

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

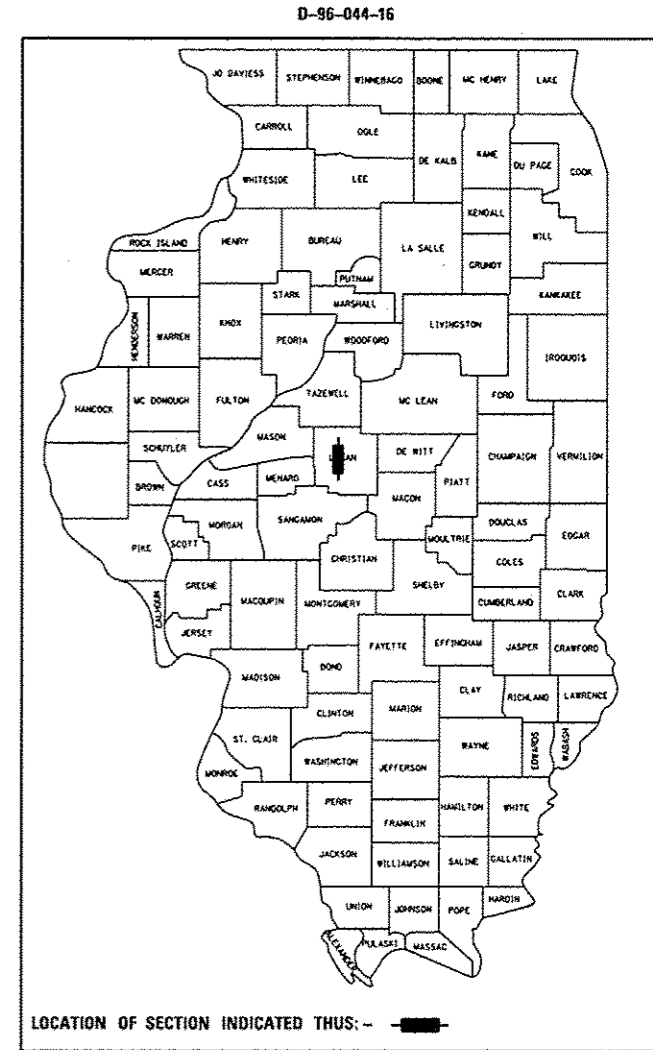
**PROPOSED
HIGHWAY PLANS**

FAI ROUTE 55 (I-55)
SECTION (54-4) BJR
PROJECT: ACNHPP-0055(453)
EXPANSION JOINT REPLACEMENT
LOGAN COUNTY

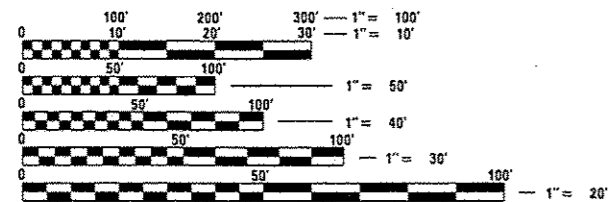
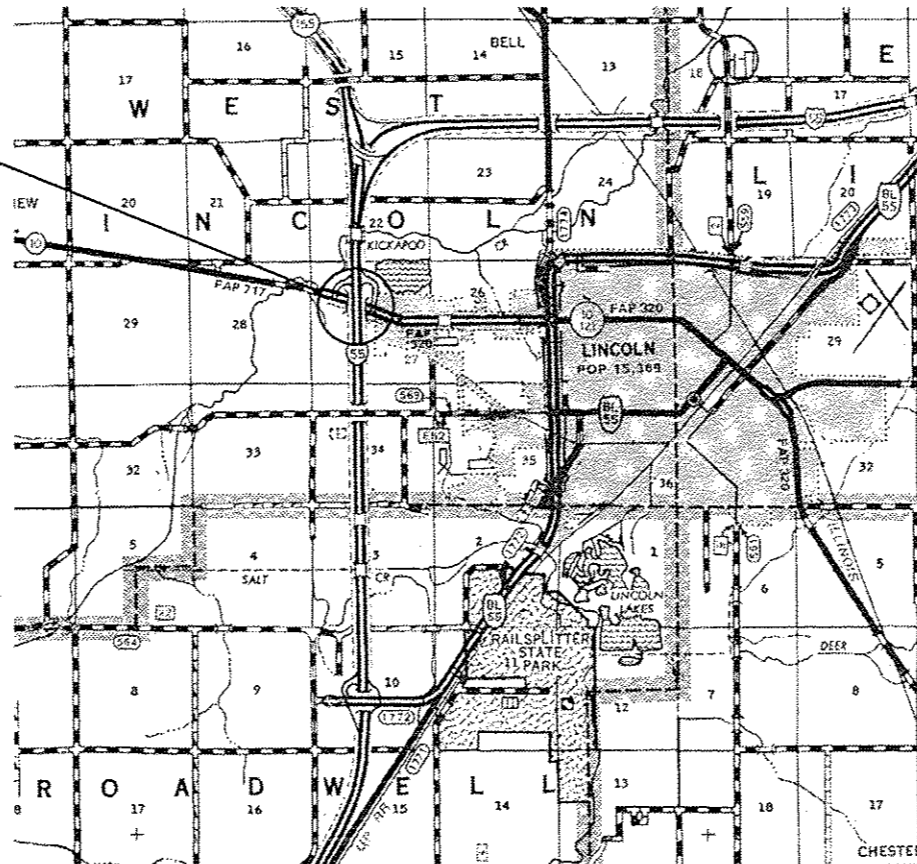
C-96-044-16

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|--------|--------------------|-----------|
| 55 | (54-4) BJR | LOGAN | 16 | 1 |
| ILLINOIS | | | CONTRACT NO. 72J07 | |

FOR INDEX OF SHEETS, SEE SHEET NO. 2



PROJECT LOCATION:
SN 054-0046 & 054-0047
I-55 OVER IL 10
WEST EDGE OF LINCOLN



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

BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY (217) 785-9290
BRIDGE INSPECTION ENGINEER: DAVE COPENBARGER (217) 785-5306

CONTRACT NO. 72J07

NET LENGTH = 327 FT = 0.06MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 3/16 2016
[Signature]
REGION FOUR ENGINEER

May 6 2016
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 6 2016
[Signature]
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, GENERAL NOTES, & HMA MIX TABLE
- 3 SUMMARY OF QUANTITIES
- 4 SHOULDER RUMBLE STRIP REMOVAL DETAIL
- 5-8 TRAFFIC CONTROL PLAN
- 9-16 BRIDGE PLANS

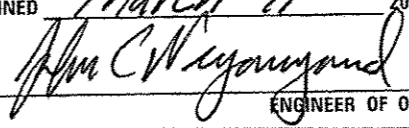
HIGHWAY STANDARDS


- 000001-06
- 001001-02
- 001006
- 701106-02
- 701400-08
- 701402-11
- 701406-10
- 701411-09
- 701428-01
- 701901-05
- 704001-08


GENERAL NOTES:

| MIXTURE USE(S) | HMA SURFACE CSE |
|--|-----------------|
| AC/PG | PG 64-22 |
| DESIGN AIR VOIDS | 4.0% @ N70 |
| MIX COMPOSITION (GRADATION MIXTURE) | IL 9.5 |
| FRICITION AGGREGATE | MIX "C" |
| QUALITY MANAGEMENT | QC/QA |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6**

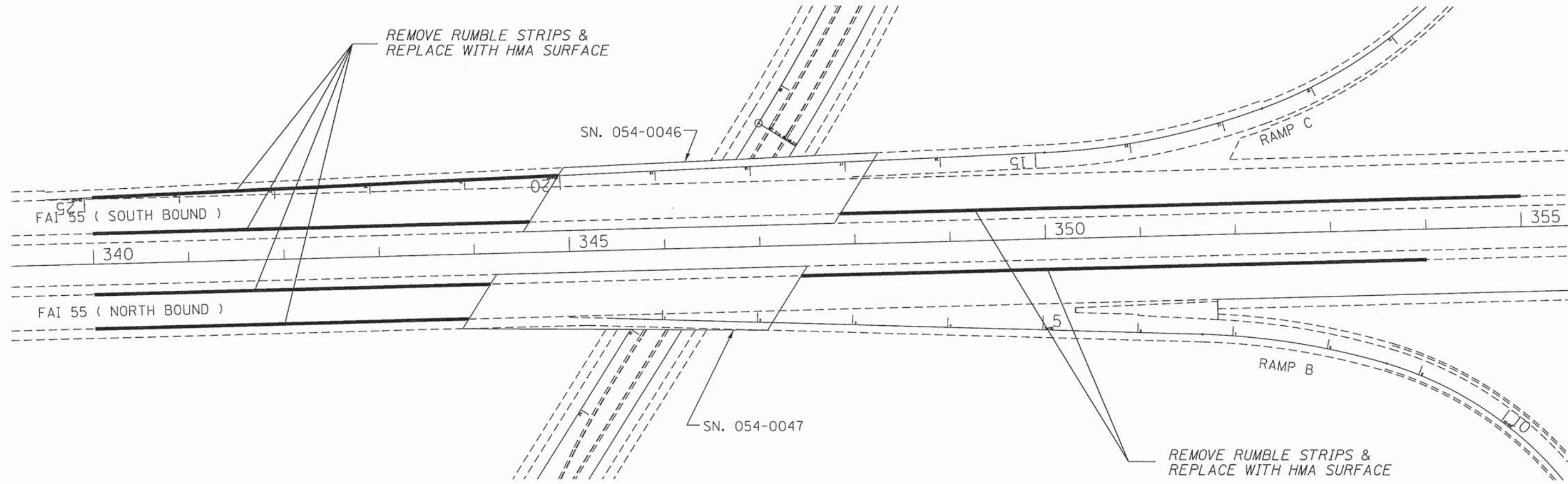
EXAMINED March 11th 20 16

 ENGINEER OF OPERATIONS

EXAMINED March 10 20 16

 ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED March 11 20 16

 ENGINEER OF PROGRAM DEVELOPMENT

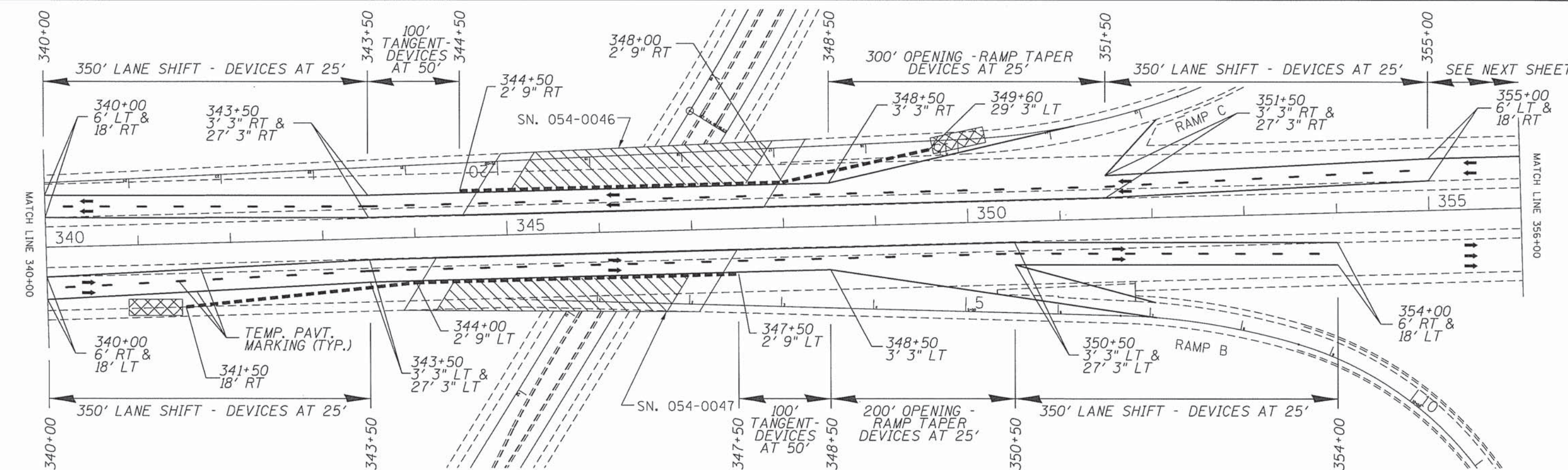
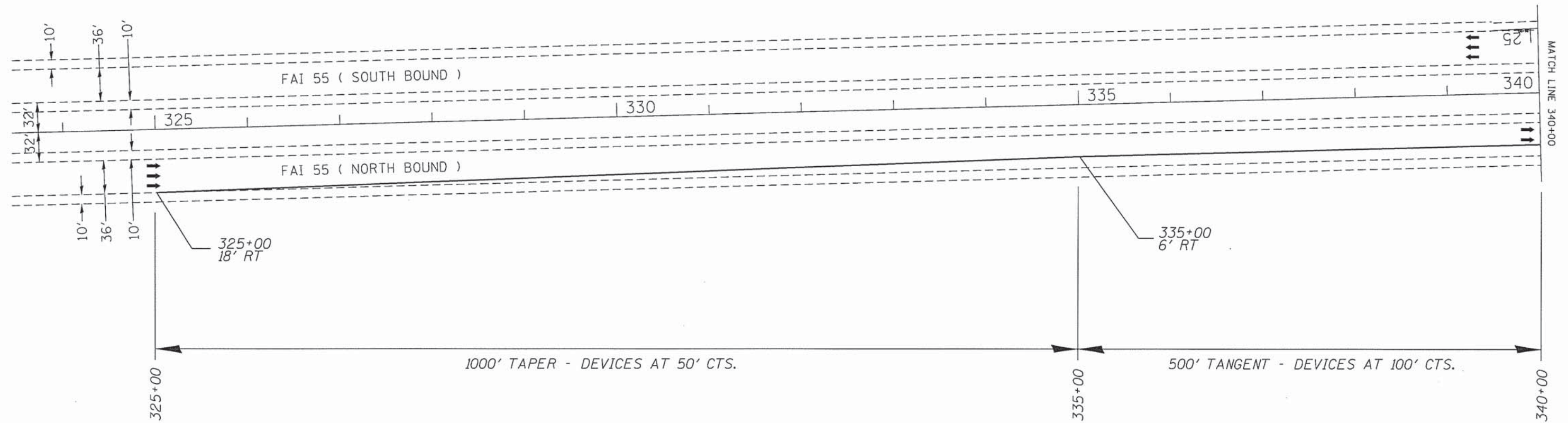
| CODE NO. | ITEM | UNIT | 6-00799-0000 | |
|----------|---|--------|---------------------|-------|
| | | | 90% FED./ 10% STATE | |
| | | | BRIDGE | |
| | | | TOTAL QUANTITY | LOGAN |
| 40600275 | BITUMINOUS MATERIALS (PRIME COAT) | POUND | 313 | 313 |
| 40603315 | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 | TON | 78 | 78 |
| 44000157 | HOT-MIX ASPHALT SURFACE REMOVAL, 2" | SO YD | 695 | 695 |
| 50102400 | CONCRETE REMOVAL | CU YD | 15.8 | 15.8 |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 15.8 | 15.8 |
| 50300300 | PROTECTIVE COAT | SO YD | 70 | 70 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 3300 | 3300 |
| 50800515 | BAR SPLICERS | EACH | 32 | 32 |
| 52000110 | PREFORMED JOINT STRIP SEAL | FOOT | 310 | 310 |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 |
| 70100207 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 | EACH | 2 | 2 |
| 70100420 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701411 | EACH | 3 | 3 |
| 70100700 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701406 | L SUM | 1 | 1 |
| 70106800 | CHANGEABLE MESSAGE SIGN | CAL MO | 6 | 6 |

| CODE NO. | ITEM | UNIT | 6-00799-0000 | |
|----------|---|--------|---------------------|-------|
| | | | 90% FED./ 10% STATE | |
| | | | BRIDGE | |
| | | | TOTAL QUANTITY | LOGAN |
| 70107006 | PAVEMENT MARKING BLACKOUT TAPE, 6" | FOOT | 4680 | 4680 |
| 70107009 | PAVEMENT MARKING BLACKOUT TAPE, 9" | FOOT | 1720 | 1720 |
| 70300150 | SHORT TERM PAVEMENT MARKING REMOVAL | SO FT | 3605 | 3605 |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 1200 | 1200 |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 1110 | 1110 |
| 70600251 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3 | EACH | 2 | 2 |
| 70600352 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3 | EACH | 2 | 2 |
| X7010410 | SPEED DISPLAY TRAILER | CAL MO | 4 | 4 |



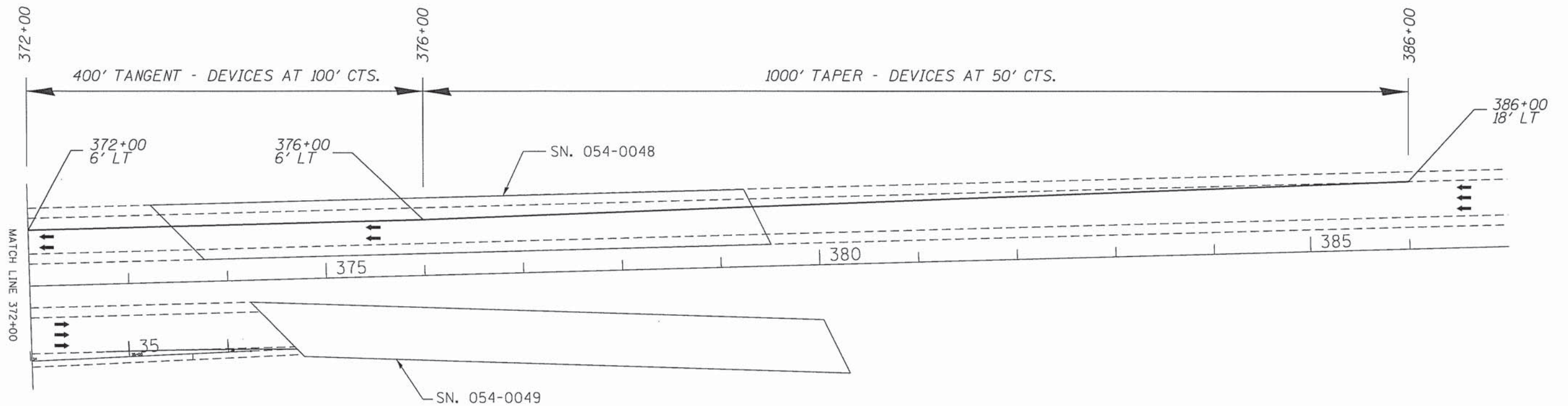
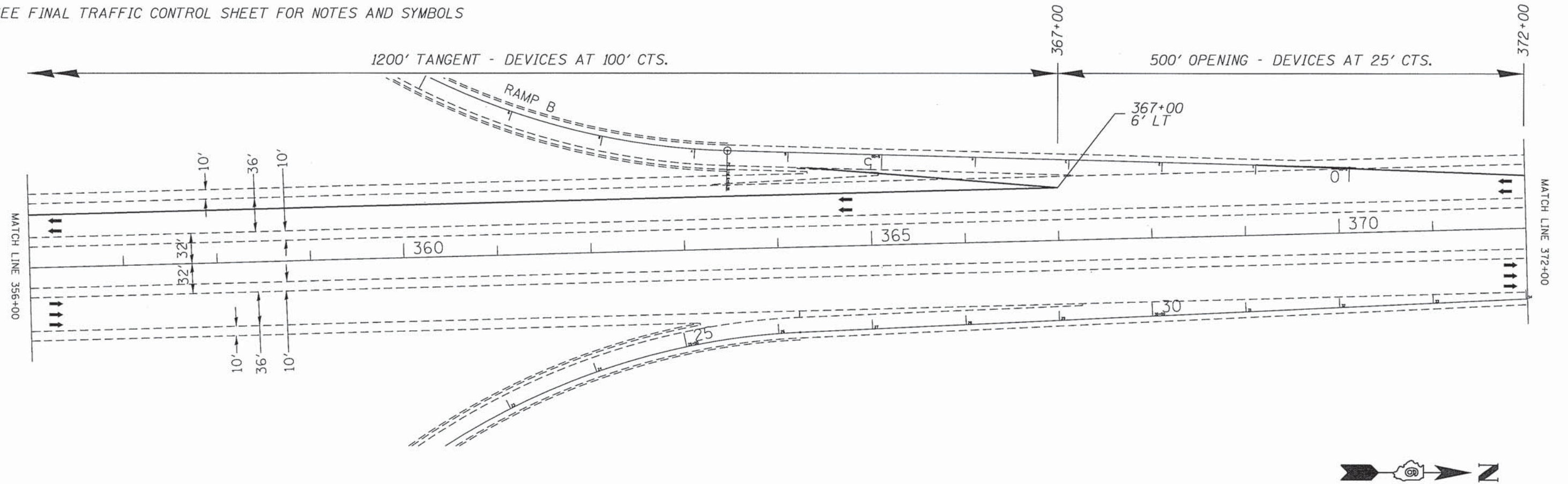
| SHOULDER WORK SCHEDULE | | | | | | | |
|------------------------|--------------------|--------|--------|--------|---------------------------------|------------------------------------|------------------------------|
| LOCATION | STATION TO STATION | | LENGTH | WIDTH | HMA SURF. REM. 2" (SQ YD) | BIT. MATL. PRIME CT. (POUND) | HMA SURF. COURSE (TON) |
| NB OUTSIDE SHLDR. | 340+00 | 343+92 | 392' | 2' | 87 | 39.2 | 9.7 |
| NB INSIDE SHLDR. | 340+00 | 344+16 | 416' | 2' | 92 | 41.6 | 10.3 |
| NB INSIDE SHLDR. | 347+43 | 354+00 | 657' | 2' | 146 | 65.7 | 16.4 |
| SB OUTSIDE SHLDR. | 340+00 | 344+90 | 490' | 2' | 109 | 49.0 | 12.2 |
| SB INSIDE SHLDR. | 340+00 | 344+58 | 458' | 2' | 102 | 45.8 | 11.4 |
| SB INSIDE SHLDR. | 347+85 | 355+00 | 715' | 2' | 159 | 71.5 | 17.8 |
| | | | | TOTALS | 695 | 312.8 | 77.8 |

SEE FINAL TRAFFIC CONTROL SHEET FOR NOTES AND SYMBOLS



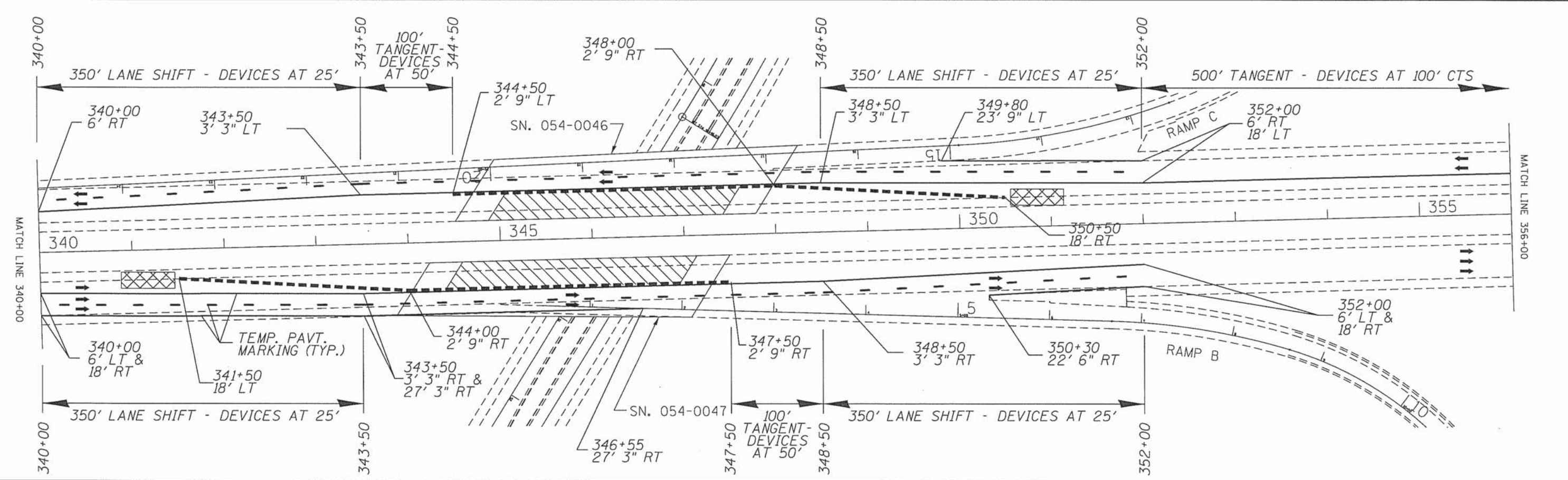
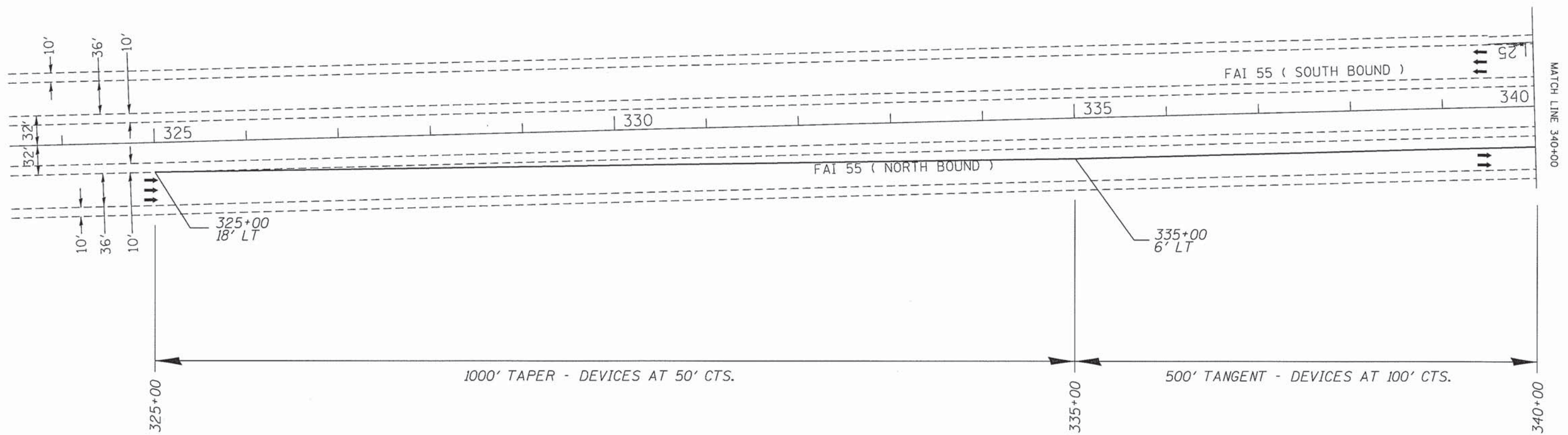
| | | | | | | | | | | | | |
|-------------|--|------------|-----------|---|--------------------------------|--|--|---------------------------|------------|--------|--------------|-----------|
| FILE NAME = | USER NAME = dudleybm | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STAGE I TRAFFIC CONTROL | | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| Default | 0:\OPERATIONS\Bridges\Bridgplans.CAD\72J07 - 0540046 & 0047 joints\plansheet.dgn | DRAWN - | REVISED - | | | | | 55 | (54-4) BJR | LOGAN | 16 | 5 |
| | PLOT SCALE = 118.0000' / 1" = | CHECKED - | REVISED - | | | | | CONTRACT NO. 72J07 | | | | |
| | PLOT DATE = 3/16/2016 | DATE - | REVISED - | | | | | ILLINOIS FED. AID PROJECT | | | | |

SEE FINAL TRAFFIC CONTROL SHEET FOR NOTES AND SYMBOLS

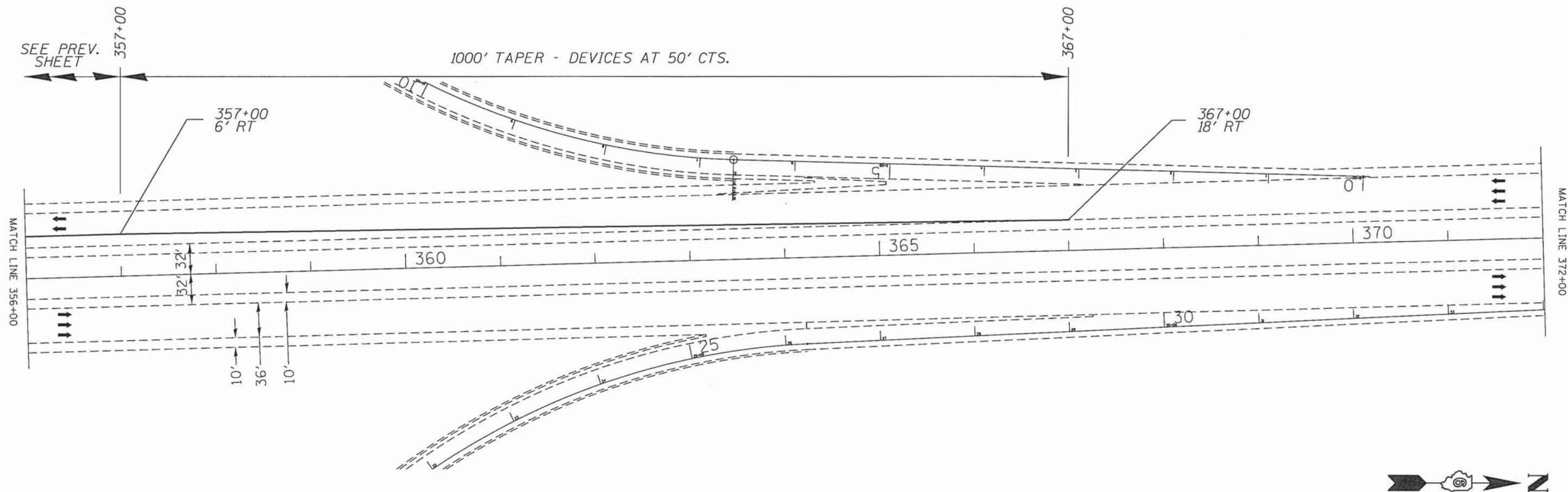


| | | | | | | | | | | | | | |
|--|-------------------------------|------------|-----------|---|-------------------------------------|------------|-------|----|--------------------|---------|--------|--------------|-----------|
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| G:\OPERATIONS\Bridges\Bridgplans.CAD\72J07 - 0540046 & 0047 joints\plansheet.dgn | PLOT SCALE = 110.0000' / 1" = | DRAWN - | REVISED - | | 55 | (54-4) BJR | LOGAN | 16 | 6 | | | | |
| Default | PLOT DATE = 3/16/2016 | CHECKED - | REVISED - | | SCALE: SHEET OF SHEETS STA. TO STA. | | | | CONTRACT NO. 72J07 | | | | |
| | | DATE - | REVISED - | | ILLINOIS FED. AID PROJECT | | | | | | | | |




SEE FINAL TRAFFIC CONTROL SHEET FOR NOTES AND SYMBOLS



| | | | | | | | | | | | | | | | |
|-------------|--|------------|-----------|---|---------------------------------|-------|----|--------|-------------|---------|--------------------|--------------|-----------|---------------------------|---|
| FILE NAME = | USER NAME = dudleybm | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STAGE II TRAFFIC CONTROL | | | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | | |
| Default | 0:\OPERATIONS\Bridges\Bridgplans_CAD\72J07 - 0540046 & 0047 joints\plansheet.dgn | DRAWN - | REVISED - | | SCALE: | SHEET | OF | SHEETS | STA. | TO STA. | 55 | (54-4) BJR | LOGAN | 16 | 7 |
| | PLOT SCALE = 1/10,000 ' / 1" = | CHECKED - | REVISED - | | | | | | | | | | | | |
| | PLOT DATE = 3/16/2016 | DATE - | REVISED - | | | | | | | | | | | | |
| | | | | | | | | | | | CONTRACT NO. 72J07 | | | ILLINOIS FED. AID PROJECT | |



SYMBOLS

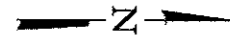
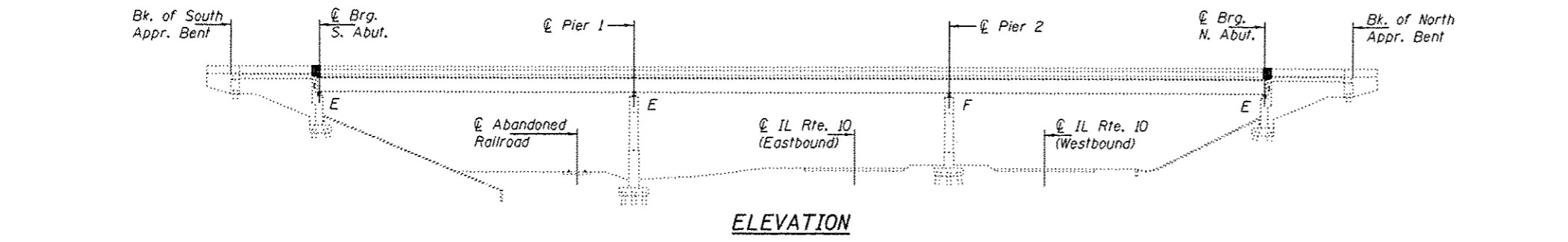
-  WORK AREA
-  TEMP. CONC. BARRIER
-  IMPACT ATTENUATOR

TRAFFIC CONTROL NOTES:

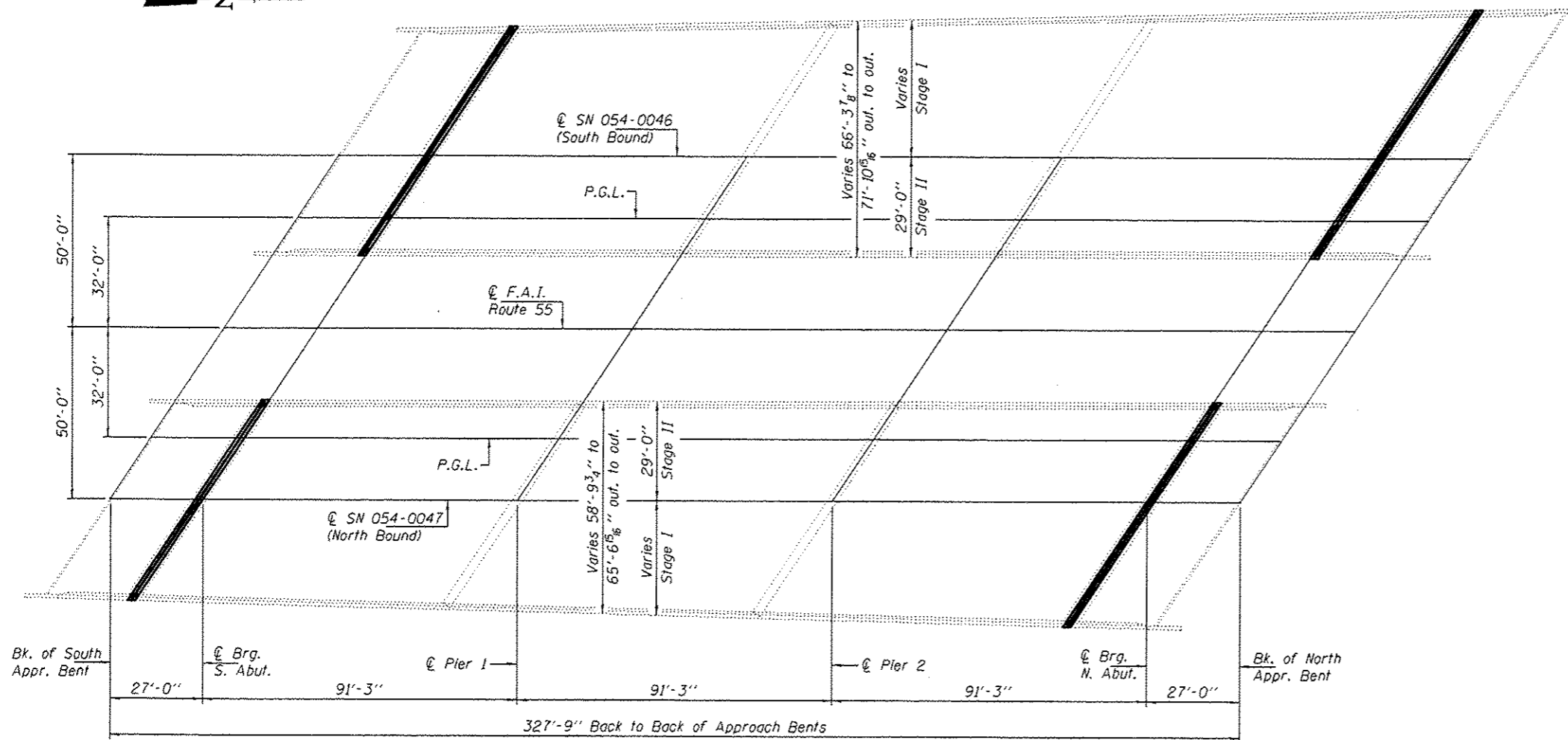
1. TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL BE PER STANDARDS 701400, 701402, AND 701411. DEVICES SHOWN IN THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701402. IMPACT ATTENUATORS, TEMPORARY CONCRETE BARRIER, AND PAVEMENT MARKING BLACKOUT TAPE SHALL BE PAID SEPARATELY.
2. OFFSETS CALLED OUT IN THIS DETAIL ARE ASSUMED TO BE FROM THE CENTER OF THE CENTER LANE IN EACH TRAFFIC DIRECTION.
3. TEMPORARY CONCRETE BARRIER OFFSETS GIVEN IN THIS DETAIL REFER TO THE EDGE OF THE BARRIER NEAREST TO LIVE TRAFFIC.
4. THE SOUTHBOUND SECTION OF TEMPORARY CONCRETE BARRIER IN STAGE I SHALL BE TAPERED 1:5. ALL OTHER APPLICATIONS SHALL BE TAPERED 1:12 PER STANDARD 701402.

| BLACKOUT TAPE SCHEDULE | | | | | |
|------------------------|-------------|--------------------|--------|-------------------------------|-------------------------------|
| STAGE | LOCATION | STATION TO STATION | | PAVT. MARK. BLACKOUT TAPE, 6" | PAVT. MARK. BLACKOUT TAPE, 9" |
| I | NB LT EDGE | 340+00 | 354+00 | 1400' | - |
| I | NB LT SKIP | 340+00 | 354+00 | 350' | - |
| I | NB RT EDGE* | 349+75 | 351+25 | - | 150' |
| I | RAMP B GORE | 350+30 | 352+00 | - | 170' |
| I | SB RT EDGE | 340+00 | 355+00 | 1300' | - |
| I | SB RT SKIP | 340+00 | 355+00 | 375' | - |
| I | SB LT EDGE* | 349+50 | 351+70 | - | 220' |
| I | RAMP C GORE | 349+80 | 352+05 | - | 225' |
| I | SB LT EDGE | 365+85 | 367+30 | - | 145' |
| I | RAMP B GORE | 364+30 | 367+30 | - | 300' |
| II | NB RT EDGE | 340+00 | 346+55 | 655' | - |
| II | NB RT SKIP | 340+00 | 352+00 | 300' | - |
| II | NB RT EDGE* | 348+35 | 352+00 | - | 215' |
| II | RAMP B GORE | 348+35 | 350+30 | - | 195' |
| II | SB LT SKIP | 340+00 | 352+00 | 300' | - |
| II | SB LT EDGE* | 349+30 | 352+00 | - | 50' |
| II | RAMP C GORE | 349+30 | 349+80 | - | 50' |
| TOTALS | | | | 4680' | 1720' |

* STAGE I BLACKOUT TAPE SHALL BE INCORPORATED INTO STAGE II.



GENERAL NOTES
 All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 Reinforcement bars designated (E) shall be epoxy coated.
 Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
 Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.



PLAN

TOTAL BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|----------------------------------|---------|----------|
| Concrete Removal | Cu. Yd. | 15.8 |
| Concrete Superstructure | Cu. Yd. | 15.8 |
| Reinforcement Bars, Epoxy Coated | Pound | 3300 |
| Bar Splicers | Each | 32 |
| Preformed Joint Strip Seal | Foot | 310 |
| Protective Coat | Sq. Yd. | 70 |

* To be applied to new concrete areas only



Expires: November 30, 2016

DESIGNED - *David Carl Puzey*
 CHECKED - *Kyla M. Stoffen*
 DRAWN - *Kyla M. Stoffen*
 CHECKED - *W. H. [Signature]*

PASSED

David Carl Puzey
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

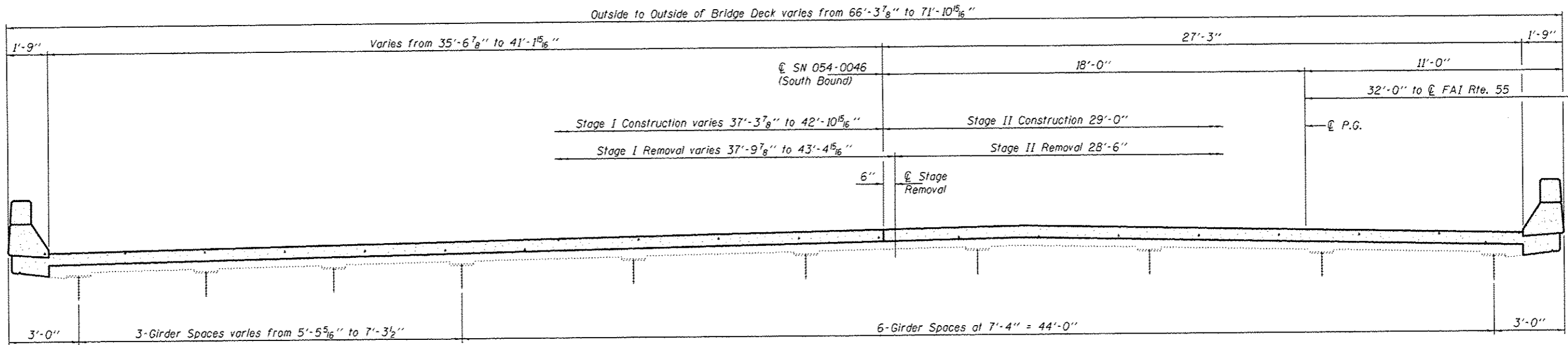
DATE - APRIL 26, 2016
 REVISED _____
 REVISED _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

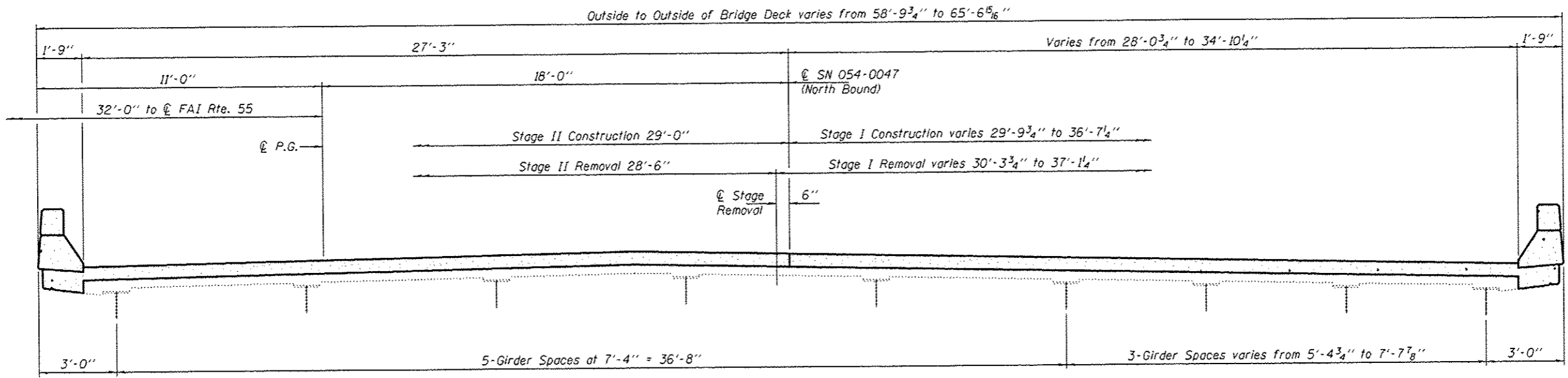
GENERAL PLAN & ELEVATION
 F.A.I. ROUTE 55 OVER ILLINOIS ROUTE 10 & ABANDONED RAILROAD
 SN 054-0046 (S.B.) & -0047 (N.B.)
 SHEET NO. 1 OF 8 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|--------|--------------|-----------|
| 55 | (54-4)BJR | LOGAN | 16 | 9 |

CONTRACT NO. 72J07
 ILLINOIS FED. AID PROJECT

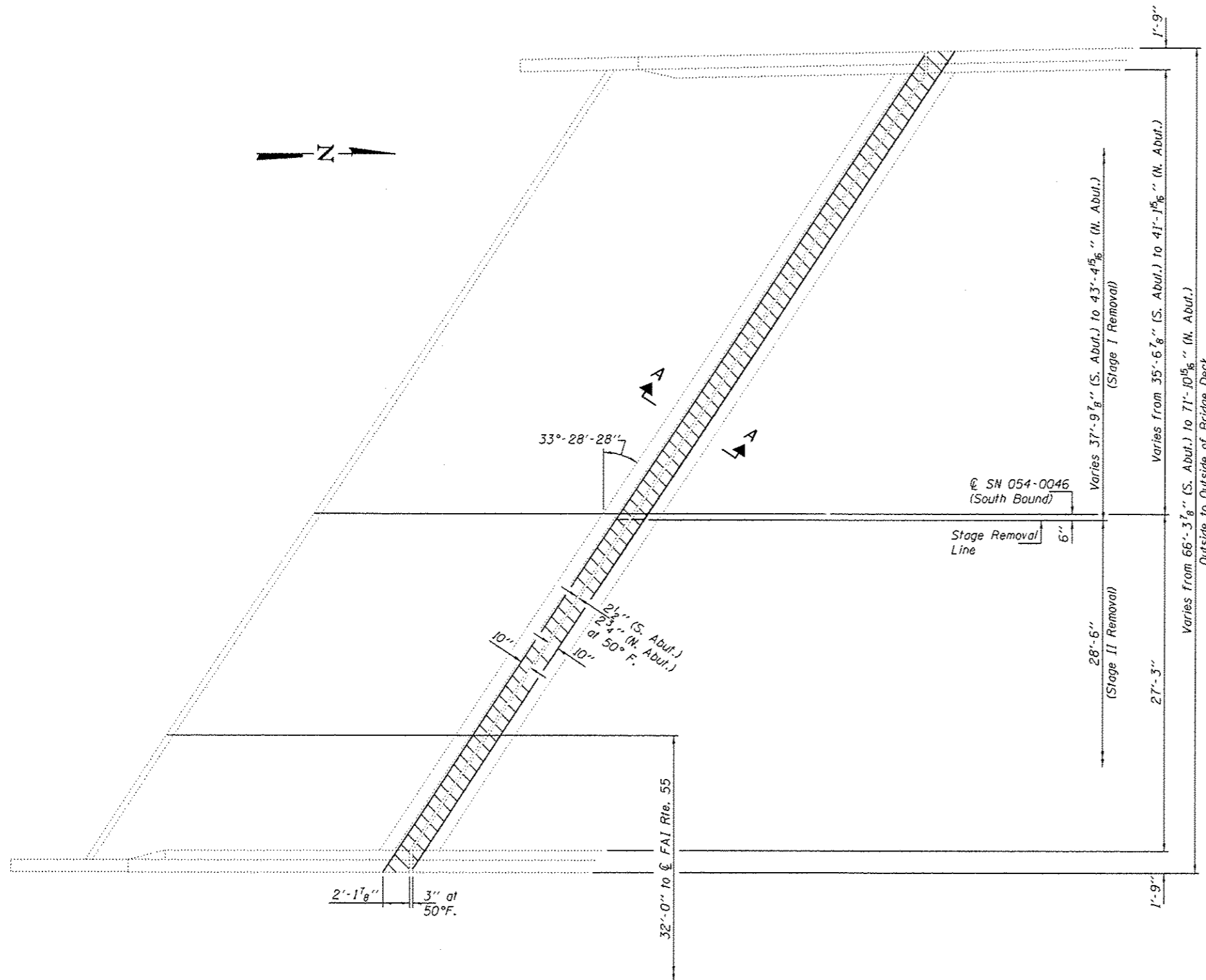


CROSS SECTION - SN 054-0046 (SOUTH BOUND)
(Looking North)



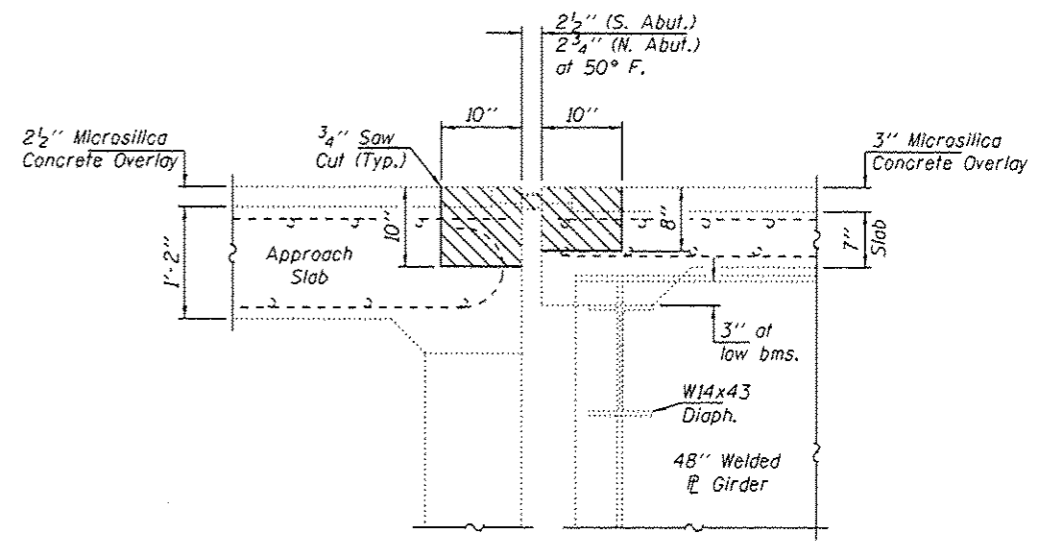
CROSS SECTION - SN 054-0047 (NORTH BOUND)
(Looking North)

| | | | | | | | | | |
|-------------------------|-----------------------|---|-----------------------------------|--|--------------------|-------------------|---------------------------|-----------------|--------------|
| DESIGNED - VHV | DATE - APRIL 26, 2016 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STAGING DETAILS | | F.A.I. RTE. 55 | SECTION (S4-4)BJR | COUNTY LOGAN | TOTAL SHEETS 16 | SHEET NO. 10 |
| CHECKED - DAB | REVISED | | SN 054-0046 (S.B.) & -0047 (N.B.) | | CONTRACT NO. 72J07 | | ILLINOIS FED. AID PROJECT | | |
| DRAWN - Kyle M. Staffen | REVISED | | SHEET NO. 2 OF 8 SHEETS | | | | | | |
| CHECKED - VHV DAB | REVISED | | | | | | | | |

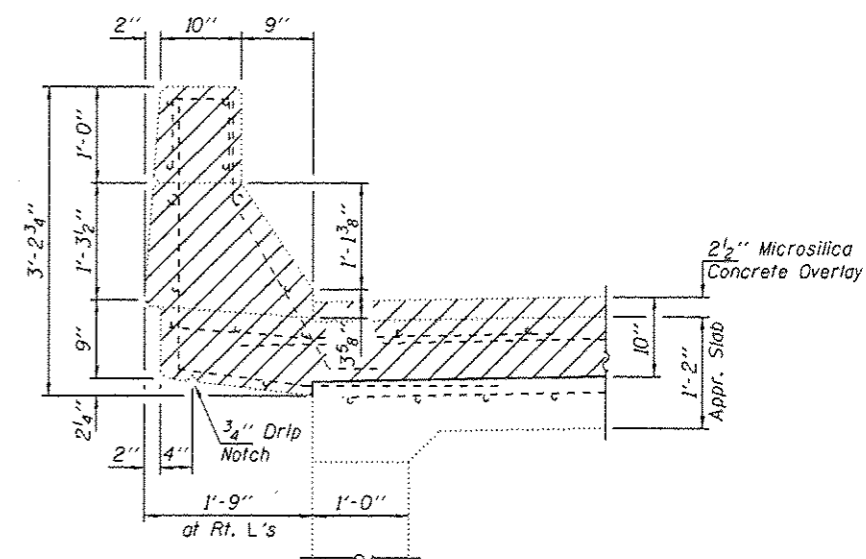


CONCRETE REMOVAL AT ABUTMENT (SN 054-0046)
 (South Abutment shown, North Abutment similar.)

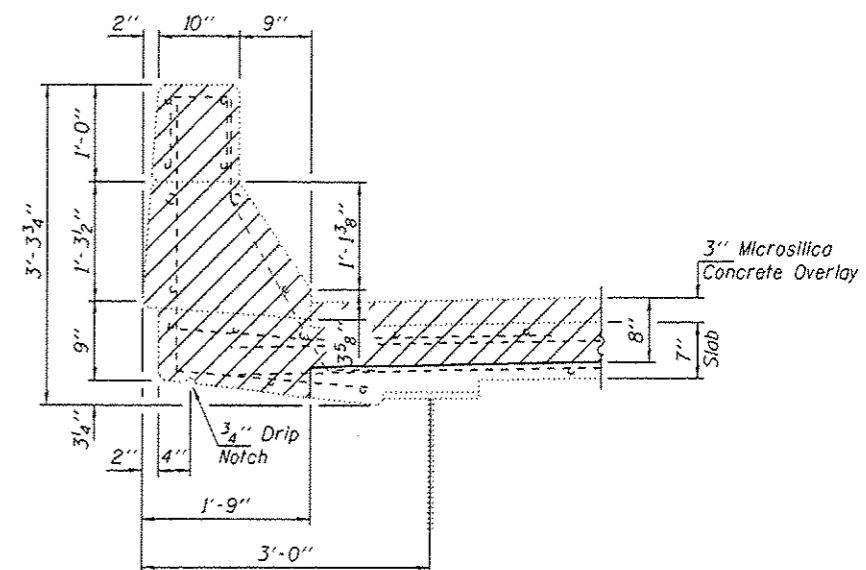
Notes:
 Hatched areas indicate concrete removal.
 Existing steel I's with studs along joint openings to be removed. Cost included with Concrete Removal.
 For Bill of Material see sheet 4 of 8.



SECTION A-A



APPROACH PARAPET REMOVAL



BRIDGE DECK PARAPET REMOVAL

DESIGNED - VHV
 CHECKED - DAB
 DRAWN - Kyle M. Steffen
 CHECKED - VHV DAB

PASSED

 ACTING ENGINEER OF BRIDGES AND STRUCTURES

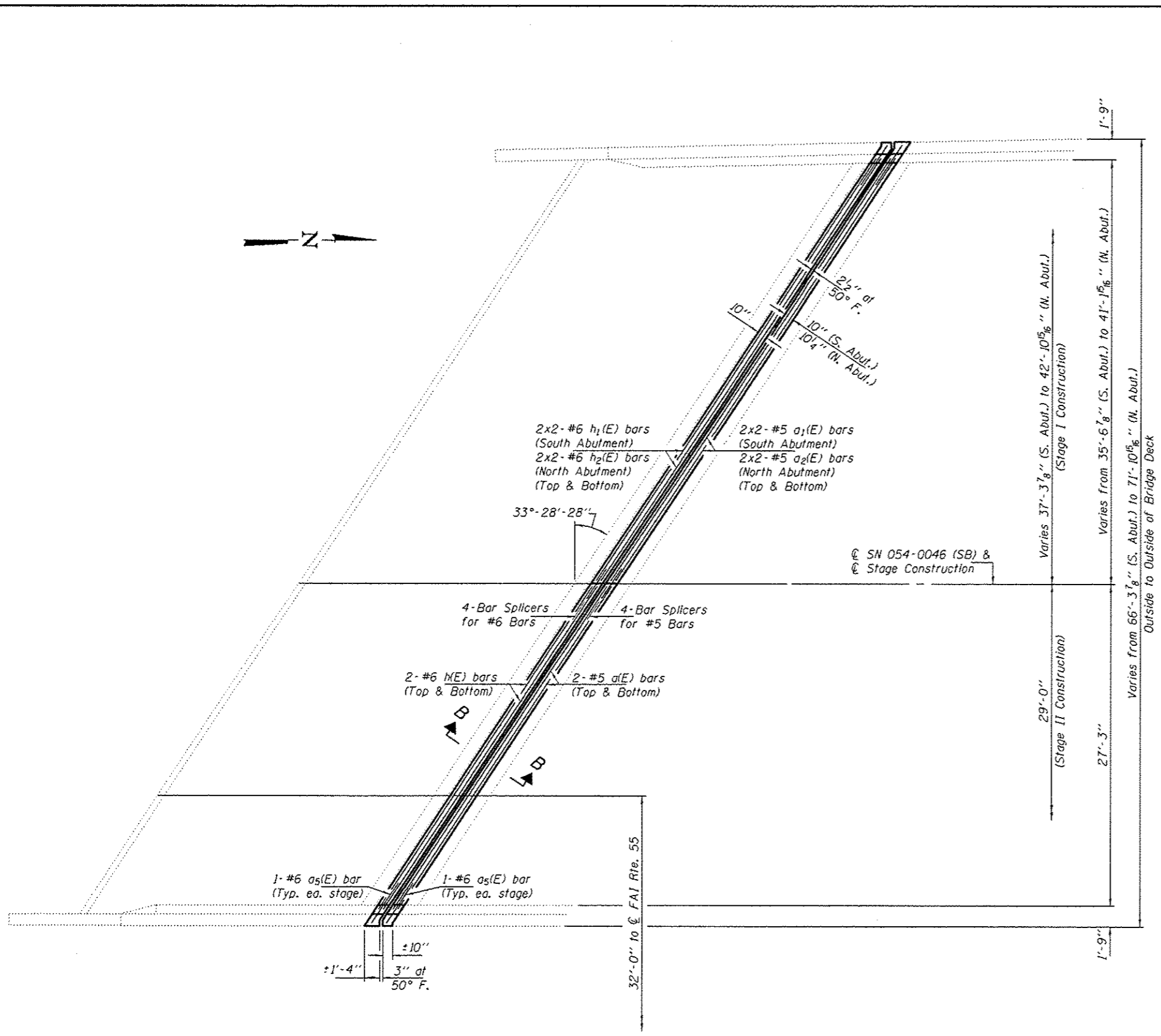
DATE - APRIL 26, 2016
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

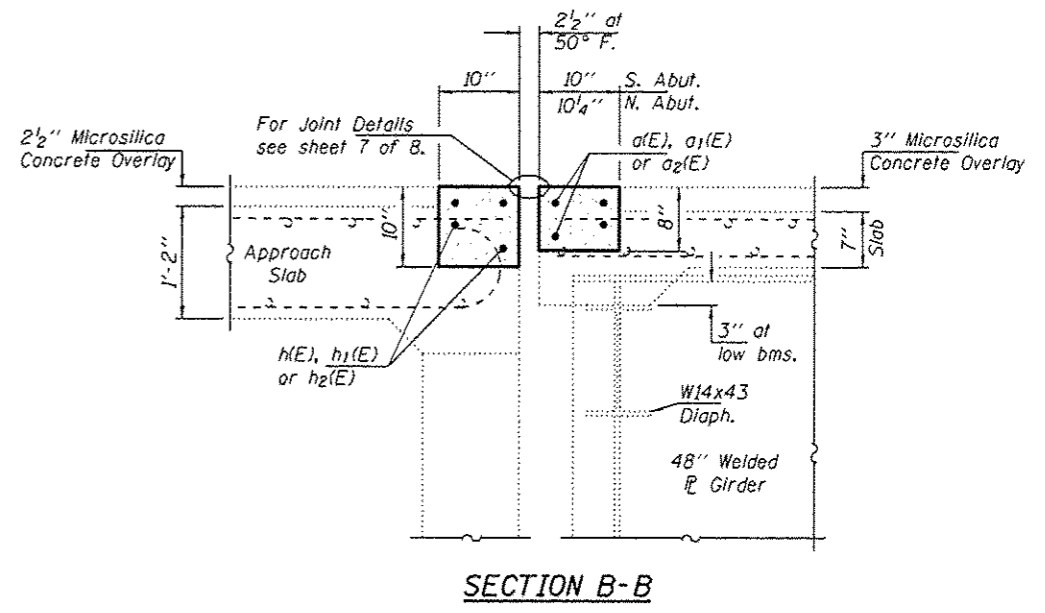
JOINT REMOVAL DETAILS AT ABUTMENT
 SN 054-0046 (S.B.)

SHEET NO. 3 OF 8 SHEETS

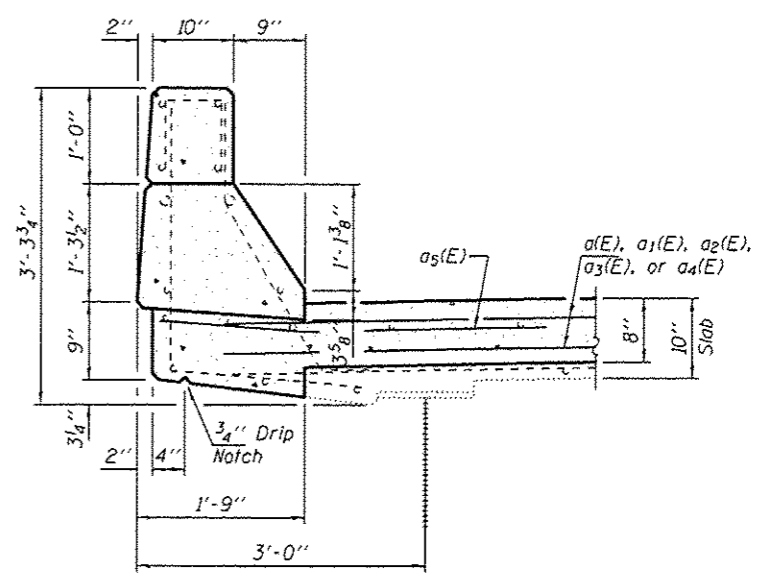
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 55 | 154-41BJR | LOGAN | 16 | 11 |
| CONTRACT NO. 72J07 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



CONCRETE REPLACEMENT AT ABUTMENT (SN 054-0046)
 (South Abutment shown, North Abutment similar.)



SECTION B-B



BRIDGE DECK PARAPET DETAILS

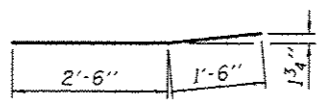
Note:
 For Approach Parapet see sheet 6 of 8.

BILL OF MATERIAL
SN 054-0046 (S.B.)

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| a(E) | 8 | #5 | 33'-6" | — |
| a1(E) | 8 | #5 | 23'-1" | — |
| a2(E) | 8 | #5 | 26'-5" | — |
| a3(E) | 8 | #6 | 4'-0" | — |
| h(E) | 8 | #6 | 33'-6" | — |
| h1(E) | 8 | #6 | 23'-7" | — |
| h2(E) | 8 | #6 | 26'-11" | — |
| Concrete Removal | | | Cu. Yd. | 8.3 |
| Concrete Superstructure | | | Cu. Yd. | 8.3 |
| Bar Splacers | | | Each | 16 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 1750 |

Bars indicated thus 2 x 2-#5 etc. indicates 2 lines of bars with 2 lengths per line.

MIN. BAR LAP
 #5 Bars = 2'-5"
 #6 Bars = 3'-5"



BAR a5(E)

DESIGNED - VHV
 CHECKED - DAB
 DRAWN - Kyle M. Steffen
 CHECKED - VHV DAB

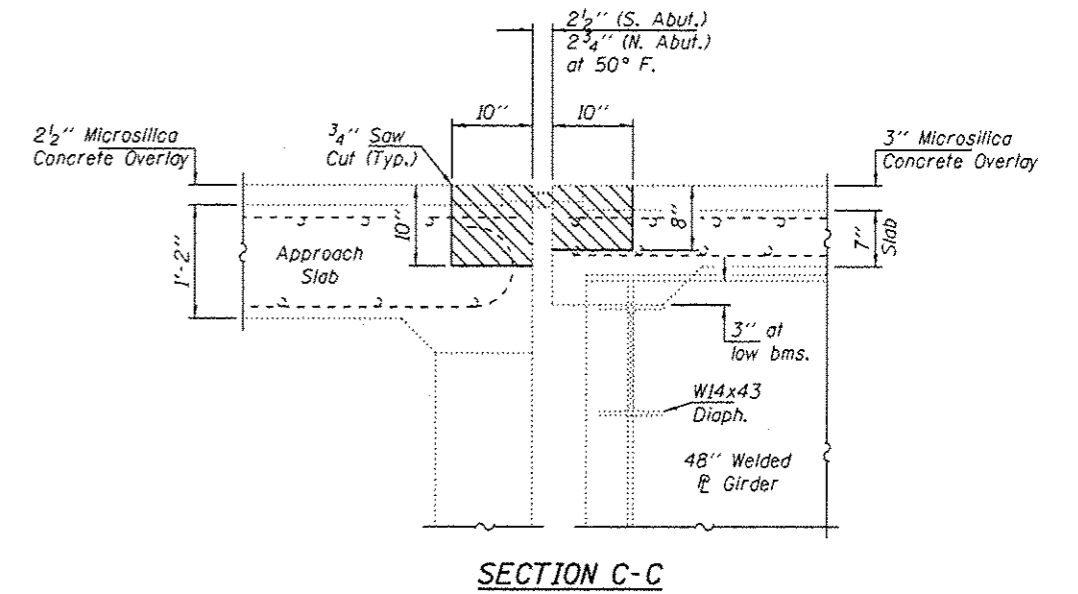
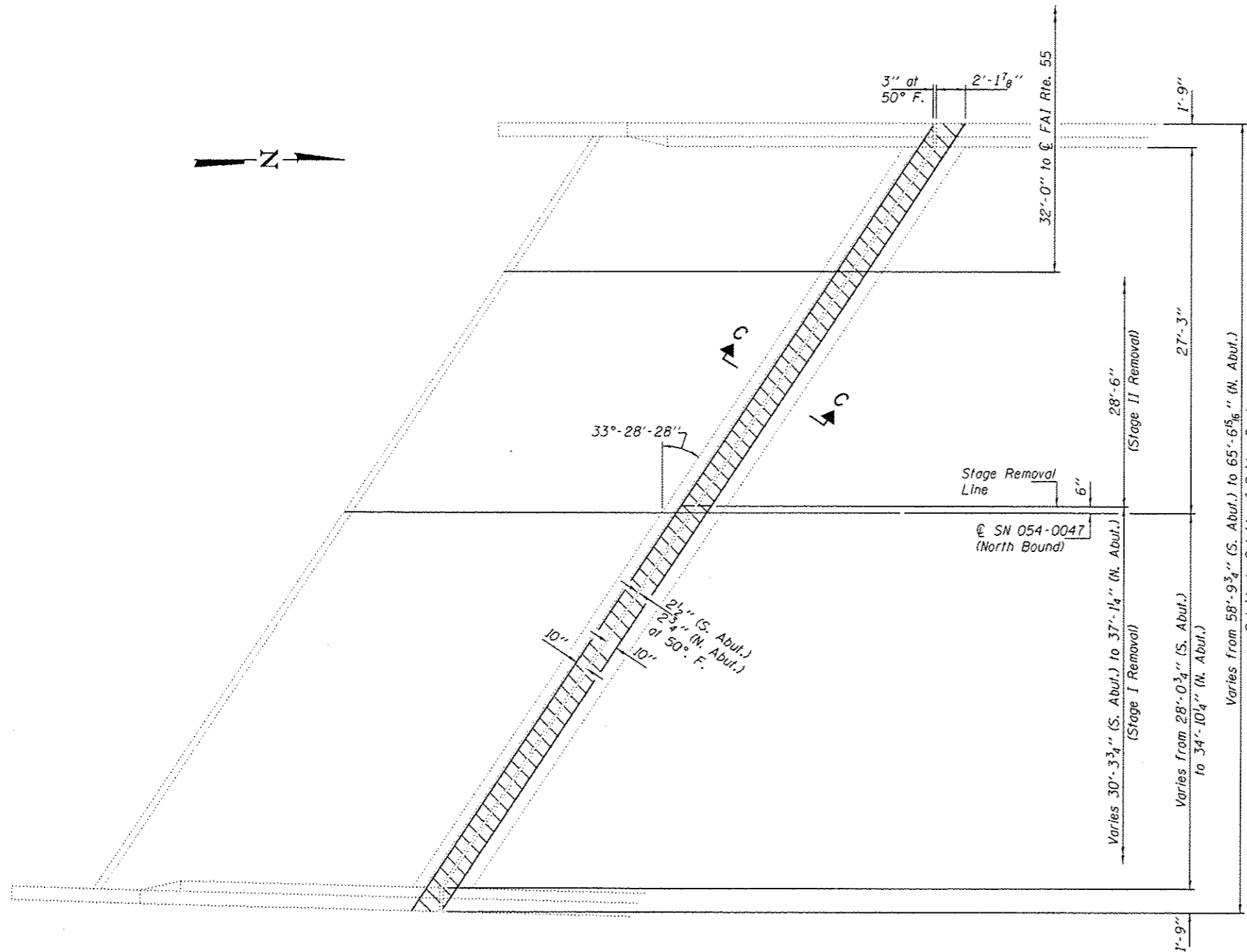
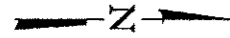
DATE - APRIL 26, 2016
 PASSED
 ACTING ENGINEER OF BRIDGES AND STRUCTURES
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENT DETAILS AT ABUTMENT
SN 054-0046 (S.B.)
 SHEET NO. 4 OF 8 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|--------|--------------|-----------|
| 55 | (54-4)BJR | LOGAN | 16 | 12 |

CONTRACT NO. 72J07
 ILLINOIS FED. AID PROJECT



Notes:
 Hatched areas indicate concrete removal.
 Existing steel I's with studs along joint openings to be removed. Cost included with Concrete Removal.
 For bridge and approach parapet removal details see sheet 3 of 8.
 For Bill of Material see sheet 6 of 8.

CONCRETE REMOVAL AT ABUTMENT (SN 054-0047)
 (South Abutment shown, North Abutment similar.)

DESIGNED - VHV
 CHECKED - DAB
 DRAWN - Kyle M. Steffen
 CHECKED - VHV DAB

PASSED

 ACTING ENGINEER OF BRIDGES AND STRUCTURES

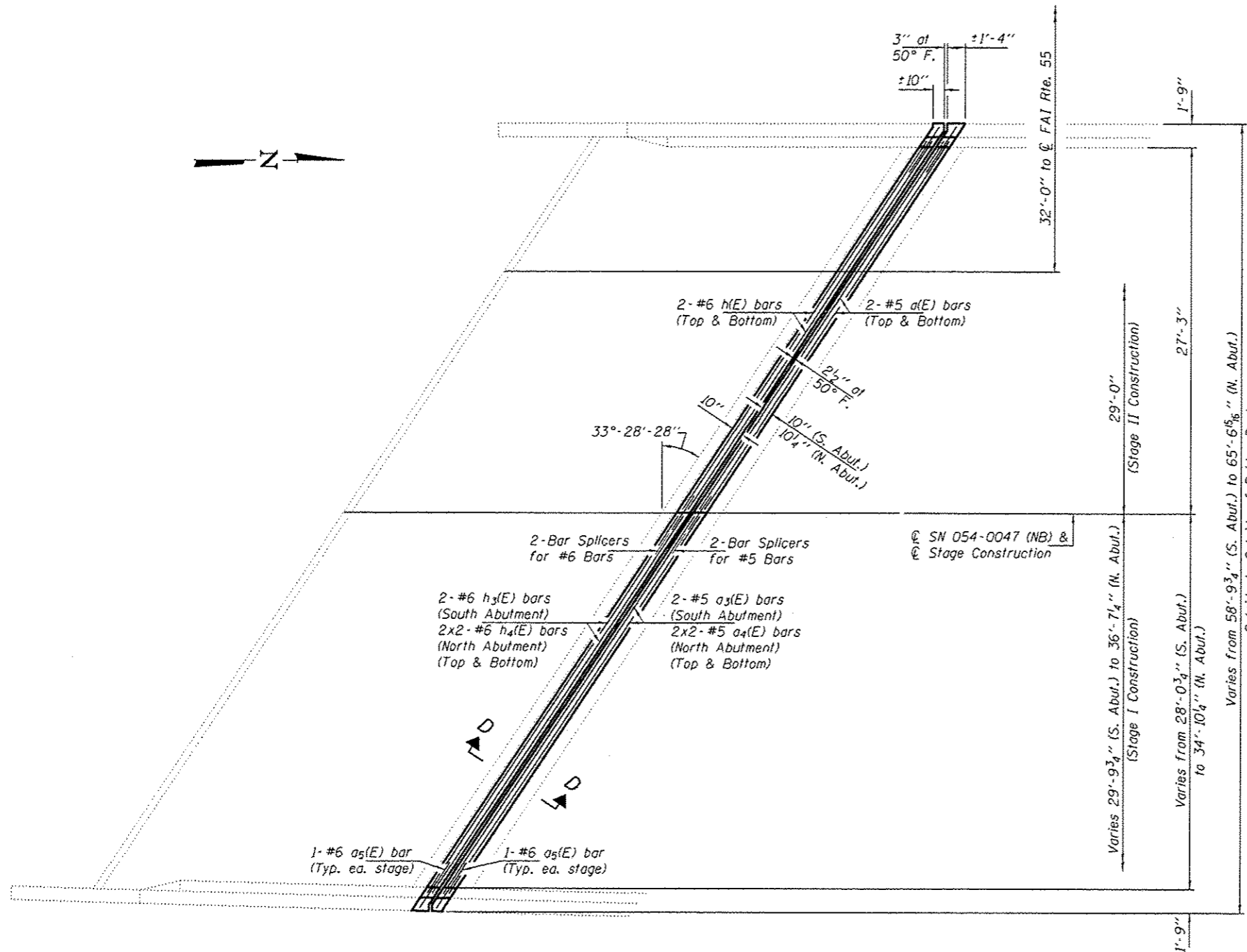
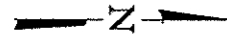
DATE - APRIL 26, 2016
 REVISED
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

JOINT REMOVAL DETAILS AT ABUTMENT
 SN 054-0047 (N.B.)
 SHEET NO. 5 OF 8 SHEETS

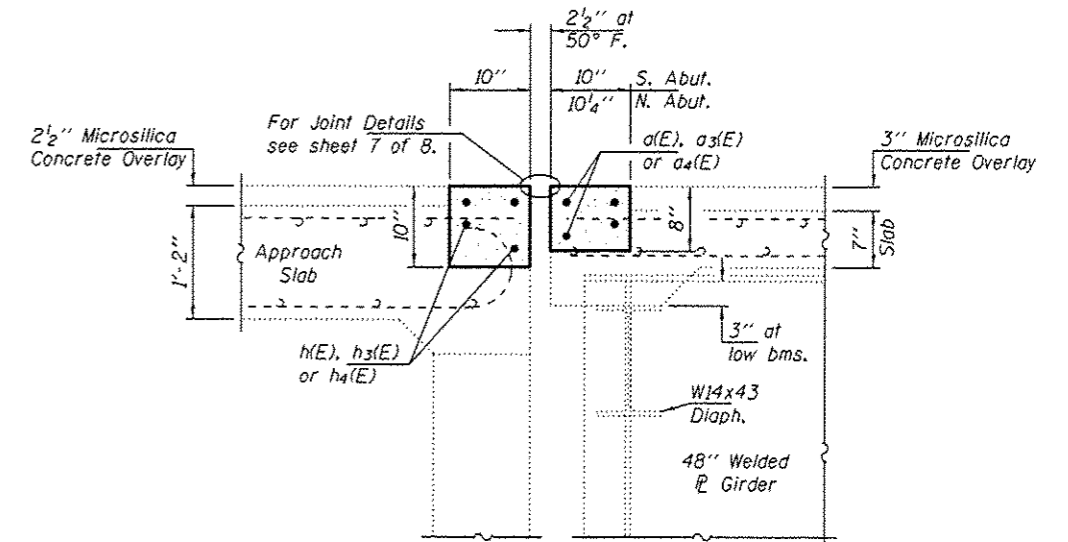
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|--------|--------------|-----------|
| 55 | 454-41BJR | LOGAN | 16 | 13 |

CONTRACT NO. 72J07
 ILLINOIS FED. AID PROJECT

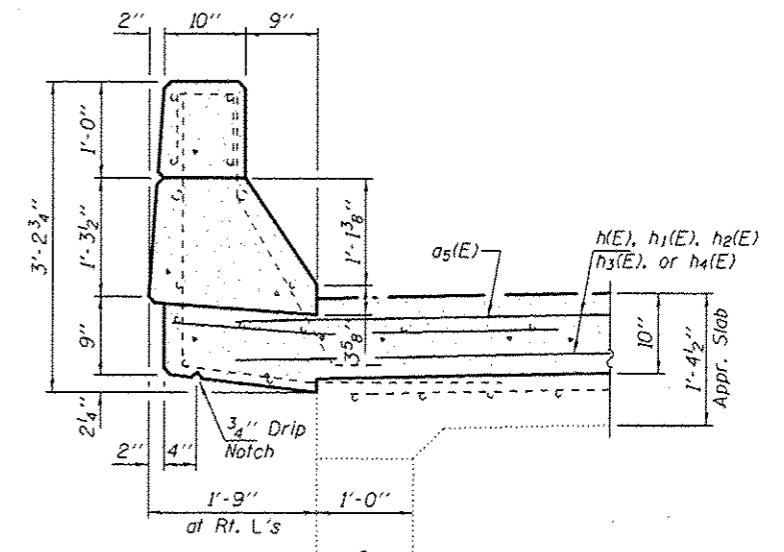


CONCRETE REPLACEMENT AT ABUTMENT (SN 054-0047)

(South Abutment shown, North Abutment similar.)



SECTION D-D



APPROACH PARAPET DETAILS

Note:
For Bridge Deck Parapet see sheet 4 of 8.

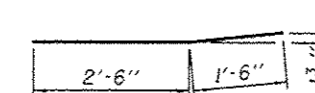
**BILL OF MATERIAL
SN 054-0047 (N.B.)**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| a(E) | 8 | #5 | 33'-6" | — |
| a3(E) | 4 | #5 | 34'-4" | — |
| a4(E) | 8 | #5 | 22'-8" | — |
| a5(E) | 8 | #6 | 4'-0" | — |
| h(E) | 8 | #6 | 33'-6" | — |
| h3(E) | 4 | #6 | 34'-4" | — |
| h4(E) | 8 | #6 | 23'-2" | — |
| Concrete Removal | | | Cu. Yd. | 7.5 |
| Concrete Superstructure | | | Cu. Yd. | 7.5 |
| Bar Splicers | | | Each | 16 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 1550 |

Bars indicated thus 2 x 2-#5 etc. indicates 2 lines of bars with 2 lengths per line.

MIN. BAR LAP

#5 Bars = 2'-5"
#6 Bars = 3'-5"



BAR a5(E)

DESIGNED - VHV
CHECKED - DAB
DRAWN - Kyle M. Steffen
CHECKED - VHV DAB

PASSED
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DATE - APRIL 26, 2016

REVISED

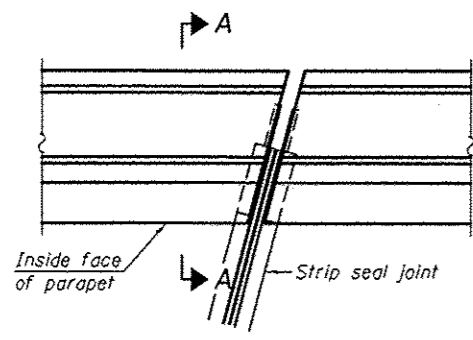
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENT DETAILS AT ABUTMENT
SN 054-0047 (N.B.)

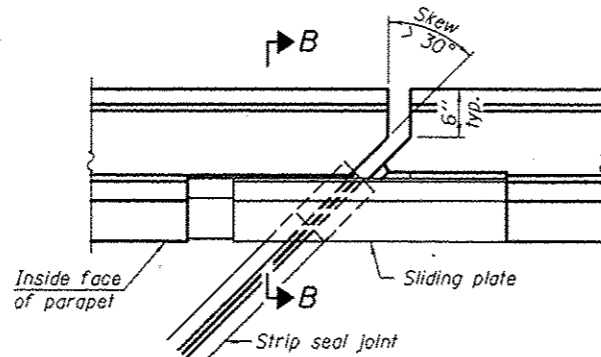
SHEET NO. 6 OF 8 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|--------|--------------|-----------|
| 55 | 154-41BJR | LOGAN | 16 | 14 |

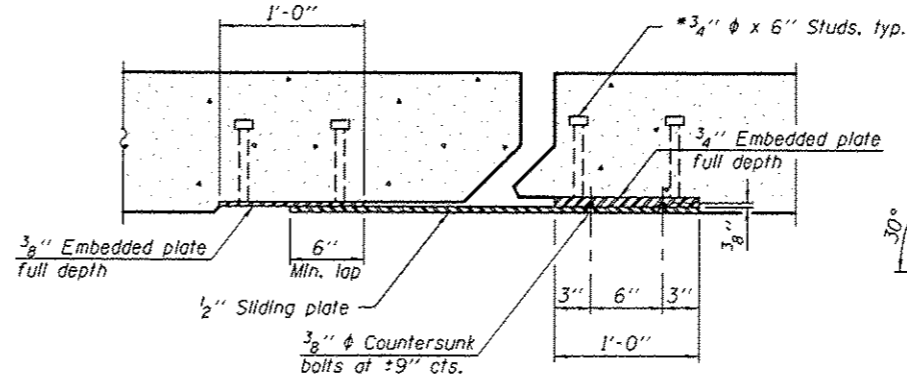
CONTRACT NO. 72J07
ILLINOIS FED. AID PROJECT



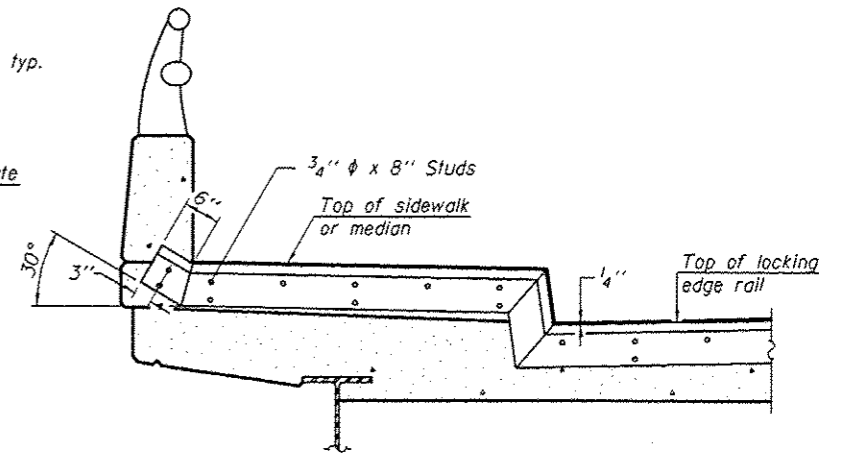
PLAN
(For skews $\leq 30^\circ$)



PLAN
(For skews $> 30^\circ$)
Showing point block

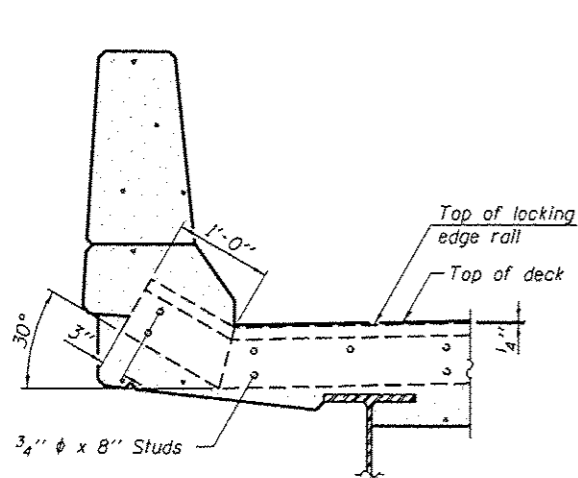


SECTION C-C

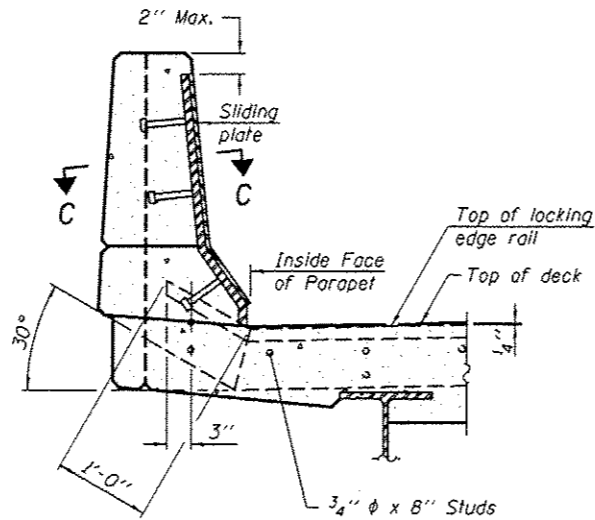


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

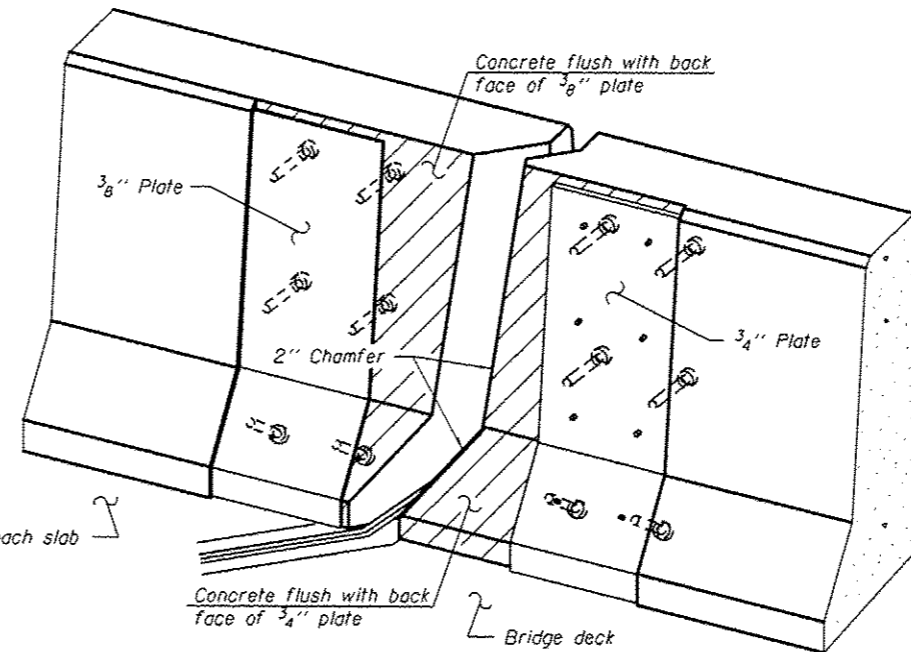
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A

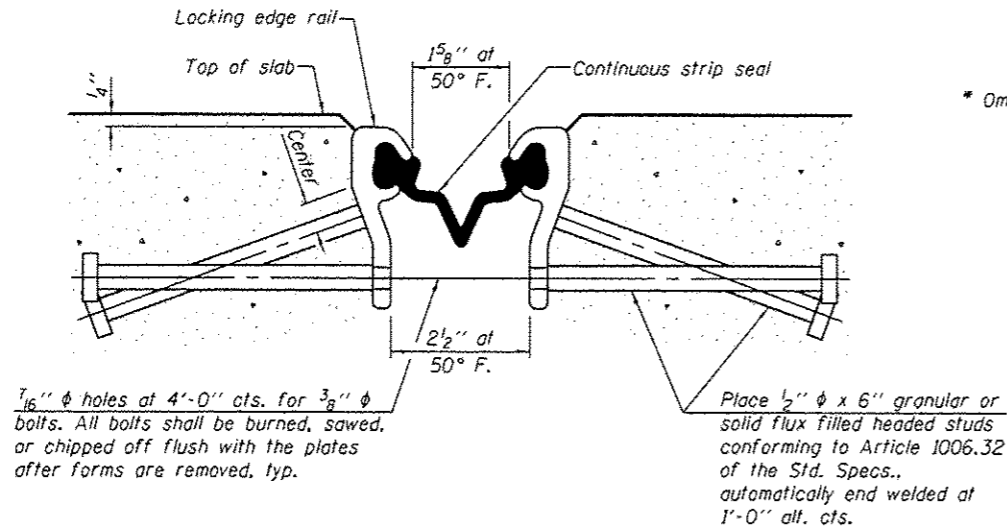


SECTION B-B



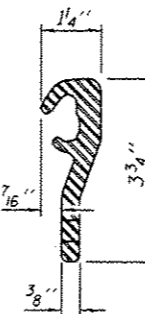
TRIMETRIC VIEW
(Showing back plates only)

* Omit weld at seal opening.

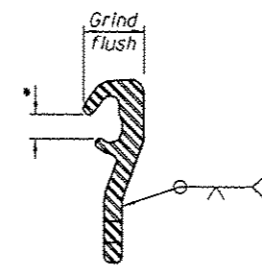


SECTION THRU SHALLOW STRIP SEAL JOINT

1/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



LOCKING EDGE RAIL



LOCKING EDGE RAIL SPLICE

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.
Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Preformed Joint Strip Seal.
The inside of the Locking Edge Rail groove shall be free of weld residue.

BILL OF MATERIAL

| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 310 |

DESIGNED - VHV
CHECKED - DAB
DRAWN - Kyle M. Staffen
CHECKED - VHV DAB

PASSED

Kyle M. Staffen
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - APRIL 26, 2016

REVISED
REVISED

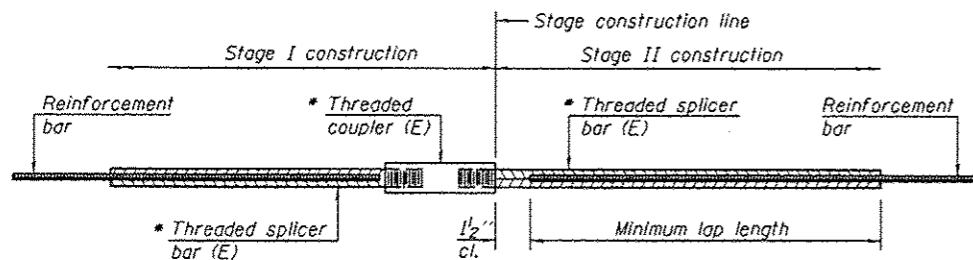
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS
SN 054-0046 (S.B.) & -0047 (N.B.)

SHEET NO. 7 OF 8 SHEETS

| P.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|--------|--------------|-----------|
| 55 | 154-41BJR | LOGAN | 16 | 15 |

CONTRACT NO. 72J07
ILLINOIS FED. AID PROJECT

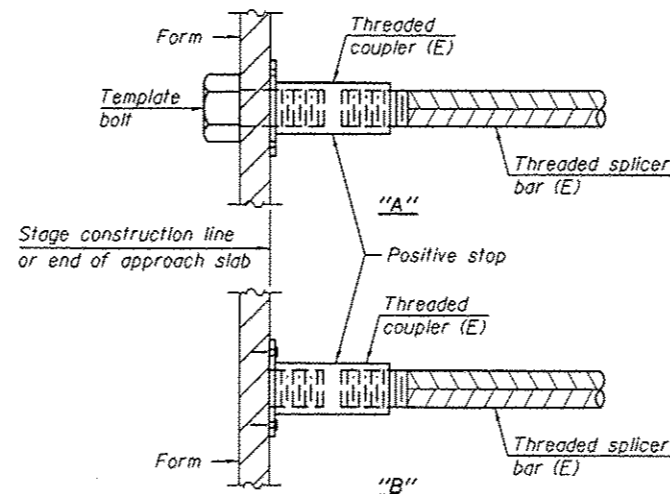


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Minimum lap length |
|----------|----------|-------------------------|--------------------|
| Approach | #6 | 8 | 3'-5" |
| Deck | #5 | 8 | 2'-5" |
| | | | |
| | | | |

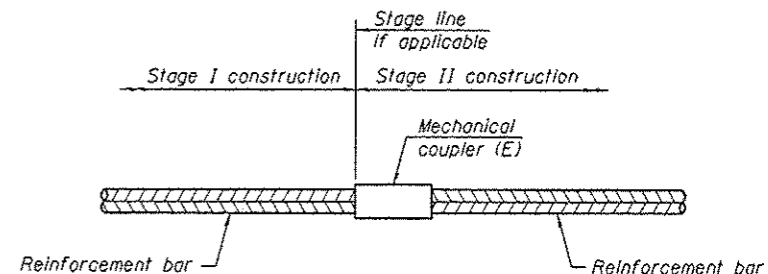


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

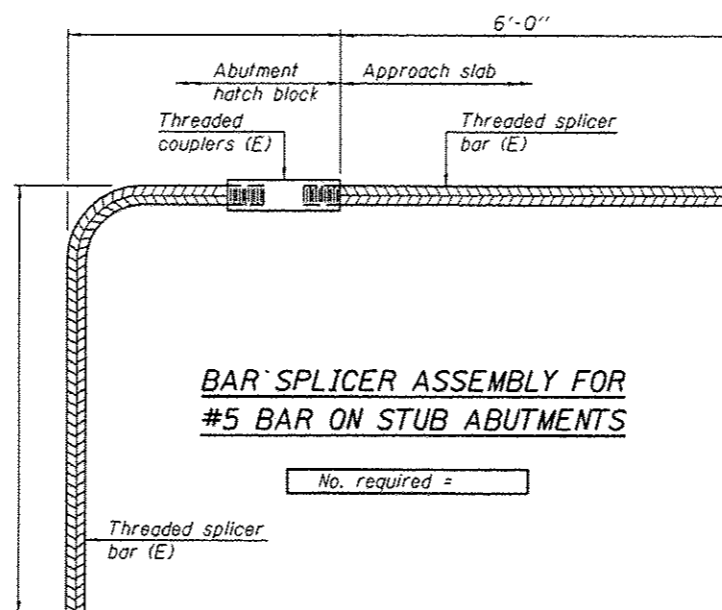
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
| | | |
| | | |
| | | |
| | | |



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 6-8-15

DESIGNED - VHV
 CHECKED - DAB
 DRAWN - Kyle M. Staffen
 CHECKED - VHV DAB

PASSED

Carl P. ...
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - APRIL 26, 2016

REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 SN 054-0046 (S.B.) & -0047 (N.B.)

SHEET NO. 8 OF 8 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|--------|--------------|-----------|
| 55 | 154-41BJR | LOGAN | 16 | 16 |

CONTRACT NO. 72J07

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