

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	1

CONTRACT NO.: 60B25

D-91-315-06

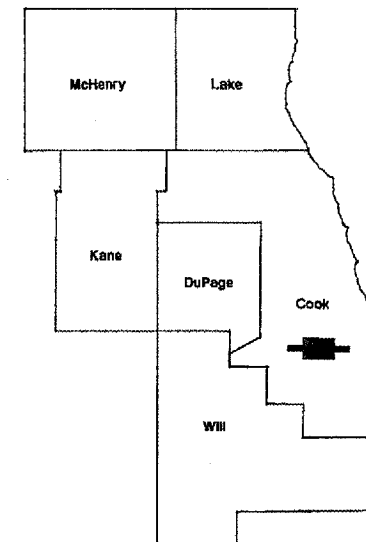
FOR INDEX OF SHEETS SEE SHEET 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE

PROPOSED HIGHWAY PLANS

FAP ROUTE 348: ILL 43 (HARLEM AVE.)
EB US 12 (95TH ST) RAMP TO SB IL 43
OVER CSX RAILROAD & RICHARD RD.
SECTION 3128-Z-HB-1-I
SN 016-1010
BRIDGE REPAIRS
COOK COUNTY
C-91-315-06

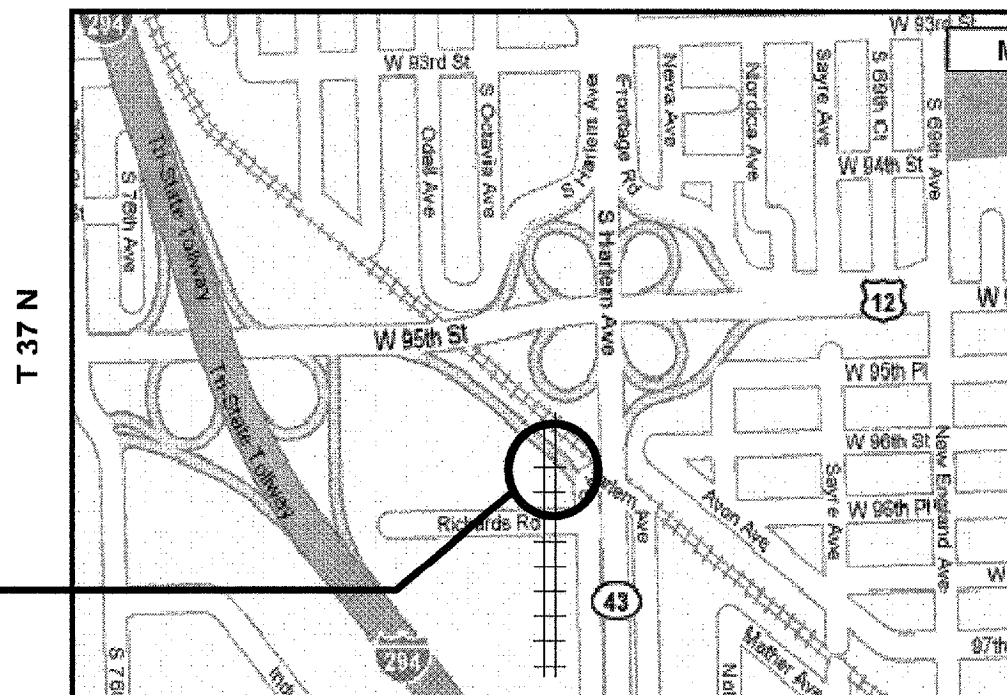
IMPROVEMENT IS LOCATED
IN THE VILLAGE OF
BRIDGEVIEW



LOCATION OF IMPROVEMENT INDICATED THUS:

R 12 E

TRAFFIC DATA (RAMP)
2005 ADT = 24,750
POSTED SPEED = 40 M.P.H.



WORTH TOWNSHIP

IMPROVEMENT
LOCATION:
SN 016-1010



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: 3/29 2007
Diane O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11 2007
Eric E. Hahn
ENGINEER OF DESIGN AND ENVIRONMENT

May 11 2007
Milton R. Sees
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

J.U.L.I.E.: JOINT UTILITY LOCATION
INFORMATION FOR EXCAVATION
(800) 892-0123

CONTRACT NO. 60B25

DISTRICT ONE - PLAN PREPARATION ENGINEER:
KEN ENG/R. BORO (847) 705-4178

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	2

CONTRACT NO. 60B25

INDEX OF SHEETS

<u>SHEET NO</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, & GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TRAFFIC STAGING
5 - 15	BRIDGE REPAIR DETAILS
16	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES

STATE STANDARDS

<u>STANDARD NO</u>	<u>DESCRIPTION</u>
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-03	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
702001-06	TRAFFIC CONTROL DEVICES

EXISTING MIN. VERTICAL CLEARANCE (RICHARDS RD.) = 18' - 10 3/8"

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT (800) 892-0123 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 OR TOLLWAY PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

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

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

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE BID FOR THE WORK.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
STATE STANDARDS
GENERAL NOTES

SUMMARY OF QUANTITIES

16ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	3

CONSTRUCTION TYPE CODE SFTY-2A

CONTRACT: 60B25
URBAN-100/STATE

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES
58700300	CONCRETE SEALER	SQ FT	7155
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1
67100100	MOBILIZATION	L SUM	1
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
X0320887	POLYMER CONCRETE	CU FT	15.5
X0321744	SILICONE JOINT SEALER, 2"	FOOT	148
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	24
X0323076	SILICONE JOINT SEALER, 1 3/4"	FOOT	112
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	79
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1160
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	6
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	8

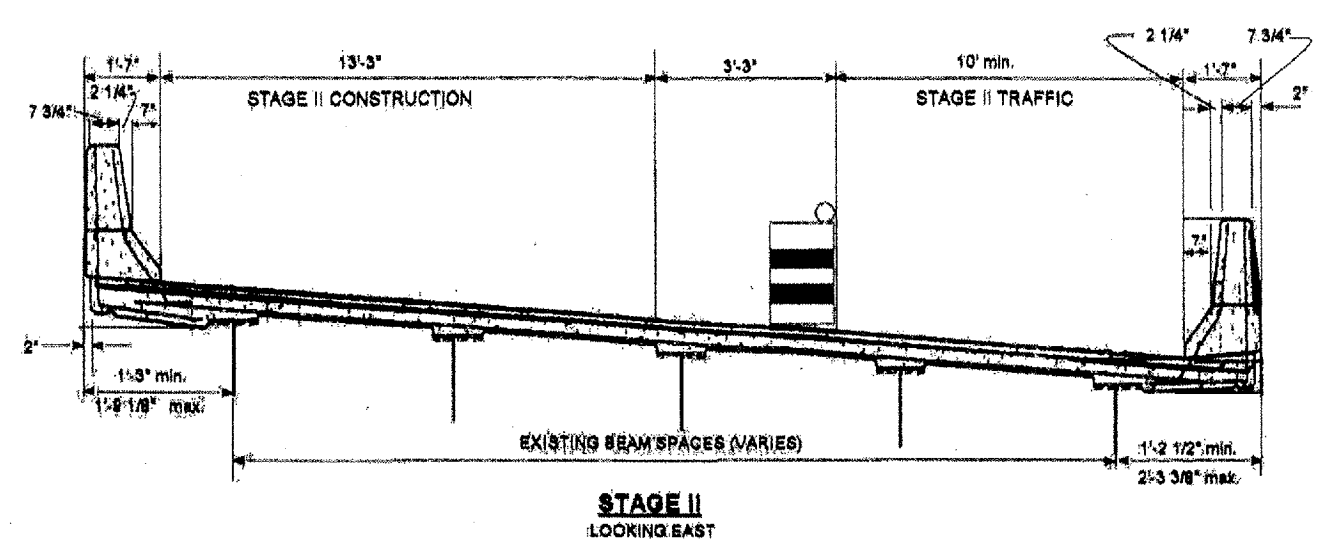
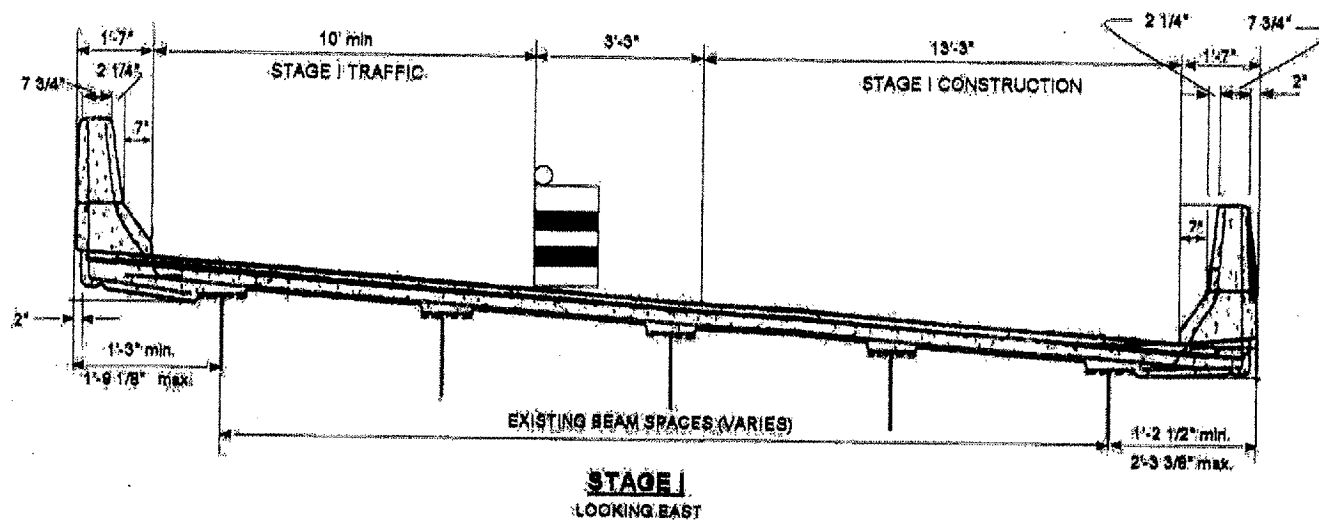
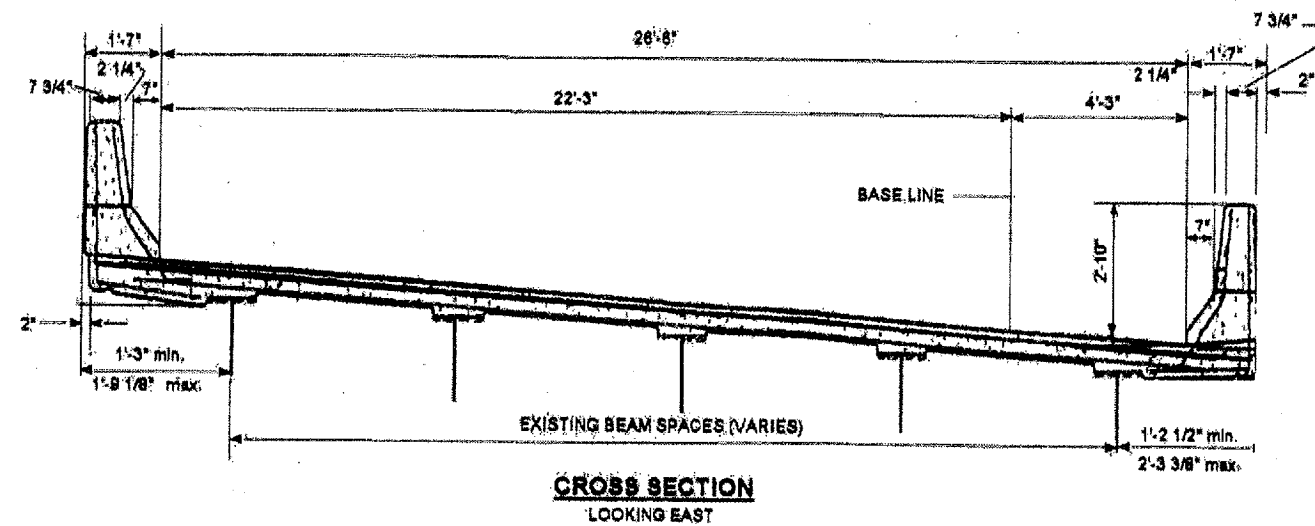
ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

Rev.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	4

CONTRACT No. 60B25



DRUMS SHALL BE SPACED AS SHOWN IN THE "PARTIAL RAMP CLOSURE DETAILS" ON THE DISTRICT "TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES & PARTIAL RAMP CLOSURES".

BASES OF PAYMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE LUMP SUM FOR "TRAFFIC CONTROL & PROTECTION (SPECIAL)"

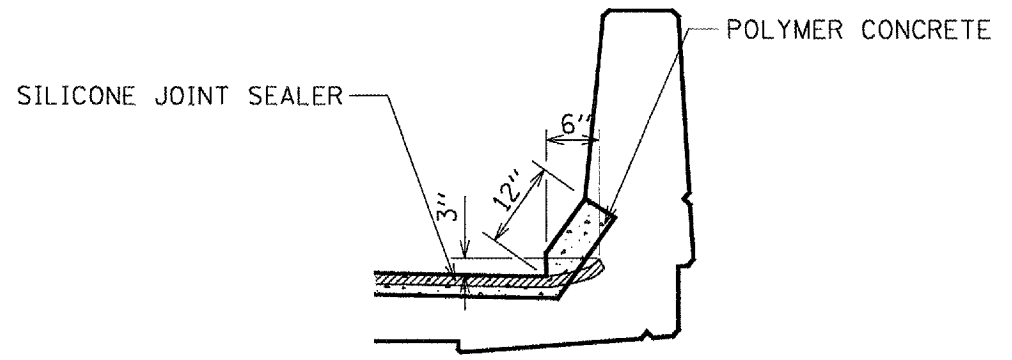
ILLINOIS DEPARTMENT OF
TRANSPORTATION

TRAFFIC STAGING
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010

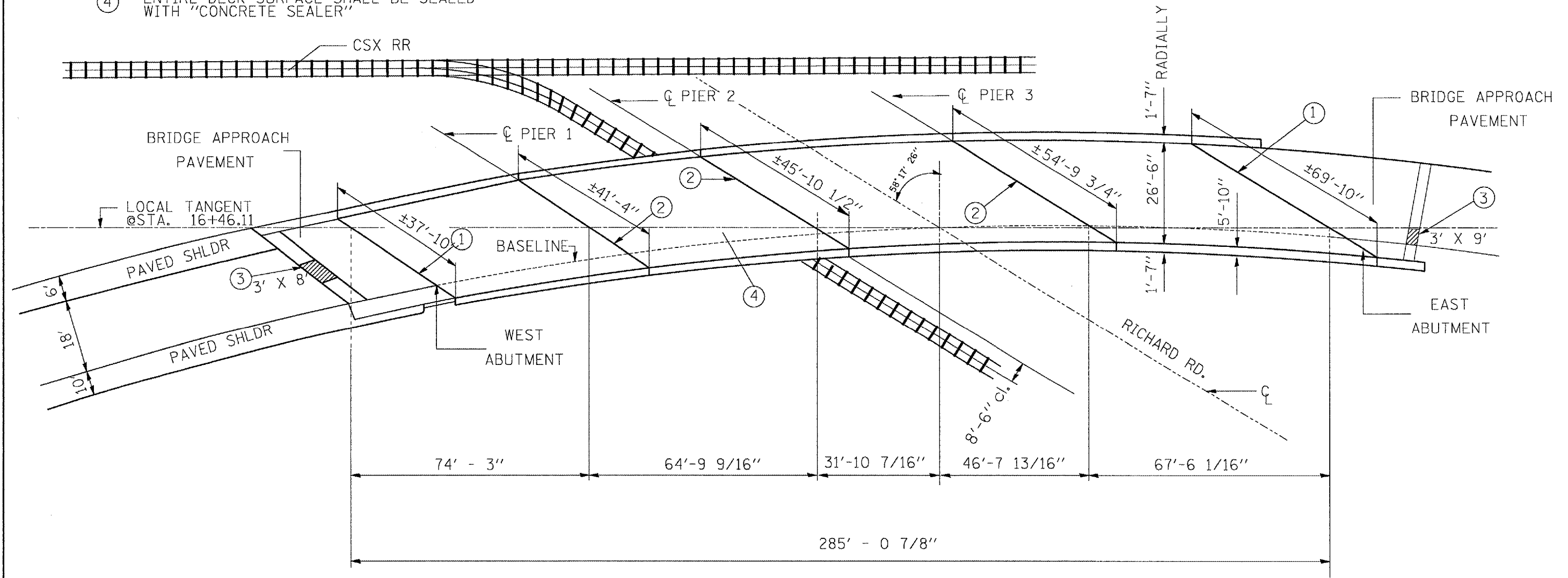
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	-	-	16	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET 1 OF 11

- ① EXISTING PJS 2 1/2"
REPLACE W/SJS 1 3/4"
see DETAIL A (SHEET 2 OF 11)
- ② EXISTING NEOPRENE 2"
REPLACE W/SJS 2" AND
POLYMER CONCRETE
see DETAIL B (SHEET 2 OF 11)
- ③ APPROACH SLAB REPAIR (FULL DEPTH)
TO APPROACH PAVEMENT RELIEF JOINT.
ALSO RESEAL RELIEF JOINT FULL WIDTH.
COST OF ALL MATERIALS SHOWN TO REPAIR
RELIEF JOINT ARE INCLUDED IN THE COST OF
"APPROACH SLAB REPAIR (FD)" (SEE SHEET 11 OF 11)
- ④ ENTIRE DECK SURFACE SHALL BE SEALED
WITH "CONCRETE SEALER"



END OF SEAL TREATMENT



PLAN

PLOT DATE = 4/27/2007
 FILE NAME = c:\projects\132706\132706a.dgn
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = mitchellr

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE REPAIR DETAILS
 GENERAL PLAN

SN# 016-1010

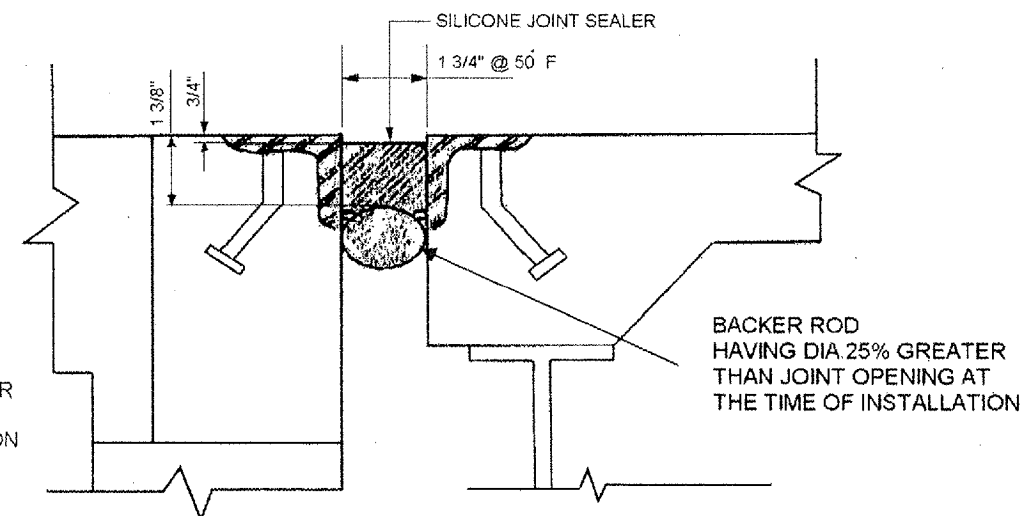
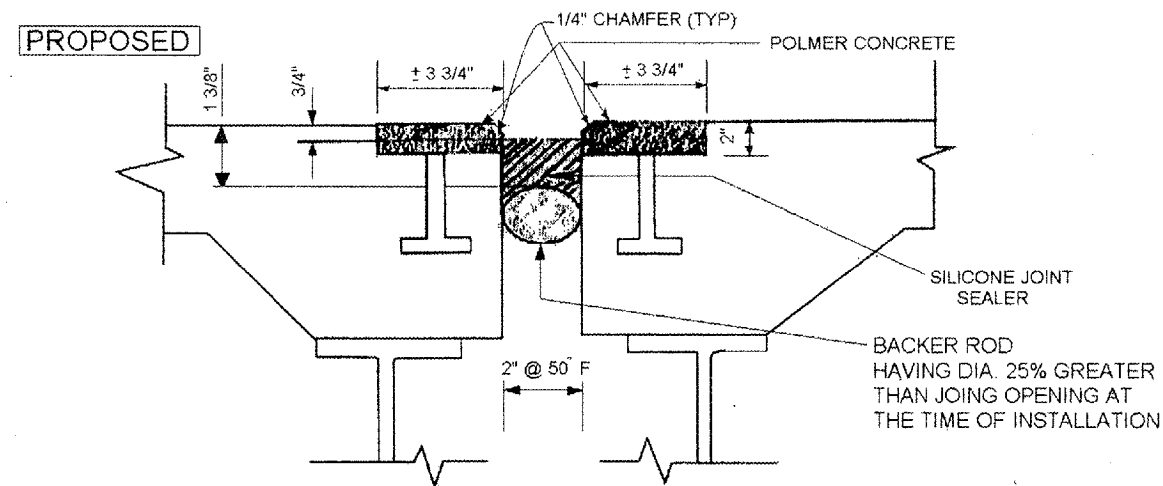
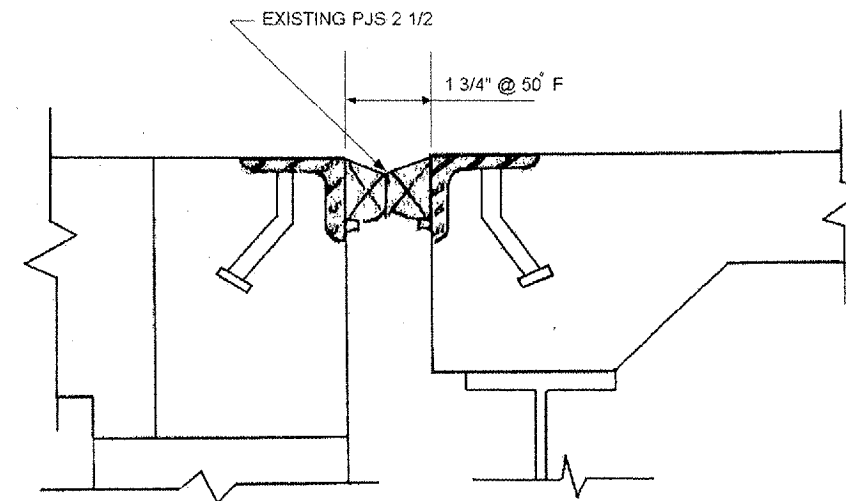
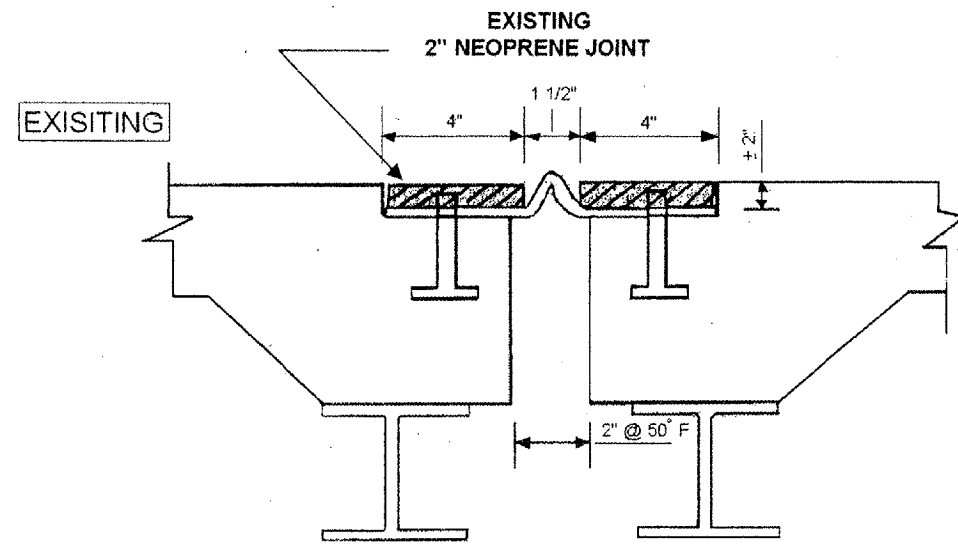
SCALE: VERT. _____
 HORIZ. _____

DATE _____ DRAWN BY _____
 CHECKED BY _____

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	6

CONTRACT No. 60B25

2 of 11



DETAIL B
PIERS 1,2,3

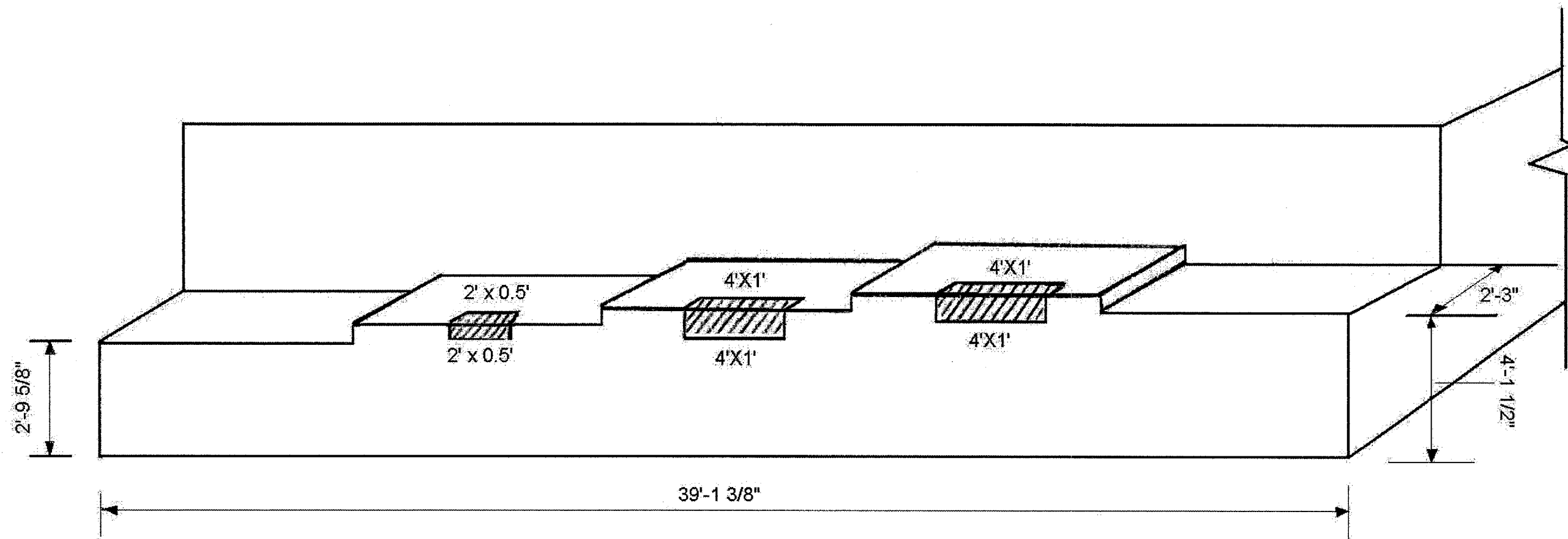
DETAIL A
E & W ABUTMENT

ILLINOIS DEPARTMENT OF
TRANSPORTATION
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
BRIDGE REPAIR DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	7

CONTRACT No. 60B25

3 OF 11



WEST ABUTMENT
(LOOKING WEST)



— STRUCTURAL REPAIR OF CONCRETE ($\leq 5"$), 46 SQ. FT.

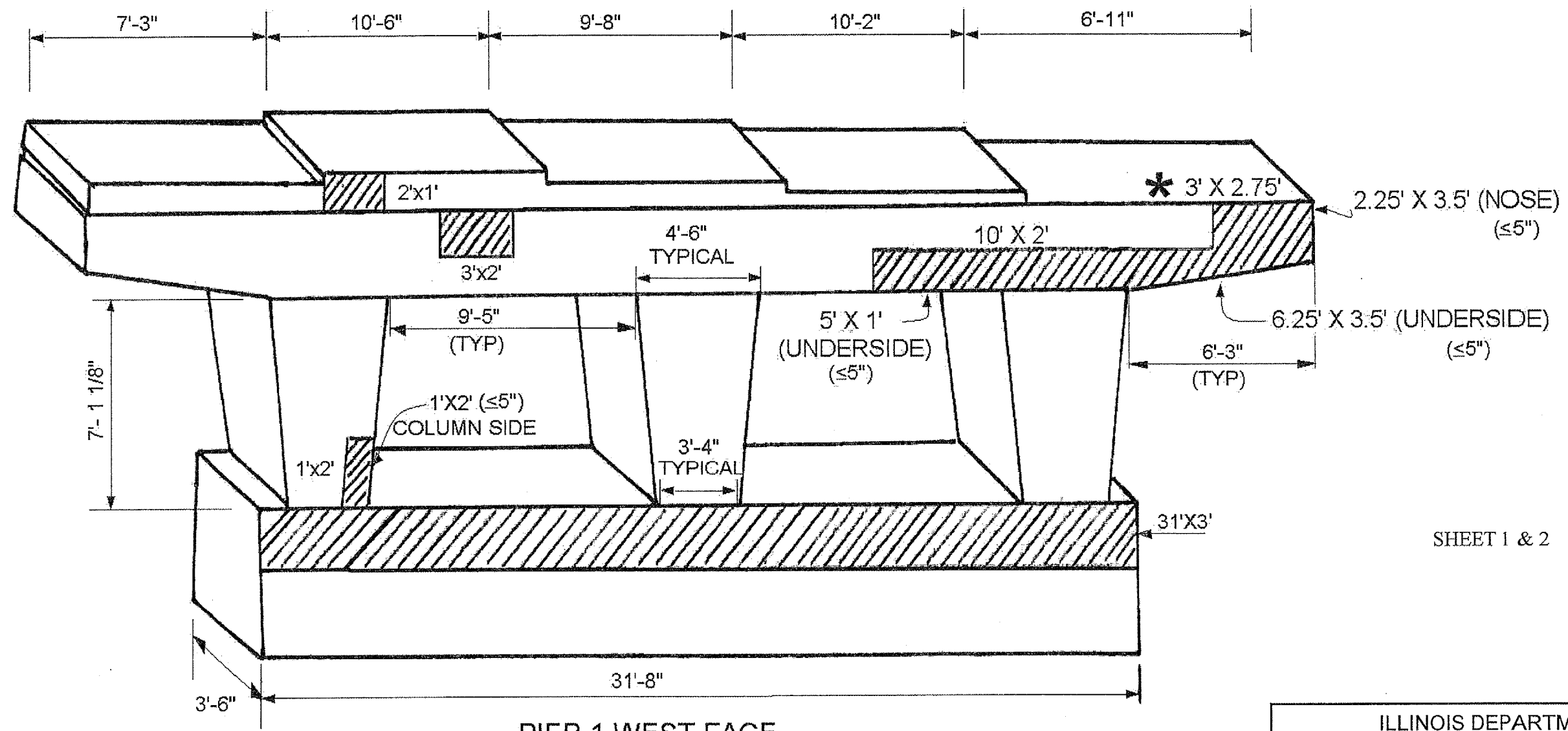
ILLINOIS DEPARTMENT OF
TRANSPORTATION

WEST ABUTMENT
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	8

CONTRACT No. 60B25

4 OF 11



PIER 1 WEST FACE
(LOOKING EAST)

FOR QUANTITIES SEE SHEET 5 OF 11

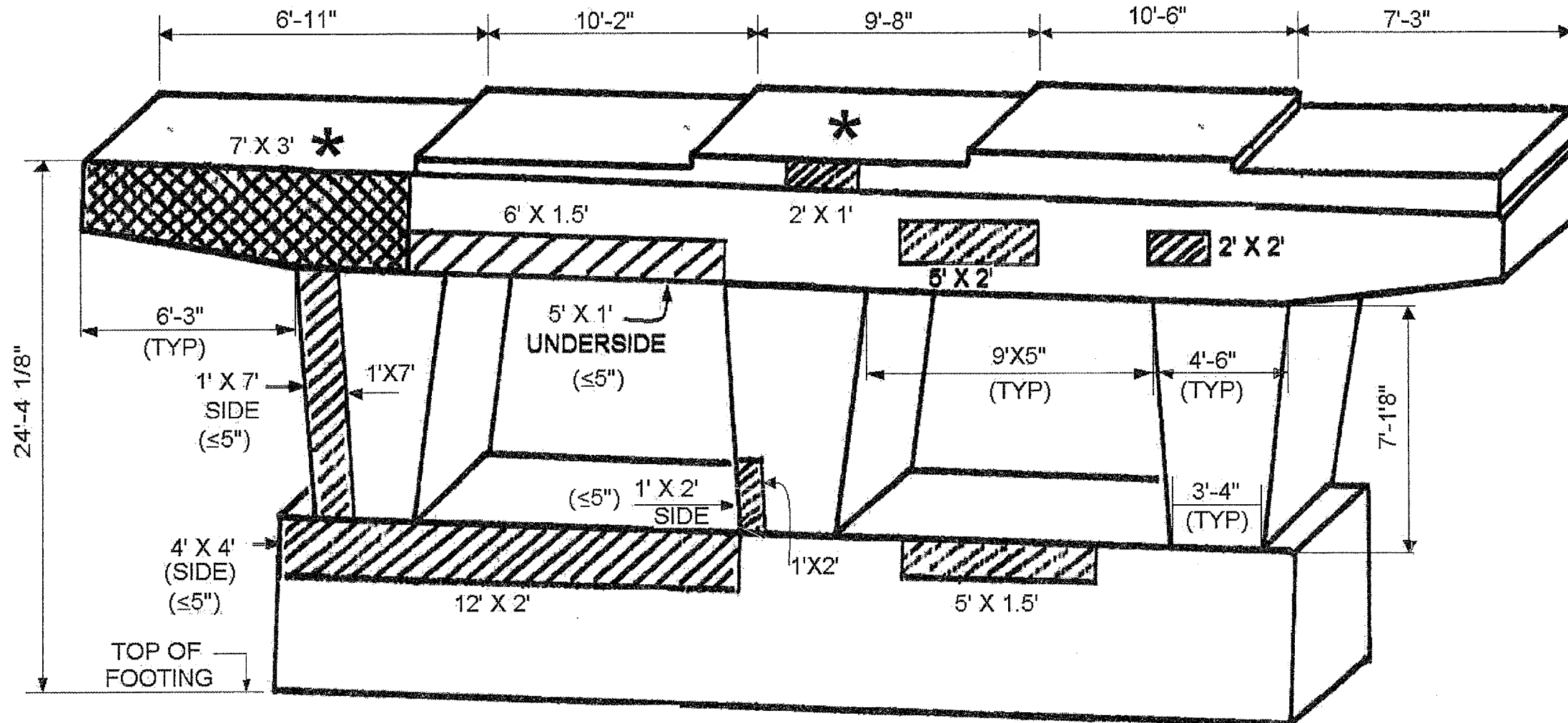
SHEET 1 & 2

ILLINOIS DEPARTMENT OF
TRANSPORTATION

PIER 1 WEST FACE
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	9

CONTRACT No. 60B25
5 OF 11



PIER 1 BILL OF MATERIALS



STRUCTURAL REPAIR OF CONCRETE (≤5"),
WEST FACE: 169 SQ. FT.
EAST FACE: 96 SQ. FT.
TOTAL 265 SQ. FT.



STRUCTURAL REPAIR OF CONCRETE (>5"), 21 SQ. FT.



BEAM END SUPPORT REQ. BEAM 1 (E & W) & 3 (E FACE)
TEMPORARY SHORING & CRIBBING - EACH - 3

PIER 1 EAST FACE
(LOOKING WEST)

	REACTIONS	
	SPAN 1	SPAN 2
R DL (K)	32.1	31.2
R LL (K)	36.5	37.5
R IMP (K)	10.1	10.6
R (TOTAL)	78.7	79.3

SHEET 2 & 2

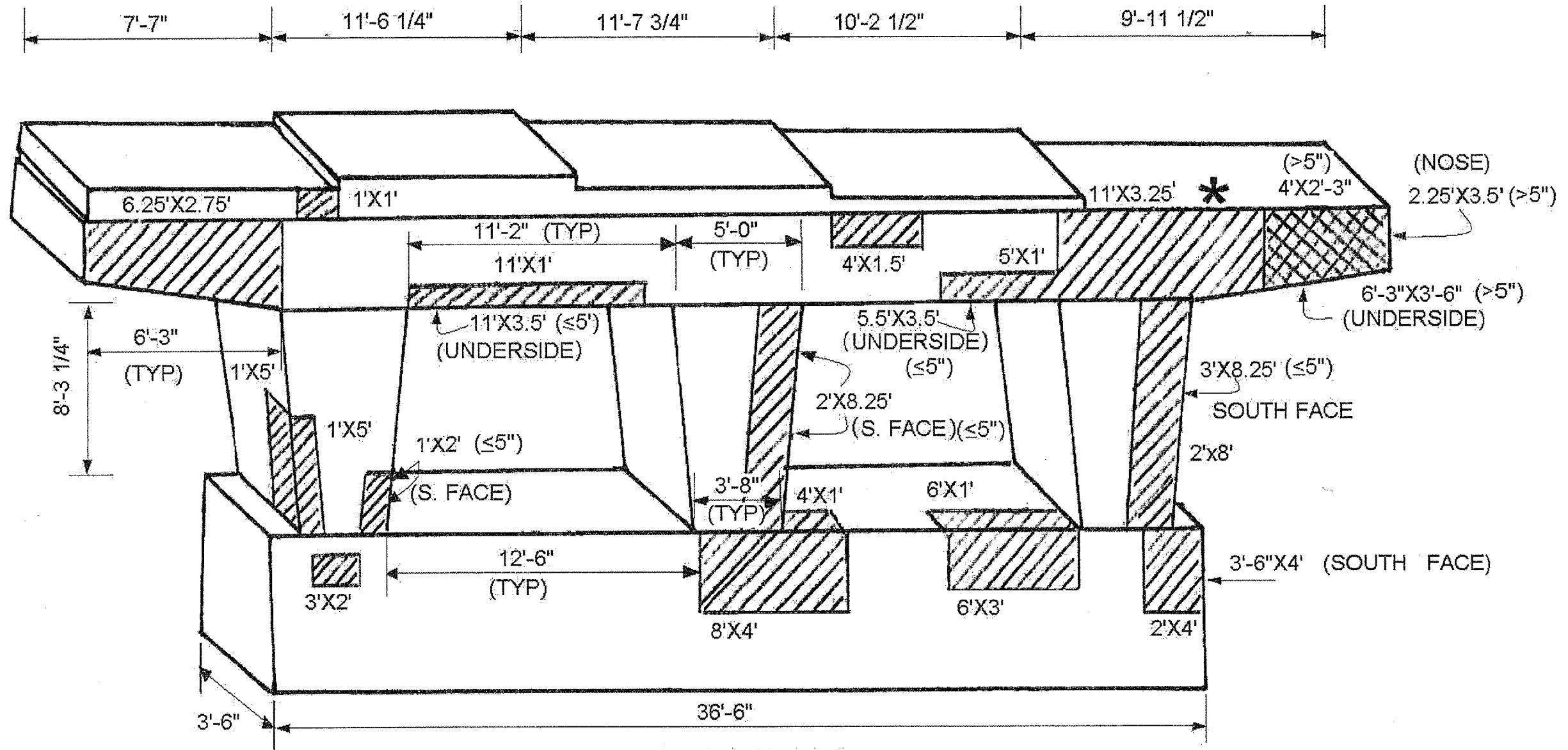
ILLINOIS DEPARTMENT OF
TRANSPORTATION

PIER 1 EAST FACE
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	10

CONTRACT No. 60B25

6 OF 11



PIER 2 WEST FACE
(LOOKING EAST)

SHEET 1 OF 2

FOR QUANTITIES SEE SHEET 7 OF 11

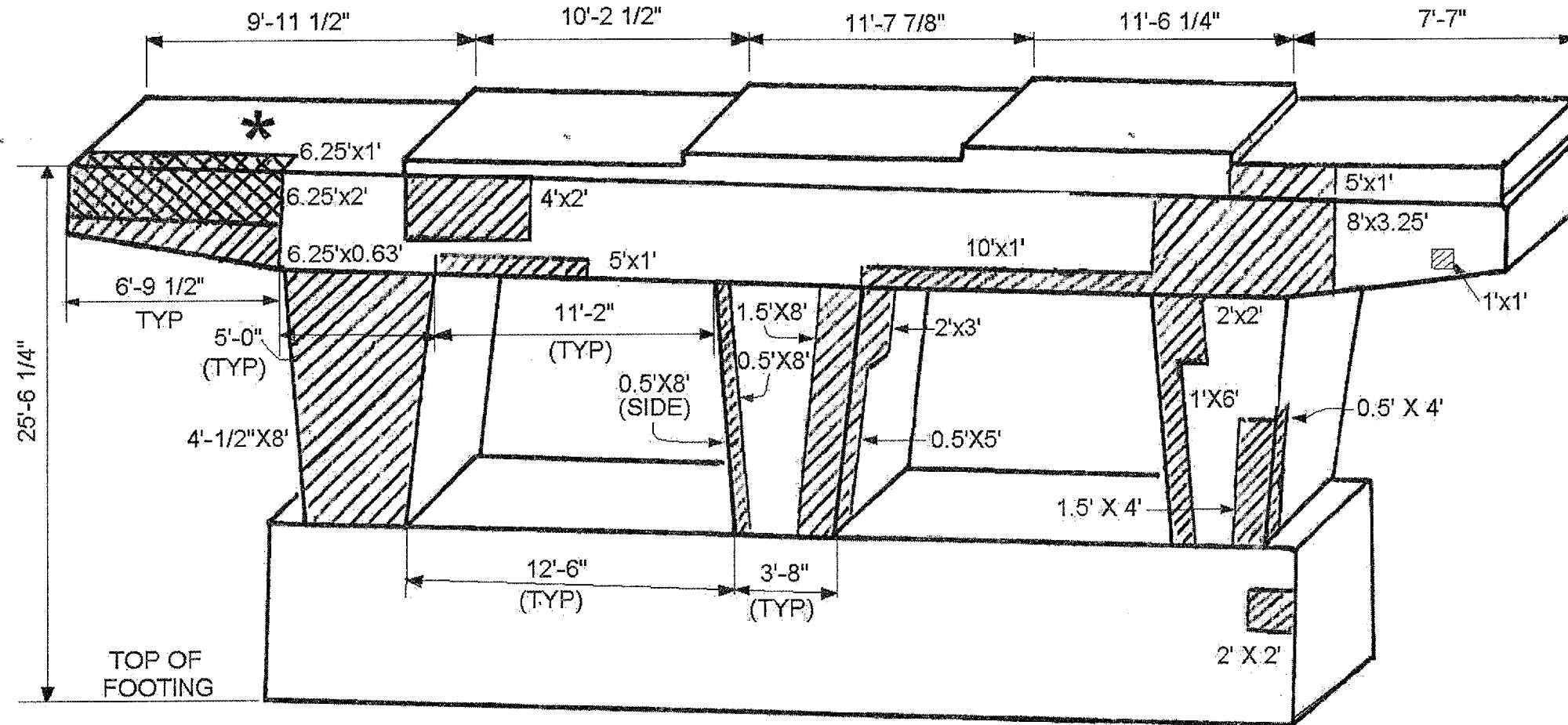
ILLINOIS DEPARTMENT OF
TRANSPORTATION

PIER 2 WEST FACE
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	11


CONTRACT No. 60B25

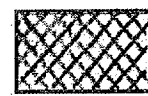
7 OF 11



PIER 2 BILL OF MATERIALS

PIER 2 EAST FACE
(LOOKING WEST)

 — STRUCTURAL REPAIR OF CONCRETE ($\leq 5''$)
 WEST FACE: 309 SQ. FT.
 EAST FACE: 146 SQ. FT.
 TOTAL 455 SQ. FT.

 — STRUCTURAL REPAIR OF CONCRETE ($> 5''$),
 WEST FACE: 39 SQ. FT.
 EAST FACE: 19 SQ. FT.
 TOTAL 58 SQ. FT.

* — BEAM END SUPPORT REQ. BEAM 1 (EAST & WEST FACE)
 TEMPORARY SHORING & CRIBBING, EACH - 2

REACTIONS		
	SPAN 2	SPAN 3
R DL (K)	31.2	45.1
R LL (K)	37.5	35.4
R IMP (K)	10.6	8.8
R (TOTAL)	79.3	88.2

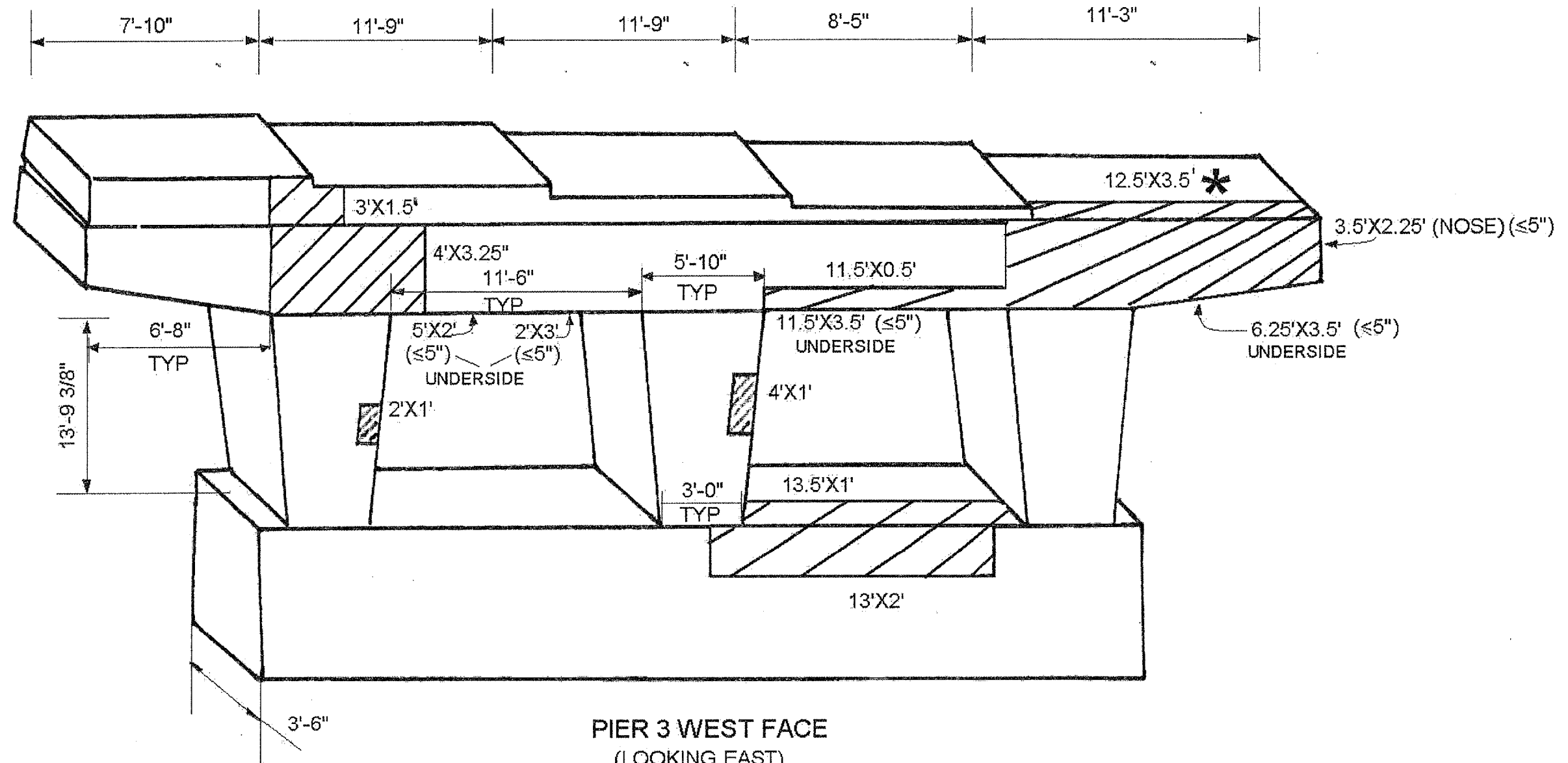
SHEET 2 OF 2

ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 PIER 2 EAST FACE
 EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
 SN 016-1010
 STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	12

CONTRACT No. 60B25

8 OF 11



PIER 3 WEST FACE
(LOOKING EAST)
FOR QUANTITIES SEE SHEET 9 OF 11

SHEET 1 OF 2

ILLINOIS DEPARTMENT OF
TRANSPORTATION

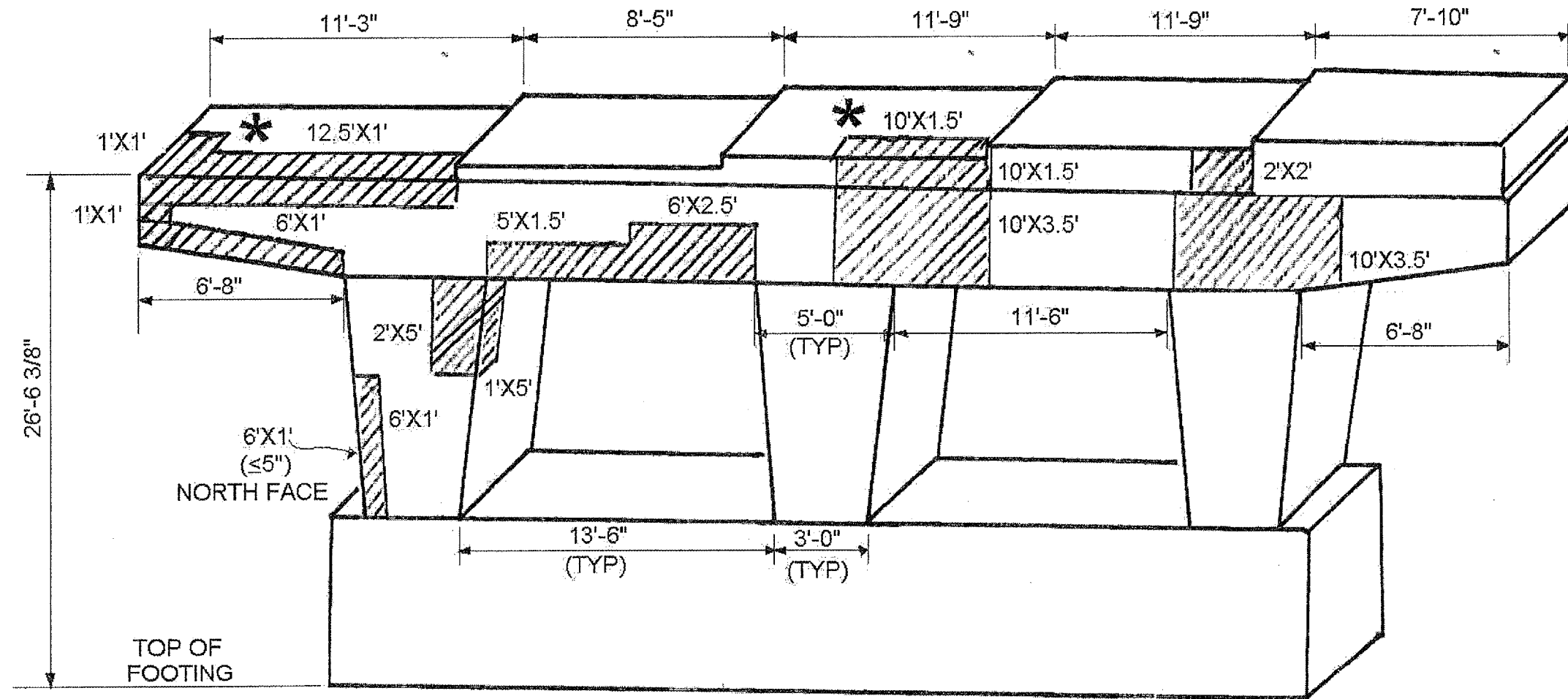
PIER 3 WEST FACE
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

FOR QUANTITIES SEE SHEET 9 OF 11

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	13

CONTRACT No. 60B25

9 OF 11



PIER 3 BILL OF MATERIALS



STRUCTURAL REPAIR OF CONCRETE (≤5")

WEST FACE: 199 SQ. FT.
EAST FACE: 174 SQ. FT.
TOTAL 373 SQ. FT.



BEAM END SUPPORT REQ. BEAM 1 EAST & WEST FACE & BM 3 EAST FACE
TEMPORARY SHORING & CRIBBING, EACH - 3

PIER 3 EAST FACE
(LOOKING WEST)

	REACTIONS	
	SPAN 3	SPAN 4
R DL (K)	45.1	47.1
R LL (K)	35.4	33.1
R IMP (K)	8.8	8.0
R (TOTAL)	89.3	88.2

SHEET 2 OF 2

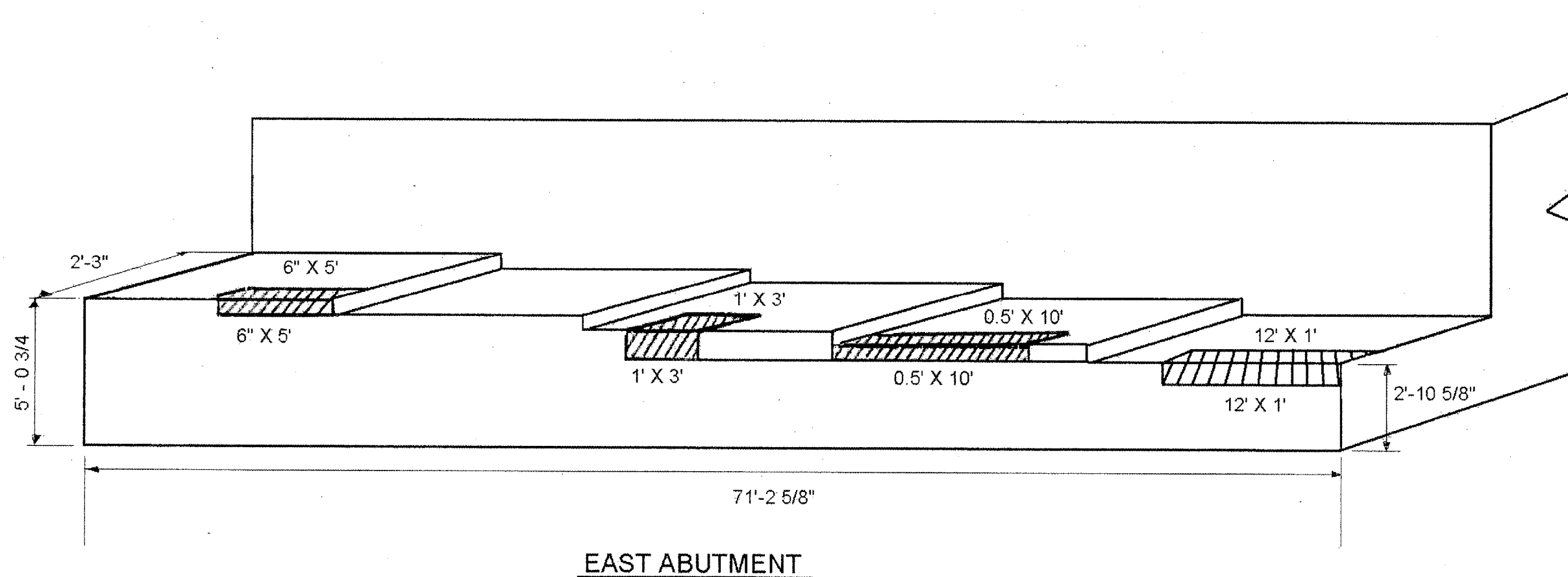
ILLINOIS DEPARTMENT OF
TRANSPORTATION

PIER 3 EAST FACE
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-I	COOK	16	14

CONTRACT No. 60B25

10 OF 11



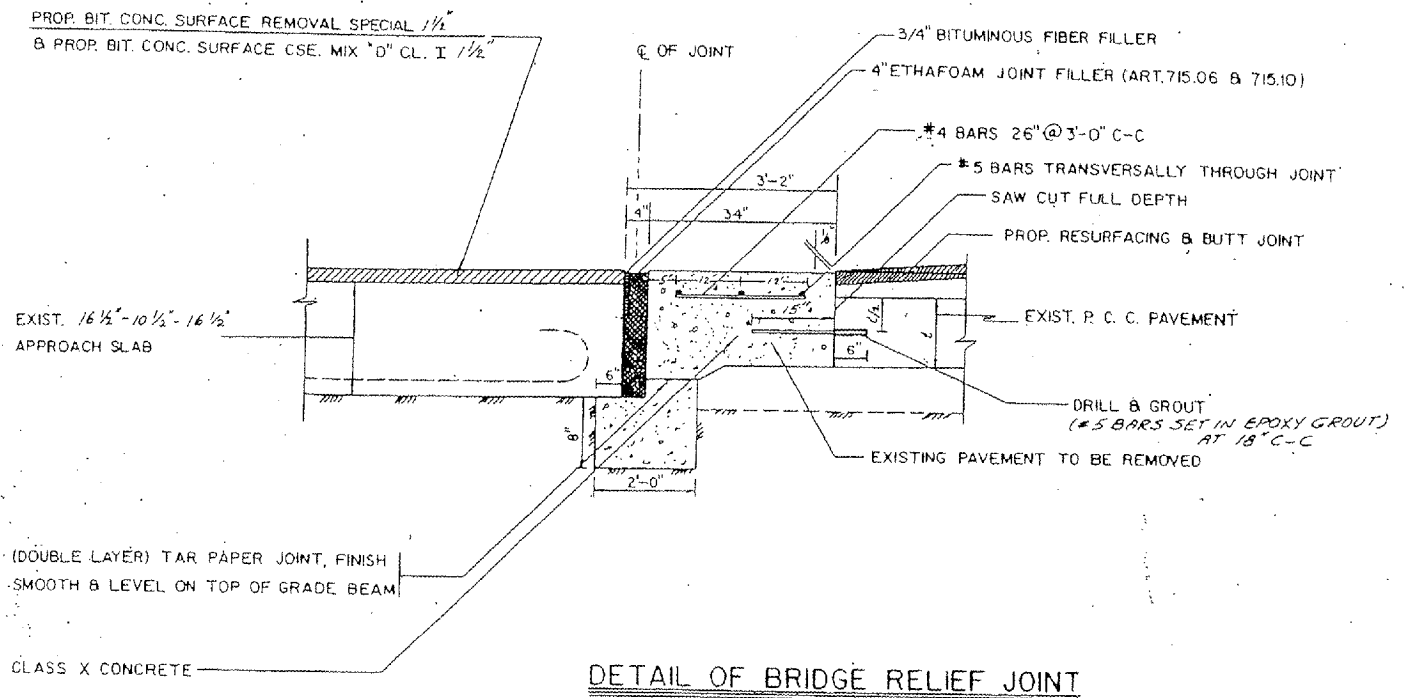
 — STRUCTURAL REPAIR OF CONCRETE ($\leq 5''$), 21 SQ. FT.

ILLINOIS DEPARTMENT OF
TRANSPORTATION

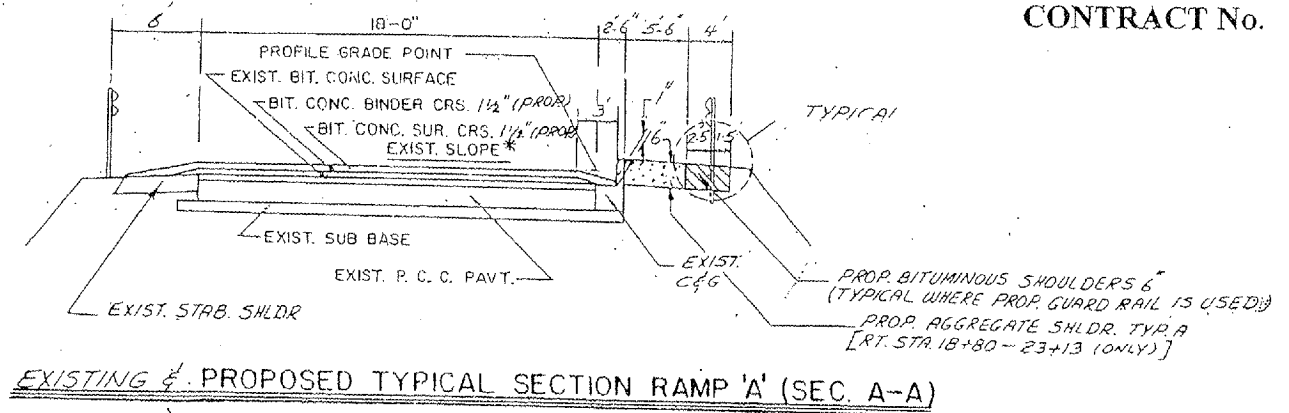
EAST ABUTMENT
EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010
STRUCTURAL PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 348	3128-Z-HB-1-1	COOK	16	15

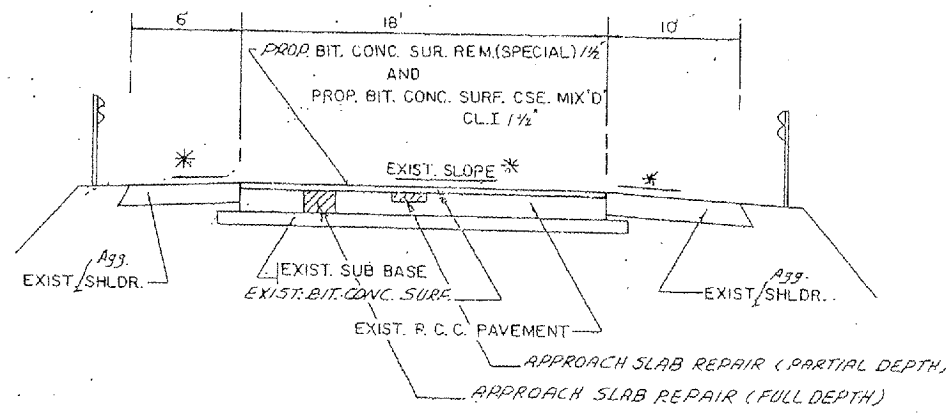
CONTRACT No. 60B25



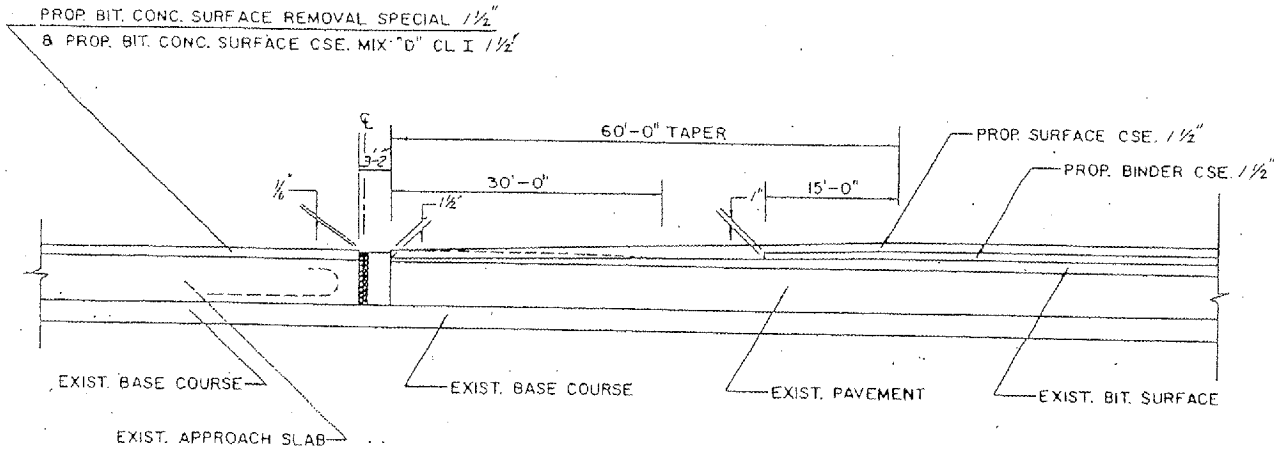
DETAIL OF BRIDGE RELIEF JOINT



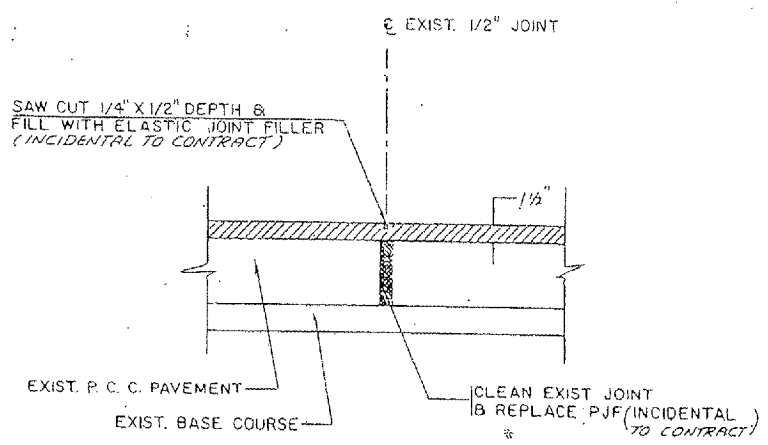
EXISTING & PROPOSED TYPICAL SECTION RAMP 'A' (SEC. A-A)



EXISTING & PROPOSED TYPICAL SECTION APPROACH SLAB (SEC. B-B)



DETAIL 60' TAPER BUTT JOINT



SECTION THRU EXPANSION JOINT (SEC. C-C)
APPROACH SLAB

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF
TRANSPORTATION

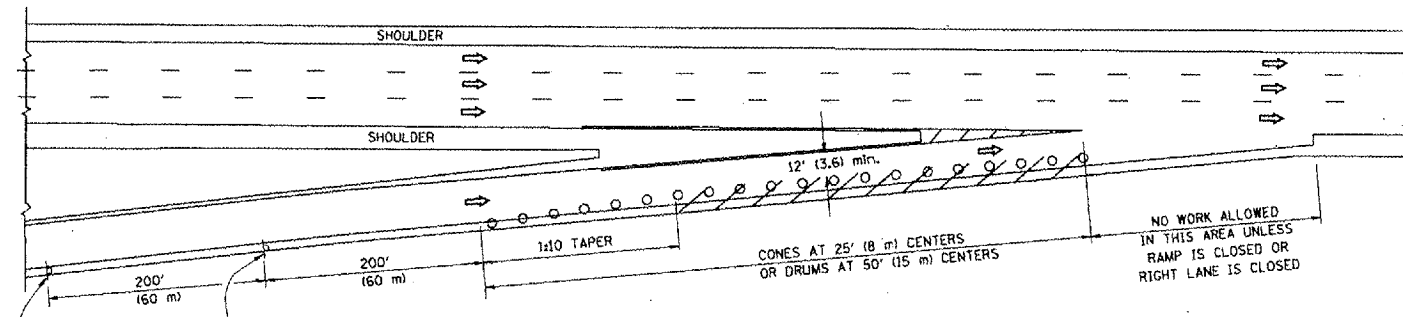
APPROACH PAVEMENT

EB 95TH ST RAMP SB TO IL 43 (HARLEM AVE)
SN 016-1010

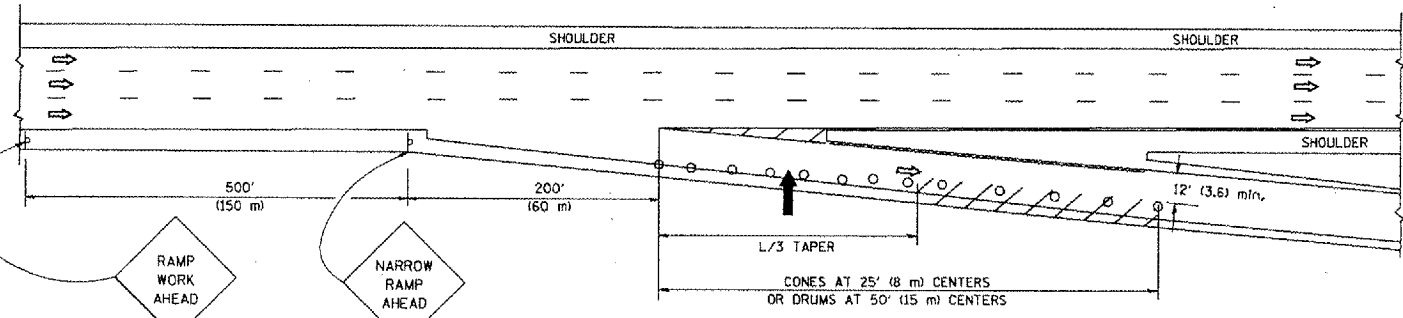
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

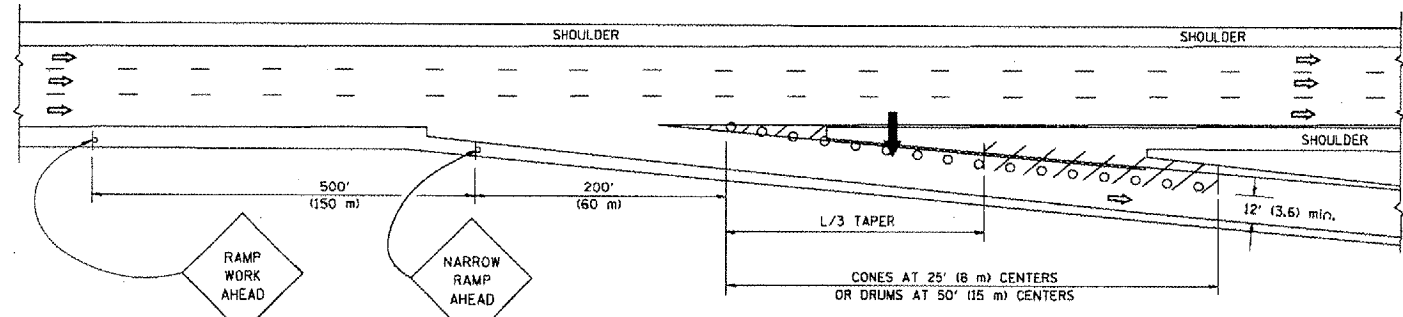
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348		COOK	16	16
STA.	TO STA.			
3128-2-HB-11-7				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

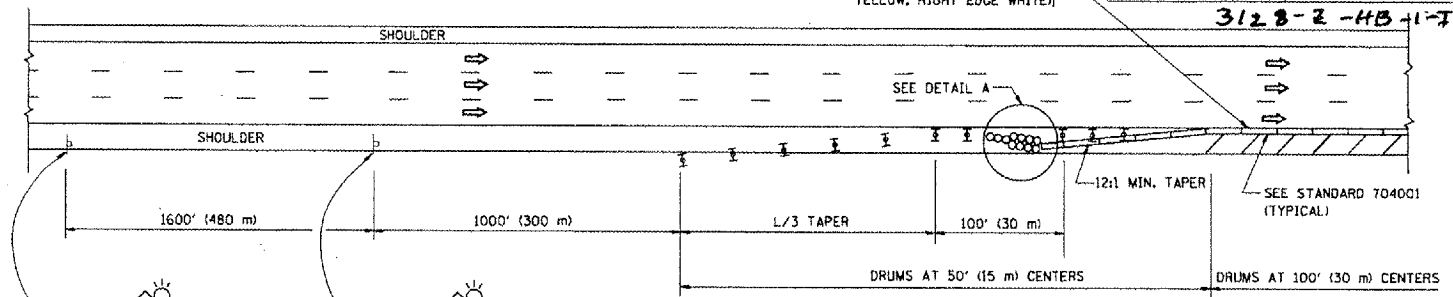
SYMBOLS

- ➔ ARROWBOARD
- ▨ WORK AREA
- ⊥ SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONG-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

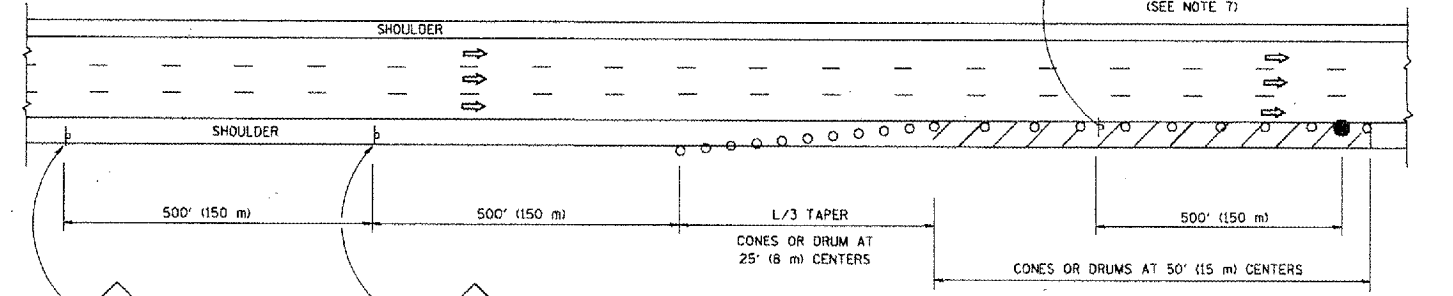
GENERAL NOTES

- THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH
	$L=0.65(W)(S)$ $L=(W)(S)$
W = WIDTH OF OFFSET IN FEET (METERS)	
S = NORMAL POSTED SPEED MPH (KM/H)	
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

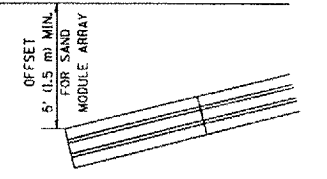


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.



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

- THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
- THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - THE WORK ACTIVITY REQUIRES FREQUENT ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

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

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SHOULDER CLOSURES
 PARTIAL RAMP CLOSURES
 DESIGNED BY: DWS
 DRAWN BY:
 CHECKED BY:
 SCALE: NONE

PLOT DATE = 3/7/2007
 PLOT SCALE = 3/8" = 1'-0"
 USER NAME = bbaard