# STATE OF ILLINOIS

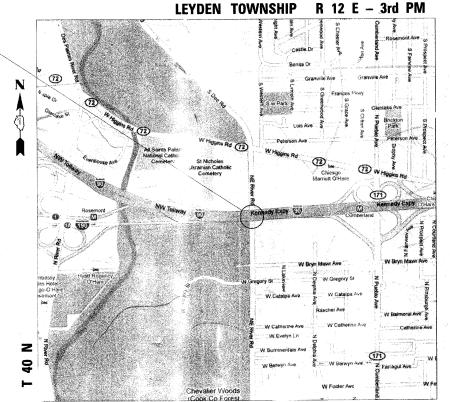
# DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

FAU 2729 / EAST RIVER ROAD **SECTION 1617–I–1** AT I-90 KENNEDY EXPWY AND CTA (2 M!. W. OF IL 43) BRIDGE DECK AND JOINT REPAIRS PROJECT NUMBER: ACM-2729(002) COOK COUNTY

C-91-259-10

# **PROPOSED HIGHWAY PLANS**

**IMPROVEMENT LOCATION** EAST RIVER ROAD AT I-90 KENNFDY EXPRESSWAY **STRUCTURE NO: 016-2124** 



LOCATION MAP

GROSS AND NET LEF GTH OF IMPROVEMENT = 266.08 FT. = 0.504 MILE

HAMELKA 1-056236

COLLINS NEERS 2

OPESSIONAL DESIGN FIRM

D-91-259-10

ILLINOIS CONTRACT NO. 60J69



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

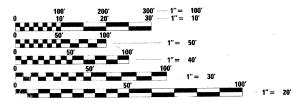
SUBMITTED FEBRUARY 1, 20 10

DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

March 19, 20 10 Scotl & Stitl P. F. KO acting Engineer of Design And NVIRON

Christine M. Reed Kl

MINTED BY THE AUTHURITY OF THE STATE OF ILL MOIS



FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION** 

**COLLECTOR (URBAN)** ADT 20,500 (2006)

SPEED LIMIT 35 MPH

IMPROVEMENT LOCATED IN THE CITY OF CHICAGO

ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

SJECT MANAGER: MR. SAAC KWARTENG (847) 705-4230 \*\*OJECT ENGINEER: MR - 4 BRICE (847) 705-4552

CONTRACT NO. 60J69

#### SUMMARY OF QUANTITIES

CONSTR.

CONSTR. TO STRUCTURE X281-2A

#### INDEX OF SHEETS

- 1 Title Sheet
- 2 Index of Sheets, State Standards, General Notes and Summary of Quantities
- 3-4 Maintenance of Traffic
- 5-10 Structure Plans S1-S6
- 11-13 District One Standards

Highway Standords

# INDEX OF HIGHWAY STANDARDS

Standard No.	Description
000001-05	Standard Symbols. Abbreviations And Patterns
001001 - 02	Areas Of Reinforcement Rebars
420001 <b>- 07</b>	Pavement Joints
701301 <b>- 03</b>	Lane Closure, 21, 2W. Short Time Operations
701306 - 02	Lane Closure, 2L, 2W, Slow Moving Operations, Day Only
701321 - 10	Lane Closure, 2L, 2W, Bridge Repair with Barrier
701501 - <b>05</b>	Urban Lane Closure, 2L, 2W, Undivided
701502 <b>- 03</b>	Urban Lane Closure, 2L, 2W, Bidirectional Left Turn
701602 <b>- 04</b>	Urban Lane Closure, Multilane 2W, Bidirectional Left Turn
701606 <b>-06</b>	Urban Lane Closure, Multilane 2W, with Mountable Median
701901 <b>- 0  </b>	Traffic Control Devices
704001 <b>-06</b>	Temporary Concrete Barrier
780001 <b>- 02</b>	Typical Pavement Markings
781001 <b>- 03</b>	Typical Applications Raised Reflective Pavement Markers
701400-04	
701401-05	
701446-01	

#### GENERAL NOTES

- These plans have been prepared from notes received from IDOT Field Maintenance Engineers.
- 10 ft (3 m) transitions shall be used to match proposed items of work to existing ilems in the field, unless otherwise shown. The transitions shall be paid for at the contract unit price for the proposed item of work specified.
- Where artificial lighting is utilized in night operations, the Contractor shall exercise
  the utmost precautions in preventing adverse visibility to the motoring public and
  adjoining residential areas.
- The engineer shall be the sole judge concerning curing time for the various hot-mix asphalt lifts.
- For stabilization, all Type III barricades shall require a minimum of four (4)
   sandbags per barricade.
- 6. The Resident Engineer must contact the Traftic Control Supervisor at (847)705-4470 at least 72 hours prior to installation of the temporary control devices.
- The Resident Engineer shall contact the CDOT Area Traffic Field Engineer at at least two (2) weeks prior to the placement of permanent pavement markings.
- All pavement markings and raised reflectors affected by the bridge repairs shall be replaced. Nominal quantities have been included in the contract for this work.
- The Contractor will not be allowed to set up a yard or field office on State property without written permission from the Department.
- 10. Do not scale these plans for construction purposes.
- II. Plan dimensions and details relative to existing plans are subject to routine 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 shange in scope of the work. However, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

- 12. During construction operations, loose material deposits that obstruct the flow of water in draining the area shall be removed before the end of each work day. At the conclusion of construction operations, all drainage structures (new and existing) shall be free from all dirt and debris. This work will not be paid for separately but shall be considered incidental to the contract.
- 13. All Type 1 and Type II barricades shall have two (2) sandbags on the bottom rall.
- 14. All raised reflective pavement markers (bridge) shall be low profile.
- Special attention is called to Article 107.12 regarding railroad flaggers. The name and telephone number of the railroad engineer is Mr. David Heard (312) 681-3862.
- 16. Before beginning any work, the Contractor shall retain and record for future reference, all existing pavement marking lines, symbols and letters (and raised reflective markers) in order that these locations can be re-established for striping. Exact locations of all pavement markings and raised reflective pavement markers shall be as directed by the Engineer.

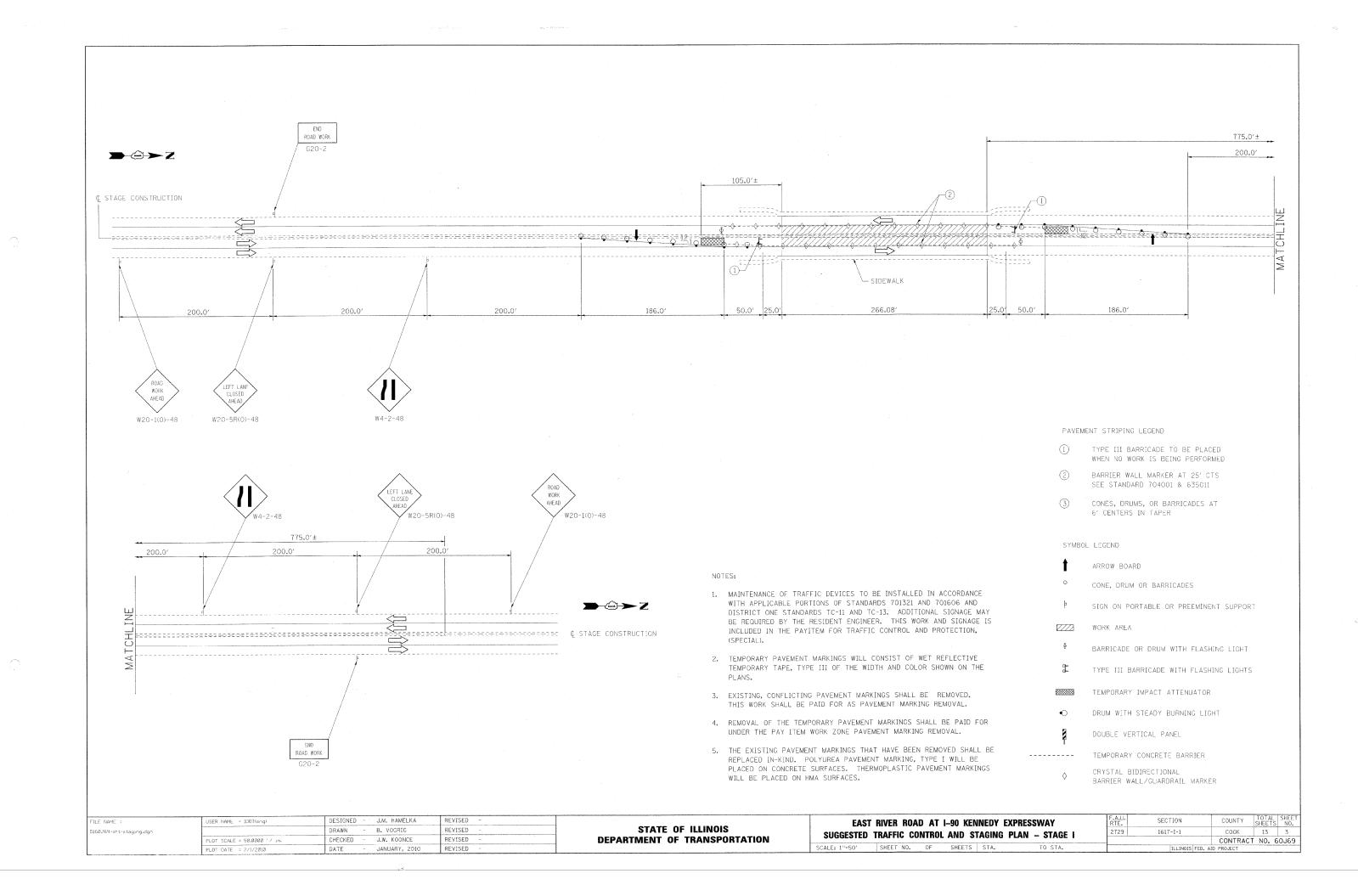
				STRUCTUH X281-2A
CODE	ITEM DESCRIPTION	UNIT	QUANTITY	20%
50157301	Protective Shield (Permanent)	Sg.Yd.	1,238	1,238
67000400	Engineer's Field Office, Type A	Cal.Mo	1 2	
67100100	Mobilization	L SUM	' /	
70101800	Traffic Control and Protection, (Special)	LISUM	1	<i>I</i> .
70301000	Work Zone Pavement Marking Removal	Sq. <b>FT</b>	860	860
70400100	Temporary Concrete Barrier	For	860	60
70400200	Relocate Temporary Concrete Barrier	Feor	860	860
78000200	Thermoplastic Pavement Marking - Line 4"	Foot	270	270
* 78008210	Polyurea Pavement Marking, Type I - Line 4"	Foot	670	670
<del>*</del> 78100100	Raised Reflective Pavement Marker	Each	10	0
₹ 78100105	Raised Reflective Pavement Marker (Bridge)	Each	10	10
78100200	Temporary Raised Reflective Pavement Marker	Each	IO .	10
78300100	Pavement Marking Removal	Sq.Ft.	310	310
78300200	Raised Reflective Pavement Marker Removal	Each	10	10
x0320887	Polymer Concrete	Cu.Ft.	27.8	27.8
X0321743	Silicone Joint Sealer, !"	Foot	254.4	254.4
X0321744	Silicone Joint Sealer, 2"	Foot	63.6	63.6
X0322256	Temporary Information Signing	Sq.Ft.	50	50
X0322933	Silicone Joint Sealer, 2.5"	Foot	63.6	63.6
X0325775	Wet Reflective Temporary Tape, Type III, 4 Inch	Foot	2,600	2,600
Z0016002	Deck Slab Repair (Full Depth, Type II)	Sq.Yd.	16.0	Ne.0
Z0016200	Deck Slab Repair, (Partial)	Sq.Yd.	117.3	//7.3
Z0030250	Impact Attenuators, Temporary (Non-Redirective), Test Level 3	Each	2.	-2
Z0030350	Impact Attenuators, Relocate (Non Redirective), Test Level 3	Each	Z	2 2
Z0048665	Railroad Protective Liability Insurance	L: Sum	1	The state of the s
Z0076600	Trainers	Hour	500	500
	Traffic Control and Protection (Expressways)	LSum	/	
X7011015		Lsum		
85000300	Maintenance of Existing Traffic Signal Installation Temporary Traffic Signal Timing	Each	2	2

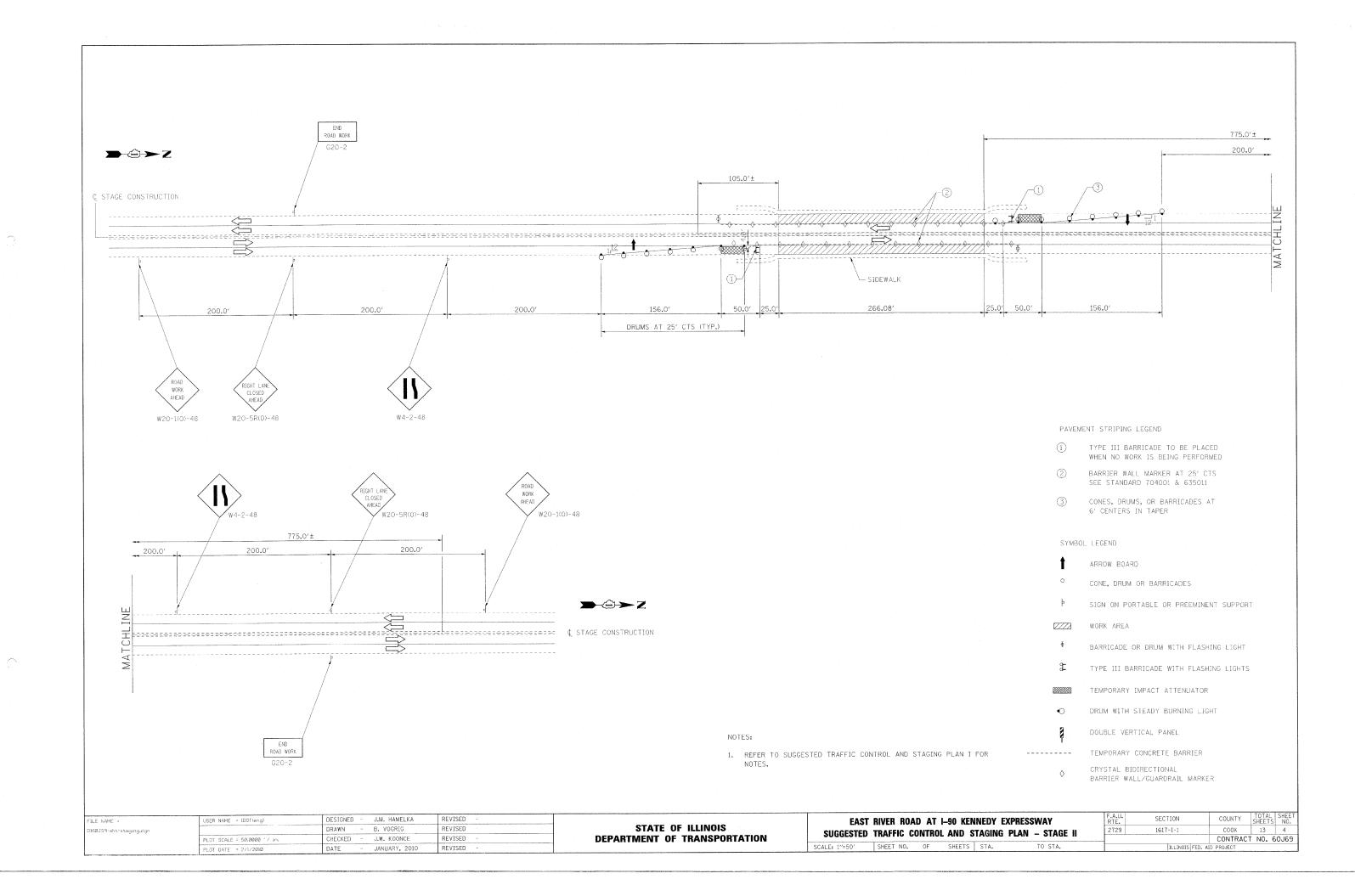
FILE NAME :	USER NAME = IDittlengi	DESIGNED -	J.W. KOONCE	REVISED -
D160J69 sht spennoze.dgn		DRAWN -	D. REDZIC	REVISED -
	PLOT SCALE = 120000 17 IN.	CHECKED -	J.W. KOONCE	REVISED -
	PLOT DATE = 2/5/2010	DATE -	JANUARY, 2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

				C KBC	,
INDEX OF SHEET	IS. STATE STANDARDS. (	ENERAL NOTES	AND SUMMARY OF QUANTITIES	F.A.U. RTE.	SECTION
		RIVER ROAD OV	ER 1–90	2729	1617-I-1
SCALE:	SHEET NO. 1 OF 1	SHEETS STA.	TO STA.		THE INOIS FED.





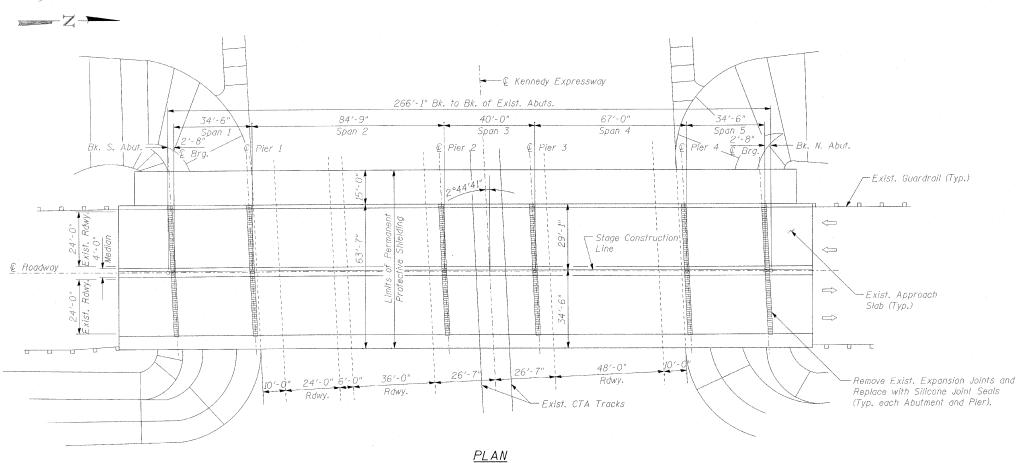


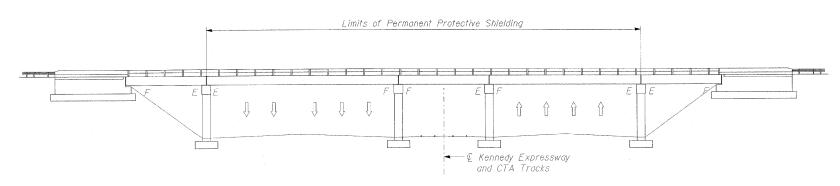
#### Existing Structure:

The existing structure is a five span prestressed concrete beam bridge with a 7.5 inch reinforced concrete deck with no overlay. The original structure was built in 1958 as Section 267-1617-15D. In 1981 the structure was widened and deck repairs were performed.

Staged construction shall be utilized to maintain traffic during construction.

No salvage





ELEVATION

DESIGNED	JWK	January, 2010	
CHECKED	JMH	EXAMINED	
DRAWN	DR	ENGINEER OF STRUCTURAL SERV	ICE
CHECKED		ENGINEER OF BRIDGES AND STRUCT	URE



# DESIGN SPECIFICATIONS

AASHTO Standard Specifications for Highway Bridges, 17th Edition

# DESIGN STRESSES

 $f_c' = 3,500 \text{ psi}$  $f_y = 60,000 \text{ psi}$ 

## SCOPE OF WORK

- 1. Repair bridge deck.
- Reconstruct deck joints at each abutment and pier with silicone seals and polymer concrete.
- 3. Permanent protective shielding.

# NOTES:

- Permanent Protective Shield shall be installed according to the details contained herein and according to the Special Provisions. For limits of Protective Shield see General Plan and Elevation sheet.
- Contractor is advised that a portion of the Permanent Protective Shielding is to be installed over tracks operated by the Chicago Transit Authority (CTA).
- 3. The Contractor shall be responsible for coordinating the installation of the Permanent Protective Shield with the CTA.

  All cost for coordination shall be included in the pay item for "Permanent Protective Shield."



COLLINS ENGINEERS, IN JAMES M. HAMELKA NO. 81-6116 EXPIRES 11-30-2010 GENERAL PLAN AND ELEVATION
F.A.U. ROUTE 2729 SEC. 1617-I-1

EAST RIVER ROAD AT
I-90 KENNEDY EXPRESSWAY

COOK COUNTY

STATION 73+75.00

STRUCTURE NO. 016-2124

SHEE	T NO. S1	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
0,122	OF .	2729	1617-I-1	COOK	13	5
S6 S	SHEETS			CONTRACT	NO. 60	)J69
			ILLINOIS FED. AI	ID PROJECT		

# INDEX OF SHEETS

- S1. General Plan and Elevation
- S2. General Notes, Bill of Materials and Index of Sheets
- S3. Stage Construction Details
- S4. Bridge Deck and Approach Slab Repairs
- S5. Silicone Joint Sealer with Polymer Concrete Nosing
- S6. Permanent Protective Shielding

# 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.
- 2. Stage construction shall be utilized to maintain traffic during construction.
- 3. The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams, and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams, diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.
- 4. Cost for removal and disposal of Existing Expansion Joints is included in the Polymer Concrete.
- 5. The removal and reattachment of guardrail, hand rail, steel railings, traffic barrier terminal, and etcetera required for repair work (e.g. transverse joint replacement or structural repair of concrete) shall be included in the contract unit price of the work item being performed.

# TOTAL BILL OF MATERIAL

ITEM DESCRIPTION	UNIT	QUANTITY
Protective Shield (Permanent)	Sq. Yd.	1,238
Polymer Concrete	Cu. Ft.	27.8
Silicone Joint Sealer, 1"	Foot	254.4
Silicone Joint Sealer, 2"	Foot	63.6
Silicone Joint Sealer, 2,5"	Foot	63.6
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	16.0
Deck Slab Repair (Partial)	Sq. Yd.	117.3

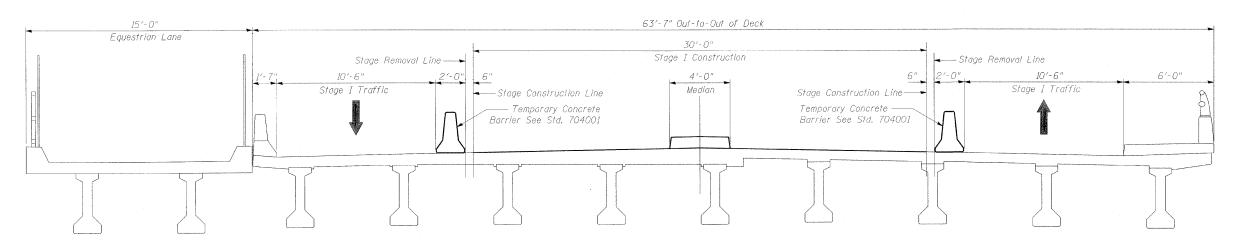
GENERAL NOTES, BILL OF MATERIALS

AND INDEX OF SHEETS

STRUCTURE NO. 016-2124

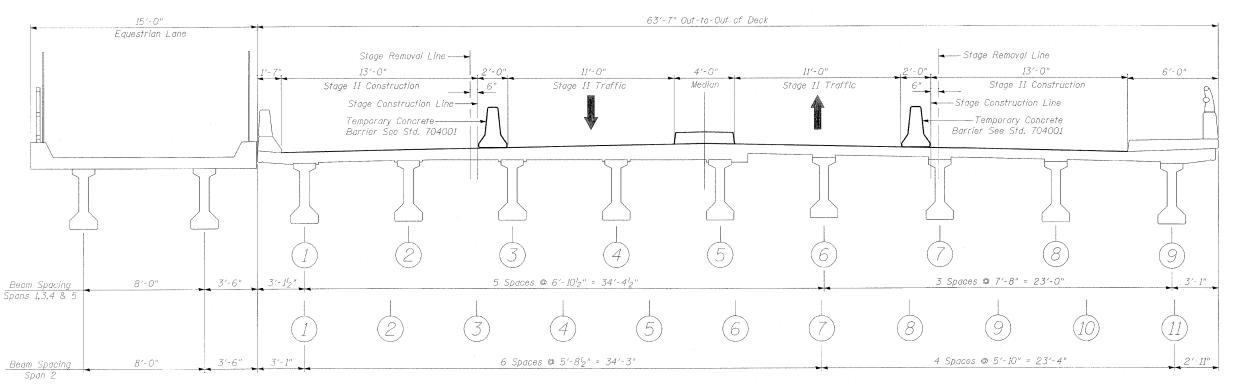
SHEET NO. S2	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
OF	2729	1617-I-1	COOK	13	6
S6 SHEETS			CONTRACT	NO. 60	J69
		ILLINOIS FED. A	D PROJECT		

DESIGNED	JWK	2010
CHECKED	JMH	EXAMINED
DRAWN	DR	ENGINEER OF STRUCTURAL SERVICE PASSED
		ENGINEER OF BRIDGES AND STRUCTURE
CHECKED	JWK	



# STAGE I CROSS SECTION

(Looking North)



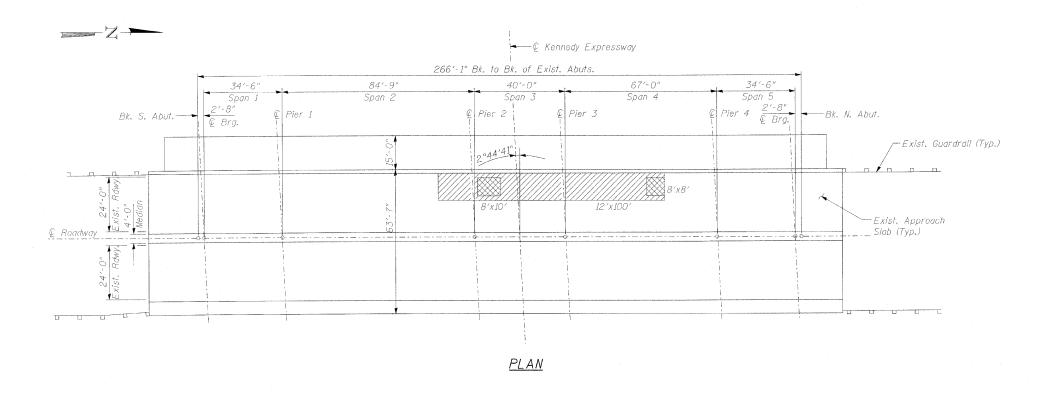
# STAGE II CROSS SECTION

(Looking North)

DESIGNED	JWK		January,	2010
CHECKED	JMH	EXAMINED		
DRAWN	DR	PASSED	ENGINEER OF ST	RUCTURAL SERVICES
CHECKED	JWK		ENGINEER OF BRIDGE	ES AND STRUCTURES

# STAGE CONSTRUCTION DETAILS STRUCTURE NO. 016-2124

SHEET NO. S3	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OF	2729	1617-I-1	COOK	13	7
S6 SHEETS			CONTRACT	NO. 60	)J69
		ILLINOIS FED.	AID PROJECT		



# BILL OF MATERIAL

SYMBOL	ITEM	UNIT	QUANTITY
	Deck Slab Repair (Partial)	Sq. Yd.	117.3
	Deck Slab Repair (Full Depth - Type II)	Sq. Yd.	16.0

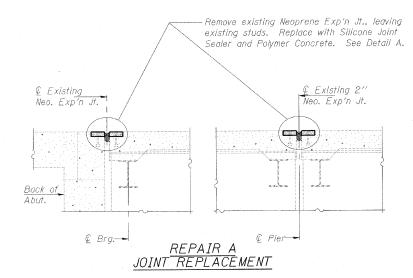
# <u>NOTES:</u>

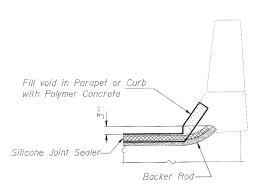
- Deck slab repair areas are estimated based on visual inspection completed in October 2009. Actual repair areas and locations shall be determined by the Engineer and shown on As-Built plans.
- 2. Deck slab repairs to be done after permanent protective shield has been installed.

BRIDGE DECK AND APPROACH SLAB REPAIRS STRUCTURE NO. 016-2124

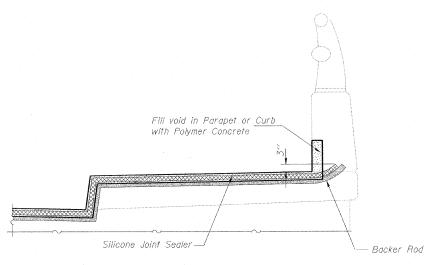
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		2729	1617-I-1	COOK	13	8
	S6 SHEETS			CONTRACT	NO. 60	J69
		ILLINOIS FED. AID PROJECT				

DESIGNED	JWK		January,	2010
CHECKED	JMH	EXAMINED	)	
DRAWN	DR	PASSED	SNGINEER OF ST	RUCTURAL SERVICE
CHECKED	JWK		ENGINEER OF BRIDGE	S AND STRUCTURE

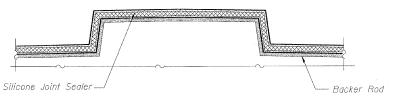




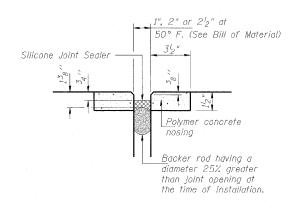
TYPICAL END OF SEAL TREATMENT
AT WEST PARAPET
(Looking South)



TYPICAL END OF SEAL TREATMENT
AT EAST PARAPET
(Looking North)



TYPICAL SEAL TREATMENT
AT MEDIAN
(Looking North)



# DETAIL A SILICONE JOINT SEALER DETAIL

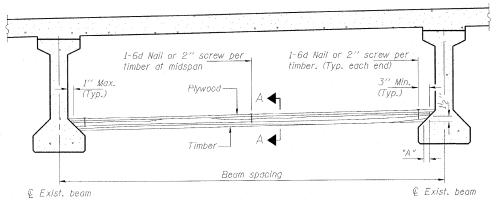
# BILL OF MATERIAL

ITEM DESCRIPTION	UNIT	QUANTITY
Silicone Joint Sealer, 1" (At S. Abut., Pier 2, Pier 3 and N. Abut.)	Foot	254.4
Silicone Joint Sealer, 2" (At Pier 4)	Foot	63.6
Silicone Joint Sealer, 2 <sup>1</sup> 2" (At Pier 1)	Foot	63.6
Polymer Concrete	Cu. Ft,	27.8

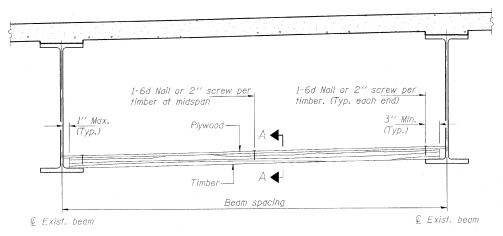
SILICONE JOINT SEALER WITH POLYMER CONCRETE NOSING STRUCTURE NO. 016-2124

SHEET NO. S5	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OF	2729	1617-I-1	COOK	13	9
S6 SHEETS			CONTRACT	NO. 60	J69
ILLINOIS FED. AID PROJECT					

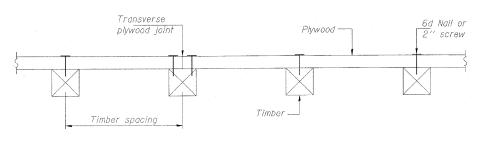
DESIGNED JWK	2010
	EXAMINED
CHECKED JMH	EXHMINED
	ENGINEER OF STRUCTURAL SERVIC
DRAWN DR	PASSED
	ENGINEER OF BRIDGES AND STRUCTUR
CHECKED JWK	



PPC I-BEAMS AND BULB-T's



STEEL BEAMS



# SECTION A-A

DESIGNED	JWK		2010
CHECKED	JMH	EXAMINED	
DRAWN	DR	PASSED	ENGINEER OF STRUCTURAL SERVICES
CHECKED	JWK .		ENGINEER OF BRIDGES AND STRUCTURES
PPS-1		01-22-09	

# TIMBER SPACING

	T	imber Sizes (in	.)
Beam Spacing (ft.)	4" x 4" with min. Fb=775 psi Fv=135 psi	4" x 6" with min. Fb=775 psi Fv=135 psi	6" x 6" with min. Fb=575 psi Fv=125 psi
	Maximui	m Timber Spac	ing (in.)
4.5	16	16	16
4.75	16	16	16
_ <u>5.0</u>	16	16	16
5.25	16	16	16
_5,5	16	16	16
5.75	16	16	16
_6.0	16	16	16
<u>6.25</u>	12	16	16
_ <u>6.5</u>	12	16	16
<u>6,75</u>	12	16	16
_7.0	8	16	16
7.25	8	16	16
_ 2,5	8	- 16	16
7,75	8	16	16
_8.0	8	12	16
<u>8,25</u>	8	12	16
_ <u>8.5</u>	6	12	12
<u>8,75</u>	6	12	12
_9.0	6	8	12

# PPC I-BEAMS AND BULB-T's

BEAM	"A " .
36'' I-Beam	1'2"
42′′ I-Beam	1/2"
48'' I-Beam	1/2"
54'' I-Beam	1 <sup>5</sup> 8′′
63'' Bulb-T	338''
72'' Bulb-T	338"

See special provision for Permanent Protective Shield System.

Timber sizes shown are nominal sizes. Rough sawn timber of the dimensions shown will also be considered acceptable.

The minimum Fb and Fv values shown are the tabulated design values given in the National Design Specification for Wood Construction for No. 2 Spruce-Pine-Fir without adjustment factors applied. Better grades or other species with equal or higher allowable stresses will also be considered acceptable.

The timber spacings shown have been determined using allowable stresses with all adjustment factors necessary for the anticipated service conditions. All timber shall be treated.

Plywood shall be 58" rated Exterior type plywood by APA.

Plywood shall be placed such that the face grain is perpendicular to the timber supports. When less than a full sheet (4' width) of plywood is used, the width of the strip used shall not be less than 2'.

Transverse plywood joints shall be supported by timbers. When 4" x 6" timbers are used, they shall be placed such that the wide face is horizontal and the narrow face is vertical.

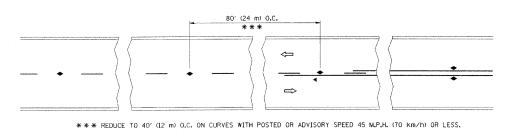
Design load = 200 psf.

# BILL OF MATERIAL

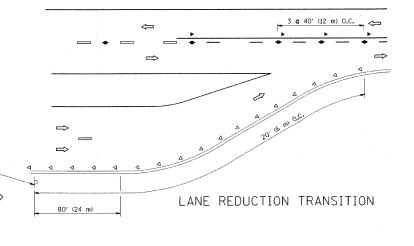
. Item				nit .	Total		
Protective	Shield	(Permanent)	Sq.	Yd.	1238		

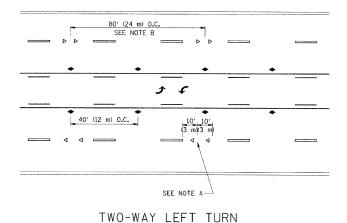
# PERMANENT PROTECTIVE SHIELD STRUCTURE NO. 016-2124

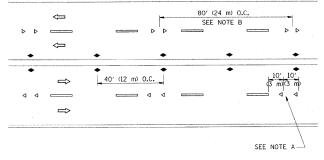
SHEET NO. S6	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2729	1617-I-1	COOK	13	10
S6 SHEETS			CONTRACT	NO. 60	J69
		ILLINOIS FED. A	ID PROJECT		



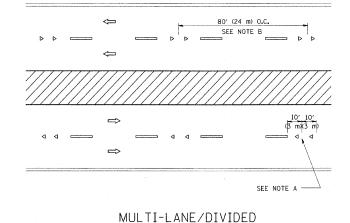
TWO-LANE/TWO-WAY







MULTI-LANE/UNDIVIDED



# GENERAL NOTES

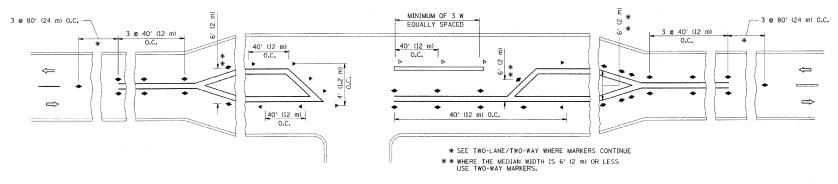
- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

# 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.

## SYMBOLS

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



LEFT TURN

#### DESIGN NOTES

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

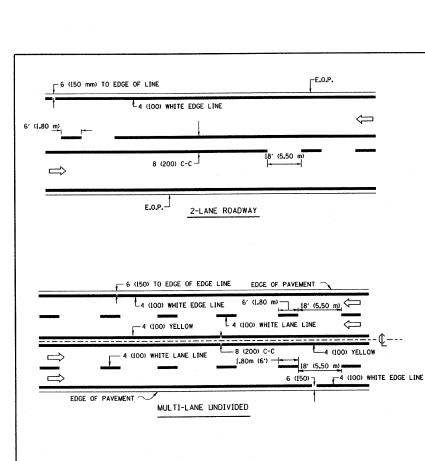
All dimensions are in inches (millimeters) unless otherwise shown.

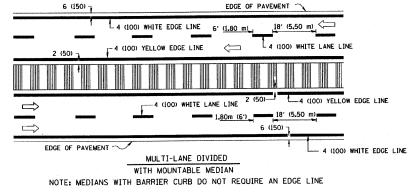
DESIGNED REVISED -T. RAMMACHER 09-19-94 TILE NAME = JSER NAME = drivakosar DRAWN REVISED -T. RAMMACHER 03-12-99 PLOT SCALE = 50.000 '/ IN. CHECKED REVISED -T. RAMMACHER 01-06-00 REVISED - C. JUCIUS 09-09-0

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

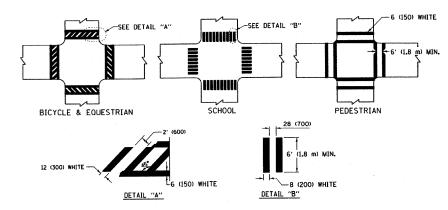
TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET NO. 1 OF 1 SHEETS STA.

COUNTY TOTAL SHEET SHEETS NO. SECTION 1617-1-1 COOK 13 11 2729 TC-11 CONTRACT NO. 60J69 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

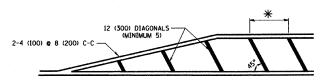




## TYPICAL LANE AND EDGE LINE MARKING

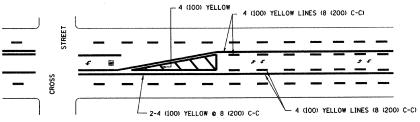


TYPICAL CROSSWALK MARKING

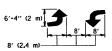


- \*FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
- \* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

#### PAINTED MEDIANS

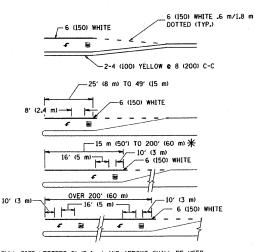


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

## TYPICAL PAINTED MEDIAN MARKING



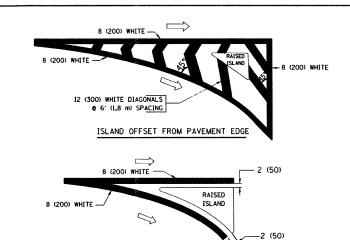
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.

↑ AREA = 15.8 SO. FT. (1.47 m²) (1.47 m²) (1.47 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

ISLAND AT PAVEMENT EDGE

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 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>c</b> 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH 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 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	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
	8' (2.4 m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 <b>e</b> 6 (150) 12 (300) <b>e</b> 45° 8 (200) <b>e</b> 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2'-4" (700) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (i,2 m) IN ADVANCE OF AND PARALLEL TO (ROSSYMLK, IF PRESENT, OTHERNISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 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 0F: "R"-3.6 SO. FT. (0.33m <sup>2</sup> ) EACH "X"-54.0 SO. FT. (5.0 m <sup>2</sup> )

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

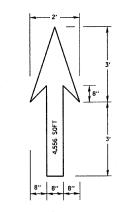
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

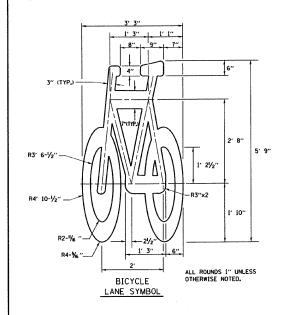
FILE NAME = USER NAME = goglianobt DESIGNED - REVISED -T. RAMMACHER 12-07-00
Wi\distatd\22x34\to24.dgn

| PLOT SCALE = 50.000 '/ IN. | CHECKED - REVISED | PLOT DATE = 1/4/2008 | DATE - REVISED - |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

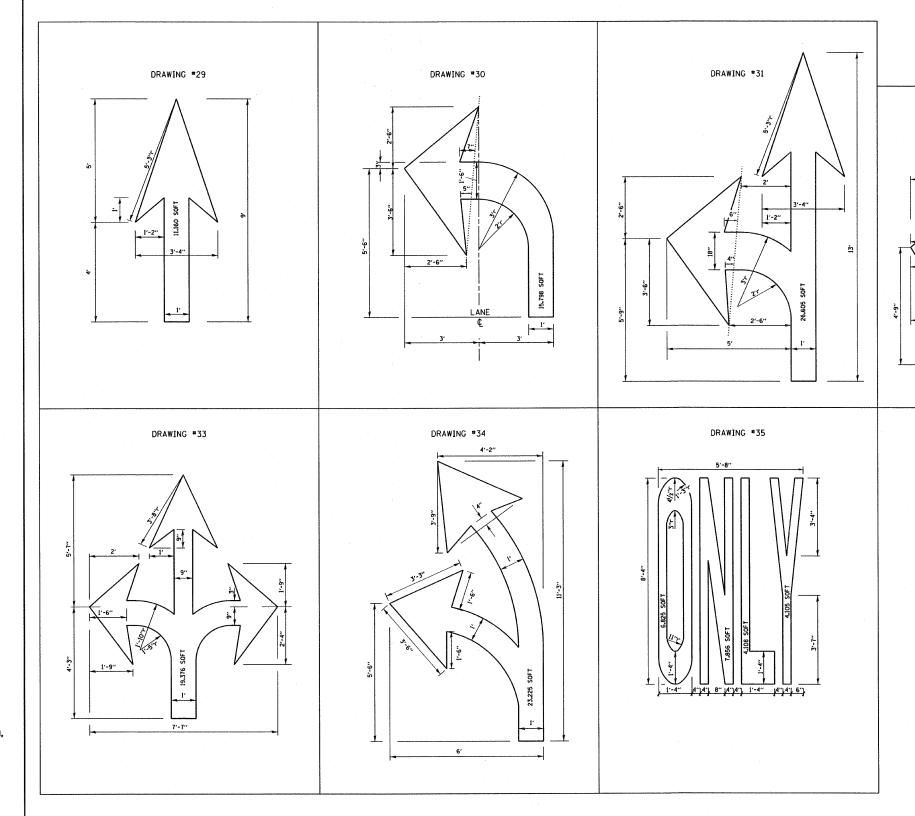
CITY OF CHICAGO					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TYPICAL PAVEMENT MARKINGS					1617-1-1	COOK	13	12
						TC-24	CONTRACT	NO. 60	J69
SCALE: NONE	SHEET NO. 1 OF 2	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





- 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



DRAWING #32

NOTE:

PLANS

ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE

- 1	FILE NAME =	USER NAME ≈ gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 12-07-00		CITY OF CHICAGO		SU.	F.A.	SECTION	COUNTY	TOTAL	SHEET NO.
	W:\diststd\22x34\tc24.dgn		DRAWN -	REVISED ~	STATE OF ILLINOIS	TYPICAL PAVEMENT MARKINGS			2729	1617-1-1	COOK	13	13
		PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.				TC-24	CONTRACT	T NO. 61	J69
		PLOT DATE = 1/4/2008	DATE -	REVISED -				STA. TO STA.	FED. ROAD	D DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		