

GENERAL

- A. ALL STREET CONSTRUCTION SHALL BE IN ACCORDANCE WITH ODOT SPECIFICATIONS LATEST REVISION.
- B. CONTRACTOR MUST APPLY FOR NECESSARY PERMITS, FEES WITH THE CITY BEFORE CONSTRUCTION OR DEMOLITION BEGINS.

PAVEMENT REPLACEMENT

- A. IMMEDIATELY AFTER PLACEMENT OF BACKFILL IN EXISTING STREETS, A TEMPORARY PAVEMENT SHALL BE INSTALLED AND THE STREET OPENED. TEMPORARY PAVEMENT SHALL CONSIST OF 8" OF COMPACTED ODOT SPECIFIED 411 BASE AND A SURFACE COURSE APPROVED BY THE CITY. THE SURFACE COURSE KEPT FLUSH WITH THE EXISTING STREET.
- B. PERMANENT PAVEMENT REPLACEMENT SHALL BE EQUAL TO OR EXCEED THE EXISTING PAVEMENT.(MINIMUM PAVEMENT COMPOSITION, SEE PAGE 300-2)
- C. ANY SETTLEMENT OF A TRENCH CAUSING A DEPRESSION SHALL BE REFILLED AS REQUIRED AT THE CONTRACTOR'S EXPENSE. THIS PROVISION APPLIES FOR ONE YEAR PERIOD AFTER THE WORK HAS BEEN ACCEPTED BY THE CITY.
- D. ALL TEMPORARY PAVEMENT AND SIDEWALK SHALL BE MAINTAINED BY THE CONTRACTOR OR DEVELOPER AT THIS OWN EXPENSE IN A SUITABLE AND SAFE CONDITION FOR TRAFFIC UNTIL PERMANENT REPLACEMENT IS MADE OR THE PROJECT IS FINALLY ACCEPTED BY THE CITY. COLD PATCH ALL TRENCHES A MINIMUM OF 4" WHEN FINAL ASPHALT WILL NOT BE REPLACED WITHIN 24 HOURS

TRAFFIC CONTROL

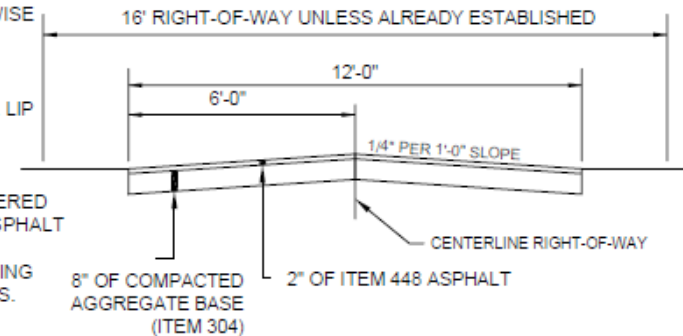
- A. THE CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL AT ALL TIMES WITH THE PROPER BARRICADES AS PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THESE CONTROL DEVICES SHALL BE IN PLACE PRIOR TO ANY WORK COMMENCING.
- B. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE CITY.

CURB STAKING AND ROADWAY

- A. LINE AND GRADE EVERY 25'-0" ON A CONVENIENT OFFSET.

PAVEMENT (ASPHALT)

- A. THE CONTRACTOR SHALL PROVIDE THE CITY WITH A COPY OF THE NORMAL (MEDIUM TRAFFIC) ODOT 448 JOB MIX FORMULA FOR EACH PLANT THAT PROVIDES HOT MIXED ASPHALT TO THIS PROJECT. ALL MIXES SHALL FOLLOW ODOT JOB MIX FORMULA.
- B. ALL WORK SHALL ADHERE TO ODOT'S LATEST REVISIONS AND TO THE CITY SPECIFICATIONS WHICHEVER IS MORE STRINGENT SHALL PREVAIL UNLESS OTHERWISE APPROVED.
- C. PATCHED AREAS SHALL BE SEALED ON THE PERIMETER OF THE PATCH WITH ASPHALT CEMENT.
- D. ALL UTILITY ADJUSTMENTS, MANHOLE, WATER VALVES, SHALL BE RAISED TO FINISHED GRADE AFTER THE FINAL ASPHALT COURSE IS LAID. IF SMOOTHNESS DOESN'T MEET THE CITY'S REQUIREMENTS A REPAIR SIMILAR TO MR. MANHOLE SHALL BE USED TO ADJUST THE MANHOLE OR VALVE.
- E. ASPHALT CEMENT SHALL BE USED NEXT TO THE LIP OF GUTTER PRIOR TO THE FINAL ASPHALT LIFT BEING PLACED. (PG64-22 SEAL)
- F. TACK COAT SHALL BE APPLIED PRIOR TO THE PLACEMENT OF THE FINAL LIFT OF ASPHALT IF THE EXISTING ASPHALT LIFT IS DIRTY,OR AFTER TEN DAYS UNLESS OTHERWISE APPROVED. TEMPERATURE MUST BE 50° F OR HIGHER, ALL TACK SHALL BE TRACKLESS.
- G. PRIME COAT SHALL BE APPLIED ON NEW AGGREGATE WHEN TEMPERATURE IS 50° F OR HIGHER . ALL DRIVEWAYS SHALL BE PRIMED PRIOR TO PLACEMENT OF ASPHALT UNLESS OTHERWISE APPROVED.
- H. NO ASPHALT SHALL BE PLACED OVER EXCAVATED TRENCHES HAVE BEEN COMPACTED AS PER CITY SPECIFICATIONS.
- I. FINAL LIFT OF ASPHALT SHALL BE FINISHED TO 1/4" ABOVE THE LIP OF GUTTER
- J. ASPHALT CEMENT SHALL BE USED ON ALL JOINTS AND FEATHERED SURFACES PRIOR TO PLACEMENT OF THE NEXT COURSE OF ASPHALT TO THE ABUTTING JOINT, UNLESS OTHERWISE APPROVED.
- K. ALL EDGES TO BE TRIMMED BACK TO SOLID MATERIAL BY SAWING AND BE STRAIGHT AND NEAT AS PER THE CITY'S INSTRUCTIONS.



TYPICAL ALLEY CONSTRUCTION

- A. MINIMUM STANDARD (UNLESS OTHERWISE APPROVED).
- B. FOR RENOVATION OF EXISTING ALLEYS ONLY. NO NEW ALLEYS WILL BE APPROVED WITHIN THE CITY.

PERMIT REQUIRED

A RIGHT-OF-WAY PERMIT FOR ANY DIGGING OR EXCAVATING WITHIN A PUBLIC RIGHT-OF-WAY FOR ANY STREET OR ALLEY IS REQUIRED 48 HOURS IN ADVANCE OF THE WORK. IN THE EVENT OF AN EMERGENCY, THE PERMIT APPROVAL REQUIREMENT SHALL BE WAIVED AND THE PROPER APPLICATION MUST BE SUBMITTED AS SOON AS POSSIBLE, BUT NO LATER THAN THE END OF THE FIRST WORKING WEEKDAY AFTER THE START OF WORK. AN EMERGENCY IS DEFINED AS A REPAIR REQUIRED TO PROVIDE SERVICE TO UTILITY CUSTOMERS OR TO MITIGATE A HAZARD, WHICH THREATENS PUBLIC HEALTH OR SAFETY.

PERMIT FORMS ARE AVAILABLE FROM THE CITY STREET DEPARTMENT. THE PERMIT FORM IS TO BE COMPLETED BY THE PERSON OR FIRM PLANNING THE WORK WITHIN THE RIGHT-OF-WAY. ALL FEES MUST BE PAID AND APPROVALS OBTAINED BEFORE ANY WORK IS STARTED. A 72 WORKING HOUR LEAD-TIME IS RECOMMENDED. A PERMIT FEE OF \$25 WILL BE REQUIRED OF EACH APPLICANT, INCLUDING CITY DEPARTMENTS.

PERFORMANCE BOND

ANY INDIVIDUAL OR FIRM WHO MAKES APPLICATION FOR A RIGHT-OF WAY OPENING PERMIT MUST PROVIDE A CURRENT PERFORMANCE BOND TO THE CITY OF PIQUA IN THE AMOUNT OF \$3000.

NO BOND IS REQUIRED FOR PLUMBERS WHO HOLD A CURRENT PLUMBING LICENSE IN THE CITY OF PIQUA AND HAVE A CURRENT PERFORMANCE BOND ON FILE IN THE HEALTH DEPARTMENT.

IN THE EVENT THAT AFTER NOTIFICATION FROM THE CITY ANY CONTRACTOR FAILS TO CORRECT PROBLEMS ASSOCIATED WITH POOR TRENCH REPAIR OR MAINTENANCE WITHIN 24 HOURS OF NOTIFICATION, THE CITY RESERVES EXCLUSIVE RIGHT TO CORRECT THE PROBLEMS AND COLLECT ASSOCIATED COSTS FROM THE PERFORMANCE BOND.

WORK REQUIREMENTS

THE APPLICANT SHALL HAVE SUFFICIENT BARRICADES, WARNING SIGNS, AND LIGHTS DURING THE ENTIRE PERIOD THAT WORK IS BEING PERFORMED AND SHALL ADHERE TO APPLICABLE SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL DISTURBED AREAS MUST BE RETURNED TO A CONDITION THAT IS AS GOOD AS OR BETTER THAN THE CONDITION BEFORE THE WORK BEGAN. ALL REPAIRS MUST MEET CITY SPECIFICATIONS. THE CITY STREET SUPERINTENDENT WILL INSPECT AND APPROVE ALL REPAIRS. THE BOND WILL BE RETURNED AFTER ALL REPAIRS ARE APPROVED, IF APPLICABLE. FOR CLOSURE OF ARTERIALS OR BUSY COLLECTORS THE CITY RESERVES THE RIGHT TO DIRECT CONTRACTOR TO CLOSE THE STREET DURING OFF PEAK TRAFFIC HOURS. CLOSURE MAY OCCUR AT NIGHT OR ON WEEKENDS. CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL ASSOCIATED WITH ROAD CLOSURE. EFFORTS SHALL BE MADE TO MINIMIZE ANY DISTURBANCE TO TREES OR ROOTS. EXCAVATION CAUSING DAMAGE TO TREES WILL RESULT IN THE REMOVAL AND REPLACEMENT, OR OTHERWISE HAS A DIRECT IMPACT ON PRIVATE PROPERTIES, OR OTHERWISE HAS A DIRECT IMPACT ON PRIVATE PROPERTIES IN THE OPTION OF THE ENGINEER. THE APPLICANT MUST NOTIFY ALL AFFECTED PROPERTY OWNERS IN WRITING, AND PROVIDE A COPY OF THE NOTIFICATION AND A MAILING LIST PRIOR THE ENGINEERING DEPARTMENT ISSUING THE PERMIT.

ALL CONTRACTORS WHO PERFORM WORK REQUIRING ENTRY INTO ANY CONFINED SPACE OF A CITY-OWNED UTILITY SHALL COMPLY WITH THE CITY'S CONFINED SPACE ENTRY PROCEDURES AND IN ACCORDANCE WITH ALL OSHA REGULATIONS, IF APPLICABLE, AND APPROVAL FROM THE WASTEWATER SUPERINTENDENT OR DESIGNEE.

MATERIAL SPECIFICATION

ALL WORK SHALL BE IN ACCORDANCE WITH THE ATTACHED DRAWINGS AND SPECIFICATIONS AND APPROVED BY THE ENGINEERING DEPARTMENT PRIOR TO COMMENCEMENT OF WORK.

STREET OPENINGS- THE MATERIAL USE TO FILL IN A DITCH OR A HOLE SHALL BE ODOT 603, GRANULAR MATERIAL (#304,#411) OR ODOT ITEM 613 LOW STRENGTH MORTAR BACKFILL . OTHER APPROVED GRANULAR MATERIALS MAY BE USED ONLY UPON THE CONTRACTOR RECEIVING PRIOR WRITTEN APPROVAL FROM THE ENGINEERING DEPARTMENT IF EXTENUATING CIRCUMSTANCES EXIST. CONTRACTORS CONCERNED WITH THE CONTACT OF THE LOW STRENGTH MORTAR BACKFILL WITH THE FITTINGS AND THE PIPE MAY PLACE A MAXIMUM OF 12 INCHES OF ODOT TYPE 603 BACKFILL ABOVE THE TOP OF THE PIPE.

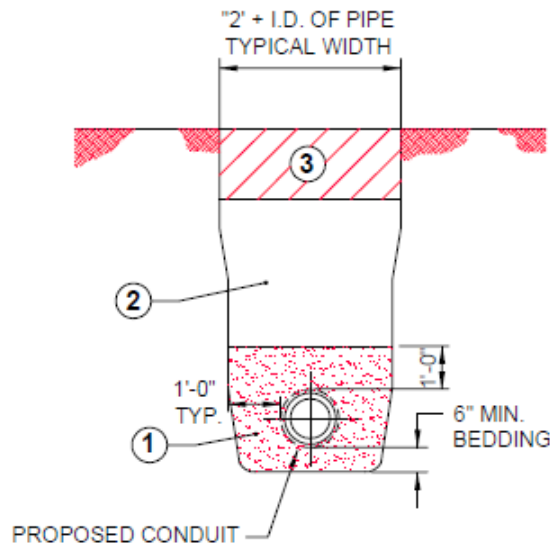
FOR RIGHT-OF-WAY OPENINGS BEYOND THE LIMITS OF THE PAVEMENT THE BACKFILL SHALL BE IN ACCORDANCE WITH THE ATTACHED DRAWINGS AND SPECIFICATIONS. ASPHALT SURFACE- ASPHALT SURFACE SHALL BE PLACED TO A DEPTH AS STATED IN ITEM 3, PAVEMENT RESTORATION, AS DETAILED IN THE ATTACHED SPECIFICATIONS.

CONSTRUCTION

REPAIR AREAS SHALL BE RECTANGULAR IN SHAPE WITH DIMENSIONS AS REQUIRED TO ENVELOP THE SURFACE DETERIORATION. AT THE DIRECTION OF THE CITY THE LIMITS OF THE REPAIRED REPLACEMENT MAY BE EXTENDED AS DEEMED NECESSARY. PAVEMENT SHALL BE REMOVED BY METHODS THAT WILL NOT DAMAGE ADJACENT PAVEMENT. ALL JOINTS AND VERTICAL FACES SHALL BE SAW CUT, CLEANED AND COATED WITH BITUMINOUS MATERIAL (TACK COAT) PRIOR TO PLACEMENT OF BITUMINOUS CONCRETE.

ALL JOINTS SHALL BE SEALED WITH ASPHALT SEALER AFTER THE FINAL SURFACE MATERIAL IS PLACED.

IF LOW STRENGTH MORTAR BACKFILL IS USED, LOW STRENGTH MORTAR BACKFILL SHALL BE BROUGHT UP UNIFORMLY TO THE FILL LINE SHOWN ON THE PLANS OR THE BOTTOM OF THE EXISTING PAVEMENT.



TRENCH DETAIL

BEDDING

GRANULAR BEDDING MATERIAL SHALL BE CRUSHED STONE OR GRAVEL COMPLYING WITH TYPE 2 BEDDING (#57 OR #67). BEDDING SHALL EXTEND 6 INCHES BELOW THE CONDUIT. BEDDING MATERIAL SHALL EXTEND 12 INCHES ABOVE THE TOP AND TO EACH SIDE OF THE CONDUIT. USE SHOVEL SLICING AND SPUD BARS IN CONJUNCTION WITH THE COMPACTION OPERATIONS TO COMPACT THE MATERIAL AND TO MANIPULATE THE MATERIAL UNDER THE HAUNCH OF THE PIPE.

BACKFILL

ALL TRENCH EDGES WITHIN THE STREET RIGHT-OF-WAY, UNDER OR WITHIN 5 FEET OF PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS ALLEYS, OR WALKS SHALL BE BACKFILLED WITH EITHER GRANULAR BACKFILL MATERIAL (#304, #411) OR ODOT ITEM 613 LOW STRENGTH MORTAR BACKFILL.

- GRANULAR MATERIAL SHALL BE PLACED IN MAXIMUM 8-INCH LIFTS. FOR GRANULAR EMBANKMENT AND STRUCTURAL BACKFILL, COMPACT EACH LIFT OF MATERIAL USING MECHANICAL DEVICES, HOE RAMS, JUMPING JACKS, HAND DEVICES, VIBRATING PLATES, OR OTHER SIMILAR EQUIPMENT. COMPACTION REQUIREMENTS SHALL BE 98% OF STANDARD PROCTOR CURVE.
- LOW STRENGTH MORTAR BACKFILL SHALL BE FURNISHED AND PLACED AS PER ODOT ITEM 613.

ALL TRENCH EDGES NOT WITHIN THE STREET RIGHT-OF-WAY, NOT UNDER OR WITHIN 5 FEET OF PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS, ALLEYS, OR WALKS CAN BE BACKFILLED WITH CLEAN NATIVE MATERIAL COMPACTED IN 12 INCH LIFTS. MATERIAL SHALL BE COMPACTED TO 85% OF THE ORIGINAL COMPACTION. NO MATERIAL SHALL BE USED FOR BACKFILLING THAT CONTAINS GRANULAR MATERIAL ROCK OR STONE GREATER THAN 4 INCHES IN DIAMETER.

PAVEMENT RESTORATION IN PAVED AREAS WITHIN THE STREET

RIGHT-OF-WAY THE PAVEMENT AND AGGREGATE BASE COMPOSITION SHALL BE PROVIDED EQUAL TO THE EXISTING PAVEMENT BUT IN NO CASE SHALL THE COMPOSITION BE LESS THAN THE FOLLOWING: 1-1/2 INCHES OF ODOT ITEM 448, SURFACE COURSE, TYPE 1 2-1/2 INCHES OF ODOT ITEM 448 INTERMEDIATE COURSE, TYPE 2 10 INCHES OF ODOT ITEM 304 AGGREGATE BASE IN ALLEYS AND DRIVEWAYS OUTSIDE OF THE STREET RIGHT-OF-WAY THE REPLACEMENT OF PAVEMENT AND/OR AGGREGATE SHALL BE EQUAL TO THE EXISTING AND/OR AGGREGATE SHALL BE EQUAL TO THE EXISTING ALLEYWAY OR DRIVEWAY COMPOSITION. IF THE PERMANENT ASPHALT CANNOT BE APPLIED WITHIN 48 HOURS OF THE INITIAL REPAIR. ODOT ITEM 405 OR COLD PATCH SHALL BE APPLIED TO THE TRENCH SURFACE. MINIMUM THICKNESS OF THE COLD PATCH MATERIAL SHALL BE 4 INCHES. SAID MATERIAL SHALL BE REMOVED PRIOR TO THE PLACEMENT OF ODOT ITEM 448.

INTERMEDIATE COURSE, TYPE 2

CONCRETE RESTORATION

ALL CONCRETE DRIVEWAYS, DRIVE APPROACHES, AND SIDEWALKS WITHIN THE STREET RIGHT-OF-WAY, SHALL BE REPLACED WITH ODOT CLASS QC1 OR QCMS CONCRETE FOR THE FOLLOWING:

SIDEWALKS --- MINIMUM THICKNESS OF 4" INCHES OF CONCRETE.

- MATCH ORIGINAL WIDTH OF SIDEWALK
- MINIMUM WIDTH OF 4 FEET REQUIRED
- MINIMUM THICKNESS OF 4 INCHES
- DRIVEWAYS AND DRIVE APPROACHES
- RESIDENTIAL: MINIMUM THICKNESS OF 6 INCHES OF CONCRETE
- BUSINESS: MINIMUM THICKNESS OF 8 INCHES OF CONCRETE
- INDUSTRIAL: MINIMUM OF THICKNESS 10 INCHES OF CONCRETE

ALL CONCRETE DRIVEWAYS, DRIVE APPROACHES, AND SIDEWALKS OUTSIDE OF THE STREET RIGHT-OF-WAY SHALL BE REPLACED EQUAL TO THE EXISTING MATERIAL COMPOSITION.

COMPACTION GUIDELINES

THE CONTRACTOR MAY OPERATE SMALL COMPACTION EQUIPMENT WITH LESS THAN A TOTAL WEIGHT OF 1 TON OVER THE CONDUIT TO COMPACT THE BACKFILL. DO NOT USE HOE RAMS ON TOP OF THE CONDUIT UNTIL 2 FEET OF BACKFILL IS COMPACTED ON TOP OF THE CONDUIT. THE CONTRACTOR MAY OPERATE COMPACTION EQUIPMENT WITH LESS THAN A TOTAL WEIGHT OF 8 TONS, BUT MORE THAN 1 TON, OVER THE CONDUIT AFTER PLACING AND COMPACTING 2 FEET OF BACKFILL. DO NOT OPERATE EQUIPMENT WITH A TOTAL WEIGHT OF 8 TONS OR MORE UNTIL PLACING AND COMPACTING A COVER OF 4 FEET OVER THE TOP OF THE CONDUIT. THE ABOVE RESTRICTIONS APPLY WHEN WORKING WITHIN ONE SPAN ON EACH SIDE OF THE CONDUIT, OR 6 FEET, WHICHEVER IS LESS.

ALL TRENCHES AND EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER THE PLACEMENT OF THE CONDUIT. UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER. UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE CONDUIT HAS BEEN PLACED.

PERMIT TO BLOCK WAY

1. NO STREET, ALLEY, PARKING LANE, OR SIDEWALK SHALL BE BLOCKED WITHOUT THE CITY FIRST APPROVING A PERMIT TO BLOCK WAY. APPLICATIONS FOR A PERMIT TO BLOCK WAY CAN BE OBTAINED AT THE CITY OF PIQUA ENGINEERING DEPARTMENT OR ONLINE AT THE CITY OF PIQUA WEBSITE: WWW.PIQUAOH.ORG EGOV SERVICES ONLINE DOCUMENTS.
2. APPLICATIONS FOR A PERMIT TO BLOCK WAY SHALL BE SUBMITTED TO THE CITY OF PIQUA ENGINEERING A MINIMUM OF 3 WORKING DAYS PRIOR TO THE REQUESTED BLOCKAGE.
3. APPLICATION SHALL INCLUDE A DETAILED DRAWING OF THE WORK ZONE LAYOUT AND INCLUDE SIGNAGE, CONES, BARRICADES, BARRELS ETC. ALL WORK ZONES SHALL CONFORM TO THE CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. IT SHALL BE THE APPLICANT/CONTRACTORS RESPONSIBILITY FOR PROVIDING AND MAINTAINING ALL NECESSARY SAFETY MATERIALS FOR THE SET UP OF THE WORK ZONE.
5. THE CITY OF PIQUA ENGINEERING DEPARTMENT SHALL INSPECT THE WORK ZONE PERIODICALLY TO ASSURE THE MAINTENANCE OF THE DEVICES.
6. ALL EXCAVATION/ REPAIR SHALL COMPLY WITH RIGHT-OF-WAY OPENING PERMIT REQUIREMENTS.
3. APPLICANT SHALL BE RESPONSIBLE FOR NOTIFYING IN WRITING ALL ADJACENT PROPERTY OWNERS TO BE AFFECTED BY THE CLOSURE. THE CITY SHALL RECEIVE A COPY OF THE WRITTEN NOTICE AND A LIST OF THE PROPERTY OWNERS AND THEIR ADDRESS THAT HAVE BEEN NOTIFIED.
4. APPLICATION SHALL INCLUDE A DETAILED DRAWING OF THE WORK ZONE LAYOUT AND INCLUDE SIGNAGE, CONES, BARRICADES, BARRELS ETC. ALL WORK ZONES SHALL CONFORM TO THE CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
5. IT SHALL BE THE APPLICANT/CONTRACTORS RESPONSIBILITY FOR PROVIDING AND MAINTAINING NECESSARY SAFETY MATERIALS FOR THE SET UP OF THE WORK ZONE.
6. THE CITY OF PIQUA ENGINEERING DEPARTMENT SHALL INSPECT THE WORK ZONE PERIODICALLY TO ASSURE THE MAINTENANCE OF THE DEVICES.
7. ALL EXCAVATION/ REPAIR SHALL COMPLY WITH RIGH-OF-WAY OPENING PERMIT REQUIREMENTS.

STREET OR ALLEY CLOSING PERMIT

1. NO STREET, ALLEY OR PARKING LANE SHALL BE CLOSED TO THRU TRAFFIC WITHOUT THE CITY FIRST APPROVING A STREET OR ALLEY CLOSING PERMIT. APPLICATIONS FOR A STREET OR ALLEY CLOSING PERMIT CAN BE OBTAINED AT THE CITY OF PIQUA ENGINEERING DEPARTMENT OR ONLINE AT THE CITY OF PIQUA WEBSITE: WWW.PIQUAOH.ORG . E-GOV SERVICES ONLINE DOCUMENTS.
2. APPLICATIONS FOR A STREET OR ALLEY CLOSING PERMIT SHALL BE SUBMITTED TO THE CITY OF PIQUA ENGINEERING DEPARTMENT A MINIMUM OF 5 WORKING DAYS PRIOR TO THE REQUESTED BLOCKAGE, EXCLUDING WEEKENDS AND HOLIDAYS.

CITY OF PIQUA



STREET CLOSING AND BLOCK WAY PERMITS

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