

012

03-08-2019 LETTING ITEM 012

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|------|-----|----------|--------------------|
| PLAN | NO. | COUNTY | TOTAL SHEETS |
| PTC | 303 | MC HENRY | 4 |
| | | | CONTRACT NO. 62F35 |

D-91-285-17

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

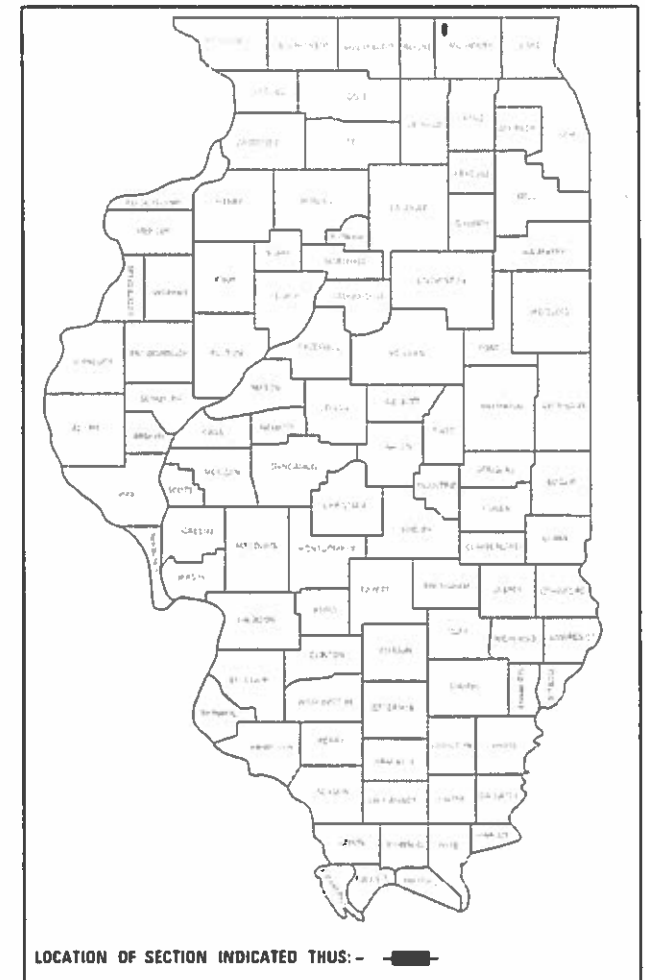
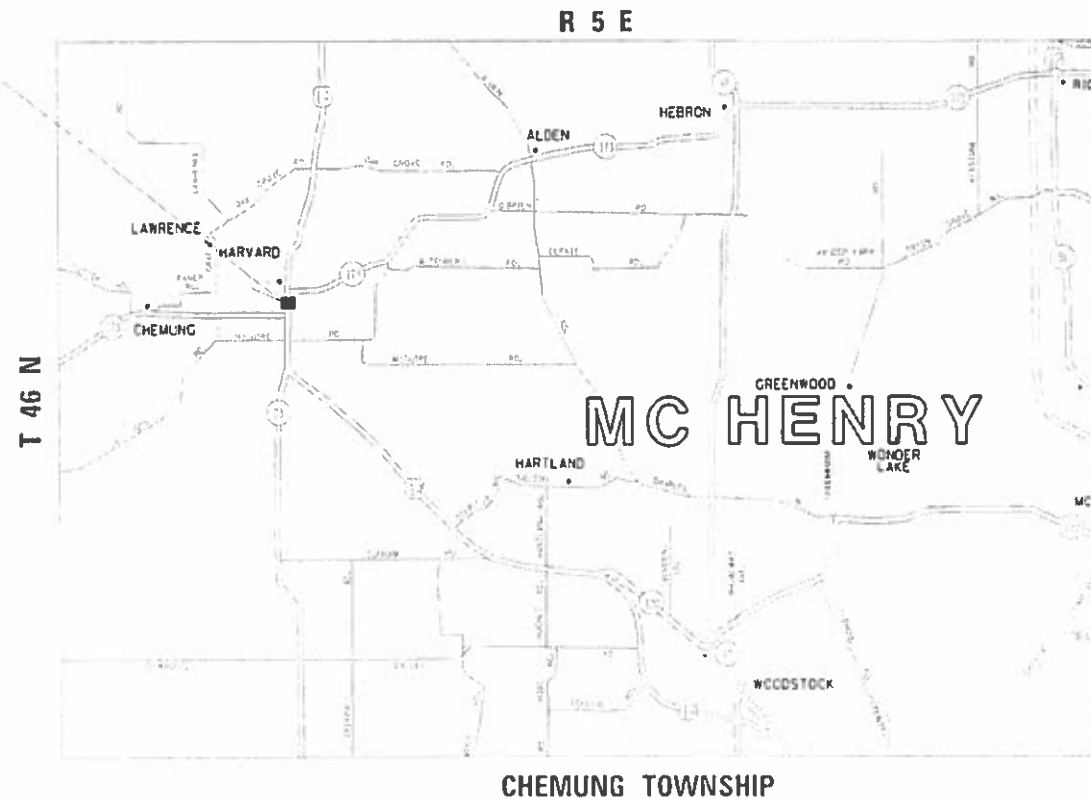
F.A.P. ROUTE 303: US 14 /IL 173 (DIVISION ST.)
AT U.P.R.R. & MCCOMB ST.
SECTION: 29VB-BR(17)
PROJECT: NHPP-YHB3 (683)
BRIDGE JOINT REPAIR, BRIDGE REPAIR
MCHENRY COUNTY

C-91-285-17

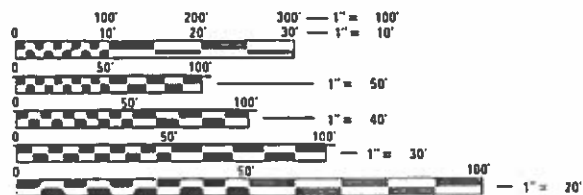
TRAFFIC DATA

2017 ADT = 12,700
SPEED LIMIT = 30 MPH

SN: 056-0007
LOCATION OF IMPROVEMENT



LOCATION OF SECTION INDICATED THUS: -



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: ALAIN MIDY (847) 221- 3056
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

GROSS & NET LENGTH = 642 FT. = 0.12 MILE

CONTRACT NO. 62F35

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED ~~DECEMBER 4~~ 2018

Anthony A. Quigley / AAS
REGIONAL ENGINEER

Feb 19 2019
E.A. EK
ENGINEER OF DESIGN AND ENVIRONMENT

Feb 20 2019
Paul P. Ch...
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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STATE STANDARDS

| STANDARD NO. | DESCRIPTION |
|--------------|--|
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24' (600 MM) FROM PAVEMENT EDGE |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY |
| 701502-05 | URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-06 | SIDEWALK, CORNER OR COSSWALK CLOSURE |
| 701901-07 | TRAFFIC CONTROL DEVICES |

GENERAL NOTES - ROADWAY

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED.)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE CITY OF HARVARD.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCES), ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE- ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
- THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, IDOT'S AREA TRAFFIC FIELD ENGINEER. VIA EMAIL AT WALTER.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM DISTRICT 1 BUREAU OF MAINTENANCE BRIDGE INSPECTIONS.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATION. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATION SHALL NOT CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

GENERAL NOTES - TRAFFIC CONTROL & PROTECTION

- TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OF CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO HOURS FROM THE TIME OF NOTIFICATION.
- ALL TEMPORARY PAVEMENT MARKINGS PROPOSED WITHIN THE WORK AREA SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION PHASE CHANGE.

MODEL: Default
 FILE: \\nas01c.psu.edu\BIBLID\BIBLID\TEC\Illinois\gov\PIV\DOT\Documents\DOT_Offices\BIBLID\1\Projects\128517\CADD\Drawings\DOT_Offices\BIBLID\128517-dhr-gemore.dgn

| MIXTURE REQUIREMENTS | | QUALITY MANAGEMENT PROGRAM (QMP) |
|---|-----------------|----------------------------------|
| MIXTURE USES | VOIDS @ Ndes | |
| PAVEMENT RESURFACING | | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm) | 4% AT 70 GYR. | QC/QA |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | 3.5% AT 50 GYR. | QC/QA |
| PATCHING | | |
| CLASS D PATCHES (HMA BINDER, IL-19.0 mm) | 4% AT 70 GYR. | QC/QA |
| HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL 19MM) | 4% AT 70 GYR. | QC/QA |
| QMP Designation: Quality Control/Quality Assurance (QC/QA); Quality Control for Performance (QCP) | | |

NOTE:

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE

| | | | | | | | | | |
|------------------------------|------------|-----------|---|--|--------------------|-------------|-----------------|--------------|---------------------------|
| USER NAME = midyja | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | US-14 /IL-173 (DIVISION ST.) INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | DRAWN - | REVISED - | | | 303 | 29VB-BR(17) | MCHENRY | 42 | 2 |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - | | | CONTRACT NO. 62F35 | | | | |
| PLOT DATE = 2/5/2019 | DATE - | REVISED - | | | SCALE: | | SHEET OF SHEETS | STA. TO STA. | ILLINOIS FED. AID PROJECT |

| SUMMARY OF QUANTITIES | | | URBAN TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | | | |
|-----------------------|--|------------------|------------------------------|------------------------------|--|--|--|--|
| CODE NO | ITEM | UNIT | | 80% FED 20% STATE 0013 | | | | |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT) | POUND | 150 | 150 | | | | |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SO YD | 660 | 660 | | | | |
| 40603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 | TON | 70.0 | 70.0 | | | | |
| 42101300 | PROTECTIVE COAT | SO YD | 10 | 10 | | | | |
| 50102400 | CONCRETE REMOVAL | CU YD | 25 | 25 | | | | |
| 50157300 | PROTECTIVE SHIELD | SO YD | 1135 | 1135 | | | | |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 25 | 25 | | | | |
| 50300260 | BRIDGE DECK GROOVING | SO YD | 3478 | 3478 | | | | |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 4415 | 4415 | | | | |
| 50800515 | BAR SPLICERS | EACH | 60 | 60 | | | | |
| 52000110 | PREFORMED JOINT STRIP SEAL | FOOT | 240 | 240 | | | | |
| 58700300 | CONCRETE SEALER | SO FT | 31422 | 31422 | | | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 6 | 6 | | | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | | | |
| 70107025 | CHANGEABLE MESSAGE SIGN | CAL DA | 45 | 45 | | | | |
| 70300904 | PAVEMENT MARKING TAPE, TYPE IV 4" | FOOT | 12160 | 12160 | | | | |

| SUMMARY OF QUANTITIES | | | URBAN TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | | | |
|-----------------------|---|-------|------------------------------|------------------------------|--|--|--|--|
| CODE NO | ITEM | UNIT | | 80% FED 20% STATE 0013 | | | | |
| 70300912 | PAVEMENT MARKING TAPE, TYPE IV 12" | FOOT | 125 | 125 | | | | |
| 70300924 | PAVEMENT MARKING TAPE, TYPE IV 24" | FOOT | 16 | 16 | | | | |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 812 | 812 | | | | |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 812 | 812 | | | | |
| 70600241 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 2 | EACH | 2 | 2 | | | | |
| 70600341 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 2 | EACH | 2 | 2 | | | | |
| * 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SO FT | 125 | 125 | | | | |
| * 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 1844 | 1844 | | | | |
| * 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 853 | 853 | | | | |
| * 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 125 | 125 | | | | |
| * 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 24 | 24 | | | | |
| * 78009000 | MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS | SO FT | 21.4 | 21.4 | | | | |
| * 78009004 | MODIFIED URETHANE PAVEMENT MARKING - LINE 4" | FOOT | 2856 | 2856 | | | | |
| * 78009006 | MODIFIED URETHANE PAVEMENT MARKING - LINE 6" | FOOT | 60 | 60 | | | | |
| * 78009012 | MODIFIED URETHANE PAVEMENT MARKING - LINE 12" | FOOT | 275 | 275 | | | | |

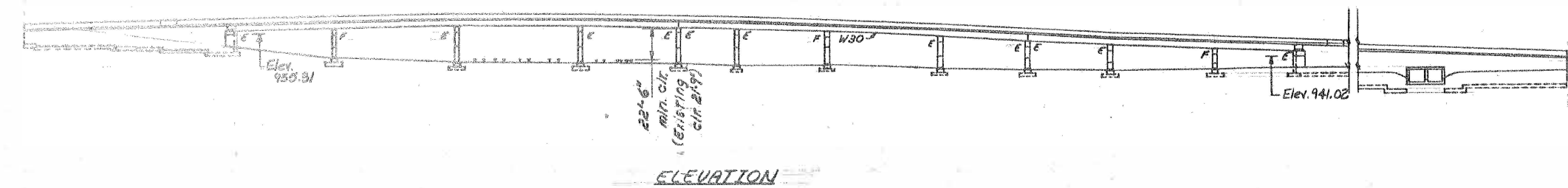
| | | | | | | | | | | | |
|--|---|------------|-----------|---|---|--------------------|-------------------------|---------|--------------|---|--|
| FILE NAME : | USER NAME : rossann | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | US-14 /IL-173 (DIVISION ST.) AT UPRR SUMMARY OF QUANTITIES | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| \\nvl084ebidinteg\h\nd\p\p\DOT\Documents\DOT | Offices\District 1\Projects\DI2851\CADD\Design\DI2851 | DR | REVIS | | | 303 | 29VB-BR(17) | MCHENRY | 42 | 3 | |
| | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - | | | CONTRACT NO. 62F35 | | | | | |
| | PLOT DATE = 12/14/2018 | DATE - | REVISED - | | | SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | |

*= SPECIALTY ITEM

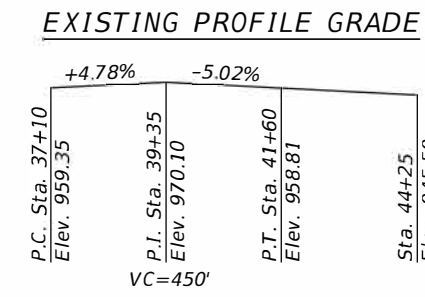
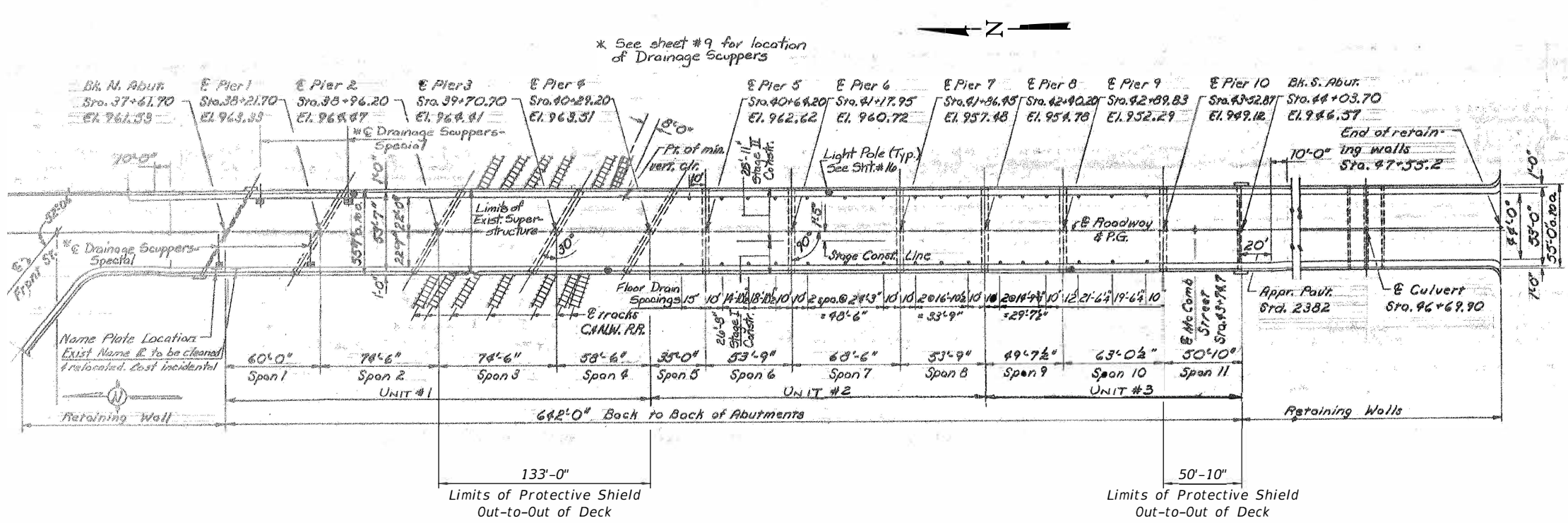
Existing Structure: S.N. 056-0007 was originally built in 1940 and reconstructed in 1970. The existing structure consists of eleven span steel beams with reinforced concrete deck at a skew of 30°. The out-to-out width of deck is 55'-7".

Traffic to be maintained utilizing stage construction.

No Salvage.



ELEVATION



EXISTING PROFILE GRADE

EXISTING CURVE DATA

P.I. Sta. = 46+70.7
 $\Delta = 0^{\circ}-27'$
 $D = 0^{\circ}-12'$
 $T = 112.5$
 $L = 225.0$
 $R = 28,647.9$

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

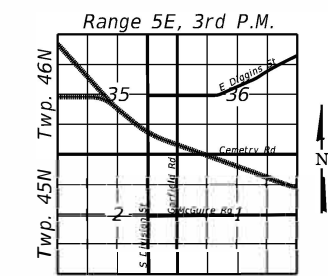
EXISTING LOADING HS 20-44

Allow 50#/sq. ft. for future wearing surface.

EXISTING DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (AASHTO M-229) (Str. Steel)
 $f_y = 36,000$ psi (AASHTO M-185) (Str. Steel)
 $f_y = 50,000$ psi (AASHTO M-222) (Brg. Plates)



LOCATION SKETCH



DATE: 12/11/2018
 IL LICENSED PROFESSIONAL
 LICENSE EXPIRES ON 11/30/2020

GENERAL PLAN & ELEVATION
 US ROUTE 14 OVER CHICAGO &
 NORTHWESTERN RAILROAD
 F.A.ROUTE 60 SEC 29VB-R(83)
 McHENRY COUNTY

| | | | | | | | | | | |
|--|--------------|-------------------|-----------|---|---|---------------------------|----------------------|------------------|-------------------|---------------|
| AES Services, Inc. 111 S. Wacker Drive, Suite 3910 Chicago, IL 60606 Ph: 312-23-6783 | USER NAME = | DESIGNED - AWM | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | GENERAL PLAN AND ELEVATION STRUCTURE NO.: 056-0007 | F.A.P. RTE. = 303 | SECTION = 29VB-R(83) | COUNTY = McHENRY | TOTAL SHEETS = 42 | SHEET NO. = 5 |
| | PLOT SCALE = | DRAWN - JS, AWM | REVISED - | | | SHEET NO. = 5 | CONTRACT NO. = 62F35 | | | |
| | PLOT DATE = | DATE = 12/07/2018 | REVISED - | SHEET NO. S-1 OF S-27 SHEETS | | ILLINOIS FED. AID PROJECT | | | | |

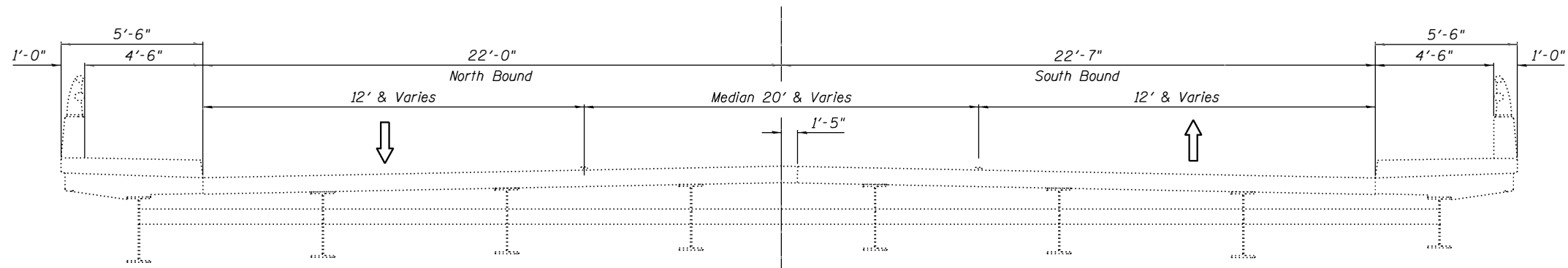
GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Prior to pouring the new concrete, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
3. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
4. 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.
5. Protective Coat shall be applied to the designated areas of the sidewalk and parapets.
6. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
7. Existing reinforcement bars are to be cleaned 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 shall be included with Concrete Removal.
8. Removal and disposal of the existing expansion joints will not be paid separately, but shall be included with the cost of Concrete Removal.
9. Repair areas are estimated. The Engineer shall determine actual repair locations and record them on the As-built plans.
10. Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

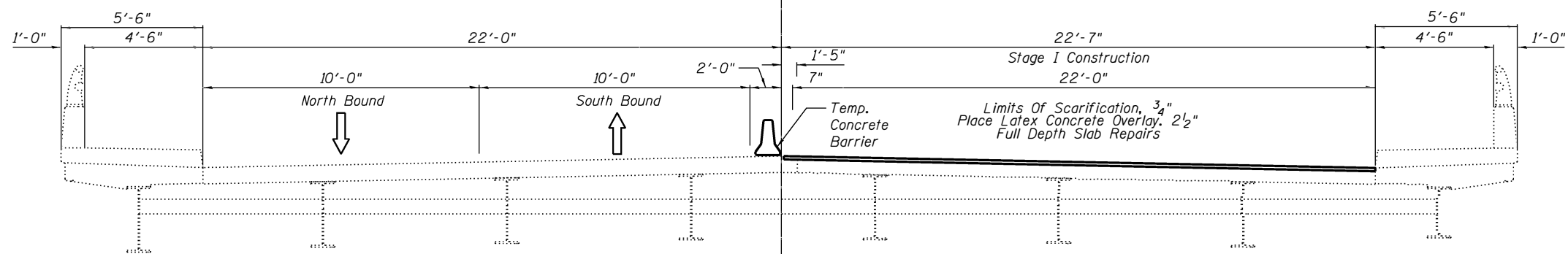
TOTAL BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Protective Coat | Sq. Yd. | 10 |
| Concrete Removal | Cu. Yd. | 25 |
| Protective Shield | Sq. Yd. | 1135 |
| Concrete Superstructure | Cu. Yd. | 25 |
| Bridge Deck Grooving | Sq. Yd. | 3478 |
| Reinforcement Bars, Epoxy Coated | Pound | 4415 |
| Bar Splicers | Each | 60 |
| Preformed Joint Strip Seal | Foot | 240 |
| Bridge Deck Concrete Sealer | Sq. Ft. | 31,422 |
| Cleaning Bridge Scuppers and Downspouts | Each | 4 |
| Clean and Reseal Relief Joint | Foot | 120 |
| Bridge Deck Latex Concrete Overlay 2 1/2" | Sq. Yd. | 3478 |
| Bridge Deck Scarification 3/4" | Sq. Yd. | 3478 |
| Structural Repair of Concrete (Depth Equal to or less than 5 inches) | Sq. Ft. | 959 |
| Structural Repair of Concrete (Depth Greater than 5 inches) | Sq. Ft. | 56 |
| Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 2 |
| Temporary Shoring and Cribbing | Each | 18 |
| Pin and Link Plate Replacement | Each | 8 |
| | | |
| | | |
| | | |

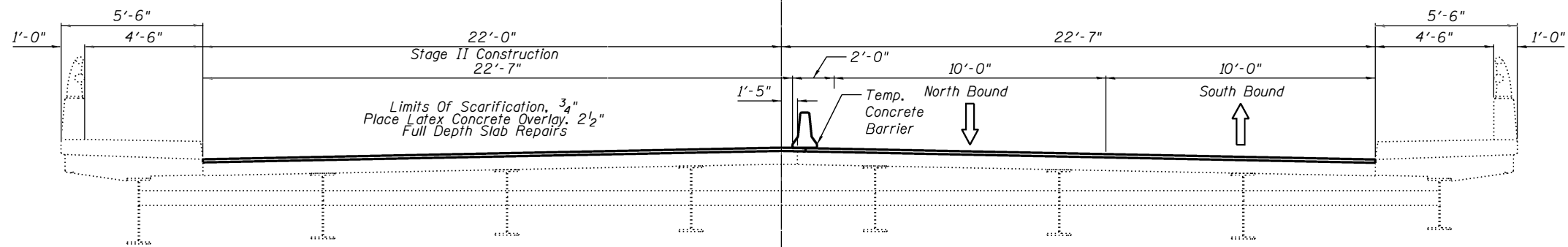
| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISED - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |



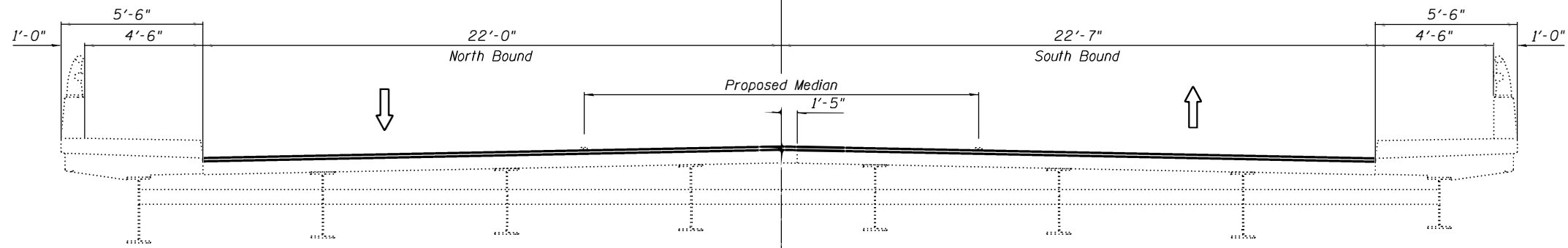
EXISTING - LOOKING SOUTH
(Perpendicular to \mathcal{C} of US RTE 14)



STAGE I PAVEMENT AND JOINT REPAIR - LOOKING SOUTH
(Perpendicular to \mathcal{C} of US RTE 14)



STAGE II PAVEMENT AND JOINT REPAIR - LOOKING SOUTH
(Perpendicular to \mathcal{C} of US RTE 14)



PROPOSED - LOOKING SOUTH
(Perpendicular to \mathcal{C} of US RTE 14)

AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

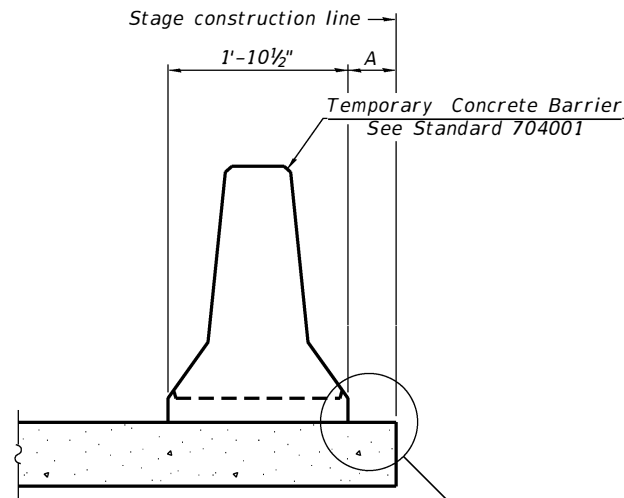
| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISED - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO.: 056-0007

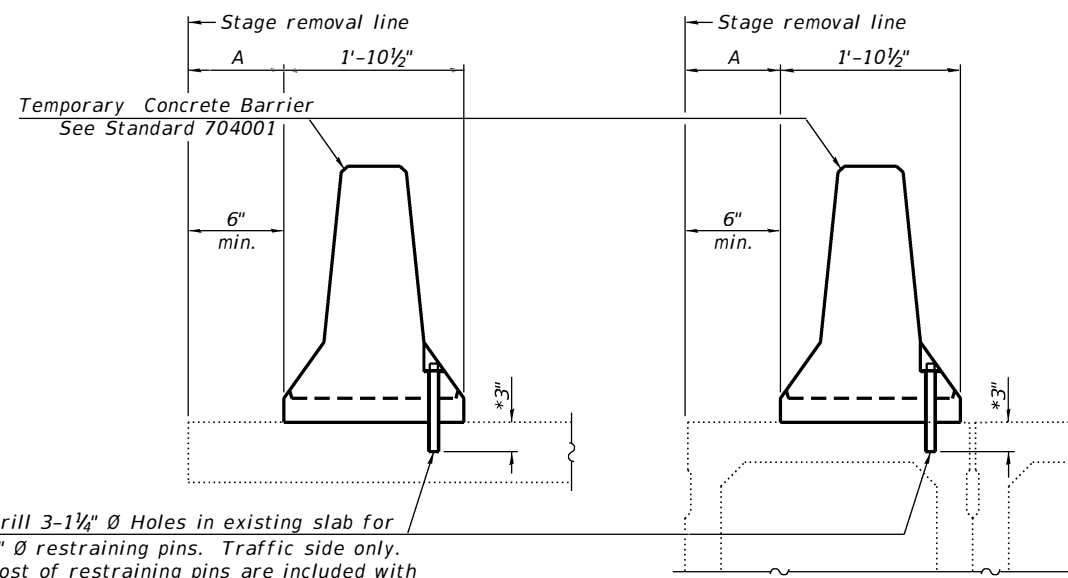
SHEET NO. S-3 OF S-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|---------|---------------------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 7 |
| CONTRACT NO. 62F35 | | | ILLINOIS FED. AID PROJECT | |



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

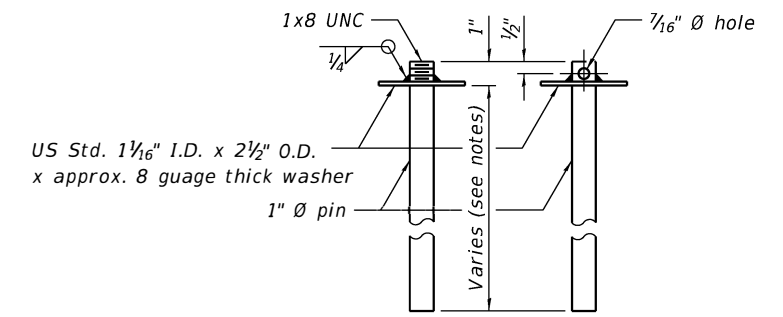


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

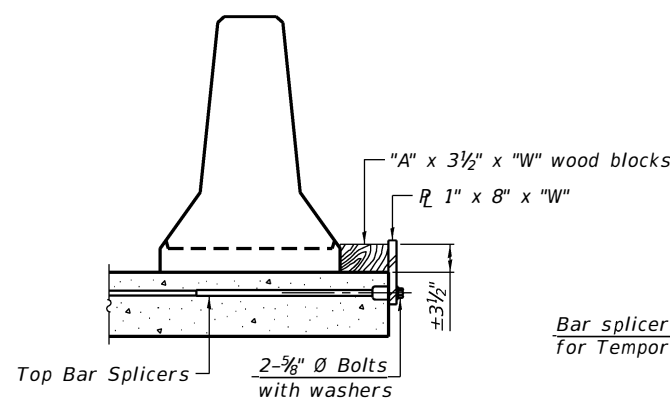
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM



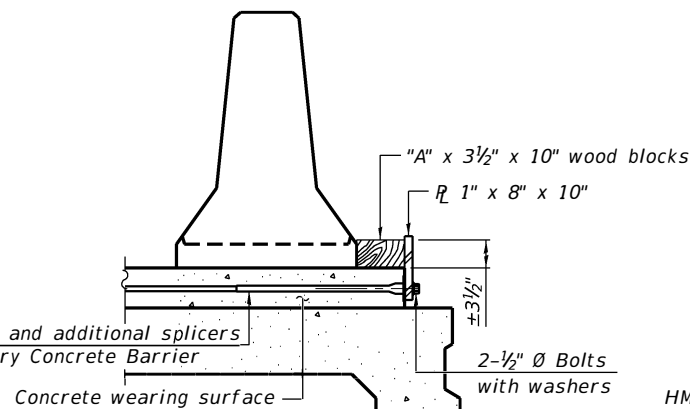
RESTRAINING PIN

SECTIONS THRU SLAB OR DECK BEAM

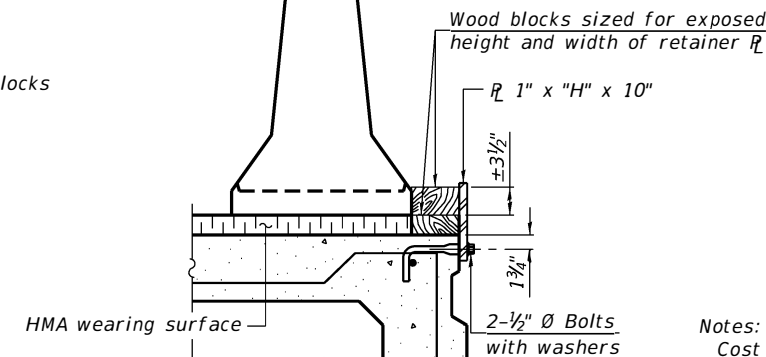


DETAIL I

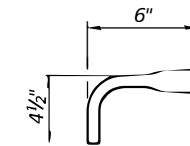
Bar splicers and additional splicers for Temporary Concrete Barrier



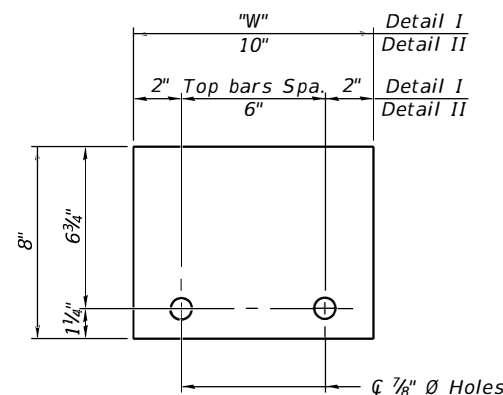
DETAIL II



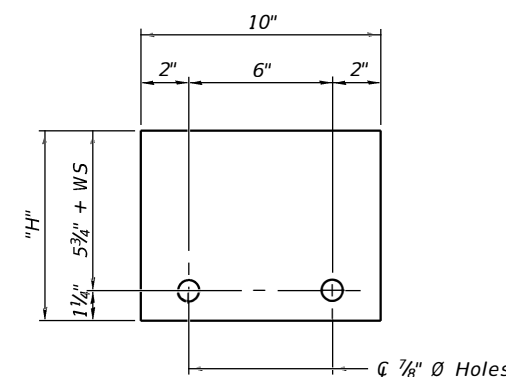
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:

- Cost of retainer assembly is included with Temporary Concrete Barrier.
- A retainer assembly shall be located at the approximate center of each temporary concrete barrier.
- The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
- When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.
- For deck beam applications the minimum required 'A' distance is 6' to accommodate the shear key clamping device.

- Detail I - Installation for a new bridge deck or bridge slab.
- Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27 8-11-2017

AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

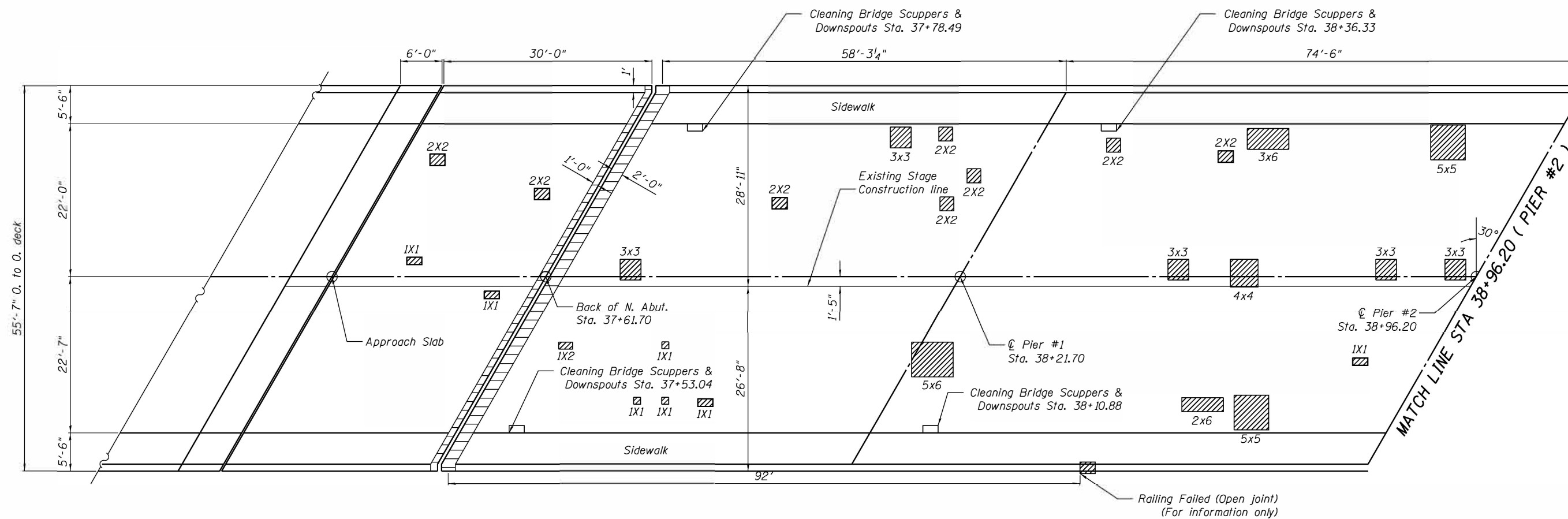
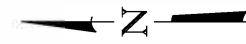
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|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO.: 056-0007

SHEET NO. S-4 OF S-27 SHEETS

| | | | | |
|---------------------------|------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 8 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



PLAN

LEGEND:

- Deck Slab Repair (Partial), For Information Only
- Remove and replace Joints seal See sheet S-10

FILE NAME =
AES Services Inc.
 111 S. Wacker Drive, Suite 3910
 Chicago, IL 60606
 Ph: 312-23-6783

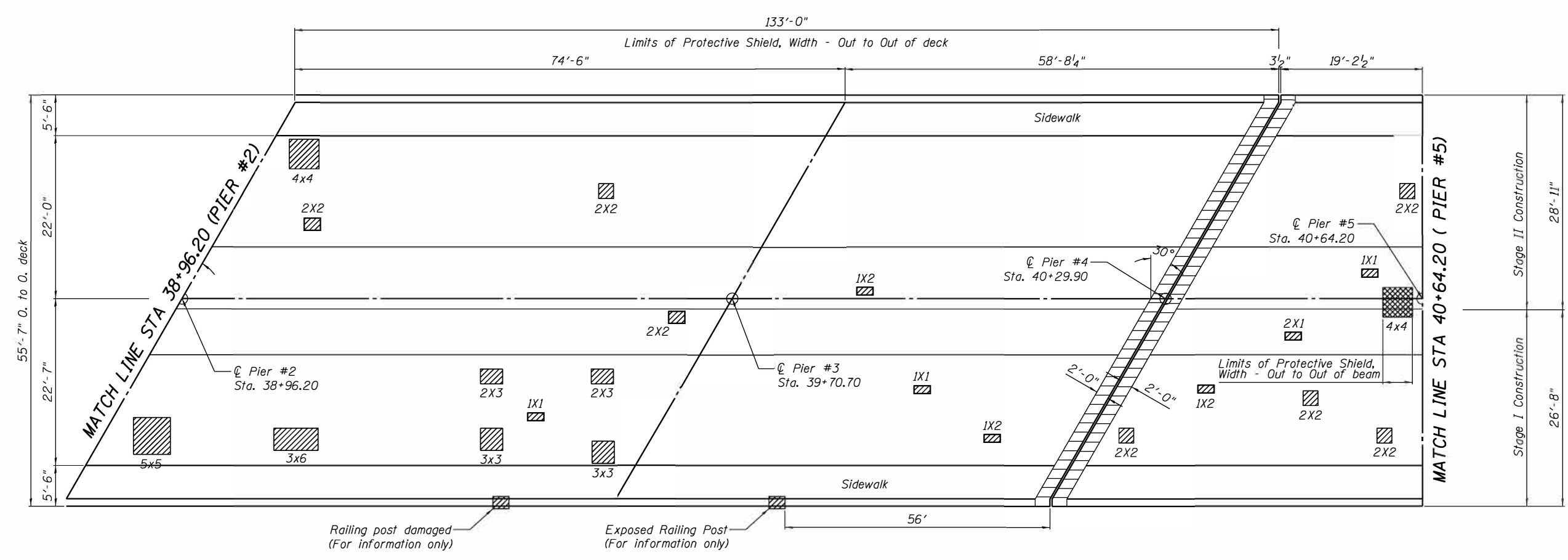
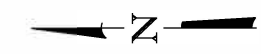
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| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK AND APPROACH PAVEMENT REPAIR - SHEET 1 OF 4
 STRUCTURE NO.: 056-0007**

SHEET NO. S-5 OF S-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|---------|--------------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 9 |
| | | | CONTRACT NO. 62F35 | |
| ILLINOIS FED. AID PROJECT | | | | |



PLAN

LEGEND:

- Deck Slab Repair (Partial), For Information Only
- Remove and replace joints Seal See sheet S-12
- Deck Slab Repair (Full Depth, Type II)

AES Services Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

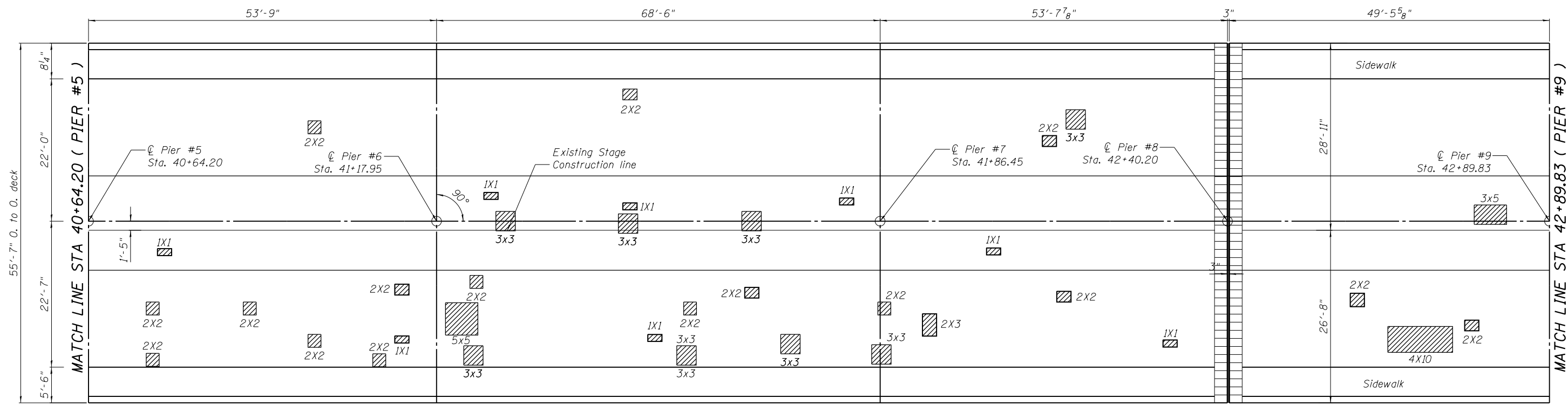
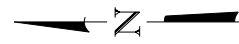
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|--------------|-------------------|-----------|
| USER NAME * | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISED - | |
| PLOT SCALE * | DRAWN - JS, AWM | REVISED - |
| PLOT DATE * | DATE - 12/07/2018 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK AND APPROACH PAVEMENT REPAIR - SHEET 2 OF 4
STRUCTURE NO.: 056-0007**

| | | | | |
|---------------------------|------------|---------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 10 |
| | | | CONTRACT NO. 62F35 | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET NO. S-6 OF S-27 SHEETS



PLAN

LEGEND:

- Deck Slab Repair (Partial),
For Information Only
- Remove and replace Joints seal
See sheet S-13

FILE NAME =
AES Services, Inc.
 111 S. Wacker Drive, Suite 3910
 Chicago, IL 60606
 Ph: 312-23-6783

| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

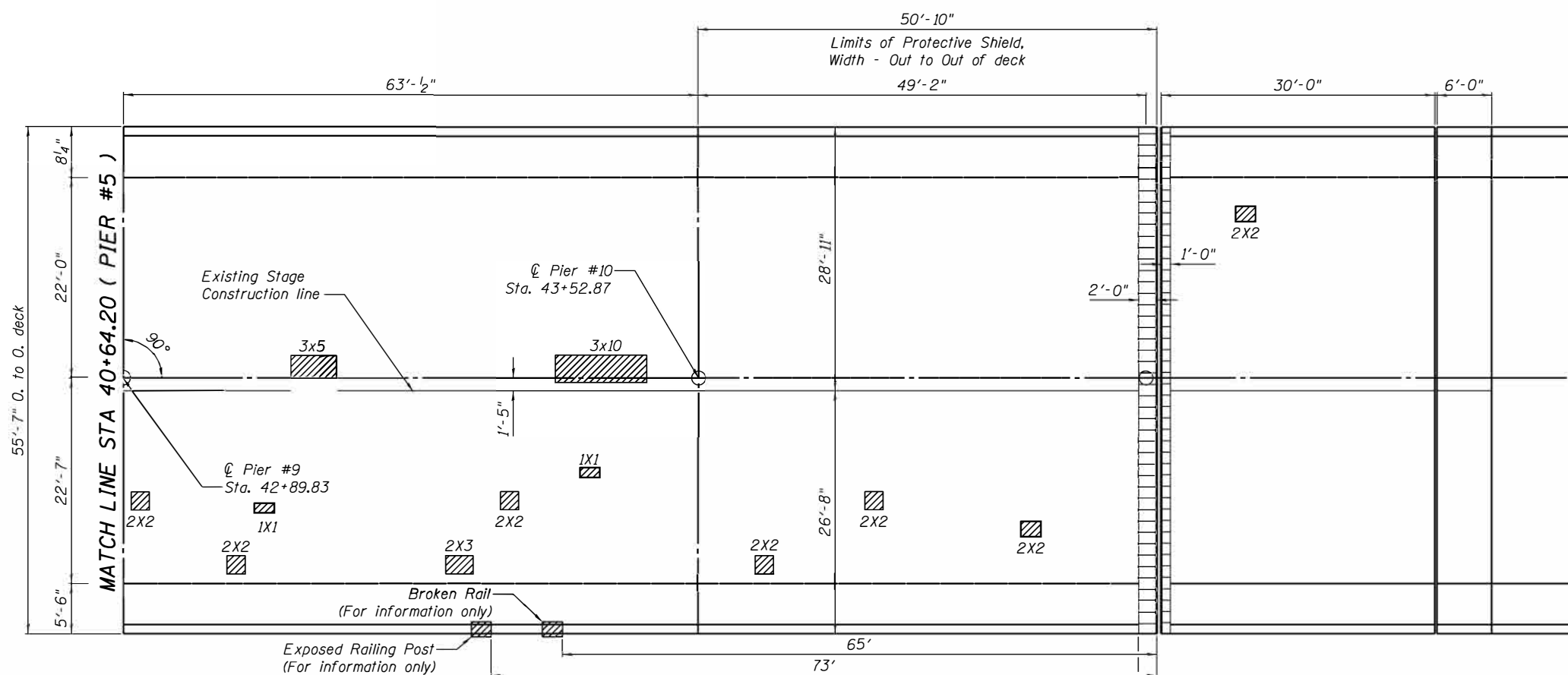
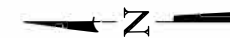
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK AND APPROACH PAVEMENT REPAIR - SHEET 3 OF 4
 STRUCTURE NO.: 056-0007**

SHEET NO. S-7 OF S-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 11 |
| CONTRACT NO. 62F35 | | | | |

ILLINOIS FED. AID PROJECT



LEGEND:

- Deck Slab Repair (Partial), For Information Only
- Remove and replace Joints seal See sheet S-11

AES Services Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

| | | |
|--------------|-------------------|-----------|
| USER NAME * | DESIGNED - AWM | REVISED - |
| CHECKED - MS | DRAWN - JS, AWM | REVISED - |
| PLOT SCALE = | DATE - 12/07/2018 | REVISED - |
| PLOT DATE * | | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

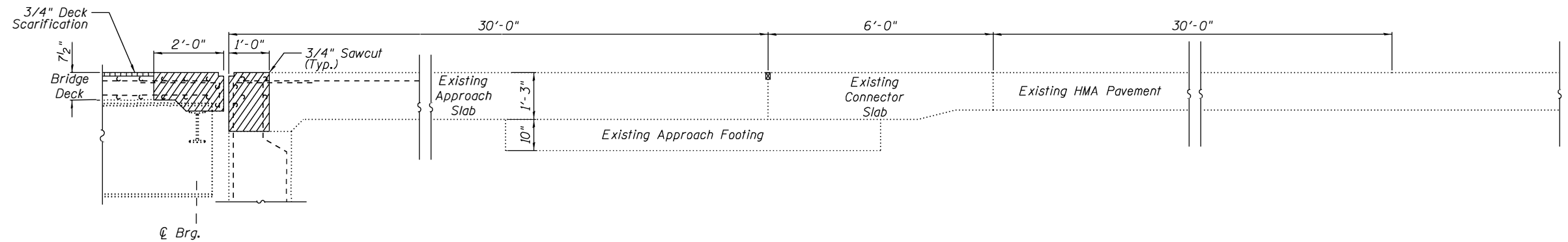
BRIDGE DECK AND APPROACH PAVEMENT REPAIR - SHEET 3 OF 3

BRIDGE DECK AND APPROACH PAVEMENT REPAIR - SHEET 4 OF 4
STRUCTURE NO.: 056-0007

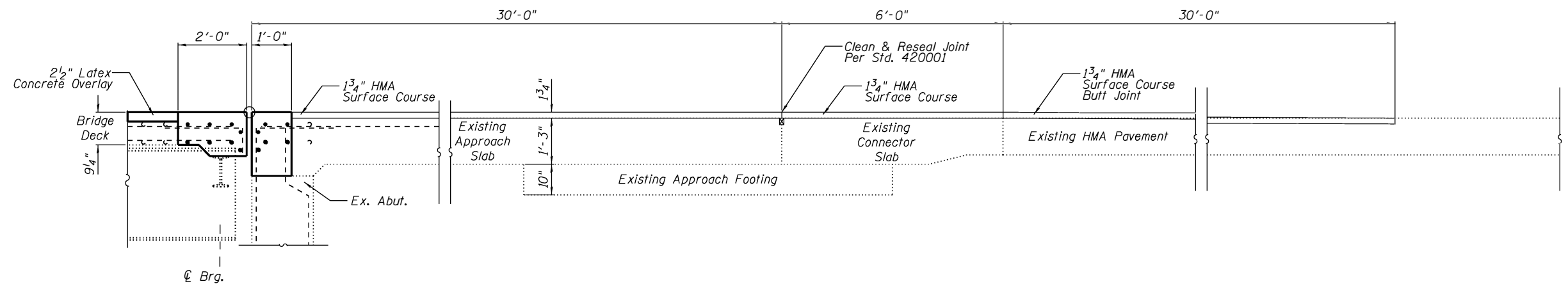
SHEET NO. S-8 OF S-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 12 |
| CONTRACT NO. 62F35 | | | | |

ILLINOIS FED. AID PROJECT



EXISTING APPROACH SLAB
Dimensions along C of US 14



PROPOSED APPROACH SLAB
Dimensions along C of US 14

FILE NAME =
AES AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

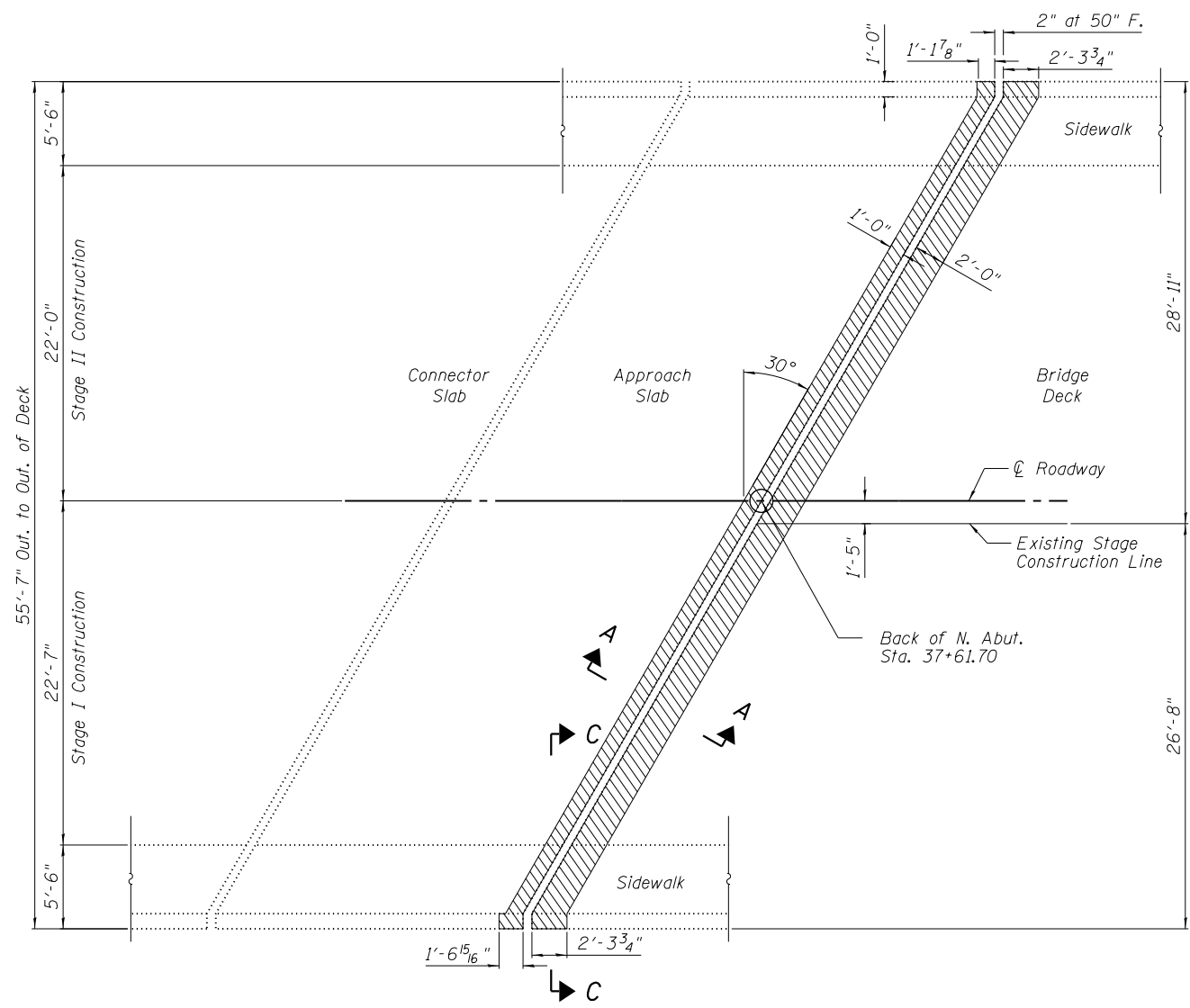
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|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB TRANSITION (NORTH & SOUTH)
STRUCTURE NO.: 056-0007

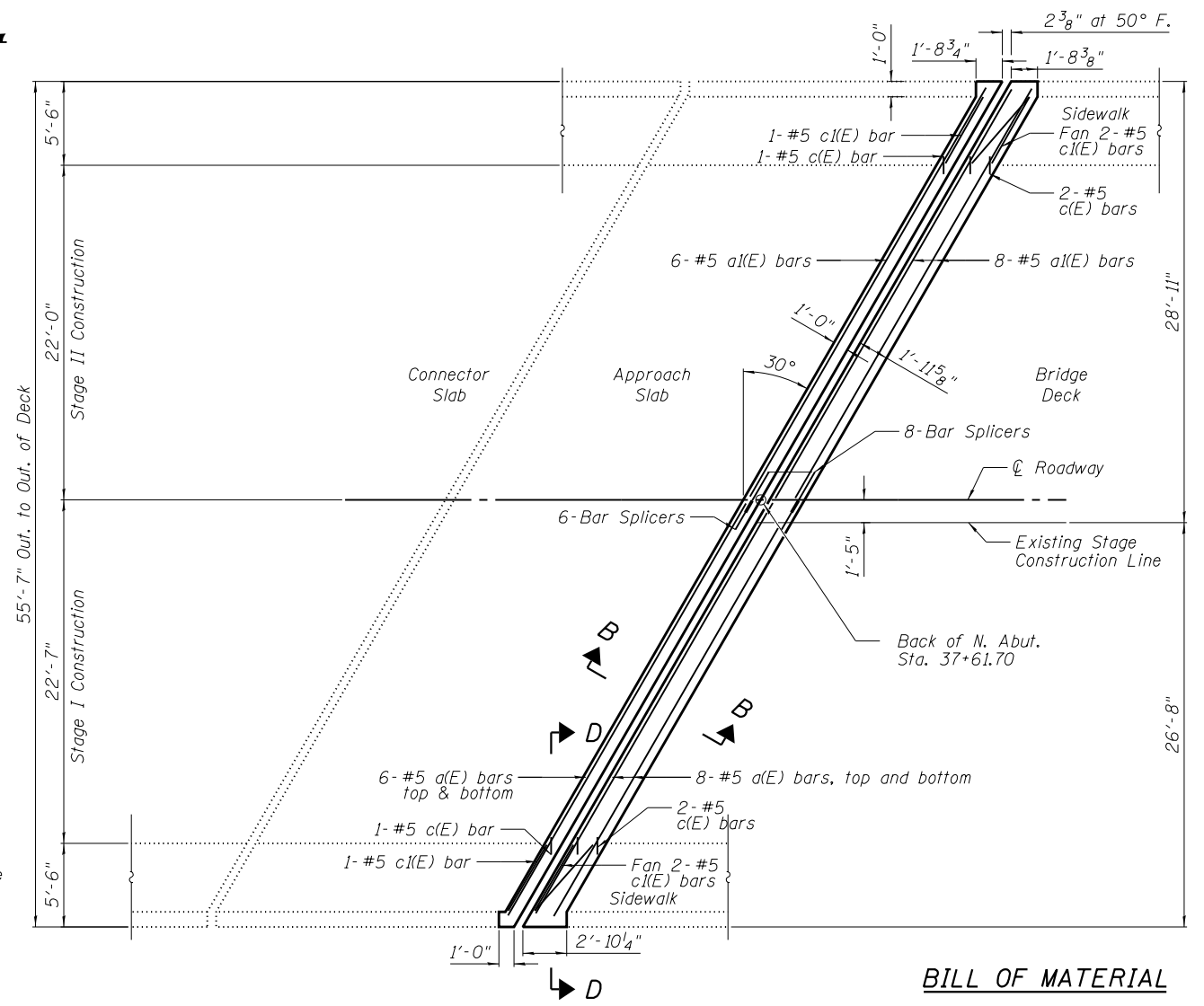
SHEET NO. S-9 OF S-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 13 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



CONCRETE REMOVAL PLAN
(North Abutment)

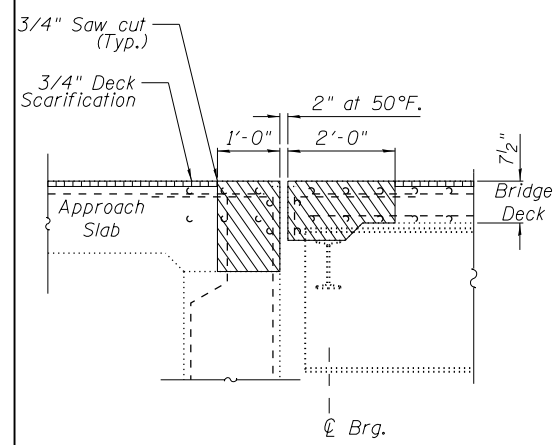
Concrete Removal
Concrete Superstructure



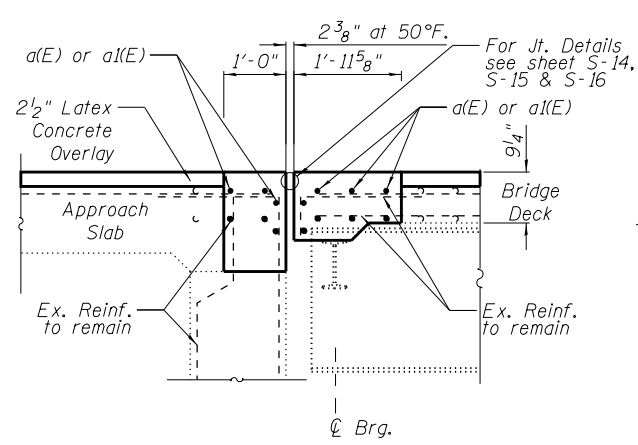
CONCRETE REPLACEMENT PLAN
(North Abutment)

BILL OF MATERIAL

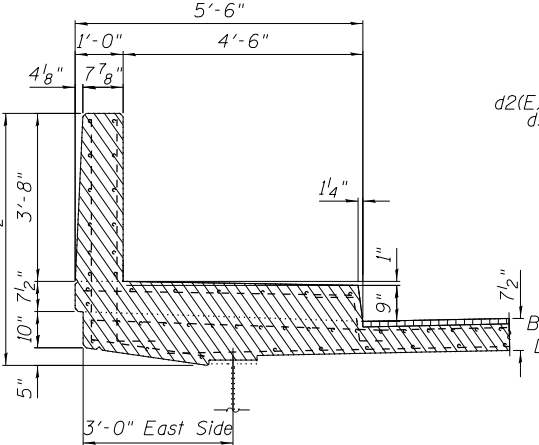
| Bar | No. | Size | Length | Shape |
|---------------------------|-----|------|---------|-------|
| a(E) | 14 | #5 | 32'-1" | — |
| a1(E) | 14 | #5 | 31'-5" | — |
| c(E) | 6 | #5 | 2'-5" | — |
| c1(E) | 6 | #5 | 6'-0" | — |
| d1(E) | 6 | #6 | 5'-8" | L |
| d2(E) | 3 | #4 | 6'-11" | L |
| d3(E) | 3 | #4 | 7'-6" | L |
| Protective Coat | | | Sq. Yd. | 3 |
| Concrete Removal | | | Cu. Yd. | 7.2 |
| Protective Shield | | | Sq. Yd. | 19 |
| Concrete Superstructure | | | Cu. Yd. | 7.2 |
| Reinf. Bars, Epoxy Coated | | | Pound | 1060 |
| Bar Splicers | | | Each | 14 |



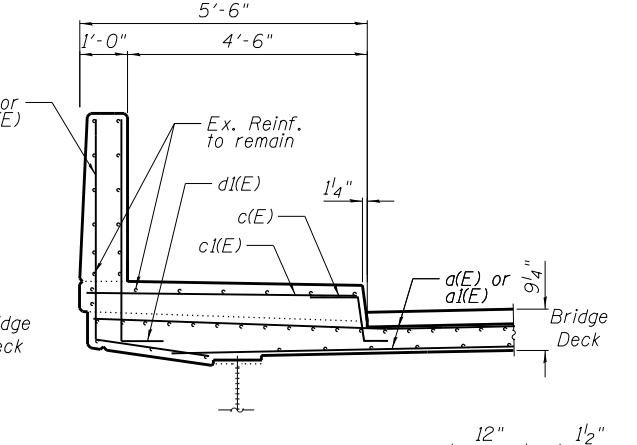
SECTION A-A
Dimensions at Rt. L's



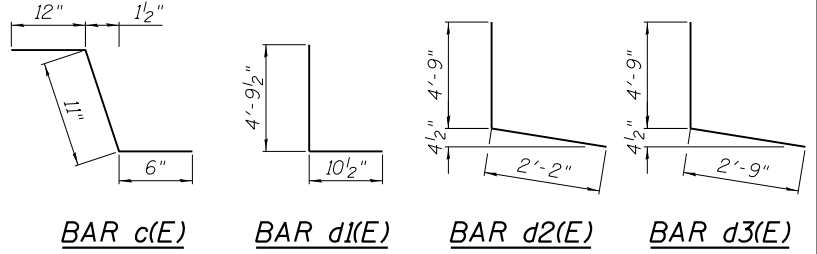
SECTION B-B
Dimensions at Rt. L's



SECTION C-C
Dimensions at Rt. L's



SECTION D-D
Dimensions at Rt. L's



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Ph: 312-23-6783

| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

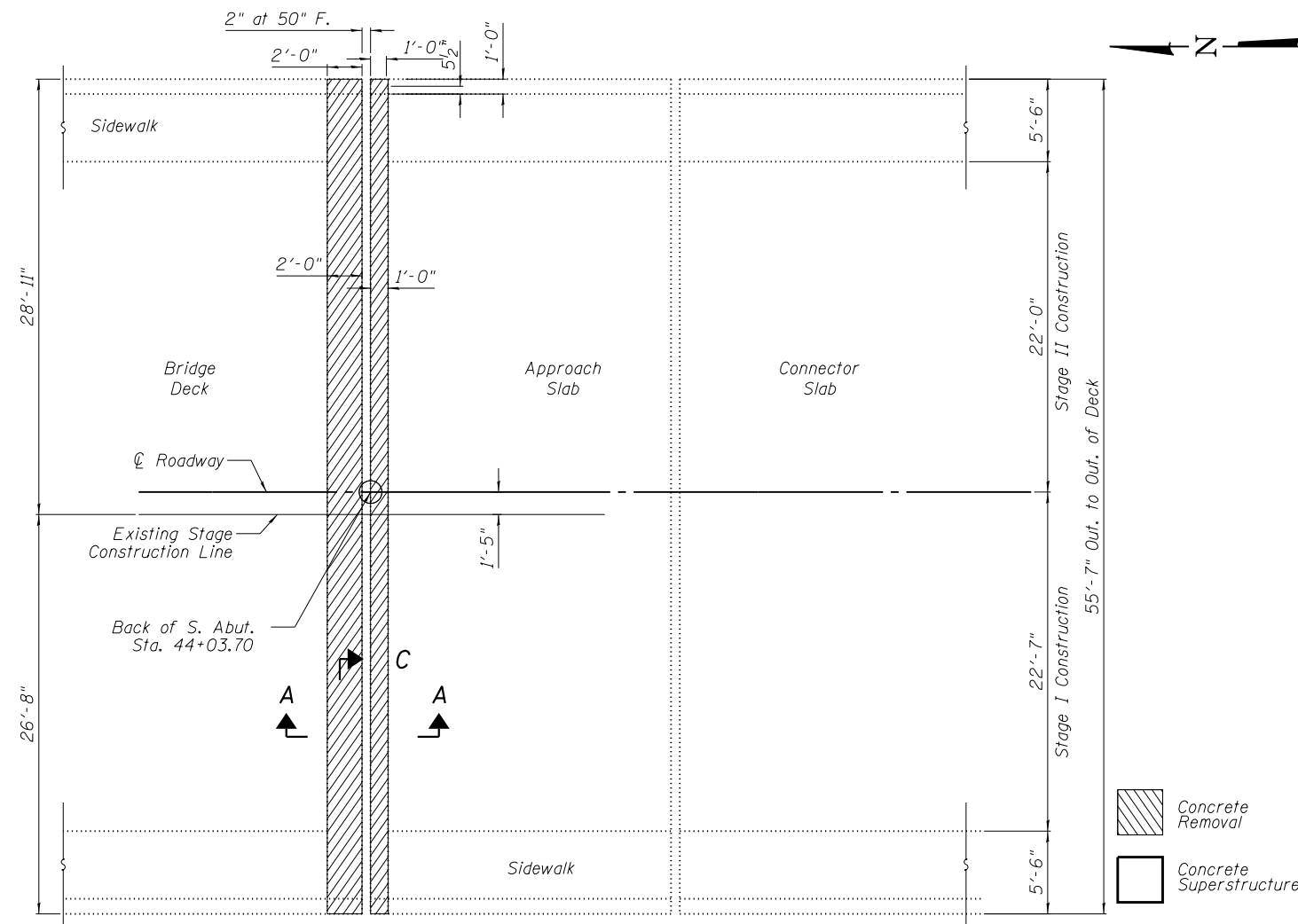
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB JOINT REPAIR (NORTH ABUTMENT)
STRUCTURE NO.: 056-0007

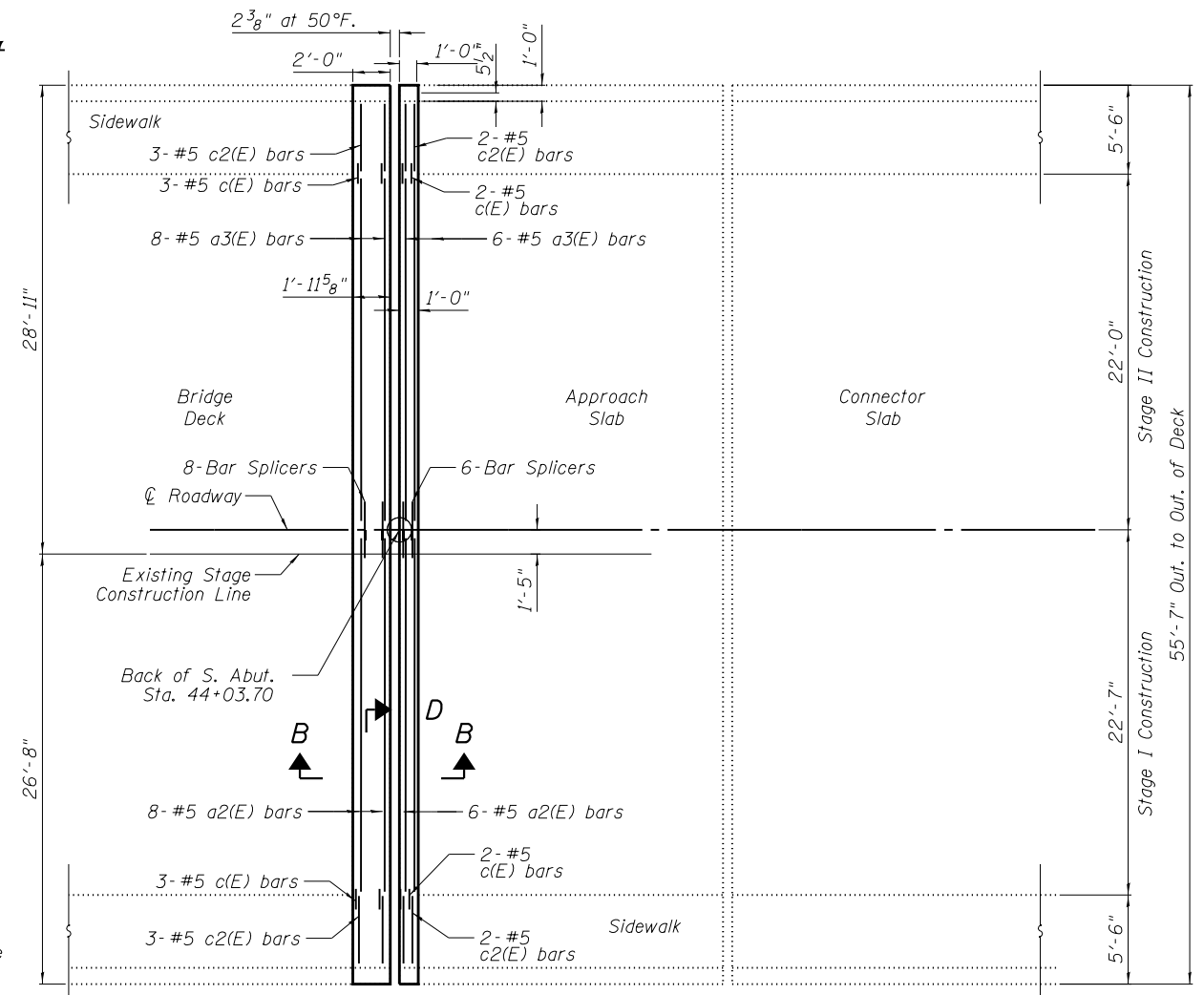
SHEET NO. 5-10 OF 5-27 SHEETS

| | | | | |
|-------------|------------|---------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 14 |
| | | | CONTRACT NO. 62F35 | |

ILLINOIS FED. AID PROJECT



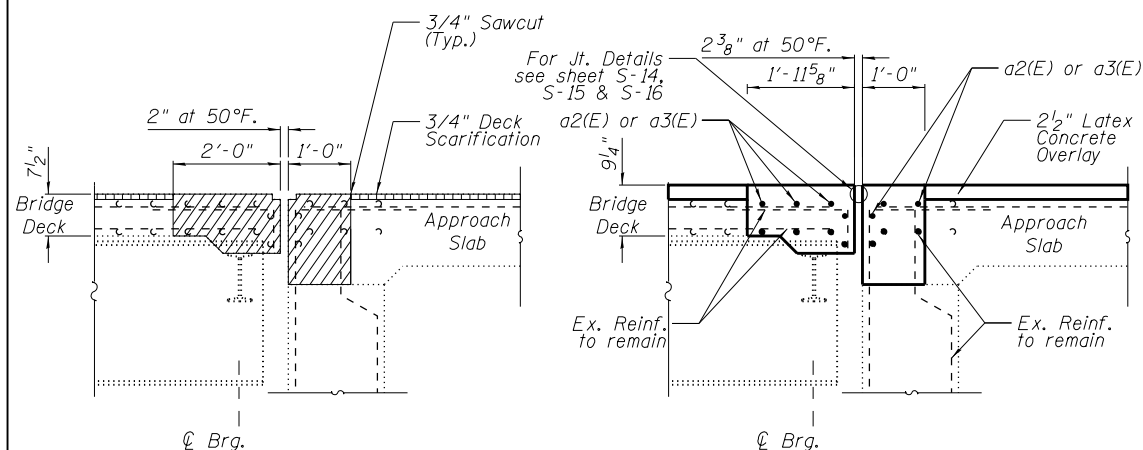
CONCRETE REMOVAL PLAN
(South Abutment)



CONCRETE REPLACEMENT PLAN
(South Abutment)

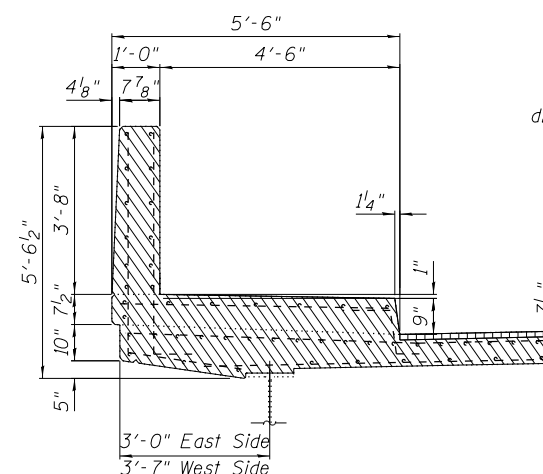
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---------------------------|-----|------|---------|-------|
| a2(E) | 14 | #5 | 27'-9" | — |
| a3(E) | 14 | #5 | 27'-2" | — |
| c(E) | 10 | #5 | 2'-5" | — |
| c2(E) | 10 | #5 | 5'-2" | — |
| d1(E) | 10 | #6 | 5'-8" | L |
| d2(E) | 5 | #4 | 6'-11" | L |
| d3(E) | 5 | #4 | 7'-6" | L |
| Protective Coat | | | Sq. Yd. | 3 |
| Concrete Removal | | | Cu. Yd. | 6.4 |
| Protective Shield | | | Sq. Yd. | 19 |
| Concrete Superstructure | | | Cu. Yd. | 6.4 |
| Reinf. Bars, Epoxy Coated | | | Pound | 1014 |
| Bar Splicers | | | Each | 14 |

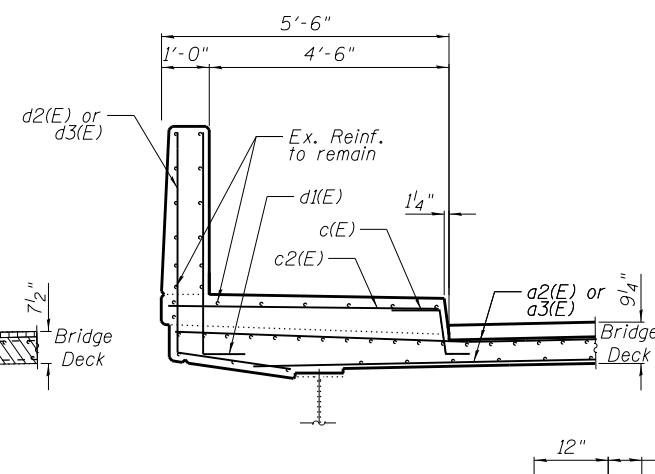


SECTION A-A
Dimensions at Rt. L's

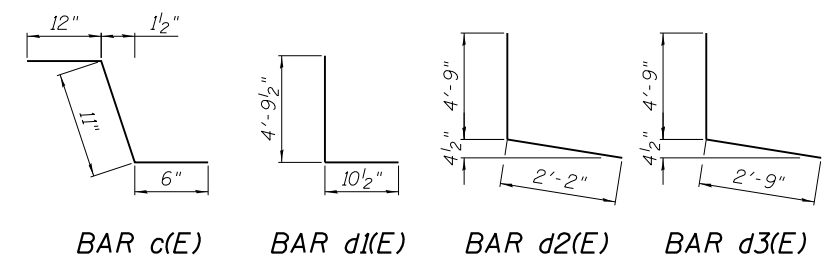
SECTION B-B
Dimensions at Rt. L's

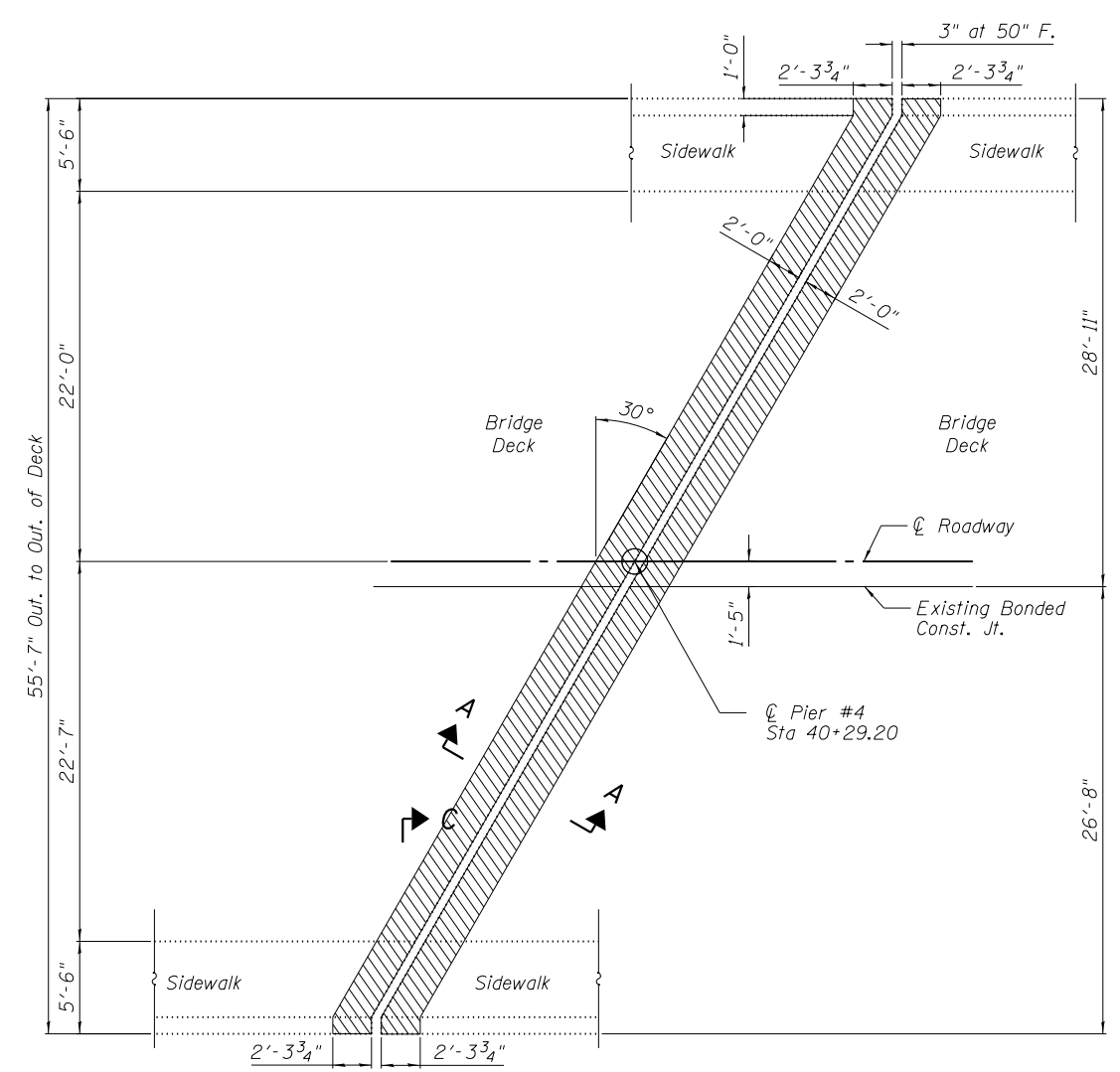
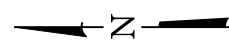


SECTION C-C
Dimensions at Rt. L's

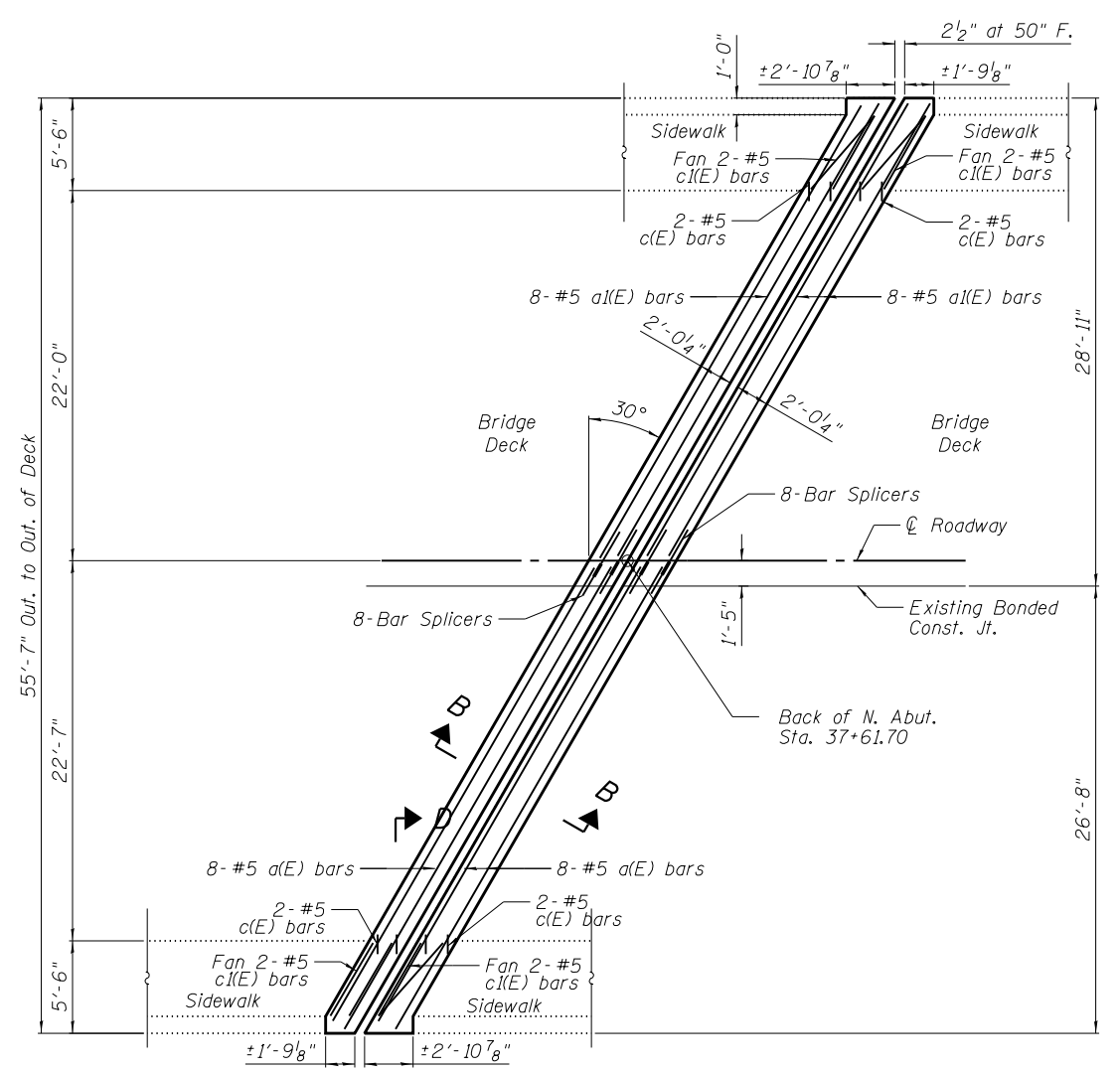


SECTION D-D
Dimensions at Rt. L's





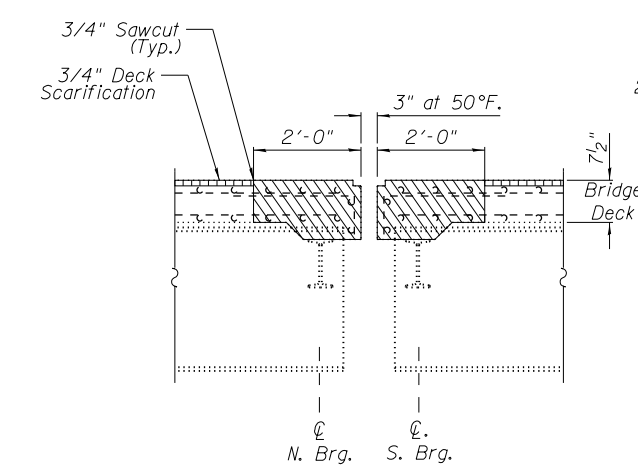
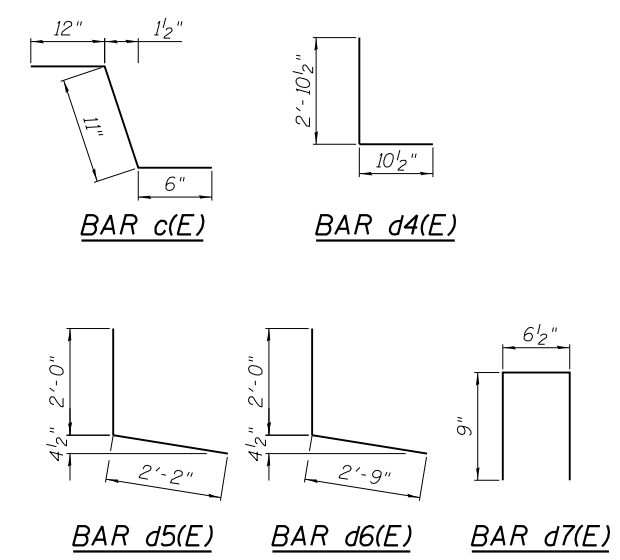
CONCRETE REMOVAL PLAN
(Pier 4)



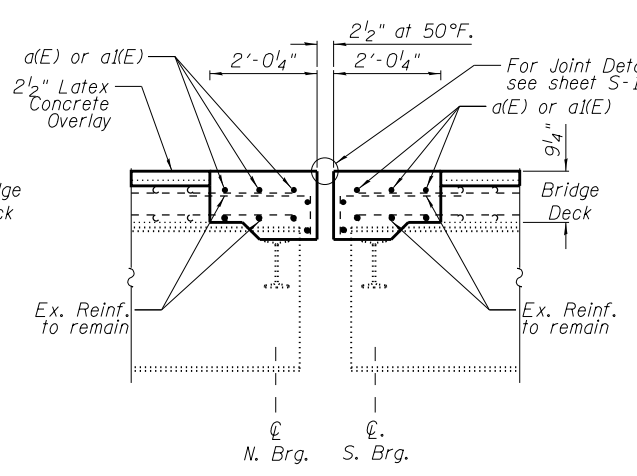
CONCRETE REPLACEMENT PLAN
(Pier 4)

BILL OF MATERIAL

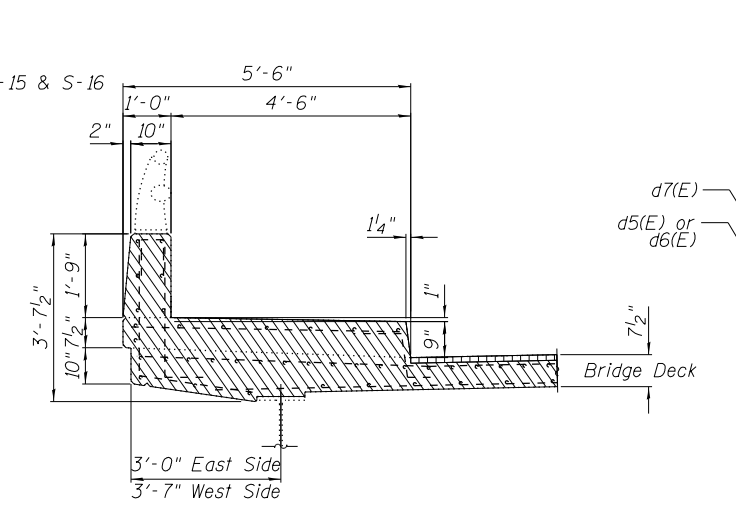
| Bar | No. | Size | Length | Shape |
|---------------------------|-----|---------|-----------|-------|
| a(E) | 16 | #5 | 32'-1" | — |
| a(I(E)) | 16 | #5 | 31'-5" | — |
| c(E) | 8 | #5 | 2'-5" | ┌ |
| c(I(E)) | 8 | #5 | 6'-0" | — |
| d4(E) | 8 | #6 | 3'-9" | ┌ |
| d5(E) | 4 | #4 | 4'-2" | ┌ |
| d6(E) | 4 | #4 | 4'-9" | ┌ |
| d7(E) | 8 | #4 | 2'-0 1/2" | ┌ |
| Protective Coat | | Sq. Yd. | 2 | |
| Concrete Removal | | Cu. Yd. | 6 | |
| Protective Shield | | Sq. Yd. | 25 | |
| Concrete Superstructure | | Cu. Yd. | 6 | |
| Reinf. Bars, Epoxy Coated | | Pound | 1210 | |
| Bar Splicers | | Each | 16 | |



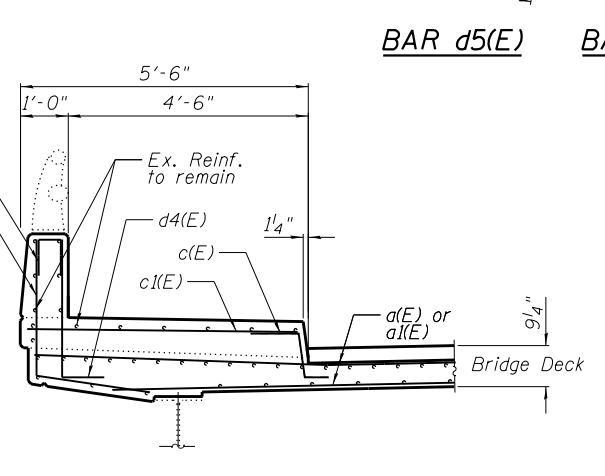
SECTION A-A
Dimensions at Rt. L's



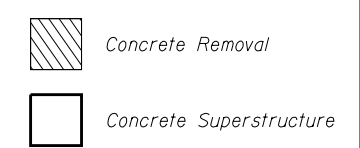
SECTION B-B
Dimensions at Rt. L's



SECTION C-C
Dimensions at Rt. L's



SECTION D-D
Dimensions at Rt. L's



AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

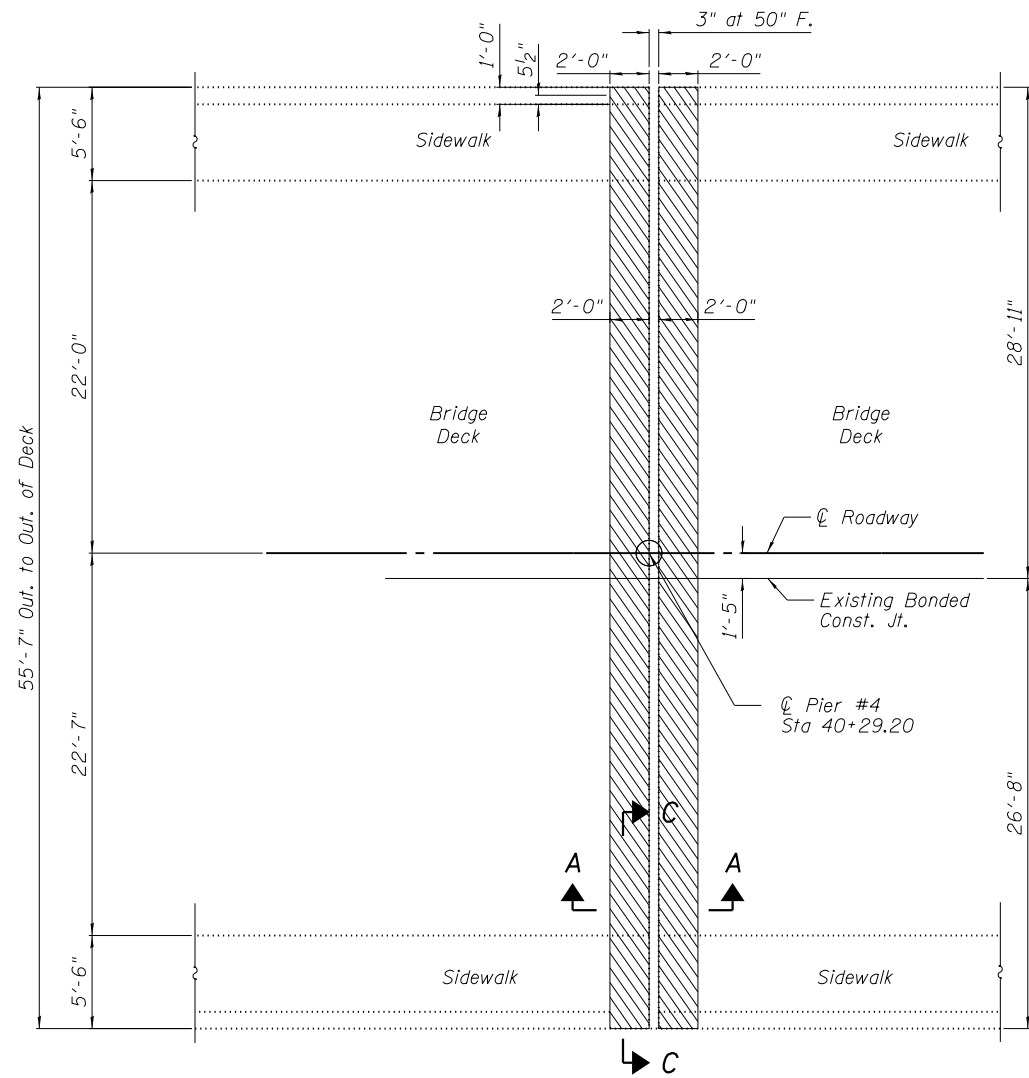
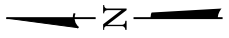
| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

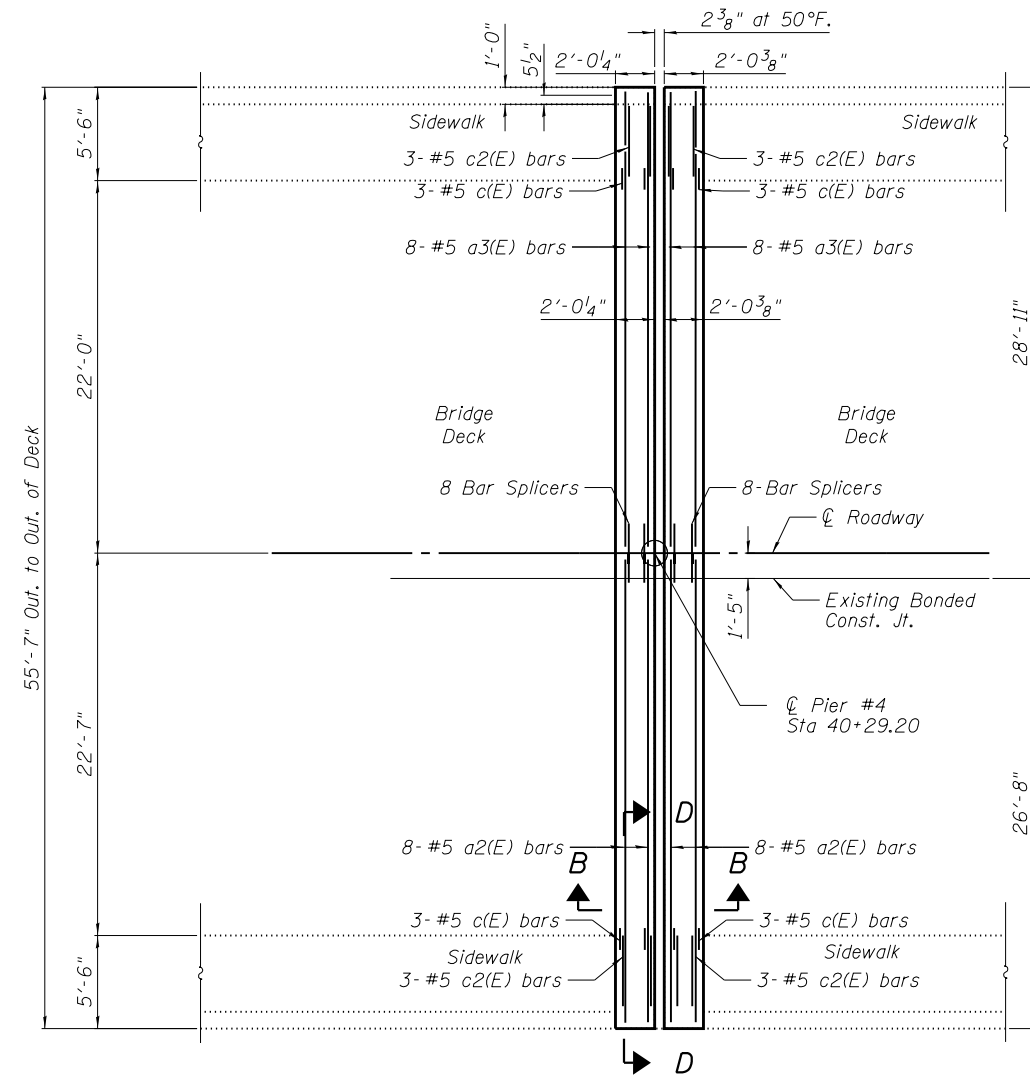
BRIDGE JOINT REPAIR DETAILS PIER 4
STRUCTURE NO.: 056-0007

SHEET NO. S-12 OF S-27 SHEETS

| | | | | |
|--------------------|------------|---------|---------------------------|-----------|
| F.A.P. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 16 |
| CONTRACT NO. 62F35 | | | ILLINOIS FED. AID PROJECT | |



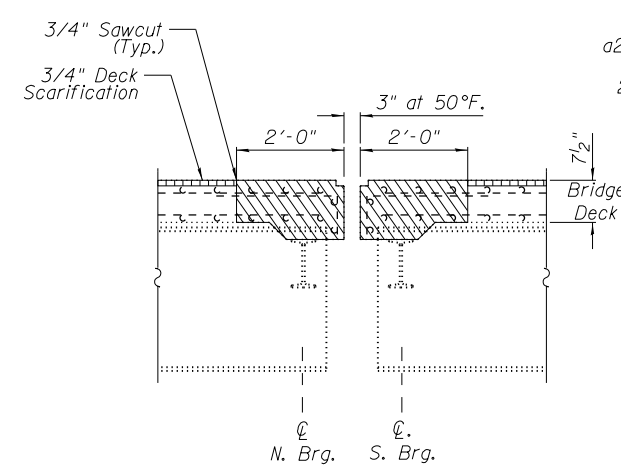
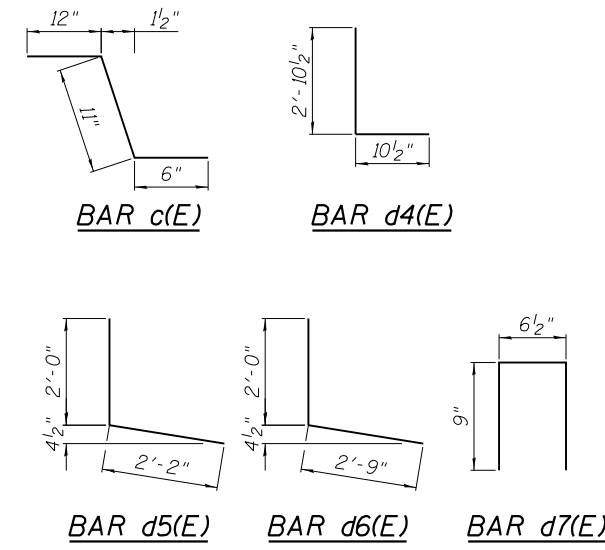
CONCRETE REMOVAL PLAN
(Pier 8)



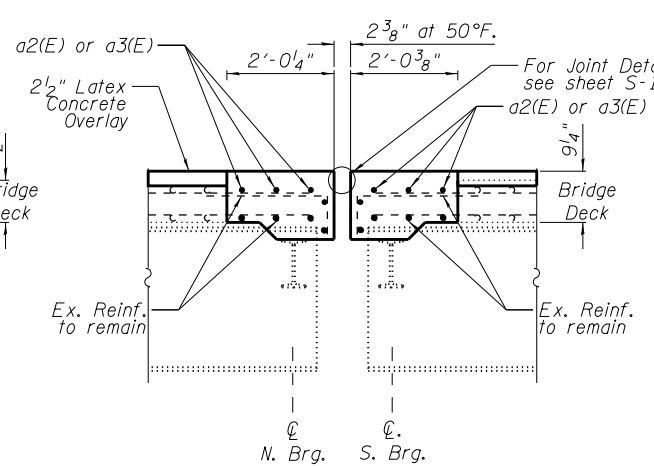
CONCRETE REPLACEMENT PLAN
(Pier 8)

BILL OF MATERIAL

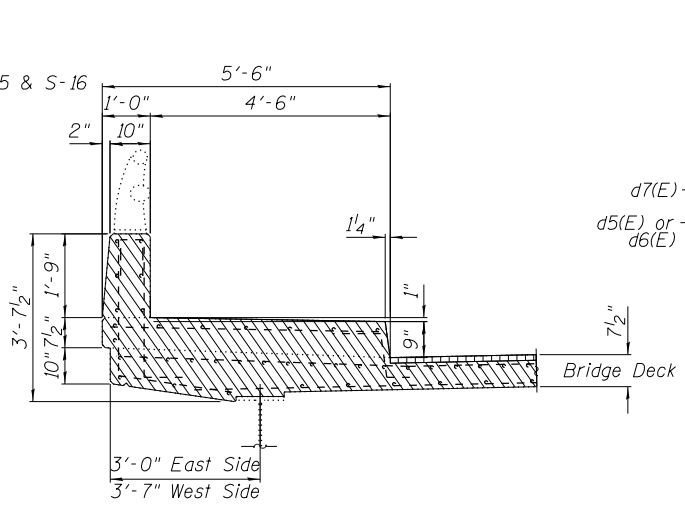
| Bar | No. | Size | Length | Shape |
|---------------------------|-----|---------|-----------|-------|
| a2(E) | 16 | #5 | 27'-9" | — |
| a3(E) | 16 | #5 | 27'-2" | — |
| c(E) | 12 | #5 | 2'-5" | ┌ |
| c2(E) | 12 | #5 | 5'-2" | — |
| d4(E) | 12 | #6 | 3'-9" | ┌ |
| d5(E) | 6 | #4 | 4'-2" | ┌ |
| d6(E) | 6 | #4 | 4'-9" | ┌ |
| d7(E) | 12 | #4 | 2'-0 1/2" | ┌ |
| Protective Coat | | Sq. Yd. | 2 | |
| Concrete Removal | | Cu. Yd. | 5.4 | |
| Protective Shield | | Sq. Yd. | 25 | |
| Concrete Superstructure | | Cu. Yd. | 5.4 | |
| Reinf. Bars, Epoxy Coated | | Pound | 1131 | |
| Bar Splicers | | Each | 16 | |



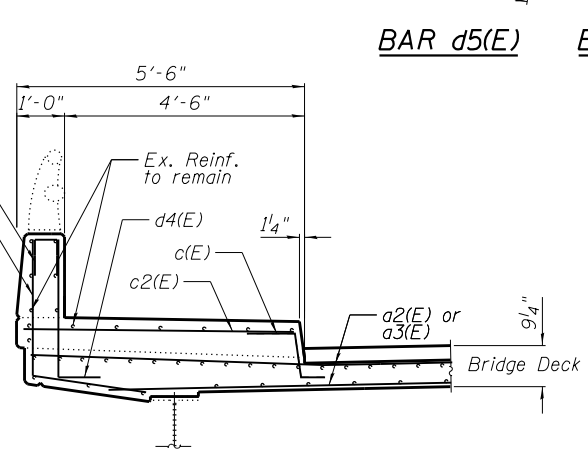
SECTION A-A
Dimensions at Rt. L's



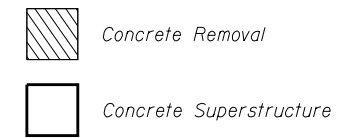
SECTION B-B
Dimensions at Rt. L's



SECTION C-C
Dimensions at Rt. L's



SECTION D-D
Dimensions at Rt. L's



AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

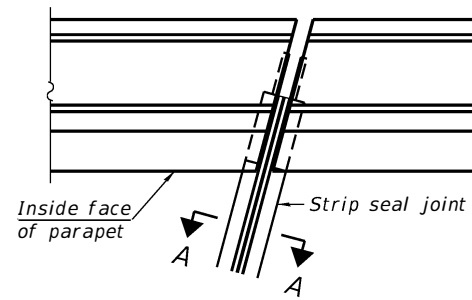
| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE JOINT REPAIR DETAILS PIER 8
STRUCTURE NO.: 056-0007

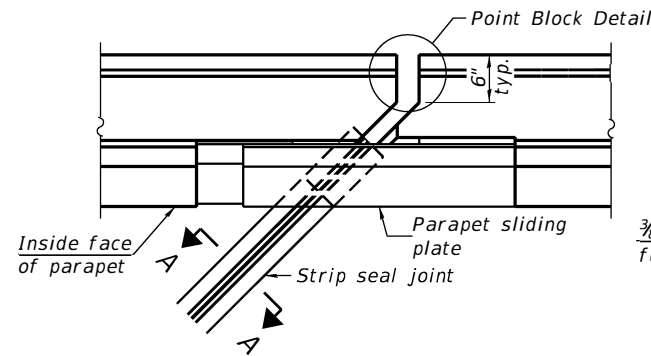
SHEET NO. S-13 OF S-27 SHEETS

| | | | | |
|--------------------|------------|---------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 17 |
| CONTRACT NO. 62F35 | | | ILLINOIS FED. AID PROJECT | |

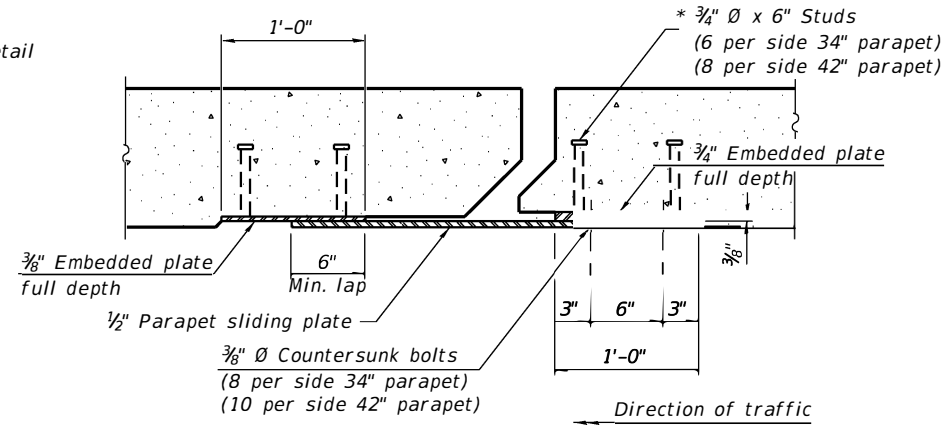


FOR SKEWS $\leq 30^\circ$

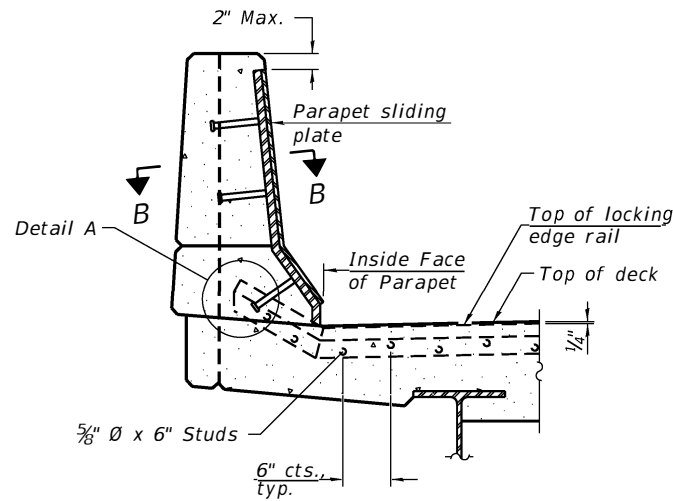
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

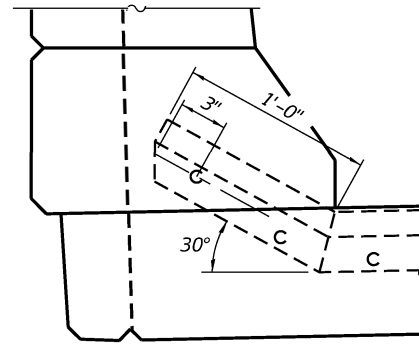


SECTION B-B

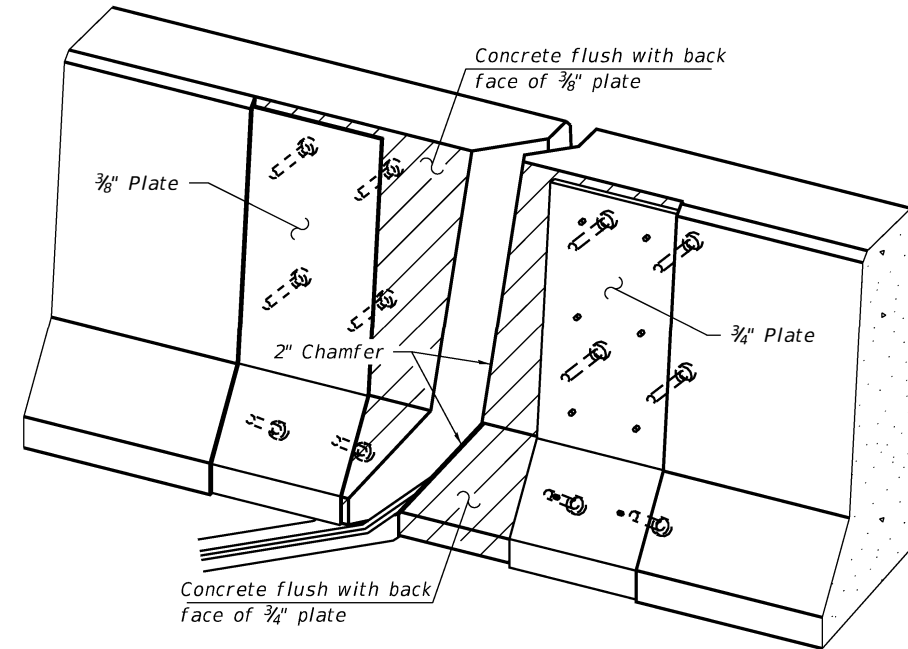


ELEVATION AT PARAPET

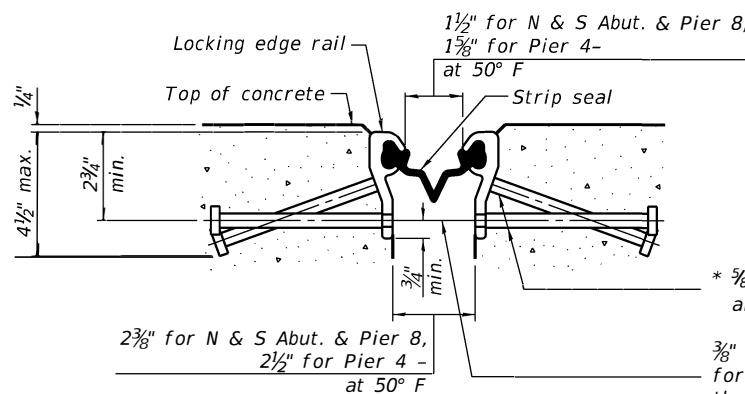
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)

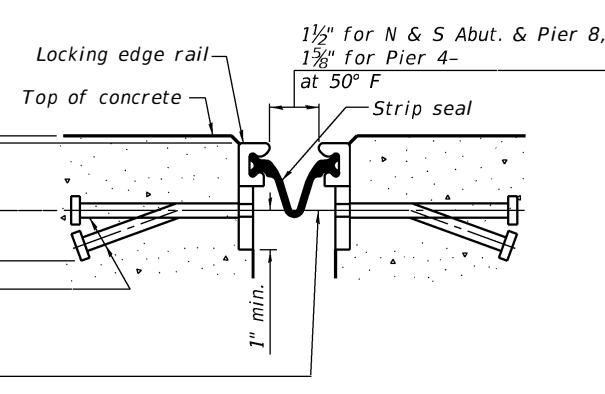


SHOWING ROLLED RAIL JOINT

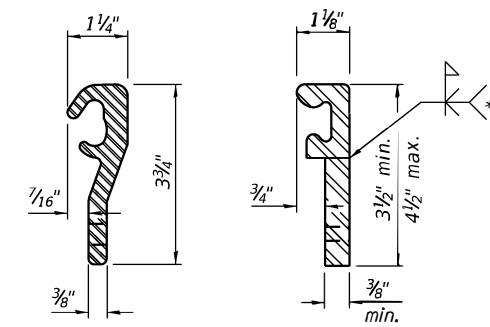
* $5/8"$ ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 $3/8"$ ϕ threaded rods in $7/16"$ ϕ holes at $\pm 4"-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

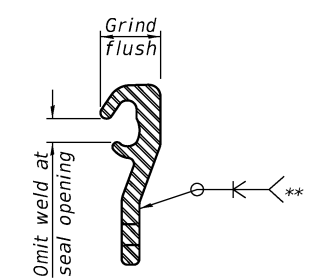


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 240 |

EJ-SS-S

8-11-17

(Sheet 1 of 3)

AES Services, Inc.
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Chicago, IL 60606
Ph: 312-23-6783

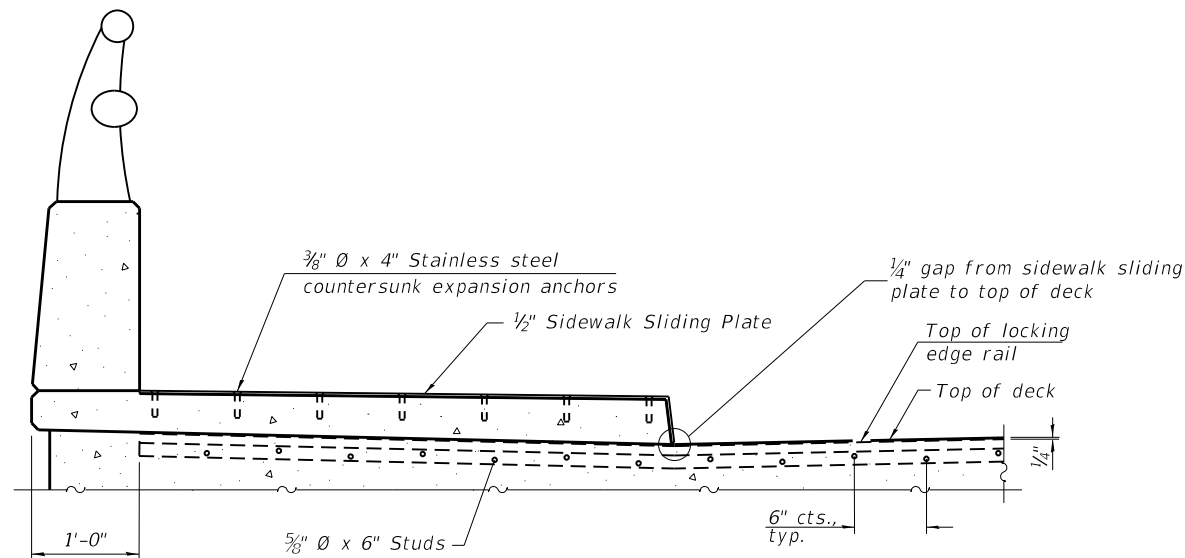
| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

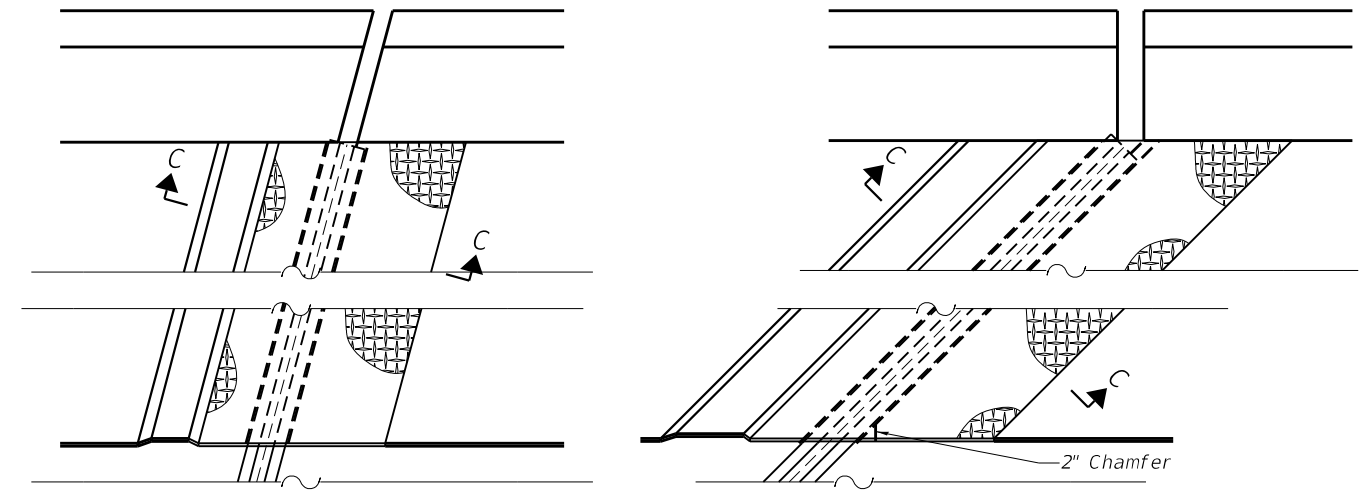
PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO.: 056-0007

SHEET NO. 5-14 OF 5-27 SHEETS

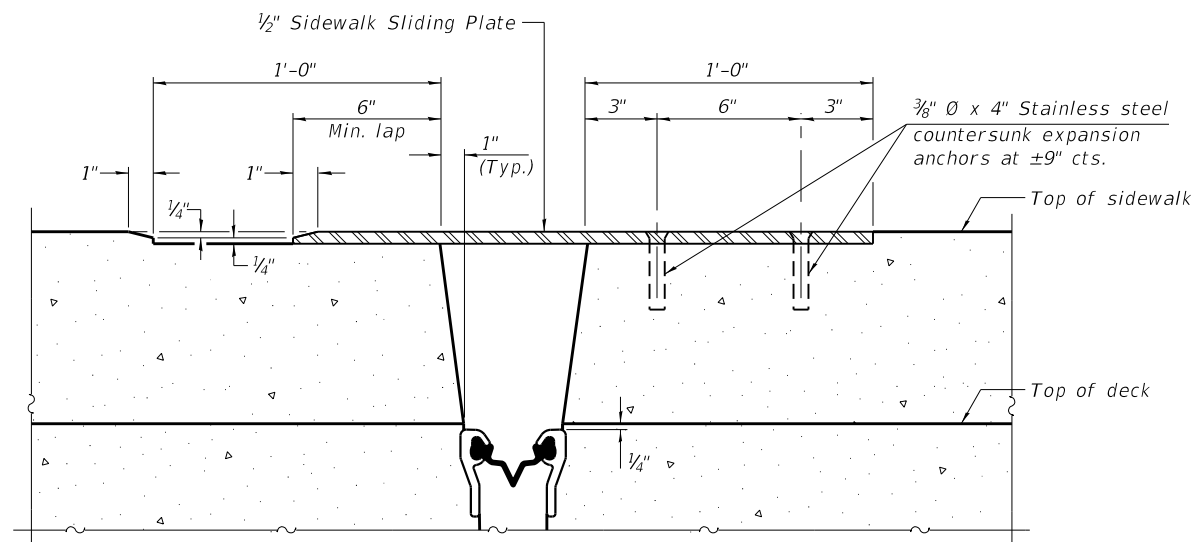
| | | | | |
|---------------------------|------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | MCHENRY | 42 | 18 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



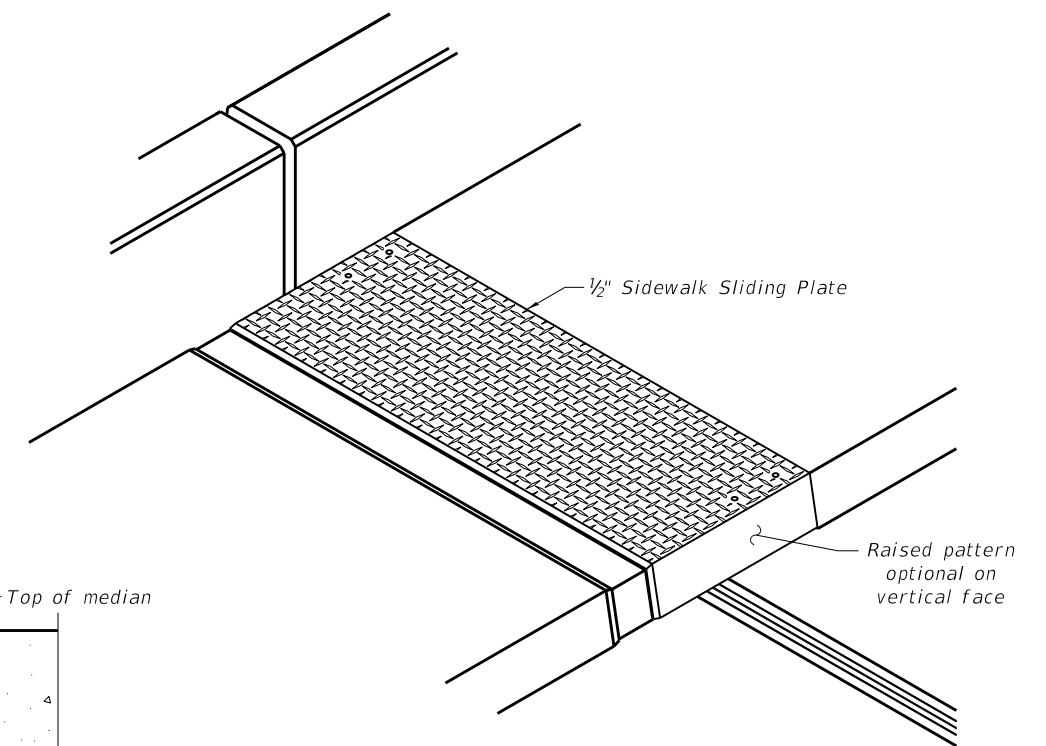
ELEVATION AT RAISED SIDEWALK



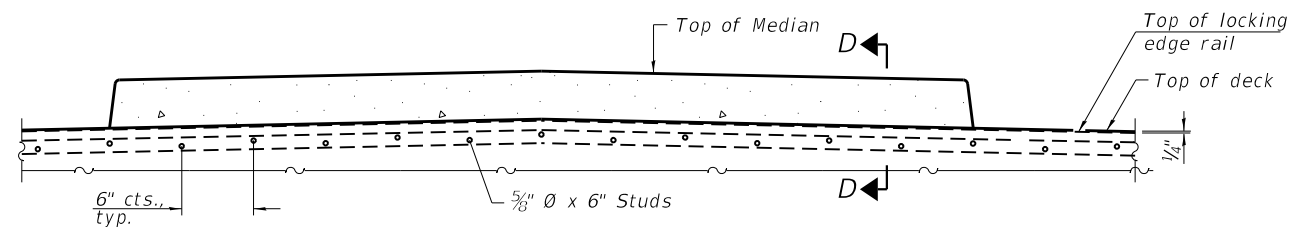
PLAN AT RAISED SIDEWALK



SECTION C-C

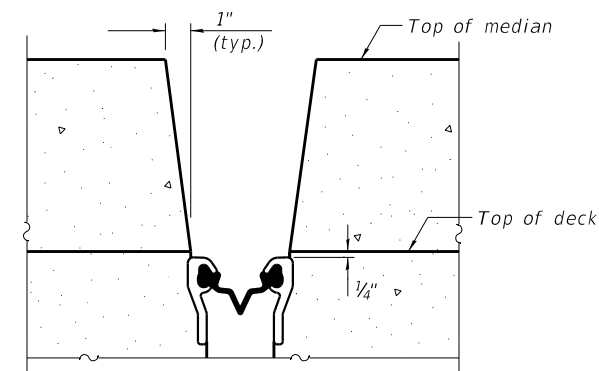


TRIMETRIC VIEW



ELEVATION AT MEDIAN

For skews $> 30^\circ$, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
(at Rt. L's)

EJ-SS-S

8-11-17

(Sheet 2 of 3)

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| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISED - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

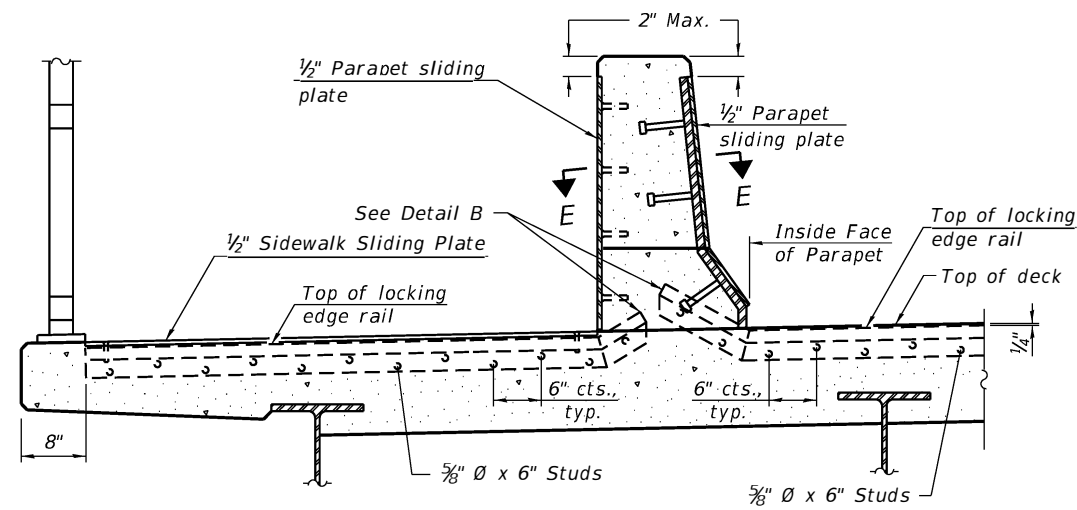
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO.: 056-0007

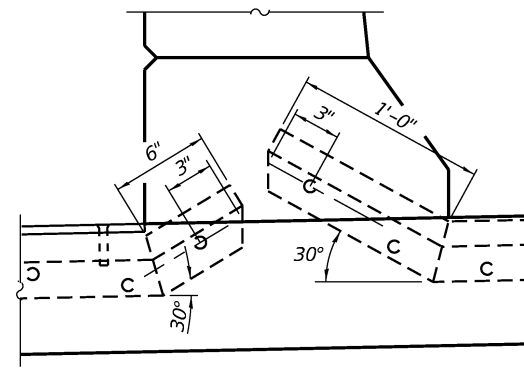
SHEET NO. S-15 OF S-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 19 |
| CONTRACT NO. 62F35 | | | | |

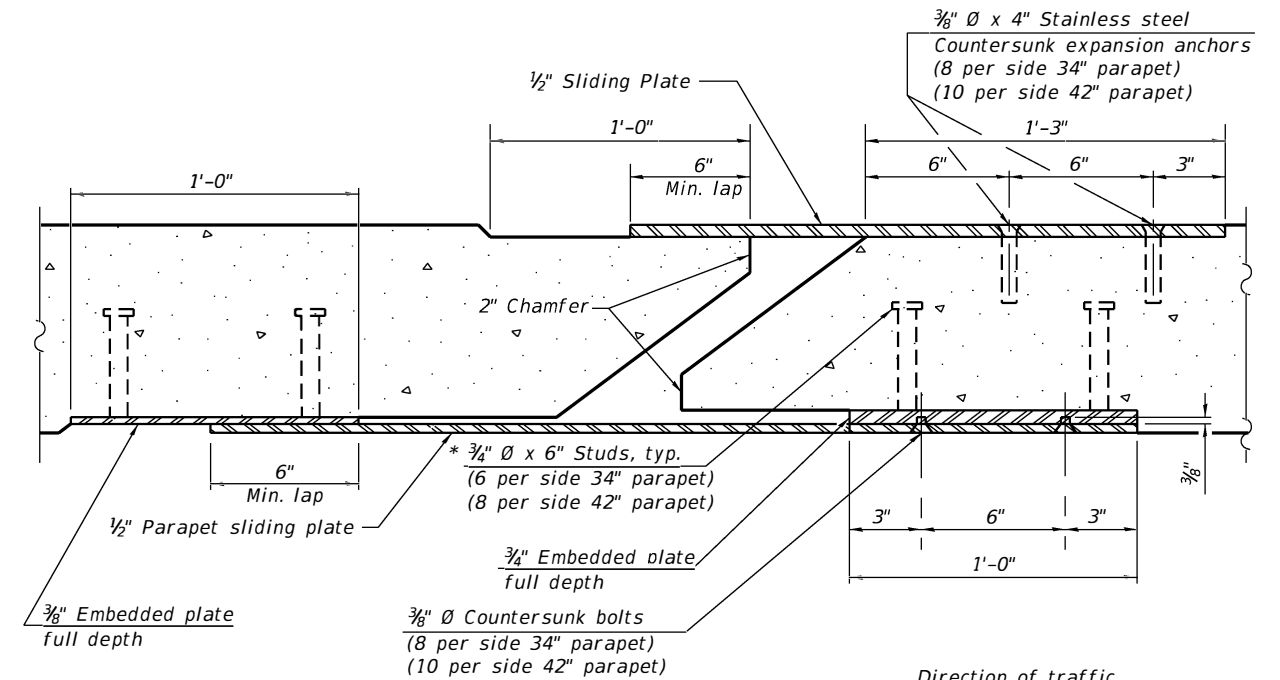
ILLINOIS FED. AID PROJECT



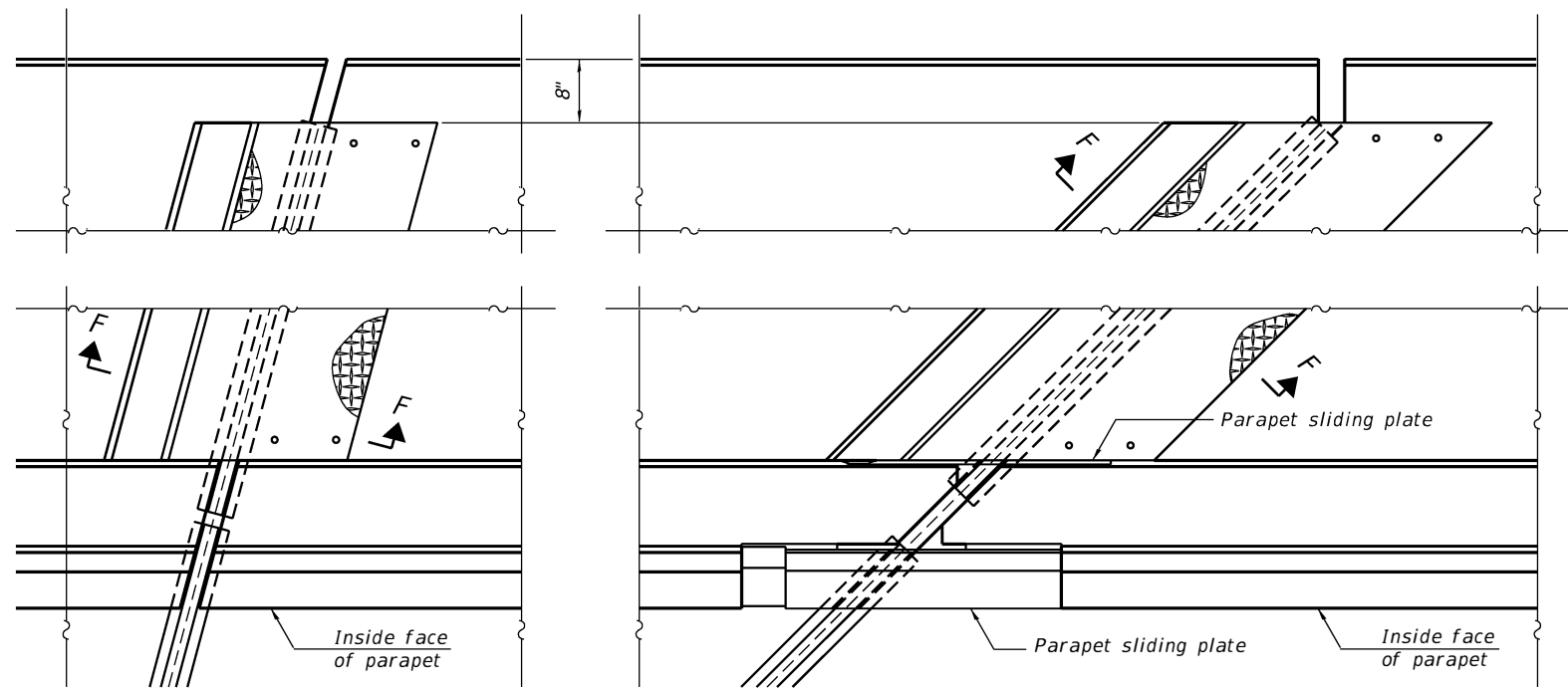
ELEVATION AT DECK LEVEL SIDEWALK
 (Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL B



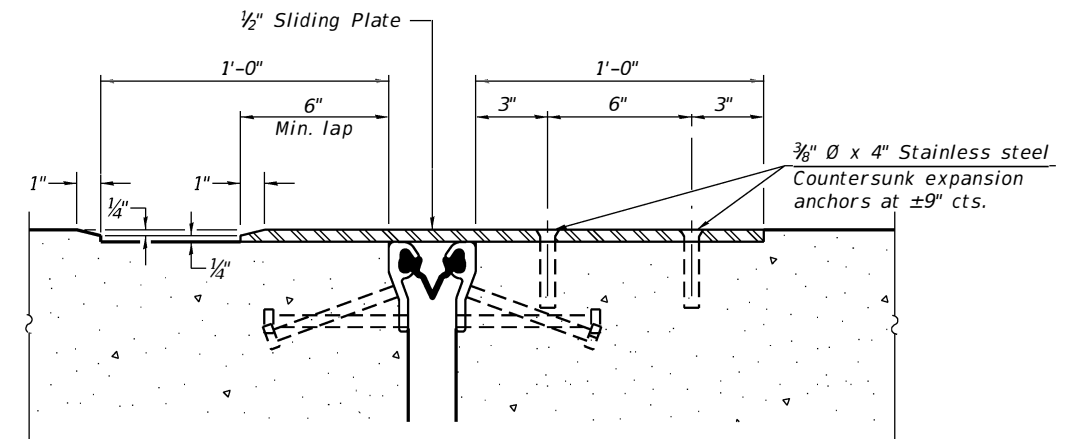
SECTION E-E



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S

8-11-17

(Sheet 3 of 3)

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 Chicago, IL 60606
 Ph: 312-23-6783

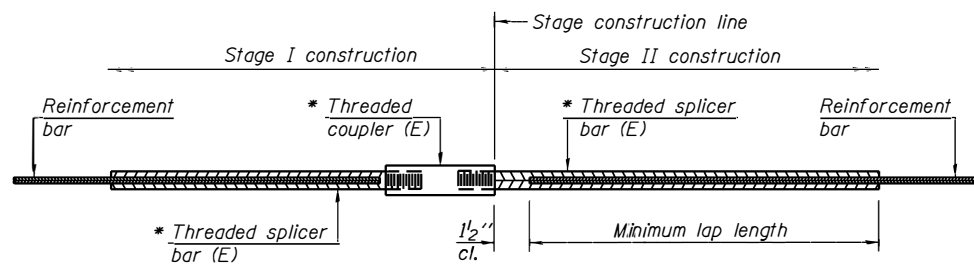
| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SIDEWALK
 STRUCTURE NO.: 056-0007**

SHEET NO. 5-16 OF 5-27 SHEETS

| | | | | |
|---------------------------|------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 20 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

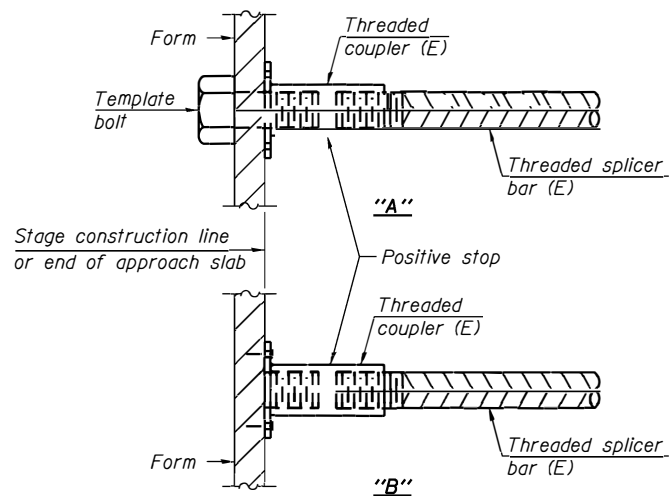


STANDARD BAR SPLICER ASSEMBLY

| Location | Bar Size | No. assemblies required | Minimum lap lengths |
|-------------|----------|-------------------------|---------------------|
| South Abut. | 5 | 6 | 3'-4" |
| Pier 8 | 5 | 8 | 3'-4" |
| | 5 | 8 | 3'-4" |
| Pier 4 | 5 | 8 | 3'-4" |
| | 5 | 8 | 3'-4" |
| North Abut. | 5 | 8 | 3'-4" |
| | 5 | 6 | 3'-4" |

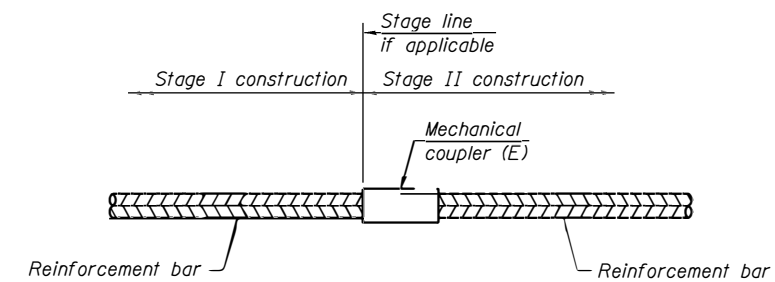
Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

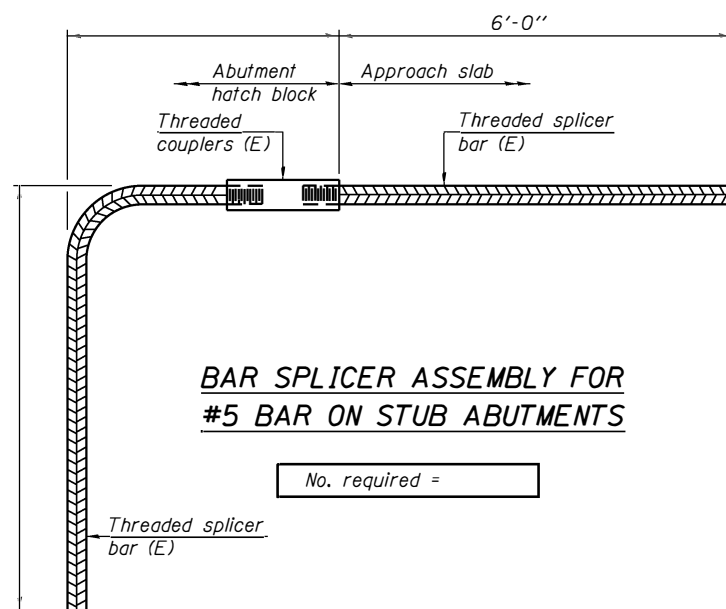


INSTALLATION AND SETTING METHODS

"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



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

2-17-2017

AES Services, Inc.
 111 S. Wacker Drive, Suite 3910
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 Ph: 312-23-6783

| | | |
|--------------|-------------------|-----------|
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| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

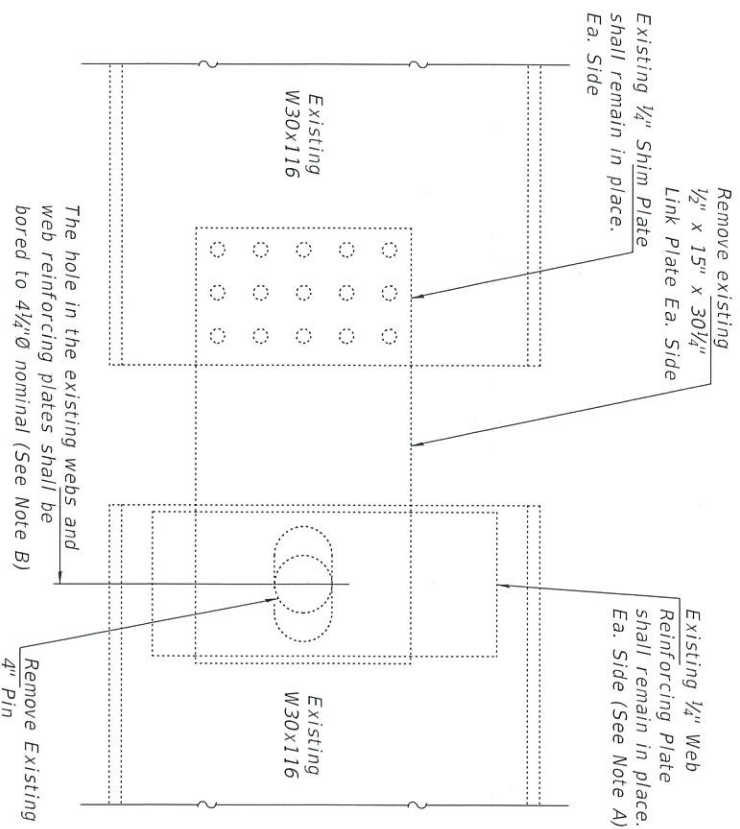
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO.**

SHEET NO. 5-17 OF 5-27 SHEETS

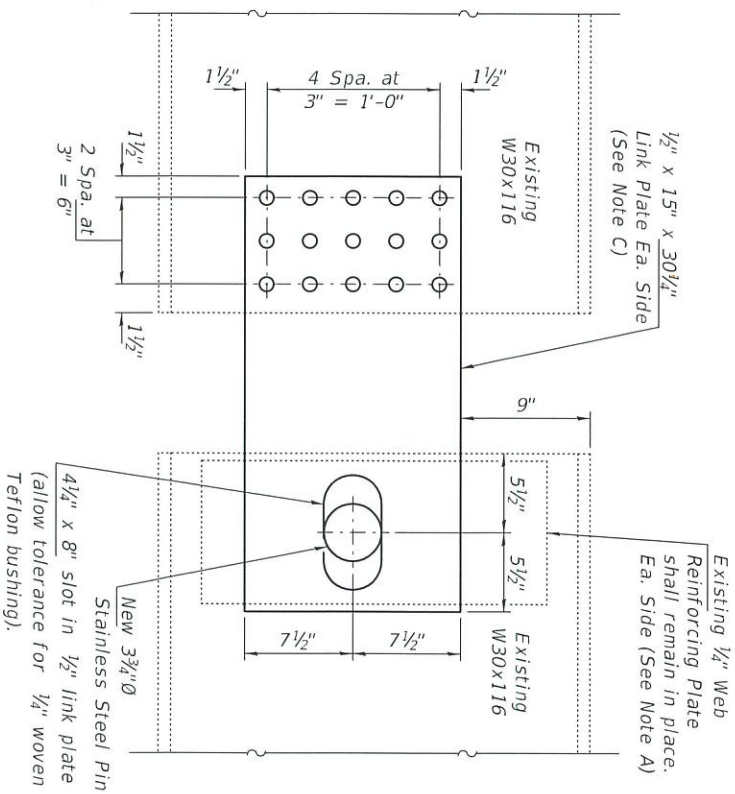
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 21 |
| CONTRACT NO. 62F35 | | | | |

ILLINOIS FED. AID PROJECT

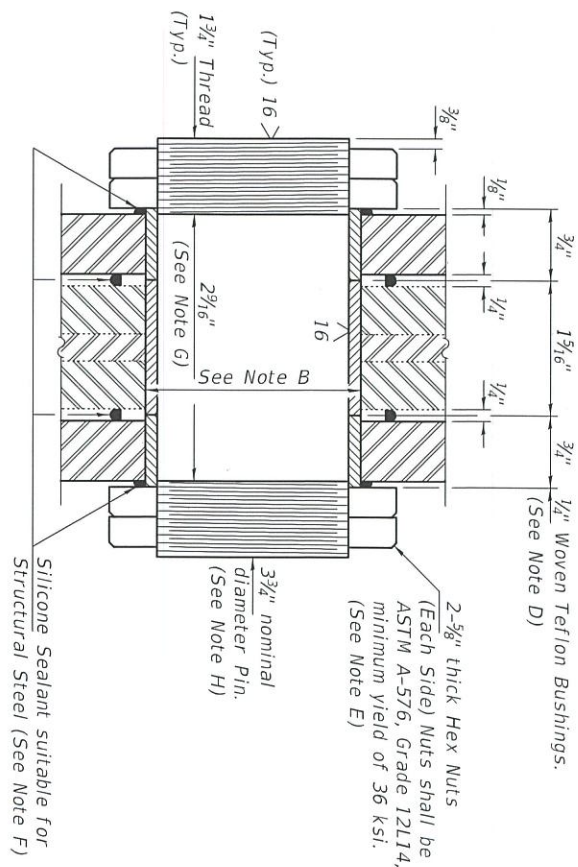


ELEVATION AT EXISTING PIN ASSEMBLY
(Typ. all beams at Pier #4)
(8 Locations)

(Cost of removal included with Pin and Link Plate Replacement)



ELEVATION AT NEW PIN ASSEMBLY
(Typ. all beams at Pier #4)
(8 Locations)



SECTION THRU PIN

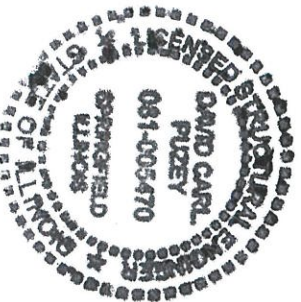
GENERAL NOTES

- All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. Cost included with Pin and Link Plate Replacement.
- All existing steel surfaces behind link plates shall be cleaned and primed before installation of new link plates. Cost included with Pin and Link Plate Replacement.
- Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the special provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". Cost included with Pin and Link Plate Replacement.
- 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, except the pin diameters, 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.
- The Link Plates shall conform to the minimum Charpy V-Notch Toughness of 25 ft.-lbs. at 40° F.
- The pins, link plates, bushings, nuts, and silicone sealant are the items included in Pin and Link Plate Replacement.
- Any pins that can be easily removed without damage to the pin shall be salvaged and the Bridge Engineer shall be contacted for disposition. Cost of salvage included with Pin and Link Plate Replacement.
- All new fasteners shall be high strength bolts. Holes shall be subpunched or subdrilled 1/16"Ø and reamed in the field to 1/16"Ø for 7/8"Ø high strength bolts unless otherwise noted after structural steel sections are properly fitted into position.
- Cost of all material and labor required to complete this work is included in the cost each for Pin and Link Plate Replacement.

- Note A: Existing welds shall be inspected for cracks using liquid dye penetrant or magnetic particle testing. Any cracks that are found shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Clean and paint before reinstalling the link plates.
- Note B: Bore diameter for bushing in link plates, existing webs and web reinforcement plates shall correspond to bushing manufacturer's allowable tolerances for proper functioning. Hole diameter may be adjusted to allow use of stock bushings.
- Note C: Inside face of new link plates shall receive first field coat in shop. The primer shall pass the M.E.K. Rub Test before the first field coat is applied.
- Note D: Actual bushing thickness per manufacturer's specifications. 1/4" is approximate. Bushings shall be a self lubricating filament wound epoxy matrix backed Duralon Bearing, metal backed Fiber Guide Bearing or equivalent. No primer or grease shall be allowed on bushings. Bushings shall be suitable for dynamic loads of 20,000 psi.
- Note E: Tighten inside nuts to bring all bushings into firm contact, then back off 1/4 turn and tighten outer nuts.
- Note F: Apply 3/8" bead to face of the web reinforcing plates approximately 1/2" from bushing immediately before installing new link plates. Place sealant around nuts after installation. Sealant shall be suitable for prolonged exterior exposure without losing flexibility or adhesion to painted steel surfaces. Proposed products shall be subject to Department's acceptance based on documented testing or other evidence.
- Note G: Body of Pin dimension is based on measured thickness of captured plates (including paint), plus 1/2".
- Note H: Nominal pin diameter (diameter tolerances subject to Specifications of Teflon Bushing Manufacturer and shall be approved by the Engineer). Pin shall be ASTM A276, UNS 21800 (Nitronic 60 or equal) (No step at threads) 12 threads per inch. Install prior to new link plates.

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--------------------------------|------|----------|
| Pin and Link Plate Replacement | Each | 8 |



Seal applies to this sheet only.

EXPIRES 11-30-2020

DESIGNED - *Abigail T. Holloway*
CHECKED - *Abigail T. Holloway*
DRAWN - *Abigail T. Holloway*
CHECKED - *HTH JSB*

EXAMINED - *Tim A. Pappas*
PASSED - *Tim A. Pappas*
ENGINEER OF PROFESSIONAL SERVICES
ENGINEER OF BRIDGE AND STRUCTURES

DATE - JANUARY 16, 2019
REVISED -

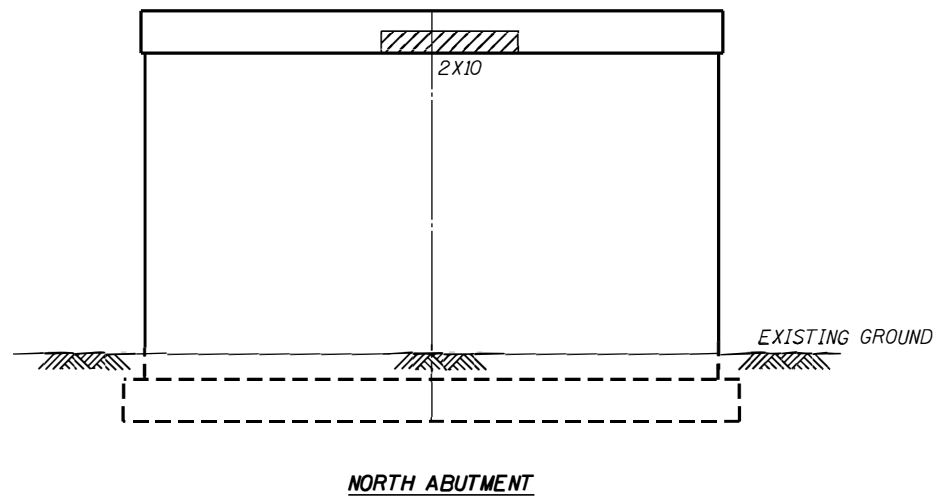
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIN AND LINK REPAIR DETAILS
STRUCTURE NO. 056-0007

SHEET NO. S-18 OF S-27 SHEETS

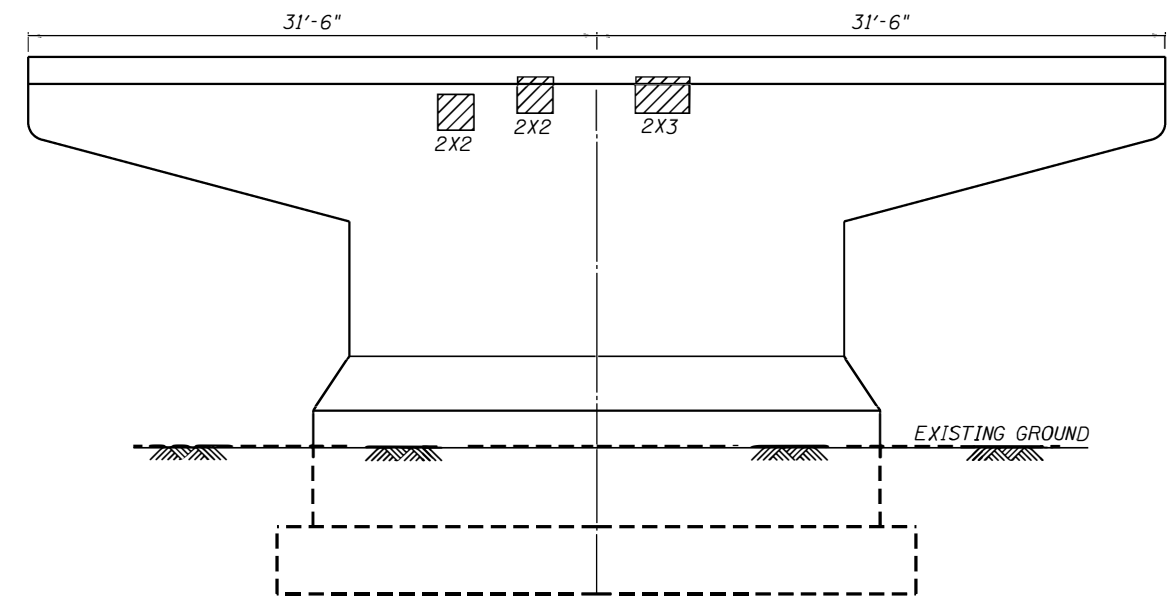
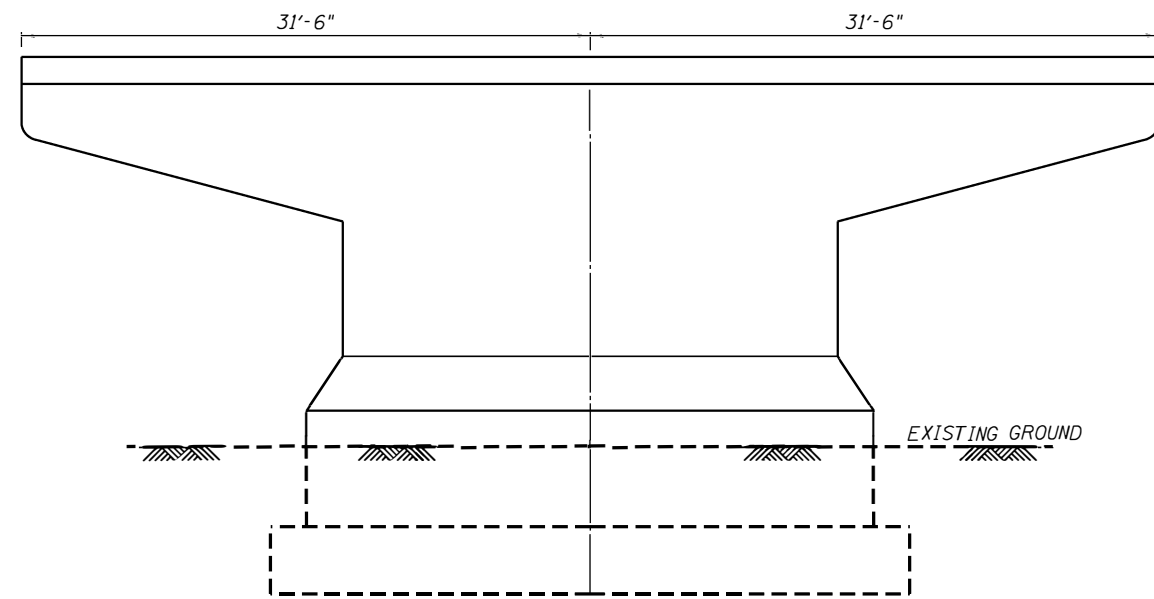
| F.A.P. RITE | SECTION | COUNTY | TOTAL SHEET NO. |
|-------------|-----------|---------|-----------------|
| 303 | 29VBR(83) | MAHENRY | 42 |
| | | | 22 |

ILLINOIS | FED. AID PROJECT

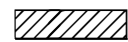


BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Structural Repair of Concrete (depth < 5") | Sq. Ft. | 34 |



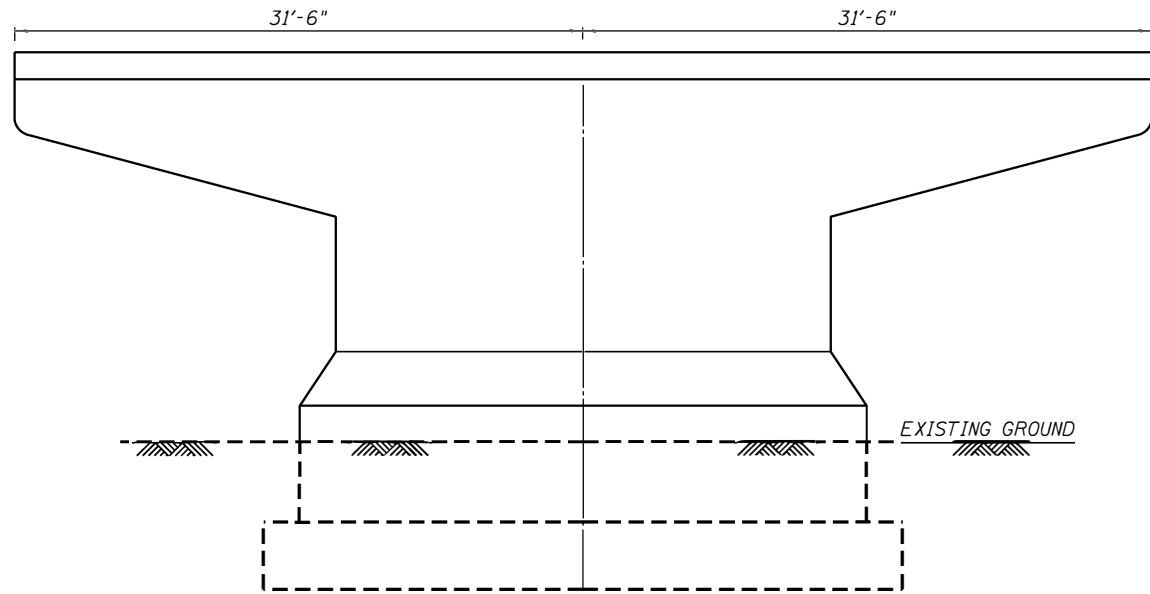
LEGEND:



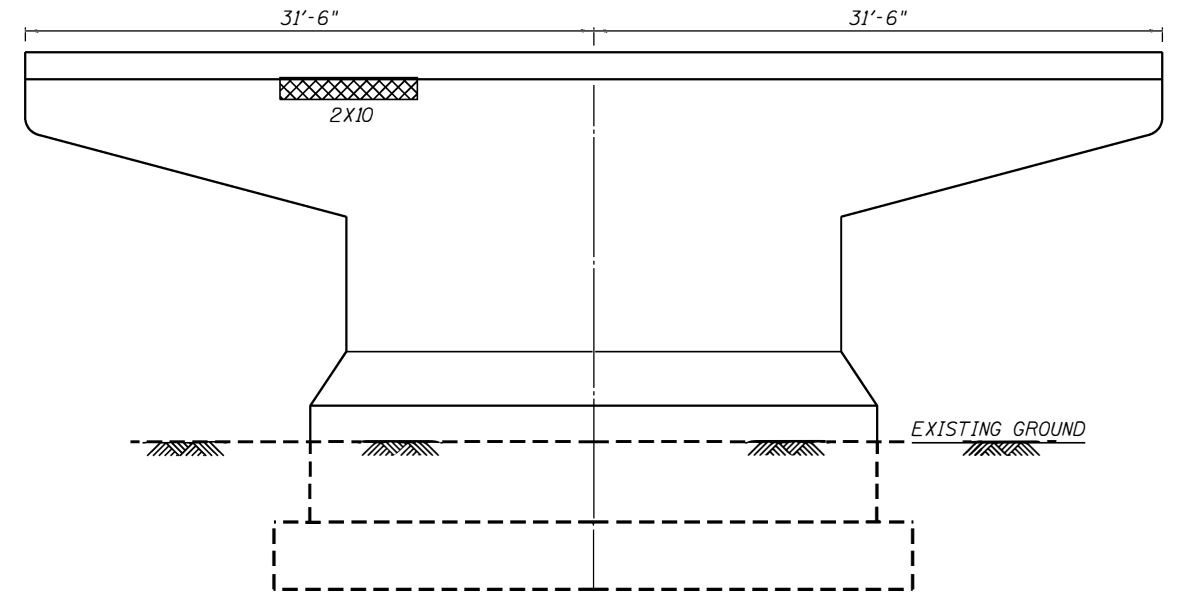
STRUCTURAL REPAIRS OF CONCRETE < 5"

| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | DRAWN - JS, AWM | REVISED - |
| PLOT SCALE = | DATE - 12/07/2018 | REVISED - |
| PLOT DATE = | | |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 23 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



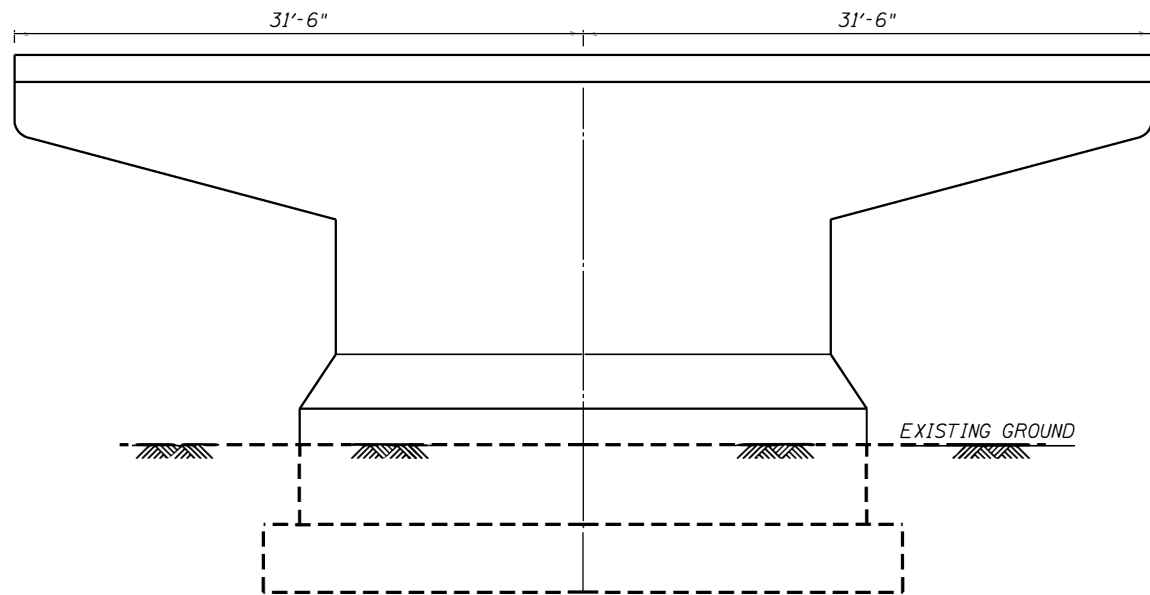
**PIER 2 NORTH FACE
ELEVATION**



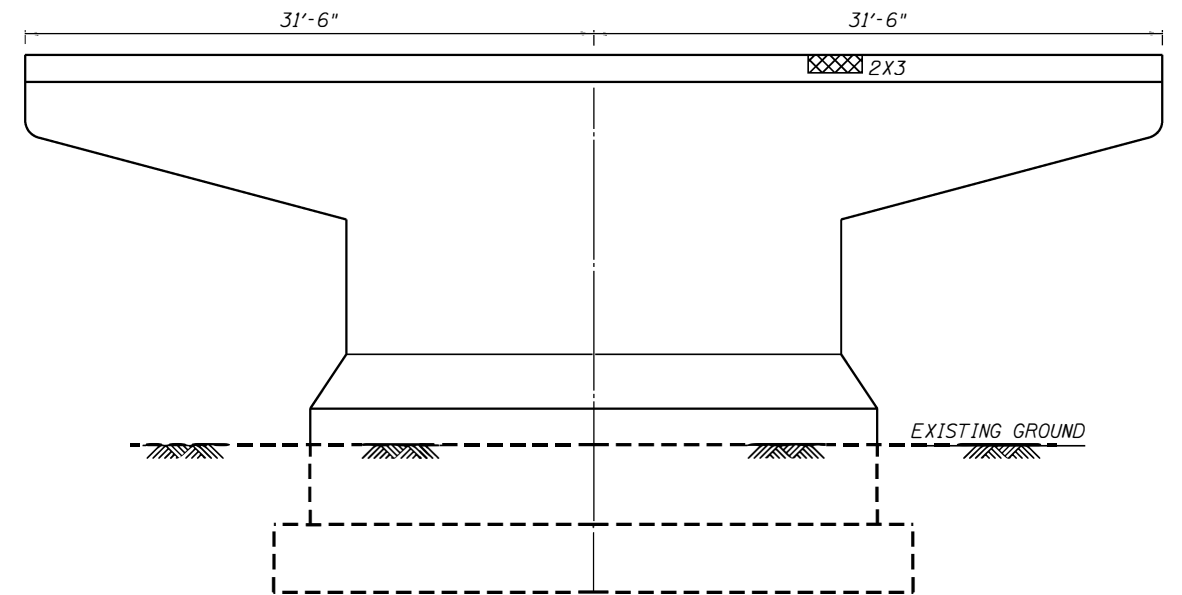
**PIER 2 SOUTH FACE
ELEVATION**

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Structural Repair of Concrete (depth > 5") | Sq. Ft. | 26 |



**PIER 3 NORTH FACE
ELEVATION**



**PIER 3 SOUTH FACE
ELEVATION**

LEGEND:

 STRUCTURAL REPAIRS OF CONCRETE > 5"

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111 S. Wacker Drive, Suite 3910
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Ph: 312-23-6783

| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | DRAWN - JS, AWM | REVISED - |
| PLOT SCALE = | DATE - 12/07/2018 | REVISED - |
| PLOT DATE = | | |

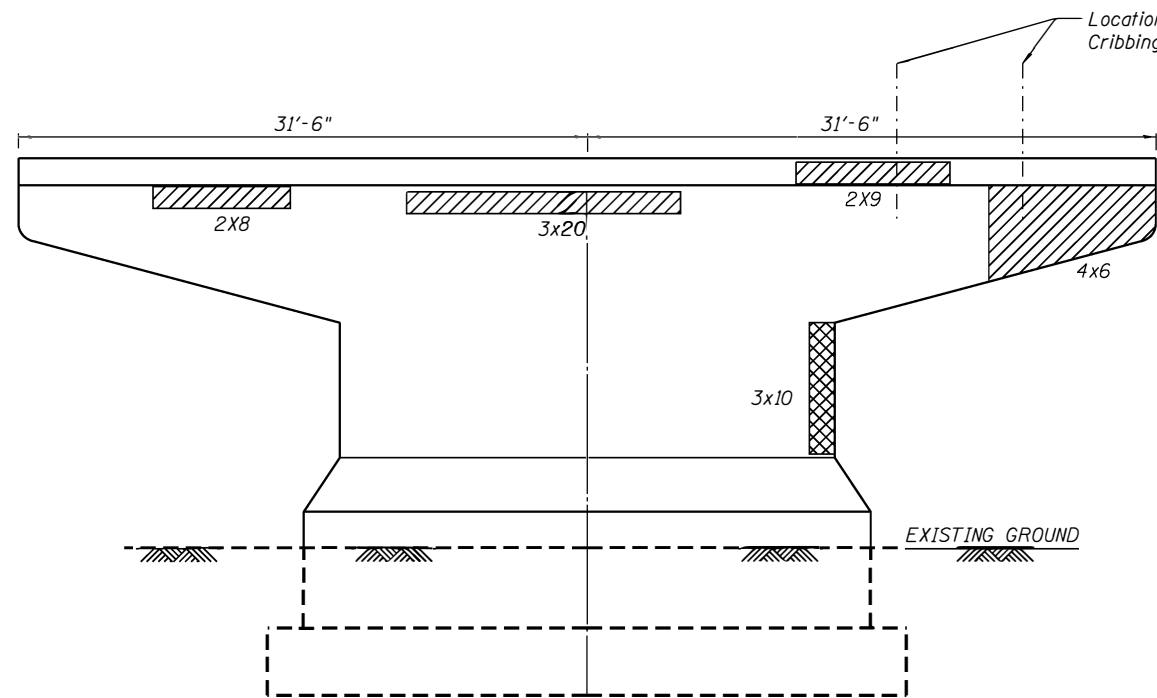
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER STRUCTURAL CONCRETE REPAIR
STRUCTURE NO.: 056-0007**

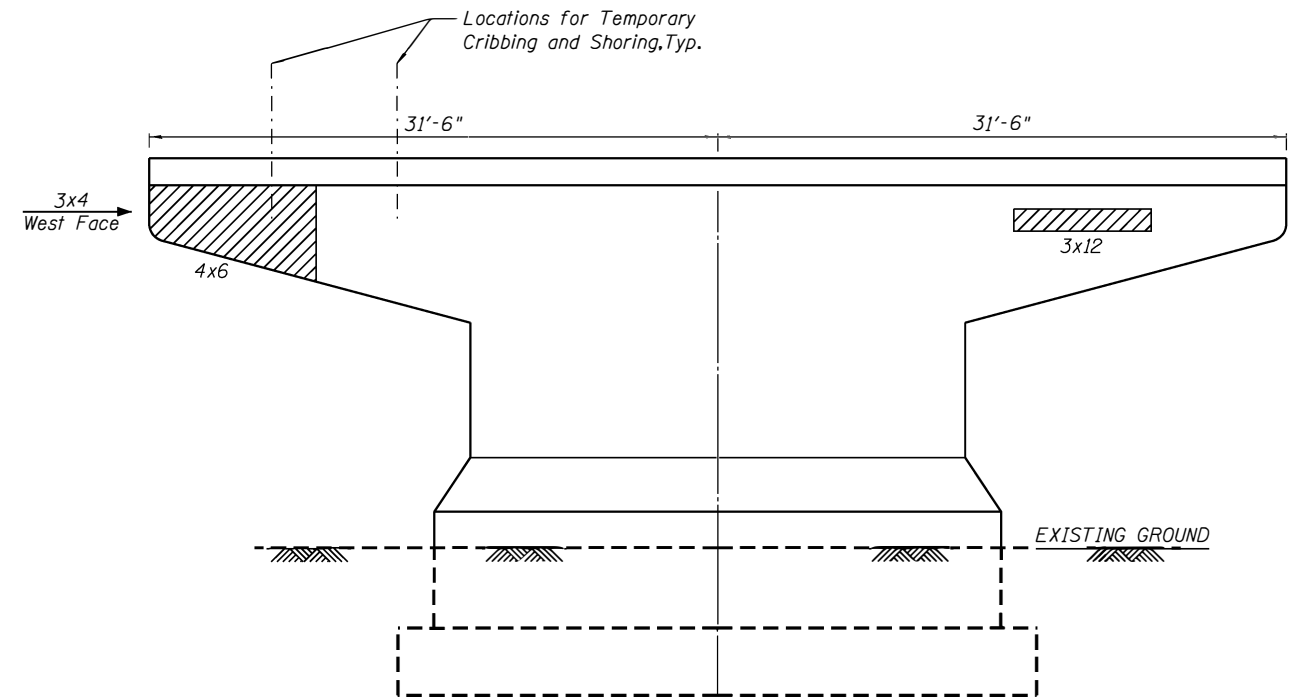
SHEET NO. 5-20 OF 5-27 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 24 |
| CONTRACT NO. 62F35 | | | | |

ILLINOIS FED. AID PROJECT



**PIER 4 NORTH FACE
ELEVATION**



**PIER 4 SOUTH FACE
ELEVATION**

UNIT NO. 1

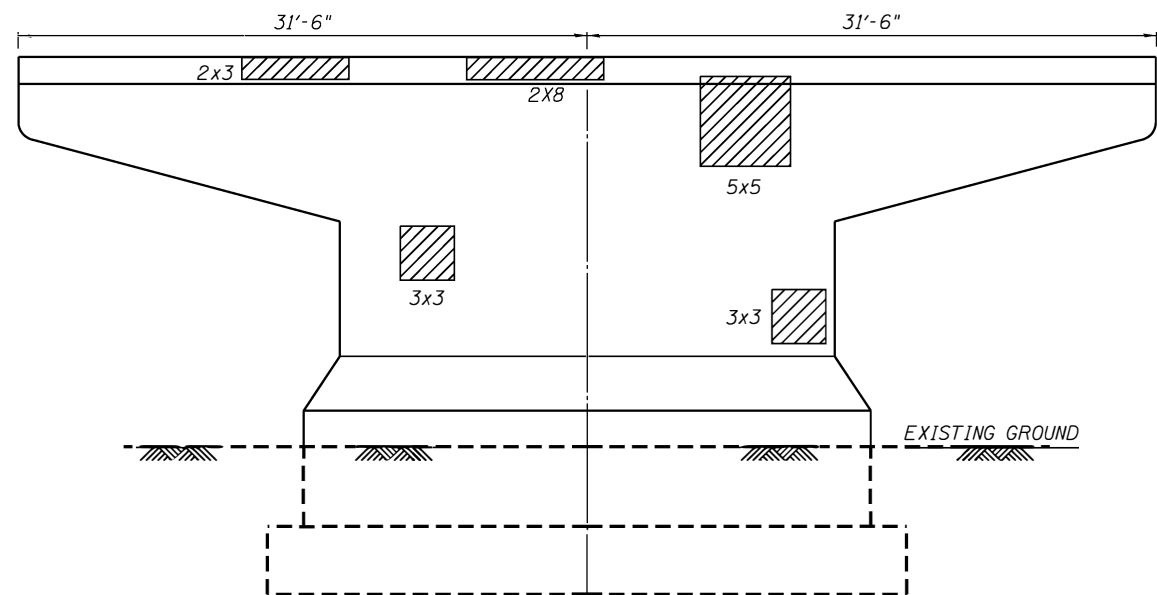
| INTERIOR BEAM REACTION TABLE | | | |
|------------------------------|-----------------------------|------------|--------|
| | N. Abut. & N. Brg. - Pier 4 | Pier 1 & 3 | Pier 2 |
| R DL (k) | 25.5 | 84.9 | 88.2 |
| R LL (k) | 37.4 | 47.4 | 49.6 |
| R IMP (k) | 10.2 | 12.4 | 12.4 |
| R TOTAL (k) | 73.1 | 144.7 | 150.2 |

UNIT NO. 2

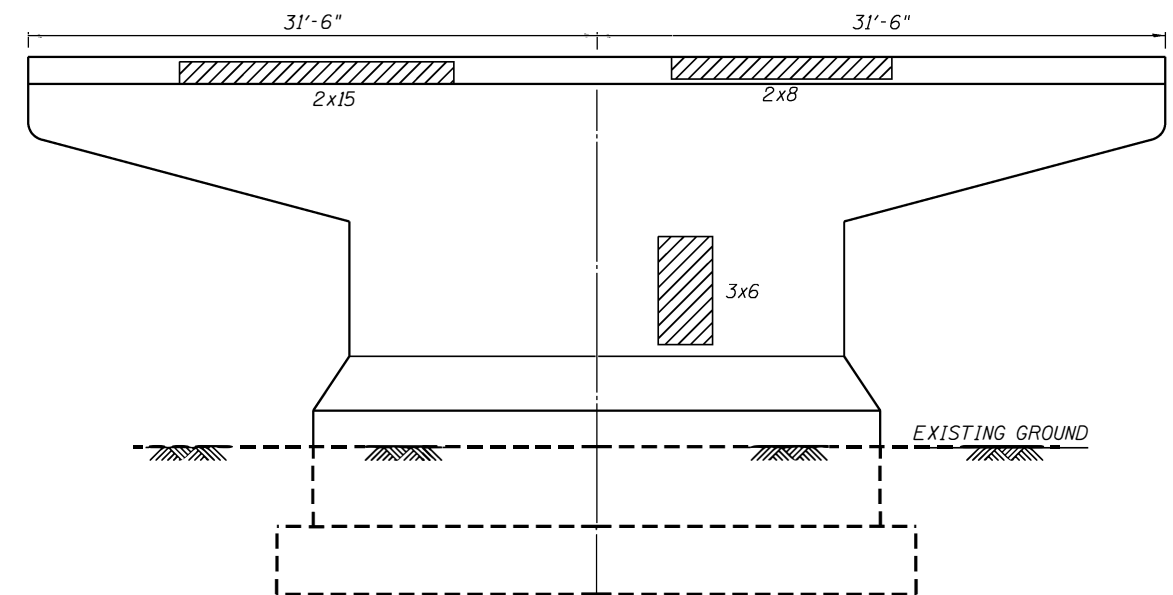
| INTERIOR BEAM REACTION TABLE | | | | | |
|------------------------------|------------------|--------|--------|--------|------------------|
| | S. Brg. - Pier 4 | Pier 5 | Pier 6 | Pier 7 | N. Brg. - Pier 8 |
| R DL (k) | 22.0 | 63.3 | 71.2 | 79.2 | 22.7 |
| R LL (k) | 34.8 | 43.3 | 44.1 | 44.8 | 36.7 |
| R IMP (k) | 10.9 | 12.8 | 11.9 | 12.1 | 10.3 |
| R TOTAL (k) | 67.7 | 119.4 | 127.2 | 136.1 | 69.7 |

UNIT NO. 3

| INTERIOR BEAM REACTION TABLE | | |
|------------------------------|-----------------------------|-------------|
| | S. Brg. - Pier 8 & S. Abut. | Pier 9 & 10 |
| R DL (k) | 21.0 | 71.1 |
| R LL (k) | 35.8 | 43.1 |
| R IMP (k) | 10.2 | 11.9 |
| R TOTAL (k) | 67.0 | 126.1 |



**PIER 5 NORTH FACE
ELEVATION**



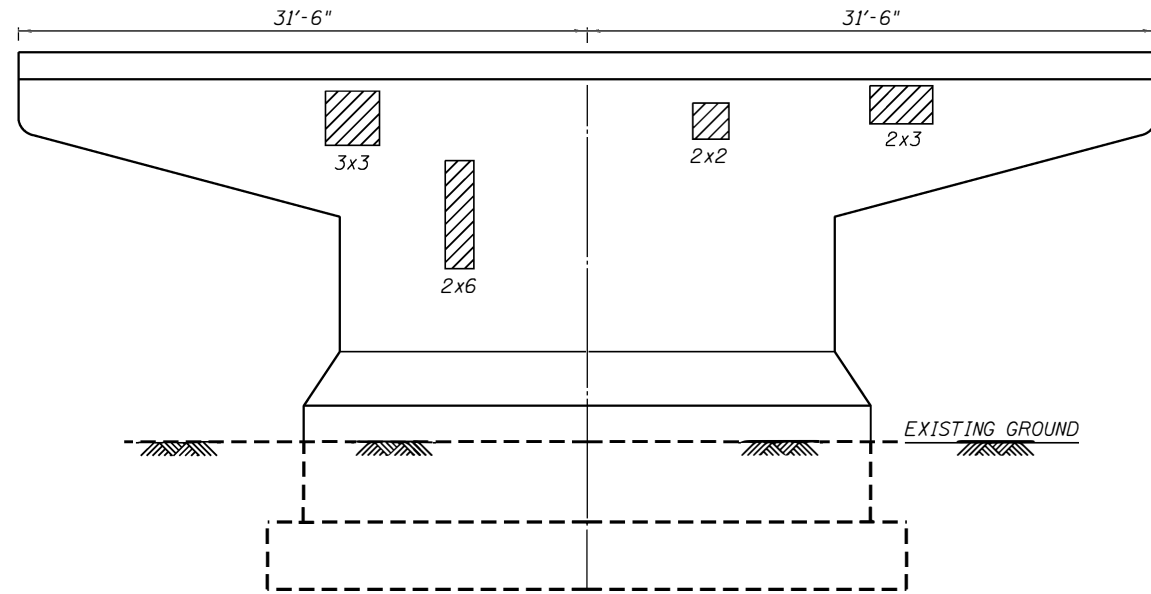
**PIER 5 SOUTH FACE
ELEVATION**

BILL OF MATERIAL

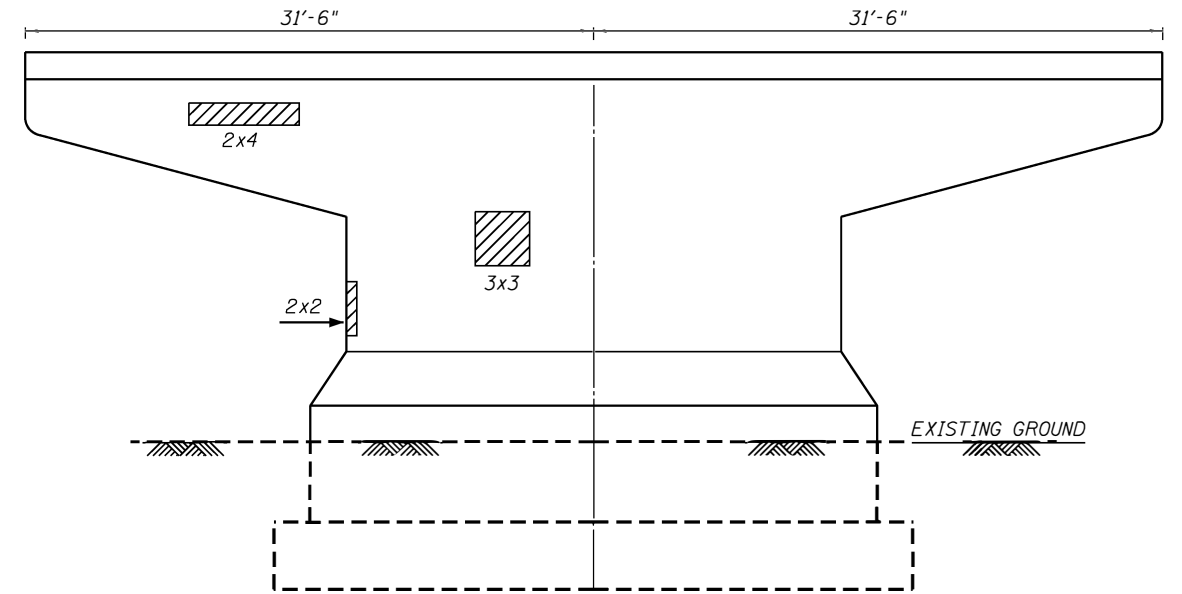
| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Structural Repair of Concrete (depth < 5") | Sq. Ft. | 307 |
| Structural Repair of Concrete (depth > 5") | Sq. Ft. | 30 |
| Temporary Shoring and Cribbing | Each | 4 |

LEGEND:

- STRUCTURAL REPAIRS OF CONCRETE < 5"
- STRUCTURAL REPAIRS OF CONCRETE > 5"



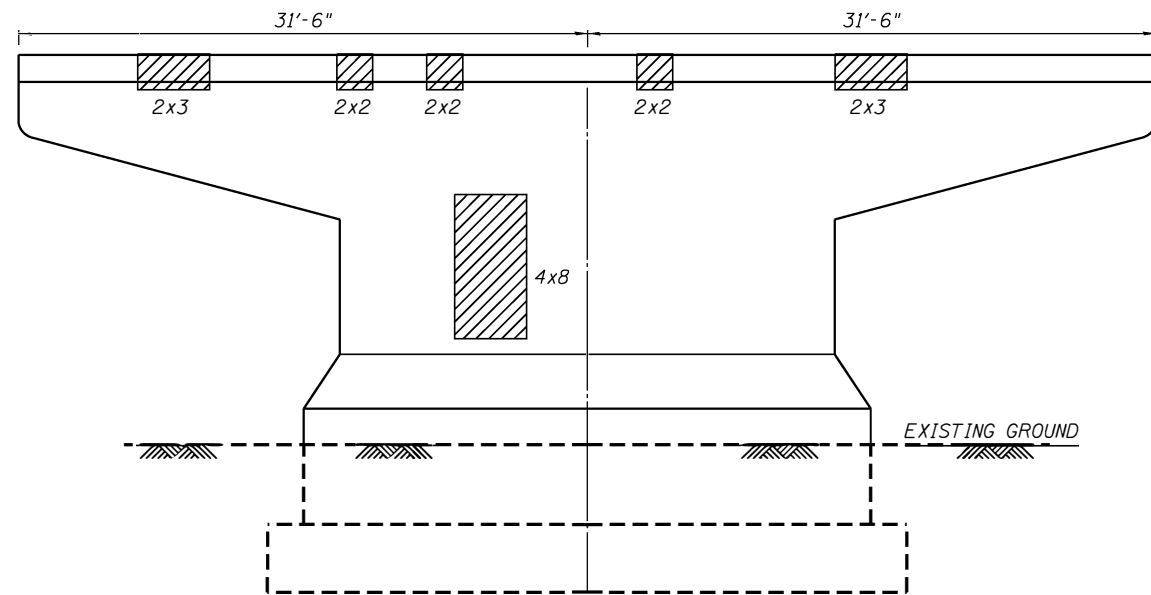
PIER 6 NORTH FACE
ELEVATION



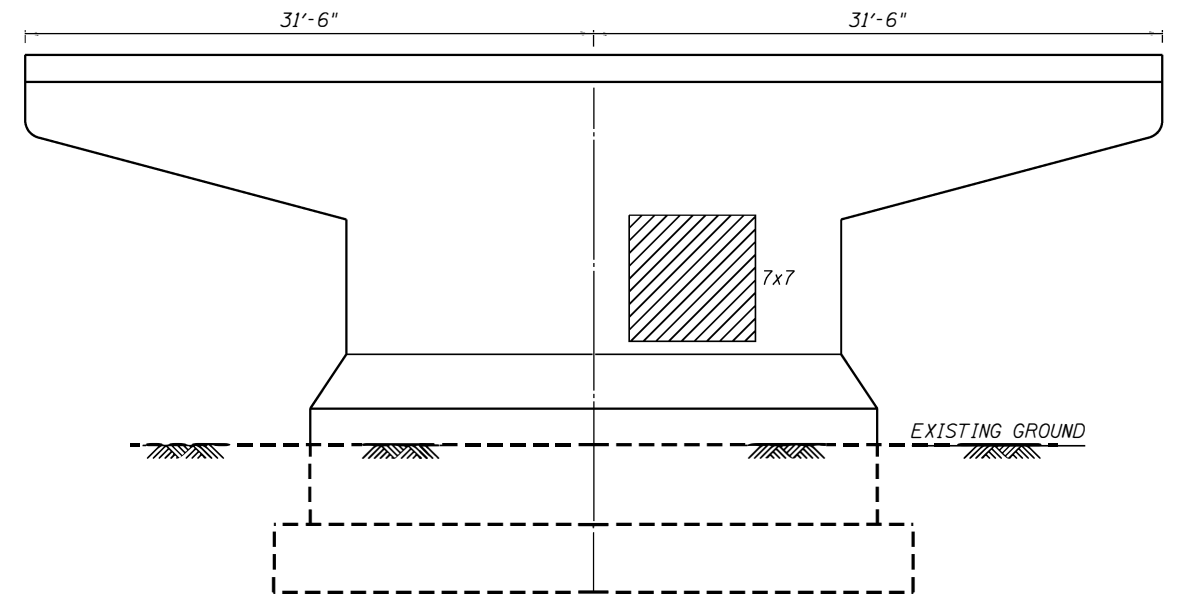
PIER 6 SOUTH FACE
ELEVATION

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Structural Repair of Concrete (depth < 5") | Sq. Ft. | 157 |



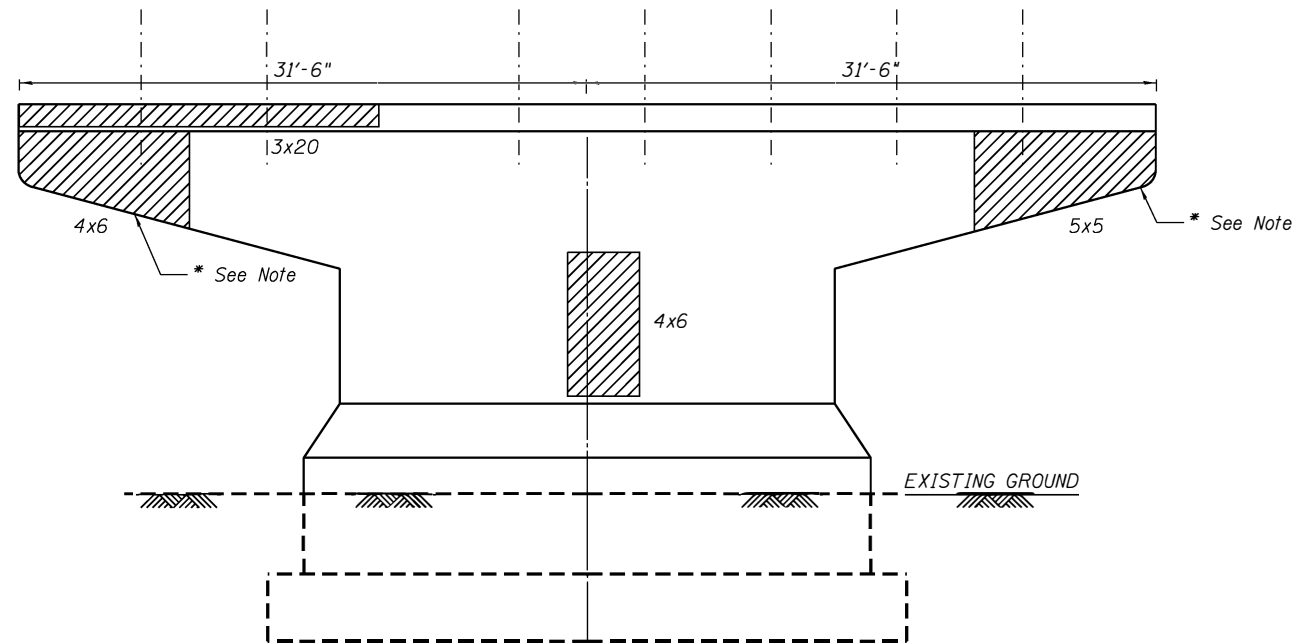
PIER 7 NORTH FACE
ELEVATION



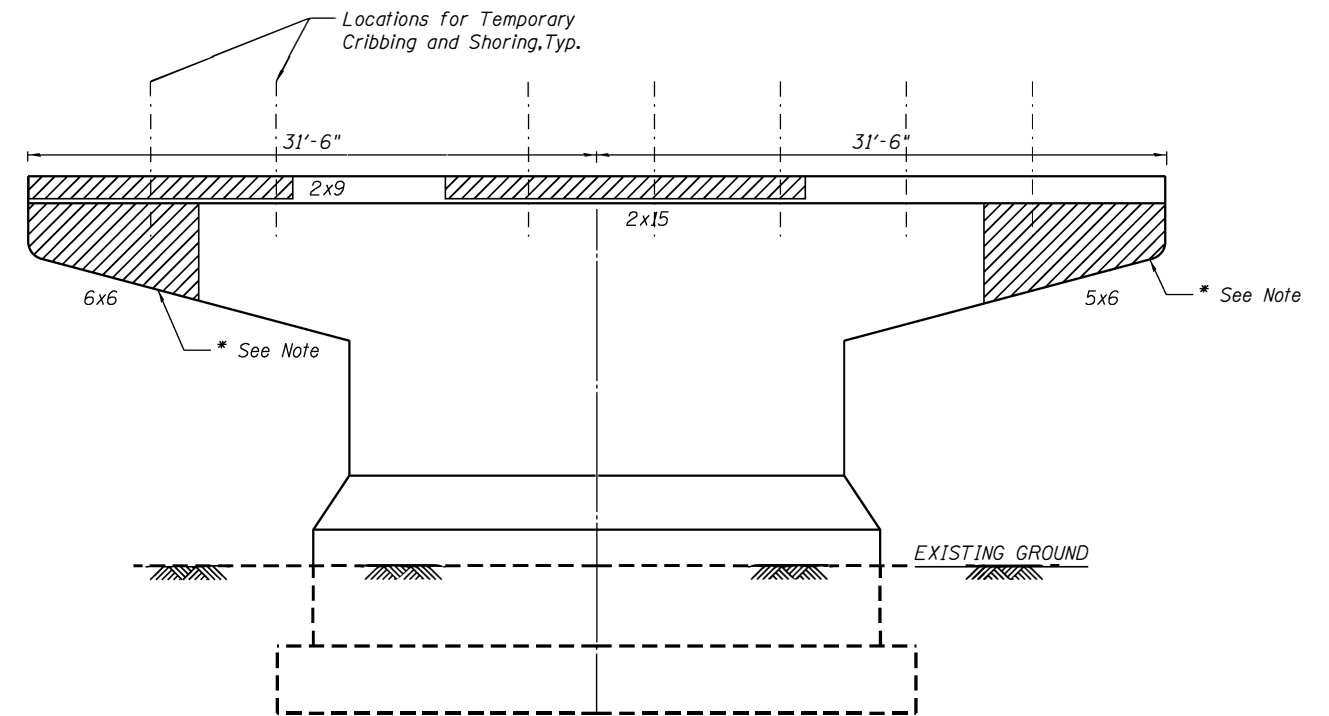
PIER 7 SOUTH FACE
ELEVATION

LEGEND:

 STRUCTURAL REPAIRS OF CONCRETE < 5"



**PIER 8 NORTH FACE
ELEVATION**



**PIER 8 SOUTH FACE
ELEVATION**

* Contractor shall provide shoring for fascia beams.

UNIT NO. 1

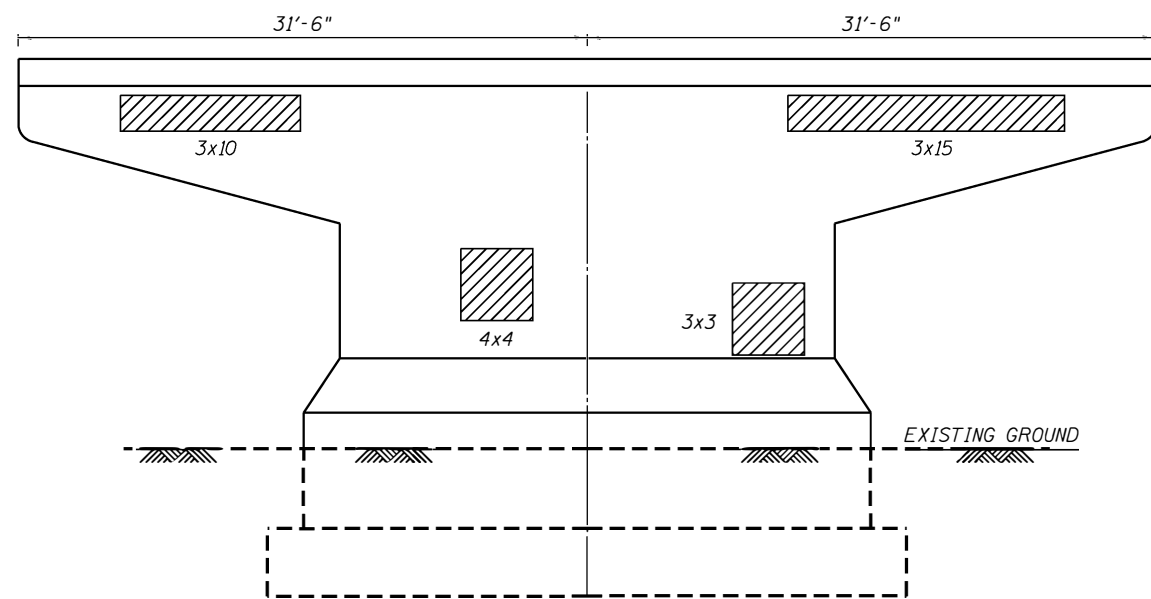
| INTERIOR BEAM REACTION TABLE | | | |
|------------------------------|---------------------------|------------|--------|
| | N. Abut. & N. Brg.-Pier 4 | Pier 1 & 3 | Pier 2 |
| R DL (k) | 25.5 | 84.9 | 88.2 |
| R LL (k) | 37.4 | 47.4 | 49.6 |
| R IMP (k) | 10.2 | 12.4 | 12.4 |
| R TOTAL (k) | 73.1 | 144.7 | 150.2 |

UNIT NO. 2

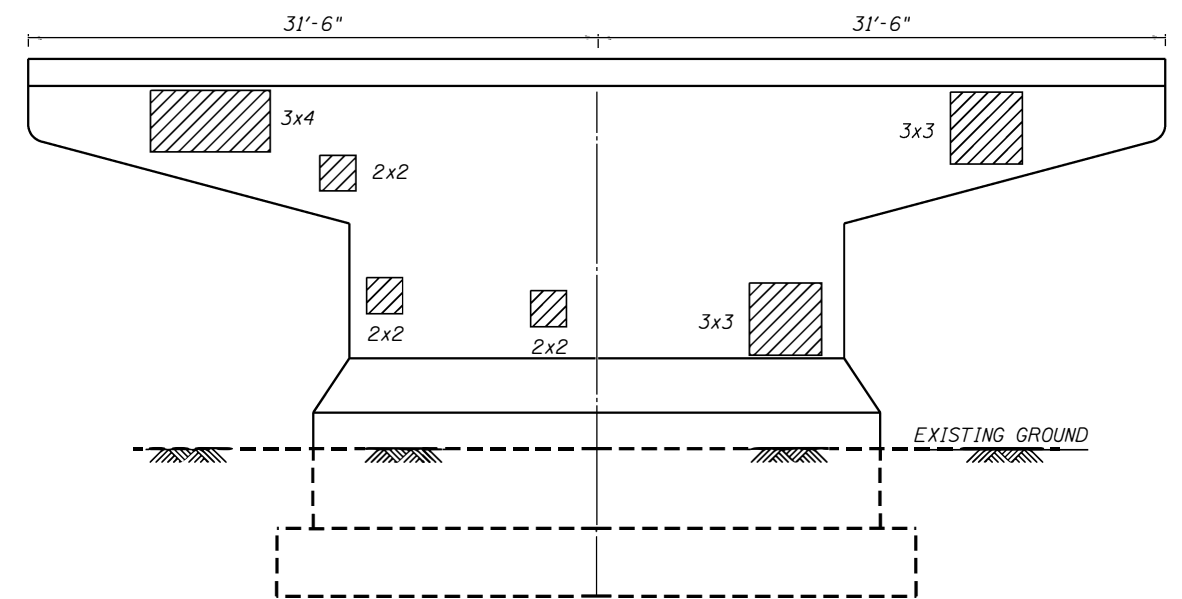
| INTERIOR BEAM REACTION TABLE | | | | | |
|------------------------------|------------------|--------|--------|--------|------------------|
| | S. Brg. - Pier 4 | Pier 5 | Pier 6 | Pier 7 | N. Brg. - Pier 8 |
| R DL (k) | 22.0 | 63.3 | 71.2 | 79.2 | 22.7 |
| R LL (k) | 34.8 | 43.3 | 44.1 | 44.8 | 36.7 |
| R IMP (k) | 10.9 | 12.8 | 11.9 | 12.1 | 10.3 |
| R TOTAL (k) | 67.7 | 119.4 | 127.2 | 136.1 | 69.7 |

UNIT NO. 3

| INTERIOR BEAM REACTION TABLE | | |
|------------------------------|---------------------------|-------------|
| | S. Brg.-Pier 8 & S. Abut. | Pier 9 & 10 |
| R DL (k) | 21.0 | 71.1 |
| R LL (k) | 35.8 | 43.1 |
| R IMP (k) | 10.2 | 11.9 |
| R TOTAL (k) | 67.0 | 126.1 |



**PIER 9 NORTH FACE
ELEVATION**



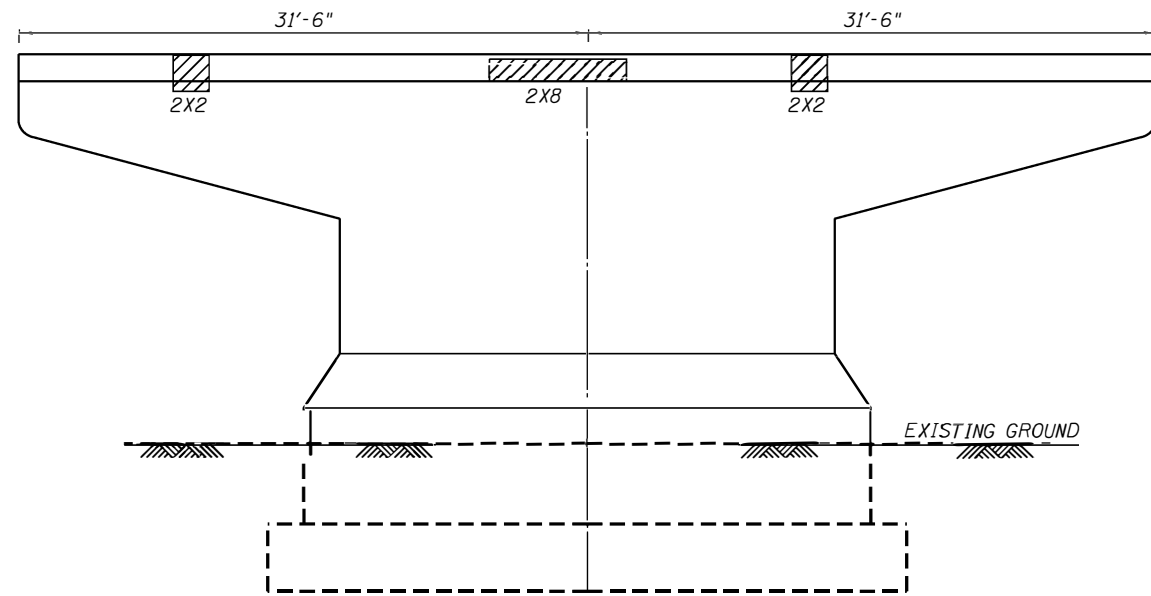
**PIER 9 SOUTH FACE
ELEVATION**

BILL OF MATERIAL

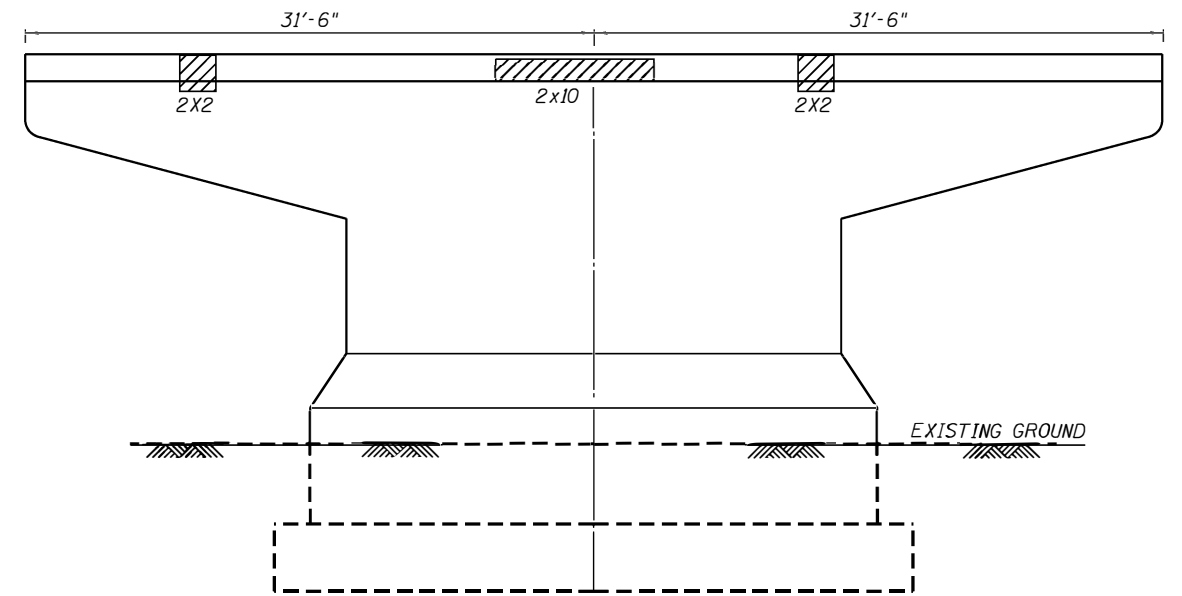
| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Structural Repair of Concrete (depth < 5") | Sq. Ft. | 389 |
| Temporary Shoring and Cribbing | Each | 14 |

LEGEND:

STRUCTURAL REPAIRS OF CONCRETE < 5"



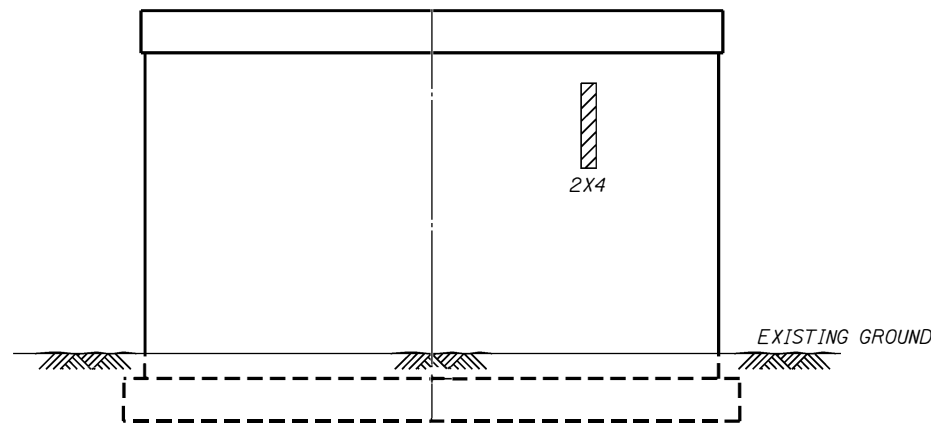
**PIER 10 NORTH FACE
ELEVATION**



**PIER 10 SOUTH FACE
ELEVATION**

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Structural Repair of Concrete (depth < 5") | Sq. Ft. | 60 |



SOUTH ABUTMENT

LEGEND:

 STRUCTURAL REPAIRS OF CONCRETE < 5"

AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

| | | |
|--------------|-------------------|-----------|
| USER NAME = | DESIGNED - AWM | REVISED - |
| CHECKED - MS | REVISOR - | |
| PLOT SCALE = | DRAWN - JS, AWM | REVISED - |
| PLOT DATE = | DATE - 12/07/2018 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER STRUCTURAL CONCRETE REPAIR
STRUCTURE NO.: 056-0007**

SHEET NO. S-24 OF S-27 SHEETS

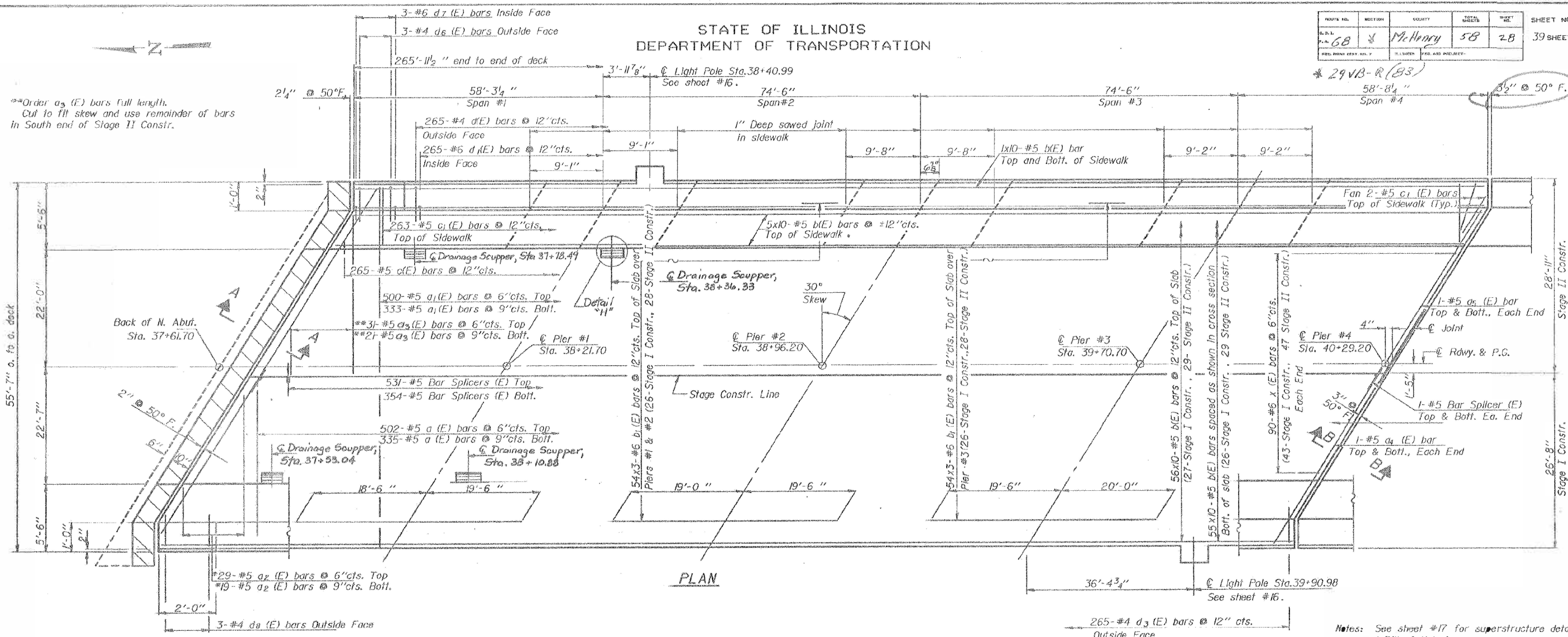
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|---------|--------------|-----------|
| 303 | 29VB-R(83) | McHENRY | 42 | 28 |
| CONTRACT NO. 62F35 | | | | |

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-------------|---------|--------|--------------|-----------|-----------|
| PROJECT NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. |
| 68 | McHenry | 58 | 28 | 39 SHEETS | |

*Order a₃ (E) bars full length. Cut to fit skew and use remainder of bars in South end of Stage II Constr.

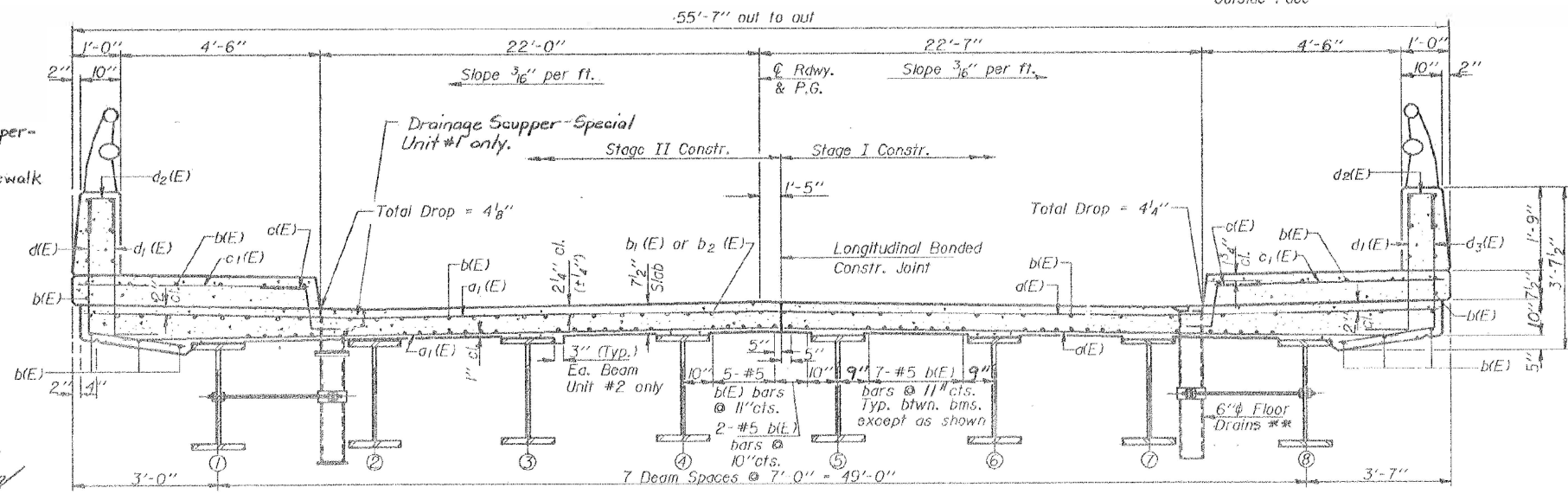
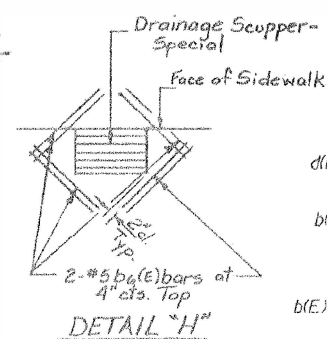


PLAN

* Order a₂ (E) bars full length, bars full length. Cut to fit skew and use remainder of bars in South end of Stage I Constr.

MIN. BAR LAP

- #5 bar 1'-9"
- #6 bar 2'-3"



CROSS SECTION
(Looking South)

Notes: See sheet #17 for superstructure detail and Bill of Material. Reinforcement bars designated (E) shall be epoxy coated. Bars indicated thus 20 x 3-#5 etc. ind. 20 lines of bars with 3 lengths per line. See sheet #16 for section A-A and B-B. See sheet #4 for bar splicer details. See sheet #1 for 6" Floor Drain space. Hatched area to be poured after superst. formwork has been removed. Quantity of Class X Concrete included with superst. See sheets #10 & #11 for Drainage Scupper Details. See sheets #13 & #14 for Drainage System Details.

| | |
|----------|---------------|
| DESIGNED | David Burdick |
| CHECKED | Thomas Drago |
| DRAWN BY | ROMBER |
| CHECKED | TJD D.B. |

May 31 1984
EXAMINED
PASSED
APPROVED

S-2-L(230°) 12-1-83

As revised TJD 6-26-84

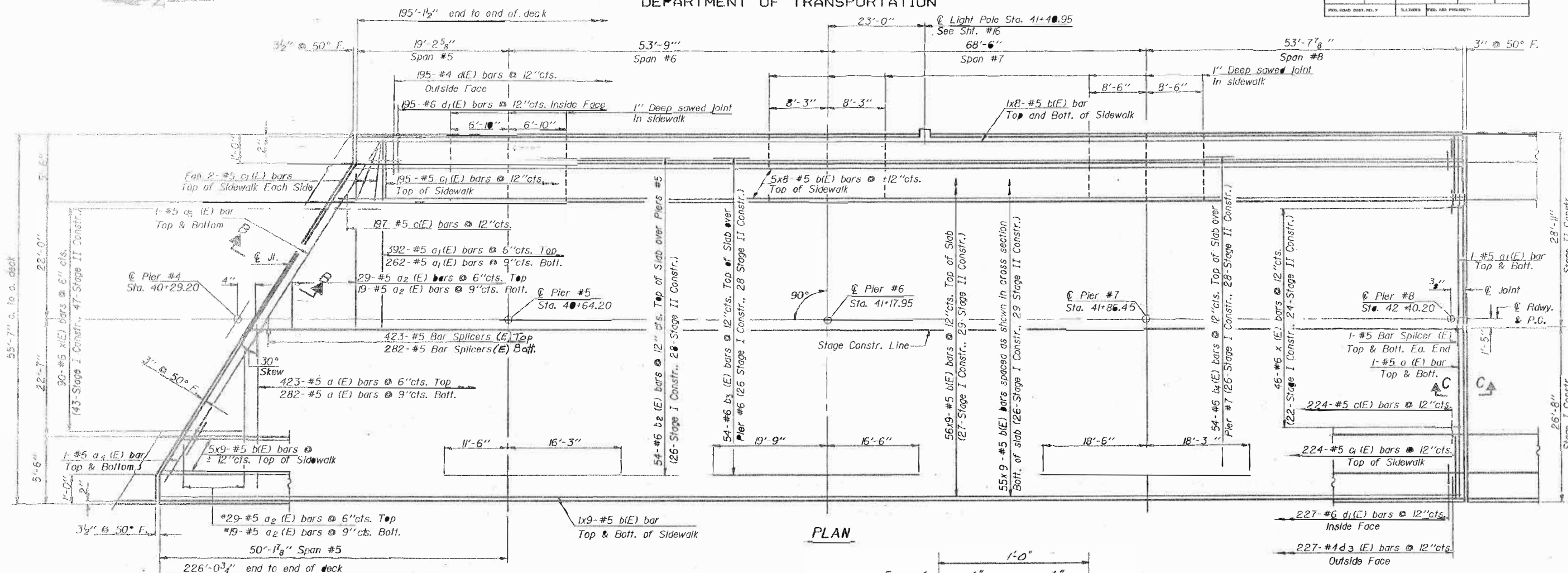
SUPERSTRUCTURE UNIT #:
F.A. RTE. 68 SEC. 29VB-R1
McHENRY COUNTY
STA. 40+82.90

FOR INFORMATION ONLY

| | | | | | | | | | | |
|--|--------------|-----------------|------------|---|---|--------------------|------------|---------|--------------|-----------|
| AES Services Inc. 111 S. Wacker Drive, Suite 3910 Chicago, IL 60606 Ph: 312-23-6783 | USER NAME = | DESIGNED - AWM | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | EXISTING BRIDGE PLANS - SHEET 1 OF 3 STRUCTURE NO.: 056-0007 | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = | CHECKED - MS | REVI SED - | | | 303 | 29VB-R(83) | McHENRY | 42 | 29 |
| | PLOT DATE = | DRAWN - JS, AWM | REVI SED - | | | CONTRACT NO. 62F35 | | | | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|--------------------|---------|--------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | | 42 | 29 |
| SHEET NO. 39 SHEET | | | | |



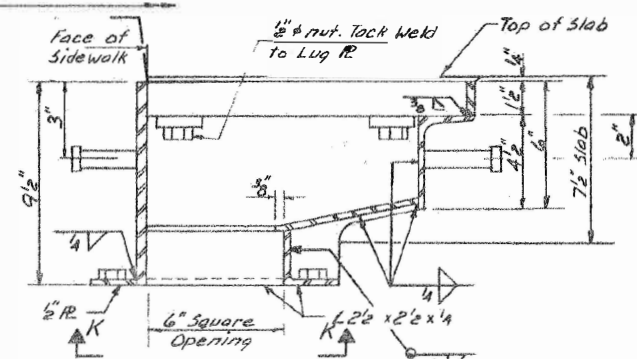
PLAN

*Order a₂ (E) bars full length. Cut to fit skew and use remainder of bars in Stage II Constr.

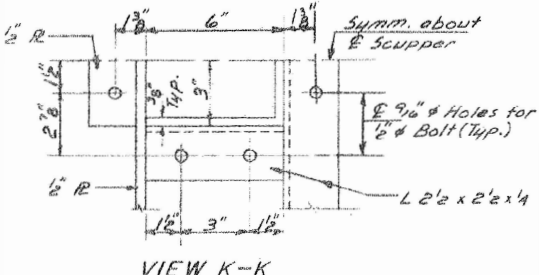
MIN. BAR LAP
#5 bar 1'-9"

FOR INFORMATION ONLY

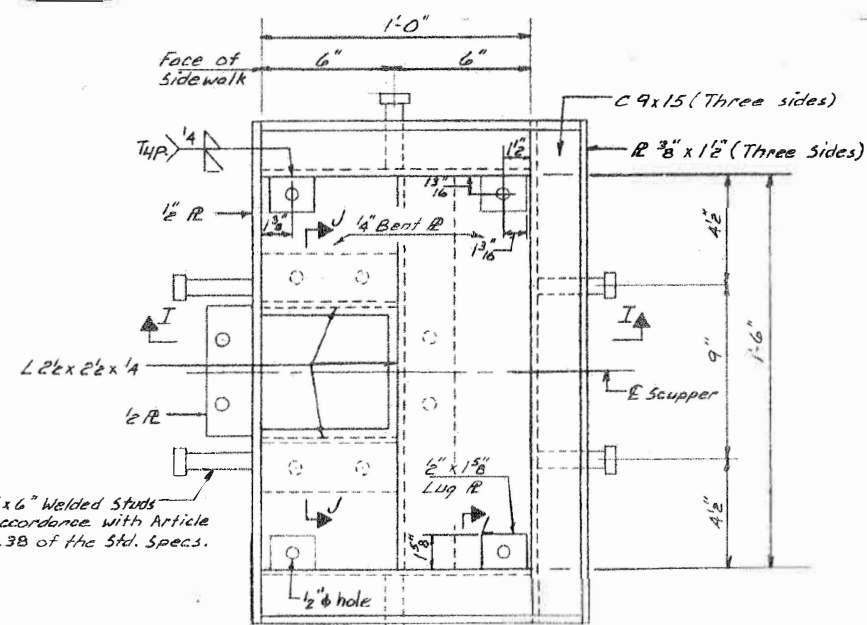
| | |
|-----------------------|-------------------------------|
| DESIGNED David Budick | EXAMINED James J. Rabinovitch |
| CHECKED Thomas D. ... | PASSED |
| DRAWN Bob ... | APPROVED |
| CHECKED TJD | D.B. |



SECTION I-I
(Showing Frame)



VIEW K-K



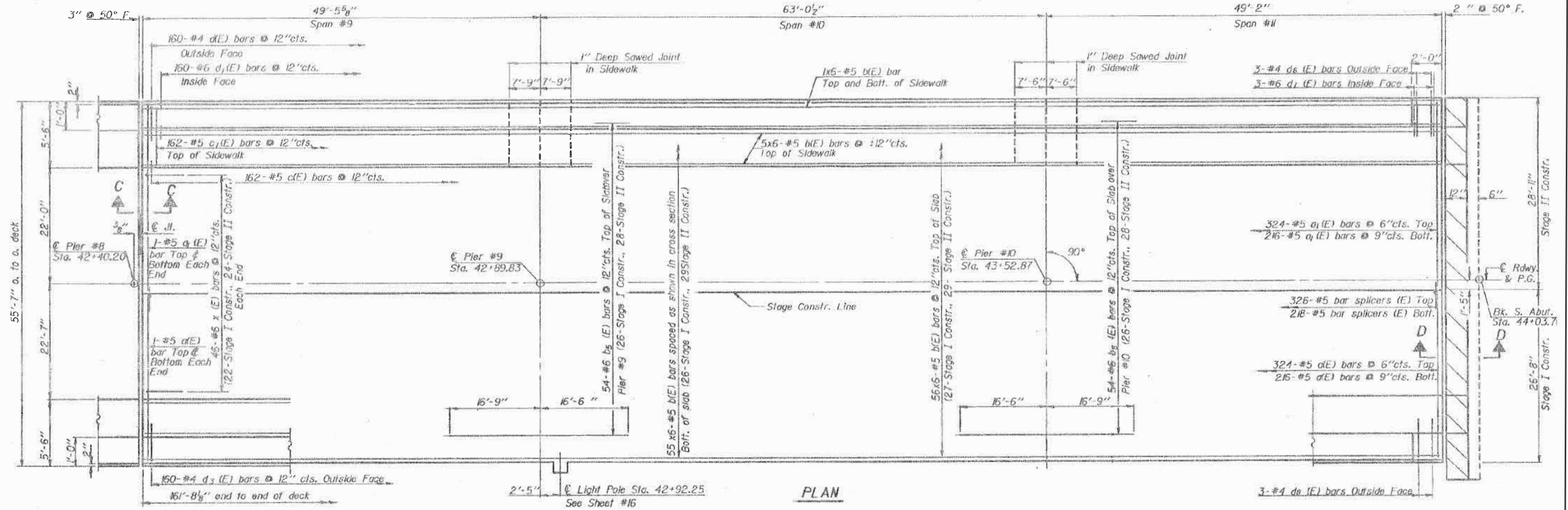
PLAN OF
DRAINAGE SCUPPER

Notes: See sheet #17 for superstructure detail and Bill of Material.
Reinforcement bars designated (E) shall epoxy coated.
Bars indicated thus 20 x 3-#5 etc. in 20 lines of bars with 3 lengths per line.
See sheet #16 for Section B-B and C-C.
See sheet #4 for bar splicer details.
See sheet #1 for 6" Floor Drain Splice.
See sheet #9 for Cross Section.
See sheet #11 for Drainage Scupper Details and notes.
Commence pouring of concrete for Unit #2 in Span #5.

DRAINAGE SCUPPER DETAILS
SUPERSTRUCTURE UNIT #3
F.A. RTE. 68 SEC. 29VB-
MCHENRY COUNTY
STA. 40+82.00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

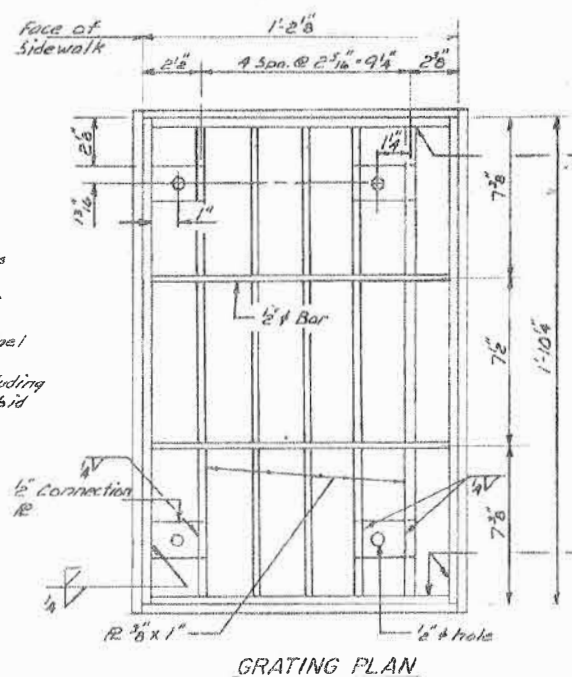
| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| F.A. RTE. | | | 30 | 39 SHEETS |
| ILLINOIS FED. AID PROJECT | | | | |



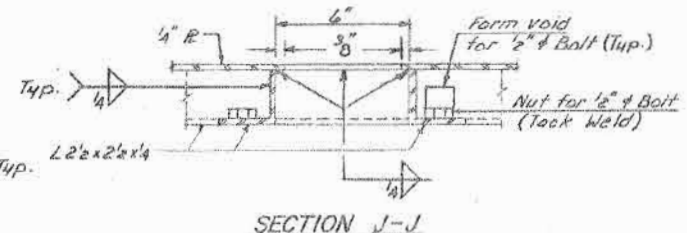
PLAN

MIN. BAR LAP
#5 bar 1'-9"

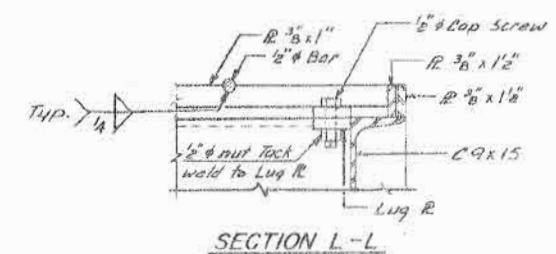
Drainage Scupper Notes:
All plates, shapes and bars shall conform to the requirements of AASHTO: M-183.
Bolts and nuts shall conform to the requirements of ASTM: A-307.
The Drainage Scupper shall be painted with the vinyl enamel coat painting specified for structural steel.
Cost of the Main Grate, Frame, Bolts, Washers and nuts including complete installation of scupper shall be paid for at the unit bid price "Drainage Scuppers-Special".



GRATING PLAN



SECTION J-J



SECTION L-L

Notes: See sheet #17 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#5 etc. indicate 20 lines of bars with 3 lengths per line.
See sheet #16 for Section C-C and D-D.
See sheet #9 for Cross Section.
See sheet #1 for 6" Floor Drain spaces.
See sheet #4 for bar splicer details.
Hatched area to be poured after superstructure formwork has been removed. Quantity of Concrete included with superstructure.

FOR INFORMATION ONLY

**DRAINAGE SCUPPER DETAILS,
SUPERSTRUCTURE UNIT #,
F.A. RTE. 68 SEC. 29VB-
McHENRY COUNTY
STA. 40+82.90**

| | |
|-------------------------|---------------------------|
| DESIGNED David Burdick | EXAMINED James J. Reuborn |
| CHECKED Thomas Donagale | PASSED |
| DRAWN RON SOMMER | APPROVED |
| CHECKED TJD D.B. | DIRECTOR OF HIGHWAYS |

As revised: TJD 6-24-84

AES Services, Inc.
111 S. Wacker Drive, Suite 3910
Chicago, IL 60606
Ph: 312-23-6783

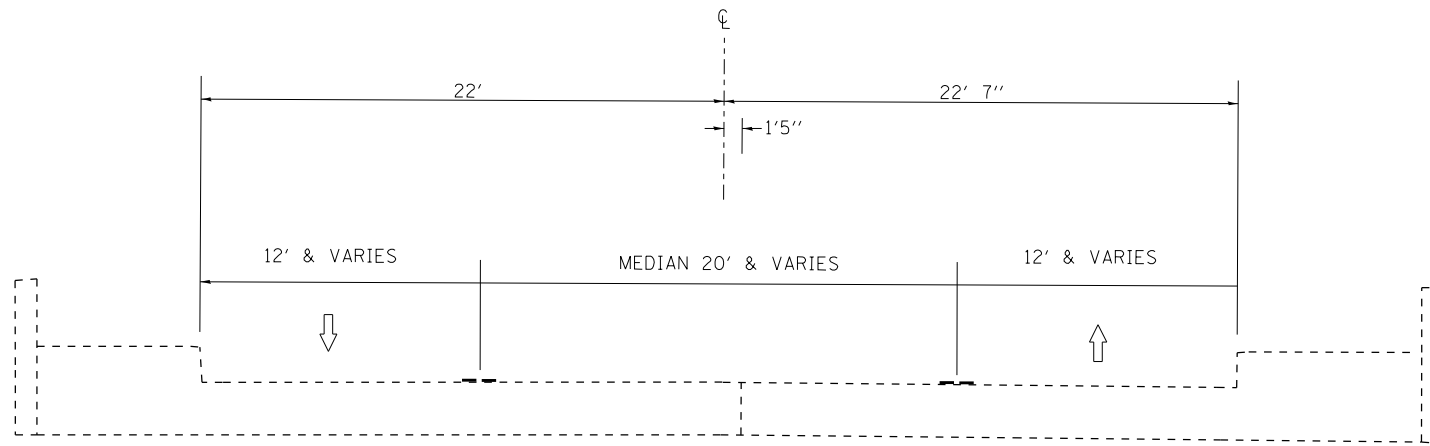
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|------------|-------------------|-----------|
| USER NAME | DESIGNED - AWM | REVISED - |
| PLOT SCALE | CHECKED - MS | REVISED - |
| PLOT DATE | DRAWN - JS, AWM | REVISED - |
| | DATE - 12/07/2018 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

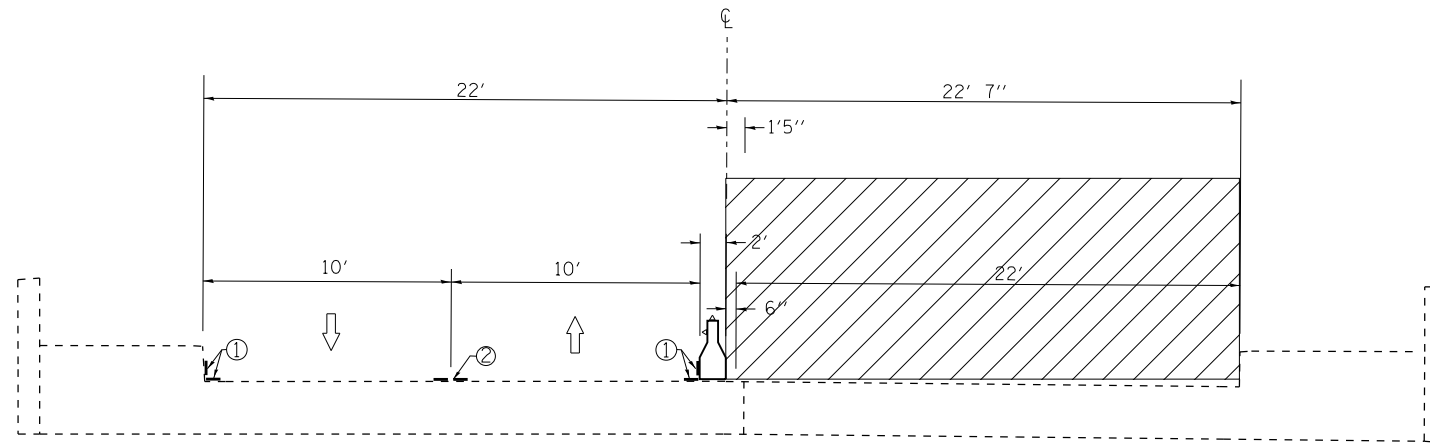
EXISTING BRIDGE PLANS - SHEET 3 OF 3
STRUCTURE NO.: 056-0007

SHEET NO. 5-27 OF 5-27 SHEETS

| | | | | |
|---------------------------|------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-R(83) | McHENRY | 42 | 31 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

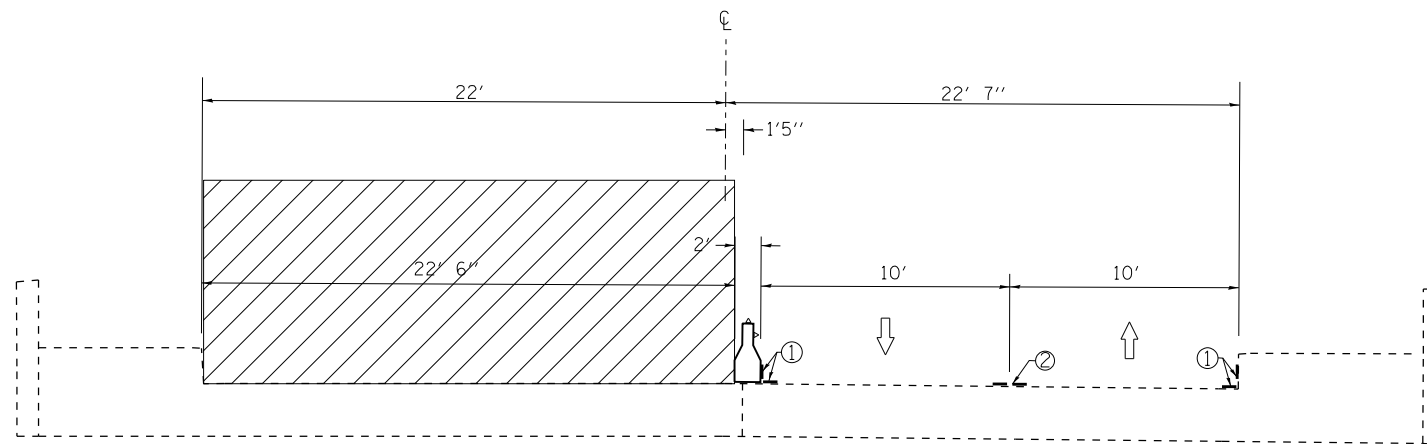


TYPICAL STRUCTURE SECTION



STAGE I CONSTRUCTION

US 14/ IL-173 (DIVISION ST.) OVER UPRR



STAGE II CONSTRUCTION

US 14/ IL-173 (DIVISION ST.) OVER UPRR

- ① WET REFLECTIVE TEMP. TAPE TYPE IV (WHITE)
- ② WET REFLECTIVE TEMP. TAPE TYPE IV (DOUBLE YELLOW)

MODEL: Default
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| | | |
|------------------------------|------------|-----------|
| USER NAME = hassann | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/12/2018 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

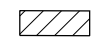
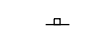



**MAINTENANCE OF TRAFFIC TYPICAL CROSS SECTIONS
US 14/IL-173 (DIVISION ST.) OVER UPRR**

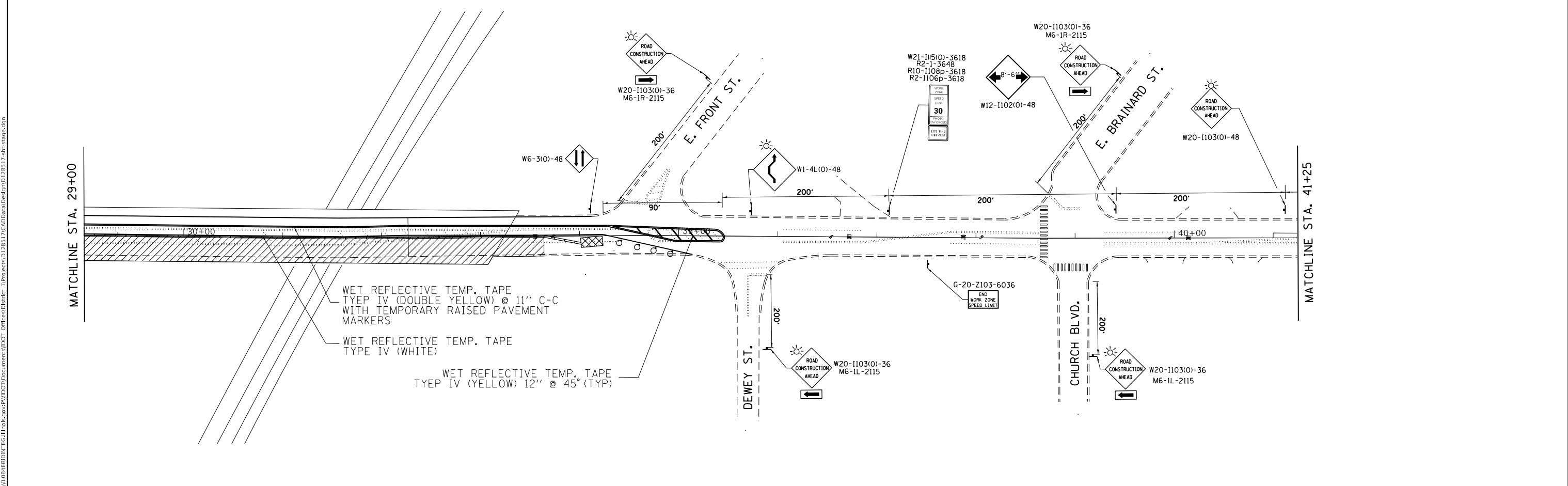
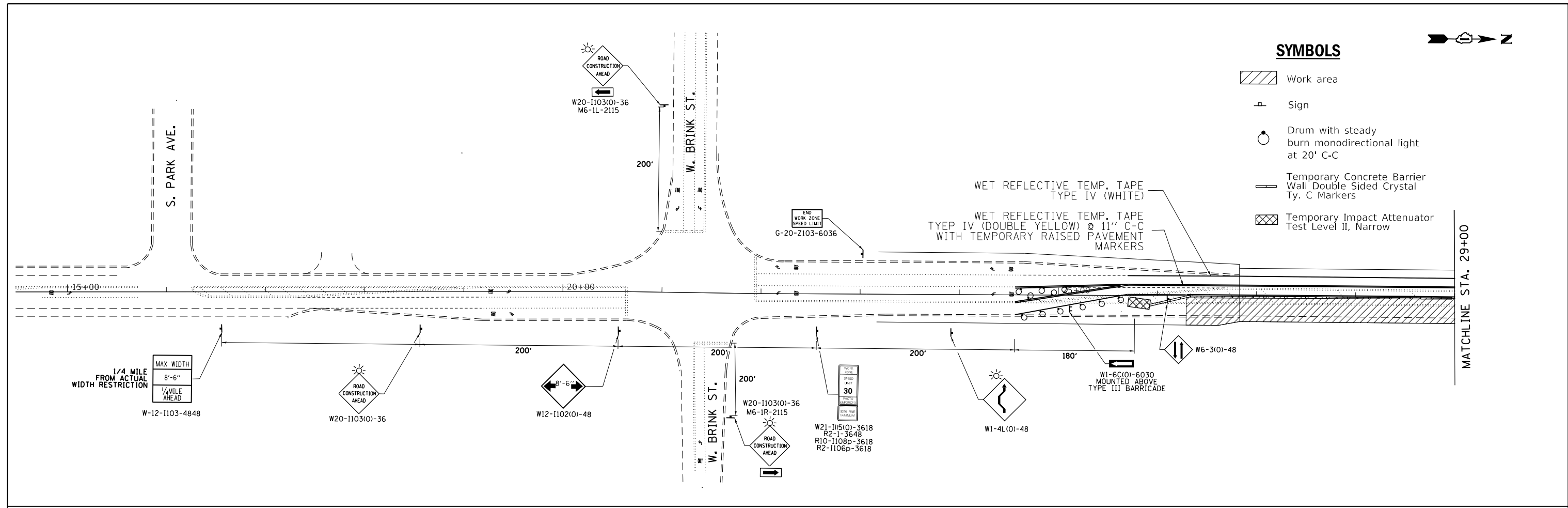
SCALE: SHEET OF SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|--------------|------------------|--------------|-----------|
| 303 | 29VB-BR (17) | MCHENRY | 42 | 32 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |



SYMBOLS

-  Work area
-  Sign
-  Drum with steady burn monodirectional light at 20' C-C
-  Temporary Concrete Barrier Wall Double Sided Crystal Ty. C Markers
-  Temporary Impact Attenuator Test Level II, Narrow



MODEL: Default
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



| | | |
|------------------------------|------------|-----------|
| USER NAME = hassan | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/13/2018 | DATE - | REVISED - |

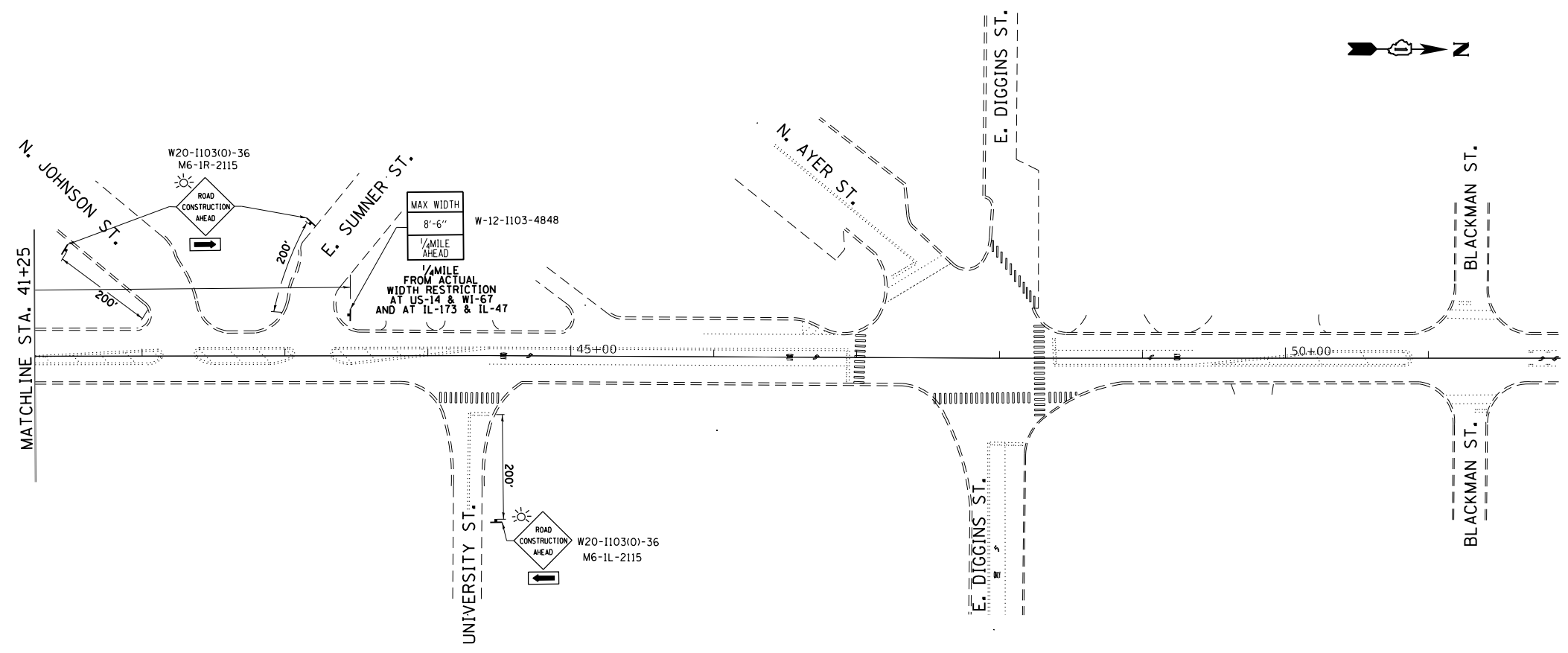
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|---|---------|-------------|--------------|
| US-141L-173 (DIVISION ST.) OVER UPRR MAINTENANCE OF TRAFFIC: STAGE I | | | |
| SCALE: | SHEET 1 | OF 2 SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|--------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-BR (17) | MCHENRY | 42 | 33 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SYMBOLS

-  Work area
-  Sign
-  Drum with steady burn monodirectional light at 20' C-C
-  Temporary Concrete Barrier Wall Double Sided Crystal Ty. C Markers
-  Temporary Impact Attenuator Test Level II, Narrow



MODEL: Default
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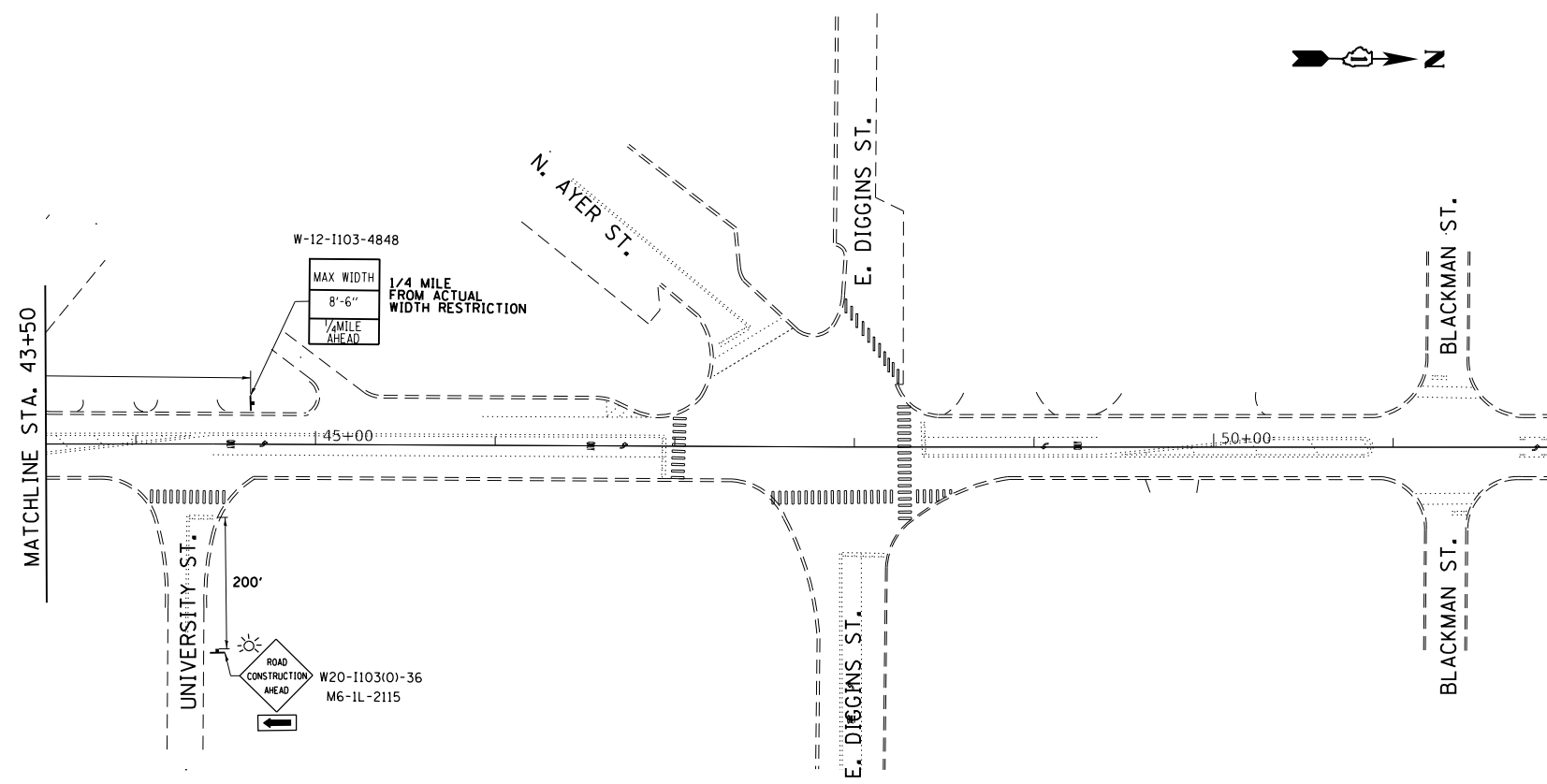
| | | |
|------------------------------|------------|-----------|
| USER NAME = hassann | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/13/2018 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**






| | | | |
|---|---------|-------------|--------------|
| US-141L-173 (DIVISION ST.) OVER UPRR MAINTENANCE OF TRAFFIC: STAGE I | | | |
| SCALE: | SHEET 2 | OF 2 SHEETS | STA. TO STA. |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|---------|--------------|-----------|
| 303 | 29VB-BR (17) | MCHENRY | 42 | 34 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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SYMBOLS

-  Work area
-  Sign
-  Drum with steady burn monodirectional light at 20' C-C
-  Temporary Concrete Barrier Wall Double Sided Crystal Ty. C Markers
-  Temporary Impact Attenuator Test Level II, Narrow

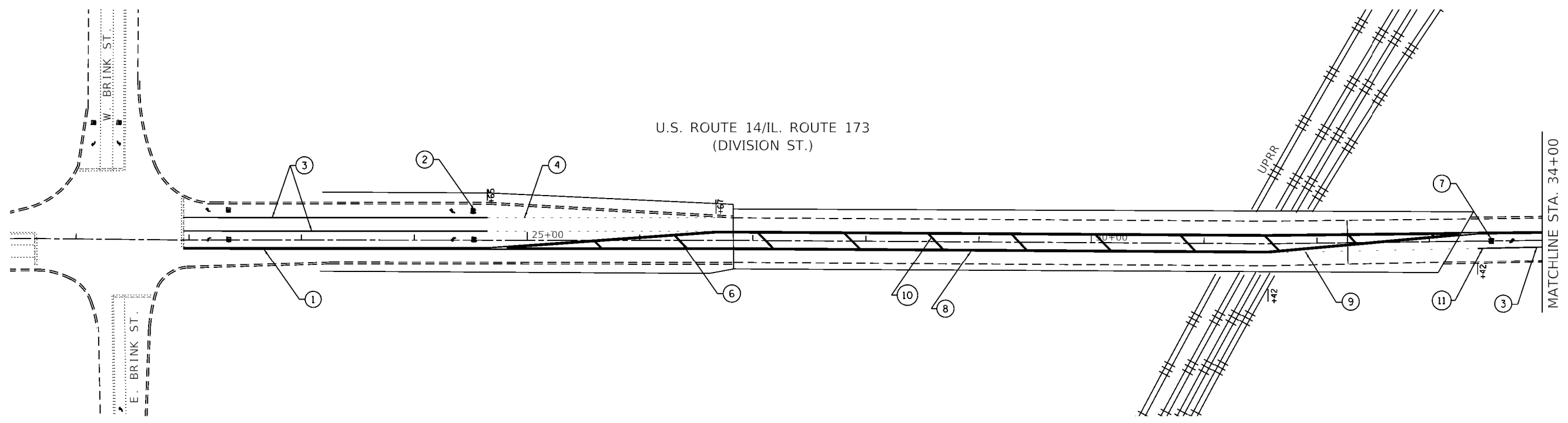
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|------------------------------|------------|-----------|
| USER NAME = hassann | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/13/2018 | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

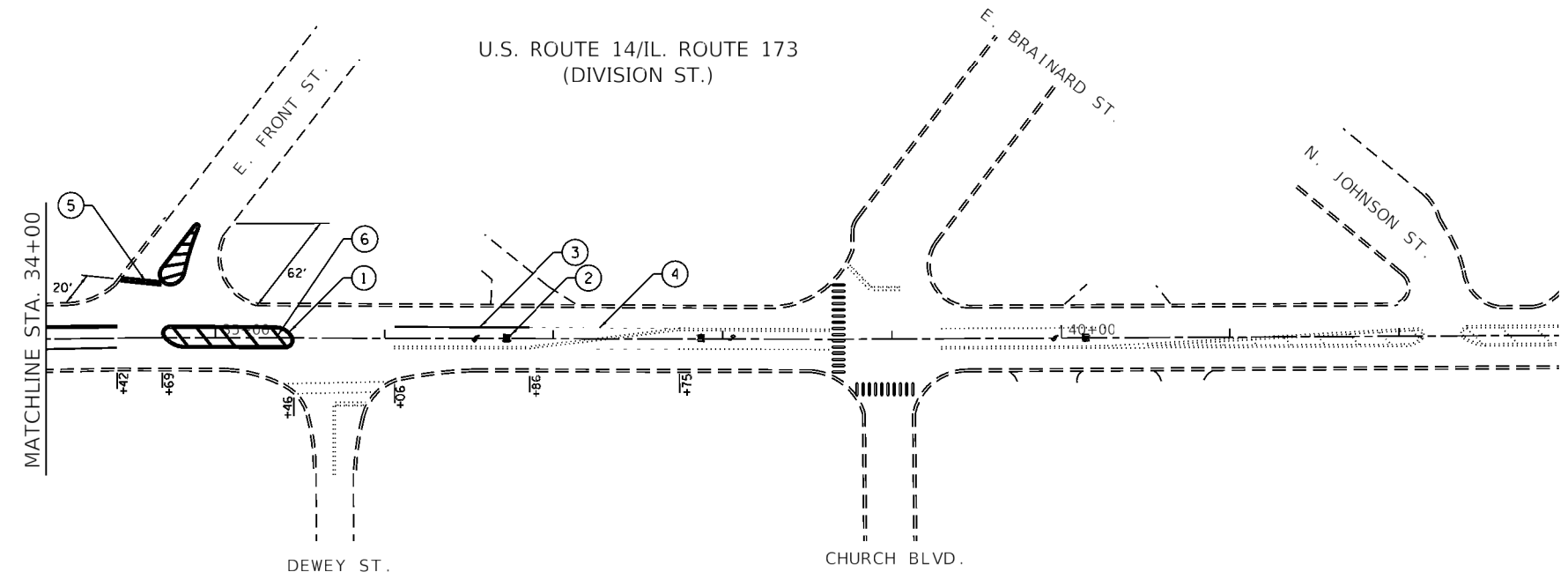
**US-141L-173 (DIVISION ST.) OVER UPRR
 MAINTENANCE OF TRAFFIC: STAGE II**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|---------|--------------|-----------|
| 303 | 29VB-BR (17) | MCHENRY | 42 | 36 |
| CONTRACT NO. 62F35 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



- | | | |
|---|---|---|
| ① PROP. THERMOPLASTIC PVMT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP.) | ⑤ PROP. THERMOPLASTIC PVMT MARKING LINE, 24" STOPBAR, WHITE (TYP.) | ⑨ PROP. MODIFIED URETHANE PAVEMENT MARKING - LINE 6", 2' DASH 6' SKIP, WHITE (TYP.) |
| ② PROP. THERMOPLASTIC PVMT, MARKING LETTERS AND SYMBOLS, WHITE (TYP.) | ⑥ PROP. THERMOPLASTIC PVMT, MARKING 12" MEDIAN @ 45' 50" C-C, YELLOW (TYP.) | ⑩ PROP. MODIFIED URETHANE PAVEMENT MARKING - LINE 12" MEDIAN @ 45' 50" C-C, YELLOW (TYP.) |
| ③ PROP. THERMOPLASTIC PVMT MARKING 6", TURN LANE, WHITE (TYP.) | ⑦ PROP. MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) | ⑪ PROP. MODIFIED URETHANE PAVEMENT MARKING - LINE 6", TURN LANE, WHITE (TYP.) |
| ④ PROP. THERMOPLASTIC PVMT MARKING 6", 2' DASH 6' SKIP, WHITE (TYP.) | ⑧ PROP. MODIFIED URETHANE PAVEMENT MARKING - DOUBLE YELLOW 4" AT 11" C-C (TYP.) | |



NOTES:
 MODIFIED URETHANE PAVEMENT MARKING
 WILL BE USED ON CONCRETE PAVEMENT ONLY.

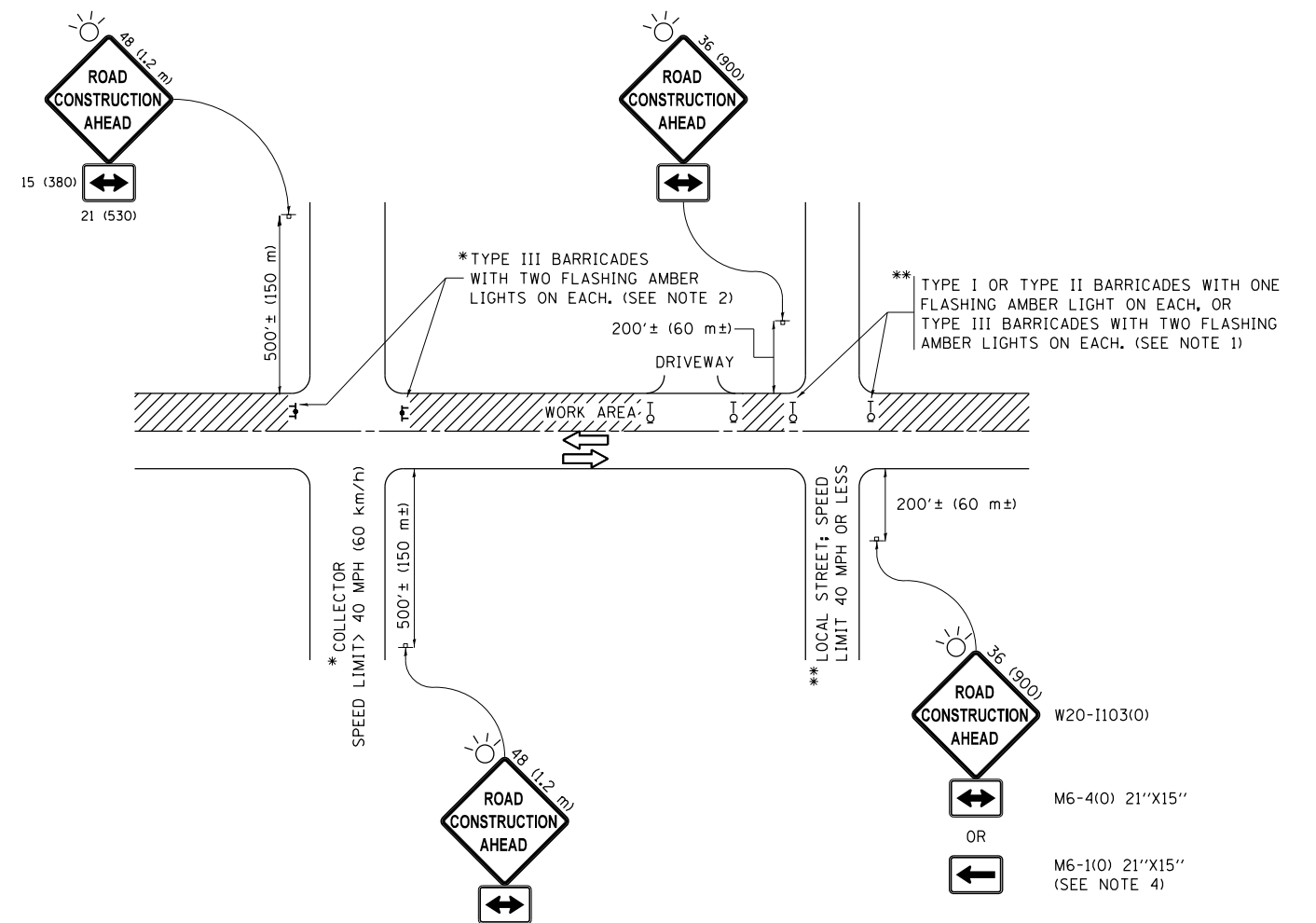
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| | | |
|------------------------------|------------|-----------|
| USER NAME = Hassam | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/14/2018 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| PAVEMENT MARKING SHEET | | | | |
|--------------------------------------|-------|----|--------|--------------|
| US-14 /IL-173 (DIVISION ST.) AT UPRR | | | | |
| SCALE: | SHEET | OF | SHEETS | STA. TO STA. |

| | | | | |
|-------------|-------------|----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-BR(17) | MCHENRY | 42 | 37 |
| | | | CONTRACT NO. 62F35 | |
| | | ILLINOIS | FED. AID PROJECT | |



NOTES:

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

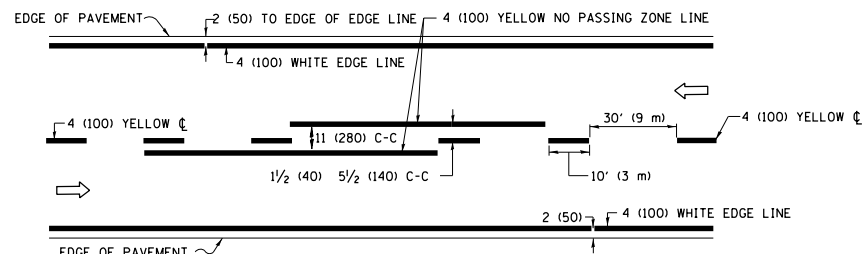
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|---|------------------------------|-------------------|---------------------------------|
| FILE NAME = | USER NAME = hassan | DESIGNED - L.H.A. | REVISED - A. HOUSEH 10-15-96 |
| p:\11084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI285\Drawings\Design\DistStd.dgn | | | REVISED - T. RAMMACHER 01-06-00 |
| Default | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - A. SCHUETZE 07-01-13 |
| | PLOT DATE = 12/12/2018 | DATE - 06-89 | REVISED - A. SCHUETZE 09-15-16 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

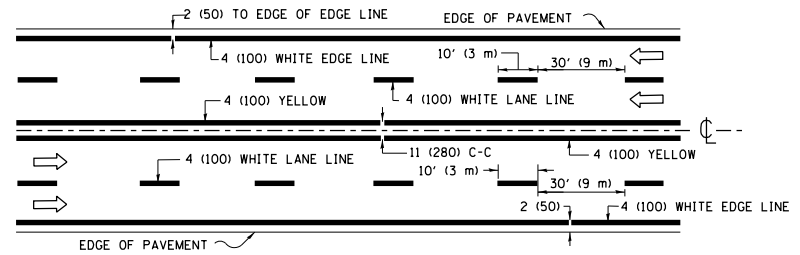
**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

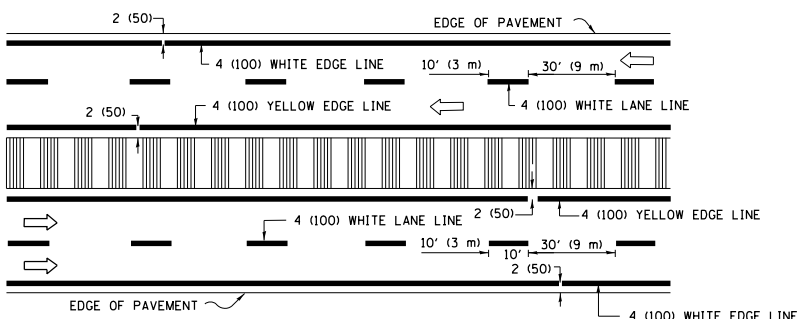
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|---------|---------------------------|-----------|
| 303 | 29VB-BR(17) | MCHENRY | 42 | 38 |
| TC-10 | | | CONTRACT NO. 62F35 | |
| ILLINOIS FED. AID PROJECT | | | | |



2-LANE ROADWAY

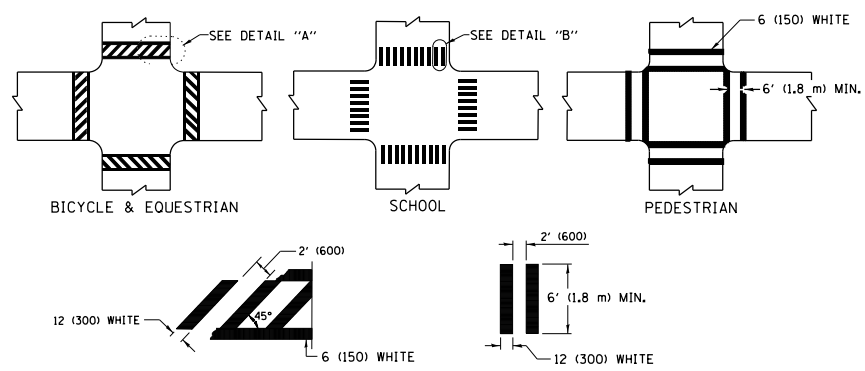


MULTI-LANE UNDIVIDED



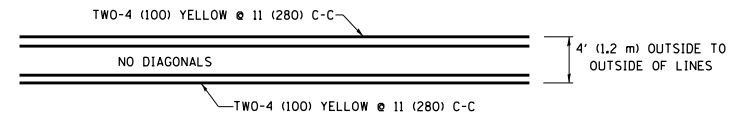
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

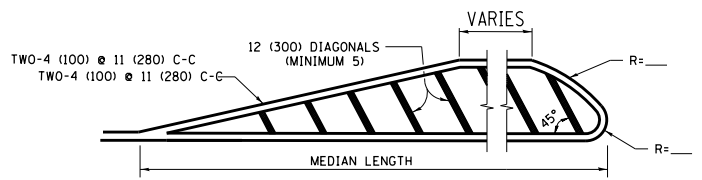


TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

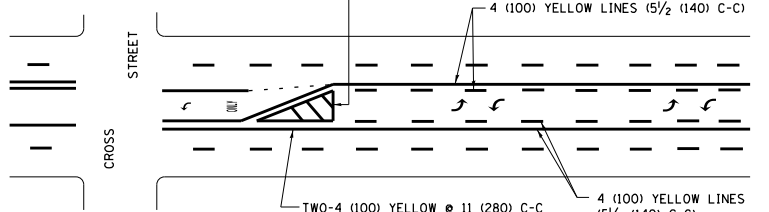


4' (1.2 m) WIDE MEDIANS ONLY



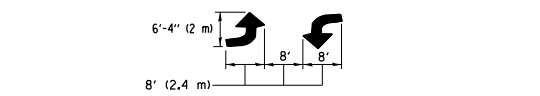
MEDIANS OVER 4' (1.2 m) WIDE

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))



MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

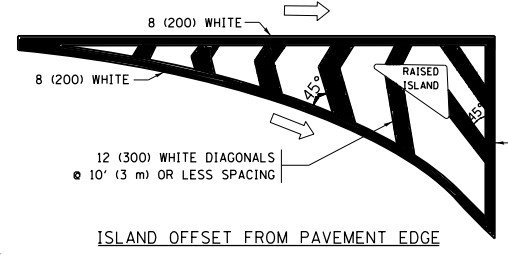
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



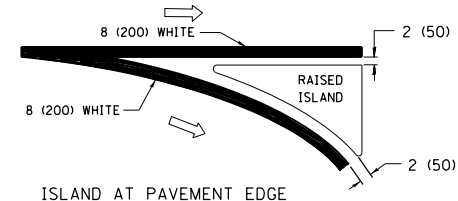
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

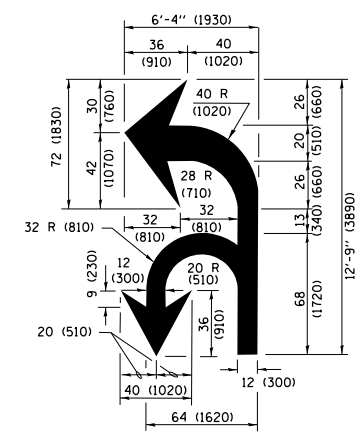
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



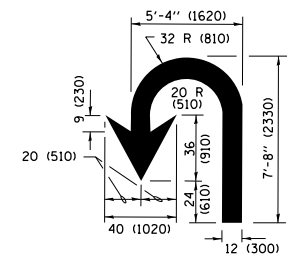
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION
* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

| D(FT) | SPEED LIMIT |
|-------|-------------|
| 345 | 30 |
| 425 | 35 |
| 500 | 40 |
| 580 | 45 |
| 665 | 50 |
| 750 | 55 |

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING /REMARKS |
|---|--|------------------------------|---|--|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MEDIANS IN YELLOW |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW | SKIP-DASH AND SOLID IN PAIRS | YELLOW WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID | YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²) |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8') | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h)) |
| U TURN ARROW | SEE DETAIL | SOLID | WHITE | 16.3 SF |
| 2 ARROW COMBINATION LEFT AND U TURN | SEE DETAIL | SOLID | WHITE | 30.4 SF |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

| | | | |
|---|------------------------------|------------------|------------------------------|
| FILE NAME = | USER NAME = hassann | DESIGNED - EVERS | REVISED - C. JUCIUS 09-09-09 |
| pw\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\0128\Drawings\Design\DistStd.dgn | | | REVISED - C. JUCIUS 07-01-13 |
| Default | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - C. JUCIUS 12-21-15 |
| | PLOT DATE = 12/12/2018 | DATE - 03-19-90 | REVISED - C. JUCIUS 04-12-16 |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

| | | | |
|-------------|---------|-------------|--------------|
| SCALE: NONE | SHEET 1 | OF 1 SHEETS | STA. TO STA. |
|-------------|---------|-------------|--------------|

| | | | | |
|---------------------------|-------------|---------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-BR(17) | MCHENRY | 42 | 39 |
| TC-13 | | CONTRACT NO. | 62F35 | |
| ILLINOIS FED. AID PROJECT | | | | |

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

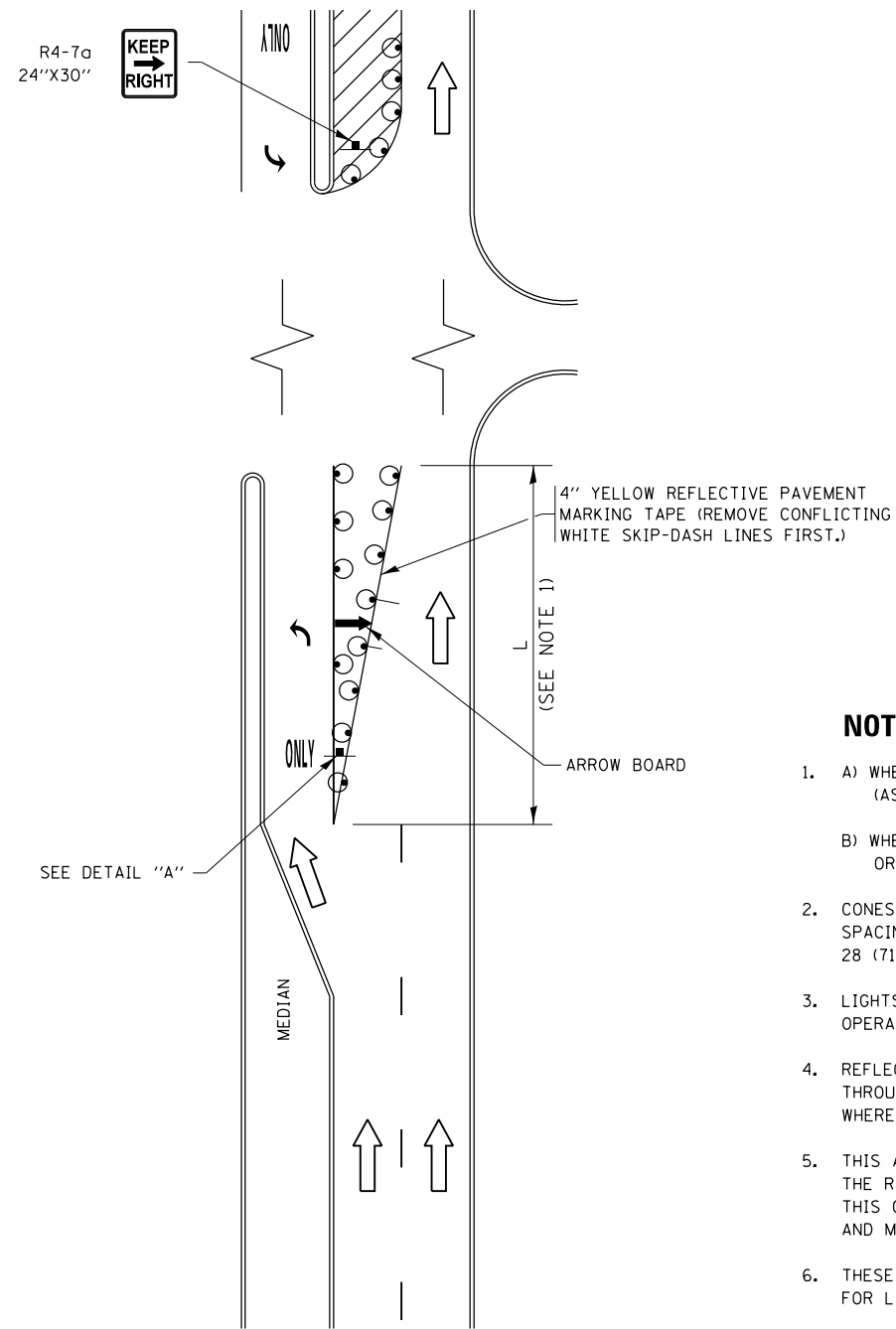


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

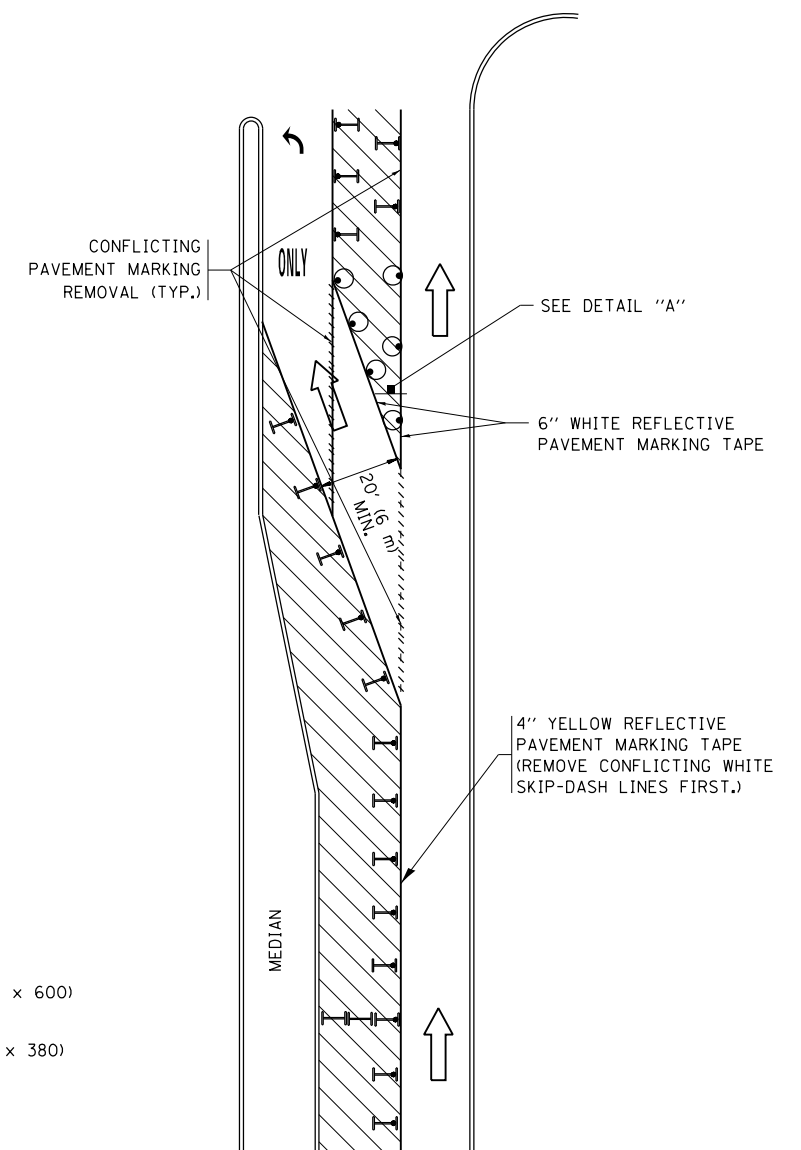
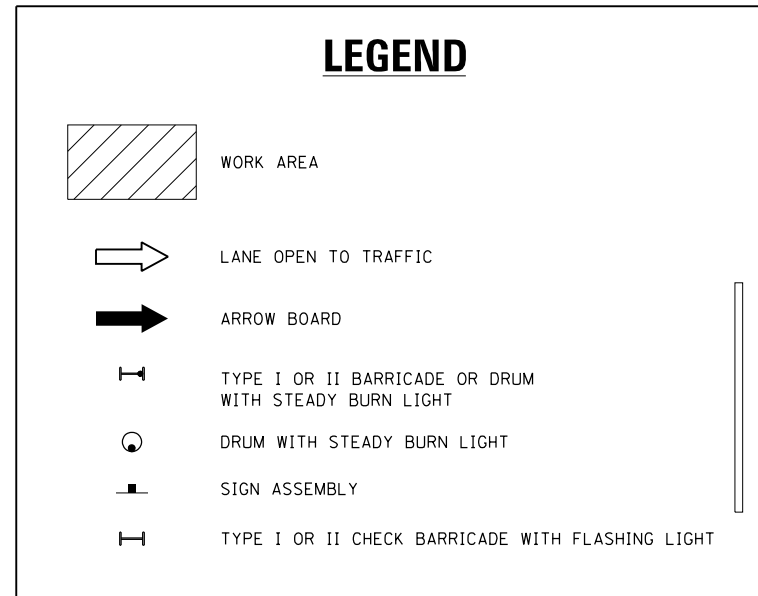
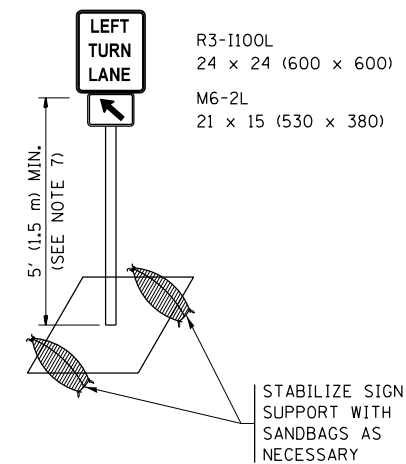


FIGURE 2



NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

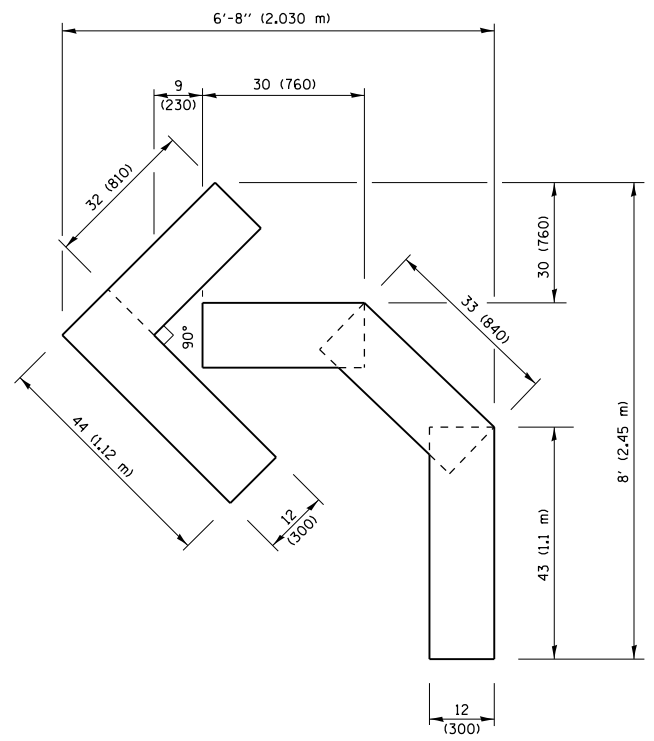


DETAIL A

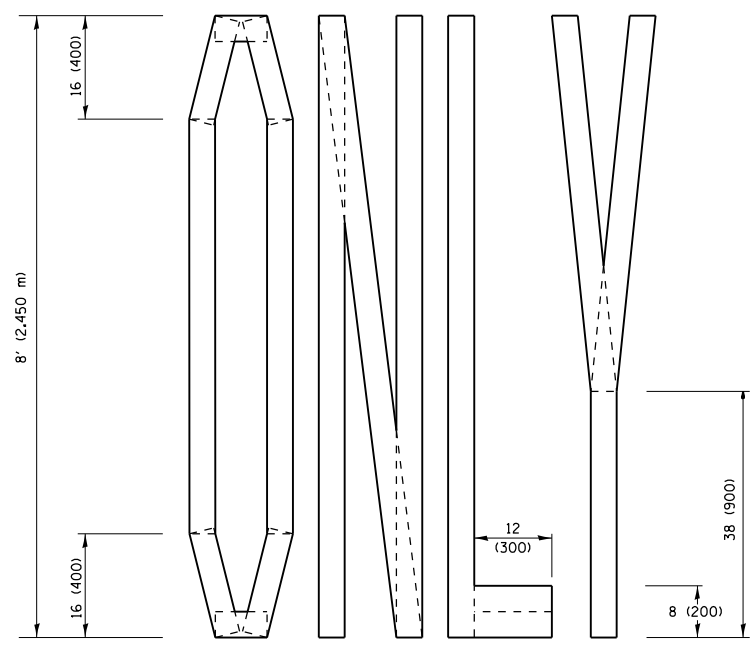
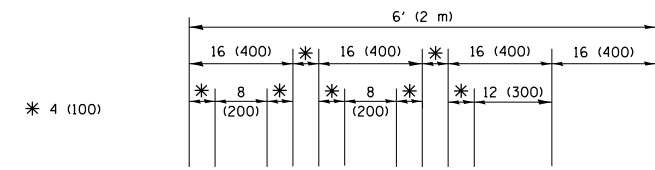
All dimensions are in inches (millimeters) unless otherwise shown.

| | | | | | | | | | | |
|--|------------------------------|---------------------------------|--------------------------------|---|--|--------------|-------------|---------------------------|--------------|--------------|
| FILE NAME = | USER NAME = hassann | REVISED - T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) | F.A.P. R.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| pw\1\084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\DI285\REVISED Design\HOUSEH 11-07-95 | REVISED - A. HOUSEH 11-07-95 | REVISED - A. SCHUETZE 07-01-13 | REVISED - A. SCHUETZE 07-01-13 | | | 303 | 29VB-BR(17) | MCHENRY | 42 | 40 |
| Default | PLOT SCALE = 100.0000' / in. | REVISED - A. HOUSEH 10-12-96 | REVISED - A. SCHUETZE 09-15-16 | | | TC-14 | | CONTRACT NO. 62F35 | | |
| | PLOT DATE = 12/12/2018 | REVISED - T. RAMMACHER 01-06-00 | REVISED - | | | SCALE: NONE | | SHEET 1 OF 1 SHEETS | | STA. TO STA. |

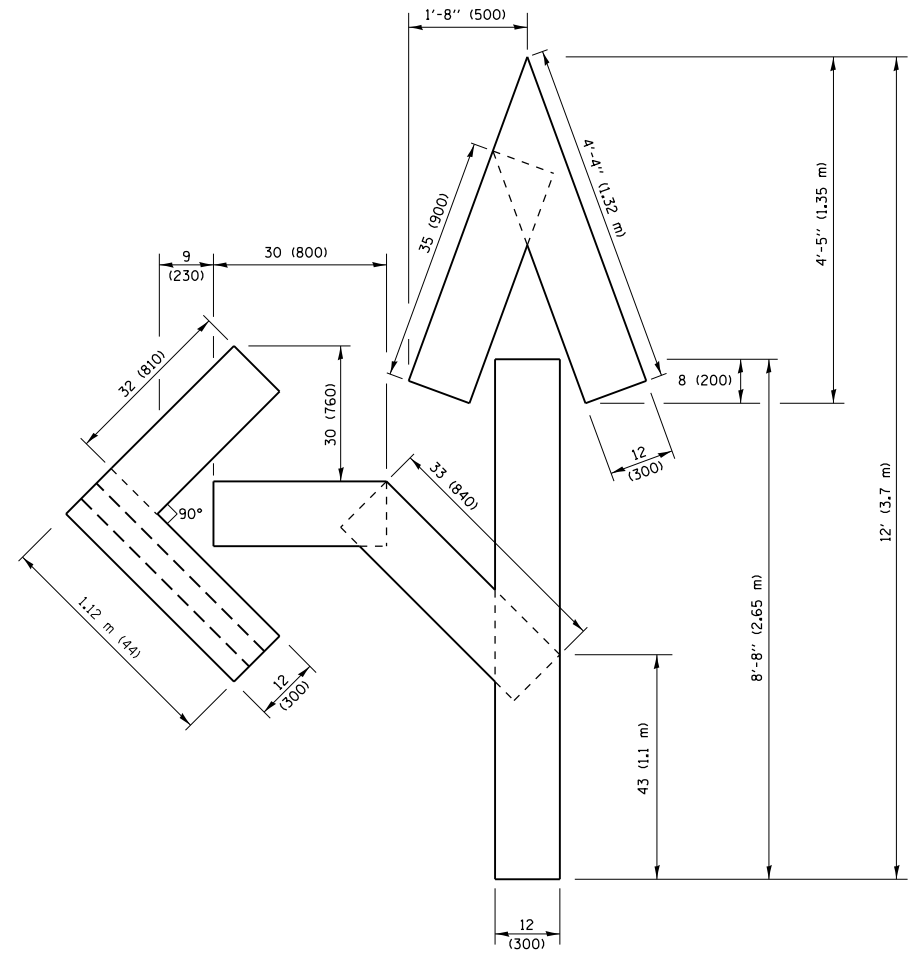
ILLINOIS FED. AID PROJECT



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

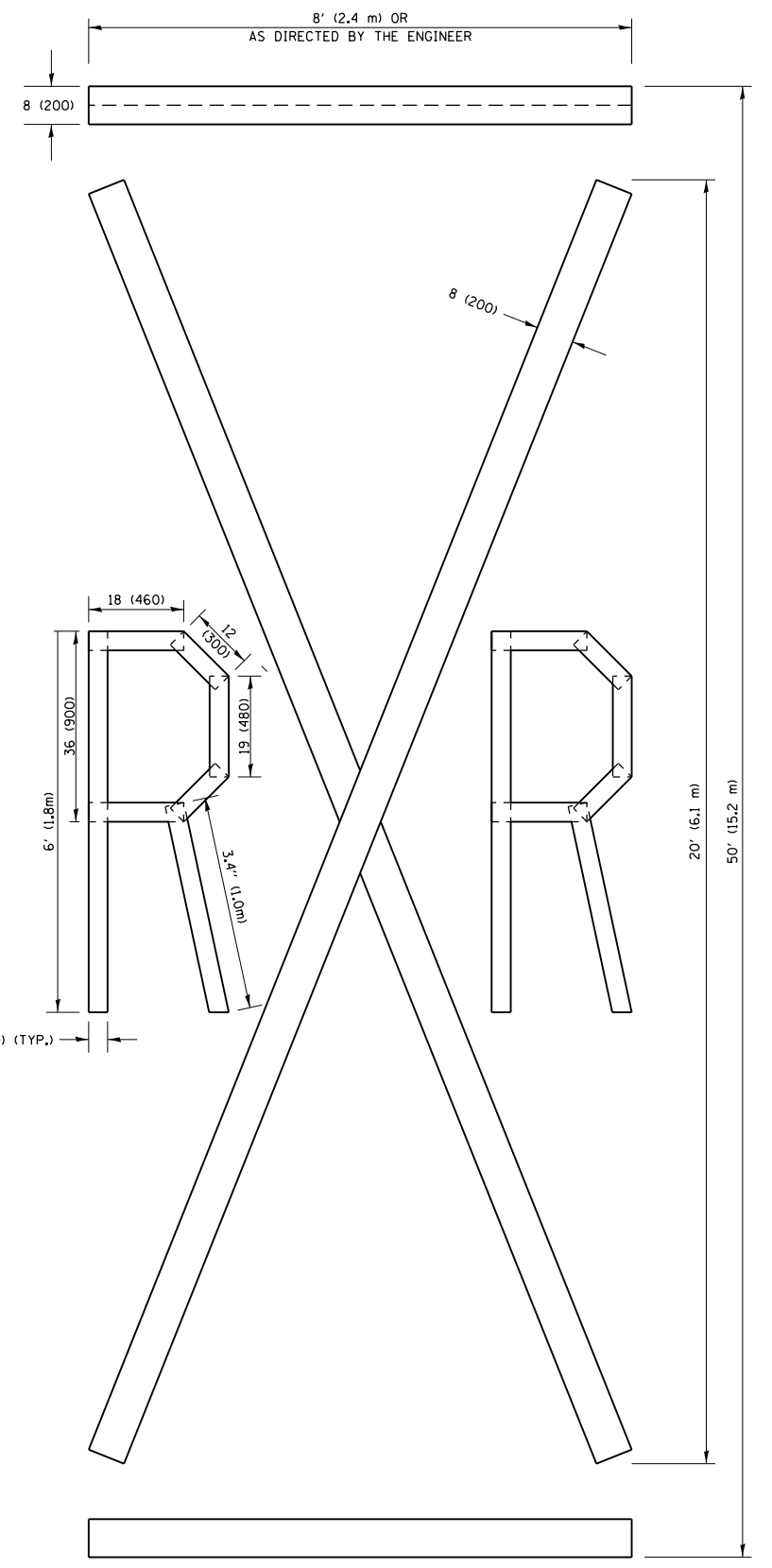


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

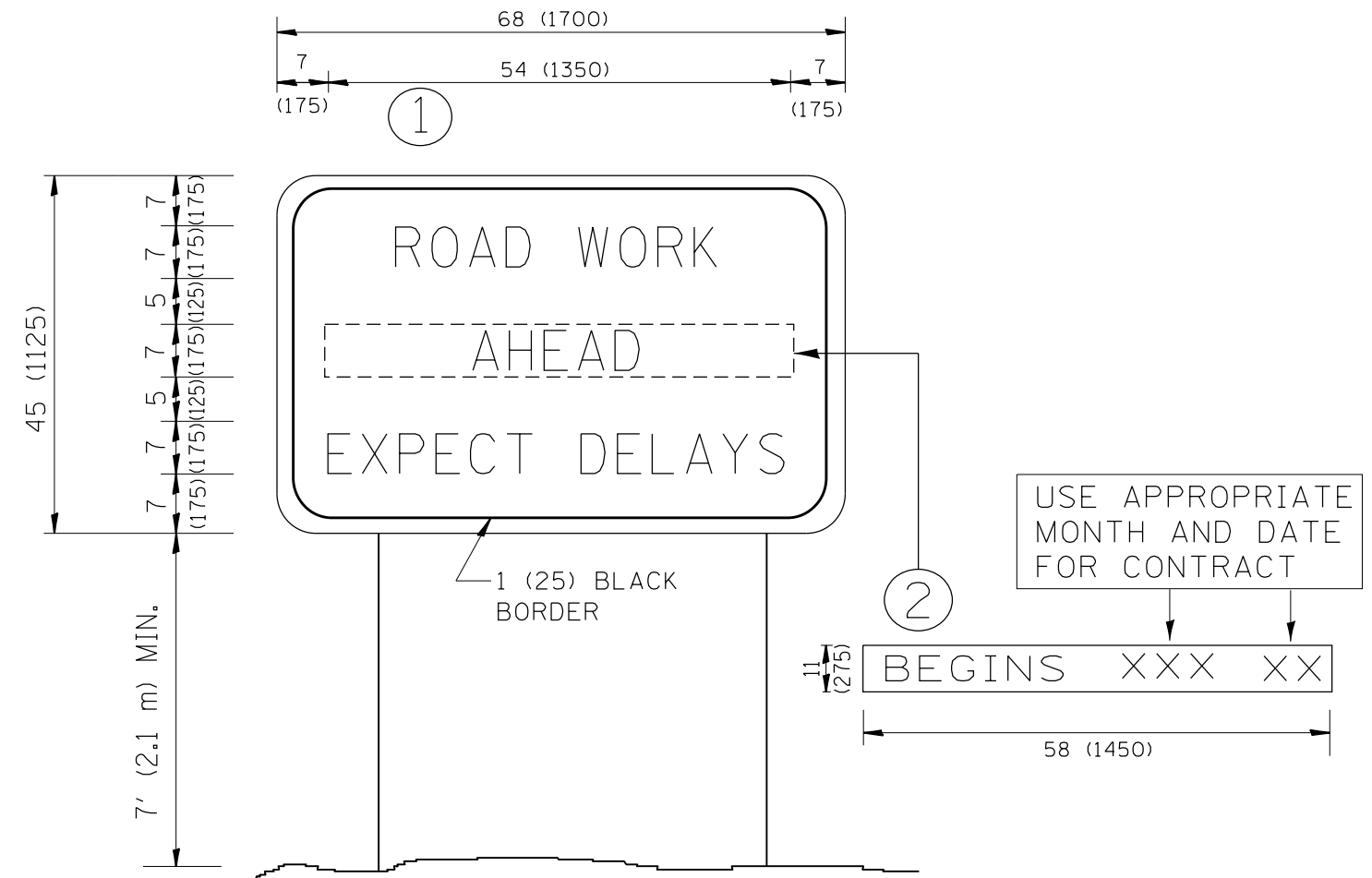
All dimensions are in inches (millimeters) unless otherwise shown.

| | | | |
|---|---------------------|------------|--------------------------------|
| FILE NAME = | USER NAME = hassann | DESIGNED - | REVISED -T. RAMMACHER 03-02-98 |
| pw\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI285\Drawings\Design\DistStd.dgn | | CHECKED - | REVISED -E. GOMEZ 08-28-00 |
| | | DATE - | REVISED -E. GOMEZ 08-28-00 |
| | | | REVISED -A. SCHUETZE 09-15-16 |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | | | |
|--|-------------------------|------|---------|
| SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| | | | | |
|---|-------------|---------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-BR(17) | MCHENRY | 42 | 41 |
| TC-16 | | CONTRACT NO. | 62F35 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| | | | |
|---|---------------------|-------------------------------|---------------------------------|
| FILE NAME = | USER NAME = hassann | DESIGNED - | REVISED - R. MIRS 09-15-97 |
| p:\11\084EBIDINTEG.illinois.gov\PIDOT\Documents\DOT Offices\District 1\Projects\DI285\Drawings\Design\DistStd.dgn | | CHECKED - | REVISED - R. MIRS 12-11-97 |
| | | PLOT SCALE = 100.0000' / 1in. | REVISED - T. RAMMACHER 02-02-99 |
| | | PLOT DATE = 12/12/2018 | REVISED - C. JUCIUS 01-31-07 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|-------------|--------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 303 | 29VB-BR(17) | MCHENRY | 42 | 42 |
| TC-22 | | CONTRACT NO. | 62F35 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |