

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
376	2009-116-I	COOK	23	1
FED ROAD DIST No. 1 ILLINOIS		CONTRACT No. 60J41		

23+1=24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP 376 / US14 (CALDWELL AVE) AT NORTH BRANCH CHICAGO RIVER
BRIDGE DECK OVERLAY, JOINT REPAIR
SECTION 2009-116 I
PROJECT NO. NHF-0376(002)
COOK COUNTY
C-91-231-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

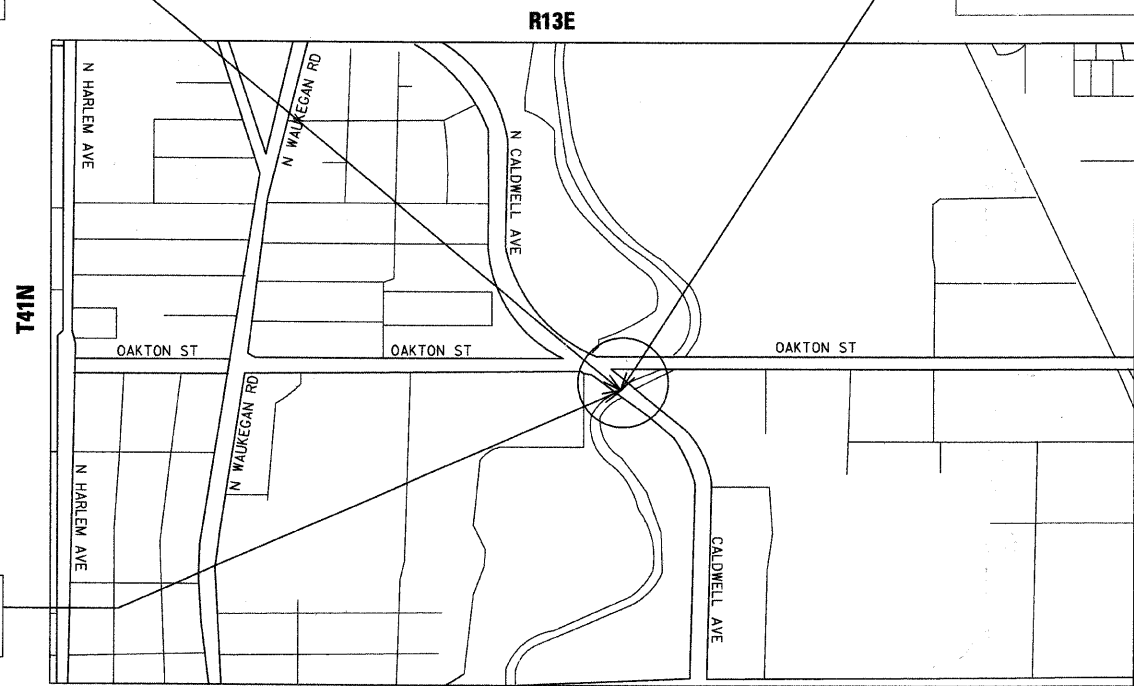
TRAFFIC DATA:
EXISTING ADT US14 19200 (2005)
POSTED SPEED = 40 MPH



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

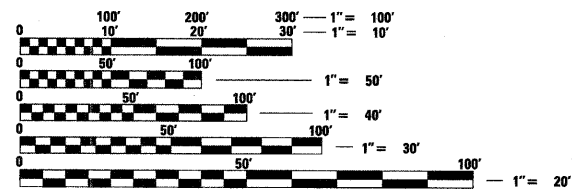
PROJECT LOCATION
US14 (CALDWELL AVE) OVER
NORTH BRANCH CHICAGO RIVER
STRUCTURE NO. 016-0928

IMPROVEMENT ENDS
STA 67+05.05



IMPROVEMENT BEGINS
STA 65+94.96

PROJECT IS LOCATED IN THE
VILLAGE OF MORTON GROVE



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 22, 2010

Diana M. O'Keefe *as*
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 19 2010

Scott E. Stitt *DE/EA*
ACTING ENGINEER OF DESIGN AND ENVIRONMENT

March 19 2010

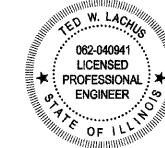
Christine M. Reed *EA*
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

GROSS LENGTH OF PROJECT = 110.09 FEET = 0.02 MILES
NET LENGTH OF PROJECT = 110.09 FEET = 0.02 MILES

PROJECT MANAGER RAJENDRA SHAH (847) 705-4555
PROJECT ENGINEER MICHELLE AQUINO (847) 705-4606
CONTRACT NO. 60J41

Primera
100 S. WACKER DRIVE SUITE 700. CHICAGO IL 60606.
P:312-606-0910 F:312-606-0415



Ted W. Lachus
TED W. LACHUS, P.E.
EXPIRES 11-30-2011

1-29-2010
DATE

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* 6A. TRAFFIC SIGNAL INSTALLATION US 14 @ OAKTON ST.

STATE STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701311-03	LANE CLOSURE 2 LANE 2 WAY MOVING OPERATIONS DAY ONLY
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W, WITH MOUNTABLE MEDIAN
701901-01	TRAFFIC CONTROL DEVICES

GENERAL NOTES:

1. THESE PLANS HAVE BEEN PREPARED FROM INFORMATION ACQUIRED FROM EXISTING PLANS AND NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO VARIATIONS FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. ANY ADJUSTMENTS PROPOSED BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE.
3. QUANTITIES FOR DECK SLAB REPAIR ARE APPROXIMATE. LOCATIONS WILL BE DETERMINED BY THE ENGINEER FOLLOWING REMOVAL OF THE HMA SURFACE COURSE AND HYDRO-SCARIFICATION. ACTUAL REPAIR LOCATIONS SHALL BE SHOWN ON THE AS-BUILT PLANS.
4. FORTY- EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) OR 811 FOR LOCATIONS OF THE EXISTING UTILITIES.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
9. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
10. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
11. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS INTO THE CREEK. THE COST OF THIS WORK SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.
12. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
13. THE ENGINEER SHALL CONTACT WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8418 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
14. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
15. ALL RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) SHALL BE LOW PROFILE.
16. ACCESS SHALL BE PROVIDED AT ALL TIMES TO PROPERTIES ABUTTING THE PROPOSED IMPROVEMENT.

COMMITMENTS

NONE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS
SURFACE COURSE	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	4% @ 70 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

The "AC Type" for Polymerized HMA Mixes SHALL BE "SBS/SBR PG 70 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" shall be "PG 64 -22" UNLESS modified by District ONE Special Provisions. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

Note: For proposed section see sheet number S8.

TEMPORARY PAVEMENT	
HOT-MIX ASPHALT BINDER IL-19 MM	4% @ 50GYR
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 MM)	4% @ 50GYR

Rev.

SUMMARY OF QUANTITIES			URBAN 80% FED. 20% STATE	CONSTRUCTION TYPE CODE	
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	016-0928 SFTY-2A QUANTITY	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	29	29	
42001300	PROTECTIVE COAT	SQ YD	434	434	
44000100	PAVEMENT REMOVAL	SQ YD	96	96	
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	248	248	
44000915	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	405	405	
44003100	MEDIAN REMOVAL	SQ FT	860	860	
50102400	CONCRETE REMOVAL	CU YD	22	22	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	25	25	
50300260	BRIDGE DECK GROOVING	SQ YD	401	401	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5080	5080	
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	16	16	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2280	2280	
50800515	BAR SPLICERS	EACH	32	32	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	157	157	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	16	16	
52100520	ANCHOR BOLTS, 1"	EACH	32	32	
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQFT	860	860	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	
67100100	MOBILIZATION	L SUM	1	1	
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	20	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	10	10	

SUMMARY OF QUANTITIES			URBAN 80% FED. 20% STATE	CONSTRUCTION TYPE CODE	
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	016-0928 SFTY-2A QUANTITY	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1862	1862	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37	37	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2215	2215	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	285	285	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	36	36	
* 78006110	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	16	16	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	88	88	
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	886	886	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	92	92	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51	51	
X0322489	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	405	405	
X0325239	TEMPORARY PAVEMENT 10"	SQ YD	96	96	
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	45	45	
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	13	13	
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1	
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	5085	5085	
Z0006204	BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ YD	405	405	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	51	51	
88600100	DETECTOR LOOP TYPE I	FOOT	66	66	
50501110	STRUCTURAL STEEL REMOVAL	POUND	660	660	
89502200	MODIFY EXISTING CONTROLLER	EACH	1	1	

FILE NAME =
FILE



DESIGNED	VEA	REVISED	-
DRAWN	VEA	REVISED	-
CHECKED	TWL	REVISED	-
DATE	1/29/2010	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
376	2009-116-1	COOK	23	3
CONTRACT NO. 60J41				
ILLINOIS FED. AID PROJECT				

Rev.

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE MOT PLANS.
3. ALL EXISTING PAVEMENT MARKING IN CONFLICT WITH THE MAINTENANCE OF TRAFFIC STRIPING SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "PAVEMENT MARKING REMOVAL".
4. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PAVEMENT MARKING TAPE WHICH CONFLICT WITH THE NEXT STAGE OR FINAL STRIPING. REMOVAL OF TEMPORARY PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "WORK ZONE PAVEMENT MARKING REMOVAL".
5. ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC, AS DETAILED ON THE PLANS, OR HIGHWAY STANDARD SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
6. ALL DRUMS, VERTICAL PANELS AND BARRICADES ADJACENT TO THE EDGE OF TRAVELED WAY SHALL BE EQUIPPED WITH STEADY-BURNING LIGHTS.
7. ALL EXISTING SIGNS WITHIN THE LIMITS OF MAINTENANCE OF TRAFFIC WHICH ARE OBSCURED BY OR OTHERWISE INTERFERED WITH BY THE CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.
8. TEMPORARY, OFF-PEAK HOUR LANE CLOSURES MUST BE REQUESTED THROUGH THE ENGINEER AND AS SPECIFIED IN THE SPECIAL PROVISIONS, WHEN OFF-PEAK HOUR OR WEEKEND LANE CLOSURES ARE REQUIRED, A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE WEEK PRIOR TO THE CLOSURE. THE MESSAGE SIGN WORDING AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
9. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH, "CHANGEABLE MESSAGE SIGN".
10. ALL TEMPORARY INFORMATION SIGNS SHALL BE PAID FOR SEPARATELY AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR "TEMPORARY INFORMATION SIGNING".
11. FOR ADDITIONAL BRIDGE CONSTRUCTION STAGING INFORMATION, SEE STRUCTURAL PLANS.

SUGGESTED CONSTRUCTION SEQUENCING

PRESTAGE

CONSTRUCTION:
IMPLEMENT STAGE 1 MOT PAVEMENT MARKING AND TRAFFIC CONTROL

MAINTENANCE OF TRAFFIC:
UTILIZE STANDARD 701606-06 AND 701311-03

STAGE 1

CONSTRUCTION:
NORTHWEST BOUND LANES: REMOVE HMA OVERLAY AND WATER PROOFING MEMBRANE SYSTEM, HYDROSCARIFY CONCRETE SLAB SURFACE, PERFORM DECK REPAIRS, PLACE LATEX CONCRETE OVERLAY AND PERFORM SUBSTRUCTURE REPAIRS.

MAINTENANCE OF TRAFFIC:
UTILIZE MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARD 701606-06

STAGE 2

CONSTRUCTION:
SOUTHEAST BOUND LANES: REMOVE HMA OVERLAY AND WATER PROOFING MEMBRANE SYSTEM, HYDROSCARIFY CONCRETE SLAB SURFACE, PERFORM DECK REPAIRS. PLACE LATEX CONCRETE OVERLAY, AND PERFORM SUBSTRUCTURE REPAIRS.

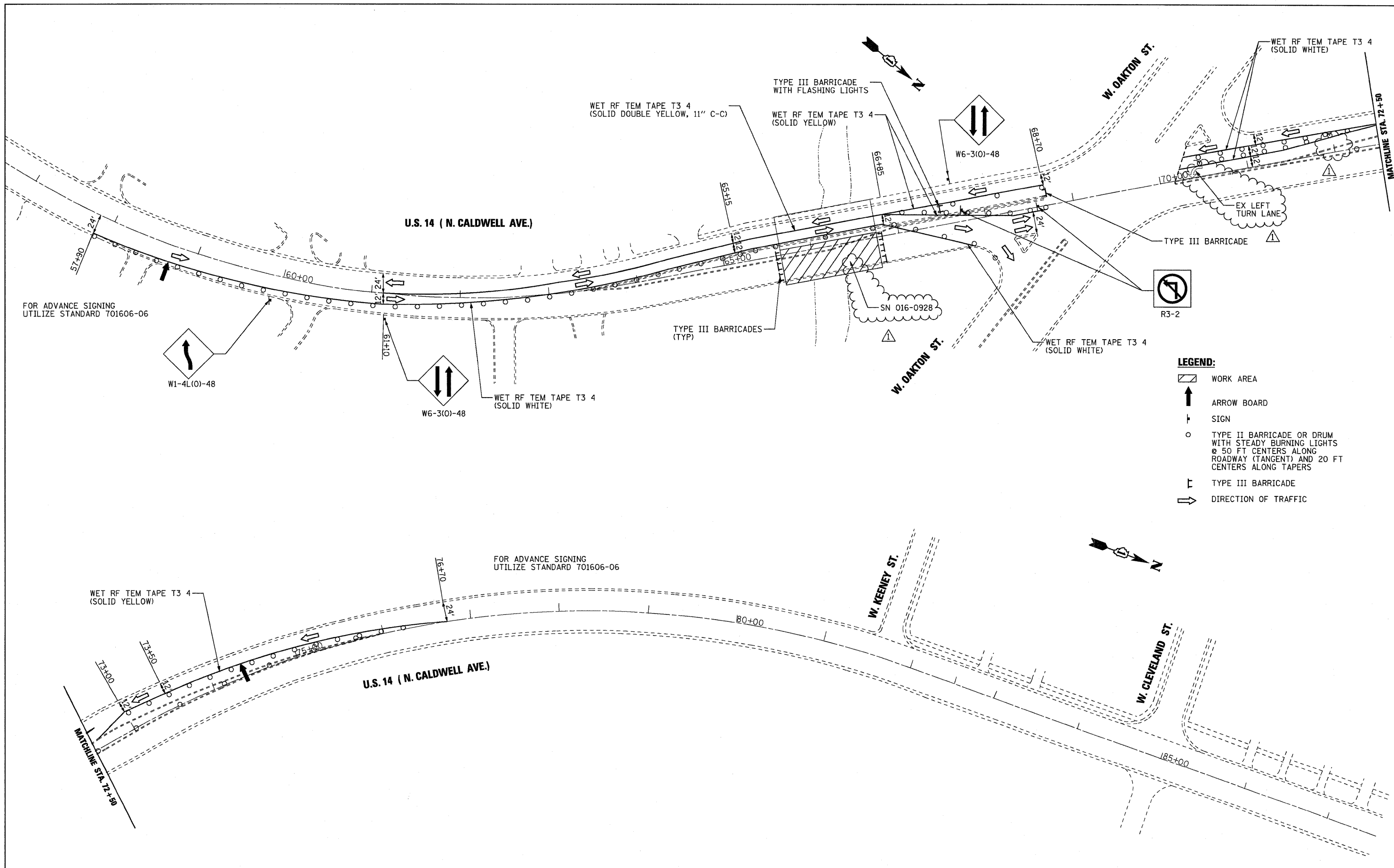
MAINTENANCE OF TRAFFIC:
UTILIZING MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARD 701606-06

STAGE 3

CONSTRUCTION:
PLACE FINAL PAVEMENT MARKINGS AND RAISED REFLECTIVE MARKERS.

MAINTENANCE OF TRAFFIC:
UTILIZE STANDARD 701606-06 AND 701311-03.

FILE NAME = #FILEL#		DESIGNED	TWL	REVISED	-	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MOT GENERAL NOTES AND SUGGESTED CONSTRUCTION SEQUENCING				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN	JLS	REVISED	-						376	2009-116-1	COOK	23	4
CHECKED	SF	REVISED	-	SCALE: SHEET NO. OF SHEETS STA. TO STA.					CONTRACT NO. 60J41						
DATE	1/29/2010	REVISED	-	ILLINOIS FED. AID PROJECT											



- LEGEND:**
- WORK AREA
 - ARROW BOARD
 - SIGN
 - TYPE II BARRICADE OR DRUM WITH STEADY BURNING LIGHTS @ 50 FT CENTERS ALONG ROADWAY (TANGENT) AND 20 FT CENTERS ALONG TAPERS
 - TYPE III BARRICADE
 - DIRECTION OF TRAFFIC

ADDENDUM NO. 1 - 3/26/2010

FILE NAME =
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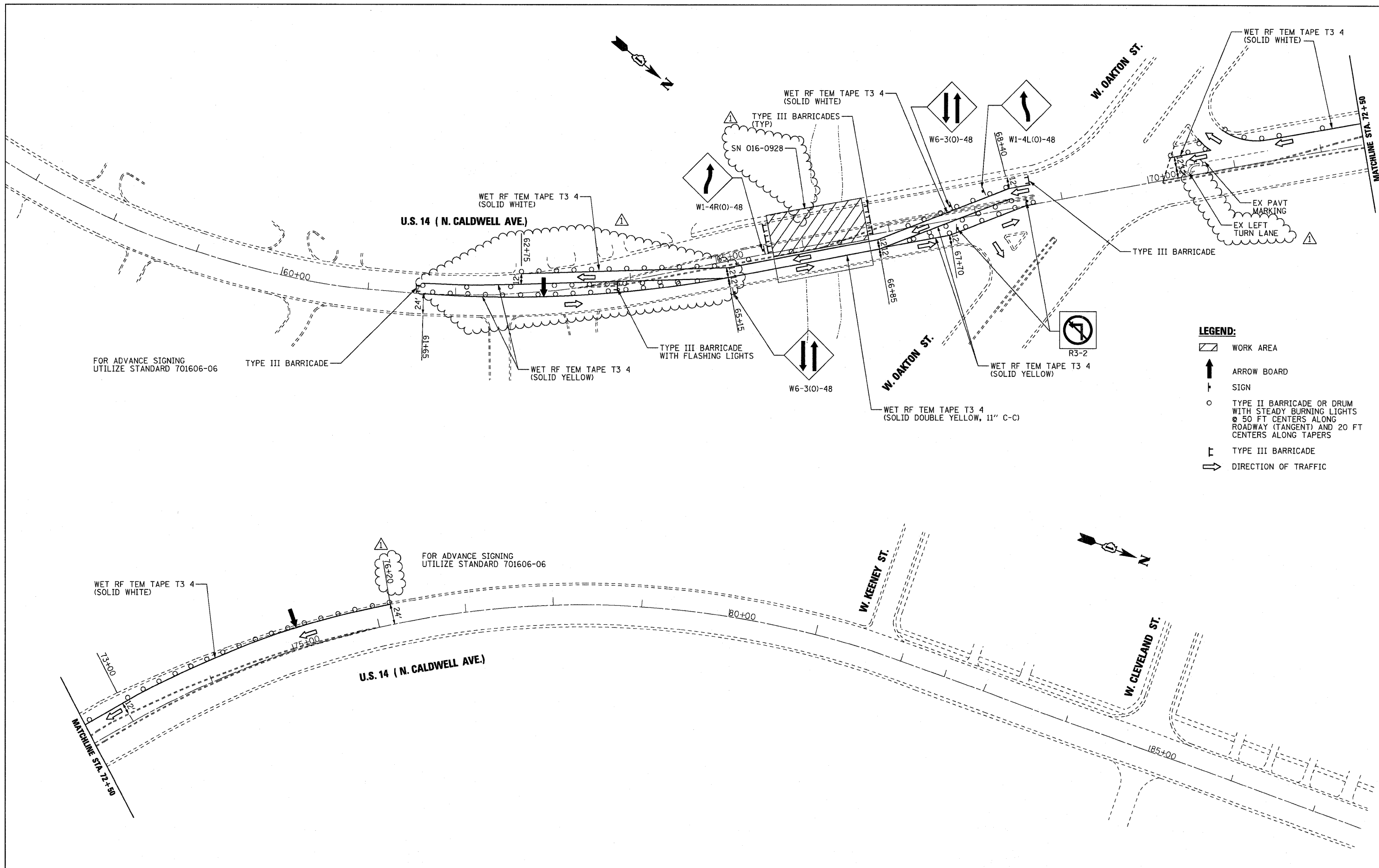
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CHECKED	SF	REVISED	-	2/12/2010
DATE	1/29/2010	REVISED	-	2/22/2010 & 3/10/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 1
US 14 (CALDWELL AVE.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
376	2009-116-1	COOK	23	5
CONTRACT NO. 60J41				
ILLINOIS FED. AID PROJECT				

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



FOR ADVANCE SIGNING
UTILIZE STANDARD 701606-06

FOR ADVANCE SIGNING
UTILIZE STANDARD 701606-06

- LEGEND:**
- WORK AREA
 - ARROW BOARD
 - SIGN
 - TYPE II BARRICADE OR DRUM WITH STEADY BURNING LIGHTS @ 50 FT CENTERS ALONG ROADWAY (TANGENT) AND 20 FT CENTERS ALONG TAPERS
 - TYPE III BARRICADE
 - DIRECTION OF TRAFFIC

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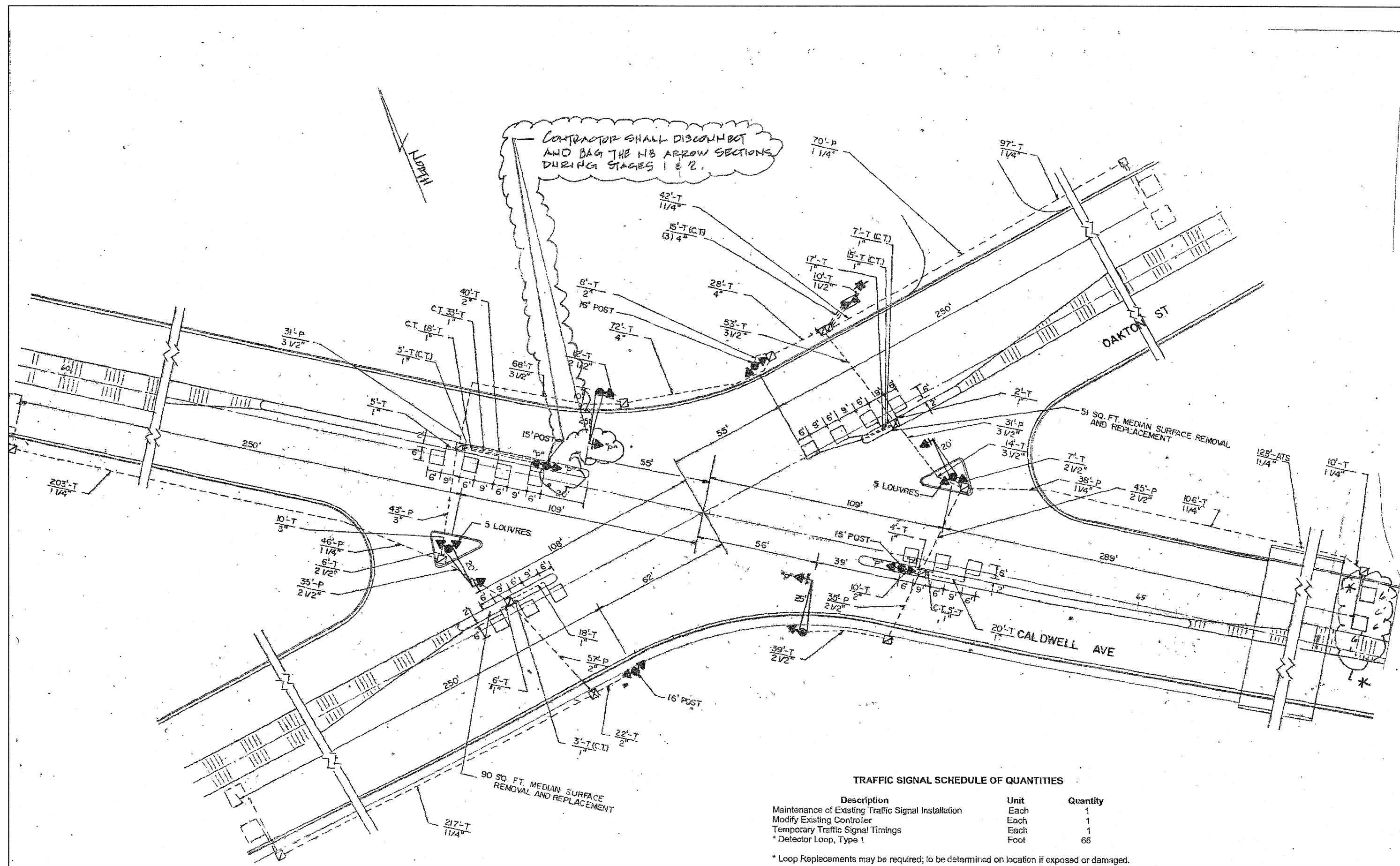
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DRAWN	JLS	REVISED	-	2/10/2010
CHECKED	SF	REVISED	-	2/12/2010
DATE	1/29/2010	REVISED	-	2/22/2010 & 3/10/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 2
US 14 (CALDWELL AVE.)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
376	2009-116-1	COOK	23	6
CONTRACT NO. 60J41				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

Description	Unit	Quantity
Maintenance of Existing Traffic Signal Installation	Each	1
Modify Existing Controller	Each	1
Temporary Traffic Signal Timings	Each	1
* Detector Loop, Type 1	Foot	66

* Loop Replacements may be required; to be determined on location if exposed or damaged.

ADDENDUM NO. 1 - 3/26/2010 - NEW DRAWING

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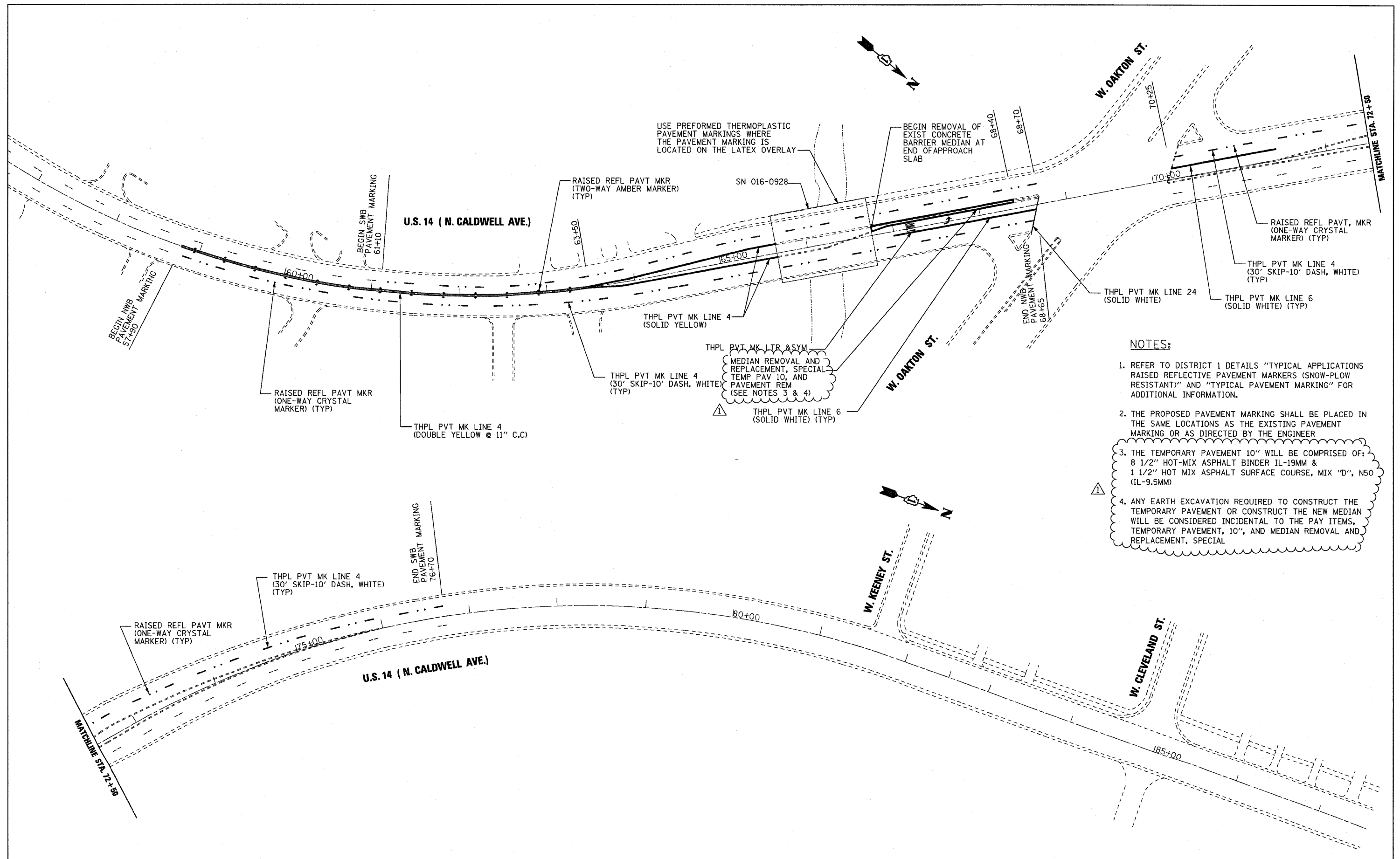
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DRAWN	VEA	REVISED	-
CHECKED	TWL	REVISED	-
DATE	1/29/2010	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION
U.S. ROUTE 14 @ OAKTON ST.**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
376	2009-116-1	COOK	23	6A
CONTRACT NO. 60J41				
ILLINOIS FED. AID PROJECT				



- NOTES:**
- REFER TO DISTRICT 1 DETAILS "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" AND "TYPICAL PAVEMENT MARKING" FOR ADDITIONAL INFORMATION.
 - THE PROPOSED PAVEMENT MARKING SHALL BE PLACED IN THE SAME LOCATIONS AS THE EXISTING PAVEMENT MARKING OR AS DIRECTED BY THE ENGINEER
 - THE TEMPORARY PAVEMENT 10" WILL BE COMPRISED OF:
8 1/2" HOT-MIX ASPHALT BINDER IL-19MM &
1 1/2" HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5MM)
 - ANY EARTH EXCAVATION REQUIRED TO CONSTRUCT THE TEMPORARY PAVEMENT OR CONSTRUCT THE NEW MEDIAN WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS, TEMPORARY PAVEMENT, 10", AND MEDIAN REMOVAL AND REPLACEMENT, SPECIAL

ADDENDUM NO. 1 - 3/26/2010

FILE NAME =
FILEL



DESIGNED	TWL	REVISED	-	2/3/2010
DRAWN	JLS	REVISED	-	2/10/2010
CHECKED	SF	REVISED	-	2/12/2010
DATE	1/29/2010	REVISED	-	2/22/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

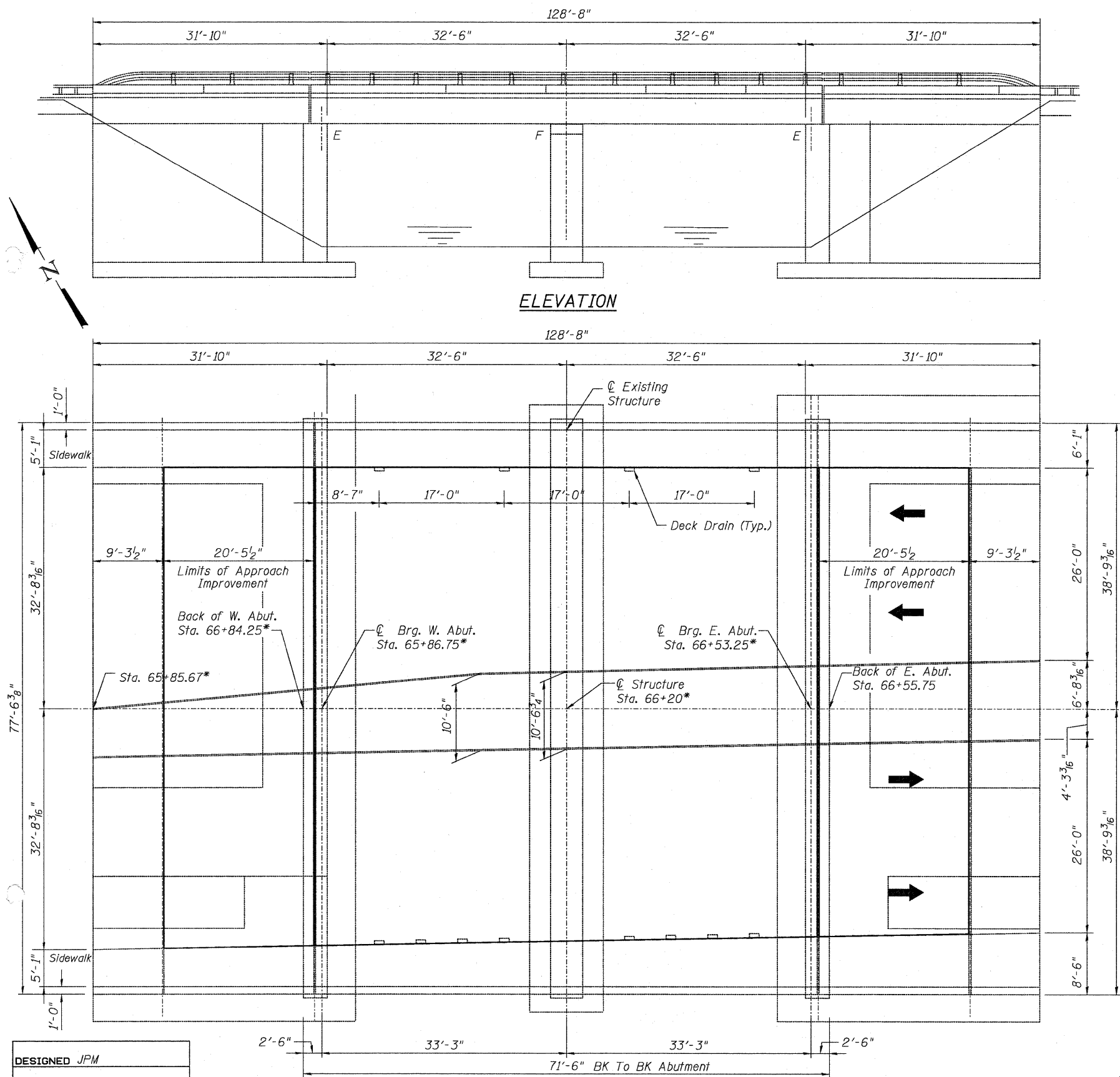
ROADWAY AND PAVEMENT MARKING PLAN
US 14 (CALDWELL AVE.)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
376	2009-116-I	COOK	23	7
CONTRACT NO. 60J41				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing Structure: SN 016-0928, original bridge built as two lanes on two span structure in 1935 as Caldwell Ave. over North Branch Chicago River and widened to 4 lanes plus walks in 1965. In 1981 the bridge superstructure was replaced with Reinforced Concrete deck and raised sidewalks on steel beams and the existing Prestressed Deck Beams on the Southeast Bound direction were reused. Substructures were modified and reconstructed. The structure measures 77'-6³/₈" Out to Out Deck and 71'-6" Bk. to Bk. Abutments. The substructures consists of Reinforced Concrete closed abutments and a wall type pier. Traffic is to be maintained utilizing staged construction. One lane for both directions will be provided during construction.



SCOPE OF WORK

1. Remove existing HMA overlay.
2. Full depth slab repairs.
3. Hydroscarify 1/2 inch deck slab surface.
4. Reconstruct all transverse expansion joints to Strip Seal.
5. Place 2 1/4 inch latex concrete overlay.
6. Remove & replace overlay on approaches.
7. Clean deck drains.
8. Diaphragm replacement.
9. Replace bearings under expansion joints with elastomeric bearings.
10. Structural repairs of concrete to substructures.

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated. Fastener shall be high strength bolts. Bolts 3/4" in. ϕ , open holes 13/16" in. ϕ , unless noted.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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".

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

Prior to pouring the new concrete deck, 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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that can not be removed by grinding 1/4" in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld area and grinding cracks will be paid for according to the Article 109.04 of the Standard Specifications.

INDEX OF SHEETS

- S1 - General Plan & Elevation
- S2 - Stage Construction Details
- S3 - Temporary Concrete Barrier
- S4 - Bridge Deck Patching & Expansion Joint Reconstruction Details
- S5 - Deck Details
- S6 - Framing Plan & Diaphragm Details
- S7 - Substructure Repair Details
- S8 - Bridge Deck & Approach Improvement Plan
- S9 - Preformed Joint Strip Seal
- S10 - Elastomeric Bearing Details
- S11 - Bar Splicer Assembly & Mechanical Splicer Details

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi
 $f_y = 36,000$ psi (Diaphragms, Side Retainers & Extensions)
 $f_y = 50,000$ psi (Bearing Plates)

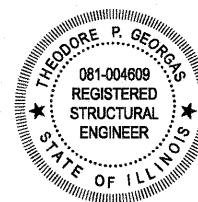
LAST DELAMINATION SURVEY

October 2009

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bar Splicer	Each	32	-	32
Bridge Deck Grooving	Sq. Yd.	401	-	401
Bridge Deck Hydro-scarification 1/2"	Sq. Yd.	405	-	405
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	405	-	405
Concrete Removal	Cu. Yd.	22	-	22
Concrete Superstructure	Cu. Yd.	25	-	25
Elastomeric Bearing Assembly, Type I	Each	16	-	16
Furnishing and Erecting Structural Steel	Pounds	5,080	-	5,080
Hot-Mix Asphalt Surface Course, Mix "D", N-70, 2"	Tons	29	-	29
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	405	-	405
Hot-Mix Asphalt Surface Removal, 2"	Sq. Yd.	248	-	248
Jack and Remove Existing Bearings	Each	16	-	16
Protective Coat	Sq. Yd.	434	-	434
Preformed Joint Strip Seal	Foot	157	-	157
Reinforcement Bars, Epoxy Coated	Pounds	2,280	-	2,280
Structural Repair of Concrete (Depth equal to or less 5 inches)	Sq. Ft.	-	13	13
Structural Repair of Concrete (Depth greater than 5 inches)	Sq. Ft.	-	45	45
Deck Slab Repair (Full Depth Type II)	Sq. Yd.	51	-	51
Anchor Bolts 1"	Each	32	-	32
Structural Steel Removal	Pounds	660	-	660

**GENERAL PLAN AND ELEVATION
 FAP 376/US 14 (CALDWELL AVE) OVER
 NORTH BRANCH CHICAGO RIVER
 COOK COUNTY
 STATION 66+20.00
 STRUCTURE NO. 016-0928**



Theodore P. Georgas 3-1-10
 Theodore P. Georgas Date
 Licensed Structural Engineer
 State of Illinois 081-4609
 Expires 11/30/2010

DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG

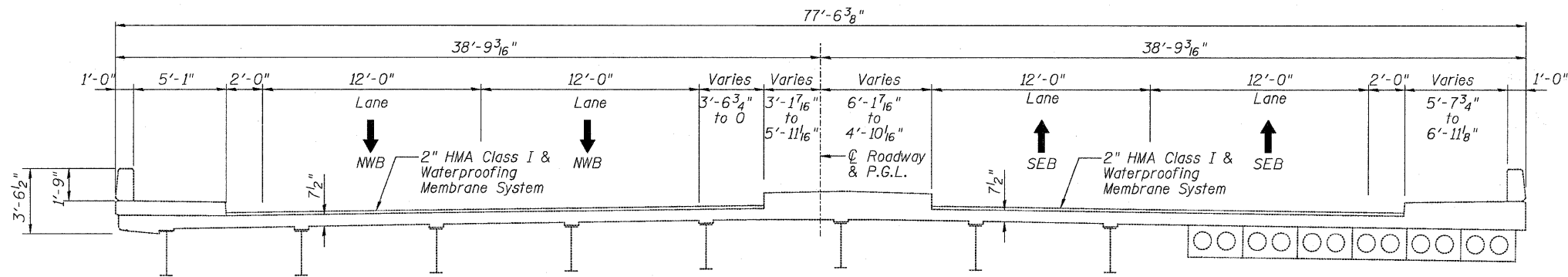


PLAN

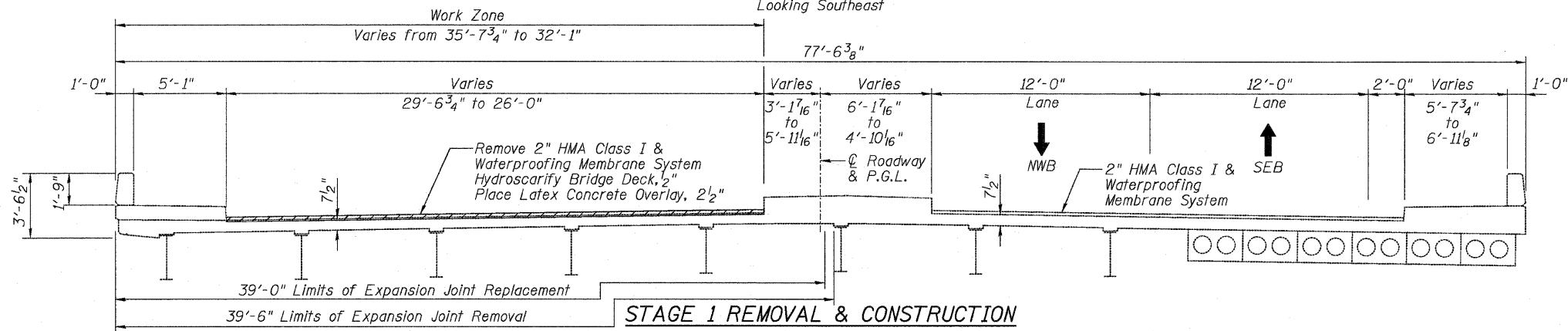
* Information taken from 1981 plans.

SHEET NO. S1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	376	2009-1161	COOK	23	8
S11 SHEETS	CONTRACT NO. 60J41			ILLINOIS FED. AID PROJECT	

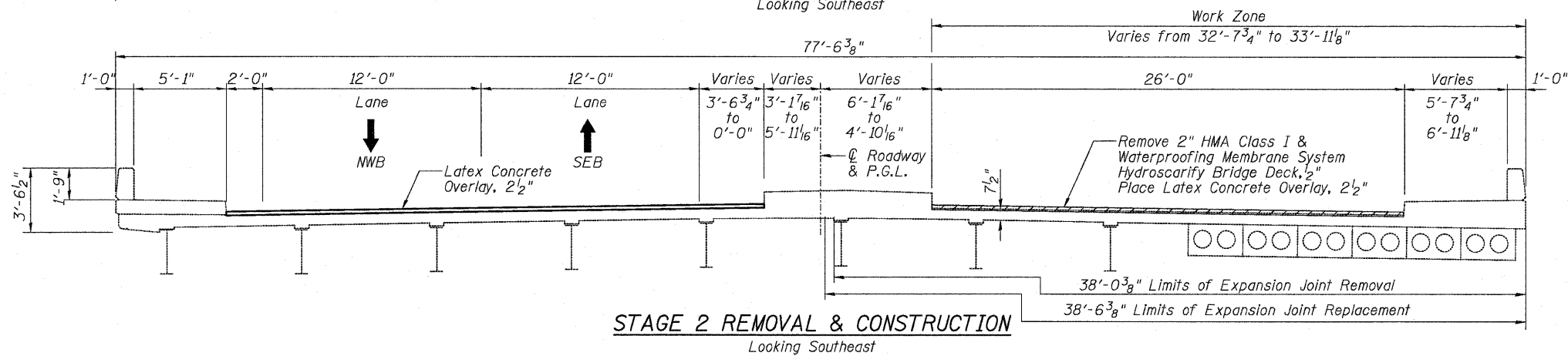
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



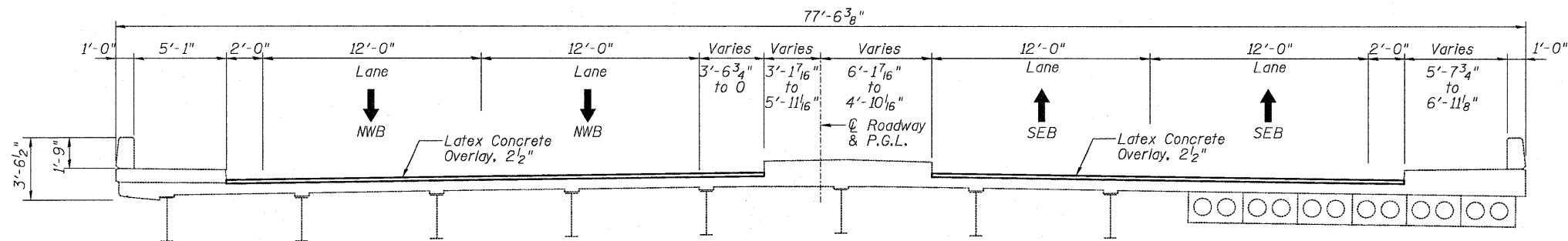
EXISTING
Looking Southeast



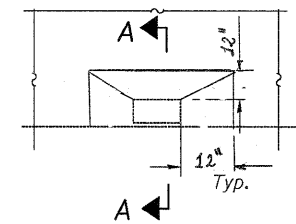
STAGE 1 REMOVAL & CONSTRUCTION
Looking Southeast



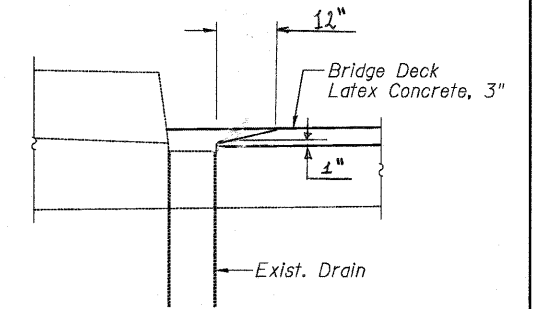
STAGE 2 REMOVAL & CONSTRUCTION
Looking Southeast



FINAL
Looking Southeast




DRAIN PLAN



SECTION A-A

LEGEND:

 2" HMA Overlay and W.P.M. Removal & Bridge Deck Hydroscarification, 1/2"

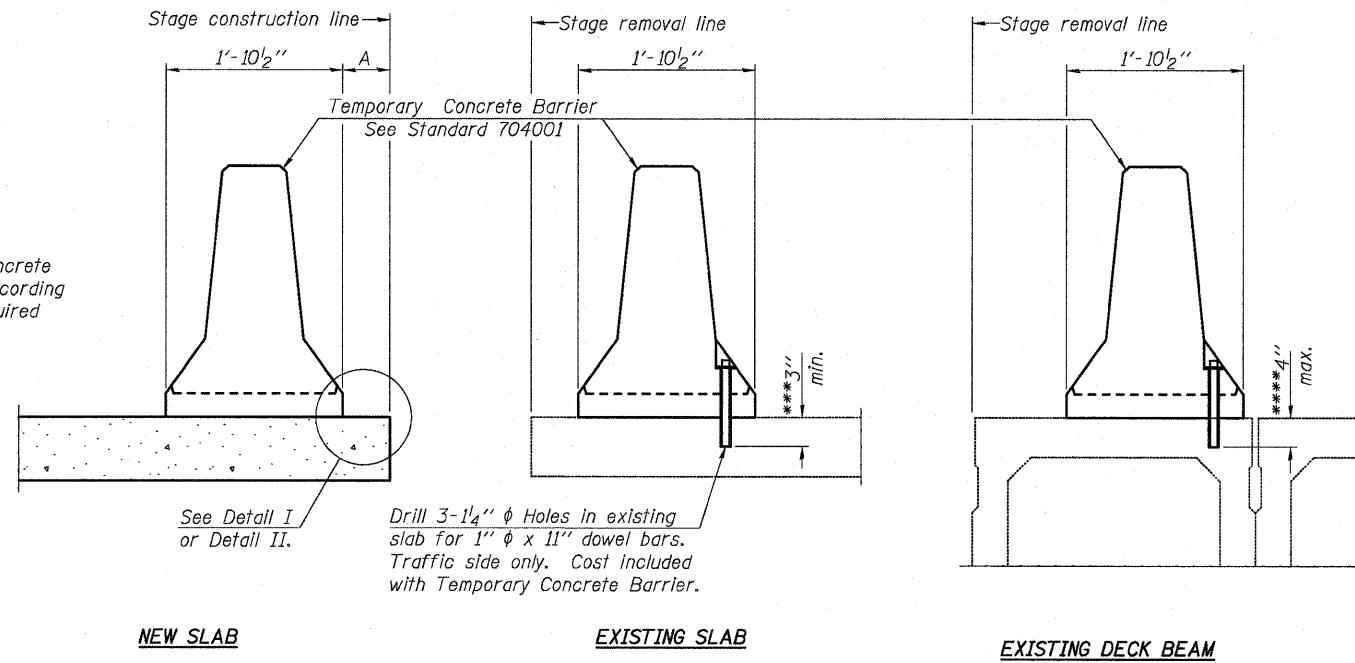
DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG



STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 016-0928

SHEET NO. S2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	376	2009-1161	COOK	23	9
S11 SHEETS		CONTRACT NO. 60J41			
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

SECTIONS THRU SLAB OR DECK BEAM

NOTES

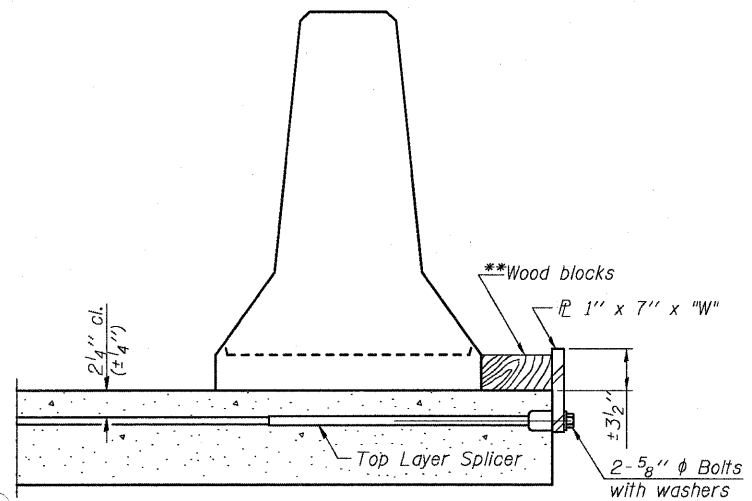
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

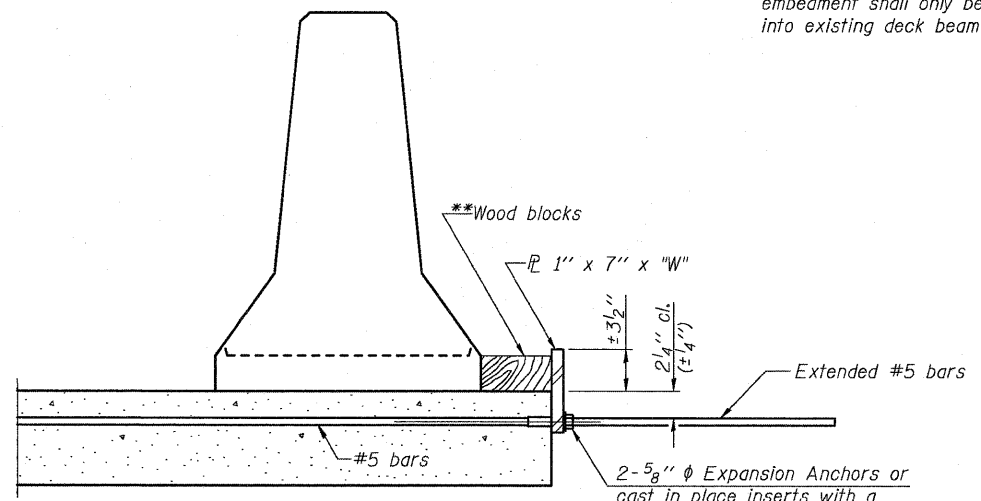
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

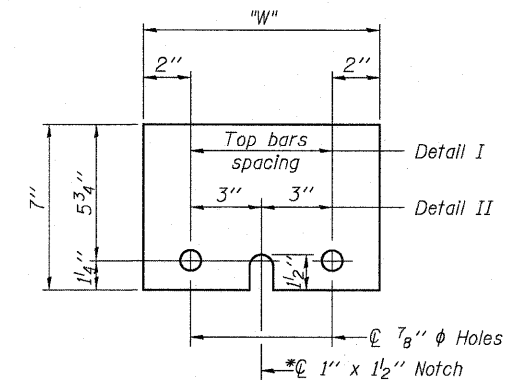
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{L} 1" x 7" x 10"
* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

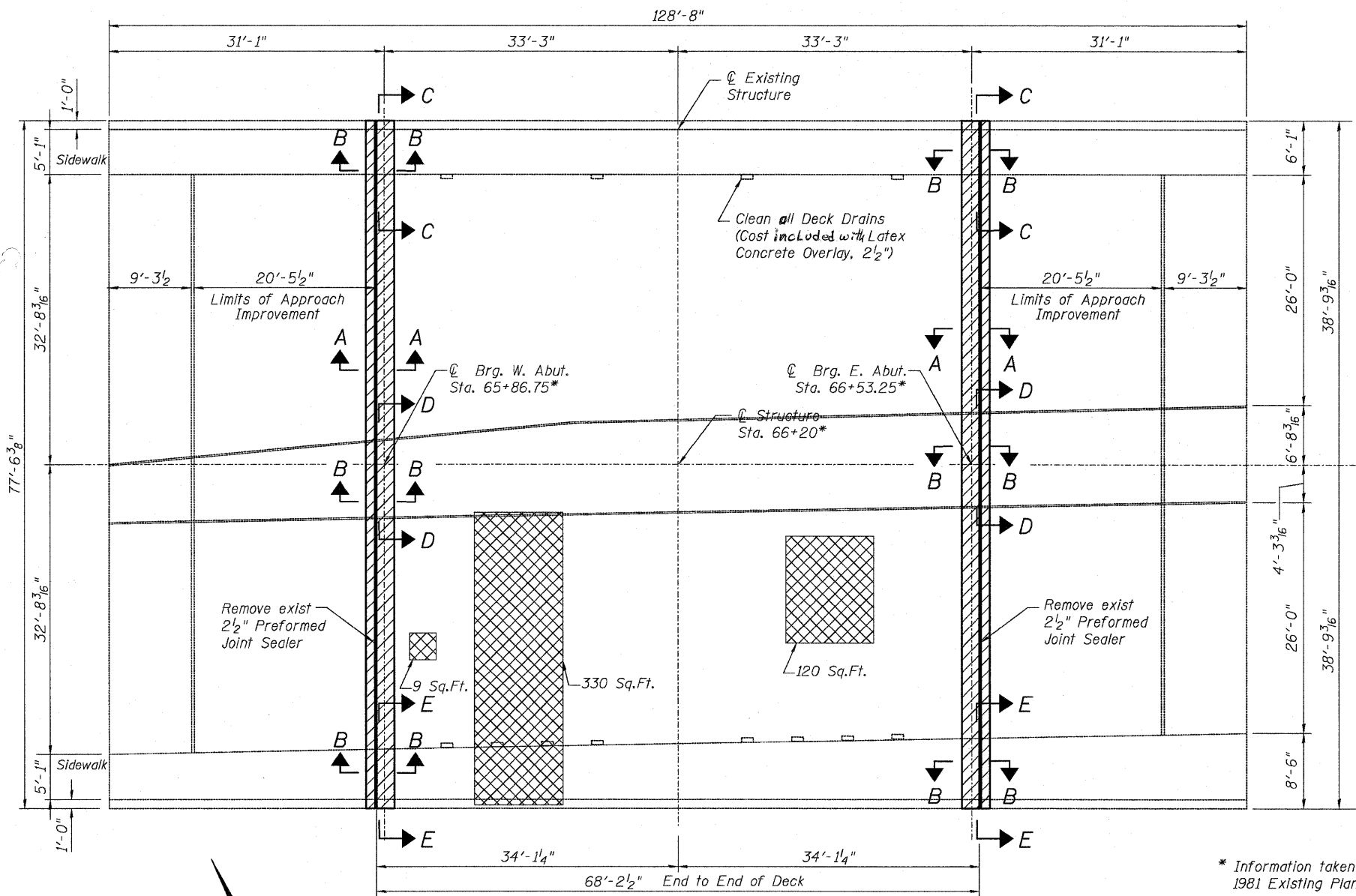
DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG



TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 016-0928

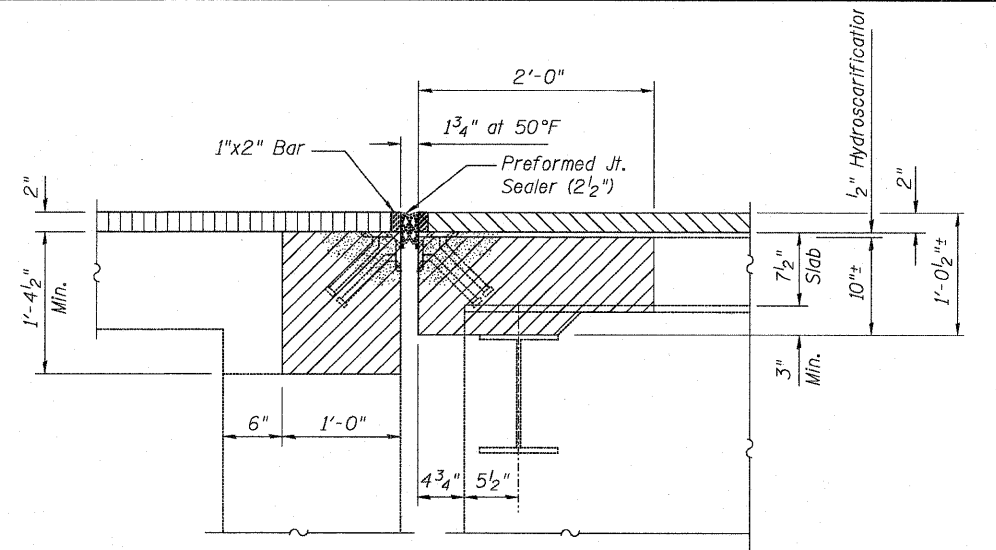
SHEET NO. S3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	376	2009-1161	COOK	23	10
S11 SHEETS		CONTRACT NO. 60J41			
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

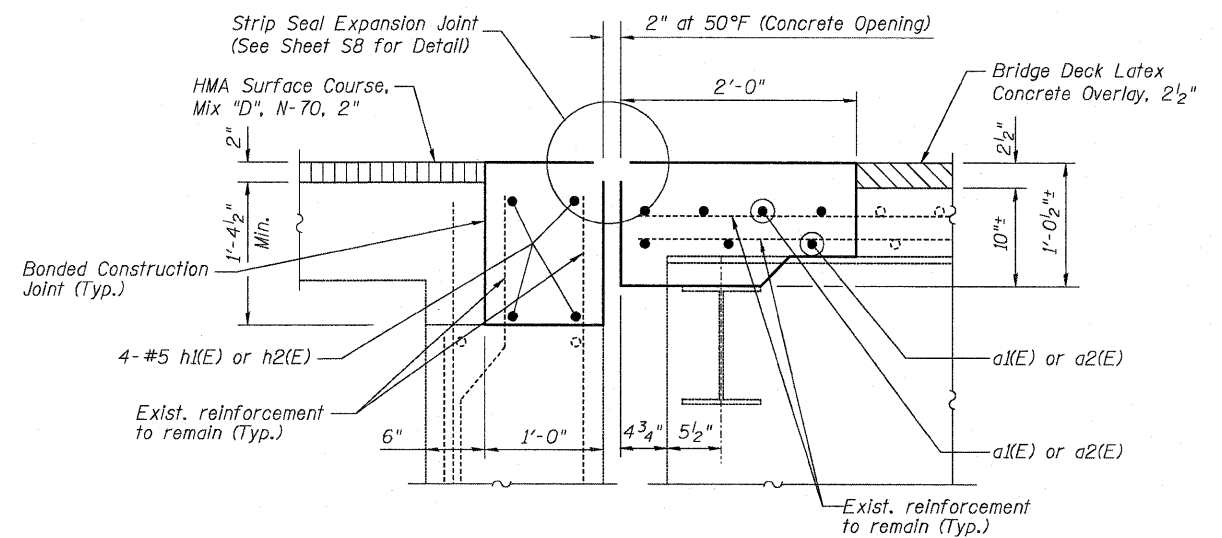


PLAN

* Information taken from 1981 Existing Plans



SECTION A-A
EXISTING



SECTION A-A
PROPOSED

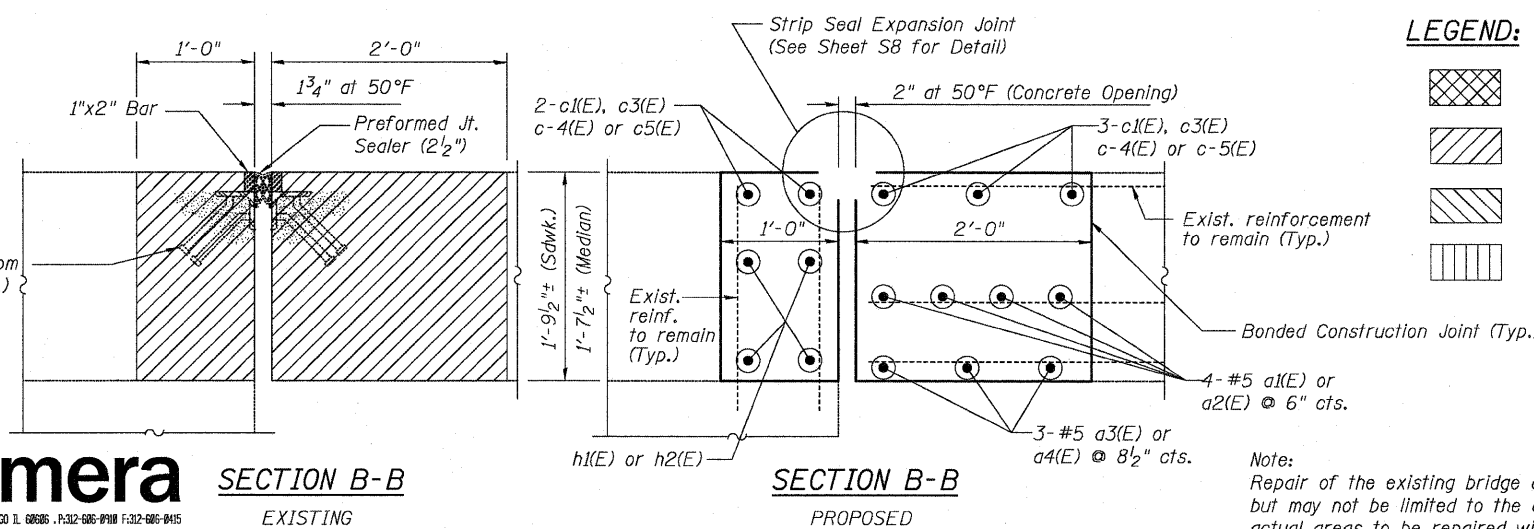
Note:
Existing reinforcing bars to remain shall be cleaned, straightened and incorporated into new concrete. Cost included with Concrete Removal.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth Type II)	Sq. Yd.	51
Concrete Removal	Cu. Yd.	22
Concrete Superstructure	Cu. Yd.	25
Reinforcement Bars, Epoxy Coated	Pounds	2,280
Bar Splicers	Each	32

Note:
For Details of Section C-C, Section D-D, Section E-E, Bar List and Bar Bend Diagram, See Sheet S5.

BRIDGE DECK PATCHING PLAN &
EXPANSION JOINT RECONSTRUCTION DETAILS
STRUCTURE NO. 016-0928



SECTION B-B
EXISTING

SECTION B-B
PROPOSED

Note:
Repair of the existing bridge deck shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

LEGEND:

- Deck Slab Repair (Full Depth Type II)
- Concrete Removal
- HMA Surface Removal (Deck) Bridge Deck Latex Concrete Overlay, 2 1/2"
- HMA Surface Removal, 2" HMA Surface Course, Mix "D", N-70, 2"

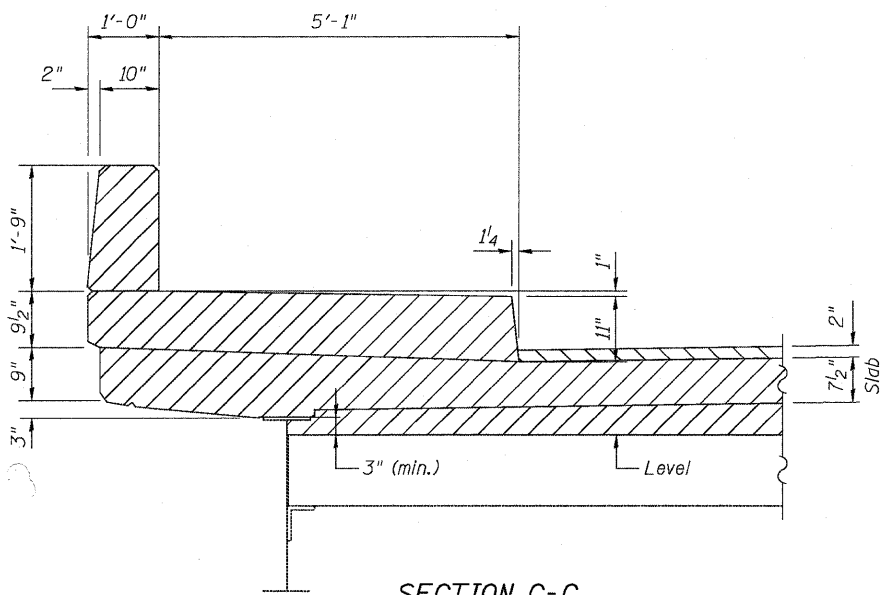
DESIGNED JPM
CHECKED TG
DRAWN MPS
CHECKED JPM, TG



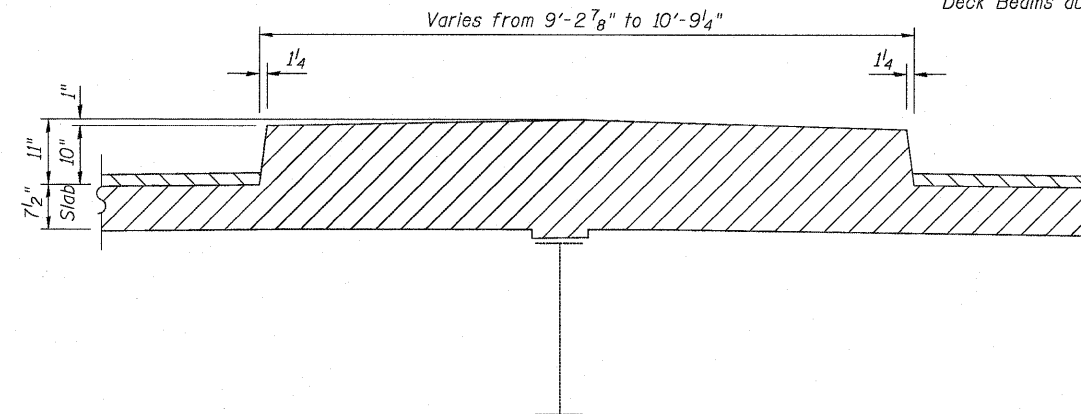
SECTION B-B
EXISTING

SHEET NO. S4	F.A.P. RTE. 376	SECTION 2009-1161	COUNTY COOK	TOTAL SHEETS 23	SHEET NO. 11
SIX SHEETS			CONTRACT NO. 60J41		
ILLINOIS FED. AID PROJECT					

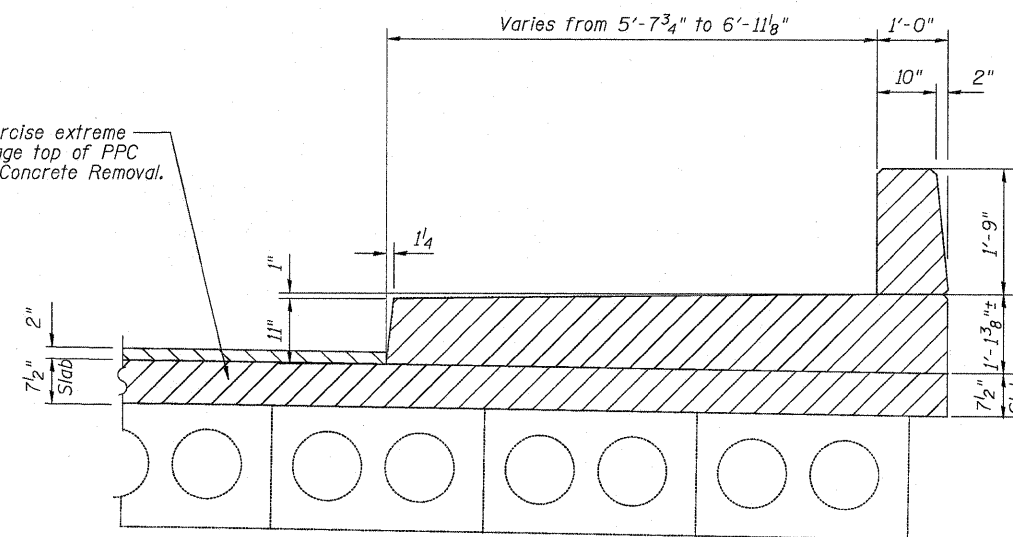
STATE OF ILLINOIS
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SECTION C-C
EXISTING

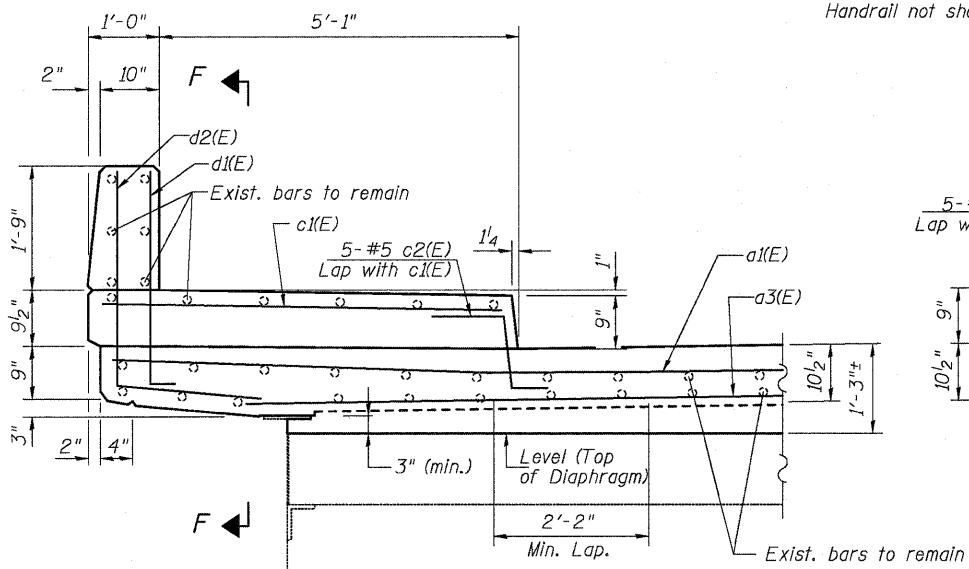


SECTION D-D
EXISTING

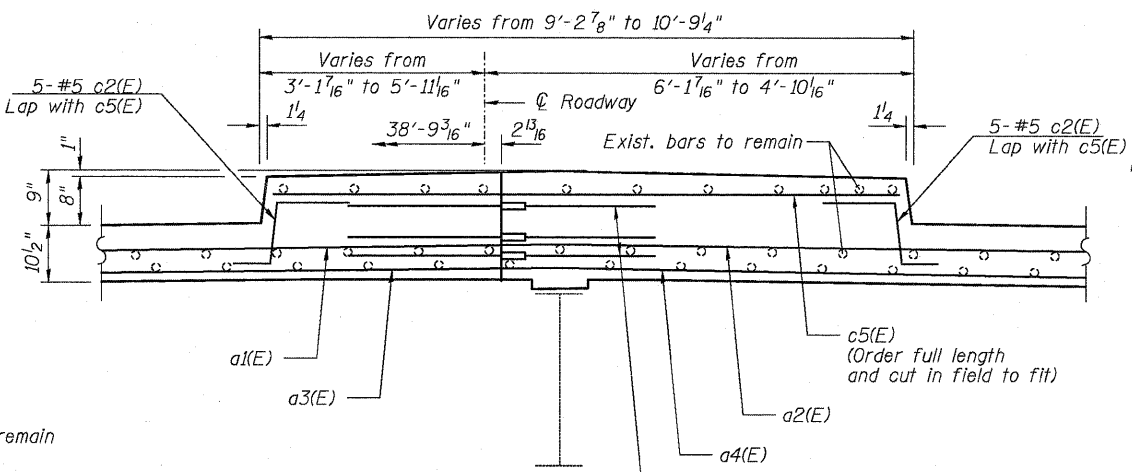


SECTION E-E
EXISTING

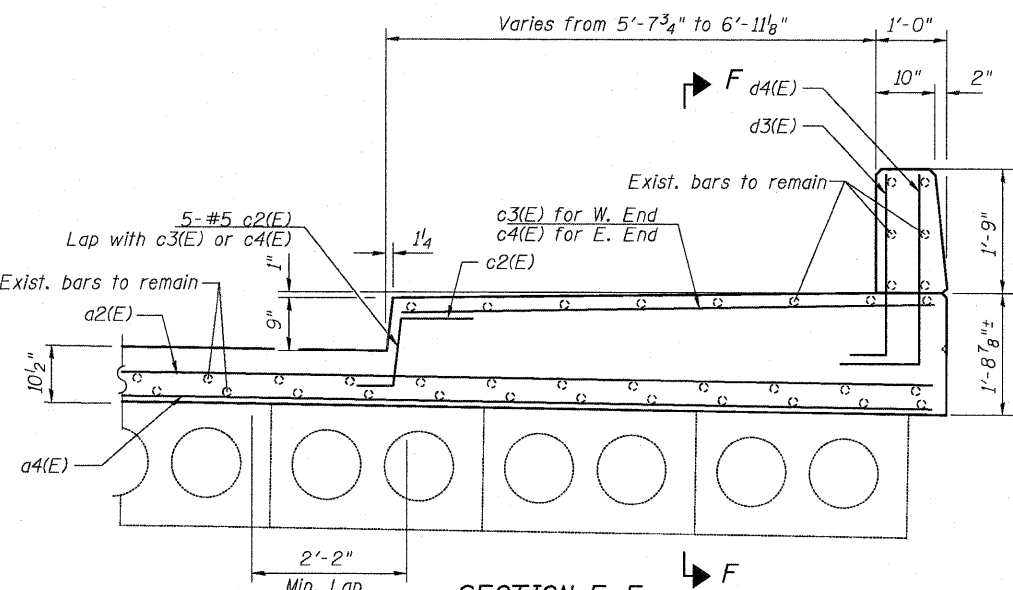
Note:
Handrail not shown.



SECTION C-C
PROPOSED



SECTION D-D
PROPOSED



SECTION E-E
PROPOSED

10 Bar Splicers for #5 Bars (Deck-ea. end)
6 Bar Splicers for #5 Bars (Backwall-ea. end)

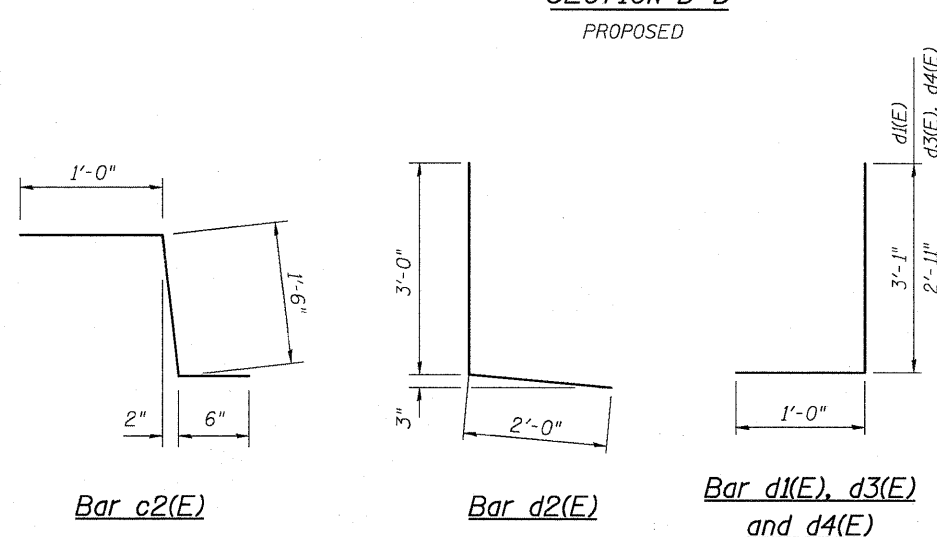
BAR LIST

Bar	No.	Size	Length	Shape
a1(E)	7	#5	37'-10"	—
a2(E)	7	#5	37'-4"	—
a3(E)	7	#5	36'-10"	—
a4(E)	7	#5	36'-4"	—
c1(E)	10	#5	5'-9"	—
c2(E)	40	#5	3'-0"	⌒
c3(E)	5	#5	6'-4"	—
c4(E)	5	#5	7'-7"	—
c5(E)	10	#5	10'-3"	—
d1(E)	10	#4	4'-1"	—
d2(E)	10	#6	5'-0"	—
d3(E)	10	#4	3'-11"	—
d4(E)	10	#6	3'-11"	—
h1(E)	8	#5	38'-10"	—
h2(E)	8	#5	38'-6"	—

Note:
Existing reinforcing bars to remain shall be cleaned, straightened and incorporated into new concrete. Cost included with Concrete Removal.

LEGEND:

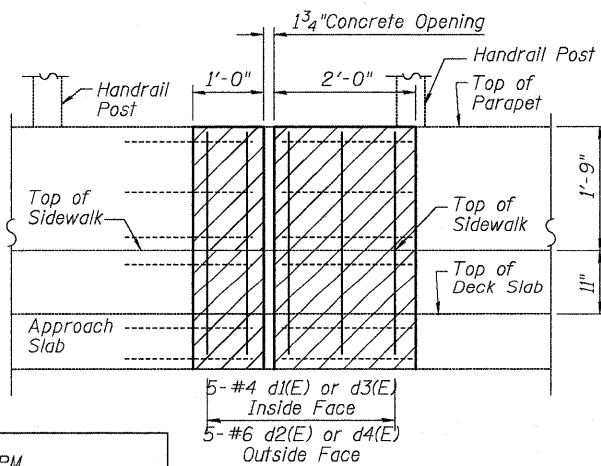
Indicates Concrete Removal



Bar c2(E)

Bar d2(E)

Bar d1(E), d3(E)
and d4(E)



SECTION F-F

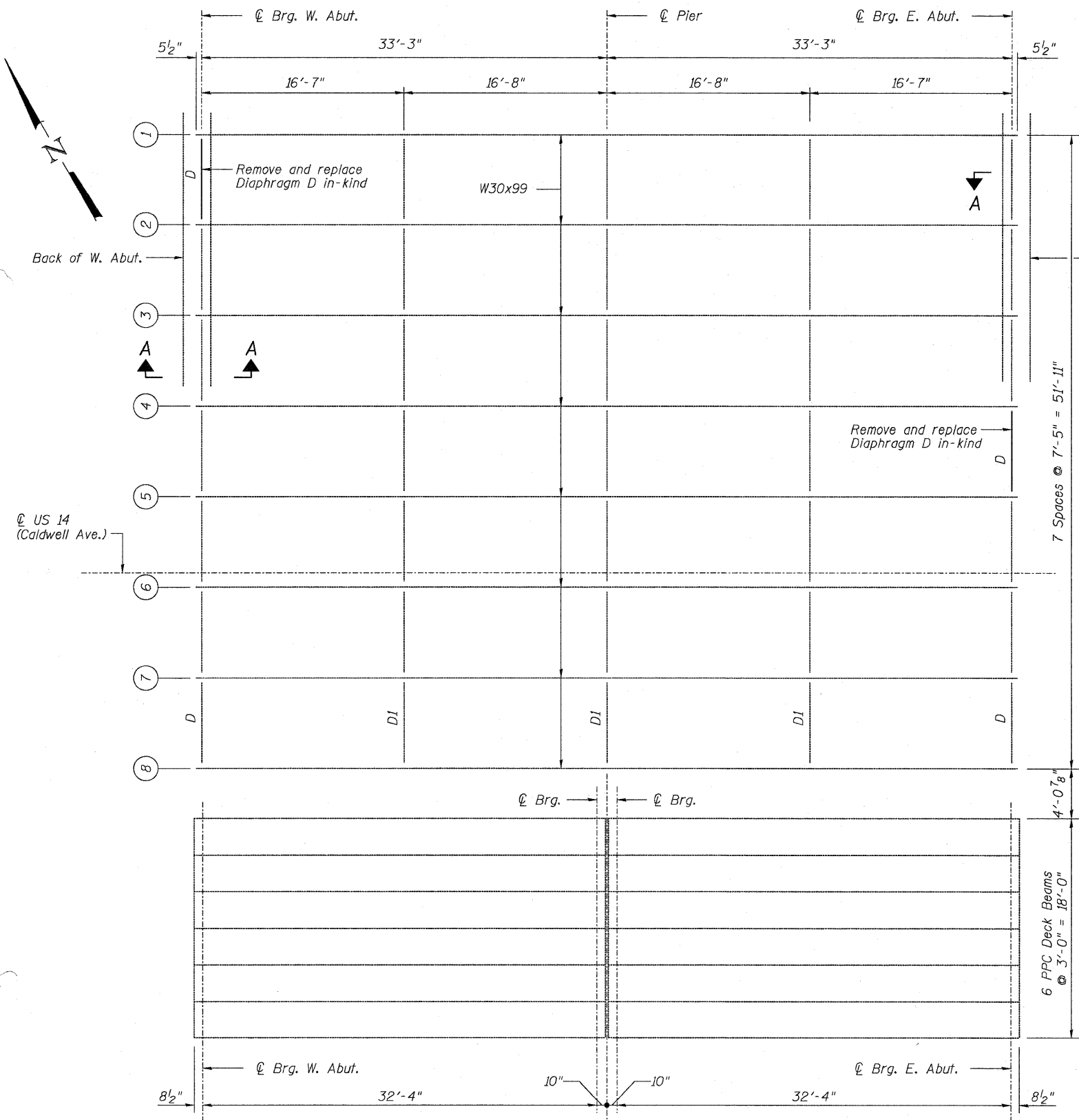
DESIGNED JPM
CHECKED TG
DRAWN MPS
CHECKED JPM, TG

Primera
100 S. WACKER DRIVE SUITE 700 • CHICAGO IL 60606 • P:312-586-8918 F:312-586-8415

DECK DETAILS
STRUCTURE NO. 016-0928

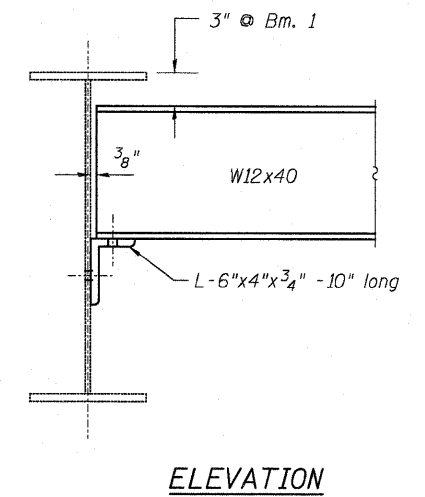
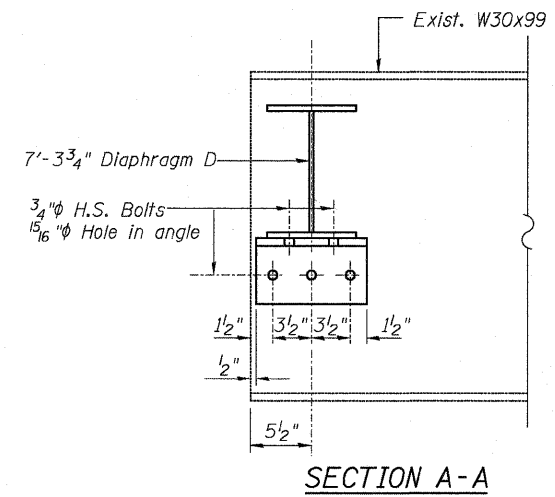
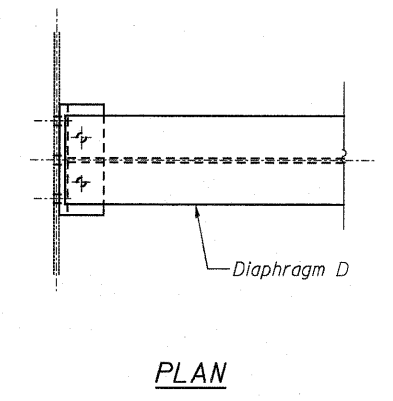
SHEET NO. 55 OF 57 SHEETS	F.A.P. RTE. 376	SECTION 2009-1161	COUNTY COOK	TOTAL SHEETS 23	SHEET NO. 12
	CONTRACT NO. 60J41				
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Note:
Existing angles are welded to the beam web.
Take extra care when removing the attached angles so as not to gouge the beam web. Grind the existing weld and the ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating field drilling of web and angle, that is attached on the other side of the web, for the new attachment. The cost of grinding and testing is incidental to "Structural Steel Removal". Any cracks that cannot be removed by grinding shall be identified and reported to the Bureau of Bridges and Structures for further disposition.

A (See Bearing Details, Sht. S-9 - Typ.)



END DIAPHRAGM D
EXISTING & PROPOSED
2 Required

Note:
Hardened washers shall be required over 15/16" holes in angles.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pounds	5,080 *
Structural Steel Removal	Pounds	660 **

* Includes Diaphragms, Angles, Fasteners, Bearing Extensions, and other steel member required for bearing assembly.

** Includes Diaphragms, Angles and Fasteners.

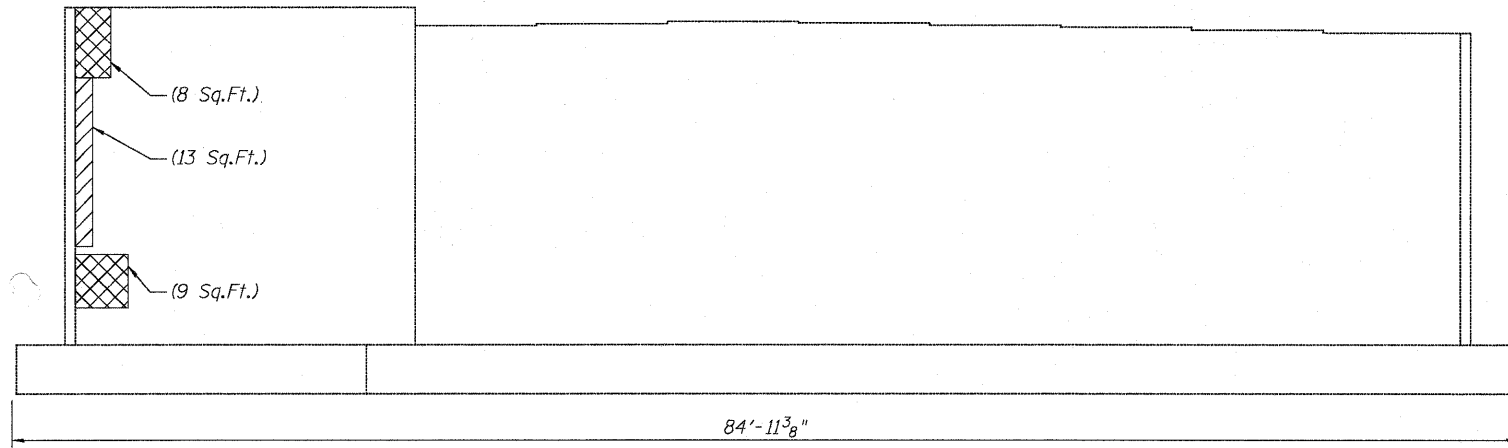
DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG



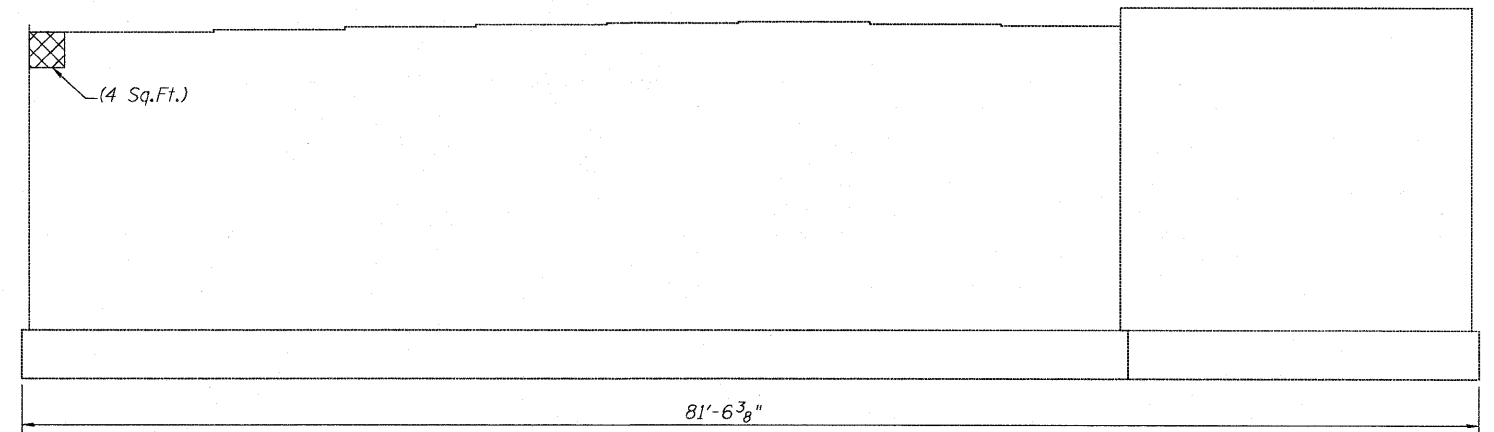
FRAMING PLAN & DIAPHRAGM DETAILS
STRUCTURE NO. 016-0928

SHEET NO. S6 S11 SHEETS	F.A.P. RTE. 376	SECTION 2009-116I	COUNTY COOK	TOTAL SHEETS 23	SHEET NO. 13
	CONTRACT NO. 60J41			ILLINOIS FED. AID PROJECT	

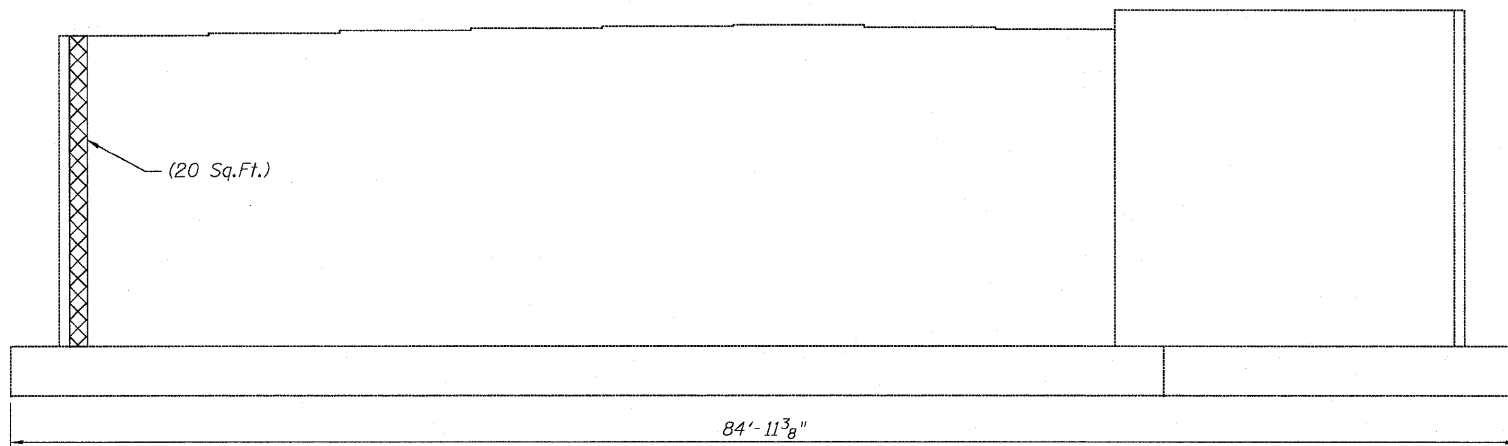
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



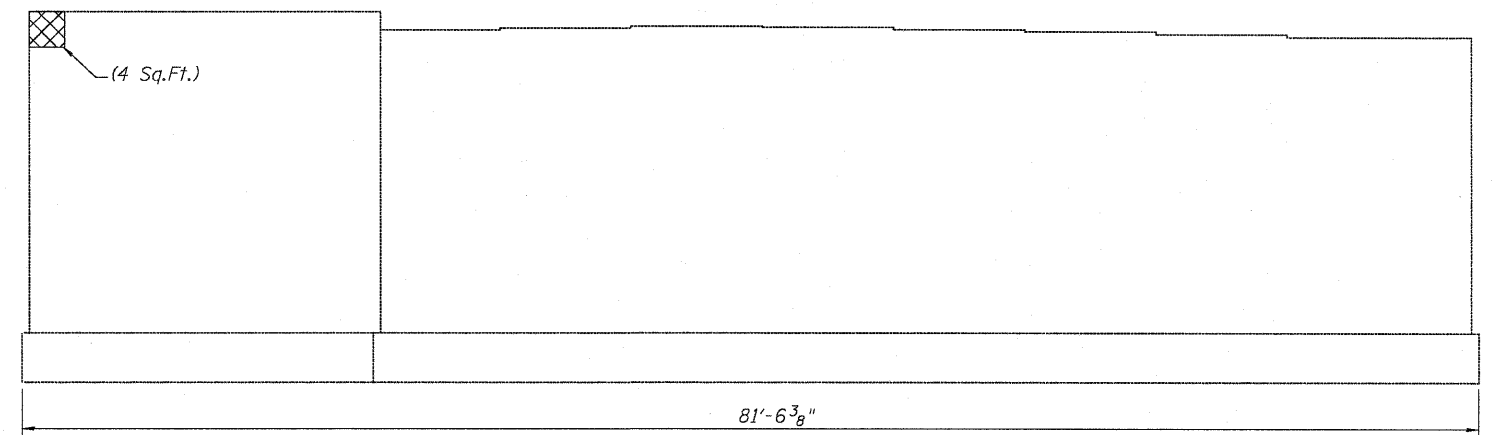
WEST ABUTMENT



PIER - WEST ELEVATION



EAST ABUTMENT





PIER - EAST ELEVATION

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	13
Structural Repair of Concrete (Depth greater than 5 inches)	Sq. Ft.	45

LEGEND:

-  Structural Repair of Concrete
(Depth equal to or less than 5 inches)
-  Structural Repair of Concrete
(Depth greater than 5 inches)

Note:
Repair of the existing Abutment and Piers shall include
but may not be limited to the areas shown.
The actual areas to be repaired will be determined
by the Engineer at the time of construction.

DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG

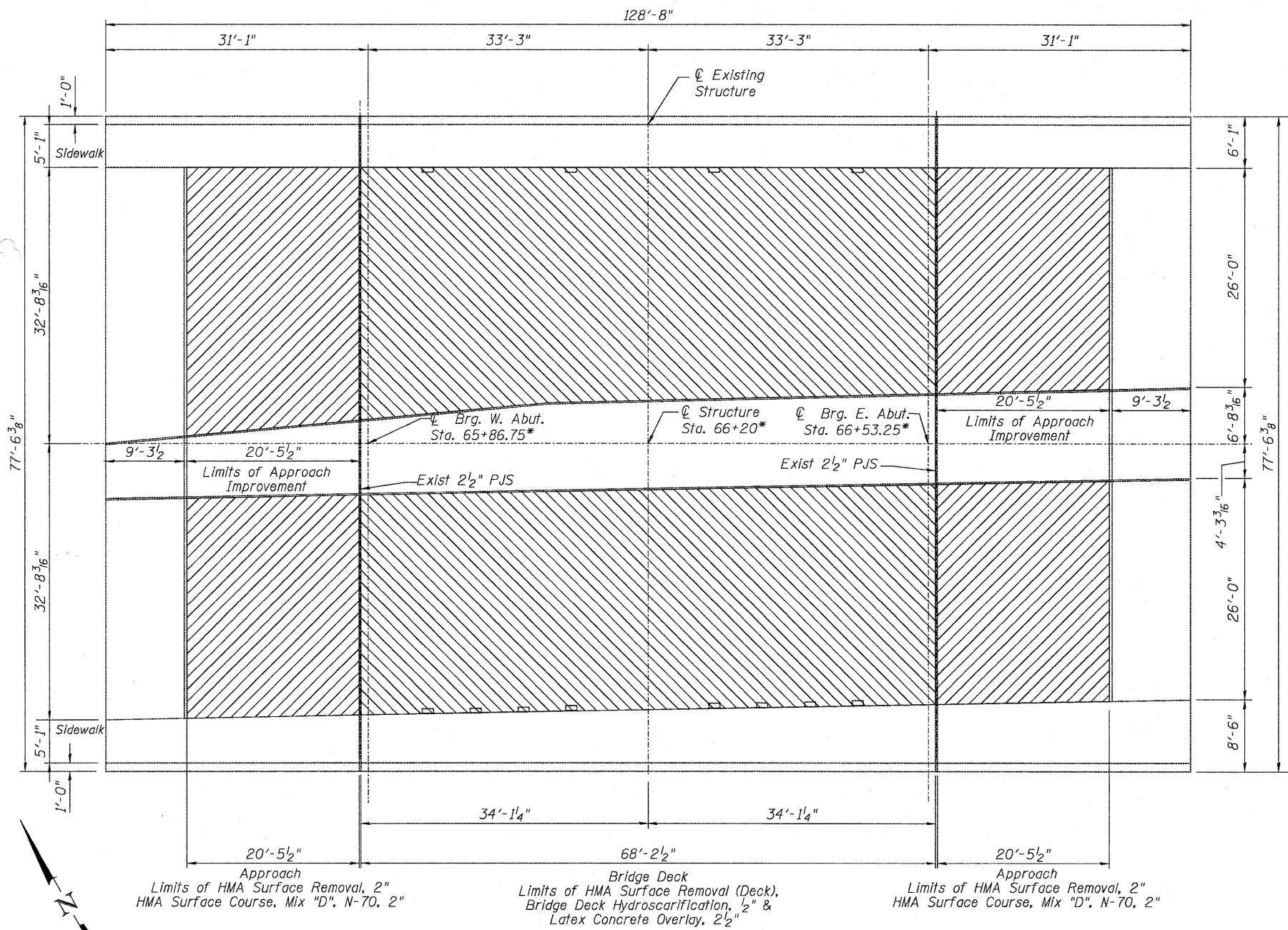


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SUBSTRUCTURE REPAIR DETAILS
STRUCTURE NO. 016-0928

SHEET NO. 57	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	376	2009-1161	COOK	23	14
S11 SHEETS			CONTRACT NO. 60J41		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

* Information taken from
1981 Existing Plans

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Hydroscarification, 1/2"	Sq. Yd.	405
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	405
Hot-Mix Asphalt Surface Course, Mix "D", N-70, 2"	Tons	29
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	405
Hot-Mix Asphalt Surface Removal, 2"	Sq. Yd.	248

LEGEND:

- Hot-Mix Asphalt Surface Removal, 2"
- Hot-Mix Asphalt Surface Course, Mix "D", N-70, 2"
- Bridge Deck Hydroscarification, 1/2"
- Hot-Mix Asphalt Surface Removal (Deck)
- Bridge Deck Latex Concrete Overlay, 2 1/2"

DESIGNED	JPM
CHECKED	TG
DRAWN	MPS
CHECKED	JPM, TG



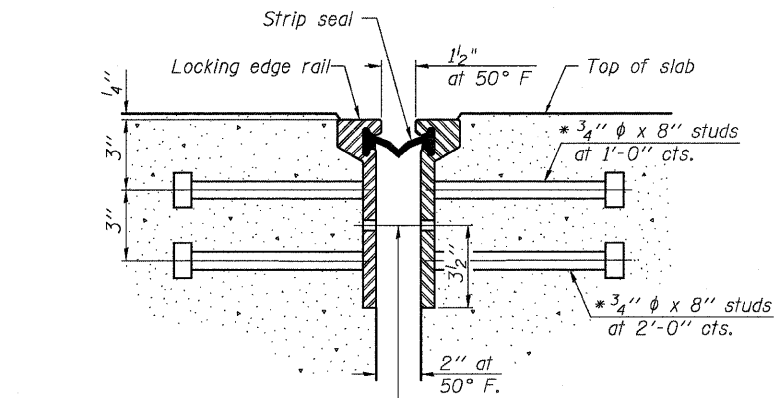
188 S. WACKER DRIVE SUITE 700, CHICAGO IL 60606, P:312-686-8918 F:312-686-8415

BRIDGE DECK &
APPROACH IMPROVEMENT PLAN
STRUCTURE NO. 016-0928

SHEET NO. 58	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	376	2009-1161	COOK	23	15
S//SHEETS			CONTRACT NO. 60J41		
ILLINOIS FED. AID PROJECT					

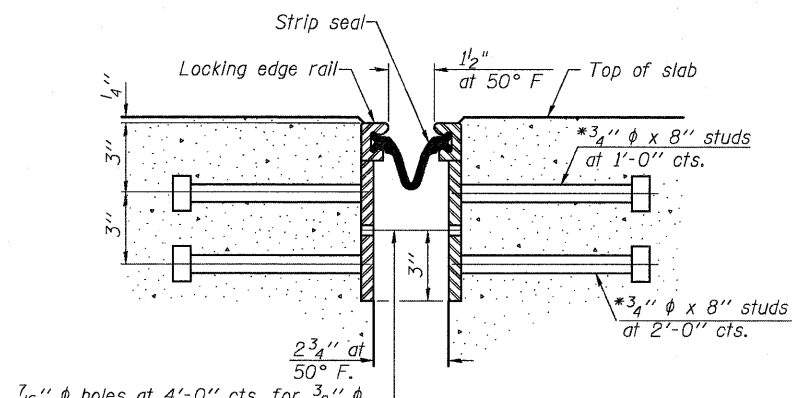
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



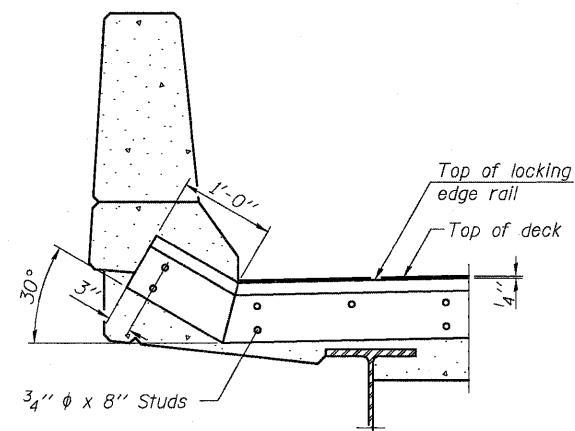
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
ROLLED RAIL JOINT

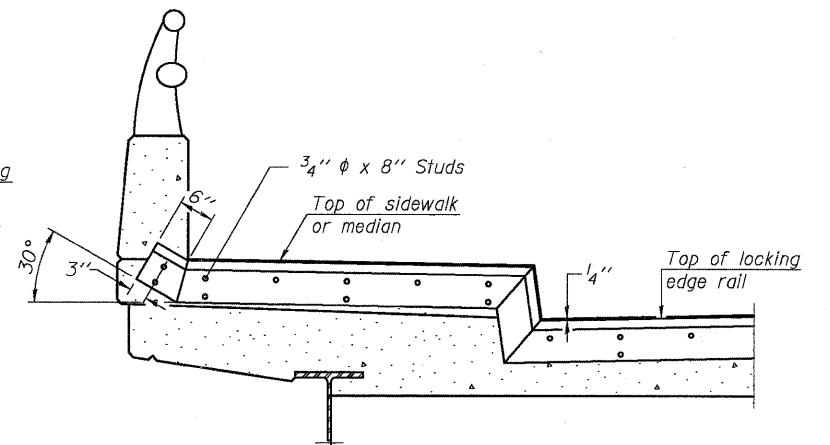


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

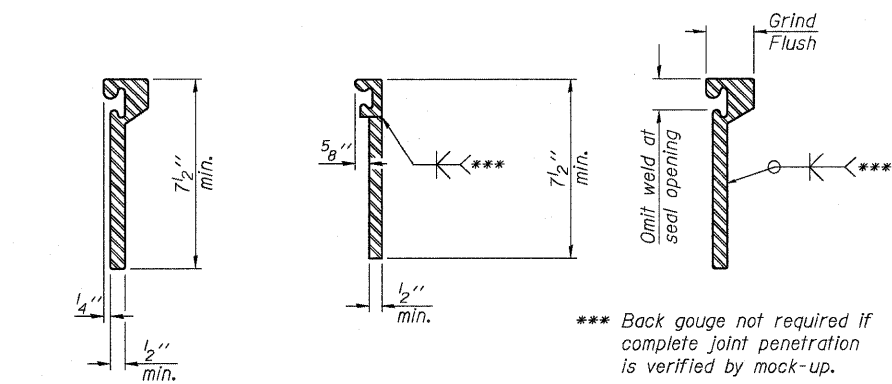
SECTION THRU
WELDED RAIL JOINT



AT PARAPET
See Section A-A for end treatment of skews > 30°.



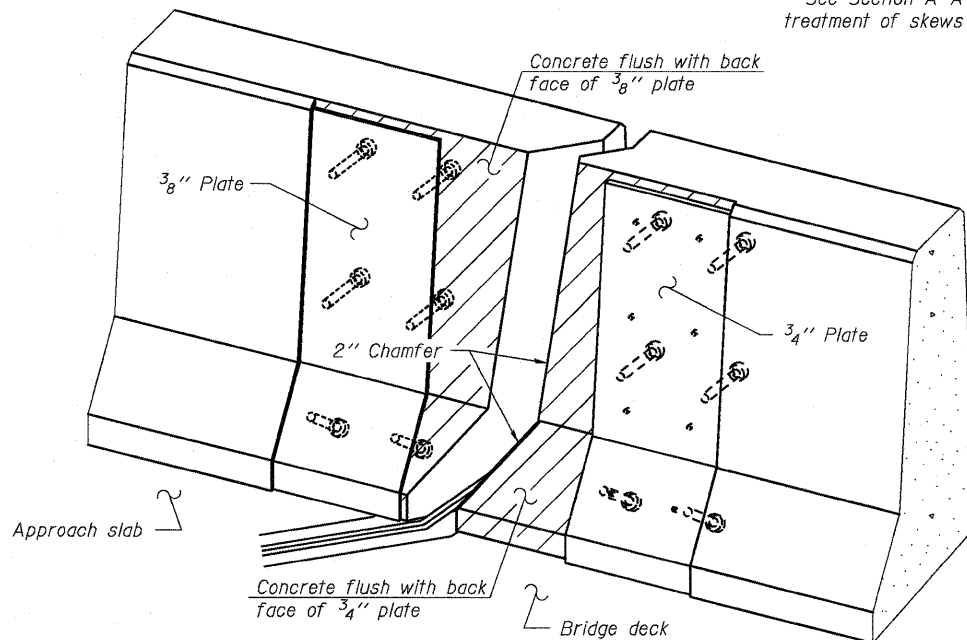
AT SIDEWALK OR MEDIAN
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



ROLLED
EXTRUDED RAIL

WELDED RAIL

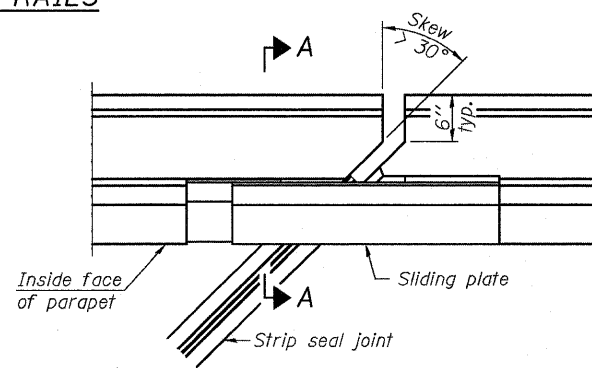
LOCKING EDGE RAIL SPLICE
The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.



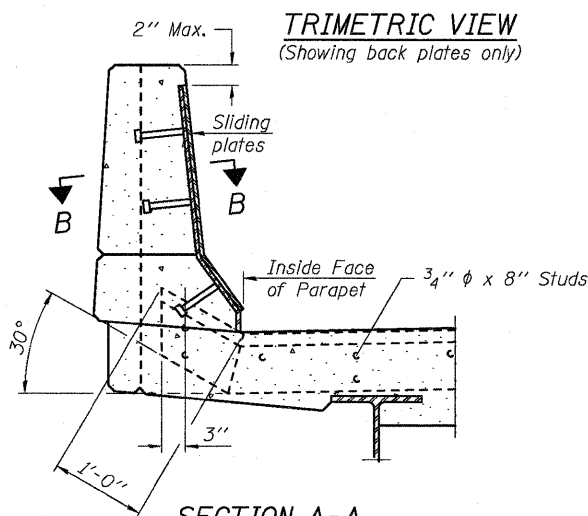
TYPICAL END TREATMENTS

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

LOCKING EDGE RAILS

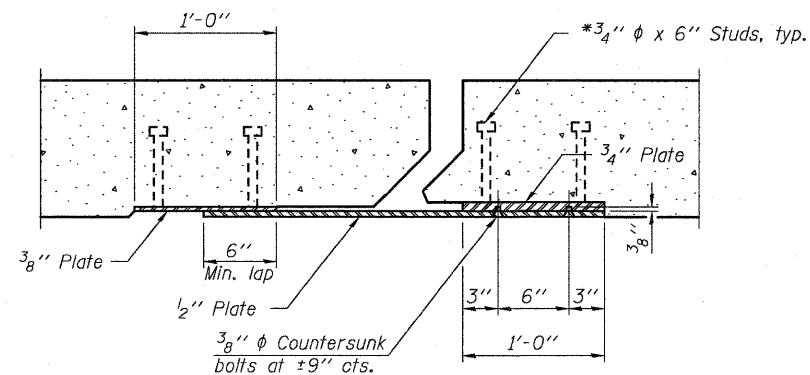


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	157

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0928

DESIGNED JPM
CHECKED TG
DRAWN MPS
CHECKED JPM, TG



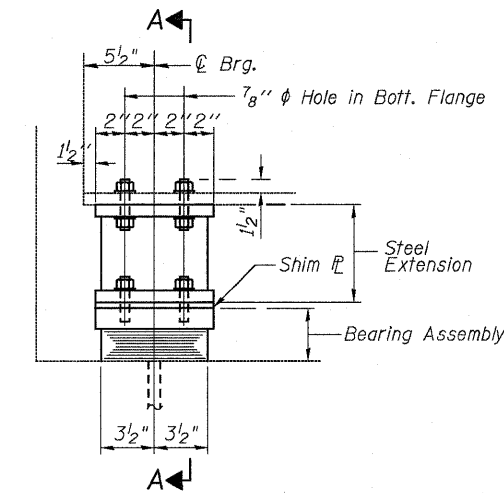
188 S. WACKER DRIVE, SUITE 700, CHICAGO, IL 60606, P: 312-506-8918 F: 312-506-8415

EJ-SSJ

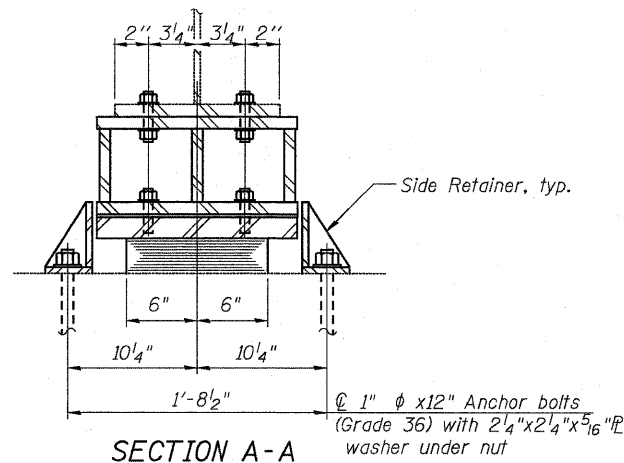
11-1-09

SHEET NO. S9	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11 SHEETS	376	2009-1161	COOK	23	16
			CONTRACT NO. 60J41		
ILLINOIS FED. AID PROJECT					

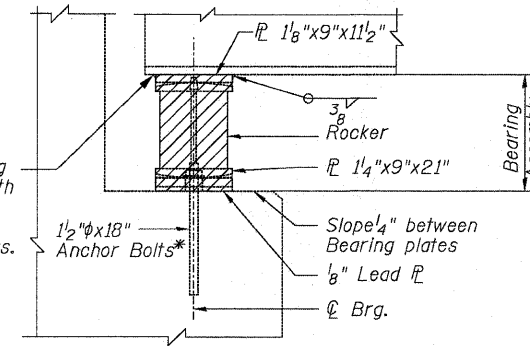
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT ABUT.

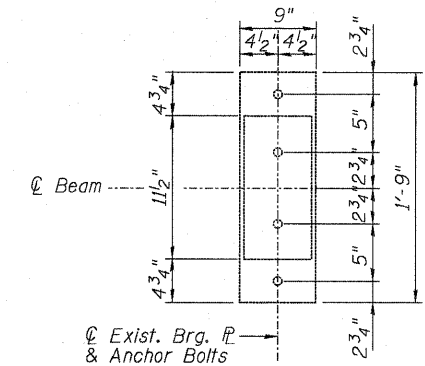


SECTION A-A



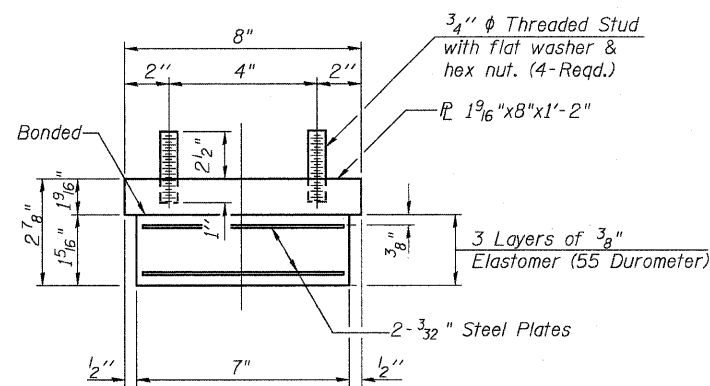
SECTION A-A

Remove and replace all existing bearing assembly at the West and East Abutments with Elastomeric Bearing Assembly, Type I.



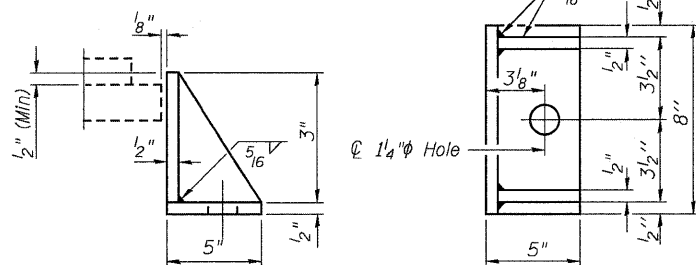
EXISTING BEARING PLAN

TYPE I ELASTOMERIC EXP. BRG.



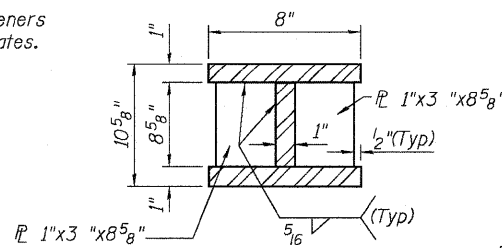
BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

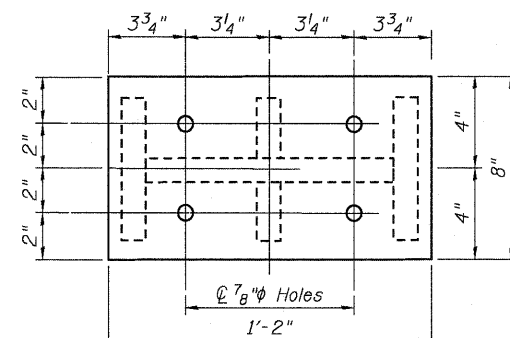


SIDE RETAINER

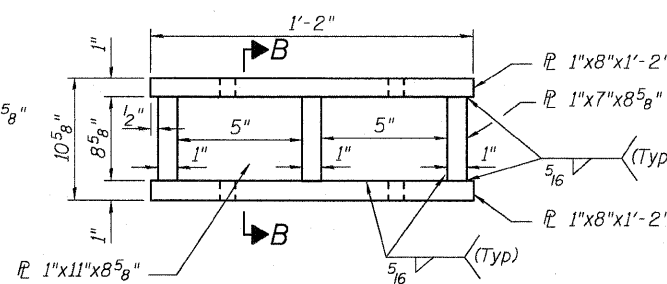
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SECTION B-B



PLAN STEEL EXTENSION



ELEVATION STEEL EXTENSION

Existing Plate to be removed using the air-arc method and grid smooth all weld material remaining on the bottom flange. Cost included with Jack and Remove Existing Bearings.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Two 1/8" in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The contractor is to verify the existing dimensions prior to fabricating the steel extensions. It is intended to keep the existing beams at their current elevations.

Steel extensions, Fasteners and other steel member required for the bearing assembly shall be included in the cost of Furnishing & Erecting Structural Steel.

Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts.

INTERIOR GIRDER REACTION TABLE
(Taken from 1981 existing plans)

	ABUT
R DL (K)	20.88
R LL (K)	32.74
Imp (K)	9.82
R Total (K)	63.44

Min. Jack Capacity = 50 Tons

LEGEND:

Indicates Bearing Removal

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	16
Anchor Bolts 1"	Each	32
Jack and Remove Existing Bearings	Each	16

ELASTOMERIC BEARING DETAILS
STRUCTURE NO. 016-0928

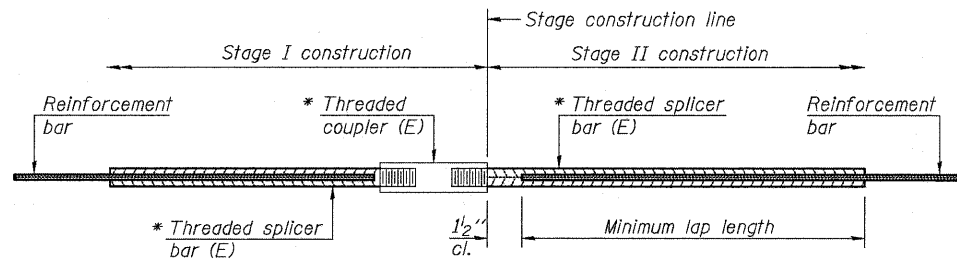
DESIGNED JPM
CHECKED TG
DRAWN MPS
CHECKED JPM, TG



180 S. WACKER DRIVE, SUITE 700, CHICAGO, IL 60606, P:312-686-9918 F:312-686-9415

SHEET NO. 510	F.A.P. RTE. 376	SECTION 2009-1161	COUNTY COOK	TOTAL SHEETS 23	SHEET NO. 17
SII SHEETS			CONTRACT NO. 60J41		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

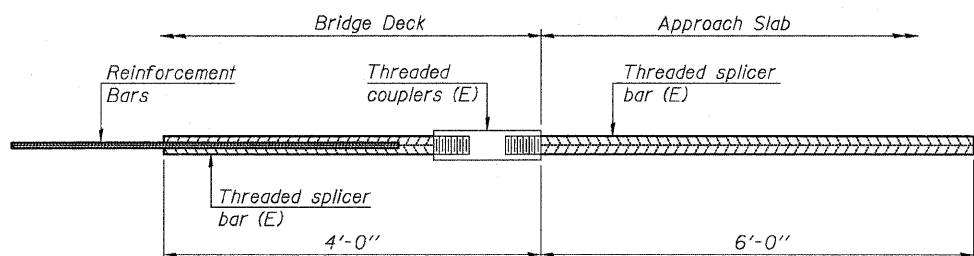
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

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

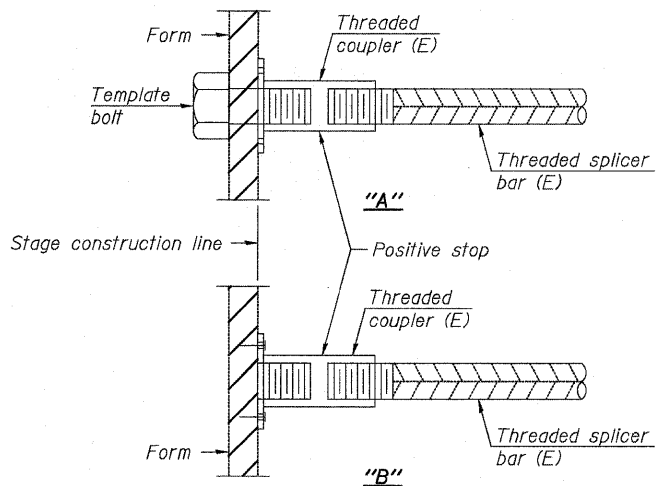
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	20	2'-2"
Abutment	#5	12	2'-2"



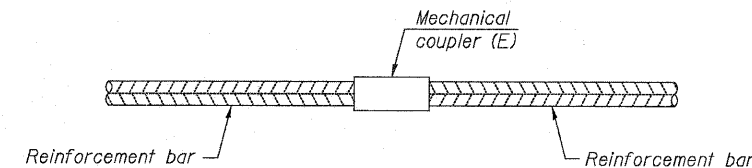
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



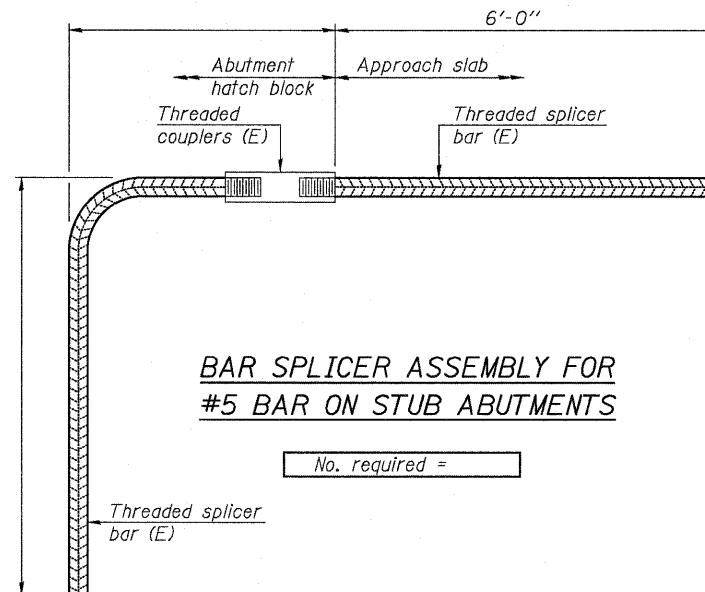
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

DESIGNED JPM
CHECKED TG
DRAWN MPS
CHECKED JPM, TG

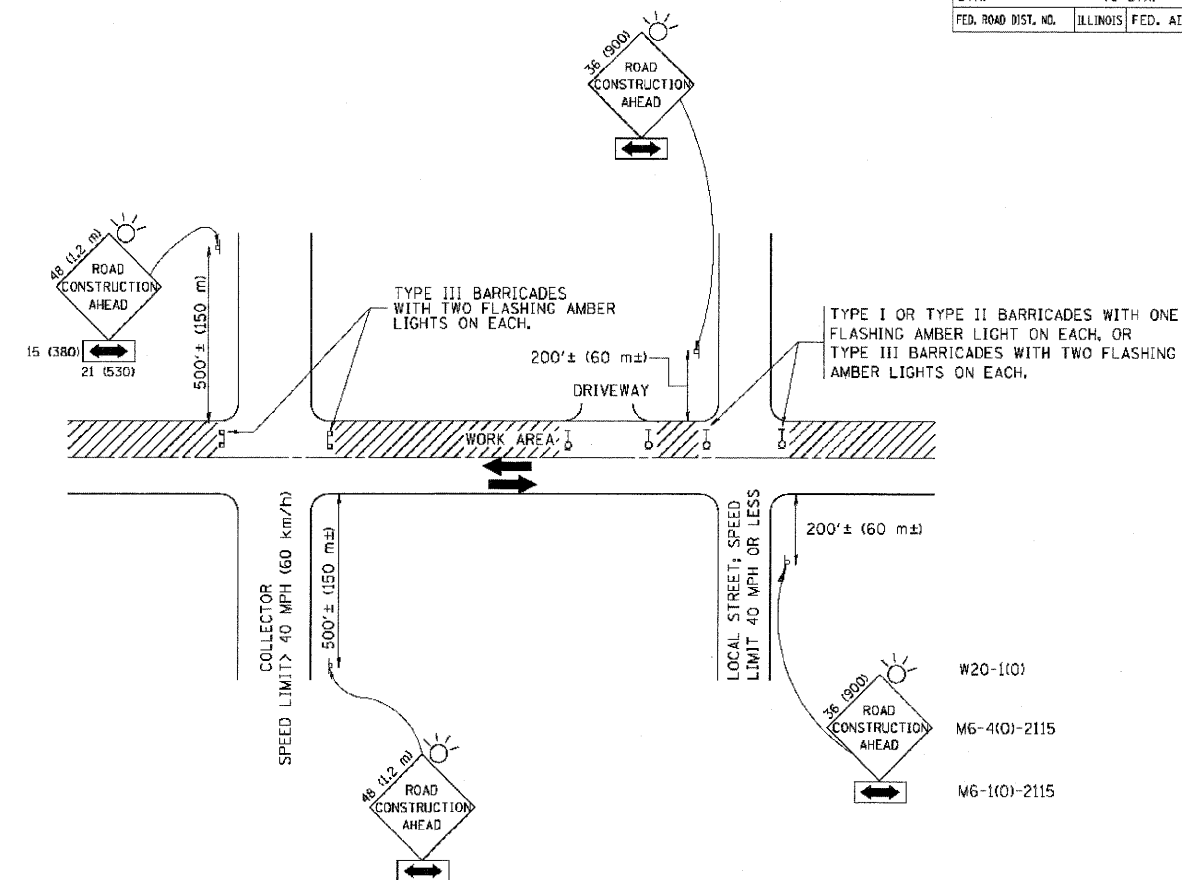


100 S. WACKER DRIVE, SUITE 700, CHICAGO, IL 60606 P.312-586-0910 F.312-586-0415

SHEET NO. S11	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	376	2009-1161	COOK	23	18
S11 SHEETS			CONTRACT NO. 60J41		
ILLINOIS FED. AID PROJECT					

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0928

CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

- 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 AND FLAG 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.
- 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).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

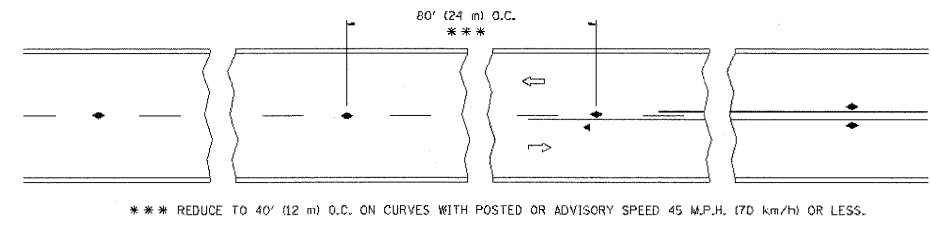
SCALE: NONE

DRAWN BY
CHECKED BY
TC-10

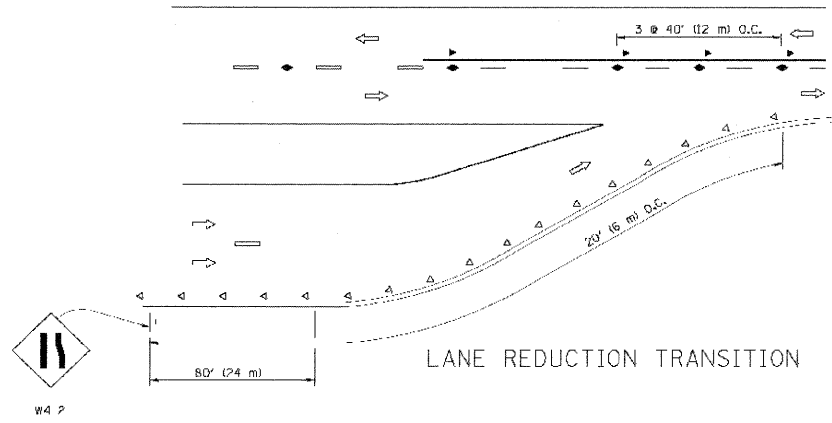
USER NAME = bawend

FILE NAME =		DESIGNED VEA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN VEA	REVISED -		TC-10				376	2009-116-1	COOK	23	19
		CHECKED TWL	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60J41				
		DATE 1/29/2010	REVISED -		ILLINOIS FED. AID PROJECT								

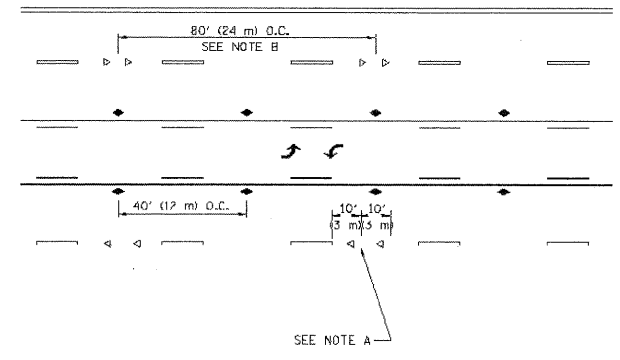
CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S1A.		10 S1A.		
FFD. ROAD DIST. NO.	ILLINOIS	FFD. AID PROJECT		



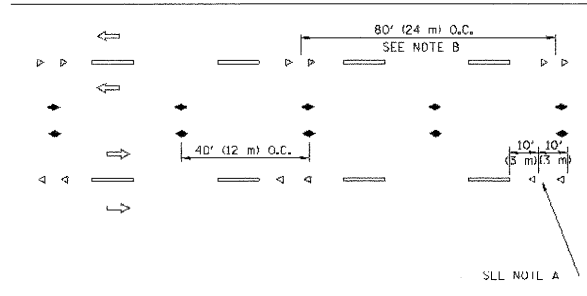
TWO-LANE/TWO-WAY



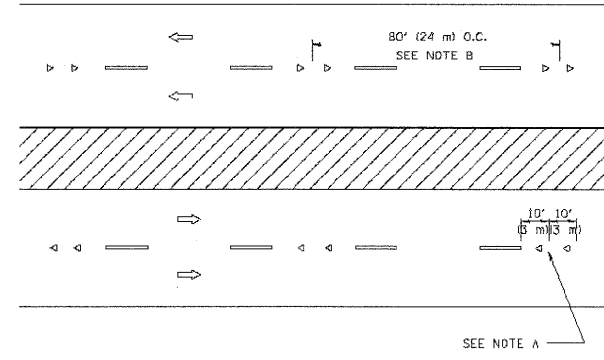
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (60 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

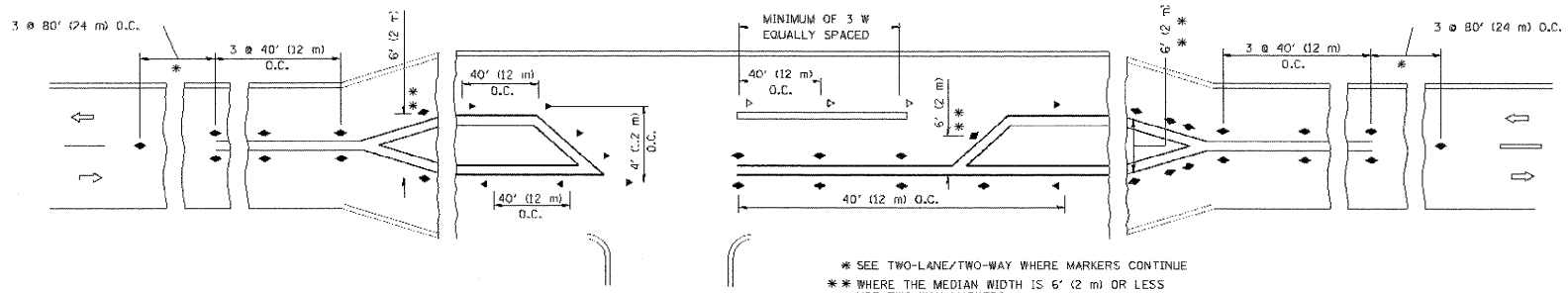
- YELLOW STRIPE
- ▬ WHITE STRIP
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND HIGHWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

- * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
- ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

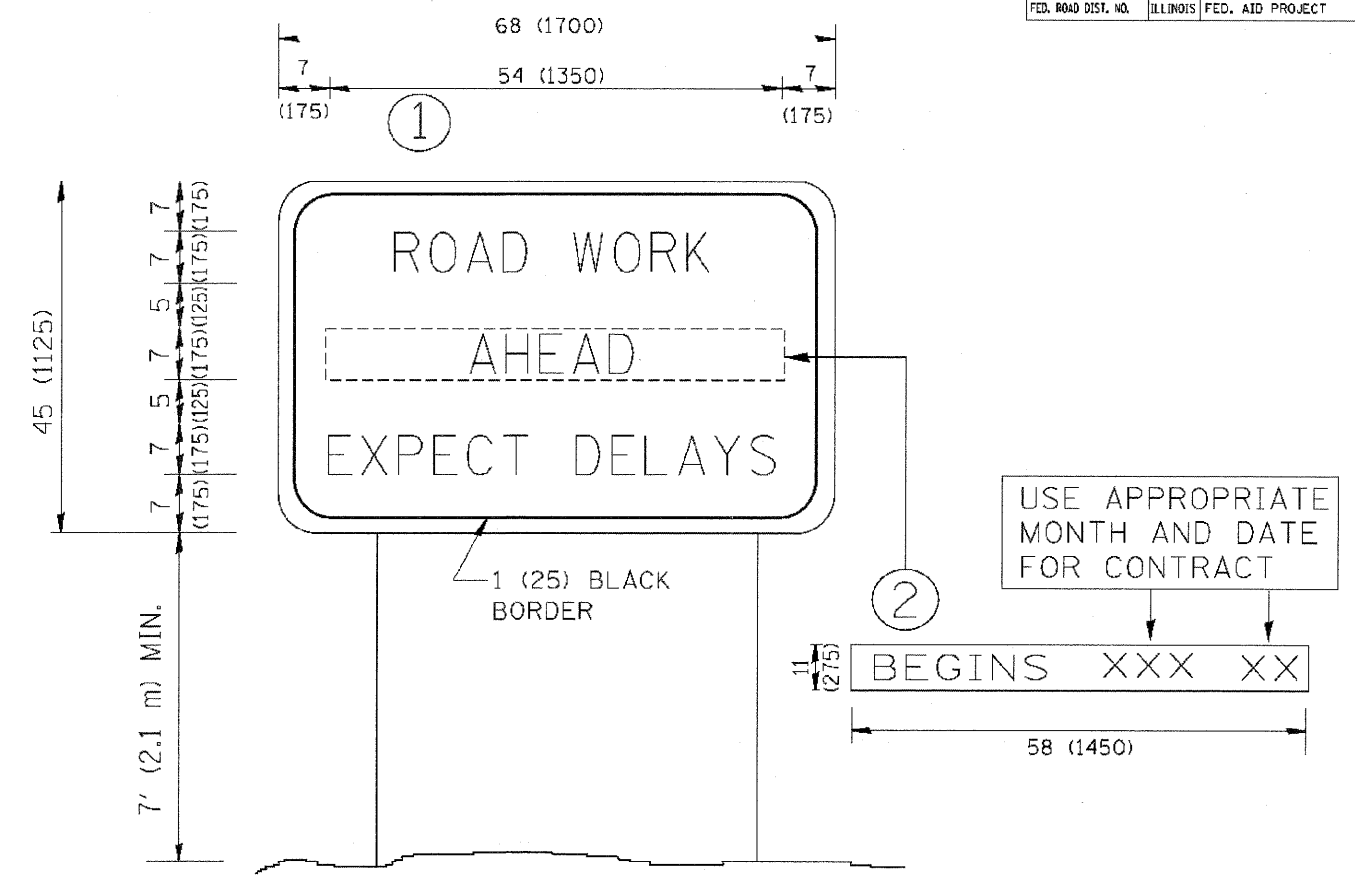
REVISIONS	NAME	DATE
T. RAMMAGHER		09-19-94
T. RAMMAGHER		03-12-99
T. RAMMAGHER		01-06-00
C. JUCIUS		09-09-09

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

DRAWN BY CAUD
CHECKED BY
TC-11

CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



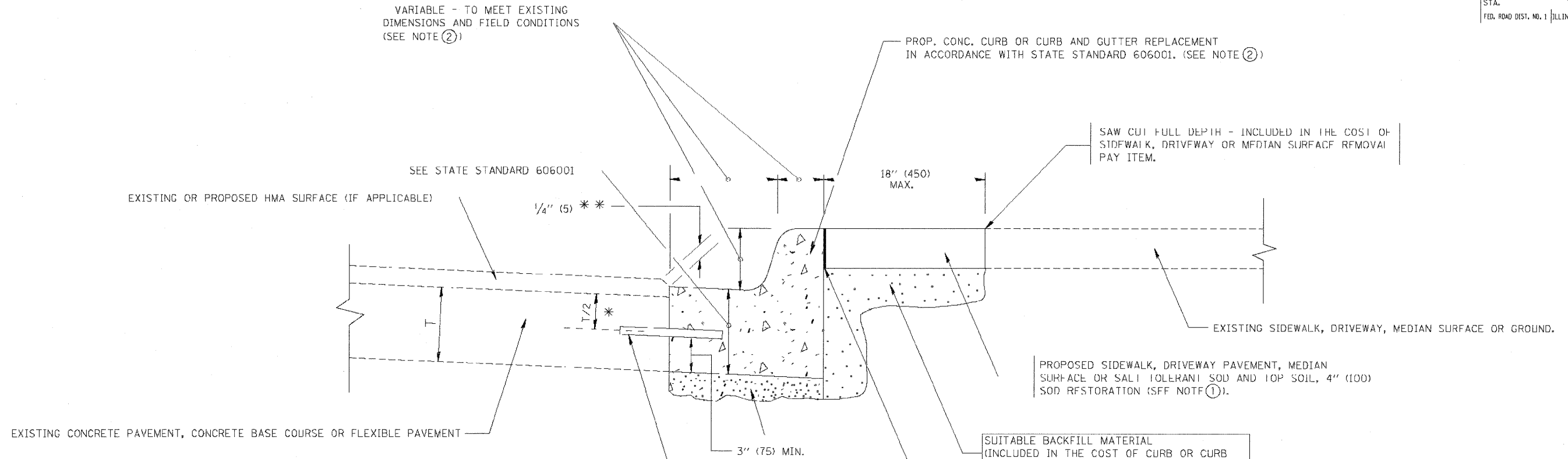
NOTES:

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.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
R. MIRS	9-15-97	ARTERIAL ROAD INFORMATION SIGN
R. MIRS	12-11-97	
T. RAMMACHER	2-2-99	
C. JUCCIUS	1-31-07	

SCALE: NONE DRAWN BY DESIGN
CHECKED BY
TC22



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
 - ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.
- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
- SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.
- ② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED
 - ③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
 - ④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
 - ⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
 - ⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
 THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
H. SHAH	09/12/96
R. SHAH	09/19/96
H. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	12/15/09

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE
 HORIZ. 1" = 10'

DRAWN BY
 CHECKED BY
 BD600-06 (BD-24)