ORDINANCE NO. 440 - 15

AN ORDINANCE OF THE BOROUGH OF SHOEMAKERSVILLE, BERKS COUNTY, PENNSYLVANIA, REPEALING AND REPLACING ORDINANCE NO. 273 OF 1983, BY PROVIDING RULES AND REGULATIONS REGARDING THE OPENING AND EXCAVATION OF STREETS WITHIN THE BOROUGH, INCLUDING BUT NOT LIMITED TO THE OBTAINING OF A PERMIT PRIOR TO THE EXCAVATION OR OPENING OF ANY BOROUGH STREETS, AND PENALTIES FOR VIOLATION THEREOF.

BE IT ENACTED AND ORDAINED by the Council of the Borough of Shoemakersville, in session duly assembled that:

SECTION I. Ordinance 273 of 1983, providing the requirement that a permit be obtained in order to make an opening in the streets of the Borough, requiring a deposit to ensure the proper closing thereof, and providing specifications for closing of the same and penalties for violation thereof, is hereby repealed, replaced and reenacted to read as follows:

STREET EXCAVATIONS AND CLOSINGS

- A. <u>Definitions and Interpretation</u>. The following words, when used in this Ordinance, shall have the meanings ascribed to them in this section, except in those instances where the context clearly indicates otherwise:
- Borough. The Borough of Shoemakersville, Berks County,
 Pennsylvania.
- 2. <u>Borough Secretary</u>. The person then serving as the duly appointed Secretary of the Borough/or his or her designee.
- 3. <u>Excavation</u>. Any activity within the right-of-way of any street, alley or cartway which involves cutting, breaking or disturbing the surface thereof. In

this Ordinance, the term "opening" shall have essentially the same meaning as excavation.

- 4. <u>Person</u>. Any natural person, partnership, firm, association, corporation or municipal authority.
- 5. Streets. Any public street, avenue, road, square, alley, highway or other public place located in the Borough and established for use of vehicles, including all portions of the right-of-way thereof, but not including state highways.

In this Ordinance, the singular shall include the plural and the masculine shall include the feminine and the neuter.

- B. <u>Permit Required to Make Opening or Excavation</u>. It shall be unlawful for any person to open or make an excavation of any kind in any of the streets in the Borough without first securing a permit therefor, as hereinafter provided.
- C. Application for Permit. Any person who shall desire to make any opening or excavation in any of the streets in the Borough shall make application to the Borough Secretary in writing for that purpose. Such application shall be made upon forms to be furnished by the Borough and shall set forth the name of the applicant, the exact location of the proposed opening or excavation and the approximate size or depth thereof, and shall contain an agreement on the part of the applicant that the work shall be done in full compliance with the ordinances of the Borough and the laws of the Commonwealth of Pennsylvania in relation thereto, and that the applicant shall well and truly save, defend and keep harmless the Borough from and indemnify it against any and all actions, suits, demands, payments, costs and charges for or by reason of the proposed opening or excavation, and all damages to persons or property resulting in

any manner therefrom, or occurring in the prosecution of the work connected therewith, or from any other matter, cause or thing relating thereto.

D. Permit Fees and Fee Schedule. Before any permit shall be issued to open or excavate any street in the Borough, the applicant shall pay a permit fee in the amount of Ten Dollars (\$10.00) or such fee as may be set by Resolution of the Borough Council from time to time, which shall cover the administrative fees of the Borough in connection therewith, and shall deposit the sum of Seventy-five Dollars (\$75.00) or such amount as may be set by Resolution of the Borough Council from time to time, to be applied against the cost of restoration of the portion of the street so opened or excavated, which shall authorize the permit holder to open or excavate a maximum area of ten square feet of street. A larger portion of street may be opened or excavated provided that an additional deposit of Seven Dollars and Fifty Cents (\$7.50) or such amount as may be set by Resolution of the Borough Council from time to time, for each additional square feet of street prepared to be opened or excavated is made to the Borough Secretary.

Where, in the opinion of the Borough's Secretary or his/her designee and at the Borough's sole discretion, site conditions are such that additional effort is required to protect the integrity of the street(s) of the Borough, the permittee may be required to perform additional work and/or pay (or provide adequate security for the payment of) additional costs. This option could include permanent restoration of the street surface by the permittee along with payment of all above stipulated fees and charges, or the reconstruction and/or resurfacing of an area of street exceeding the area directly affected by the opening or excavation at the permittee's expense. Where additional

work is required, a legally binding agreement to perform such work, acceptable to the Borough in form and substance, shall be executed by the applicant before issuance of the permit.

Upon inspection, if it be determined that the permittee actually removed, disturbed or damaged, either in the initial or subsequent restoration, an area of yardage greater than that set forth in his or her application, the permittee shall forthwith pay a proportionate amount to be fixed by the Borough's Secretary within three (3) days after demand therefore shall be made in writing.

- E. <u>Computation of Area of Street Pavement or Surface to be Charged</u>. In computing the square yards of the pavement or surface area to be disturbed as the basis of any fee to be charged which is based upon quantity of surface area disturbed, twelve inches (12") shall be added to all sides of the proposed opening or excavation.
- F. <u>Issuance of Permits Restricted</u>. Permits shall be issued only to persons furnishing public utility services or the owner or owners of the real property adjoining the location where such opening or excavation is to be made.
- G. <u>Information Contained on Permit</u>. Any permit issued hereunder shall specify the exact location where the opening or excavation is to be made, the approximate permitted size or depth thereof and the times within which the work for which the permit is granted shall be performed and completed.
- H. <u>Permit Approval or Disapproval</u>. A permit may be issued to the applicant within twenty (20) days after all of the requirements therefor have been fulfilled. If the application is disapproved for any reason, written notice of disapproval together with reasons therefor shall be given to the applicant within five (5) days of such disapproval.

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- I. Responsibility to Contact Utilities. The work authorized by the permit is subject to all of the provisions of the Act of December 10, 1974, P.L. 852, No. 287, 1 et seq., as amended or supplemented from time to time. It shall be the permittee's responsibility to contact the utilities that have recorded their facilities in compliance with said Act.
- J. <u>Compliance with Other Ordinances and Laws</u>. No permit shall be issued to any person indebted to the Borough because of any previous application or permit, or in violation of any previous permit. Any permit is issued subject to all ordinances of the Borough, all state and federal laws, and to the following conditions:
- 1. <u>Bore Holes.</u> Bore holes will be considered openings and a restoration charge of Twenty-five Dollars (\$25.00) or such fee as may be set by Resolution of the Borough Council from time to time, will be levied for each bore hole made. A permit will be required for each bore hole grouping. The permittee shall plug and seal bore holes, in a manner and with materials approved by the Borough Secretary or his/her designee, in a manner and with materials approved by the Borough, to the street surface within thirty (30) days of boring. If the applicant does not plug and seal the holes within the given time period, the Borough reserves the right to take any steps deemed necessary to repair the street, and the associated costs shall then be paid by the permittee upon the Borough's demand.
- 2. Ahead of Paving Permit. Permits for excavation performed in advance of Borough scheduled street improvements at the same location, where the required work is completed in accordance with a schedule approved by the Borough, will be issued at no charge. A detailed construction plan must accompany each

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application for an "Ahead of Paving Permit." Excavation, backfilling and temporary street opening restoration will be performed by the permittee at his or her cost as directed by the Borough.

- 3. <u>Subsurface Plans</u>. Upon completion of work, the permittee shall furnish to the Borough Secretary completely dimensioned plans showing accurately and distinctly, and in such detail as required, the size, shape and kind of pipe, wire or structure the permittee has installed or altered and its location with reference to the street surface and the nearest curb line and curb intersection. No refunds will be allowed until such plans have been furnished and accepted.
- 4. <u>Time Limit</u>. In case the work has not been completed on or before the date as shown on the permit, the Borough may, if it deems advisable, take steps to backfill the trench and replace permanent pavement over the opening for which the permit has been issued. If an extension of time beyond said date is necessary for the completion of the work, a written application therefor must be filed and approved by the Borough Secretary.
- 5. Excavation Notice. The Act of Assembly No. 1986 -172 (the "Act") requires those who intend to excavate, demolish or blast to file certain notices (one-call, etc.) before commencing work. Applicants for permits to excavate or open any public street of the Borough shall comply with all of the requirements of this Act. Permits issued by the Borough shall be deemed null and void unless the requirements of the Act have been met.
- 6. <u>Surface Cut</u>. Trenches in paved areas shall be cut to a neat edge using an asphalt/concrete saw.

- 5. Barricade Cover, Lighting and Traffic Control. All street openings shall be completely barricaded and protected by the permittee. Excavations left open or incompletely repaired after dark shall be marked by PennDOT approved flashing lights. Where work is interrupted, the person(s) responsible for the opening shall secure and cover the excavation with an appropriate metal plate. All required traffic control shall be provided by the permittee in accordance with PennDOT's current publication (Work Zone Traffic Control Plan) or any future PennDOT publication(s) dealing with this subject. Nothing contained in this Ordinance or other legislation of the Borough shall release the person opening the street from all liability associated with claims for injury or damage resulting therefrom.
- 8. <u>Backfilling</u>. All openings made in the improved area shall be backfilled by the permittee in accordance with detailed sketches for filling and restoration which are hereafter set forth as Exhibits "A" and "B," respectively, and which are made a part of this Ordinance.
- 9. Paving Restoration. Immediately following backfilling and compacting the permittee shall apply cold patch or hot mix bituminous material to the opening at a depth no less than two inches (2") and compacted to the level of the abutting surface. This temporary restoration may be in place no longer than three (3) months. If due to traffic, weather, or other conditions, this temporary material is displaced and the road surface becomes uneven, the permittee must add additional material to keep the surface smooth. Permanent restoration must be placed in accordance with Borough standards no later than the expiration of such three (3) month period or two (2) weeks after the permittee is given notice by the Borough Secretary,

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whichever occurs first. Failure to abide by any of these restoration criteria will subject the permittee to pay the full amount plus 10% of any costs incurred by the Borough to repair the street.

10. Shoulder Restoration.

- (a) <u>Paved and Stabilized Shoulders</u>. Paved and stabilized shoulders shall be reconstructed and restored to a serviceable of the same type as existed before the start of work. All shoulder restoration shall be the responsibility of the permittee.
- (b) Other Shoulders. Other shoulders shall be restored according to the following:
- (i) Suitable material shall be used for the backfill of openings in shoulders.
- (ii) If the length of the facility exceeds fifty feet (50'), the shoulder shall be graded, rolled and penetrated with RT-2C or MC-30 bituminous material at a minimum rate of twenty-five hundredths (0.25) gallon per square yard and chipped or lightly sanded to prevent tracking of oil onto the pavement.
- 11. Restoration at Appurtenances. The top of every manhole, valve box or other access to the facility shall be of the same elevation as the finished and restored surface in which it is located. The surface surrounding manholes or valve covers located in shoulders shall be paved in such a manner as to prevent washouts. All manholes, including those cast-in-place, shall be constructed in compliance with current industry standards and PennDOT Form 408, Section 713.2(c).

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- 12. <u>Additional Restoration</u>. All disturbed portions of the street, including all appurtenances and structures, such as guiderails or drain pipes, shall be restored to a condition equal to or better than that which existed before the start of any work authorized by the permit.
- (a) If the permittee opens any street pavement having a bituminous concrete surface, whether to install a new facility or to modify an existing facility, the permittee shall, in addition to the restoration conditions outlined in the permit and in this Ordinance, overlay the street pavement in accordance with the following conditions:
- (i) When a longitudinal opening longer than ten feet (10') and wider than three feet (3') is made in the street pavement, the permittee shall overlay the traffic lanes in which the openings were made for the entire length of the street between such openings, as directed by the Borough.
- (ii) When two (2) or more transverse trench openings are made in the street pavement less than two hundred feet (200') apart, the permittee shall overlay all traffic lanes in which the openings were made for the entire length of street between such openings, as directed by the Borough.
- been made by the permittee in the street pavement less than two hundred feet (200') apart within five (5) years of the last resurfacing by the Borough the permittee shall mill and overlay all traffic lanes in which the openings were made. Milling depth, area, and leveling course to be determined by the Borough. Overlay to consist of a minimum

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- 1-1/2" superpave mixture as determined by the Borough. (see detail 923005-131-A-001)
- (iv) Where disturbed lanes adjacent to shoulders are overlaid, the shoulder shall be raised so that the overlaid pavement and shoulder edges are at the same elevation.
 - (b) Regardless of the age of the wearing course:
- openings are made in the street pavement, the Borough may require the permittee to overlay all traffic lanes in which such openings are made for the entire length of the street that was opened if the Borough determines that the present serviceability index of the street, as discussed in Chapter 3 of the current PennDOT "Maintenance Manual," has been impaired by the opening; or
- (ii) When five (5) or more openings are made by the same permittee in the street pavement less than one hundred feet (100') apart, the Borough may require the permittee to overlay the entire disturbed area.
- 13. Notice to Borough Secretary. The Borough Secretary shall be 8030 notified at telephone number (610) 562-4950 at least two (2) hours prior to the time when the opening in the pavement is to be made, and shall be further notified at least two (2) hours prior to the time when an opening is to be backfilled and completed, so that the proper instructions may be issued for permanent pavement replacement.
- 14. <u>Work for Borough of Shoemakersville</u>. Contractors doing work of this nature for the Borough and any authority of the Borough of Shoemakersville shall

be required to obtain a permit therefor, however said permits shall be issued without charge.

- such a time and in such a manner as shall be consistent with the safety of the public and shall conform to all requirements and standards of the Borough. If the Borough discovers that the work has been discontinued or has not been properly performed, the permittee, upon being notified thereof in writing by the Borough, shall immediately take all necessary steps, at his or its expense, to place the work in such condition as to conform to the Borough's requirements or standards. If a dispute arises between the permittee and any Borough employee charged with the responsibility to inspect such work, the employee shall have the authority to suspend work until the matter can be referred to and be decided by the Borough consulting engineer.
- 16. Additional Inspection Fees. If the Borough determines that the permitted work is of sufficient magnitude or importance to warrant assignment of one (1) or more Borough employees to inspect the permitted work on a more than spot inspection basis, the permit shall so indicate, and the permittee shall be charged for all salary, overhead and expenses incurred by the Borough for the inspection.
- K. Responsibility for Defects Occurring Within Two (2) Years. If within two (2) years after the restoration of the surface as herein provided defects shall appear therein resulting from defective backfilling by the permittee, the permittee shall reimburse the Borough for the cost of all necessary repairs to the permanent paving.
- L. Responsibility of Permittee for Certain Work; Right of Borough to Do Certain Work; Charges Therefor. All other work in connection with openings in any

street, including excavation, protection, refilling and temporary paving, shall be done by or for the person to whom or for which the permit has been issued, at such person's expense, and all such work shall be subject to the provisions of this Ordinance and to the supervision and approval of the Borough, provided that the Borough may, if it deems it necessary to the proper performance of the work, require that cutting of the surface of streets and the backfilling of all excavations therein shall be done by the Borough, in which event the applicant shall pay the actual cost of the work to be performed by the Borough.

M. Emergency Openings. In the case of any leak, explosion or other accident in any subsurface pipe, line, structure, construction or apparatus, it shall be lawful for the person owning or responsible for such pipe, line, structure, construction or apparatus to commence an excavation to remedy such condition before securing a permit, provided that application for a permit shall be made immediately and not later than the next business day thereafter, and that such person shall comply with all the provisions of this Ordinance. If an emergency condition exists, the Borough Secretary shall be notified immediately at telephone number (610) 562-4950. If any such emergency condition shall not be immediately attended to by the owner or person responsible for such pipe, line, structure, construction or apparatus, the Borough shall, after such notice as it shall deem necessary under the circumstances of the particular case, proceed to cause the Borough to do the work necessary and required by such emergency, and charge the same on the basis of cost plus twenty percent (20%) to such owner or person.

- N. Restrictions Regarding Trees and Shrubbery. The permission herein granted does not confer upon the permittee or its contractors the right to cut, remove or destroy trees or shrubbery within the legal right-of-way, except under specifications, regulations and conditions as the Borough may prescribe or as otherwise permitted by the laws of the Commonwealth of Pennsylvania.
- O. <u>Permittee Responsibilities for Future Relocation of Work</u>. If at any time in the future the roadway is widened or reconstructed, or the alignment of any grade thereof are changed, the permittee further agrees to change or relocate all or any part of the structures covered by the permit which interfere with the improvement of the roadway, at the permittee's own cost and expense.
- P. Conditions for Laying and Extending Utility Lines. No new water, sewer, steam or gas main or electric, shall hereafter be laid or constructed, and no such existing main or line shall be extended in any of the streets of the Borough until the plan therefor shall have been first filed with the Borough consulting engineer and such plan and the exact location of such main or line approved by the Borough consulting engineer. The Borough consulting engineer shall not approve the locating of any such main or line at a depth of less than thirty inches (30") from the surface of the street unless he shall be convinced that locating the same at a depth of more than thirty inches (30") from the surface is impossible or impractical. Within ninety (90) days of completion of the construction project, an "as-built" plan and/or Geographic Information System (GIS) information, as designated by the Borough, establishing the exact location where such main or line was installed shall be filed with the Borough Secretary.

- Insurance Required. No person shall dig up any street or alley without Q. first giving to the Borough:
- Permittee's Liability Insurance. The permittee shall purchase and 1. maintain insurance that will afford the following protection from claims:
- Additional Insureds. This policy shall name both the (a) Borough and Borough Engineer as "additional insured."
- Coverage. For damages because of bodily injury, sickness (b) or disease, or death of any person other than employees including claims insured by usual personal injury liability coverage; property damages and loss of use resulting therefrom; any or all of which may arise out of or result from the operations and completed operations of the contractor, whether such operations and completed operations be by the contractor or by any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. Before starting the work, the contractor will file with the Borough a certificate of such insurance, acceptable to the Borough. Insurance covering comprehensive general liability shall be maintained by the contractor for the duration of the work.
- (c) <u>Limits of Insurance</u>. The permittee shall provide insurance in the following minimum amounts:

FORM	MINIMUM LIMITS
Comprehensive General Liability	
Bodily Injury	\$5,000,000
Property Damage	\$5,000,000
Personal Injury	\$5,000,000

Including premises operations, explosion and collapse hazard, underground hazard, products/completed operations hazard, contractual insurance, broad form property damage, independent contractors and personal injury, including employees.

- R. Payment for Work Done by Borough. Payment for all work done by the Borough under the provisions hereof, including but not limited to all expenses incurred by the Borough as a result of delay to the completion of the street reconstruction project which is attributable to the repair or relocation of the utility line, shall be paid by the person liable therefor under the provisions hereof within thirty (30) days after a bill therefor is sent to such person by the Borough. Upon failure to pay such charges within such time, the same shall be collectible by the Borough by an action at law or in the manner provided by law for the collection of municipal claims.
- S. Penalties. Any person who opens or excavates in any manner the pavement or surface of any public street of the Borough without first having obtained the proper permit and paid the application fees and charges hereinbefore set forth, including any extension fee, or who violates any of the other provisions of this Ordinance shall, upon conviction thereof, be sentenced to pay a fine of not less than One Hundred Dollars (\$100.00) and not exceeding Six Hundred Dollars (\$600.00) for each offense, plus costs, and in default of the payment of such fine and costs, said person and/or the responsible agents or officer of firms and corporations violating the provisions of this Ordinance, shall be imprisoned in the Berks County Prison for a period not exceeding thirty (30) days. Every day that a violation of this Ordinance continues shall constitute a separate offense.

T. <u>Applicability</u>. The provisions of this short Ordinance shall not apply to laying sidewalks or curbs.

U. <u>Severability</u>. In the event any provision, section, sentence, clause or part of this Ordinance shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses or parts of this Ordinance. It being the intent of the Council that the remainder of this Ordinance shall be and shall remain in full force and effect.

V. <u>Effective Date</u>. This Ordinance shall become effective after enactment on the earliest date permitted by law.

DULY ENACTED AND ORDAINED this for day of Vanuary, 2015 by the Borough Council of the Borough of Shoemakersville, Berks County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF SHOEMAKERSVILLE

By:

President of Borough Council

Attest.

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Melissa Wagner

Secretary of the Borough

APPROVED as an Ordinance this \mathcal{O}'

4551171-1

day of January

2015

Richard Kepner, Mayor

Exhibit A

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Trench Excavation for Piped Utilities.
- B. Bedding and Backfilling.
- C. Temporary paving.
- D. Bituminous Pavements.
- E. Traffic Line Painting.

1.02 REFERENCES

- A. American Association of State Highway and Transportation Officials (AASHTO):
 - 1. AASHTO T99, Moisture-Density Relations of Soils, Using a 5.5-lb. Rammer and a 12-in. Drop.
 - 2. AASHTO T191, Standard Method of Test for Density of Soil In-Place by the sand cone method.
- B. The "PDT Sections" noted herein refer to sections contained in the Commonwealth of Pennsylvania Department of Transportation Specifications Publication 408, latest edition. The references pertain only to materials, construction equipment, methods and labor. The payment provisions do not apply to work to be performed under this Contract.
 - 1. PDT Section 305, Bituminous Concrete Base Course.
 - 2. PDT Section 350, Subbase.
 - 3. PDT Section 401, Plant Mixed Bituminous Concrete Courses.
 - 4. PDT Section 409, Superpave Mixture Design and RPS Construction of Plant-Mixed HMA Courses
 - 5. PDT Section 460. Bituminous Tack Coat.
 - 6. PDT Section 491, Milling of Bituminous Pavement Surface.
 - 7. PDT Section 703, Aggregates.
 - 8. PDT Section 962, Painting Traffic Lines and Markings.

C. State Code:

- 1. Commonwealth of Pennsylvania Department of Transportation Bulletin 25: Specifications for Bituminous Materials.
- 2. Commonwealth of Pennsylvania Department of Transportation Bulletin 27: Bituminous Concrete Mixtures, Design Procedures, and Specifications for Special Bituminous Mixtures.

- 3. Pennsylvania Test Method: PTM No. 604.
- 4. Commonwealth of Pennsylvania, Pennsylvania Code, Title 67, Chapter 459.
- 5. Commonwealth of Pennsylvania, Pennsylvania Code, Title 67, Chapter 213, Official Traffic Control Devices.
- D. CE-8 Specifications for Pipeline Occupancy of Consolidated Rail Corporation Property.
- E. Requirements and Specifications for Pipeline Occupancy, National Railroad Passenger Corporation, USA ENG 1604 (Amtrak).

1.03 PROJECT CONDITIONS

- A. State Highways: All work within the right-of-way of State Highways shall be performed in accordance with the requirements of PENN DOT Chapter 459.
- B. Railroads: All work within railroad right-of-way shall be performed in accordance with the requirements of the owner of the railroad.
 - 1. A copy of a permit from the railroad company will be submitted to the Borough of Shoemakersville.
 - 2. Contractor, if required by the railroad company, shall furnish materials for supporting track structures
 - 3. Materials and methods of construction used on railroad company property shall be subject to the approval of the railroad Contractor shall investigate the impact the railroad company's regulations and requirements, including delays, will have on the Work, prior to commencing with construction operations.
 - 4. The railroad company has the right to provide inspection and signaling and to support, reballast, or realign their tracks, or perform other work by its own forces. The cost of such work will be the responsibility of the Contractor.
 - 5. Contractor shall record and have on file details pertaining to railroad company inspections. Records shall include, as a minimum, the dates of inspections, number and names of railroad company personnel, and number of hours spent on inspection by railroad personnel.

1.04 SUBMITTALS

A. Certificates: Furnish certification from bituminous and aggregate producer attesting that materials conform to requirements of Pennsylvania Department of Transportation Specifications.

1.05 PROJECT CONDITIONS

- A. State Highways:
 - 1. All work within the right-of-way of State Highways shall be performed in strict accordance with the requirements of PA DOT, Title 67, Chapter 459.

2. Employ traffic control measures in accordance with the requirements of PA DOT, Title 67, Chapter 212.

B. Time Requirements:

- 1. State Highways: The permanent replacement of street roadway and shoulder pavement will not be permitted until at least 90 days after the required temporary pavement has been placed. However, permanent replacement pavement must be placed within 210 days after the required temporary pavement has been placed.
- 2. Streets other than State Highways: As specified by Ordinance

C. Protection:

- 1. Protect paved surfaces outside of the limits of work. Repair pavement outside limits damaged by construction.
- D. Repairs to roadways damaged by Contractor's equipment shall be at Contractor's expense. The work may include single lane or full roadway width repairs as directed by authority having jurisdiction over roadway

PART 2 - PRODUCTS

2.01 MATERIAL

- A. Backfill Material (To Restoration Depth in Seeded Areas): On-site, or imported (borrowed), excavated material, free of cinders, ash, refuse, vegetable or organic material, boulders, rocks, stone, or other material which is unsuitable. Backfill material may not contain stones larger than six (6) inches in maximum dimension. A maximum of 20% of the backfill volume may be stones so long as the stones are evenly distributed within the material. No additional payment will be made for imported materials.
- B. Aggregate Backfill and Bedding: Fine aggregates and coarse aggregates conforming to PDT Sections 703.1 and 703.2. Material as listed below and shown on Exhibit B.
 - 1. Aggregate Backfill (To Restoration Depth in Paved Areas PA DOT No. 2A, or PA DOT No. 2RC Coarse Aggregate where indicated on Exhibit B.
- C. Flowable Backfill as specified in PENN DOT Publication 408, Section 220.
- D. Underground Warning Tape:
 - 1. Printed, and alkali resistant, polyethylene tape, 3 inches minimum width, color coded, 1-inch minimum lettering, printed with name or symbol of utility buried below, and suitable for installation in all soil types.
 - 2. Magnetic tape shall be manufactured with foil back or other means to enable detection, by a metal detector, when it is buried up to 4 feet deep.
 - 3. Provide for:
 - a. Sanitary sewers, green.
 - b. Storm sewers, green.
 - c. Sewage force main, green.

- d. Water line, blue.
- e. Gas line, yellow.
- f. Electrical conduit, red.
- g. Telephone conduit, orange.
- h. CATV conduit, orange.
- i. Petroleum line, yellow.
- i. Low-pressure sewers, green.

E. Bituminous Materials and Pavements:

- 1. Asphalt Cement: PG64-22 conforming to PDT Bulletin 25.
- 2. Bituminous Tack Coat: Class AE-T, conforming to PDT Section 460.
- 3. Temporary Paving
 - Type 2-P Bituminous Stockpile Patching Material conforming to Section 484 of Bulletin 27
 - b. Superpave: Wearing course 9.5 mm, PG 64-22 0.0 to 0.3 million ESAL's, SRL-L, 2" depth
- 4. Base Course:
 - a. Bituminous Concrete Base Course: Conforming to PDT Section 305; mixture limited to asphalt cement.
 - b. Superpave: Base Course 25.0 mm, PG 64-22, 0.3 to 3.0 million ESAL's, 4" depth.
 - c. Bituminous Tack Coat: Class E-I, E-6 or E-8 emulsified asphalt conforming to PDT Bulletin 25.
- 5. Wearing Course:
 - a. Hot mixed, hot laid, Bituminous Wearing Course, conforming to PDT Section 420
 - b. Superpave: Wearing course 9.5 mm, PG 64-22 0.3 to 3.0 million ESAL's, SRL-M, 1.5" depth.
- F. Traffic Paint State Highways: Conforming to PDT Section 962.2 (b).

PART 3 - EXECUTION

3.01 TRENCH PREPARATION AND EXCAVATION

- A. Perform sheeting and shoring as required by OSHA.
- B. Perform soil erosion control work in accordance with requirements of Soil Erosion and Sedimentation Control.
- C. General: Perform excavation to the lines and grades indicated on the Drawings and as specified in this section, or as directed.
 - 1. Excavation shall be made by open cut, unless written permission to tunnel or bore is given.

- 2. Trenches may be excavated and backfilled either by machinery or by hand as the Contractor may elect; Contractor shall use hand excavation and backfilling when necessary to protect existing structures, utilities, or private or public properties.
- D. Stripping, Storing and Restoring Surface Items: Contractor shall remove all paving, sub-paving, curbing, brick or concrete pavers, granite curbing or other similar materials, and shall grub and clear the surface over the area to be excavated. Properly store and preserve such materials that may be required for use in restoring the surface. Contractor shall replace materials damaged or disposed due to Contractor's negligence, with materials of equal or better quality.
 - 1. All suitable excavated materials may be stored, if practical, in the roadway or such other suitable place and in such manner as approved. Unsuitable materials will be removed and disposed off-site.
 - 2. Excess suitable materials remaining after the trenches have been backfilled, which cannot be stored on site, shall be removed and stored at a suitable site, provided by the Contractor.
 - 3. Contractor shall furnish additional suitable materials to properly refill the trenches.
 - 4. Contractor shall restore shrubbery, fences, poles or other property and surface structures, removed or disturbed by construction operations, to a condition equal to or better than before the Work began, furnishing all necessary labor and materials.
 - 5. Width of Trench: Pipe trenches shall be sufficiently true in alignment to permit the pipe to be laid in the approximate center of the trench. The trench shall be wide enough to provide a free working space on each side of the pipe; however, the trench width at least 12 inches above the top of the outside barrel of the pipe shall not exceed the following dimensions

MAXIMUM WIDTHS

Nominal Pipe Diameter (Inches)	Aggregate Backfill and Temporary Pavement (Trench Width Inches)	Final Pavement Restoration and Reseeding over Trench (Width Inches)
2 and smaller	18	42
3	24	48
4	24	48
6	24	48
8	24	48
10	28	52
12	30	54
14	32	56
15	33	57
16	34	58
18	36	60
20	40	64

MAXIMUM WIDTHS

Nominal Pipe Diameter (Inches)	Aggregate Backfill and Temporary Pavement (Trench Width Inches)	Final Pavement Restoration and Reseeding over Trench (Width Inches)
21	42	66
24	48	72
27	54	78
30	60	84
33	63	87
36	66	90
42	75	99
48	84	108
54	90	114
60	96	120
66	106	130

- 6. At manholes, valve pits, and other structures, the pay-line shall be measured as one (1) foot outside the wall for excavation and eighteen (18) inches outside the wall for restoration.
- 7. Where sheeting and shoring are used, the maximum allowable width of trench shall be measured between the closest interior faces of the sheeting or shoring as placed.
- 8. When the maximum width of trench specified cannot be maintained, Contractor shall install temporary sheeting.

E. Length of Trench:

- 1. Trench shall not be opened more than 100 feet in advance of the pipelines laid.
- 2. Contractor shall limit all trench openings to a distance commensurate with all rules of safety.
- 3. When Contractor stops the Work, either totally or partially, Contractor shall refill the trench and temporarily repave over it at his expense and the trench shall not be opened until he is ready to proceed with the construction of the pipeline.
- F. Pumping and Draining: Contractor shall provide pumping equipment, or use other methods, to prevent water from accumulating in the trenches and other excavations.
 - 1. Contractor shall have sufficient pumping equipment at all times during placement of pipelines.
 - 2. Grade the surface or provide diversion measures in the vicinity of excavation to prevent surface water from entering open trenches or excavations.
- G. Accommodations of Drainage: Contractor shall prevent storm or sanitary sewer systems from being obstructed and shall maintain flows in these pipelines at all times during construction operations.

- H. When the material excavated from the trenches must temporarily be placed over open drainage gutters or other waterways Contractor shall, at no additional cost, install a temporary bridge over the gutters, or provide other means for allowing water to flow through.
- I. Maintenance of Traffic: Work shall be conducted so as to cause a minimum of inconvenience to pedestrian and vehicular traffic and to private and public properties along the line of work. Contractor shall, at all times, maintain crossing, walks, sidewalks, and roadways open and safe to pedestrian and vehicular traffic, and shall keep fire hydrants, water valves, fire alarm boxes, and mail boxes accessible for use. When it is necessary to maintain pedestrian traffic over open trenches, provide a bridge at least three feet in width, equipped with side railings. When the excavated material will encroach upon sidewalks or private property, planking shall be placed in order to keep the sidewalk or private property clear of excavated material.
 - 1. In important thoroughfares, highways, or in narrow streets, the material excavated from the trench shall be removed from the site in order to provide suitable space for traffic.
 - When it is necessary to haul soft or wet materials over public roadways Contractor shall provide suitable vehicles and shall conform to all laws and regulations relevant to such hauling.
 - 3. Where in order to keep one side of the roadway free from any obstruction or to keep the material stored alongside the trench from falling on private property outside the right-of-way, a safe and suitable barrier shall be placed alongside the trench.
- J. Blasting and Explosives: Not permitted in performance of trenching work.
- K. Protection of Utilities, Property and Structures: The existence and location of underground utilities indicated on the Drawings is to serve as a notification that such utilities exist in the general proximity of the work. Utilities not shown, or not located where shown, shall not relieve the Contractor of the responsibility for their protection during construction.
 - The Contractor shall notify all utility companies, through the Pennsylvania One Call System, in advance of construction, to locate their facilities in accordance with Pennsylvania Act 287 of 1974, as amended by Act 121 of 2008 (the Act); and shall cooperate with agents of these companies during performance of the Work. Procedures for emergency action and repairs to utilities shall be as established by the Act.
 - 2. When the Contractor, during the progress of the excavation uncovers pipelines or conduits, which because of injury or age are in poor condition, Contractor shall immediately notify the owner of the utility in order that steps may be taken for replacement or repair. Contractor shall record locations and procedures of repairs made by Contractor.

3.02 PIPE BEDDING AND TRENCH BACKFILL

- A. Bedding as per utility specification
- B. Backfilling Methods:
 - 1. General: Backfilling shall not be done in freezing weather except by special permission, and it shall not be done with frozen material. Do not backfill when the material already in the trench is frozen.
 - 2. In State Highways all backfill shall be in accordance with the requirements of PennDOT Chapter 459.
- C. Aggregate Backfill to Restoration Depth: From one (1) foot above the top of the pipe to restoration depth, the trench shall be backfilled by hand or by approved mechanical methods. Backfill in this section of the trench shall be coarse aggregate material subject to limitations specified and consolidated by tamping in four (4) inch layers or other approved mechanical methods unless otherwise specified. Any consolidation method utilizing water such as jetting or puddling shall not be permitted. Consolidation shall proceed from the center of the trench to the sides to prevent arching.
- D. Flowable Backfill: Place as specified in PENN DOT Publication 408, Section 220.
- E. Underground Warning Tape: Provide continuous identification tape in trenches for the purposes of early warning and identification of buried pipes during future excavation. Install in tape accordance with manufacturer's instructions. Bury tape 12 inches below finished grade or as shown on the Drawings.
 - 1. Provide in trenches for utilities indicated in Part 2.
- F. Compacting: Compact trench backfill as follows:
 - 1. All trench excavation, backfill and compaction within State Highway and the Borough of Shoemakersville right-of-way shall be performed in accordance with PENN DOT (the Department) requirements and will be subject to inspection by representatives.
 - 2. Paved Areas: Place material in lifts not exceeding 8 inches in loose thickness and compact to a 95% maximum dry density based on ASTM D1557, modified proctor.

3.03 PAVING PREPARATION

- A. Subsurface Preparation: Perform site grading, paved area(s) grading and finish rolling just prior to subbase installation
- B. Pavement Removal:
 - 1. Saw cut and remove existing pavement to neat lines equidistant from the centerline of the trench.

- 2. Prior to permanent pavement restoration, saw cut and remove trench edge pavement one foot from each edge of trench.
- 3. Perform milling of the 6:1 skew line transition for State Highway crossings in accordance with PDT Section 491.
- C. Subgrade: Backfill and compact trenches per requirements.
- D. At joints between existing pavements and new paving work, the edges of existing pavements shall be cut and neatly trimmed. An application of asphalt cement shall be provided at all locations where new bituminous paving joins existing bituminous paving.

3.04 INSTALLATION PAVING

A. Temporary Pavement:

1. Install temporary pavement over areas where the pavement has been removed. Install temporary pavement to 2 inches thickness after compaction, with top surface flush with surface of adjacent pavement, and maintain until permanent restoration is made.

B. Replacement of Permanent Pavement:

- 1. General:
 - a. The Contractor shall restore all street paving, shoulders, driveways, and parking areas, including subgrade, and base courses with materials, as specified herein.
 - b. Method of preparing and placing mixture, compaction, and protection of inplace bituminous concrete for pavement shall comply with PDT Sections 305, 309, 401 and 409.
 - c. Location of types and thicknesses of replacement pavements are as indicated on Exhibit B.

C. Base Course:

- 1. Superpaye: Construct in accordance with PDT Section 409.
- 2. Bituminous Pavement Construction: Method of preparing mixture, placing mixture, compaction, and protection of in-place bituminous concrete for paving shall comply with PDT Sections 401 or 409. Minimum thickness of bituminous concrete base course and wearing course is as indicated Exhibit B.

D. Bituminous Wearing Course:

- 1. Superpave: Construct in accordance with PDT Section 409.
- 2. Install wearing course with top surface flush with surface of adjacent pavement.
- E. Roadway Traffic Lines and Markings: Apply in accordance with PDT Section 962

 Provide satisfactory barrier cones for at least 30 minutes, or until the paint is dry and track free from vehicular traffic. Repaint marked or damaged areas, as directed.

3.05 INSTALLATION (OVERLAY PAVING)

- A. Provide overlay to limits indicated on the permit.
 - 1. Use materials, composition of mixture, and methods to construct the bituminous concrete overlay paving conforming to all applicable requirements of PDT Section 409 for Superpave Construction.
 - 2. The thickness of the overlay pavement after compaction shall be 1½ inches.

3.06 CLEAN-UP AND MAINTENANCE

- A. During construction, surfaces of all areas including, but not limited to, roadways, and driveways shall be maintained on a daily basis to produce a safe, desirable, and convenient condition.
 - Paved areas shall be swept and flushed after backfilling, and recleaned as dust, mud, stones and debris caused by the work, or related to the work again accumulates.
- B. Repair or Correction of Unsatisfactory Conditions: All unsatisfactory conditions resulting from the work shall be corrected.
- C. Continuously maintain temporary pavement until it is replaced with permanent pavement.
- D. Any subnormal or dangerous condition caused by the work, on any surface, shall be repaired or corrected within two hours of observance or notification of its existence.

3.07 RESTORATION AND CLEAN-UP OF SURFACE

- A. Replacement or Restoration of Surface Items: The Contractor shall restore (unless otherwise stipulated) all sidewalks, curbings, gutters, shrubbery, fences, poles, sod or other property and surface structures removed or disturbed as a part of the work to a condition equal to or better than that before the work began, furnishing all incidental labor and materials.
 - 1. Replacement of curbs and sidewalks, shall be in accordance with the materials and methods specified by the Borough of Shoemakersville.
- B. Clean-Up and Maintenance of Surfaces:
 - 1. General: During construction, the surfaces of all areas including, but not limited to, roadways and driveways shall be maintained on a daily basis to produce a safe,

desirable, and convenient condition. Streets shall be swept and flushed after trench backfilling, and recleaned as dust, mud, stones and debris, caused by or related to the Work, again accumulates. .

- a. Surplus materials and temporary structures furnished by the Contractor shall be removed from the site by the Contractor.
- b. Construction debris and excess excavated material shall be disposed of by the Contractor in a manner and place acceptable to all governing agencies.
- c. The construction site shall be left clean at the end of each working day to the satisfaction of the Borough of Shoemakerville.
- 2. Repair or Correction of Unsatisfactory Conditions: All unsatisfactory conditions resulting from the work shall be corrected.
- 3. Abnormal or dangerous condition caused by the Work, on any surface, shall be repaired or corrected within two hours of observance or notification of its existence.
- C. Traffic Signal Systems: Severed, damaged or removed loop detectors, lead-in wires, conduit, junction boxes, etc., shall be repaired within five (5) days. The Contractor shall engage a PENN DOT approved traffic signal contractor to perform repairs/restoration. Only PENN DOT-approved materials shall be used.

END OF SECTION

SHOEMAKERSVILLE BOROUGH APPLICATION FOR STREET CUT PERMIT

Date:				
Application made by: Name of owner or authorized agent		Telepho	Telephone number	
	Address	City	State	Zip code
	Contractor		Telephone number	
	Address	City	State	Zip code
_	on to break pavement of street su			
		on site location		
For the purpo	ose of:			
Width: _ Length: _	D DIMENSION: feet feet completed on or before:	, 20		
	Signature of applicant			
THE PERM	IT IS GRANTED SUBJECT TO	THE FOLLOWING CON	DITIONS:	
1. A detaile	ed construction plan will be subn	nitted with every application	n.	
	of the permittee's liability insurant be submitted with every application		d Borough Engi	neer as additional
Commonwer harmless the and charges resulting in a any other ma	k shall be completed in full comalth of Pennsylvania in relation to Borough from and indemnify it for or by reason of the proposed any manner therefrom, or occurratter, cause or thing relating there of the conditions as herein set for	thereto. Applicant shall we against any and all actions opening or excavation, and ing in the prosecution of the eto. Acceptance of the period	ll and truly save , suits, demands l all damages to e work connecte	, defend and keep , payments, costs persons or property ed therewith, or from
distinctly, ar	etion of work, the permittee shall not in such detail as required, the altered and its location with refer	size, shape and kind of pipe	e, wire or structi	are the permittee has
Eggs	Annroved:		Date Issued:	