

FAP 330, FAI 90/94	SECTION 2004-1241	COUNTY COOK	TOTAL SHEETS 36	SHEET NO. 1
-----------------------	----------------------	----------------	--------------------	----------------

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**LOCATION 1) FAP 330 US 12/45 (MANNHEIM RD)
OVER IL64 (NORTH AVE)
SN: 016-0336**

**LOCATION 2) FAI 90/94 EB (KENNEDY EXWY)
AT ADDISON STREET CURVE**

**SECTION: 2004-1241
BRIDGE REPAIR, SAFETY IMPROVEMENT
COOK COUNTY
C-91-119-03**

D-91-119-03



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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
C.U.A.N.
CHICAGO UTILITY ALERT NETWORK
1-312-744-7000

CONTRACT NO. 62603

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 13, 20 05
Dina O'Leary/PP
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 13, 20 05
Mike Hine/ED
ENGINEER OF DESIGN AND ENVIRONMENT

May 13, 20 05
Victor Modera/ED
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

CONTRACT NO. 62603

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
5	LOCATION MAP
6	ROADWAY CROSS SECTIONS (LOC 1)
7-8	ROADWAY PLAN (LOC 1)
9-19	BRIDGE PLANS (LOC 1: SN 016-0336)
20	TRAFFIC STAGING SECTIONS PLAN (LOC 1)
21	TRAFFIC CONTROL PLAN STAGE I (LOC 1)
22	TRAFFIC CONTROL PLAN STAGE II (LOC 1)
23	FINAL PAVEMENT MARKING PLAN (LOC 1)
24-25	DETOUR PLANS & RAMP CLOSURES, DETAILS (LOC 1)
26	PAVEMENT GROOVING PLAN (LOC 2)
27-30	EXISTING WET PAVEMENT SENSOR AND INDUCTION LOOP INSTALLATION (LOC 2)
31	FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
32	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS

INDEX OF SHEETS (CONTINUED)

SHEET NO.	DESCRIPTION
33	TYPICAL APPLICATIONS RAISED REFLECTIVE, PAVEMENT MARKERS
34-35	MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS
36	DISTRICT ONE TYPICAL PAVEMENT MARKINGS

STATE STANDARDS

STANDARDS	DESCRIPTION
420001-05	PAVEMENT JOINT
420111-01	PCC PAVEMENT ROUNDOUTS
420401-05	BRIDGE APPROACH PAVEMENT
421001-01	BAR REINFORCEMENT FOR CRC PAVEMENT
424001-03	SIDE WALK RAMPS ACCESSIBLE TO THE DISABLED.
606001-02	CURB AND GUTTER DETAILS
701301-02	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701311-02	LANE CLOSURE, 2L,2W, MOVING OPERATIONS-DAY ONLY
701400-02	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-03	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-03	MULTI-LANE, TRAFFIC CONTROL AT ENTRANCE OR EXIT RAMPS
701446	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701601-04	URBAN LANE CLOSURE, MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701801-03	LANE CLOSURE, 1W, 2W CROSSWALK OR SIDEWALK CLOSURE
702001-05	TRAFFIC CONTROL DEVICES

MIXTURE REQUIREMENTS

MIXTURE TYPE	AC/PG	AIR VOIDS	RAP% (MAX)	THICKNESS IN
BITUMINOUS CONCRETE SURFACE COARSE, SUPERPAVE, MIX'D", N70	PG 64-22	4% @ 70 GYR	10	2
BITUMINOUS CONCRETE BINDER COARSE, SUPERPAVE, IL-19, N70	PG 64-22	4% @ 70 GYR	15	8

UNIT WEIGHT OF 112 LBS/SQ YD/IN USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**INDEX OF SHEETS
STATE STANDARDS**

SCALE: NONE
DATE 4/15/2005

DRAWN BY
CHECKED BY

FAP 330, FAI 90/94	SECTION 2004-1241	COUNTY COOK	TOTAL SHEETS 36	SHEET NO. 3
-----------------------	----------------------	----------------	-----------------------	-------------------

CONTRACT NO. 62603

GENERAL NOTES LOCATIONS 1 AND 2

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

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCES), ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE REESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKERS SHALL BE AS DIRECTED BY 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 BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UPMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

GENERAL NOTES LOCATIONS 1 ONLY

ALL WORK WHICH REQUIRES FRAMES AND GRATES TO BE ADJUSTED SHALL BE CONSTRUCTED UTILIZING "CAST IN PLACE" ALTERNATE ACCORDING TO STATE HIGHWAY STANDARD 420111 FOR "PCC PAVEMENT ROUNDOUTS".

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800)-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR ARTERIAL OPERATIONS - (847)-705-4470, A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL LOCATE, PROTECT AND MAINTAIN ALL EXISTING ELECTRICAL CONDUIT AND LIGHTING FACILITIES IN AND AROUND THE VICINITY OF THE REPAIR OF THE BRIDGE SUBSTRUCTURE AND SUPERSTRUCTURE.

TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL FOR TYPICAL APPLICATION OF RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHOWN IN THE PLANS.

CONCRETE SUPERSTRUCTURE SHALL HAVE A SEVEN (7) DAYS CURE MINIMUM.

WHEN CONSTRUCTING SIDEWALK RAMPS FOR THE HANDICAPPED (STATE STANDARD 424001), USE TYPE B RAMPS UNLESS OTHERWISE SPECIFIED.

THE ENGINEER SHALL CONTACT MR SCOTT KUZNICKI, TRAFFIC FIELD TECHNICIAN, AT (733) 685-8386. TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS **AND SIGNS**.

FOR FRAMES AND LIDS ADJUSTMENT REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS

GENERAL NOTES LOCATION 2 ONLY

ALL DAMAGE TO THE RAISED REFLECTIVE PAVEMENT MARKERS OR THE WET PAVEMENT SENSOR SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL CONTACT MR ROY LAWSON, DISTRICT ONE TRAFFIC SURVALLANCE ENGFINEER AT (708) 524-2145 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING THE WORK.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." (CHICAGO UTILITY ALERT NETWORK) AT (312) - 744 -7000 FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES (48 HOUR NOTIFICATION HOUR IS REQUIRED).

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR EXPRESSWAY OPERTIONS - (847) 705-4151 OR 4177, A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE "ADVANCED WARNING SIGN DETAIL FOR ARTERIAL TRAFFIC" LOCATED IN THE SPECIAL PROVISIONS FOR "TEMPORARY INFORMATION SIGNING FOR LANE CLOSURES" AND THE SPECIAL PROVISION FOR "PUBLIC CONVENIENCE AND SAFETY" ARE APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SCALE: NONE
DATE 4/15/2005

DRAWN BY
CHECKED BY

Rev.

CONTRACT NO. 62603

SUMMARY OF QUANTITIES			SPTY-2A URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		LOC. 1	LOC. 2			
				FAP 330	FAL 90/94			
Z0006303	BRIDGE DECK HYDRO-SCARIFICATION 3/4"	SO YD	859	859				
42001165	BRIDGE APPROACH PAVEMENT	SO YD	468	468				
42001300	PROTECTIVE COAT	SO YD	2235	2235				
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SO YD	234	234				
44000100	PAVEMENT REMOVAL	SO YD	281	281				
44000600	SIDEWALK REMOVAL	SO FT	140	140				
44000700	APPROACH SLAB REMOVAL	SO YD	360	360				
44000910	BITUMINOUS CONCRETE REMOVAL (DECK)	SO YD	859	859				
44003100	MEDIAN REMOVAL	SO FT	2874	2874				
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SO YD	128	128				
44213100	PAVEMENT FABRIC	SO YD	406.4	406.4				
44213200	SAW CUTS	FOOT	204	204				
50102400	CONCRETE REMOVAL	CU YD	113.9	113.9				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	128.3	128.3				
50300260	BRIDGE DECK GROOVING	SO YD	1057	1057				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	21420	21420				
51401600	TEMPORARY BRIDGE RAIL	FOOT	420	420				
59000100	EPOXY CRACK SEALING	FOOT	121	121				
60300205	FRAMES AND GRATES TO BE ADJUSTED (SPECIAL)	EACH	2	2				
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	45	45				
60608300	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12	FOOT	28	28				
60611600	COMBINATION CONCRETE CURB AND GUTTER, (SPECIAL)	FOOT	190	190				
63500105	DELINEATORS	EACH	64	64				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	3.4	0.6			
67100100	MOBILIZATION	L SUM	1	0.85	0.15			
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1				
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1				

SUMMARY OF QUANTITIES			SPTY-2A URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE SFTY-2A				
CODE NO	ITEM	UNIT		LOC. 1	LOC. 2			
				FAP 330	FAL 90/94			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1				
70103816	TRAFFIC CONTROL SURVEILLANCE	CAL MO	4	4				
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	1294	1294				
70300560	PAVEMENT MARKING TAPE, TYPE III 12"	FOOT	191	191				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	622.3	622.3				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1844	1844				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	96	96				
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	400	400				
* 78008220	POLYUREA PAVEMENT MARKING TYPE I - LINE 5"	FOOT	1290		1290			
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	70	70				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	16	16				
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	34	34				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	8				
X0300626	CURB AND GUTTER REMOVAL	FOOT	596	596				
X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SO YD	859	859				
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SO FT	48	48				
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	187	187				
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	38	38				
X6062500	PORTLAND CEMENT CONCRETE SIDEWALK ACCESSIBILITY RAMP, TYPE B, 5 INCH	SO FT	140	140				
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1		1			
X8850102	INDUCTION LOOP	FOOT	40		40			
Z0002600	BAR SPLICERS	EACH	276	276				
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	16	16				
Z0037300	PAVEMENT GROOVING	SO YD	9067		9067			
Z0047300	PROTECTIVE SHIELD	SO YD	1230	1230				
Z0075300	TIE BARS	EACH	200	200				

*SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

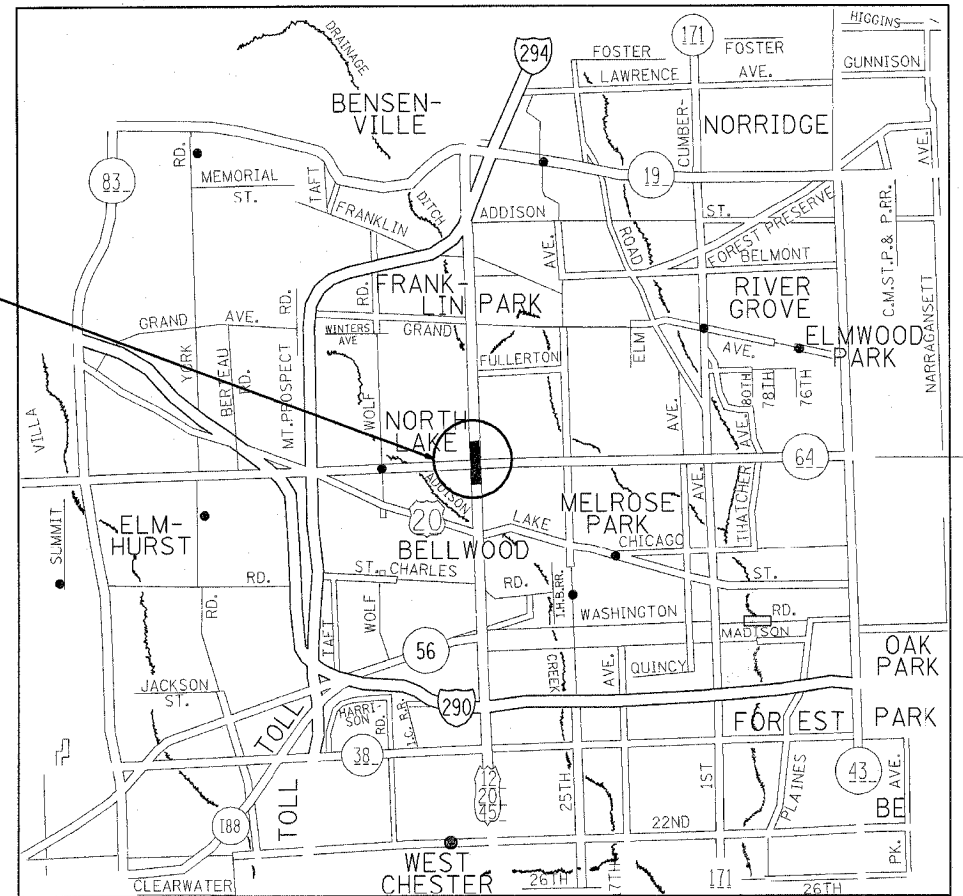
Rev.

CONTRACT NO. 62603

LOCATION 1

IMPROVEMENT LOCATED IN THE VILLAGES OF MELROSE PARK, STONE PARK, NORTH LAKE, BELLWOOD AND FRANKLIN PARK

R 12 E



**IMPROVEMENT LOCATION
US 1245 OVER IL 64**

TRAFFIC DATA
IL 64
 2001 ADT = 57,100
 SPEED LIMIT = 40 MPH

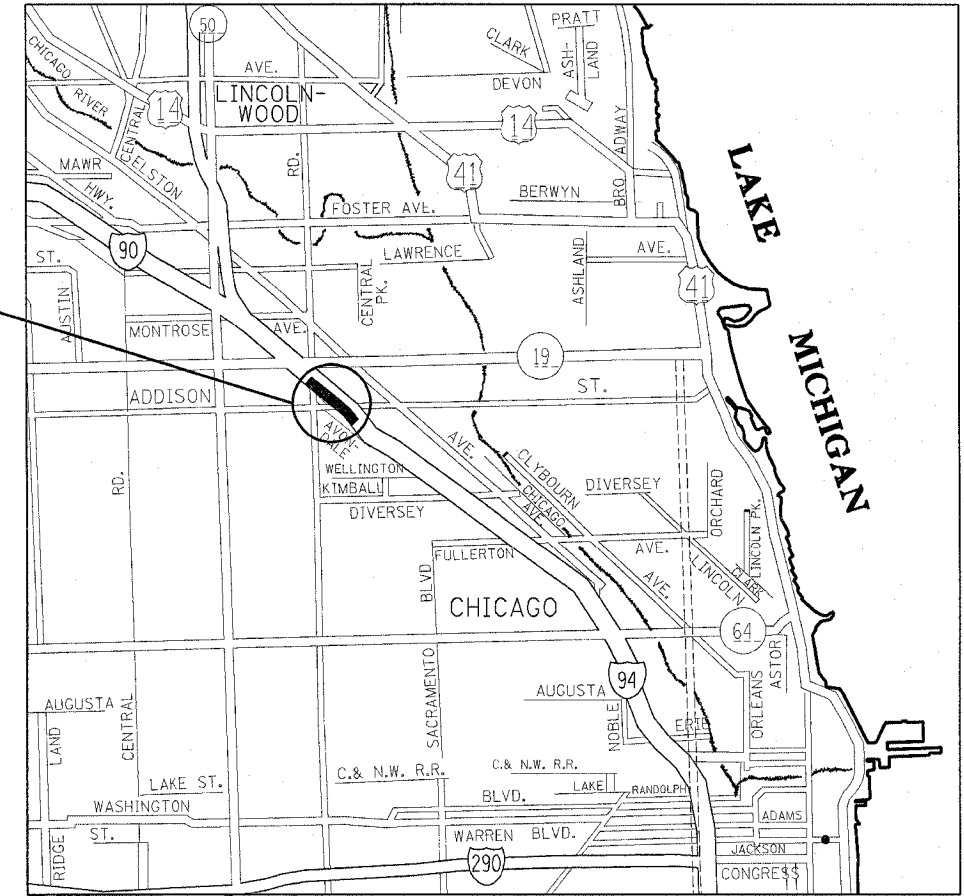
US 1245
 2001 ADT = 45,900
 SPEED LIMIT = 35 MPH

PROVISO TOWNSHIP

LOCATION 2

IMPROVEMENT LOCATED IN THE CITY OF CHICAGO

R 13 E



**IMPROVEMENT LOCATION
AT ADDISON STREET CURVE
FAI 9094 EASTBOUND**

TRAFFIC DATA
I 9094 KENNEDY EXPWY
 2001 ADT = 282,300
 SPEED LIMIT = 55 MPH

JEFFERSON TOWNSHIP

REF
REF
REF

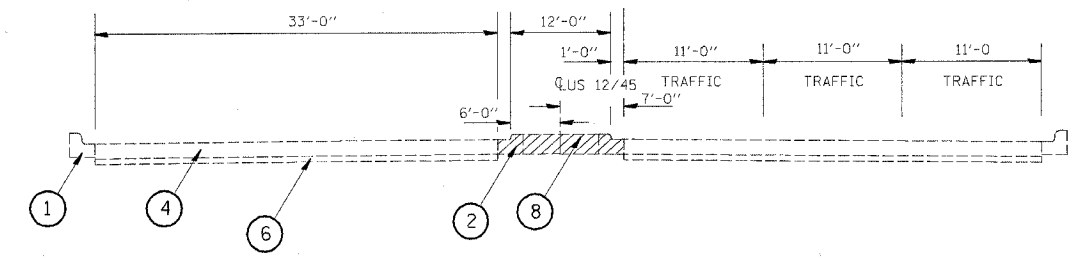
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION MAP
 SCALE: VERT.
 HORIZ.
 DATE 4/16/2005
 DRAWN BY
 CHECKED BY

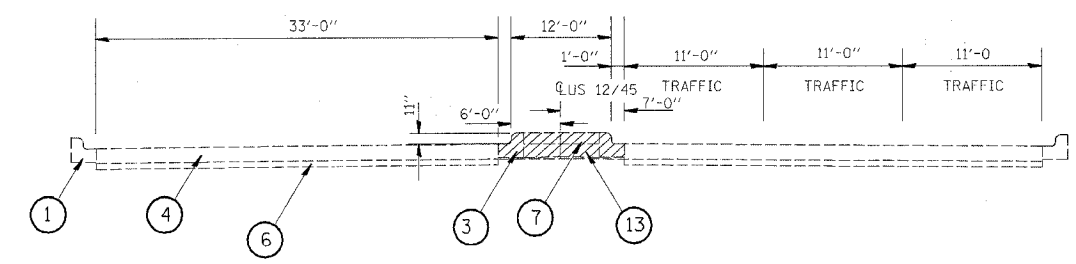
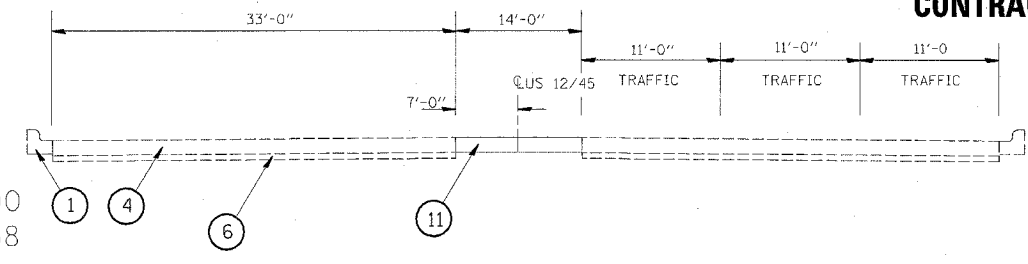
EXISTING

PROPOSED

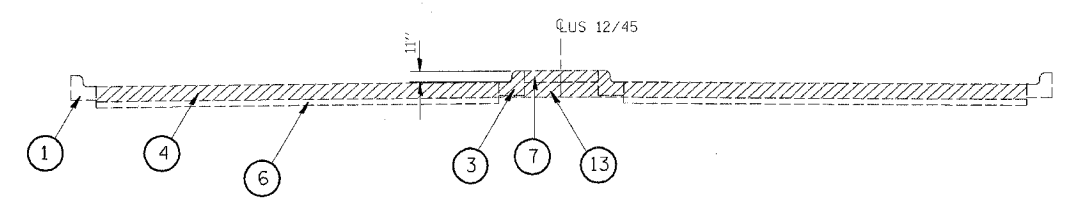
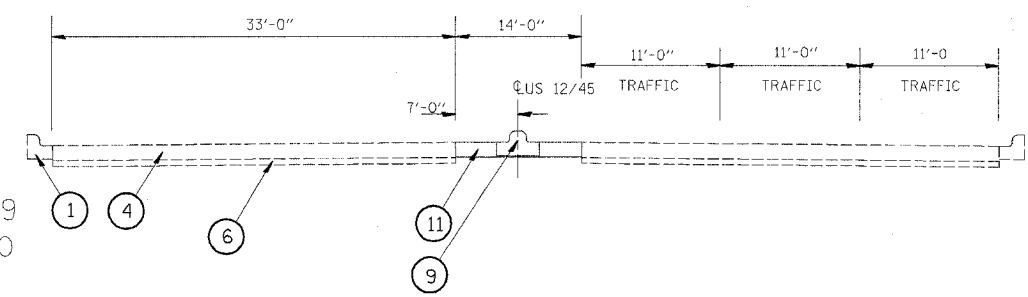
CONTRACT NO. 62603



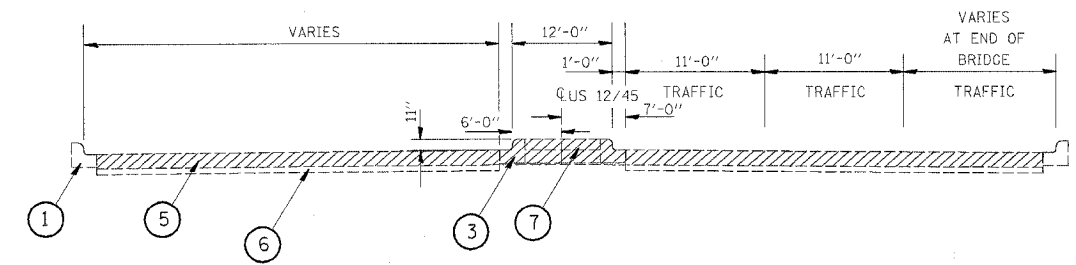
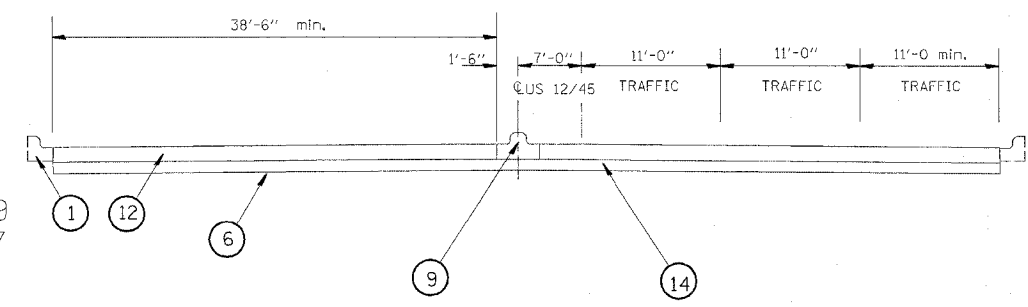
STA 55+54.38 TO 55+70.00
STA 59+25.00 TO 59+54.38



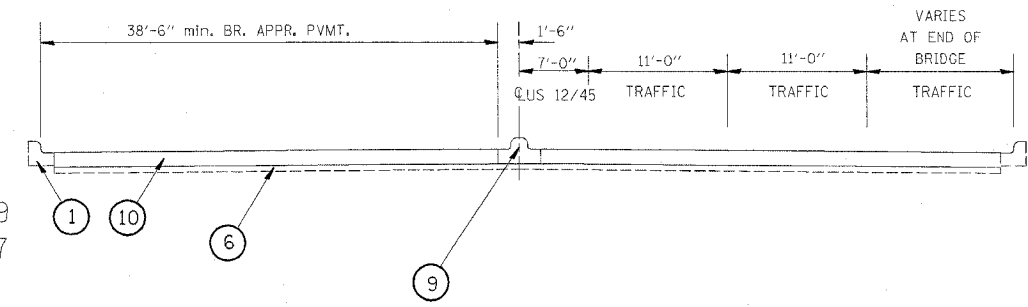
STA 55+70.00 TO 56+71.59
STA 58+37.17 TO 59+25.00



STA 56+71.59 TO 56+81.59
STA 58+27.17 TO 58+37.17



STA 56+81.59 TO 57+01.59
STA 58+07.17 TO 58+27.17



- ① EXISTING CONCRETE COMBINATION CURB AND GUTTER, TYPE B 6.12
- ② EXISTING CONCRETE COMBINATION CURB AND GUTTER, TYPE M 2.12
- ③ EXISTING CONCRETE COMBINATION CURB AND GUTTER, TYPE B 11.12
- ④ EXISTING PCC PAVEMENT 10"
- ⑤ EXISTING APPROCH PAVEMENT

- ⑥ EXISTING GRANULAR SUB-BASE
- ⑦ EXISTING NONTRAVERSABLE CONCRETE MEDIAN SURFACE, 4"
- ⑧ EXISTING BITUMINOUS CONCRETE MEDIAN 12"
- ⑨ PROPOSED CURB AND GUTTER (SPECIAL)
- ⑩ PROPOSED BRIDGE APPROACH PAVEMENT

- ⑪ PROPOSED BITUMINOUS PAVEMENT 10" (SFC. CRSE. 2", LEV. BINDER 8")
- ⑫ PROPOSED BRIDGE APPR. PVMT. CONNECTOR (PCC)
- ⑬ EXISTING 17" EARTH FILL
- ⑭ CONCRETE PAD

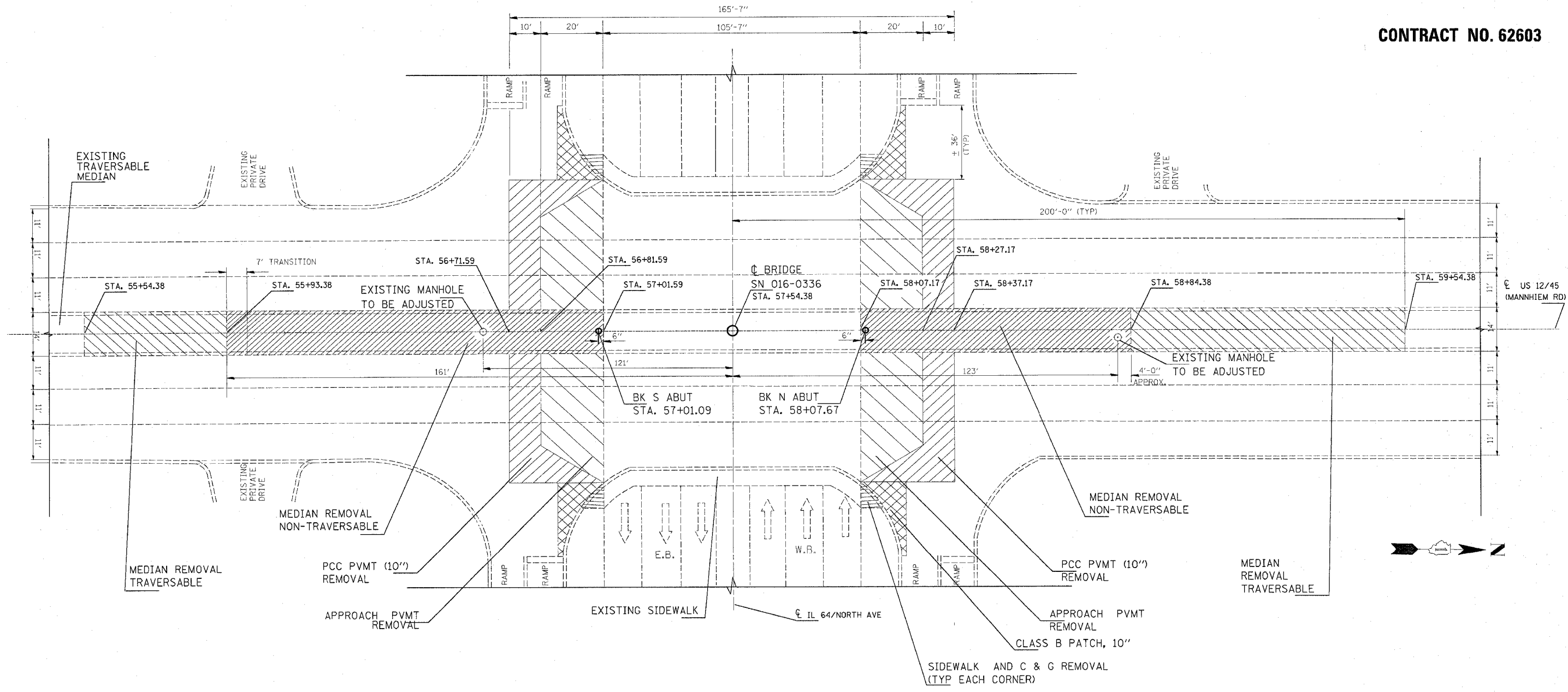
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ROADWAY TYPICAL SECTIONS
LOC 1: US 12/ 45
(MANNHEIM RD)

SCALE: VERT. DATE 4/16/2005
HORIZ. DATE 4/16/2005

DRAWN BY
CHECKED BY

CONTRACT NO. 62603



PLAN
(SHOWING REMOVAL)

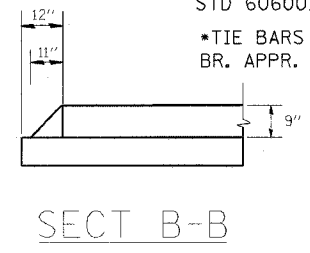
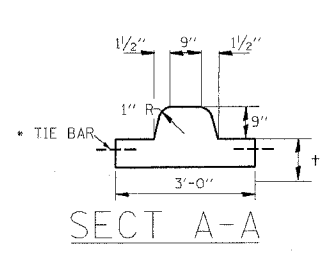
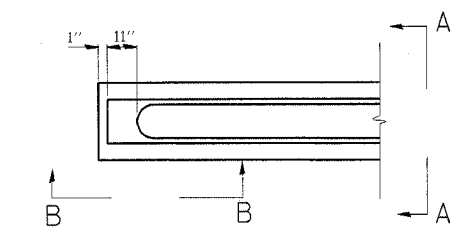
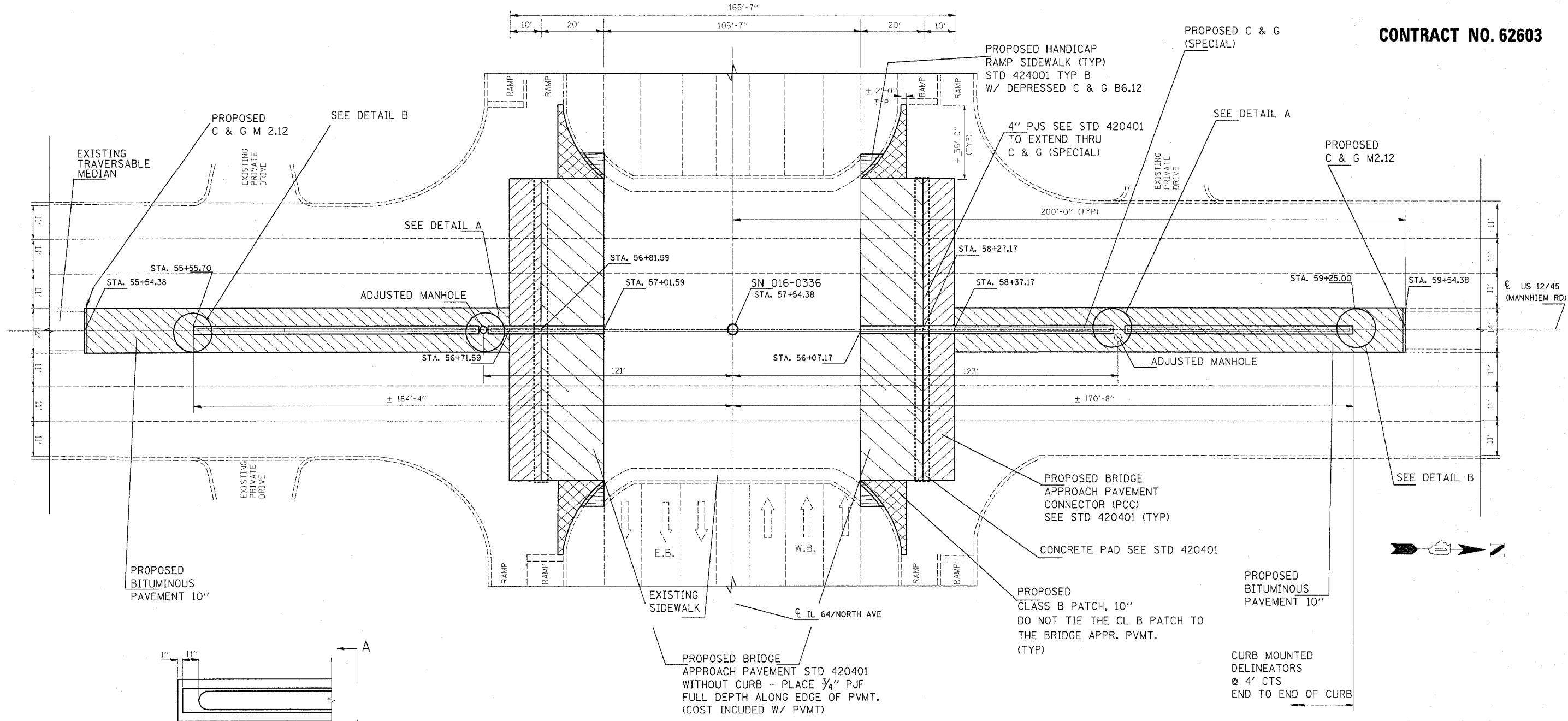
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ROADWAY PLAN
LOC 1: US 12/ 45
(MANNHEIM RD)
REMOVAL

SCALE: VERT. _____
 HORIZ. _____
 DATE 4/16/2005

DRAWN BY _____
 CHECKED BY _____

CONTRACT NO. 62603

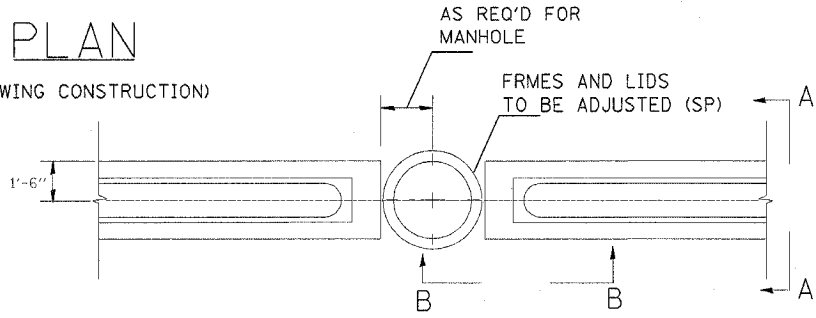


± = THICKNESS OF ADJACENT BITUM. PVMT. OR PCC BRIDGE APPR. PVMT OR BRIDGE APPR. PVMT CONNECTOR (PCC) FOR ADDITIONAL NOTES AND DETAILS SEE STD 606001

• TIE BARS USED WHEN ADJACENT TO PCC BR. APPR. PVMT. AND PCC CONECTOR PVMT.

PLAN

(SHOWING CONSTRUCTION)



DETAIL "A"

REVISIONS	
NAME	DATE

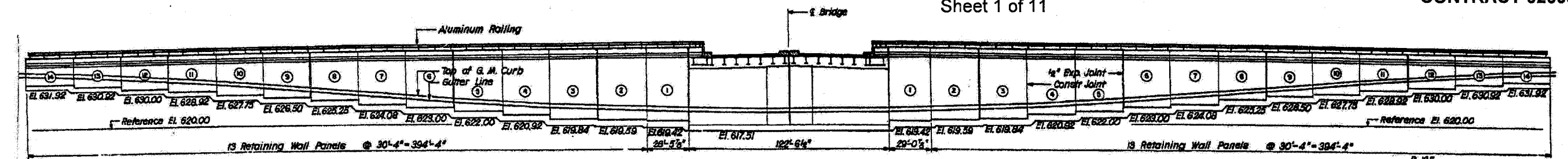
ILLINOIS DEPARTMENT OF TRANSPORTATION
ROADWAY PLAN
 LOC 1: US 12/ 45
 (MANNHEIM RD)
CONSTRUCTION

SCALE: VERT. HORIZ. DATE 4/16/2005 DRAWN BY CHECKED BY

FAP 330,	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	9

Sheet 1 of 11

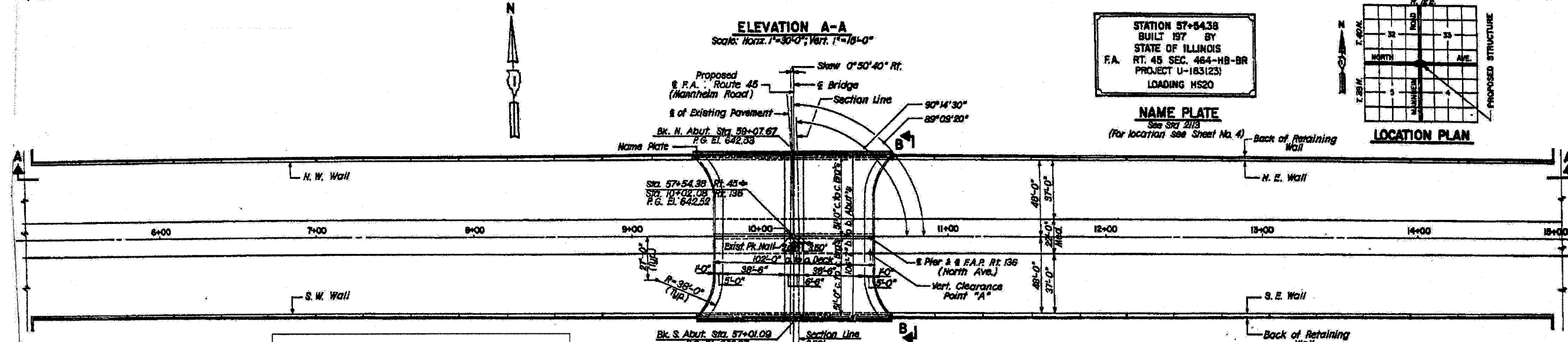
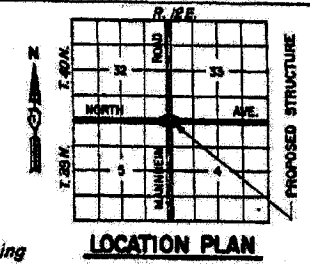
CONTRACT 62603



ELEVATION A-A
Scale: Horiz. 1"=30'-0"; Vert. 1"=10'-0"

STATION 57+54.38
BUILT 197 BY
STATE OF ILLINOIS
F.A. RT. 45 SEC. 464-HB-BR
PROJECT U-183(23)
LOADING HS20

NAME PLATE
See Sta 213
(For location see Sheet No. 4)



EXISTING DETAILS FOR INFORMATION ONLY

TOTAL BILL OF MATERIALS

PAY ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	113.9
Concrete Superstructure	Cu Yd	128.3
Bar Splicers	Each	276
Reinforcement Bars Epoxy Coated	Pound	21,420
Deck Slab Repair Full Depth, Type II	Sq Yd	16
Epoxy Crack Sealing	Foot	121
Bridge Deck Hydro-Scarification 1/2"	Sq Yd	859
Bridge Deck Latex Concrete Overlay, 2 1/4"	Sq Yd	859
Bituminous Concrete Removal (Deck)	Sq Yd	859
Bridge Deck Grooving	Sq Yd	1,057
Protective Coat	Sq Yd	2,235
Protective Shield	Sq Yd	1,230

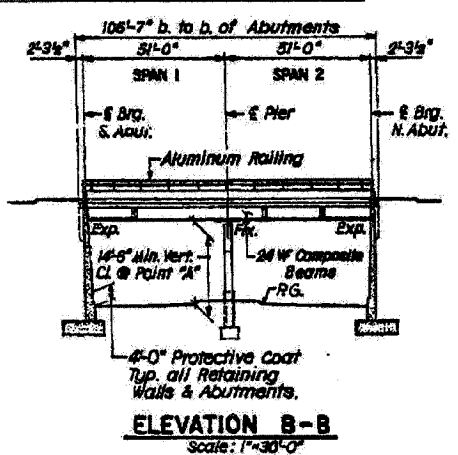
General Notes
Reinforcement bars shall conform to the requirements of AASHTO M-31, M322, Grade 60.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

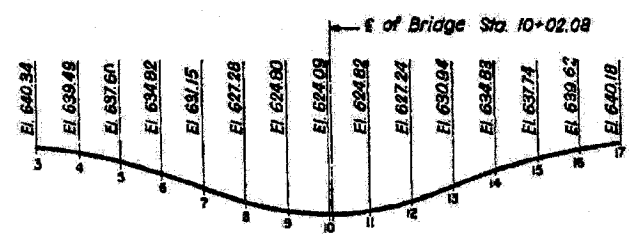
Any reinforcement bars that are damaged during concrete removal shall be replaced with a approved bar splicer or anchorage system. Cost shall be included in the cost of "Concrete Removal".

ILLINOIS DEPARTMENT OF TRANSPORTATION
GERNERAL PLAN AND ELEVATION
LOC 1: US 12/ 45 OVER IL 64
SN 016-0336

PROPOSED PROFILE OF F.A. Rt. 45
(Top of Fill surfacing @ applied grade.)



ELEVATION B-B
Scale: 1"=30'-0"

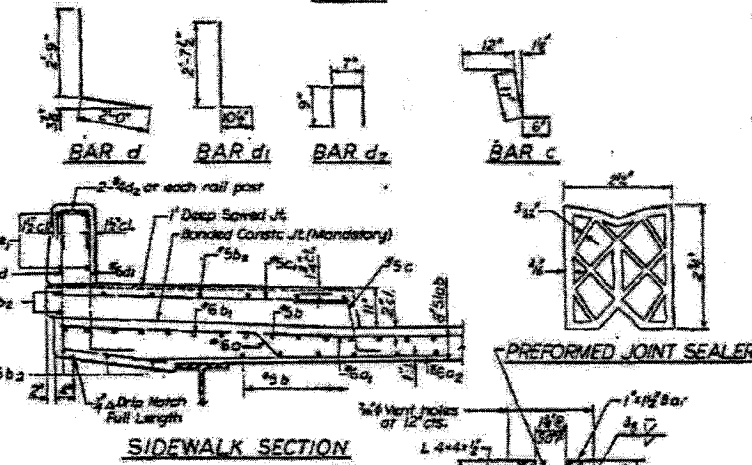
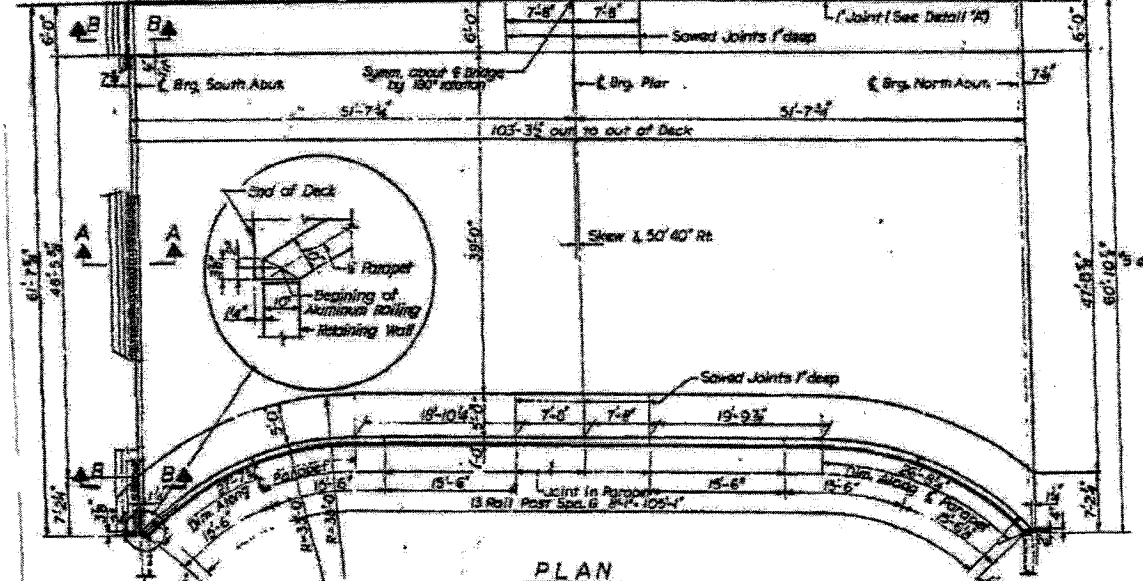
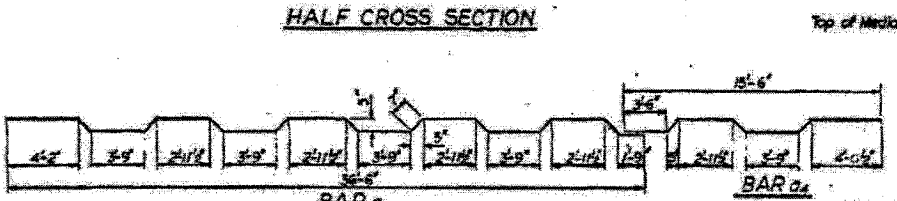
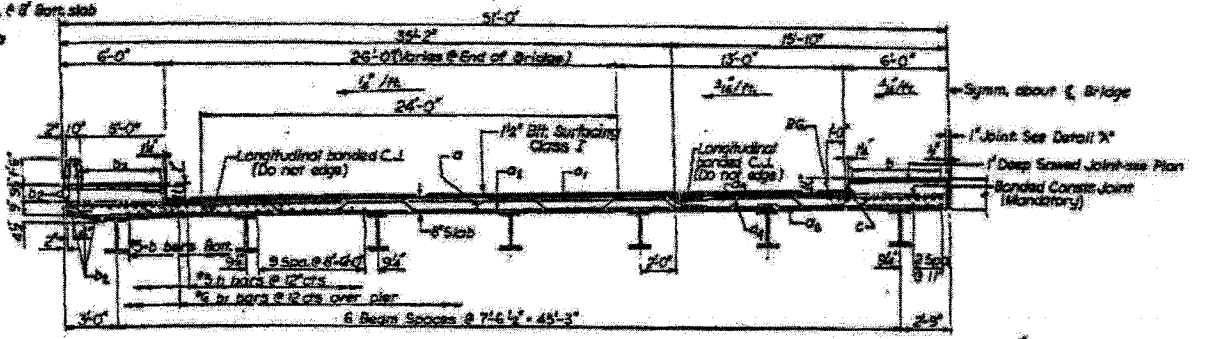
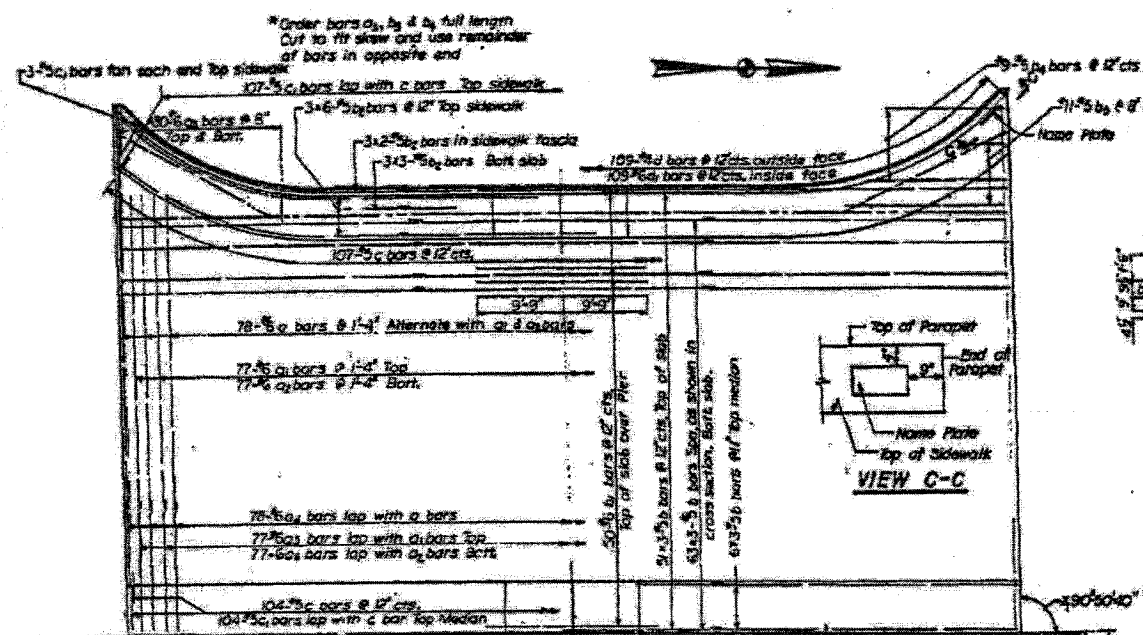


EXISTING PROFILE OF F.A.P. Rt. 136 (NORTH AVE.)

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	10

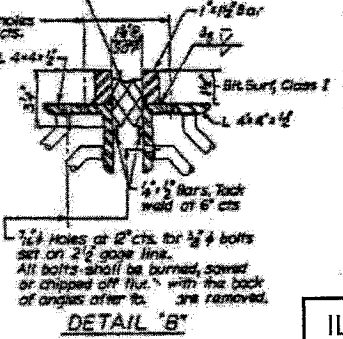
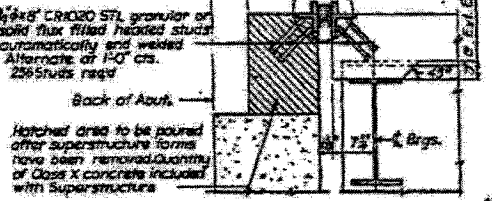
Sheet 2 of 11

CONTRACT 62603



BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a	156	#6	38'-0"	
a1	154	#6	36'-4"	
a2	154	#6	40'-0"	
a3	120	#6	14'-2"	
a4	156	#6	16'-0"	
a5	154	#6	15'-8"	
a6	154	#6	10'-10"	
b1	100	#6	19'-6"	
b2	66	#5	3'-0"	
b3	22	#5	23'-0"	
b4	18	#5	20'-0"	
b	120	#5	35'-2"	
c	422	#5	2'-3"	
c1	434	#5	5'-0"	
d	218	#4	4'-9"	L
d1	218	#6	3'-6"	
d2	56	#4	2'-1"	
e	48	#5	15'-2"	
e1	76	#5	7'-2"	
Reinforcement bars				Lbs. 78,170
Class X Concrete				Cu Yds. 389.4



Notes: Bars indicated thus S12-3 indicates 3 lines of bars with 3 lights per line. 14#1 bar laps #4 dia. For Section B-B see Sh. No. 8

ILLINOIS DEPARTMENT OF TRANSPORTATION
 EXISTING BRIDGE PLAN SUPERSTRUCTURE
 LOC 1: US 12/ 45 OVER IL 64
 SN 016-0336

FOR INFORMATION ONLY

4 APPROACH SLAB
BAR SCHEDULE

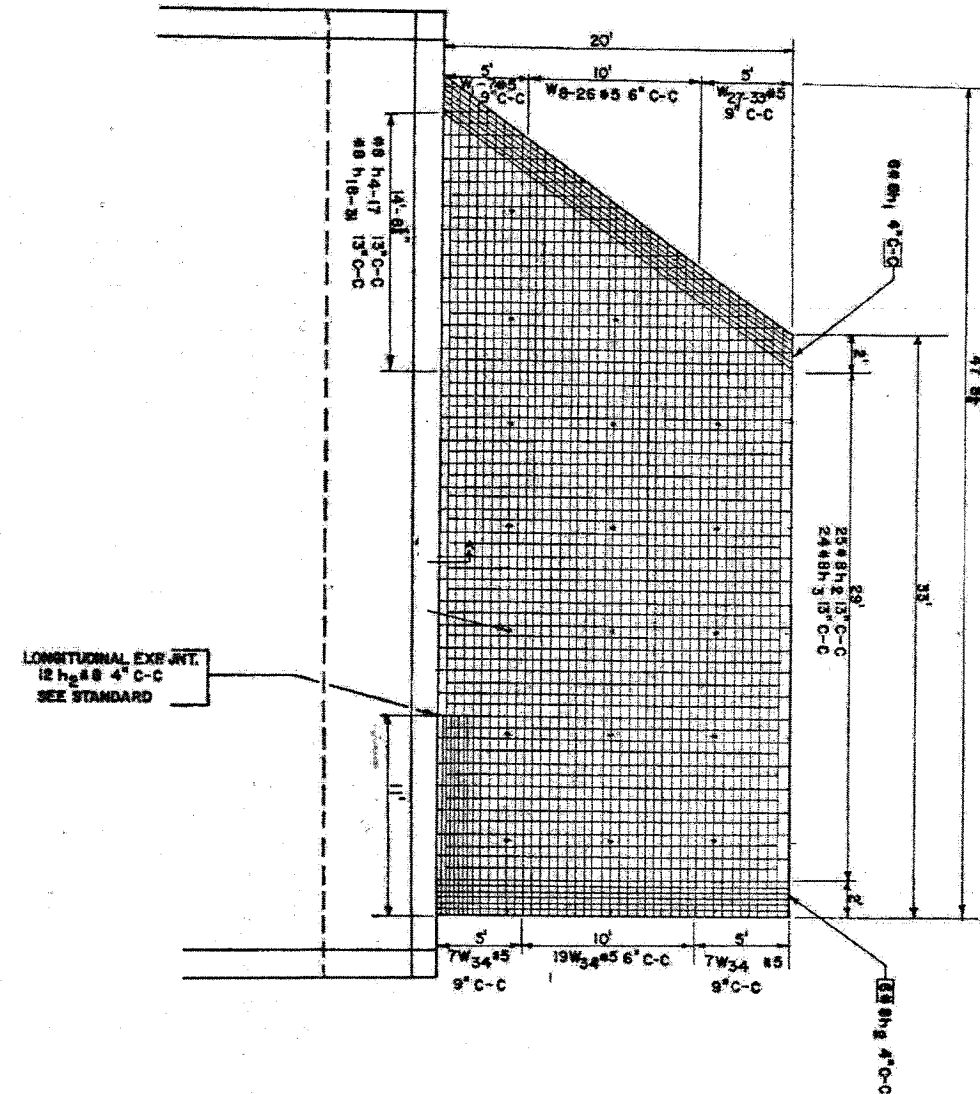
TYPE	NO.	SIZE	LENGTH	SHAPE	TYPE	NO.	SIZE	LENGTH	SHAPE
H 1	24	8	26' 2"	C	W 4	4	5	34' 2 1/8"	—
H 2	172	8	21' 4"	C	W 5	4	5	33' 7 1/2"	—
H 3	96	8	17' 4"	C	W 6	4	5	33' 0 7/8"	—
H 4	4	8	20' 8"	C	W 7	4	5	32' 6 3/8"	—
H 5	4	8	19' 2 3/8"	C	W 8	4	5	32' 1 1/8"	—
H 6	4	8	17' 8 5/8"	C	W 9	4	5	31' 9 1/2"	—
H 7	4	8	16' 3"	C	W 10	4	5	31' 5 1/8"	—
H 8	4	8	14' 9 3/8"	C	W 11	4	5	31' 0 3/4"	—
H 9	4	8	13' 3 3/4"	C	W 12	4	5	30' 8 1/4"	—
H 10	4	8	11' 8"	C	W 13	4	5	30' 3 7/8"	—
H 11	4	8	10' 2 3/8"	C	W 14	4	5	29' 11 3/8"	—
H 12	4	8	8' 8 3/4"	C	W 15	4	5	29' 7"	—
H 13	4	8	7' 3"	C	W 16	4	5	28' 2 5/8"	—
H 14	4	8	5' 9 3/8"	C	W 17	4	5	28' 10 1/4"	—
H 15	4	8	4' 3 3/4"	C	W 18	4	5	28' 5 3/4"	—
H 16	4	8	2' 10"	C	W 19	4	5	28' 1 3/8"	—
H 17	4	8	1' 3 1/2"	C	W 20	4	5	27' 9"	—
H 18	4	8	17' 11 1/8"	C	W 21	4	5	27' 4 1/2"	—
H 19	4	8	16' 5 1/2"	C	W 22	4	5	27' 0 1/8"	—
H 20	4	8	14' 11 7/8"	C	W 23	4	5	26' 7 3/4"	—
H 21	4	8	13' 6 1/8"	C	W 24	4	5	26' 3 1/4"	—
H 22	4	8	12' 0 1/2"	C	W 25	4	5	25' 10 7/8"	—
H 23	4	8	10' 6 7/8"	C	W 26	4	5	25' 6 3/8"	—
H 24	4	8	8' 11 1/4"	C	W 27	4	5	25' 2"	—
H 25	4	8	7' 5 1/2"	C	W 28	4	5	24' 7 3/4"	—
H 26	4	8	5' 11 7/8"	C	W 29	4	5	24' 0 3/4"	—
H 27	4	8	4' 6 1/4"	C	W 30	4	5	23' 6 1/4"	—
H 28	4	8	5' 0 1/2"	C	W 31	4	5	22' 11 1/2"	—
H 29	4	8	1' 7"	C	W 32	4	5	22' 4 7/8"	—
W 1	4	5	35' 10"	—	W 33	4	5	21' 10 1/4"	—
W 2	4	5	35' 3 1/2"	—	W 34	43	5	10' 8"	—
W 3	4	5	34' 8 3/4"	—					

REINFORCING BARS 23,271 LBS. CLASS X CONCRETE 1168 CU YD

Sheet 3 of 11

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	11

CONTRACT 62603



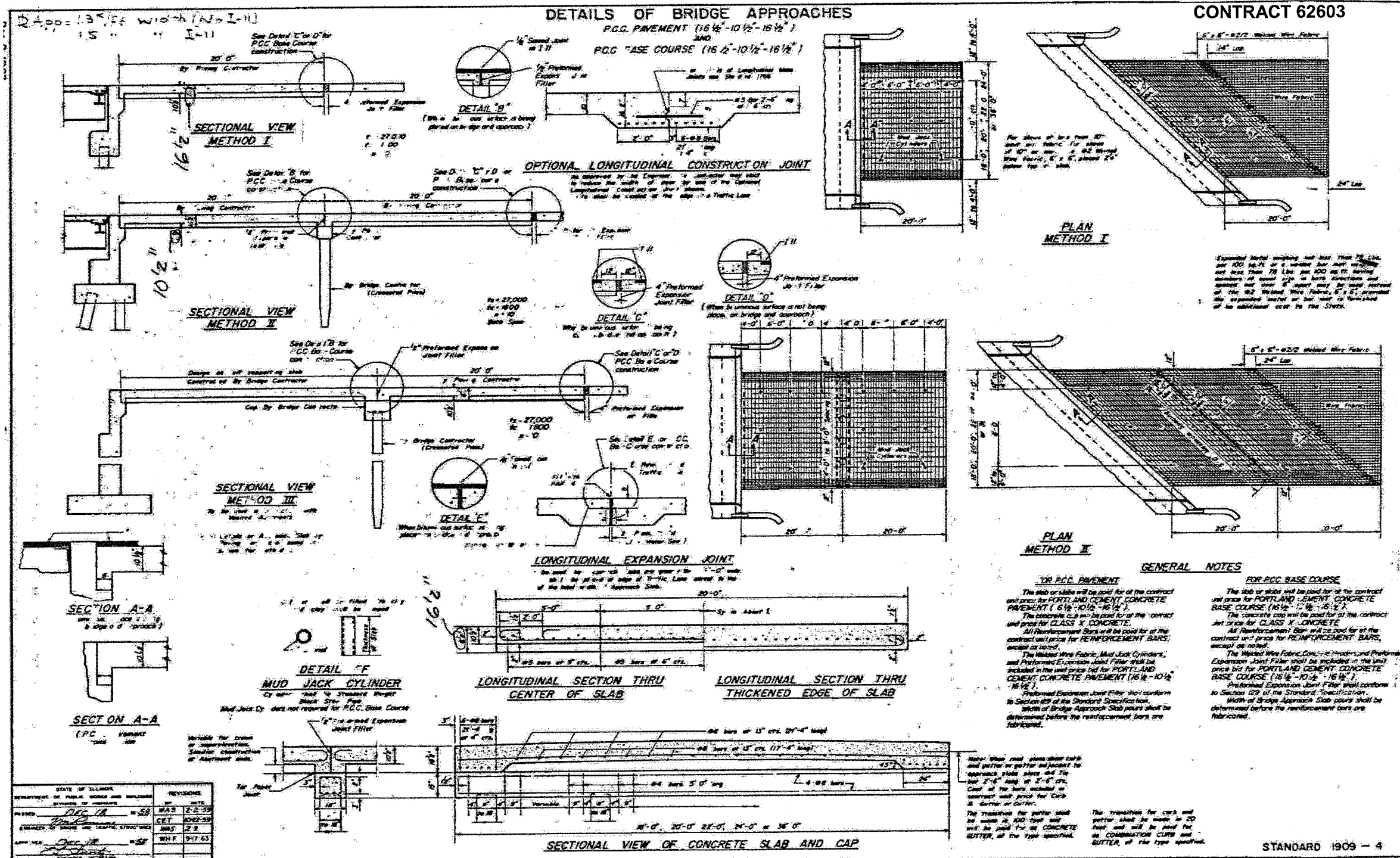
APPROACH SLAB FOR ALL 4 APPROACHES

FOR ADDITIONAL DETAILS SEE STD 1909
ON SHT. 4 OF 11.

FOR INFORMATION
ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
APPROACH SLAB
LOC 1: US 12/ 45 OVER IL 64
SN 016-0336

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	12



FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DETAILS OF BRIDGE APPROACHES
 LOC 1: US 12/ 45 OVER IL 64
 SN 016-0336

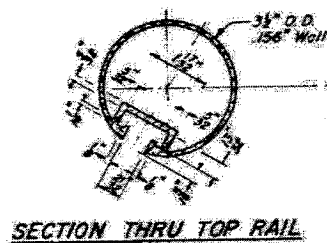
FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	13

Sheet 5 of 11

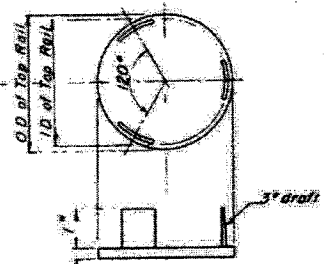
CONTRACT 62603

NOTES:

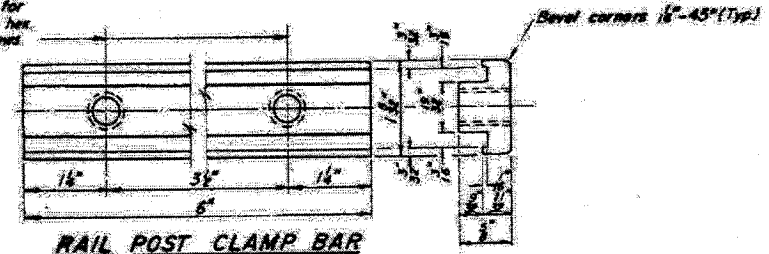
All Posts shall be normal to parapet.
 All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
 All joints in rail shall be spliced per detail.
 Provide 1-1/2" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade - high spots shall be ground and low spots shimmed.
 Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per linear foot for ALUMINUM RAILING, TYPE L.
 Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T3 with min. yield 35 ksi, tensile 36 ksi, and elongation of 10% in 2 inches.



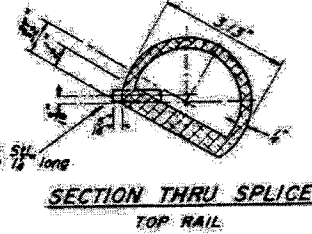
SECTION THRU TOP RAIL



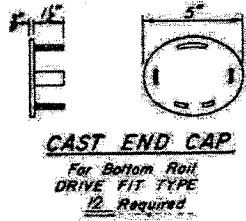
CAST END CAP
For Top Rail
1/2 Required



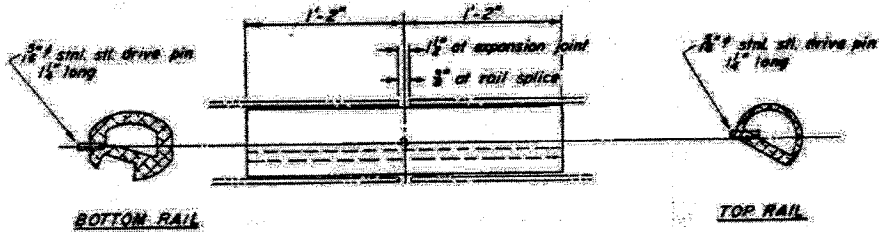
RAIL POST CLAMP BAR
For Top Rail



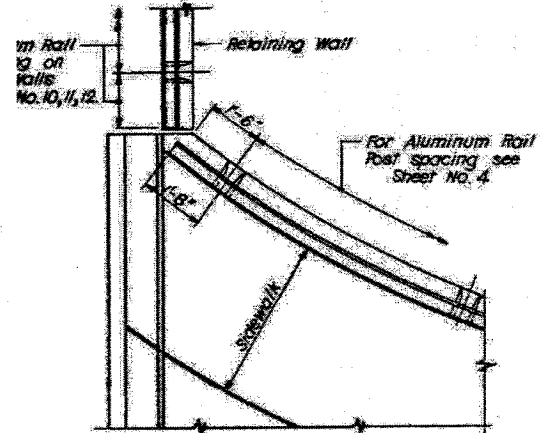
SECTION THRU SPLICE
TOP RAIL



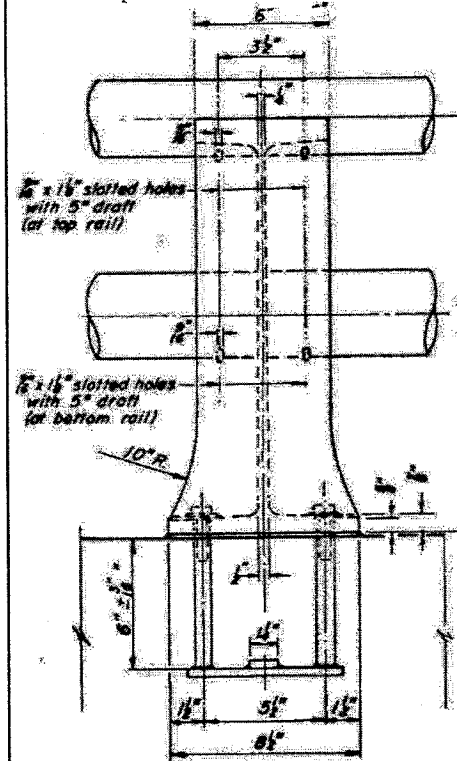
CAST END CAP
For Bottom Rail
DRIVE FIT TYPE
1/2 Required



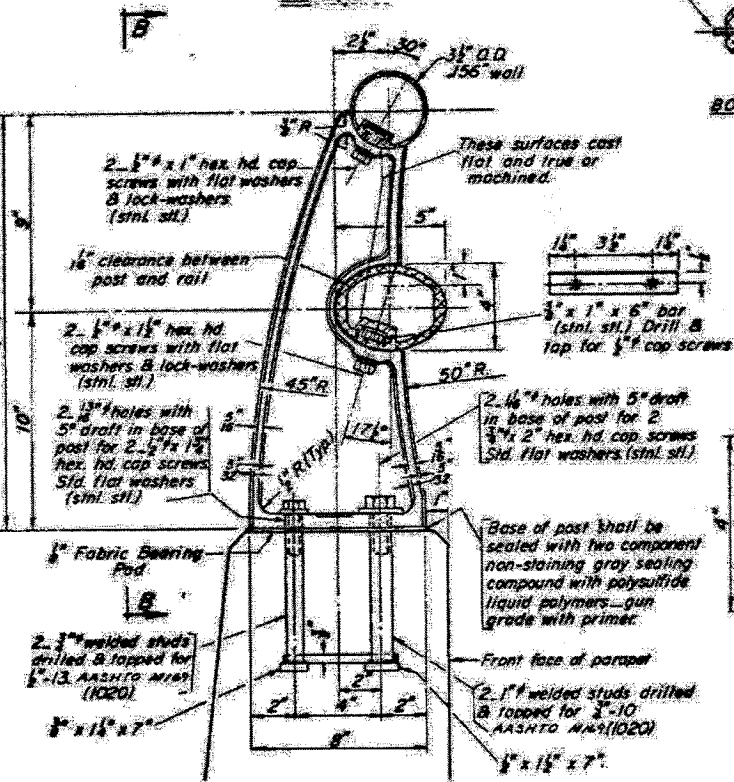
RAIL SPLICE



PLAN

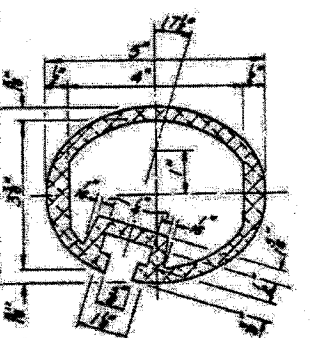


VIEW B-B

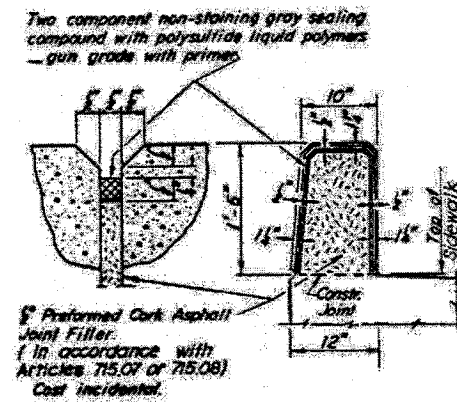


SECTION A-A

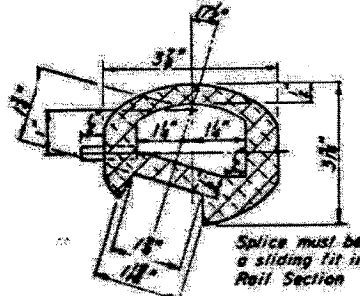
RAIL POST DETAILS



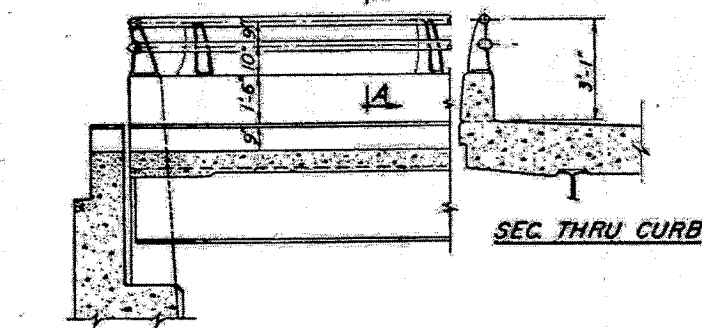
SEC THRU ELLIPTICAL
RAIL SECTION



PARAPET JOINT DETAIL



SEC THRU SPLICE



INSIDE VIEW AT ABUTMENT
DETAIL "C"

BILL of MATERIALS

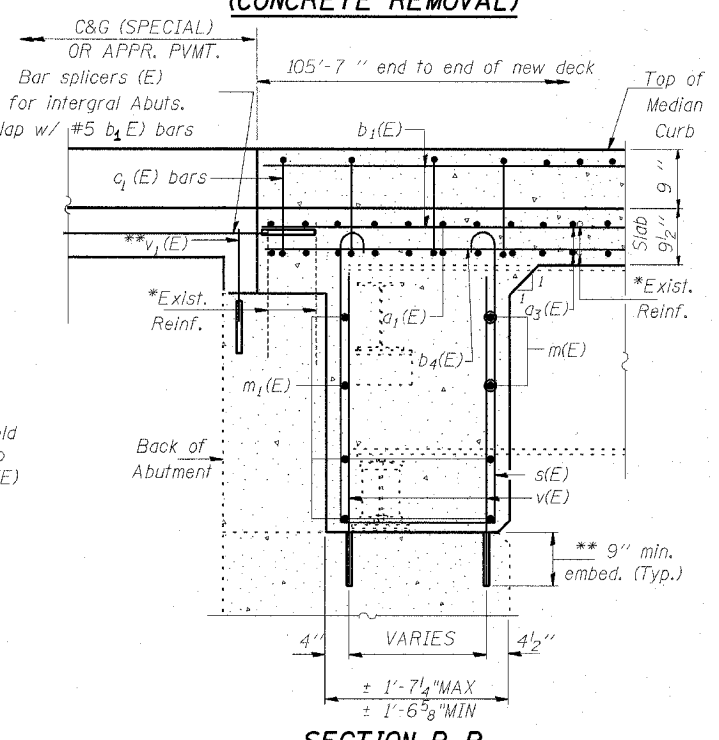
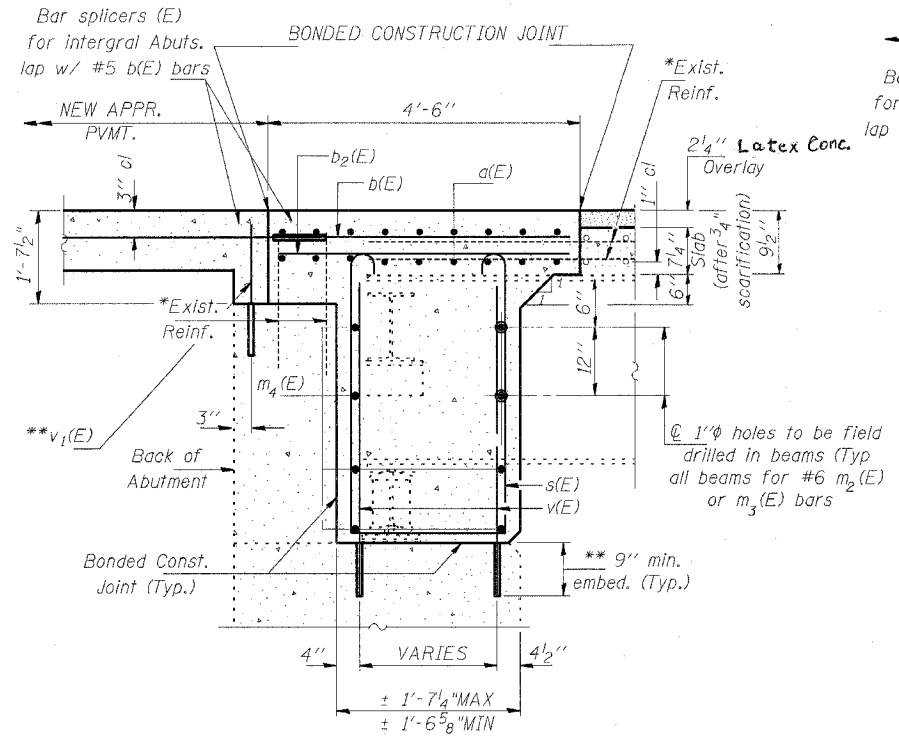
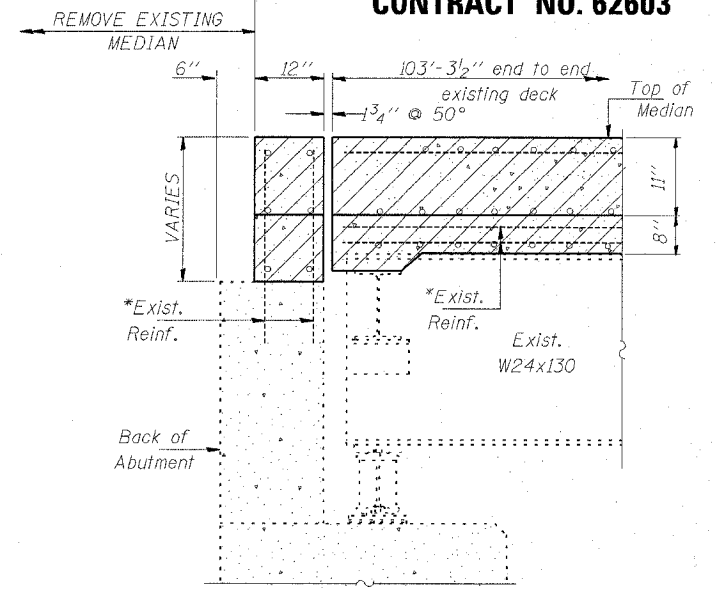
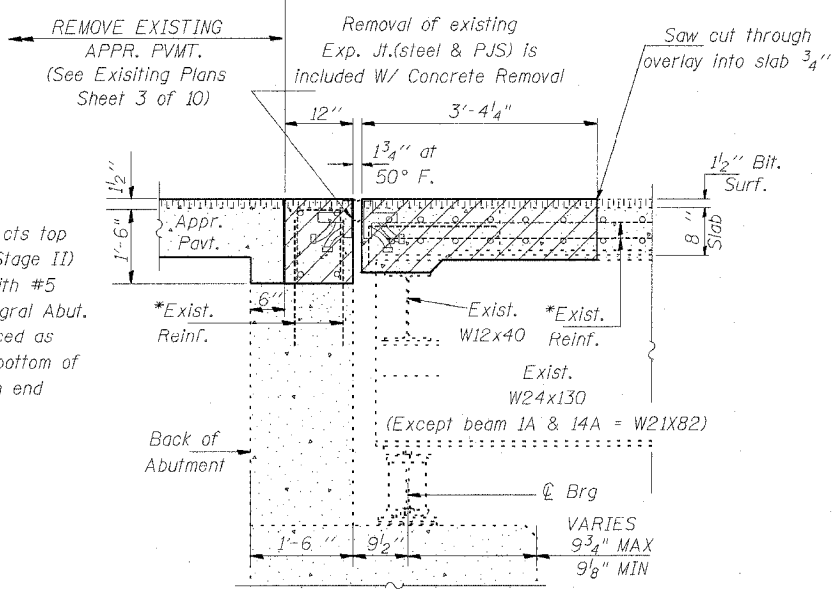
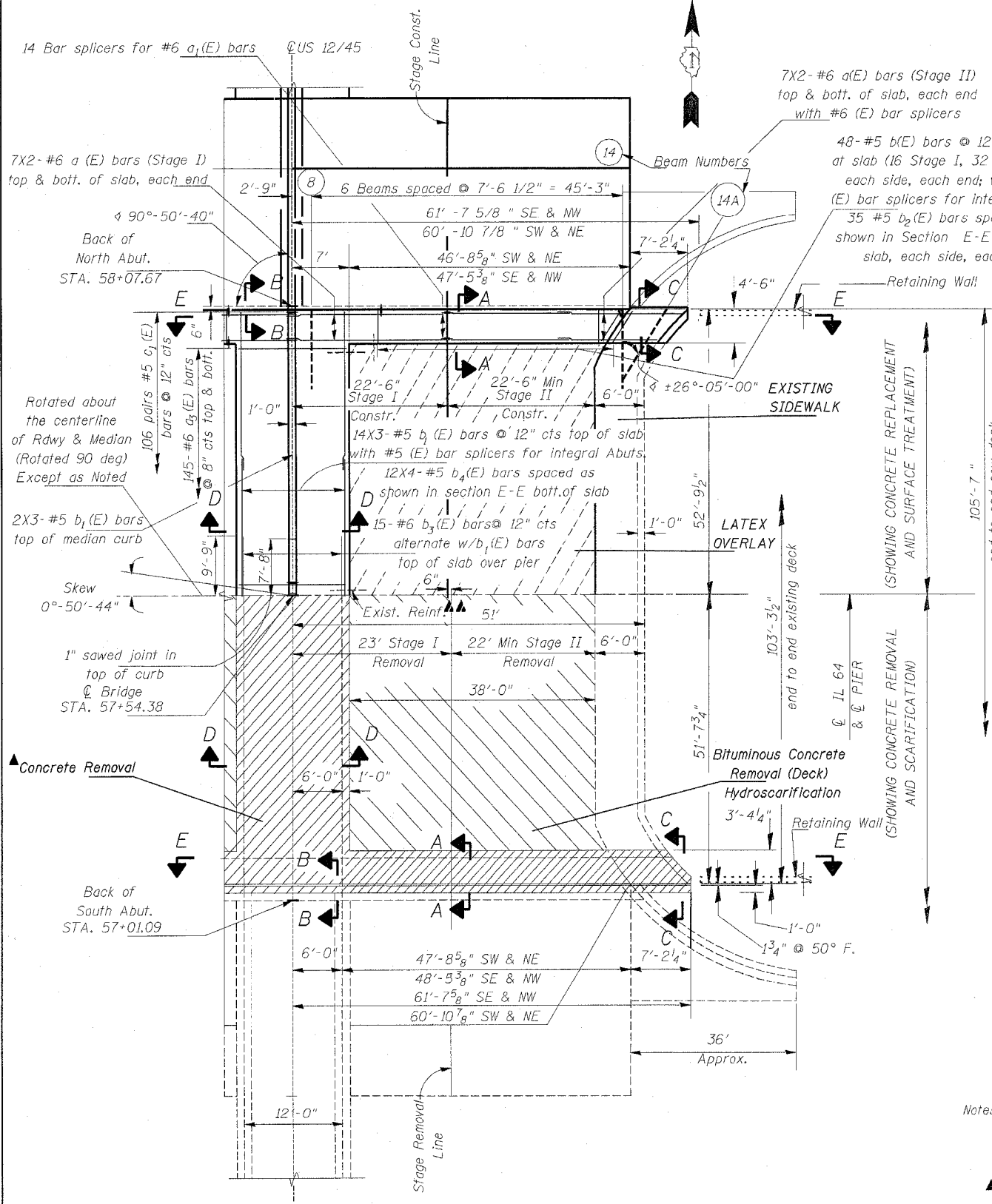
Item	Unit	Quantity
ALUMINUM RAILING, TYPE L	Lin. Ft.	1,909

Stainless Steel machine bolts or cap screws to be in accordance with Art. 710.37 (a) of Std. Specs except the tensile strength shall modified to 100,000 p.s.i.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ALUMINUM RAILING
 LOC 1: US 12/ 45 OVER IL 64
 SN 016-0336

FOR INFORMATION ONLY

CONTRACT NO. 62603



Notes: See Sheet 7 of 11 for Sections C-C & D-D, Bar Details. See Sheet 7 of 11 for Bill of Material. See Sheet 8 of 11 for Section E-E.

▲ Any bituminous removed over the Concrete Removal area is included in the cost of "Concrete Removal".

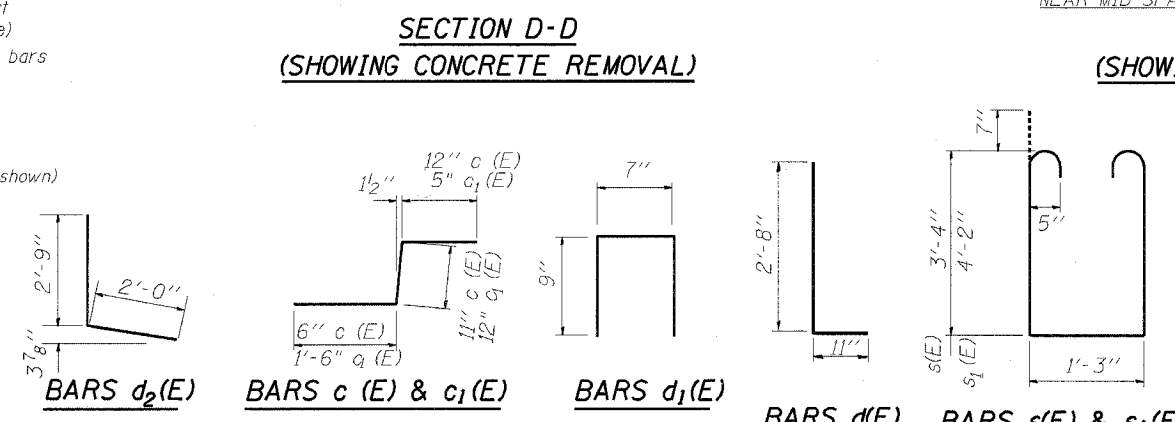
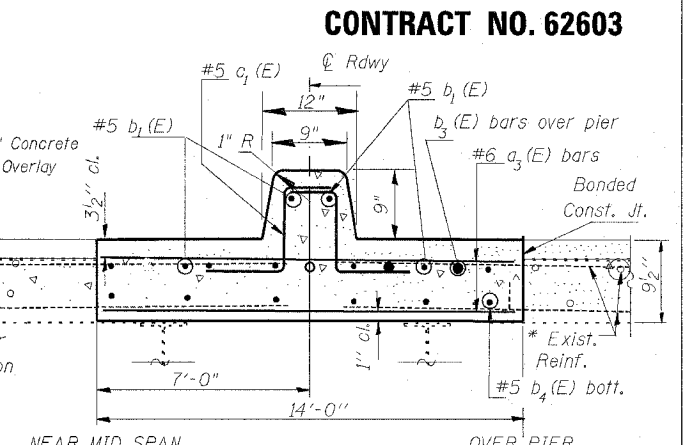
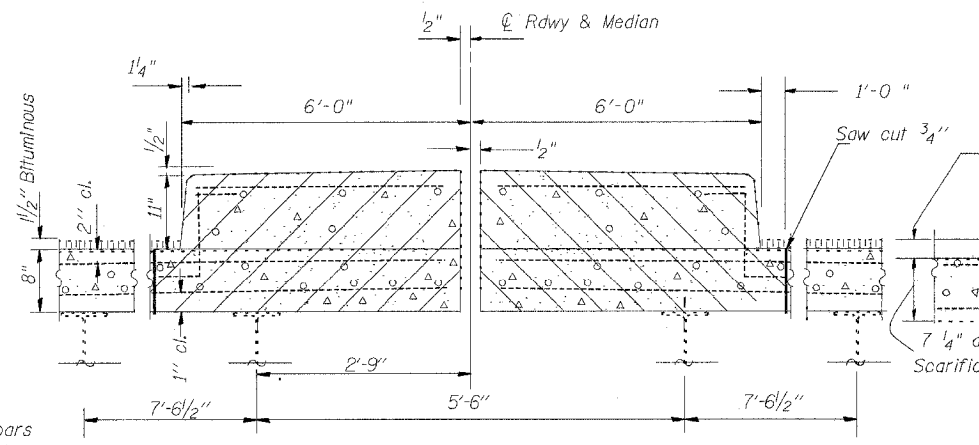
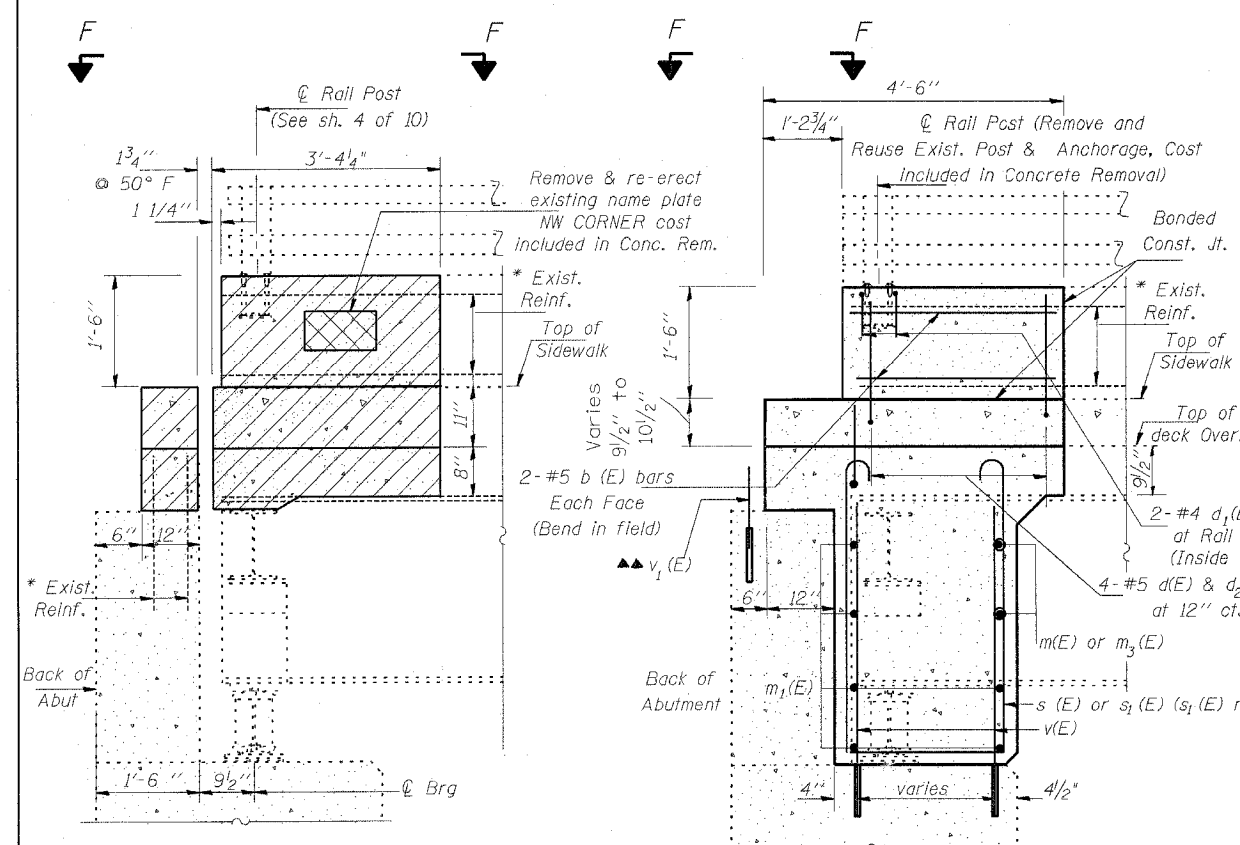
▲▲ 3'-0" existing reinforcement to extend into removal area.

* Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction.

** Epoxy grout #5v (E) & v₁(E) bars in 7/8" φ drilled holes. See Std. Specs. Cost included with Reinforcement Bars, Epoxy Coated.

For Bar Splicer details, see sheet 9 of 10.

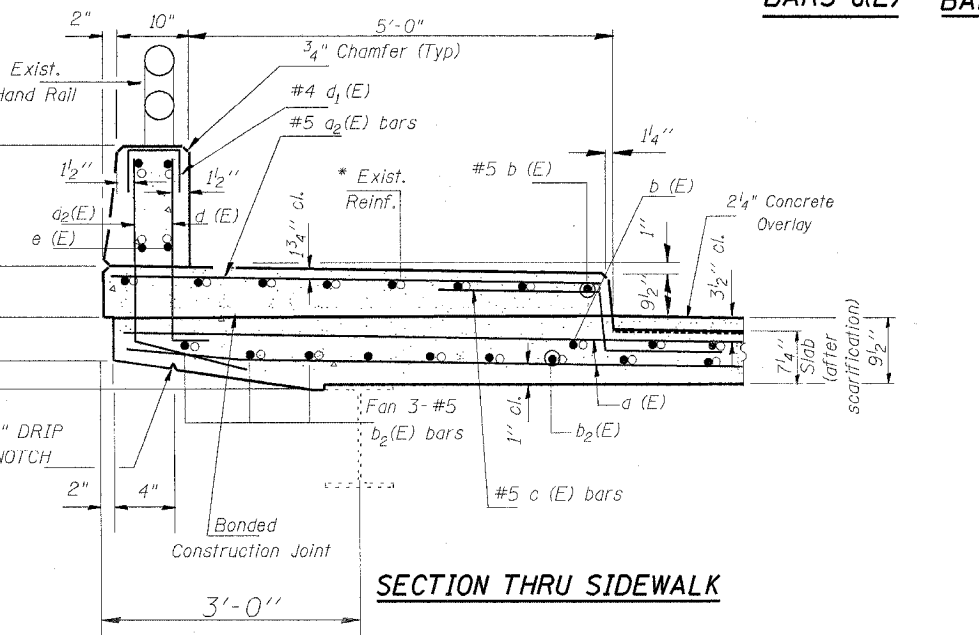
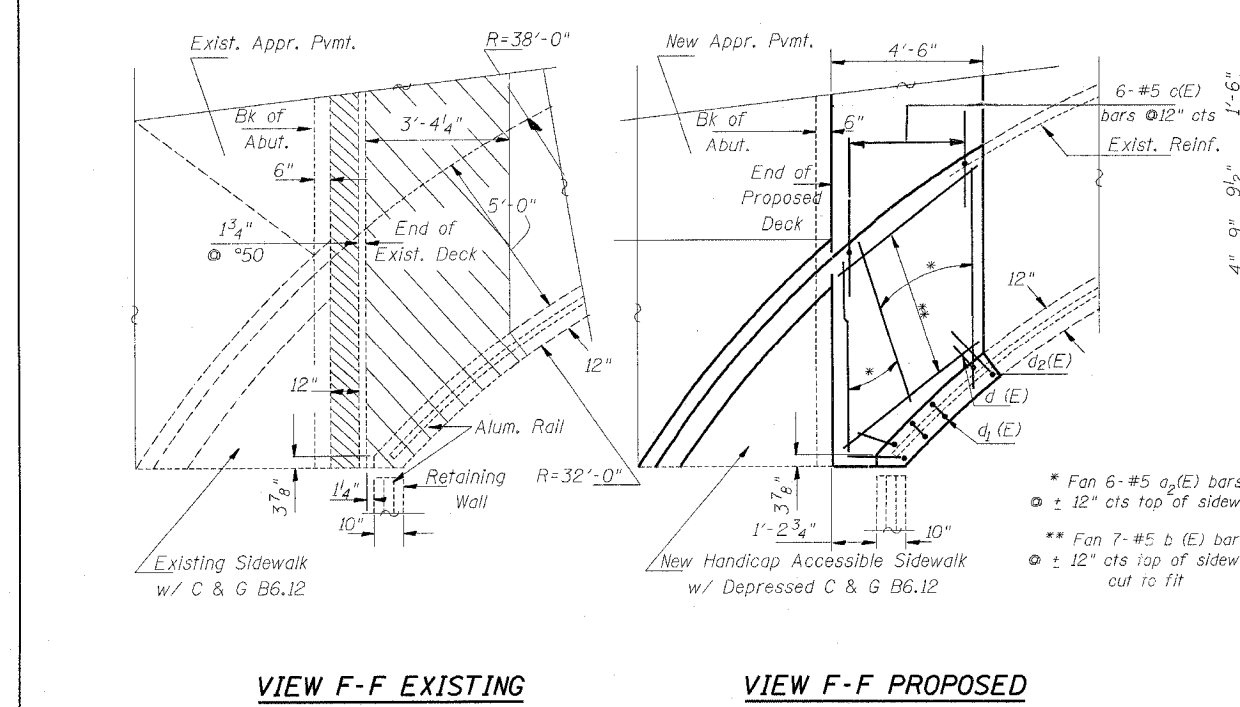
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		BRIDGE PLAN LOC 1: US 12/ 45 OVER IL 64 SN 016-0336 SCALE: VERT. DRAWN BY HORIZ. CHECKED BY DATE 4/16/2005



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	56	#6	20'-10"	
a ₁ (E)	28	#6	23'-10"	
a ₂ (E)	24	#5	7'-0"	
a ₃ (E)	290	#6	13'-8"	
b(E)	220	#5	4'-3"	
b ₁ (E)	42	#5	36'-6"	
b ₂ (E)	152	#5	4'-3"	
b ₃ (E)	15	#6	19'-6"	
b ₄ (E)	48	#5	27'-9"	
c(E)	24	#5	2'-5"	
c ₁ (E)	212	#5	2'-11"	
d(E)	16	#5	3'-7"	
d ₁ (E)	8	#4	2'-1"	
d ₂ (E)	16	#5	4'-9"	
e(E)	16	#4	3'-0"	
m(E)	8	#6	26'-6"	
m ₁ (E)	24	#6	26'-6"	
m ₂ (E)	16	#6	15'-6"	
m ₃ (E)	8	#6	13'-3"	
m ₄ (E)	48	#6	21'-0"	
s(E)	184	#5	9'-1"	
s ₁ (E)	16	#5	10'-9"	
v(E)	200	#5	4'-3"	
v ₁ (E)	246	#5	1'-10"	
Concrete Removal		Cu. Yd.	113.9	
Concrete Superstructure		Cu. Yd.	128.3	
Reinforcement Bars, Epoxy Coated		Pound	21,420	
Bar Splicers		Each	276	

Reinforcement bars designated (E) shall be epoxy coated.

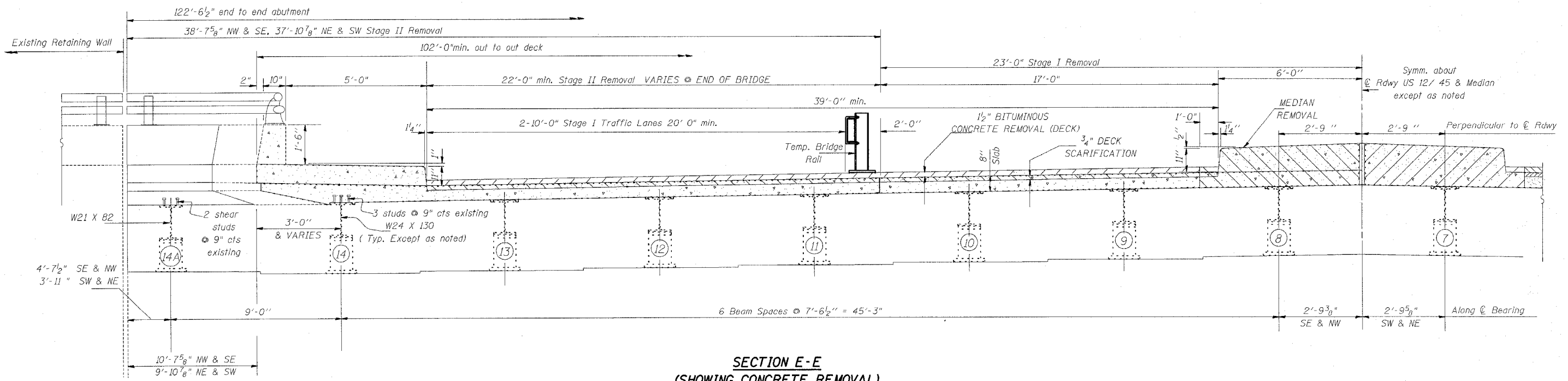


Min Bar Laps
 #5 bar - 1'-8"
 #6 bar - 2'-0" Longitudinal
 - 2'-7" Transverse

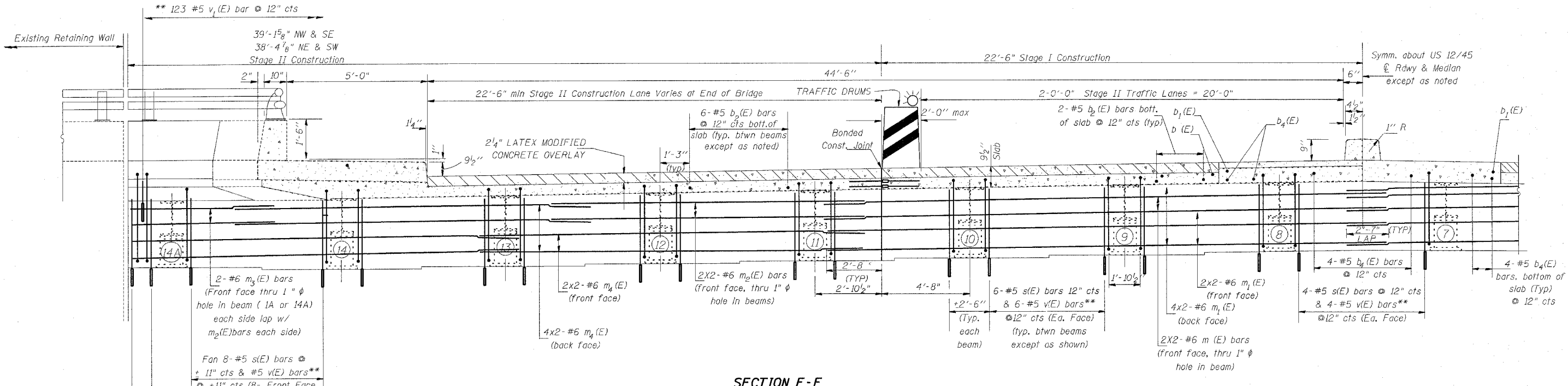
- ▲ Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction.
- ▲▲ Epoxy grout #5 v(E) & v₁(E) bars in 7/8" φ drilled holes. See Std. Specs. Cost included with Reinforcement Bars, Epoxy Coated.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE PLAN
 LOC 1: US 12/ 45 OVER IL 64
 SN 016-0336
 SCALE: VERT. HORIZ.
 DATE 4/18/2005
 DRAWN BY
 CHECKED BY



SECTION E-E
(SHOWING CONCRETE REMOVAL)



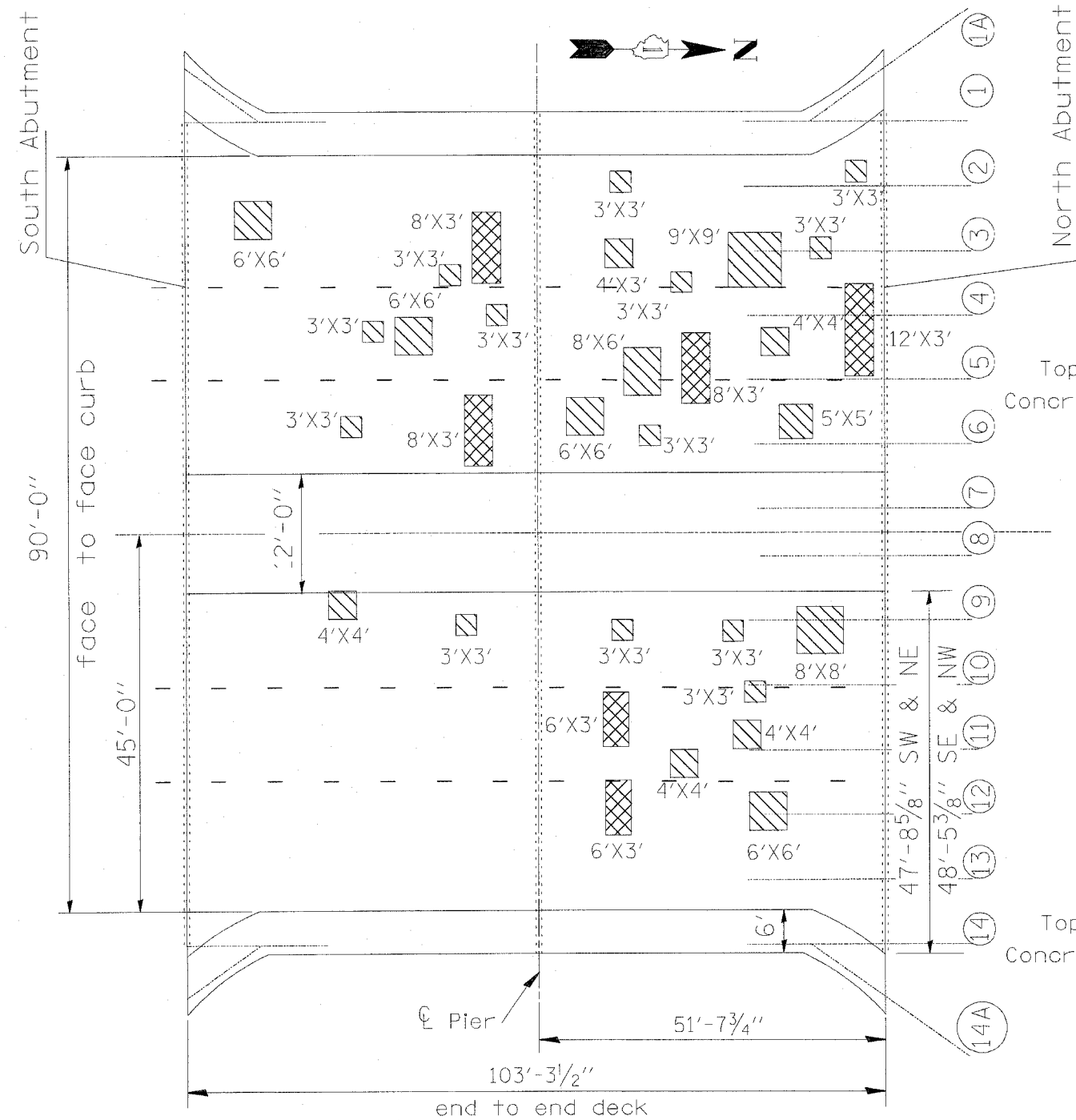
SECTION E-E
(SHOWING CONCRETE REPLACEMENT)

Bars indicated thus 4X2 #6 etc. indicates 4 lines of bars with 2 lengths per line.

All dimensions are perpendicular to $\text{\textcircled{C}}$ rdwy except as noted.
 * Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction.
 ** Epoxy grout #5 v(E) & v1(E) bars in $\text{\textcircled{7}}/8$ " drilled holes. See Std. Specs. Cost included with Reinforcement Bars, Epoxy Coated.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION	
BRIDGE PLAN	
LOC 1: US 12/ 45 OVER IL 64	
SN 016-0336	
SCALE: VERT. HORIZ. DATE 4/18/2005	DRAWN BY: CHECKED BY:

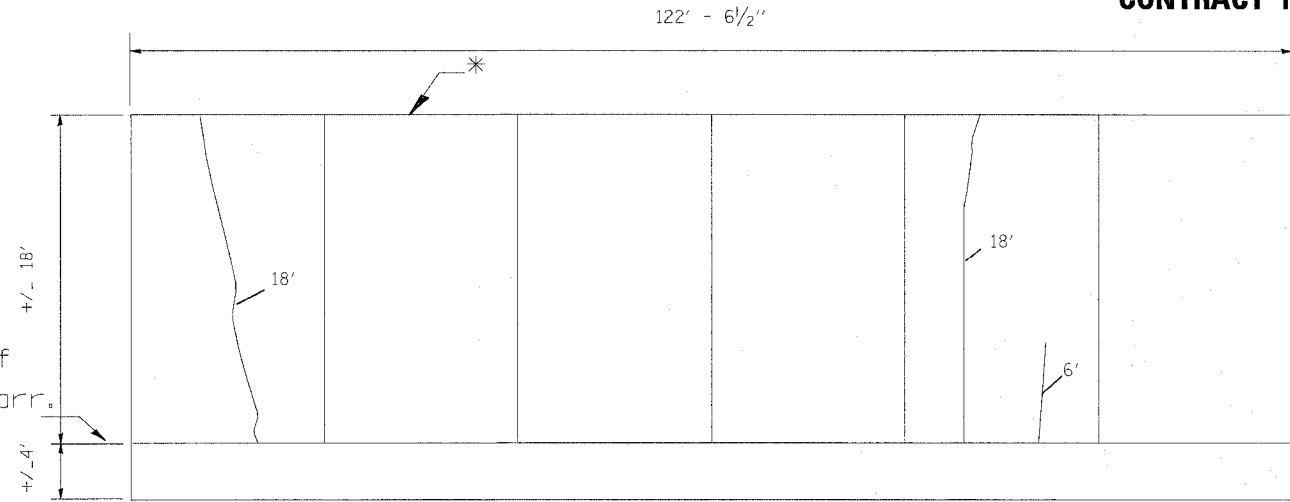


PLAN
(TOP OF DECK)

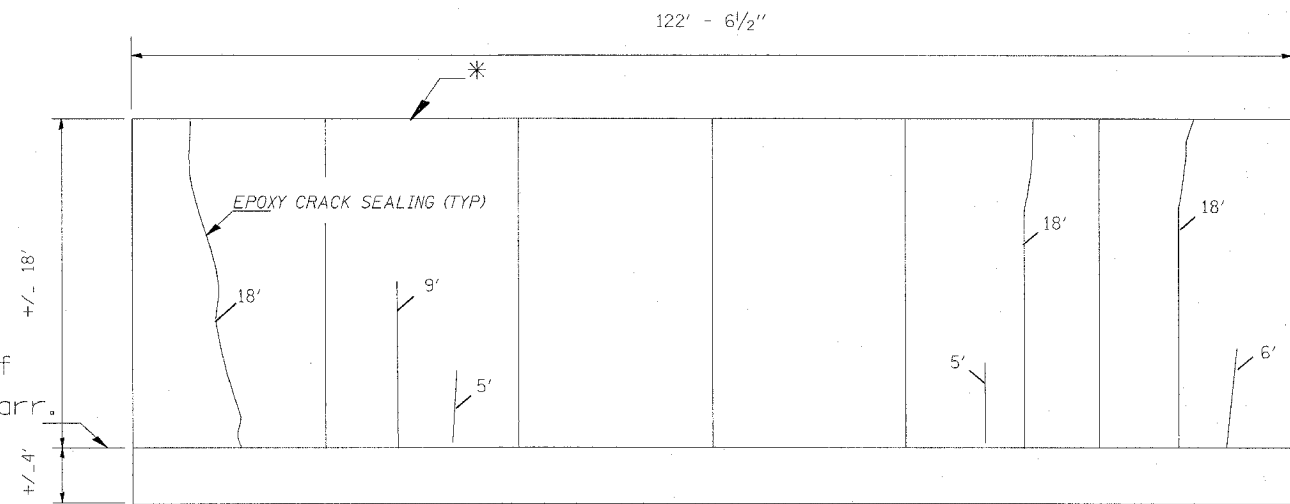
DATE OF SURVEY = 10-1-2004

LEGEND

- DECK SLAB REPAIR (FULL DEPTH)
- DECK SLAB REPAIR (PARTIAL DEPTH) APPROX. QTY= 62 SQ YD
COST INCLUDED IN "BRIDGE DECK HYDRO-SCARIFICATION"



SOUTH ABUTMENT ELEVATION
(LOOKING SOUTH)



NORTH ABUTMENT ELEVATION
(LOOKING NORTH)

* Clean existing abutment seals before concrete is placed. Cost included w/ Concrete Superstructure.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
DECK SLAB REPAIR (FULL DEPTH TYPE II)	SQ YD	16
EPOXY CRACK SEALING	FOOT	121

Notes:

Patching not necessary within 3'-4 1/4" of end of existing deck.
Areas of deck repairs are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

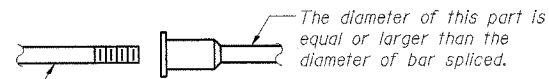
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK PATCH AND CRACK SEALING
LOC 1: US 12/ 45 OVER IL 64
SN 016-0336

SCALE: VERT.
HORIZ.
DATE 4/18/2005

DRAWN BY
CHECKED BY

The diameter of this part is the same as the diameter of the bar spliced.



ROLLED THREAD DOWEL BAR



**** ONE PIECE**

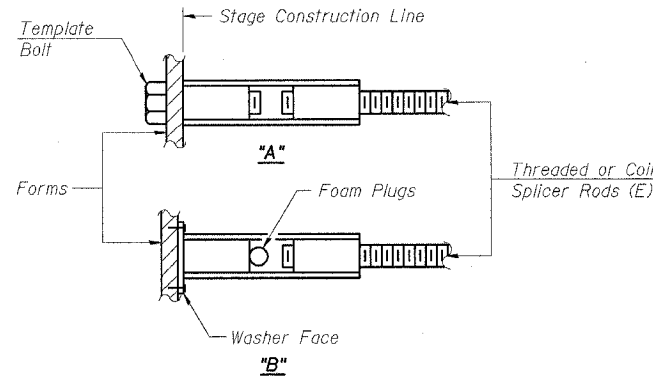
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



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.

NOTES

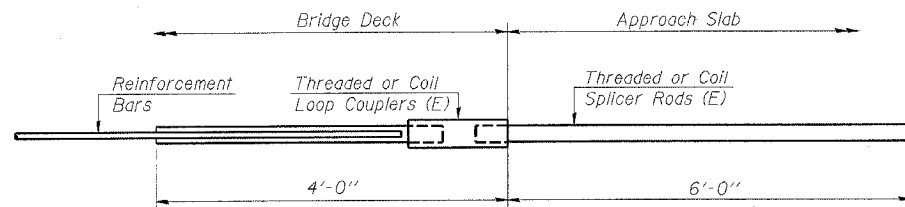
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_f$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_f$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_f = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

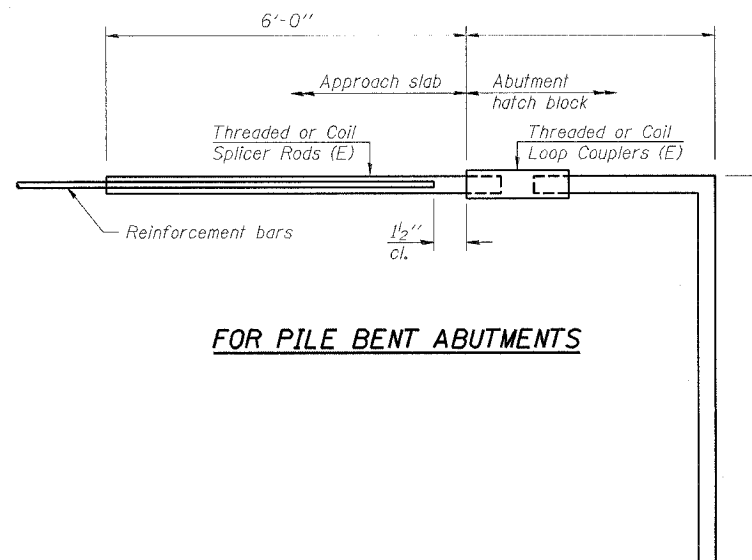
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



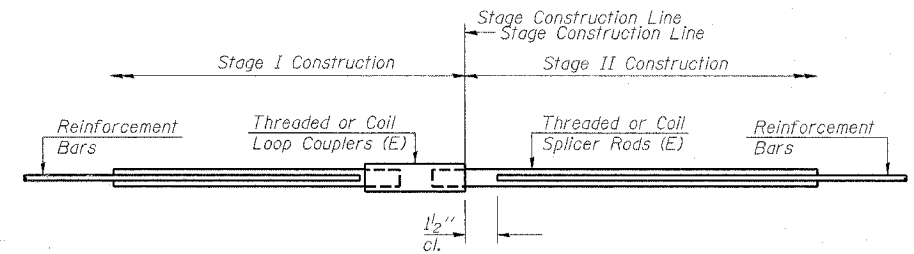
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 220



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

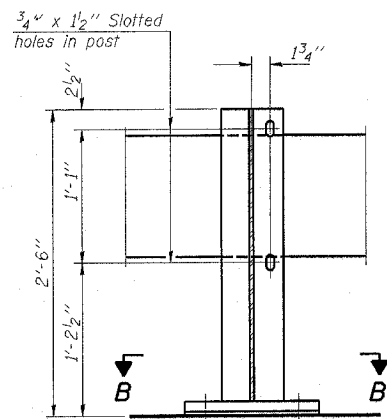


STANDARD

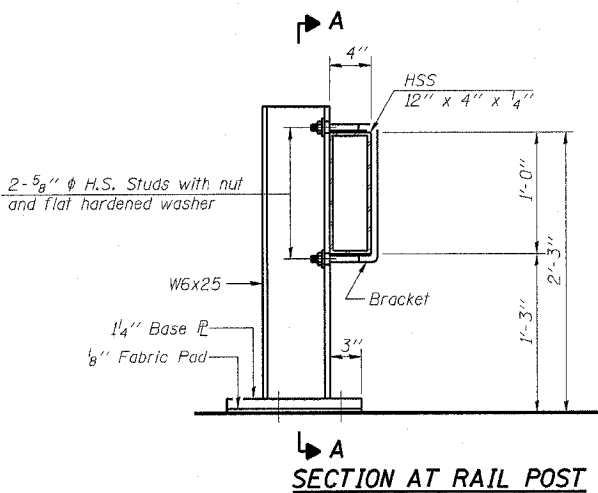
Bar Size	No. Assemblies Required	Location
#6	56	a ₁ (E) bar in deck

REVISIONS	
NAME	DATE

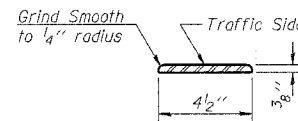
ILLINOIS DEPARTMENT OF TRANSPORTATION
 BAR SPLICER ASSEMBLY DETAILS
 LOC 1: US 12/ 45 (MANNHEIM RD)
 OVER IL 64 (NORTH AVE)
 COOK COUNTY
 SN 016-0336
 SCALE: VERT. _____
 HORIZ. _____
 DATE 4/18/2005
 DRAWN BY _____
 CHECKED BY _____



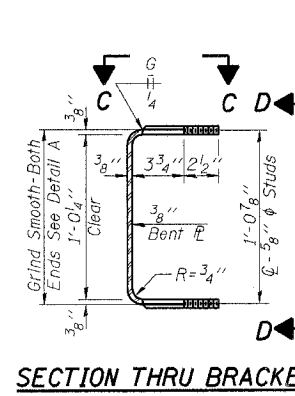
SECTION A-A



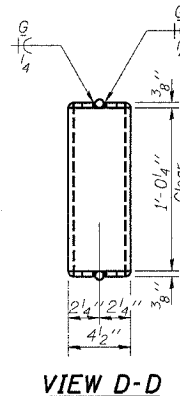
SECTION AT RAIL POST



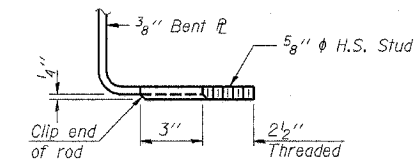
DETAIL A



SECTION THRU BRACKET



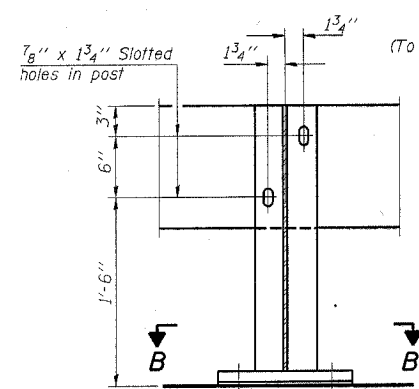
VIEW D-D



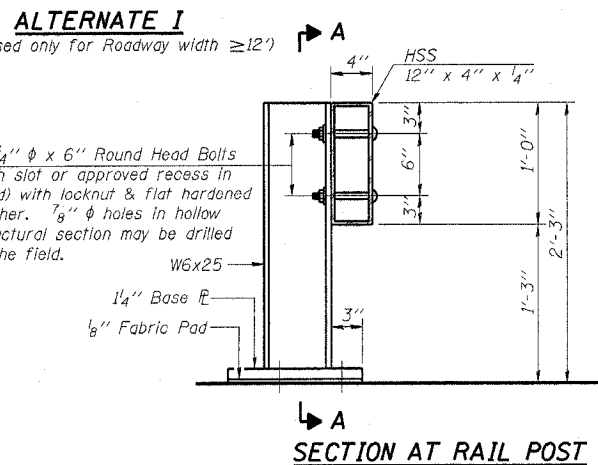
VIEW E-E

NOTES

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing.
 All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and brackets shall conform to AASHTO M 270, Grade 50.
 Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, threaded rods, studs, nuts and washers noted which shall conform to AASHTO M 164.
 The bridge rail shall receive one shop coat of a steel prime paint.
 The 1" ϕ high strength bolts or threaded rods used to connect the railposts shall be tightened according to Article 505.04(f)(2) of the Standard Specifications.
 Temporary Bridge Rail shall be according to Section 514 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Temporary Bridge Rail.
 See sheet of for Rail Post spacing.
 The contact surfaces between post flange, rail and inside face of bracket for Alternate I shall be free of all lubricants.
 The nut for 5/8" ϕ high strength studs used in Alternate I to connect bracket to post shall be tightened to a snug fit and given an additional one half turn.



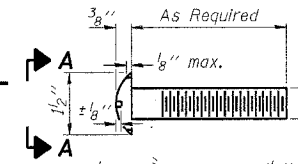
SECTION A-A



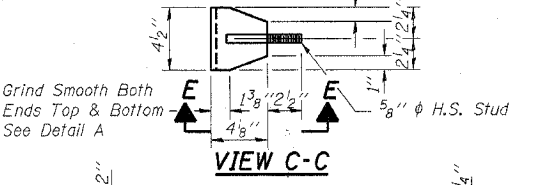
SECTION AT RAIL POST

ALTERNATE I
 (To be used only for Roadway width $\geq 12'$)

2-3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat hardened washer. 7/8" ϕ holes in hollow structural section may be drilled in the field.



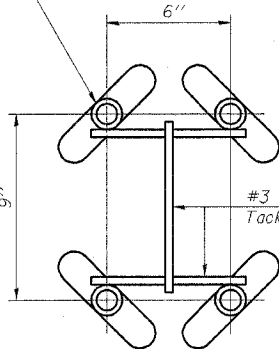
VIEW A-A ROUND HEAD BOLT



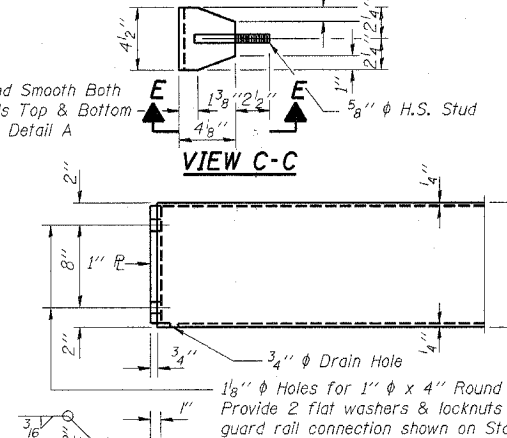
VIEW C-C

Grind Smooth Both Ends Top & Bottom See Detail A

Wing type threaded inserts tapped for 1" ϕ H.S. bolts. (Insert Load Capacity = 14k min./bolt)

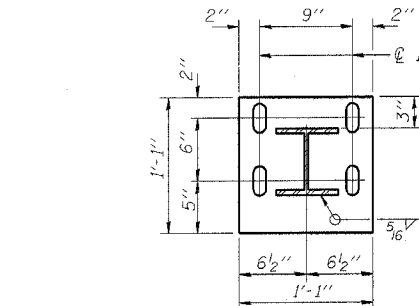


INSERT DETAIL



END OF RAIL DETAILS

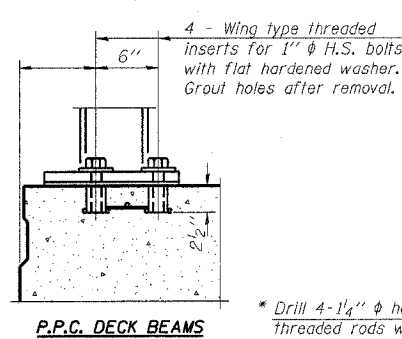
1/8" ϕ Holes for 1" ϕ x 4" Round Head Bolts Provide 2 flat washers & locknuts for guard rail connection shown on Std. 631026.



SECTION B-B

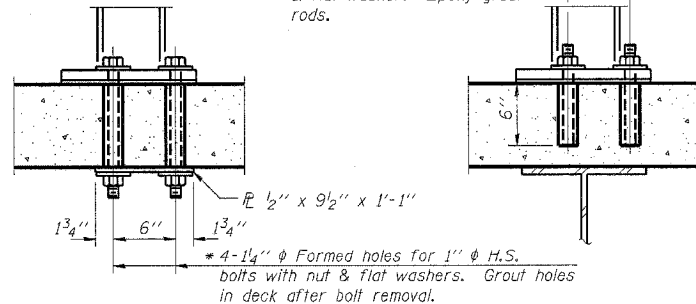
* Drilled holes for existing deck.

ALTERNATE II

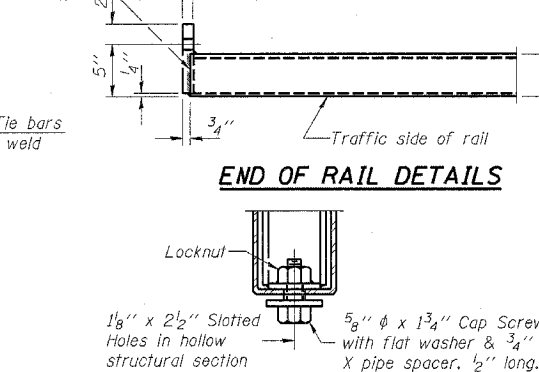


P.P.G. DECK BEAMS

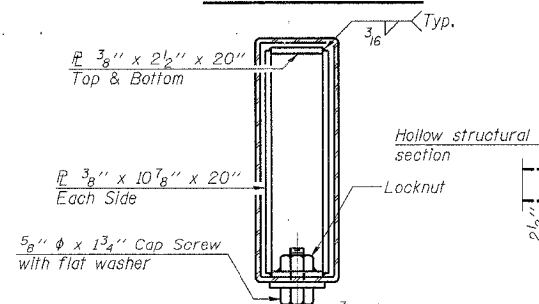
* Drill 4-1/4" ϕ holes for 1" ϕ threaded rods with hex nut & flat washer. Epoxy grout rods.



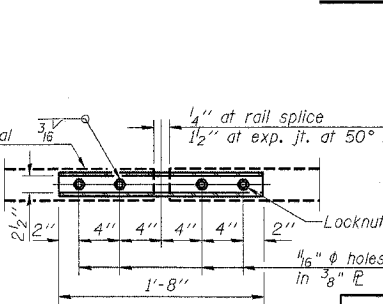
NEW & EXISTING DECKS ANCHORAGE DETAILS



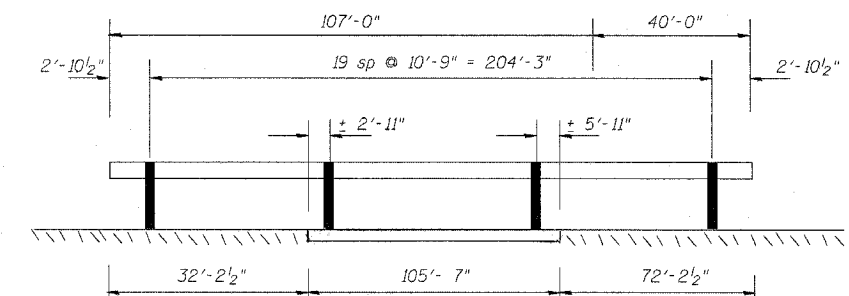
RAIL SPLICE CONNECTION AT EXPANSION JT.



SECTION AT RAIL SPLICE



PLAN-BOTT. SPLICE P TYPICAL



TEMPORARY BRIDGE RAIL POST SPACING

SEE SHT 21 OF 36

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Bridge Rail	Foot	420

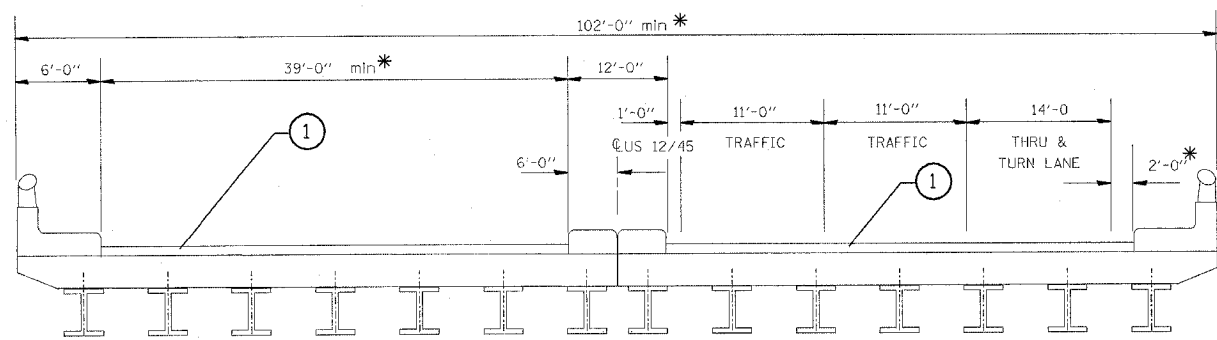
QUANTITY INCLUDED IN THE ROADWAY PLANS.

REVISIONS	DATE
NAME	DATE

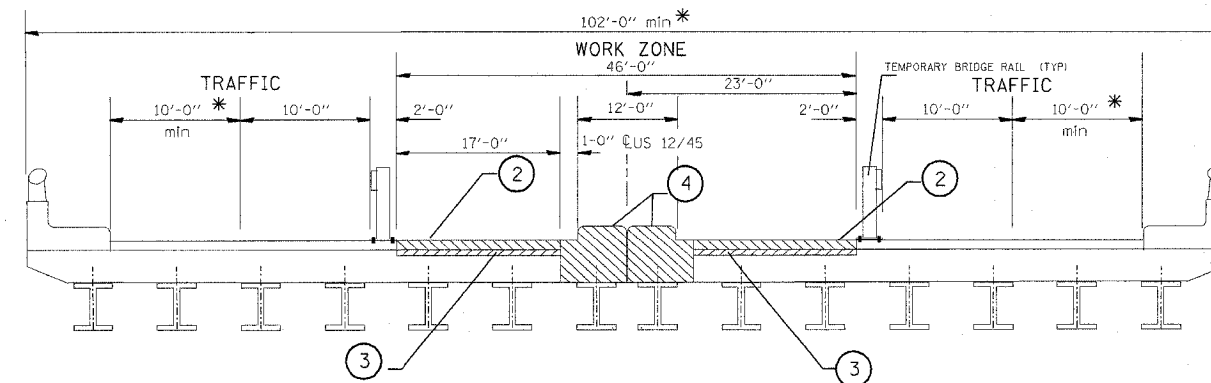
ILLINOIS DEPARTMENT OF TRANSPORTATION
LOC 1
TEMPORARY BRIDGE RAIL

SCALE: VERT. HORIZ.
 DATE: DRAWN BY: CHECKED BY:

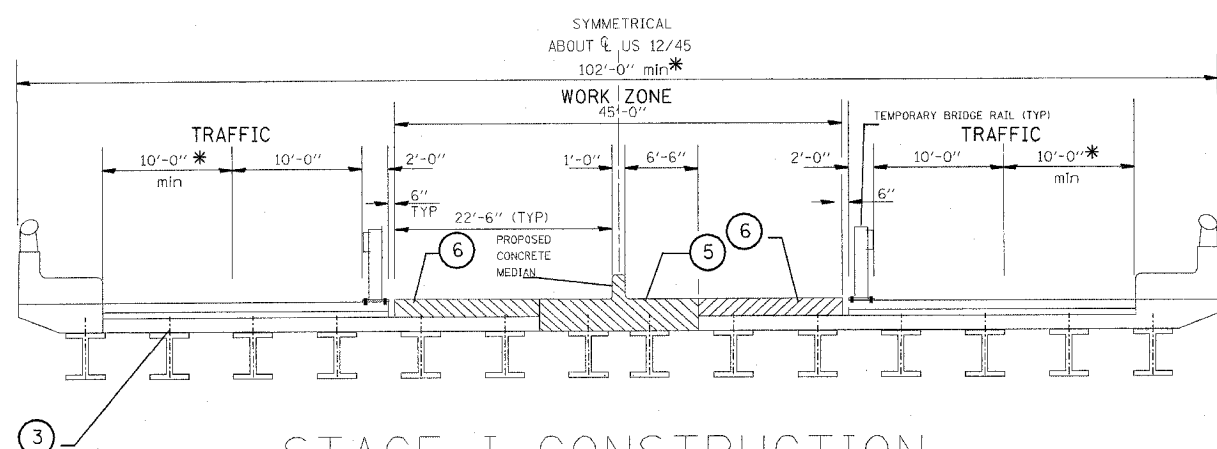
CONTRACT NO. 62603



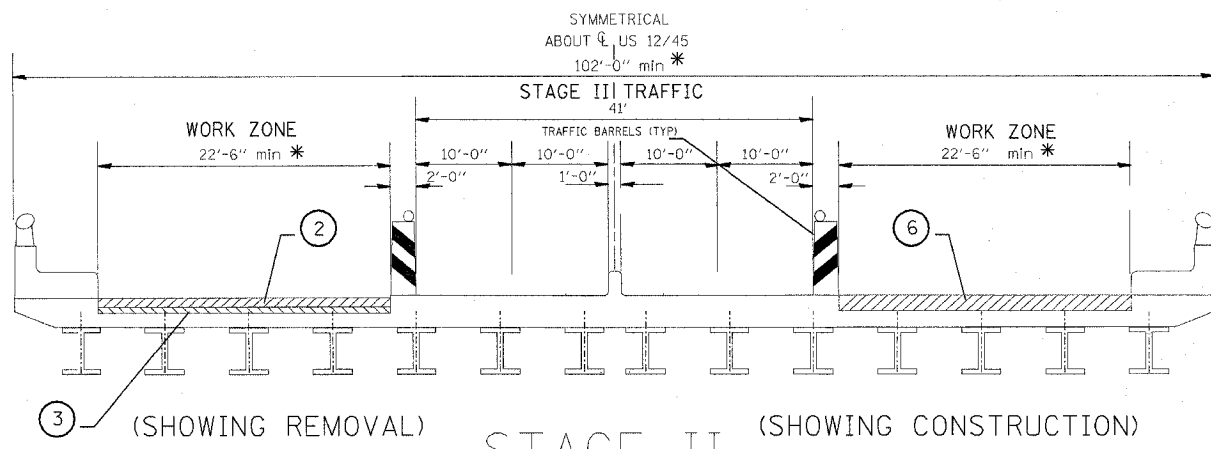
EXISTING
(LOOKING NORTH)



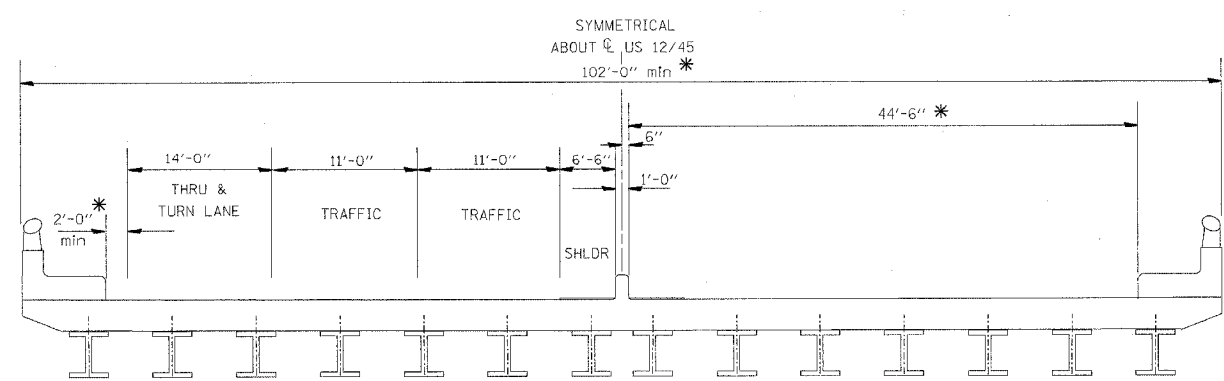
STAGE I REMOVAL
(LOOKING NORTH)



STAGE I CONSTRUCTION
(LOOKING NORTH)



STAGE II
(LOOKING NORTH)



FINAL
(LOOKING NORTH)

LEGEND

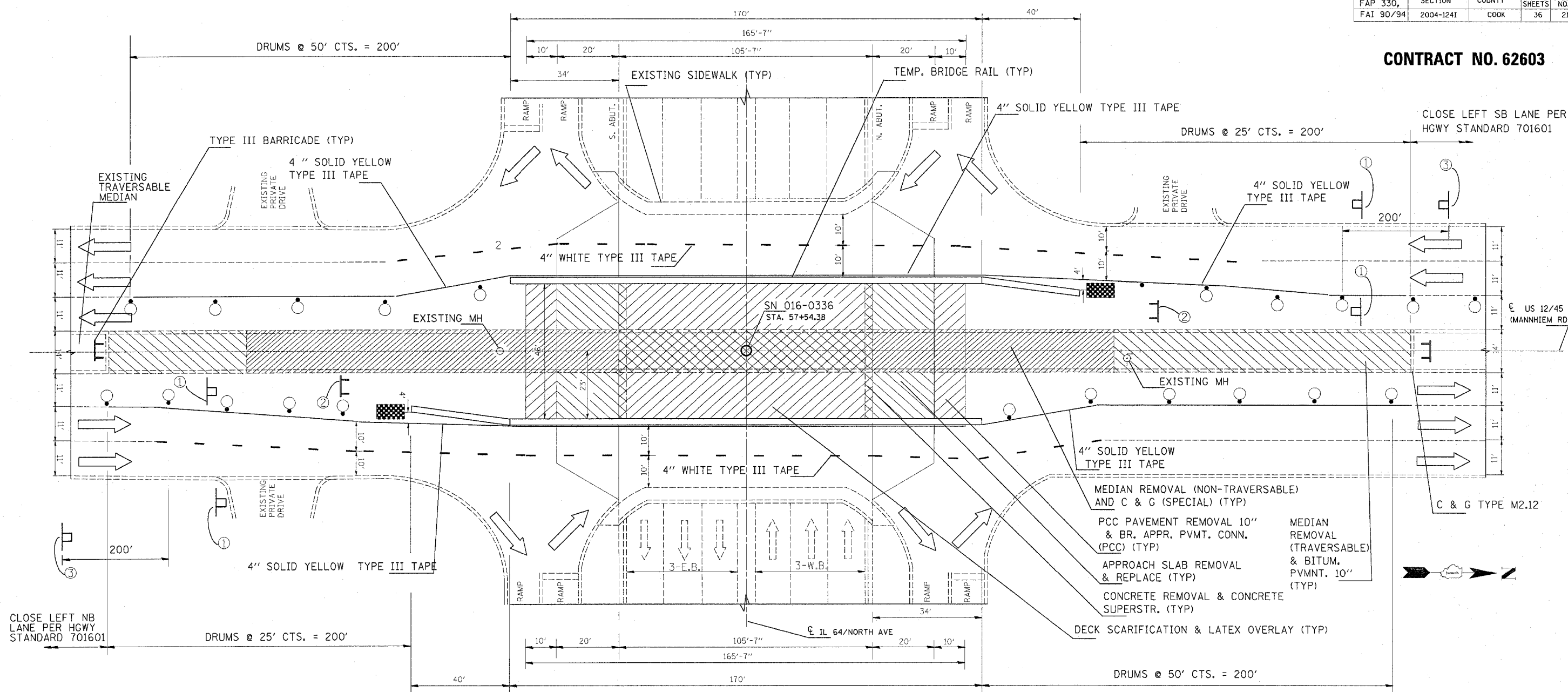
- ① EXISTING BITUMINOUS WEARING SURFACE 1/2"
- ② BITUMINOUS SURFACE REMOVAL
- ③ BRIDGE DECK HYDRO-SACRIFICATION 3/4"
- ④ CONCRETE REMOVAL
- ⑤ CONCRETE SUPERSTRUCTURE
- ⑥ BRIDGE DECK LATEX CONCRETE OVERLAY 2 1/4"

* VARIES AT END OF BRIDGE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC STAGING
US 12/ 45 OVER IL 64
SECTIONS
SN 016-0336
 SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE 4/18/2005

CONTRACT NO. 62603









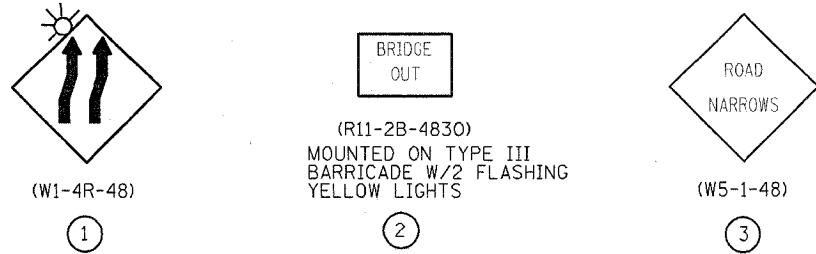
STAGE I

NOTES

COVER EXISTING CONFLICTING PAVEMENT MARKING WITH BLACK TYPE III TAPE.

COST OF ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION, STD 701601".

-  IMPACT ATTENUATOR
-  WORK ZONE
-  SIGN
-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH MONODIRECTIONAL STEADY BURNING LIGHTS
SPACED AT: 50' C-C TANGENTS
25' C-C TAPERS
12' C-C RADIUS
-  DIRECTION OF TRAFFIC



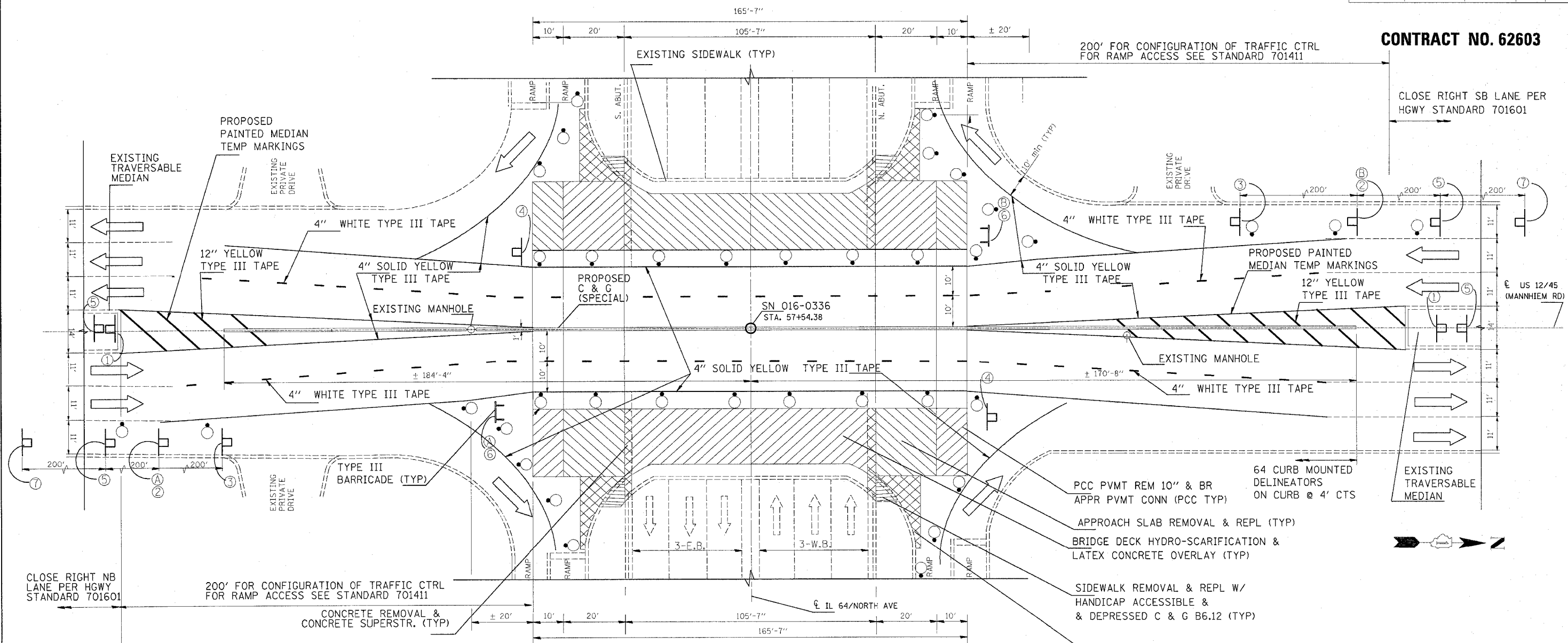
REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC STAGING
 US 12/ 45 OVER IL 64
STAGE I

SCALE: VERT. _____
 HORIZ. _____
 DATE 4/18/2005

DRAWN BY _____
 CHECKED BY _____

CONTRACT NO. 62603



STAGE II

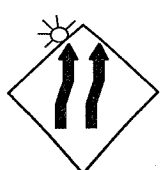
DRUM WITH MONODIRECTIONAL STEADY BURNING LIGHTS
SPACED AT: 50' C-C TANGENTS
25' C-C TAPERS
12' C-C RADIUS

TYPE III BARRICADE WITH FLASHING LIGHTS

WORK ZONE

SIGN

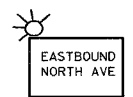
DIRECTION OF TRAFFIC



(W1-4R-48)
①



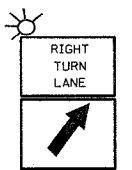
②



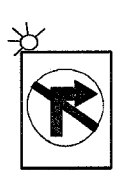
A



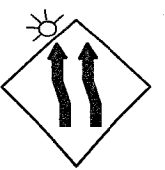
B



③



(R3-2)
④



(W1-4L-48)
⑤



⑥



(W5-1-48)
⑦

NOTES

FOR DETOUR OF WB IL 64 TO NB US 12/45 & EB IL 64 TO SB US 12/45 SEE SHEET 24.
FOR DETOUR OF SB US 12/45 TO EB 64 & NB US 12/45 TO WB IL 64 SEE SHEET 23.

COVER EXISTING CONFLICTING PAVEMENT MARKING WITH BLACK TYPE III TAPE.

COST OF ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION, STD 701601".

SIDEWALKS SHALL BE CLOSED PER STD 701801.
BOTH SIDEWALKS SHALL NOT BE CLOSED SIMULTANEOUSLY.

REVISIONS	
NAME	DATE

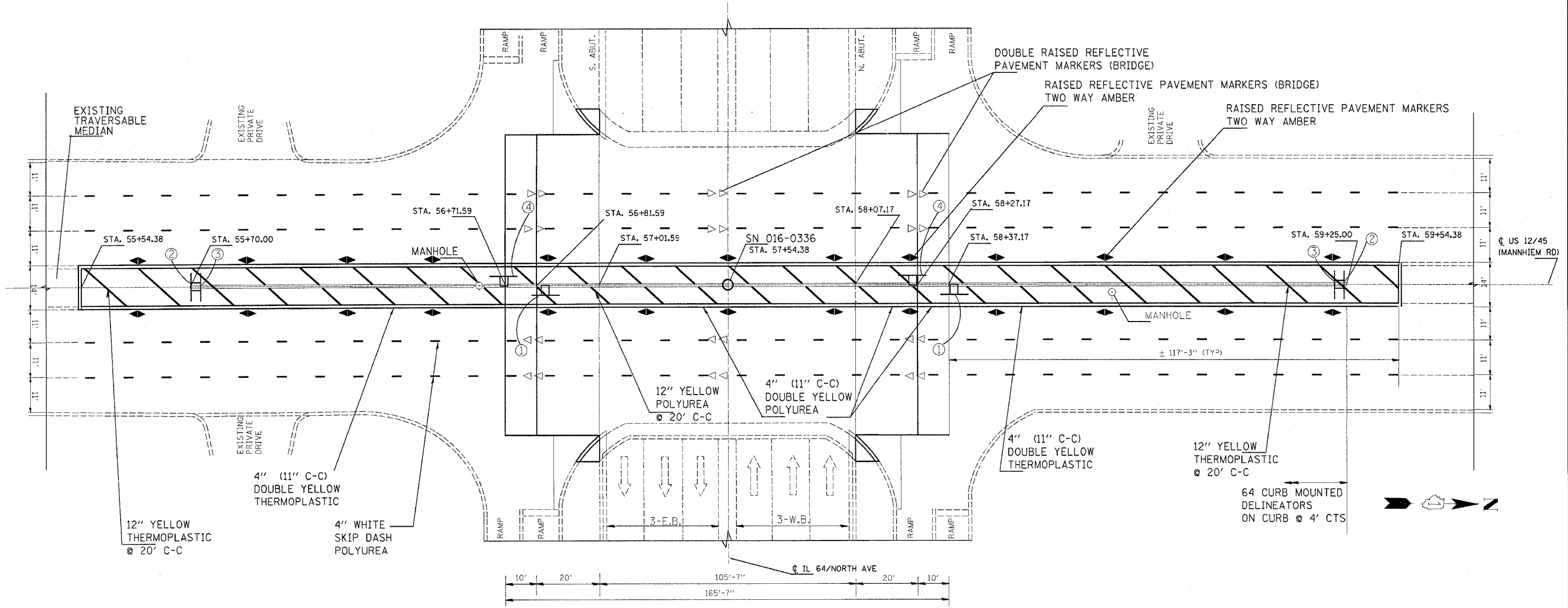
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC STAGING
US 12/ 45 OVER IL 64
STAGE II

SCALE: VERT.
HORIZ.
DATE 4/18/2005

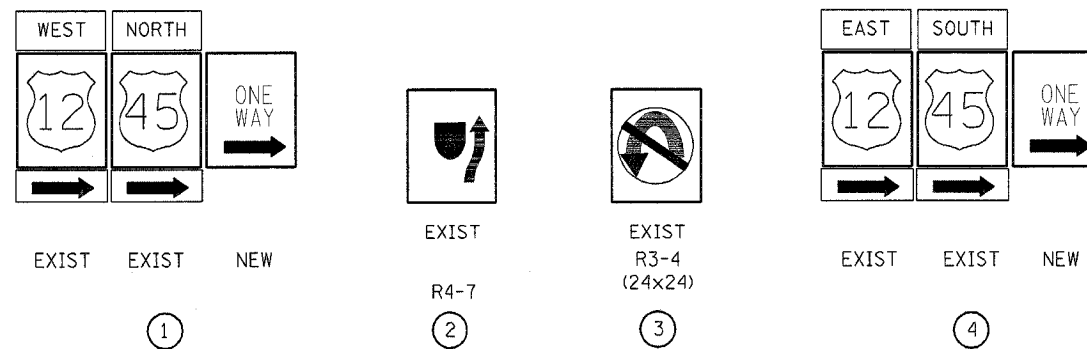
DRAWN BY
CHECKED BY

FAP 330, FAI 90/94	SECTION 2004-1241	COUNTY COOK	TOTAL SHEETS 36	SHEET NO. 23
-----------------------	----------------------	----------------	--------------------	-----------------

CONTRACT NO. 62603

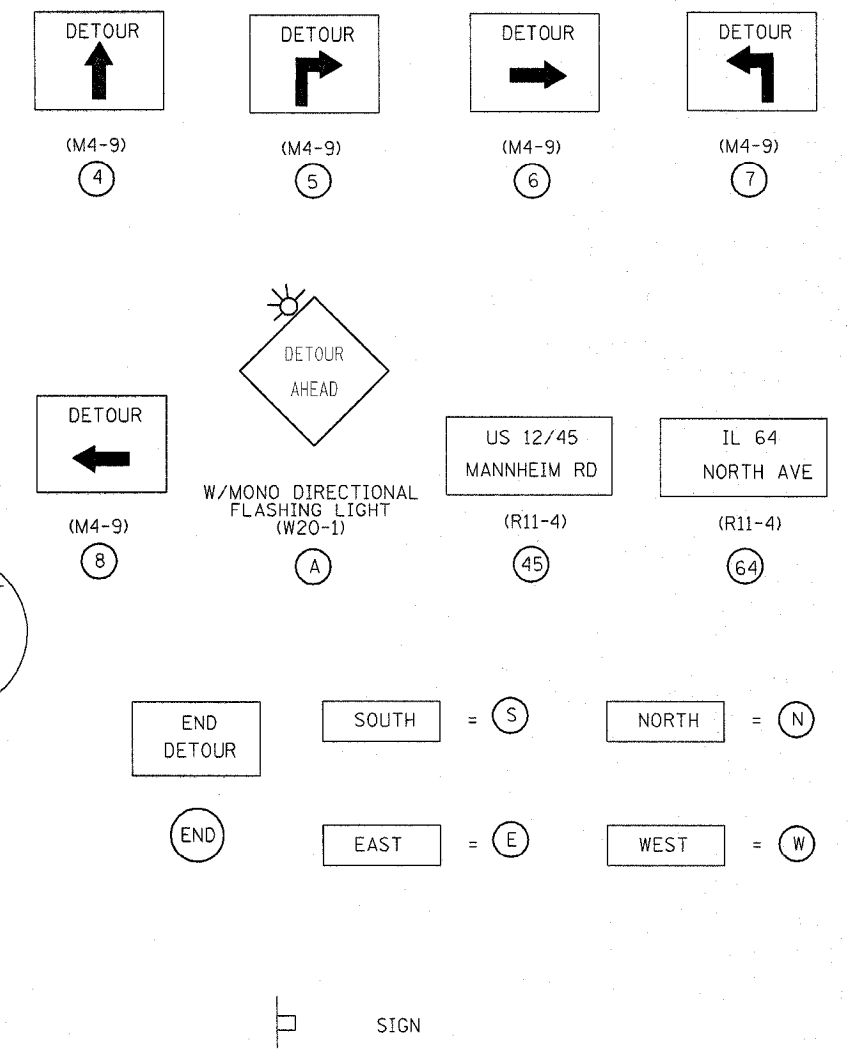
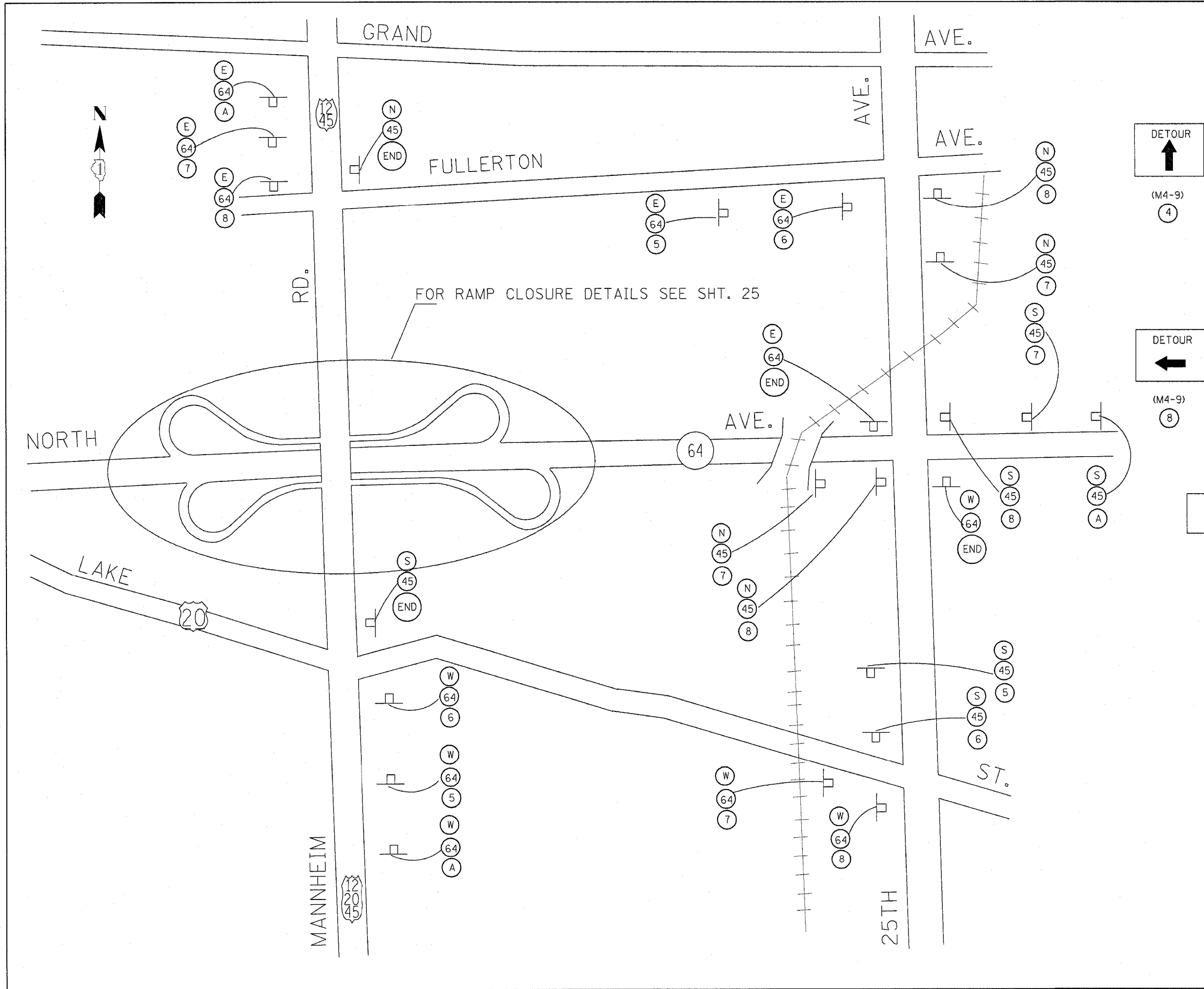


NOTE: USE TUBULAR STEEL POSTS FOR ALL THE SIGN INSTALLATIONS .
CORE HOLES AND SLEEVE ALL POSTS. REMOUNT EXISTING SIGNS.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**LOC 1: US 12/ 45
 MANNHEIM RD
 FINAL PAVEMENT
 MARKINGS**
 VERT. SCALE: HORIZ.
 DATE 5/6/2005
 DRAWN BY
 CHECKED BY

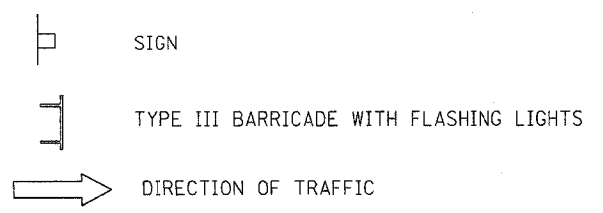
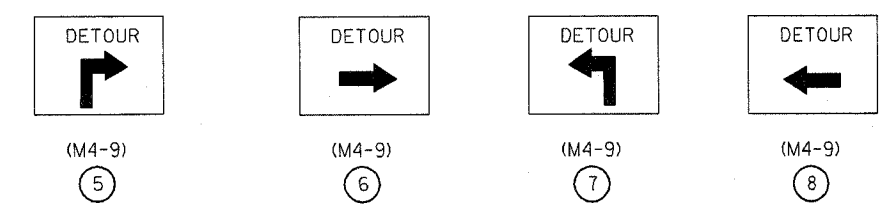
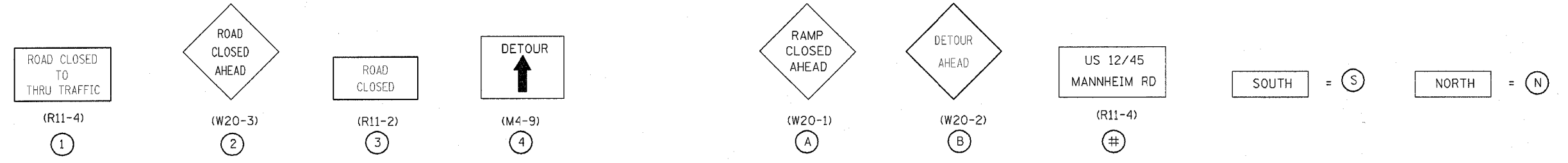
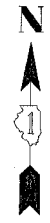
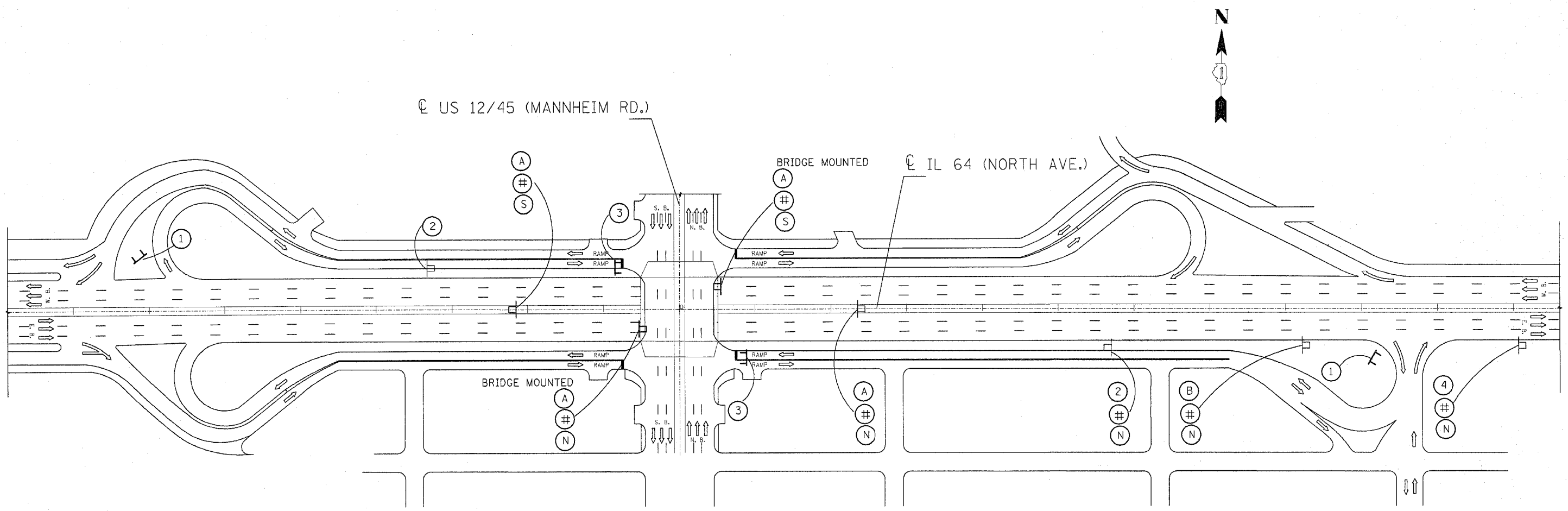


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC STAGING
 STAGE II
 DETOUR PLANS**
 LOC 1: US 12/45
 SCALE: VERT. _____
 HORIZ. _____
 DATE 4/18/2005
 DRAWN BY _____
 CHECKED BY _____

FOR FULL DETOUR SEE SHEET 24

CONTRACT NO. 62603

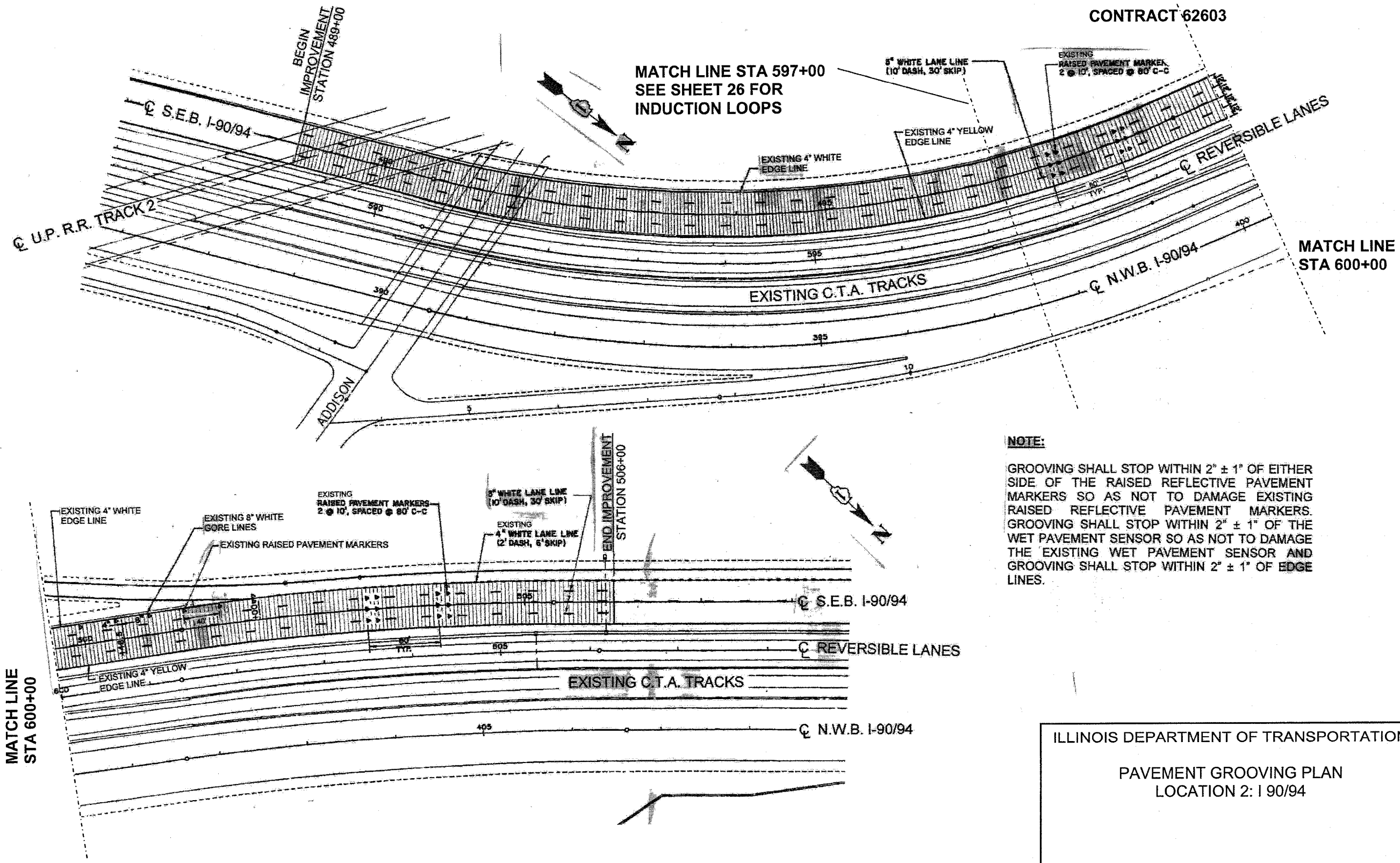


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC STAGING
 STAGE II
 RAMP CLOSURE DETAILS
 LOC 1: US 12/45**
 SCALE: VERT. _____
 HORIZ. _____
 DATE 4/18/2005
 DRAWN BY _____
 CHECKED BY _____

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	26

CONTRACT 62603

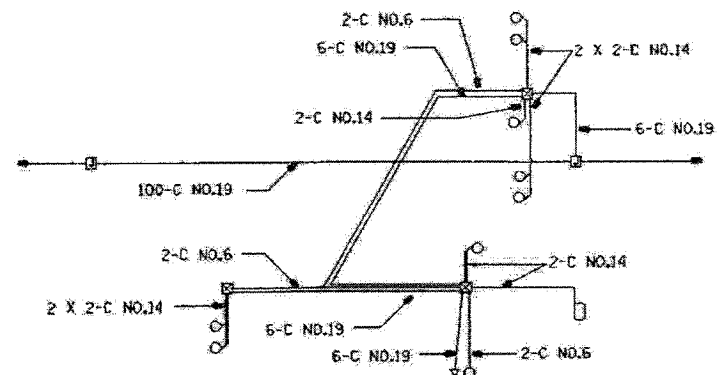


NOTE:
 GROOVING SHALL STOP WITHIN 2" ± 1" OF EITHER SIDE OF THE RAISED REFLECTIVE PAVEMENT MARKERS SO AS NOT TO DAMAGE EXISTING RAISED REFLECTIVE PAVEMENT MARKERS. GROOVING SHALL STOP WITHIN 2" ± 1" OF THE WET PAVEMENT SENSOR SO AS NOT TO DAMAGE THE EXISTING WET PAVEMENT SENSOR AND GROOVING SHALL STOP WITHIN 2" ± 1" OF EDGE LINES.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PAVEMENT GROOVING PLAN
 LOCATION 2: I 90/94

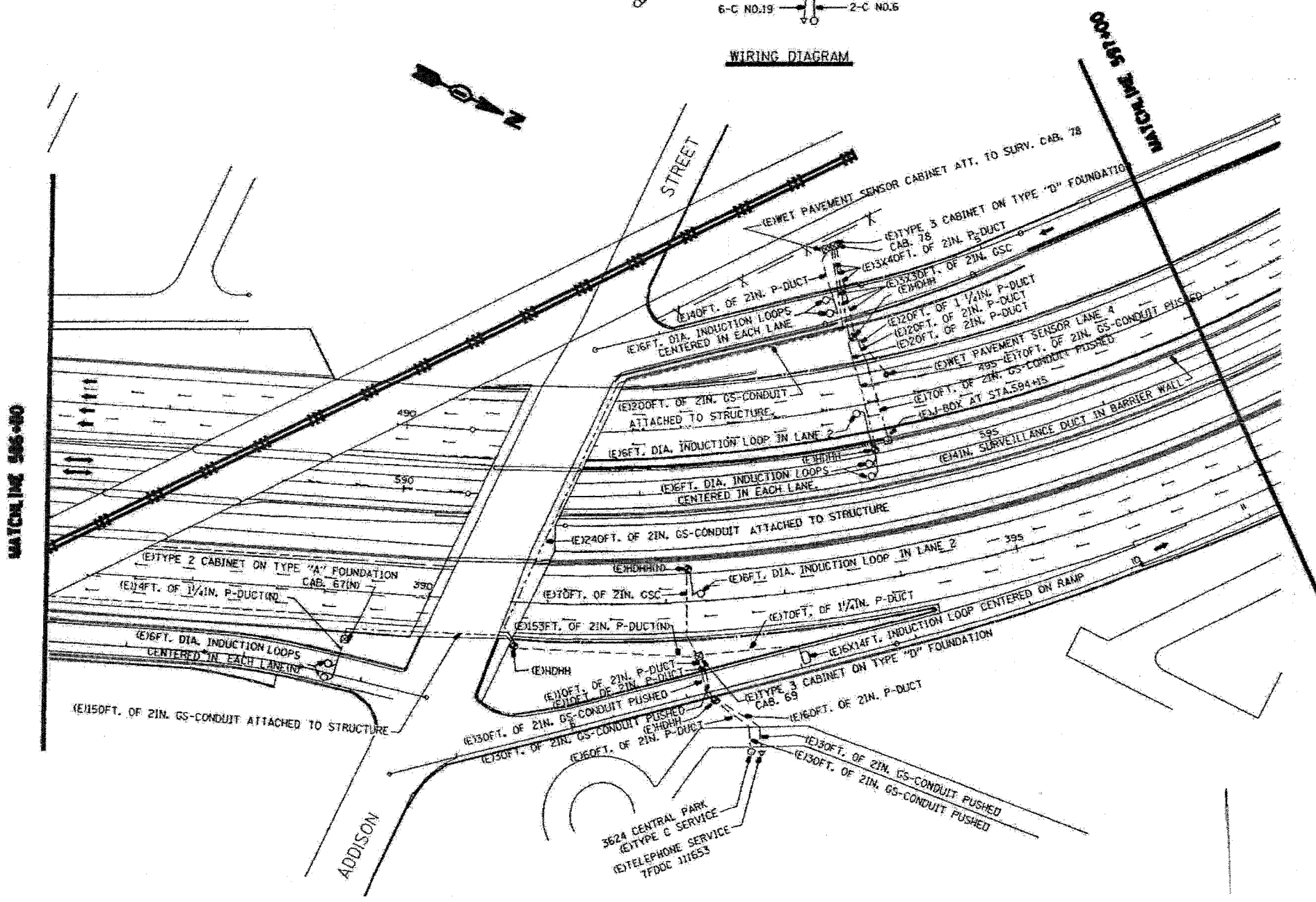
FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	27

CONTRACT 62603



WIRING DIAGRAM

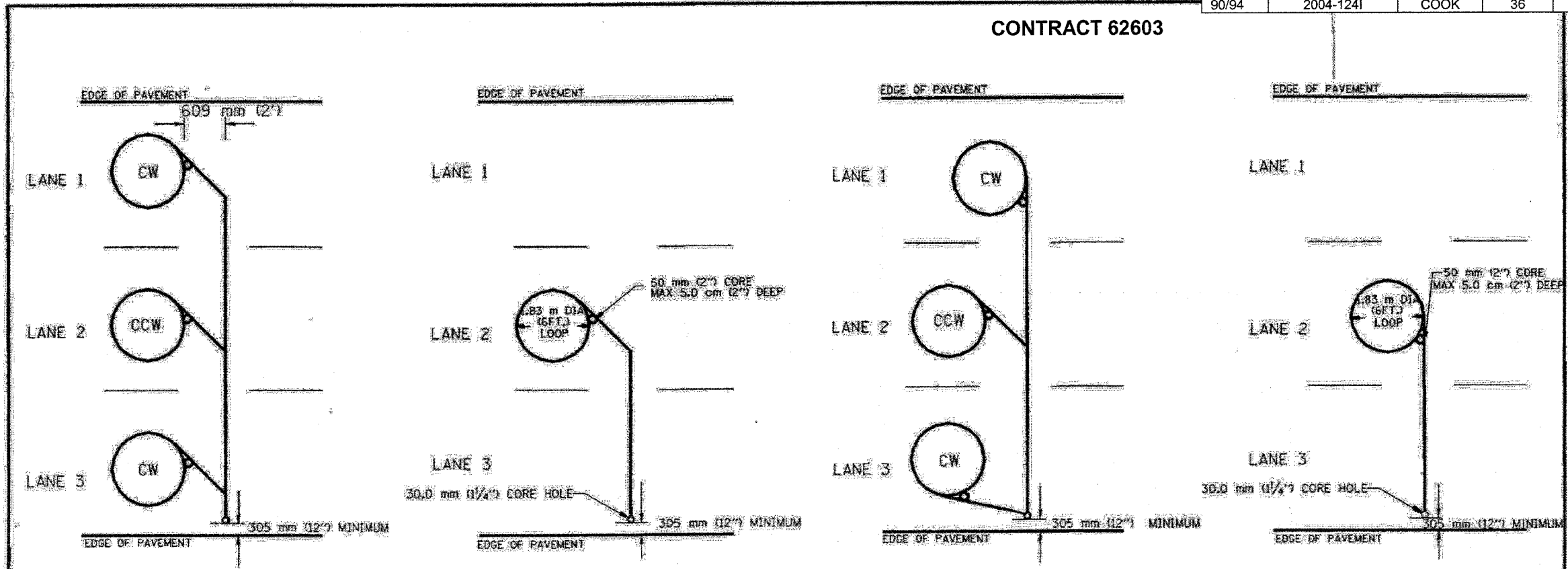
SYMBOL	LEGEND
□	INDUCTION LOOP
○	ROUND INDUCTION LOOP
⊠	TSC CABINET
△	TELEPHONE SERVICE
○	SERVICE INSTALLATION
⊞	JUNCTION BOX
⊞	HEAVY DUTY HAND HOLE
---	P-DUCT
---	GS-CONDUIT
⊞	EXISTING
⊞	PROPOSED
⊞	INSTALL
⊞	FLASHER
⊞	RAMP METERING



ILLINOIS DEPARTMENT OF TRANSPORTATION
 EXISTING
 WET PAVEMENT SENSOR
 AND INDUCTION LOOP
 SENSOR INSTALLATION
 LOCATION 2: 1 90/94

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	28

CONTRACT 62603

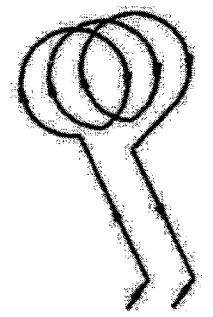


TYPICAL 1.83 m (6 FT.) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY

TYPICAL 1.83 m (6') DIA. INDUCTION LOOP
LAYOUT FOR LANE 2

TYPICAL 1.83 m (6') DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY

TYPICAL 1.83 m (6') DIA. INDUCTION LOOP
LAYOUT FOR LANE 2



WIRING DETAILS

- NOTES:
1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 45 m (150 FT.) OR MORE FROM CABINET.
 2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
 3. LOOPS SHALL NOT BE SPLICED IN SERIES.
 4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

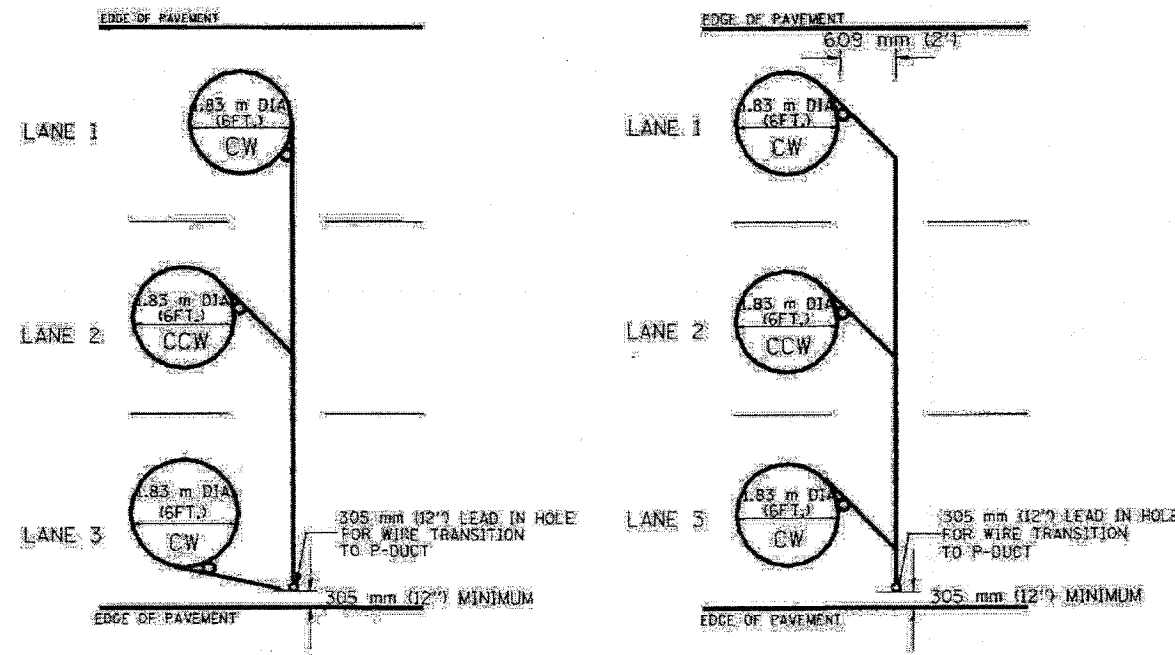
REVISION	DATE
1.	5/94
2.	9/95

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
**EXISTING ROUND LOOP
INSTALLATION**
LOCATION 2: I 90/94
SCALE: NONE
DATE: 8-27-94
DRAWN BY: G.W.
CHECKED BY: J.L.L.

TRAFFIC SYSTEMS CENTER (TY-1TSC-418#1)

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	29

CONTRACT 62603

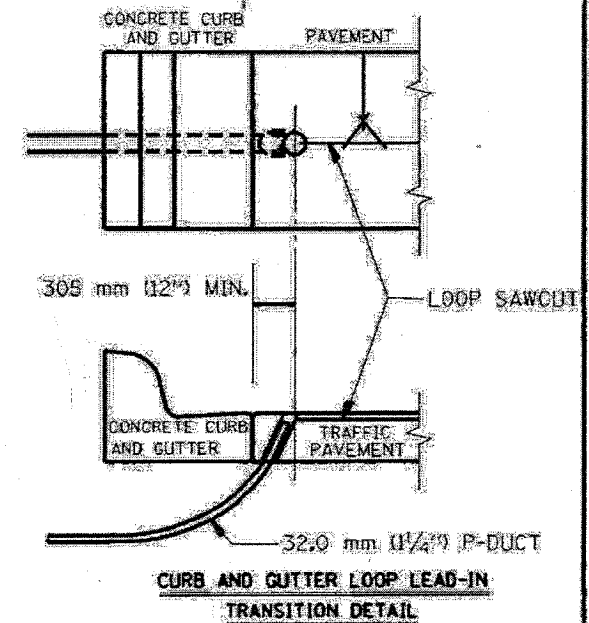


TYPICAL 1.83 m (6FT.) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY

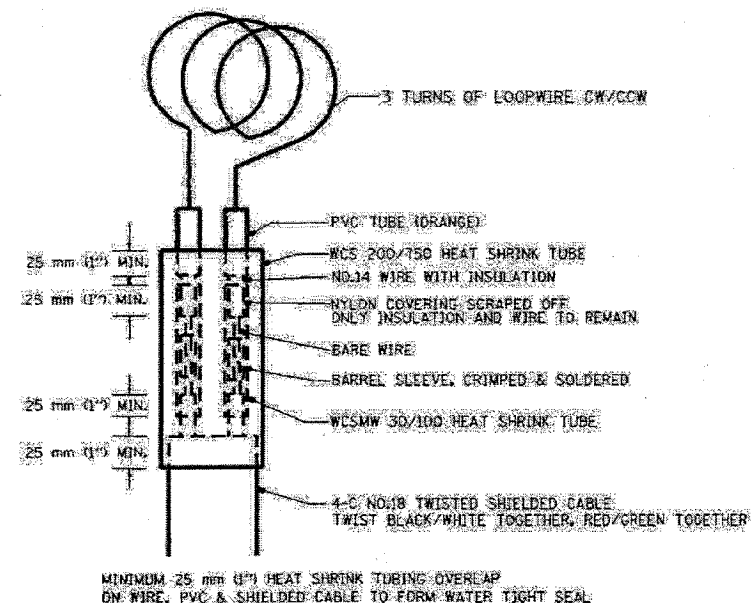
TYPICAL 1.83 m (6FT.) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 45 m (150FT.) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY. OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.



CURB AND GUTTER LOOP LEAD-IN
TRANSITION DETAIL



MINIMUM 25 mm (1\") HEAT SHRINK TUBING OVERLAP ON WIRE, PVC & SHIELDED CABLE TO FORM WATER TIGHT SEAL

LOOP SPLICING REQUIREMENTS

LOC 2: I 90/94

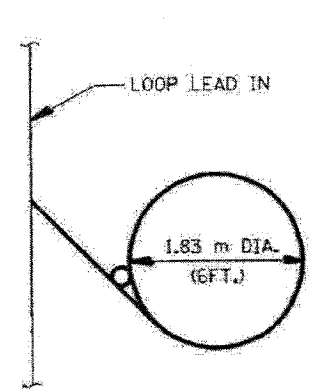
REVISION	DATE
R.L.	6/94
T.C.	10/95

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
**EXISTING
ROUND INDUCTION LOOP
TYPICALS**
SCALE: NOT SHOWN
DATE: 6-22-94
DRAWN BY: GAK
CHECKED BY: R.L.

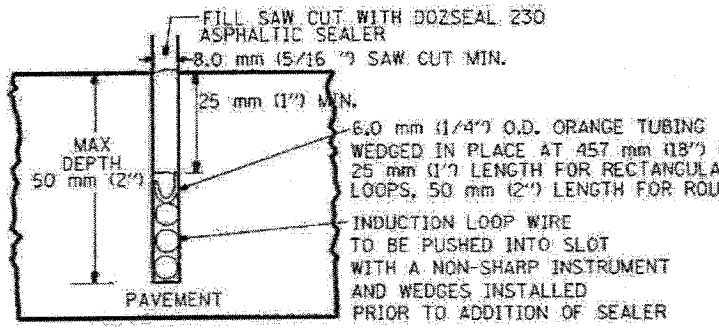
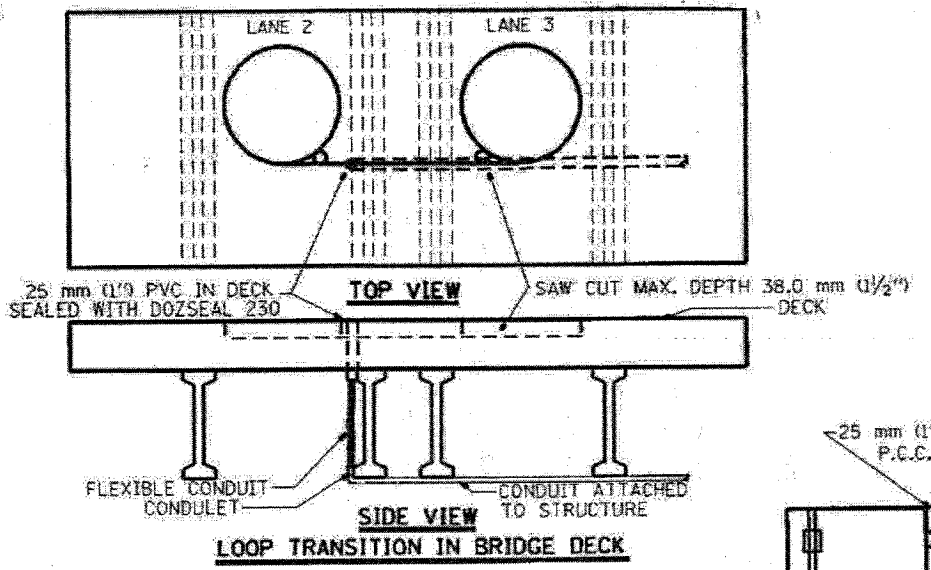
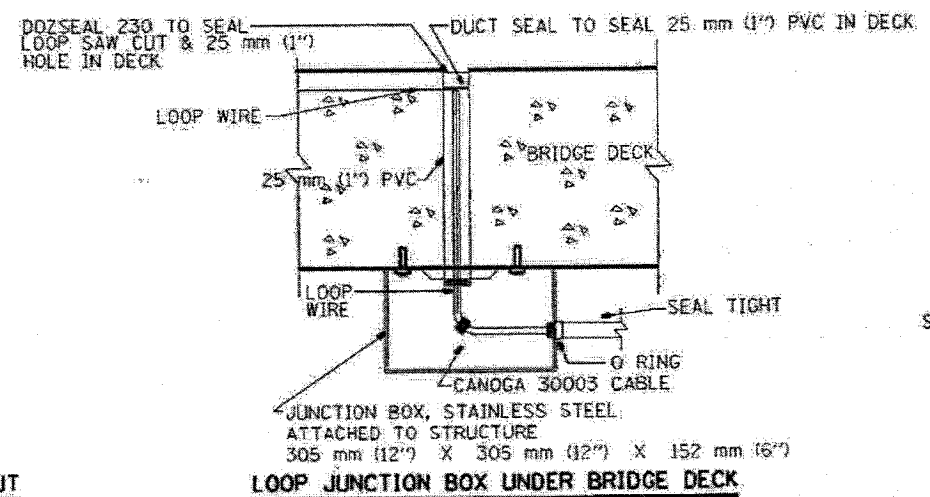
TRAFFIC SYSTEMS CENTER (TY-ITSC-418#2)

FAP 330	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	2004-1241	COOK	36	30

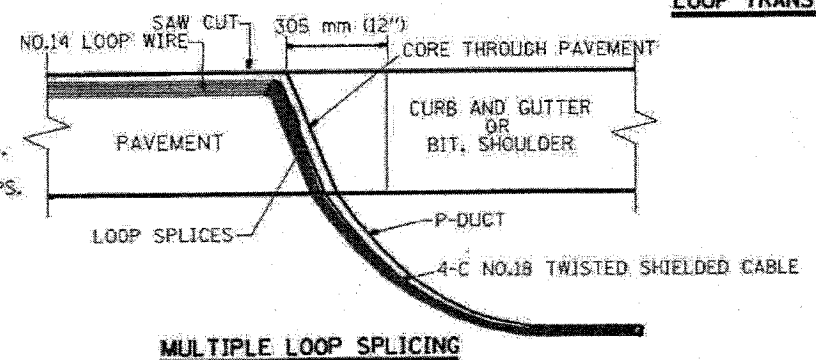
CONTRACT 62603



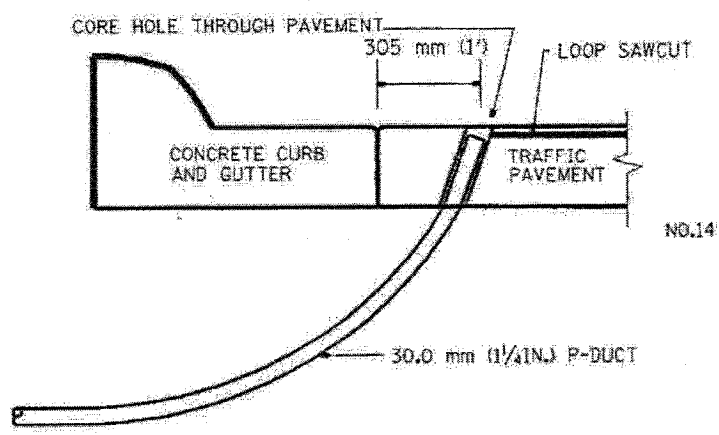
TYPICAL LOOP SAWCUT LAYOUT



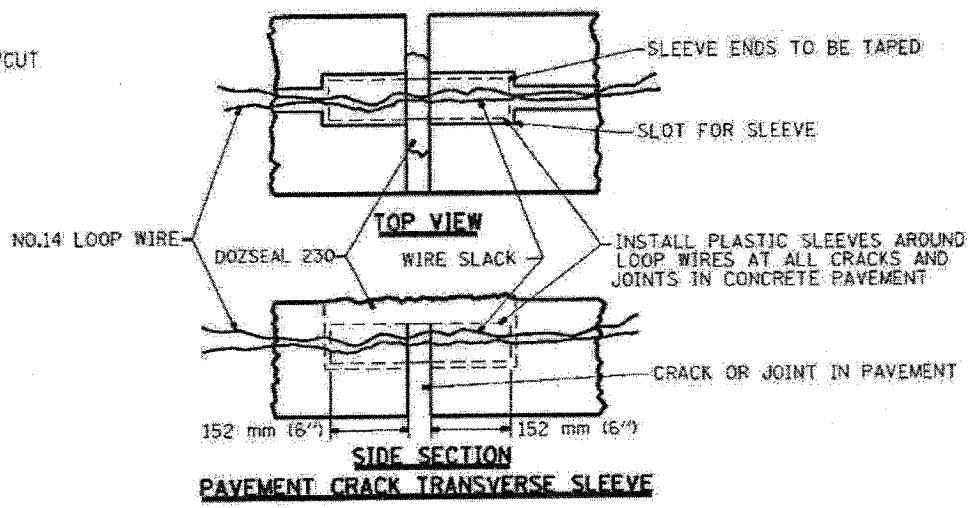
LOOP CROSS SECTION IN PAVEMENT



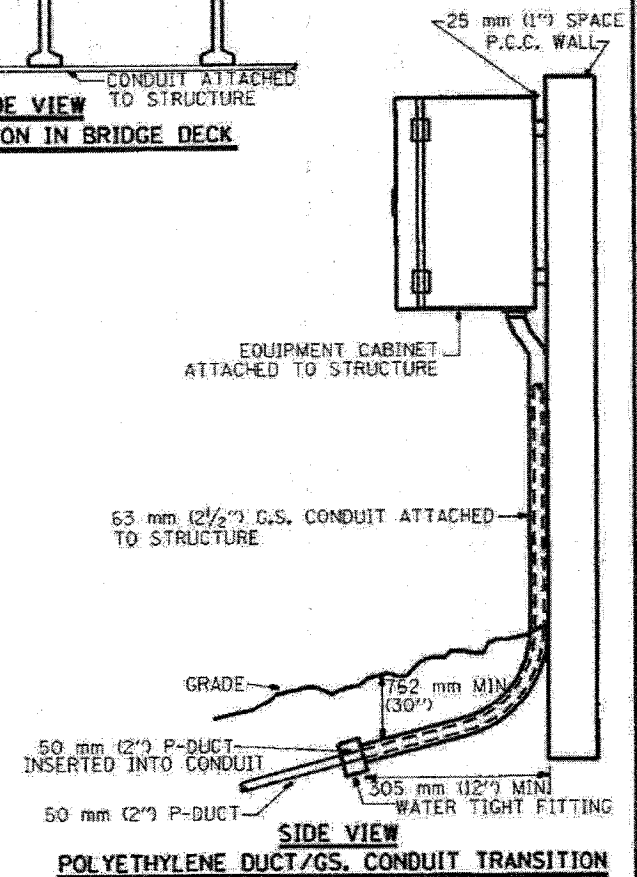
MULTIPLE LOOP SPLICING



SIDE SECTION LOOP LEAD-IN TRANSITION DETAIL



PAVEMENT CRACK TRANSVERSE SLEEVE



REVISIONS	DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER
BL	8/94	LOOP, CONDUIT & DUCT INSTALLATION DETAILS LOC 2: 190/94 SCALE: NONE DATE: 1-27-94 DRAWN BY: G.M. CHECKED BY: A.L.
RL	3/96	
TL	11/96	
AL	05/98	
TL	10/98	

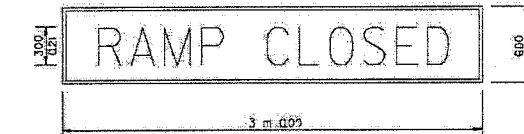
TRAFFIC SYSTEMS CENTER (TY-1TSC-418-4)

* FAP 330
FAI 90/94

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	2004-124	COOK	36	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

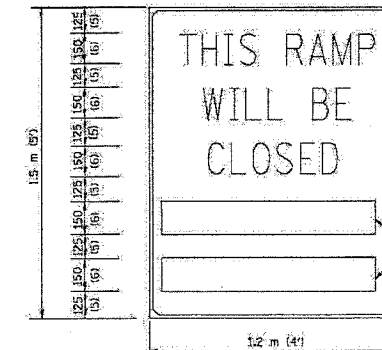
CONTRACT 62603

RAMP CLOSURE ADVANCE WARNING SIGN



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

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND
12' (11/2) 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, A MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

- GENERAL NOTES:
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 100 (20) HIGH.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - 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.
 - THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
 - AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

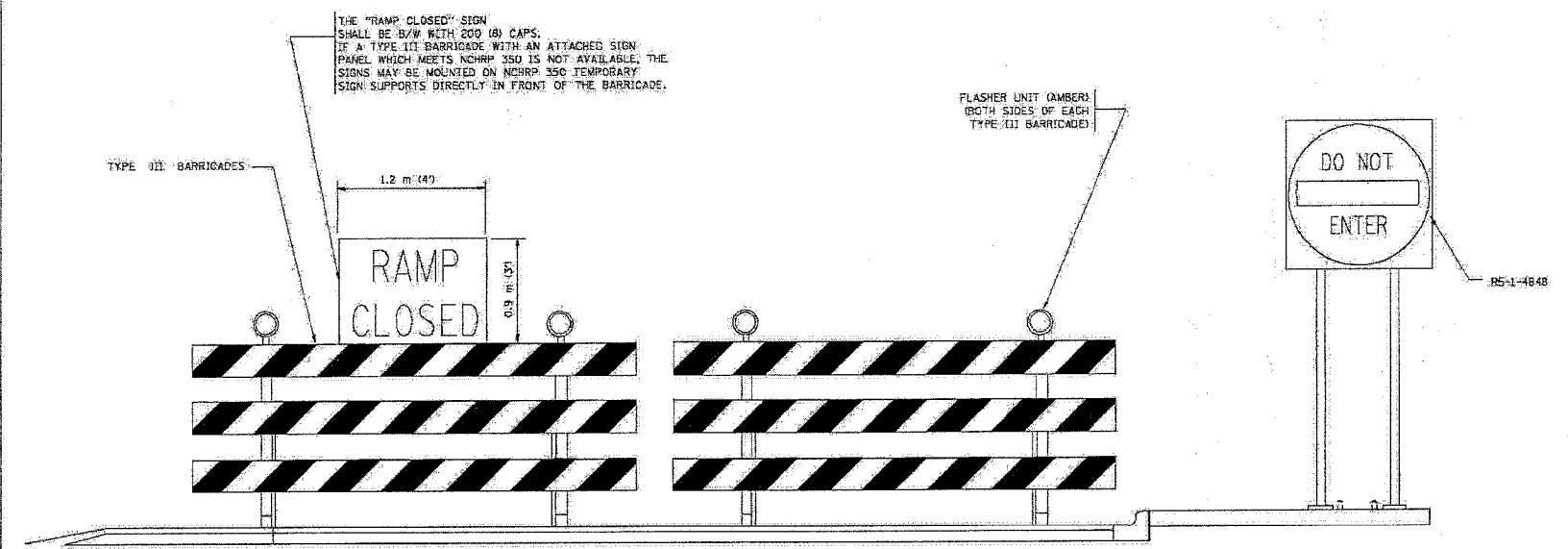
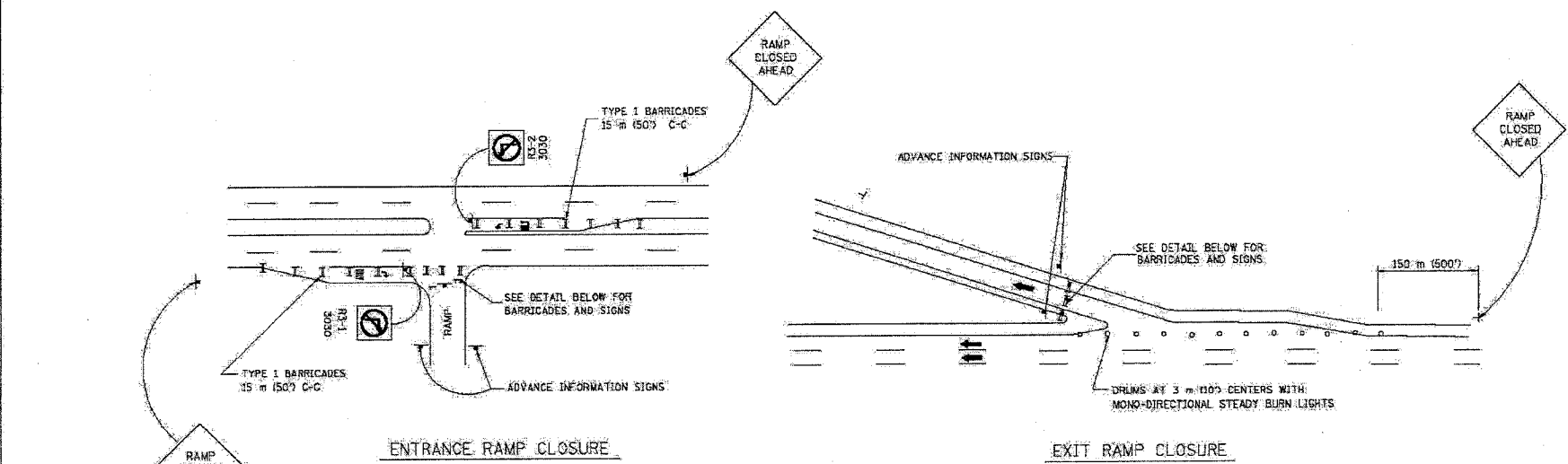
FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/98
Revised drawings to meet NCHRP 350	4/03

SCALE: NONE
DATE: 05/06/2003

DRAWN BY
CHECKED BY
IC-8

REVISION DATE: 04/03/03



THE "RAMP CLOSED" SIGN SHALL BE 30" W/TH 200 (8) CAPS. 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 DIRECTLY IN FRONT OF THE BARRICADE.

FLASHER UNIT (MMSR) BOTH SIDES OF EACH TYPE III BARRICADE

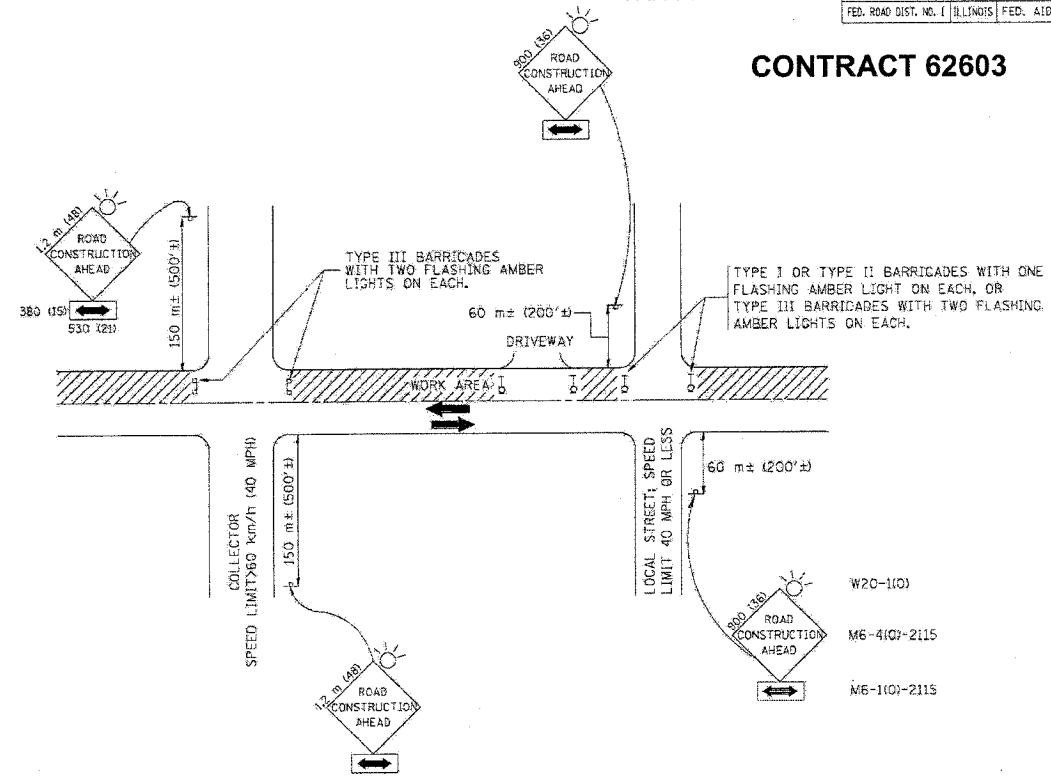
DETAIL FOR REQUIRED BARRICADES & SIGNS

- NOTES:
- CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - 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.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	2004-1241	COOK	36	32
STA.	TO STA.			
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT			

* FAP 330
FAI 90/94

CONTRACT 62603



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

NOTES:

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

- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 800x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150L STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

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

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

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

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

SCALE: VERT.
HORIZ.
DATE 10/18/2002

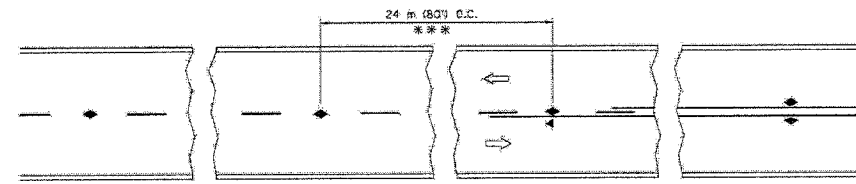
DRAWN BY
CHECKED BY
IC-10

REVISION DATE: 6/06/00

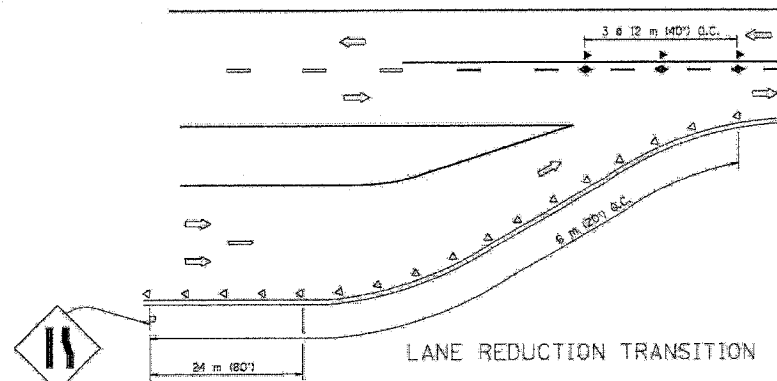
* FAP 330
FAI 90/94

PLAN NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2004-1241	COOK	36	33	
STA.	TO STA.			
FILE AND REV. NO.	DESIGNER	REV. AND PROJECT		

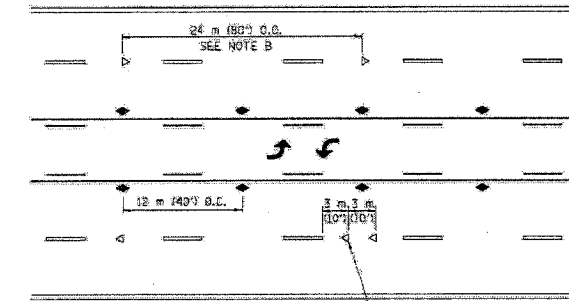
CONTRACT 62603



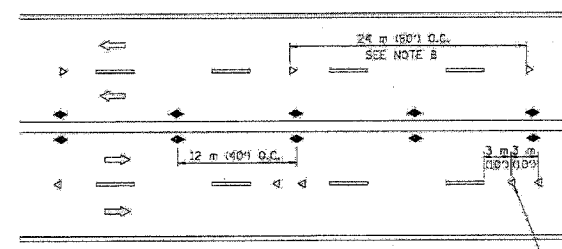
TWO-LANE/TWO-WAY



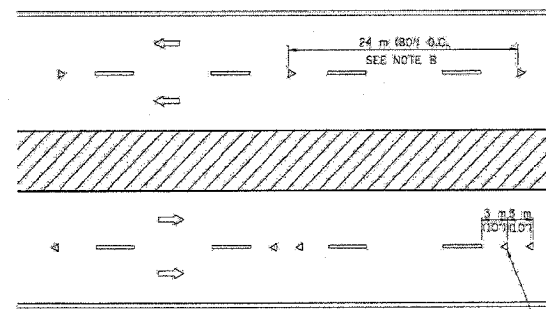
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

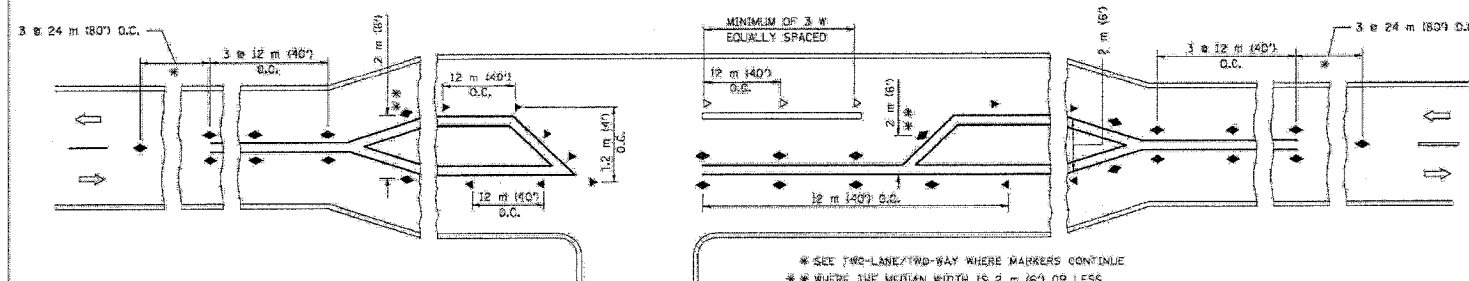
- YELLOW STRIPE
- WHITE STRIPE
- ◄ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (BY/2)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS
(SNOW-PLOW RESISTANT)

REVISIONS	
NAME	DATE
J. RAMMACHER	08-19-94
J. RAMMACHER	03-12-98
J. RAMMACHER	01-06-00

SCALE: NONE
DATE: 10/18/2002

DRAWN BY CADD
CHECKED BY TC-11

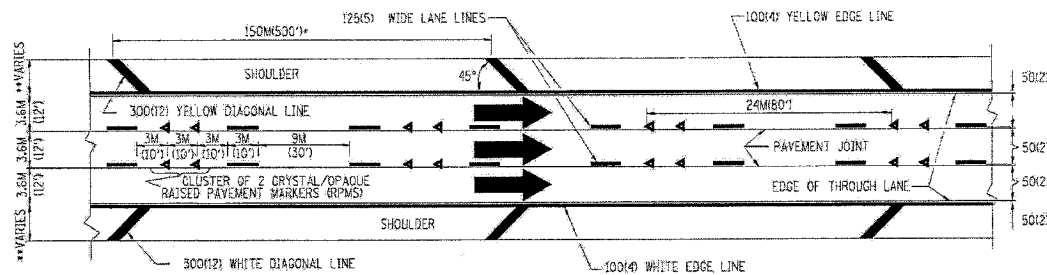
REVISION DATE: 01/06/00

* FAP 330
FAI 90/94

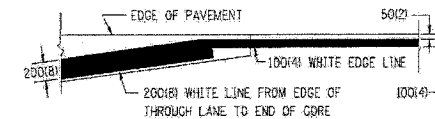
P.A. NO.	SECTION	COUNTY	CDL#	SHEET NO.
*	2004-1241	COOK	36	34
STA.		TO STA.		
FED. ROAD DIST. NO. 1		COUNTY	FED. AID PROJECT	

CONTRACT 62603

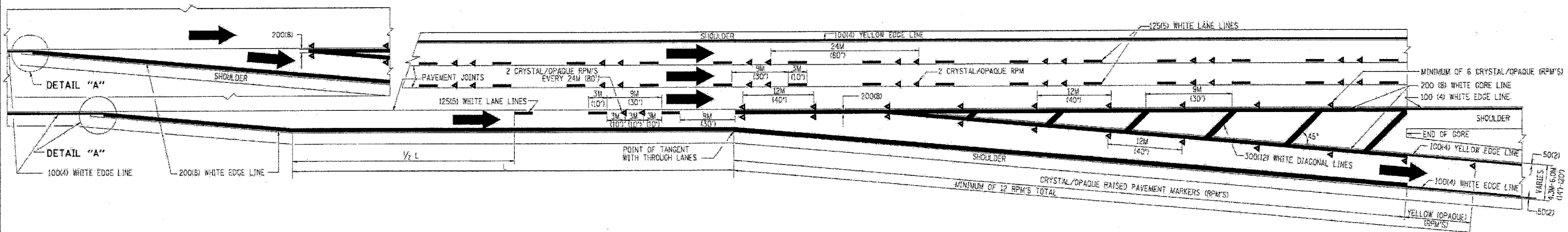
- THE DIAGONAL LINES SHALL BE SPACED AT 12M (40') C-C ACROSS ALL STRUCTURES WHICH ARE 150M (500') OR LESS IN LENGTH
- THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 1.8M (6') OR LESS IN WIDTH



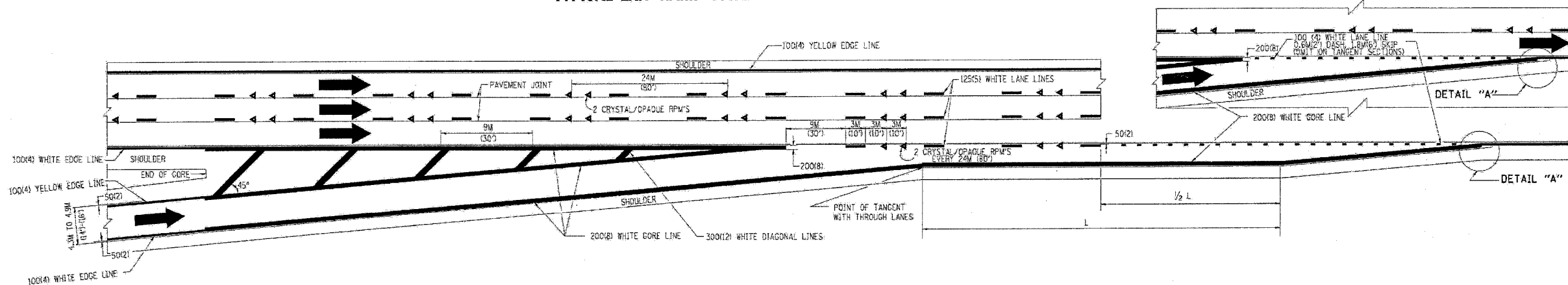
- NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
 2. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES
 3. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED ON PCC PAVEMENT.



TYPICAL EDGE LINES & LANE LINES



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
AM	3/96
DWS	7/96

ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS**

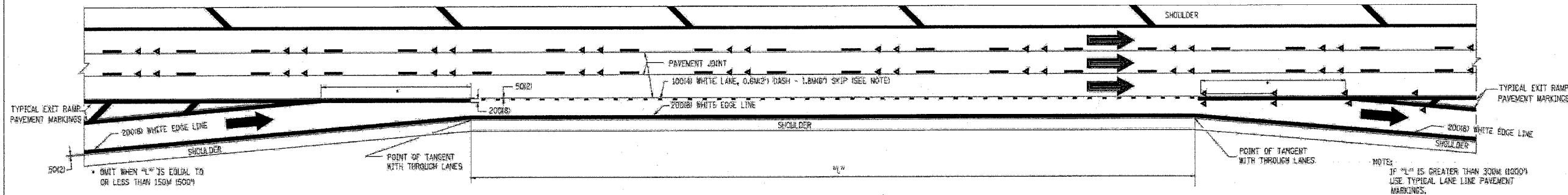
SCALE: NONE
DATE: 10/18/2002

DRAWN BY C.A.D.D.
CHECKED BY
TC12 SHEET 1 OF 2
REVISION DATE: 07/09/96

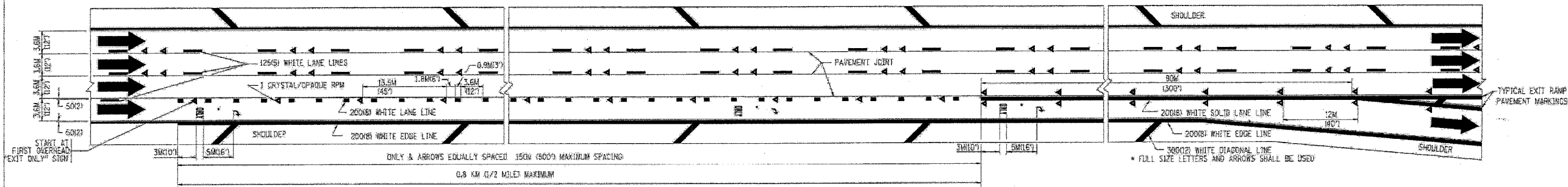
* FAP 330
FAI 90/94

PLAN NO.	SECTION	COUNTY	TOWNSHIP	SHEET NO.
2004-1241	COOK	36	35	
STATION		TO STA.		
TEL. ROAD DIST. NO. 7		SHEET NO.		NO. OF SHEETS

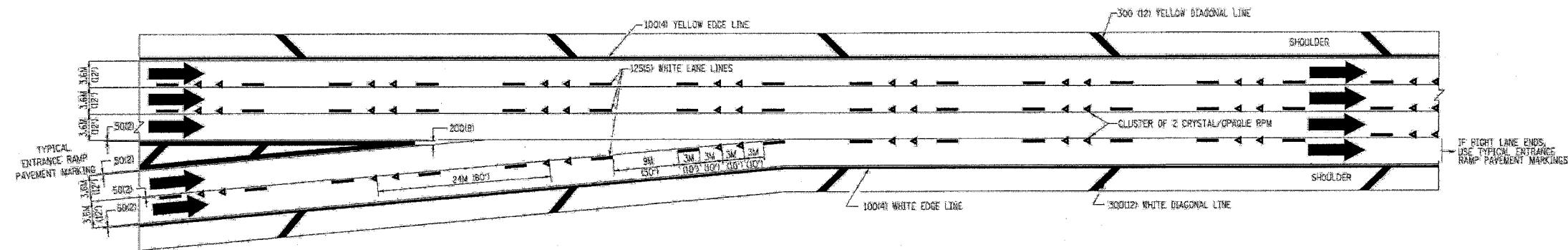
CONTRACT 62603



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91

ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS**

SCALE: NONE
DATE: 10/18/2002

DRAWN BY C.A.D.D.
CHECKED BY

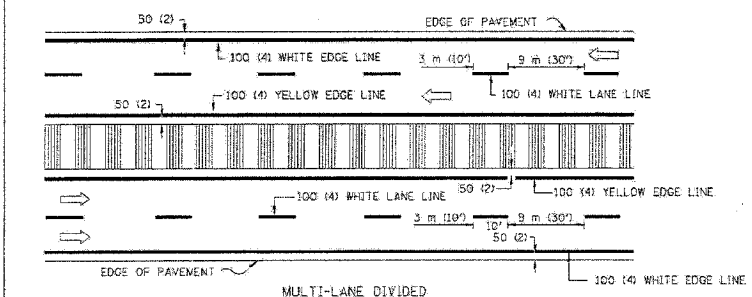
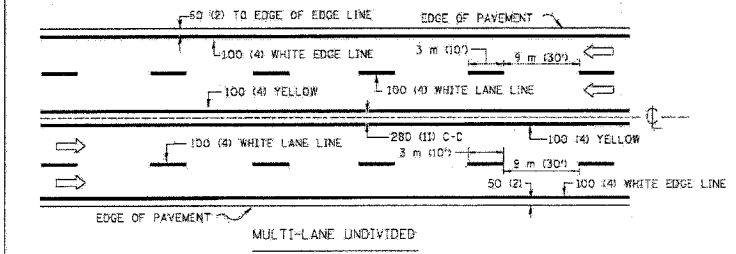
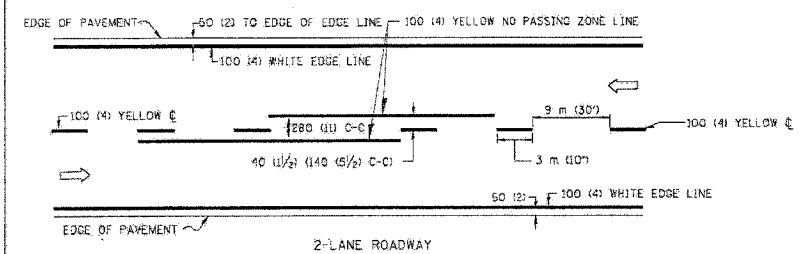
TC12 SHEET 2 OF 2

REVISION DATE: 01/01/95

F. & M. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2004-1241	COOK	36	36
STA.	TO STA.			
TEL. ROAD DIST. NO.	BLANKS	TEL. NO. PROJECT		

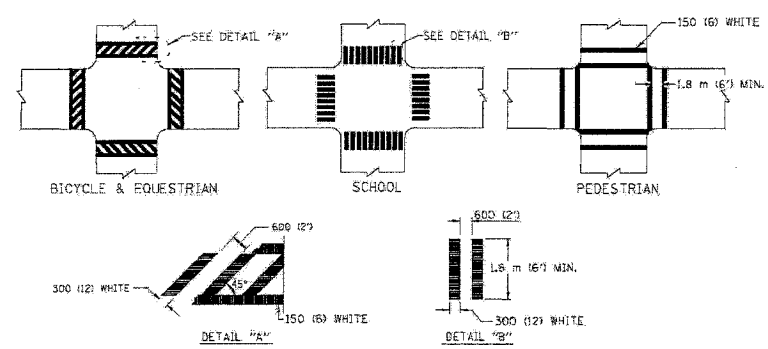
CONTRACT 62603

* FAP 330
FAI 90/94

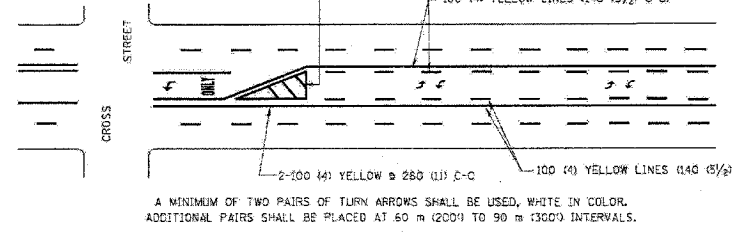
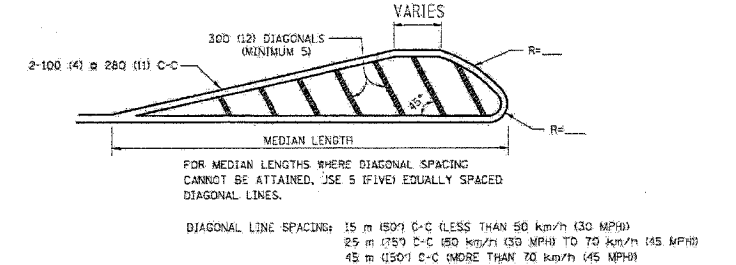
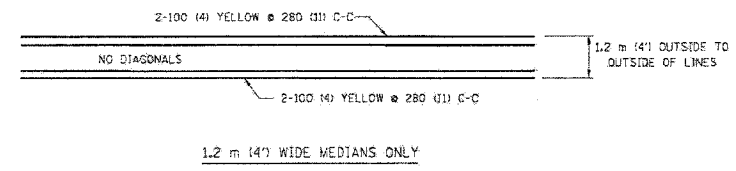


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

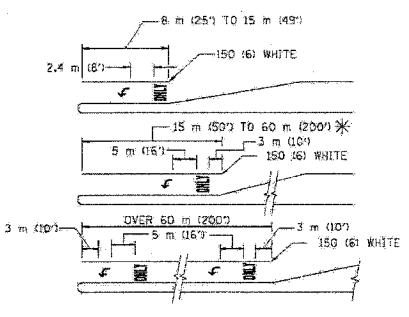
TYPICAL LANE AND EDGE LINE MARKING



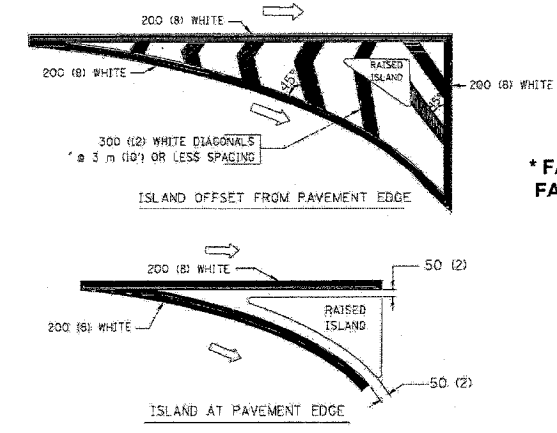
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL))	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT; OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
DORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 78000! AREA OF 1 "R"=0.33m² (3.6 SQ. FT.) EACH "X"=5.0 m² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
EYERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

SCALE: NONE
DATE: 10/18/2002
DRAWN BY: CADD
CHECKED BY: TC-13
REVISION DATE: 01/06/00