

STATE OF ILLINOIS  
**WINNEBAGO COUNTY HIGHWAY DEPARTMENT**  
 PLANS FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM  
**ROUTE: VARIOUS COUNTY HIGHWAYS**  
**SECTION: 11-00473-01-SP**  
**PROJECT NO.: HSIP-0201(031)**



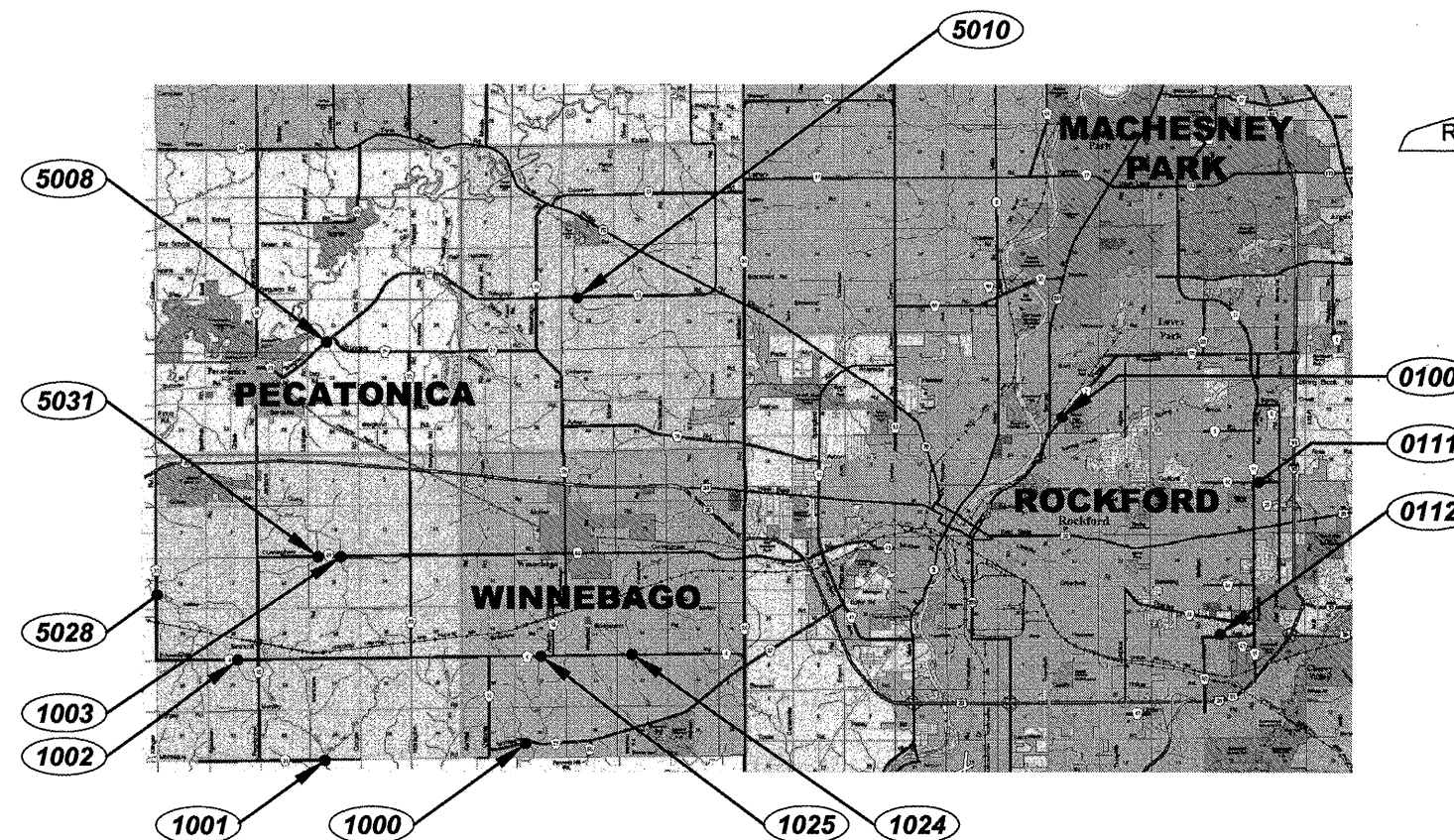
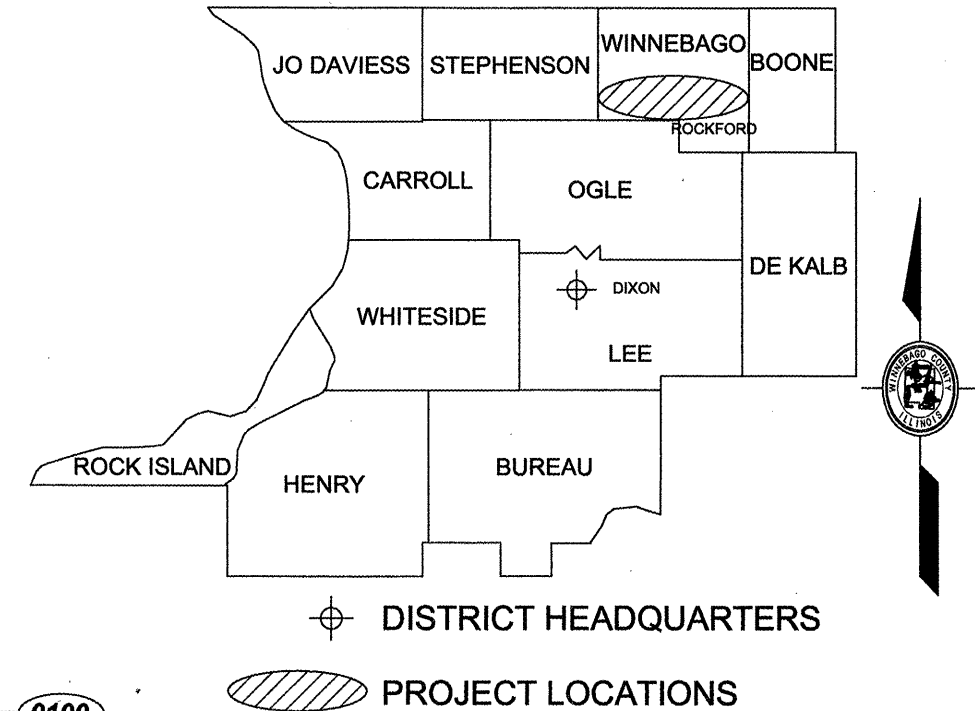
**INDEX OF SHEETS**

| SHEET NO. | SHEET NAME                            |
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| 1         | COVER SHEET                           |
| 2         | SUMMARY OF QUANTITIES & GENERAL NOTES |
| 3         | GUARDRAIL LAYOUTS - 1                 |
| 4         | GUARDRAIL LAYOUTS - 2                 |

**STANDARDS**

| STD. NO.    | STD. TITLE                                                    |
|-------------|---------------------------------------------------------------|
| B.L.R. 23-4 | TRAFFIC BARRIER TERMINAL TYPE 1                               |
| 630001-10   | STEEL PLATE BEAM GUARDRAIL                                    |
| 630101-09   | GUARDRAIL MOUNTED ON EXISTING CULVERTS                        |
| 630301-05   | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS    |
| 635006-03   | REFLECTOR AND TERMINAL MARKER PLACEMENT                       |
| 635011-02   | REFLECTOR MARKER AND MOUNTING DETAILS                         |
| 701006-03   | OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE      |
| 701201-04   | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH           |
| 701301-04   | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                   |
| 701501-06   | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED                         |
| 701701-08   | URBAN LANE CLOSURE, MULTILANE INTERSECTION                    |
| 701901-02   | TRAFFIC CONTROL DEVICES                                       |
| 720011-01   | METAL POSTS FOR SIGNS, MARKERS & DELINEATORS                  |
| 728001-01   | TELESCOPING STEEL SIGN SUPPORT                                |
| 729001-01   | APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS) |

GUARDRAIL 2012 - COUNTY-WIDE  
 JOB NO.: C-92-137-12  
 CONTRACT NO.: 85564



**SITE LOCATIONS**

| NO.  | CO. HWY.              | TWP        | P.M. | T   | R   | SEC.  |
|------|-----------------------|------------|------|-----|-----|-------|
| 0100 | 7 - FOREST HILLS ROAD | ROCKFORD   | 3    | 44N | 2E  | 7     |
| 0111 | 86 - GUILFORD ROAD    | ROCKFORD   | 3    | 44N | 2E  | 14/23 |
| 0112 | 60 - HARRISON AVENUE  | ROCKFORD   | 3    | 44N | 2E  | 34    |
| 1000 | 27 - MONTAGUE ROAD    | WINNEBAGO  | 4    | 26N | 11E | 32    |
| 1001 | 31 - MONTAGUE ROAD    | SEWARD     | 4    | 26N | 10E | 34    |
| 1002 | 4 - EDWARDSVILLE ROAD | SEWARD     | 4    | 26N | 10E | 20/29 |
| 1003 | 49 - CUNNINGHAM ROAD  | SEWARD     | 4    | 26N | 10E | 10/15 |
| 1024 | 4 - EDWARDSVILLE ROAD | WINNEBAGO  | 4    | 26N | 11E | 22/27 |
| 1025 | 4 - EDWARDSVILLE ROAD | WINNEBAGO  | 4    | 26N | 11E | 20/29 |
| 5008 | 21 - TELEGRAPH ROAD   | PECATONICA | 4    | 27N | 10E | 22    |
| 5010 | 21 - TELEGRAPH ROAD   | BURRITT    | 4    | 27N | 11E | 16/21 |
| 5028 | 37 - KLINGER ROAD     | SEWARD     | 4    | 26N | 10E | 18    |
| 5031 | 49 - CUNNINGHAM ROAD  | SEWARD     | 4    | 26N | 10E | 10/15 |



**CALL J.U.L.I.E.**  
 BEFORE YOU DIG  
 1-800-892-0123  
 SEE  
 "SITE LOCATIONS"

THESE PLANS PREPARED BY:  
 WINNEBAGO COUNTY HIGHWAY DEPARTMENT

APPROVED April 17 2012  
  
 WINNEBAGO COUNTY ENGINEER

PASSED April 18 2012  
  
 DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
 BASED ON LIMITED  
 REVIEW April 18 2012  
  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER



### SUMMARY OF QUANTITIES:

CONSTRUCTION TYPE CODE: 0021

| Item | Pay Item Number | Pay Item Description                         | Unit of Measure | Quantity |
|------|-----------------|----------------------------------------------|-----------------|----------|
| 1    | 63000001        | STEEL PLATE BEAM GUARDRAIL, TY A, 6 FT POSTS | FOOT            | 4168.75  |
| 2    | 63000025        | STEEL PLATE BEAM GUARDRAIL, ATTACH TO STR    | FOOT            | 631.25   |
| 3    | LR631020        | TRAFFIC BARRIER TERMINAL, TY 1               | EACH            | 12       |
| 4    | 63100167        | TRAFFIC BARRIER TERMINAL, TY 1 (SP) TANGENT  | EACH            | 35       |
| 5*   | 63200310        | GUARDRAIL REMOVAL                            | FOOT            | 1441     |
| 6    | 63500105        | DELINEATORS                                  | EACH            | 48       |
| 7    | 67100100        | MOBILIZATION                                 | LSUM            | 1        |
| 8*   | X7010216        | TRAFFIC CONTROL AND PROTECTION SPECIAL       | LSUM            | 1        |
| 9    | 78200410        | GUARDRAIL MARKER, TY A                       | EACH            | 111      |
| 10   | 78201000        | TERMINAL MARKER, DIRECT APPLIED              | EACH            | 47       |

\* SEE SPECIAL PROVISIONS

### GENERAL NOTES:

- GUARDRAIL REMOVAL SHALL INCLUDE DISMANTLING, LOADING, HAULING, DISPOSAL, AND RESTORATION OF THE SITE IN PREPARATION FOR INSTALLATION OF NEW GUARDRAIL.
- PRIOR TO THE COMMENCEMENT OF WORK BY THE CONTRACTOR AT EACH SITE, ALL REQUIRED GRADING OF SHOULDERS, FRONT SLOPES, AND GUARDRAIL TERMINATION POINTS WILL HAVE BEEN COMPLETED BY WINNEBAGO COUNTY. THE FURNISHING OF MATERIALS AND PERFORMANCE OF GRADING IS NOT INCLUDED WITH THE WORK ON THIS CONTRACT.
- THE COST OF REMOVING AND REPLACING EARTH AND SHOULDER MATERIAL NECESSARY FOR INSTALLATION OF STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURE, WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THIS ITEM. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL FIELD CONDITIONS WHICH RELATE TO THIS ITEM AS WELL AS TO ALL ITEMS ASSOCIATED WITH THIS CONTRACT.
- ANY COST ASSOCIATED WITH FURNISHING AND INSTALLING SHORT RADIUS GUARDRAIL AT SITE 0112, AS INDICATED IN THE GUARDRAIL LAYOUTS, WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS. THE GUARDRAIL ELEMENT PLATES SHALL BE FACTORY-FABRICATED TO THE INDICATED RADIUS OF CURVATURE OR TO THE RADIUS NECESSARY TO MATCH THE GUARDRAIL CONFIGURATION SPECIFIED BY THE ENGINEER.
- ANY COST ASSOCIATED WITH FURNISHING AND INSTALLING LONGER POSTS FOR THE GUARDRAIL ATTACHED TO THE STRUCTURE AT SITE 1025 WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES.
- ONCE WORK IS BEGUN ON A CONTINUOUS RUN OF GUARDRAIL, ALL OF THE GUARDRAIL THAT IS REMOVED IN THAT RUN MUST BE REPLACED WITH NEW GUARDRAIL IN THE SAME DAY AND THE NEW GUARDRAIL SHALL BE TEMPORARILY CONNECTED TO ANY REMAINING OLD GUARDRAIL IN A MANNER APPROVED BY THE ENGINEER.
- WORK AREAS SHALL BE LEFT IN SAFE AND ORDERLY CONDITION. NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROAD OR SHOULDERS DURING NON-WORKING HOURS.
- ALL GUARDRAIL AND TERMINAL MARKERS SHALL BE INSTALLED IN THE SAME DAY THAT THE GUARDRAIL AND TERMINAL SECTIONS TO WHICH THEY ARE TO BE ATTACHED ARE INSTALLED. GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.
- WHERE GUARDRAIL IS TO BE REMOVED ON BOTH SIDES OF THE ROAD, REPLACEMENT ON ONE SIDE SHALL BE COMPLETE BEFORE REMOVAL ON THE SECOND SIDE SHALL BEGIN.
- HOLES REMAINING AT LOCATIONS WHERE GUARDRAIL POSTS ARE PULLED OR CUT OFF (AT LEAST 6 INCHES BELOW THE GROUND SURFACE) SHALL BE FILLED IN LAYERS WITH GRANULAR MATERIAL AND TAMPED.
- AT BRIDGE LOCATIONS, FLAGGERS WILL NOT BE ALLOWED TO STAND ON THE BRIDGE TO PERFORM FLAGGING OPERATIONS. FLAGGERS WILL BE REQUIRED TO OPERATE AT OR NEAR THE BRIDGE APPROACHES IN ORDER TO PROVIDE AN ACCEPTABLE ESCAPE ROUTE.

### SCHEDULE OF WORK:

|                               |    | SITE 0100 | SITE 0111 | SITE 0112 | SITE 1000 | SITE 1001 | SITE 1002 | SITE 1003 | SITE 1024 | SITE 1025 | SITE 5008 | SITE 5010 | SITE 5028 | SITE 5031 | TOTALS  |
|-------------------------------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| 1. Install SPBGR              | -- | 93.75     | 25        | 537.5     | 400       | 312.5     | 337.5     | 337.5     | 350       | 425       | 500       | 462.5     | 387.5     |           | 4168.75 |
| 2. Install SPBGR (ATS)        | -- | 56.25     | 12.5      | 25        | 75        | 50        | 75        | 25        | 50        | 75        | 62.5      | 62.5      | 62.5      |           | 631.25  |
| 3. Install TBT-TY1            | 1  | 2         | 1         | 1         | 1         | 2         | 1         | 1         | --        | 2         | --        | --        | --        |           | 12      |
| 4. Install TBT-TY1(SP)TAN     | -- | 2         | 1         | 3         | 3         | 2         | 3         | 3         | 4         | 2         | 4         | 4         | 4         |           | 35      |
| 5. Remove GR                  | 25 | 300       | 140       | 188       | 538       | 75        | 175       | --        | --        | --        | --        | --        | --        |           | 1441    |
| 6. Install Delineator         | 2  | 4         | 2         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         |           | 48      |
| 9. Install GR MRKR, TY A      | 2  | 5         | 2         | 12        | 10        | 8         | 9         | 9         | 10        | 10        | 12        | 12        | 10        |           | 111     |
| 10. Install Terminal MRKR, DA | 1  | 4         | 2         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         |           | 47      |

ATS - Attached to Structure  
 DA - Direct Applied  
 GR - Guardrail  
 MRKR - Marker  
 SPBGR - Steel Plate Beam Guardrail  
 TBT - Traffic Barrier Terminal

# GUARDRAIL LAYOUTS

## LEGEND:

ATS - Attached to Structure  
 EOP - Edge of Pavement  
 GR - Guardrail  
 GRMB - Guardrail Marker-Bidirectional (◆)  
 GRMM - Guardrail Marker-Monodirectional (▶)  
 Install Guardrail (all components)

Remove Guardrail (all components)

SN - Structure Number  
 SPBGR - Steel Plate Beam Guardrail  
 SR - Short Radius  
 TBT - Traffic Barrier Terminal

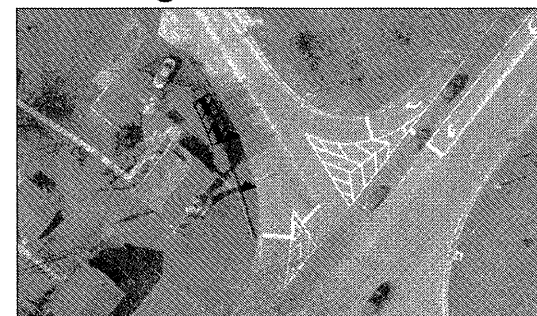
## GUARDRAIL OFFSETS:

| SITE | DISTANCE (EOP TO GR FACE) |
|------|---------------------------|
| 0100 | 10'                       |
| 0111 | 4'                        |
| 0112 | 10'W; 4'N                 |
| 1000 | 6'                        |
| 1001 | 6.5'N; 5.5'S              |
| 1002 | 2'                        |
| 1003 | 6'                        |
| 1024 | 6'N; 4'S                  |
| 1025 | 4.5'                      |
| 5008 | 5'                        |
| 5010 | 5'                        |
| 5028 | 5'                        |
| 5031 | 5'                        |

## NOTE:

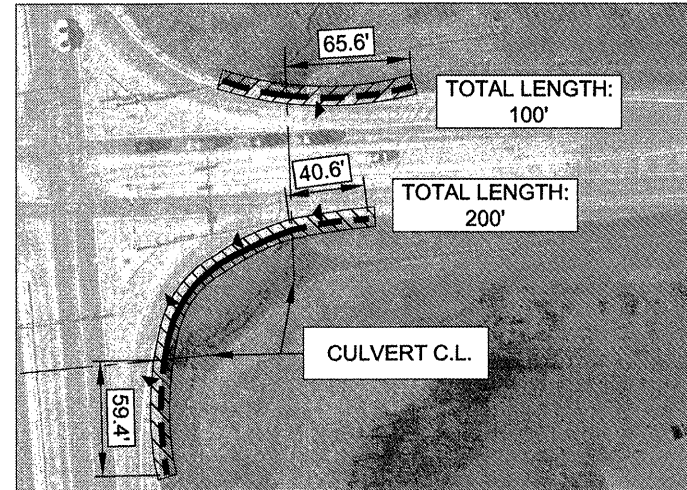
Indicated dimensions are approximate. Layout points are to be determined by the Engineer at the site locations.

### SITE 0100 - FOREST HILLS ROAD (CH 7) @ LANDSTROM ROAD



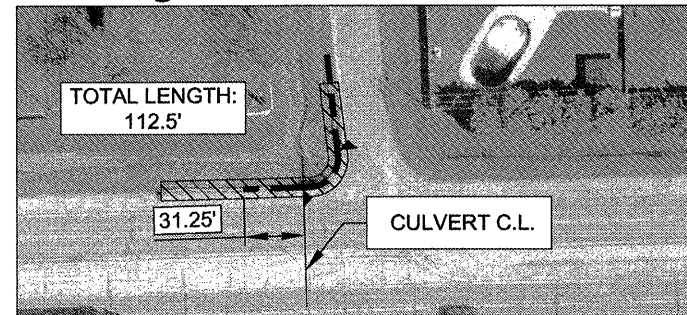
1 - TBT-TY1  
 2 - GRMM  
 SCALE: 1"=50'

### SITE 0111 - GUILFORD ROAD (CH 86) @ PERRYVILLE ROAD (CH 11)



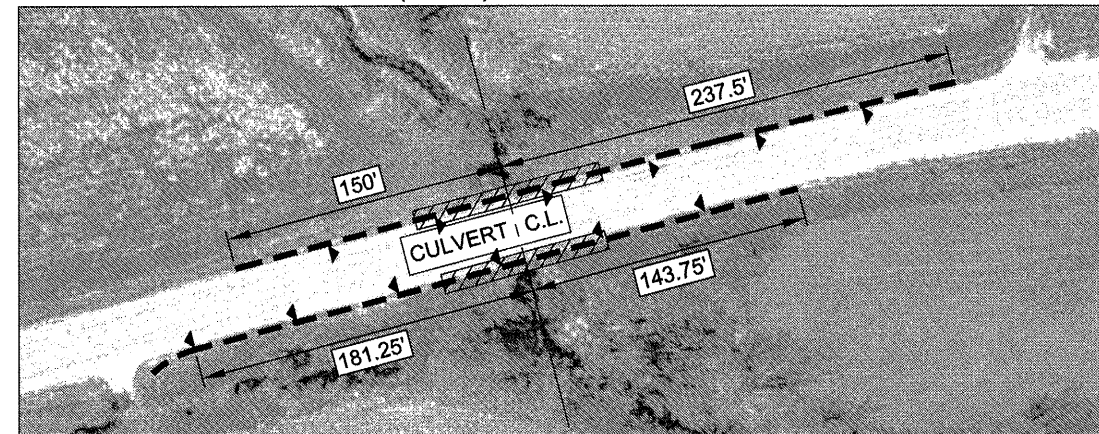
93.75' SPBGR  
 56.25' SPBGR - ATS (CASE IV)  
 2 - TBT-TY1  
 2 - TBT-TY1(SP)TAN  
 5 - GRMM  
 SCALE: 1"=50'

### SITE 0112 - HARRISON AVENUE (CH 60) @ COLUMBINE BOULEVARD



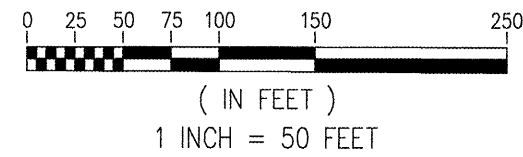
25' SPBGR (15' SR)  
 12.5' SPBGR-ATS (CASE I)  
 1 - TBT-TY1  
 1 - TBT-TY1(SP)TAN  
 2 - GRMM  
 SCALE: 1"=50'

### SITE 1000 - MONTAGUE ROAD (CH 27) 0.7 MI E OF OSBORNE ROAD (CH 16)



537.5' SPBGR  
 25' SPBGR-ATS (CASE IV)  
 1 - TBT-TY1  
 3 - TBT-TY1(SP)TAN  
 12 - GRMM  
 SCALE: 1"=50'

## GRAPHIC SCALE:



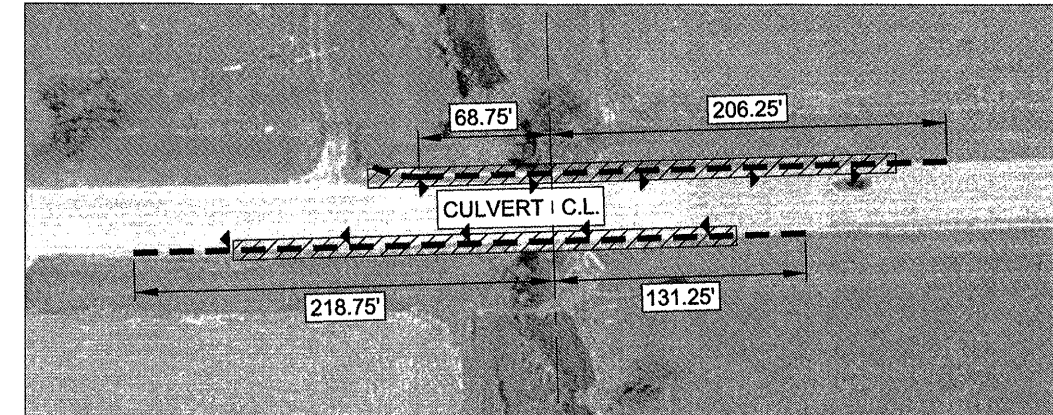
ROUTE  
VARIOUS

SECTION  
11-00473-01-SP

SHEET  
3 OF 4

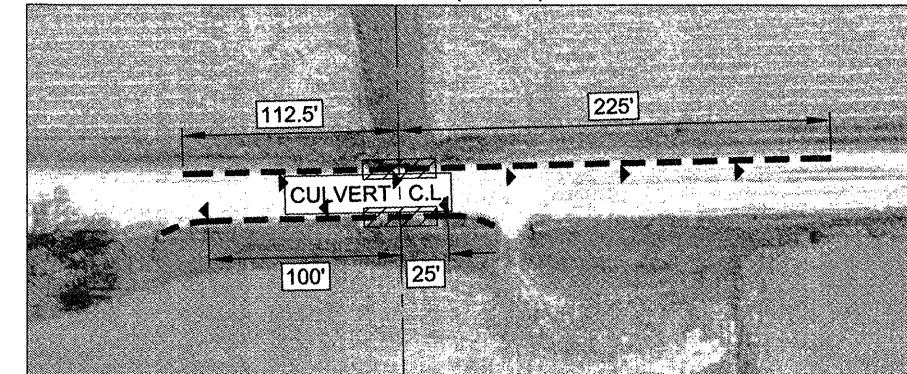
GUARDRAIL 2012 - COUNTY-WIDE

### SITE 1001 - MONTAGUE ROAD (CH 31) 0.7 MI W OF CONGER ROAD



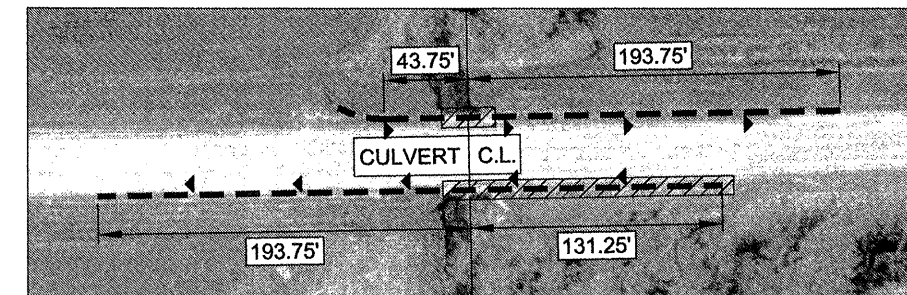
400' SPBGR  
 75' SPBGR-ATS (CASE II)  
 1 - TBT-TY1  
 3 - TBT-TY1(SP)TAN  
 10 - GRMM  
 SN 101-5018  
 SCALE: 1"=50'

### SITE 1002 - EDWARDSVILLE ROAD (CH 4) 0.8 MI W OF PECATONICA ROAD (CH 18)



312.5' SPBGR  
 50' SPBGR-ATS (CASE I)  
 2 - TBT-TY1  
 2 - TBT-TY1(SP)TAN  
 8 - GRMM  
 SCALE: 1"=50'

### SITE 1003 - CUNNINGHAM ROAD (CH 49) 0.4 MI W OF CONGER ROAD



337.5' SPBGR  
 75' SPBGR-ATS (CASE IV)  
 1 - TBT-TY1  
 3 - TBT-TY1(SP)TAN  
 9 - GRMM  
 SN 101-5032  
 SCALE: 1"=50'



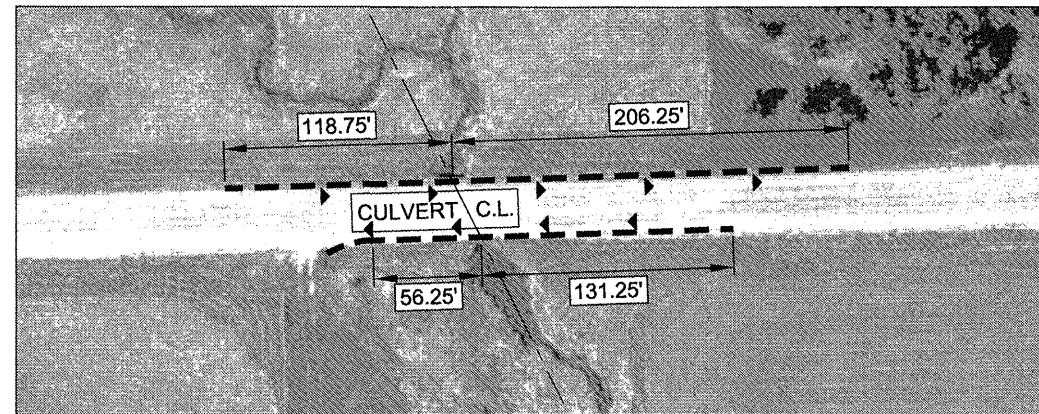
ROUTE  
VARIOUS

SECTION  
11-00473-01-SP

SHEET  
4 OF 4

GUARDRAIL 2012 - COUNTY-WIDE

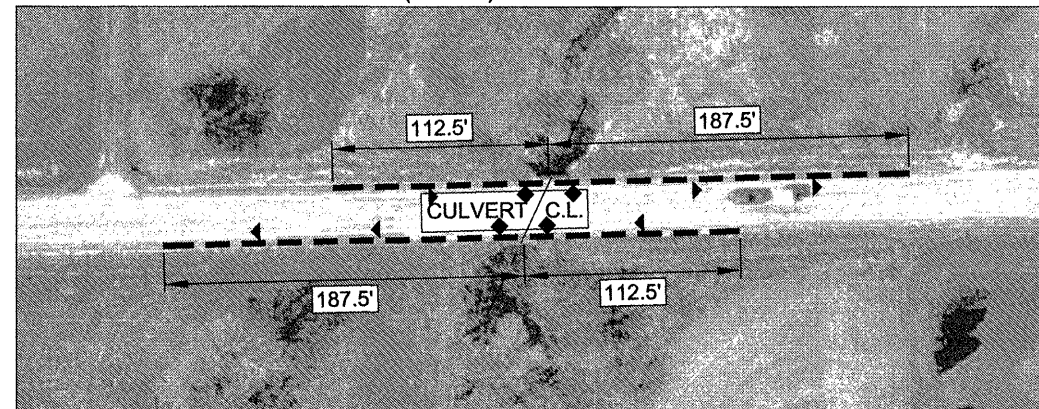
SITE 1024 - EDWARDSVILLE ROAD (CH 4)  
0.8 MI E OF WESTFIELD ROAD



337.5' SPBGR  
25' SPBGR-ATS (CASE IV)  
1 - TBT-TY1  
3 - TBT-TY1(SP)TAN  
9 - GRMM

SCALE: 1"=50'

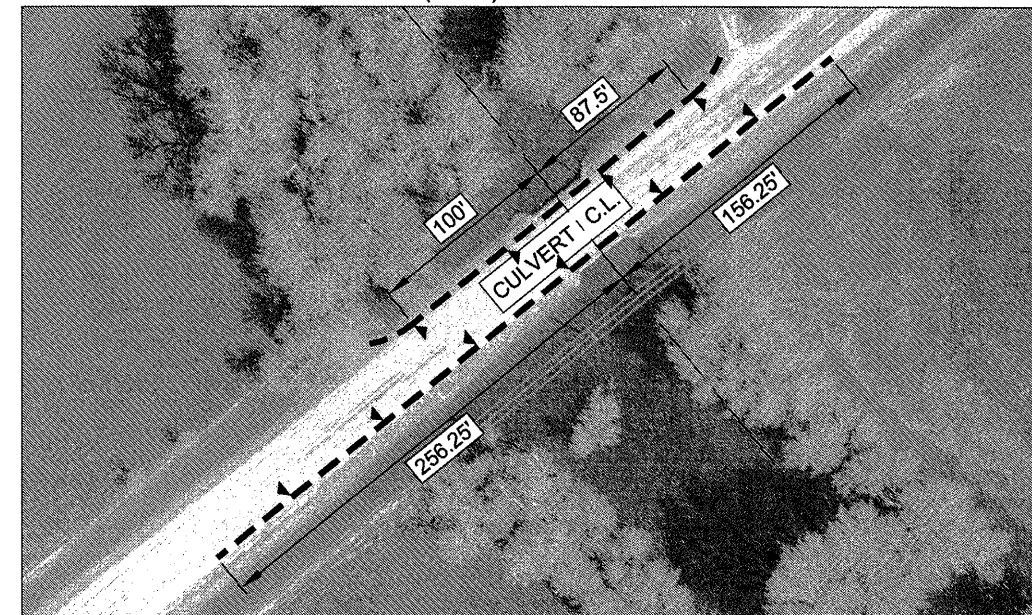
SITE 1025 - EDWARDSVILLE ROAD (CH 4)  
0.2 MI W OF ALWORTH ROAD (CH 16)



350' SPBGR  
50' SPBGR-ATS (CASE I)  
4 - TBT-TY1(SP)TAN  
4 - GRMB  
6 - GRMM

SCALE: 1"=50'

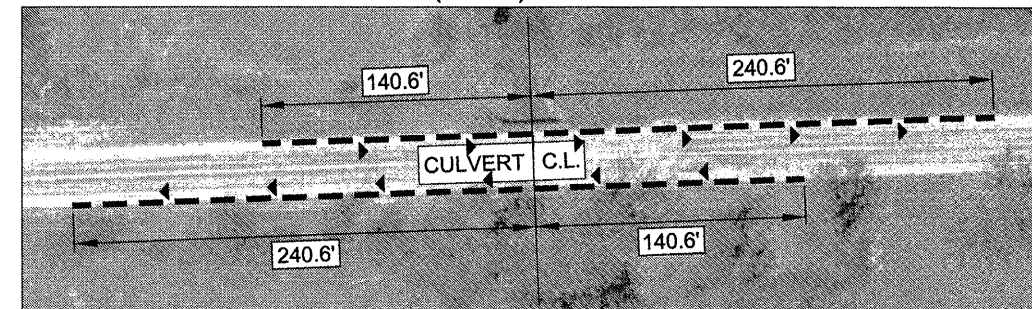
SITE 5008 - TELEGRAPH ROAD (CH 21)  
0.2 MI W OF SAUNDERS ROAD (IL 81)



425' SPBGR  
75' SPBGR-ATS (CASE IV)  
2 - TBT-TY1  
2 - TBT-TY1(SP)TAN  
10 - GRMM

SN 101-5008  
SCALE: 1"=50'

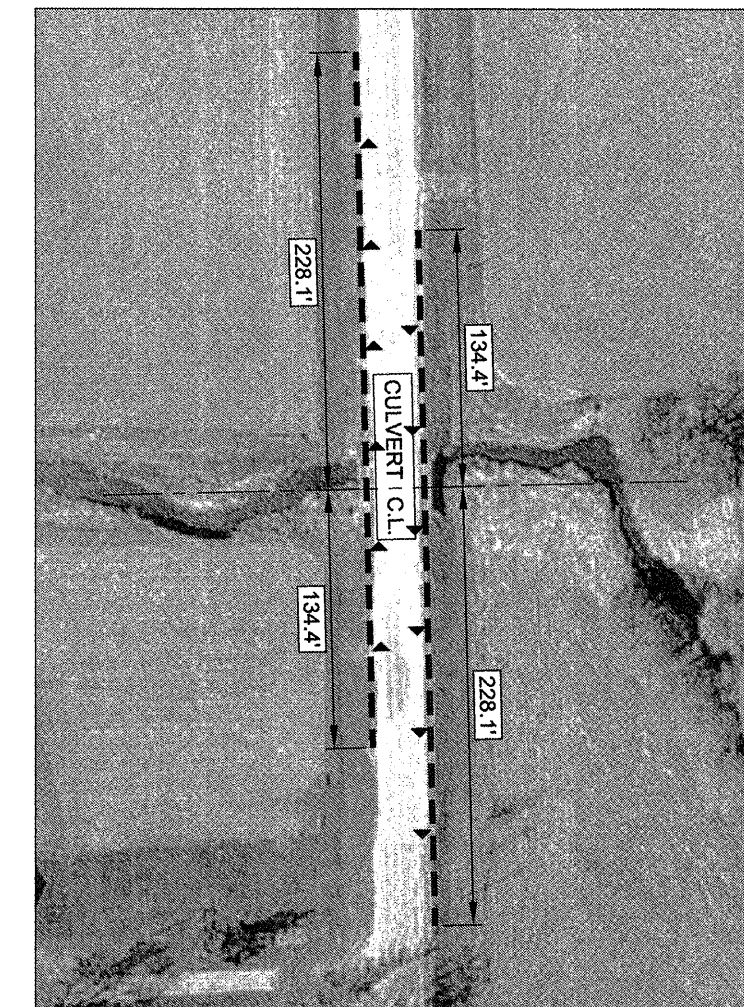
SITE 5010 - TELEGRAPH ROAD (CH 21)  
0.8 MI E OF WINNEBAGO ROAD (CH 16)



500' SPBGR  
62.5' SPBGR-ATS (CASE IV)  
4 - TBT-TY1(SP)TAN  
12 - GRMM

SN 101-5010  
SCALE: 1"=50'

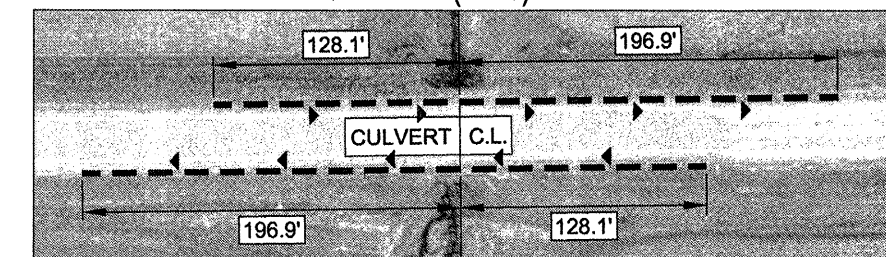
SITE 5028 - KLINGER ROAD (CH 37)  
0.3 MI N OF KELLEY ROAD



462.5' SPBGR  
62.5' SPBGR-ATS (CASE IV)  
4 - TBT-TY1(SP)TAN  
12 - GRMM

SN 101-5028  
SCALE: 1"=50'

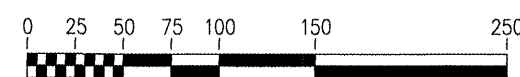
SITE 5031 - CUNNINGHAM ROAD (CH 49)  
1.2 MI E OF PECATONICA ROAD (IL 18)



387.5' SPBGR  
62.5' SPBGR-ATS (CASE IV)  
4 - TBT-TY1(SP)TAN  
10 - GRMM

SN 101-5031  
SCALE: 1"=50'

GRAPHIC SCALE:



( IN FEET )  
1 INCH = 50 FEET