FOR INDEX OF SHEETS SEE SHEET 3

IMPROVEMENT IS LOCATED IN THE

CITY OF CHICAGO

 ROUTE
 SECTION
 COUNTY
 TOTAL SHEET
 SHEETS
 NUMBER

 FAI 290
 2006-013I
 COOK
 6
 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE

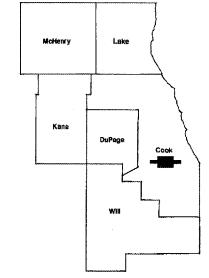
FAI 290 (EISENHOWER EXPRESSWAY)
VARIOUS STRUCTURES OVER I-290 AND CTA
SECTION: 2006-013I

PROPOSED HIGHWAY PLANS

PERMANENT PROTECTIVE SHIELDING
COOK COUNTY
C-91-327-06

CONTRACT NO. 60B37

D-91-327-06



LOCATION OF IMPROVEMENT INDICATED THUS:

TRAFFIC DATA: (I - 290) SPEED LIMIT = 55 MPH

2006 ADT = 220,700

CONTRACT NO. 60B37

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: 2006
Diag of Reference
Deputy director of Highways, region Engineer

Accember 8, 2006

Exile Hamber
Alcanber 8, 2006

Millon R. Slee F. E. B.

DIRECTOR DIVISION OF HIGHWAYS

DIRECTOR DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

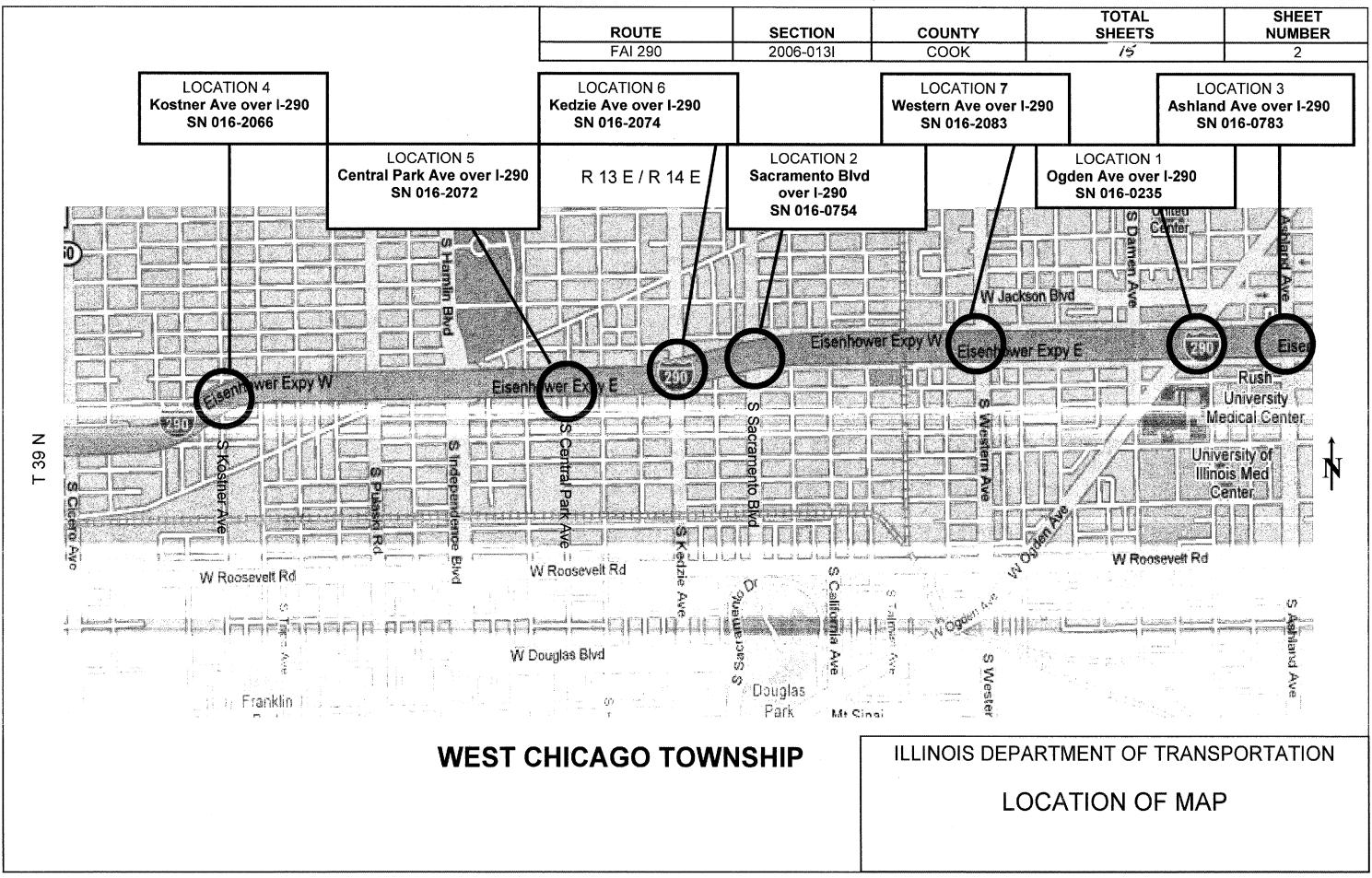
C.U.A.N: CHICAGO UTILITY ALERT NETWORK (312) 744-7000

ROV

form date: 5/05/2003

s:\contracts-maintenance\wp\11x17plans\60b37 rfm\cover sheet_rm.doc

DISTRICT ONE – DESIGN – PLAN PREPARATION ENGINEER: KEN ENG / ROBERT BORO (847) 705-4178



			TOTAL	SHEET
ROUTE	SECTION	COUNTY	SHEETS	NUMBER
FAI 290	2006-13 I	COOK	15	3

CONTRACT 60B37

INDEX OF SHEETS

STATE STANDARDS

1.	TITLE SHEET	701400 <i>-0</i> 2	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
2	LOCATION MAP		,
3	INDEX OF SHEETS AND STATE STANDARDS	701401 - 03	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH
4	GENERAL NOTES		
5	SUMMARY OF QUANTITIES	701411 - 03	LANE CLOSURE, MULTILANE AT ENTRANCE OR EXIT RAMP
6	BRIDGE PLANS (S.N. 016 - 0235, LOCATION 1)		FOR SPEEDS ≥ 45 MPH
7	BRIDGE PLANS (S.N. 016 - 0754, LOCATION 2)		
8	BRIDGE PLANS (S.N. 016 - 0783, LOCATION 3)	701446	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
9	BRIDGE PLANS (S.N. 016 - 2066, LOCATION 4)		
10	BRIDGE PLANS (S.N. 016 - 2072, LOCATION 5)	702001 - 06	TRAFFIC CONTROL DEVICES
11	BRIDGE PLANS (S.N. 016 - 2074, LOCATION 6)		
12	BRIDGE PLANS (S.N. 016 - 2083, LOCATION 7)		
13	PERMANENT PROTECTIVE SHIELDING DETAILS		
14	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES		
	AND PARTIAL RAMP CLOSURES		
<u>~</u>	TRAFFIC CONTROL DETAILS FOR FREEWAY CENTER LANE		

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS STATE STANDARDS

Rev.

CLOSURE SHOULDER LANE

15 FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

				TOTAL	SHEET
i	ROUTE	SECTION	COUNTY	SHEETS	NUMBER
ļ	FAI 290	2006-0131	COOK	15	4

GENERAL NOTES

CONTRACT NO. 60B37

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).

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

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

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORKS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE INSPECTORS.

THE CONTRACTOR SHALL BE AWARE THAT SOME LOCATIONS HAVE UTILITY CONDUITS. ANY DAMAGE TO THE CONDUITS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE. THE CONTRACTOR SHALL ADJUST THE PROTECTIVE SHIELDING TO FIT AROUND THE CONDUITS. DETAIL SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES.

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

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

THE CONTRACTOR SHALL ADJUST THE PROTECTIVE SHIELDING TO RIDE ABOVE THE EXISTING LIGHTING FIXTURES IN ORDER TO MAINTAIN THE EXISTING LEVEL OF LIGHTING OF THE ROADWAY UNDERNEATH. DETAILS SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.

WHEN 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.

ANY CONDUIT ATTACHED TO THE FLANGE MUST BE RELOCATED PRIOR TO THE INSTALLATION OF THE PROTECTIVE SHIELDING. CONTACT NEIL THAKKAR I BUREAU OF ELECTRICAL AT 847-705-3078. UNDER NO CIRCUMSTANCES SHALL THE PROTECTIVE SHIELDING REST ON TOP OF THE CONDUIT.

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Rev.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2006-031	COOK	15	5

CONTRACT: 60B37

	SUMMARY OF QUANTITIES									
			URBAN 100% STATE	CONSTRUCTION	ON TYPE CODE:	SFTY - 2A				I
Code No.	Description	Unit	Total Quantities	LOC. 1 016-0235	LOC. 2 016-0754	LOC. 3 016-0783	LOC. 4 016-2066	LOC. 5 016-2072	LOC. 6 016-2074	LOC. 7 016-2074
67100100	MOBILIZATION	L SUM	1	0.14		0.14	0.14	0.14	0.15	0.15
X0322066	PROTECTIVE SHIELD (PERMANENT)	SQ YD	7695	1319	792	1109	11140	, 823	956	1580
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	0.14	0.14	0.14	0.14	0.14	0.15	0.15
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0.14	0.14	0.14	0.14	0.14	0.15	0.15

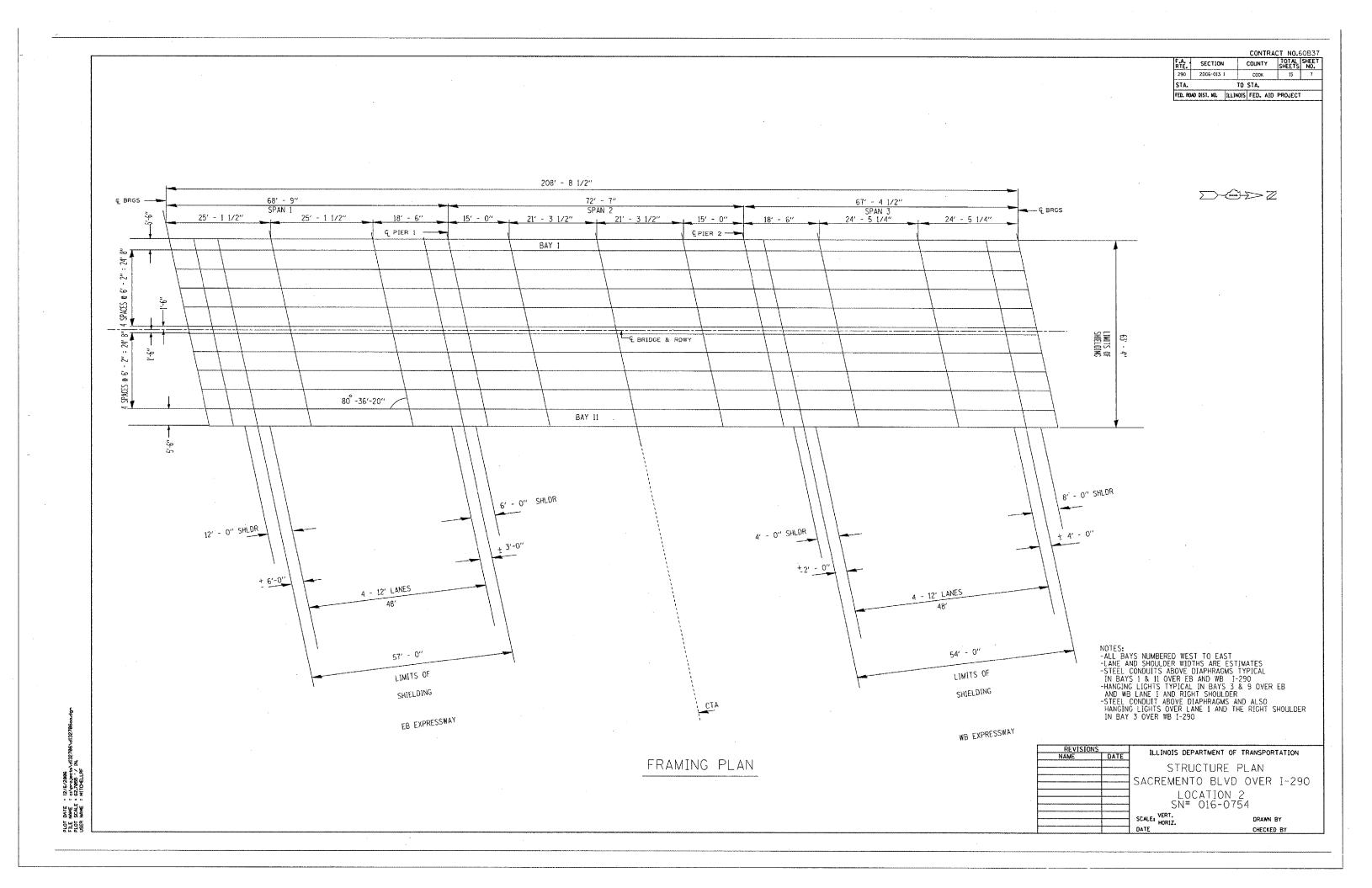
ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

Rev.

CONTRACT NO. 60837 F.A. SECTION 290 2006-013 I COUNTY SHEETS NO.

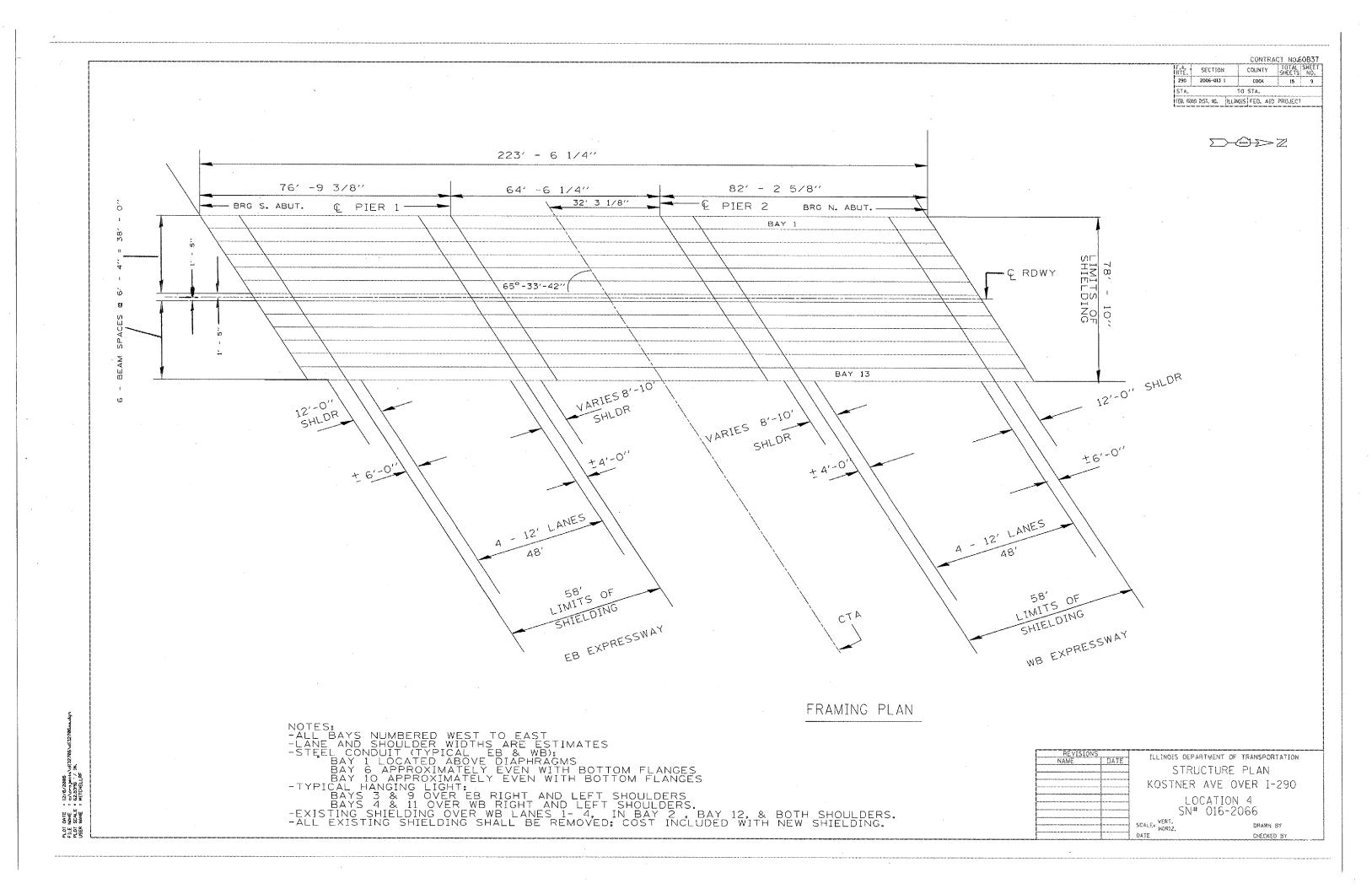
COOK 15 6 TO STA. FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT ← Ç N. ABUTMENT © BRG PIER 1 € BRG PIER 2____ C S. ABUTMENT BAY 1 63'-0" 63'-0"
LIMITS OF
SHIELDING - CROADWAY 47° - 08' 47° - 08% BAY 11 116'-8" 145'-0" 116'-8" 378'-4" Ç - Ç BRG. FRAMING PLAN NOTES: -ALL BAYS NUMBERED WEST TO EAST -LANE AND SHOULDER WIDTHS ARE ESTIMATES -STEEL CONDUIT ABOVE CROSS BRACING IN BAY 1 OVER EB AND WB LANES ILLINOIS DEPARTMENT OF TRANSPORTATION -HANGING LIGHTS TYPICAL IN BAYS 3 & 8 OVER EB AND WB LANE 3 & 4 AND STRUCTURE PLAN BOTH SHOULDERS. OGDEN AVE OVER I-290 -EXISTING SHIELDING IN BAY 4 OVER EB LANE 3 & 4 SHALL BE REMOVED; COST INCLUDED WITH NEW SHIELDING LOCATION 1 SN# 016-0235 -STEEL CONDUIT ROUGHLY EVEN WITH BOTTOM FLANGES IN BAYS 9 & 10 AND THROUGH CROSS BRACING IN BAY 11 OVER EB AND WB LANES. SCALE: VERT. -CONCRETE STRUCTURE (HANDHOLE) IN BAY 1 OVER WB LANES 3 & 4. DATE CHECKED BY

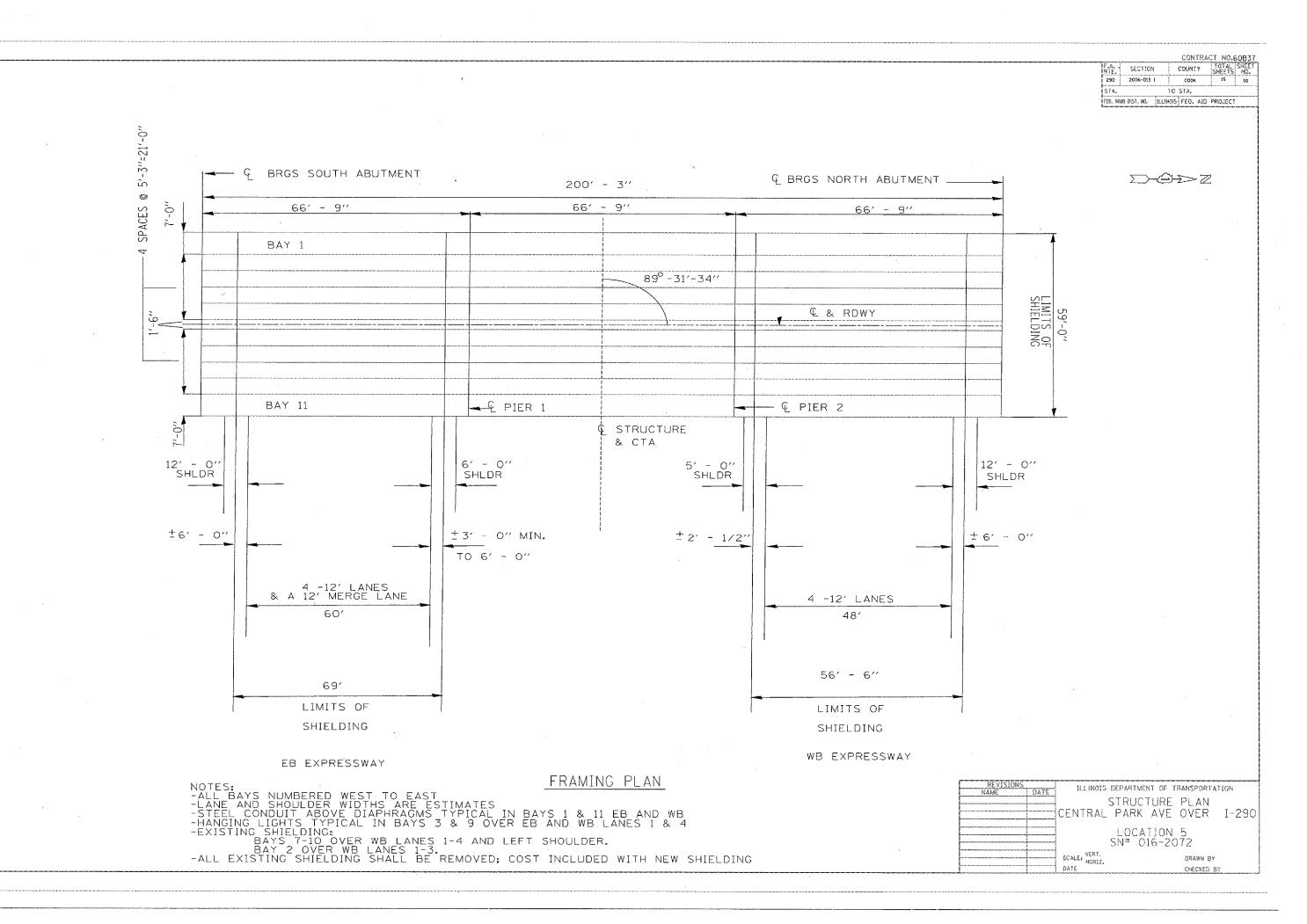


CONTRACT NO.60B37 SECTION COUNTY TOTAL SHEET NO. 290 2006-013 I COOK 15 8 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT BRGS SOUTH ABUTMENT & BRGS NORTH ABUTMENT 269' - 10 1/2" ¢ STRUCTURE 65'-9 1/2'" 69'-1 3/4''' 69'-1 3/4'" 65'-9 1/2'" PIER 1 & PIER 3 L PIER 2 BAY 1 spaces @ 6'-8 1/2" SHIELDING OF 9 BAY 14 3' - 0" 10' - 0' SHLDR 3' - 0" SHLDR 10' - 0" SHLDR SHLDR + 1' - 1/2' ±1' - 1/2" ±5' - 0' ±5′ - 0″ 4 - 12' LANES 4 - 12' LANES 48' 48 **—** € CTA 54' - 1/2" 54' - 1/2" LIMITS OF LIMITS OF SHIELDING SHIELDING FRAMING PLAN NOTES:
-ALL BAYS NUMBERED WEST TO EAST
-LANE AND SHOULDER WIDTHS ARE ESTIMATES
-STEEL CONDUIT ABOVE DIAPHRAGMS IN BAY 1
OVER EB & WB LANES
-STEEL CONDUIT BELOW DIAPHRAGMS IN BAY 3
OVER THE EB LANES AND IN BAY 5 OVER THE WB LANES
-HANGING LIGHTS TYPICAL IN BAYS 4, 8 & 11 OVER LANE 1
AND THE RIGHT SHOULDER, BOTH EB AND WB
-EXISTING SHIELDING IN BAY(S)
6, 7 & 8 OVER EB LANES 3 & 4
6 OVER WB LANES 1, 2 & 3
13 OVER EB LANES 3 & 4.
-STEEL CONDUIT ABOVE DIAPHARAGMS IN BAY 14
TYPICAL OVER EB & WB LANES
-BEAM DEPTH DIFFERENTIAL TYPICAL AT BOTH
FASCIAS OVER EB AND WB LANES
ALL EXISTING SHIEDING SHALL BE REMOVED; COST INCLUDED WITH NEW SHIELDING EB EXPRESSWAY WB EXPRESSWAY ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURE PLAN ASHLAND AVE OVER I-290 LOCATION 3 SN# 016-0783 SCALE: VERT. DRAWN BY DATE CHECKED BY

: [2/6/2006 : ci\projects\d[32706\d]32706eadgn : 62 8306 : / Nu

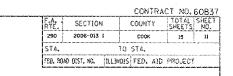
1.01 DATE = (2/6/2006)
THE NAME = chprojectals
1.01 SCALE = 62.8386 - / H
SER NAME = MITCHELLRF

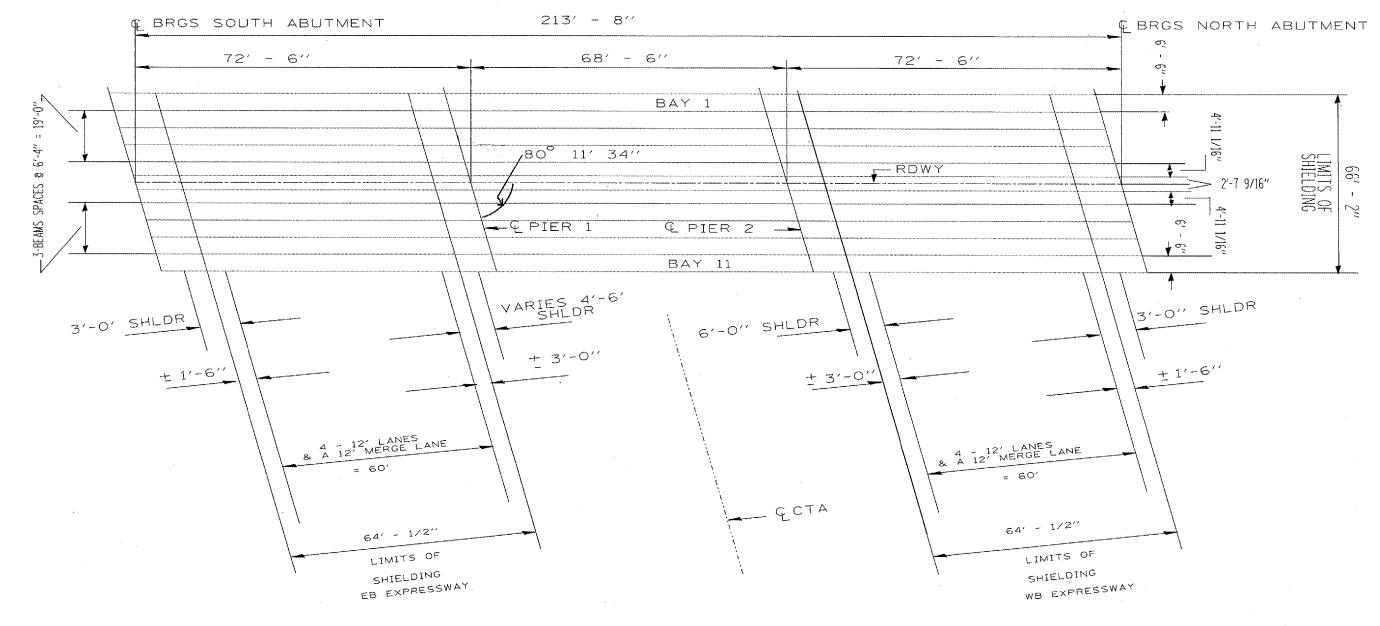




= 12/6/2886 = cityrojecta/d132786\d132786

LE NAME = 12/6/2009 LE NAME = criprojec LDT 9CALE = 62,5849 *





FRAMING PLAN

NOTES:
-ALL BAYS NUMBERED WEST TO EAST
-LANE AND SHOULDER WIDTHS ARE ESTIMATES
-PLASTIC CONDUIT, BAY 1 ABOVE DIAPHRAGMS OVER
EB AND WB EXCEPT OVER LANE 5 EB
-PLASTIC CONDUIT DROPS TO THE BOTTOM FLANG OVER EB LANDS
-HANGING LIGHTS TYPICAL IN BAYS 2 & 8 OVER EB LANES 1 & 5 AND
IN BAYS 3 & 8 OVER WB LANES 1 & 5
-STEEL CONDUIT EVEN WITH BOTTOM FLANGES IN BAYS 9 & 11 OVER
EB AND WB I-290

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURE PLAN KEDZIE AVE OVER I-290 LOCATION 6 SN# 016-2074

SCALE: VERT.

DRAWN BY

DATE = 12/5/2006

NAME = cro-organical(32

SCALE = 52,6398 - / 14

NAME = MITCHELLRF

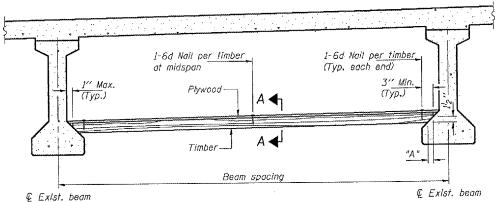
CONTRACT NO. 60837 290 2006-013 I COOK 15 12 COUNTY SHEETS NO. STA. TO STA, FEO. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT 241' - 4" $\longrightarrow \bigcirc \longrightarrow \mathbb{Z}$ ℚ BRGS SOUTH ABUTMENT € BRGS NORTH ABUTMENT PIER 2 ₽IER 1 94' - 2" 73' - 7" 19' - 0" | 18' - 10" | 18 47' - 1" 24' - 8" 18' - 9'' 18' - 10" 18' - 10" | 18' - 9" 24' - 3" 24' - 8" 25'-0" BAY 1 62' - 4 1/4" 4 SPACE @ 6'-3" = 4 SP RUL 3 4'-6" : 18'-0" 4 SPACE 124' - 8 1/2" Q BRIDGE ≥. SPACE @ 6'-3": 6.7-10 10-7-10 10-7-10 Š \sim BAY 23 VARIES 6' - 8' SHLDR VARIES 6' - 8' SHLDR VARIES 8' - 10' VARIES 8' - 10" SHLDR SHLDR ±5′ - 0" ±4' - 0'' ± 5' - 0" ±4' - 0" 4 - 12' LANES 4 - 12' LANES = 48' = 48' 57' 57′ LIMITS OF LIMITS OF ____ CTA SHIELDING SHIELDING NOTES:

-ALL BAYS NUMBERED WEST TO EAST
-LANE AND SHOULDER WIDTHS ARE ESTIMATES
-SINGLE STEEL CONDUIT ABOVE DIAPHRAGMS IN BAYS 1
& 10 OVER EB LANES
-CONDUIT "BUNDLES" IN BAYS 5, 14, 15, 18 & 23 OVER EB & WB LANES
-THE CONDUITS IN BAYS 14, 15 & 18 ARE BELOW THE DIAPHRAGMS,
ALL OTHERS ARE ABOVE.
-HANGING LIGHTS TYPICAL OVER EB & WB LANES, LEFT & RIGHTS SHOULDERS IN BAYS 4 &19
-UNEVEN BEAM DEPTH IN BAYS 8 & 13 OVER SHOULDERS OF EB & WB LANES
-HANGING LIGHTS IN BAY 13 OVER SHOULDERS OF BOTH EB & WB LANES WB EXPRESSWAY ILLINOIS DEPARTMENT OF TRANSPORTATION FRAMING PLAN STRUCTURE PLAN WESTERN AVE OVER I-290 LOCATION 7 SN# 016-2083 SCALE: VERT. DRAWN BY DATE CHECKED BY

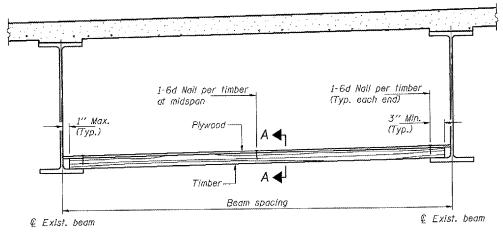
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET NO.

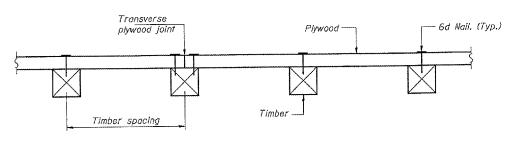
Contract Number: 60837



PPC I-BEAMS AND BULB-T's



STEEL BEAMS



SECTION A-A

TIMBER SPACING

	Timber Sizes (în.)				
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	n Timber Spac	ing (in.)		
4.5	16	16	16		
4.75	16	16	16		
5.0	16	16	16		
5.25	16	16	16		
5.5	16	16	16		
5.75	<i>1</i> 6	16	16		
6.0	16	<i>1</i> 6	16		
6.25	12	16	<i>1</i> 6		
6.5	12	16	16		
6.75	12	16	16		
7.0	8	<i>1</i> 6	16		
7.25	8	16	16		
7.5	8	16	16		
7.75	8	16	16		
8.0	8	12	16		
8.25	8	12	16		
8.5	6	12	12		
8.75	6	12	12		
9.0	6	8	12		

PPC I-BEAMS AND BULB-T's

BEAM	"A"
36'' I-Beam	12"
42" I-Beam	11/2"
48" I-Beam	1/2"
54" I-Beam	1 ⁵ 8''_
63'' Bulb-T	338"
72'' Bulb-T	338"

Notes: 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.

All timber shall be treated. Plywood shall be ⁵B'' Exterior type plywood.

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.

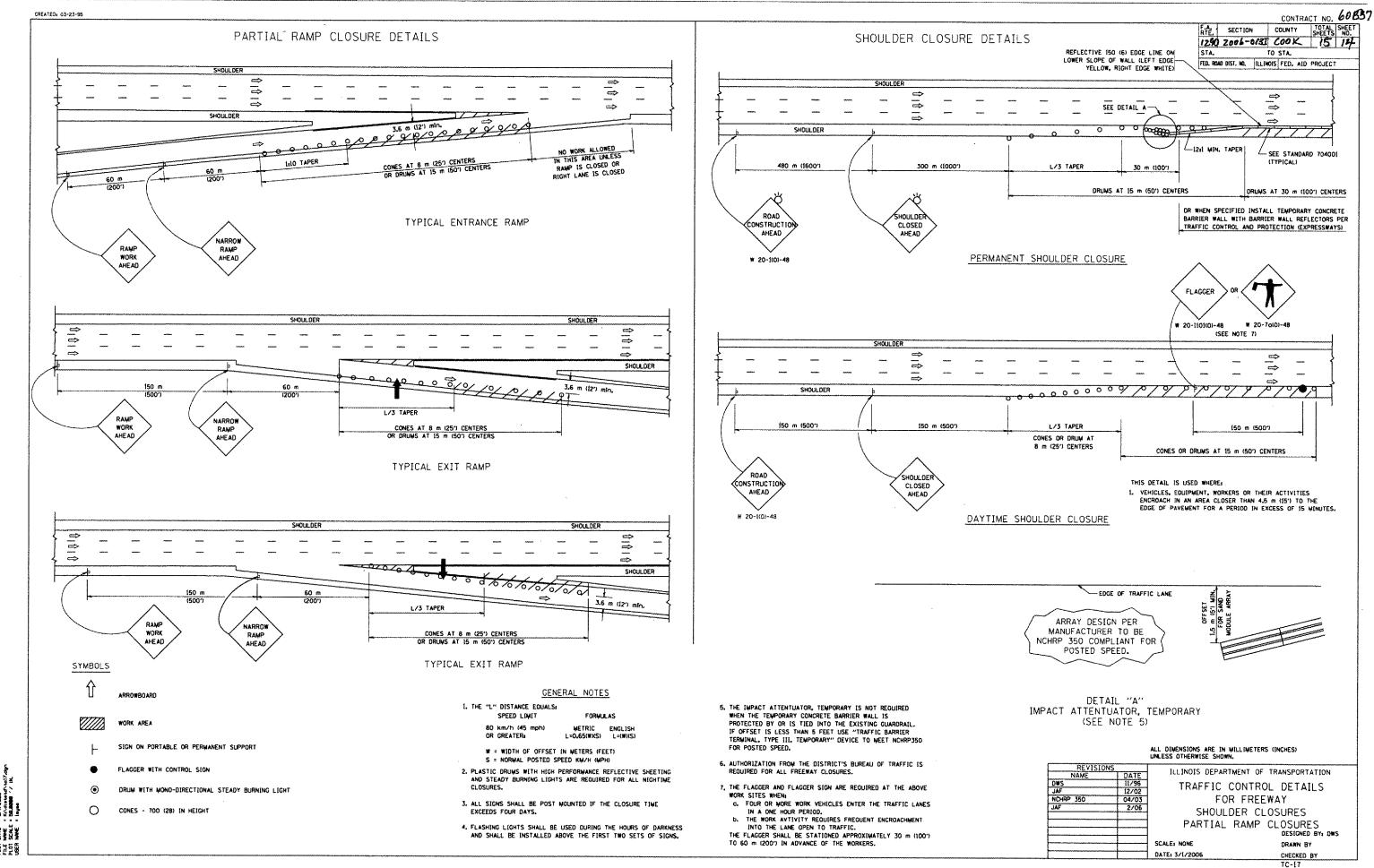
When 4" x 6" timbers are used, they shall be placed such that the wide face is horizontal and the narrow face is vertical.

Design load = 200 psf.

BILL OF MATERIAL

Item	Unit	Total	
Protective Shield (Permanent)	Sq. Yd.	7695	

PERMANENT PROTECTIVE SHIELD



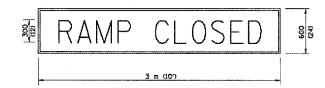
DATE SCALE SCALE

REVISION DATE: 02/28/06

STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

RAMP CLOSURE ADVANCE WARNING SIGN

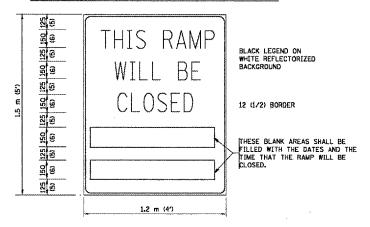


BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND

25 (I) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



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

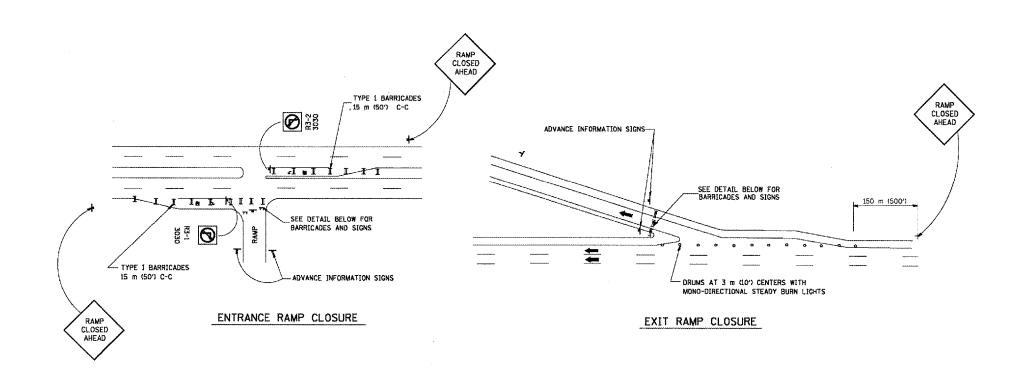
GENERAL NOTES:

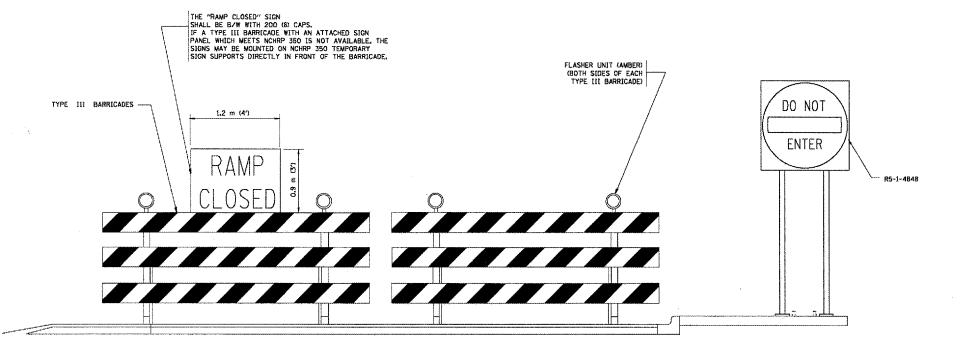
- 1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS, CONES SHALL BE A MINIMUM OF 700 (28) HIGH.
- 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- 3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- FOR DAYTIME RAMP CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ADVANCE WARNING SIGNS ON THE EXIT GUIDE SIGNS.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- 6. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
- 7. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- 8. 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.

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

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION			
NAME	DATE	TETMOTO DELAGRIME	MI OF INANSPORTATION		
DWS	2-83	l FG	REEWAY		
DWS	1/90				
DWS	9/94	I ENTRANCE	AND EXIT RAMP		
DWS	12/94	רו חבוונ	RE DETAILS		
DWS/JAF	12/02	CLUSUI	VE DETAILS		
JAF	2/06				
Revise devices to	4/03	SCALE:	DRAWN BY		
meet NCHRP 350		DATE: 3/1/2006	CHECKED BY		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			TC-8		

TC-8
REVISION DATE: 02/28/06





DETAIL FOR REQUIRED BARRICADES & SIGNS