

**TUSCOLA COUNTY ROAD COMMISSION  
REQUEST FOR PROPOSAL  
PROFESSIONAL ENGINEERING AND SURVEY DESIGN SERVICES  
GRADE, BASE, AND DRAINAGE**

Consultant: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Sign & Print: \_\_\_\_\_

Date: \_\_\_\_\_

Phone & Fax: \_\_\_\_\_

Email: \_\_\_\_\_

**Grade, Base, and Drainage Design:**

**Completed Proposal to the Tuscola County Road Commission by September 15, 2022**

**Ackerman Road from M-24 to Graf Road, Columbia Township, T14N R9E**

**Cost for Design Package:    \$ \_\_\_\_\_**

**Proposal Requirements:**

- **Proposal shall be limited to 2 pages total.**
- **Proposal shall include cost breakdown associated to the survey and design.**
- **Qualifications of Team**
- **Past Performance/Similar projects completed**
- **Completed first page of the RFP (doesn't count towards 2-page max proposal)**

***Qualification statements/quote proposals shall be received no later than 9:15 AM Thursday September 15, 2022, to Brent Dankert P.E., Acting County Highway Engineer. Late proposals will not be considered. See notice to bidder. Proposals must be delivered in a plainly marked and sealed envelope. No electronic proposals will be accepted. Any questions shall be directed to Brent Dankert at 989-233-7472 or highwayengineer@tuscolaroad.org.***

**Proposal Intent**

The Tuscola County Road Commission seeks to hire a qualified professional engineering firm to provide necessary survey and design work for a grade, base, and drainage project. The intent of the project is to center the roadway on the section line, widen the roadway to the standard cross section, (Grade) improve the base of the roadway, (Base) and provide positive drainage (Drainage). This includes performing all surveying, design, permitting, and design necessary for a completed project as detailed below, along with deliverable of the electronic CAD file, associated special provisions and plans.

All survey work will be completed under the supervision of a Professional Surveyor licensed in the State of Michigan. All design work shall be completed in accordance with MDOT and AASHTO design criteria. This work shall be completed under the direct supervision of a Professional Engineer licensed in the State of Michigan and the plan set is to be certified by that Professional Engineer. The final design shall be approved by the Tuscola County Road Commission.

**Background:**

Ackerman Road from M-24 to Graf Road, Columbia Township, T14N R9E, 0.67 miles of grade, base, and drainage. The Dehmel Drain is located on the south side of Ackerman Road.

**Anticipated Project Timeline:**

**All dates are from the completion of the prior task. The Township will be involved in the 30% and 60% plan review.**

Start of Project	Proposals received by the Tuscola County Road Commission
14 Days	Information and Agreements sent to the Township for review
45 Days	Consultant Notified of Award at Tuscola County Road Commission Board Meeting
60 Days	30% Plan Review – Topo, alignment, existing cross section, existing utilities
30 Days	60% Plan Review – Proposed drainage, alignment, and cross section. If necessary, Permitting will start after the 60% Plan Review.
30 Days	90% Plan Review – Public Hearing
30 Days	Final Comments Provided to Consultant (within two weeks of public hearing)
30 Days	Final Deliverables to Tuscola County Road Commission

**Existing Data Provided by the Tuscola County Road Commission:**

- Certification Maps: Certification maps with the project location(s) and lengths have been included within this document.
- Culvert Rating History Reports: Reports of all known culverts along the project location(s) have been included within this document. These reports include detailed descriptions as well as culvert ratings. These reports are to assist the designer in the design and replacement of culverts but are not to be viewed as a complete database of all existing culverts. This is not an inclusive list of culverts on the project, but rather the existing information based on current records.
- Parcel Data and Parcel Map: Parcel data of all related properties will be supplied to the awarded consultant. This data is to be labeled on the plan sheets.
- Traffic Count Data: If available.

**Grade Base and Drainage Requirements:**

Required Survey Data:

- Section Corners: All section corners must be located, and section lines established prior to the start of the survey.
- Topographical Data: All topographical information must be collected within the county right-of-way. Any information pertinent to design, outside of the right-of-way, shall also be surveyed (i.e., drainage outlet, building within ten feet of right-of-way, etc.).
- Utilities: A design MISS DIG design ticket must be requested by the designer through the MISS DIG ticketing system. Utilities (aerials and underground) are to be drafted on the plan sheets. All utilities must be clearly identified.
- Locate and prove out government corners and file L.C.R.C.'s.
- Locate property corners and place protective wood stakes.
- Set out section line nails and/or traverse points.
- Locate or establish benchmarks, four per mile.
- Set R.O.W. stakes at 200' intervals along both R.O.W. lines, prior to public hearing.
- Cross sections must be obtained at a minimum of 100' +/- intervals ROW to ROW. These must include any information important to design outside of the way.
- Extend topo 100' +/- through intersections.
- All stationing shall run from south to north and west to east.

Plan Requirements:

- Plans shall include a title sheet with an overview of the project location. General project information shall also be included, as well as a sheet index of the included sheets.

- Plans shall include a note sheet with general project notes. A list of utility owners shall be included. A legend shall be included for all used line types. A key for soil erosion and sedimentation control measures shall also be included.
- Plans shall include the Tuscola County Road Commission typical cross section, and any additional typical cross sections as needed. Cross sections shall be labeled with station ranges where applicable.
- Plans shall be drawn at a scale of 1" = 40' horizontal and 1" = 5' vertical. Provide stationing annotations at every 100' interval, as well as tick marks at every 50' interval. A maximum of ¼ mile shall be shown on each sheet.
- Plan View shall include topographic features within the road right-of-way as needed for road development. See the following:
  1. Title block
  2. Drawing scale
  3. North arrow
  4. R.O.W. lines
  5. Section line(s) shown and labeled
  6. Benchmarks labeled and described
  7. Stationing line and labels
  8. Road names
  9. House numbers, labeled in bold for appearance
  10. Parcel numbers and owners labeled
  11. Waterways labeled
  12. Tree lines
  13. Fence lines
  14. Edges of roadway
  15. Horizontal curves
  16. Proposed ditches, 25' left and right of section line
  17. Flow arrows of centerline of ditch, at 200' intervals minimum
  18. Flow arrows at cross culverts
  19. Flow arrows at outlets
  20. Driveway and cross culverts shall be shown with sizes and lengths labeled, existing and proposed
  21. Soil erosion and sedimentation control measures labeled
  22. Utility objects and lines shown and labeled
  23. Miscellaneous objects within R.O.W. (mailboxes, etc.)
- Station and offset shall be labeled for each feature within the right-of-way. Proposed work shall be in all caps and referenced in bold. Referenced off section line unless discussed with the Engineer and approved otherwise.
- Profile View shall be split into a centerline view and existing ditch profiles set at 25' left and right of the centerline.

1. The proposed road centerline, through placement of aggregate, shall be plotted denoting any cut areas.
- All proposed horizontal and vertical curves shall be designed and labeled in the plan and profile.
  - The Tuscola County Road Commission will not be responsible for the drainage design along Ackerman Road. The selected consultant will be responsible for determining the watershed area and properly sizing the culverts.
    1. The proposed ditching shall be plotted with all culverts, with inverts shown.
    2. Driveway culverts are replaced in-kind by diameter and at lengths to provide a top width of 30' for residential and 40' for agricultural. Length of culverts shall include 1 on 4 side slopes; no end sections shall be used.
    3. Cross culverts are to be designed and shown in the profile, minimum 15" dia for cross culverts underneath the roadway.
      - a. All culverts under the roadway shall be poly coated.
    4. Positive drainage for all ditches and culverts shall be established. All outlets shall be designed and shown on the plans. Drainage area shall be determined to verify proper culvert sizing.
    5. For county drains, the drainage area shall be determined to size any proposed cross culverts. Driveway culverts in county drains are not replaced. No ditching shall be conducted in county drains.

**EGLE Permitting:**

For crossroad culverts within a county drain or natural stream, an EGLE permit(s) may need to be completed. The designer shall complete and submit the application and corresponding documents to acquire the permit(s). The cost shall include completing the application with the four required 8 ½ x 11 drawings at 30 scale and digital photos.

- Four drawings:
  1. Plan view of proposed crossing.
  2. Profile of roadway centerline with cross section through structure.
  3. Profile of culvert, centerline of waterway.
  4. Cross Section of drain 50' downstream.
- Photos:
  1. Each end of the existing culvert.
  2. Photo of waterway upstream and downstream.

**Attachments:**

Attached to this document are the following:

- Typical Cross Section
- Road Certification Map
- Road Culvert Rating History Report
- Road Parcel Location Image
- Drainage Information Ackerman and Graf Intersection
- Tuscola County ROW Permit

**LIABILITY**

The consultant shall always exercise extreme care and shall assume all liability for any damages resulting from their operation. Furthermore, they shall hold the Tuscola County Road Commission harmless from any such claims or damages.

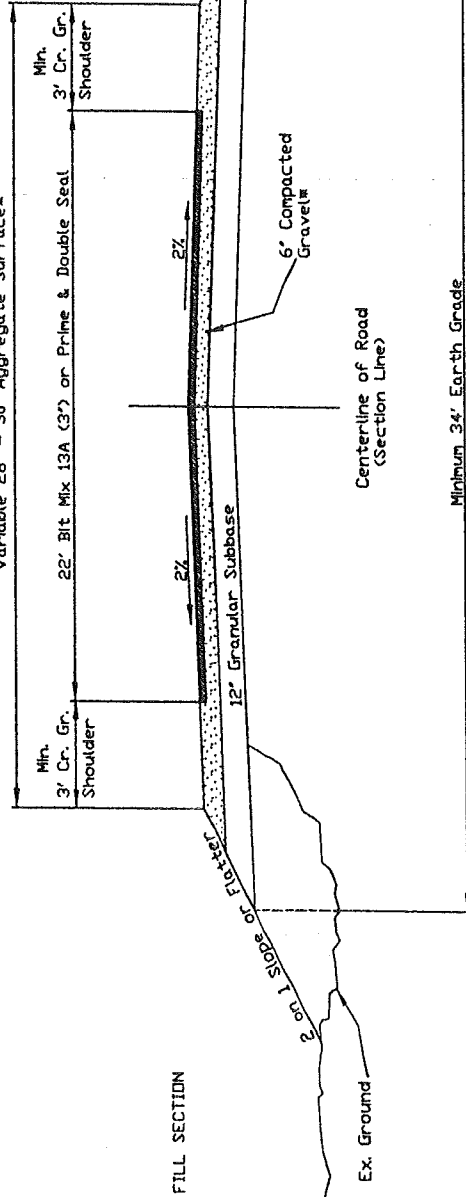
**NON-COMPLIANCE WITH PROJECT SPECIFICATION PROVISIONS**

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 Tuscola County Road Commission, the voiding and/or canceling of the acceptance of any contract, resulting from this project.

**The Tuscola County Board of Road Commissioners 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.**

Right of Way

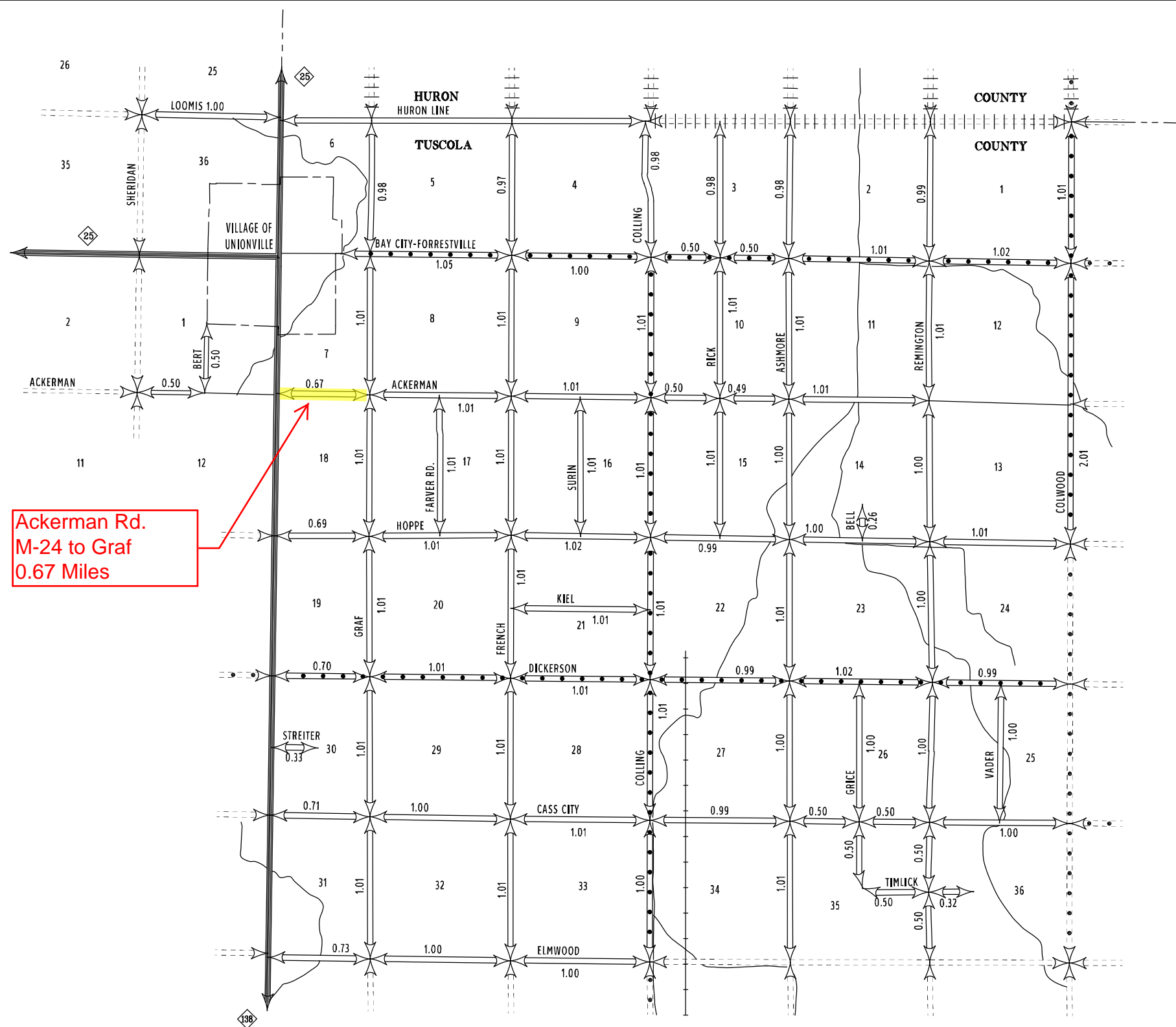
Variable 28' - 30' Aggregate Surfaces



Minimum 34' Earth Grade  
MDDT Spec 21A, 22A, 23A, or Crushed Limestone  
or Approved By Engineer.

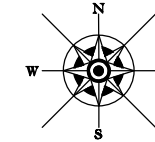
TCRC  
STANDARD CROSS SECTION

DATE: 8/24/2006  
Board Approved



Ackerman Rd.  
M-24 to Graf  
0.67 Miles

TOWNSHIP OF  
**COLUMBIA**  
TUSCOLA COUNTY  
T 14 N - R 9 E  
**ROAD SYSTEMS**  
ACT 51 PUBLIC ACTS 1961



PREPARED BY  
**MICHIGAN**  
DEPARTMENT OF TRANSPORTATION



PRIMARY ROAD SYSTEM 19.02 MILES  
LOCAL ROAD SYSTEM 58.46 MILES

- LEGEND**
- COUNTY LINE -----
  - CORPORATE LIMITS -----
  - TOWNSHIP LINE -----
  - STATE TRUNK LINE =====
  - COUNTY PRIMARY -.-.-.-.-
  - COUNTY LOCAL =====
  - CITY OR VILLAGE MAJOR STREET -----
  - ADJOINING COUNTY |||
  - ADJOINING TOWNSHIP -.-.-.-.-

1	2	3	4	5	6
7	8	9	10	11	
12	13	14	15	16	
17	18	19	20	21	
22	23	24			

KEY TO TWP.SHEET NUMBERS



# Annual Treatment History Report

Tuscola (County)

Report Module: Road Surface Management Analysis

Today's Date: 3/15/2022

Date Range: 1900 - 2021

## Report Filter

Field Name	Operator	Value(s)
Road Segment	=	Manually Selected Items (Saved Network Name): Ackerman Rd. M-24 to Graf

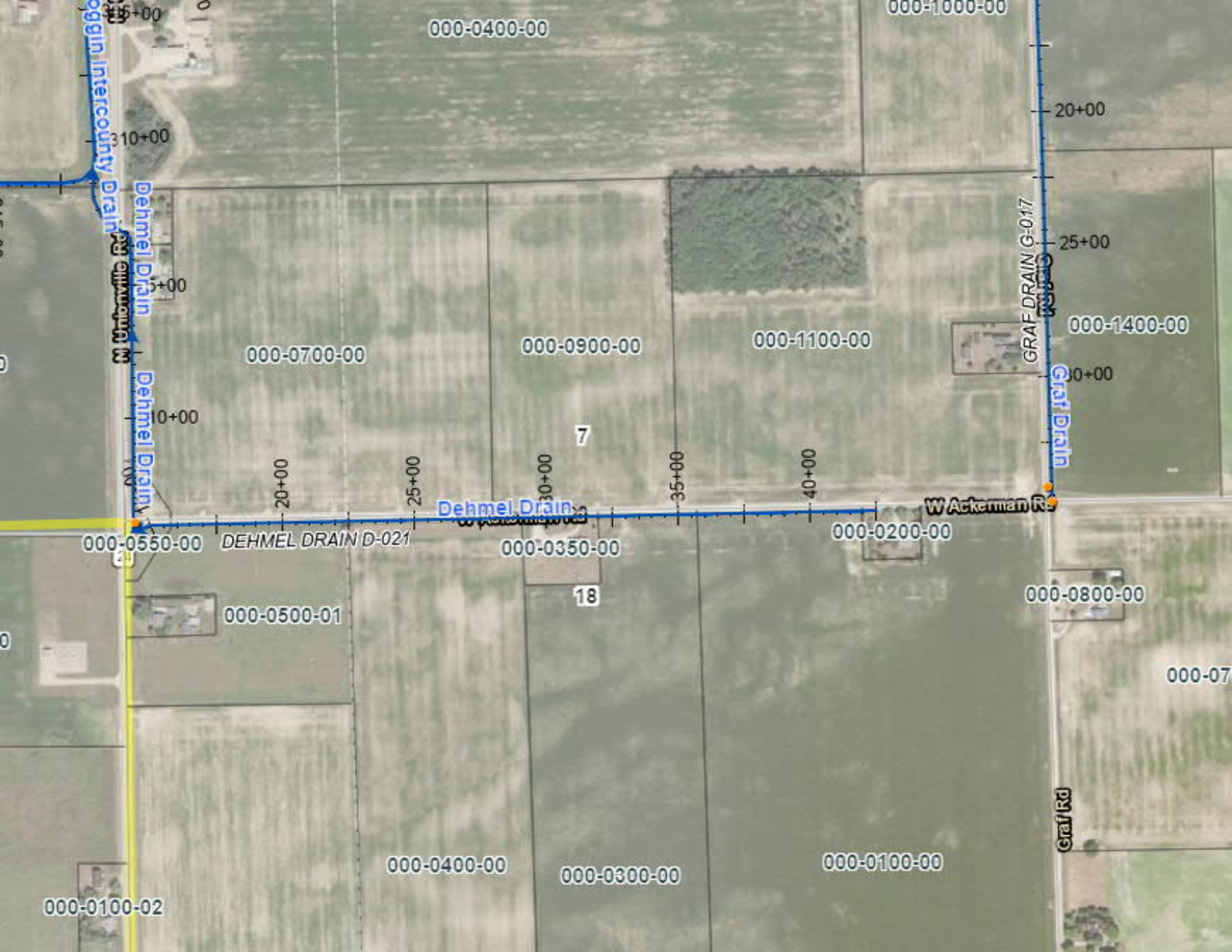
# Annual Treatment History Report

Year	Jurisdiction	NFC	Surface	PRNo	Road Name	P.O.B	P.O.E	Length	Lanes	Improvement
2016	Columbia Twp	Local	Gravel-Standard	273508	W Ackerman Rd	0.000	0.663	0.663	2	Limestone Application (3") with Grading

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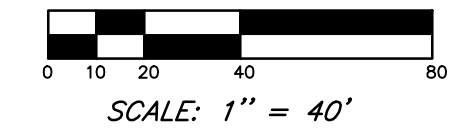
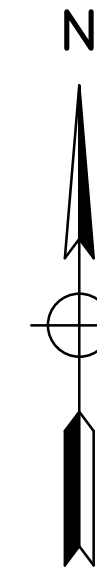
**2016 Mileage: 0.663**

<b>Total Centerline Mileage</b>	<b>0.663</b>
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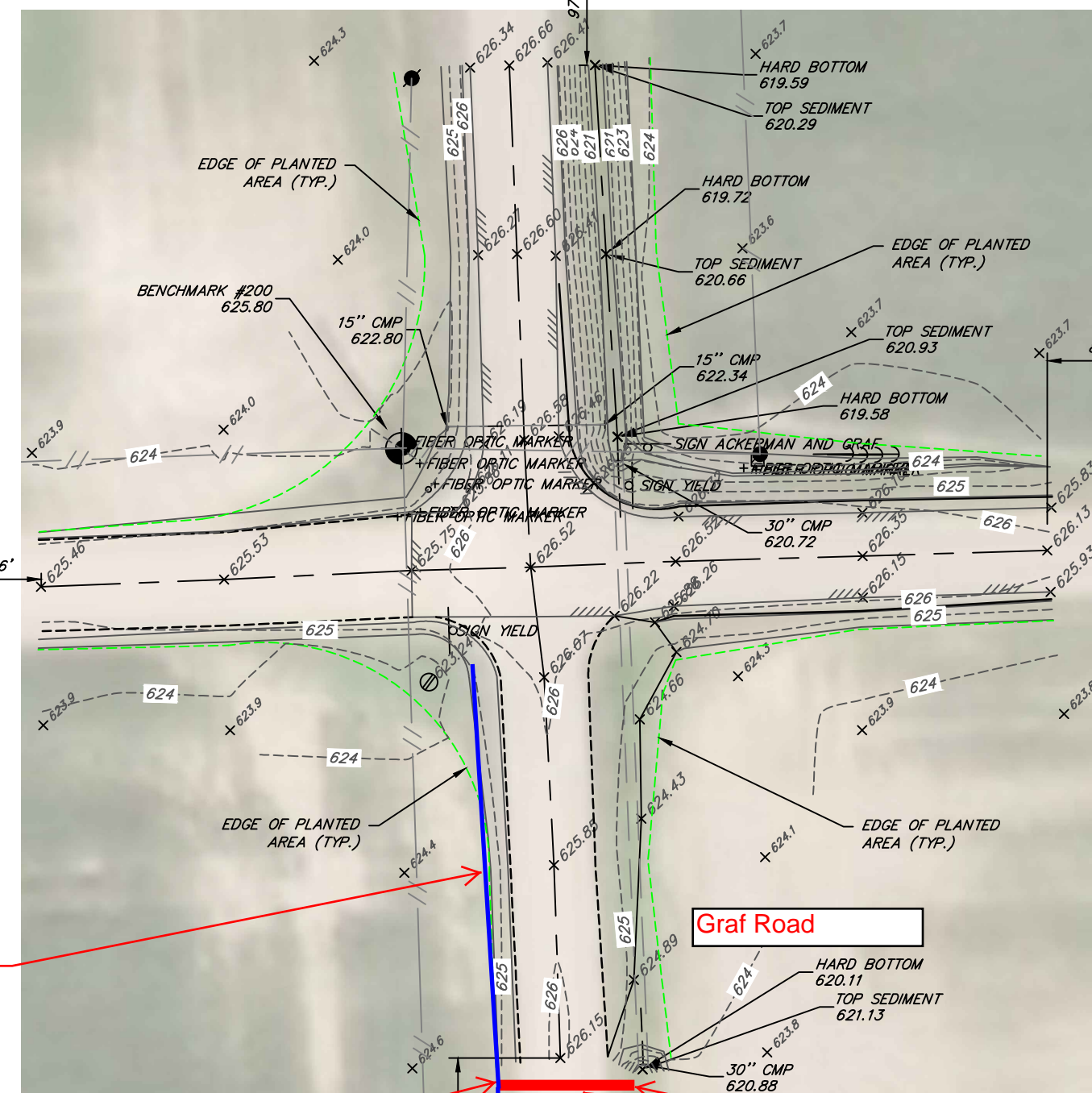


ACAD FILE: PG. F.B. RET. PLOTTING SCALE: APPROVED BY: CHECKED BY: DRAWN BY: DESIGNED BY: WORKORDER NO.:

SECTIONS 7, 8, 17 & 18  
T.14 N. - R.9 E.  
COLUMBIA TOWNSHIP  
TUSCOLA COUNTY,  
MICHIGAN



TOP SEDIMENT	620.22	X619.41	HARD BOTTOM
TOP SEDIMENT	619.98	X619.42	HARD BOTTOM
TOP SEDIMENT	620.10	X619.32	HARD BOTTOM
TOP SEDIMENT	620.38	X619.56	HARD BOTTOM
TOP SEDIMENT	620.18	X619.48	HARD BOTTOM
TOP SEDIMENT	620.30	X619.49	HARD BOTTOM
TOP SEDIMENT	620.31	X619.56	HARD BOTTOM
TOP SEDIMENT	620.48	X619.54	HARD BOTTOM
TOP SEDIMENT	620.21	X619.58	HARD BOTTOM
TOP SEDIMENT	620.32	X619.68	HARD BOTTOM
TOP SEDIMENT	620.30	X619.65	HARD BOTTOM



Ackerman Road

Graf Road

Grade/create ditch @ 1.74% from the southwest quadrant of Ackerman and Graf to the proposed 15" CMP cross culvert.

15" CMP INV: 621.35

15" CMP INV: 621.20

40 LF of 15" CMP @ 0.37% Length of culvert can be adjusted. Install Riprap east side

Grade ditch @ 7.30% from the proposed 15" CMP cross culvert to 50' south of the culvert.

- LEGEND**
- ⊙ - FOUND SURVEY CORNER
  - ⊠ - FOUND MONUMENT BOX
  - - - - STORM CULVERT
  - - - - SIGN
  - ⊙ - BENCHMARK
  - - UTILITY RISER
  - - POWER POLE

**BENCHMARK**  
BM 200 - Set gear spike in power pole at Northwest quadrant of Ackerman Road and Graf Road.  
NAVD88 Elev. 625.80

I hereby certify that I have surveyed the parcel of land hereon shown and described within the limits accepted by the practice of Professional Surveying.

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Jeffrey E. Wood  
Professional Surveyor No. 41115

TOPOGRAPHIC SURVEY FOR:  
**TUSCOLA COUNTY ROAD COMMISSION**  
1733 MERTZ RD.  
CARO, MICHIGAN 48723

PREPARED BY:  
JEFFREY E. WOOD  
PROFESSIONAL SURVEYOR NO. 41115  
230 S. WASHINGTON AVENUE  
SAGINAW, MICHIGAN 48607  
TEL. 989-754-4717  
DRAWN BY: J. THERING  
DATE: APRIL 17, 2020  
JOB NUMBER: 128427SG2020

TOPOGRAPHIC SURVEY OF:  
PART OF SECTIONS 7, 8, 17 & 18  
T.14 N. - R.9 E.  
COLUMBIA TOWNSHIP  
TUSCOLA COUNTY, MICHIGAN



128427SG2020  
B-5374

**TUSCOLA COUNTY ROAD COMMISSION**  
*Right - of - Way Permit Worksheet*

DATE: \_\_\_\_\_

Applicant/Property Owner:

Contractor:

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Applicant Signature  
Phone: \_\_\_\_\_

Contractor Signature  
Phone: \_\_\_\_\_

Project Locations:

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BETWEEN

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DISTANCE FROM

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Township: \_\_\_\_\_

Section: \_\_\_\_\_

TYPE OF WORK:

Driveway: Residential \_\_\_\_\_ Farm \_\_\_\_\_ Commercial \_\_\_\_\_

Special Use: Utility \_\_\_\_\_ Type \_\_\_\_\_

Misc.: \_\_\_\_\_

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REVIEWER'S RECOMMENDATIONS: \_\_\_\_\_

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Reviewer's Signature: \_\_\_\_\_

Flagged: \_\_\_\_\_