HARRY HAGSTROM, CHAIRMAN
HAROLD FALAN, VICE-CHAIRMAN
DEAN JURIK, MEMBER
JIM LEGGETT, MEMBER
ROBERT HILTY, MEMBER

85 WEST HIGHWAY M-115
BOON, MICHIGAN 49618
PHONE 231-775-9731
FAX 231-775-9732

WEXFORD COUNTY ROAD COMMISSION

OUR MISSION IS TO IMPROVE AND MAINTAIN A SAFE AND EFFICIENT ROAD SYSTEM

July 23, 2025

NOTICE TO CONTRACTORS AND MATERIAL SUPPLIERS

Sealed bids will be received at the office of the Wexford County Road Commission, 85 West Highway M-115, Boon, Michigan 49618 until 2:00 p.m. Monday, August 11, 2025, at which time and place the bids will be opened and read by the Wexford County Road Commission for guardrail removal and replacement.

Guardrail Removal and Replacement
3 Locations – Hanover and Boon Townships

All submitted bids must be in a sealed envelope clearly marked **WCRC Guardrail Replacement.** Telephone or faxed bids will not be accepted. Specifications are available at the Road Commission office in Boon, Michigan.

All materials and all work will be in accordance with the 2020 MDOT Standard Specifications for Construction and the attached special provisions.
Insurance requirements shall be in accordance with the 2020 MDOT Standard Specifications for Construction. Award is contingent upon Board approval.

The Wexford County Road Commission, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Sub-Title A, Office the Secretary, Part 21, Nondiscrimination 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, minority business enterprises 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, or national origin in consideration for an award.

The Board reserves the right to reject any or all bids or any part of the same, to waive irregularities and/or informalities and to make the award in part or entirety in any manner deemed to be in the best interest of the Wexford County Road Commission.

Wexford County Road Commission

Harry Hagstrom, Chairman
Harold Falan, Vice-Chairman
Dean Jurik, Member
Jim Leggett, Member
Robert Hilty, Member

WEXFORD COUNTY ROAD COMMISSION
Guardrail Removal and Replacement- 3 Locations
Bid Proposal

3 Project Locations:
N 19 Rd Road - Hanover Township, Section 15 & 16, Wexford County, Michigan. There are 2 sections of existing guardrail between W 18 Rd and W 18 ½ Rd that need to be replaced.
Location 1: 438' of B-rail plus terminations
Location 2: 450' of B-rail plus terminations
See attached vicinity maps for accurate locations.

S 23 Road – Boon Township, Section 26, Wexford County, Michigan. There is 1 section of existing guardrail on the west side of the road between W 36 Rd and W 34 Rd that needs to be replaced.
438' of B-rail plus terminations
See attached vicinity maps for accurate locations.

Description of Work:
The existing guardrail needs to be replaced.
The contractor is to remove existing guardrail, blocks, posts, terminations and hardware at each location. Materials to be organized and stored on site near work locations. Wexford County Road Commission will pick up the salvaged materials and remove from site.
The contractor will place new Type B guardrail and terminations at the locations, per the attached guardrail plan sheets provided by KPM Engineering.
WCRC has called in a design MissDig and it appears there are not utility conflicts at any location.

Maintaining Traffic:
The contractor shall provide all equipment, labor, and materials to properly control traffic throughout the length of the project. All traffic control features shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices to protect the traveling public, their workforce, and the work.
Traffic control shall be provided at no additional cost to the Road Commission and shall be included in the price of the work.

Project Schedule:
Project to be completed prior to October 10th, 2025. No work on Saturdays without prior approval from WCRC. No work on Sundays, holidays, or holiday weekends. Once the contractor has started work at any location, the run must be completed within 5 calendar days.

General Log Notes:
1. All grade work and gravel shoulder repair will be performed by WCRC.

2. Any damage to HMA Shoulder will be repaired by the contractor.

3. Per MDOT 807.03.B All posts within 3 feet of existing culvert are to be set in holes and backfilled as to not damage the culvert.

4. Guardrail, terminations, and curves will be staked in field by Engineer.

5. All removed guardrail, components, and hardware become the property of the Wexford County Road Commission and will be removed from the site by WCRC. Contact WCRC prior to starting work so we can schedule work to ensure prompt removal.

6. The 2020 MDOT Standard Specifications for Construction, 2010 Michigan Manual of Uniform Traffic Control Devices, and MDOT Standard Plans shall apply.

7. The submitted bid shall utilize the following pay items and include all materials and labor to complete the project to the above specifications and standards.

Measurement and Payment:
Project will be paid for using the following pay items:
- Guardrail, Salv.
- Guardrail, Type B, 96 inch Post
- Approach Terminal, Type 1B
- Approach Terminal, Type 2 B
- Guardrail Reflector
- Guardrail, Curved, Type B-CRT (15'R)
- Guardrail Departing Terminal, Type B

Insurance Requirements:
Insurance: Requirements as per MDOT 2020 Standard Specifications for Construction.

Bid Bond Requirements:
Bid bond is not required on this project.

WEXFORD COUNTY ROAD COMMISSION
Guardrail Removal and Replacement- 3 Locations
Bid Tab

Wexford County, Michigan.

All of the work herein specified will be paid for and included in the following pay items:

Items of Work	Unit	Qty	Unit Price	Total Price
Mobilization	LS	1	_____	_____
Guardrail, Salv.	Ft	1201	_____	_____
Guardrail, Type B, 96 inch Post	Ft	1326	_____	_____
Approach Terminal, Type 1B	Ea	3	_____	_____
Approach Terminal, Type 2 B	Ea	1	_____	_____
Guardrail Reflector	Ea	54	_____	_____
Guardrail, Curved, Type B-CRT (15'R)	Ft	50	_____	_____
Guardrail Departing Terminal, Type B	Ea	2	_____	_____
			Project Total	_____

Company Name_____

Address_____

Email_____

By (Name and Title) _____

Authorized Signature_____

Date_____

<div align="center">

SPECIAL PROVISION

FOR

MAINTAINING TRAFFIC

</div>

KFH / WCRC　　　　　　　　　　*1 of 2*　　　　　　　　　　*8-11-18*

Description:

This work shall consist of all labor, materials, and equipment required to maintain traffic as specified herein.

General:

Traffic shall be maintained in accordance with Section 104.11and Section 812 of the 2020 MDOT Standard Specifications for Construction, including any supplemental specifications, and as herein specified. All traffic control devices and their usage shall comply with the 2010 edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

The Contractor shall submit a written plan for maintaining traffic prior to beginning work, and subsequent updates of the plan to the Engineer for approval prior to putting changes into effect. The information shall note the traffic control devices and their placement, the location of flag persons, and intermediate flag persons as necessary. The maximum length of a flag control sequence shall be two miles with only one flag control sequence allowed at a time. Flag persons shall be equipped with two-way radios and a warning garment that is both fluorescent orange and reflectorized. Flag persons shall be used at crossroads or other traffic generators within the lane closure as directed by the Engineer.

**SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC**

KFH / WCRC   *2 of 2*   *8-11-17*

Traffic Restrictions:

All work shall be confined to daylight hours. No work shall be permitted on Sundays, holidays, holiday weekends, or during special events. All lanes of traffic shall be open at the end of each working day if constructing partial width. A minimum of one lane of traffic shall be maintained at all times, except where noted in the plans or if road is closed completely. Current MDOT signing sequences shall be utilized for the operation being performed. Commercial and residential driveways shall remain accessible at all times.

Measurement and Payment:

The completed work for Traffic Control, including all labor, materials, and equipment as required, shall include, but not be limited to, the following items as described in the 2020 MDOT Standard Specifications for Construction:

 Flag Control
 Minor Traffic Devices
 Sign, Type B, Temporary
 Lighted Arrow, Type A
 Sign Covers

These items will **not** be paid for separately but will be included in Project Total.

GUARDRAIL WORKSHEET

(REV. 04-2025)

FOR APPROACH TERMINALS ON R-61-SERIES, R-62-SERIES AND R-63-SERIES

ROUTE _____ CONTROL SECTION _____ JOB # _____
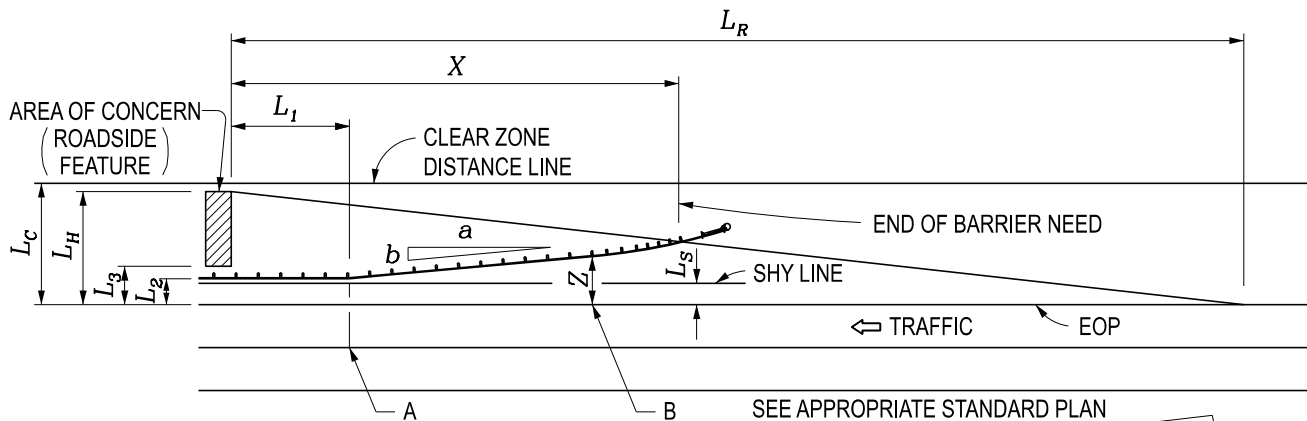
DESIGNED BY _____ DATE _____ CHECKED BY _____ DATE _____

APPROX. STATION OR M.P. _____ DESCRIPTION _____

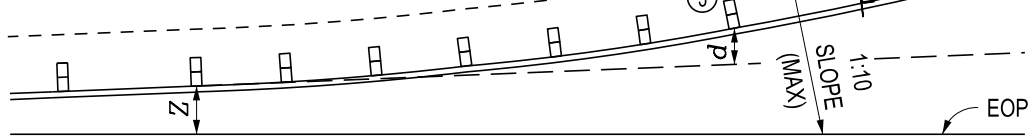stationing per lathe right side

GUARDRAIL RUN # _____

Right or East

IF STATIONING IS NOT AVAILABLE, LOCATE TO NEAREST FIXED OBJECT

NOTES: TYPE 1 TERMINAL ILLUSTRATED

$\dfrac{b}{a}$ (FLARE RATE) = 0 WHEN THE GUARDRAIL RUN IS TANGENT

d = 1.8' FOR TYPE 1 TERMINALS
d = 0 FOR TYPE 2 AND 3 TERMINALS

$$X = \frac{L_H + \left(\frac{b}{a}\right)\left(L_1\right) - \left(L_2 + d\right)}{\frac{b}{a} + \frac{L_H}{L_R}}$$

$$Z = L_2 + \left(\left|S_B - S_A\right|\right)\left(\frac{b}{a}\right)$$

7.01.30

LENGTH OF NEED . . . . X = _____

RUNOUT LENGTH (7.01.19) . . . . L_R = _____

GUARDRAIL TAPER RATE (7.01.29A) . . . . $\dfrac{b}{a}$ = _____

E.O.P. TO FACE OF BARRIER (DESIGNED) . . . . L_2 = _____

CLEAR ZONE (7.01.11) . . . . L_C = _____

E.O.P. TO ROADSIDE FEATURE (MEASURED) . . . . L_3 = _____

EFFECTIVE TURNED OUT DISTANCE OF ANCHORAGE . . . d = _____

LATERAL EXTENT OF ROADSIDE FEATURE (MEASURED). L_H = _____

LATERAL OFFSET AT END OF FLARE . . . . Z = _____

NOTE: DISTANCE OF OBJECT FROM BACK OF BARRIER MUST BE
GREATER THAN THE MAXIMUM DEFLECTION (7.01.20)

$L_H \leq L_C$

REFER TO STANDARD PLAN R-59-SERIES AND DESIGN MANUAL
SECTION 7.01.30 FOR GUARDRAIL AT EMBANKMENTS

DESIGN ADT _____

DESIGN SPEED _____

APPROACH SLOPE _____

L_1 = _____ (RECOMMENDED MINIMUM
DISTANCE: 25' OR LENGTH
OF GUARDRAIL BRIDGE
ANCHORAGE MEASURED FROM
BRIDGE RAIL ENDING,
_____ WHICHEVER IS GREATER)

L_S = _____ SHY LINE (7.01.18)

STATION AT A (S_A) _____

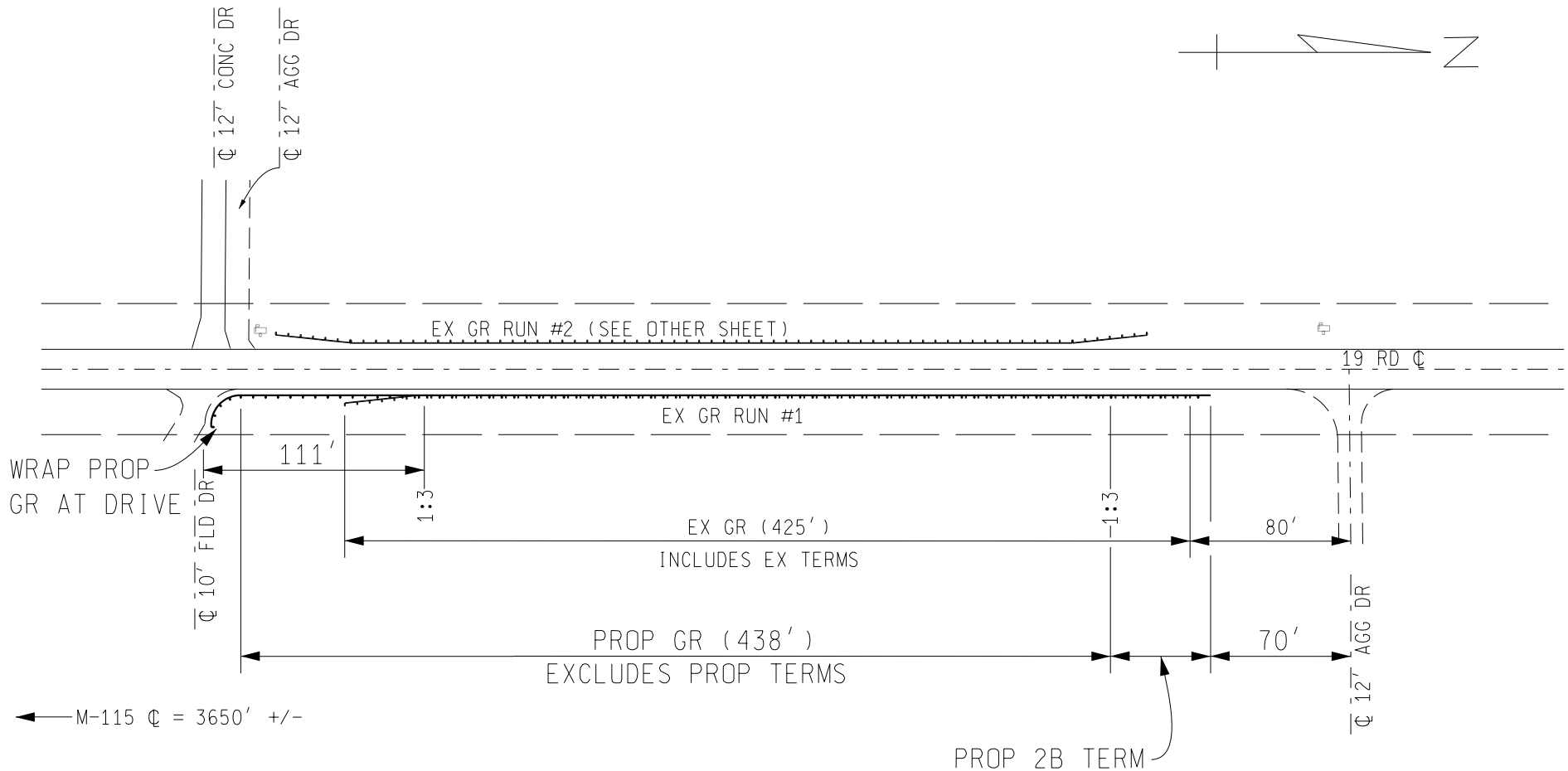STATION AT B (S_B) _____

* L_C (ADJUSTED) _____ RADIUS _____ Kcz _____

* SEE 7.01.11D FOR INFORMATION REGARDING
ADJUSTING CLEAR ZONE DISTANCES WHEN
GUARDRAIL IS LOCATED ON CURVED ROADWAYS.

SHEET 1 OF 2

Ç 12' CONC DR
Ç 12' AGG DR

N

EX GR RUN #2 (SEE OTHER SHEET)

19 RD Ç

EX GR RUN #1

WRAP PROP
GR AT DRIVE

111'

Ç 10' FLD DR

1:3

1:3

EX GR (425')
INCLUDES EX TERMS

80'

Ç 12' AGG DR

PROP GR (438')
EXCLUDES PROP TERMS

70'

M-115 Ç = 3650' +/-

PROP 2B TERM

PROP GUARDRAIL (RUN #1, RT OR EAST)
425 Ft	Guardrail, Salv
438 Ft	Guardrail, Type B, 96 inch Post
1 Ea	Guardrail Approach Terminal, Type 2B
18 Ea	Guardrail Reflector
25 Ft	Guardrail, Curved, Type B-CRT (15' R)
1 Ea	Guardrail Departing Terminal, Type B

EX & PROP GUARDRAIL 14' FROM Ç TO FACE RAIL

NO SCALE

811
3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
800-482-7171
OR 811

KPM ENGINEERING
CIVIL ENGINEERING CONSULTANTS

19 ROAD
GUARDRAIL RUN #1

DATE: 6/26/2025

WEXFORD COUNTY
ROAD COMMISSION
85 WEST M-115
BOON, MI 49618

DRAWN BY | SHEET NO.
PJM |

9:46:55 AM

6/26/2025

GUARDRAIL WORKSHEET

FOR APPROACH TERMINALS ON R-61-SERIES, R-62-SERIES AND R-63-SERIES

ROUTE _____ CONTROL SECTION _____ JOB # _____

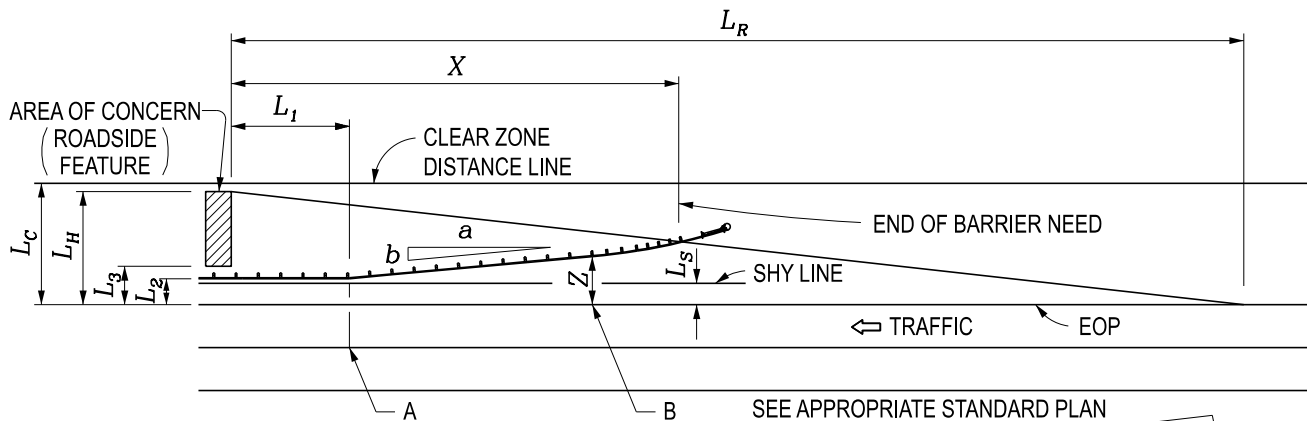DESIGNED BY _____ DATE _____ CHECKED BY _____ DATE _____

APPROX. STATION OR M.P. _____ DESCRIPTION _____

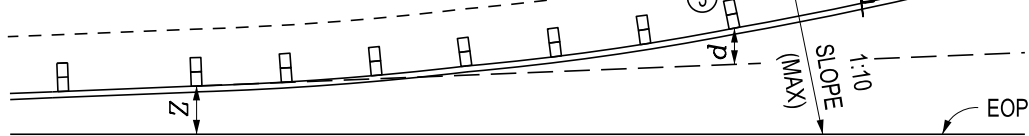stationing per lathe right side

GUARDRAIL RUN # _____

Left or West

IF STATIONING IS NOT AVAILABLE, LOCATE TO NEAREST FIXED OBJECT

NOTES: TYPE 1 TERMINAL ILLUSTRATED

$\frac{b}{a}$ (FLARE RATE) = 0 WHEN THE GUARDRAIL RUN IS TANGENT

d = 1.8' FOR TYPE 1 TERMINALS
d = 0 FOR TYPE 2 AND 3 TERMINALS

$$X = \frac{L_H + \left(\frac{b}{a}\right)\left(L_1\right) - \left(L_2 + d\right)}{\frac{b}{a} + \frac{L_H}{L_R}}$$

$$Z = L_2 + \left(\left|S_B - S_A\right|\right)\left(\frac{b}{a}\right)$$

7.01.30

LENGTH OF NEED .... X = _____

RUNOUT LENGTH (7.01.19) .... L_R = _____

GUARDRAIL TAPER RATE (7.01.29A) .... $\frac{b}{a}$ = _____

E.O.P. TO FACE OF BARRIER (DESIGNED) .... L_2 = _____

CLEAR ZONE (7.01.11) .... L_C = _____

E.O.P. TO ROADSIDE FEATURE (MEASURED) .... L_3 = _____

EFFECTIVE TURNED OUT DISTANCE OF ANCHORAGE.... d = _____

LATERAL EXTENT OF ROADSIDE FEATURE (MEASURED). L_H = _____

LATERAL OFFSET AT END OF FLARE .... Z = _____

NOTE: DISTANCE OF OBJECT FROM BACK OF BARRIER MUST BE
GREATER THAN THE MAXIMUM DEFLECTION (7.01.20)

$L_H \leq L_C$

REFER TO STANDARD PLAN R-59-SERIES AND DESIGN MANUAL
SECTION 7.01.30 FOR GUARDRAIL AT EMBANKMENTS

DESIGN ADT _____

DESIGN SPEED _____

APPROACH SLOPE _____

L_1 = _____ (RECOMMENDED MINIMUM
DISTANCE: 25' OR LENGTH
OF GUARDRAIL BRIDGE
ANCHORAGE MEASURED FROM
BRIDGE RAIL ENDING,
WHICHEVER IS GREATER)

L_S = _____ SHY LINE (7.01.18)

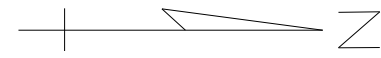STATION AT A (S_A) _____

STATION AT B (S_B) _____

* L_C (ADJUSTED) _____ RADIUS _____ Kcz _____

* SEE 7.01.11D FOR INFORMATION REGARDING
ADJUSTING CLEAR ZONE DISTANCES WHEN
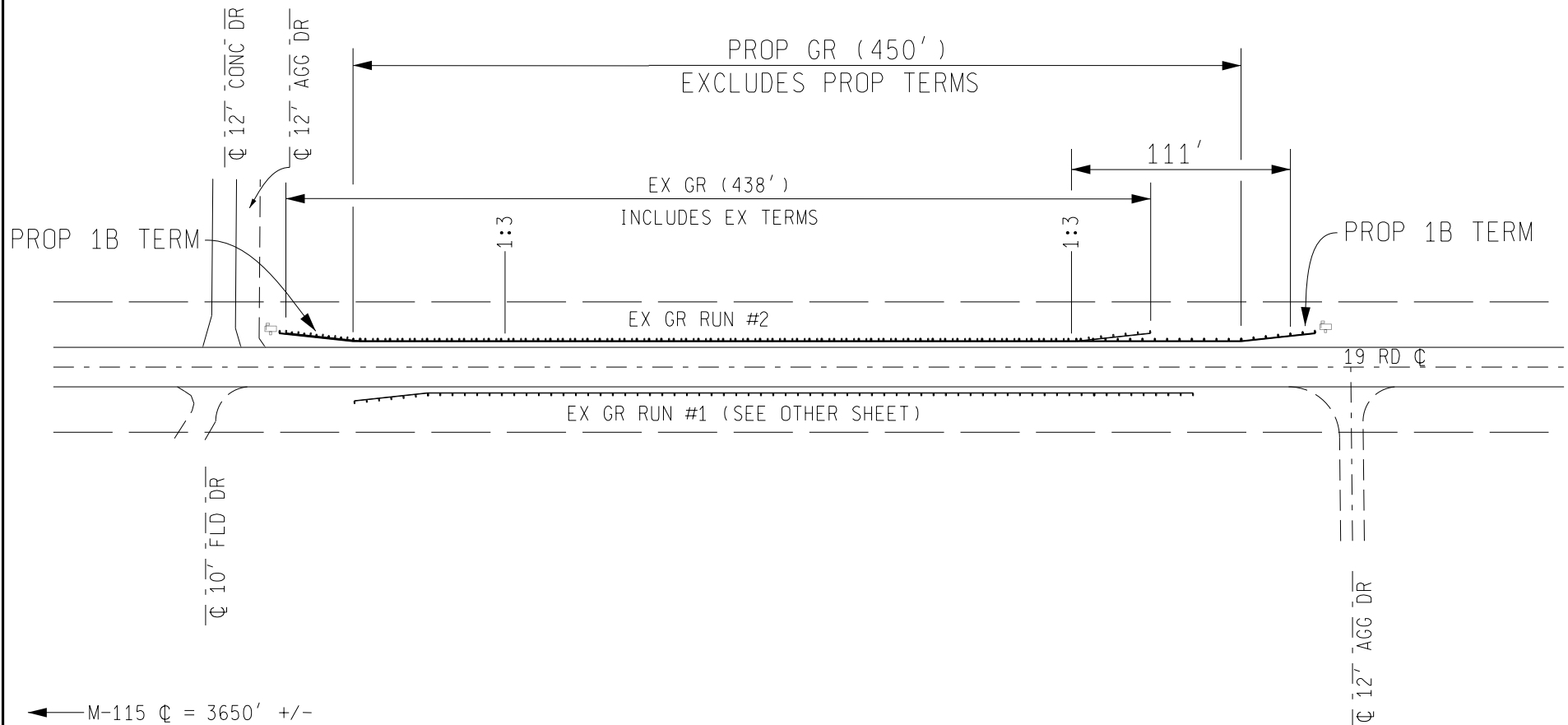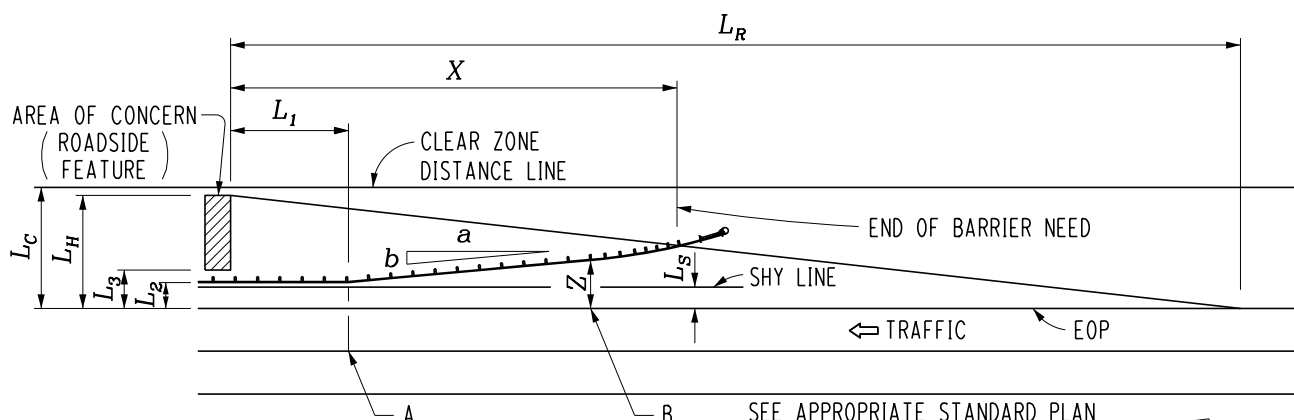GUARDRAIL IS LOCATED ON CURVED ROADWAYS.

SHEET 1 OF 2

PROP GUARDRAIL (RUN #2, LT OR WEST)

438 Ft	Guardrail, Salv
450 Ft	Guardrail, Type B, 96 inch Post
2 Ea	Guardrail Approach Terminal, Type 1B
18 Ea	Guardrail Reflector

EX & PROP GUARDRAIL 14' FROM ₵ TO FACE RAIL

PROP GR (450')
EXCLUDES PROP TERMS

₵ 12" CONC DR
₵ 12" AGG DR

111'

EX GR (438')
INCLUDES EX TERMS

1:3   1:3

PROP 1B TERM   PROP 1B TERM

EX GR RUN #2

19 RD ₵

EX GR RUN #1 (SEE OTHER SHEET)

₵ 10" FLD DR

₵ 12" AGG DR

◄— M-115 ₵ = 3650' +/-

9:46:05 AM

6/26/2025

19 ROAD	WEXFORD COUNTY ROAD COMMISSION
GUARDRAIL RUN #2	85 WEST M-115 BOON, MI 49618
	DRAWN BY	SHEET NO.
DATE: 6/26/2025	PJM	

GUARDRAIL WORKSHEET

FOR APPROACH TERMINALS ON R-61-SERIES, R-62-SERIES AND R-63-SERIES

ROUTE _____ CONTROL SECTION _____ JOB # _____

DESIGNED BY _____ DATE _____ CHECKED BY _____ DATE _____

APPROX. STATION OR M.P. _____ DESCRIPTION _____
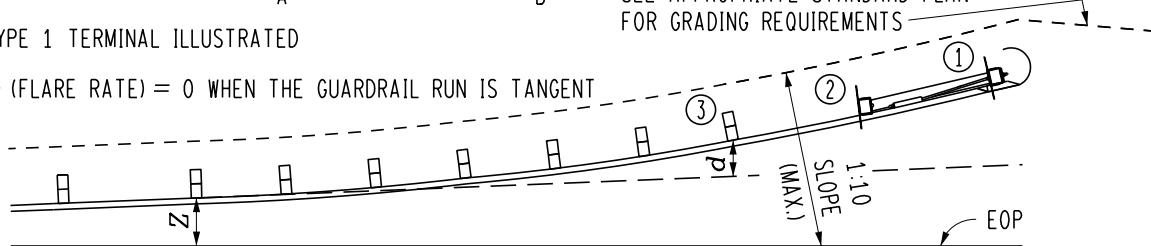
GUARDRAIL RUN # _____

IF STATIONING IS NOT AVAILABLE, LOCATE TO NEAREST FIXED OBJECT

NOTES: TYPE 1 TERMINAL ILLUSTRATED

$\frac{b}{a}$ (FLARE RATE) = 0 WHEN THE GUARDRAIL RUN IS TANGENT

d = 1.8' FOR TYPE 1 TERMINALS
d = 0 FOR TYPE 2 AND 3 TERMINALS

$$X = \frac{L_H + \left(\frac{b}{a}\right)\left(L_1\right) - \left(L_2 + d\right)}{\frac{b}{a} + \frac{L_H}{L_R}}$$

$$Z = L_2 + \left(\left|S_B - S_A\right|\right)\left(\frac{b}{a}\right)$$

see sheet 2 and pics

LENGTH OF NEED .... X = _____

RUNOUT LENGTH (7.01.19) .... L_R = _____

GUARDRAIL TAPER RATE (7.01.29A) .... $\frac{b}{a}$ = _____

E.O.P. TO FACE OF BARRIER (DESIGNED) .... L_2 = _____

CLEAR ZONE (7.01.11) .... L_C = _____

E.O.P. TO ROADSIDE FEATURE (MEASURED) .... L_3 = _____

EFFECTIVE TURNED OUT DISTANCE OF ANCHORAGE ... d = _____

LATERAL EXTENT OF ROADSIDE FEATURE (MEASURED).. L_H = _____

LATERAL OFFSET AT END OF FLARE .... Z = _____

NOTE: DISTANCE OF OBJECT FROM BACK OF BARRIER MUST BE
       GREATER THAN THE MAXIMUM DEFLECTION (7.01.20)

$L_H \leq L_C$

REFER TO STANDARD PLAN R-59-SERIES AND DESIGN MANUAL
SECTION 7.01.30 FOR GUARDRAIL AT EMBANKMENTS

DESIGN ADT   _____

DESIGN SPEED   _____

APPROACH SLOPE _____

L_1 = _____ (RECOMMENDED MINIMUM
                 DISTANCE: 25' OR LENGTH
                 OF GUARDRAIL BRIDGE
                 ANCHORAGE MEASURED FROM
                 BRIDGE RAIL ENDING,
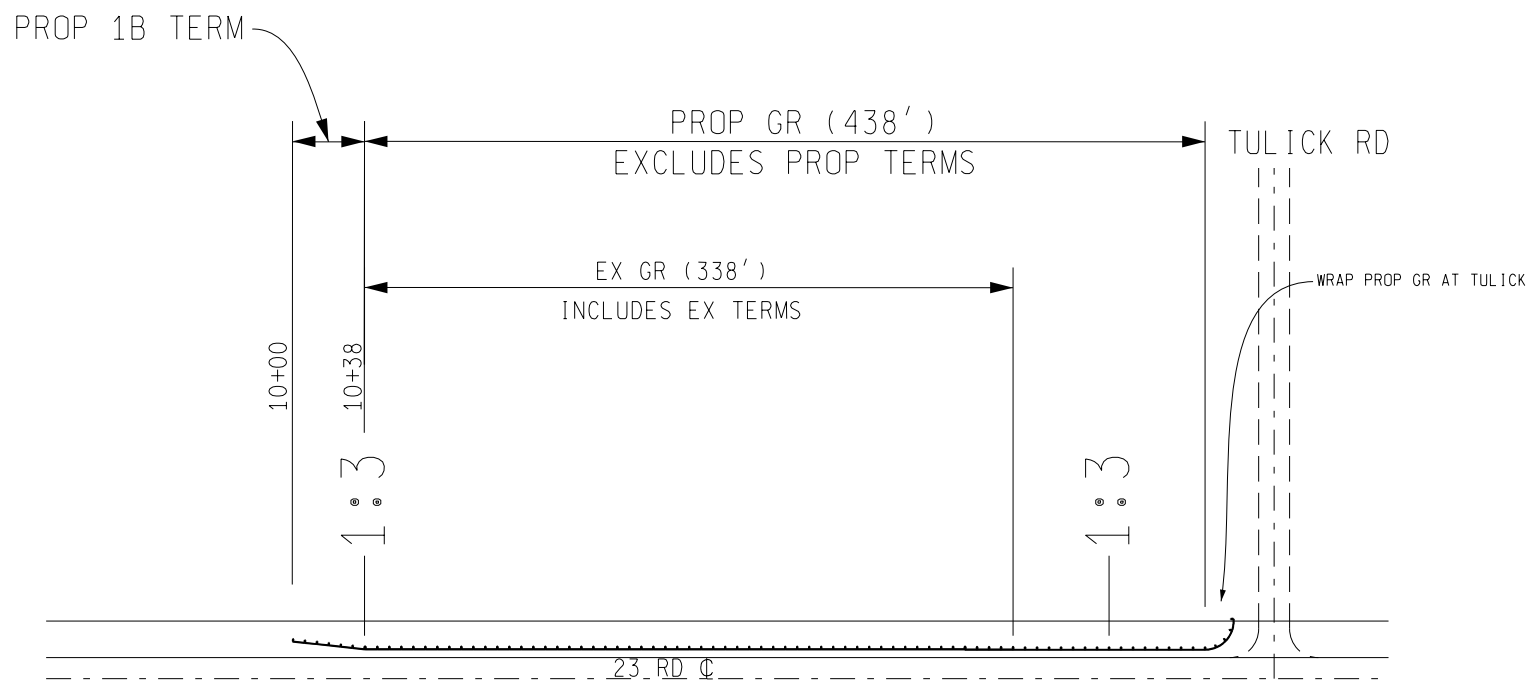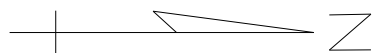   WHICHEVER IS GREATER)

L_S = _____ SHY LINE (7.01.18)

STATION AT A (S_A) _____

STATION AT B (S_B) _____

PROP 1B TERM

PROP GR (438')
EXCLUDES PROP TERMS

TULICK RD

EX GR (338')
INCLUDES EX TERMS

WRAP PROP GR AT TULICK

10+00

10+38

1 : 3

1 : 3

23 RD ℄

PROP GUARDRAIL

338 Ft	Guardrail, Salv
438 Ft	Guardrail, Type B, 96 inch Post
1 Ea	Guardrail Approach Terminal, Type 1B
18 Ea	Guardrail Reflector
25 Ft	Guardrail, Curved, Type B-CRT (15' R)
1 Ea	Guardrail Departing Terminal, Type B

EX & PROP GUARDRAIL 15' FROM ℄ TO FACE RAIL

NO SCALE

811
3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
800-482-7171
OR 811

KPM ENGINEERING

23 ROAD

DATE: 8/22/2024

WEXFORD COUNTY
ROAD COMMISSION
85 WEST M-115
BOON, MI 49618

DRAWN BY	SHEET NO.
PJM	15

12:05:44 PM

8/22/2024

Legend

Guardrail Location

19 Rd Guardrail

Mesick

Guardrail Location 1   Guardrail Location 2

Google Earth

Image © 2025 Airbus

1 mi

19 Rd Guardrail

Legend
■ Guardrail Location

Guardrail Location 2

Guardrail Location 1

Google Earth

300 ft

115

HARING

Boon

Haring Charter T

115

131

Guardrail Location 3

Guardrail Locations

See attached guardrail plans and work sheets.

Lake Mitchell

Lake Cadillac

Cadillac

131

Gold Star Mothers Mem Hwy

55

55

55

Axin

Google Earth

Image © 2024 Airbus

3 mi

N
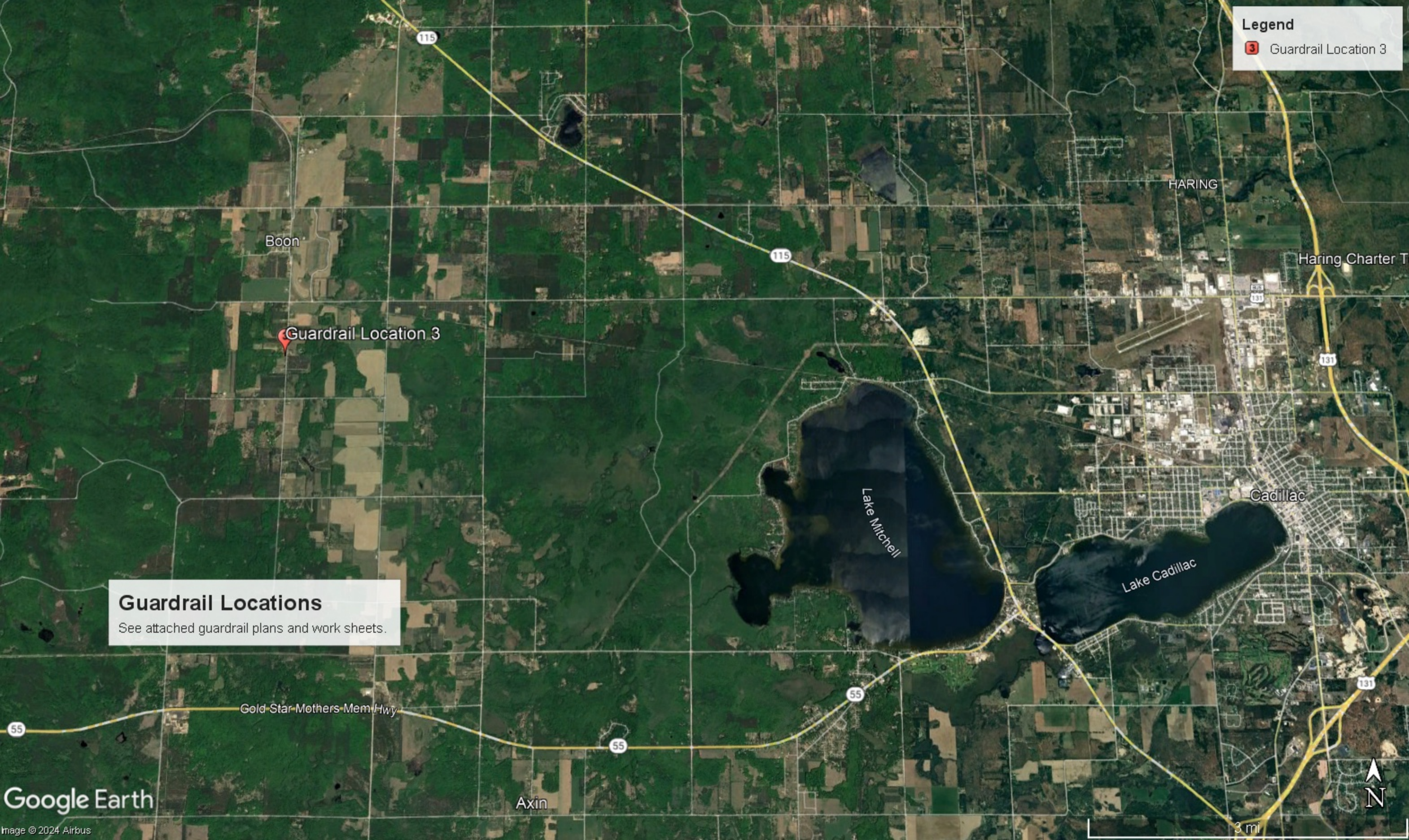
W 34 Rd

W 34 Rd

Boon Rd

S 23 Rd

Guardrail Locations

See attached guardrail plans and work sheets.

Guardrail Location 3

Google Earth

N

1000 ft