Price Quote for Gilford Road Culvert at Murphy Drain Culvert Replacement

1.0 Miles South of M-138

Tuscola County

Board of County Road Commissioners

1733 S. Mertz Rd. Caro, MI 48723

Letting Date - March 18, 2021 8:15am

Contractor:		
Sign & Print:		
Phone & Fax	<u> </u>	

Project Completion Date: June 30th, 2021

Gilford Road Culvert at Murphy Drain LSUM Price \$_______

Culvert Replacement 54' of 72" C.S.P with Metal Headwalls

Gilford Township

Signed Insurance Agreement shall be enclosed.

Gilford Road Culvert Replacement at the Murphy Drain

Bid Submittal

Due to the current situation across the state all bids must be submitted electronically and hard copy. The hard copy must be submitted in a plainly marked, sealed envelope. The hard copy can be mailed to the road commission or placed in the dropbox located outside of the Tuscola County Road Commission office. The electronic copy of the bid shall be emailed to <a href="https://disable.night-nig

The Contractor has examined the proposal, permits, plans, and the location of the work described here in and is fully informed as to the nature of the work and the conditions relating to its performance.

General:

This project includes the removal and replacement of the culvert on Gilford Road at the Murphy Drain. The new culvert materials including the 72" CMP culvert, headwalls and associated hardware, will be provided by the Tuscola County Road Commission. Geotextile fabric will not be included with the Culvert materials. The quantities on the plan sheets are estimated quantities and differing quantities will need to be discussed with the engineer before work begins.

The Contractor hereby proposed to furnish all necessary labor, equipment, and materials to complete the work called out and shown on the plan sheets, for the lump sum price listed, herein described in strict accordance with the requirements of the Michigan Department of Transportation 2012 Standard Specifications for Construction, and/or such other special provisions and supplemental specifications as may be listed or attached to this proposal.

Construction:

Work Schedule:

The project will be awarded March 18th, 2021. Contract completion is scheduled for June 30th, 2021, unless arranged with Engineer. Once work begins it must continue until the project is completed. Liquidated damages may be assessed at a rate of \$100.00 per day, starting July 1st, 2021 per the discretion of the Engineer.

For

Gilford Road Culvert Replacement at the Murphy Drain

Utility Coordination:

The Contractor is responsible for coordinating all utility relocations as needed. Attached is a list of the contact information for the utilities on site. **Note: Miss Dig must be contacted 72 hours prior to start of work.**

Staking and Material Testing:

The Tuscola County Road Commission will provide construction staking, inspection, and material testing on the project. The contractor shall provide 48 hours advance notice prior to facility scheduling of the work.

Material Delivery

The contractor is responsible for coordinating all culvert material delivery to the site. The contractor shall provide 2 weeks advance notice to the Tuscola County Road Commission to deliver the culvert materials. The Tuscola County Road Commission with coordinate with Jensen for the delivery, however the contractor will be responsible for offloading all materials on site on the agreed delivery date.

Material Tickets:

Material tickets for concrete, HMA, aggregate, and backfill shall be provided by the contractor to the Tuscola County Road Commission.

Clearing:

Clearing has not been completed. The contractor is responsible for all tree removal within the project limits and any minor brush removal necessary. All costs are to be included in other items of work.

Removal and Disposal of Existing Culvert

All costs associated with the removal and disposal of the existing culvert shall be included in the lump sum bid price.

Bypass Pumping and Dewatering

Bypass pumping and dewatering may be required to install the culvert. All costs necessary to perform the installation of the structure in dry conditions should be included in the lump sum bid price.

Gilford Road Culvert Replacement at the Murphy Drain

Backfill:

All backfill material within the 1 on 1 influence of the road shall meet requirements of MDOT 2012 Standard Specifications for Construction for Class II Granular Material. All backfill shall be compacted to meet MDOT Density and Inspection Manual requirements. All costs associated with backfill materials shall be included in the lump sum price bid.

Aggregate Base:

Material shall meet requirements of Section 902 MDOT 2012 Standard Specifications for Construction. Gravel shall be 6" of 22A Limestone or Natural Gravel placed and compacted accordingly. Aggregate base must be graded to within 4" (+/- ½") of finished HMA surface and compacted to meet MDOT Density and Inspection Manual requirements. Aggregate base must extend out beyond proposed shoulder (approximately 32' total width). See attached typical cross section for details. All costs associated with aggregate shall be included in the lump sum price bid.

HMA:

The HMA will be placed by the Tuscola County Road Commission.

Shoulder, Cl II:

The shoulder will be placed by Tuscola County Road Commission.

Rip Rap Plain

Rip rap shall meet requirements of Section 813 MDOT 2012 Stand Specifications for Construction. Rip rap must be placed on geotextile fabric. All cost associated with Rip Rap Plain shall be included in the lump sum price bid. The estimated quantity of rip rap necessary shall be 20 square yards (10 square yards at each end).

Ditch Cleanout/Realignment

All ditching, ditch cleanout and realignment shall be completed in accordance with the requirements of the Tuscola County Drain Commissionand the Tuscola County Road Commission. All costs associated with ditch cleanout/realignment shall be included in the lump sum price bid.

Slope Restoration:

Slope Restoration should be completed in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction, the *attached Special Provision*, and as modified here. The contractor is responsible for maintaining/repairing the site until

Gilford Road Culvert Replacement at the Murphy Drain

permanent vegetation is established. A retainer of up to 10%, at the Engineer's discretion, of the project cost will be held until the project has permanent vegetation. All cost associated with slope restoration shall be included in the lump sum price bid.

Soil Erosion and Sediment Control

Soil Erosion and Sediment Control (SESC) shall be the responsibility of the contractor and be completed in accordance with the requirements of the Tuscola County Drain Commission and the Tuscola County Road Commission. SESC measures shall be completed in accordance with the EGLE permit approved for this project. All costs associated with SESC measures shall be included in the lump sum price bid.

Sign Removal and Salvage

The removal, salvage, and reinstallation of any street signs will be performed by the Tuscola County Road Commission.

Maintaining Traffic:

Temporary Traffic Control required to close Gilford Road shall be provided by and maintained by the Tuscola County Road Commission. The contractor is required to maintain the barricades to block access across the structure on the weekends and after work is complete every night. The contractor is responsible for the project site and shall provide any additional measures needed to separate the public from the work zone. All costs for maintaining traffic control shall be included in the lump sum price bid.

Documents Attached:

- Utility Coordination
- Special Provision Slope Restoration, Modified
- Gilford Road Detour
- Typical Cross Section
- Approved Shop Drawing
- EGLE Permit
- Title IV Compliance
- Tile VI Compliance

Gilford Road Culvert Replacement at the Murphy Drain

Payment and Paperwork:

<u>Liability:</u>

The Contractor shall at all times exercise extreme care and shall assume all liability for any damages resulting from his operation and shall hold the Tuscola County Road Commission harmless from any such claims or damages.

The successful bidder must also furnish certificates for policies giving satisfactory evidence of insurance coverage to the minimum extent of \$500,000.00 property damage and \$1,000,000.00 personal liability to insure adequate payment for any damage caused by his operations.

The Contractor shall, prior to the start of work, file with the Tuscola County Road Commission a certificate that he carries worker's compensation insurance.

Payment:

These projects are quoted on a "NOT TO EXCEED" total basis for all work necessary to complete each project. Payment shall be made by the Tuscola County Road Commission upon receipt of site specific invoice. Invoice shall be accompanied by all necessary material tickets. The lump sum amount bid shall be payment in full for all labor, materials, and equipment needed to accomplish the work.

NON-COMPLIANCE WITH PROJECT SPECIFICATION PROVISIONS:

Any variation from the specifications of the project herein without written approval from the Tuscola County Road Commission and/or its authorized representative may result in, at the discretion of the Road Commission, the voiding and/or canceling of the acceptance of any bid and/or contract, resulting from this project.

The Board reserves the right to accept or reject any or all proposals and to re-advertise or to accept the proposal that, in their opinion, is in the best interest of Tuscola County.

Your bid will not be accepted unless the enclosed agreement is signed and returned with your bid.

AGREEMENT

This ag	greement made this	day of	, 20	
by and	between the Board of Tusc	cola County Road Co	ommissioners and	
1.	Ifollowing work in the state	us of an independe	hereby agrees to undertake the contractor performing the following job:	e
resulting acting Road C	ng from the above operatio under his control or directio	n by this employee on; and will indemn ers or employees f	nd all liability for property damage or bodily injets, agents, assigns, sub-contractors and anyone nify, hold harmless and defend the Tuscola Court from any and all claims for property damage	e else
3.	Said contractor,			while
Comm \$500,0 Comm Addition prior to certifyi	ission and Commissioners a 00/\$1,000,000 for property ission copies of said certifican onally, said contractor, o start of said job with the E	is an additional insu damage and bodil ates of insurance p Board of Tuscola Co	cates of insurance, naming the Tuscola County ured under the policy, with policy limits of ly injury, and shall furnish the Tuscola County Forior to commencing any work on said project, shall furnity Road Commissioners, a policy of insurance ensation insurance on all those required to be	Road urnish
4.	The address of the Board	of Tuscola County F	Road Commissioners is 1733 S. Mertz Rd., Card),
MI 487	723.			
Witnes	ssed:			
			Board of Tuscola County Road Commission	 ners
			 Contractor	

TUSCOLA COUNTY ROAD COMMISSION "AN EQUAL OPPORTUNITY EMPLOYER"

SPECIAL PROVISION FOR MAINTAINING TRAFFIC I of I

GENERAL

Traffic shall be maintained in accordance with Sections 812 and 922 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction, including any Supplemental Specifications, and as herein specified.

CONSTRUCTION INFLUENCE AREA

The construction influence area (CIA) shall consist of the width of the project right-of-way from 3,500 feet before the project P.O.B. to 3,500 feet beyond the project P.O.E. and 500 feet in all directions along all cross roads.

TRAFFIC CONTROL DEVICES

All traffic control devices and their usage shall conform to the Michigan Manual on Uniform Traffic Control Devices (MMUTCD), 2011 edition as amended, and as herein specified.

Sign covers shall be placed over existing regulat01y, warning and construction signs that are not applicable during construction.

Signing for a lane closure shall be according to attached MDOT Maintaining Traffic Typical Figure M0150a. The use of the speed limit signs, R 2-1, will be as needed.

Sheeting shall conform to section 922.02B of the 2012 Standard Specifications for Construction. Engineer grade reflective sheeting must meet the requirements for ASTM D 4956 Type I engineer grade sheeting.

TRAFFICRESTRICTIONS

Work shall be conducted during daylight hours only. No work shall be conducted on Sundays unless approved by the Engineer.

The maximum distance between the traffic regulators shall be no more than 2 miles in length. All sequences of more than 2 miles in length will require written permission from the Engineer before proceeding.

PAYMENT

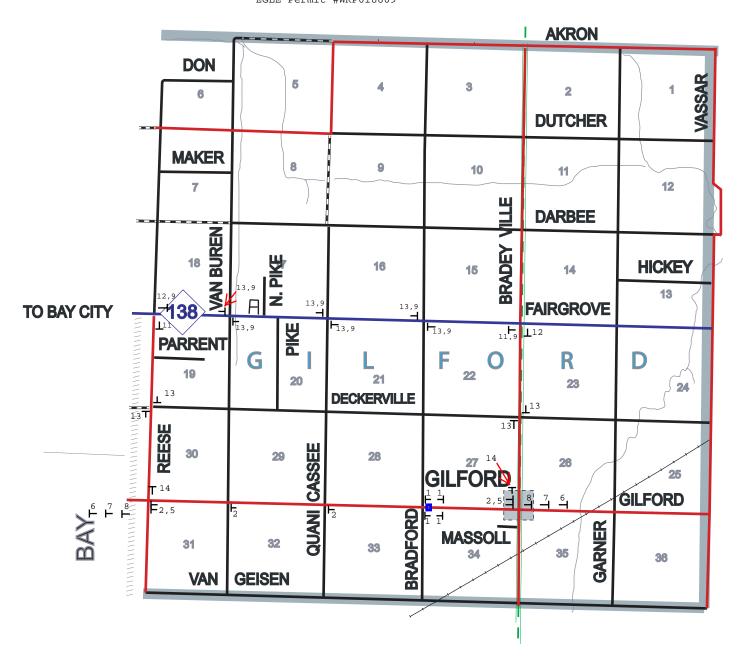
Payment for Maintaining Traffic shall be included in other Bid unit prices. There will be no separate payment for Maintaining Traffic.

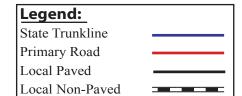
Approved by Board 1/27/05 rev.1/17/07 rev.12/22/11 rev. 117/13



GILFORD TOWNSHIP

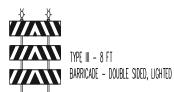
TCRC Job #460-923 Detour Route: Gilford Rd. 50' East of Bradford Rd. 54' x 72" Culvert w/ Steel Head walls EGLE Permit #WRP018809





ROAD **CLOSED**

R11-248" x 30"



1) -4

ROAD CLOSED TO THRU TRAFFIC

R11-4 60" × 30"



BARRICADE – DOUBLE SIDED, LIGHTED

ROAD CLOSED **MILES AHEAD LOCAL TRAFFIC ONLY**

R11 - 3 60 \times 30"

3



4



M4-1048" x 18"





W20-1 6 REQ'D 48" x 48"



W20-3 2 REQ'D 48" x 48"

-2



W20-2 2 REQ'D 48" x 48"

-2

Gilford Rd.

-8



M4 - 9RIGHT

30" × 24" (11) - 2



M4-9 **LEFT**





M4-9 UP





M4-8a 2 REQ'D 24" x 18"



TUSCOLA COUNTY ROAD COMMISSION TITLE IV COMPLIANCE APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- 1. <u>Compliance with Regulations:</u> The contractor shall comply with the Regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation, Title 49, code of Federal Regulations, Part 21 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- 2. <u>Non-discrimination</u>: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulation, including employment practices when the contractor covers a program set forth in Appendix B of the Regulations.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, or national origin.
- 4. <u>Information and Reports:</u> The contractor shall provide all information and reports required by the Regulatins, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the **Tuscola County Road Commission** to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses this information, the contractor shall so certify to the State highway department, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
- 5. <u>Sanctions for Non-compliance:</u> In the event of the contractor's non-compliance with the non-discrimination provisions of this contract, the **Tuscola County Road Commission** shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - (a) Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - (b) Cancellation, termination or suspension of the contract, in whole or in part.
- 6. Incorporation of Provisions: The contractor shall include the provisions of paragraphs(1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issues pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Tuscola County Road Commission may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Tuscola County Road Commission to enter into such litigation to protect the interests of the State highway department to enter into such litigation to protect the interests of the State and/or the United States to enter into such litigation to protect the interests of the United States.

"The TUSCOLA COUNTY ROAD COMMISSION, in accordance with Title VI of the Civil Rights Act of 1964, 78-252, 42 U.S.C. 2000d-222d-4, the Civil Rights Act of 1987, P.L. 100-259, and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, Non-discrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of Race, Color, Sex, Age, National Origin, or Handicap in consideration for an award. For additional compliance information, please see Appendix A."

TUSCOLA COUNTY ROAD COMMISSION

NOTICE TO BIDDERS FOR UTILITY COORDINATION

TCRC 1 of 2 8/26/2020

The contractor shall cooperate and coordinate activities with the owners of utilities as stated in Section 104 of the 2012 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. **Utility coordination will not be paid for separately and will be included in other items of work.**

PUBLIC UTILITIES

Refer to the project Plans for the contact information for public utilities that are located within the Construction Influence Area (CIA).

For the protection of underground utilities and in conformance with Public Act 174 of 2013, the Contractor shall contract the Miss Dig system, Inc. by phone at 811 or (800) 482-7171 or via the web at either elocate.missdig.org for single address or rte.missdig.org, a minimum of 3 business days prior to excavation, excluding weekends and holidays.

The Plans identify the utilities that are required to be relocated or abandoned by others. Contact information for all utilities reflected on these plans is below:

<u>AIR ADVANTAGE</u>
Attn: Leroy Koglin
465 N. Franklin
Frankenmuth, MI 48734
Office (989) 652-9500

ATT
Attn: Linda Dennisuk
54 N Mill St, 4th Floor
Pontiac, MI 48342
Office (248) 456-8256
Email: ld2154@att.com

DTE Energy
Phone: (313) 235-5632
One Energy Plaza, 518 SB
Detroit, MI 48226
Email:
Design_MissDig@DTEener
gy.com

Owners of public utilities will not be required to move poles or structures not already identified in the Plans to be relocated, in order to facilitate the operation of construction equipment, unless it is determined by the Project Engineer that such poles or structures constitute a hazard to the public or are extraordinarily dangerous to the Contractor's operations. If the Contractor determines that additional relocations will be required in order to facilitate the operation of construction equipment for completion of this project, the Contractor shall notify the Engineer and the Public Utility in writing, no later than 10 calendar days after award.

The Contractor shall coordinate with Public Utility companies to relocate any facilities required to accommodate the proposed scope of work, at no additional cost to the Owner.

Underground electrical, cable, phone, and gas services may exist throughout the project limits. The Contractor shall be prepared to work with these utility companies to coordinate necessary relocations if additional conflicts arise. The private utility owner is responsible for costs, equipment, and labor to relocate their utilities as shown on the plans, or as deemed necessary by the Engineer.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR SLOPE RESTORATION, NON-FREEWAY

RSD:JLB 1 of 3 APPR:DMG:KJS:05-13-20

- **a. Description.** This work consists of preparing all lawns and slopes on non-freeway projects designated for slope restoration on the plans or as directed by the Engineer and applying topsoil, fertilizer, seed, mulch with mulch anchor, mulch blanket, high velocity mulch blanket and permanent turf reinforcement mat to those areas. Ensure turf establishment is in accordance with section 816 of the Standard Specifications for Construction and Standard Plan R-100 Series, except as modified herein or otherwise directed by the Engineer.
- **b. Materials.** The materials and application rates specified in sections 816 and 917 of the Standard Specifications for Construction apply unless modified by this special provision or otherwise directed by the Engineer. Use the following materials on this project:
 - 1. Seeding mixture as called for on the plans.
 - 2. Fertilizer, Chemical Nutrient, Class A.
 - 3. Topsoil Surface, Furnished or Salvaged, 4 inch. Remove any stones greater than 1/2 inch in diameter or other debris from all topsoil.
 - 4. Mulch and Mulch Anchoring, Mulch Blanket and/or High Velocity Mulch Blanket.
 - 5. Permanent Turf Reinforcement Mat (TRM) must be 100 percent synthetic and consist of 100 percent ultraviolet (UV) stabilized polyolefin fibers sewn between two layers of black UV stabilized polypropylene netting with polyolefin thread. The TRM must meet the following "minimum average roll value" requirements:

<u>Property</u>	Test Method	Requirement
Mass/Unit Area	ASTM D6566	10 oz/syd
Ultraviolet Stability @ 1000 hrs	ASTM D4355/D4355M	80 percent
Tensile Strength (MD)	ASTM D6818	165 lbs/ft

Acceptance. Supply a Test Data Certification for the permanent TRM from one of the following manufacturers or approved equal:

Recyclex - American Excelsior Co., Arlington, TX (800) 777-7645 P300 - North American Green, Poseyville, IN (800) 772-2040 Landlok 450 - Propex, Inc., Chattanooga, TN (800) 621-1273 PP5-10 - Western Excelsior, Mancos, CO (800) 833-8573

c. Construction. Ensure construction methods are in accordance with subsection 816.03 of the Standard Specifications for Construction. Begin this work as soon as possible after final grading of the areas designated for slope restoration but no later than the maximum time frames

RSD:JLB 2 of 3

stated in subsection 208.03 of the Standard Specifications for Construction. It may be necessary, as directed by the Engineer, to place materials by hand.

Shape, compact and assure all areas to be seeded are weed free prior to placing topsoil. Place topsoil to the minimum depth indicated above, to meet proposed finished grade. If the area being restored requires more than the minimum depth of topsoil to meet finished grade, fill this additional depth using topsoil or, at the Contractor's option, embankment. Furnishing and placing this additional material is included in this item of work.

Ensure topsoil is weed and weed seed free and friable prior to placing seed. Remove any stones greater than 1/2 inch in diameter or other debris. Apply seed mixture and fertilizer to prepared soil surface. Incorporate seed into top 1/2 inch of topsoil.

Apply mulch at a rate of 2 tons per acre. Place mulch anchoring over the mulch at a rate specified in subsection 816.03.F of the Standard Specifications for Construction. Place mulch blanket and high velocity mulch blanket in accordance with subsection 816.03.G of the Standard Specifications for Construction and as shown on Standard Plan R-100 Series.

Install areas constructed with the TRM on prepared (seeded) grades as shown on the plans in accordance with the manufacturer's published installation guidelines. Anchor the top edge of the TRM in a minimum 6 inch deep trench. Operation of equipment on the slope is prohibited after placement of the TRM. No credit for splices, overlaps, tucks or wasted material will be made.

If an area washes out after this work has been properly completed and approved by the Engineer, make the required corrections to prevent future washouts and replace the topsoil, fertilizer, seed and mulch. This replacement will be paid for as additional work using the applicable contract pay items.

If an area washes out for reasons attributable to the Contractor's activity or failure to take proper precautions, replacement will be at the Contractor's expense.

The Engineer will inspect the seeded turf to ensure the end product is well established, in a vigorous growing condition, and contains the species called for in the seeding mixture.

If the seeded turf is not well established at the end of the first growing season, the Contractor is responsible to re-seed until the turf is well established and approved by the Engineer.

If weeds are determined by the Engineer to cover more than 10 percent of the total area of slope restoration, the Contractor must provide weed control in accordance with subsection 816.03.1 of the Standard Specifications for Construction. Weed control will be at the Contractor's expense with no additional charges to the project.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item Pay Unit

Slope Restoration, Type ______Square Yard

1. Place **Slope Restoration**, **Type A** in all areas not described in the other types of slope restoration and will be measured by area in square yards in place. **Slope Restoration**, **Type**

A includes installing topsoil surface, furnished or salvaged; fertilizer, chemical nutrient, class A; seeding mixture; and mulch and mulch anchoring.

- 2. Place **Slope Restoration**, **Type B** parallel (8 feet minimum) to the edge of the roadway, in areas that have a 1 on 3 slope and in any ditch with a grade less than 1.5 percent, or as directed by the Engineer. **Slope Restoration**, **Type B** will be measured by area in square yards in place. **Slope Restoration**, **Type B** includes installing topsoil surface, furnished or salvaged; fertilizer, chemical nutrient, class A; seeding mixture; and mulch blanket.
- 3. Place **Slope Restoration, Type C** in areas that have a 1 on 2 slope, any ditch with a grade of 1.5 percent to 3 percent or as directed by the Engineer. **Slope Restoration, Type C** will be measured by area in square yards in place. **Slope Restoration, Type C** includes installing topsoil, furnished or salvaged; fertilizer, chemical nutrient, class A; seeding mixture; and high velocity mulch blanket.
- 4. Place **Slope Restoration, Type D** in areas that have a slope steeper than 1 on 2, any ditch with a grade steeper than 3 percent or as directed by the Engineer. **Slope Restoration, Type D** will be measured by area in square yards in place. **Slope Restoration, Type D** includes installing topsoil, furnished or salvaged; fertilizer, chemical nutrient, class A; seeding mixture; and TRM.



NOTICE OF AUTHORIZATION

Permit Number: WRP018809 v. 1 Site Name: 79 - Gilford Road over Murphy Drain	Date Issued: October 3, 2019 Expiration Date: October 3, 2024
The Michigan Department of Environment, Great Lakes, and Ene P.O. Box 30458, Lansing, Michigan 48909-7958, under provision Environmental Protection Act, 1994 PA 451, as amended; specifi	s of the Natural Resources and
☐ Part 31, Floodplain Regulatory Authority of the Water F	Resources Protection.
□ Part 301, Inland Lakes and Streams.	
☐ Part 303, Wetlands Protection.	
☐ Part 315, Dam Safety.	
☐ Part 323, Shorelands Protection and Management.	
☐ Part 325, Great Lakes Submerged Lands.	
☐ Part 353, Sand Dunes Protection and Management.	
Authorized activity:	
Remove 964 cubic yards of existing backfill including the exinch metal culvert and replace with a 54-foot-long by 72-inc recessed six inches).	5
To be conducted at property located in: Tuscola County, Waterbo	ody: Murphy Drain

Section 27, Town 13N, Range 07E, Gilford Township

Permittee: **Brent Dankert** Tuscola County Road Commission 1733 Mertz Road Caro, MI 48723

Issued By:

Luke Golden

Cadillac District Office Water Resources Division

989-370-1569



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY WATER RESOURCES DIVISION PERMIT

Issued To:				
Brent Dankert Tuscola County R 1733 Mertz Road Caro, MI 48723	oad Commission			
Permit No:	WRP018809 v.1			
Submission No.:	HNS-BWST-HGKZ6			
Site Name:	79 - Gilford Road over Murp	ny Drain		
lssued: Revised:	October 3, 2019			
Expires:	October 3, 2024			
Water Resources D Protection Act, 1994	vivision (WRD), under the pro 4 PA 451, as amended (NRE	artment of Environment, Great Lakes, and Energy (EGLE), ovisions of the Natural Resources and Environmental EPA); specifically:		
🔀 Part 301, Inland	\boxtimes Part 301, Inland Lakes and Streams $\qquad \qquad \square$ Part 323, Shorelands Protection and Management			
Part 303, Wetla	Part 303, Wetlands Protection Part 325, Great Lakes Submerged Lands			
Part 315, Dam Safety Part 353, Sand Dunes Protection and Manage		Part 353, Sand Dunes Protection and Management		
Part 31, Water Resources Protection (Floodplain Regulatory Authority)				
Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:				
Authorized Activit	y:			
		ncluding the existing 53-foot-long by 72-inch by 72-inch metal culvert (invert recessed six		

Waterbody Affected:

Property Location: Tuscola County, Gilford Township, Town/Range/Section 13N07E27

Property Tax No.

Authority granted by this permit is subject to the following limitations:

Murphy Drain

- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.
- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.

- D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify EGLE within one week after the completion of the activity authorized by this permit by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of EGLE.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
- M. In issuing this permit, EGLE has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, EGLE may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, EGLE may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from EGLE. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by EGLE prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of EGLE. The permittee must submit a written request to EGLE to transfer the permit to the new owner. The new owner must also submit a written request to EGLE to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all the above information may be provided to EGLE. EGLE will review the request and, if approved, will provide written notification to the new owner.
- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.

 EGLE-WRD

- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
 - 1. All work shall be completed in accordance with plans attached and kept on file with the EGLE's, WRD, Transportation Review Unit.
 - 2. Authority granted by this permit does not waive compliance requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA. Any discharge of sediment into waters of the state and/or off the road right-of-way is a violation of this permit, Part 91, and Part 31, Water Resources Protection, of the NREPA. A violation of these parts subjects the permittee to potential fines and penalties.
 - 3. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
 - 4. The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
 - 5. Temporary soil erosion and sedimentation control measures shall be installed before or upon commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading or the final earth change has been completed.
 - 6. All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.

- 7. All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20th for the Upper Peninsula, October 1st for the Lower Peninsula north of US-10, and October 10th for the Lower Peninsula south of US-10.
- 8. This permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
- 9. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by EGLE, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
- 10. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, revegetated and reseeded with native Michigan species appropriate to the site, and mulched in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
- 11. All riprap shall be properly sized and graded based on wave action and velocity and shall consist of clean natural field stone or rock (free of paint, soil or other fines, asphalt, soluble chemicals, or organic material). Broken concrete, free of protruding metal, contaminants, and other foreign material may be used.
- 12. During removal or repair of the existing structure, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
- 13. Prior to the removal of the existing structures, cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, concrete or other acceptable barriers shall be installed to isolate all construction activity from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site.
- 14. All cofferdam and temporary steel sheet pile shall then be removed in its entirety, unless specifically shown to be left in plan on the accepted plans. Cofferdam and sheet pile that is left in place shall be cut off at the elevation shown on the plans and shall be a minimum of one foot below the stream bottom.
- 15. The existing structure shall be kept open to pass the stream flow during removal of the existing road fill.

- 16. The placement of the new culvert and the initial placement of fill in the stream shall be done immediately after removal of the existing culvert. The placement shall be conducted in such a manner that all flow is immediately passed through the new culverts, allowing the major placement of fill to be done in the dry or in still water where erosion and sedimentation will be minimized. The fill material used in this initial placement shall be washed gravel, coarse aggregate, or rock and shall be placed at both ends of the culvert to a level above normal water level before backfill material is placed.
- 17. The culvert shall be installed to align with the center line of the existing stream at both the inlet and outlet ends and must be recessed into the stream bed to provide a natural channel substrate throughout the structure, as shown on the approved plans.
- 18. Road fill side slopes shall not be steeper than 1-on-2 (1 vertical to 2 horizontal) except where headwalls of reinforced concrete, mortar masonry, dry masonry, or other acceptable methods are used.
- 19. Road fill side slopes terminating in the stream and any raw streambanks resulting from the construction shall be stabilized with temporary measures in accordance with appropriate Best Management Practices based on site conditions, and if necessary, may be riprapped extending above the ordinary high water mark, before or upon commencement of the permitted activity. Temporary stabilization measures shall be maintained until permanent measures are in place.
- 20. All other road fill slopes, ditches, and other raw areas draining directly to the stream may be protected with riprap, sod and/or seed and mulch as may be necessary to provide effective erosion protection. The placement of riprap shall be limited to the minimum necessary to ensure proper stabilization of the side slopes and fill in the immediate vicinity of the structure.
- 21. If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap, temporary seed and mulch, or other acceptable temporary protection.
- 22. No work shall be done in the stream during periods of above-normal flows except as necessary to prevent erosion.
- 23. Prior to the start of construction, all adjacent non-work wetland areas shall be protected by properly trenched sedimentation barrier to prevent sediment from entering the wetland. Orange construction fencing shall be installed as needed to prohibit construction personnel and equipment from entering or performing work in these areas. Fence shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site, the sedimentation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.
- 24. Stormwater shall not directly outlet to the stream.

Issued By:

Luke Golden

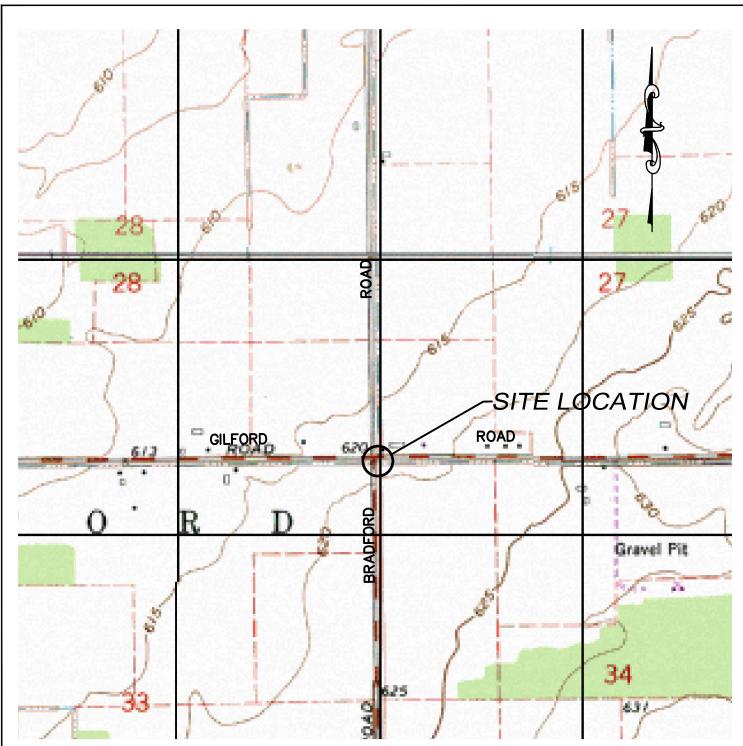
Cadillac District Office Water Resources Division

989-370-1569

Gilford Township Clerk CC:

Tuscola County Drain Commissioner

Tuscola County CEA
Patrick Phelan, BMJ Engineering



DRAINAGE AREA: 352 ACRES = 0.55 SQ. MI.

FOR:
TUSCOLA
COUNTY
ROAD
COMMISSION

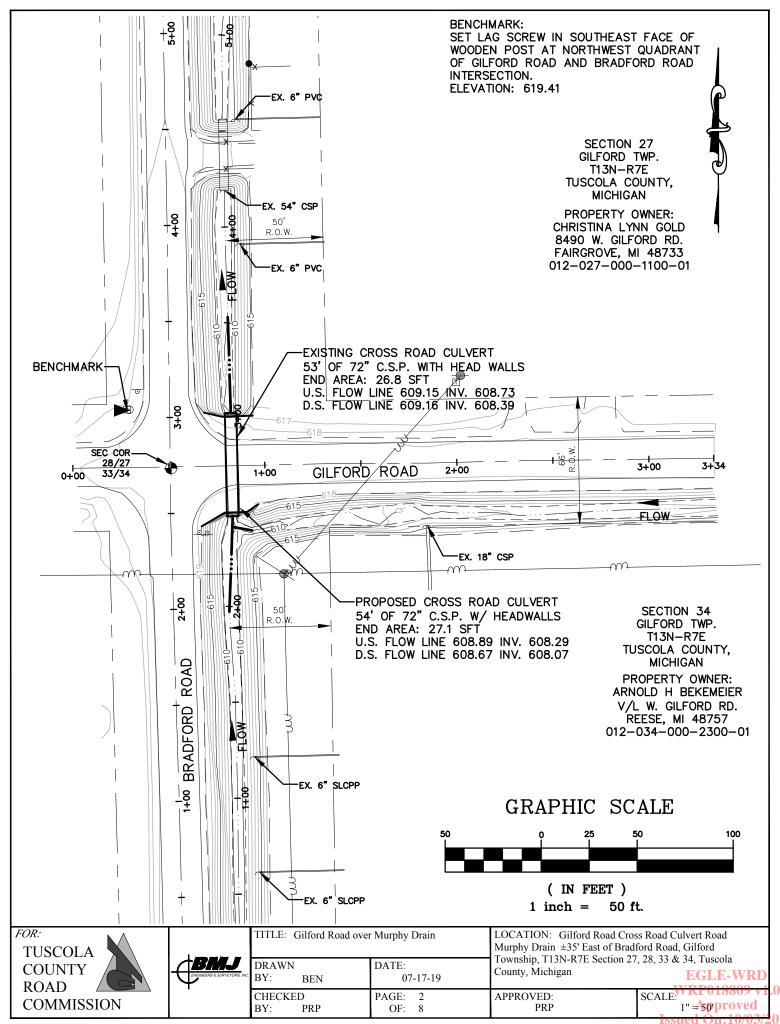


• •		LOCATION: Gilford Road Cross Road Culvert Road Murphy Drain ±35' East of Bradford Road, Gilford	
RAWN Y: BEN		Township, T13N-R7E Section 27, 28, 33 & 34, Tus County, Michigan	

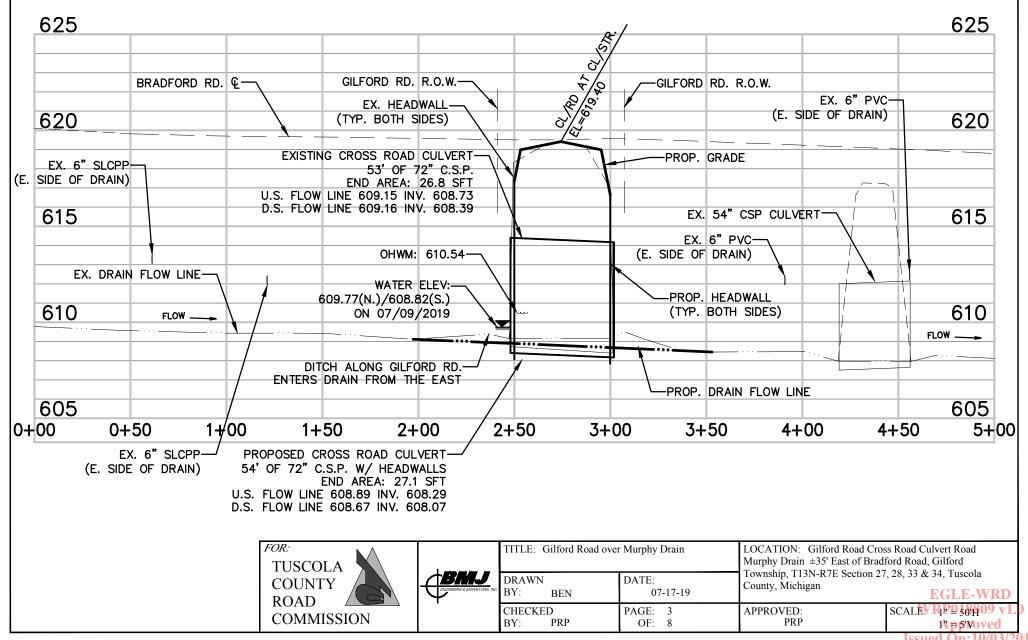
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 O7-17-19
 County, Michigan
 EGLE-WRD

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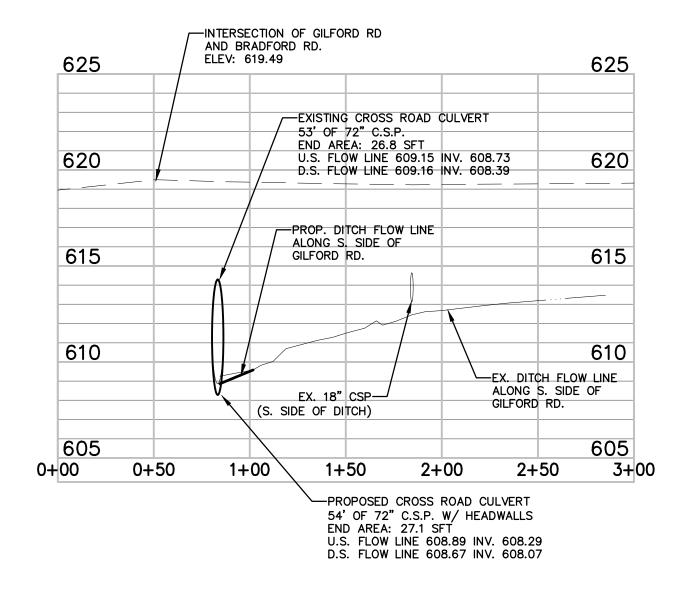
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Gilford Road over Murphy Drain Stream Flow Line Profile



Gilford Road Centerline Profile



FOR:	. A
TUSCOLA	
COUNTY	
ROAD	
COMMISS	ION



TITLE: Gilford Road over Murphy Drain LOCATION: Gilford Road Cross Road Culvert Road Murphy Drain ±35' East of Bradford Road, Gilford Township, T13N-R7E Section 27, 28, 33 & 34, Tuscola DRAWN DATE: County, Michigan **EGLE-WRD** BY: 07-17-19 BEN SCALE: I" = 50'H 1" = 50'H

CHECKED PAGE: APPROVED: PRP OF:



LOOKING AT UPSTREAM (SOUTH) END OF CULVERT



LOOKING AT DOWNSTREAM (NORTH) END OF CULVERT





IIILE: Gilford Road	Murphy Drain ±35' E	
DRAWN	DATE:	Township, T13N-R7E
BY: BEN	07-17-19	County, Michigan
CHECKED	PAGE: 5	APPROVED:
BY· PRP	OF: 8	PRP

LOCATION: Gilford Road Cross Road Culvert Road Murphy Drain ±35' East of Bradford Road, Gilford Township, T13N-R7E Section 27, 28, 33 & 34, Tuscola

ounty, Michigan

EGLE-WRD

DRIPOVED: ISCALEWRP018809 v1

Issued On: 10/03/2019



LOOKING UPSTREAM (SOUTH) FROM CROSSING



LOOKING DOWNSTREAM (NORTH) FROM CROSSING.





	TITLE: Gilford Road over Murphy Drain	
vc.	DRAWN BY: BEN	DATE: 07-17-19
	CHECKED BY: PRP	PAGE: 6 OF: 8

LOCATION: Gilford Road Cross Road Culvert Road Murphy Drain ±35' East of Bradford Road, Gilford Township, T13N-R7E Section 27, 28, 33 & 34, Tuscola

County, Michigan

APPROVED: PRP



LOOKING UPSTREAM (SOUTH) FROM DOWNSTREAM (NORTH) LIMITS.



LOOKING DOWNSTREAM (NORTH) FROM UPSTREAM (SOUTH) LIMITS.





TITLE: Gilford Road over Murphy Drain		
wc.	DRAWN BY: BEN	DATE: 07-17-19
	CHECKED BY: PRP	PAGE: 7 OF: 8

LOCATION: Gilford Road Cross Road Culvert Road Murphy Drain ±35' East of Bradford Road, Gilford Township, T13N-R7E Section 27, 28, 33 & 34, Tuscola

County, Michigan

EGLE-WRI

APPROVED:

SCALE:

SCALE

SCALE: N/A pproved



LOOKING SOUTH ON BRADFORD RD FROM INTERSECTION.



LOOKING NORTH ON BRADFORD RD FROM INTERSECTION.



LOOKING WEST ON GILFORD RD FROM INTERSECTION.



LOOKING EAST ON GILFORD RD FROM INTERSECTION.



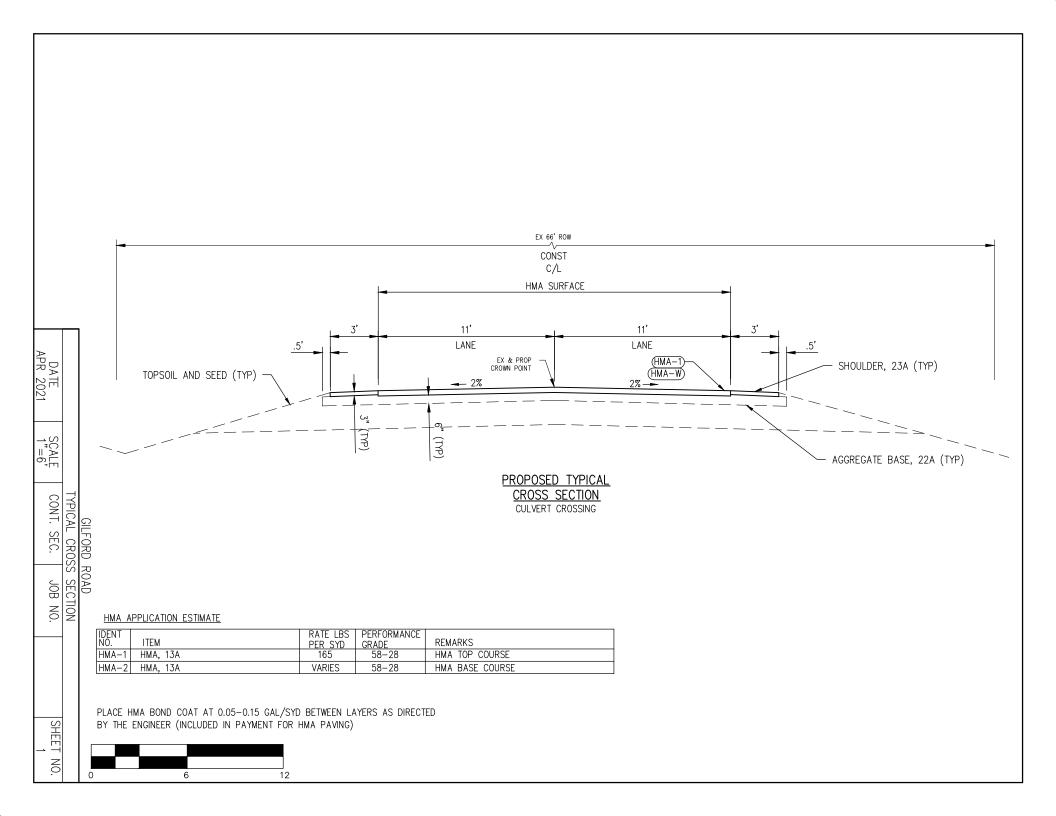


TITLE: Gilford Road over Murphy Drain

LOCATION: Gilford Road Cross Road Culvert Road
Murphy Drain ±35' East of Bradford Road, Gilford
Township, T13N-R7E Section 27, 28, 33 & 34, Tuscola
County, Michigan

EGLE-WRD

CHECKED PAGE: 8 APPROVED: SCALE: WRP018
BY: PRP OF: 8 PRP N/APPR



GENERAL NOTES:

1. BOLT HEADS MAY BE PLACED EITHER IN THE VALLEY OR ON THE CREST OF THE CORRUGATION.
JOB SITE CONDITIONS MAY REQUIRE SOME HOLES TO BE FIELD DRILLED.

MINIMUM ALLOWABLE SOIL-BEARING PRESSURE IS 4,000 LBS./SQ. FT.

- 2. CORRUGATED METAL CULVERTS ARE FLEXIBLE BY NATURE AND THEREFORE DERIVE STRUCTURAL STABILITY FROM THE STRENGTH AND RELATIVE STIFFNESS OF THE SURROUNDING BACKFILL MATERIAL. IT IS THE RESULTING SOIL-CULVERT INTERACTION SYSTEM THAT DEFINES THE ABILITY OF A FLEXIBLE METAL CULVERT TO WITHSTAND THE DEFINED SERVICE LOADS. FOR THIS REASON SPECIFICATIONS ADDRESSING APPROPRIATE BACKFILL MATERIAL SELECTION AND COMPACTION LEVELS MUST BE INCLUDED IN THE PROJECT DOCUMENTS. IN THE ABSENCE OF SUCH DOCUMENTATION IT IS RECOMMENDED THAT APPLICABLE STANDARDS PUBLISHED FOR FLEXIBLE METAL CULVERTS ARE SECURED FROM ASTM OR AASHTO. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND/OR ITS AGENTS (PURCHASER, ENGINEER, CONTRACTOR, ET AL.) TO ENSURE PROPER BACKFILL SPECIFICATIONS AND INSTALLATION METHOD.
- 3. DRAWINGS CONFORM TO THE ENGINEERING SITE DESIGN (BY OTHERS) WITH NO ASSUMPTIONS AS TO FIT AND CONFORMANCE. LANE HAS NOT PERFORMED SITE ENGINEERING SERVICES ON THIS PROJECT AND NO ATTEMPT HAS BEEN MADE TO VERIFY THE SAME. IT SHALL BE THE RESPONSIBILITY OF THE PROJECT ENGINEER

