

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED HIGHWAY PLANS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3542	3-B-10BR(11)	COOK	26	1
		ILLINOIS	CONTRACT NO. 60T39	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

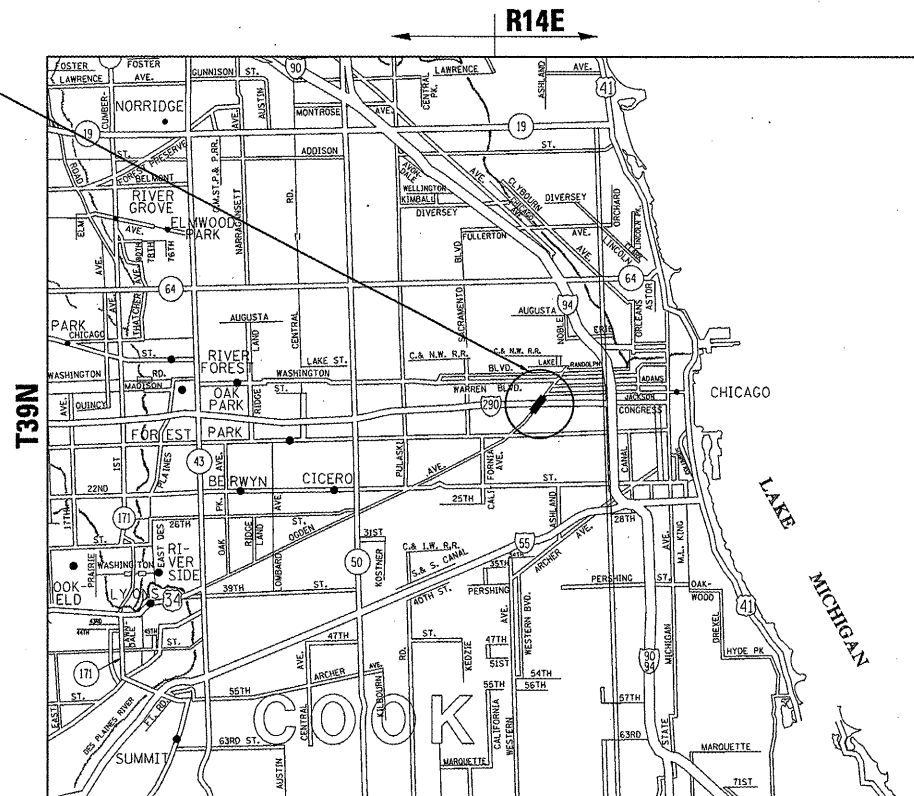
**IMPROVEMENT IS LOCATED
IN CITY OF CHICAGO**

**F.A.I. 290: I-290 (EISENHOWER EXPY)
AT OGDEN AVE.
SECTION: 3-B-10BR(11)
BRIDGE REPAIR; WEST SIDEWALK REPLACEMENT
COOK COUNTY**

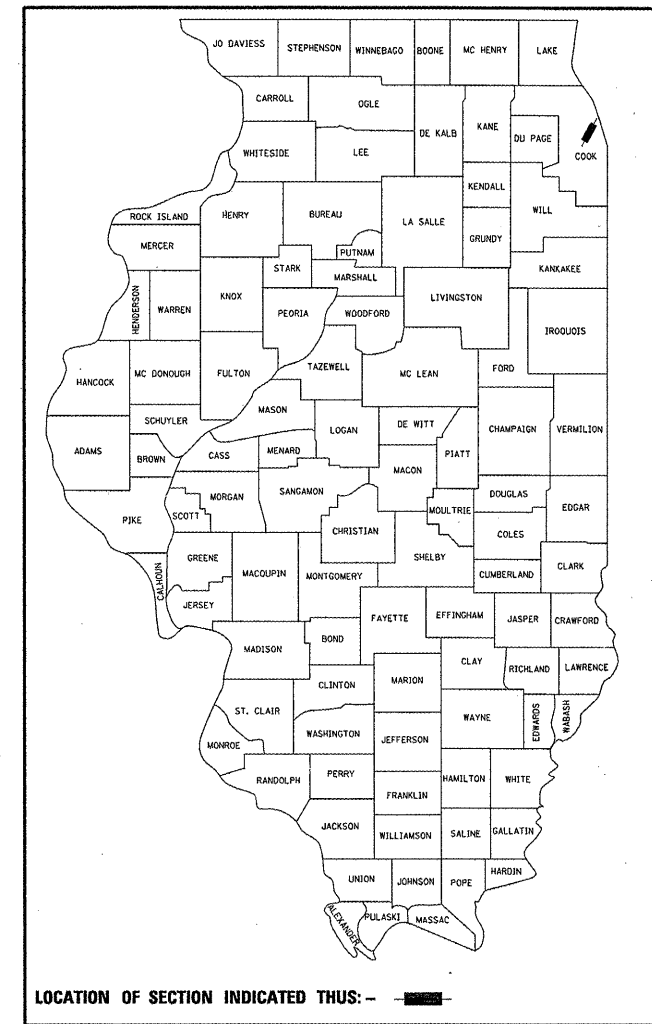
C-91-345-12

D-91-345-12

**LOCATION OF IMPROVEMENT
SN 016-0235**



WEST CHICAGO TOWNSHIP



LOCATION OF SECTION INDICATED THUS: —■—

TRAFFIC DATA I-290

2010 ADT = 215,100
POSTED SPEED = 55 MPH

TRAFFIC DATA OGDEN AVE.

2010 ADT = 22,600
POSTED SPEED = 30 MPH

PROJECT ENGINEER BORO, ROBERT (847) 705 - 4237
PROJECT MANAGER RAYAN, ISSAM

CONTRACT NO. 60T39

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

SUBMITTED MARCH 29, 2012
Diana M. O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11, 2012
John D. Baranzelli, P.E.
 acting ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2012
William E. Freyler
 acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

**C.U.A.N.: CHICAGO UTILITY ALERT
NETWORK (312) 744-7000**

Rev.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-8	TRAFFIC STAGING PLAN
9	PROPOSED PAVEMENT MARKING
10-19	BRIDGE REPAIR PLANS (SN 016-0235)
20	FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-8)
21	SINGLE AND MULTI-LANE WEAVE (TC-9)
22	TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)
23	ARTERIAL ROAD INFORMATION SIGN (TC-22)
24-26	CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS (TC-24)

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
635011-02 643001 701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' to 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701400-05	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-06	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-08	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701446-03	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801-05	LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." (CHICAGO UTILITY ALERT NETWORK) AT (312) 744-7000 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 CHICAGO.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

CONCRETE SUPERSTRUCTURE SHALL HAVE A SEVEN DAY MINIMUM CURE.

SLIPFORMING OF PARAPETS IS NOT ALLOWED.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 (FOR ARTERIALS) AND (847) 705-4151 (FOR EXPRESSWAYS) A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE "ARTERIAL ROAD INFORMATION SIGN (TC-22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS.

"THE CONTRACTOR SHALL PROVIDE TEMPORARY ADA ACCESSIBLE RAMPS TO BE USED WITH STANDARDS 701801. RAMP DETAILS SHALL BE APPROVED BY THE ENGINEER. COST OF RAMPS ARE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL)."

FILE NAME =	USER NAME = hamdenah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 (EISENHOWER EXPY) AT OGDEN AVE.		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwork\p1dot\hamdenah\0299703\DI	512-ah-plot.dgn	DRAWN -	REVISED -		INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES		3542	3-B-10BR111	COOK	26	2
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60T39
	PLOT DATE = 4/3/2012	DATE -	REVISED -		ILLINOIS FED. AID PROJECT						

Rev.

SUMMARY OF QUANTITIES			URBAN 100% STATE 0014 TOTAL QUANTITIES		CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT								
X6040205	FRAMES AND LIDS, SPECIAL	EACH	2	2						
50102400	CONCRETE REMOVAL	CU YD	145	145						
50157300	PROTECTIVE SHIELD	SO YD	530	530						
50300255	CONCRETE SUPERSTRUCTURE	CU YD	162	162						
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	36750	36750						
50800515	BAR SPLICERS	EACH	24	24						
50901730	BRIDGE FENCE RAILING	FOOT	379	379						
52000110	PREFORMED JOINT STRIP SEAL	FOOT	188	188						
67100100	MOBILIZATION	L SUM	1	1						
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1						
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	780	780						
70400100	TEMPORARY CONCRETE BARRIER	FOOT	460	460						
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SO FT	53	53						
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	2307	2307						
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	33	33						
78300100	PAVEMENT MARKING REMOVAL	SO FT	780	780						

SUMMARY OF QUANTITIES			URBAN 100% STATE 0014 TOTAL QUANTITIES		CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT								
* X0321519	CONDUIT SUPPORT SYSTEM	L SUM	1	1						
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1						
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1						
X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	4982	4982						
X7030040	WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 INCH	FOOT	250	250						
X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	6	6						
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	47	47						
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	7.4	7.4						
Z0016200	DECK SLAB REPAIR (PARTIAL)	SO YD	1.8	1.8						
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1						
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4						
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1						
*Specialty Items										

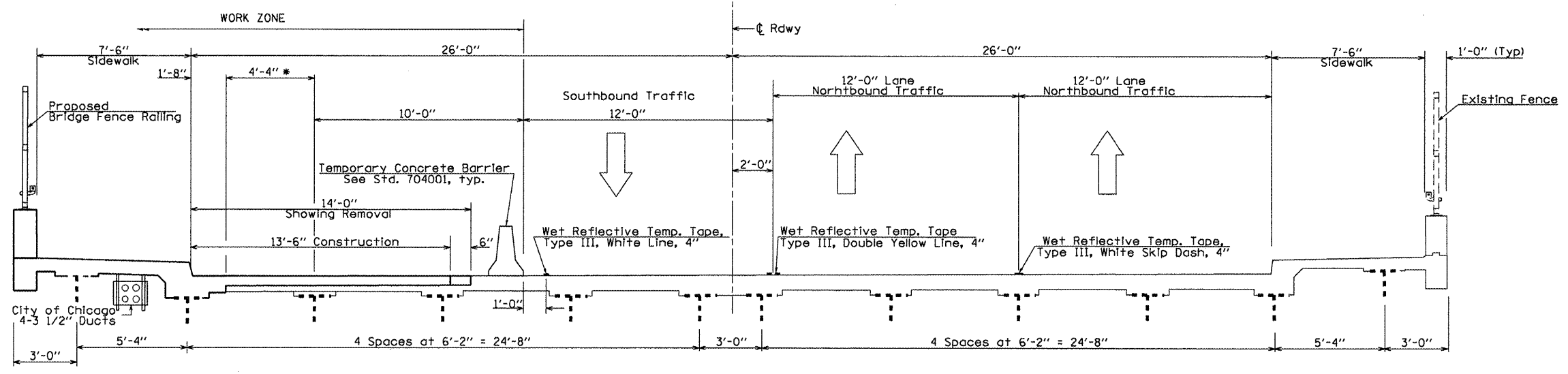
FILE NAME =	USER NAME = handanah	DESIGNED -	REVISED -
c:\pw_wor\1\pwl\of\handanah\0299703\0134512-stf-plc.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**I-290 (EISENHOWER) AT OGDEN AVE.
SUMMARY OF QUANTITIES**

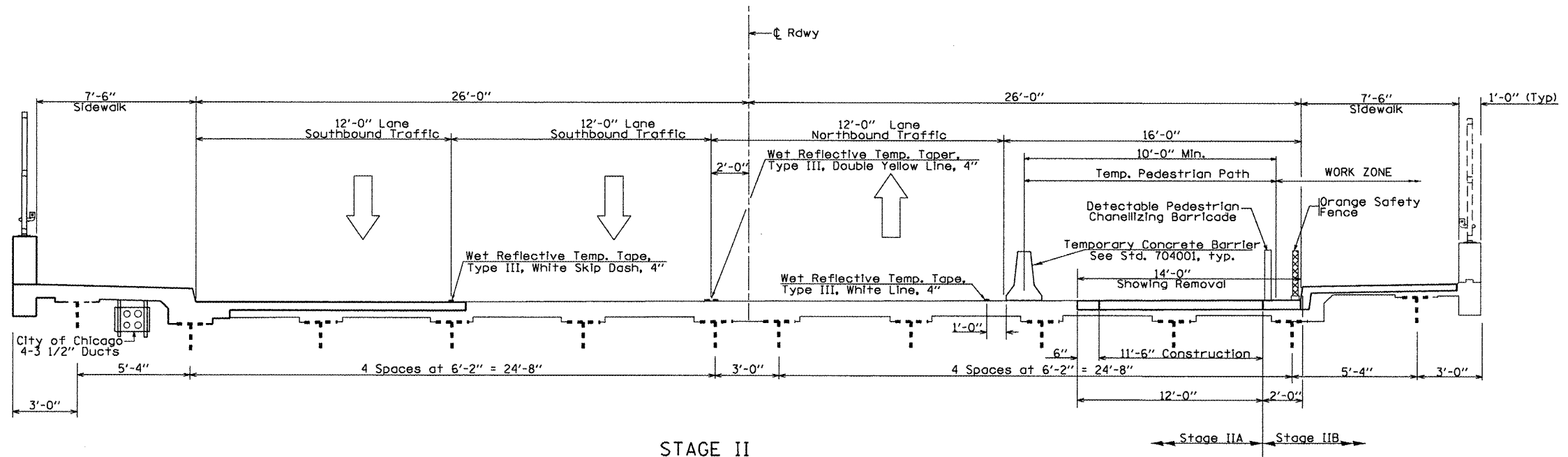
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3-B-10BR(11)	COOK	26	3
CONTRACT NO. 60T39			Rev.	



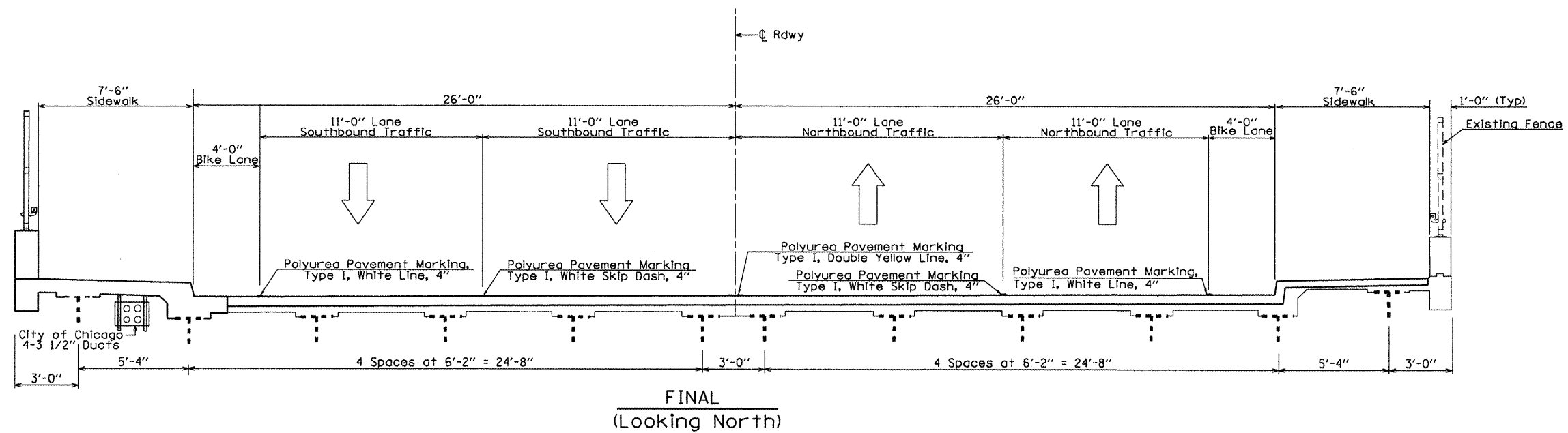
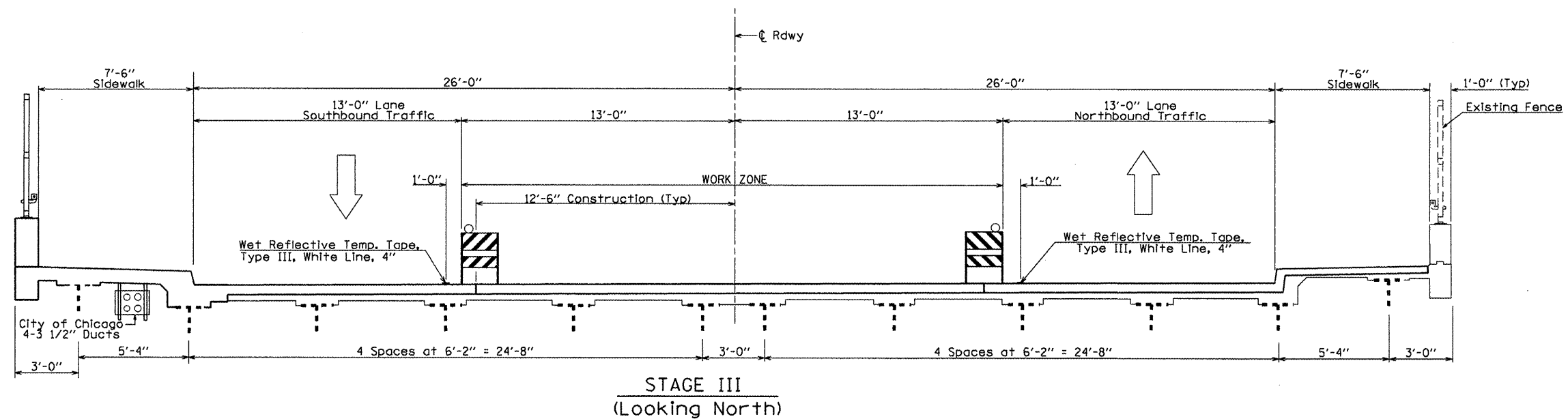
*Restricted Construction Loads
See Sheet 7

STAGE I
(Looking North)



STAGE II
(Looking North)

FILE NAME = c:\pwwork\pwwork\handanah\0299703\013	USER NAME = handanah 1512-sh1-plan.dgn	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 (EISENHOWER EXPY) AT OGDEN AVE. TRAFFIC CONTROL PLAN STAGE I & II		F.A. RTE.	SECTION 3-B-10BR(11)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 4
PLOT SCALE = 100.0000' / 1" = 100'		CHECKED -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60T39	
PLOT DATE = 4/3/2012		DATE -	REVISED -		ILLINOIS FED. AID PROJECT						



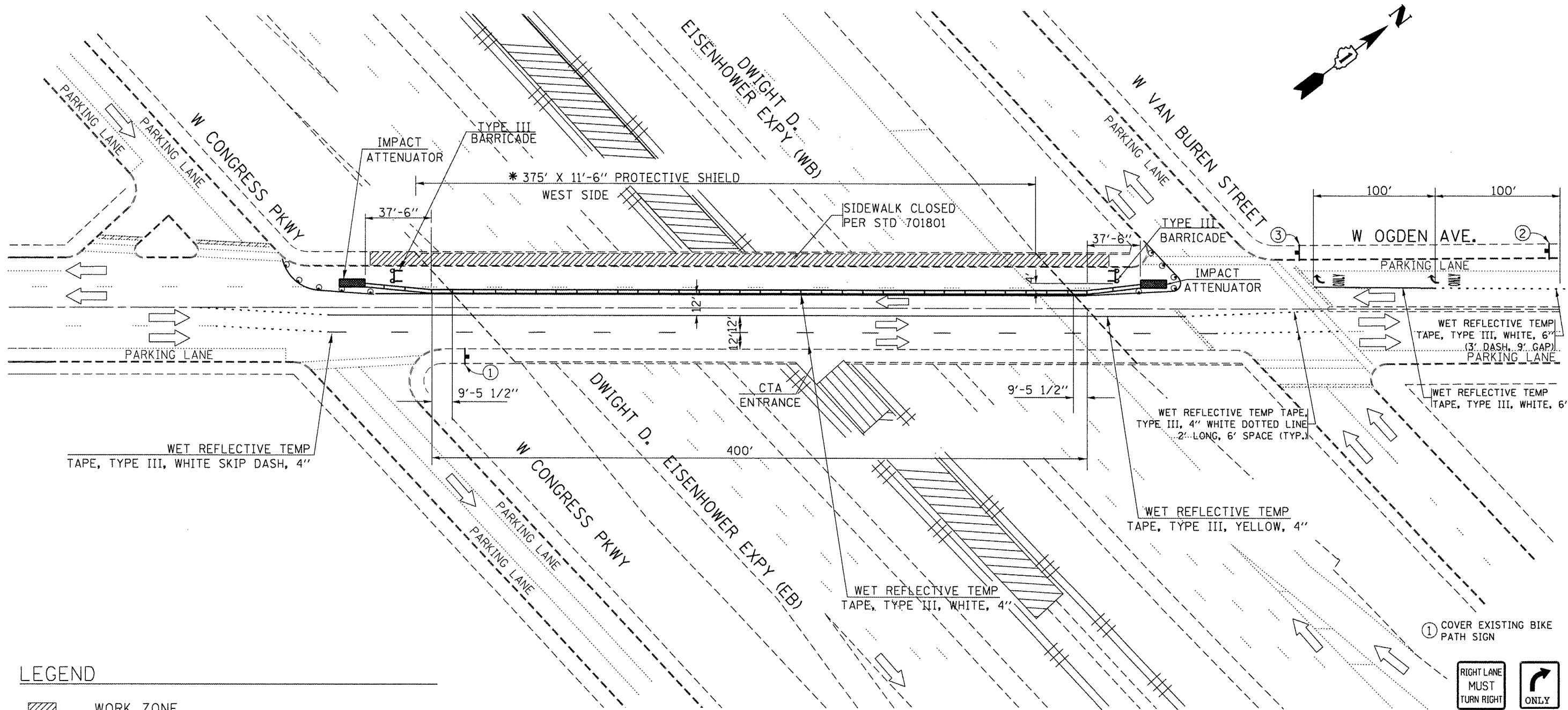
FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED -
c:\pwork\pvidot\hamdanah\0299703\0134512-shr-plan.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 4/3/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION







I-290 (EISENHOWER EXPY) AT OGDEN AVE.
TRAFFIC CONTROL PLAN
STAGE III & FINAL

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3-B-10BR(11)	COOK	26	5
CONTRACT NO. 60T39				
ILLINOIS FED. AID PROJECT				





LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  DRUM OR CONE WITH STEADY BURNING LIGHT
-  IMPACT ATTENUATOR
-  TEMPORARY CONCRETE BARRIER
-  TYPE III BARRICADE WITH 2 STEADY BURN LIGHTS

**PLAN
STAGE I**

NOTES:

- COST OF TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET ARE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
- ACCESS TO CTA STATION SHALL BE MAINTAINED ALL TIMES DURING CONSTRUCTION.
- * EXISTING PROTECTIVE SHIELDING EXISTS OVER EXPRESSWAY. THE CONTRACTOR MAY USE THIS SHIELDING AS THEIR PROTECTIVE SHIELDING; AREA INCLUDED IN QUANTITY OF SHIELDING.

- ① COVER EXISTING BIKE PATH SIGN
- ② 
- ③ 

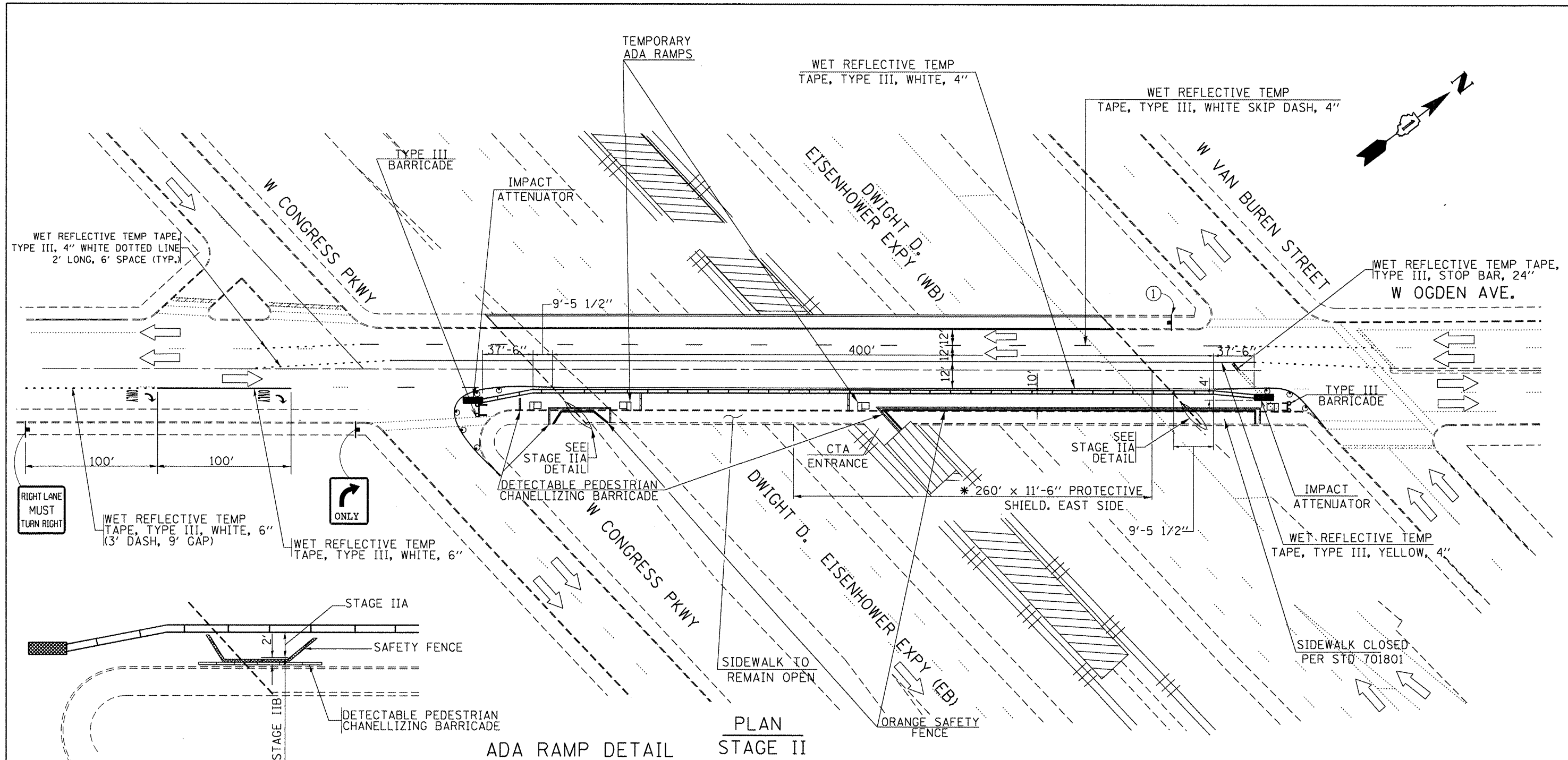
FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED -
ct\pwwork\pwwidat\hamdanah\02299703\0134512-sh1-plan.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**I-290 (EISENHOWER EXPY) AT OGDEN AVE.
TRAFFIC CONTROL PLAN
STAGE I**

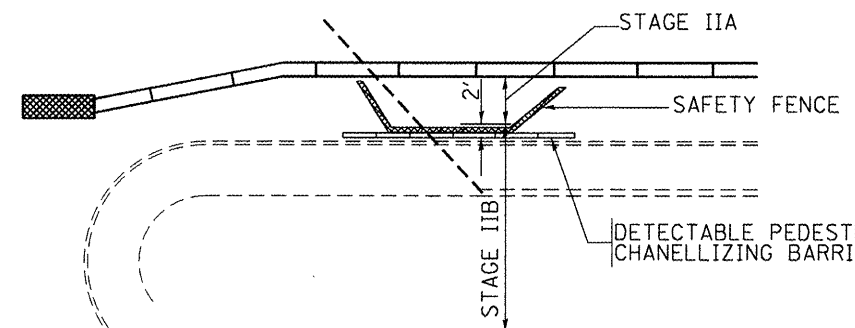
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3-B-10BR(11)	COOK	26	6
CONTRACT NO. 60T39			ILLINOIS FED. AID PROJECT	



RIGHT LANE MUST TURN RIGHT

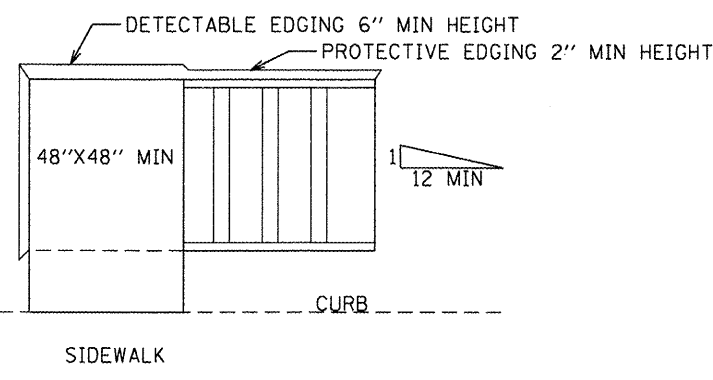
ONLY



ADA RAMP DETAIL

PLAN STAGE II

- LEGEND**
- DIRECTION OF TRAFFIC
 - DRUM OR CONE WITH STEADY BURNING LIGHT
 - IMPACT ATTENUATOR
 - TEMPORARY CONCRETE BARRIER
 - TYPE III BARRICADE WITH 2 STEADY BURN LIGHTS
 - TEMPORARY ADA RAMPS



① COVER EXISTING BIKE PATH SIGN

NOTES:

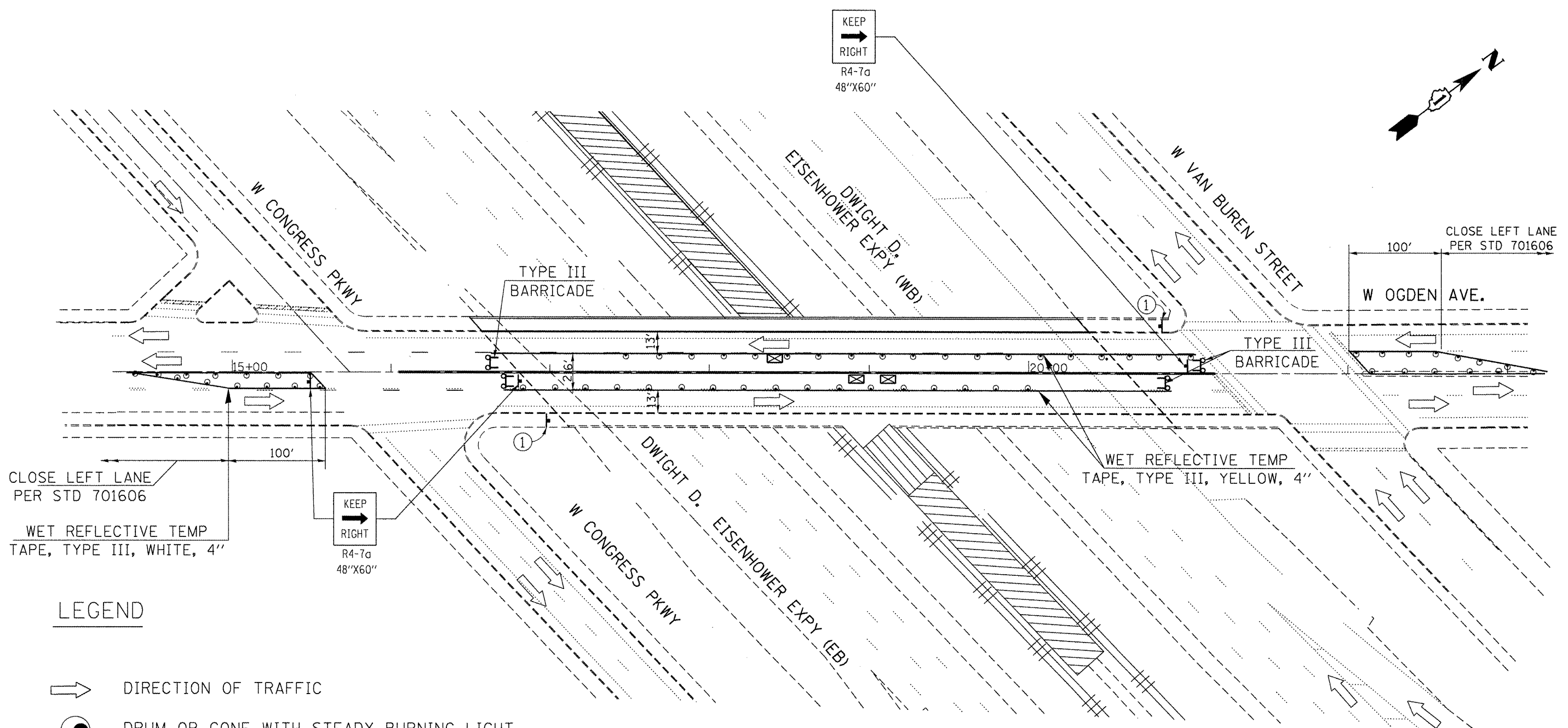
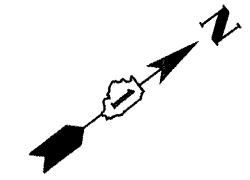
COST OF TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET ARE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL).
 ACCESS TO CTA STATION SHALL BE MAINTAINED ALL TIMES DURING CONSTRUCTION.
 * EXISTING PROTECTIVE SHIELDING EXISTS OVER EXPRESSWAY. THE CONTRACTOR MAY USE THIS SHIELDING AS THEIR PROTECTIVE SHIELDING; AREA INCLUDED IN QUANTITY OF SHIELDING.

FILE NAME =	USER NAME = hmdanah	DESIGNED -	REVISED -
c:\p\work\p\dat\hmdanah\2299783\01\512-shr-plan.dgn		DRAWN -	REVISED -
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -
PLOT DATE = 4/3/2012		DATE -	REVISED -

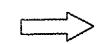


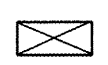
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

I-290 (EISENHOWER EXPY) AT OGDEN AVE.			
TRAFFIC CONTROL PLAN			
STAGE II			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3-B-10BR(1)	COOK	26	7
CONTRACT NO. 60T39			ILLINOIS FED. AID PROJECT	



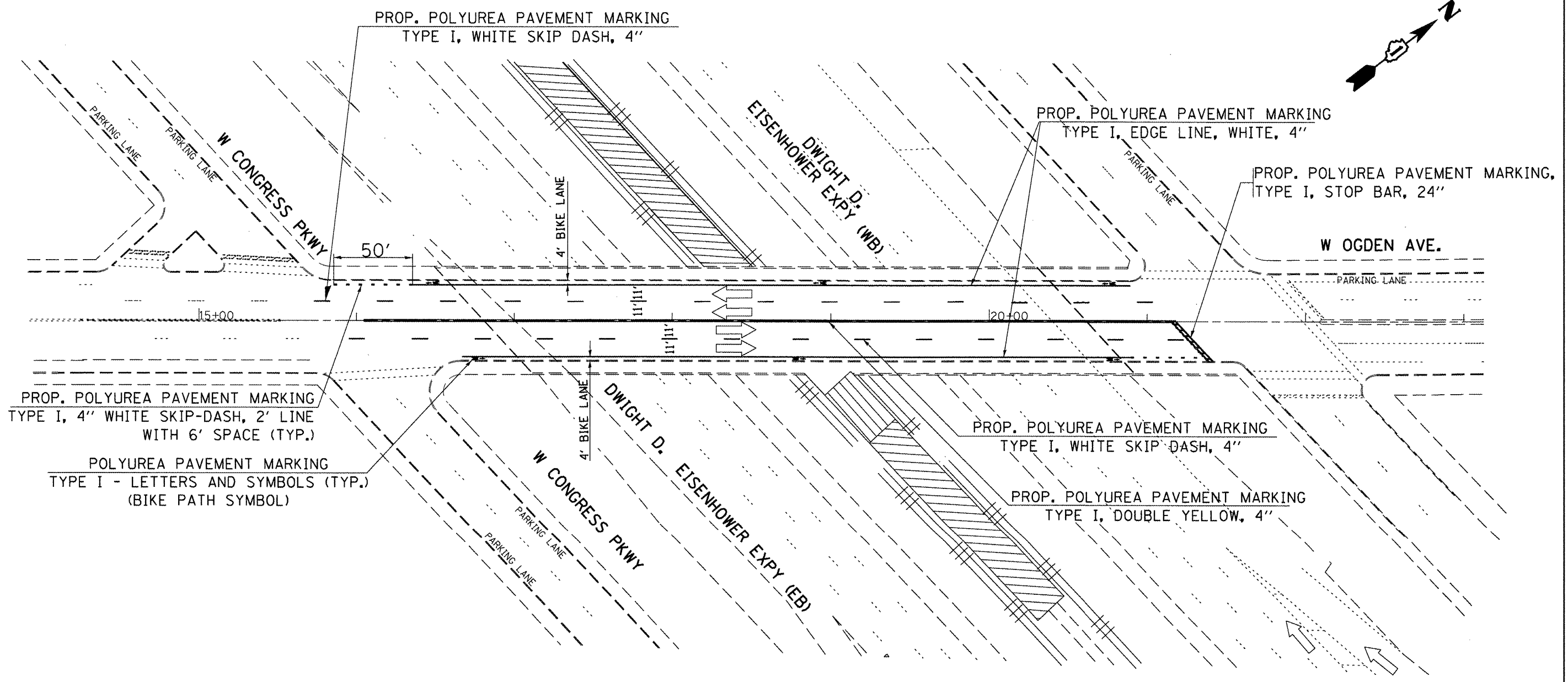
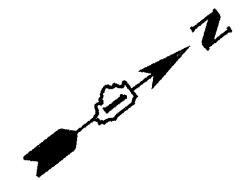
LEGEND

-  DIRECTION OF TRAFFIC
-  DRUM OR CONE WITH STEADY BURNING LIGHT
-  TYPE III BARRICADE WITH 2 STEADY BURN LIGHTS
-  PROTECTIVE SHIELD - 6'-2" X 10' X 3 (3 PATCHES IN THE BAY OF PATCHES, 2' EACH SIDE OF PATCH)

**PLAN
STAGE III**

① COVER EXISTING BIKE PATH SIGN

FILE NAME =	USER NAME = handanah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 (EISENHOWER EXPY) AT OGDEN AVE. TRAFFIC CONTROL PLAN STAGE III	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
g:\pwork\pwork\handanah\d0299783\013512-sht-plan.dgn	DRAWN -	REVISED -	3542			3-B-10BR(11)	COOK	26	8	
PLOT SCALE = 64.3844' / in.	CHECKED -	REVISED -	CONTRACT NO. 60T39							
PLOT DATE = 4/3/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	

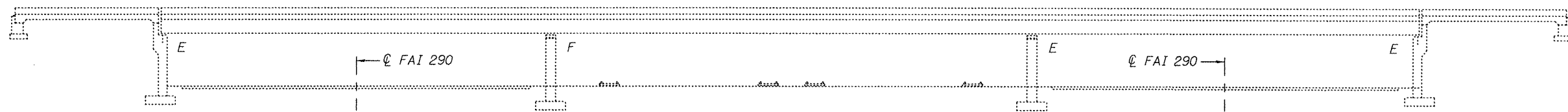


PROP. POLYUREA PAVEMENT MARKING
TYPE I, 4" WHITE SKIP-DASH, 2' LINE
WITH 6' SPACE (TYP.)

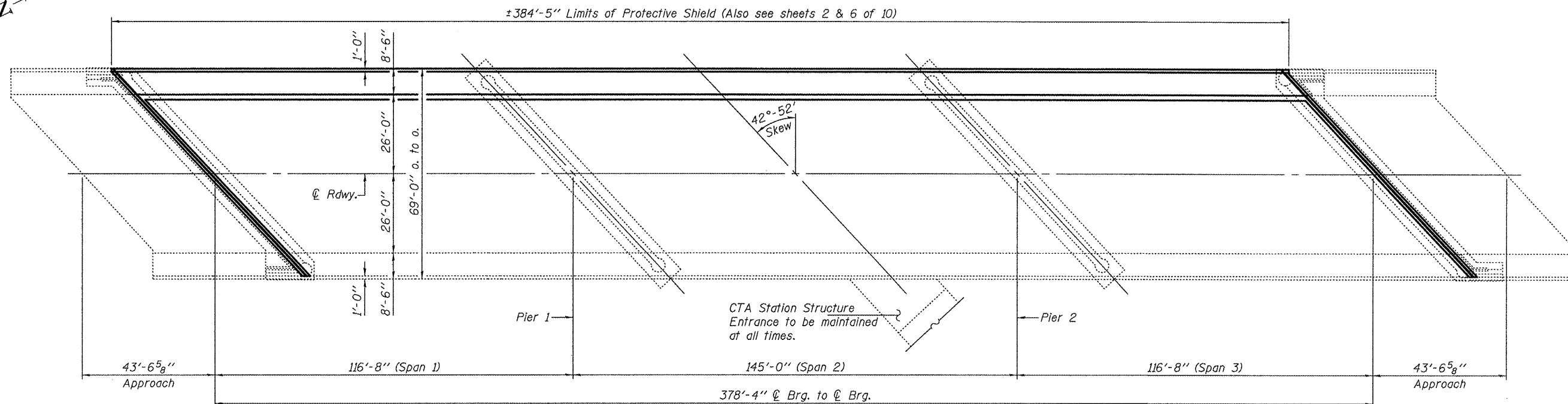
POLYUREA PAVEMENT MARKING
TYPE I - LETTERS AND SYMBOLS (TYP.)
(BIKE PATH SYMBOL)

PAVEMENT MARKING PLAN

FILE NAME =	USER NAME = hmandanah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 (EISENHOWER EXPY) AT OGDEN AVE. PROPOSED PAVEMENT MARKING		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
cr:\pwork\pwork\hmandanah\0299783\013	512-ahp-plan.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	3542	3-B-10BR(11)	COOK	26	9
	PLOT SCALE = 64.3844' / in.	CHECKED -	REVISED -									
	PLOT DATE = 5/2/2012	DATE -	REVISED -									
							CONTRACT NO. 60T39					
<small>ILLINOIS FED. AID PROJECT</small>												



ELEVATION



PLAN

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (AASHTO M-270)

LOADING HS20-44

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Reinforcement bars designated (E) shall be epoxy coated. Prior to pouring the new concrete deck, all heavy or loose rust, loose 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.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

Plan 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.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Removal of existing pedestrian fence which is located on top of the west parapet shall be included in the pay item Concrete Removal.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	145
Concrete Superstructure	Cu. Yd.	162
Preformed Joint Strip Seal	Foot	188
Reinforcement Bars, Epoxy Coated	Pound	36,750
Bar Splicers	Each	24
Bridge Fence Railing	Foot	379
Deck Slab Repair (Partial)	Sq. Yd.	1.8
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	47
Protective Shield	Sq. Yd.	530
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	7.4
Manhole, Special Frames and Lids, Special	Each	2
Conduit Support System	L.S.	1



Expires: November 30, 2012

DESIGNED - [Signature]	EXAMINED - [Signature]	DATE - MAY 9, 2012
CHECKED - [Signature]	PASSED - [Signature]	
DRAWN - Kyle M. Steffen		
CHECKED - [Signature]		

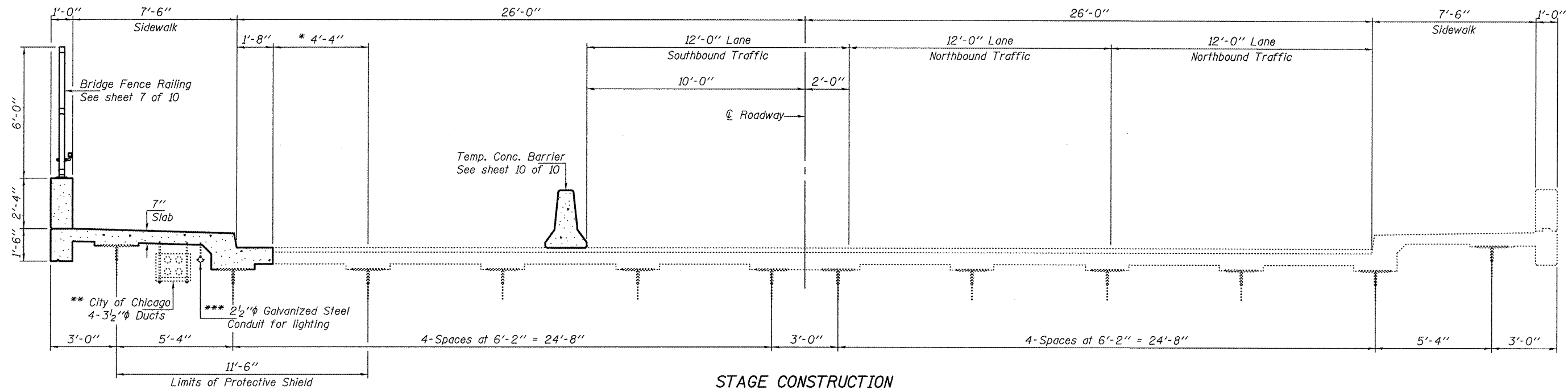
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 OGDEN AVENUE OVER F.A.I. ROUTE 290
 SN 016-0235

SHEET NO. 1 OF 10 SHEETS

F.A.I. RTE. 290	SECTION 3-B-10BR(11)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 10
CONTRACT NO. 60T39				
ILLINOIS FED. AID PROJECT				

* The maximum allowed load that can be applied to this cantilever slab will be 500 pounds per linear foot of slab. This maximum allowed load includes any combination of dead or live loads. A point load of 1500 pounds will be allowed due to the anticipated distribution of the point load over a distance of 3 feet. Anticipated loading conditions shall be submitted to the Engineer prior to the start of the removal phase.



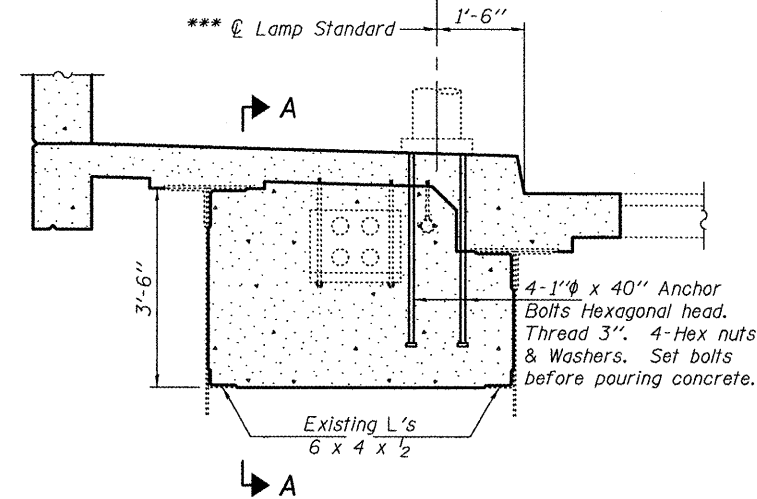
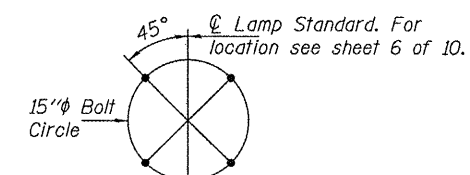
STAGE CONSTRUCTION

(Looking North)

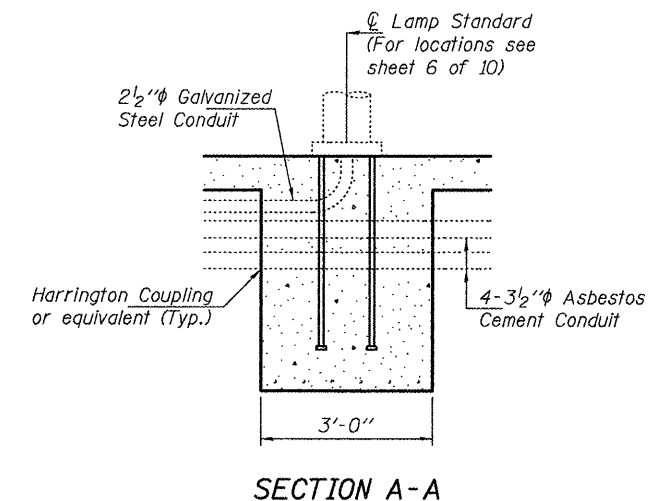
** The Contractor is responsible for providing a support system for the ducts in their existing position. Care shall be taken not to damage the existing asbestos material (ACM) ducts. The Contractor shall make the asbestos material (ACM) ducts non-friable before handling. Any damage to the ducts must be repaired at the Contractor's expense. Inserts to permanently support the ducts shall be cast into the proposed sidewalk slab. No drilling or epoxy grouting will be allowed in the proposed sidewalk slab in order to support the ducts. All labor and material cost of the installation and removal of temporary support system for the ducts and installation of inserts for permanent support is to be paid for at the contract unit price LUMP SUM for Conduit Support System.

Areas of existing protective shielding may need to be removed and reinstalled in order to access the area under the west sidewalk to install the ducts support. The protective shielding under the west sidewalk shall be removed after the sidewalk is replaced. Cost is included in cost of Protective Shielding.

*** The contractor is responsible for the temporary support, protection and re-attachment using cast inserts of the electrical conduit supplying power to the lamp standards under the sidewalk. The contractor shall coordinate with the City of Chicago for the power shut-off and reconnect as well as the removal, safe storage and reinstallation of the lamp standards. All labor and materials necessary to complete this work, including related electrical work on 24"φ manhole (see sheet 6 of 10), is included in the cost of Concrete Superstructure.



SECTION THRU SIDEWALK AT LIGHT STANDARD



SECTION A-A

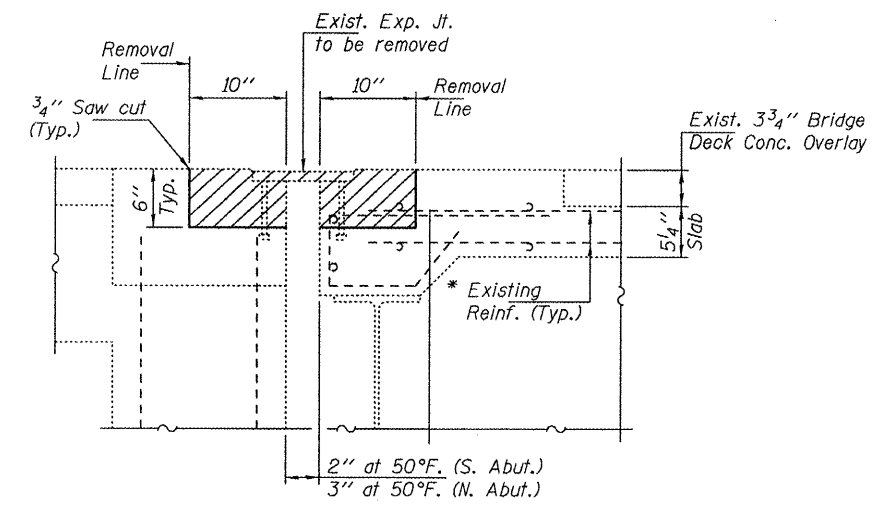
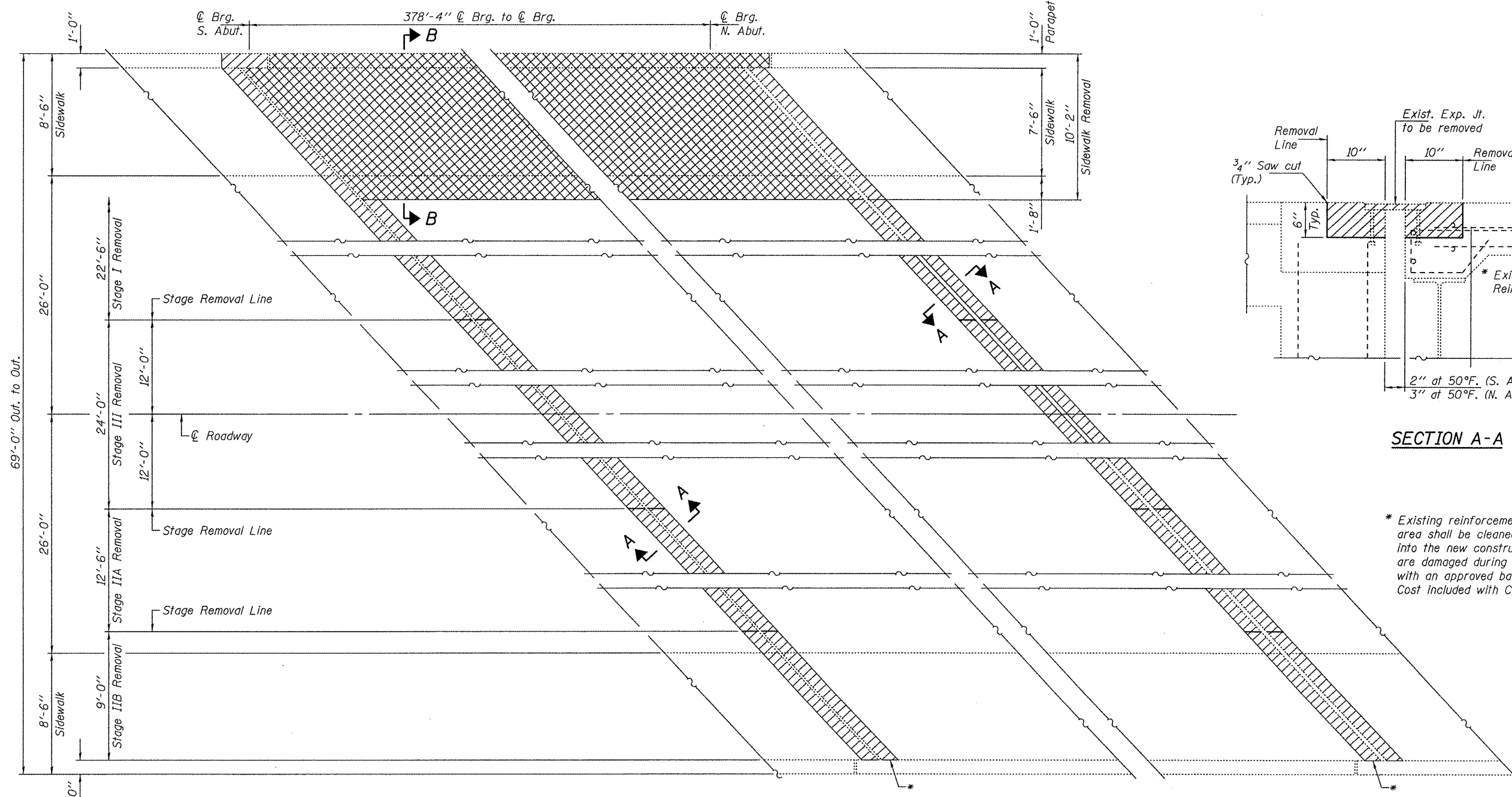
DESIGNED - MKC	EXAMINED - <i>Jayne F. J...</i>
CHECKED - ADY	ACTING ENGINEER OF STRUCTURAL SERVICES
DRAWN - Kyle M. Steffen	PASSED - <i>Carl...</i>
CHECKED - MKC ADY	ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - MAY 9, 2012

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

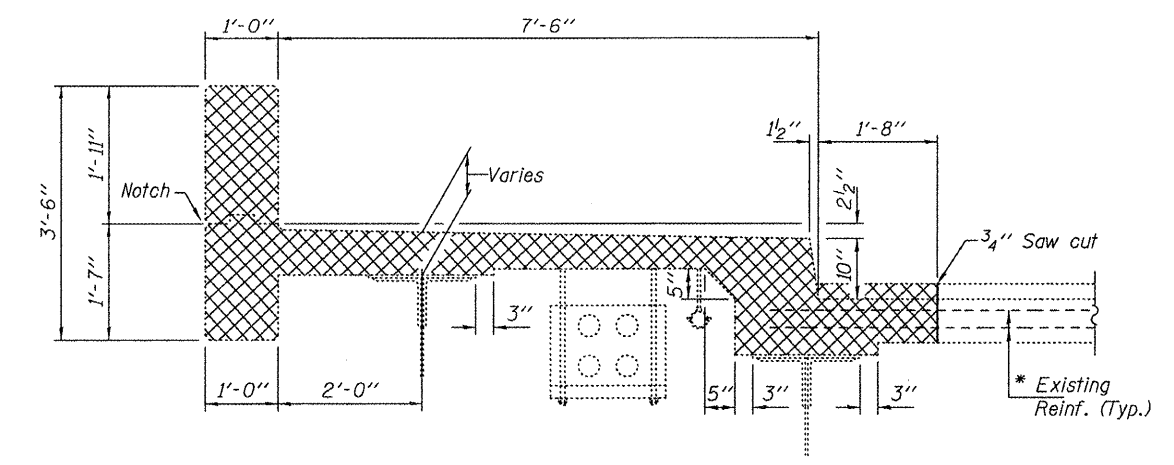
STAGE CONSTRUCTION & LIGHT POST DETAILS
SN 016-0235
SHEET NO. 2 OF 10 SHEETS

F.A.I. RTE. 290	SECTION 3-B-10BR(11)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 11
CONTRACT NO. 60T39				
ILLINOIS FED. AID PROJECT				



SECTION A-A

* Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost Included with Concrete Removal.

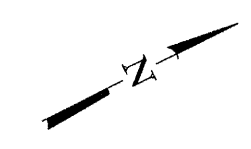


SECTION B-B

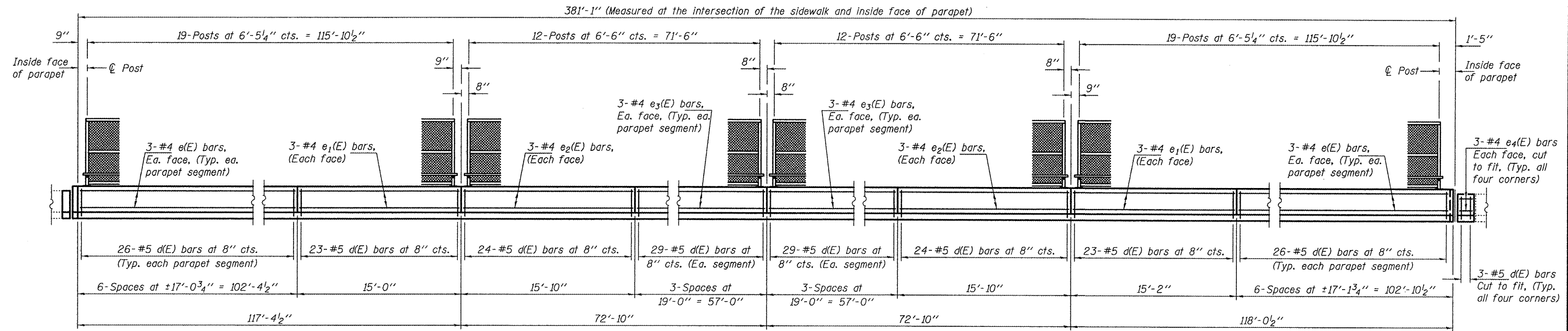
CONCRETE REMOVAL PLAN

* Concrete removal shall end at the vertical face of the existing concrete parapet.

- Indicates areas of Concrete Removal for joint replacement.
- Indicates areas of Concrete Removal for sidewalk replacement.

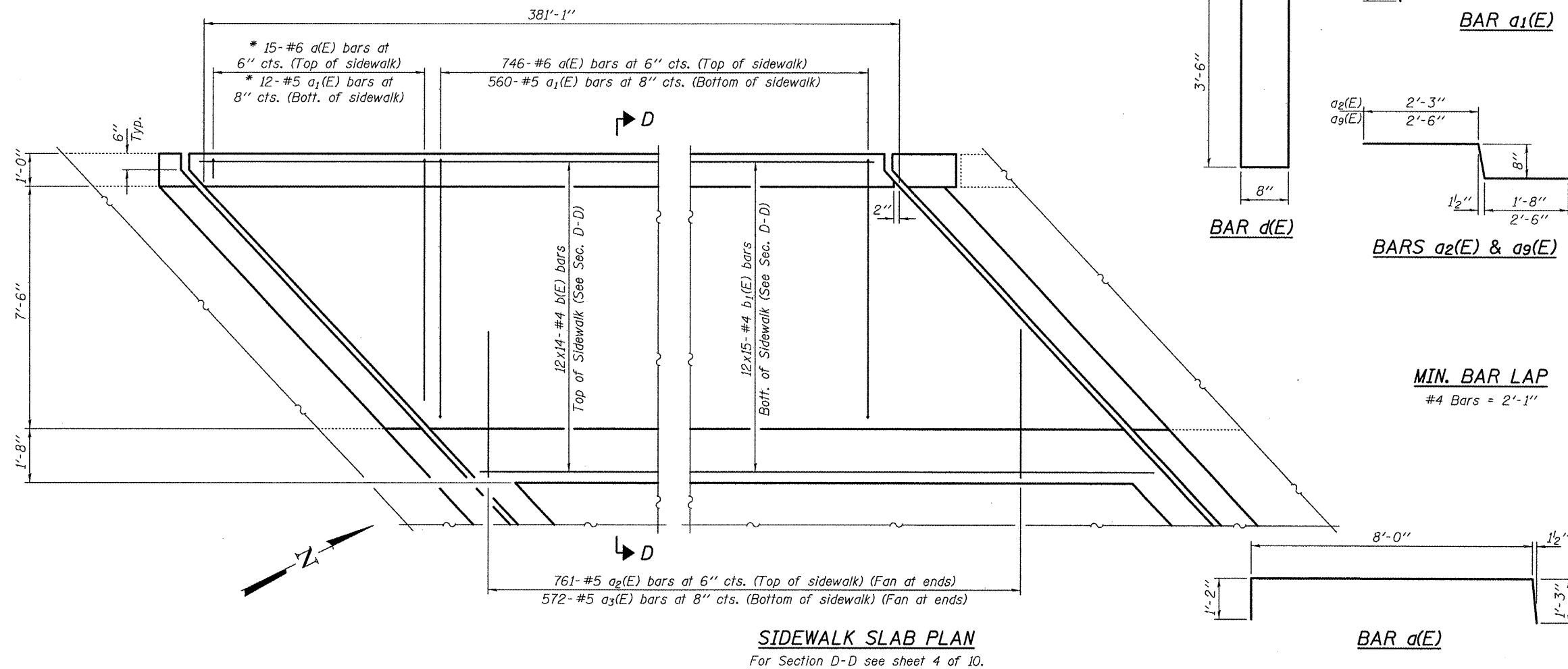


DESIGNED - MKC	EXAMINED - <i>Joanne F. Schuff</i>	DATE - MAY 9, 2012	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONCRETE REMOVAL DETAILS SN 016-0235	F.A.I. RTE. 290	SECTION 3-B-10BR(11)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 12
CHECKED - ADY	PASSED - <i>Carl Sawyer</i>				CONTRACT NO. 60T39				
DRAWN - Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES				SHEET NO. 3 OF 10 SHEETS				
CHECKED - MKC ADY					ILLINOIS FED. AID PROJECT				

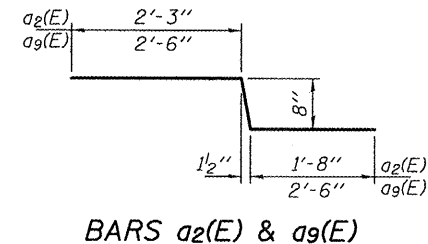
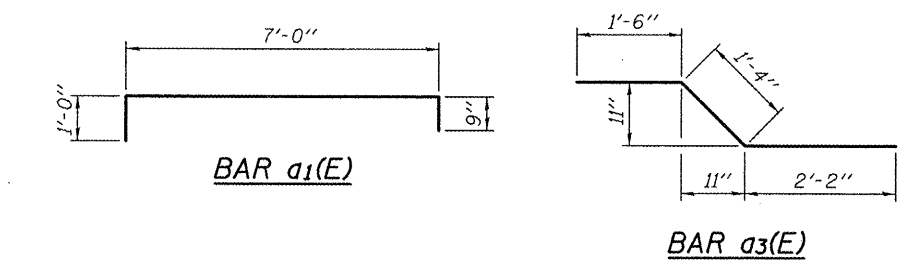


* Order a(E) & a₁(E) bars full length. Cut to fit skew and use remainder of bars in the opposite end.

PARAPET ELEVATION
See sheet 4 of 10 for Parapet Joint Details and see sheet 6 of 10 for Bridge Fence Railing Details.



SIDEWALK SLAB PLAN
For Section D-D see sheet 4 of 10.

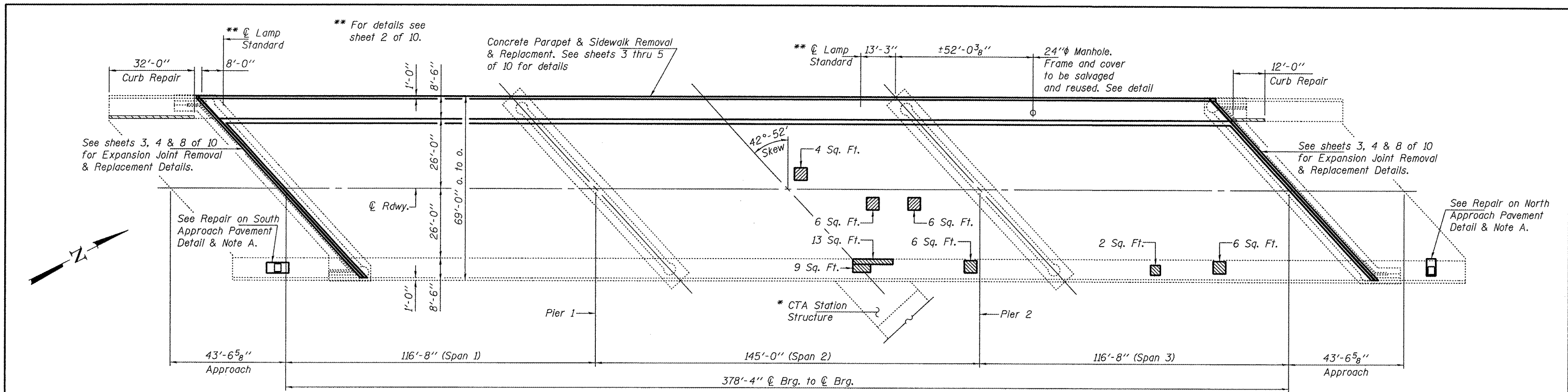


MIN. BAR LAP
#4 Bars = 2'-1"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	761	#6	10'-6"	U
a ₁ (E)	572	#5	8'-9"	U
a ₂ (E)	761	#5	4'-7"	U
a ₃ (E)	572	#5	5'-0"	U
a ₄ (E)	8	#6	11'-0"	U
a ₅ (E)	4	#5	11'-0"	U
a ₆ (E)	8	#5	19'-5"	U
a ₇ (E)	8	#5	34'-0"	U
a ₈ (E)	8	#5	10'-0"	U
a ₉ (E)	2	#5	5'-8"	U
a ₁₀ (E)	8	#5	15'-7"	U
b(E)	168	#4	29'-4"	U
b ₁ (E)	180	#4	27'-9"	U
d(E)	592	#5	7'-8"	U
e(E)	72	#4	16'-7"	U
e ₁ (E)	12	#4	14'-7"	U
e ₂ (E)	12	#4	15'-5"	U
e ₃ (E)	36	#4	18'-7"	U
e ₄ (E)	24	#4	3'-0"	U
Concrete Removal		Cu. Yd.	145	
Concrete Superstructure		Cu. Yd.	162	
Bar Splicers		Each	24	
Reinforcement Bars, Epoxy Coated		Pound	36,500	

Bars indicated thus 12 x 14-#4 etc. indicates 12 lines of bars with 14 lengths per line.



** For details see sheet 2 of 10.

Concrete Parapet & Sidewalk Removal & Replacement. See sheets 3 thru 5 of 10 for details

** ϕ Lamp Standard
 13'-3" $\pm 52'-0 \frac{3}{8}"$
 24" ϕ Manhole. Frame and cover to be salvaged and reused. See detail

12'-0" Curb Repair

See sheets 3, 4 & 8 of 10 for Expansion Joint Removal & Replacement Details.

See sheets 3, 4 & 8 of 10 for Expansion Joint Removal & Replacement Details.

See Repair on South Approach Pavement Detail & Note A.

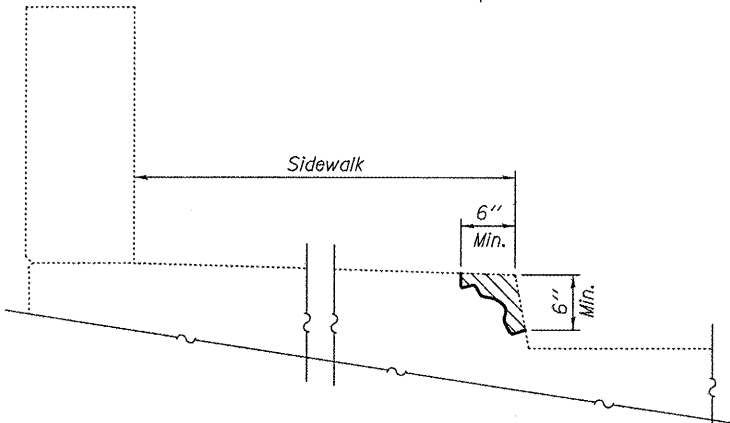
See Repair on North Approach Pavement Detail & Note A.

PLAN

* Entrance to CTA shall be maintained at all times. Use Standard 701801.

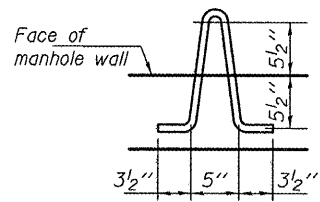
- Deck Slab Repair (Partial)
- Structural Repair of Concrete ≤ 5 inches
- Deck Slab Repair (Full Depth, Type II)

Note A:
 Remove the existing manhole frame and cover and the adjacent deteriorated concrete sidewalk. The anticipated removal limits for concrete removal are shown on this sheet. Install at the same location a rectangular 30" x 36" manhole frame, bolted/gasketed lid with steel butt hinge. The reference for the manhole is Neenah R-6665-IHH or equivalent manhole from a different manufacturer. The work for finishing and installing this manhole shall be paid for at the contract unit price Each, for ~~Manhole, Special, Frames and Lids, Special~~. The manhole frame and lid shall be installed as per the manufacturer's recommendations. The lid shall be installed so that the lid is flush with the surrounding concrete sidewalk.



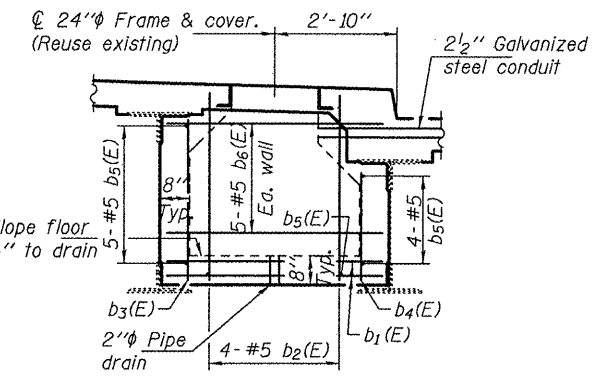
CURB REPAIR DETAIL

(Structural Repair of Concrete ≤ 5 inches)
 (32 linear feet on S. Appr. Pavement)
 (12 linear feet on N. Appr. Pavement)



PULLING IRON DETAIL

$\frac{3}{4}"$ ϕ Mild steel. Hot dip galvanized after fabrication. $\frac{5}{8}"$ inside radius typ. for all bends



SECTION A-A

BARS $b_2(E)$ THRU $b_4(E)$

Bar	A
$b_2(E)$	5'-0"
$b_3(E)$	4'-6"
$b_4(E)$	3'-3"

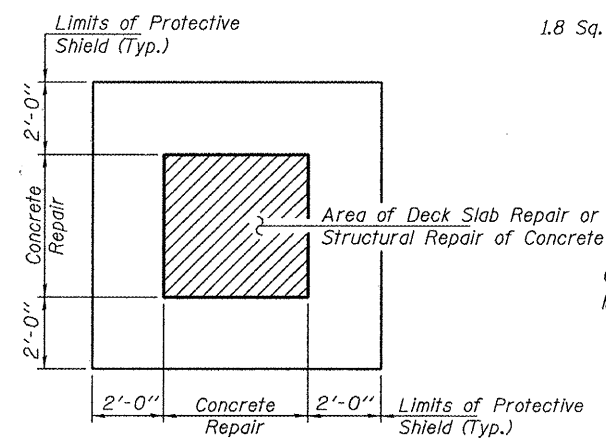
Note: Field cut longitudinal bars and fan transverse bars over manhole opening.

24" ϕ MANHOLE BILL OF MATERIAL

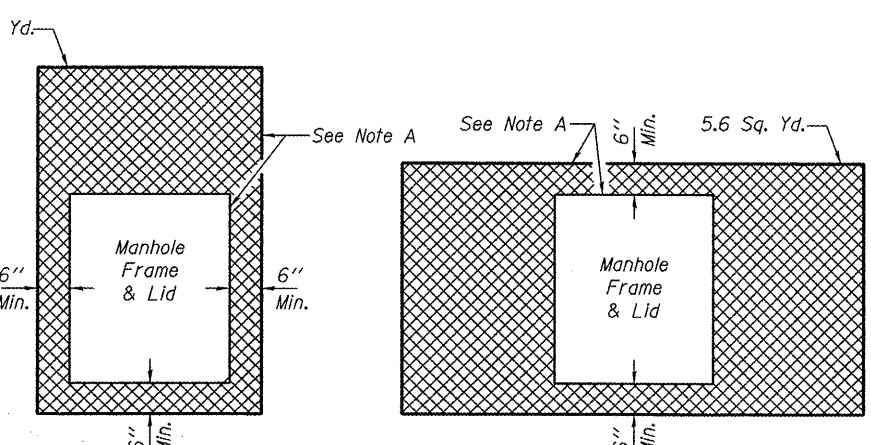
Bar	No.	Size	Length	Shape	
$b_2(E)$	8	#5	6'-0"	L	
$b_3(E)$	3	#5	5'-6"	L	
$b_4(E)$	3	#6	4'-3"	L	
$b_5(E)$	16	#5	4'-0"	—	
$b_6(E)$	20	#5	5'-0"	—	
Reinforcement Bars, Epoxy Coated				Pound	250

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Sq. Yd.	1.8
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	47
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	7.4
Manhole, Special, Frames and Lids, Special	Each	2

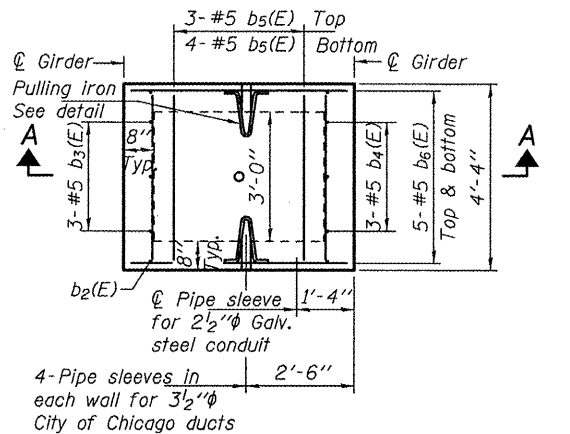


TYPICAL PROTECTIVE SHIELD DETAIL



REPAIR ON NORTH APPROACH PAVEMENT

REPAIR ON SOUTH APPROACH PAVEMENT



PLAN 24" ϕ MANHOLE

Cost of concrete included with Concrete Superstructure

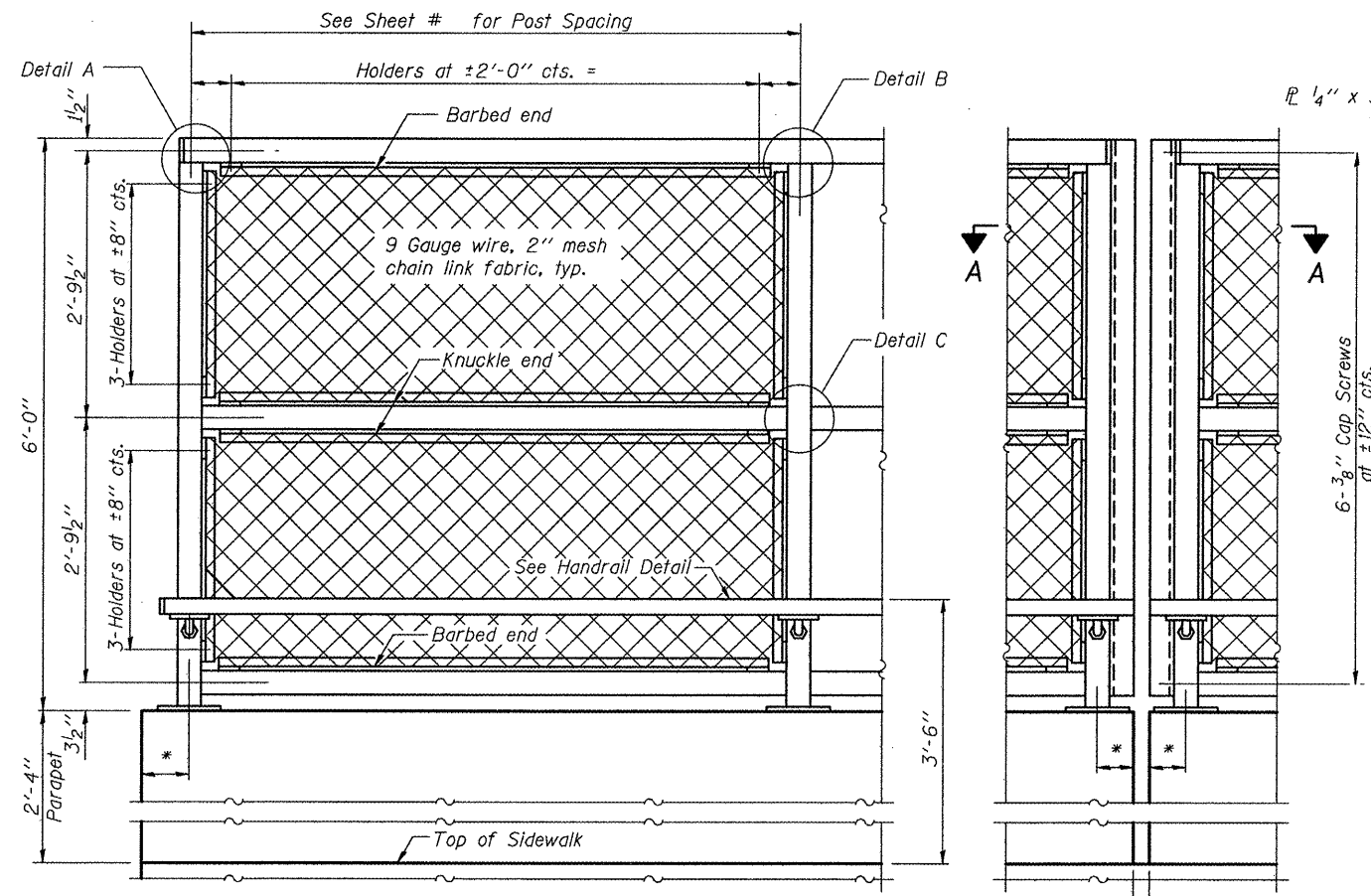
DESIGNED - MKC
 CHECKED -
 DRAWN - Kyle M. Steffen
 CHECKED - MKC

EXAMINED - *Jay F. Hill*
 ENGINEER OF STRUCTURAL SERVICES
 PASSED - *D. Carl Fisher*
 ENGINEER OF BRIDGES AND STRUCTURES
 DATE - MAY 9, 2012

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DECK PATCHING DETAILS
 SN 016-0235
 SHEET NO. 6 OF 10 SHEETS

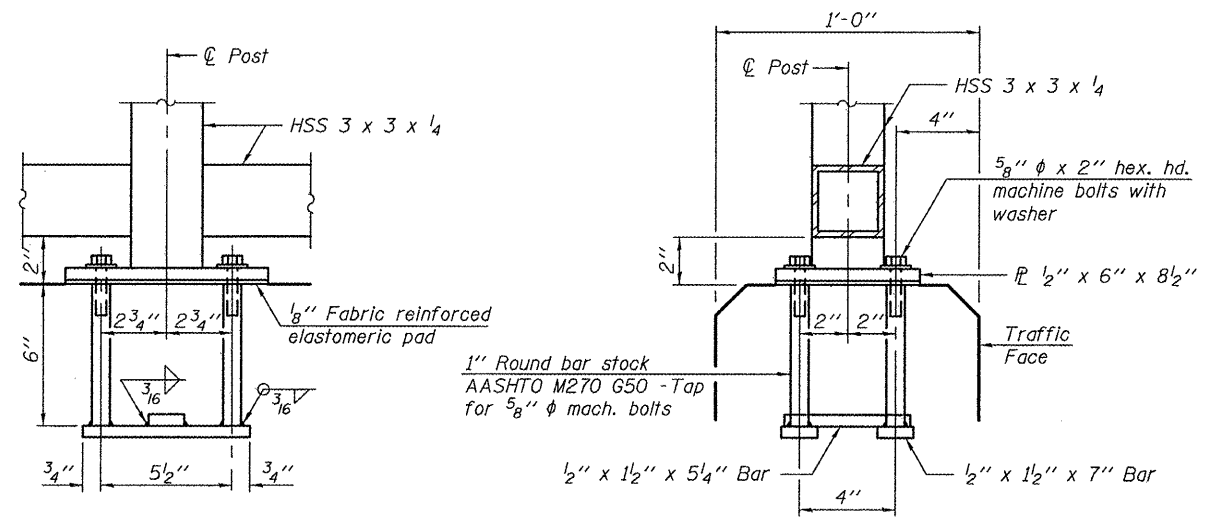
F.A.I. R.T.E. 290
 SECTION 3-B-10BR(11)
 COUNTY COOK
 SHEETS 26
 SHEET NO. 15
 CONTRACT NO. 60T39
 ILLINOIS FED. AID PROJECT



ELEVATION
(Inside Face)

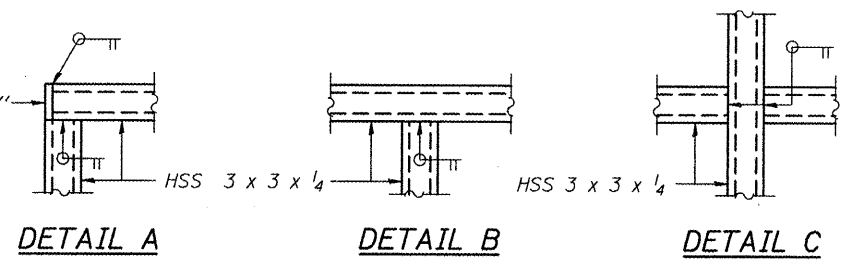
ELEVATION
(At Parapet Joint)

* See sheet 5 of 10 for parapet joint spacing and post spacing.



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

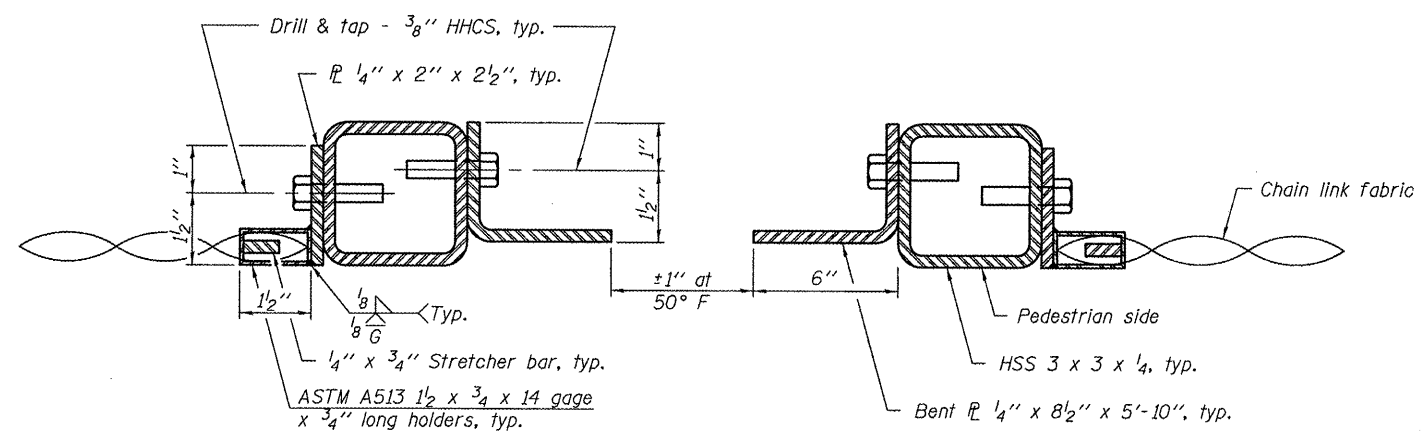


DETAIL A

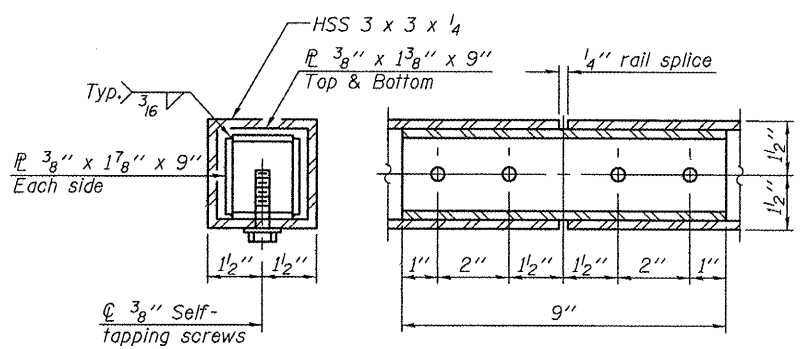
DETAIL B

DETAIL C

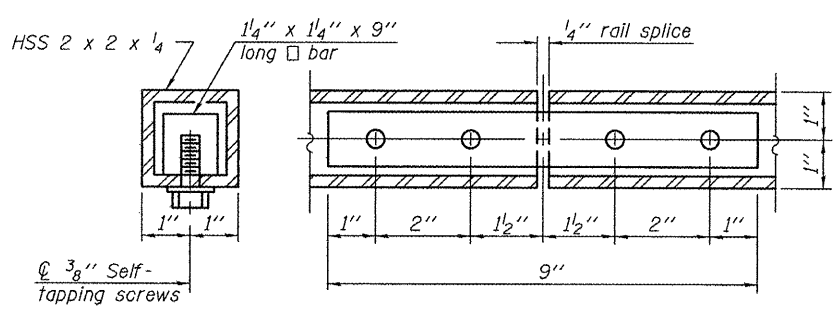
Note:
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



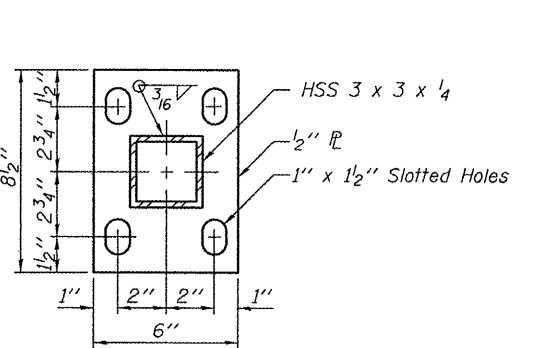
SECTION A-A



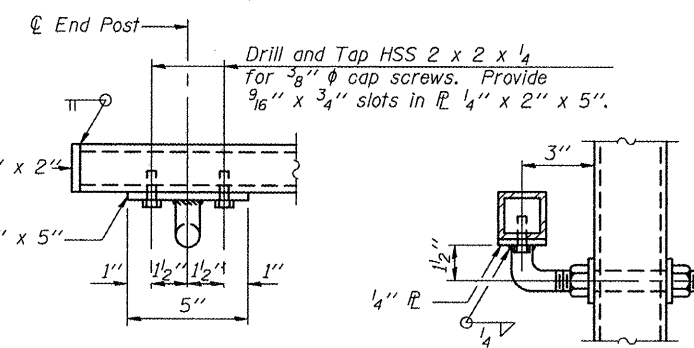
RAIL SPLICE



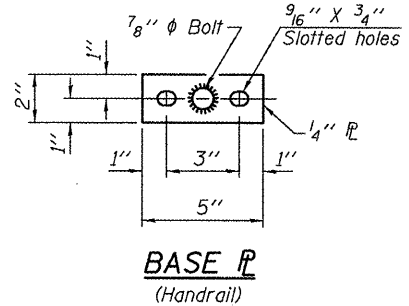
HANDRAIL SPLICE



BASE R



HANDRAIL DETAIL



BASE R
(Handrail)

Item	Unit	Quantity
Bridge Fence Railing	Foot	379

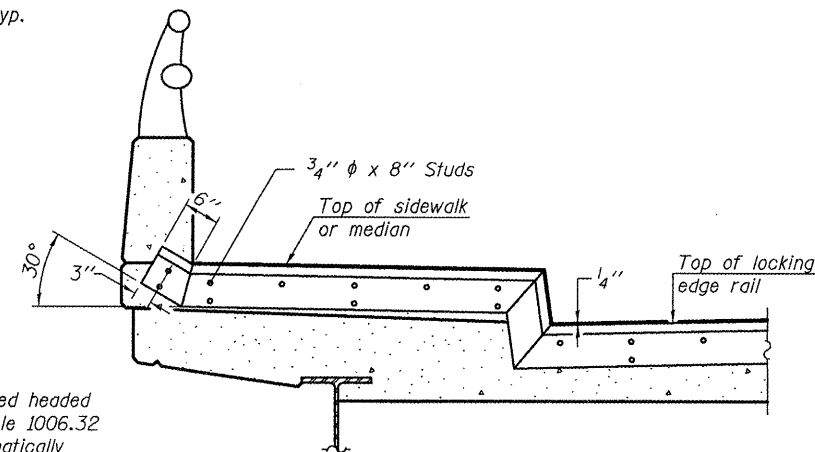
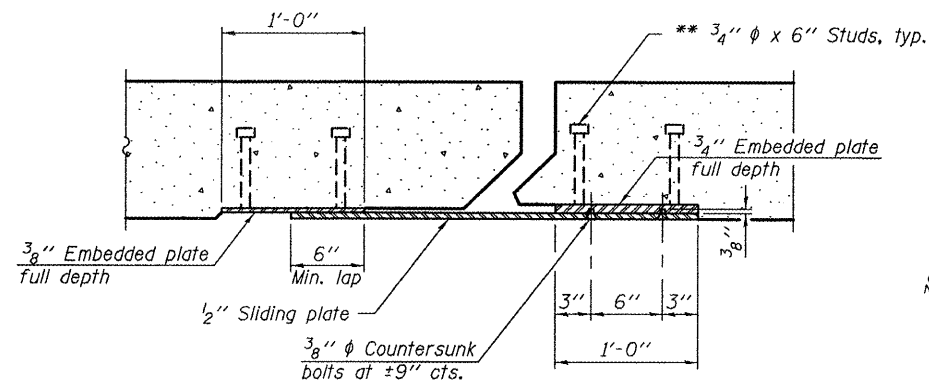
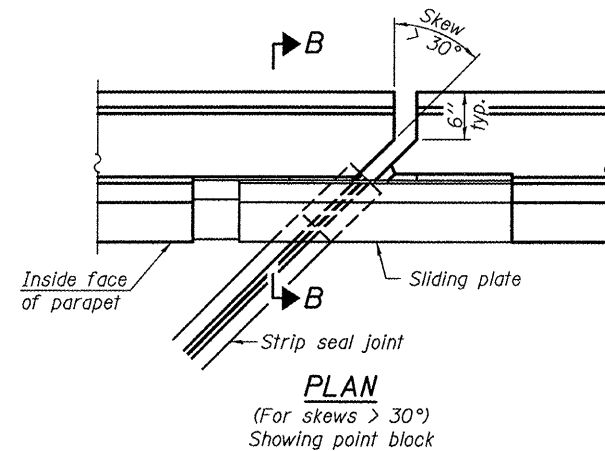
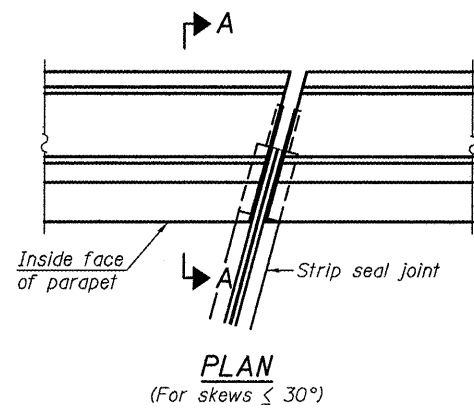
R-28 7-1-10

DESIGNED - MKC	EXAMINED - <i>James F. J...</i>	DATE - MAY 9, 2012
CHECKED - ADY	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED - <i>Paul...</i>	
CHECKED - MKC ADY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

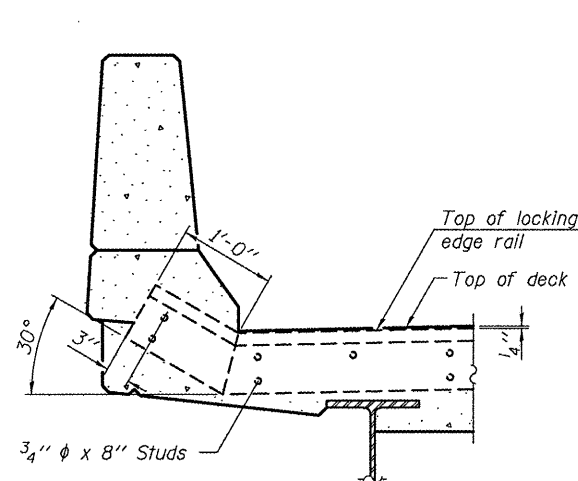
BRIDGE FENCE RAILING, PARAPET MOUNTED
SN 016-0235
SHEET NO. 7 OF 10 SHEETS

F.A.I. RTE. 290	SECTION 3-B-10BR(1)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 16
			CONTRACT NO. 60T39	
ILLINOIS FED. AID PROJECT				

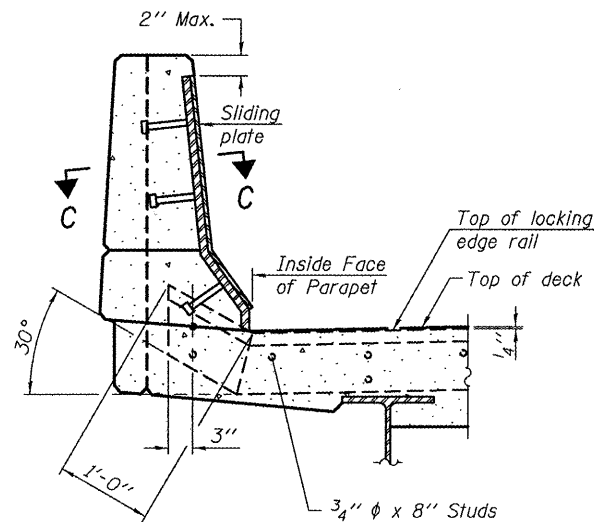


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

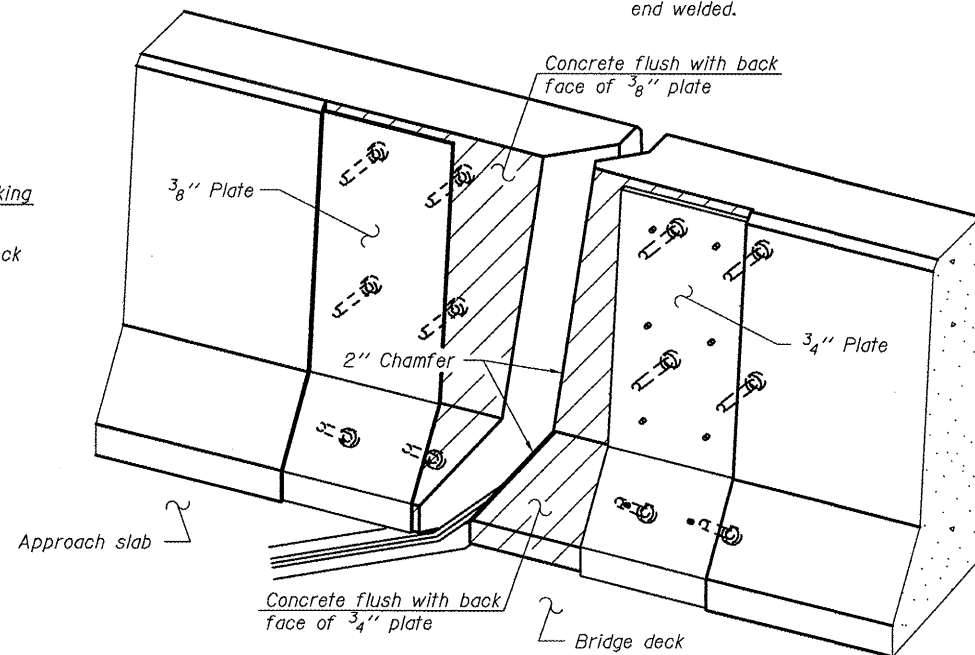
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



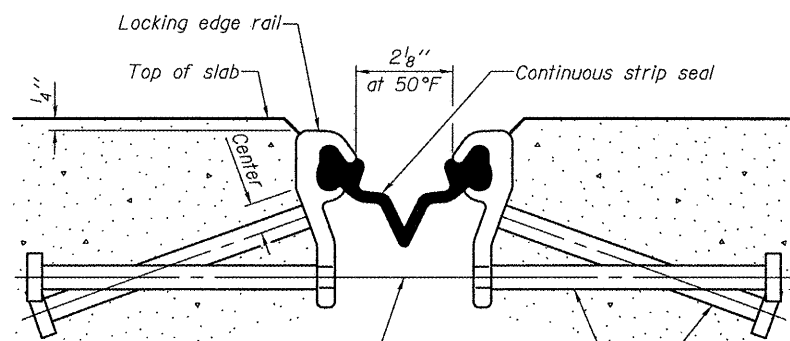
SECTION A-A



SECTION B-B



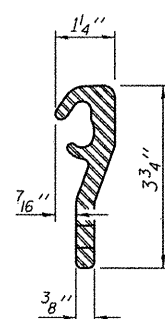
TRIMETRIC VIEW (Showing back plates only)



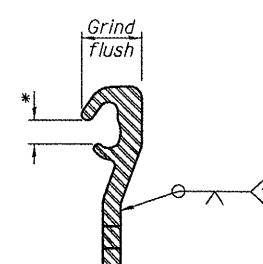
SECTION THRU STRIP SEAL JOINT FOR OVERLAY OVER DECK BEAMS

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.

Place 1/2" φ x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.



LOCKING EDGE RAIL



LOCKING EDGE RAIL SPLICE

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

The inside of the Locking Edge Rail groove shall be free of weld residue.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	188

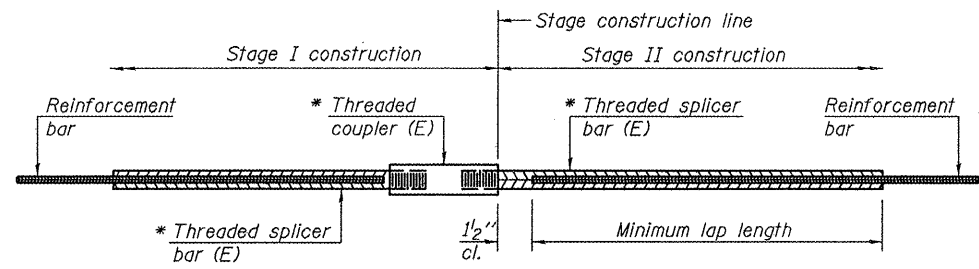
DESIGNED - MKC	EXAMINED - <i>James F. Duff</i>	DATE - MAY 9, 2012
CHECKED - ADY	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED - <i>Carl Meyer</i>	
CHECKED - MKC ADY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS SN 016-0235

SHEET NO. 8 OF 10 SHEETS

F.A.I. RTE. 290	SECTION 3-B-10BR(11)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 17
CONTRACT NO. 60T39				ILLINOIS FED. AID PROJECT



STANDARD BAR SPLICER ASSEMBLY

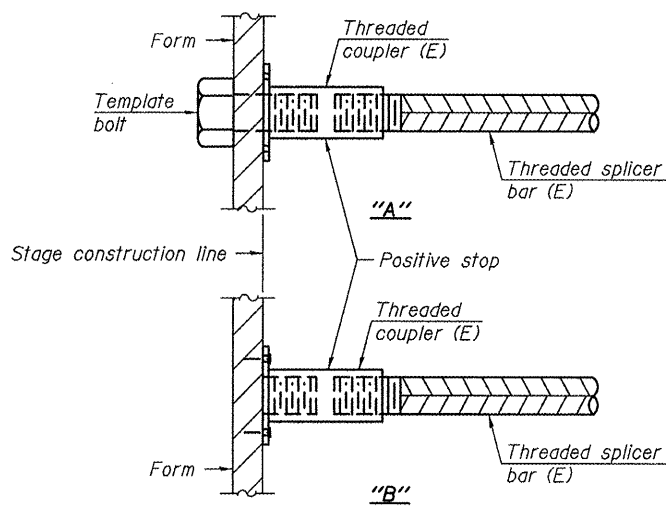
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- 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
- Table 5: Epoxy bar, Top bar lap, Class B

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

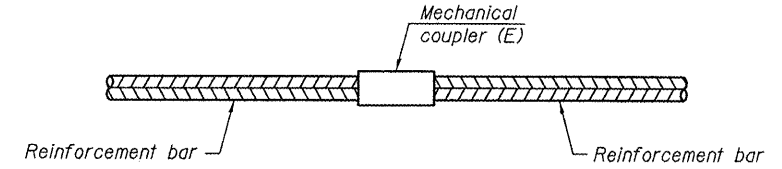
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Expansion Joints	#5	24	3



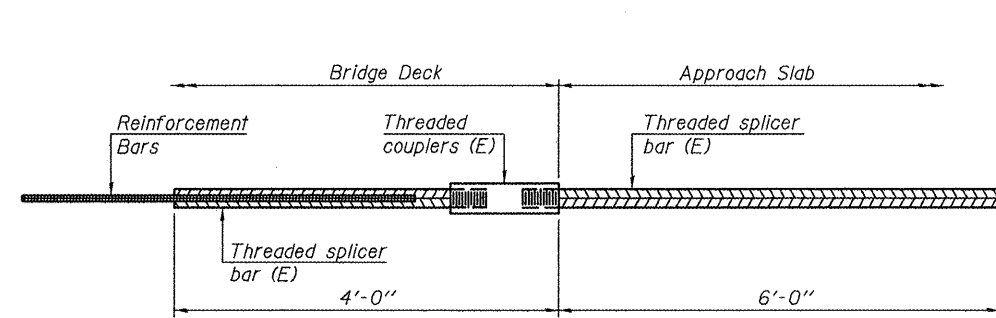
INSTALLATION AND SETTING METHODS

"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.



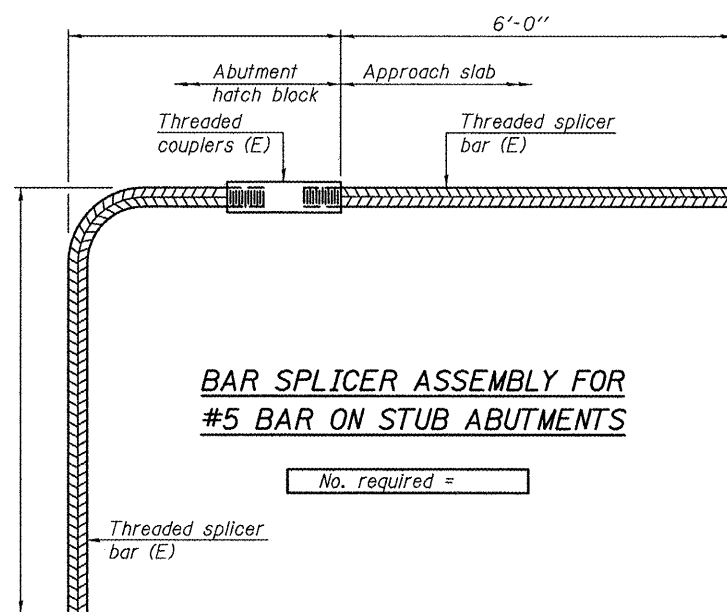
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. 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.

BSD-1 7-1-10

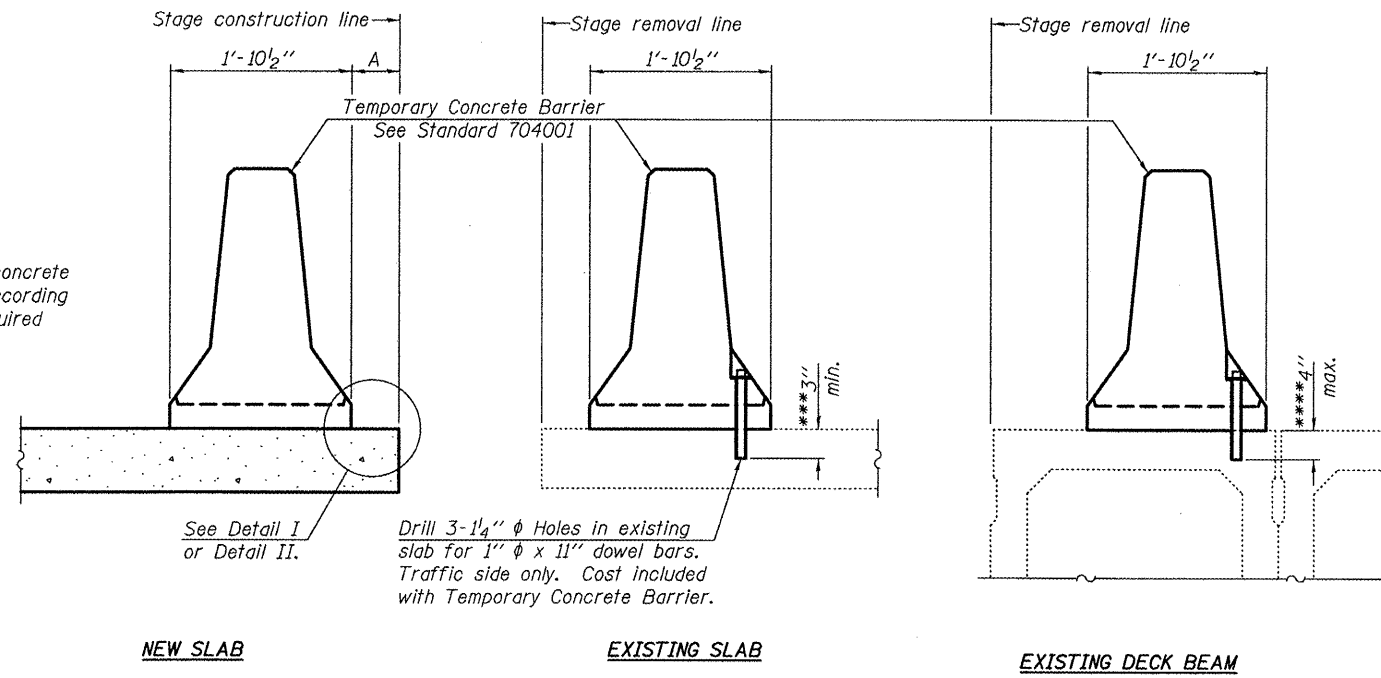
DESIGNED - MKC	EXAMINED	DATE - MAY 9, 2012
CHECKED - ADY	<i>James F. Duff</i> ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED	
CHECKED - MKC ADY	<i>Carl Meyer</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY & MECHANICAL SPLICER DETAILS
 SN 016-0235
 SHEET NO. 9 OF 10 SHEETS

F.A.I. RTE. 290	SECTION 3-B-10BR(11)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 18
CONTRACT NO. 60T39			ILLINOIS FED. AID PROJECT	

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



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

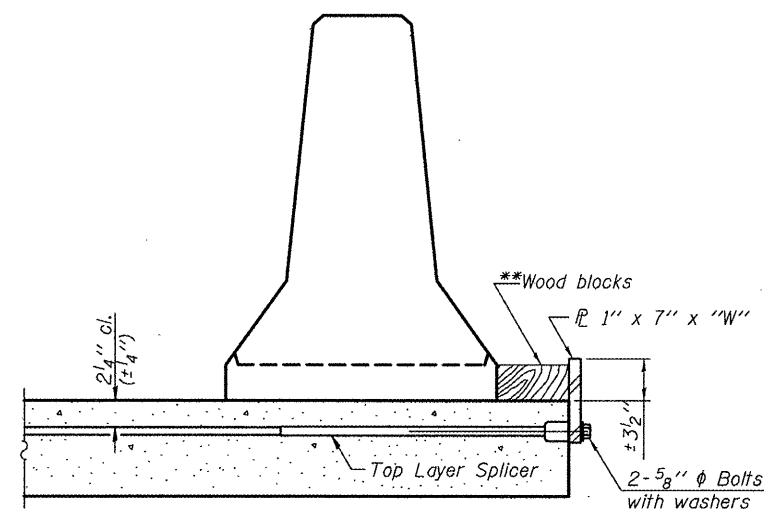
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

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.

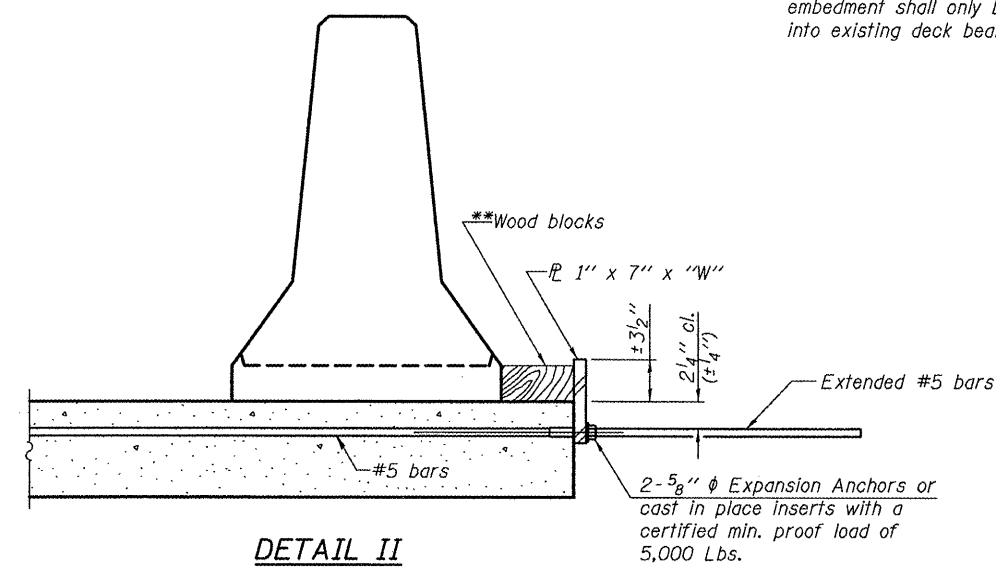
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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.



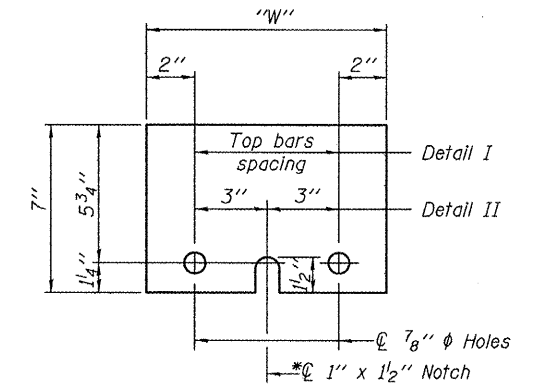
DETAIL I



DETAIL II

** 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"



STEEL RETAINER \bar{L} 1" x 7" x "W"

* Required only with Detail II

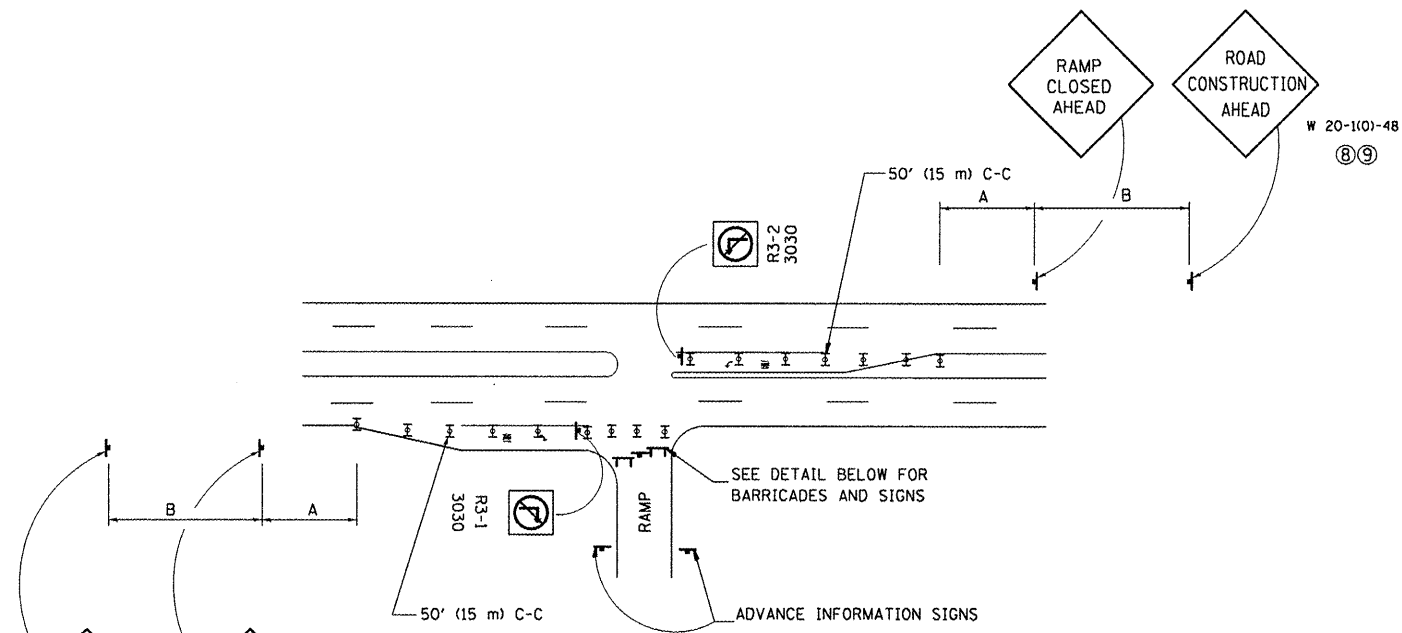
R-27 7-1-10

DESIGNED - MKC	EXAMINED	DATE - MAY 9, 2012
CHECKED - ADY	<i>Joanne F. Deff</i> ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED	
CHECKED - MKC ADY	<i>Carl Brown</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
SN 016-0235**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-10BR(11)	COOK	26	19
			CONTRACT NO. 60T39	
ILLINOIS FED. AID PROJECT				

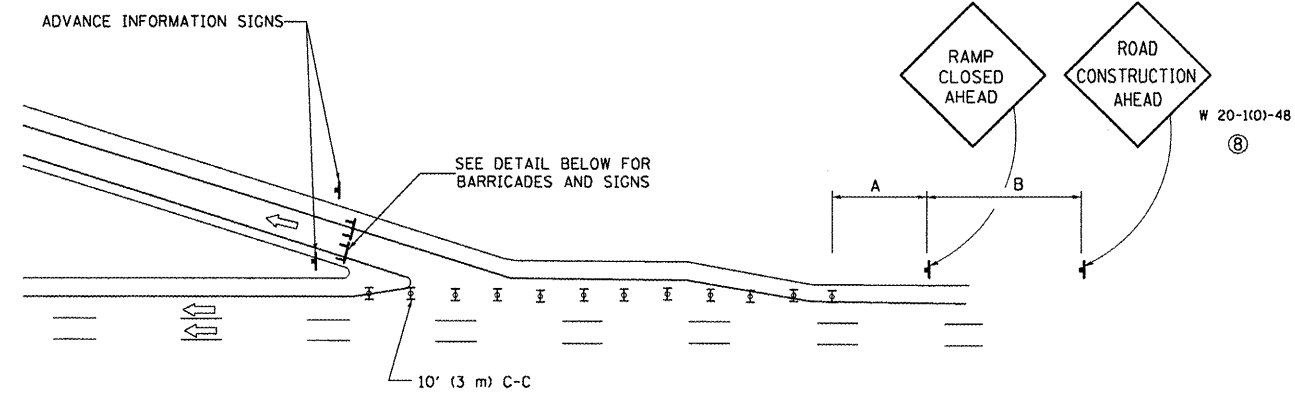
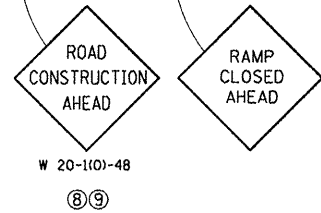


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL >45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	150' (45 m)	150' (45 m)

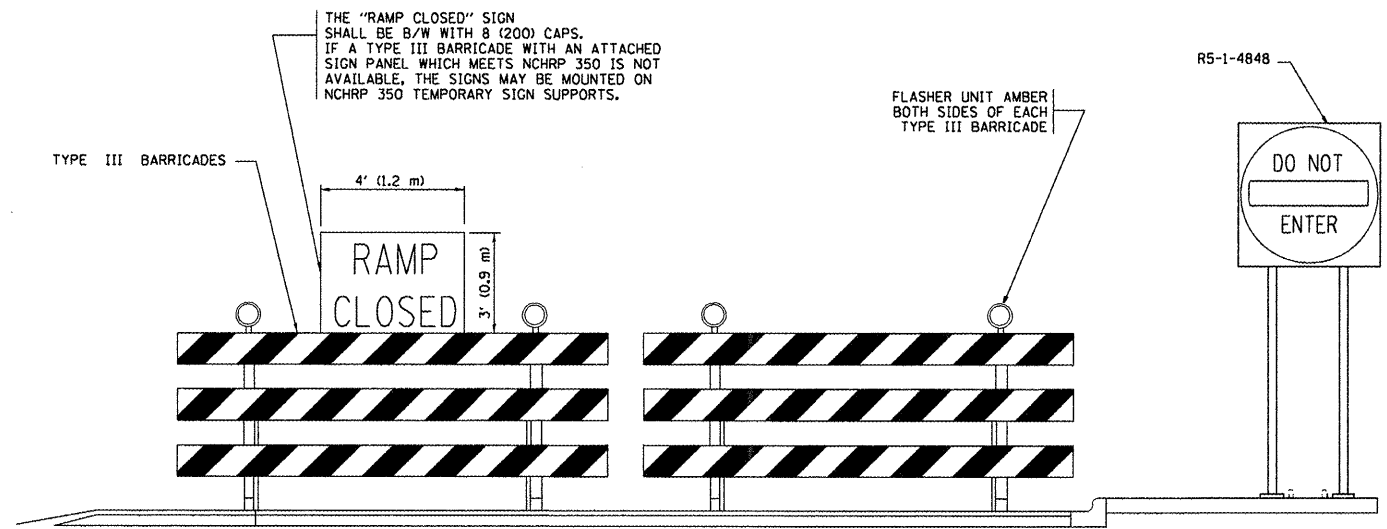
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



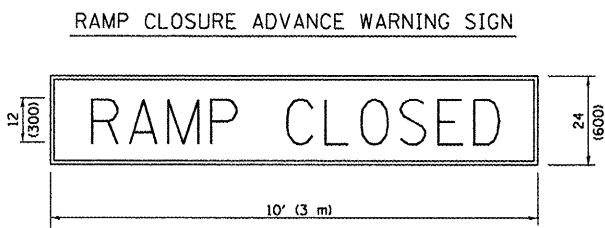
EXIT RAMP CLOSURE

SYMBOLS

- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- ▬ TYPE III BARRICADE WITH FLASHING LIGHT

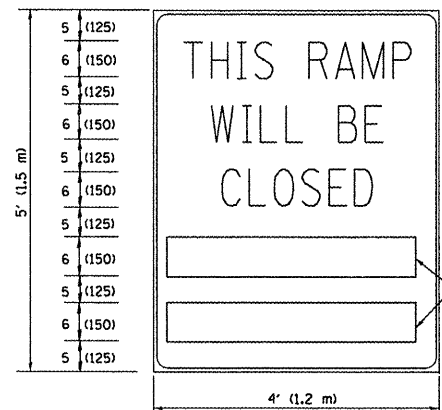


DETAIL FOR REQUIRED BARRICADES & SIGNS



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND

1/2 (12) BORDER

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

GENERAL NOTES:

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY-FOUR (24) HOURS IN LENGTH.
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED ON CLOSURES LESS THAN 24 HOURS IN DURATION.

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

FILE NAME =	USER NAME = hamdanah	DESIGNED - DWS	REVISED - DWS/JAF 12-02
ct:\pw\work\p\wido\hamdanah\0299703\Dis\Std.dgn		DRAWN -	REVISED - JAF 02-06
PLT SCALE = 100.0000' / 1"		CHECKED -	REVISED - SPB 01-07
PLT DATE = 4/3/2012		DATE - 02-83	REVISED - SPB 12-09

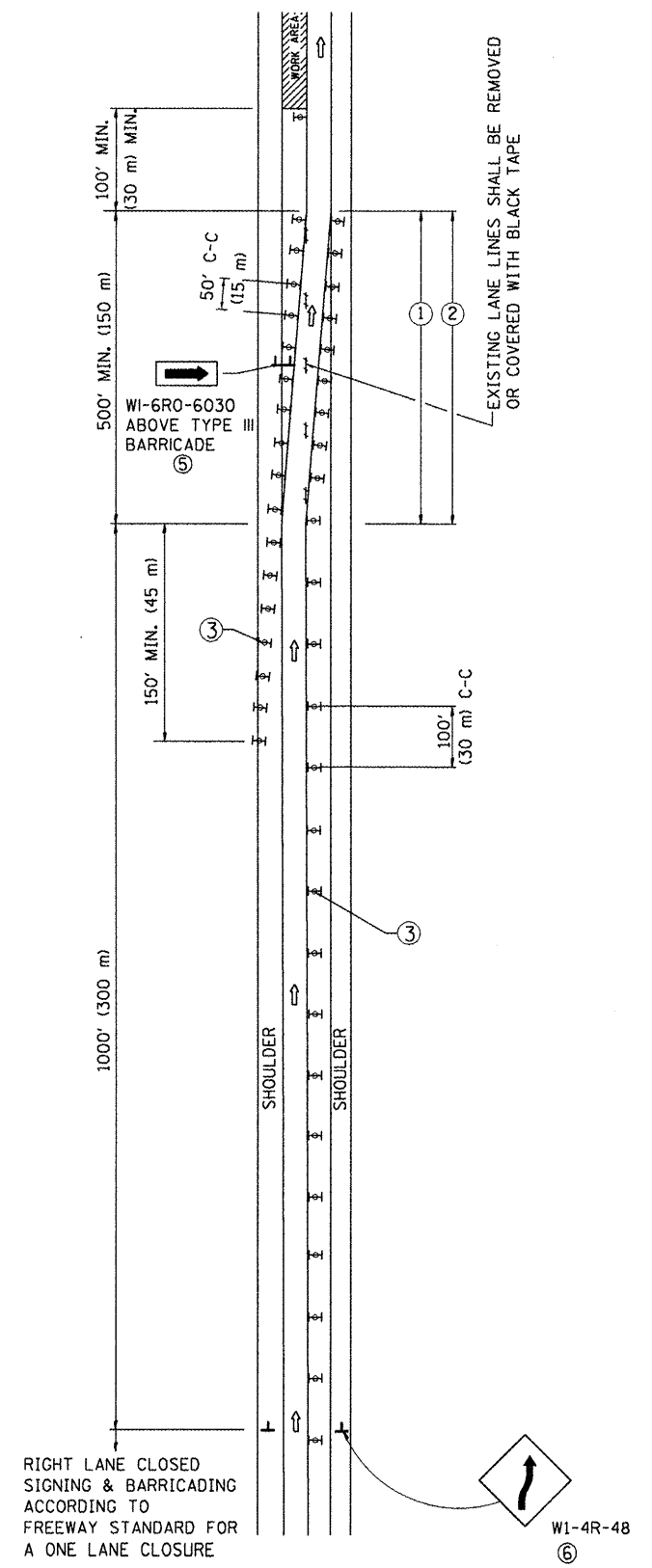
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FREWAY ENTRANCE AND EXIT RAMP
CLOSURE DETAILS**

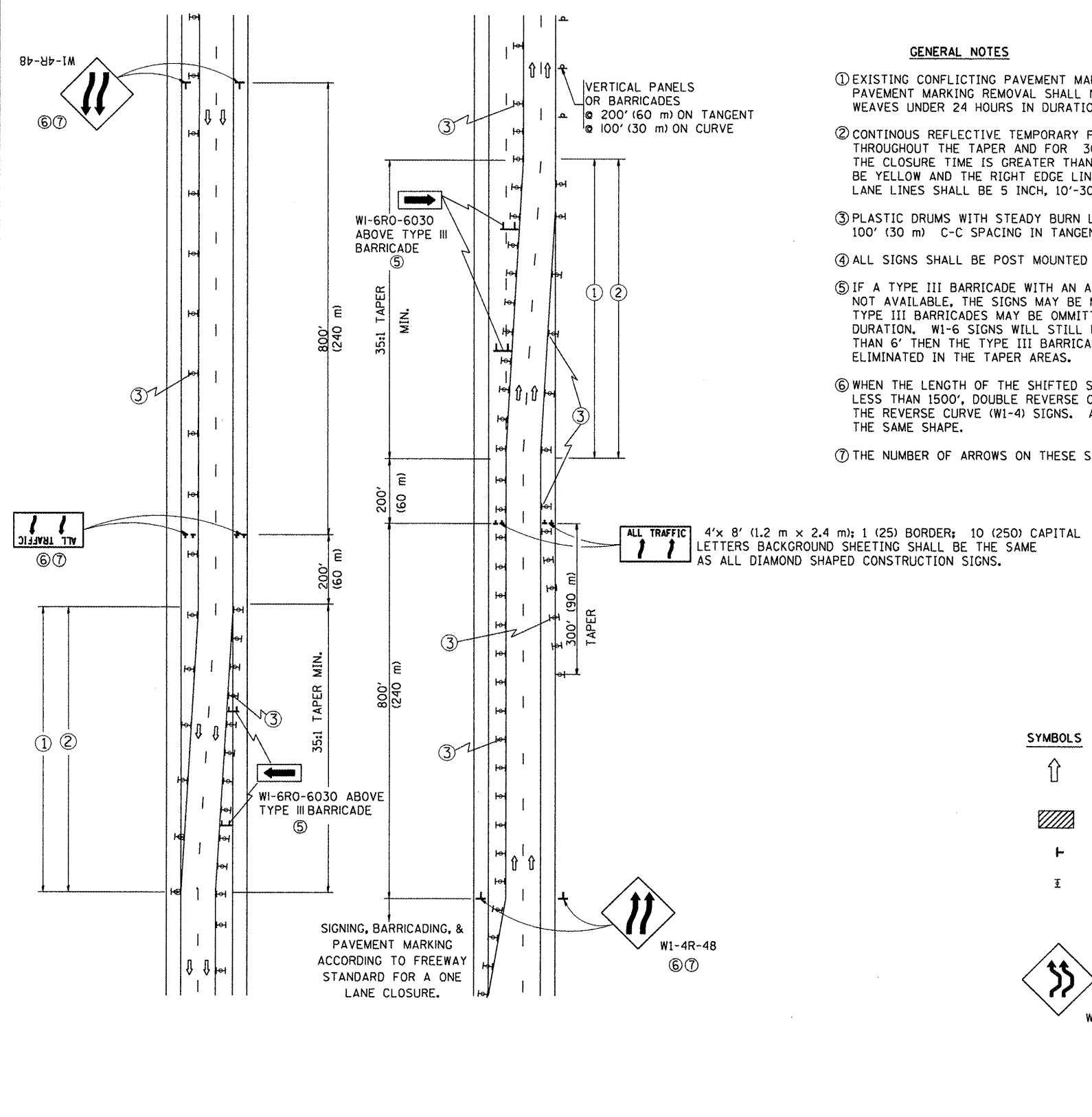
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-10BR(11)	COOK	26	20
TC-08			CONTRACT NO. 60T39	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES

- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 24 HOURS IN DURATION.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ⑤ IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS. TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. WI-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- ⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- ⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- ↑ DIRECTION OF TRAFFIC
 - ▨ WORK AREA
 - ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
 - ⊞ TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- W1-4R-48
W24-1-48

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

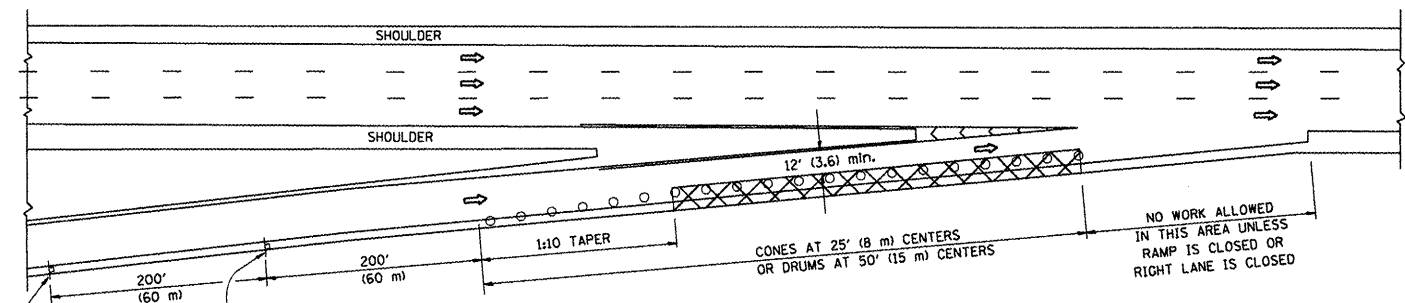
FILE NAME =	USER NAME = hamdanah	DESIGNED - DWS	REVISED - JAF 01-03
cr:\pw_work\pwidat\hamdanah\0299703\Dis\Std.dgn		DRAWN -	REVISED - JAF 02-06
		CHECKED -	REVISED - SPB 01-07
		DATE - 02-87	REVISED - SPB 12-09

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

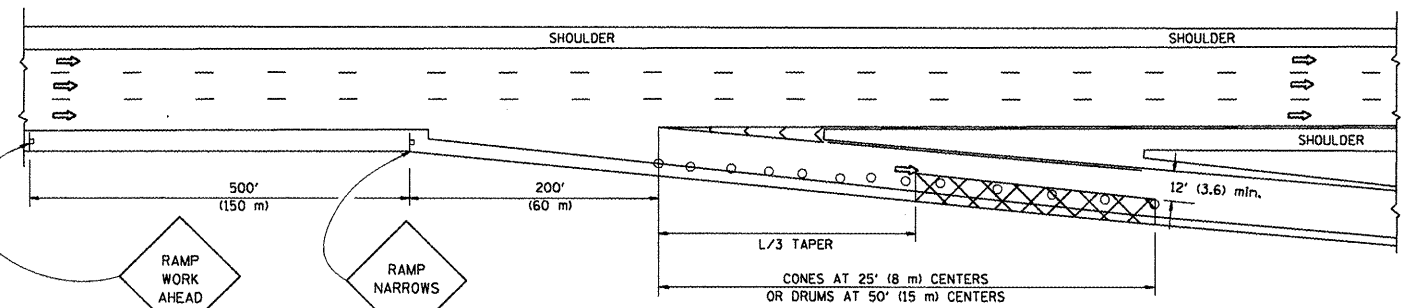
TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-10BR(11)	COOK	26	21
TC-09			CONTRACT NO. 60T39	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

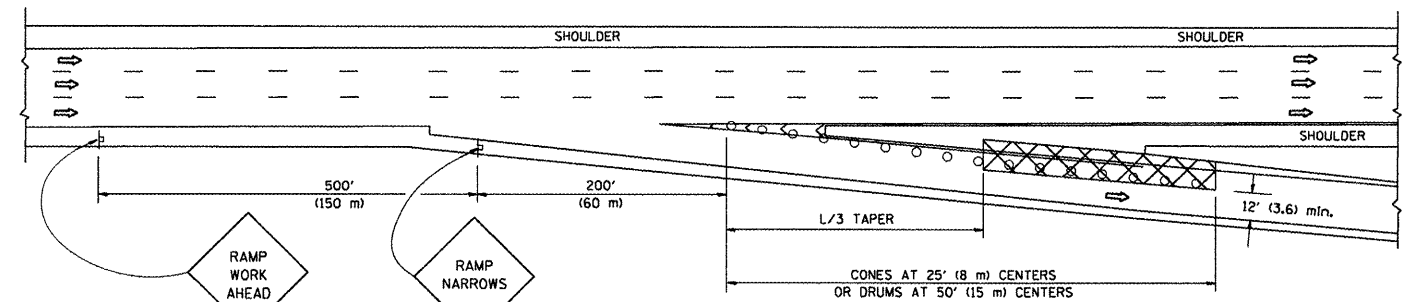
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

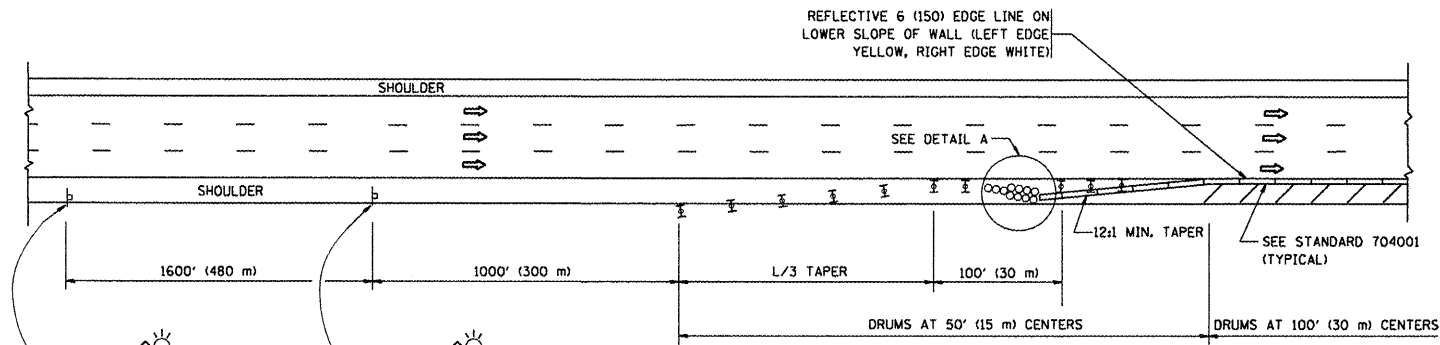
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

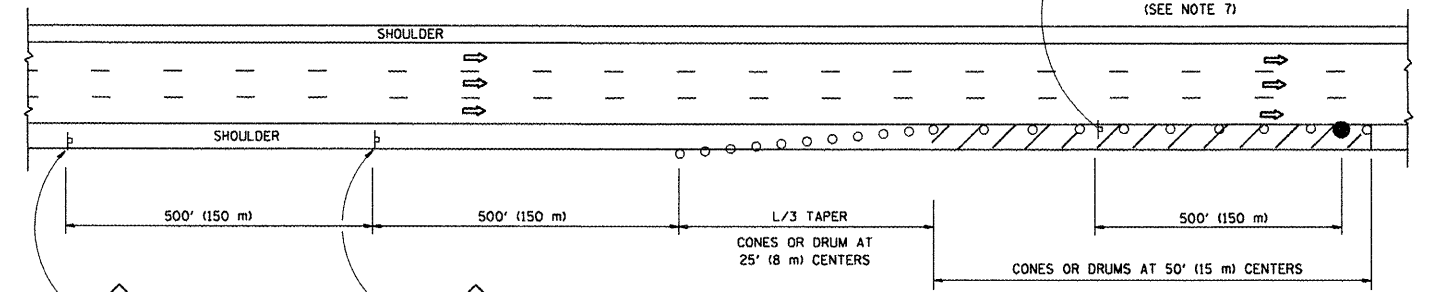
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h)	METRIC ENGLISH
OR GREATER:	$L=0.6S(W/S)$ $L=(W/S)$
W = WIDTH OF OFFSET IN FEET (METERS)	
S = NORMAL POSTED SPEED MPH (KM/H)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT.

DETAIL "A"
 IMPACT ATTENUATOR, TEMPORARY
 (SEE NOTE 5)

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

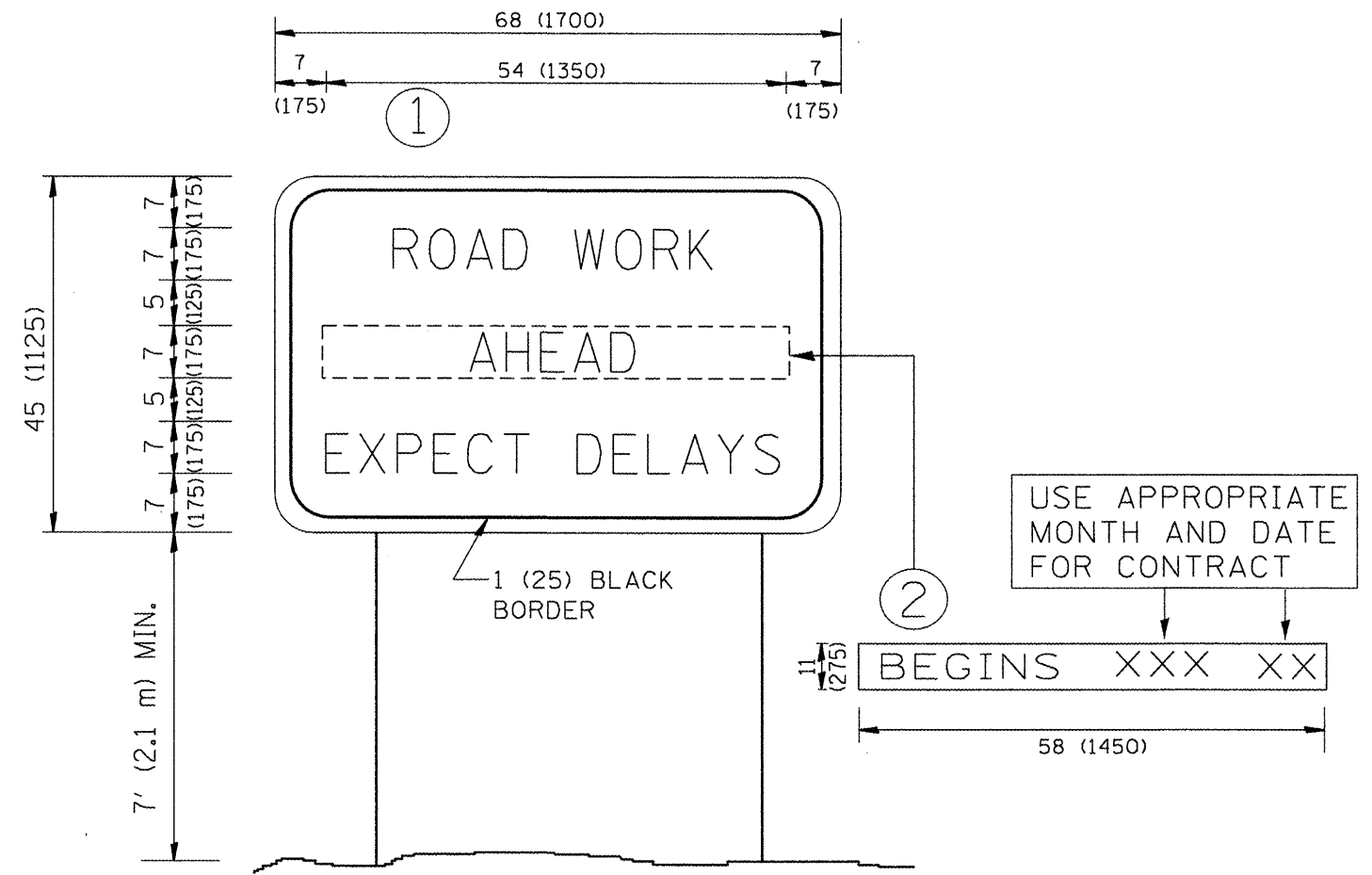
FILE NAME =	USER NAME = handenah	DESIGNED -	REVISED - 04-03
c:\pwork\pwork\handenah\d0299703\Dis	std.dgn	DRAWN - D.W.S.	REVISED - J.A.F. 12-06
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 4/3/2012	DATE - 11-96	REVISED - S.P.B. 12-09

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY
 SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3-B-10BR(11)	COOK	26	22
TC-17		CONTRACT NO. SECTION		
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.

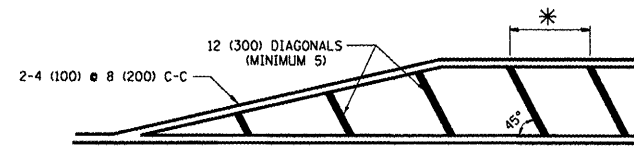
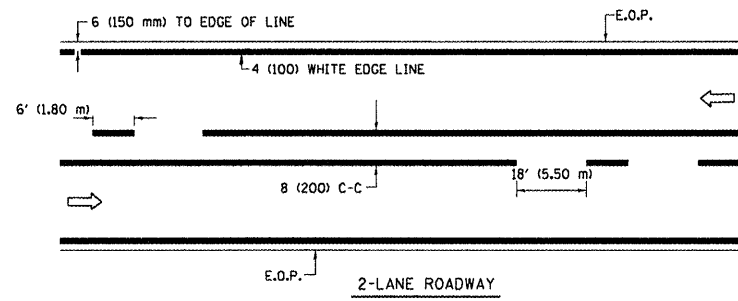
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = handanah	DESIGNED -	REVISED - R. MIRS 09-15-97
c:\pwork\pwork\handanah\d0299703\DisStd.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
		CHECKED -	REVISED - T. RAMMACHER 02-02-99
		DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

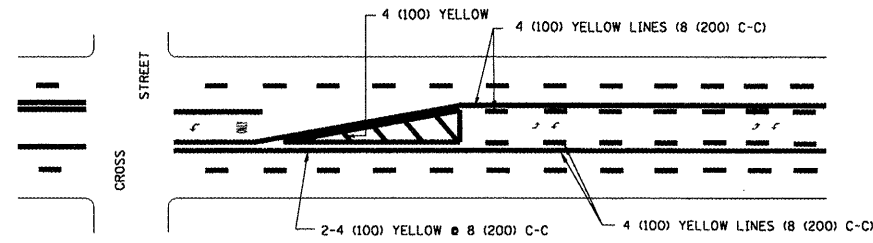
ARTERIAL ROAD INFORMATION SIGN	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-10BR(11)	COOK	26	23
TC-22		CONTRACT NO. 60T39		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

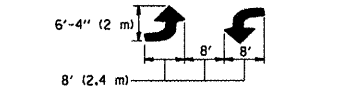


* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 * DIAGONAL LINE SPACING: 20' (6.1 m) C-C

PAINTED MEDIANS

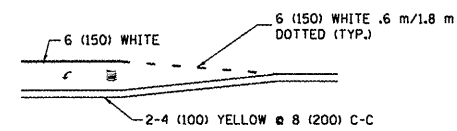


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

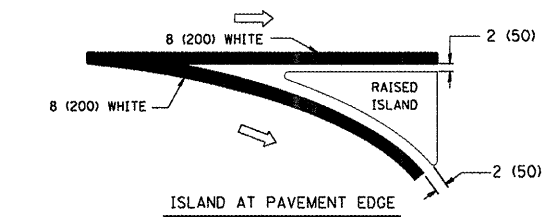
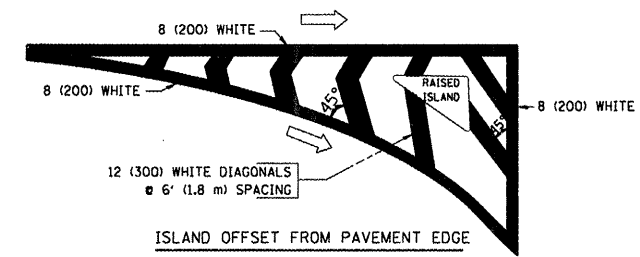
TYPICAL PAINTED MEDIAN MARKING



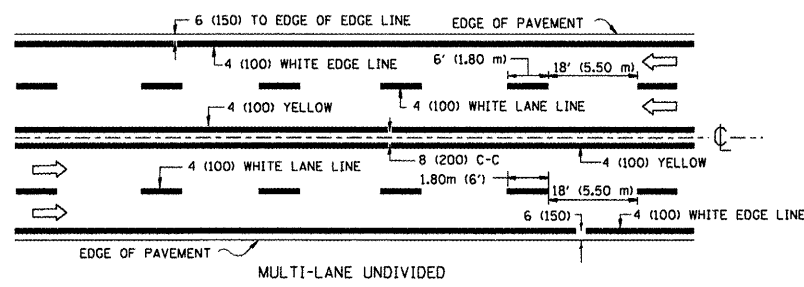
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.8 SQ. FT. (1.47 m²) ONLY AREA = 22.9 SQ. FT. (2.13 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

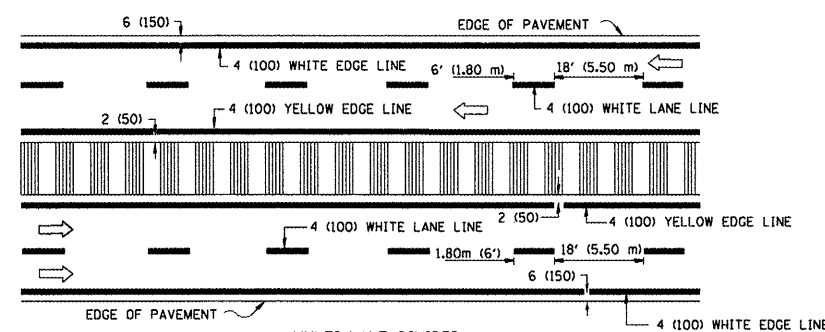
TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING



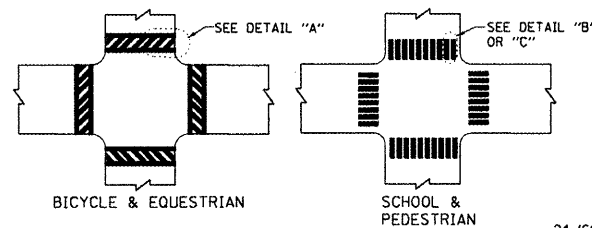
MULTI-LANE UNDIVIDED



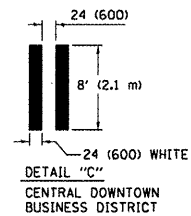
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



DETAIL 'C' CENTRAL DOWNTOWN BUSINESS DISTRICT

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 x 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 x 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 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) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 x 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL & PEDESTRIAN)	12 (300) x 45° 24 (600) x 90°	SOLID SOLID	WHITE WHITE	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 x 4 (100) WITH 12 (300) DIAGONALS x 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS x 45°	SOLID	WHITE	DIAGONALS: 20' (6.1 m) (LESS THAN 30 MPH (50 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. (0.33m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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

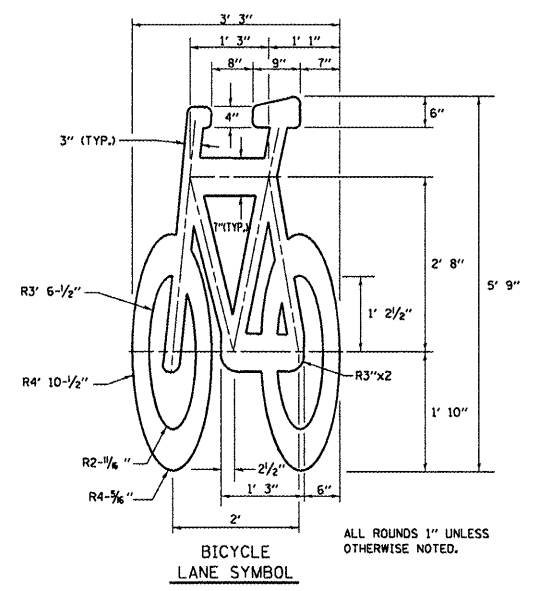
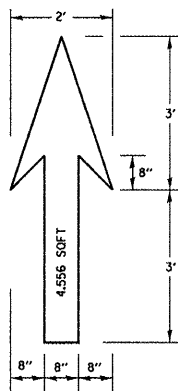
FILE NAME =	USER NAME = hmdanah	DESIGNED -	REVISED - T. RAMMACHER 12-07-00
ca:\pw_work\pwidth\hmdanah\02299703\Dis	Std.dgn	DRAWN -	REVISED - K. ENG 02-28-12
	PLOT SCALE = 100.0000' / 1m	CHECKED -	REVISED -
	PLOT DATE = 4/3/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
TYPICAL PAVEMENT MARKINGS

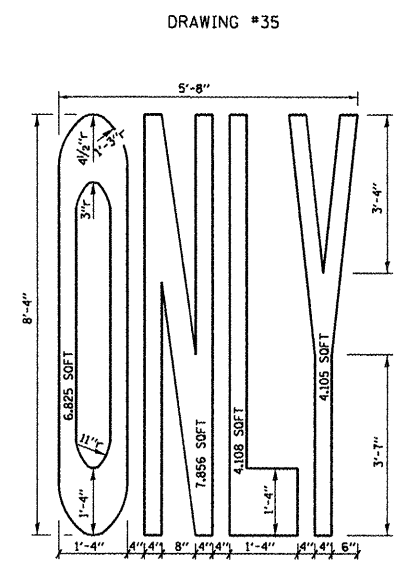
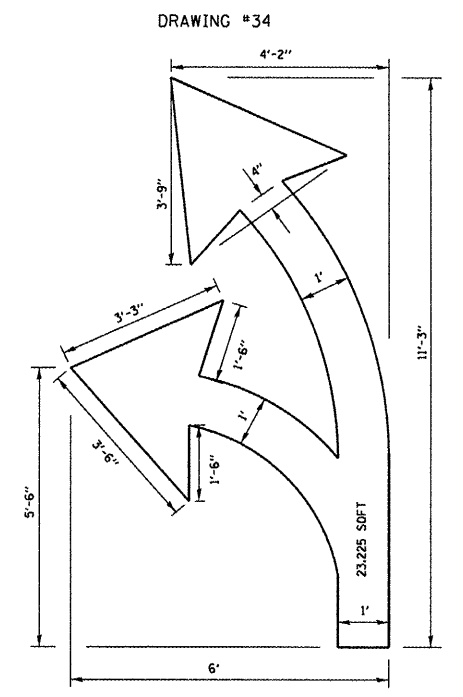
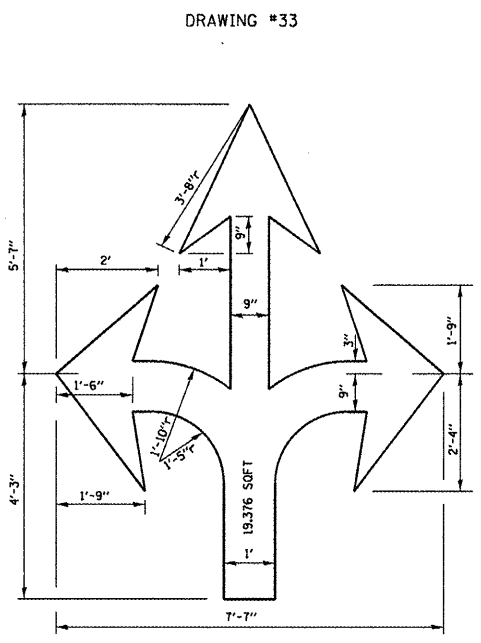
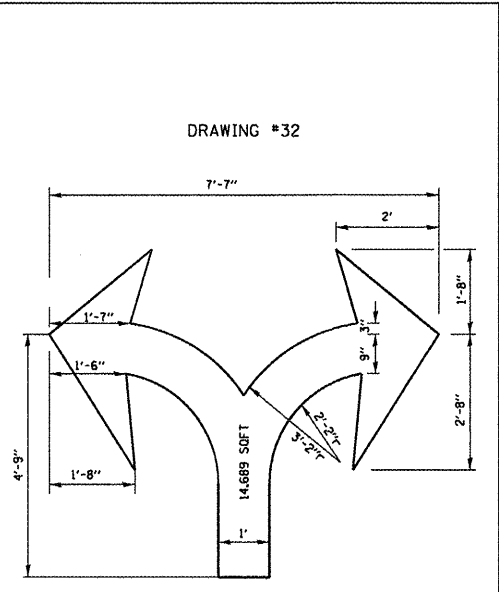
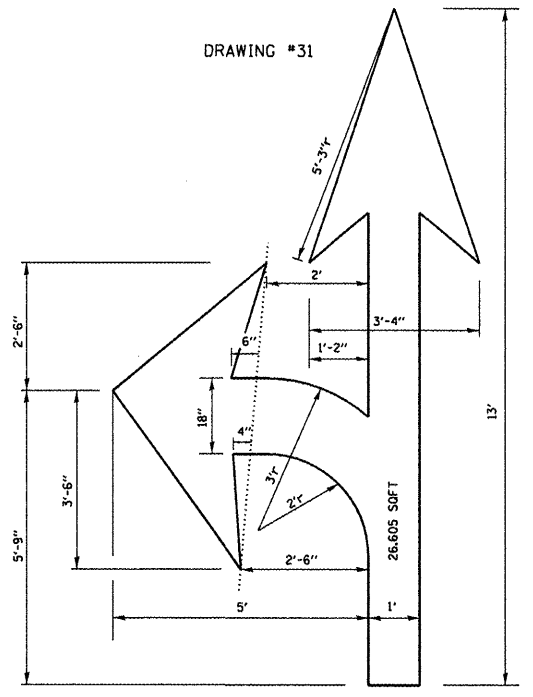
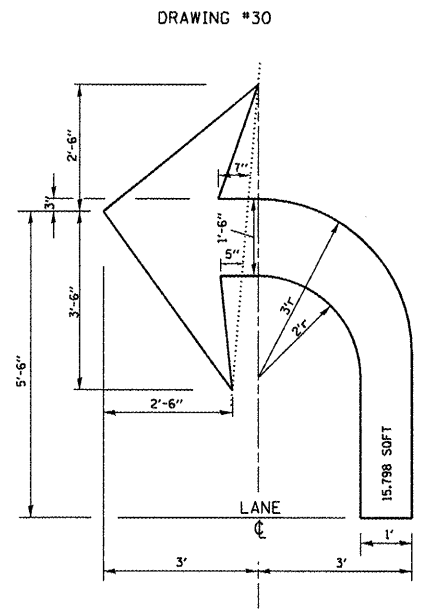
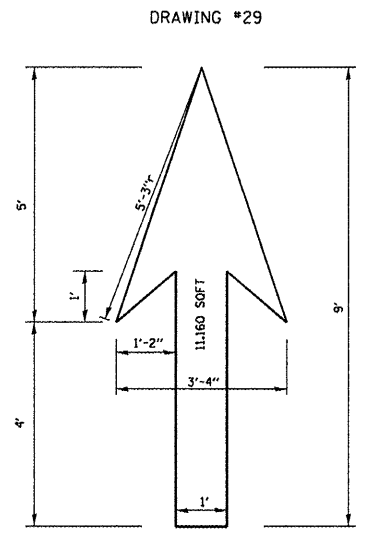
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-BR(11)	COOK	26	24
TC-24			CONTRACT NO. 60T39	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

SCALE: NONE SHEET NO. 1 OF 3 SHEETS STA. TO STA.



NOTE:
 1.) FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.
 2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS
 DRAWING #28



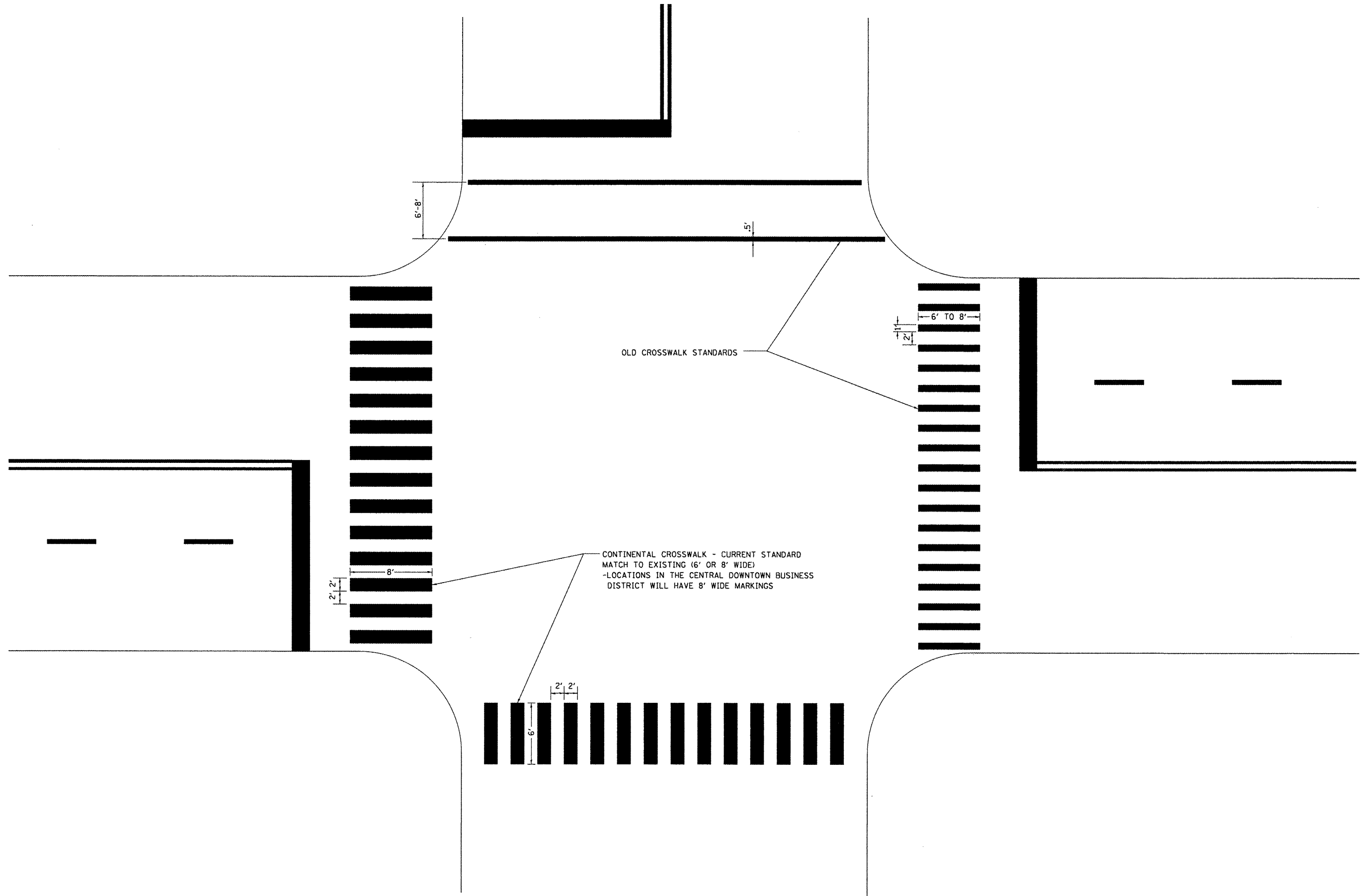
NOTE:
 ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED - T. RAMMACHER 12-07-00
et\pw_work\pavdist\hamdanah\2299783\3\Std.dgn	Plot.dgn	DRAWN -	REVISED - K. ENG 01-12-12
PLT SCALE = 100.0000 ' / 1"		CHECKED -	REVISED -
PLT DATE = 4/3/2012		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO	
TYPICAL PAVEMENT MARKINGS	
SCALE: NONE	SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-BR(11)	COOK	26	25
TC-24			CONTRACT NO. 60T39	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED - T. RAMMACHER 12-07-00
c:\pwork\pvidot\hamdanah\d8299703\Dis	Std.dgn	DRAWN -	REVISED - K. ENG 01-12-12
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -
	PLOT DATE = 4/3/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	3-B-BR(11)	COOK	26	26
TC-24			CONTRACT NO. 60T39	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				