

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

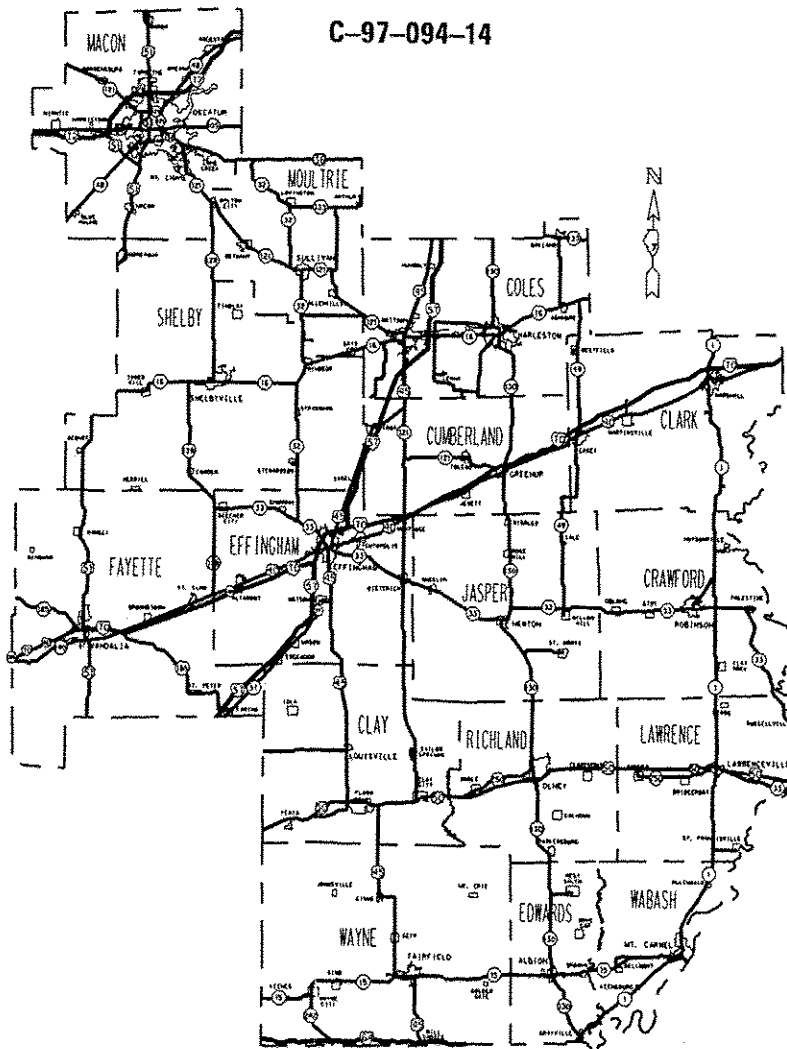
VARIOUS ROUTES
SECTION D7 GUARDRAIL 2015-1

TYPE of IMPROVEMENT MAINTENANCE
VARIOUS COUNTIES

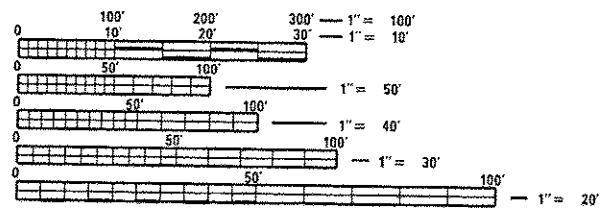
FOR INDEX OF SHEETS, SEE SHEET NO. 2

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|---------|----------|--------------------|-----------|
| | | VARIOUS | 5 | 1 |
| | | ILLINOIS | CONTRACT NO. 74688 | |

D-97-048-14



C-97-094-14



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER ROB MACKLIN
PROJECT MANAGER LYNN McCLELLAN

CONTRACT NO. 74688

GROSS LENGTH = x.xx FT. = x.xxx MILE
NET LENGTH = x.xx FT. = x.xxx MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED FEBRUARY 11 2015

Roy L. Dinkel
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Mar D. Baranzoli P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Mar 20 2015

Orin Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

THIS PROJECT IS LOCATED ON VARIOUS ROUTES IN VARIOUS COUNTIES ALL LOCATED WITHIN REGION 4-DISTRICT 7. THE WORK INCLUDED IN THIS SECTION CONSISTS OF VARIOUS TYPES OF GUARDRAIL REPAIR AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

ALL WORK IS TO BE REPLACED IN KIND OR, AS INDICATED ON THE CONTRACT PLANS OR PROVISIONS.

THE LOCATIONS OF THE REPAIR AREAS WILL BE DETERMINED BY THE ENGINEER.

GUARDRAIL WORK SHALL INCLUDE ALIGNMENT AS NECESSARY TO RESTORE THE RAIL TO THE ORIGINAL CONDITIONS.

REMOVAL OF DAMAGED MATERIALS SHALL INCLUDE DISMANTLING, LOADING, HAULING AND DISPOSAL. THE WORK SITE SHALL BE LEFT IN A SAFE AND ORDERLY CONDITION.

NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.

ANY NECESSARY TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR; APPROPRIATE STANDARDS ARE LISTED ON SHEET NO. 2.

THE LIMITS OF THE DAMAGED GUARDRAIL WILL BE MARKED WITH PAINT. THE REPLACEMENT PARTS AND THE QUANTITIES INDICATED ARE WITHIN THESE LIMITS AS MARKED.

REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY MUST BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS SHALL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.

GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (PH. 800-892-0123) OR FOR NON-MEMBER, THE UTILITY COMPANY DIRECTLY.

ANY WORK ORDER MAY BE CANCELLED AT THE ENGINEER'S DISCRETION.

SELF WEATHERING STEEL ITEMS (CORTEN) WILL BE PAID FOR THE SAME AS REGULAR ITEMS.

NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

THE CONTRACTOR IS ADVISED THAT THE GUARDRAIL PAY ITEMS INCLUDED IN THE PLANS MAY BE USED TO REPLACE/REPAIR SPBGR AND TRAFFIC BARRIER TERMINALS FOR THE NEW MIDWEST STANDARD AS SHOWN IN THE HIGHWAY STANDARDS AS WELL AS SPBGR AND TRAFFIC BARRIER TERMINAL INSTALLED PRIOR TO JAN. 1, 2007. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UTILIZING THE CURRENT MIDWEST STANDARDS.

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS AND GENERAL NOTES
- 3-4 SUMMARY OF QUANTITIES
- 5 DETAIL OF IMPACT ATTENUATORS (NON-DIRECTIVE) TL 3

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 5:

- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630101-09 GUARDRAIL MOUNTED ON EXISTING CULVERTS
- 630106-01 LONG-SPAN GUARDRAIL OVER CULVERT
- 630201-06 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-06 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631006-08 TRAFFIC BARRIER TERMINAL, TYPE 1B
- 631011-09 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631026-06 TRAFFIC BARRIER TERMINAL, TYPE 5
- 631031-13 TRAFFIC BARRIER TERMINAL, TYPE 6
- 631032-08 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 631033-06 TRAFFIC BARRIER TERMINAL, TYPE 6B
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 636001-02 CABLE ROAD GUARD SINGLE STRAND
- 643001-02 SAND MODULE IMPACT ATTENUATORS
- 664001-02 CHAIN LINK FENCE
- 665001-02 WOVEN WIRE FENCE
- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701011-04 OFF-ROAD MOVING OPERATION, 2L, 2W, DAY ONLY
- 701101-04 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
- 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701400-08 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701406-09 LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
- 701421-07 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >=45 MPH TO 55 MPH
- 701501-06 URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701606-10 URBAN SINGLE LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701611 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-04 TRAFFIC CONTROL DEVICES
- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

| | | | | | | | | | | | |
|--------------------------------------|-----------------------------|------------|-----------|---|--|---------------------------|---------|---------|--------------|-----------|--|
| FILE NAME 3 | USER NAME 3 ateffannk | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | INDEX OF SHEETS & GENERAL NOTES | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| 01\pr_work\p1dot\teffannk\039717\107 | *688-shr-plan.dgn | DRAWN - | REVISED - | | | | | VARIOUS | 5 | 2 | |
| | PLOT SCALE = 60.0000' / in. | CHECKED - | REVISED - | | | CONTRACT NO. 74688 | | | | | |
| Default | PLOT DATE = 2/11/2019 | DATE - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

100% STATE

100% STATE

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | |
|-----------------------|---|-------|------------------|------------------------|-------------------|
| CODE NO | ITEM | UNIT | | 0021 MCHD | 0021 CONT. MAINT. |
| X0100002 | GRADING AND SHAPING SPECIAL | SQ YD | 3300 | 3000 | 300 |
| 63000025 | STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES | FOOT | 45 | 30 | 15 |
| 63100045 | TRAFFIC BARRIER TERMINAL, TYPE 2 | EACH | 1 | 1 | |
| 63100070 | TRAFFIC BARRIER TERMINAL, TYPE 5 | EACH | 1 | 1 | |
| 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 1 | 1 | |
| 63100087 | TRAFFIC BARRIER TERMINAL, TYPE 6A | EACH | 1 | 1 | |
| 63100089 | TRAFFIC BARRIER TERMINAL, TYPE 6B | EACH | 2 | 1 | 1 |
| 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 22 | 20 | 2 |
| 63100169 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED | EACH | 3 | 2 | 1 |
| 63301210 | REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A | FOOT | 163 | 150 | 13 |
| 63301215 | REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE B | FOOT | 33 | 20 | 13 |

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | |
|-----------------------|--|-------|------------------|------------------------|-------------------|
| CODE NO | ITEM | UNIT | | 0021 MCHD | 0021 CONT. MAINT. |
| 63400105 | GUARD POSTS | EACH | 10 | 10 | |
| 63600105 | CABLE ROAD GUARD, SINGLE STRAND | FOOT | 100 | 100 | |
| 64300260 | IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 | EACH | 1 | 1 | |
| 66500105 | WOVEN WIRE FENCE, 4' | FOOT | 1700 | 1600 | 100 |
| 67100100 | MOBILIZATION | L SUM | 1 | 0.75 | 0.25 |
| 78200410 | GUARDRAIL MARKERS, TYPE A | EACH | 70 | 60 | 10 |
| 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 11 | 10 | 1 |
| X6300210 | GUARDRAIL BLOCKS | EACH | 325 | 250 | 75 |
| X6300215 | RAIL ELEMENT PLATES | EACH | 275 | 270 | 5 |
| X6300217 | RAIL ELEMENT PLATES (RADIUS) | EACH | 11 | 10 | 1 |
| X6300220 | EXTRUDER HEAD | EACH | 8 | 7 | 1 |
| X6300225 | SINGLE END SECTION | EACH | 51 | 50 | 1 |
| X6300231 | STEEL POST, ATTACHED TO STRUCTURES | EACH | 11 | 10 | 1 |

24

| | | | | | | | | | | | | |
|-------------|-----------------------------|------------|-----------|---|------------------------------|---------------------|------|---------------------------|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = staffanmk | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUMMARY OF QUANTITIES | | | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| Default | 4688-shv-p1en.dgn | DRAWN - | REVISED - | | SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA. | VARIOUS | 5 | 3 | |
| | PLOT SCALE = 100.0000' / 1" | CHECKED - | REVISED - | | | | | CONTRACT NO. 74688 | | | | |
| | PLOT DATE = 2/11/2015 | DATE - | REVISED - | | | | | ILLINOIS FED. AID PROJECT | | | | |

100% STATE

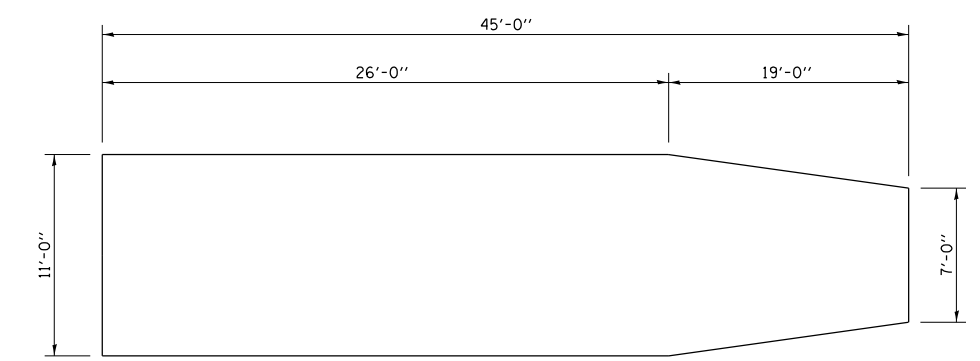
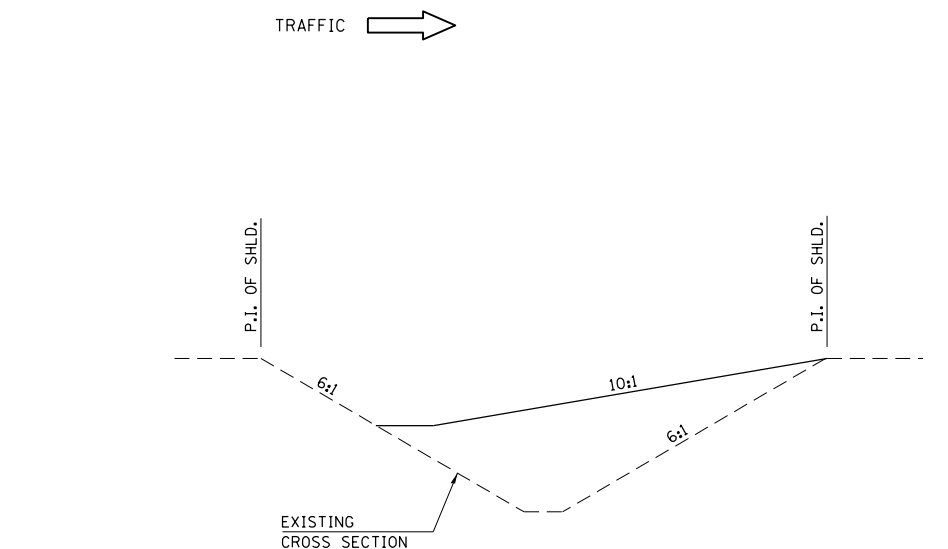
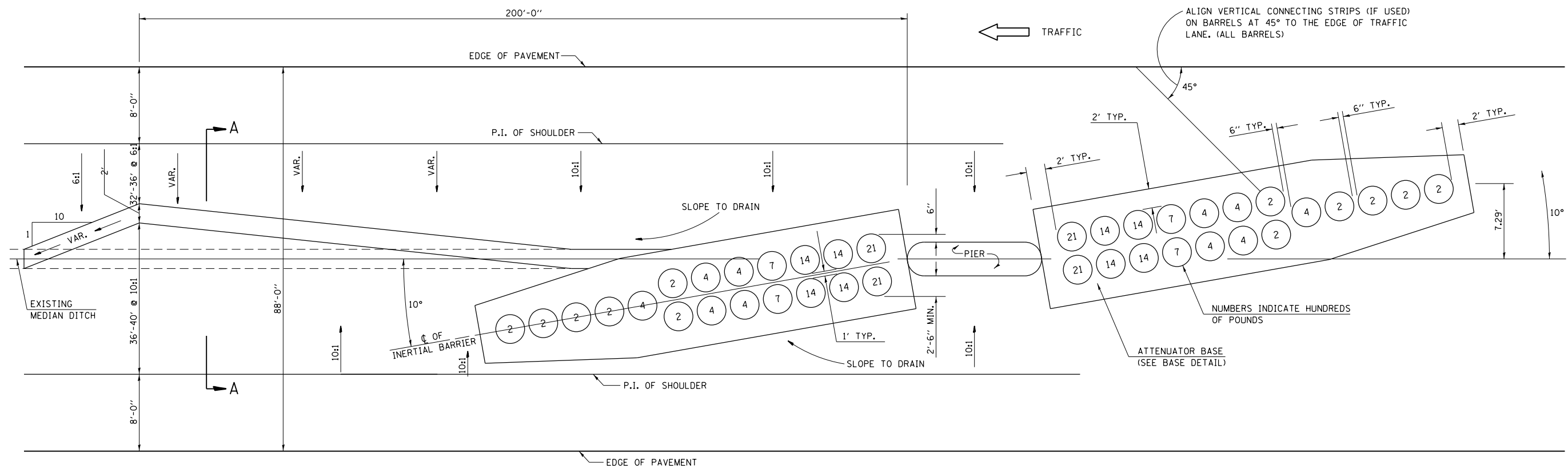
100% STATE

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | |
|-----------------------|--|-------|------------------|------------------------|-------------------|
| CODE NO | ITEM | UNIT | | 0021 MCHD | 0021 CONT. MAINT. |
| X6300235 | WOOD POSTS | EACH | 16 | 15 | 1 |
| X6300236 | STEEL POSTS 6' | EACH | 245 | 200 | 45 |
| X6300239 | STEEL POSTS 9' | EACH | 38 | 35 | 3 |
| X6330310 | REMOVE AND REINSTALL EXTRUDER HEAD | EACH | 3 | 2 | 1 |
| X6331110 | STEEL POSTS, SPECIAL | EACH | 6 | 5 | 1 |
| X6430210 | REMOVE AND REINSTALL IMPACT ATTENUATORS | EACH | 14 | 10 | 4 |
| X6640298 | CHAIN LINK FENCE (SPECIAL) | FOOT | 180 | 150 | 30 |
| X6640308 | CHAIN LINK GATES (SPECIAL) | EACH | 1 | 1 | |
| X6640502 | CHAIN LINK FENCE POST | EACH | 50 | 50 | |
| Z0012752 | CONCRETE STRUCTURE REPAIR | CU FT | 4 | 4 | |
| Z0020210 | PULL POST ARRANGEMENT | EACH | 8 | 8 | |
| Z0029658 | REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - POST | EACH | 25 | 20 | 5 |
| Z0051400 | REMOVING AND RESETTNG POSTS | EACH | 13 | 10 | 3 |

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | |
|-----------------------|--|------|------------------|------------------------|-------------------|
| CODE NO | ITEM | UNIT | | 0021 MCHD | 0021 CONT. MAINT. |
| Z0052410 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) | EACH | 32 | 30 | 2 |
| Z0052415 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED) | EACH | 2 | 2 | |
| Z0052600 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2 | EACH | 1 | 1 | |
| Z0052900 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 4 | EACH | 1 | 1 | |
| Z0053000 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 5 | EACH | 1 | 1 | |
| Z0053200 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 4 | 3 | 1 |
| Z0053210 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6A | EACH | 1 | 1 | |
| Z0053220 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6B | EACH | 1 | 1 | |
| Z0059660 | REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT PLATE | EACH | 5 | 4 | 1 |
| Z0076480 | TRAFFIC BARRIER TERMINAL CONNECTOR | EACH | 2 | 2 | |

23

| | | | | | | | | | | |
|--|---------------------------|------------|-----------|---|------------------------------|---|---------|---------------------------|--------------------|-----------|
| FILE NAME = | USER NAME = staffennik | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUMMARY OF QUANTITIES | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| c:\hwy\work\hwy\idot\staffennik\039771\107 | 14688-hhtrplm.dgn | DRAWN - | REVISED - | | | VARIOUS | 5 | 4 | CONTRACT NO. 74688 | |
| Default | PLOT SCALE = 1/8" = 1'-0" | CHECKED - | REVISED - | | | SCALE: SHEET 2 OF 2 SHEETS STA. TO STA. | | ILLINOISIFIED A10 PROJECT | | |
| | PLOT DATE = 2/11/2015 | DATE - | REVISED - | | | *01 GUARDRAIL 2015-1 | | | | |



GENERAL NOTES

1. ALL 10:1 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 10:1 OR FLATTER.
2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
3. THE LENGTH X WIDTH OF MODULE LAYOUT IS 41.0' X 7.0' : 19 MODULES - 14,400 LBS.
4. IN AREAS OF 10:1 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN ϕ . SEE SPECIAL PROVISIONS AND SCHEDULES.

NOT TO SCALE
 Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. Z0030150

| | | | |
|--|-----------------------------|------------|-----------|
| FILE NAME = | USER NAME = steffernk | DESIGNED - | REVISED - |
| ei:\pw\work\p\idot\steffernk\d0397171\07 | 4688-sh:plan.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 60.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 2/11/2015 | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DETAIL OF IMPACT ATTENUATORS (NON-REDIRECTIVE) TEST LEVEL 3
 88' MEDIAN**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------------|-----------|
| | | VARIOUS | 5 | 5 |
| | | | CONTRACT NO. 74688 | |
| ILLINOIS FED. AID PROJECT | | | | |