VILLAGE OF CALEDONIA
FULL DITCH ENCLOSURE APPLICATION

($45.00 per hour/minimum two hours)

For Village Use
Permit Number: **FD–09-**
Receipt Number:
Account Number: **4350**
Approved / Denied
Date Issued:

Project Address: _____ **Date:**_____

Lot: ____ **Block:**____ **Subdivision:** _____

Parcel Id #: _____

Name of Applicant: _____ **Applicant's Telephone:** _____

Address of Applicant:_____

Name of Mortgagee:_____

Mortgagee's Telephone:_____

Address of Mortgagee:_____

Estimated Cost of Ditch Enclosure:_____

Name of Design Engineer/Inspector:_____

Size of Driveway Culvert: _____

Size of Upstream Culvert: _____

Size of Downstream Culvert:_____

Length and Description of Area Proposed to be enclosed:_____

_____

(Applicant to supply Drawings of installation with cross sections)

Name of Installation Contractor:_____

Contractor's Insurance Carrier:_____

Hold Harmless Agreement Signed: Yes: ☐ **No:** ☐

Conditions:_____
_____
_____
_____
_____
_____

_____
Signature of Applicant

_____
Village Engineer's Signature

Date Approved: _____

Date Installed:_____ **Date of Backfill Inspection: Pass** ☐ **Fail** ☐ **By:** _____

Date of Final Grading Inspection: _____**By:** _____

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TOTAL DITCH ENCLOSURE SPECIFICATION

1. Any or all of the following documents that are applicable are included in these specifications:

    a. Standard Specifications for Sewer and Water Construction in Wisconsin, herein referred to as “Standard Specifications”.

    b. State of Wisconsin Standard Specifications for Road and Bridge Construction herein referred to as “State Specifications”.

2. Pipe material, fittings and manholes shall conform to AASHTO M 294 and shall be of equal or better quality as is ADS N-12 pipe. The pipe shall be the slotted or perforated type and shall be double walled with the inside wall being smooth. The pipe diameter shall be specified by the Village Engineer but in no case shall be less than 12 inches.

3. Pipe shall be carefully laid in a straight line and at the proposed elevation and all work shall conform to Chapter 3 of the State Specification for Sewer and Water Construction except as noted herein.

4. Bedding material conforming to 6.43.2 of the Standard Specifications shall be installed at the following minimum thicknesses:

    a. Bottom – Two inches below the pipe.
    b. Side – Six inches.
    c. Top – Two inches.

5. Prior to covering the pipe, geotextile filter fabric conforming to Section 628.2.8.1 of the State Specifications shall be wrapped over the top one-half of the pipe above the spring line .

6. All joints and connections are to be made with approved connectors and bands. Any voids shall be wrapped with approved filter fabric. All lateral connections are to be made at or above the spring line of pipe.

7. Driveway culvert end sections shall be removed prior to joining the enclosure pipe t o the culvert.

8. Each end of the enclosure shall be equipped with an animal guard grate. Grate bars shall be spaced not less than three nor more than six inches.

9. Each end of the enclosure shall be equipped with a corrugated metal flared end section.

10. After the enclosure is installed the disturbed area shall be covered with a minimum of 3 inches or topsoil and seeded pursuant to Village Ordinances. The area shall be fine graded to allow for good surface drainage to the appropriate inlets. The final elevation shall be a minimum of 3 inches below the existing road shoulder.

FULL DITCH ENCLOSURE APPLICATION PROCEDURES

1. The Engineering Department will inspect the site to determine if a Full Ditch Enclosure is feasible. The criteria used in establishing the feasibility of a Full Ditch Enclosure shall include the following items:

    a. A ditch with a minimum depth of 2.5', side slopes that are steeper than 4:1, and non-maintainable slopes.

    b. Potential depth of cover over the Full Ditch Enclosure shall be a minimum of half of the diameter of the enclosure. In no instance shall the cover over an enclosure be less than six (6") inches. A Ditch must still be maintained over the enclosure providing proper drainage from the yard and shoulder area to the ditch. This ditch must be a minimum of one (1') foot below the edge of pavement and have a centerline slope of no less than 1.0%. Side slopes are not to exceed 4:1.

    c. The existing and future drainage area to be served by the Full Ditch Enclosure shall be examined. The Full Ditch Enclosure will likely not be allowed if future upstream development will likely require extensive modification of the proposed enclosure because of increases in runoff, potential elevation or gradient problems or if it is impossible to determine at this time, the best method of draining the involved drainage area.

    d. The installation of the Full Ditch Enclosure shall not be allowed if its construction will reduce the hydraulic effectiveness of the existing drainage facilities or if such installation will not conform to acceptable engineering standards. If the enclosure is determined by the Village Engineer to be not feasible, the owner shall have the right to appeal the decision to the Village Board.

    e. The installation of the Full Ditch Enclosure may not be allowed if potential damages or hazards exist due to a possible conflict or close proximity of another utility lines or facilities.

2. If the Village Engineer determines that the Full Ditch Enclosure is feasible, the owner shall hire a Professional Engineer to draw up design plans and specifications, which conform to Village Standards.

3. Once the owner has obtained the design plans and specifications stamped by their Professional Engineer, the owner must submit a completed Full Ditch Enclosure Application Form along with 2 sets of stamped Plans and Specifications to the Engineering Department. The owner must also supply the minimum permit fee of $90.00. (Note: Prior to the permit being issued, an additional fee may be required depending on the amount of review time on the project.)

Plan and Specifications shall show the following information:

a. Scaled plan view showing the location & elevations of the existing ditch, existing driveway culverts, the closest upstream and downstream culverts, existing edge and centerline of pavement, edge of shoulder, sump pump and downspout leads, lot boundaries and proposed enclosure pipe.

b. Scaled profile view showing the existing road profile, ditch profile, lot and adjacent culvert elevations for the top and invert of pipes, top of driveway elevations, proposed top of ground elevations and proposed enclosure pipe elevations, size and gradient. Cross sections showing existing and proposed spot elevations (in USGS datum) must be provided at lot lines extended, over the enclosure at break points, inlets, driveway culvert /storm sewer connections and at other locations as deemed necessary by the Village Engineering Department. Surveyor/design Engineer is contact the Village Engineering Department for additional cross section and grading plan requirements.

c. The plans shall depict the sizes, locations and depths of all nearby utilities including, but not limited to, water, sewer, gas, electric and telephone mains and services. Sanitary sewer manhole rims and inverts must be shown upstream and downstream of the project.

d. Detailed drawings showing the type of manhole or catch basin construction and type of connection for any tile, sump pump or downspout laterals shall be provided. Details of the storm sewer / ditch enclosure system must also be provided and must conform to Village requirements.

e. Systems must be constructed of corrugated metal pipe or reinforced concrete pipe. End aprons are to be installed on the inlet and outlet ends of the enclosure system.

f. Sketch showing existing and future contributing drainage areas.

g. Hydraulic calculations verifying the hydraulic capacity of the involved enclosure.

h. Complete construction specifications which must conform to the State Specifications for Sewer and Water Construction, Village Ordinances and the Village Engineer’s Minimum Ditch Enclosure Specifications.

4. If another utility line or facility is in the immediate area of the enclosure, the applicant shall provide written verifications from the involved utility that there are no objections to the proposed enclosure.

5. Upon review and approval of the plans and specifications, the owner shall enter into the standard agreement with the Village. The agreement shall run with the property and shall be binding on the existing owner and all subsequent owners. Such agreement shall hold the owner responsible for liability associated with the construction, maintenance and operation of the enclosure. The agreement shall hold the Village harmless for any and all damages which may result from the improper installation or operation of the enclosure. It shall be understood that the Village will not be liable for damages to or destruction of the enclosure from any cause whatsoever, including, but not limited to, ditch work done by the Village.

6. After the execution and recording of the agreement, the owner may begin work after receiving notice to proceed from the Village Engineer. All work must conform to the approved plans and specifications.

7. The Village Engineer's office shall be contacted for inspections during the following timeframes:

   a. After the pipe is laid and just prior to any backfilling.

   b. After the backfilling and rough grading and just prior to topsoiling and seeding or sodding.

8. After the work is completed, the design engineer/inspector shall submit written verification to the Village that all work has been completed pursuant to the plans and specifications.

9. After all work is accepted by the Village Engineering and design engineer, the Village Engineer shall notify the owner in writing that the ditch enclosure has been accepted by the Village.

Tony Bunkelman, P.E.
Caledonia Village Engineer

AGREEMENT

To: Village of Caledonia

I hereby acknowledge that I fully understand and agree to all of the conditions specified by the Village of Caledonia Engineering Department in approving my request for permission to fully enclose the drainage ditch / road ditch on my property. I understand and agree that the construction of the full ditch enclosure must strictly conform to the standards specified by the Village Engineer's office. I understand and agree that the Village of Caledonia has no liability for any of the costs associated with this enclosure. I understand and agree that the Village of Caledonia in no way warrants the proper operation of this enclosure. I understand and agree that the Village of Caledonia has no liability for damage to, or destruction of this enclosure from any cause whatsoever, including, but not limited to, ditch work by the Village. If the system fails, is in need of repair, drainage is restricted, or if a drainage problem occurs as a result of this installation, the Owner will be responsible to repair or remove the system at the direction of the Village Engineer. Failure to do so in a timely fashion will result in the issuance of daily fines and or payment of all removal / repair costs related to the removal /repair or damages caused by this system. If payment is not received costs will be assessed to the tax roll. This agreement shall constitute a covenant running with the land and shall be binding upon the parties hereto, their heirs, successors and assigns.

Signed:_____

Date:_____

Property Location: _____

_____

Phone : _____ : _____

Parcel Tax Key Number: 51-104-04-____-____-_____-_____

STATE OF WISCONSIN)
)SS
COUNTY OF RACINE)

_____, being first duly sworn on oath says that he is the person who made and signed the forgoing statement and agreement, and that all statements made therein are true.

Subscribed and sworn before me this _____ day of _____, 20____.

_____
Notary Public

_____, County, WI

My Commission Expires:_____

ROAD OPENING PERMIT CONDITIONS AND PROVISIONS

1. Construction and maintenance operations shall be performed without closing the road to traffic except as may be specifically authorized by the Village Highway Superintendent. Unless otherwise authorized, two-way traffic shall be maintained at all times. Proper barricades, signs, flags, lights, and flagmen shall be provided and maintained at all locations where construction and maintenance work interferes with normal traffic use of the road.

2. Laterals shall be augered under the traveled portion of all roads. The augered distance shall include as a minimum 14' from the centerline of the right-of-way whenever possible.

3. If open-cut is authorized by the Village Engineer, the pavement shall be cut in a straight line and the trench backfilled with sand or a suitable material and topped with 10" of crushed stone. After all settlement has stopped, the surface shall be replaced with the same type and thickness as removed.

4. The contractor shall restore roadway ditches as soon as installation of the sewer or water service is completed in order to maintain existing drainage patterns along or across all streets.

5. The applicant agrees to accept liability to the traveling public for any damages occurring during or as a result of issuing this permit

6. A copy of this approval along with any plans and special provisions shall be available on the job site.

7. The applicant shall save harmless the Village of Caledonia from all suits, actions, or claims brought on account of any injuries or damages sustained by any person or property in consequence of the work by the applicant. The applicant shall protect and hold harmless the Village and each and every of the Village's elected and appointed officials, officers, employees, agents, contractors and representatives from and against any and all injury, payments, penalties and damages arising from any and all intentional and negligent activities of the Applicant and the Applicant's appointed officials, officers, employees, agents, contractors and representatives.