CITY OF CINCINNATI
DEPARTMENT OF TRANSPORTATION AND ENGINEERING
DIVISION OF ENGINEERING

RIGHT OF WAY PERMITS
AND
STREET RESTORATION
MANUAL

RULES AND REGULATIONS
FOR WORK IN THE CITY RIGHT OF WAY
OF THE CITY OF CINCINNATI

CINCINNATI MUNICIPAL CODE
CHAPTERS 718, 721, 722 & 723

JUNCTA JUVANT CITY OF CINCINNATI OHIO

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RECOMMENDED:

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RIGHT-OF-WAY PERMITS and STREET RESTORATION MANUAL
TABLE OF CONTENTS

SECTION

TABLE OF CONTENTS
continued

SECTION 1

AUTHORIZATION

The following Rules and Regulations have been prepared by the Director of the Department of Transportation and Engineering, and approved by the City Manager, as required under the following Sections of the Cincinnati Municipal Code.

CMC Sec. 721-35. - Rules and Schedules.

A complete set of rules and regulations shall be prepared by the Director and approved by the City Manager, describing in detail the procedure to be observed in obtaining permits and precautions to be taken in acting under the permits when issued. Specifications shall also be similarly prepared describing the manner in which restoration work shall be done. The rules and regulations shall contain a schedule of prices to be charged for various size openings in various kinds of paving, due regard being had to the kind of service to be rendered by the department in connection with the restoration work. The City Manager shall have the right to change the rules, regulations and specifications and to revise the schedule or prices whenever the interests of the city require such change or revision.

The City Engineer may issue permits for nighttime construction between the hours of 11:00 p.m. and 7:00 a.m. the following day, where the applicant demonstrates it is in the interest of public safety that operations be conducted during those hours.

CMC Sec. 721-89. - Sidewalk Specification and Inspection.

The Director shall have on file the specifications regulating the manner in which a sidewalk repair or construction is to be done. Upon notice of the completion of any sidewalk construction or repair, the City Engineer shall make an inspection of the work. If, in the judgment of the City Engineer, the work is unsatisfactory, notice of such fact shall be served, by mail or otherwise on the contractor and the property owner, and the contractor shall be ordered to relay or repair the work according to specifications.

CMC Sec. 721-125. - Rules and Regulations.

The City Engineer is authorized to make and enforce all necessary rules and regulations for the effectuation of the provisions governing openings in city retaining walls.

CMC Sec. 722-1-R3. - Rules and Regulations for Making Openings in a Right of Way.

"Rules and Regulations for Making Openings in a Right of Way" means the rules and regulations governing the making and restoration of openings in streets, alleys, sidewalks, public ways or places of the city drafted under the authority of this Code and on file in the department, including without limitation the city's Right-of-Way Permits and Street Restoration Manual, as amended from time to time.

In case of any dispute as to the interpretation of any or all of these Rules and Regulations, the decision of the City Manager shall be final.

In performing work under these Rules and Regulations, the Permittee is fully responsible for making their operations conform to all applicable statutes, rules, and regulations of the City of Cincinnati and the State of Ohio.

These Rules and Regulations shall be made a part of the specifications for any and all projects, under the jurisdiction of any City Department, involving the use of the public right-of-way, the opening of the public right-of-way, the tunneling of a public way, or any other City permit required under Chapters 718, 721, 722, and 723 of the Municipal Code for work in the public right-of-way. These Rules and Regulations shall also be embodied in the proposal for submitting bids on contracts, and, in the formal contract, the Contractor shall be required to perform all work covered by these Rules and Regulations in strict accordance therewith.

All specifications of work shall be defined by the referral to the ODOT CMS and the City Supplement, unless otherwise noted.

The Permittee agrees that when performing any work under this permit, he shall be bound by the requirements of Section 107, "Legal Relations and Responsibility to Public," as outlined in the State of Ohio Department of Transportation Construction and Material Specifications.

Definitions:

City Engineer. City Engineer, DOTE - Engineering Division or his designee

City Supplement. Most recent edition of City of Cincinnati Supplement to the ODOT CMS

City Traffic Engineer. City Traffic Engineer, DOTE – Traffic Engineering Division or his designee

CMC. Cincinnati Municipal Code

Contractor. Permittee or Permittee's contractor

Director. Director of DOTE or his designee

DOTE. City of Cincinnati Department of Transportation and Engineering

Engineer. Engineer, DOTE - Engineering Division

Inspector. Inspector, DOTE - Engineering Division

ODOT CMS. The most recent edition of the State of Ohio Department of Transportation Construction and Material Specifications.

Permittee. Individual or company that was issued a DOTE Permit

Right-of-Way (ROW). Any the following: The entire strip of land lying between property lines set aside for transportation purposes; DOTE owned property adjacent to a public roadway; or right-of-way as defined in Section 723-1(c) or 722-1-R2 of the Cincinnati Municipal Code.

Revocable Street Privilege (RSP). An authorized or permitted private right in the use of a special part of a city street, sidewalk, alley, or way, separate and distinct from the use of

city streets, alleys, and ways by the general public or by authorized public utility corporations. Application and conditions for a Revokable Street Privilege are available on DOTE's website.

Roadway. The portion of the Right-of-Way set aside for vehicular and bicycle use. This is usually the pavement.

Street. Area in the right-of-way that includes pavement, curb, sidewalk, driveway, sod, etc.

Utility. Any water, sewer, gas, drainage, sprinkler or culvert pipe and any electric power, telecommunication, signal, communication, or cable television conduit, fiber, wire, cable, or operator thereof.

Warranty. Obligation of the Permittee to remove, replace, and/or repair faulty, defective, or improper work, materials or equipment discovered within the Warranty Period.

Warranty Period. A period during which the warranty is to be in effect, beginning on the date final inspection date established by the Inspector and denoted on the closed-out permit and extending for a period of one year.

SECTION 2

INTRODUCTION

I. RIGHT-OF-WAY PERMITS ISSUED BY DOTE

Unless otherwise noted, a Street Contractor's License is required before applying for a permit. Please see Section 7 for details.

1. Blasting Permit

a. A permit issued for construction or demolition purposes using explosives.

b. A blasting permit is issued by the City Engineer pursuant to Chapter 703 of the Cincinnati Municipal Code. A coordinated review involving the Fire and Police Division of the Safety Department. The Building Department is involved for blasting on private property.

Items required for the permit:

1. Demolition company qualifications and company history.
2. Plan indicating the transportation of the explosives, site safety, including pre-demolition and post-demolition requirements.
3. Insurance naming the City as the additional insured in the amount of $20 million aggregate, $5 million per occurrence.
4. Any additional conditions determined by the coordinated review.

2. Barricade Permit

a. A permit issued for barricading a sidewalk and/or street to be blocked off to allow contractors to use space to place equipment or material. A permit is usually issued for building construction and demolition. A pedestrian detour signage plan, directing pedestrians to a safe street crossing, should be attached to this permit.

b. A permit issued for a temporary construction walkway when pedestrian access is to be maintained adjacent to the project.

c. The following Cincinnati Municipal Code sections will be included as a condition of a Barricade Permit related to the demolition of a building:

CMC Sec. 721-105. - Removing Subsurface Encroachments When Building Is Wrecked.

Whenever a building with appurtenant facilities or encroachments within the street right-of-way is wrecked or removed, the Owner shall remove all such appurtenant encroachments or facilities and fill in and restore the space previously occupied by them to conform to the adjacent street and pavement. In case the Owner shall fail to make such removal and restoration, the City Manager shall be authorized to cause it to be done and to charge the cost against the Owner in the same manner as provided in the case of the removal of encroachments interfering with street construction.

CMC Sec. 721-129. - Driveways Across Sidewalks.

The construction, reconstruction, and repair of driveways across sidewalks shall be subject to Sections 721-131 to 721-145, inclusive. If access to a driveway is continuously blocked, or use of the driveway is discontinued, the Owner of the real property which is or was served by that driveway shall remove any apron in the public Right-Of-Way, and restore the curb and grass strip.

3. Equipment Permit

The use of any equipment in the right-of-way requires a DOTE Permit. This includes cranes, man-lifts, helicopter lifts, dumpsters, manhole/vault access, portable storage, and scaffolding.

4. Excess Load Permit

a. A permit issued for vehicles overweight and/or oversize. Generally, overweight refers to over 80,000 pounds combined gross weight of a vehicle or vehicle/load. Oversize refers to vehicles/loads exceeding eight feet six inches in width, 13 feet 6 inches in height or 53 feet in length (except in case of trains of three or more units, not to exceed 70 feet in length), but not exceeding 80,000 pounds combined gross weight of vehicle or vehicle/load.

b. Issued pursuant to Section 517 of the Cincinnati Municipal Code.

c. When the load exceeds 100,000 pounds (superloads) or exceeds the size limitations identified in 517, additional requirements and fees of the permit may be required. These include special inspection, additional review by DOTE's Structures Section and Traffic Engineering Division, videotaping of existing conditions, City Public Services escort for traffic signal moving, mandatory off duty CPD escort, etc.

d. Bonding can be required for loads exceeding 80,000 pounds.

5. Nighttime Construction Permit

A permit issued to Contractors that request for specific reasons and are granted permission from the City Engineer, 48 hours in advance, to work in the right-of-way between 11:00 PM and 7:00 AM. Work on private property requires permission from the Director of the City's Planning and Building Departments.

a. In general, notice to be given 48 hours in advance, in writing, to all properties (houses, apartments, businesses, hospitals, motels, etc.) within a 500 ft. radius of work as it progresses. Notice shall include phone number of person to respond to citizen requests that will be on the job site during the nighttime work. The request must include a valid reason why the work cannot be performed during non-restricted hours.

b. If DOTE receives complaints that cannot be rectified by the Contractor, then the permit will be revoked, and no construction will be allowed between 11:00 PM and 7:00 AM.

c. This is a no cost permit as it is supplemental to a street opening permit for the actual work.

6. Primary Site Development Permit (See Subdivision and Development Manual)

A permit issued along with a DOTE Subdivision Permit for building new public streets that are part of a private land development for residential, commercial, and industrial subdivisions or developments.

7. Sidewalk/Driveway Repair Permit

a. A permit issued for the replacement of deteriorated existing concrete walk or driveways. This permit is only issued if the walk or driveway is reconstructed in its original location. If existing walk or driveway is removed and relocated, a Street Opening Permit will be required.

b. Final cost of permit is based on a standard fee for Sidewalk/Driveway Replacement for the first 50 linear feet and an additional fee for every additional 50 linear feet.

c. A permit may be issued to Property Owners to do sidewalk work in the street right-of-way abutting their property provided such work is less than 65 square feet in area and does not involve any driveway/drive apron construction.

8. Street Opening Permit

Any construction in the right-of-way that would include, but not limited to, the disturbance of sod, sidewalk, curb, and pavement requires a Street Opening Permit. Examples of construction are underground utilities, utility poles, sidewalk, curb, pavement, driveways, test borings, potholing, and construction of any private encroachment granted by an easement or Revocable Street Privilege (RSP), etc.

a. A street opening shall be considered an excavation in a street or work in a City street that may cause damage to a street pavement or surface or any work in the opinion of the City Engineer that will place the City street in jeopardy. Permits are issued to be valid for enough time to perform the specified work and to make permanent restorations to the street and public facilities that have been disturbed.

b. A street opening permit may be issued for a monitoring well in the right-of-way provided it will be in place less than one year. If planned to be in place over one year, a revocable street privilege will be required in addition to the DOTE permit.

9. Street Use Permit

This usually no-cost permit, with no licensing requirement, is usually issued for the following purposes:

a. To citizens or organizations that wish to hold an event or perform minor nondestructive work that will block sidewalks or roadways.

b. To establishments that have approval by a RSP to install outdoor seating areas on sidewalks in the right-of-way.

c. For temporary sidewalk and road closures.

10. Residential Parking Permit (RPP)

a. A permit issued for parking in a designated RPP zone. (CMC Section 514)

b. You must live in the designated RPP zone to be issued this permit.

c. See the DOTE Website for the RPP procedure and application.

11. Right-of-Way Construction Permit

a. A construction permit, as defined in Chapter 722-1-C10 of the Municipal Code, means any permit required under Chapter 718, Chapter 721, Chapter 722, or Chapter 723, for construction in the right-of-way.

b. Chapter 722 of the Municipal Code contains conditions and requirements applicable to work requiring a construction permit in addition to the requirements and authorizations applicable to the particular type of work involved (e.g., street openings, revocable street privileges, street use permit) that are set forth elsewhere in the Municipal Code.

12. Wall Opening Permit

A permit issued to install utility connections or driveway access through a city owned wall. The permit will define the terms and conditions for making the opening.

13. Valet Permit

See DOTE Website for details.

II. GENERAL CONDITIONS FOR ISSUING PERMITS

DOTE Permits are issued by the City Engineer or his representative in response to a written application filed by a licensed Street Contractor with the DOTE – Engineering Division – ROW Management Section. Applications and permits shall be on forms provided by the City. (Sample and instructions of a permit application are shown in the Appendix of this book.)

A street opening shall be considered an excavation in a street or right-of-way, work in a City street that may cause damage to a street pavement or surface, or any work in the opinion of the City Engineer, that will place the City street or other right-of-way area in jeopardy. Permits are issued to be valid for enough time to perform the specified work and to make permanent restorations to the street and public facilities that have been disturbed.

The application shall give the location and dimensions of the proposed opening, the purpose for which the opening is to be made, the kind of pavement or surface to be opened, the date that the opening was or will be made and the duration of work. If the work, including all street restoration, is not completed within the time shown on the permit, the City or its agent will complete the restoration, and the Permittee will be responsible for the cost of the restoration. In the event an extension of time is required for permit performance, a written request shall be made to the City Engineer, with reasons for the delay, prior to the expiration of the permit.

The issuance of a DOTE permit will be based on approved plans. Work deviations from an approved plan shall not be performed until an approval of the change has been secured from the City Engineer. The example of a typical plan and cross-section which, under normal conditions, supplies information required to obtain approval, is in the Appendix of this book.

The application form, with a minimum of two sets of construction drawings attached, shall be submitted to the Right-of-Way Management Section of the Engineering Division. Plans accompanying utility permit applications for installations being made

in conjunction with a City or State improvement may be submitted on copies of the construction contract plans.

A request for preliminary approval of a location for proposed facilities shall be made, in writing, to the City Engineer and include two prints of a drawing of the proposed installation with details.

Owners of underground facilities on public Right-Of-Ways are required to maintain full participating memberships in the Ohio Utilities Protection Service (OUPS).

Work by "Providers" (defined in Section 722-1-P6 of the Municipal Code and including, but not limited to, utility companies) that own or operate systems in the public Right-Of-Way is subject to Chapter 722 of the Municipal Code. Chapter 722 sets forth Provider obligations for work related to public improvement projects as well as for routine utility maintenance and construction activities in the public Right-Of-Way.

ADDITIONAL RESTORATION

If collateral damage occurs due to construction or permit activity, or a DOTE Inspector deems the final restoration substandard, additional restoration may be required. DOTE does not guarantee the condition or original construction of the existing street. The Permittee shall restore the street back to a like or better condition.

III. OTHER REQUIREMENTS AND DOTE POLICIES FOR USE OF THE RIGHT-OF-WAY (for a complete list, see DOTE website for details)

1. Communication Pole Policy
2. Parking Pad Requirements
3. Working in the CBD

SECTION 3

PERMIT DETAILS

I. BARRICADE PERMITS

If City owned utility poles are adjacent to the demolition site or barricade, the contractor must meet with Traffic Engineering to determine the method to protect these facilities. If fire hydrants or other utility structures or apparatuses are within the area, the contractor must meet with the appropriate utility owner and maintain access if required.

1. Construction Barricades and Fences

Construction barricades shall be constructed of plywood or wire mesh, painted standard City MALT beige or galvanized wire mesh; framed in wood; be at least four feet (4') high and self-supporting. Horizontal wood frame material shall be a minimum of eight-inch (8") wide stock. Vertical wood frame material shall be a minimum of four-inch (4") wide stock. Wood framing shall be painted to conform to standard ODOT Traffic Control Barricade Design, six inches (6") wide, alternating orange and white reflective stripes, applied at a 45-degree angle to the wood framing.

The construction fence shall be securely erected independent of any street roadway, sidewalk, or paved surface. If the fence is not to be moved for any reason, it may be securely mounted into the paved area. The permit holder will be responsible for pavement restoration, as directed by the City, at the end of the project. All construction fences shall be maintained in an undamaged and clean condition so as not to obscure the visual impact of the barricade. No other paint, sign or materials shall be applied to the barricade fence except for approved traffic control aids and one project identification sign.

The project signs are for information only and cannot include any business advertising. No other business advertising is allowed to be hung on the fence. All barricade fences shall be returned to their proper design location during all non-working hours. The location of the signs on the fence must be approved by the City Engineer.

Project signs must be designed in accordance with the appropriate standards for wind loads so as not to blow over the fence structures to which they are attached.

Alternate fence designs may be submitted to the City Engineer for review.

If pedestrian access is to be maintained adjacent to the project, a temporary construction walkway will be required.

If pedestrian access is maintained in a roadway area, concrete or approved waterfilled barrier protection (or equal) will be required, along with needed temporary ADA required accommodations.

When a construction barricade or fence encloses an area in or adjacent to the right-of-way it shall be the responsibility of the Permittee to return the right-of-way area to the City in as good or better condition upon expiration of the permit.

2. Demolition Barricades and Fence Requirements

The Demolition Contractor is responsible for protecting all public and adjoining private property from damage.

If, in the opinion of the City Engineer or as directed by representatives of the Planning and Building Department, demolition operations may cause damage to public or private property located within the right-of-way, a permit will be required. The Demolition Contractor must arrange the operations, so they correspond to the requirements of the latest version of the ANSI/ ASSE A10.6 Safety and Health Program Requirements for Demolition Operations.

If the right-of-way (including sidewalks and roadways) can be reopened daily then additional barricade fees may be waived.

All requirements identified in this section are considered minimum requirements. The Permit Holders are fully responsible for the safety of the traveling public affected by their work. If during the course of the work, in the opinion of the City Engineer, protection is deemed inadequate, the Permittee will be directed to provide additional protection at the Permittee's expense.

II. EQUIPMENT PERMITS

These guidelines are for obtaining permits to perform maintenance work on building accessories (signs, awnings, cornices, lighting, window painting, etc.). The primary objective for the Department of Transportation and Engineering (DOTE) to issue public right-of-way permits is to assure that the vehicular and pedestrian traveling public is not exposed to hazardous working conditions, the work is performed in a safe manor, impact is minimized on local businesses, and that public property is not damaged.

1. **No Permits (except on the areas adjacent to the Streetcar)** from DOTE will be required for maintenance work where the work is performed directly on or supported by **light equipment** (ladders, small non-motorized lifting equipment, etc.) on the sidewalk; the work area is safely and properly controlled; a clear four foot (4') wide pedestrian path is maintained; and the work duration does not exceed two hours. Access must be maintained to all affected businesses and tenants. The company performing the work is required to coordinate its work schedule with the Department of Transportation and Engineering Right-of-Way Management Inspection Group. Phone number (513) 352-3451.

   If work is being performed on the Streetcar Route, a Track Access Permit will need to be acquired.

2. A **DOTE Equipment Permit** will be required for **Light Maintenance Work** (light bulb replacement, window cleaning, etc.) involving the use of a vehicle or equipment with a boom arm and/or outriggers that has an impact on pedestrian or vehicle traffic movement. A partial sidewalk closure will be permitted for only light maintenance work that can be confined next to the building and is not more than twenty feet above the sidewalk. The work area must be safely and properly controlled. A clear four-foot (4') wide pedestrian path must be maintained. Access must be maintained to all affected businesses and tenants. No drawing is required.

3. A **DOTE Equipment Permit** will be required for **Heavy Maintenance Work** (painting, power washing, sign, awning, gutter, etc. replacement/modifications, etc.)

involving the use of a dumpster, vehicle, or equipment with a boom arm and/or outriggers that has an impact on pedestrian or vehicle traffic movement. A full sidewalk closure will be required for heavy maintenance work.

4. A Drawing will be required, with the permit application, illustrating the location of the equipment and the maintenance of traffic and safety measures that will be put into place to support the work including sidewalk closed signs and barricades. The work area must be safely and properly controlled and alternate pedestrian routes need to be clearly identified. Access must be maintained to all affected businesses and tenants unless other arrangements have been made with those persons.

III. CONSTRUCTION COORDINATION - Registration of Emergency Work

Emergency Permits are registered by permittees who have been given access to the Construction Coordination permit data base. The final approved permit is issued by DOTE.

In addition to use by City Agencies, emergency permits may be registered in Construction Coordination by private companies regulated by the Public Utility Commission of Ohio (PUCO), operating under an agreement with the City, authorized by City Council, for the purpose of providing a specific service in the City of Cincinnati. These agencies provide a local construction and facility maintenance force to keep pace with facility maintenance needs and public safety.

Emergency repairs may be performed under an Emergency Repair permit. Emergency work is generally defined as work that requires a response within 24 hours of the first notification.

The participating utilities are required to promptly remit payment of all charges billed to the permit within 30 days of receiving the invoice.

In the event of a conflict between the general emergency work requirements set forth herein and specific emergency work provisions elsewhere in the CMC or City regulations, then the specific provision shall control.

IV. SIDEWALKS AND DRIVEWAYS

1. **Permits**: Sidewalk and driveway construction permits may be applied for at the Right-of-Way Management Section, City Hall, Room 425. Contact the Right-of-Way Management Section at 513-352-3463 if there are any questions regarding these Right-of-Way permits. An Issued permit must be secured before the work is started. See APPENDIX for additional permit requirements for sidewalks and driveways.
2. **Inspection**: All forms must be set, the trench for the sidewalk or driveway excavated to the required depth, and the sub-grade properly prepared before the Inspector will allow concrete to be placed. To schedule an inspection on the day before the concrete is placed, call 352-3451 between 7:30 AM and 8:30 AM with the Permit Number. When field inspections are scheduled, a designated or responsible person must be at the site to take instructions.
3. **One Year Warranty**: The Contractor shall be required to keep all work performed by him in good condition for a term of one year from date of inspection by the City

Inspector. Any portion of the work that becomes defective through settlement, cracking, breaking of surface, or in any other manner, shall be removed and replaced, by the Contractor, at his own expense. An additional permit and one year warranty period will be required for warranty repair work.

4. **Structural Sidewalk Slabs**: Structural slabs are reinforced concrete sidewalks that span over basement areas within the right-of-way and are supported by concrete beams, walls, steel beams, brick arches, etc. Applications for permits to repair or replace a structural slab shall include a detailed construction drawing prepared and stamped by an Ohio Registered Professional Engineer. The City's preference is to fill in the basement encroachment area and eliminate as many structural slabs as possible. For design, details, and drawing requirements, please see Section 4 of this Manual.

5. **Sidewalk Cellar Doors**: Prefabricated cellar doors shall be designed for an ASHTO H-20 Truck load. At the time of publication of this manual, DOTE is aware of three companies that provide H-20 rated doors: Bilco, Halliday Products, and Sycamore Castings. An alternate may also be submitted for approval. The Contractor shall take field measurements to verify sizes and submit catalogue cut sheets to the Engineer for approval. The Manufacturer shall guarantee against defects in material or workmanship for a period of five years.

6. **Parking Lots or Driveways Abutting Sidewalks in the Right-of-Way (CMC Section 721-139)**: Where driveways serve other than residential property, the portion of the driveway across the sidewalk area shall be confined to a width measured at the property line not greater than the width at the curb line, by the construction of suitable curbs or barriers. These curbs or barriers shall be constructed of concrete, wooden timbers or other suitable materials and firmly set or anchored in the ground. The curb or barrier shall extend at least seven inches above the surface of the ground or paved area.

   In cases where the private property is used for parking vehicles in a position other than parallel to the street property line, these curbs or barriers shall be located or constructed as to prevent any part of the parked vehicles from extending over the sidewalk area. The location, specifications and termini shall be subject to the approval of the City Engineer.

SECTION 4

DESIGN REQUIREMENTS

I. DRAWING SUBMITTALS FOR PERMITS FOR UTILITY INSTALLATIONS AND STREET IMPROVEMENTS

1. The scale of the drawing should be such that the location, extent, and type of work can be readily identified and should be no smaller than a ratio of one inch to 40 feet (1" = 40'), but preferably one inch to 20 feet (1" = 20').

2. Typical sections should be drawn to a scale no smaller than one inch per 10 feet (1" = 10') horizontally and vertically. Profiles should be drawn to the same horizontal scale as the plan, with the vertical scale no smaller than one inch per 20 feet (1" = 20').

If small, dimensioned clearances are involved, enlarged details of these areas will be required when the scale of the drawings prohibits clarity.

It is required that all drawings, including necessary details, be shown to scale. Drawings not to scale are unacceptable. The scale of plans, sections, profiles, and details shall be shown on the drawings.

3. The plans shall show the complete proposed work within the limits of the project and shall be to proper scale. Scale should be of sufficient size to include all pertinent features of the proposed work, including all existing facilities above and below ground, and street tree size and location within 100 feet of the proposed work. Plans are to be sufficiently dimensioned to show the locations of other adjacent utility lines and structures; to provide the locations of any offsets in the line; and to show the limits of construction. Any proposed facility line should be laterally dimensioned from the street curb, edge of pavement, the street right-of-way line, or other permanent physical feature of an uncurbed street.

The proposed work should also be referenced longitudinally to a known central control point, (i.e., nearest street intersection, curb line street right-of-way intersection point, or other existing permanent physical feature,); distances from poles, fire hydrants or street addresses alone are not acceptable. The location of all existing utility facilities shall be shown on the plans as accurately as possible from available records. Where doubt exists as to accuracy or completeness of these records due to the high density of utility occupancy or, if, in the opinion of the City Engineer, a more accurate determination of the location and extent of underground facilities is necessary, sufficient test pits shall be dug to accurately locate existing facilities. Where utility vaults have been approved for sidewalk areas, the plans must show the location of all existing or proposed service branches to the abutting property.

4. A typical cross-section of the proposed installation shall be shown on the plans. This shall indicate, by dimension, both the horizontal and vertical location, the extent of the installation within the right-of-way, and the positions of other utility lines 25 feet in any direction of the proposed work. The width of the street, sidewalks, sub-sidewalk space, and the street right-of-way shall also be shown. A profile of the proposed installation shall be shown where conflict with or close clearance to other

utilities or structures will occur; or when conditions indicate that this information is necessary.

5. **Plan Submittals**

   a. **Large Projects.** It is suggested for large projects that DOTE review the development plans at 30%, 60%, 90%, and final drawing completion. The drawings shall be in 11" x 17" pdf format and submitted as an attachment to an e-mail or in a CD/DVD disk. Full scale (22" x 34") mylar copies of final approved drawings shall be submitted for any permit work that will change the locations of the edge of pavement, curb, sidewalk, driveway, etc.

   b. **Small Projects.** Two sets of drawings must be attached to the permit application.

   c. In the event of major corrections by a reviewing agency to the original submissions, a print marked as "corrected" shall be returned to the Applicant. The Applicant will make the required changes and resubmit the corrected document. If the changes are acceptable, DOTE will then process the application and issue the necessary permits. Submission of revised plans shall be marked as "revised," with the date of revision near the drawing title.

   d. The review and approval of plans submitted for permit is based on the accuracy of the information represented on the plan. If the approved plan misrepresents the actual field conditions or unforeseen circumstances arise, the City Engineer reserves the right to require any additional work to meet current City standards and policies that are necessary to complete the job.

II. GENERAL REQUIREMENTS FOR UTILITY DESIGN

In the preparation of plans for and in the subsequent construction of utility installations, the Applicant is expected to:

1. Privately owned building service facilities will be placed on private property. A Revocable Street Privilege or easement will be required if this is not possible.

2. Coordinate the proposed installation with any City project to ensure that the proposed installations will not hinder future expansion of other utilities and/or City projects.

3. Review all available records prior to locating the proposed utility appurtenance, and, if necessary, make investigative excavations (with the permission of the City Engineer) to avoid conflict with existing utilities. The City will accept no responsibility for any costs or liabilities incurred due to improper locating of existing underground features, or from the utility installation under the permit.

4. Use materials and methods of installation that have been approved by the City and are in conformity with all Federal, State and Local ordinances and regulations pertaining to these installations. Utilities are encouraged to use the latest guidelines for markings of buried conduits.

5. Give priority to sewer installations in any street right-of-way because of drainage grade restrictions. No longitudinal facilities will be permitted in the four-foot-wide space behind and in front of the face of the curb unless the City Engineer makes specific exception. The four-foot area behind the curb is reserved generally for City

facilities such as trees, street signage, general street furniture, parking meters, utility poles and longitudinal street lighting ducts. The four-foot area in front shall be reserved to provide clearance requirements for adjacent street drainage facilities and to prevent potential damage to the curb.

6. Avoid meandering lines in all cases. Every effort should be made to ensure that the proposed longitudinal installation is parallel to the existing or proposed street. Deeper construction and/or the adjustment of existing utility lines may be necessary to meet this requirement. Between the longitudinal utility and the existing street right-of-way line, service branches or laterals shall be installed normal to the right-of-way line without angles or offsets. When property frontages are greater than 40', service branches or laterals shall be designed to have a minimum of 5' horizontal clearance from other utility laterals within the right-of-way limits unless special permission is granted for variance. Lateral branches connected to above-ground facilities (i.e., poles, streetlights, etc.) will be located, taking into consideration the minimum clearance requirements for maintenance of both proposed and existing above and below-ground facilities.

7. Design utility installations to provide the minimum lateral and vertical clearances required by the adjacent utilities. DOTE requires that the minimum lateral clearance shall be three feet and the minimum vertical clearance shall be 12". The City Engineer will determine clearances in the Central Business District (CBD) at the time of application. Space in the CBD is at a premium.

8. Any utility manhole or chamber where the required horizontal and vertical clearance with adjacent sewer lines cannot be obtained should be supported with 12-inch circular concrete piers at each corner. The piers shall be constructed to a minimum depth of 12 inches below the invert of the sewer at that location, or as required by the City Engineer.

9. All underground conduits shall have a minimum of three feet (3') of cover from top of conduit to top of the pavement. All electrical conduits shall be rigid metal or PVC encased with at least 3 inches of concrete, 3000 psi or greater. Electrical conduit shall be in accordance with City Supplement Item 1321. City-owned electric will generally be located immediately behind the curb at a depth of 18 inches. The City Engineer shall review any unusual clearance problems. The City Engineer reserves the right to require an upgrade of the materials proposed to construct the underground system.

10. **Above-Ground Facilities**. Utility poles, fire hydrants or any fixed objects must be installed with a minimum clearance of 2 feet from the face of the established curb line. A minimum of a 4 foot clear sidewalk space in residential areas and 6 foot clear sidewalk space in the CBD/ NBD areas shall remain after pole installed. Typically, the 4-foot area behind the established curb line is reserved for utility poles, fire hydrants, and street furniture in general. Maintain a minimum of 5 feet of clearance from driveways or vehicle access areas. Entire block of concrete sidewalks and driveways disturbed or damaged by this work shall be replaced from joint to joint.

    Permission for the installation or replacement of utility poles shall be granted by the City Traffic Engineer as part of the DOTE permit process.

Any relocation or proposed installation in an established underground district shall be installed underground.

11. **Central Business District (CBD).** The CBD is the area bounded on the north by the north property line of Twelfth Street, on the east by the east property line of Broadway, on the south by the Ohio River, and on the west by the west property line of Central Avenue. Due to numerous basement encroachments, as a general rule, all longitudinal utilities shall be constructed in the roadway within the existing curb lines, reserving the sidewalk space for street trees, lighting, traffic signal circuits, utility poles, parking meters, signposts/poles, and other street furniture. Transformer vaults, where permitted in the sidewalk space, shall not encroach within 3 feet behind the face of the curb. Where existing conditions make this impossible, special consideration will be given in an attempt to meet these existing conditions. Transformer vaults for private service will be located out of the right-of-way.

    Due to the general lack of space for all utilities in the CBD, the City Engineer may require construction of a utility chamber or tunnel having a roof elevation of more than 6' below the street surface. Only one entry manhole shaft per chamber may be installed on top of the utility chambers.

    Where work is to be carried out and there are special pavement surfaces, street trees or streetscapes, the Applicant will be required to restore the area in kind, including sidewalks and vault surfaces to match the existing surface. DOTE stores some clay pavers, cast iron grates and granite curb that may be made available to the permit holder. Where new surface treatments are proposed, the Applicant or Facility Owner will be required to furnish metal frames to enable a Developer to finish the chamber surface in the same manner as his proposed abutting sidewalk. This may require vault framing to be so located as to match the layout of the existing sidewalk pattern. The Applicant will be required to obtain matching materials, as necessary, and to coordinate the work with the site Developer's operations.

    Vaults constructed in sidewalk space shall be subject to such surface adjustments, as necessary, to comply with grade and use requirements of the adjacent streets and private property.

    For any work on a street with a proposed or existing streetcar, the utility shall be placed outside the established zone of influence for the streetcar.

12. **CMC CHAPTER 722 – Management and Control of the Use of the City Right-of-Way.** Planning, design, and location of facilities for any work for utilities in the public right-of-way must comply with Chapter 722 of the Municipal Code in addition to the requirements set forth in these regulations and elsewhere in the Municipal Code.

III. REQUIREMENTS ON TRANSMISSION FACILITIES

Application for utility transmission lines presents somewhat different considerations. Transmission lines are underground utilities that are rarely tapped for service connections and require minimal maintenance. Therefore, it is important that they be located at a depth that will avoid conflict with adjacent service facilities. As a general

rule, the depth of these transmission lines will be at least six feet (6'-0"), except in areas where service facilities are not required (i.e., Expressway R/W, Parks, Cemeteries, etc.)

For the purpose of these Rules and Regulations, the following shall be used to determine the facilities classified as transmission lines:

1. **Gas.** A transmission line shall be defined as a pipeline installed for the purpose of transmitting gas from a source of supply to one or more distribution centers, or one or more large volume customers, and which pipeline is rarely tapped for service to abutting property.

   When there are two or more mains in a single street or along a common route, one will be considered a transmission line if the other or others supply all service.

2. **Electric**. Transmission systems shall include all facilities for transmitting bulk power at voltages of 69,000 volts and higher, or any group of ducts or duct bank in excess of nine square feet in cross sectional area and/or exceeding three feet in vertical dimensions.

3. **Telephone.** A transmission facility shall be defined as any group of ducts or duct bank in excess of nine square feet in cross sectional area and/or exceeding three feet in vertical dimensions.

4. **Water.** A transmission line shall be defined as any water main in excess of twenty inches (20") in diameter.

   When the proposed utility installation exceeds the above limitations, they shall be installed with a minimum of six feet (6'-0") of cover unless specific permission for the variance is granted by the City Engineer. Although existing transmission lines are generally located under the paved portion of the street, they may be located in the sidewalk space under special conditions. In such cases, street trees should not be planted over the transmission lines unless adequate clearances are maintained as determined by the City Engineer.

IV. UNDERGROUND UTILITY STRUCTURES AND SURFACE-ACCESSED FACILITIES

1. Roadway Structures

The top of any proposed or reconstructed underground chamber, vault or manhole for a public utility, sewer, water line, or similar installation in the public right-of-way, that contains a maximum horizontal outside dimension greater than six feet (6'-0"), shall be located a minimum of six feet (6'-0") below the surface of the street pavement. An approved type nosing or manhole dome with a maximum five-foot (5'-0") diameter may be constructed at entry ports to the main structure to keep within size limitations.

The tops of all chambers, vaults, manholes, etc. shall be a minimum of two feet (2'0") below the top surface. Details of chambers, vaults, or manholes not in accordance with a city or state standard must be shown in the plans and include the design loads and the stamp of a Professional Engineer registered in the State of Ohio.

The stated minimum clearances of utility structures shall apply, except in those cases when it can be clearly shown that an alternative location cannot be utilized and justification is submitted for the proposed structure space required. **S**ince oversized structures are considered special cases, approvals of such structures are granted only on a case-by-case basis and are not transferable to other locations or circumstances.

2. Sidewalk Structures

Structures will be permitted within the sidewalk portion of the right-of-way only after every effort has been made to place them on the private property they serve. A Revocable Street Privilege or Easement is required in cases where a private encroachment within the sidewalk area is required. In no case shall final plans be prepared for the encroachment until permission has been received from the City Engineer for the use of this space.

All facility access lids, valve covers and any other surface access components for underground facilities located in sidewalks and cross walks shall be skid proof and comply with the American Disabilities Act (ADA).

V. REQUIREMENTS FOR THE DESIGN OF STRUCTURAL SLABS AND UTILITY STRUCTURES IN OR UNDER SIDEWALKS AND STREETS

This section summarizes the minimum structural design criteria for use in designing field-constructed or pre-manufactured structures with clear spans under 10 feet (10') in length in or under a sidewalk or street in the public right-of-way. Structures with spans of 10 feet (10') or more in length shall be designed in accordance with the latest edition of the AASHTO, LRFD Bridge Design Specification, hereafter referred to as AASHTO for the remainder of Subsection V. If heavier wheel loads on a sidewalk structure are anticipated due to commercial activity or for any other reason, such heavier loads shall be used. Please note that in many cases, the design loads determined in accordance with this policy will be larger than has been required for similar circumstances in the past.

1. General Provisions – All Materials

A report from a testing lab and/or a complete set of calculations certified by a Registered Professional Plans identifying design loads and sealed by a Professional Engineer registered in the State of Ohio (affirming that the design strength meets or exceeds the design loads) must be furnished with the application for a permit to construct a structure in the right-of-way. Pre-manufactured structures may be accepted provided that sufficient documentation is submitted demonstrating that the structure meets or exceeds the design loads specified herein as so determined by the City Engineer.

Engineer documenting the strength of the structure may be requested by the City before granting approval.

a. The smaller dimension of any opening in the top of any sidewalk structure, including gratings, shall be such that an object measuring larger than three-eighths of an inch (3/8") will not pass through the opening.

b. The cover shall have a skid-resistant surface capable of developing a coefficient of static friction of at least 0.5, which shall be determined by conducting a test based on a current ASTM standard appropriate for the material.

c. If the structure is in a sidewalk, it shall be designed for either a 250-pound per square foot uniform live load, or an 8,000-pound concentrated wheel load (no dynamic load allowance is required for sidewalk structures), or a pair of 8,000pound wheel loads space six (6) feet apart, whichever produces the larger moment and/or shear, plus any applicable vertical or lateral pressure due to soil, water or surcharge. The dead load factor shall not be less than 1.25. The live load factor shall not be less than 1.35. Use resistance factors as identified in AASHTO.

d. Sidewalk Cellar Doors – Prefabricated cellar doors shall be designed for an ASHTO H-20 Truck load. At the time of publication of this manual, DOTE is aware of three companies that provide H-20 rated doors: Bilco, Halliday Products, and Sycamore Castings. Contractor shall take field measurements to verify sizes and submit catalogue cut sheets to the Engineer for approval. Manufacturer shall guarantee against defects in material or workmanship for a period of five years.

e. If the structure is in a street, it shall be designed for either a 21,280-pound concentrated wheel load (16,000-pound wheel load times 1.33 dynamic load allowance), or a pair of 21,280-pound wheel loads spaced six feet (6') apart, coincident with a lane load of 640 pounds per linear foot assumed to be uniformly distributed over a ten-foot (10') width, plus any applicable vertical or lateral pressure. The dead load factor shall not be less than 1.25. The live load factor shall not be less than 1.75. Use resistance factors as identified in AASHTO.

f. The tire contact area for an 8,000-pound wheel load shall be assumed to be uniformly distributed over a rectangle with a width of fourteen inches (14") and a length of five-and-three-quarters inches (5.75"). The tire contact area for a 16,000 pound wheel load shall be assumed to be uniformly distributed over a rectangle with a width of twenty inches (20") and a length of ten inches (10").

g. The distribution of the wheel load on the structure shall be determined in accordance with the provisions of AASHTO.

h. The lateral pressure acting on a structure shall be determined in accordance with the provisions of AASHTO.

i. The calculated or tested instantaneous deflection may not exceed one half-inch (1/2") for any cover slab, lid or roof of any structure subjected to a wheel load, unless the deflection is less than the maximum deflection allowed by AASHTO or the pertinent code or material standard.

j. The calculated or tested difference in elevation between the top of a premanufactured utility structure and the sidewalk, due to permanent deformation, settlement or any combination thereof, may not exceed one-quarter inch (1/4") at any point.

k. In calculating bending moments and shears in beams, no distribution of the concentrated load applied directly above the beam shall be assumed.

l. Concentrated loads need not be placed within two feet (2') of the face of a building.

2. Specific Provisions – Concrete

a. The concrete shall be ODOT Class QC 1 or QC 2 with a minimum 28-day compressive strength of 4000 psi and shall have an entrained air content of 6% ±2%.

b. All reinforcing steel shall be Grade 60.

c. All reinforcing steel shall be epoxy-coated, unless an alternate method of corrosion protection is approved by the City Engineer.

d. When designing reinforced concrete structural slabs, the concentrated load applied to the slab may be distributed in accordance with the provisions of AASHTO.

e. A minimum three and a half inch (3.5") thick sidewalk wearing course with a bond breaker shall be constructed on top of all new structural slabs which support sidewalks. If a portion of a structural slab which supports a sidewalk is to be replaced, the new construction shall be a two-course slab as describe in this paragraph, unless otherwise allowed by the City Engineer. A standard five inch (5") thick concrete sidewalk shall be constructed over roof structures that support back fill.

3. Specific Provisions – Metals

a. All steel members other than non-structural form deck used to support any portion of the sidewalk area must be protected with material which afford a fire-resistant rating not less than three (3) hours when tested in accordance with ASTM E 119 (a specific design from the U.L. Fire Resistance Directory or equivalent listing should be identified). Drawings shall distinguish between structural (composite design) form deck and non-structural form deck.

b. All metal, other than fireproofed steel, shall be corrosion resistant.

c. All underground facilities or encroachments in the right-of-way that require sidewalk access doors shall be furnished with a double leaf hinged door made of aluminum or shop-primed (red oxide) steel diamond plate, which shall be capable of withstanding the required design loads for sidewalks. The door system shall meet all pedestrian safety requirements identified herein and Section 5.VII of this manual.

4. Specific Provisions – Plastic and Other Materials

a. The material must be examined by a testing laboratory or agency in accordance with the latest editions of the following standards:

   1. ASTM D756, procedure E (Accelerated Service)
   2. ASTM D543 Section 7, procedure I (chemical resistance)

b. The material is acceptable if each of the following criteria are satisfied:

   1. Retention of 75% of the control specimen values for load or deflection.

2. No more than 2% change in weight or any dimension.
3. No visual cracking, crazing, checking, blistering or surface pitting.

c. If nationally recognized standards other than those listed in part 4(a) have been developed for evaluating the material of a proposed structure, such other standards shall be considered acceptable, subject to the approval of the City Engineer.

5. Specific Provisions – Procedure for Conducting Load Test

a. For 8,000 pounds wheel loads, the structure shall be tested for a concentrated wheel load not less than 1.75 x wheel load [derived from Section 3.V.1.c. For 16,000 pound wheel loads, the structure shall be tested for a concentrated wheel load no less than 2.33 x wheel load [derived from Section 3.V.1.d].

b. The test load shall be applied to a 1-inch proof load plate, oriented on top of the structure such that the maximum stresses and deflections are achieved. The area of the proof load plate shall be as described in Section 3.V.1.e.

c. The test load shall be applied to the structure uniformly over a period of 1 minute plus or minus (+/-) 15 seconds.

d. Maximum deflection shall be measured prior to load application during the one (1) minute holding period and immediately following release of the load.

e. The test load shall be applied and deflections shall be recorded for a minimum of ten (10) loading cycles.

VI. STREET TREE STANDARDS

Street trees are to be planted in the center of existing sod areas or tree wells that are equal to or greater than four feet (4') wide from the back of curb. Any planting of new tree or removal of existing trees needs to be permitted by the city's Urban Forestry Section. Neighborhood Business Districts, and the Central Business District where streetscape projects are undertaken, may qualify for an exception. The Standard Special Soil Mix is required to a depth of 2.5'.

The vertical clearances for tree limbs (See C.M.C. Sect. 743-53) are eight feet (8') over sidewalks and fourteen feet (14') over paved portion of roadways.

Tree grates are not permitted unless special exception is obtained from the City Engineer. If a special exception is obtained an appropriate maintenance agreement (Revocable Street Privilege) must be executed prior to the installation of grates. Such agreements shall include the transfer of the responsibility for repair, replacement, expanding the tree opening as necessary and regular maintenance from the City to the maintaining party. Tree Grates have been approved in the CBD, OTR and Mt. Adams. They should have Revocable Street Privileged.

Tree guards are not permitted unless specific exception is obtained from the City Engineer.

Any disputes on the location of trees, utilities or street furniture shall be resolved by the Director.

The following standards shall be used as a control in establishing the longitudinal thirty to fifty-foot (30' to 50') spacing of street trees.

1. The lateral clearance between a tree and the edge of a driveway apron or handicap ramp shall be ten feet (10').
2. In order to maintain proper sight distance at intersecting streets, trees shall not be planted closer than thirty feet (30') from the nearest intersection, measured from the end of the corner rounding.

VII. CLEARANCES TO FIXTURES AND UTILITIES SHALL BE IDENTIFIED BELOW:

1. **Parking signs**: No closer than ten feet (10') in front or five feet (5') in back.
2. **Regulatory/warning signs**: (black on white, black on yellow, white on red) thirty feet (30') in front or five feet (5') in back.
3. **Traffic Signals**: Provide a minimum of one hundred fifty feet (150') of sight distance.
4. **Parking Meters**: Street trees are to be planted at the front of parking spaces opposite the front wheel of the parked vehicle. If utility problems preclude this location, the tree should be planted at the rear of the space. Trees to be planted in front of the parking space are to be no closer than 4' to the parking meter.
5. **Utility Pull Boxes**: No closer than five feet (5').
6. **Sanitary, combination and storm manholes, and inlets**: No closer than five feet (5').
7. **Underground utility mains and services:** (water, gas, electric, cable tv, storm, sanitary, etc.) No closer than five feet (5').
8. **Fire Hydrants**: No closer than five feet (5').
9. **Light Poles and Utility Poles**: No closer than fifteen feet (15').
10. **Drainage Ditches**: No planting permitted in these locations.

The planting of trees on streets with street lighting shall be coordinated through City Traffic Engineering to determine species and spacing of the trees so the planting does not adversely affect the illumination of the street lights.

The above standards for planting of street trees shall also apply to the location of new utilities in relation to existing street trees. Any deviation from the above standards must be approved by the City Engineer.

SECTION 5

TRAFFIC CONTROL

I. MAINTAINING TRAFFIC

The Contractor must perform the required work with the maximum safety of, and the least inconvenience to, the traveling public (including pedestrian) and the Contractor. The City Traffic Engineer must approve any proposed variance from the Maintenance of Traffic notes, in advance, in writing. Except as modified herein, the requirements for maintaining traffic, as indicated in the "State of Ohio Department of Transportation Construction and Material Specification", Item 614; "The Ohio Manual Of Uniform Traffic Control Devices" (OMUTCD), Part 6; and the City of Cincinnati "Traffic Safety Handbook" (Blue Book) current editions, latest revisions and pertinent items of specifications and proposal shall apply.

The Contractor must use drums, signs, sign supports, barricades, impact attenuators and other traffic control devices that are certified to meet NCHRP350 safe-crash standards unless otherwise specified in contract documents. Contractors may not use heavy, nonyielding devices or supports that do not conform to the current standards of NCHRP350 unless allowed by contract documents.

Item 614.03 Traffic Control General

All traffic control will conform to the requirements of the plan, standard construction drawings shown on the plan, and the OMUTCD for streets and highways, for the installation, maintenance, and operation of all traffic controls and traffic control devices. When the plans or standard construction drawings do not cover a specific traffic control situation, place the necessary traffic control devices according to the OMUTCD and use the procedures required by the OMUTCD. In addition, Contractor shall comply with applicable traffic control requirements set forth in Section 722-3(c) of the Municipal Code (*Conditions for Providers Occupying the Right of Way*).

1. In addition to Item 614, "Maintaining Traffic," as set forth in the State of Ohio Department of Transportation Construction and Material Specifications, the following notes also apply to the work carried out within the limits of this project.
    a. The Contractor will be required on an interim and/or permanent basis to furnish, erect, maintain and subsequently remove all lights, signs, barricades and all other traffic control devices necessary for the safety and maintenance of traffic. This also includes all advance warning signage, regulatory signs, informational signs, detour signs and directional signs. Keep all equipment clean and in proper working condition. All signs are to be retro reflectorized or illuminated and have the most recent color and type as specified in the OMUTCD manual.
    b. The Contractor shall be required to do the following:
        i. Replace any traffic control device that becomes moved or damaged during the duration of the project.
        ii. Assign a competent person to check the work zone on a daily basis to correct any deficiencies.

iii. Make these checks before work is to start for the day to assure all devices are in place or, if not needed, are covered, or removed from the site.

iv. If the Contractor is not working and no roadway hazards are present, cover or remove any unnecessary signs.

c. The standard channelizing devices for closing any lane to traffic are properly weighted thirty-six-inch (36") drums or forty-two-inch (42") cones. Tapers for lane closures have thirty-six-inch (36") drums or forty-two-inch (42") cones. Twenty-eight-inch (28") cones may be used for **daytime only**, short duration closures. All channelizing devices must be orange in color with a minimum of two retro reflective bands (42" cones have four retro reflective bands). The retro reflective material used on channelizing devices must have a smooth, sealed surface that will display approximately the same color day and night. The Contractor must keep all retro reflective material on devices in good condition, maintaining their retro reflective properties.

d. The use of flashing arrow panels should be used for all lane closures and may be required at any time during the job or project by the Right-of-Way (ROW) Inspector or a Traffic Engineering official. **Use arrow panels in the Cincinnati Business District (CBD) area for any work within a travel lane.** Arrow panels must conform to the OMUTCD Part 6, Section 6F.53, "Arrow Panels". For a stationary lane closure the arrow panel should be located on the shoulder at the beginning of the merging taper. Where the shoulder is narrow, the arrow panel should be located in the closed lane. Use the arrow panel in combination with appropriate signs, channelizing devices and other temporary traffic control devices. Locations that will require a flashing arrow panel will appear in item #14.

e. If flagging is necessary, the required method of flagging is with approved Stop/Slow paddles. Flags should be limited to emergency situations, intersections and low speed, low volume locations, which can best be controlled by a single flagger. The flagging operation and flagging station will conform to the OMUTCD Part 6E, "Flagger Control".

2. Failure to comply with Maintenance of Traffic requirements will result in the Right-Of-Way permit being cancelled. The Contractor will be ordered to remove all personnel and equipment from the City of Cincinnati Right-of-Way until proper traffic control is in place and approved by the Department of Transportation and Engineering's ROW Inspector and/or a Traffic Engineering official.

3. Before work begins, the Contractor must submit to the Engineer the name and telephone number of a person(s) who can be reached 24 hours a day by the City of Cincinnati and all interested police agencies. The contact person(s) provided by Contractor shall be the person(s) responsible for replacing and maintaining necessary traffic control devices per the approved traffic control plan.

4. Pedestrian protection and pedestrian access will be maintained at all times and will conform to the OMUTCD Part 6.D.01, "Pedestrian Consideration". Pedestrian safety is of utmost importance throughout the life of the contract or job. Pedestrians cannot be led into conflicts with work site vehicles, equipment, or operations.

Pedestrians cannot be led into conflicts with vehicles moving through or around the work site. Pedestrians must be provided with a safe, convenient, and accessible path that replicates as nearly as practical the most desired characteristics of the existing sidewalk(s) or footpath(s). If the pedestrian pathway is to be closed, the Contractor must post signs to direct pedestrians to the safest crossing point. If the pedestrian pathway is to be closed between safe crossing points, the Contractor must post signs in advance of the closed area at a safe crossing point or make arrangements for safe pedestrian passage. If Traffic Engineering or the Engineer requires pedestrian barriers, the Engineer must approve the type used by the Contractor. The Contractor bears full responsibility for ensuring and maintaining the safety of pedestrians.

5. Contractor must notify the following groups five (5) working days prior to the start of work and three (3) days prior to any street closure with the approval of the City Traffic Engineer or his/her designee and the Project Engineer:

    a. Local Police District

    b. Local schools

    c. Local Firehouses

    d. Local hospitals

    e. Queen City Metro

    f. Abutting property owners

    g. TANK (for work in CBD)

    Before any (full or partial) planned street closure that necessitates a detour, the permit holder shall notify the occupants/tenants/owners and/or residents of property abutting that street, in writing, of the upcoming closure. The written notice must include the DOTE permit number, a description of the area to be closed, the dates and times of the closure, and the permit holder's 24-hour contact information including name, phone number, and email. Notices must be delivered via mail at least 5 business days before the closure or via hand delivery at least 72 hours before the closure. The permit holder shall submit a copy of the notice and a list of the notified addresses to the DOTE Construction Inspector 24-hours prior to the actual closure.

    The Engineer may require additional contacts.

6. If temporary signs to restrict parking are installed, notify the local police district 24 hours prior to installation, and post the signs at least 14 hours before the parking restriction listed on the sign. Dates and times on temporary signs must be properly worded and legible. **On heavily parked residential streets, parking restriction cannot begin until 8:00 AM.**

7. The Contractor will make arrangements and pay for the services of an off-duty Cincinnati Police Officer and cruiser, as needed. The Cincinnati Police Department (Phone: 352-2583) requires advance notice for these services. The use of a police officer(s) with a marked police vehicle is encouraged and may be required by Traffic Engineering, the Project Engineer, or the ROW Inspector when work is done within 50’ of a signalized intersection.

The hiring of a police officer(s) is for assistance with traffic and pedestrian control, for the safety of the traveling public and for the safety of the Contractor's employees. The police officer(s) is considered to be employed by the Contractor and the Contractor is responsible for their actions. Although the Contractor employs them, Traffic Engineering, the Project Engineer, or the ROW Inspector will determine the police officer's placement and duties. The closing of a road for the purpose of the proposed work will only be done with advanced notification and the approval of Traffic Engineering.

8. The Contractor, through the Engineer or Inspector, is required to contact the Traffic Service Bureau Controller Service section at 352-4391 one week prior to any grinding or curb repair operations near vehicle loop detectors. They will coordinate with the Contractor to save the existing loops or to arrange for proper signal operation if the loop(s) must be destroyed.
9. A copy of these Maintenance of Traffic notes shall be kept available at the site any time work is in progress. Please notify the Division of Traffic Engineering after completion of the project.
10. All sub-contractors must adhere to the same Maintenance of Traffic requirements as the General Contractor. The General Contractor is responsible for all subcontractors.
11. One week prior to any grinding or paving, notify the Traffic Engineering representative. The Traffic Engineering representative will approve or not approve the date and time with respect to area events and/or planned lane closures.
12. No obstructions to traffic are to be placed in that portion of the roadway or sidewalk area where the main directional flow of traffic is concentrated during the hours of 7:00-9:00 AM and 4:00-6:00 PM in the CBD, or any other through street, as defined in the City of Cincinnati's Traffic Code.
13. If, in the opinion of the City Engineer, the City Traffic Engineer, or his/her designee, proper provisions and maintenance of traffic or traffic controls are not provided by the Contractor, the City may take additional measures to maintain safe traffic controls. **The cost of the City's additional traffic control measures will be charged to the Permittee.**
14. Failure to follow established traffic safety requirements constitutes a violation of the Street Opening Permit and **subjects the Permittee to all sanctions and penalties authorized by the Cincinnati Municipal Code**.

Item 614.10 Work Zone Traffic Signals

1. Refer to section 1314 of the City of Cincinnati Supplement to State of Ohio Department of Transportation Construction and Material Specifications for the requirements of Maintenance of Existing Traffic Signals and Street Lighting Circuits.

Item 614.11 Work Zone Pavement Markings

1. Replace all pavement markings, which are removed or damaged during the project or job to the same or better condition and type as before the work began.

2. Maintain visible pavement markings after each workday.
3. Following the grinding operations, use painted temporary pavement markings. Do not use construction tape in the wet or cold weather periods, as it should not be expected to withstand snowplowing operations.
4. Following the placement of the leveling course, apply paint or construction tape per the final striping plan to serve as temporary pavement markings. If construction tape is used for temporary pavement markings on the leveling course, remove it before placement of the surface course.
5. Place all temporary pavement markings to retain lane assignments and avoid areas near curbs, islands, etc., unless otherwise directed by the Engineer. Install these temporary pavement markings with the same professional alignment and general positive guidance that is required for permanent pavement markings.
6. After placement of the surface course, use paint for the layout of the final striping plan. Do not use construction tapes on the surface course. After the Engineer has approved the layout of the temporary pavement markings, apply permanent pavement markings in thermoplastic on asphalt surface courses.
7. For DOTE contracts, the City will provide documentation so that the temporary pavement markings can be properly aligned. The Engineer will provide inspection and approve the layout. The Contractor will perform the layout.

   For all other permit work: When replacing pavement markings as part of a "grind & pave" restoration, thermo plastic material per ODOT spec 644 is required. When replacing portions of existing pavement markings due to other construction activity, pavement markings are to be replaced in kind. Before any work commences, it will be Permittees (or their sub-contractors) responsibility to document the locations of pavement markings that will be removed and replaced. One week before work begins, the Permittee must provide the DOTE Inspector with a sketch or drawing detailing (dimensions, type, etc.) the locations of the existing pavement markings. If this sketch is not provided, the DOTE Inspector will have a City Survey Crew locate the existing pavement markings. All costs for the City to locate the existing pavement markings will be added to the permit.
8. On any street which has the surface course placed during the snow season (beginning on November 1), the Contractor will be required to maintain visible pavement markings until the earlier of March 15 of the following year or until the permanent pavement markings are placed.

II. CENTRAL BUSINESS DISTRICT (CBD) - WORK RESTRICTIONS

1. Because of the heavy concentration of pedestrians in the Central Business District during declared special events and the Holiday Season, the Director may issue a work restriction for the Central Business District.

2. All City departments, divisions, independent boards and commissions and private utility companies doing or having work to be done on the streets or sidewalks in the Central Business District, shall be required to complete work prior to the restricted dates.

3. The work restriction shall pertain to the streets and sidewalks of the Central Business District, including Fountain Square, except that of an emergency nature. No permits will be issued for such work during this period, except for work of an emergency nature, or by specific written permission of the City Engineer.
4. Any request for an exception should be submitted to the City Engineer for investigation and recommendation. Any authorization of work will be given following the investigation.
5. Restricted Time shall be in effect during the Holiday Season, which is defined as the Friday before Thanksgiving until the second Monday after December 25th. Restriction dates are subject to change.
6. Restricted Time for "Special Events will be determined on case-by-case basis per the "special event" schedule produced by the Cincinnati Police Department.

III. TEMPORARY COVERED WALKWAYS

In response to concerns regarding pedestrian safety in the vicinity of construction sites, the following are guidelines for the erection and maintenance of covered walkways around construction areas. In addition to sites containing buildings under construction, the term "construction areas" shall include excavations for new building and renovations of existing buildings that involve the lifting, removal, or storage of construction materials overhead, or any other site so designated by the City Engineer.

While protecting the public is of paramount importance, this policy also serves the needs of Architects, Engineers, and Contractors by outlining a standardized construction method. Thus, anyone involved in the development of a downtown project can determine the size and spacing of the structural elements in a covered walkway without having to design each element individually. See the Standard Temporary Walkway drawings in the Appendix. Any proposed deviation from these specifications or multiple level scaffolding systems must be designed and plans sealed by an Engineer registered in Ohio. Plans must be submitted, and written authorization must be attained from the City Engineer.

1. General Requirements For All Construction Walkways:

a. Walkways must be constructed to allow unobstructed vision at the intersection of the street property lines.
b. Walkways must have a clear unobstructed width of not less than four feet (4'), or six feet (6') in the Central Business District.
c. Walkways must be covered and have a clear unobstructed ceiling height of not less than eight feet (8').
d. Walkway roof structures must be designed for a live load of 250 pounds per square foot.
e. Walkway floor structures are not required unless needed to cross an opening in the sidewalk or street, or as directed by the City Engineer. Otherwise, the sidewalk or street may serve as the floor of the walkway. Any structural floor provided must be designed for a live load of 150 pounds per square foot.

f. Adequate artificial illumination must be provided in all portions of the walkway between sunset and sunrise.

g. All sill plates and posts shall be pressure-preservative treated material. Otherwise, pressure-preservative treated material need not be used unless walkway is to be dismantled and later reconstructed in a different location. However, all fasteners shall be galvanized steel.

h. The side of the walkway facing the construction area shall be completely enclosed with plywood.

2. Specific Requirements For All Construction Walkways

a. Walkways shall be constructed using Southern Pine or other species of lumber with demonstrated equivalent strength characteristics when exposed to weather. All temporary walkways shall have a slip resistant surface.

b. Walkways with clear widths of six feet (6'-0") or less shall be constructed in accordance with the drawings in the Appendix.

   1. For clear widths of four-feet-eight-inches (4'-8") or less, grade of roof plank shall be No. 2 or better.

   2. For clear widths of four-feet-eight-inches (4'-8") up to five-feet-three-inches (5'-3") inclusive, grade of roof plank shall be No. 1 or better.

   3. For clear widths greater that five-feet-three-inches (5'-3") up to six feet (6'0") inclusive, grade of roof plank shall be Dense Industrial 65 Scaffold Plank.

c. Concrete or other approved protection barriers shall be required when pedestrian traffic is maintained in a roadway or vehicle area.

d. Temporary construction walkways may be constructed of steel or other material. However, a drawing of this structure must be attached to the permit application for review and acceptance by DOTE. Drawing must show design loads and shall be sealed by a Registered Professional Engineer.

e. Walkways must be ADA accessible.

SECTION 6

CONSTRUCTION IN THE RIGHT OF WAY

GENERAL - CMC CHAPTER 722 – MANAGEMENT AND CONTROL OF THE USE OF THE CITY RIGHT-OF-WAY. All work within in the public right-of-way must comply with Chapter 722 of the Municipal Code in addition to the requirements set forth in these regulations and elsewhere in the Municipal Code.

I. PRECONSTRUCTION

A complete copy of the street opening permit MUST BE KEPT AT THE WORK SITE and be made available upon the request of any City representative.

Failure to maintain complete permit documents can result in suspension of work until all proper permits or documents are obtained. The Contractor is fully responsible for the safety of the work site at all times.

1. After the permit has been issued, the Applicant is required to do the following:

a. 24 hours before any work starts in the ROW or before any change in the work area occurs, the limits of the proposed excavation shall be marked, on the ground, in white paint.

b. After marking the limits of proposed excavation, at least two working days and no more than ten days before commencing excavation, call the Ohio Utilities Protection Service at 1-800-362-2764 and provide all the required information.

c. Notify DOTE at least one working day prior to the commencing of excavation. The phone number is listed on your permit. Any work done without inspection will be considered defective. All defective work must be replaced. Cancellations must be received before 8:30 a.m. on the day of the scheduled work.

d. Contact the local Cincinnati Police District Office for obtaining and posting "No Parking" signs for streets under construction. See APPENDIX for sample guidelines.

e. Before commencing work within fifteen feet (15') of a public street tree, obtain a permit from the City's Urban Forestry Section. Contact them at 861-9070, 8:00 a.m. to 5:00 p.m., Monday through Friday. For additional details, see Section 743-19 of the Cincinnati Municipal Code and Section 105.071 of the City's Supplement to the ODOT CMS.

2. Schedule

In accordance with CMC Section 722, all work shall be scheduled to prioritize efficiency, least obtrusive use of the right of way, consistent with safety, and to minimize traffic and other disruptions including street cuts. The City may require a Construction Schedule before issuing the permit.

a. CMC Sect. 722-5 (b) *Construction Schedule for Utility Work*, Generally. All work by a provider within the public right-of-way shall be performed within a reasonable amount of time and shall be diligently pursued by the Permittee, irrespective of the public or non-public character of the work.

b. With the exceptions of public improvement project work subject to Section 722-5(a) and emergency work subject to CMC Section 722-6(c), Permittee shall submit a written construction schedule to the City not less than five working days prior to commencing work in the right-of- way and shall notify the City not less than one working day prior to excavation in the right-of-way.

3. Daily Completion of Work

a. All the equipment and material necessary to maintain the excavation and complete the work must be available on site daily, prior to the start of the workday. Equipment, material, and street plates are not to be stored within the right-of-way unless specific permission is stated in the permit.

b. In the event of an emergency requiring Police or Fire assistance, call 911.

c. In the event of an emergency requiring the City's road maintenance department, contact the Traffic and Roads Operation Division Dispatcher at 591-6004 or Customer Service at 591-6000.

4. Trench Plates

a. Trench plates shall be at the site before excavation begins in the roadway.

b. Trench plates may be placed over non-backfilled trenches for a maximum of one hundred fifty feet (150'). Additional plates may be placed over backfilled trenches for a maximum of one hundred fifty feet (150'). Longer lengths of plates can be placed if pre-approved by the Inspector.

c. Permittee must provide the following information, **DAILY**, about trench plates that will remain overnight on Cincinnati streets to the City's Customer Service Hotline at (513) 591-6000 by 4:00 PM:

1. Location of Street Plate (Street Address or Intersection)
2. Contractor Name
3. Emergency Contact Name and Telephone Number (365/24)
4. Plate Identification Initials
5. Start Date and Anticipated Removal Date

d. **Note that trench plates may only be used on Cincinnati streets for emergency purposes or for a short duration to allow time for a durable repair and high-quality street restoration. Every attempt must be made to minimize the extent and duration of such use. If the City determines that the contractor is not pursuing the restoration in a timely manner and, if so ordered by the City, the Contractor shall remove the plates and restore the trench temporarily until a permanent restoration can be completed. Trench Plates are not permitted in a crosswalk.**

e. Unattended trench plates must have permanent visible markings, such as the initials of the company, placed on the plates to help identify the owner of the trench plates.

f. Trench plates must be of adequate size and strength, pinned and properly anchored, and asphalt wedged to minimize traffic impacts and noise. Permittee shall be allowed to weld plates together in lieu of pinning at the discretion and satisfaction of the DOTE Inspector. However, if the welds fail and/or plates shift or become loose, the Permittee MUST pin and anchor plates from that point on. Suggested thicknesses of steel plates:

   1. ¾" plate with 12" bearing, up to 2.0' trench width.
   2. 1" plate with 18" bearing, up to 5.0' trench width.
   3. Special permission for trenches in excess of 5.0' in width

g. Permittees leaving trench plates on Cincinnati streets must be on site within 60 minutes following initial notification to resolve problems associated with their use. The Permittee will be charged a minimum of $250 for City costs associated with reinstalling loose or dislocated trench plates. If the trench plates have not been previously called in or the emergency contact fails to respond promptly, these charges will be doubled.

h. Trench plates must be wedged with asphalt and securely mounted to the pavement so they do not bounce, move or make any noise. This may require plates to be welded together or pinned. Plates may also be required to be welded or pinned when placed at certain locations such as intersections, inclines, bus routes or locations that the Inspector believes the plates may move. Wedge material shall be removed from the pavement after the plates are permanently removed. The Inspector may reject equipment, material or trench plates at any time, if the Inspector determines they are unsafe. If the Permittee is unable to leave a work site in a safe condition, the City may correct the unsafe condition, at the Permittee's expense.

i. Trench plates in City streets, during the winter season (November 1 through March 31), should only be used for emergency purposes or when materials are not available to complete a good temporary pavement restoration. During the winter season, the City's Traffic and Roads Operation Division (TROD) shall be contacted when the plates are removed. TROD (Customer Service) may be reached at (513) 591-6000, 24 hours each day, 7 days a week. Bicycle access to be maintained at all times. Any plates placed in the roadway shall be placed perpendicular to the travel lane for the bicyclist's safety.

5. Recessed Plates

a. Recessed plates are steel plates that are placed flush with the pavement. Recessed plates may be required during winter months, at intersections, heavily traveled roads or when plates will be in the same location for an extended period of time.

6. Sidewalk Plates

Securing unattended excavations within the Sidewalk Space (Sidewalk Space is defined as public space between the edge of pavement and the right-of-way line):

a. **Excavations more than one foot in depth.** Cover excavation with steel plates as specified in Street Restoration Book to provide a safe, walkable, skid-proof

surface. Asphalt wedges may be required along edges of plates to prevent tripping hazards.

b. **Excavations less than one foot in depth.** Cover with a steel plate or approved equal as stated above. Or secure the entire perimeter of the work area (at least one foot beyond the limits of excavation) with plastic mesh fencing (minimum of 3' high) mounted on weighted drums or fence posts with Sidewalk Closed signs at each end.

II. INSPECTION

Inspectors from various departments may be assigned to or involved in work performed within the City right-of-way.

1. DOTE provides the Inspectors that are responsible for the field administration of all street construction and maintenance including, but not limited to, the enforcement of traffic maintenance requirements, facility installation, backfill, temporary restoration and subsequent permanent restoration of the affected City street right-of-way.

2. DOTE reserves the right to inspect all materials incorporated into City streets, including the facilities that supply and manufactures the materials, at the Permittee's cost.

3. The Metropolitan Sewer District or Greater Cincinnati Water Works is responsible for the inspection of the sewer or water main installation. After the installation of the utility has been approved, the Permittee must contact the DOTE Inspector to inspect the backfill operation and pavement restoration.

4. The Park Board Urban Forestry Section (861-9070) provides Arborists to inspect tree-related work.

5. All privately-owned utilities will be responsible for the inspection of their installation. After the installation of the utility has been approved, the Permittee must contact the DOTE Inspector to inspect the backfill operation and pavement restoration.

6. Permit specified materials may not be used until inspected, tested, and accepted by the Engineer. The Contractor must furnish all labor necessary in handling such material for testing. Materials or workmanship found at any time to be defective shall be remedied by the Contractor regardless of previous inspections.

III. STREET OPENINGS AND RESTORATION

1. Pavement Removal

All pavements, walks, drives, and curb at the removal limits shall be saw cut full depth with a wet diamond-bladed saw. Brine from the saw cut must be washed down immediately after sawing so as to not be tracked by autos or pedestrians. Any pavement sawed will require a permanent restoration. A Vermeer type saw is not permitted to be used in the right-of-way unless a waiver has been granted.

If written permission is given to for use of a Vermeer type saw the following conditions are required:

a. Vermeer type saw cuts shall not extend more than 100’ beyond the installation of the pipe.

b. Vermeer type saw cuts shall be patched with 2” of asphalt if left open to traffic.

c. Measures must be taken to control dust. If complaints are received regarding dust, noise or vibration and are not remedied, permission to use a Vermeer type saw will be revoked.

d. All ends and edges of the Vermeer type saw cut runs (as determined by the DOTE Inspector) must be saw cut before final restoration.

2. Trenching

All excavations for utility installations within the public right-of-way shall be made in accordance with the applicable provisions of Items 603 and 1101 of the most recent City of Cincinnati Supplement to the State of Ohio, Department of Transportation Construction and Material Specifications, and in accordance with Chapter 17, Sub Parts 1926.651, 1926.652 and 1962.453 of the O.S.H.A. Construction Resource Manual.

No tunnels or borings shall be made without written permission from the City Engineer.

If conduit is not constructed by open cut then all existing utilities must be pot-holed to expose depth and location as directed by the DOTE Inspector.

Any excavation located under or near railroad right-of-way is subject to the provisions of Section 1101.051 of the City of Cincinnati Supplement to the State of Ohio Department of Transportation Construction and Material Specifications (ODOT CMS).

On any work location where excavation, use of heavy equipment, stacking or unloading materials on City right-of-way surface may cause street damages, the City may require the Contractor to deposit sufficient monies or a surety bond to guarantee the cost of restoration of damaged areas or possible future damage to right-of-way surfaces. The City does not guarantee the condition of the existing pavement and the Contractor will be required to restore any pavement damaged to its original condition. The Contractor must use construction means and methods to minimize the least damage as possible.

The Contractor must remove excavated materials every day. No materials are allowed to be stored in the right-of-way during non- working hours.

3. Backfilling

The area immediately around the conduit should be backfilled with compacted granular material as shown in the plans or per the appropriate agency’s design standards. Controlled Low Strength Material/Control Density Fill (CLSM-CDF) is required for all trench backfill in the right-of-way. A list of the approved CLSMCDF mixes and performance specifications is available on the DOTE Website.

CLSM-CDF Waiver

The use of CLSM-CDF as trench backfill may be waived provided the following conditions are met:

a. Written permission is granted by DOTE.

b. The waiver only applies to utility work for the construction of new full width pavement or in the right-of-way outside the existing street pavement.

c. Backfill shall be placed in Accordance with ODOT CMS 203 and compacted in lifts not to exceed 8 inches (8").

d. A representative from an approved geotechnical firm must be on site testing compaction during all backfilling operations.

e. Compaction testing must be performed in accordance with ODOT Supplemental Specification 1015.

f. Results of compaction testing must be given to the DOTE Inspector.

4. Temporary Restoration

After satisfactory backfilling operations are followed, as described in previous paragraphs, the Permittee shall provide a temporary pavement and maintain it until the permanent restoration is completed prior to the permit expiration date.

Temporary restoration for low traffic volume pavement, and walks and driveways shall consist of bringing the CLSM within two inches (2") of the final grade and capping with two inches (2") of compacted 448 asphalt. Temporary restoration for high traffic volume pavement shall consist of nine inches (9") of concrete base capped with two inches (2") of compacted 448 asphalt. No Cold Mix asphalt will be allowed for any temporary restorations. Asphalt used for temporary pavement restoration shall be placed and compacted in accordance with ODOT CMS Item 401.

On **pre-approved residential streets** with asphalt surfaces that are designated to be resurfaced by the Permittee, the pavement may be restored by placing at least eleven (11") of neatly finished concrete base level with the adjacent asphalt surface. The top one-and-a-half inches (1-1/2") of the concrete must be removed during the grind and repave operations.

Asphalt or concrete surfaces will be considered a temporary restoration if:

a. The material is not placed in accordance with City or ODOT specifications; or

b. The Inspector determines that the pavement is unacceptable due to an uneven surface, improper finish, etc.

c. In the event of any settlement in the temporary surface, the permittee shall make corrections immediately when notified by the City. The City reserves the right to make the area safe and charge all costs incurred to the permitted if the permittee does not act timely. The City also reserves the right to restore pavements in all cases where the City concludes that maintenance or installation requirements have not been immediately achieved by the

Permittee or its agent, in which case the City may add the restoration costs to the permit.

d. The City will attempt to notify the Permittee before Emergency Maintenance is performed. However, Permittee must provide appropriate emergency contact person(s) and phone number(s).

5. Permanent Restoration

Permanent restorations shall be in accordance with the Standard Pavement Restorations located in the **APPENDIX**. Methods and materials used in making the permanent restoration shall match the existing pavement or surface conditions or be replaced as directed by the DOTE Inspector, and shall conform to the State of Ohio, Department of Transportation Construction and Material Specifications and/or City of Cincinnati Supplement to the above. The City may request that the Permittee furnish a full report of laboratory tests of any and all materials used for restoration. A City approved testing laboratory shall make tests. **The Permittee shall pay all samples and testing costs.**

a. Concrete Cylinder Test: One cylinder to be tested at the age of 7 days, one cylinder to be tested at 28 days and one spare test cylinder. Material failing to meet specifications may be rejected and shall be removed from the project by the Permittee or Contractor, if so ordered.

b. Concrete Beam Test This test is required if the concrete base or pavement is opened to vehicle traffic prior to the standard cure time.

c. Asphalt Concrete Tests: In-place field density tests performed with a nuclear gage. DOTE may also request Density Acceptance tests of asphalt cores as described in ODOT CMS 446.05.

6. General Preparations for Permanent Pavement Restorations

When permission has been received by the Permittee from the Inspector to make final restoration in the disturbed areas, the following rules and regulations shall apply:

a. Where the edge of the opened trench is within two feet (2') of the paved gutter line or longitudinal joint of the roadway, or within two feet (2') of the unpaved berm line, the pavement shall be removed to the back of the integral curb or to the longitudinal joint or the edge of the berm and replaced as directed by the DOTE Inspector.

b. Where any part of the opening is within two feet (2') of the paved portion of a roadway having an earth berm without curb and gutter, the disturbed berm area will be restored as directed by the DOTE Inspector.

c. When the edges of the existing pavement have been damaged during the installation operations, the damaged pavement shall be removed to a neat line as determined by the DOTE Inspector, with a suitable sawing instrument.

d. Edges of restored pavement shall be parallel and/or perpendicular to the curb line. If possible, the pavement restoration of a utility service cut should be a uniform width.

7. Cure Times for Concrete Pavements

Do not place traffic on concrete base or pavement for the following durations after the concrete has been placed:

a. Class QC 1 Concrete – 7 days or beam break per ODOT CMS

b. Class QC MS Concrete – 24 hours

c. Class QC FS Concrete – 4 hours

8. Pavement Planing and Asphalt Resurfacing

As a minimum, a one-lane pavement planing and asphalt resurfacing (Grind & Pave) operation will be required when any of the following conditions are met:

a. The street involved in the permitted work is identified in the latest edition of the City Official Thoroughfare System as a Class 1 (Expressways/Freeways), Class 2 (Principal Arterial Streets) or Class 3 (Minor Arterial Streets) streets.

b. The street pavement segment (between street intersections) has a Pavement Condition Index value of 60 or higher

c. The permitted work involves:

    1. trenching operations; or

    2. the permitted work involves 4 or more excavations made in a street segment (between street intersections).

Note: The City has the right to increase the one-lane "grind and pave" requirement to a full pavement width "grind and pave" depending on number and extent of service excavations in the pavement with any given street segment. In special circumstances, the City has the right to require a "grind and pave" when all the conditions above are not met.

If pavement planing and asphalt resurfacing (Grind & Pave) is required, the Permit will state the approximate width and length of pavement planing and asphalt resurfacing. The Inspector will mark the actual limits of resurfacing before the planing operation begins. The Permittee will also be responsible for asphalt resurfacing if the pavement is damaged, gouged or marred while the permit work is performed. The edge of asphalt resurfacing shall be at least 5' from the curb line or edge of pavement.

The top one-and-a-half inches (1 ½") of the asphalt surface shall be planed in accordance with ODOT CMS Item 254-Pavement Planing. Sweep planed surfaces and adjacent surfaces to remove all loose debris. Apply ODOT CMS Item 407 – Hot Tack Coat material at a rate of 0.075 gallons per square yard to the planed surface. Perform mechanical resurfacing over the planed surface with a one-and-a half-inch (1 ½") surface course of hot-mix asphalt material meeting the requirements of 401, 441, and 448 of the ODOT CMS. Type 442 asphalt concrete surface course (12.5 mm, Type A-448) shall be used on Major Streets.

Within 24 hours after the completion of the surface course, seal the edges of the paved area with an asphalt binder material meeting the requirements of 702.01 of the ODOT CMS. Seal edges in the CBD only as directed by the Right of Way

Inspector. If mechanical resurfacing does not immediately follow the planning operation, place a compacted asphalt concrete wedge, with a minimum diameter of eight feet (8'), around all exposed utility castings with hot-mix asphalt. Asphalt wedges are required at curb ramps, driveways, and edges of grinding limits.

The Paving Contractor must meet the following requirements:

a. Paving equipment (including, but not limited to pavers and rollers) must be approved by the DOTE before start of work.

b. Must have a minimum of three years of experience with hot-mix asphalt paving public streets or highways.

   Upon request of DOTE, the permit applicant or Permittee shall submit a list of five recent paving projects including the following information: project name and location; project dates; number of squared yards paved; and name and phone number of Project Manager.

9. Asphalt Resurfacing Outside the Limits of Main Line Trench Restoration

If excavations for service laterals or test holes for directional drilling are made in the asphalt pavement outside the limits of the main line grind and pave, the District Inspector will have the option to require final pavement restorations as follows:

a. If 4 or more excavations are made in a street segment (between street intersections), then a one-and-a-half-inch (1-1/2") thick grind and pave (one lane or full width depending on number and extent of service excavations in the pavement) will be required in that street segment.

b. If less than four (4) excavations are made in a street segment (between street intersections), then thermal seal patching, infra-red or other heat treatment restoration will be required.

10. Scheduling

Permittee must schedule grind & pave work with City at least one week in advance of actual work date(s). The City reserves the right to postpone grind & pave work to a later date due to events or CPD requests.

11. Grind & Pave Not Completed

In accordance with the process set forth in CMC Section 722-7, DOTE may arrange for remedial action to complete work that violates permit requirements including, but not limited to, failure to complete the work in the permitted time frame. The City may recover its costs for performing the remedial work from the Permittee. Extension of time for the permit will be considered provided Permittee makes a timely request for such extension.

12. Asphalt Surface Course

The asphalt surface course shall be placed within five (5) calendar days after milling. The Permit will be assessed $1000 each day until the surface course is placed.

13. Pavement Marking Restoration

When replacing pavement markings as part of a "grind & pave" restoration, thermo-plastic material per ODOT spec 644 is required. When replacing portions of existing pavement markings due to other construction activity, pavement markings are to be replaced in kind.

Before any work commences, it will be Permittees (or their sub-contractors) responsibility to document the locations of pavement markings that will be removed and replaced. One week before work begins, the Permittee must provide the DOTE Inspector with a sketch or drawing detailing (dimensions, type, etc.) the locations of the existing pavement markings. If this sketch is not provided, the DOTE Inspector will have a City Survey Crew locate the existing pavement markings. All costs for the City to locate the existing pavement markings will be added to the permit.

14. Concrete Sidewalk and Driveway Construction

The following requirements shall apply to concrete sidewalk and driveway construction:

a. Concrete sidewalks shall be a minimum of five inches (5") thick. Concrete Driveways shall be a minimum of seven-inch (7") thick Class QC MS Concrete. Disturbed or damaged sidewalks or driveways shall be replaced joint to joint.

   Disturbed sidewalk and/or driveways MUST BE TEMPORARILY RESTORED DAILY with asphalt.

b. Sidewalk Closures - Maintain pedestrian protection and access at all times. See City Supplement Section 614.07 for details. On wide sidewalks, maintain pedestrian traffic on one-half of the walk while reconstructing the other half of the walk.

c. Parking Restrictions – Notify the local Police District if temporary signs to restrict parking are required. See APPENDIX for guidelines. For heavily parked residential streets, parking cannot be restricted until after 8:00 AM.

d. Before commencing work within fifteen feet (15’) of a public street tree, obtain a permit from the City’s Urban Forestry Section. Contact them at 861-9070, 8:00 a.m. to 5:00 p.m., Monday through Friday. For additional details, see Section 105.071 of the City’s Supplement to the ODOT CMS.

e. Adjustment of Water Stop Boxes – The Contractor will call the Greater Cincinnati Water Works 352-4653, at least 48 hours before pouring the concrete.

f. Adjustments of Gas Stop-Boxes – The Contractor will call the Cincinnati Gas & Electric Company, 632-2201, at least 48 hours before pouring the concrete.

g. Protection of Electrical Conduits and Cables – The Contractor agrees to protect the cable and conduit and notify the Cincinnati Gas & Electric Company, 3511216, at least 48 hours before pouring the concrete. The Contractor is held liable for any damages that may occur due to negligence on his part.

h. Removals and Excavation-Sidewalks and driveways shall be replaced in full block widths only. Wherever the proposed concrete sidewalk adjoins or abuts an existing sidewalk, the existing sidewalk shall be sawed and trimmed to a neat line. Care should be taken not to damage adjacent concrete. If the adjacent concrete is damaged, the entire adjacent block shall also be replaced. Remove existing walk and excavate to the required depth and a width that allows installation and bracing of forms. All excavated material shall be hauled from the site the same day. Material may not be stored overnight.

i. Subgrade Compaction-Grade and uniformly compact the subgrade with a mechanical plate compactor.

j. Forms – Use wooden or metal forms that extend the full depth of the concrete and that do not spring under the concrete pressure.

k. Placing and finishing -- Immediately before placing concrete, thoroughly moisten the subgrade. Deposit concrete in a single layer, strike it off with a template and smooth it with a float. Surface of concrete shall receive a broom finish. Use a quarter inch (¼") radius edging tool to edge all outside edges and joints. Divide the walks into equally spaced rectangular blocks at approximately five-foot (5') intervals. (The width of the block should be approximately the same dimension as the length of the block.) The depth of the transverse joints shall be no less than one-fourth the thickness of the slab. Transverse expansion joints shall be constructed of one-half-inch (½") thick expansion joint filler and placed at thirty-foot (30') intervals. Install one-half inch (½") thick expansion joint filler behind the curb and between the walk and any fixed structure that extends the full depth of the walk.

l. Curing – Cure concrete according to ODOT CMS Item 451, except apply membrane cure at a rate not less than 1 gallon per 200 square feet of surface. Concrete walk and Class QC MS Concrete Drive may be opened to traffic 24 hours after the concrete has been finished. Class QC 1Concrete Drive may be opened to traffic 72 hours after the concrete has been finished.

m. Backfill – After forms are removed, all voids shall be filled with topsoil and seed.

n. Materials and Workmanship - The Contractor shall immediately remedy materials or workmanship found at any time to be defective or not meet the specifications. If the Contractor fails to comply promptly with these requirements, the City Manager may revoke the license of the Contractor.

o. Street Furniture and Fixtures – The Contractor shall replace all signs, posts, parking meters or street furniture that are removed to accommodate the work. All signs, posts, or parking meters shall be placed in the same location from which they were removed. They shall be placed a minimum of eighteen inches (18") and a maximum of twenty-four inches (24") from the face of the curb.

p. Before removing parking meter posts, the Contractor will call the Meter Shop (352-3702) to have the meter heads removed by the City. A representative of this Section will remove the meter heads and leave the post.

15. Curb

Curbs shall be restored to match the existing curb. Over the Rhine should be replaced with granite curb to be supplied by the City. Concrete curbs shall be restored in accordance with the drawings in the **APPENDIX**.

Replace removed curb within two working days from excavation. After excavation, place necessary barricades over the cuts to protect the public. Within three days after the concrete is placed, remove all forms, backfill and seed the area behind the curb, and clean up the site. Confine operations to one side of the street at a time and do not restrict parking on both sides of the street.

Type L-1 Curb shall only be used for curb ramp installation. L-1 curb may be constructed only if directed by the Engineer for driveways with high ingress/egress traffic volumes.

Backfill the disturbed area behind the curb with topsoil meeting the requirements of 653 - Topsoil Furnished and Placed and seeded in accordance with 659 - Seeding and Mulching of these Special Provisions. Properly compact the topsoil after it is placed. Should noticeable settlement of the topsoil occur during the project, place additional topsoil and seed to restore the settled area to the proper grade.

16. Curb Ramps

If the walk or existing curb ramp at a street corner is disturbed, a new curb ramp(s) shall be constructed in accordance with the latest version of the City of Cincinnati Curb Ramp Design Guide, which includes the Curb Ramp Standard Drawings, Accession No. 27256.

Detectable Warning Systems (DWS) for curb ramps outside the Central Business District (CBD) and Neighborhood Business Districts (NBD):

Type F, Armor Tile 24” X 48” Cast-in-Place Tactile/Detectable Warning Surface Tile as manufactured by Armor Tile Tactile Systems: 300 International Drive, Suite 100, Williamsville, NY 14221 (1-800-682-2525). Color: Brick Red.

Type F, ADA Solutions 24” X 48” Cast-in-Place Tactile/Detectable Warning

Surface Paver System as manufactured by ADA Solutions, Inc.: One Survey Circle – 2nd Floor, North Billerica, MA 01862 (1-800-372-0519). Color: Red

Unless otherwise stated in the plans or permit, Type B DWS shall be used for construction of all curb ramps inside the CBD and NBD. Contact the Engineer for the Type of DWS to be used in CBD and NBD Streetscapes. In the Central Business District the DWS should be clay pavers with a contrasting color surrounding the sidewalk pavement. In Over the Rhine the DWS including 12th Street shall be cast iron.

17. Sodding and/or Seeding

When an opening has been made in sod area, not only the actual area disturbed shall be restored, but any adjacent sod area which may have been damaged or destroyed in connection with the work shall also be removed and restored. If the existing sod can be removed without damage and is kept in live and usable condition, it may be re-used, but all damaged sod shall be replaced with a new sod.

Sod shall be placed in accordance with ODOT CMS Item 660, including 660.09 watering. Sod shall always be placed between the curb and walk. All sod shall be placed over a minimum of four inches (4") of topsoil as per ODOT CMS Item 659.05. No sod shall be installed when temperature is below 32°F and no sod shall be placed over frozen soil. The topsoil base shall be held to such grade that when the sod is in place, the top of the sod will be flush with the surrounding grade and in accordance with a typical cross section.

Seeding shall be in accordance with ODOT CMS Item 659, including 659.17 watering. Seeds shall be placed over a minimum of four inches (4") of topsoil as per ODOT CMS Item 659.05.

18. Daily and Final Cleanup

The Contractor or Permittee shall at all times correct any undesirable condition identified by the Inspector.

Dust control and/or cleanup operations shall be continuously performed at the job location. All excavated material, unless permitted to be reused, shall be removed at the end of the working day. No material shall be placed in such a manner that may cause blockage and/or clogging of surface water drains. All equipment left on site shall be stored in a safe manner.

Upon completion of the project, total cleanup of all areas shall be performed to full satisfaction of the Division in control of the work. All pavement shall be left in clean condition, either swept or flushed clean. All excavated soils, materials, and equipment shall be removed from the job location. Approval of the final cleanup shall be as determined by the DOTE Inspector in charge of the permit.

If the inspecting personnel determine that the Final Cleanup is not sufficient in its final condition, the City reserves the right to complete and/or correct such work at the expense of the Permittee.

IV. MISCELLANEOUS CONSTRUCTION ITEMS AND CONDITIONS

1. Loop Detectors

The Contractor will be responsible for replacing damaged traffic loop detectors.

Exercise extreme care when working in an area with loop detectors. The City and the Contractor will inspect the signalized intersections prior to the start of work to locate detectors and determine whether the detector can be salvaged and to arrange for proper signal operation if the loops must be destroyed. Coordinate the work with City forces to reduce the out-of-service time of the detector.

Contact the City's Traffic Services Bureau Controller Service Section at 352-4391 one week prior to any work (full-depth repairs, milling operations, and curb repairs) impacting loop detectors.

2. Survey Benchmarks and Hillside Inclinometers

When City of Cincinnati survey monuments are encountered, arrangements must be made with the DOTE Supervising Surveyor to temporarily remove and reinstall any survey monuments encountered with the work. AT NO TIME may a survey monument be destroyed without the authorization of the DOTE Supervising

Surveyor. Benchmark Monuments shall not be disturbed until witnessing has been completed by the DOTE Supervising Surveyor.

The Permittee shall notify the DOTE Supervising Surveyor in writing at least two (2) working days prior to the authorized destruction of any City of Cincinnati Benchmark. The DOTE Supervising Surveyor shall be responsible for all witnessing of any Benchmark to be disturbed. The Permittee shall be responsible for removal of a destroyed Benchmark.

The Permittee shall deposit an amount as required by Cincinnati Municipal Code 102-21 for witnessing and replacement of Benchmarks. The Permittee shall note that this amount can substantially increase if witnessing does not occur prior to disturbance.

The City Geotechnical Engineer shall be notified if inclinometers are encountered in or near the work area.

3. Concrete Bus Pads

The entire width of a damaged bus pad shall be reconstructed from joint to joint. Bus pads shall be constructed in accordance with ODOT CMS Item 452-NonReinforced Concrete Pavement. Bus pad shall be constructed of eleven-inch (11") thick Class QC MS Concrete. Dowel bars at longitudinal and transverse joints shall be installed in accordance with ODOT Standard Drawing BP-2.1 & BP-2.2

4. Directional Drilling or Horizontal Boring of Conduit

If conduit is not constructed by open cut then all existing utilities must be pot-holed to expose depth and location as directed by the DOTE Inspector. Pavement and walk restoration shall be in accordance with the permit or this Section. This type of construction method is not allowed in the Cincinnati Business District (CBD).

5. Abandoned Structures

Unless otherwise stated in the Project Specifications, all abandoned structures located in the pavement shall be removed to six feet (6') below the ground surface. All abandoned structures located in the sidewalk shall be removed to three feet (3') below the ground surface. The remaining void shall be backfilled with CDF. Sidewalk and driveway must be replaced joint to joint.

6. Utility Bar and Core Holes

Holes in the pavement less than four inches (4") in diameter shall be restored by placing CDF or Quick Set Fill to nine inches (9") from the top of pavement and placing concrete in the remainder of the hole. Holes greater than four inches (4") shall be restored in accordance with the standard pavement restoration details shown in the **APPENDIX**.

Holes in concrete walk or drive shall be restored by replacing the entire block of sidewalk or driveway (joint to joint).

7. Cold Weather Concrete

a. When the air temperature is 35°F or below, provide concrete with a temperature between 50°F and 80°F at the point of placement.

b. Do not place concrete on or against any surface that is frozen (below 32°F) or has frost.

c. On Class QC 1 concrete walks and driveways, protect concrete from freezing for 72 hours after concrete is finished.

d. On Class QC 1 concrete pavement or base, protect concrete from freezing for 6 days after concrete is finished.

e. On Class QC MS concrete walks, driveways, pavement, and base, protect concrete from freezing for 24 hours after concrete is finished.

f. If air temperature is forecast to go below 32°F, Contractor must provide Min/Max thermometer to verify temperature of concrete during the curing period.

8. Substandard Pavements

Substandard pavement is existing pavement that consists of full depth gravel, cinders, or other granular material covered with less than two inches (2") of asphalt. After the backfilling, restore the pavement in accordance with the Standard pavement drawings in the APPENDIX.

9. Emergency Repairs

a. Backfill shall be CDF.

b. If concrete pavement or base is removed without sawcutting, the final restoration will require that the pavement within three feet (3') of the trench or the nearest joint be removed by sawcutting.

c. If asphalt pavement is removed without sawcutting, the final restoration will require that the pavement within one foot (1') of the trench be removed by sawcutting.

d. Final restoration shall be accordance with this Section.

10. Ditches

Ditches that are disturbed shall be restored with the same material and dimensions to match the existing ditch.

11. Storing Equipment in the Right-of-Way

No material, equipment or steel plates may be stored in the right-of-way unless approved by the DOTE Inspector.

12. Work on a Private or Unimproved Street

For work on a private street, contact the Homeowner's Association or residents to determine type of pavement or driveway restoration.

Driveways on an unimproved street must be shaped to conform to existing drainage ditches and/or drainage piping be installed as required. Drainage piping installed under driveways must be 12-inch corrugated pipe constructed of non-rusting material. Any construction of or modifications to drainage systems must be per approval of the City Engineer.

Bituminous concrete driveways are allowed on unimproved streets in the right-of-way and shall be constructed in three courses to a depth of 10 inches.

13. Portable Toilets

No portable toilets allowed to be temporarily located in the right-of-way unless on a trailer and removed daily.

They are not permitted to be left during non-working hours in the right-of-way.

14. Work on Streetcar Route

Any work or use of the right-of-way, whether requiring a DOTE permit or not, may require a Trackway Access Permit (TAP) from SORTA or their private operator. See APPENDIX for details.

When a DOTE permit is required, Permittee shall fill out a "Working Within or Near the Streetcar Trackway and Power Envelope" request form and submit with the application. Details of this process can be found on DOTE's web site.

15. Project Signs

For work more than two weeks in duration, project signs are required. See APPENDIX for details.

16. Field Office Trailers

Field office trailers will not be authorized within the public right-of-way.

V. CHANGES DURING CONSTRUCTION

1. Involved Parties

a. Permit Issuer

b. Permittee

c. Contractor

d. DOTE Inspector

e. DOTE Permit Inspector Supervisor

f. Other DOTE Agencies (Traffic, Highways, Structures, etc.)

2. Changes in Maintenance of Traffic

a. Change should be proposed by Contractor or Permittee and initially discussed with DOTE Inspector. If Contractor proposes the change, the DOTE Inspector will need to get confirmation from the Permittee before going to next step.

b. DOTE Inspector to forward proposal to Traffic Engineering. Also copy DOTE Permit Inspector Supervisor and Permit Issuer.

c. Traffic Engineering returns approved, modified, or denied proposal to DOTE Inspector.

d. Inspector notifies Contractor and Permittee of status of proposal.

e. If major change, Inspector should notify Permit Issuer of changes.

3. Changes in Approved Construction Plan

a. Permittee (ONLY) to submit proposal, in writing and with revised plans if applicable, to Permit Issuer for approval.

b. Permit Issuer will forward approved changes to the Permittee and DOTE Inspector.

c. Inspector to notify Supervisor of changes.

d. Permittee will forward approved changes to the Contractor.

SECTION 7

FEES, CHARGES, AND FINES

I. SURETY FOR RESTORATION OF OPEN CUTS OR DAMAGE IN THE RIGHT-OF-WAY

Proper restoration of City property must be assured in one of the following ways:

1. The Permittee has a "Street Contractor License," in accordance with Cincinnati Municipal Code 721-83.

If the estimated cost of restoration exceeds the surety attached to the Street Contractor License, the City may require that the Permittee make a cash deposit or provide additional surety equal to the estimated cost of restoration.

2. The Permittee is operating under a City of Cincinnati contract where a Surety Bond is required.

3. The Permittee is County, State or Federal Department whose functions require the installation and/or maintenance of underground facility. In such cases, the security deposit is waived provided a previous agreement to guarantee restoration is obtained and the nonrefundable portion of the deposit is made in cash.

4. The Permittee is a corporation whose City-granted franchise empowers it to make its own paving restoration. Permits will be issued only when the restoration work keeps pace with the openings being made. Such corporations shall promptly pay all bills for special inspection and restoration work done by City forces.

II. INSPECTION

The fees for the various services performed by DOTE are as outlined in the APPENDIX and this Section. These rates are revised periodically by the City Manager. The latest edition of these rates may be obtained from the DOTE Website.

Inspection costs for work performed under DOTE Inspection are estimated and included in the charges at the time the permit is issued. The fee for inspection is estimated based on normal working hours, 7:30 a.m. – 4:00 p.m., Monday through Friday, excluding holidays. Work scheduled outside of normal working hours must be pre-authorized by the City Engineer and will be considered overtime work.

Overtime inspection will be reimbursed to the City at the hourly rate of the Inspector at the appropriate rate (time and a half or double time), plus fringes, in addition to the estimated inspection fee for the permit.

Copies of the permit(s) and the approved drawings, as well as any special permissions required, shall be kept at the work site at all times until final restoration and site cleanup is completed.

III. RESTRICTED PAVEMENTS

Any newly constructed pavements or those newly resurfaced under State, County, or City auspices shall be restricted from openings in pavement for a period of three (3)

years from the date of the final inspection by the City of Cincinnati inspection personnel, as covered by Section 721-39 of the Cincinnati Municipal Code. If openings are made, a Restricted Street Fee will be charged, and final restoration will require pavement resurfacing.

The Restricted Street Fee will consist of an additional non-refundable charge made on a sliding scale and shall be 10% of the regular inspection charge for each remaining month or fraction thereof of the 3-year restricted period. For example, if the pavement is 31 months old when the opening is made, the additional charge will be 50% over the regular charge. If the pavement is 9 months old when the opening is made, the additional charge will be 270% over the regular charge.

On Restricted Streets constructed of full depth concrete pavement or base, restoration to the nearest construction joint will be required. On Restricted Streets constructed with an asphalt surface, the wearing surface will be repaved (1 ½" thick grind and pave) for a minimum one lane width for the entire limits of the work. The lane width may vary from ten to sixteen feet (10' to 16') depending on the size and location of the trench and the width of the street. This asphalt resurfacing requirement may be waived for a single repair on a street segment where the pavement restoration area is less than 100 square feet.

IV. WARRANTY

PERMITTEE'S RESPONSIBILITY IN RESTORED AREAS

The Permittee is required to repair any defects in the restored areas that occur within a period of one year from the date of final acceptance of the permanent restoration. The Permittee shall pay any expense incurred by the City in repairing defective areas.

As stated on all DOTE Permits: "In performing work under this permit, the Permittee is responsible for all related operations, that the operations conform to all applicable statutes, rules and regulations of the City of Cincinnati, State of Ohio, and the Permittee shall defend, indemnify, and hold the City, its officers, employees, and agents harmless from and against any and all actions, suits, claims, losses, costs (including without limitations attorneys fees), demands, judgments, liability and damages arising from the work done under this permit."

To paraphrase the Licensed Street Contractor Bond Form, the Principal (Permittee) shall correct the "Unsatisfactory Work" within 30 days upon notice. In case of default by the Principal, Surety shall pay the City the full amount to properly complete the Work.

The Bond Form also includes the following statement: "The full obligation for the Principal and Surety under this bond shall extend for a period of one year from the date of final inspection by the City Inspector, of any Work performed during the license period." Please note if any original work stated on the permit is left unfinished and the permit was never "closed out" or assigned a date of final inspection, the full obligation of the Bond must be honored, regardless of the date of notification.

No disputes as to the method and type of restoration determined by the Inspector will be considered.

V. PERMIT FEES

1. **Inspection Fee (Restoration Classes)**

   This portion of the permit fees covers the cost of the Inspectors time to inspect and measure the restoration. The cost of this fee is based on the square yard area or linear foot length of the restoration class. Please note that the original permit cost is based on estimated quantities and/or time. The final cost of the permit may be adjusted based on as–built quantities and/or documented inspector overtime.

2. **Administrative Processing Charge (A.P.C.)**

   Non-refundable application fee.

3. **Additional Administrative Review Fee**

   Fee to cover the application and plan review, processing, and issuance of the permit. Cost is calculated similar to the Inspection Fee. This fee may be based on the actual review time for more complex projects involving the redesign and reconstruction of streets in the Right–of–Way.

4. **Street Opening Fee**

   This fee is assessed to compensate for the loss of integrity of street pavements resulting from the cutting, excavating and patching of the street. This fee is used as partial funding support for the street restoration program, as determined by the City Engineer. Cost is calculated similar to the Inspection Fee.

   DOTE will determine the fee based on the PCI rating of the street. If the street is restricted or has a PCI rating of 82 or above, then the Class 12 fee will be required and a minimum one-lane Grind and Pave. If the street has a PCI rating of 60 – 81, then the Class 12 fee will not be required, but a minimum one-lane Grind and Pave is required. If the PCI rating is below 60, then the Class 12 fee will not be required, and can be restored following the standard trench restoration requirements.

   This fee shall be applied to permits involving opening of street pavement. DOTE has the option not to apply this fee to Class 12 Restorations (resurfacing asphalt pavement).

5. **Other Fees**

   a. **Special Inspections**

      Charges for special inspections, as required by the City Engineer, for the facilities constructed and associated activities will be at the current hourly rate structure for the actual period worked by the Inspector. Cost depends on whether the Inspector worked on regular or overtime. These charges may be in addition to the other regulated permit fees. The hourly rate structure includes the employee hourly rate, current fringe benefits and overhead costs. This Special Inspection fee is traditionally for nonroadway items such as City owned electrical facilities and structures.

   b. **Traffic Aids**

      All necessary traffic aids and materials, furnished by the Public Services Department or services provided by DOTE Traffic Engineering Division,

shall be charged to the Permit at the time of completion. These charges will be based on documented time, equipment and material.

c. Other Charges by City Agencies

A charge will be assessed to the permit for any work that is performed by a City agency. This includes damage to the City infrastructure that requires an immediate repair.

6. Streetcar Power-Down Permits

Cincinnati City Council passed Ordinance No. 297-2021 on June 23, 2021, establishing fees for streetcar power-down permits. A specific streetcar power-down permit must be obtained in addition to any other necessary permits, and the power-down fees are in addition to any other applicable permit fees. Fees are based on the number of hours the overhead power must be shut down, with a 4-hour minimum charge.

7. Overtime Work Assignments

When the project requires inspection, at a time other than regular working hours (7:30 A.M. to 4:00 P.M. Monday thru Friday), the charge for inspection shall be at the required overtime rate for the period being worked, using the hourly rate structure. The inspection fee for the project shall be based upon the actual total of overtime hours worked.

8. Standard Inspection Fee

Fee associated with Equipment Permits.

9. Cancellation Fee

Permits cancelled by the Applicant after they have been processed and before they are issued for construction or after issuance are subject to this fee.

10. Working Without a Permit

The fees for permits for work started (excluding emergency work) without securing the proper permits in advance will be three times the amounts listed in this schedule of charges.

11. Notice of Violation Remedial Action and Civil Fine

Upon issuance of an administrative order for a notice of violation or a civil fine provided in CMC Section 722-7, the Director shall serve upon the provider a written notice in accordance with CMC Section 1501-13.

A person served with a written notice pursuant to this section may answer the charge in accordance with Section 1501-15, including an offer of proof of correction, if applicable, in accordance with Section 1501-19 within ten business days of receipt of the notice by the person being charged.

For purposes of denying a civil violation of this chapter, or offering proof of correction, the procedures contained in Section 1501-13 to Section 1501-31 shall apply to the person being charged.

City of Cincinnati

Department of Transportation & Engineering
Permit & License Center
City Hall, Room 425, 801 Plum Street
Cincinnati, Ohio 45202-1980
513-352-3463 Fax: 513-352-5397
Web Page: www.cincinnati-oh.gov/transeng/pages/-7297-/

Permit Application

Date: _____
Permit Type: _____
Permit Number: _____
*PLEASE ALLOW **7-14 DAYS** FOR PROCESSING*

New construction work requires submittal of (2) copies of plans and documents, unless otherwise requested.

Applicant/Contractor: _____ Contact Name: _____

Address of Work: _____ Phone: _____

Location of Work: _____ Fax: _____

Property Owner: _____ Email: _____

Purpose: _____

_____

Start Date: _____ Duration of work: _____

Affected Area: Length: _____ Width: _____ Other: _____

Pavement Affected

Roadway: Asph: ____ Conc. ____ Brick. ____
Sidewalk: Conc. ____ Paver. ____
Curb: Asph: ____ Conc. ____ Granite. ____

Review Agency	Reviewed By	As Noted	Resubmit	Date

Special Notes: _____

_____

_____

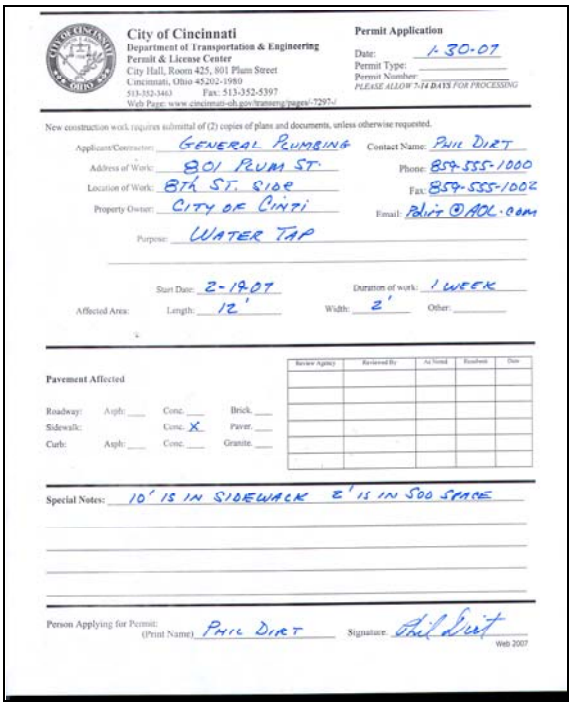
_____

_____

Person Applying for Permit:
(Print Name)_____ Signature: _____

Web 2007

Instructions for filling out General Application Form



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Cincinnati, Ohio 45202-1980
513-352-3463 Fax: 513-352-5397
Web Page: www.cincinnati-oh.gov/transeng/pages/-7297-/

Permit Application
Date: 1-30-07
Permit Type:
Permit Number:
PLEASE ALLOW 7-14 DAYS FOR PROCESSING

New construction work requires submittal of (2) copies of plans and documents, unless otherwise requested.

Applicant/Contractor: GENERAL PLUMBING Contact Name: PHIL DIRT
Address of Work: 801 PLUM ST. Phone: 859-555-1000
Location of Work: 8TH ST. SIDE Fax: 859-555-1002
Property Owner: CITY OF CINTI Email: PDirt@AOL.com
Purpose: WATER TAP
Start Date: 2-19-07 Duration of work: 1 WEEK
Affected Area: Length: 12' Width: 2' Other:

Pavement Affected

Roadway:	Asph:	Conc:	Brick:	
Sidewalk:		Conc: X	Paver:	
Curb:	Asph:	Conc:	Granite:	

Review Agency	Reviewed By	As Noted	Resubmit	Date

Special Notes: 10' IS IN SIDEWALK 2' IS IN SOD STRIP

Person Applying for Permit: (Print Name) PHIL DIRT Signature: Phil Dirt

Web 2007

Date: The date the Application is submitted.

Permit Type: For Department use only

Permit number: For Department use only

Applicant/Contractor: This is the person and or company applying for the permit. For certain types of permits the Applicant can be the Property Owner. For most other permits the Applicant must be a Contractor, which holds a current license.

Address of work: This is the actual address of the property that fronts the proposed work. If the work involves work that stretches further than a single property, any address along that street segment will suffice.

Location of Work: This is used to help describe where the work is taking place if other than in front of a specific property. The work may be on a side street or in an alley behind the property.

Property Owner: This optional information can be helpful for locating the exact address of the work.

Contact Name: This is the name of the person who is directly involved with the project and can be reached 24/7 in the case of an emergency.

Start Date: This is the date that work is proposed to commence.

Duration: The length of time required to complete all work including cleanup and restoration.

Purpose: Description of the reason for the application. Street cut, scaffolding, barricade, new tap, etc.

Affected area: The permit cost estimate for some permits is based on the size of the pavement cut and is dependant on where the cut is located; street, sidewalk, curb. Note any permit is really only an estimate determined by the information provided by the applicant. After the project is complete the DOTE Inspector will make a final inspection and any adjustments to the final cost will be billed or credited.

Length/Width: Use this space to detail the size of the area affected. For detailed street cuts additional drawings may be necessary.

Review Agency: These blocks are for internal use only.

Pavement Affected: For construction type projects, indicate the type of pavement involved.

Special notes: Use this area for any additional information.

Signature: This must be a person who is already listed on the Company Information Sheet, which you supplied when applying for your license.

COMPANY INFORMATION

MUST BE COMPLETED AND RETURNED WITH NEW BOND FORM

Date_____

Company Name: _____

Street Address: _____

City, State, Zip: _____

Telephone No: _____ Fax No : _____

COMPANY REPRESENTATIVE:

Name: _____

Title: _____

Telephone No: _____ Fax No: _____

Cell No: _____ E-Mail: _____

Provide e-mail address if you would like to receive next year's renewal information electronically (optional)

LOCAL INSURANCE COMPANY:

Agent: _____

Company: _____

Address: _____

City, State, Zip: _____

Telephone No: _____ Fax No : _____

PERSONS AUTHORIZED TO OBTAINED PERMITS:

Name: _____ Signature _____

Name: _____ Signature _____

Name: _____ Signature _____

Name: _____ Signature _____

☐ Check here if everyone from your company is authorized to obtain permits. Otherwise, if box is not checked, only people above can get permits.

city of CINCINNATI
TRANSPORTATION & ENGINEERING

NOTE - Most recent form is located on DOTE Website

city of CINCINNATI
TRANSPORTATION & ENGINEERING

Division of Engineering
Right-of-Way (ROW) Management
801 Plum Street, Suite 450
Cincinnati, OH 45202
513-352-3463

LICENSED STREET CONTRACTOR BOND FORM

For Office Use Only:
Contractor's License No._____
PW - _____

As used in this Bond, the following terms have the following meanings:

"Principal" and **"Applicant"** means _____

Street Address City State Zip Code Phone/Fax

"Surety" means_____

Street Address City State Zip Code Phone/Fax

"City" means City of Cincinnati.

"Work" means to dig, excavate, build, erect, place in jeopardy and/or repair street infrastructure.

KNOW ALL MEN BY THESE PRESENTS that Principal and Surety are held and firmly bound unto City in the sum of $_____(a minimum of $10,000) to be paid to City; and we jointly and severally bind ourselves, our heirs, executors, and assigns.

The conditions of the above obligation are such that:

WHEREAS, the Principal is an applicant for a license permitting him to obtain permits to work on City owned property within the City for the term of one year from April 1, _____, to March 31, _____, inclusive, and

WHEREAS, said work is to be accomplished so as to conform in all respects with the specifications, rules and ordinances of the City.

Now, if said license shall be issued to Principal, the Principal shall perform the Work according to the specification, rules and ordinances of the City on any City owned property; and shall upon notice from the City Engineer, within 30 days, properly complete such Work which, in the opinion of the City Engineer, is not satisfactory due to neglect, workmanship or material, then this obligation shall be void. If the unsatisfactory Work is not corrected to the satisfaction of the City, within the 30-day period, the Principal ***will be default of the obligation***. Concurrent with the notice sent to Principal, the City Engineer shall send a notice to Surety. In case of default by Principal, Surety shall pay the City, within 15 days after the default, the full amount, as determined by the City Engineer, necessary to properly complete the Work.

The full obligation for the Principal and Surety under this bond shall ***extend for a period of one year*** from the date of final Inspection by the City Inspector, of any Work performed during the license period. In the event the Principal performs additional, corrective or repair work on any project covered by this bond after final inspection by the City Inspector due to problems with that work, the full obligation for the Principal and Surety under this bond ***shall extend for an additional period of one year*** from the date of final inspection by the City Inspector of the additional, corrective or repair work.

Signed by us the _____ day of _____, _____ A.D.,

(Principal)_____
(Name) (Title)

Approved As To Form:

(Surety)_____
(Name) (Title)

_____
Assistant City Solicitor

(Surety's Bond Number)_____

INSTRUCTIONS TO APPLICANTS APPLYING FOR LICENSE IN PERSON:
Have a recognized surety company who is licensed to do business in Ohio, fill out and sign this form. ***In all cases; a notarized, dated, surety, power of attorney must accompany this bond form.*** After this bond form has been properly completed, signed by the surety company and the contractor, with power of attorney attached, present bond to Dept. of Transportation & Eng., ROW Management, Room 425, City Hall.

License Fees for 2013-2014

New License	$120
Renewal License	$ 85

For a new license or to renew a license six months into the license period (starts **October 1, 2013** through **March 31, 2014**) $ 60

A Check List to Help Expedite your Street Contractor's License

- Did you use the enclosed City of Cincinnati bond form or one downloaded from our web site?
- Is the Power of Attorney attached?
- Is the 'Surety' signature legible? If not, please print name under signature.
- Did you sign the bond form?
- Did you fill out and enclose the Company Information Sheet?
- Did you enclose a **signed** check for the proper amount?

Please submit to:

City of Cincinnati
Department of Transportation & Engineering
801 Plum St., Rm. 450
Cincinnati, OH 45202
Attn: ROW Mgmt.

city of CINCINNATI
TRANSPORTATION & ENGINEERING

NOTE - Most recent form is located on DOTE Website

City of Cincinnati
Department of Transportation and Engineering

Harry Black, City Manager

Right-of-Way License and Permit Fees
Effective 4/1/2007 *(rev. 2/1/11)
Street Opening Fee Revised 3/1/2018

Street Contractor License Fees (CMC §721-87)		
Description	**New**	**Renewal**
Full-Year (April 1 thru March 31)	$120.00	$85.00
Half-Year (October 1 thru March 31)	$60.00	

Street Opening Permit Fees (CMC §721-35)					
ID	**Description**	**Units**	**Standard Quantity**	**Standard Fee**	**Additional Unit Fee**
	Administration Fee	Sq. Yd.	2 Sq. Yds. or less	*$36.00	$0.20
	Inspection Fees				
01	Pavement - Concrete	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
02	Pavement - Asphalt on Ornamental Base	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
02a	Pavement - Ornamental	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
03	Pavement - Asphalt on Concrete Base	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
04	Pavement - Asphalt	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
05	Roadway - Substandard	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
06	Sidewalk - Concrete/Asphalt Concrete	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
06a	Driveway - Concrete/Asphalt Concrete	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
07	Complete Resurface - Concrete Base	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
08	Complete Resurface - Aggregate Base	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
09	Sodding or Seeding	Sq. Yd.	2 Sq. Yds. or less	$30.00	$1.40
11.1	Curbing - Concrete	Lin. Ft.	10 Lin. Ft. or less	$50.00	$2.00
11.2	Curbing - Asphalt	Lin. Ft.	10 Lin. Ft. or less	$50.00	$2.00
12	Asphalt - Surface Only	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
13.1	Ditches - Improved Concrete	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
13.2	Ditches - Improved Asphalt	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
13.3	Ditches - Unimproved	Sq. Yd.	2 Sq. Yds. or less	$50.00	$4.00
14	Road Grinding	Sq. Yd.	10 Sq. Yds. or less	$50.00	$4.00
15	Joint Sealing	Lin. Ft.	500 Lin. Ft. or less	$50.00	
15	Joint Sealing	Lin. Ft.	Over 500 Lin. Ft.	$70.00	
16	Seal Coating	Sq. Yd.	1,000 Sq. Yds. or less	$120.00	$0.15

Street Opening Fees (CMC §721-35)				
Description	**Units**	**Standard Quantity**	**Standard Fee**	**Additional Unit Fee**
Pavement Life Reduction Fee (before 3/1/2018)	Sq. Yd.	2 Sq. Yds. or less	$18.00	$1.50
Pavement Life Reduction Fee (rev. 3/1/2018)	Sq. Yd.	Area = (Length+3.5') x (Width +3.5')	No Fee	$6.00

Right-of-Way License and Permit Fees
Effective 4/1/2007 *(rev. 2/1/11)

Sidewalk Repair Permit Fees (CMC §721-75)		
Description	**Driveway Width at Street Pavement**	**Fee**
Sidewalk (50 linear feet or less), including one driveway	20 linear feet or less	$22.00
	Over 20 linear feet	$24.00
Each additional 50 linear feet of sidewalk or fraction thereof		$7.00
Each additional driveway	20 linear feet or less	$9.50
	Over 20 linear feet	$12.00

Equipment Permit Fees (CMC §721-35)			
Description	**Units**	**Standard Quantity**	**Fee**
Administrative Fee	Each	Each	*$36.00
Inspection Fee	Each	Each	$50.00

Excess Load Permit Fees (CMC §517-37)				
Description			**Round Trip Fee**	**Monthly Fee**
Each vehicle weighing 40 tons or less with any specified dimension greater than	Width:	8 feet 6 inches	$40.00	
	Height:	13 feet 6 inces		
	Length:	53 feet 70 feet (for trains of 3 or more units)		
Each vehicle weighing 40 tons or more			$75.00	$260.00

The Police Chief may apply a different fee schedule if a police escort is required.

Fire Kettle Permit Fees (CMC §723-79)		
Description	**Per Month**	**Per Additional Week**
Each fire kettle at each location	$75.00	$25.00

Permit Cancellation Fees (CMC §721-35)				
Description	**Units**	**Standard Quantity**	**Standard Fee**	**Additional Unit Fee**
Cancellation before issuance of permit	Each	Permit	*$36.00	
Cancellation after issuance of permit	Each	Permit	*$86.00	

Right-of-Way License and Permit Fees
Effective 4/1/2007 *(rev. 2/1/11)

Sidewalk Barricade Permit Fees (CMC §723-91)				
Description	**Units**	**Location**	**First Month**	**Per Additional Week**
For temporary canopy, barricading of, or storage of materials upon a sidewalk for construction or demolition	For each 25 linear feet or fraction thereof:	District A	*$94.00	*$28.00
		District B	*$74.00	*$23.00
		District C	*$38.00	*$14.00

Fees reduced by 50% when permittee is required to keep one-half or more of sidewalk space open to the public; fees reduced by 25% if the permittee is required to keep less than half of the sidewalk width open to the public. Minimum fee is *$30.00.

Roadway Barricade Permit Fees (CMC §723-93)				
Description	**Units**	**Location**	**First Month**	**Per Additional Week**
For temporary barricading or use of, including temporary walkway, or for the storage of materials upon any roadway or public space other than the sidewalk space for construction or demolition.	For each 25 linear feet or fraction thereof:	District A	*$238.00	*$64.00
		District B	*$182.00	*$50.00
		District C	*$46.00	*$16.00

Other Barricade Permit Fees (CMC §723-95)			
Description	**Units**	**First Month**	**Per Additional Week**
For a temporary construction hoist, enclosure, or canopy which contains, embraces, or supports a temporary office, warehouse, storage bin, or similar structure, in addition to the fees prescribed in CMC §723-91 and §723-93 (Hoisting operations associated with the installation or removal of mechanical equipment or materails or electrical equipment or materials may not be construed to be construction or demolition operations.)	Per Unit	*$134.00	*$38.00
For use of guy ropes on derricks or hoists across a street, alley, or other public space, for construction or demolition.	Per Location	*$42.00	*$15.00

Additional Inspection Fee Rates (CMC §721-35)		
Description	**Units**	**Fee**
Straight Time (1x) - REG	Hour	$38.50
Overtime (1-1/2x) - OTH	Hour	$57.75
Double Time (2x) - OT2	Hour	$77.00

Right-of-Way License and Permit Fees
Effective 4/1/2007 *(rev. 2/1/11)

License and Permit Fee Notes		
1	Sidewalk and Roadway Barricade Permits	District A: Area bounded by the: north property line of Twelfth Street on the north Ohio River on the south; east property line of Broadway on the east; and west property line of Central Avenue on the west. District B: Area within boundaries of a Neighborhood Business District District C: All areas outside of District A and District B

city of CINCINNATI
TRANSPORTATION & ENGINEERING

RESIDENT PERMIT PARKING APPLICATION

APPLICATION DATE: ____ /____ /____

NAME: _____

ADDRESS: _____
Street No. Street Name Apt. No. Zip Code

HOME PHONE: _____ WORK PHONE: _____

EMAIL ADDRESS: _____

LICENSE PLATE NUMBER AND STATE: _____
For yearly and half year permits only

☐	YEARLY PERMIT	($30) ___QTY.	☐	YEARLY VISITOR PASS	($30)
☐	HALF YEAR PERMIT	($15) ___QTY.	☐	HALF YEAR VISITOR PASS	($15)
☐	TEMPORARY PASS	($5) ___QTY.			

NOTE: 1. Maximum of 2 permits per year in any combination of yearly and/or half year.
2. Maximum of 1 visitor pass per year whether yearly or half year.
3. Unlimited number of temporary passes allowed. Valid for two weeks from date of purchase.

** As part of the application process, proof of residency via a valid driver's license or vehicle registration and a utility bill or signed lease with the same address are required. Nonresident business owners (and employees) must prove current employment with a lease, pay stub, or W2 form, in the RPP district.

_____
Signature of the applicant

FOR CITY USE ONLY

DOTE Permit No.: _____

Total Cost: _____

VERIFICATION:

REQUIRED	AND	REQUIRED
____Driver's License		___ Utility Bill
OR		OR
____Vehicle Registration		___ Signed Lease
		OR
		___ Other: _____

Rev. 7/22/11

NOTE - Most recent form is located on DOTE Website

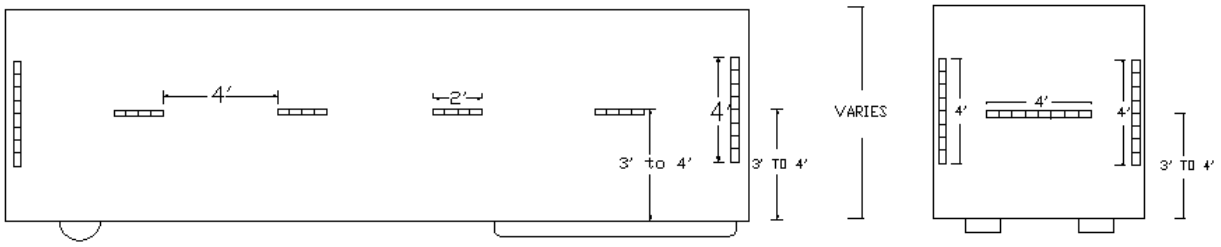
All containers, roll-off boxes, and dumpsters within the City of Cincinnati Rights-Of-Way shall be properly identified on two opposite sides of the box or container with the company name, telephone number (24/7), and container number. Containers, dumpsters and roll-off boxes placed within City of Cincinnati rights-of-way shall also be marked with retroreflective conspicuity tape in the following manner:

a) **Container Ends**
Each container end shall be marked with two vertical strips, four feet in length, mounted two feet above and two feet below the vertical center point of the container and within six inches of each corner. In addition, one four-foot long horizontal strip equally divided at the horizontal center point of the box. The horizontal strip shall be placed three to four feet above the bottom of the container.

b) **Container Sides**
Each long side of the container shall be marked with two vertical strips, four feet in length, mounted two feet above and two feet below the vertical center point of the container and within six inches of each corner. Horizontal tape shall be mounted in two-foot strips with four feet between each strip extending the length of the container. The horizontal strips shall be placed three to four feet above the bottom of the container and shall be consistent across the side of the container.

All material shall be two-inch to four-inch wide retroreflective conspicuity tape type 3M SCOTCHLITE DIAMOND GRADE CONSPICUITY SERIES 985 (RED 6" / WHITE 6") or its equivalent.

The container owner shall keep all retroreflective taping clean and in good condition to maintain maximum reflectivity. The City of Cincinnati may refuse or revoke permits for containers not in compliance.

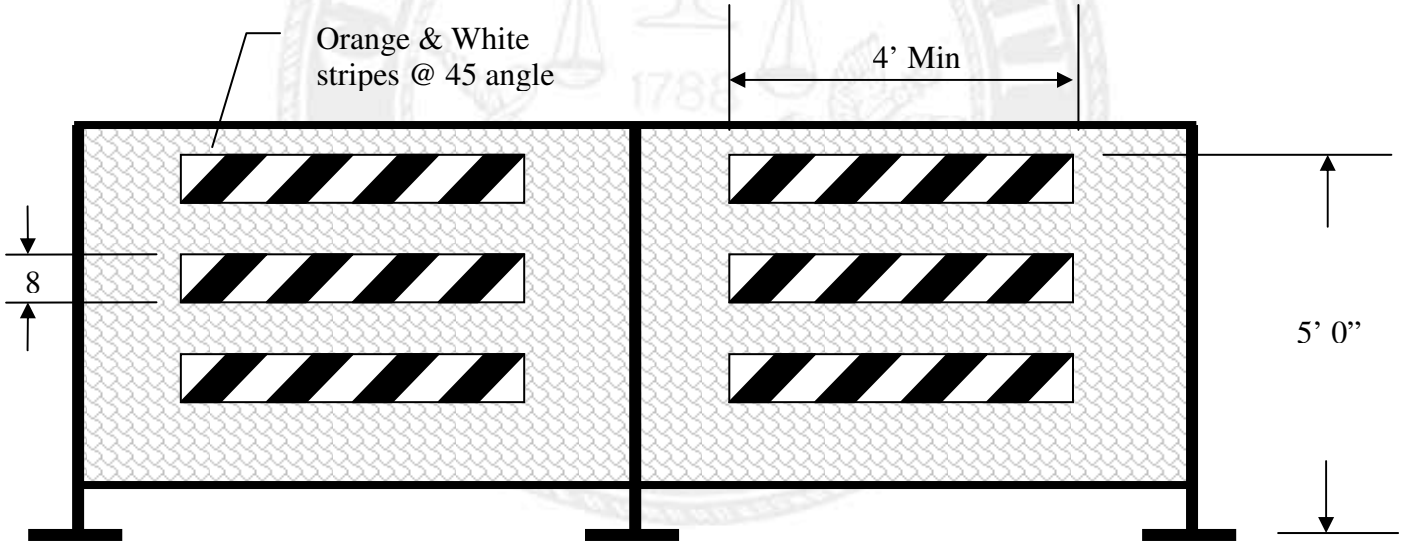


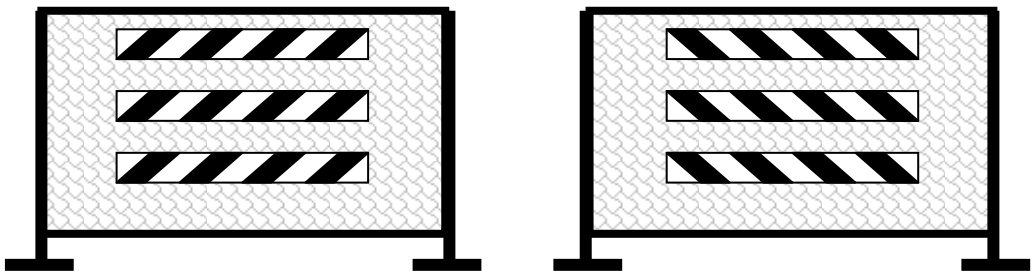
Side View End View

Construction/Barricade Fences

The construction/barricade shall be securely erected independent of any street roadway, sidewalk, or paved surface.

No sign or material may be fastened to the fence except for approved traffic control aids and (1) project identification sign. The project sign is for information only and cannot include advertising.





Traffic passes to left **Traffic passes to right**

For road closures, a ROAD CLOSED sign, and a Detour Arrow sign shall be used and mounted to the barricade.

See City of Cincinnati "Traffic Safety Handbook", "Street Restoration Book", and Ohio MUTCD for additional information.

REQUEST FOR A REVOCABLE STREET PRIVILEGE INFORMATION SHEET

OWNERSHIP INFORMATION

Property Owner's
Name_____
(Permittee must be the property owner or recognized community group)

Owner's Mailing
Address_____

_____

Contact Phone Number_____

Contact E-Mail Address_____

REVOCABLE STREET PRIVILEGE LOCATION

Street Address: _____

Hamilton County Auditor's Book: _____ Page: _____ Parcel: _____

TYPE OF ENCROACHMENT – Circle Number

(See attached sheet for conditions and additional information required)

1. Removable structure attached to building such as an awning, canopy, sign, light, banner, flag, fire escape, etc.
2. Fence or other free standing temporary structure
3. Planters or Landscaping (Installation and Maintenance)
4. Outdoor Café Seating
5. Emergency Doors that swing into Right-Of Way
6. Sidewalk pavers or decorative or colored concrete sidewalk
7. Monitoring Wells
8. Community Sign, Historical Marker, or Bus Stop Shelter (Structures with poles and/or foundations)
9. Attachments to City owned utility poles in the Right-Of Way (cigarette ash receptacles, sensors, monitors, etc.)
10. Park Bench
11. Private Utility
12. Driveway on Paper Street
13. Other encroachments
    Description_____

    _____

A LETTER DESCRIBING THE REASON FOR THE REQUEST for a Revocable Street Privilege, along with detailed drawings (if applicable), must be attached to this form and sent to:

City of Cincinnati
Real Estate Division
City Hall, Room 122
801 Plum Street
Cincinnati, OH 45202-1927
513-352-5362

The Guide to

Sidewalk Safety

Prepared by

city of CINCINNATI
TRANSPORTATION & ENGINEERING

Rev. July 2021

The Importance of Sidewalks

Sidewalks are one of the City's greatest assets and an important part of the City's infrastructure. They are vital to livable neighborhoods and thriving business districts. They connect our homes, neighborhoods, parks, recreational facilities, schools, and businesses. Safe and aesthetic sidewalks promote neighborhood interaction and enhance property value.

Sidewalks need occasional repair to keep them safe and useful. ***This brochure clarifies how property owners share in the responsibility of maintaining safe sidewalks, as well as how the City of Cincinnati can assist property owners with this responsibility.***

Together, we can keep Cincinnati's sidewalks safe, attractive, and a source of community pride.

Who's responsible for safe sidewalks?

Property owners and the City of Cincinnati have a joint responsibility for maintaining sidewalks.

Sidewalks are part of the City street system and are located in the City right-of-way. Property owners often question why they are asked to maintain this "public" property. The answer can be found in the Ohio Revised Code (ORC) Chapter 729, as well as the Cincinnati Municipal Code (CMC). Section 721-147 of the CMC requires the abutting property owner to maintain the sidewalk space in good condition and free from nuisance. This section of the CMC has been in existence for over 130 years, and is a common requirement in cities of similar size.

The City of Cincinnati is responsible for repairing sidewalks at corners, curb ramps, and bus stops.

Property owners are responsible for repairing sidewalks, structural sidewalks (i.e. sidewalks and coverings over basements, cellar doors, gratings, and vents), and driveways.

In some instances, residential property owners (3 family or less) that have public sidewalks along more than one side of their property are only responsible for sidewalk repairs on one side. The City is responsible for maintaining the additional sidewalk, in this case. Property owners are still responsible for all driveways that lead to their property. The sidewalk frontage that is the property owner's responsibility is determined by the following criteria:

1. The sidewalk frontage where the driveway exists;
2. If there are no driveways or multiple driveways, the sidewalk frontage that the street address is based on;
3. If neither apply, the City Engineer shall determine the appropriate sidewalk frontage based on typical frontages for adjacent parcels in that area.

Owners of commercial properties and some residential properties (4 family or more) are responsible for sidewalks and driveways on all sides of their property.

Who decides if a sidewalk is safe?

The Department of Transportation and Engineering (DOTE) oversees the Sidewalk Safety Program.

DOTE Inspectors respond to requests and complaints of sidewalk hazards. Inspectors evaluate the sidewalk in accordance with condemnation guidelines approved by Cincinnati City Council. These guidelines were developed in accordance with the Americans with Disabilities Act (ADA), legal precedents for liability, condemning criteria from other cities, and community standards. The goal of inspection is to provide safe sidewalks for all.

What happens when an Inspector finds a defective sidewalk?

A DOTE Inspector will mark sidewalk blocks that require replacement by the property owner with a white "X". Blocks that will be replaced without charge to the property owner are marked with a white "C".

A *Notice to Repair* is then sent to the property owner, which will include the number of sidewalk blocks and/or driveways that must be replaced. The Notice will also include replacement options and estimated costs.

Emergency Repairs:

An "EMERGENCY" condition is defined as impassable or hazardous for all users. These conditions are considered urgent and if not addressed, could cause harm to those using the sidewalks along your property.

DOTE Inspectors may determine that a sidewalk is so unsafe or deteriorated, that a hazardous condition exists. In this case, the property owner will receive an EMERGENCY Notice to Repair.

What defects do Inspectors look for?

DOTE Inspectors are primarily looking for issues that may cause a person injury now or in the near future. Some of the most common reasons for repair include:

- Offset sidewalk blocks, where one block is raised or sunken more than 5/8 inch from an adjacent block.
- Sidewalks with gaps or cracks.
- Sidewalk blocks where the surface is severely damaged or pitted.
- Sidewalk blocks with depressions that are likely to collect water or mud, which can freeze in cold weather.

Some sidewalks may not fall under the City's condemnation criteria. However, these blocks will continue to deteriorate and require repair in the future. For efficiency, DOTE recommends that property owners consider future needs when making repairs.

Who repairs sidewalks damaged by City trees?

Sidewalks damaged by City tree roots are the responsibility of the abutting property owner. Once a damaged sidewalk block is removed, the contractor will inspect the underlying root to minimize future damage. If the root is smaller than 4 inches in diameter, the root will be cut off and removed. The resulting void will be filled with soil and compacted.

If the root is larger than 4 inches in diameter, the contractor must contact the City's Urban Forestry office at (513)861-9070. An Urban Forester will respond as soon as possible to evaluate the roots. The contractor will then be advised if the root can be cut and removed. If cutting the root will damage the tree or make the tree unstable, Urban Forestry may remove the tree and the contractor can continue with the sidewalk repair.

What if I disagree with the inspector's evaluation of my sidewalk?

If you disagree with the markings on your sidewalk, or the number of sidewalk blocks in need of repair, you may contact the Sidewalk Safety Program and request to meet with the Inspector to review their evaluation.

If you are still not satisfied, you may request a hearing before the Sidewalk Board of Appeals. You must request a hearing in writing, prior to the expiration of your *Notice to Repair* letter. Appeals may be made to *Transportation & Engineering City Engineer, Room 450, 801 Plum Street, Cincinnati, Ohio 45202*. You are required to appear before the Board, which consists of DOTE's Director and City Engineer, a Law Department representative, and two Citizen members. Board meetings are held once a month.

What guidelines do I have to follow for sidewalk replacement?

All work, whether completed by the property owner or a licensed & bonded contractor should follow City Standards.

All construction in the public right-of-way must be completed under a permit obtained from the DOTE's Permit Office. Construction completed without a permit is subject to a $100.00 fine.

Concrete is required to be ready-mix ODOT "Class QC-1", formed, placed, finished, and sealed to the City Standard. It will require inspection by a DOTE inspector. Concrete bag mix is NOT permitted.

Concrete sidewalks shall be five inches (5") thick. Concrete driveways may only be constructed by a licensed contractor and shall be no less than seven inches (7") thick.

What options do I have for sidewalk replacement?

If you receive a *Notice to Repair*, you may choose how the repair is completed.

Property owners may choose from three options when completing the required work: Property owner replacement, Contractor replacement, or City replacement.

DEADLINE EXTENSIONS ARE NOT PERMITTED

Property Owner Replacement:

Property owners may replace up to 65 square feet of sidewalk. ***A permit must be obtained from the Department of Transportation and Engineering Permit and License Office in City Hall, Room 425, 801 Plum Street, Cincinnati, Ohio 45202.***

Property owners may not repair or replace driveways or structural sidewalks (i.e. sidewalks and coverings over basements, cellar doors, gratings, and vents), unless licensed by the City of Cincinnati.

Contractor Replacement:

Property owners may hire a contractor to replace sidewalk and driveway areas that are in need of repair. An estimated cost to have the City perform the work is included in the *Notice to Repair*, which can help when evaluating bids from other contractors.

All contractors working on the sidewalk (right-of-way) are required to be licensed and bonded with the City. This provides protection for the property owner, as the contractor must post a bond that insures their work for one year against defects. If issues with the work arise, the City may contact the bonding company to resolve.

A list of licensed contractors is included with the *Notice to Repair*. DOTE recommends getting multiple bids, joining with neighbors that also require replacement, and/or evaluating future needs when hiring a contractor, to reduce the overall cost.

Your contractor must obtain a permit from DOTE prior to starting any work. The permit includes an inspection by the City. The Inspector will check the work to verify it meets City standards.

City Replacement:

If the required work is not completed by the expiration date on the *Notice to Repair*, a City contractor will complete the required replacement. ***The abutting property owner will receive a bill for the work.***

Property owners may also choose to have the City perform the replacement. An estimated cost to have City Contractors perform the required work is included with the *Notice to Repair*. This estimate includes construction costs, permit fees, and administrative fees.

If you prefer to have the City perform the work, please contact the Sidewalk Safety Program by phone or email. Please note, there may be a gap between the *Notice to Repair* expiration date and the actual repair date, as the City performs repair work over a large area.

When does the property owner pay if the City does the work?

After the City Contractor's work is accepted by the City, the property owner will be billed for the cost of the repairs.

If you have questions or comments about the bill you received, please contact the Sidewalk Safety Program by phone or email.

If you are still not satisfied, you may request a hearing before the Sidewalk Board of Appeals. You must request a hearing in writing, prior to the due date of the billing statement. Appeals may be made to *Transportation & Engineering City Engineer, Room 450, 801 Plum Street, Cincinnati, Ohio 45202*.

What payment options are available if the City does the work?

The City offers two options for property owners to pay their repair bills:

1. Pay the bill in full by the due date. **PARTIAL PAYMENTS ARE NOT ACCEPTED.**
2. Have the bill collected with your property taxes.

Assessment Details:

Property owners have the option to distribute their repair bill over a 3-year term, 5-year term, or a 10-year term.

- 3–year semi-annual payments (six payments total)
- 5-year semi-annual payments (ten payments total)
- 10-year semi-annual payments (twenty payments total)

If you wish to take advantage of one of these payment options, please mark the appropriate box on your bill and return it.

If the bill is not paid by the due date, and no payment option has been selected, the bill will automatically default to the 3-year semi-annual payment option.

These payments are made with your property tax payments to the County Treasurer. For more information about payment options, please call or email the Sidewalk Safety Program.

Calculating the Payments for your Tax Bill

The semi-annual payments are calculated the same as most home mortgage payments. Interest is calculated based on the total bill (principal) amount owed. The interest is then added to the principal amount and divided into the number of payments chosen, similar to a mortgage payment schedule.

Interest charges are based on the unpaid balance. As a result, there are higher interest charges at the beginning of the assessment, and the interest charges gradually decrease as the principal is paid.

	3 Year	5 Year	10 Year
Construction Costs	$ 1,000.00	$ 1,000.00	$ 1,000.00
Administrative Fee (15%)	$ 150.00	$ 150.00	$ 150.00
Permit Fee	$ 22.00	$ 22.00	$ 22.00
Total Bill (Principal)	$ 1,172.00	$ 1,172.00	$ 1,172.00
2021 Interest Rate*	3.16%	3.36%	3.93%
Total Interest	$ 65.66	$ 111.00	$ 256.68
Semi-Annual Payment Amount	$ 206.28	$ 128.30	$ 71.43
Total Loan Amount**	**$ 1,237.66**	**$ 1,283.00**	**$ 1,428.68**

**Interest Rates change annually*
***An additional 3% collection fee is assessed by Hamilton County.*

Where do I apply for a permit?

In Person: DOTE Permit and License Office in City Hall, Room 425, 801 Plum Street, Cincinnati, Ohio 45202.

Online: www.cincinnati-oh.gov/dote/permits-licenses/dote-resource-center/

Phone: (513) 352-3463

Email: row.permits@cincinnati-oh.gov

Fax: (513) 352-5397

Good Sidewalks make Good Neighborhoods!

Sidewalks have a way of bringing a neighborhood together.

When sidewalks are in good condition, the neighborhood becomes a more desirable place to live – ask any realtor.

Sidewalks serve many purposes. Sidewalks can be a recreation space for walkers, joggers, families, and neighbors alike, to make use of the most basic form of transportation – walking!

They're our sidewalks.
Be proud of them.
Take care of them.
And enjoy them!

DOTE Sidewalk Safety Program
Phone: (513) 352-4503
SidewalkSafetyProgram@cincinnati-oh.gov
Cincinnati City Hall
801 Plum Street, Room 425
Cincinnati, Ohio 45202

SIDEWALK CONDEMNATION GUIDELINES

BACKGROUND

Sidewalks represent an important part of our transportation system and a considerable investment by the citizens of Cincinnati. Cincinnati Municipal Code (CMC) Sect. 721-1-S defines sidewalk as *"...the portion of a street lying between the established or presumable curb line and the adjacent property line; the portion set aside for pedestrian use."* According to CMC Sect. 721-147 abutting property owners are responsible for maintaining the sidewalk and keeping it free from nuisance. When the City finds that the sidewalk is not in good repair or is not free from nuisance, CMC Sect. 721 -149 directs that the abutting property owner be notified to perform the necessary work to correct the condition. CMC Sect. 721-163 makes owners of abutting property responsible for funding construction and maintenance relating to sidewalks. Finally, as stated in CMC Sect. 721-67, the City Engineer is responsible for supervising sidewalk construction, reconstruction, or repair.

This document provides standards for condemning sidewalks. Driveways are considered part of the sidewalk, and the portion of a driveway between the curb line and a concrete walk is referred to as the driveway apron. Condemnation of sidewalks should be principally based upon public safety, usability, and access requirements. Some standards have been interpreted from the Americans with Disability Guidelines. These condemnation criteria fall into three general categories: geometric, condition, and miscellaneous. Sidewalks may be condemned on the basis of one or more of the following conditions. Reasonable judgment must be exercised in applying these standards to field situations.

The only acceptable way to repair a condemned block of concrete sidewalk or driveway is to remove and replace the entire block from joint to joint.

A. GEOMETRIC CRITERIA

Geometric criteria describes a defective sidewalk that presents concern due to adverse cross slope, significant offsets, irregular surface finish, etc. The following geometric criteria will be used to guide condemnation evaluation:

- Blocks, or portions thereof, having an edge that differs vertically by 5/8" or more from the adjacent sidewalk or top of curb surface, which, in the opinion of the City Engineer's representative, presents a safety hazard to the public. Sidewalk offset at the curb should only be condemned if sidewalk would hold water or if in area where pedestrians would be crossing from the sidewalk over the curb at crosswalks, bus stops, or parking spaces.

- Sidewalk or driveway joints where blocks are separated horizontally from adjacent sidewalk blocks or curb by 3/8" or more. Where a separation under 1" occurs between

adjacent non-condemnable blocks, preformed expansion joint material or an approved DOTE equal can be used to fill this gap.

- Blocks that cause an abrupt change in longitudinal grade of the sidewalk. The change in the longitudinal slope shall be no greater than 2% every 5'.

- Blocks adjacent to condemned blocks, which, if left in place, would require the replaced block to be constructed at an improper grade.

- Blocks having depressions or below curb grade which are likely to impound water; promoting the formation of ice or accumulation of mud.

- Wheelchair ramps with vertical offset of 1/4" or more in height measured at the wheelchair entrance from the gutter to the top of the curb.

B. CONDITION CRITERIA

Condition criteria describes defective sidewalks that present concern due to concrete deterioration, improper finishing, damage, etc. The following condition criteria will be used to guide condemnation evaluation:

- Blocks with a crack in width of 3/8" or more.

- Blocks with multiple smaller cracks.

- Blocks with a surface finish that does not provide a coefficient of friction of 0.5.

- Blocks, which are severely spalled or holed with loose or missing aggregate, which shows signs of rapid deterioration.

- Blocks that are damaged or may be damaged by adjacent sidewalk repairs.

- Sidewalks and driveway block which, in the opinion of the City's Sidewalk inspector, present a safety hazard to the public.

- Structural slabs, appurtenances, and their supporting elements that, in the opinion of the City' Structural Engineer, are structurally unsafe. The City may require the property owner to retain a private structural engineer to evaluate such conditions and provide recommendations to the owner and the City regarding necessary actions. After review by the City, the owner shall be responsible to carry out all recommendations.

C. MISCELLANEOUS CRITERIA

The following miscellaneous criteria will be used for condemnation evaluation:

- Sidewalk surfaces or material placed in the right-of-way without a permit or a Revocable Street Privilege.

- Sidewalk construction in the right-of-way without proper inspection.

- Cellar doors, gratings, or coal hole covers not flush with the adjacent sidewalk or curb; not having a flat surface; having projecting hinges; having significant corrosion; or having openings in excess of 3/8”; or, in the opinion of the sidewalk inspector, poses a hazard.

- Abandoned driveways or structures must be removed in accordance with CMC Sect. 721-102 and Sect. 721-102.

- Undermined sidewalk.

- Dirt and debris covering a walk must be removed to accommodate inspection and provide a safe walking surface.

- Asphalt sidewalks or driveways are not permitted on improved streets with curbs. Asphalt sidewalks or driveways may exist on unimproved streets or where approved by the City Engineer.

EXISTING SIDEWALK OR DRIVEWAY REPAIR - Permit Procedure

To construct a new or relocated sidewalk in the Right-of-Way, a Street Opening Permit is required.

To reconstruct an existing walk or drive in the same location in the Right-of-Way, a Sidewalk/Driveway Repair Permit is required. Use the following procedures:

1. A LICENSED STREET CONTRACTOR must construct all sidewalk or driveway repairs.

2. An unlicensed property owner may be issued a Permit to repair sidewalks if the repair area is less than 65 square feet. All work shall be in accordance with City Standards. Unlicensed property owners are not permitted to perform driveway repairs.

3. The minimum thickness of the walk is 5". The minimum thickness of the concrete drive is 7". Concrete shall be in accordance with ODOT Construction and Material Specification 499 (Class C Concrete, 4000 PSI, Air entrained). Surface of concrete shall receive a broom finish. All concrete must be ready-mixed concrete supplied by an ODOT approved concrete company.

4. Driveways shall be reconstructed in accordance to City of Cincinnati Standard Drawings Acc. Nos. 21508.

5. Driveways within the right-of-way of an improved roadway shall be constructed of concrete. Driveways within the right-of-way of an unimproved roadway shall be constructed of concrete or asphalt. All others materials will require a Revocable Street Privilege (RSP).

6. The minimum thickness of an asphalt driveway in the Right-Of-Way is 10". Asphalt shall be in constructed in accordance with the ODOT Construction and Material Specifications.

NEW, RELOCATED, OR EXTENDED SIDEWALK - PERMIT PROCEDURE

To reconstruct an existing walk or drive in the same location in the Right-of-Way, a Sidewalk/Driveway Repair Permit is required.

To construct a new, relocated, or extended sidewalk in the Right-of-Way, a Street Opening Permit is required. Use the following procedures:

1. A LICENSED STREET CONTRACTOR must construct all new or relocated sidewalks.

2. When applying for a permit to install a new or relocated sidewalk, APPLICANT must submit three copies of a site plan for review and approval. The site plan must show ALL utilities (i.e. subsurface utilities, manholes, utility service shut-off valves, fire hydrants, utility poles, drain/catch basins), and trees, signs, and property lines.

   To have the location of subsurface utilities marked on the ground at the location of the new walk, call the Ohio Utilities Protection Service (OUPS) at 1-800-362-2764.

3. Special Surfaces – All sidewalks shall be constructed with standard gray concrete with joints placed every 4' to 5'. All other materials will require a Revocable Street Privilege (RSP).

4. Minimum width and location of sidewalks
   Residential – Back of concrete walk must be located 8'-0" off the face of curb. The width of the unobstructed concrete walk shall be 5'-0". The 3'-0" strip between the face of curb and front of walk may be filled with sod, concrete, or pavers (if approved).

   Neighborhood Business District– Back of concrete walk must be located 9'-0" off the face of curb. The width of the unobstructed concrete walk shall be 6'-0". The 3'-0" strip between the face of curb and front of walk may be filled with sod, concrete, or pavers (if approved).

   Trees – If trees are to be planted, the strip between the face of curb and the front of the walk shall be 4'-0".

   Sidewalk Gratings - No grating shall encumber a sidewalk to the extent that less than 4'-0" of continuous non-grated walkway is provided through the area. If the non-grated area is adjacent to the curb there must be a minimum of 6'-0" of continuous non-grated walkway provided. No grating shall pass a ½ inch square device or have any circular opening measuring greater than 5/8 inch.

Limited Right-of-Way – Minimum widths and locations of sidewalks can be reduced if approved by the City Engineer.

5. The maximum cross slope of the walk is 2.0%. Longitudinal slope may not change more than 2.0% every 5 feet.

6. Curb ramps at street corners and legal crossings shall be constructed in accordance with City Standards and this Manual.

7. The minimum thickness of the walk is 5". Concrete shall be in accordance with ODOT Construction and Material Specification 499 (Class C Concrete, 4000 PSI, Air entrained). Surface of concrete shall receive a broom finish.

8. All concrete must be ready-mixed concrete supplied by an ODOT approved concrete company.

NEW OR RELOCATED DRIVEWAY - PERMIT PROCEDURE

To reconstruct an existing walk or drive in the same location in the Right-of-Way, a Sidewalk/Driveway Repair Permit is required.

To construct a new or relocated driveway in the Right-of-Way, a Street Opening Permit is required. Use the following procedures:

1. Check with the Zoning Section in the Building Department at 513-352-2430 to determine if there are zoning code issues.

2. Based on traffic safety criteria, restrictions may apply if driveway is near a street intersection, legal crosswalk, or in a posted school zone.

3. A LICENSED STREET CONTRACTOR must construct all new or relocated driveways.

4. When applying for a permit to install a new or relocated sidewalk, APPLICANT must submit three copies of a site plan for review and approval. The site plan must show ALL utilities (i.e. subsurface utilities, manholes, utility service shut-off valves, fire hydrants, utility poles, drain/catch basins), and trees, signs, and property lines, and the nearest intersection.

5. To have the location of subsurface utilities marked on the ground at the location of the new walk, call the Ohio Utilities Protection Service (OUPS) at 1-800-362-2764.

6. Driveways within the right-of-way of an improved roadway shall be constructed of concrete. Driveways within the Right-Of-Way of an unimproved roadway shall be constructed of concrete or asphalt. All others materials will require a Revocable Street Privilege (RSP).

7. Driveways on unimproved streets must be shaped to conform to existing drainage ditches. Drainage conduit may be installed under driveways with a 12 inch corrugated pipe constructed of non-rusting material. Any construction of or modifications to drainage systems must be per approval of the City Engineer in accordance with Municipal Code 721-63 and 721-65.

8. Maintain the following distances from utilities:

Fire Hydrant	5 feet
Utility Pole	5 feet
Drain/Catch Basin	5 feet
Tree	10 feet to center of tree

9. The minimum thickness of a concrete driveway is 7". Concrete shall be in accordance with ODOT Construction and Material Specification 499 (Class C Concrete, 4000 PSI, Air entrained). Surface of concrete shall receive a broom finish.

10. All concrete must be ready-mixed concrete supplied by an ODOT approved concrete company.

11. The minimum thickness of an asphalt driveway is 10". Asphalt shall be in accordance with ODOT Construction and Material Specification 301 and 448.

12. The private driveway minimum width is 8'-6".

13. The minimum width of a driveway approach curb cut opening (from full height curb to full height curb) is 18'-0" for residential applications, 25'-0" for commercial applications. The maximum width of the curb cut opening is 38'-0" for residential applications, 43'-0" for commercial applications. The driveway width of the curb cut opening shall not exceed 60% of the property's frontage. On unimproved streets (no curb exists), the curb cut width shall be measured at the edge of the roadway pavement.

    Driveway grades shall be designed in accordance with City of Cincinnati Standard Drawings Acc. No. 21439. Driveways shall be constructed in accordance with Acc. Nos. 21436 or 21516. The modified commercial driveway (Acc. No. 22855) may only be used when authorized by the City Engineer.

14. The driveway approach shall not cross the projected adjacent property line.

15. Twenty-five feet of driveway behind the roadway must be hard-surfaced, (i.e. concrete asphalt, or pavers) for multi-family (3 units or more) or commercially zoned property.

PROCEDURE FOR POSTING "NO PARKING" SIGNS

1. Original request must be submitted in person at the respective Police District office before 3:00 p.m. on the day prior to the requested date for the posting. **"No Parking" signs must be posted a minimum of 14 hours prior to the enforcement period.**

2. The request, preferably on the contractor's letterhead, should contain the following information:

   - Explanation for the request, the date and times (requests will be honored for days indicated on signs),
   - A contact person's name and telephone number; and
   - Locations of work to be performed.

3. The contractor may request to post a sign that indicates Monday – Friday (with specific times listed). This request should be made out of necessity, not convenience.

4. The information will be entered into the Police blotter. The second and third shift Police Officers will check to see if the signs are posted. This makes violations enforceable.

5. If a contractor is unable to perform the work on the requested date, the contractor should return to the Police District office to ask for an extension. The Police blotter is updated with the new information.

6. The contractor should post new signs. No changes are permitted on signs that are previously posted. **Omitting this step will leave the contractor with no police enforcement powers.**

7. **The contractor must remove the "No Parking" signs upon expiration of sign.**

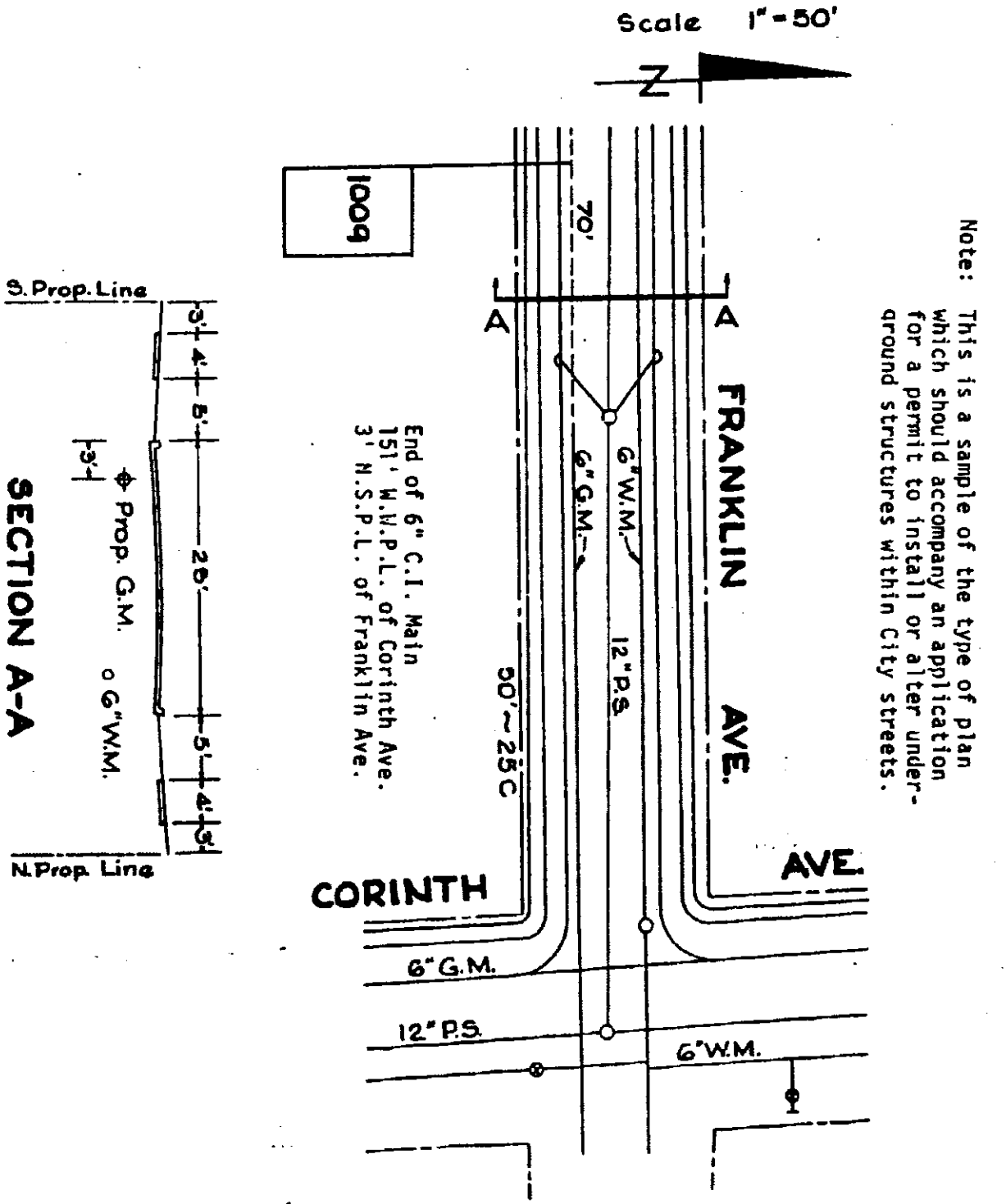
8. The contractor should provide a copy of each request to post "No Parking" signs to the Project Engineer to be included in the project file.

GAS MAIN EXTENSION

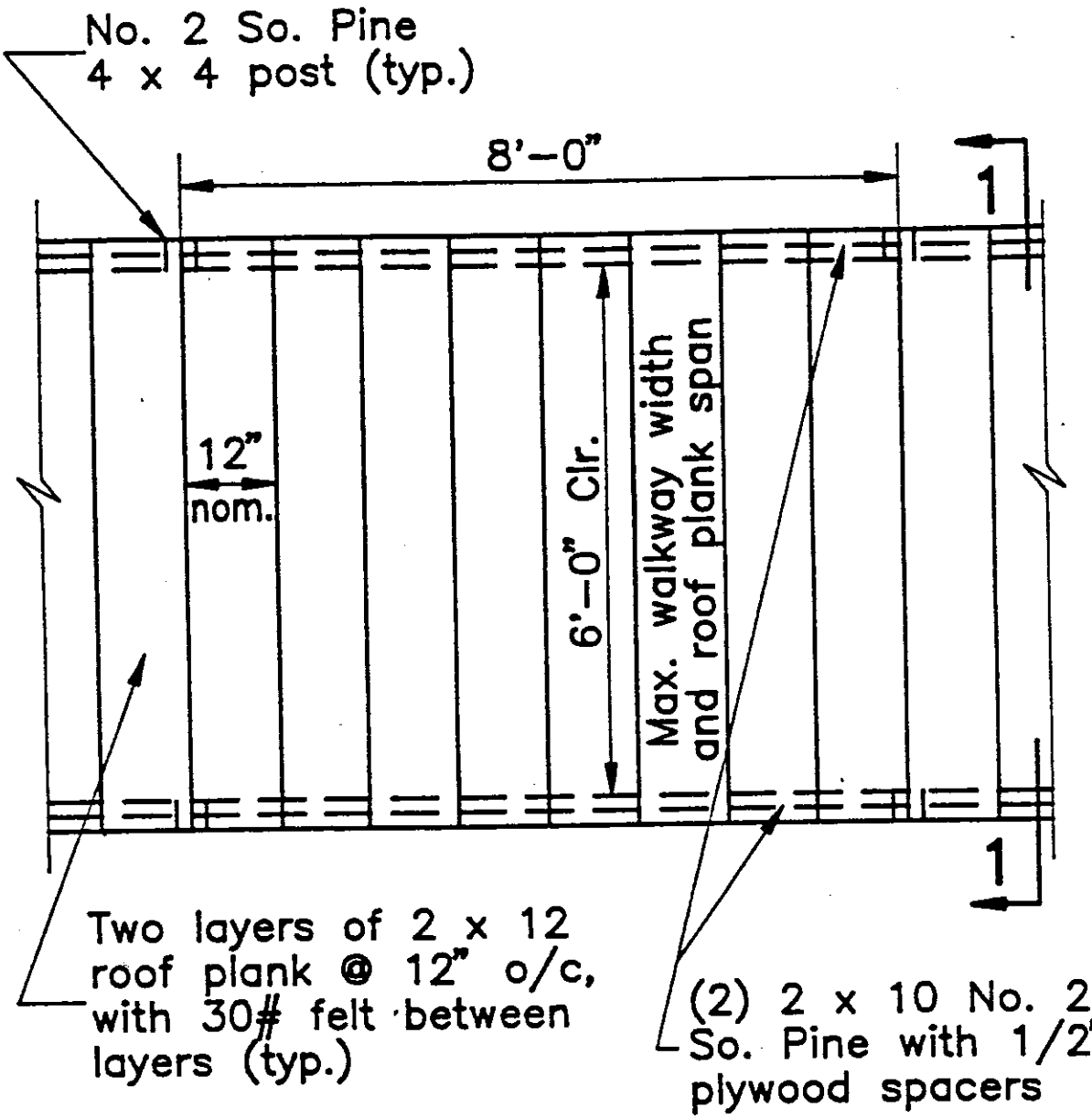
Drawn By: R. James
Traced By:
Checked By: J. Florian
Approved By:

S. S. Franklin Avenue
From 151' W.W.P.L. of Corinth Ave.
to 70' Westwardly
One House

Bond Hill Plat No.
Total Extension 70 Feet 73

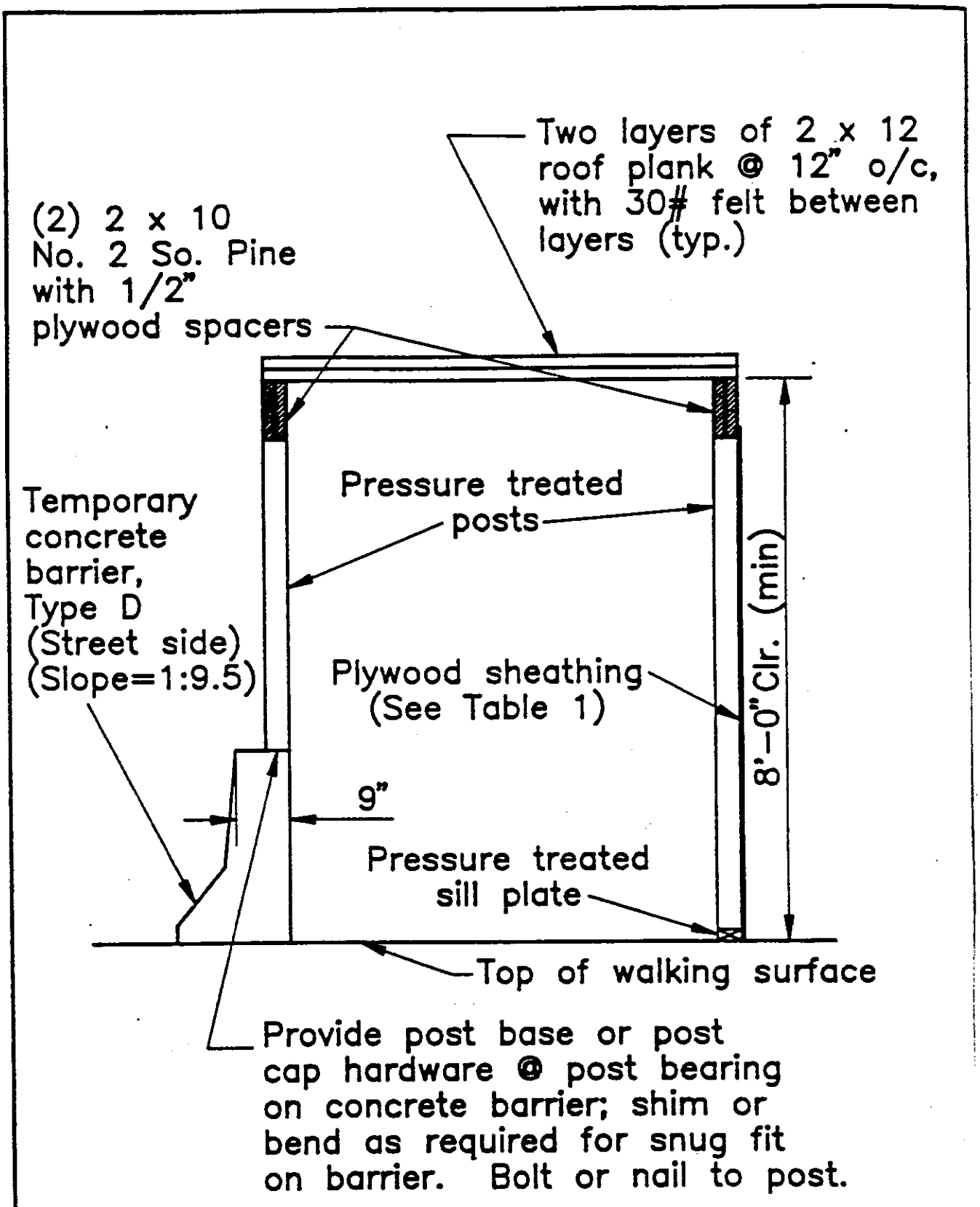


Note: This is a sample of the type of plan which should accompany an application for a permit to install or alter underground structures within City streets.



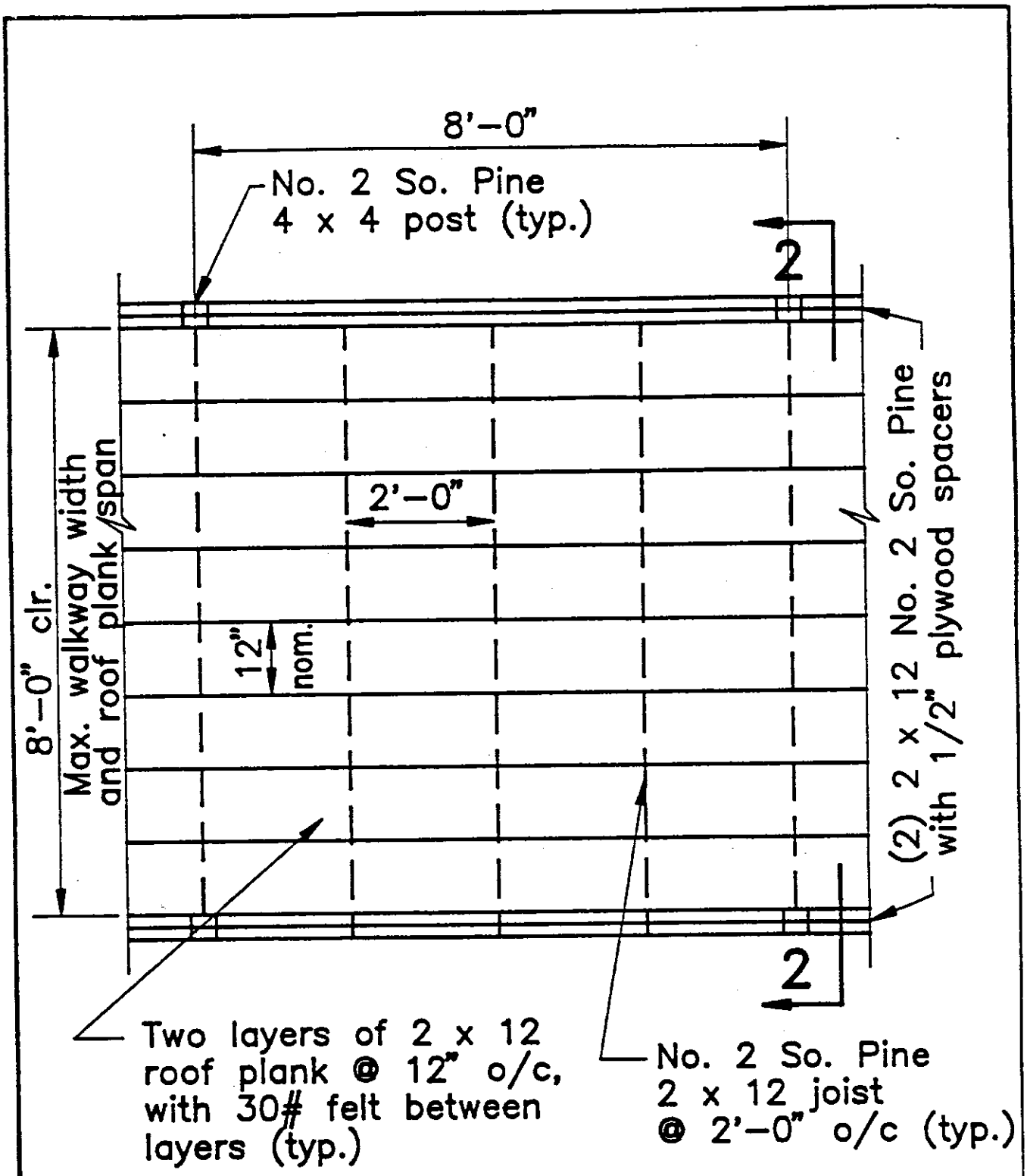
PLAN

FIGURE 1A



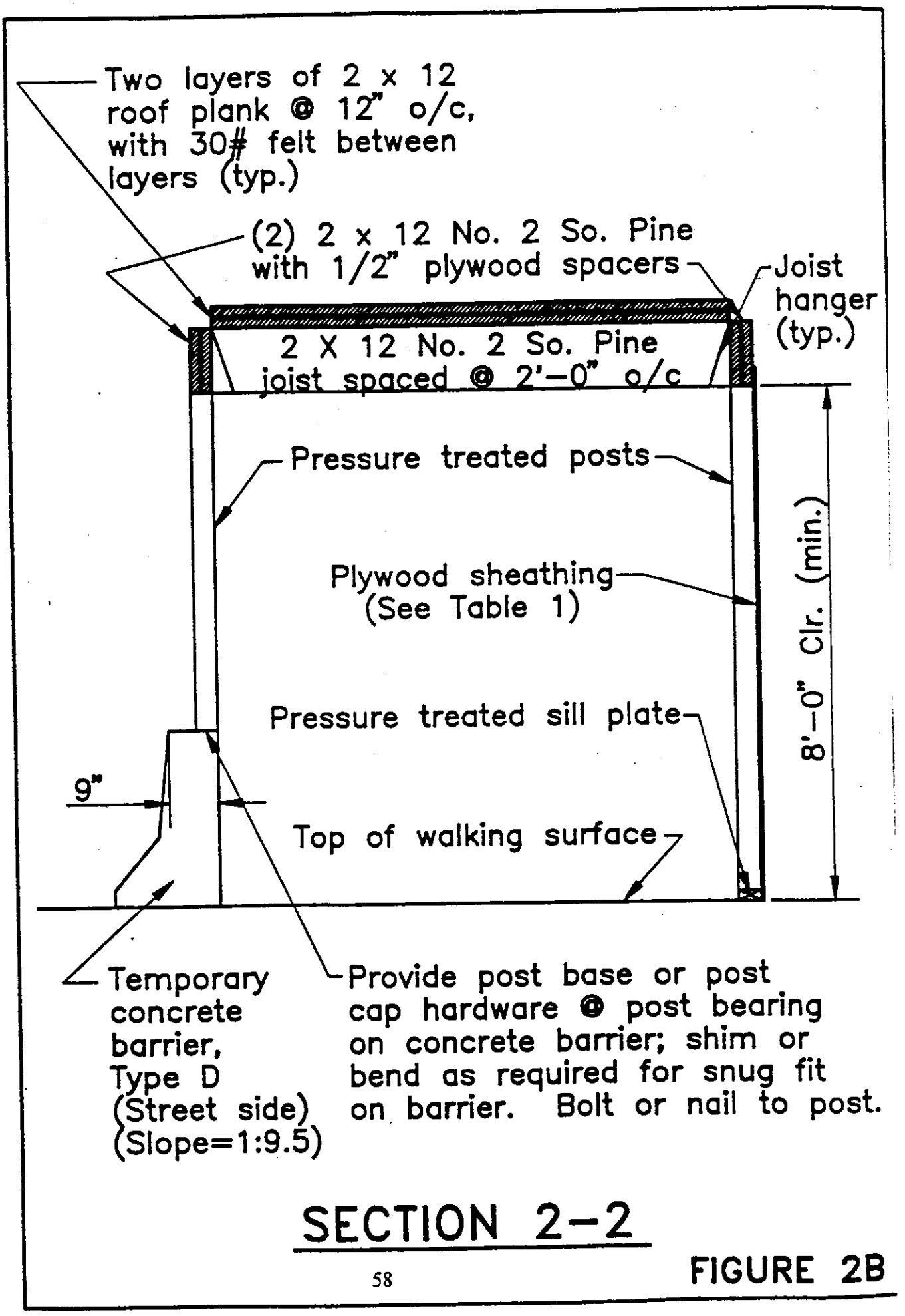
SECTION 1-1

FIGURE 1B



PLAN

FIGURE 2A



SECTION 2-2

FIGURE 2B

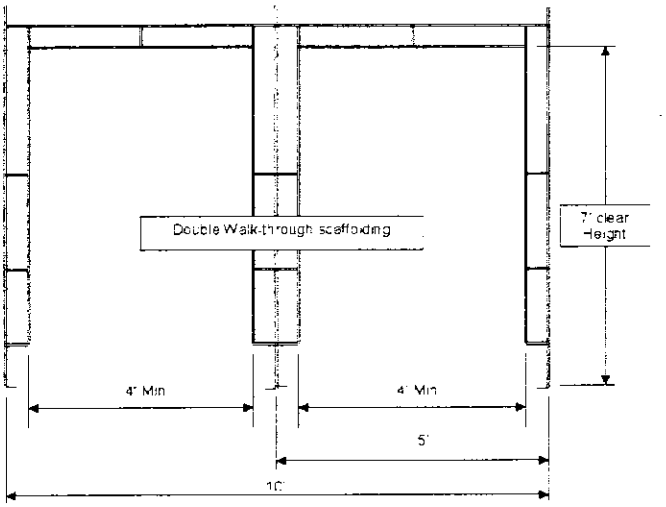
TABLE 1

ALLOWABLE PLYWOOD SHEATHING

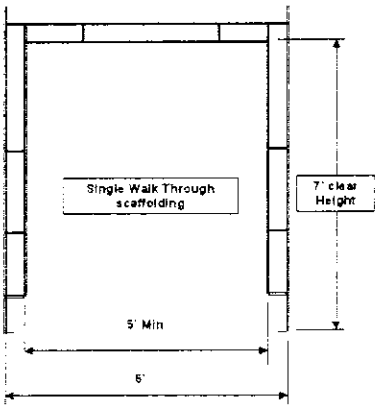
DESCRIPTION	REQ'D PANEL THICK.
APA Rated Sheathing, Grp. 4 Species	19/32" or 5/8"
APA Rated Sheathing, Grp. 1 Species	15/32" or 1/2"
Structural I (Always Grp. 1)	3/8"

City of Cincinnati
Department of Transportation and Engineering
City Hall, Room 420, 801 Plum St.
Cincinnati, Ohio 45202-1980
513-352-3463

TEMPORARY CONSTRUCTION WALKWAYS

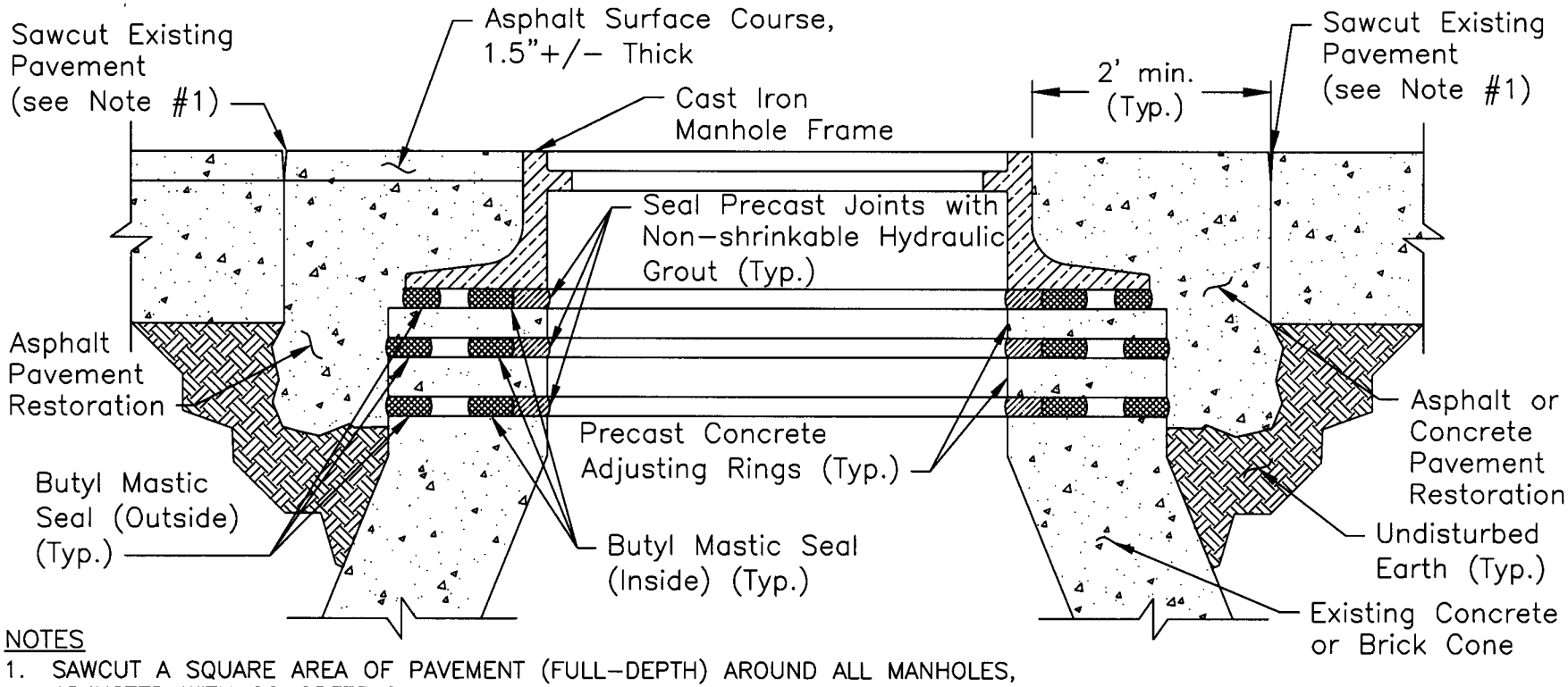


Double width Walk Through scaffolding frames are to be used whenever possible. Minimum unobstructed pedestrian access is to be **4 feet wide x 7 feet high** for each section.



Where double width scaffolding cannot be used, single width scaffolding can be used but must have a minimum unobstructed clearance of **5 feet wide x 7 feet high**.

- Walk Through and Canopy Scaffolding must include a roof structure designed for a minimum of 250# per sq ft impact protection. Construction to include (2) layers of 2" x 10" #1 southern pine with a plywood layer in between covered with plastic.
- A lighting system, certified by IBI, with protected lights spaced no further than 25 feet apart, inside the walkway is required if the system will be functional during nighttime hours.
- If scaffolding is within 10 feet of any electrical power lines you must contact Cinergy (513) 287-3628
- Safety netting or barrier construction required is subject to the nature of the work being performed.



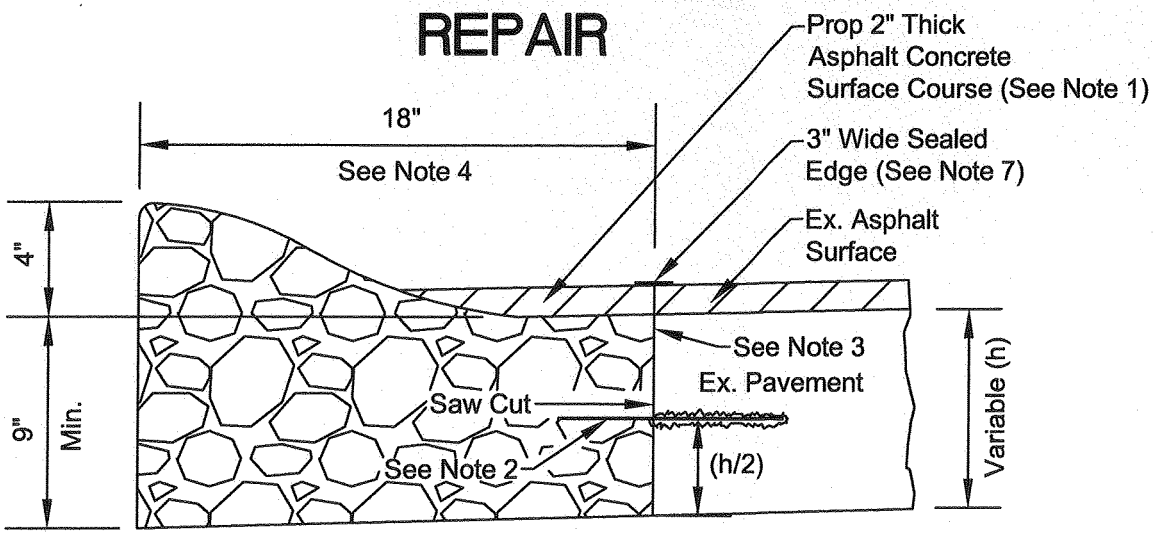
NOTES

1. SAWCUT A SQUARE AREA OF PAVEMENT (FULL-DEPTH) AROUND ALL MANHOLES, ADJUSTED WITH CONCRETE RINGS, A MINIMUM OF 2 FEET BEYOND THE EDGE OF THE CASTING PRIOR TO MACHINE PAVING.
2. RESTORE CUT WITH ASPHALT FROM THE BOTTOM TO EXISTING STREET PAVEMENT SURFACE.
3. REPLACE ALL MANHOLE FRAMES AND COVERS, OTHER THAN STANDARD, WITH STANDARD CASTINGS (ACC. NO. 49005).
4. PROVIDE ADJUSTING RINGS WITH A MINIMUM OF 1 -#3 CONTINUOUS REINFORCING BAR IN THE CENTER.
5. PROVIDE "CONSEAL" BUTYL MASTIC SEAL OR APPROVED EQUAL.
6. OFFSET INSIDE AND OUTSIDE BUTYL MASTIC SEAL SEAMS BY 180°.
7. RESTORE PAVEMENT USING COMPACTED 301 ASPHALT CONCRETE BASE IN 4 INCH MAXIMUM LIFTS.
8. AFTER ADJUSTMENT WORK, PLACE A COMPACTED HOT-MIX ASPHALT WEDGE AROUND RAISED CASTING WITH A MINIMUM DIAMETER OF 4 FEET FOR A 1 INCH OVERLAY AND 6 FEET FOR A 1.5 INCH OVERLAY, OR AS DIRECTED BY THE ENGINEER.

SEWER MANHOLE ADJUSTMENT WITH PRECAST CONCRETE RING & MORTAR

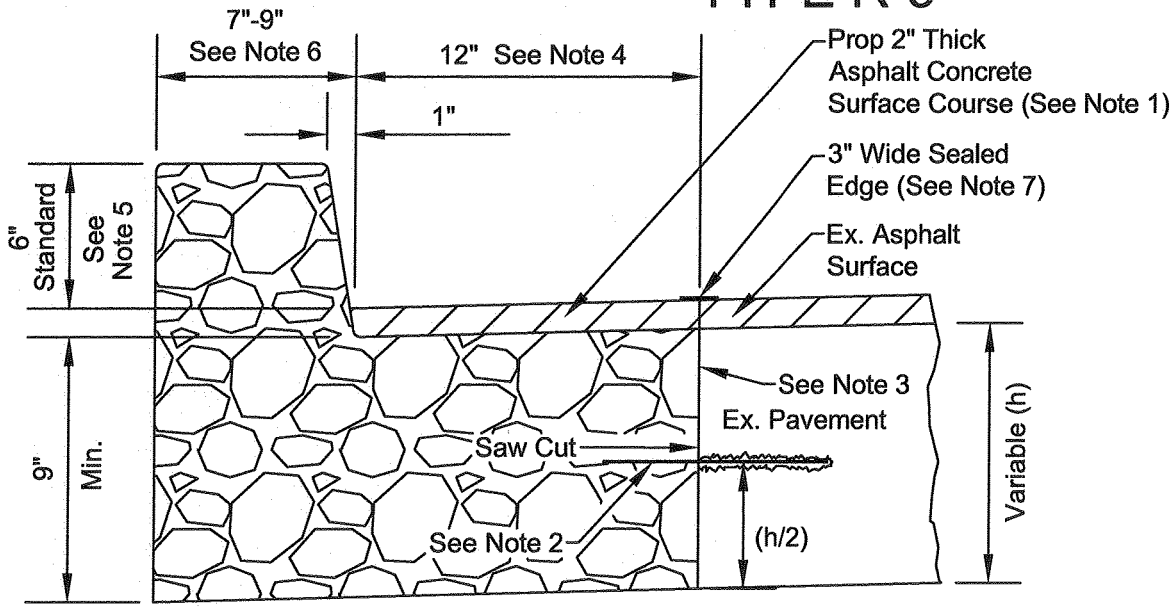
NOT TO SCALE **REVISED: 8/8/13**

CONCRETE CURB REPAIR



NOT TO SCALE

TYPE R-5



NOT TO SCALE

TYPE P-5

Note 1 - Special care shall be taken during construction to obtain maximum compaction of bituminous concrete in gutters.

Note 2 - For concrete pavement only. Epoxy coated No. 5 dowel bars, 12" long @ 36" o.c. Dowel bars not required on residential streets or other streets as instructed by the DOTE Inspector.

Note 3 - Vertical face at existing pavement surface shall be cleaned by compressed air and wetted prior to placing concrete.

Note 4 - Remove entire existing concrete gutter plate if adjacent to asphalt pavement.

Note 5 - Meet existing curb height or 2" Min.

Note 6 - 9" only on radii & circulars

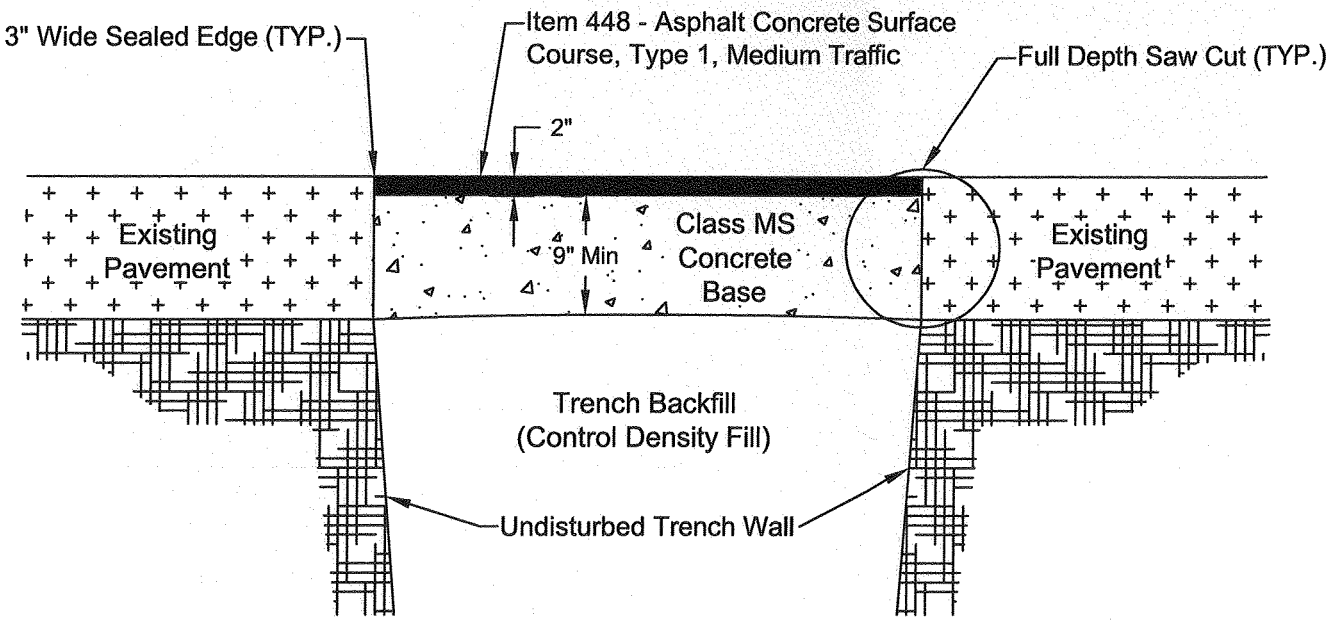
Note 7 - Item 702.04 - Edge of new asphalt surface course shall be sealed with a 3" width of hot asphalt binder

CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING

STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE OCTOBER 2010

STANDARD RESTORATION FOR ALL NON RIGID PAVEMENT



NOTES:

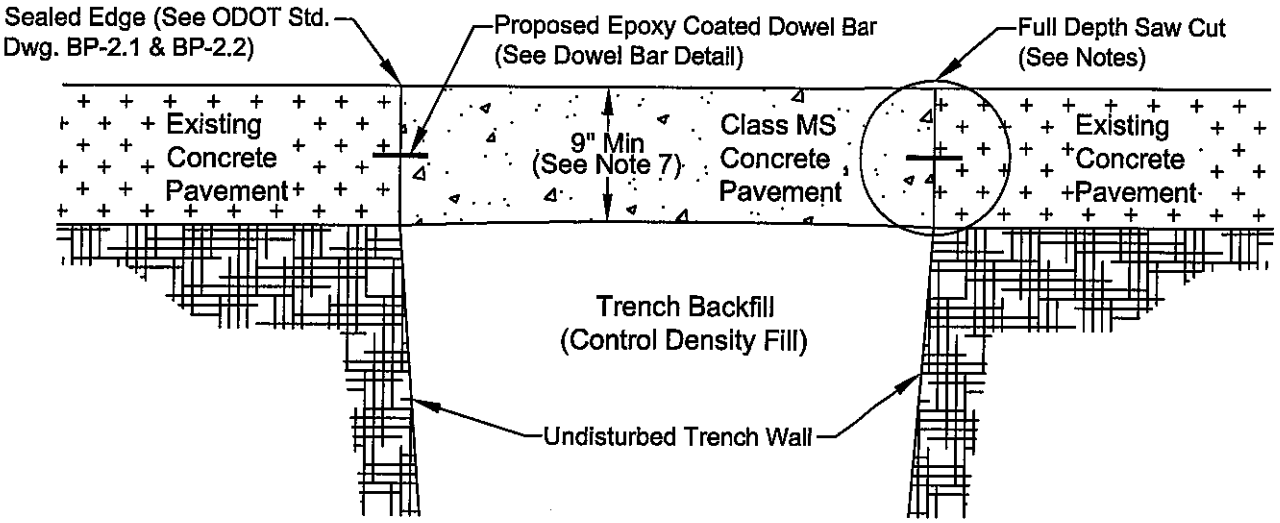
1. Saw cut full depth pavement with wet diamond blade saw. Vermeer will not be permitted.
2. Vertical face of existing pavement shall be cleaned by compressed air and wetted prior to placing concrete.
3. Place and finish concrete base in accordance with ODOT CMS Item 305.
4. Place and compact asphalt concrete surface course in accordance with ODOT CMS Item 401.
5. Item 702.04 - Edges of new asphalt surface course shall be sealed with a uniform 3" width of hot applied asphalt binder.
6. If the proposed pavement width is greater than 3'-0", the contractor has the option to use ODOT CMS Item 301 - Asphalt Concrete Base.
   a. Asphalt concrete base must be placed and compacted in two equal lifts. The thickness of asphalt base shall be 8" on Residential streets and 10" on Arterial streets.
   b. Prior to placing the asphalt base, all vertical surface shall be cleaned and coated with bituminous material in accordance with ODOT 407.02.

CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING

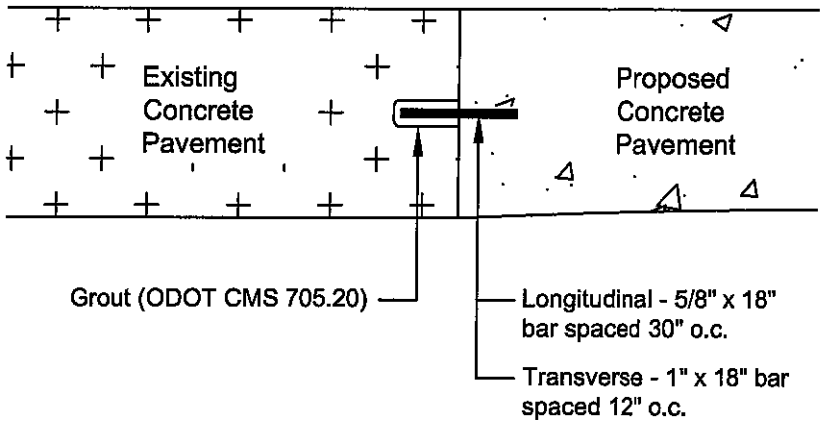
STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE OCTOBER 2010

STANDARD RESTORATION CONCRETE PAVEMENT



DOWEL BAR DETAIL



NOTES:

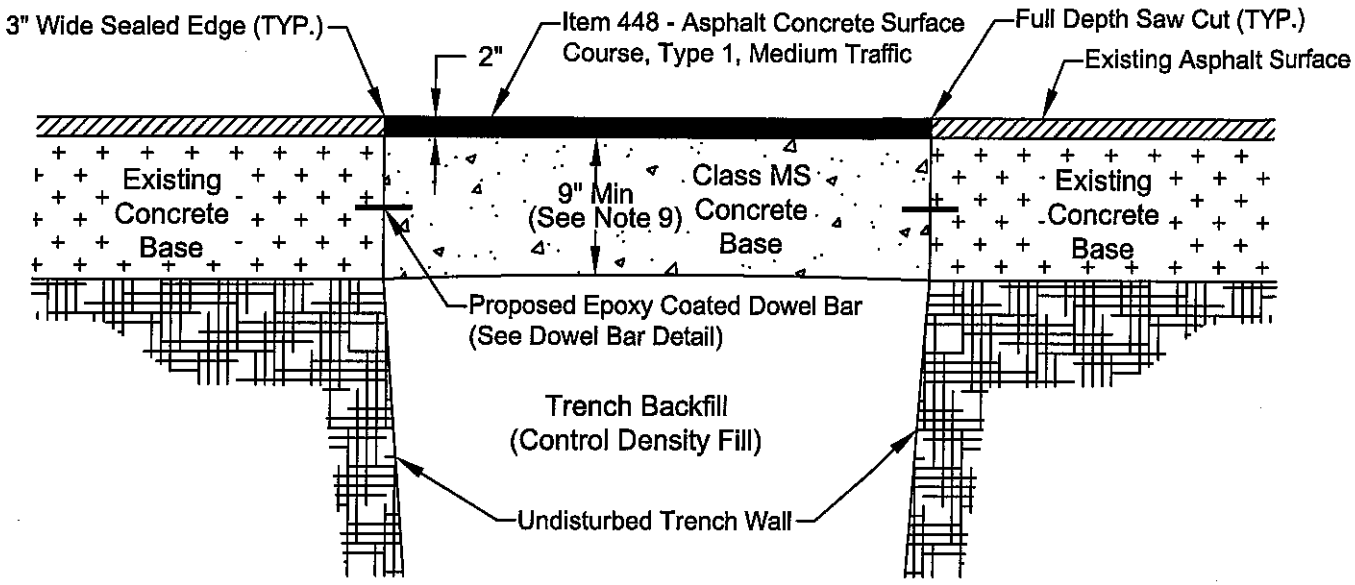
1. Saw cut full depth pavement with wet diamond blade saw. Vermeer will not be permitted.
2. Construct dowel bars in accordance with ODOT CMS 255.05. Grout for dowel bars shall meet the requirement of ODOT CMS 705.20 - Non-shrink, Non-metalic Grout.
3. Unless otherwise permitted by the DOTE Inspector, concrete pavement removal and restoration limits shall extend to the nearest existing pavement joint or back of curb.
4. Locations of proposed transverse and longitudinal joints must match existing. See ODOT Standard Drawing BP-2.1 and BP-2.2 for details of reinforcing steel in these joints.
5. Vertical face of existing concrete pavement shall be cleaned by compressed air and wetted prior to placing concrete.
6. Place and finish concrete pavement in accordance with ODOT CMS Item 452.
7. Proposed concrete pavement shall be 9" thick or match the bottom of the existing concrete pavement, whichever provides the greater thickness.

CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING

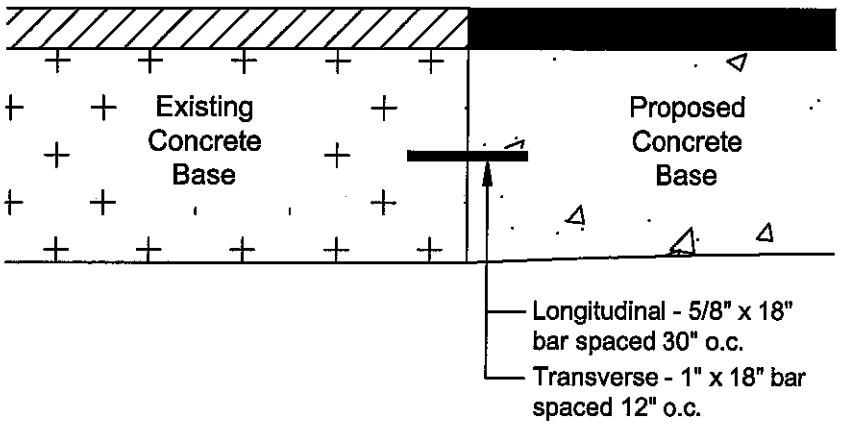
STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE SEPTEMBER 2011

STANDARD RESTORATION
ASPHALT SURFACE ON CONCRETE BASE



DOWEL BAR DETAIL



NOTES:

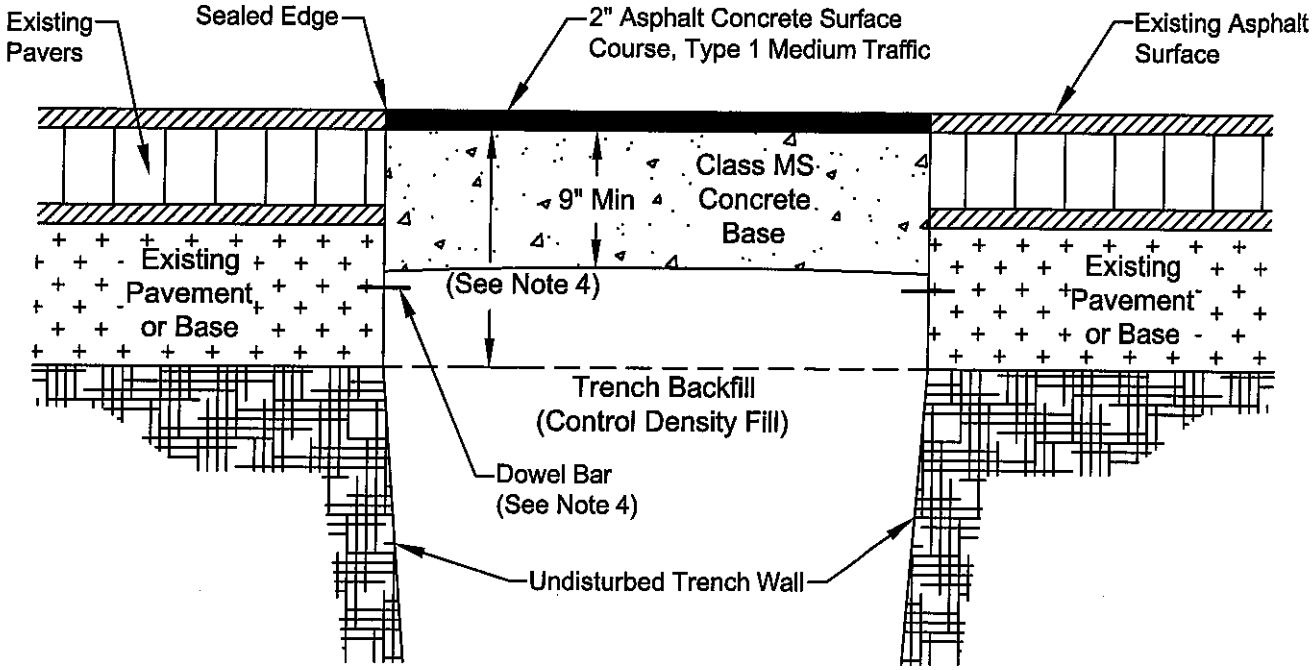
1. Saw cut full depth pavement with wet diamond blade saw. Vermeer will not be permitted.
2. Place dowel bars in accordance with ODOT CMS 255.05. Grout for dowel bars shall meet the requirement of ODOT CMS 705.20 - Non-shrink, Non-metalic Grout.
3. If the edge of the trench is within 3' of a longitudinal joint or curb line, the pavement shall be removed to the back of curb or to the longitudinal joint, and replaced as shown.
4. Locations of proposed transverse and longitudinal joints must match existing. See ODOT Standard Drawing BP-2.1 and BP-2.2 for details of reinforcing steel in these joints.
5. Vertical face of existing concrete pavement shall be cleaned by compressed air and wetted prior to placing concrete.
6. Place and finish concrete base in accordance with ODOT CMS Item 305.
7. Place and compact asphalt concrete surface course in accordance with ODOT CMS Item 401.
8. Item 702.04 - Edges of new asphalt surface course shall be sealed with a uniform 3" width of hot applied asphalt binder.
9. Proposed concrete base shall be 9" thick or match the bottom of the existing concrete base, whichever provides the greater thickness.

CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING

STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE SEPTEMBER 2011

STANDARD RESTORATION ASPHALT SURFACE ON BLOCK PAVED STREETS



NOTES:

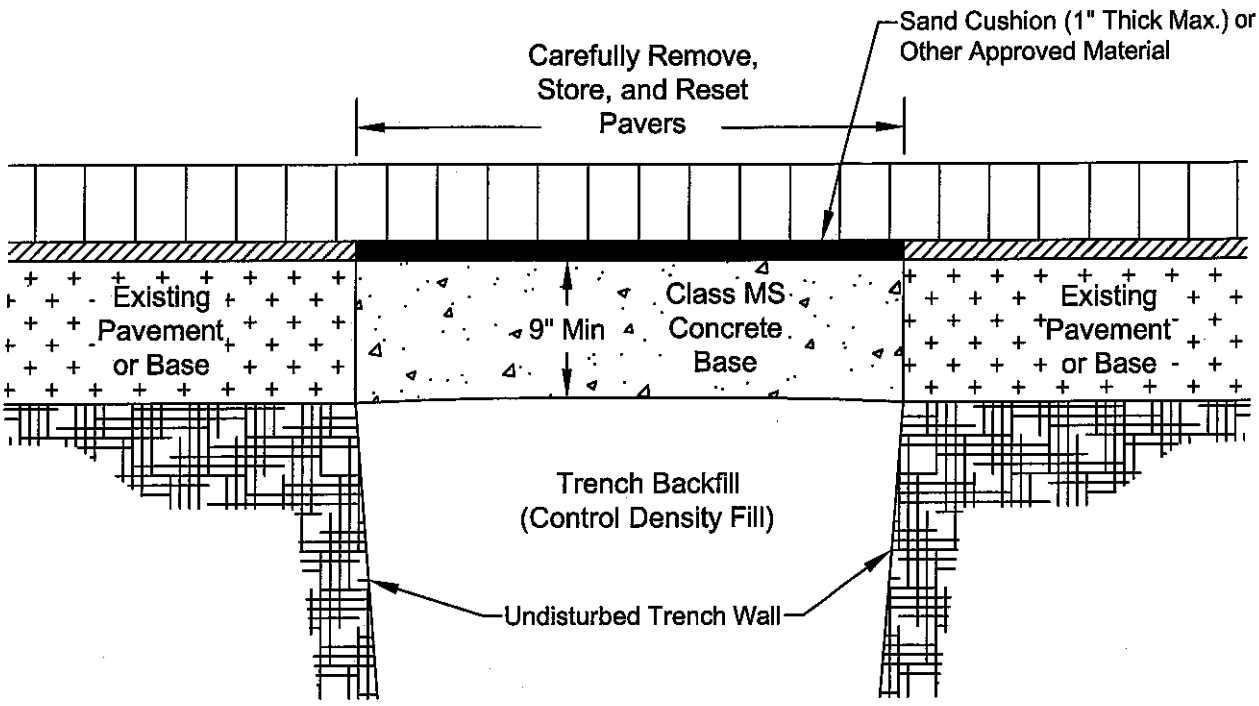
1. Place and finish concrete base in accordance with ODOT CMS Item 305.
2. Place and compact asphalt concrete surface course in accordance with ODOT CMS Item 401.
3. Item 702.04 - Edges of new asphalt surface course shall be sealed with a uniform 3" width of hot applied asphalt binder.
4. If trench is on a major street with concrete base, bottom of proposed concrete base shall match bottom of existing concrete base and connected with dowel bars as shown on STANDARD RESTORATION drawing for asphalt surface on concrete base.

CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING

STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE SEPTEMBER 2011

STANDARD RESTORATION
EXPOSED BLOCK PAVED STREETS



NOTE:
Place and finish concrete base in accordance with ODOT CMS Item 305.

CITY OF CINCINNATI DEPARTMENT OF
TRANSPORTATION AND ENGINEERING

STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE OCTOBER 2010

GRANITE CURB RESTORATION

PROPOSED 5" THICK CLASS 'C' CONCRETE WALK ITEM # 608 OR SOD SPACE

1/2" CELLULAR FIBER EXPANSION JOINT MATERIAL

EXISTING GRANITE CURB TO BE REMOVED & RESET

STREET RESTORATION (ITEMS A-D)

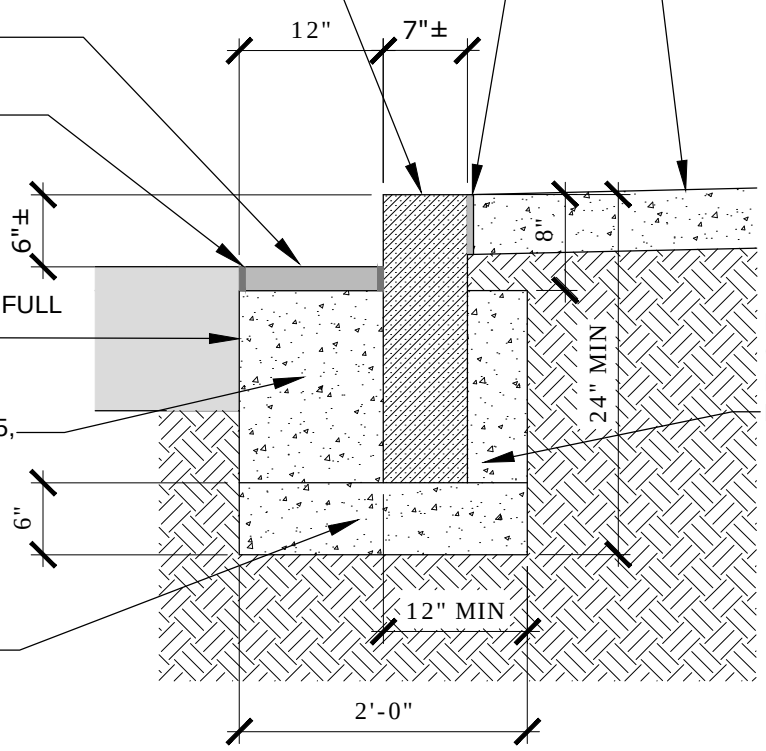
A. NEW BITUMINOUS ASPHALT ITEM # 448 - 2" THICK

B. NEW JOINT TO BE SEALED W/ JOINT SEALER ITEM # 702.01

C. EXISTING ROADWAY PAVEMENT FULL DEPTH SAWCUT

D. PROPOSED CLASS-MS CONCRETE BASE, ODOT ITEM # 305, 9" MIN. THICK

PROPOSED CLASS-C CONCRETE FOOTING ODOT ITEM # 511



PROPOSED CLASS-C CONCRETE FOR RESETTING CURB ITEM # 629.06

CONSTRUCTION NOTES:

1. EXISTING GRANITE CURB SHALL BE CAREFULLY REMOVED AND SAFELY STORED.

2. EXISTING GRANITE CURB DAMAGED OR EXISTING SUPPLY INSUFFICIENT, MAY BE REPLACED WITH CURB SUPPLIED BY THE CITY. CONTACT DOTE ARCHITECTURE/URBAN DESIGN AT 513-352-4885 OR STREET REHAB AT 352-5284.

3. SEE ITEM # 629 IN THE CITY SUPPLEMENT TO THE ODOT CMS FOR ADDITIONAL GRANITE CURB RESTORATION INFORMATION.

CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING

STANDARD RESTORATION OF STREET OPENINGS

SCALE: NONE JUNE 2013

CINCINNATI STREETCAR
CITY OF CINCINNATI
Standard Operating Procedure

TITLE: Streetcar Right-of-Way Manual

Publication Number:		Page Number:	Page 1 of 1
Revision Number:		City Review by:	Shawn Patton
Prepared by:	DOTE / SORTA	Approved by:	Keith Pettit
Issued by:	DOTE	Issue Date:	November 30, 2017

Change Record:

Revision Number	Date	Responsible	Description of Change
1	9/8/21	DOTE	Remove SORTA, add TAA fees

APPENDIX I TO THE
CITY OF CINCINNATI
DEPARTMENT OF TRANSPORTATION AND ENGINEERING
DIVISION OF ENGINEERING
STREET RESTORATION BOOK

Streetcar Right-of-Way Manual

City of Cincinnati
November 7, 2012

Contents:

PREFACE

Appendix I to the City of Cincinnati Department of Transportation and Engineering Division of Engineering Street Restoration Book Rules and Regulations for Activities along the Streetcar Right-of-Way Alignment ("Streetcar Right-of-Way Manual") implements regulations and operational standards regarding activities conducted under a permit, franchise agreement or special agreement along the alignment of the Cincinnati Streetcar System ("Streetcar") and the public right-of-way of the City of Cincinnati ("City").

By constructing street improvements to facilitate the implementation of the Cincinnati Streetcar, the City seeks to support the efficient and safe multi-modal transportation uses of its streets. The shared use of such streets by automobile, pedestrian, bicycle, and public transit modes (e.g., publicly operated buses and Streetcars), however, requires constant oversight and management to avoid conflicts with non-transportation street activities (e.g., street openings and street encroachments).

As a home-rule municipal corporation, the City has exclusive authority under Ohio and local law over the regulation and control of public right-of-way within the City, including, but not limited to, streets, avenues, alleys, and sidewalks. Due to the City's essential interest in safe and efficient use of its rights of way, non-transportation activities located in the right-of-way currently require authorization from the City – typically in the form of a permit. As a condition of such permits, applicants must comply with all City regulations and the Cincinnati Municipal Code, including the Street Restoration Handbook. This Appendix describes additional right-of-way permit conditions for activities that potentially conflict with the maintenance of the City's Streetcar-related Street improvements and with the operation of the Cincinnati Streetcar.

The City has entered into an agreement for an "Operator" to operate and maintain the Streetcar system. The Agreement may be amended or replaced from time to time. The Operator also coordinates activities in the public right-of-way along the Cincinnati Streetcar right-of-way alignment.

Any City permit issued for activities in the right-of-way along the Streetcar alignment shall contain a condition making the permit effective only upon the applicant obtaining a valid Track Access Authorization, which will be administered by the Operator according to the procedure outlined in this Appendix. In other words, the City has determined that no work may occur in the Streetcar right-of-way alignment unless the applicant obtains a permit from the City, which permit shall be conditioned on a valid Track Access Authorization from the Operator.

The processes outlined herein are intended as life-safety standards and procedures critical for management of streets that contain Streetcar trackway. It is imperative that all parties comply with these standards to ensure the safety and well-being of the permitee's staff, contractors,

utility employees, the travelling public, and Streetcar operating personnel. Compliance requires diligence of all parties and is of mutual interest in promoting safe performance of work in the right-of-way with minimal disruption to the use of City streets and sidewalks.

Copies of this manual are available online at www.cincinnati-oh.gov. For additional information, please contact:

City of Cincinnati
Department of Transportation and Engineering
801 Plum Street, Suite 450
Cincinnati, OH 45202
(513) 352-3463
Row.permits@cincinnati-oh.gov

I. DEFINITIONS

Unless otherwise defined below, all terms used in this Streetcar Right-of-Way Manual shall have the same meaning as set out in the provisions of the City of Cincinnati Department of Transportation and Engineering/Division of Engineering Street Restoration Book Rules and Regulations as authorized by Cincinnati Municipal Code Chapters 721 through 725.

A. Construction means any of the following activities performed by any person within a public right-of-way:

1. Installation, excavation, laying, placement, repair, upgrade, maintenance, inspection, or relocation of facilities or other improvements, whether temporary or permanent;
2. Modification or alteration to any surface, subsurface or aerial space within the public right-of- way;
3. Performance, restoration, or repair of pavement cuts or excavations;
4. Reconstruction of any of the work described in Paragraphs (A)(1) through (A)(3) of this subsection; or
5. Other similar construction work.

B. Day means each day shown on the calendar.

C. Emergency Activity has the meaning set forth in Section 3 of this Streetcar Right-of-Way Manual.

D. Franchisee means a utility business entity that has entered into a franchise agreement with the City for the operation of its utility facilities within the City's public right-of-way.

E. Headways means a measurement of the distance/time between transit vehicles. A shorter headway signifies a more frequent service. Headway is measured as the distance from the tip of one vehicle to the tip of the next one behind it, expressed as the time it will take for the trailing vehicle to cover that distance. This time is expressed in minutes.

F. Non-Revenue Service Hours means all hours except for revenue service hours and the thirty (30) minutes prior to the first revenue service hour of the day.

G. Normal Transportation Purpose means ordinary use of the public right-of-way for travel by the public including by pedestrians, vehicles, and bicyclists. Encroachment or

obstruction of the Vehicle and Power Envelope for commercial activities is not a normal transportation purpose for purposes of this Streetcar Right-of-Way Manual.

H. OMUTCD (Ohio Manual on Uniform Traffic Control Devices) means the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) establishes statewide standards for the design and use of traffic control devices on any street, highway, bikeway or private road open to public travel in Ohio, as well as private roads open to public travel.

I. Operator means an agent or contractor of the City of Cincinnati who is responsible for operating and maintaining the Streetcar pursuant to an operations and maintenance agreement with the City.

J. Operating Restrictions means a deviation from normal Streetcar operations as a result Permitee activity that actually or potentially encroaches on or obstructs the Vehicle and Power Envelope.

K. Overhead Contact System (OCS) means the system of wires, poles and underground feeders that distributes 750 VDC (nominal) traction power to the Streetcar vehicles from the substations. The contact wire which hangs above the track is a continuously energized, un-insulated solid copper wire suspended by span wires or bracket arms which is contacted by the pantograph or trolley pole on the vehicle.

L. Permitee means a person requiring a Track Access Authorization for an activity within the Streetcar ROW Alignment as a condition of a valid City permit for such activity including, but not limited to, permits for construction activities and activities that encroach on or obstruct the public right-of-way. The definition of Permitee includes the following:

    1. Any officer, director, partner, manager, superintendent, or other authorized agent exercising control over or on behalf of the Permitee; and
    2. Any contractor or subcontractor of the Permitee, for purposes of compliance with this Streetcar Right-of-Way Manual.

M. Person means any individual or any association, firm, partnership, joint venture, corporation or other legally recognized entity, whether for profit or not for profit. Person does not include the City nor its Operator.

N. Police Officer means State of Ohio certified sworn officers including, but not limited to City of Cincinnati Police officers and Hamilton County Sheriff officers.

O. Power Down means the disconnection of traction electrical power (TEP) to the entire Streetcar system or any segment thereof and/or the vehicle maintenance facility by the Streetcar operator.

P. Public Right-of-Way means generally property, whether or not in the form of a strip, for or devoted to (a) public transportation purposes; or (b) the placement of the City's utility easements and other traditional uses along a transportation route, whether by dedication, prescription or otherwise, as well as the spaces above and below. In addition to the foregoing, the definition of Public Right-of-Way includes, without limitation, public highways, streets, avenues, alleys, sidewalks, public grounds, bridges, public grounds, aqueducts, and viaducts within the City.

Q. Regulations means all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, standards, executive orders, consent orders, and guidance from regulatory agencies, judicial decrees, permits, licenses or other governmental requirements of any kind.

R. Revenue service hours means:

1. Monday through Friday between the hours of 7:30 am and 10:30 pm
2. Saturdays between the hours of 8:30 am and 10:30 pm
3. Sundays between the hours of 9:30 am and 9:30 pm

Revenue service hours are based on certain requirements including demand and are subject to change by the City and/or the Operator at any time and at times with limited notice. The hours described are current as of 8/31/2021.

S. Routine Activity shall have the meaning set forth in Section III, subsection 1, of this Streetcar Right-of-Way Manual.

T. Street Restoration Book means a manual published by the City that contains engineering, technical and other special criteria and standards established by the Director of the Department of Transportation and Engineering for activities conducted under a permit, franchise agreement or special agreement within the City's public right-of-way.

U. Streetcar ROW Alignment means the public right-of-way contiguous with the Streetcar trackway, including the area from property line to property line, which may include a roadway, sidewalk, curb, grassy area, utilities facilities, all or any combination of the above.

V. Street means every public way set apart for travel, by whatever word designated, including the area from property line to property line, which may include a roadway, sidewalk, curb, grassy area, utilities facilities, all or any combination of the above.

W. Streetcar Personnel means the body of persons employed and authorized by the City or the City's Operator to work for or on the Streetcar.

X. Track Access Authorization means the authorization required as a condition of City permits to work within the Streetcar ROW Alignment, including but not limited to work within the Streetcar Vehicle and Power Envelope.

Y. Track Access Card means credentials issued to an individual upon successful completion of a Streetcar track access safety training. Track Access Cards are specific to an individual, include an expiration date after which certification is no longer valid, and are not transferable. The City may revoke Track Access Card credentials and an associated Track Access Authorization for any safety specific reason, or if an individual shares, forges, or otherwise misuses a Track Access Card. Track Access Cards are mandatory for any person working for a Permitee pursuant to a Track Access Authorization and are subject to inspection by the City or Operator prior to issuance of a Track Access Authorization and at any time during work associated with a Track Access Authorization within the Vehicle and Power Envelope. Track Access Cards must be visibly displayed/worn by and persons working within the Vehicle and Power Envelope pursuant to a Track Access Authorization.

Z. Trackway means the area immediately surrounding the rails on which the Streetcars run including the track slab. These lanes are typically shared with vehicular traffic.

AA. Vehicle and Power Envelope means the horizontal and vertical boundaries specifying the surrounding borders of the Streetcar track system, encompassing the overhead power contact wire, the sides and underground excavation depth under the vehicle. This envelope includes the trackway and sidewalk, along with any areas within 5-feet 6inches (5'6") of equipment and the safe margin of the Streetcar system as illustrated in the Vehicle and Power Envelope Diagram (Figure 1 to this Streetcar Right-of-Way Manual).

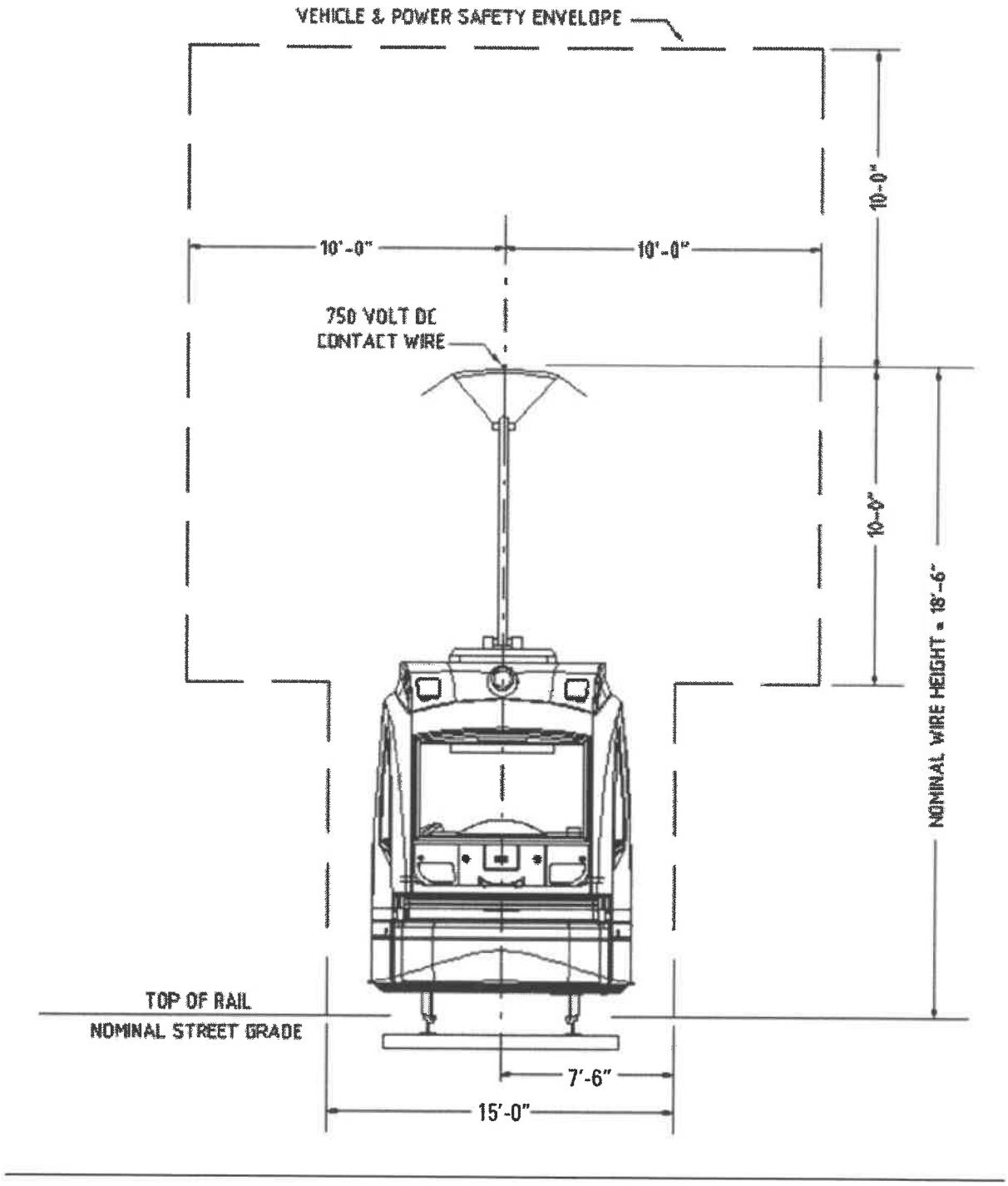


Figure 1 - Vehicle and Power Envelope

II. APPLICABILITY

Any activity by a Permitee undertaken with potential to obstruct or encroach on the Streetcar ROW Alignment other than for a Normal Transportation Purpose shall require a valid Track Access Authorization obtained in accordance with the procedures set forth in this Streetcar Right-of-Way Manual. This manual applies to all Streetcar systems, Franchisees, and other Permitees operating within the Streetcar ROW Alignment.
The following list of activities is a non-exclusive set of examples that illustrate types of activities that require a Track Access Authorization:

1. Construction, repair, or inspection activity in the public right-of-way along the Streetcar alignment if the activity has the potential to obstruct or encroach on the Vehicle and Power Envelope.
2. Activities requiring a street opening permit and having the potential to encroach on the Vehicle and Power Envelope.
3. Activity by film crews, parades, street festivals, and other forms of activity that potentially obstruct or encroach on the Vehicle and Power Envelope while conducting authorized and lawful business within the City.
4. Delivery of equipment or bulk materials to a site, regardless of site location, where the delivery must take place in the public right-of-way along the Streetcar alignment.
5. Construction, repair, and inspection activity by utility companies if the activity has potential to obstruct or encroach upon the Vehicle and Power Envelope.
6. Any activity resulting in placement of barricades within the Vehicle and Power Envelope. (Construction companies and delivery service companies who have a need to barricade a public right-of-way, but who are not engaging in construction or repair in the public right-of-way, should also be familiar with traffic control regulations contained in the Ohio Manual on Uniform Traffic Control Devices ("OMUTCD") and the Cincinnati Municipal Code, in addition to the requirements of this Streetcar Right-of-Way Manual.)

Irrespective of the activity type, it is important that the Permitee understand that Streetcar services or special Streetcar movements may occur at any time of day or night for any purpose – in either direction along the trackway – except when the City or Streetcar operator has instituted a Streetcar operating restriction in conjunction with a valid Track Access Authorization. Headway between Streetcars will be a minimum of 10-minute intervals through all Revenue Service Hours. As a general rule, Streetcar operations will be less frequent during Non-Revenue Service Hours than during Revenue Service Hours (see defined terms in Section I, above).

For safety reasons, Permitee personnel should always assume that Streetcar operations could occur at any time.

III. TRACK ACCESS ACTIVITY CATEGORIES

Track Access Authorization procedures vary depending on whether an activity qualifies as Routine Activity, Major Activity, or Emergency Activity. For purposes of this Streetcar Right-of-Way Manual, an activity qualifies as routine, major, or emergency according to the general factors summarized in Table 1, below.

TABLE 1 – Categories of Track Access Authorization

	Planned / Reasonably Foreseeable	Power Down or Operating Restrictions	Duration
Routine Class 1	Activity is reasonably foreseeable; ordinarily planned in advance.	No.	No restrictions on duration; okay for Non-Revenue or Revenue Service Hours.
Routine Class 2	Activity is reasonably foreseeable; ordinarily planned in advance.	Yes.	Activity can reasonably be completed during NonRevenue Service Hours, including multiple nights if needed; required to be performed during NonRevenue Service Hours unless exceptions apply.
Major	Activity is reasonably foreseeable; ordinarily planned in advance.	Yes.	All or portion of activity must be performed during Revenue Service Hours; activity cannot reasonably be performed during Non-Revenue Service Hours.
Emergency	Activity meeting the definition of emergency in Section III.3.	Varies case-by-case.	Varies case-by-case.

The City's Streetcar Director, Chief Safety Officer and/or Transit Coordinator shall determine whether to grant or deny each Track Access Authorization and the conditions upon which the authorization may be granted, but access shall not be unreasonably denied or withheld. In the event of a conflict between City permit conditions and a Track Access Authorization, the City permit shall control.

1. Routine Activity

For purposes of this Streetcar Right-of-Way Manual, routine activity generally consists of activity that can be done without requiring Power Down or Operating Restrictions during Revenue Service Hours. Class 1 Routine Activity consists of planned activity by a Permitee in the Streetcar ROW Alignment that does not require Operating Restrictions or Power Down; Class 2 Routine Activity requires Operating Restrictions or Power Down. The City may grant a programmatic Track Access

Authorization to Permittees for multiple instances of related work activity or for a category of related Routine Activities during a fixed period of time.

A. Class 1 Routine Activity means activity by an authorized Permitee within the Streetcar ROW Alignment that Operator determines does not require Operating Restrictions or Power Down. Operator may grant Permitee Track Access Authorization for Class 1 Routine Activity for access during all hours subject to the following requirements:

1. Track Access Authorization is required.
2. Track Access Authorization is subject to the general provisions of this Streetcar Right-of-Way Manual.
3. Advance notice must be given to the City and Operator.
4. Safety procedures used during these hours shall be described in the Track Access Authorization, and shall include all OMUTCD and City of Cincinnati requirements, including, but not limited to, the City of Cincinnati Street Restoration Book, the City of Cincinnati Street Traffic Safety Handbook, any provisions normally employed by the Permitee for working in the public right-of-way, any applicable Routine Safety Procedures, and any additional safety procedures agreed to between the City and Permitee. Refer to Track Access Safety Procedures: Conditions of Work During Streetcar Operations, Article IV.

B. Class 2 Routine Activity means routine activity by an authorized Permitee within the Streetcar ROW Alignment that Operator determines may require Operating Restrictions or Power Down but can ordinarily be performed during Non-Revenue Service Hours. Track Access Authorization for Class 2 Routine Activity is subject to the following requirements in addition to the above requirements applicable to Class 1 Routine Activity:

1. Track Access Authorization for Class 2 Routine Activity is limited to activity during Non-Revenue Service Hours unless an exception applies as provided in Section III.1.B.6, below.
2. Class 2 Routine Activity must be complete at least 30 minutes prior to start of Revenue Service Hours.
3. If a Power Down is required, Track Access Authorization shall be conditioned on the requirement that power be restored at least 30 minutes prior to the beginning of Revenue Service Hours.

4. Class 2 Routine Activity may be performed during Non-Revenue Service Hours over the course of multiple days.
5. Permitee must be aware that although normal passenger service is not taking place during Non-Revenue Service Hours, Streetcars may still be operating (i.e., deadheading, testing and/or inspection of the Streetcars, tracks and/or overhead power systems).
6. Exceptions to Non-Revenue Service Hour limitation. The Operator may grant exceptions for performance of Class 2 Routine Activity during Revenue Service Hours if: (a) activity during Revenue Service Hours is reasonably necessary under the circumstances; and (b) the activity can be performed without undue disruption to streetcar operations. An activity will not constitute an undue disruption on Streetcar activity if:

    (i) No Power Down is required during Revenue Service Hours; and

    (ii) Operating restrictions solely address encroachment of the activity into the vehicle envelope (as opposed to the power envelope) and either: (1) the Permitee can clear the encroaching activity from the vehicle envelope without interfering with the operation of the Streetcar vehicle; or (2) the activity does not physically block the path of the vehicle and the vehicle can proceed through the work area with assistance from a flagger and/or supervisor.

7. If an exception is not warranted, then the activity will require authorization as a Major Activity.

2. Major Activity

The City and Operator recognize that, periodically, Permitee may need to perform maintenance activities that require Operating Restrictions for several hours or days during Revenue Service Hours. During such events, a partial curtailment of the Streetcar operations may be required. Such events shall be planned in advance between the Permitee, the City, and the Operator. A determination of the operating schedule of the Streetcar in any given line segment affected by a curtailment will be made on a case by case basis as part of the Track Access Authorization process.

A. Major Activity means non-emergency activity that requires Operating Restrictions and does not qualify as Class 1 or Class 2 Routine Activity. Major Activity consists of planned work that requires Operating Restrictions and/or Power Down and, by

definition, disrupts Streetcar operations. Track Access Authorization for Major Activity is subject to the following requirements:

1. Track Access Authorization is required.
2. Track Access Authorization is subject to the general provisions of this Streetcar Right-of-Way Manual.
3. Advance notice must be given to the City and Operator.
4. Safety procedures used during these hours shall be described in the Track Access Authorization, and shall include all OMUTCD and City of Cincinnati requirements, including, but not limited to, the City of Cincinnati Street Restoration Book, the City of Cincinnati Street Traffic Safety Handbook, any provisions normally employed by the Permitee for working in the public right-of-way, any applicable Routine Safety Procedures, and any additional safety procedures agreed to between the City and Permitee.
5. Special precautions may be required for in-street work during Revenue Service Hours. Refer to Track Access Safety Procedures: Conditions of Work During Streetcar Operations, Article IV.
6. Permitee shall work with the City and Operator to ensure that (1) Streetcar disruption is minimized, and (2) any required reductions in Streetcar service are implemented in a safe and orderly fashion.
7. To the extent feasible, Major Activities shall be performed during Non-Revenue Service Hours in order to minimize impacts to Streetcar operations.

3. Emergency Activity

Permitee Emergency Activity means activity by a Permitee in the Streetcar ROW Alignment is immediately necessary to: (1) prevent damage or injury to the health or safety of any person; (2) restore utility service; (3) prevent the imminent loss of utility service; or (4) protect property, the environment, or the right-of-way from imminent and substantial harm. Reasonably foreseeable work in the public right-of-way shall not qualify as Emergency Activity. Emergency Activity shall require Track Access Authorization, except that a Track Access Authorization may be issued retroactively.

Emergency Activity shall be subject to the following requirements:

A. Permitee shall notify the City and Operator immediately (as soon as practicable) upon learning of conditions requiring Emergency Activity in the Vehicle and Power Envelope. The Permitee shall strive to notify the City and the Operator at least four hours prior to commencement of work and shall provide a minimum of no less than one hour advance notice; the period of advance notification shall not be less than

the time taken by the Permitee to route personnel and equipment to the affected area.

B. Operator will immediately assign one of its supervisors to work with the Permitee to determine if Streetcar operations may continue during the Emergency Activity under an Operating Restriction, or if the system must be halted or services truncated.

C. Permitee shall work with the City and Operator to ensure that (1) Streetcar disruption is minimized, and (2) any required reductions in Streetcar service are implemented in a safe and orderly fashion.

D. If a system halt or truncation is necessary, the assigned supervisor shall coordinate the location of all Streetcars prior to a Power Down in the impacted area, including the following:

   1. The assigned Streetcar supervisor will coordinate with Streetcar Control to immediately direct that all Streetcars shall be held at the next station or implement a truncated operating plan.
   2. The assigned supervisor shall execute the Power Down for the affected OCS section(s).
   3. Streetcar Power Down cannot strand Streetcars and passengers between stations. All cars must be safely berthed at a station-stop.
   4. If outage duration warrants, the City will contact SORTA to arrange for special bus services as an alternative to the Streetcar, to maintain service for riders in the affected area.

E. If a system halt or truncation is not necessary, the Permitee shall coordinate the work with the assigned supervisor to execute the required repairs in a safe, timely and efficient manner.

F. Permitee will keep the assigned supervisor informed of the progress of the work at all times.

G. Following an emergency declaration, Permitee shall attend a mandatory after-action meeting to be held within five business days of the resolution of the Emergency Activity to review the declaration and to document the basis for the emergency declaration. Permitee, City, and Operator staff must attend this meeting and consider any recommendations for improvement of emergency operations.

H. Permitee must provide evidence that the activity meets the definition of Emergency Activity as defined in Section I.C above. Activity that was reasonably foreseeable and/or planned is not Emergency Activity.

I. If the City determines that conditions did not warrant Emergency Activity, penalties may apply under the Cincinnati Municipal Code.

IV. TRACK ACCESS AUTHORIZATION PROCEDURE

1. Review Authority. The Operatorwill issue all Track Access Authorizations. Due to the significant life-safety issues presented by work in the Vehicle and Power Envelope, the City's Streetcar Director, Chief Safety Officer, and/or Transit Coordinator shall have sole discretion to approve or deny Track Access Authorizations. Permitee activity in the Streetcar ROW Alignment cannot commence in the absence of a signed and completed Track Access Authorization.

2. Permit Application and Issuance Procedure. Permits are processed using the following procedures:

   A. Track Access Authorization requests shall be made using a Track Access Form, a sample version of which is attached to this Appendix.
   B. All requests for planned work within the Streetcar ROW Alignment shall be submitted at a weekly track access planning meeting, unless alternative Track Access Authorization review arrangements have been approved in advance by the City and Operator. Neither the City nor the Operator shall agree to arrangements that result in competitively unfair access to the Streetcar ROW Alignment.
   C. Operator may grant a programmatic Track Access Authorization to a Permitee covering (a) multiple instances of related Routine Activities over a fixed period of time or (b) a category of Routine Activities.
   D. Track Access Authorization requests will be discussed at the meeting, where an approval or a request for further information or actions will be made. Requests can be made simultaneously with any other required City of Cincinnati permit application(s).
   E. If approved for a Track Access Authorization, the Permitee may pick up the completed/signed Track Access Authorization at the start of the planned work day, at the MOF, from the Streetcar Maintenance of Way ("MoW") manager or designee.
   F. Only the Permitee's job supervisor (who will supervise the work under the Track Access Authorization authorization) may sign for and receive the Track Access Authorization. The MoW manager or designee will verify that the Permitee has made all proper preparations for the work, and that all personnel have a current and valid Track Access Card.
   G. Note that a Track Access Authorization must be signed by the City and properly issued by the Operator to be valid.

3. Extended Activity. Any work of an extended nature (i.e., Major Activity) will require advance long-term planning with the City and Operator.

4. Operator Contact Number and Training

   A. The Operator shall provide all parties a telephone call number for 24-hour immediate access to the supervisor on duty at the Streetcar operations center.
   B. The Operator shall provide track access training to all Permitees and their agents for the required authorizations within this Streetcar Right-of-Way Manual.
   C. The City and the Operator shall make provisions for required training and authorizations, at Permitee's expense. Operator shall not charge Permitee for training costs.

5. Pre-Conditions for Work while Streetcars are in Operation. Activity will be allowed within the Vehicle and Power Envelope during Streetcar operations, under the following conditions:

   A. A Track Access Authorization has been issued for the work.
   B. Prior to commencement of the work, the Operator shall review the flagging and safety rules with the Permitee supervisor. A designated safety area for personnel will be established for Streetcar passage during the work period.
   C. Brief stoppage of the Streetcar to clear personnel will be allowed.
   D. The Operator shall issue an "Operating Restriction Order" (requiring Streetcars to proceed at slow speed through affected area) to all Streetcars on the alignment during the work of the Permitee.
   E. The on-site supervisor, if applicable, shall alert the Permitee of the approaching Streetcar and make visual contact with each train operator as they approach the work area. Once contact is confirmed between the supervisor and the operator of the Streetcar, the Streetcar shall hold until the supervisor has determined that the Permitee, its tools and equipment are safely located.
   F. When Streetcars are running under an Operating Restriction Order, The Operator will hold an in-field review of the procedures with both the Permitee and the supervisor. Dependent upon site specific conditions, the Operator may designate the Permitee with authority to walk the train through the work area.
   G. When the work has been completed, the Permitee will close out the Track Access Authorization with the signature of the designated Streetcar supervisor on duty. The Permitee must vacate the work site and cease all work under the former Track Access Authorization.

H. The Operating Restriction Order shall not be released until the Operator has determined that the Permitee has completed the work, removed all tools and vehicles, and left the track alignment.

6. Permitee Requirements

A. All supervisory level personnel working within the Vehicle and Power Envelope shall have had track access training as required by the Operator and the City. The Permitee will pay all costs for their personnel (labor and other expenses) to attend such training. The City and The Operator will not charge for track access training.

B. All personnel, regardless of employer, entering the Vehicle and Power Envelope, shall have in their possession a current and valid Track Access Card. Track Access Cards are obtained after attending a short duration Track Access Training safety course. See Safety Training below.

C. At the beginning of each work shift involving track access, trained supervisors of the Permitee shall instruct all members of the work crew in the track access rules and safety procedures.

D. In the event of two crews (i.e., a work crew within the street and a work crew in adjacent areas along the track (sidewalks or adjacent traffic lanes)), the Permitee shall have at least one crewmember, in addition to the supervisor, with the required track access training.

E. When adjacent work is being performed, employees of the Permitee shall not enter or cross the Vehicle and Power Envelope to bring materials and supplies to their work area without the use of a traffic control personnel for flagging purposes.

F. The Permitee supervisor on duty shall have the Track Access Authorization in his/her possession at all times during commission of the work being completed under the particular permit at the work location.

G. When the Major Activity work has been completed, the Permitee will close out the Track Access Authorization with signature of the designated supervisor on duty, if applicable. The Permitee must vacate the work site and not return unannounced.

V. Track Access Safety Procedures

1. Streetcar Power Down Process

A. Except in the case of a Life-Threatening Emergency (see below), traction power shall only be removed from the Streetcar system by Streetcar Control, in coordination with a Streetcar Supervisor. Critical Streetcar and passenger safety procedures must be implemented by the Operator prior to the Streetcar's Power Down.

B. Should Permitee require a Power Down to perform work within the Power Envelope, a Track Access Authorization shall be required. Power is not disconnected at the end of the revenue day and all elements of the Overhead Contact System are to be assumed energized at all times unless the Operator has de-energized the system. Therefore, a Power Down during both revenue service and non-revenue service hours must be requested and permitted.

C. Cincinnati City Council passed Ordinance No. 297-2021 on 6/23/21 establishing fees for streetcar power-down permits. The current "Fee schedule for streetcar power-downs" shall be reviewed annually and be either confirmed or updated by the Director of DOTE (or his/her designee). These fees are in addition to any other applicable permit fees.

D. A Power Down of the Streetcar overhead contact wire is accomplished through the SCADA (supervisory control and data acquisition) system at the Streetcar Control Center. The DC feeder breakers are remotely operated from the Control Center.

E. A normal Power Down cannot be made by disconnecting the AC infeed power at the substation. Only the Operator can verify Power Down.

F. Immediately after Power Down the Operator "lock out / tag out" Procedure shall be employed to ensure power is down. This will be communicated and coordinated with the Permitee.

2. Procedures Necessary During a Life-Threatening Situation

A. In the event of a life-threatening emergency, first responders on the scene must immediately notify the Operator to Power Down the system and activate the emergency response program as outlined in the System Safety and Emergency Preparedness Plan (SSEPP).

B. First responder organizations include law enforcement, fire, rescue and medical response units. All first responder organizations shall maintain staff on duty with training in Streetcar operations and track access safety. First responder organizations must also maintain staff trained in follow-up assistance procedures, to ensure the safety of Streetcars, passengers and vehicular traffic is not jeopardized.

C. It shall be recognized that unexpected halting of Streetcars can result in adverse consequences in matters of both passenger safety and traffic management. A life-threatening emergency does not include the following:

1. Shutdown for the convenience of a Permitee (i.e., turning off power to maneuver a crane or other mobile equipment through the Vehicle and Power Envelope);
2. Shutdown as a means of preventing a Streetcar from traversing through an area under inspection for maintenance work, when proper Track Access Authorizations have not been obtained; or

3. Shutdown for any form of rush order to establish or restore utility service to a utility customer.

D. Nothing in this section is intended to dictate when a Permitee may be permitted access to its facilities for an Emergency Activity in the Streetcar ROW Alignment as provided in the Cincinnati Municipal Code or emergency repairs as provided elsewhere in the City Street Restoration Book. Such actions shall be subject to the requirements for "Emergency Activity" in III.3 above.

E. First responders shall notify potentially impacted utilities consistently with normal protocols.

3. Banners and Signs. No posting of banners and signs, or the running of ropes, wires or cables shall be made through or within the Vehicle and Power Envelope.

4. Cranes and Overhead Equipment. Cranes and other mobile equipment not specifically insulated for overhead electric line work shall not be permitted to operate within the Vehicle and Power Envelope without Power Down.

5. Access to Traction Power Substations. Only authorized Streetcar operating personnel shall enter Streetcar Traction Power Substations.

VI. SPECIAL PROCEDURES FOR ADJACENT WORK PROVIDERS

Certain routine services performed adjacent to the Streetcar track in the Streetcar ROW Alignment may require cautionary training and regulation of work procedures and working times. Such work is typified by landscaping services, station-stop cleaning services and streetlight replacement services. Such work may also include activities outside of the Vehicle and Power Envelope, but immediately adjacent thereto. Track Access Authorizations and training for such work will be handled on a case-by-case basis in coordination between the City and the Operator.

Such Permitees will, at minimum, be required to have (1) an annually renewable Track Access Authorization, (2) Track Safety Training and (3) current and valid Track Access Cards.

The Operator and/or the City will periodically audit the Permitee's performance under the annual Adjacent Track Access Authorization. If the Permitee is found in violation of the permit requirements, The Operator or the City may revoke the annual permit. Permitees whose annual permit is revoked will need to apply for individual permits under the procedures described above.

VII. TRACK ACCESS TRAINING

The Operator will provide special safety training classes intended to train the supervisory personnel of all Permitees authorized to do work within the Streetcar ROW Alignment. Training and materials provided will be suitable to allow the supervisory level personnel to train their respective workers. Track Access Safety goes beyond and is in addition to safety requirements for regular in-street work. This safety training and information provided is intended to supplement, not replace, existing safety programs in use by the utility companies and other service providers.

As a condition of work within the Streetcar ROW Alignment, all individuals must be able to demonstrate that they have attended Track Access Training courses at the proper level; individuals must carry a current and valid Track Access Card, issued upon completion of training.

Permitees must take necessary corrective action with personnel found to violate any Track Access rules and/or procedures. Any violations may be cause for revocation of Track Access Cards and/or Track Access Authorizations. Violations shall be subject to civil penalties under the Cincinnati Municipal Code.

VIII. INDEMNIFICATION

The Permitee, in accepting and by acting under a City permit for work in the Streetcar ROW Alignment, agrees to defend, indemnify, and hold harmless the City and its duly appointed agents and employees to the fullest extent permitted by law from and against any and all claims, suits, liabilities, losses, damages, costs or expenses, including attorneys' fees, that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the negligence, recklessness, or willful misconduct of the Permitee in the exercise of this permit.
Nothing in this Street ROW Manual shall limit the application of bonding, insurance, or any other permit requirements imposed under applicable Regulations.

IX. FINES AND PENALTIES

Failure to comply with the requirements of this Streetcar Right-of-Way Manual may result in revocation of City permits, revocation of street contractor licenses, levying of administrative fines, and other penalties as provided for in the Cincinnati Municipal Code.

CITY OF CINCINNATI

DEPARTMENT OF TRANSPORTATION AND ENGINEERING

Fee Schedule for streetcar power-down permits

City of Cincinnati

August 25th, 2021

Cincinnati City Council passed Ordinance No. 297-2021 on 6/23/21 establishing fees for streetcar power-down permits. These fees are in addition to any other applicable permit fees.

The fee schedule for streetcar power-down permits effective until **August 31, 2022**, is as follows:

$87.50 Per Hour

There is a **4-hour minimum** due to the time it takes crews to set up and remove a power down.

Fees for a streetcar power-down are paid at the same time as other permit fees. The track access authorization and associated power down is NOT valid until signed. Permit holders must attend the weekly track access authorization meeting to discuss the power-down request and specific dates/times for power down.

**Fees are subject to change annually. Current Fee schedule can be found at:

https://www.cincinnati-oh.gov/dote/permits-licenses/dote-resource-center/

ITEM 452 – 11" NON-REINFORCED CONCRETE PAVEMENT

This work consists of replacing existing pavement at various bus stops or intersection approaches with new concrete pads, typically measuring 10 feet wide (as measured from the back of the P-1 Curb) by 80 feet in length, or as directed by the Engineer. Install pads on the following streets:

XXX

Use Class MS concrete in accordance with the provisions of 499 for the new concrete pavement.

Sawcut the existing pavement and remove to the limits as established by the Engineer. Pay for the sawcutting and pavement removal under either Item 202 – Pavement Removed (for rigid pavements) or Item 203 – Excavation (for flexible base pavements). Compact subgrade in accordance with 204 - Subgrade Compaction. Include the cost of subgrade compaction in the unit cost for this item.

For Concrete Pad Installation in Rigid Pavements:

Space the expansion and contraction joints to align with existing joints on the adjacent concrete base pavement. Adhere to the requirements of ODOT Standard Drawing BP-2.2, Transverse Pavement Joints **(see Appendix C)**. Seal all joints. Tie new concrete pavement with the existing pavement via the following:

Longitudinally: Install tie bars or hook bolts in the existing concrete pavement per ODOT standard Drawing BP-2.1 **(see Appendix C)**.

Transversely: Install dowels in the existing concrete pavement per ODOT Standard Drawing BP-2.2 **(see Appendix C)**.

The Engineer may waive the tie-in requirements should the existing concrete pavement not support the drilling operation for the dowels or tie bars/hook bolts.

For Concrete Pad Installation in Flexible Base Pavements:

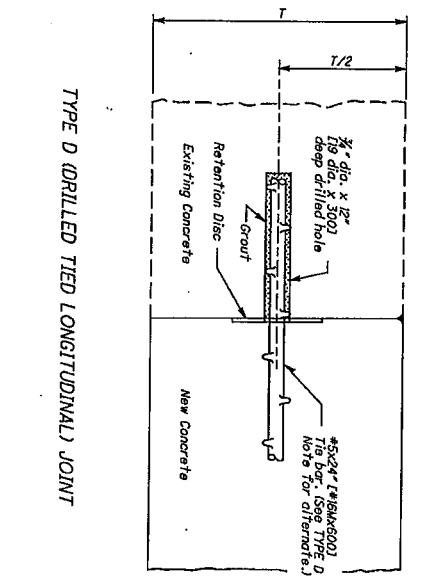
Adhere to the requirements of ODOT Standard Drawing BP-2.2 (**see Appendix C**) for joint construction and dowel placement in the new concrete pavement. Seal all joints.

The Contractor must adhere to the Concrete Jointing Detail Drawing in Appendix C.

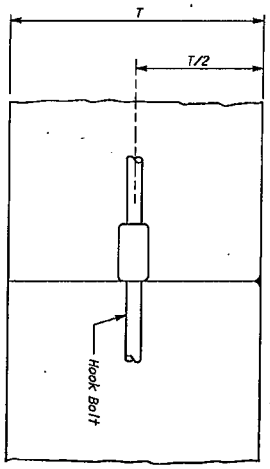
Install new integral concrete curb with the pavement. Curb paid separately under Item 609 – Concrete Curb Integral with Concrete Pavement, Type P-1.

Seal the new/existing pavement interface with a 702.01 asphalt binder material.

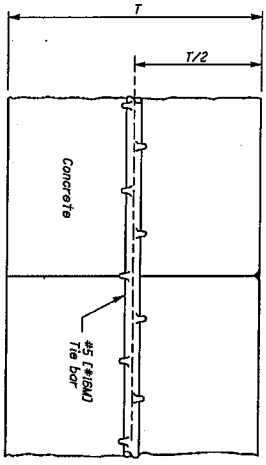
Payment is full compensation for furnishing all materials, shaping and compacting the exposed underlying material, placing new pavement, sealing the perimeter of the concrete pad, and for all labor, equipment, and incidentals necessary to complete this work.



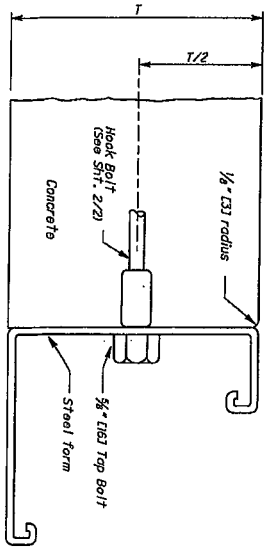
TYPE D (DRILLED TIED LONGITUDINAL) JOINT



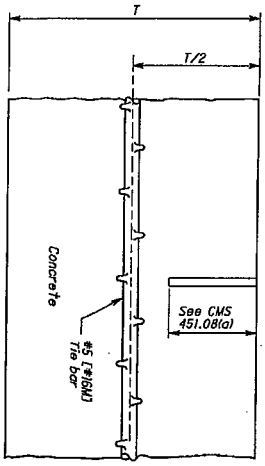
BUTT JOINT w/ HOOK BOLT



BUTT JOINT W/ TIE BAR



ACCEPTABLE METHOD OF FORMING JOINT



SAWED JOINT

NOTES

GENERAL: Longitudinal joints shall be used when specified on the typical section and shall be constructed as shown on this drawing in Items 451 and 452 Pavement and Item 305 Base.

The joint shall be on the centerline of the pavement unless otherwise shown on the plans. Where the pavement width exceeds 16' [5.0 m], an additional longitudinal joint shall be introduced into the jointing details as directed by the Engineer.

Tie bars shall be #5 [#16M] deformed bars. A satisfactory device shall be used to hold the tie bars in proper position or they may be installed by a mechanical installing device. Tie bars shall be centered on the longitudinal joint as nearly as practical.

BUTT JOINT: The longitudinal joint between adjoining slabs poured in separate operations shall be a butt joint with hook bolts or tie bars, unless otherwise shown on the plans. Bent tie bars shall not be permitted.

TYPE D DRILLED TIED LONGITUDINAL JOINT: Type D joints shall be constructed in accordance with CMS 255.05. The nylon or plastic retention disc shall be clear or opaque white in color. Grout shall meet the requirements of CMS 255.02. ¾" [16] expansion anchors, FF-S-325, Group VIII, Type I or Group II Type 4, Class 1 may be used lieu of the #5x24" [#16M×600] deformed bar and shall be installed according to the manufacturer's recommendations.

The use of self drilling expansion shield anchors, FF-S-325, Group III, Type I (a) and (c) shall not be permitted.

See Sheet 2/2 for additional details.

THIS DRAWING REPLACES BP-2.1 DATED 7-16-04.

1/2	SCD NUMBER	STANDARD ROADWAY CONSTRUCTION DRAWING	OFFICE OF ROADWAY ENGINEERING	ALL METRIC DIMENSIONS (IN BRACKETS [ ]) ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.	PAVEMENT DESIGN ENGR	STATE OF OHIO DEPARTMENT OF TRANSPORTATION
	BP-2.1	LONGITUDINAL PAVEMENT JOINTS			D. MILLER	PAVEMENT ENGINEERING ADMINISTRATOR 7-18-08 DATE

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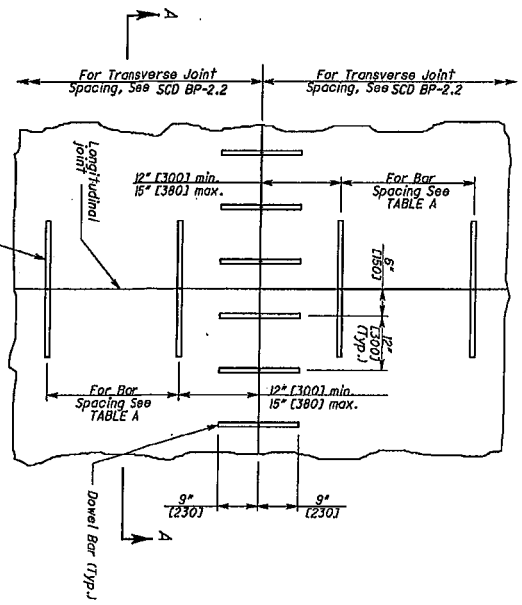
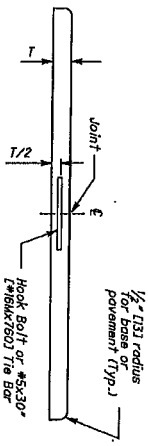


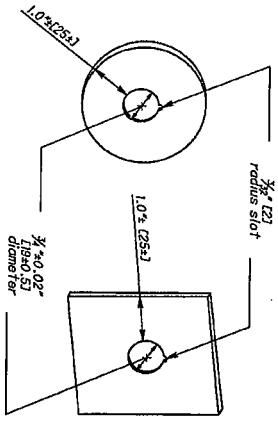
PLAN

TABLE A			
Thickness of Pavement	Transverse Joint Spacing	Number of Tie Bars per Slab	Max. spacing between Tie Bars
10" [250] or less	15' [4.6 m]	7	26" [660]
	21' [6.5 m]	10	26" [660]
Greater than 10" [250]	15' [4.6 m]	9	20" [508]
	21' [6.5 m]	13	20" [508]



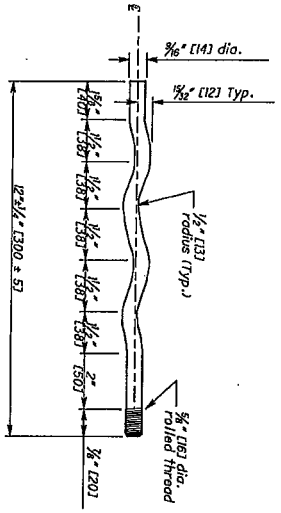
SECTION A-A

TIE BAR OR HOOK BOLT SPACING

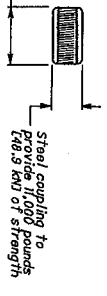


NYLON OR PLASTIC GROUT RETENTION DISCS FOR DOWEL/TIE BARS

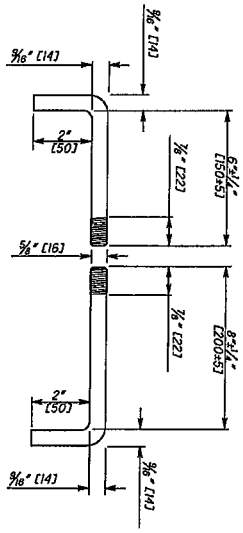
(1/8" [1.6] min. thick)



HOOK BOLT ALTERNATE



HOOK BOLT



NOTES

EDGING: Edge joints with a thin metal edger having a radius of 1/8" [3]. Any impression left in the surface of the pavement by the flat part of the edging tool shall be eliminated.

In lieu of the above method the longitudinal joint may be constructed in accordance with CMS 451.08(d).

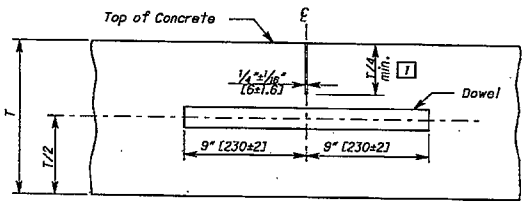
HOOK BOLTS: Threaded hook bolts and alternates shall be turned to a tight fit when installed in couplings. Ensure the coupling is located on the same side of the joint as the shorter (6"+/-1/4" [150 +/-5]) hook bolt.

METAL STRENGTH: Tie bars, hook bolts assemblies, and the hook bolt alternate shall have a minimum strength of 11,000 pounds [48.9 kN].

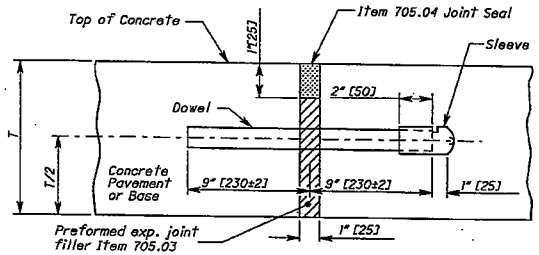
SPACING: Tie bars shall not be located within 12" [300] of any transverse joint.

THIS DRAWING REPLACES BP-2.1 DATED 7-16-04.

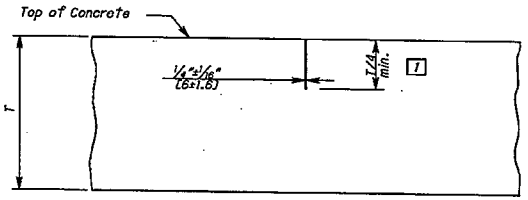
2/2	SCD NUMBER	STANDARD ROADWAY CONSTRUCTION DRAWING	OFFICE OF ROADWAY ENGINEERING	ALL METRIC DIMENSIONS ( ) IN BRACKETS [ ] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.	PAVEMENT DESIGN ENGR. D. MILLER	STATE OF OHIO DEPARTMENT OF TRANSPORTATION
	BP-2.1	LONGITUDINAL PAVEMENT JOINTS				PAVEMENT ENGINEERING ADMINISTRATOR 7-18-08 DATE



ITEM 451, 452 & 305

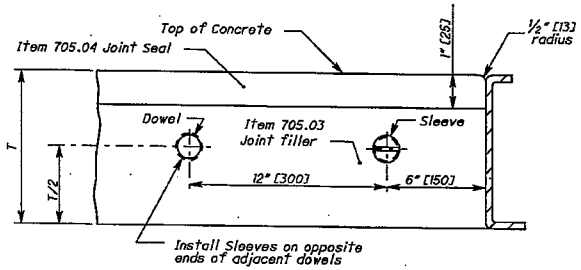


SECTION THROUGH EXP. JOINT



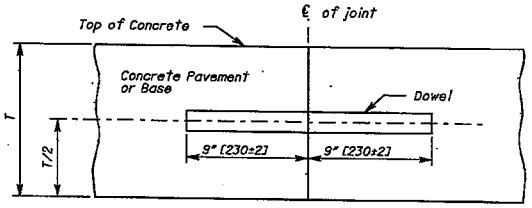
ITEM 452 and 305
(for shoulders, alleys, driveways, etc.)

CONTRACTION JOINTS SECTIONS



SIDE ELEVATION OF EXP. JOINT
(through Concrete Pavement or Base)

EXPANSION JOINTS



SECTION THROUGH CONSTRUCTION JOINT

CONSTRUCTION JOINT

LEGEND

1 Where T > 10" [255], the sawcut depth shall be T/3. If using early entry saws, cut joints 2¼" to 2½" [56 To 63] deep and ⅛" [3] wide.

NOTES

GENERAL: Notes and details shown on this drawing shall be considered in conjunction with and supplemental to the pertinent specifications for portland cement concrete pavement and bases, and related incidentals.

JOINT COMPONENTS: This drawing is intended for use with a uniform depth pavement. When the project involves the placing of variable depth pavement, the joint components shall be held in place in accordance with the method shown in the plans or as approved by the Engineer.

CONTRACTION JOINTS: Contraction joints in Items 452 and 305 shall not be dowelled in alleys, private drives, or commercial drives.

Contraction joints of the type specified shall be spaced in accordance with the CONTRACTION JOINT SPACING Table.

CONTRACTION JOINT SPACING	
Types of Pavement or Base	Maximum Spacing Between Joints
Item 451 Reinforced Concrete Pavement	21' [6.5 m]
Item 452 Non-Reinforced Concrete Pavement	15' [4.6 m]
Item 305 Concrete Base	15' [4.6 m]

THIS SHEET REPLACES BP-2.2 DATED 7-16-04.

STANDARD ROADWAY CONSTRUCTION DRAWING

TRANSVERSE PAVEMENT JOINTS

OFFICE OF ROADWAY ENGINEERING

ALL METRIC DIMENSIONS (IN BRACKETS [ ]) ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

PAVEMENT DESIGN BMP: D. Miller

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
PAVEMENT ENGINEERING ADMINISTRATOR

7-18-08
DATE

SCD NUMBER BP-2.2

1 / 2

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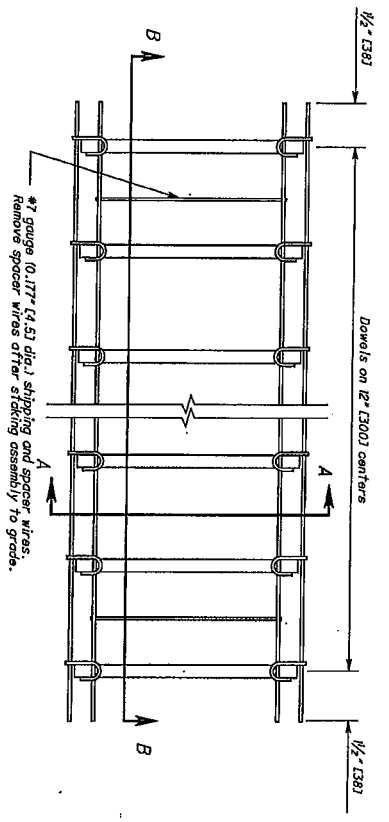
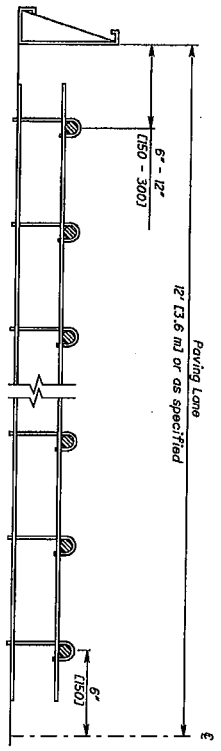
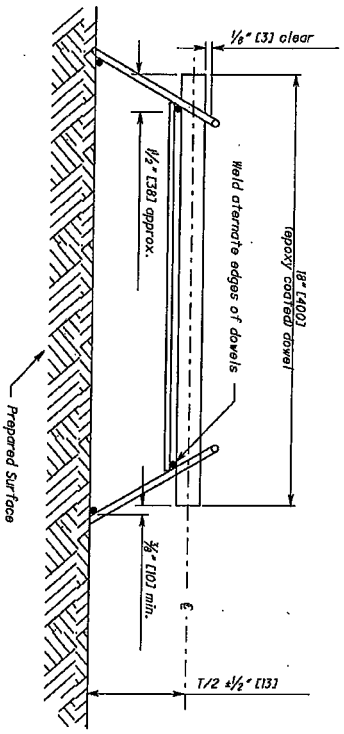


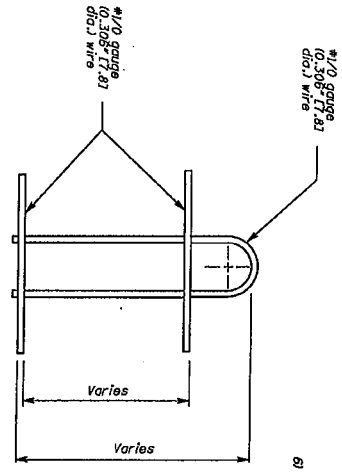
PLAN VIEW



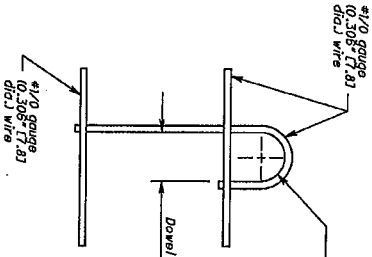
SECTION B-B



SECTION A-A



U-LEG DETAIL



J-LEG DETAIL (ALTERNATE)

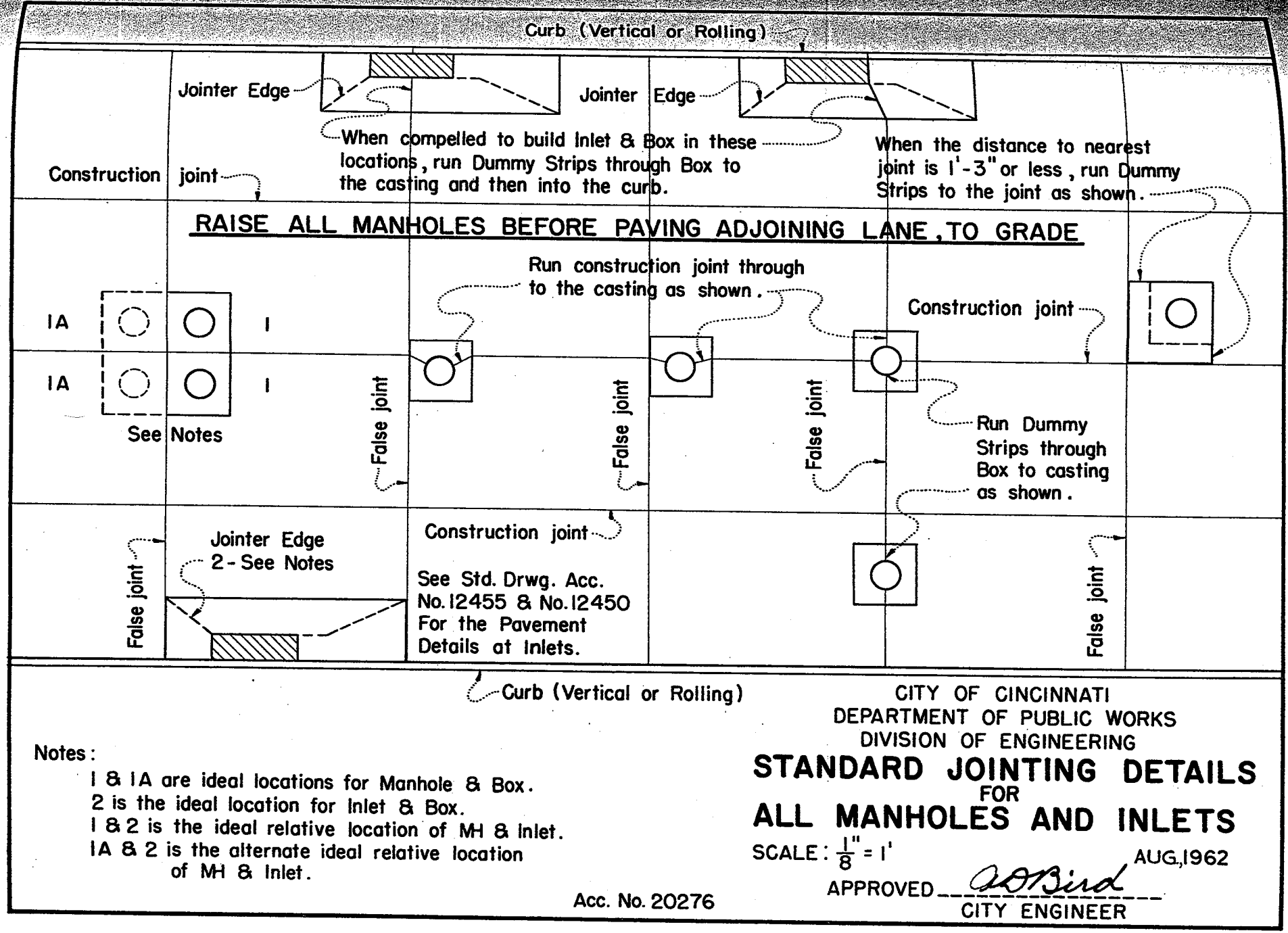
NOTES

1) Wire sizes shown are minimum required.
2) All wire intersections are to be welded.
3) Stakes typically applied at working ends of dowel.
4) TOLERANCES:
5) A) ±¼" per foot [±20 mm per meter] unless otherwise specified.
   B) Centerline of individual dowels shall be parallel to each other, the surface and the centerline of the slab.
   C) On centers should be ±½" [±13].
   D) Dowels should be placed at mid-depth of slab.
6) J-Leg or U-Leg to be installed on inside or outside of subframe.

Refer to OMS 451.08 B and 709.13 for dowel specifications.

THIS SHEET REPLACES BP-2.2 DATED 7-16-04.

2/2	SCD NUMBER BP-2.2	STANDARD ROADWAY CONSTRUCTION DRAWING TRANSVERSE PAVEMENT JOINTS	OFFICE OF ROADWAY ENGINEERING	ALL METRIC DIMENSIONS ( ) ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.	PAVEMENT DESIGN ENGR. D. Miller	STATE OF OHIO DEPARTMENT OF TRANSPORTATION PAVEMENT ENGINEERING ADMINISTRATOR 7-16-08 DATE



Notes:

1 & 1A are ideal locations for Manhole & Box.
2 is the ideal location for Inlet & Box.
1 & 2 is the ideal relative location of MH & Inlet.
1A & 2 is the alternate ideal relative location of MH & Inlet.

Acc. No. 20276

CITY OF CINCINNATI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

STANDARD JOINTING DETAILS FOR ALL MANHOLES AND INLETS

SCALE: $\frac{1"}{8}$ = 1'

AUG, 1962

APPROVED A O Bird
CITY ENGINEER

r.m.h. (redrawn)

20-9-2

CONSTRUCTION SIGNAGE

For projects lasting longer than 2 weeks in OTR/ CBD/ Banks areas, sandwich boards or banners placed on barricade fencing shall be installed as per the specifications below.

SANDWICH BOARDS

Sandwich boards (such as Plasticcade A Frames 24" x 36") shall be placed at the ends of the construction project limits, in the roadway but near the sidewalk, or as directed by the DOTE Inspector. Stand color shall be white. Insert to be digitally printed on 2' x 3' coroplast material (4 mm thick sign panel) both sides.

Sandwich board shall use the display template as shown below which includes the project name, permit holder, and contact phone number. Construction dates are to be printed on interchangeable adhesive vinyl (if dates are known) or to be handwritten onto vinyl strip with a bold permanent marker. Permittee responsible to have extra blank adhesive vinyls for schedule updates throughout project.

VINYL BANNER

Banners may be used in place of a sandwich board; size should be larger – 36" x 54".
Place banner on each frontage of the barricade construction fencing. Banner material: vinyl with welded (sewn) edges; grommets in 4 corners to fasten to fencing.
Construction dates to be on interchangeable adhesive vinyl as above (unless dates are not expected to change).

DOTE will supply artfile upon request.

Contact: Joell Angel-Chumbley (513)352-5268

joell.angel-chumbley@cincinnati-oh.gov