an unsafe opening, the responsible person, firm, corporation, association, or others shall respond and repair said patch within seventy-two (72) hours.

(3) Work performed outside the pavement.

- (a) Restoration. All work areas outside the pavement shall be restored to their original condition after work is completed.
- (b) Conditions during construction. At the end of each daily work period (usually the evening), all pits/trenches remaining open shall be barricaded or fenced on all sides to insure pedestrian and motorist safety. Where work will be interrupted longer than a week, temporary repairs (i.e., stone backfill to grade) shall be made. In no case shall any work area outside of the pavement be in a disturbed state longer than thirty (30) days. When notified of a failure in the work area (i.e., cave-in), the responsible person, firm, corporation, association, or others shall respond and repair said work within one (1) week.
- Reconstruction/restoration standards. All reconstruction/ restoration shall result in a work site condition equal to or better than that which existed prior to beginning construction. The person, firm, corporation, association, or others shall be responsible for any defects (i.e., settling of pavement, humped pavement, settlement of trenches outside the pavement, or other) for the lifetime of the pre-existing paved street, or, until the street is resurfaced. The person, firm, corporation, association, or others are expected to be familiar with the applicable standards referenced herein and to employ qualified contractors who will comply with these standards in the restoration of the right-of-way. Any person, firm, corporation, association, or others who fail to comply with these standards risk exclusion from performing future right-of-way work. All reconstruction/restoration work within the paved and unpaved area of the right-of-way shall be performed in accordance with the following standards unless otherwise modified by the City Engineer due to unusual site-specific circumstances.
 - (a) Pavement. The person, firm, corporation, association, or others shall also refer to graphic representation of pavement restoration details referred to herein as "standard drawings" available in the Office of the City Engineer for instruction not shown under this heading.

- (i) Pavement cuts shall be filled with compacted select material. Concrete base and asphalt surface shall be placed in accordance with standard drawings. In no case shall replacement asphalt be of less thickness than that which was existing prior to the initiation of work.
- (ii) Patches will be approved based on their general appearance as well as their "rideability." Rideability is defined as a leveling tolerance to within one-quarter inch (1/4") at any point across the patch as it relates to the surrounding asphalt street surface.
- (iii) In cases where work causes the disturbance of more than thirty percent (30%) of the width of a traffic lane, street, or intersection, the City may cause the person, firm, corporation, association, or others to overlay an area larger than their work area to insure a smooth, ridable surface.
 - (iv) In all cases, site cleanup is necessary and required.
- (b) Signalized intersections. In no case shall a person, firm, corporation, association, or others, or their contractor, cut into the pavement of a signalized intersection without having contacted the Department of Engineering forty-eight (48) hours prior to beginning such work. The City's signal maintenance contractor will locate buried loop detection devices so as to protect them from damage. Anyone damaging a loop detector will be charged for the repair and/or reinstallation of the device.
- (c) Pavement marking. Lane striping or other painted and affixed delineators which may be removed during construction shall be replaced by the person, firm, corporation, association, or others before restoration will be considered complete. The person, firm, corporation, association, or others will be responsible for matching the existing product (traffic paint, thermoplastic, raised pavement markers, lane tape) and applications. The Department of Engineering shall be the governing authority.
- (d) Sidewalks. The person, firm, corporation, association, or others shall refer to the standard drawings for sidewalks for instructions not shown under this heading. Sidewalks damaged by a person, firm, corporation, association, or others shall be removed and replaced in full sections. A section's size will be determined by the adjacent sections or the City Inspector. All edges of concrete to be removed shall be saw cut and then formed from construction (or dummy) joint to joint. Any sections of sidewalk which have been undermined as work progressed, shall also be cut out and replaced with suitable backfill tamped prior to replacement. Should damage be observed after the work has been completed, the person, firm, corporation, association, or others shall be notified to perform repairs. Where sidewalk sections are removed at

street corners, the sidewalk and adjacent curb shall be restored as a curb cut handicapped ramp. Construction of the ramp shall be in accordance with City standards.

- (e) Curb and gutter. The person, firm, corporation, association, or others shall refer to the standard drawings for curb and gutter details for instructions not shown under this heading. When curb and gutter is replaced, it will be restored in full ten-foot (10') sections. Existing curb elevations will be matched to ensure constant grade and positive drainage. Curb and gutter is to be installed over four inch (4") crushed stone base, matching adjacent curb sections materials, i.e., concrete or exposed aggregate. Expansion material shall be used at joints. Should the work include removal of a section which was finished with a dummy joint, the contractor shall saw cut the joint prior to forming and pouring the new section.
- (f) Street/road crossings. When conditions are suitable, the preferred method of crossing a street in the City shall be by jacking or boring the new pipe, service line or system extension under the street crossed. In some cases, it may be determined that a street can be crossed with an open cut to the pavement. However, in these cases, specific restoration standards and time constraints may be imposed. Boring under and across roadways shall be the preferred method for installing utility lines across City-owned or maintained street. Roadway bores of two inches (2") and less in diameter shall be installed at a minimum depth of twenty-four inches (24") below the pavement surface. Roadway bores of greater than two inches (2") in diameter shall be installed at a minimum depth of thirty-six inches (36") below the pavement surface. Excavations (utility cuts) across City-owned or maintained roadways shall be avoided unless roadway subsurface conditions and/or the potential damage to adjoining utility lines located under the roadway prevent safe boring. All utility cuts shall be excavated to a minimum depth of eighteen inches (18"). All utility cuts shall be saw cut along the edges with any section of raised pavement removed. Unless otherwise approved by the City Engineer, all utility cuts shall be backfilled using approved flowable fill (flowable mortar) installed in the trench in a manner which results in the finished surface of the material being four and one-half inches (4 1/2") from the payement surface. Care should be used to cover the utility pipe or conduit with six inches (6") of crushed stone prior to installing the flowable fill to prevent the conduit from floating to the surface. Steel plating of one inch (1") thickness shall be placed over the utility cut for the period of time necessary for the flowable fill to cure (approximately forty-eight (48) hours) and until the street pavement has been repaired. The plating shall be of such size that assures that each edge extends at least twelve inches (12") from the edge of the cut pavement. At no time

should it be assumed that the City will permit an open pavement cut. Open pavement cuts may be permitted only on a case-by-case basis.

- (g) Bridge attachments. Any proposed attachments require the submittal of detailed plans and specifications with the permit application for approval on a case-by-case basis.
- Grass areas and trees. All areas covered with grass prior to construction shall be reseeded or sodded after construction. No permit shall be released until grass is showing at least seventy-five percent (75%) re-growth. Special care shall be taken to ensure suitable topsoil is used as the final cover over an excavation either by stockpiling existing topsoil separately during excavation or by using sifted topsoil brought to the site. Contractors will minimize equipment parking on turf areas. In the event this is unavoidable and results in rutting of the turf and soil, restoration will not be considered complete until any ruts have been leveled out and grass seed is showing at least seventy-five percent (75%) re-growth. Contractors will plant grass seed to match that existing at the site, fescue with fescue, Bermuda with Bermuda, etc., (in no case shall more than ten percent (10%) be annual rye). Seed placed after June 15th cannot be expected to show a substantial re-growth and must be re-seeded in the fall. Trees shall not be removed or heavily pruned in the course of programmed utility work without prior approval from the City. In the event tree roots are damaged during excavation, all damaged material must be cut back cleanly to undamaged material. All cuts shall be cleanly made with either chain saw, knife, or lopping shears. Applications of tree wound paint are not allowed.
- Landscaped areas general. The City has done extensive landscaping in many areas including medians of arterial streets. When work is planned in one of these planted areas, it is the responsibility of the person, firm, corporation, association, or others to contact the Department of Engineering two (2) days prior to the start of work for consultation and possible removal/replacement of plantings. The Department of Engineering will determine procedures to be followed for maintenance of the plants and their policies will govern. In cases where above ground work needs to be screened or where existing plant materials must be replaced, the person, firm, corporation, association, or others shall install landscaping materials in accordance with a landscape plan provided by the City. In cases where trees are affected, it is the responsibility of the person, firm, corporation, association, or others to contact the Department of Engineering at least two (2) days prior to the start of work for consultation on care and possible removal/replacement of trees.
- (5) <u>Inspection of reconstruction/restoration</u>. The City shall conduct inspections of work sites to insure that all applicable reconstruction/restoration standards are being met during the construction process and to insure that all

reconstruction/restoration work has been completed in accordance with the provisions of this section. Inspection services will be provided by the City as necessary and upon request by the person, firm, corporation, association, or others. In some cases, due to scope, location or duration of the work, it is necessary to notify the City forty-eight (48) hours before beginning the work. City Inspectors shall focus on work zone safety, traffic control, backfilling, compaction, hazard protection, and repaying.

- (6) Permits and fees. Permits for construction within the right-of-way will be issued by the Department of Engineering on a per-project basis to the responsible person, firm, corporation, association, or others. The application for a permit must be submitted to the Engineering Department at least forty-eight (48) hours prior to the start of work. If an emergency repair is necessary, the permit shall be obtained within twenty-four (24) hours from the start of the repair. For construction within a state right-of-way, only a copy of the permit issued by the state will be required to be submitted to the Department of Engineering.
- (7) <u>Fee schedule</u>. Permits issued under the provisions of this section shall be valid for the length of time determined on a case by case basis by the City Engineer to be sufficient to complete reconstruction/restoration of the site. In instances in which construction is conducted in phases, a separate permit will be required for each phase. The following fee will apply for City right-of-way construction permits: twenty-five dollars (\$25.00). With the exception of emergency situations, if construction is performed without first obtaining a permit, the permit fee shall increase to fifty dollars (\$50.00). (Ord. #2005-016, July 2005)
- **16-404.** <u>Driveway entrances</u>. No one shall cut, build or maintain a driveway without first obtaining a permit from the City Engineer. Driveway entrances which are included with new construction permits will not require a separate permit; however, a site plan may be required for review and approval by the City Engineer.

Such a permit will not be issued when the contemplated driveway is to be so located or constructed as to create an unreasonable hazard to pedestrian and/or vehicular traffic. No driveway shall exceed thirty-five feet (35') in width at its outer or street edge and when two (2) or more adjoining driveways are provided for the same property a safety island of not less than ten feet (10') in width at its outer or street edge shall be provided. (1996 Code, § 16-409)

16-405. <u>Permits</u>. Applications for such permits shall be made to the City Engineer, or such person as he may designate to receive such applications, and shall state thereon the location of the intended excavation, driveway, or tunnel, the size thereof, the purpose thereof, the person, firm, corporation, association, or others doing the actual excavating, the name of the person, firm, corporation, association, or others for whom the work is being done, and shall

contain an agreement that the applicant will comply with all ordinances and laws relating to the work to be done. Such application shall be rejected or approved by the City Engineer within twenty-four (24) hours of its filing. (1996 Code, § 16-410)

- 16-406. <u>Fees</u>. The fees for permits for excavations on private property shall be levied in accordance with the fee schedule established by the issuing authority. Fees for permits for excavations within public rights-of-way shall be as provided for in § 16-403, except that the fee for a residential driveway cut shall be twenty-five dollars (\$25.00). (Ord. #2005-016, July 2005)
- 16-407. <u>Deposit or bond</u>. No such permit shall be issued unless and until the applicant therefore has deposited with the City Recorder a cash deposit or in lieu of a deposit the City Recorder or his/her designee may require a surety bond in such form and amount as the City Engineer shall deem adequate to cover the costs to the City if the applicant fails to make proper restoration. From this deposit or bond shall be deducted the expense to the City of relaying the surface of the ground or pavement, and of making the refill if this is done by the City or at its expense. The balance shall be returned to the applicant without interest after the tunnel, driveway, or excavation is completely refilled and the surface or pavement is restored. (1996 Code, § 16-412)
- 16-408. Manner of excavating—barricades and lights—temporary sidewalks. Any person, firm, corporation, association or others making any excavation or tunnel shall do so according to terms and conditions of the application and permit authorizing the work to be done. Sufficient and proper barricades and lights shall be maintained to protect persons and property from injury by or because of the excavation being made. If any sidewalk is blocked by any such work a temporary sidewalk shall be constructed and provided which shall be safe for travel and convenient for users. (1996 Code, § 16-413)
- 16-409. Restoration of streets, etc. Any person, firm, corporation, association, or others hauling across or making any excavation or tunnel in or under any street, alley, or public place in the City of Sevierville shall restore said street, alley, or public place to its original condition. In case of unreasonable delay in restoring the street, alley, or public place, the City Engineer shall give notice to the person, firm, corporation, association, or others that unless the damage, excavation, or tunnel is properly repaired within a specified reasonable period of time, the City will do the work and charge the expense of doing the same to such person, firm, corporation, association, or others. If within the specified time the conditions of the above notice have not been complied with, the work shall be done by the City, an accurate account of the expense involved shall be kept, and one hundred fifty percent (150%) of the total cost shall be charged to the person, firm, corporation, association, or others

who made the excavation or tunnel with a minimum charge of one thousand dollars (\$1,000.00). (1996 Code, § 16-414)

- 16-410. <u>Insurance</u>. In addition to making the deposit or giving the bond hereinbefore required to insure that proper restoration is made, each person applying for an excavation permit shall file a certificate of insurance indicating that he is insured against claims for damages for personal injury as well as against claims for property damage which may arise from or out of the performance of the work, whether such performance be by himself, his subcontractor, or anyone directly or indirectly employed by him. Such insurance shall cover collapse, explosive hazards, and underground work by equipment on the street, and shall include protection against liability arising from completed operations. The amount of the insurance shall be prescribed by the City Administrator in accordance with the nature of the risk involved. (1996 Code, § 16-415)
- 16-411. <u>Time limits</u>. Each application for a permit shall state the length of time it is estimated will elapse from the commencement of the work until the restoration of the surface of the ground or pavement. It shall be unlawful to fail to comply with this time limitation unless permission for an extension of time is granted by the City Administrator. (1996 Code, § 16-416)
- 16-412. <u>Supervision</u>. The City Engineer or his authorized representative shall from time to time inspect all excavations and tunnels being made in or under any public street, alley, or other public place in the City and see to the enforcement of the provisions of this chapter. Notice shall be given to him at least ten (10) hours before the work of refilling any such excavation or tunnel commences. (1996 Code, § 16-417)
- 16-413. Perpetual care. Any person, firm, corporation, public or private utility, association, or others affecting a public way within the City, shall be responsible for any defects which occur to the public facility within the public way due to workmanship or materials. The cost for repairs shall be the responsibility of the utility owners of the facility which was placed within the City of Sevierville public way. The City's Public Works Department will be responsible for making the repairs or having the work contracted. The City may allow the utility to make the repairs if requested to do so. Repairs shall be made in accordance with specifications furnished by the City of Sevierville. (1996 Code, § 16-418)