

PERMIT FOR EXCAVATION IN GOSHEN TOWNSHIP

PERMIT NUMBER: _____

DATE: _____

VIDEO TAPE DATE: _____

Non-Refundable \$10.00 Permit Fee

This permit is issued with the following stipulations:

1. A pre-construction meeting will be held before construction begins. Give 24-hour notice to the Service Director before work begins. Phone number 722-3400
RESIDENTS MUST BE GIVEN 24 HOURS NOTICE.
2. Maintain at least one lane of traffic at all times. Complete closure of the road will not be permitted at any time **except by written permission from the Board of Trustees or their appointed representative.**
3. Provide the lights, signs, barricades and flaggers necessary to maintain safety in accordance with the *Ohio Manual of Uniform Traffic Control Devices*.
4. Backfill specification around pipe: Contractor shall contact appropriate agency. Clermont County Sewer and Water specifications have precedent for pipe bedding and cover.
5. HIGH DENSITY BACKFILL (LIGHT MORTAR OR FLASHFILL) will be the required backfill for this project. (See attached specifications.)
6. EXTREME WEATHER CONDITIONS: Use compacted crushed stone base (ODOT item #304) installed in 6" courses to within 4" of surface where the edge of the ditch, trench or pit is within 3' of the edge of the pavement. Cold patch will be maintained by the contractor until weather permits the completion of items #7 and #8 of this specification.
7. Asphalt subbase 6" of (ODOT item #301 asphalt) in 2" lifts to within 2' of surface. Cold patch shall be required if asphalt 301 is unavailable.
8. Finished surface of roadway with (ODOT item #404), 2" installed and edges shall be sealed with liquid asphalt. Cold patch shall be required if asphalt 404 is unavailable.
9. Right-of-way must be restored to "as good" or "better" condition. Proper drainage shall be maintained throughout the project at all times. All ditches, slopes, drainage infrastructure, mail boxes, traffic signs, guard rails and side walks will be restored to county specifications (regardless of current condition). Ditched will be seeded or sodded as directed by the township inspector. Temporary seeding and erosion control may be required at the discretion of the inspector.
10. All roadway areas that are interrupted or bored shall follow the *ODOT Construction and Material Specs Manual* and be returned to their original condition. **ALL PAVED DRIVEWAYS MUST BE BORED.**
11. Cash Bond Rate is determined by:
 - a. Measuring length of pavement and area within 3' of pavement edge, multiplied times \$100.00 per foot.
 - b. In addition, other construction within the right-of-way will be 10% of construction cost, with a minimum of \$500.00 Cash Bond.Cash Bond is hereby attached to indemnify the Township for liability or damage as the result of such excavation and to guarantee the performance of all conditions of the permit, if issued. Cash Bond to be held for one year from date issued, pending final inspection.
12. Applicant must provide a copy of Insurance Certificate for the amount of \$1,000,000.00 to protect the Township against liability or damage as the result of such excavation.

Certificates of insurance that are required from contractors shall also name the Township as an additional insured.

13. All OSHA regulations must be followed. A **“COMPETENT PERSON” AS DEFINED BY OSHA SHALL BE ON SITE WHILE TRENCHING.**
14. Roadways and driveways shall be made passable by end of days work.
15. Pavement and berm must be kept clean of construction debris at all times. The contractor agrees to reimburse the Township for any clean up or installation of proper signs, barricades, flashers, and platting of the work site by Township personnel. This includes mud tracked onto Township roads.
16. Materials stored in right-of-way are required to be properly barricaded and signed. Materials shall not be stored on the road surface.
17. Loading and unloading of equipment and materials from the roadway without protecting the pavement will not be permitted. The Contractor will repair any damage done to the roadway.
18. Contractor agrees to reimburse Township for inspection of project after regular work hours or weekends.
When the project is completed it shall be inspected by the Township Service Director or his designated representative. Please call the number below to arrange your final inspection.
19. After a 21 day waiting period, temporary patch will be removed and roadways put back to ODOT specifications, weather permitting. (SEE ATTACHED SHEET)

Township Approved

Date

Contractor's Signature

Date

Method of Payment / Payment Amt.

NOTE: If the road is to be closed for any length of time, it is **MANDATORY** that the Township be notified of the time and exact location so emergency services can be notified. (Paragraph #2)

GOSHEN TOWNSHIP:

Service Department	722-3400
Police Department	722-3200
Fire Department	722-3473

PERMIT NO.: _____

APPLICATION FOR EXCAVATION IN TOWNSHIP PUBLIC RIGHT-OF-WAY

DATE: _____

NAME: _____

ADDRESS: _____

TELEPHONE: _____ EMERGENCY NUMBER: _____

24-HOUR CONTACT PERSON: _____

LOCATION OF WORK: _____

NAME OF ROAD: _____

ADDRESS: _____

UTILITY INVOLVED: GAS: _____ ELECTRIC: _____ WATER: _____

SEWER: _____ CABLE: _____

OTHER PERMITS GRANTED IN CONNECTION WITH THIS WORK:

SEWER: _____

WATER: _____

ENGINEER PIPE PERMIT NUMBER: _____

IF ROAD SURFACE IS 5 YEARS OR NEWER, ROAD WILL REQUIRE BORING WITH CASING. THE SERVICE DIRECTOR WILL MAKE THE FINAL DETERMINATION IF BORING OR OPEN CUT WILL BE PERMITTED.

1. State the following in connection with the proposed excavation:
 - a. Duration of the excavation: _____.
 - b. Method of excavation to be used:
 - () BORE - pits, minimum 3' from pavement.
 - () OPEN TRENCH
 - () ROAD CUT
 - c. Warning devices to be used at the site of the excavation: _____

2. Plans indicating location: trench size, type of excavation, right-of-way, showing affected private property and additional easements SHALL be required. Plans must be attached.

3. How many square yards of road surface will be disturbed? _____
4. Length of work in right-of-way:
- | | Length | Width |
|--|------------------|------------------|
| a. Bore(s) # _____ | _____ | _____ |
| b. Lateral cuts requiring high-density fill | _____ | _____ |
| c. Parallel trench within 3' of pavement
-Granular Fill | _____ | _____ |
| d. Parallel trench outside 3' of pavement
-Earth Fill | _____ | _____ |
| | <u>Total Ft.</u> | <u>Total Ft.</u> |
| e. Length of parallel trench outside of the
right-of-way, requiring easement from
property owner | _____ | _____ |

The applicant does hereby covenant and agree to comply with all the laws of the State of Ohio, OSHA regulations, and the Resolutions of the Trustees of Goshen Township pertaining to excavating in public roadways, and to perform the above work in accordance with the plans, specifications and proposals submitted herewith, and the items indicated herein, and certify that the information and statements given on this application, drawings and specifications are to the best of my knowledge true and correct.

IT MUST BE UNDERSTOOD THAT THIS APPLICATION DOES NOT CONSTITUTE PERMISSION TO DO WORK WITHIN THE RIGHT-OF-WAY, BUT IS ONLY AN APPLICATION FOR A PERMIT. YOU WILL RECEIVE NOTICE AS TO OUR DECISION TO ISSUE A PERMIT FOR THIS JOB.

Applicant's Signature

ITEM SPECIAL – LOW STRENGTH MORTAR BACKFILL MATERIAL

Description: This work shall consist of the placement of a flowable mixture of portland cement, fly ash and sand for back-filling conduits or at other locations as shown on the plans or as specified. Backfill shall not be used as a structure backfill for aluminum and aluminum coated pipe culverts. The work shall be in accordance with ODOT Items 603 and 499 unless otherwise specified herein.

Materials: Materials shall be:

- A. Cement: 701.01 or 701.04
- B. Fly Ash shall meet ASTM C-618 and come from a source approved by the Engineer.
- C. Fine Aggregate shall be natural sand consisting of mineral aggregate particles. The gradation of the sand shall meet requirements of 703.05. The sand shall be fine enough to stay in suspension in the mixture to the extent required for proper flow. The Engineer reserves the right to reject sand if a flowable mixture cannot be produced.
- D. Water used for mortar backfill shall be free from oil, salts and other impurities that would have an adverse effect on the quality of the backfill material.

MORTAR MIX PROPORTIONING: The initial trial mixture shall consist of the following qualities of materials per cubic yard:

	<u>Class LSM-100</u>	<u>Class LSM-50</u>
Cement	100 pounds	50 pounds
Fly Ash	250 pounds	250 pounds
Sand (SSD)*	2850 pounds	2910 pounds
Water (Maximum)	500 pounds	500 pounds

*saturated-surface-dry

The Engineer may make adjustments of the proportions providing the total absolute volume of the materials is maintained.

Mix Adjustment: To expedite settlement of the mortar, it will be necessary for bleed water to appear on the surface immediately after the mortar is struck off. A delay in bleeding indicates there are too many fines in the mixture, so the fly ash quantity shall be reduced in increments of 50 pounds until the mixture is bleeding freely. Approximately 50 pounds of sand shall be added to replace each 50 pounds increment of fly ash to maintain the original yield.

To produce a flowable mortar it may be necessary to make several one cubic yard trial batches at different water contents. The mixture is too dry when cracks develop in the mortar as it flows into place.

Mixing Equipment: Sufficient mixing capacity of mixers shall be provided to permit the mortar to be placed without interruption.

Placing Mortar: Flowable mortar shall be discharged from the mixer by any reasonable means into the space to be filled. The fill material shall be brought up uniformly to the fill line shown on the plans or as directed by the Engineer. Placing of material over low strength mortar backfill may commence as soon as the surface water is gone or as directed.

Method of measurement: The number of cubic yards of low strength mortar will be measured by conversion of the total batch weights. Conversion factor will be 3,650 pounds per cubic yard.

Basis of Payment: For the volume of mortar furnished and placed, the Contractor will be paid at the contract unit price per cubic yard. This payment shall be full compensation for placing the low strength mortar and for furnishing all materials, equipment and incidentals necessary to complete this item, unless included under other items on the plans.

<u>ITEM</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
Special	Cubic Yard	Low strength mortar Backfill material, Class LSM - _____.

FLOWABLE CONTROLLED DENSITY FILL (FCDR)
CONTROLLED LOW STRENGTH MATERIAL (CLSM)
CONTROLLED DENSITY FILL (CDL)

Description: This work shall consist of furnishing and placement of a flowable mixture of portland cement, fly ash and sand for backfilling trenches under various combinations of pavement within public right-of-way or other locations as shown on the plans or as specified. Backfill for aluminum and aluminum coated pipe culverts.

Materials shall be:

Cement

Fly Ash shall meet ASTM C 518 Class C or F except that requirements for moisture and pozzolanic activity are waived for Class F fly ash and Loss-on-Ignition (LOI) shall not exceed 12% for Class F fly ash.

Fine Aggregate shall be natural or synthetic sand manufactured from stone.

Water used for mixture shall be free from oil, salts, acid and other impurities that would have an adverse effect on the quality of the backfill material.

Mix Proportioning: The initial trial mixture shall consist of the following quantities of materials per cubic yard:

	TYPE I	TYPE II	TYPE III	TYPE IV	TYPE V
Cement	100 lb.	50 lb.	100 lb.	-0-	-0-
Fly Ash Class F	300 lb.	250 lb.	2000 lb.	1500 lb.	-0-
Fly Ash Class C	-0-	-0-	-0-	500 lb.	400 lb.
Sand (SSD)*	2815 lb.	2910 lb.	-0-	-0-	2930 lb.
Water	300 lb.	500 lb.	725 lb.	850 lb.	430 lb.
Air	3 oz.	-0-	-0-	-0-	-0-
Mixer Type	Transit	Transit	Volumetric	Volumetric	Volumetric

These quantities of materials are expected to yield approximately one cubic yard of a flowable consistency. The proportioning of materials shall be the responsibility of the Contractor. Adjustments of the proportions shall be based on maintaining the total absolute volume and proportioning shall insure that unconfined compressive strength at 28 days is to be 100 PSI. (90 days does not exceed 150 PSI)

The minimum unconfined compressive strength shall not be less than 50 PSI. The Contractor may be required to provide test data from a laboratory inspected by the Cement and Concrete Reference Laboratory (CCRL) and approved by the Director that shows the proposed proportioning will meet strength limitations.

Mix Adjustment: To expedite consolidation of Type I or Type II mixtures it will be necessary for bleed water to appear on the surface immediately after the mixture is struck off. A delay in bleeding indicates there are too many fines in the mixture, so the fly ash quantity shall be reduced in increments of 50 pounds until the mixture is bleeding freely. Approximately 50 pounds of sand shall be added to replace each 50 pounds increment of fly ash to maintain the original yield.

Flow Test: A test for the flow consists of filling a 3-inch diameter by 5-inch high open-ended cylinder on a smooth, level surface to the top with a flowable mixture. If necessary, strike off the top of the cylinder so the mixture is level. Pull the cylinder straight up, within 5 seconds, and measure the approximate spread of the mixture. The diameter of the material shall be at least 12 inches.

Pumping: Mix proportioning of Type I and Type II are not designed to be pumped. If the Contractor elects to pump the flowable mixture, fly ash will need to be added until the total amount and fly ash is 750 pounds. Fine aggregate shall be reduced to balance the absolute volume of the mixture.

Fast Setting: Type IV and Type V

Fast Setting mixture shall be used as directed by the Engineer for backfilling trenches under pavement within public right-of-way when it is deemed that the pavement must be quickly reopened to traffic so as to minimize inconvenience to vehicular traffic or as shown in the plans. Use of a fast setting mixture is intended to allow for fast placement of an asphalt/concrete pavement within four hours or less, of mixture replacement. Type I, II, and III, are designed for next day paving.

Delivery Equipment

Type I and Type II mixtures shall be delivered and placed from ready mixed concrete trucks or volumetric mobile concrete mixers.

Type III, IV, and V fast setting mixture shall be delivered and placed from volumetric mobile concrete mixers. Volumetric shall be calibrated so as to combine mix materials in accordance with the proportions and sufficiently mix mixture to obtain a uniform mixture meeting the requirements of the specifications.