11-9-12 LETTING ITEM 060

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENTS ARE LOCATED IN THE VILLAGES OF ITASCA,

**ELK GROVE AND PALATINE** 

0

 $\circ$ 

 $\circ$ 

PROPOSED HIGHWAY PLANS

FAI ROUTE 290: I-290 AND FAP ROUTE 342: IL 53 EXTENSION VARIOUS LOCATIONS
SECTION: 2012-026 BR
SUBSTRUCTURE REPAIRS
COOK AND DUPAGE COUNTIES

C-91-419-12

LOC. 1) IL 53 EXTENSION AT LAKE-COOK RD (SN 016-3215)

LOC. 2) I-290 AT BIESTERFIELD RD (SN 016-0960)

LOC. 3) I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091)

FOR LOCATION MAPS, SEE SHEET 3

2012-026 BR

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED AUGUST 22 20 12

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

OCTOOR 5 20 12

DIPLY DIRECTOR OF DESIGN AND ENVIRONMENT

OCTOOR 5 20 12

DIRECTOR OF HIGHWAYS CHIEF ENGINEER

OTHER 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
1-800-892-0123
OR 811

PROJECT ENGINEER: BORO, ROBERT (847) 705–4237 PROJECT MANAGER: RAYYAN, ISSAM (847) 705–4178

CONTRACT NO.60T70

### **INDEX OF SHEETS**

SHEET NO	DESCRIPTION
. 1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	LOCATION MAPS: 1, 2 AND 3
4	SUMMARY OF QUANTITIES
5-11	STRUCTURAL REPAIRS - LOCATION 1, (SN 016-3215)
12-19	STRUCTURAL REPAIRS - LOCATION 2, (SN 016-0960)
20	TRAFFIC CONTROL PLAN - LOCATION 2
21-28	STRUCTURAL REPAIRS - LOCATION 3, (SN 022-0091)
29	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND
	PARTIAL RAMP CLOSURES (TC-17)

## **STATE STANDARDS**

STD NO	DESCRIPTION
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
643001	SAND MODULE IMPACT ATTENUATORS
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-03	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-05	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-06	LANE CLOSURE, FREEWAY/EXPRESSWAY
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER

### **GENERAL NOTES**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811, FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOURS NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGES OF ELK GROVE, ITASCA AND PALATINE.

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

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

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

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

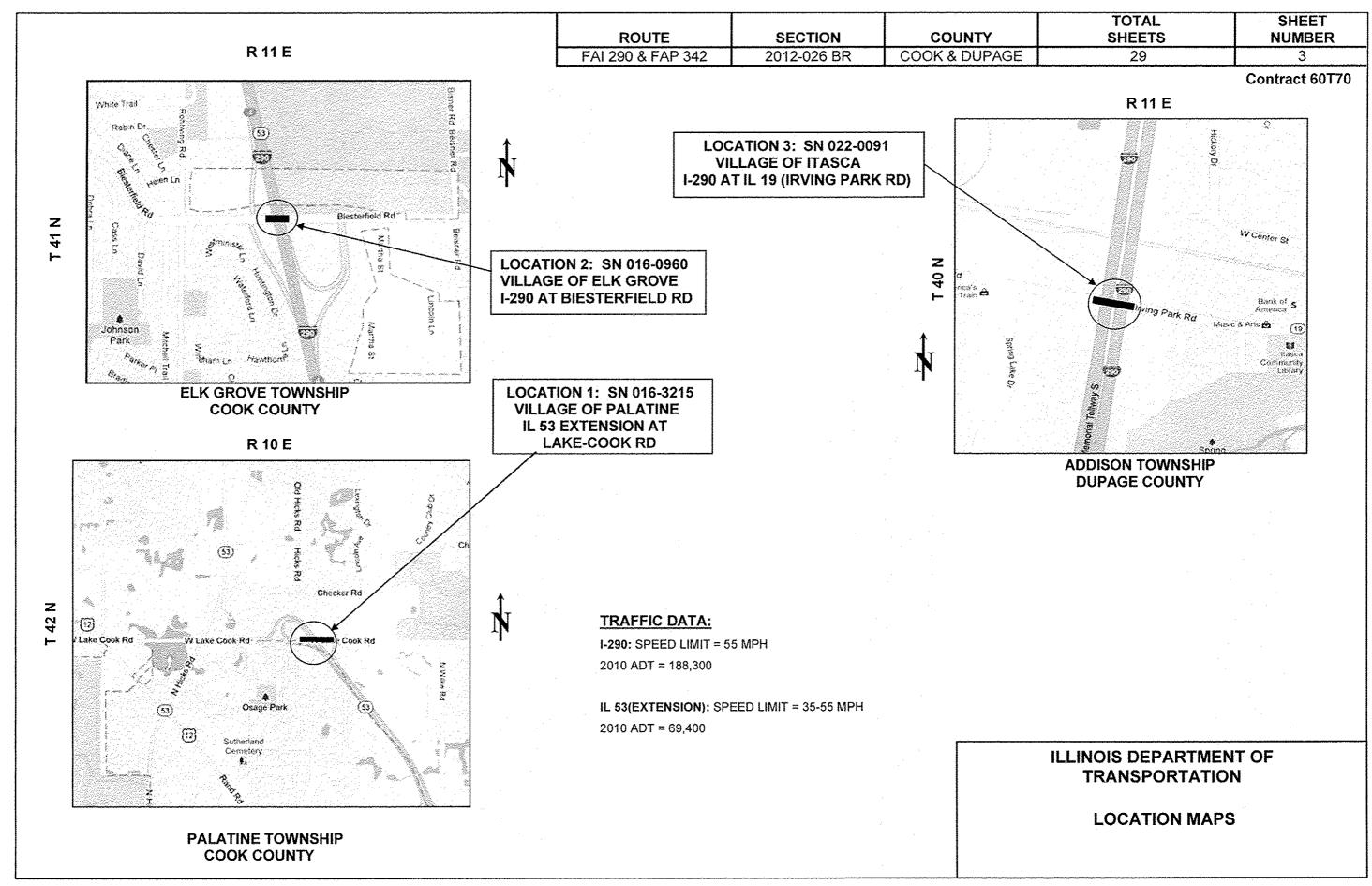
THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

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

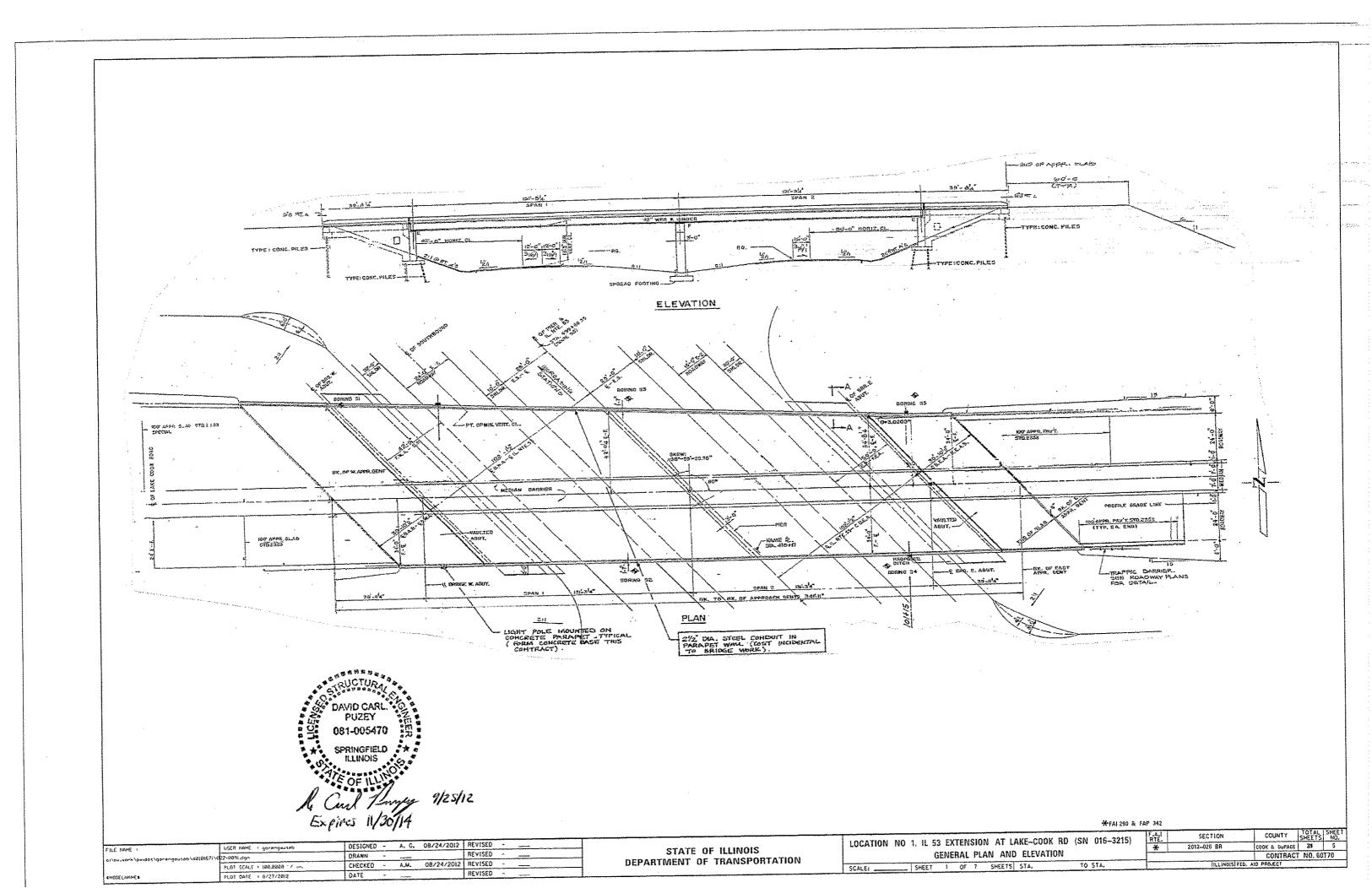
¥ FAI 290 & FAP 342

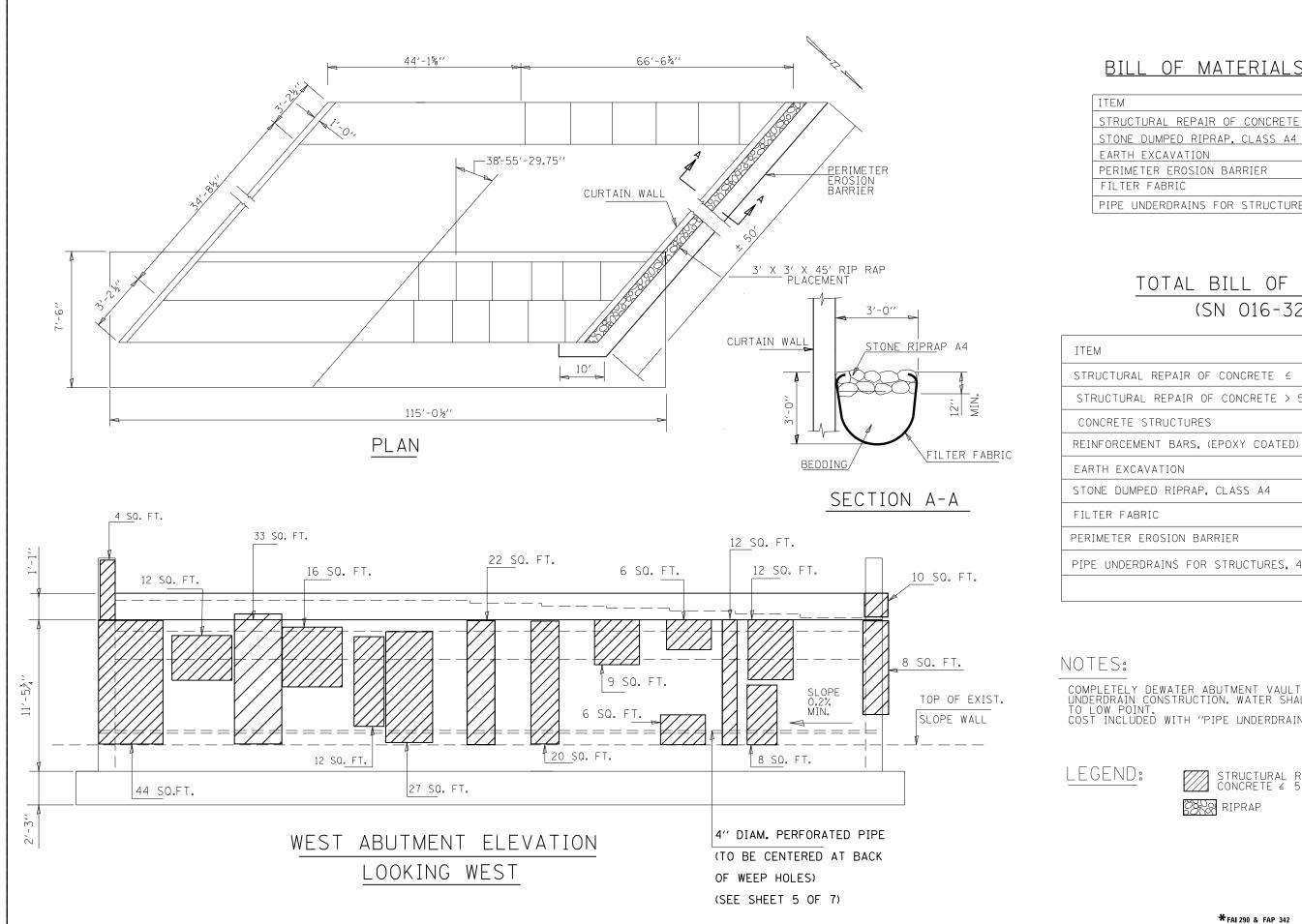
FILE NAME :		USER NAME : gorengautab	DESIGNED	REVISED			F.A.I SECTION COUNTY SHEETS	HEET NO.
ct/br.work/bridot/go	orongautab\d0l81671\8	12-8891.dgn	DRAWN	REVISED ~	STATE OF ILLINOIS	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	¥ 2012-026 BR CO9K & D±PAGE 29	2
	[	PLOT SCALE : 100.0000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION		CONTRACT NO. 60770	
#HOOELNAME#		PLOT DATE = 8/27/2012	DATE	REVISED		SCALES SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT	



OYFOX URBAN OTEOL OTEOT URBAN 100%. STATE CONSTRUCTION TYPE CODE 0014 CONSTRUCTION TYPE CODE 0014 100%. SUMMARY OF QUANTITIES SUMMARY OF QUANTITIES STATE DUPAGE CO DUPAGE CO TOTAL TOTAL LOC. 1 LOC. 2 LOC. 3 LOC. 2 LOC. 3 LOC. 1 SN 022-0091 F 4 / (0014) OUANTITIES SN 016-3215 546 (0014) SN 016-0960 (0014) CODE NO UNIT OUANTITIES SN 016-3215 (0014) SN 016-0960 FA / (0014) ITEM SN 022-0091 (0014) ITEM CODE NO UNIT 40 EARTH EXCAVATION CU YD 45 20200100 85 TEAL 0760J 07505 STRUCTURAL REPAIR OF CONCRETE (DEPTH SO FT 20012755 99 75 GREATER THAN 5 INCHES) 28000400 PERIMETER EROSION BARRIER FOOT 280 IMPACT ATTENUATORS, TEMPORARY (NON-Z0030250 EACH REDIRECTIVE). TEST LEVEL 3 37 42 28100707 STONE DUMPED RIPRAP. CLASS A4 SO YD 79 20046304 PIPE UNDERDRAINS FOR STRUCTURES 4" FOOT 510 206 152 28200200 FILTER FABRIC SO YD 215 105 110 Z0073200 TEMPORARY SHORING AND CRIBBING EACH 21 20 50102400 CONCRETE REMOVAL CU YD 1.4 1.4 13.0 50300225 CONCRETE STRUCTURES 17 CU YD 31.4 1.4 50800205 REINFORCEMENT BARS, EPOXY COATED POUND 5230 2420 67000400 ENGINEER'S FIELD OFFICE. TYPE A CAL MO 2 2 2 MOBILIZATION 67100100 L SUM 0.33 0, 34 0.33 NIGHTTIME WORK ZONE LIGHTING 0.5 TEMPORARY PAVEMENT MARKING - LINE 6" 37.5 TEMPORARY CONCRETE BARRIER FOOT 125 125 78200530 BARRIER WALL MARKERS. TYPE C EACH 20 20 TRAFFIC CONTROL AND PROTECTION X7011015 0. 33 L SUM 0, 34 0.33 (EXPRESSWAYS) PROTECTION AND WAINTENANCE OF EXISTING X8210305 L SUM 0.35 0.3 0.35 UNDERPASS LIGHTING STRUCTURAL REPAIR OF CONCRETE (DEPTH Z0012754 978 877 1605 SO FT 3460 EQUAL TO OR LESS THAN 5 INCHES) Rev #FAI 290 & FAP 34 F.A.I RTE. COUNTY TOTAL SHEET SHEETS NO. FILE NAME : DESIGNED -REVISED SECTION USER NAME : dorenoou/do STATE OF ILLINOIS DRAWN REVISED SUMMARY OF QUANTITIES 2012-026 BR LOT SCALE . 100,0000 1/ In CHECKED -REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60170 PLOT DATE # 8/27/2012 DATE REVISEO SCALE: \_\_\_\_\_ SHEET NO. \_\_ OF \_\_\_ SHEETS STA. \_\_\_ TO STA, FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT

022-0091 den 8/27/2012 1:59:11 PM Uscr-gorengautab





STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

## BILL OF MATERIALS (WEST ABUT)

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT.	277.0
STONE DUMPED RIPRAP, CLASS A4	SQ. YD	17
EARTH EXCAVATION	CU YD	17
PERIMETER EROSION BARRIER	FOOT	65
FILTER FABRIC	SQ. YD	45
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	116

## TOTAL BILL OF MATERIALS (SN 016-3215)

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE 4 5"	SQ. FT	978.0
STRUCTURAL REPAIR OF CONCRETE > 5"	SQ. FT	75.0
CONCRETE STRUCTURES	CU. YD	13.0
REINFORCEMENT BARS, (EPOXY COATED)	LBS	2420
EARTH EXCAVATION	CU YD	45
STONE DUMPED RIPRAP, CLASS A4	SQ. YD	37
FILTER FABRIC	SQ. YD	105
PERIMETER EROSION BARRIER	FOOT	130
PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	206

COMPLETELY DEWATER ABUTMENT VAULTS PRIOR TO PIPE UNDERDRAIN CONSTRUCTION. WATER SHALL BE PUMPED TO LOW POINT.
COST INCLUDED WITH "PIPE UNDERDRAINS FOR STRUCTURES 4". "

COUNTY TOTAL SHEET NO. COOK & Dupage 29 6 SECTION LOCATION NO 1. IL 53 EXTENSION AT LAKE-COOK RD (SN 016-3215) 2012-026 BR **WEST ABUTMENT REPAIRS** CONTRACT NO. 60T70 \_ SHEET 2 OF 7 SHEETS STA. TO STA.

DESIGNED

CHECKED

DRAWN

DATE

22-0091.dan

PLOT SCALE = 100.0000 '/ in.

PLOT DATE = 8/27/2012

REVISED

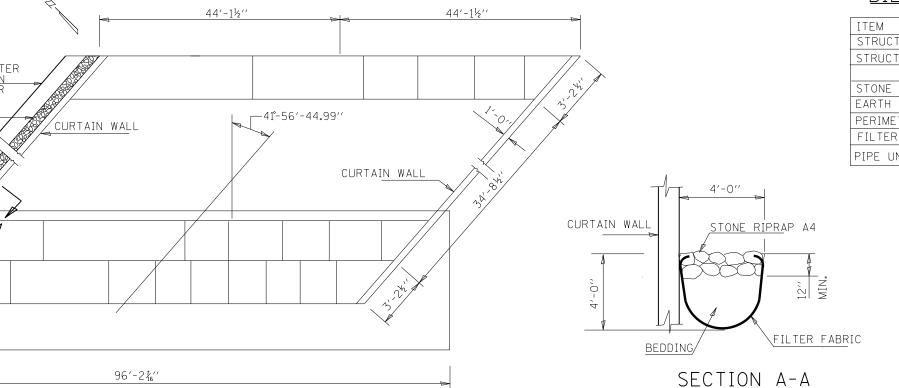
REVISED

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REVISED

## BILL OF MATERIALS (EAST ABUT)

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ∠ 5"	SQ. FT	670.0
STRUCTURAL REPAIR OF CONCRETE > 5"	SQ. FT	75.0
STONE DUMPED RIPRAP, CLASS A4	SQ. YD	20
EARTH EXCAVATION	CU YD	28
PERIMETER EROSION BARRIER	FOOT	65
FILTER FABRIC	SQ. YD	60
PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	90



## TABLE OF REACTIONS

	REACTIONS (Kips)						
	E. ABUT. W. ABUT. Pi						
DL	54	61	213				
SDL LL	40	50	83				
IMP.	8	10	16				
TOTAL	102	121	312				

## NOTES:

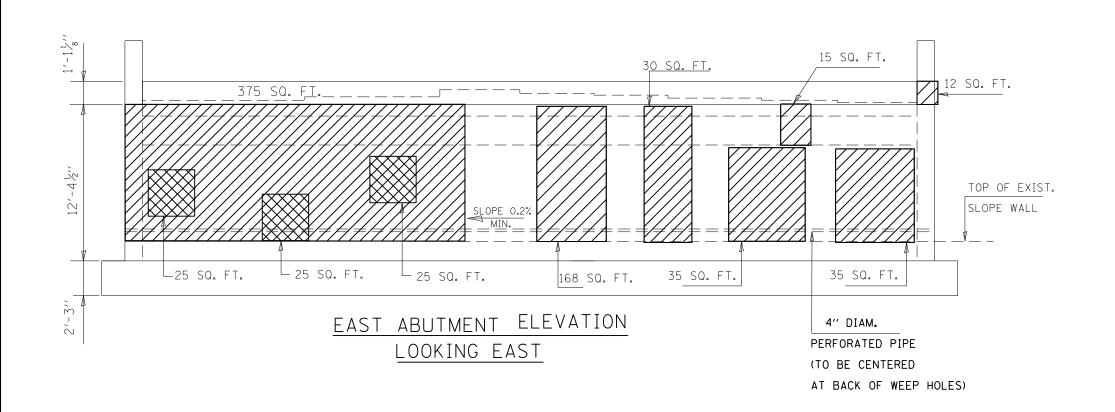
COMPLETELY DEWATER ABUTMENT VAULTS PRIOR TO PIPE UNDERDRAIN CONSTRUCTION. WATER SHALL BE PUMPED TO LOW POINT. COST INCLUDED WITH "PIPE UNDERDRAINS FOR STRUCTURES 4"."

## LEGEND:

STRUCTURAL REPAIR OF CONCRETE 45"

STRUCTURAL REPAIR OF CONCRETE > 5"

RIPRAP

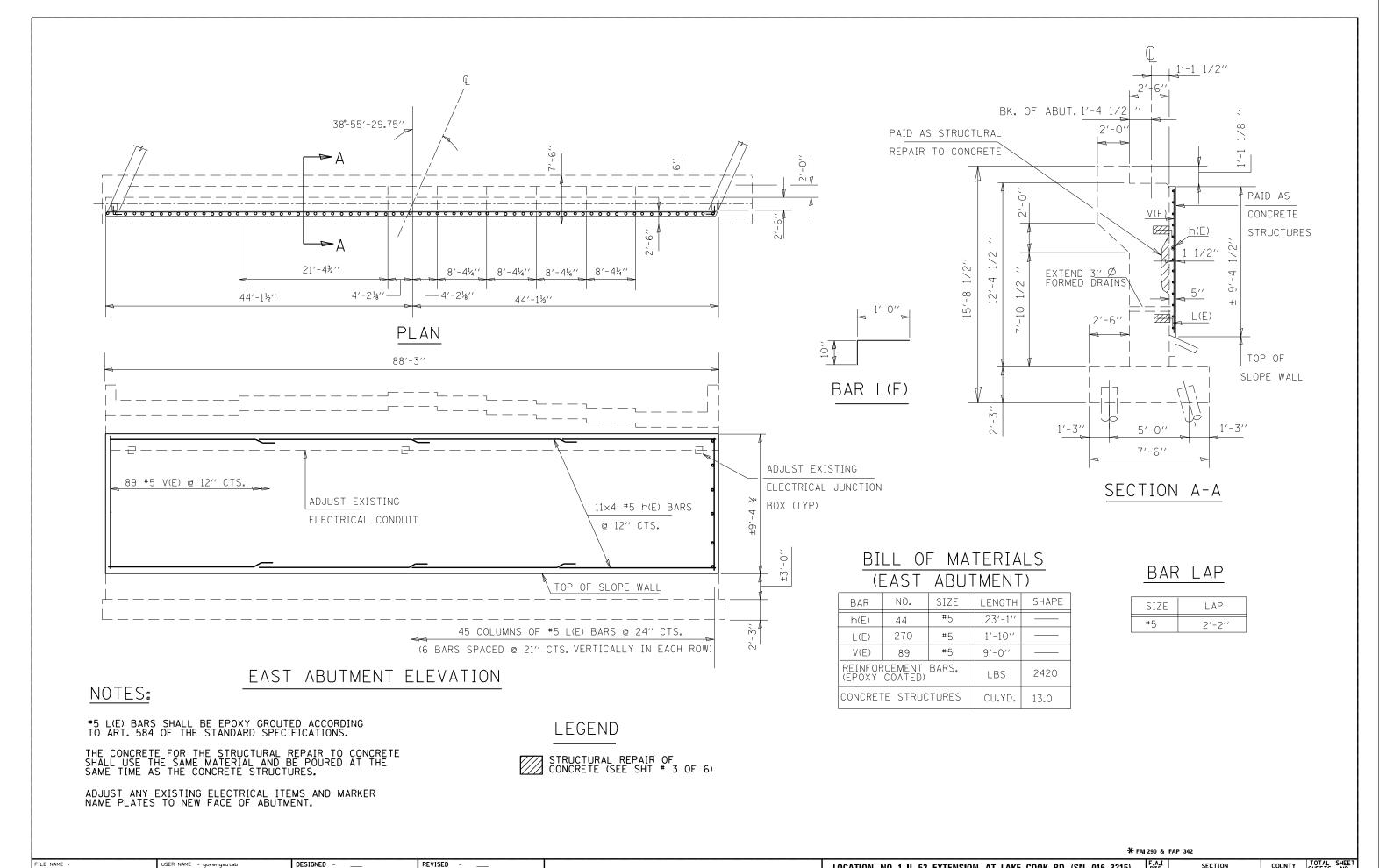


PLAN

#### ¥ FAI 290 & FAP 342

FILE NAM	1E =	USER NAME = gorengautab	DESIGNED	REVISED		LOCATION NO 1. IL 53 EXTENSION AT LAKE-COOK RD (SN 016-3215)	F.A.I	SECTION	COUNTY TOTAL SHE	ĔΤ
c:\pw_wor	rk\pwidot\gorengautab\d0101671\0	22-0091.dgn	DRAWN	REVISED	STATE OF ILLINOIS	·	*	2012-026 BR	COOK & DuPAGE 29 7	$\dashv$
		PLOT SCALE = 100.0376 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT REPAIRS	<del></del>		CONTRACT NO. 60T70	$\neg$
Default		PLOT DATE = 8/27/2012	DATE	REVISED		SCALE: SHEET 3 OF 7 SHEETS STA, TO STA,		ILLINOIS FED. AI		$\dashv$

4′ X 4′ X 45<u>′</u> RIP RAP PLACEMENT



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PLOT DATE = 9/13/2012

DRAWN

DATE

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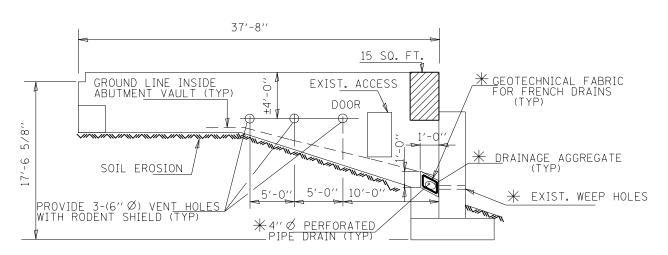
REVISED

22-0091.dan

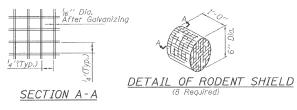
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION LOCATION NO 1. IL 53 EXTENSION AT LAKE-COOK RD (SN 016-3215)

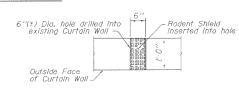
EAST ABUTMENT REPAIRS

SCALE: \_\_\_\_\_\_ SHEET 4 OF 7 SHEETS STA. TO STA.

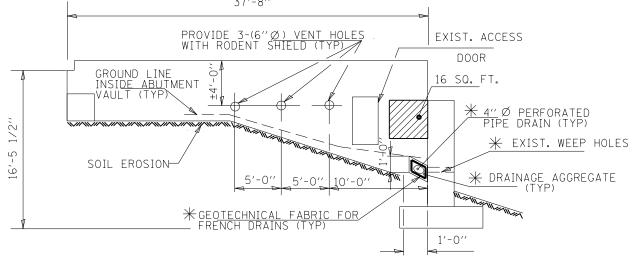


## EAST ABUTMENT CURTAIN WALL LOOKING SOUTH





37'-8'' RODENT SHIELD PLACEMENT



## WEST ABUTMENT CURTAIN WALL LOOKING NORTH

NOTES:

COST OF CORING 12 VENT HOLES (3 EACH SIDE AT EACH ABUTMENT) AND SHIELDS INCLUDED WITH "STRUCTURAL REPAIR OF CONCRETE  $\leq$  5"."

\* CLEAN EXISTING WEEP HOLE IN THE EXIST. WINGWALL TO ACCOMODATE THE 4" PERFORATED PIPE DRAIN. AFTER INSTALLATION SEAL AROUND THE PIPE DRAIN. COST INCLUDED IN THE COST OF PIPE UNDERDRAINS FOR STRUCTURES 4".

EXCAVATED SOIL FOR PIPE UNDERDRAIN INSTALLATION SHALL BE PLACED ON TOP OF SLOPED GROUND INSIDE VAULT. COST INCLUDED IN " PIPE UNDERDRAIN FOR STRUCTURES 4"."

## BILL OF MATERIALS (CURTAIN WALLS)

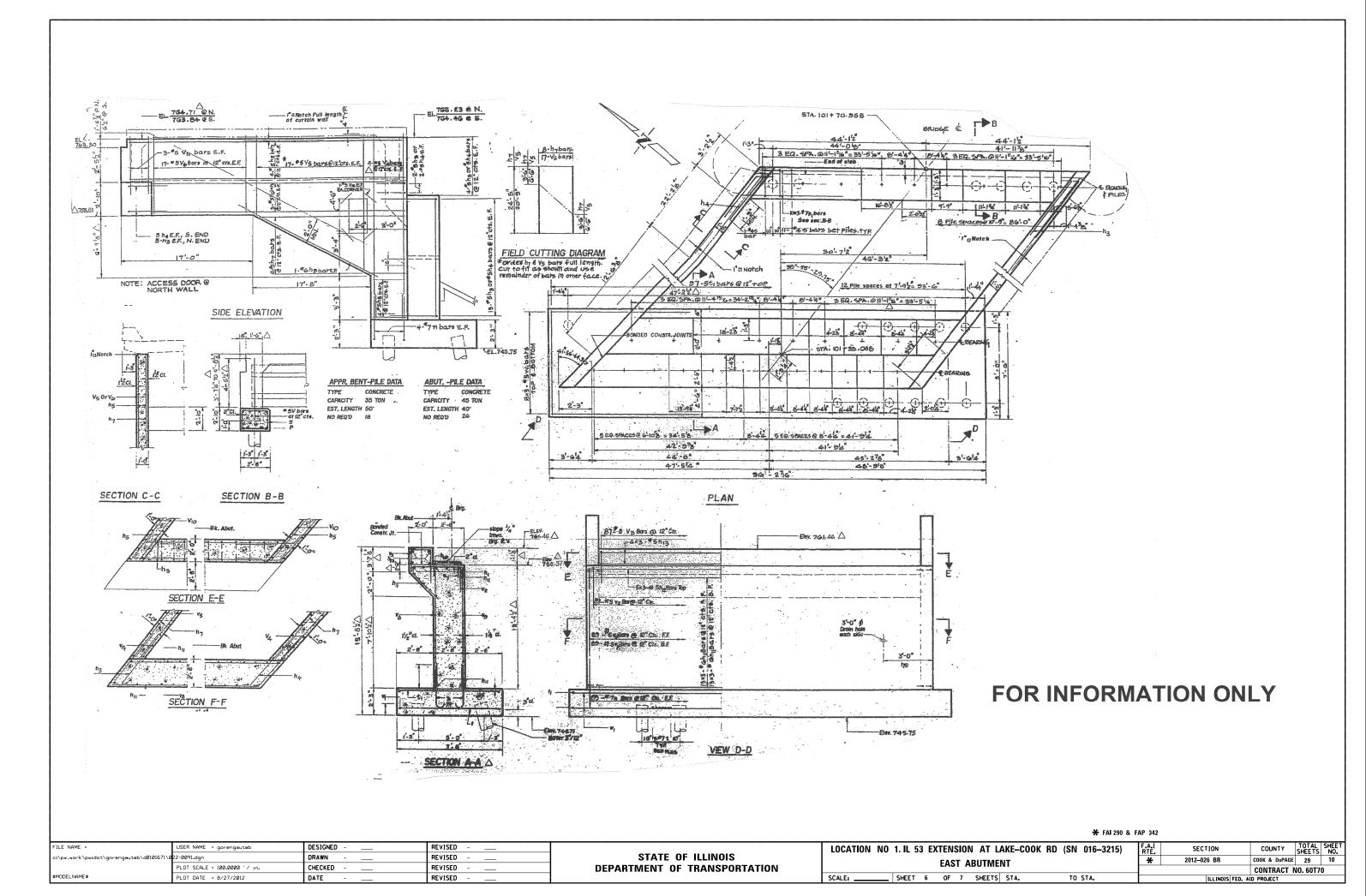
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE 4 5"	SQ. FT.	31.0

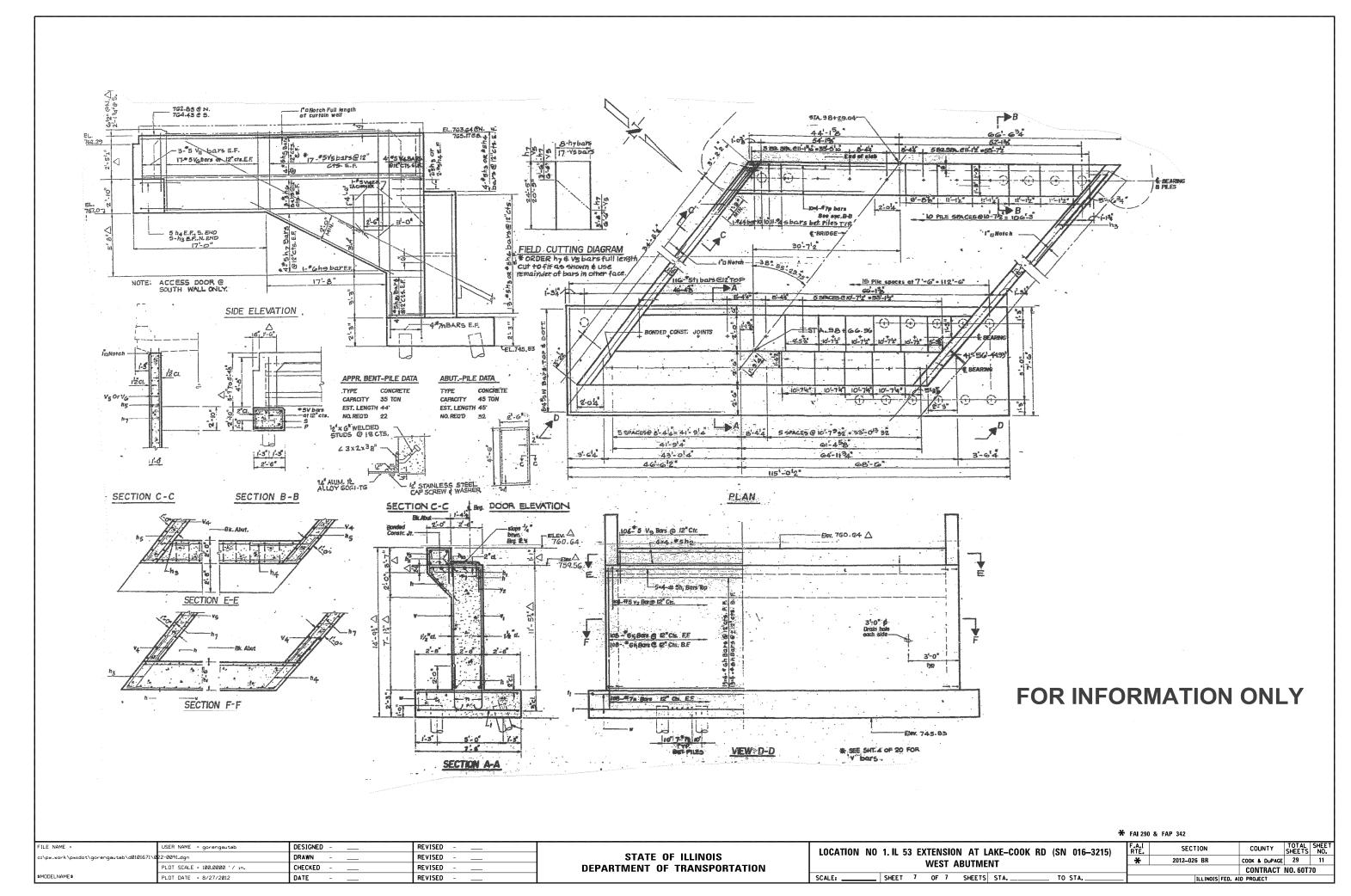
## LEGEND:

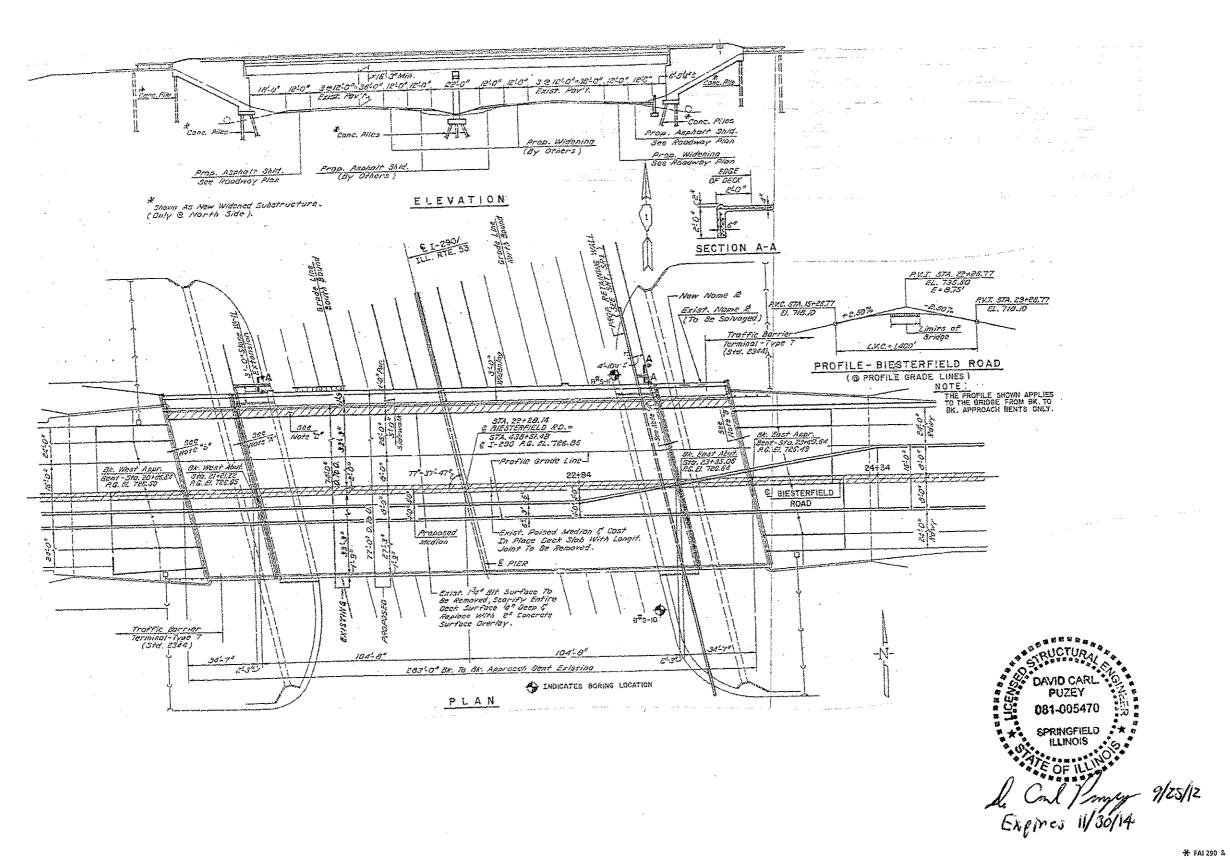
STRUCTURAL REPAIR OF CONCRETE ≤ 5"

#### **\***FAI 290 & FAP 342

FILE NAME =	USER NAME = gorengautab	DESIGNED	REVISED		LOCATION NO 1. IL 53 EXTENSION AT LAKE-COOK RD (SN 016-3215)		CTION		TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidot\gorengautab\d0101671\0	22-0091.dgn	DRAWN	REVISED	STATE OF ILLINOIS			026 BR	COOK & DuPAGE	29	9
	PLOT SCALE = 100.0000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	CURTAIN WALL REPAIRS			CONTRACT NO	O. 60T70	
\$MODELNAME\$	PLOT DATE = 8/27/2012	DATE	REVISED -		SCALE: SHEET 5 OF 7 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT		

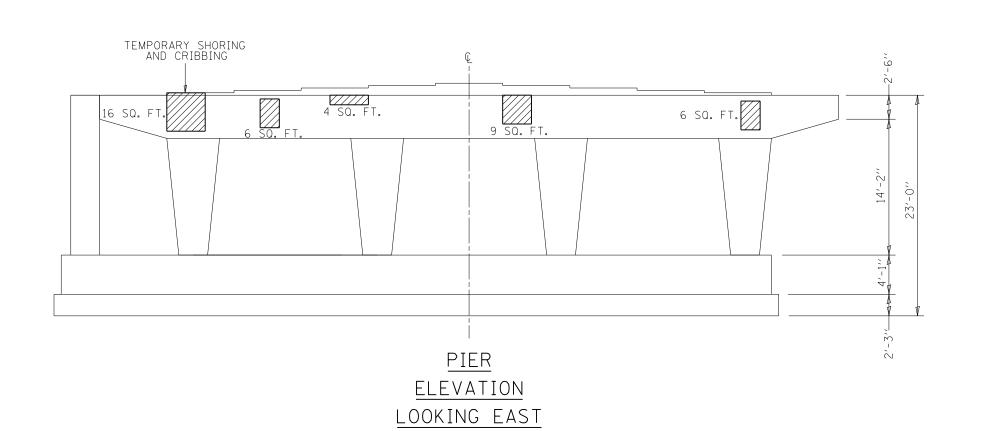


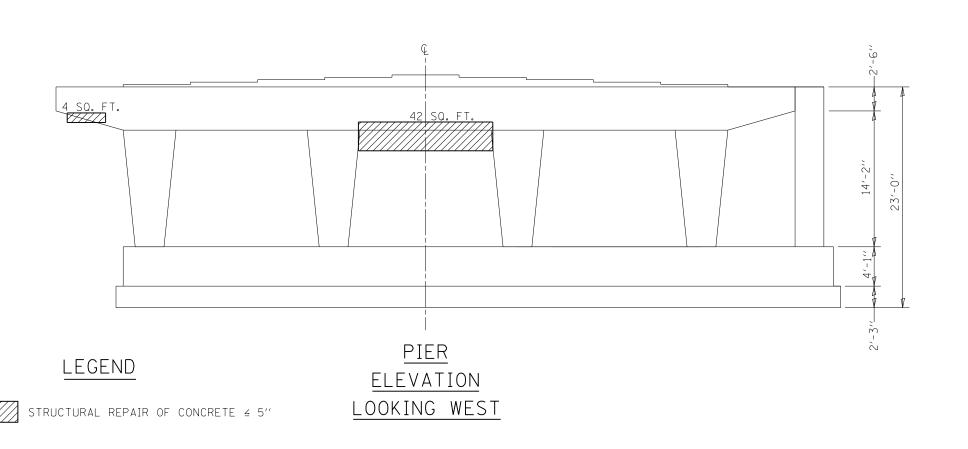




# FAI 290 & FAP 342

	······································	DESIGNED - A.G. 08/24/2012	REVISED -		LOCATION NO 2.1-290 AT BIESTERFIELD RD (SN 016-0960)	RYE. SECTION COUNTY SHEETS NO.
FILE NAME : 51\p*,*ork\p*idos\gorengauteb\d8i8i67i\&	USER HAME : garangaulab 22-089Ldan		REVISED -	STATE OF ILLINOIS	GENERAL PLAN AND ELEVATION	CONTRACT NO. 60170
SI/Daf#Bak /beiggt sån an Anacon reconst	PLOT SCALE + 188.9988 ' / 1/2	CHECKED - A.M. 08/24/2012	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALES SHEET 1 OF 9 SHEETS STA. TO STA.	ILLINOISTED. AID PROJECT
*MODEL NAME *	PLOT DATE + 8/27/2012	DATE -	REVISED			





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DESIGNED -

CHECKED -

DRAWN

DATE

22-0091.dan

PLOT SCALE = 100.0000 '/ in.

PLOT DATE = 8/27/2012

## TABLE OF REACTIONS

		REACTIONS (Kips				
		ABUTS.	PIER			
	DL	55	183.2			
	LL	46.6	79.8			
	IMP.	10.2	17.4			
	TOTAL	111.8	280.4			

## BILL OF MATERIALS (PIER)

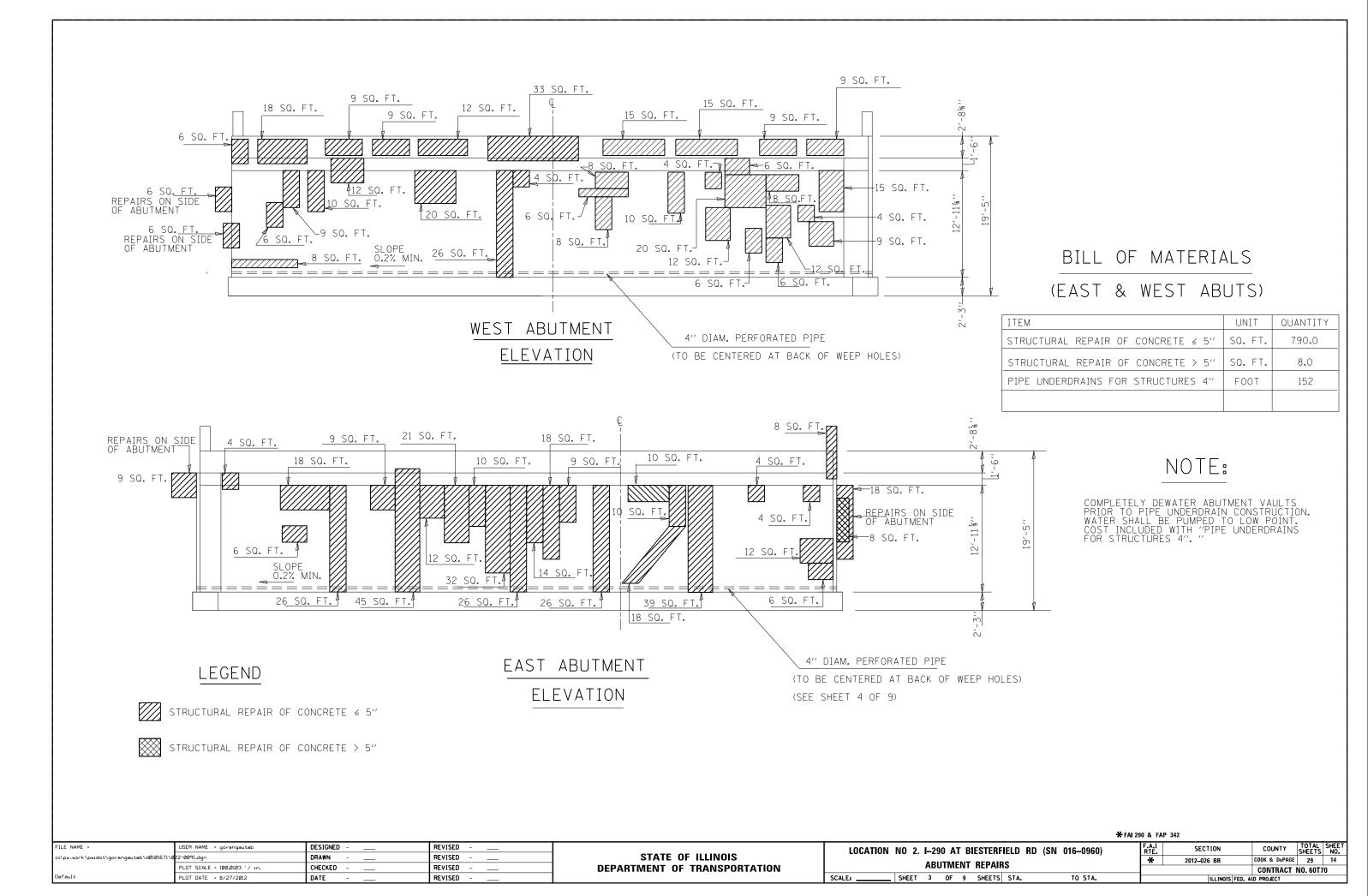
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \( \ext{ 5"} \)	SQ. FT.	87.0
TEMPORARY SHORING AND CRIBBING	EACH	1.0

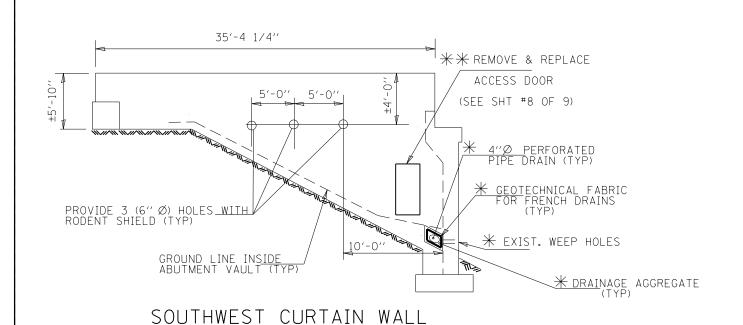
# TOTAL BILL OF MATERIALS (SN 016-0960)

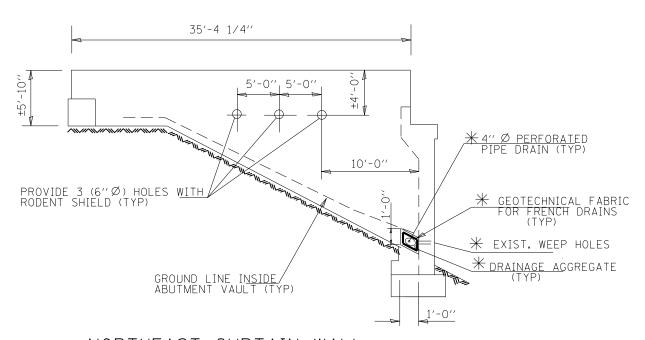
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE 4 5"	SQ. FT	877.0
STRUCTURAL REPAIR OF CONCRETE > 5"	SQ. FT	8.0
TEMPORARY SHORING AND CRIBBING	EACH	1
CONCRETE REMOVAL	CU YD	1.4
CONCRETE STRUCTURES	CU YD	1.4
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	152

**★** FAI 290 & FAP 342

	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION NO 2. I-290 AT BIESTERFIELD RD (SN 016-0960)	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	NO.
		PIER REPAIRS	*	2012–026 BR	COOK & DuPAGE		13 D
		SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.		ILLINOIS FED. A			







NORTHWEST CURTAIN WALL

NORTHEAST CURTAIN WALL
SOUTHEAST CURTAIN WALL

## BILL OF MATERIALS

(CURTAIN WALLS)
(SEE SHT 8 OF 9)

ITEM		UNIT	QUANTITY
CONCRETE	STRUCTURES	CU YD	1.4
CONCRETE	REMOVAL	CU YD	1.4

## NOTES:

DETAIL OF RODENT SHIELD

RODENT SHIELD PLACEMENT

Rodent Shield inserted into hole

COST OF CORING 12 VENT HOLES (3 EACH SIDE AT EACH ABUTMENT) AND SHIELDS INCLUDED WITH "STRUCTURAL REPAIR OF CONCRETE"

\* CLEAN EXISTING WEEP HOLE IN THE EXIST.
WINGWALL TO ACCOMODATE THE 4" ØPERFORATED
PIPE DRAIN. AFTER INSTALLATION SEAL AROUND
THE PIPE DRAIN.
COST INCLUDED IN THE COST OF PIPE UNDERDRAINS
FOR STRUCTURES 4".

EXCAVATED SOIL FOR PIPE UNDERDRAIN INSTALLATION SHALL BE PLACED ON TOP OF SLOPED GROUND INSIDE VAULT.
COST INCLUDED IN " PIPE UNDERDRAIN FOR STRUCTURES 4"."

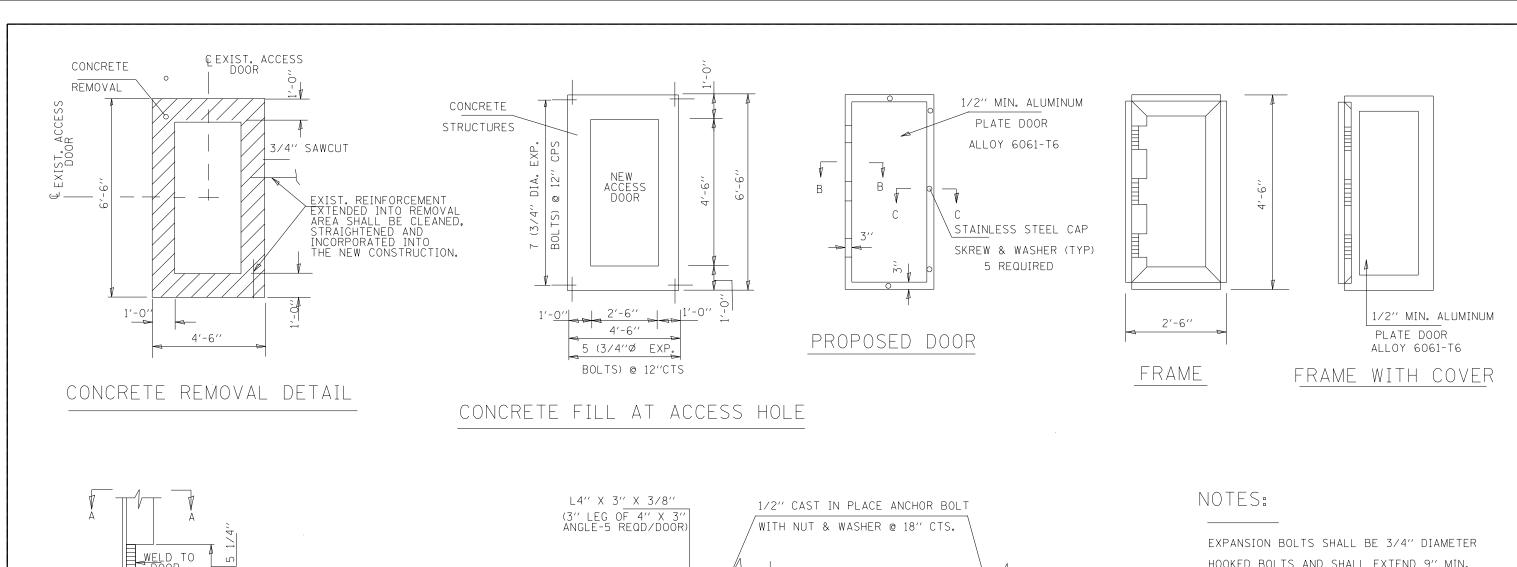
\*\* COST OF ACCESS DOOR REMOVAL AND REPLACEMENT (2 DOORS TOTAL) INCLUDED IN COST OF "CONCRETE STRUCTURES".

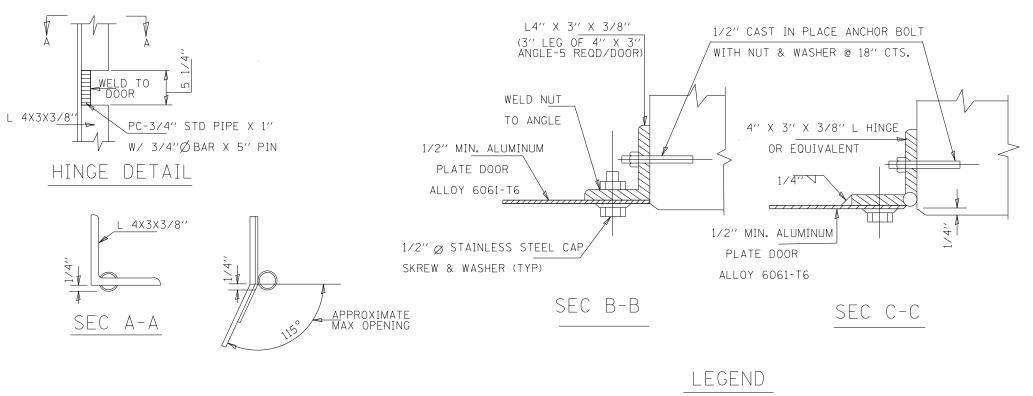
#### ₩ FAI 290 & FAP 342

FILE NAME =	USER NAME = gorengautab	DESIGNED	REVISED		LOCATION NO 2. I-290 AT BIESTERFIELD RD (SN 016-0960)		SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\gorengautab\d0101671\	022-0091.dgn	DRAWN	REVISED	STATE OF ILLINOIS			2012-026 BR	29 15
	PLOT SCALE = 100.0000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	CURTAIN WALL REPAIRS	"	2012 020 211	CONTRACT NO. 60T70
Default	PLOT DATE = 9/13/2012	DATE	REVISED		SCALE: SHEET 4 OF 9 SHEETS STA. TO STA.		ILLINOIS FED.	. AID PROJECT

SECTION A-A

6''(±) Dia. hole drilled into existing Curtain Wall





HOOKED BOLTS AND SHALL EXTEND 9" MIN. INTO CONCRETE.

PAINT ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE WITH EPOXY PAINT.

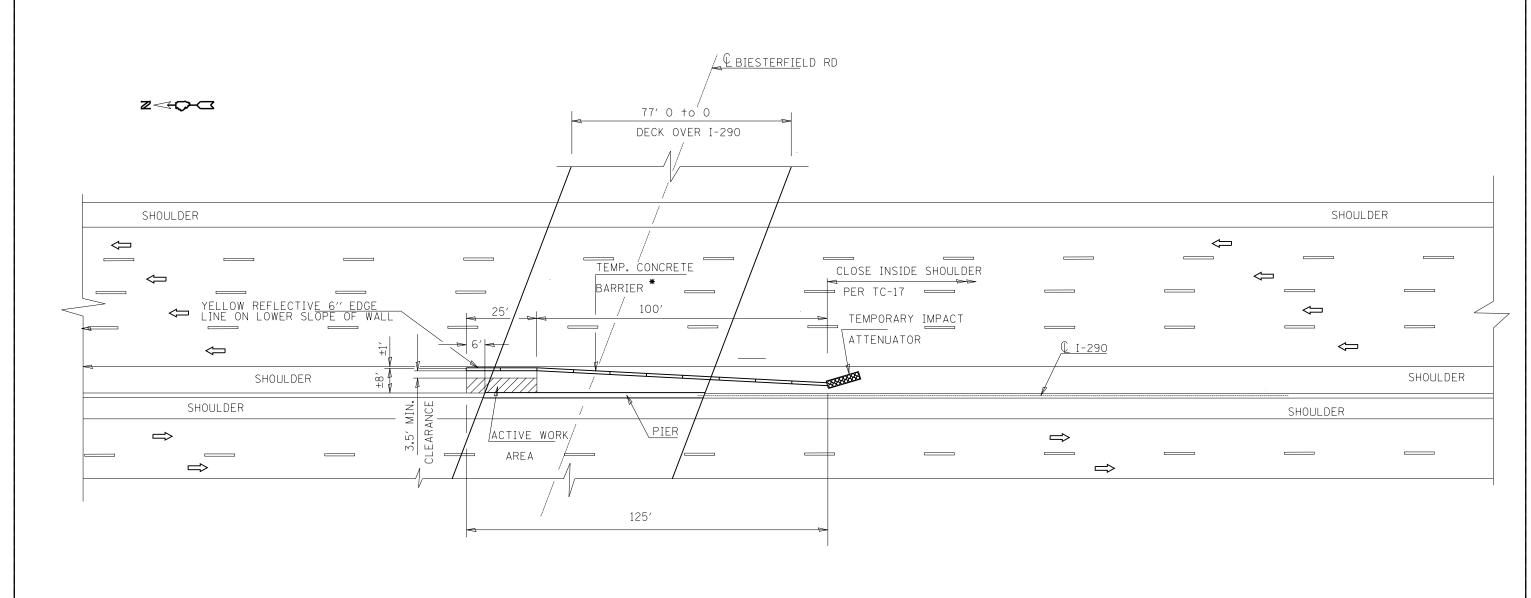
WORK THIS SHEET WITH SHEET #4 OF 9.



CONCRETE REMOVAL

\*FAI 290 & FAP 342

FILE NAME =	USER NAME = gorengautab	DESIGNED	REVISED		LOCATION NO 2. I–290 AT BIESTERFIELD RD (SN 016–0960)	F.A.I	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\gorengautab\d0101671\0	22-0091.dgn	DRAWN	REVISED	STATE OF ILLINOIS  ACCESS DOOR REPAIRS		*	2012-026 BR	COOK & DuPAGE 29 16
	PLOT SCALE = 100.0000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	ACCESS DUON NETAINS	<b>  "</b>		
\$MODELNAME\$	PLOT DATE = 8/27/2012	DATE	REVISED		SCALE: SHEET 5 OF 9 SHEETS STA. TO STA.	$\vdash$	ILLINOIS FED.	D. AID PROJECT



## PERMANENT SHOULDER CLOSURE

LEGEND

TEMPORARY CONCRETE BARRIER

IMPACT ATTENUATOR

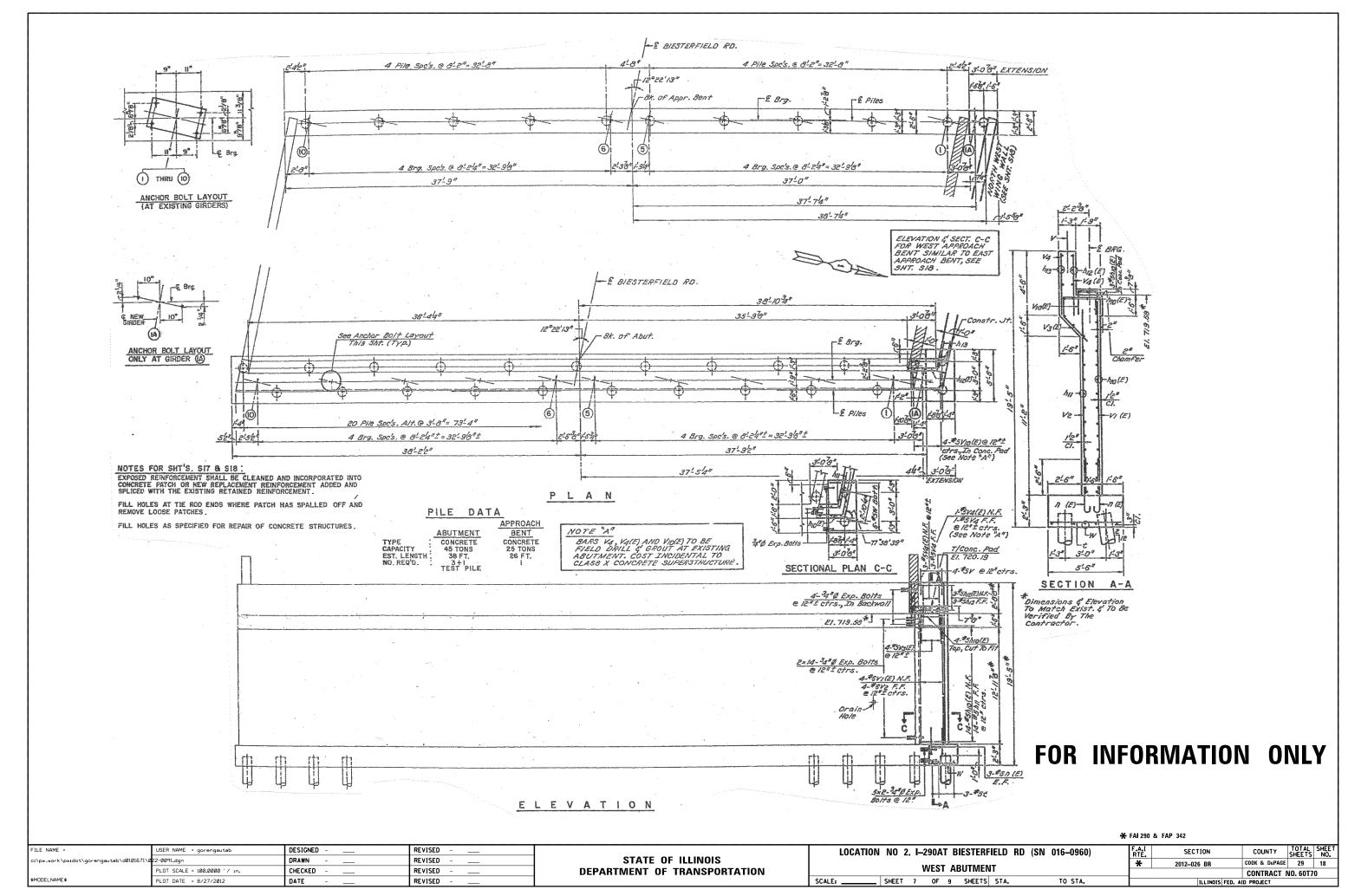
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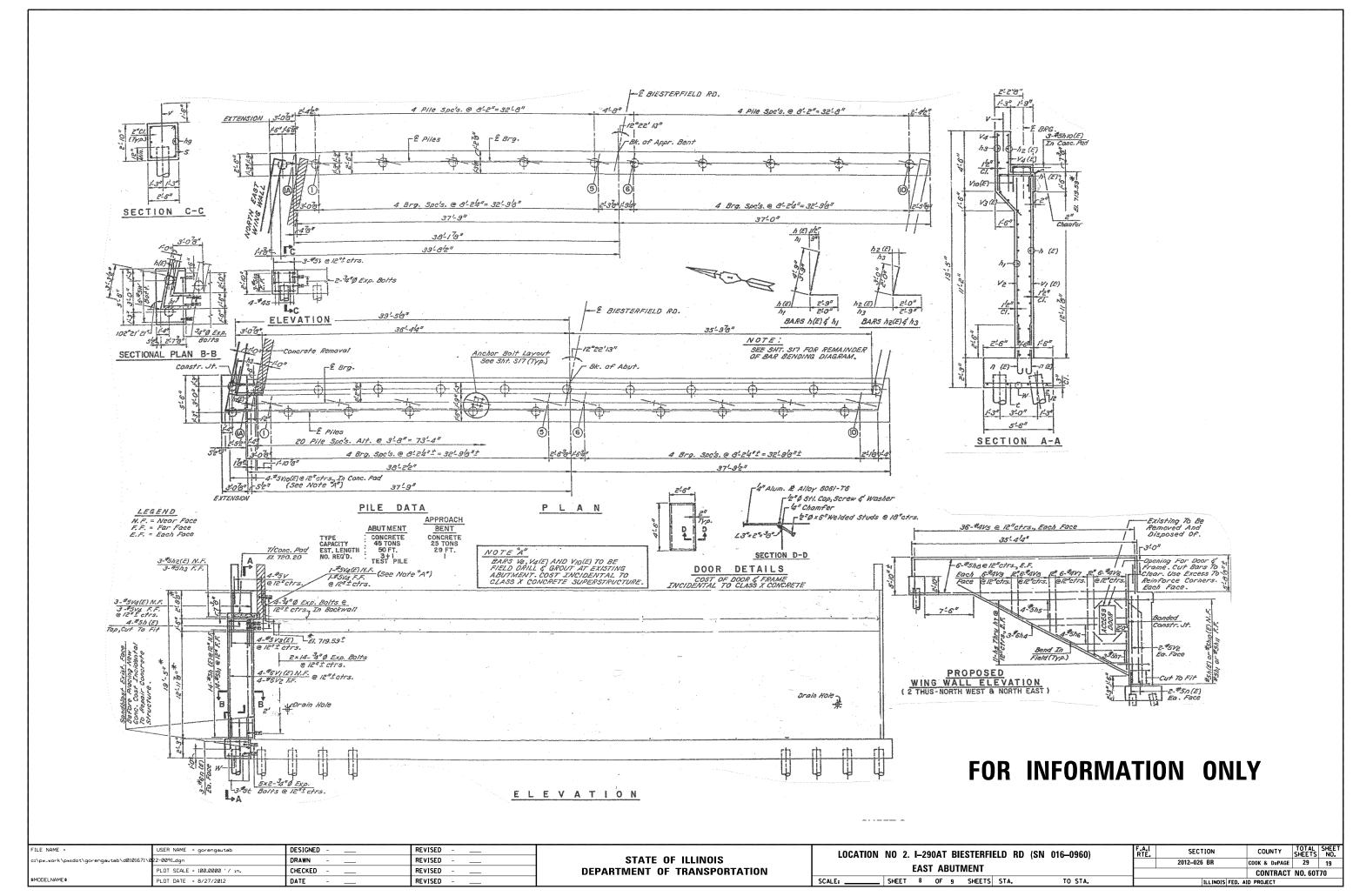
WORK THIS SHEET WITH "TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES" TC-17

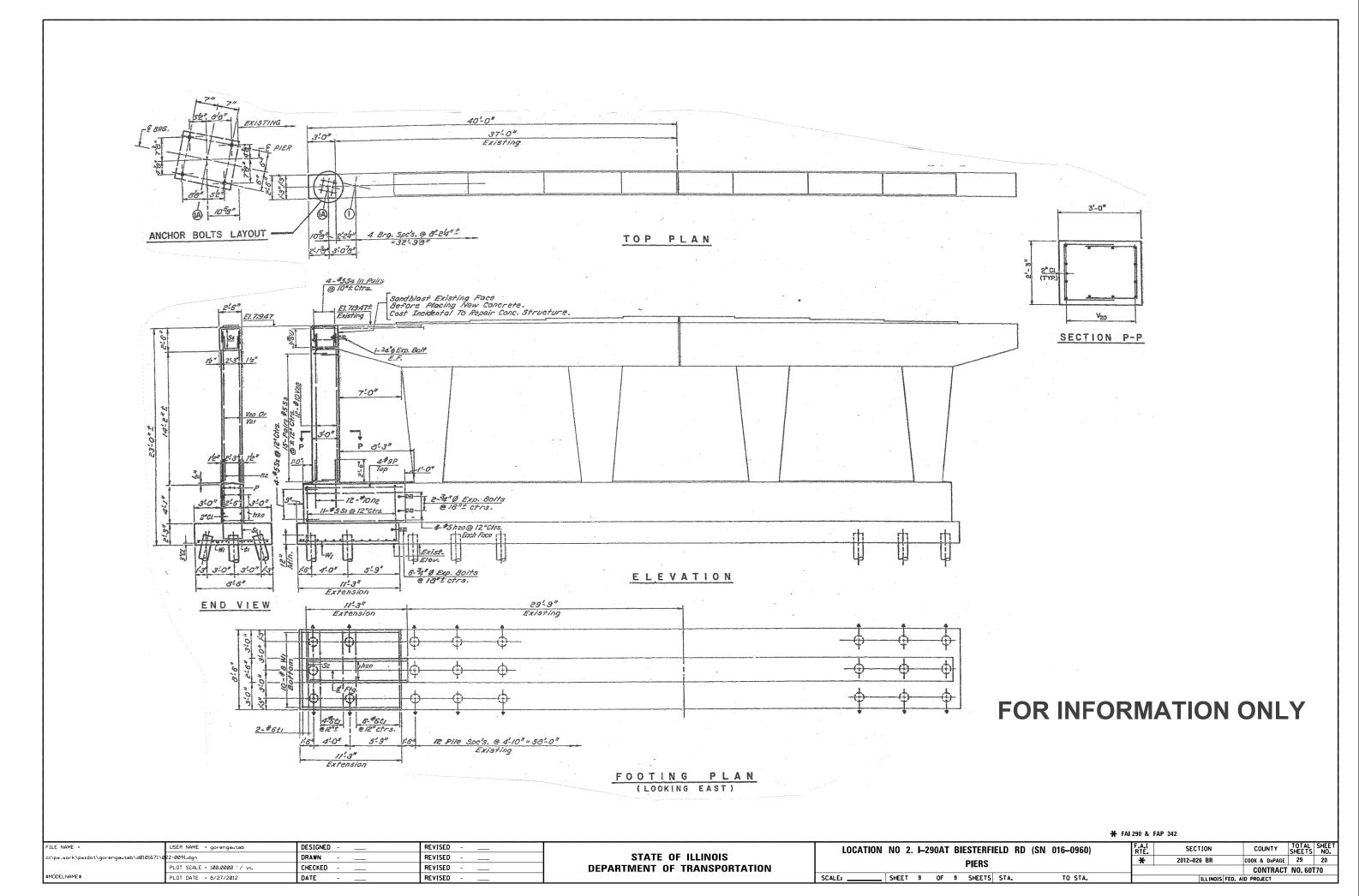
\* TEMPORARY CONCRETE BARRIER WALL MUST BE PINNED TO THE SHOULDER PAVEMENT IF THE CLEARANCE IS LESS THAN 3.5 FT.

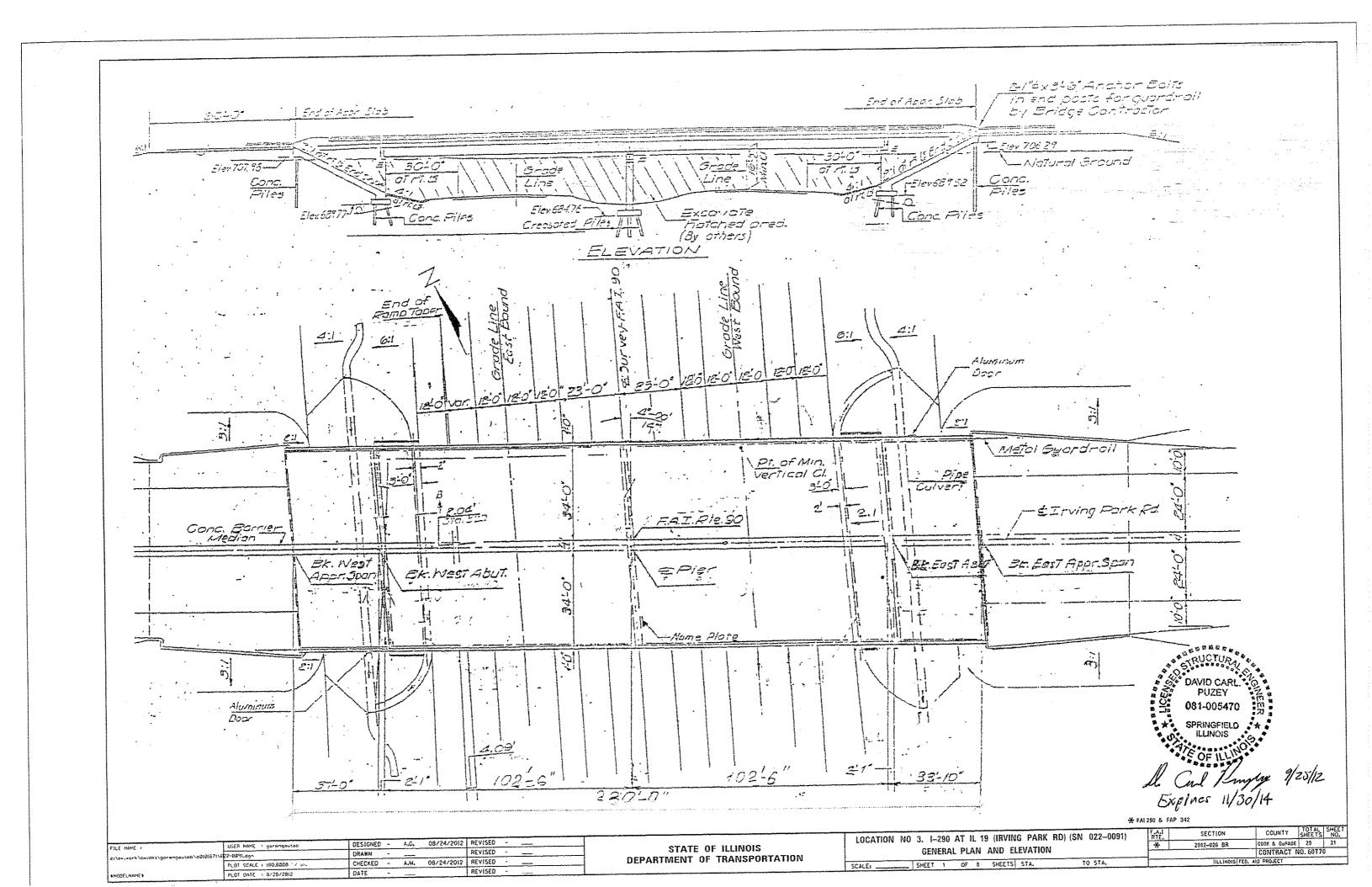
¥ FAI 290 & FAP 342

FILE NAME =	USER NAME = gorengautab	DESIGNED	REVISED		LOCATION NO 2. I-290 AT BIESTERFIELD RD (SN 016-0960)	F.A.I	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\gorengautab\d0101671\0	22-0091.dgn	DRAWN	REVISED	STATE OF ILLINOIS	TRAFFIC CONTROL PLAN	*	2012-026 BR	COOK & DuPAGE 29 17
	PLOT SCALE = 100.0000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	INAFFIC CONTROL PLAIN	<b>  "</b>		25
\$MODELNAME\$	PLOT DATE = 9/13/2012	DATE -	REVISED -		SCALE: SHEET 6 OF 9 SHEETS STA. TO STA.	$\overline{}$	TILL INDIS FED. A	ND PROJECT









## 36'-4'' 36'-4" 5,-6,, $4' \times 2' \times \pm 34'$ 4<sup>0</sup>-00'-14'' 4'×2'×±34' RIPRAP PERIMETER EROSION BARRIER RIPRAP 34′ € RDWY CURTAIN WALL CURTAIN WALL

PLAN

WEST ABUTMENT

TEMPORARY SHORING AND CRIBBING (ALL BEAMS =10 EA)

24 SQ.FT 20SQ.FT

36'-1 5/8''

## TABLE OF REACTIONS

	REACTIONS (Kip:		
	ABUTS.	PIER	
DL	49.1	172	
SDL LL	46.7	77.4	
IMP.	10.3	17	
TOTAL	106.1	266.4	

4'-0'' CURTAIN WALL STONE RIPRAP A4 12" MIN. FILTER FABRIC BEDDING

SECTION A-A

## LEGEND:







## TOTAL BILL OF MATERIALS

(SN 022-0091)

UNIT	QUANTITY
SQ. FT	1605
SQ. FT	16
LBS	2810
CU. YD	17.0
EACH	20
FOOT	152
SQ. YD	42
CU. YD	40
SQ. YD	110
FOOT	150
FOOT	152
	SO. FT SO. FT LBS CU. YD EACH FOOT SO. YD CU. YD SO. YD FOOT

## BILL OF MATERIALS (WEST ABUT)

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT	937
STRUCTURAL REPAIR OF CONCRETE > 5"	SQ. FT	16
TEMPORARY SHORING AND CRIBBING	EACH	10
STONE DUMPED RIPRAP, CLASS A4	SQ. YD	31
FILTER FABRIC	SQ. YD	62
EARTH EXCAVATION	CU. YD	21
PERIMETER EROSION BARRIER	FOOT	100
PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	76

COMPLETELY DEWATER ABUTMENT VAULTS PRIOR TO PIPE UNDERDRAIN CONSTRUCTION. WATER SHALL BE PUMPED TO LOW POINT. COST INCLUDED WITH "PIPE UNDERDRAINS FOR STRUCTURES 4". "

## NOTE:

SUPPORT SYSTEM SHALL BE PLACED BEHIND THE EXISTING BARRIER WALL.

## WEST ABUTMENT

ELEVATION

PERFORATED PIPE (TO BE CENTERED AT BACK OF WEEP HOLES) (SEE SHEET 6 OF 8 FOR DETAILS)

198 SQ.FT

20 SQ.F.

4" DIAM.

20 SQ.FT

10′

**★** FAI 290 & FAP 342

SECTION COUNTY 2012-026 BR COOK & DuPAGE 29 22 CONTRACT NO. 60T70

FILE NAME =	USER NAME = gorengautab	DESIGNED	REVISED
c:\pw_work\pwidot\gorengautab\d0101671\0	22-0091.dgn	DRAWN	REVISED
	PLOT SCALE = 100.0000 '/ in.	CHECKED	REVISED
Default	PLOT DATE = 9/13/2012	DATE	REVISED

16 SQ. FT

0.2% MIN.

12 S<u>Q. FT</u>

36'-6 5/8"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

9 SQ.FT

18SQ.FT

LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091) **WEST ABUTMENT REPAIRS** SHEET 2 OF 8 SHEETS STA. TO STA.

10′

1<u>6</u> SQ.FJ

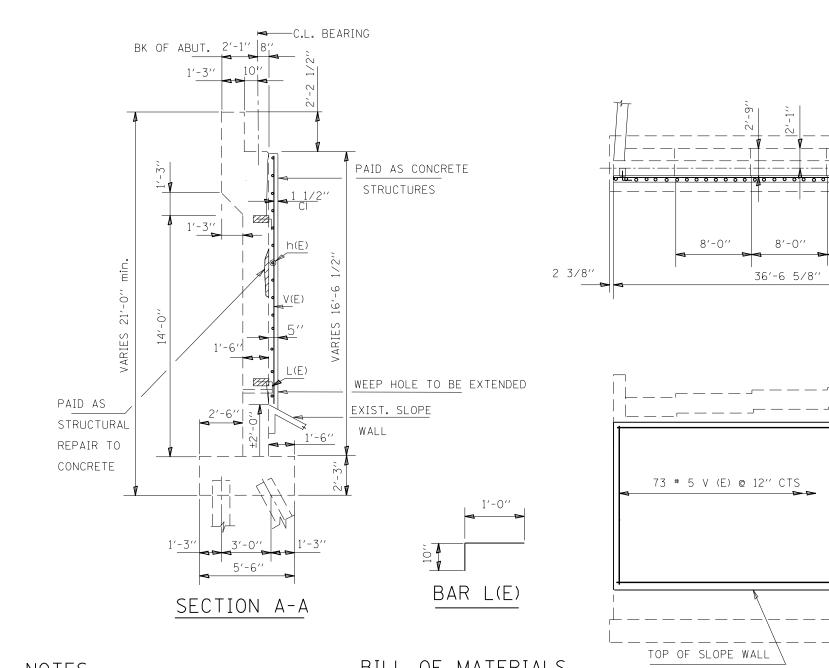
12 SQ.FT

16 SQ. F

8 SQ.FT

<u>416</u> SQ. FT

12 <u>SQ.FT</u>



## NOTES:

#5 L(E) BARS SHALL BE EPOXY GROUTED ACCORDING TO ART. 584 OF THE STANDARD SPECIFICATIONS.

THE CONCRETE FOR THE STRUCTURAL REPAIR TO CONCRETE SHALL USE THE SAME MATERIAL AND BE POURED AT THE SAME TIME AS THE CONCRETE STRUCTURES.

PLOT DATE = 8/27/2012

ADJUST ANY EXISTING ELECTRICAL ITEMS AND MARKER NAME PLATESTO NEW FACE OF ABUTMENT.

## BILL OF MATERIALS

## (WEST ABUT)

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	45	#5	25′-1′′	
L(E)	296	#5	1'-10''	
V(E)	73	#5	14'-0''	
	CEMENT COATED)	LBS	2810	
CONCRET	E STRUC	CU.YD.	17.0	

REVISED

## MINIMUM BAR LAP

SIZE	LAP
#5	2'-2''

## ELEVATION

8'-0"

6'-0''

6'-0"

PLAN

LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091)		91)	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.					
WEST ADJUMENT DEDAIDS						*	2012-026 BR	COOK & DuPAGE	29	23		
WEST ABUTMENT REPAIRS									CONTRACT	VO. 60T7	0	
SCALE:	SHEET 3	OF	8	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT				

¥ FAI 290 & FAP 342

1′-6′

7 3/8"

8'-0''

8'-0''

36'-1 5/8"

15×3 #5 h(E) BARS @ 12" CTS.

37 COLUMNS OF #5 L(E) BARS @ 24" CTS.

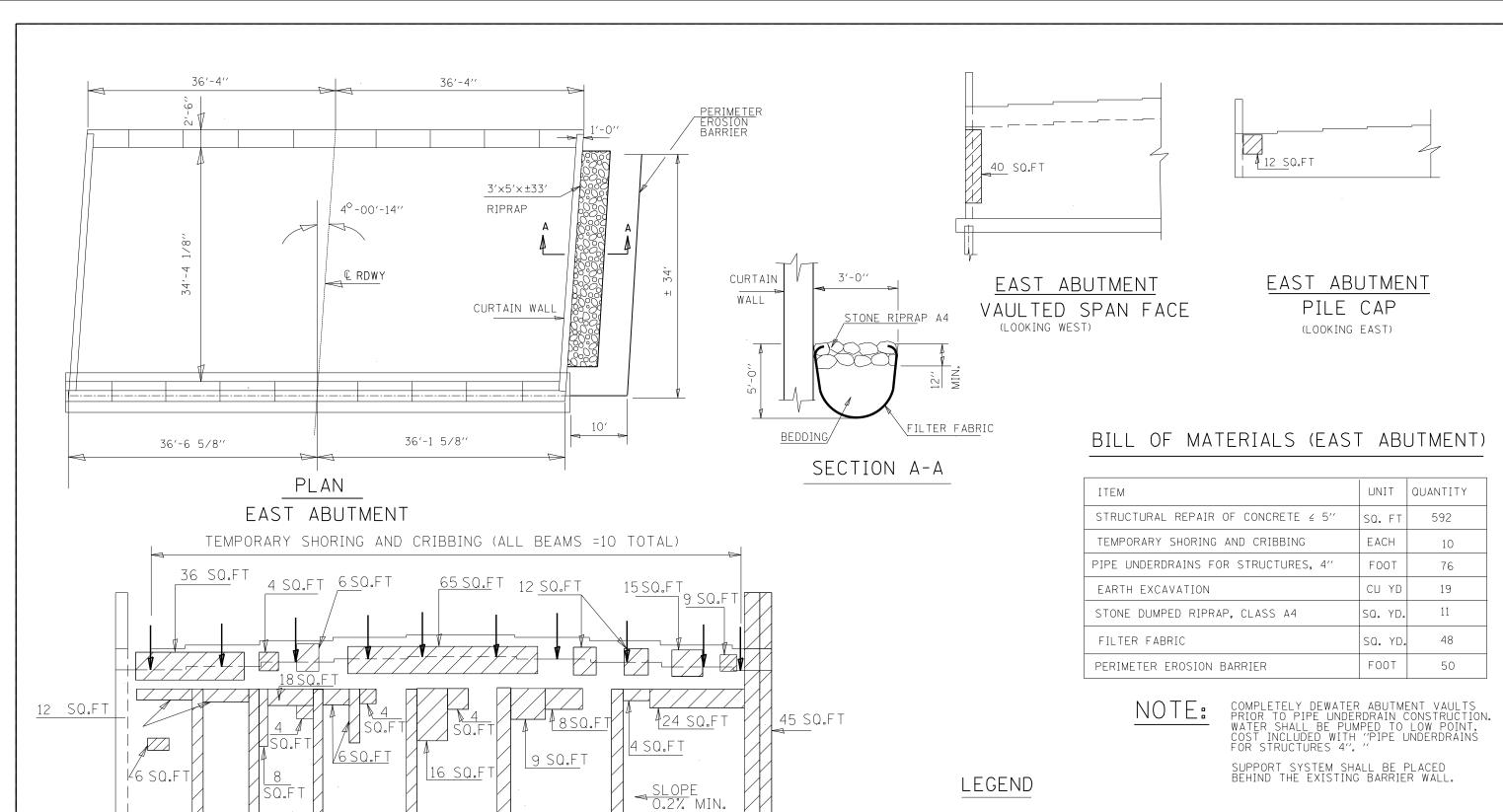
(8 BARS SPACED @ 24" CTS. VERTICALLY IN EACH ROW)

FILE NAME : DESIGNED -REVISED 022-0091.dgn DRAWN REVISED PLOT SCALE = 100.0000 '/ in. CHECKED REVISED

DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCALE:



LEGEND

STRUCTURAL REPAIR OF CONCRETE ≤ 5"



**★** FAI 290 & FAP 342

DESIGNED COUNTY TOTAL SHEET NO.

COOK & DUPAGE 29 24 REVISED LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091) SECTION STATE OF ILLINOIS 22-0091.dan DRAWN REVISED 2012-026 BR **EAST ABUTMENT REPAIRS** LOT SCALE = 100.0000 '/ in. CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60T70 SHEET 4 OF 8 SHEETS STA. TO STA. PLOT DATE = 9/13/2012 DATE REVISED

4" DIAM. PERFORATED PIPE (TO BE

CENTERED AT BACK OF WEEP HOLES)

(SEE SHEET 6 OF 8 FOR DETAILS)

30SQ.FT 30 SQ.FT

30 SQ.FT

<u>30 SQ.</u>FT

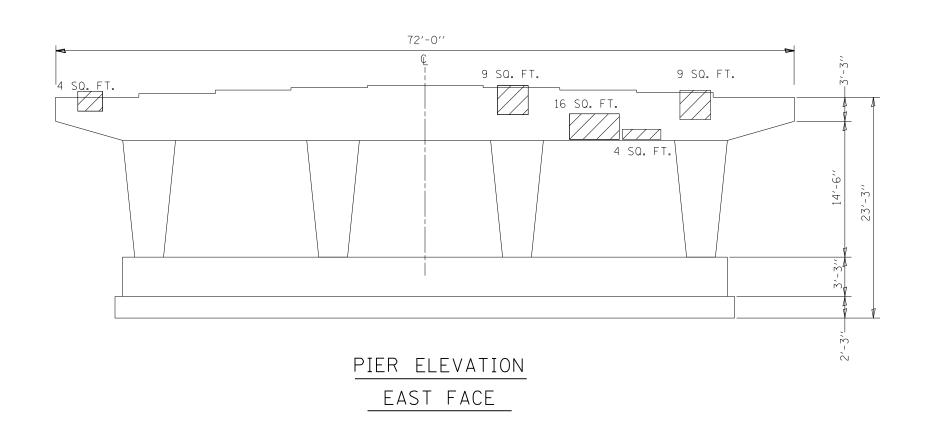
ELEVATION

EAST ABUTMENT

(OUTSIDE FACE LOOKING EAST)

30SQ.FT

30 SQ.FT

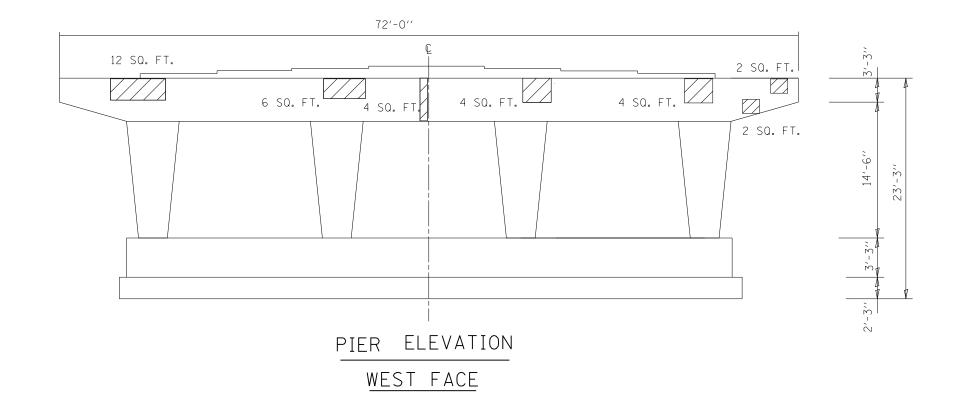


## BILL OF MATERIALS (PIER)

	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT	76

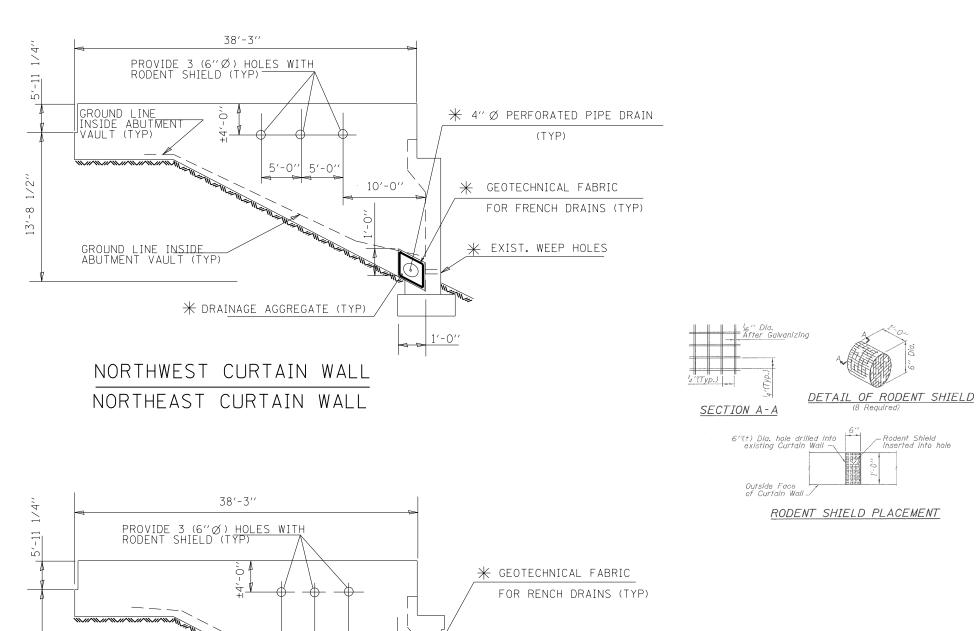


STRUCTURAL REPAIR OF CONCRETE ≤ 5"



**★** FAI 290 & FAP 342

COUNTY TOTAL SHEET NO. COOK & DuPAGE 29 25 DESIGNED -REVISED SECTION LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091) STATE OF ILLINOIS tab\d0101671\022-0091.dan DRAWN REVISED 2012-026 BR PIER REPAIRS **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 100.0000 '/ in. CHECKED -REVISED -CONTRACT NO. 60T70
| ILLINOIS | FED. AID | PROJECT PLOT DATE = 8/27/2012 DATE REVISED -SCALE: \_\_\_\_\_ SHEET 5 OF 8 SHEETS STA. TO STA.

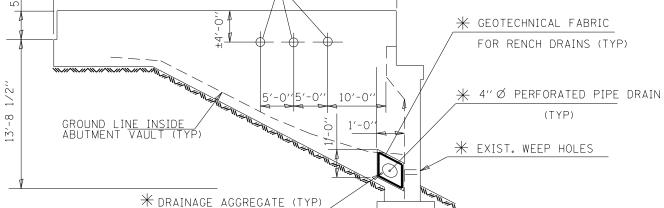


### NOTES:

COST OF CORING 12 HOLES (3 EACH SIDE AT EACH ABUTMENT) AND SHIELDS INCLUDED WITH "CONCRETE STRUCTURES".

\*\* CLEAN EXISTING WEEP HOLE IN THE EXIST.
WINGWALL TO ACCOMODATE THE 4" PERFORATED
PIPE DRAIN. AFTER INSTALLATION SEAL AROUND
THE PIPE DRAIN.
COST INCLUDED IN THE COST OF PIPE UNDERDRAINS
FOR STRUCTURES 4".

EXCAVATED SOIL FOR PIPE UNDERDRAIN INSTALLATION SHALL BE PLACED ON TOP OF SLOPED GROUND INSIDE VAULT. COST INCLUDED IN " PIPE UNDERDRAIN FOR STRUCTURES 4"."



# SOUTHWEST CURTAIN WALL SOUTHEAST CURTAIN WALL

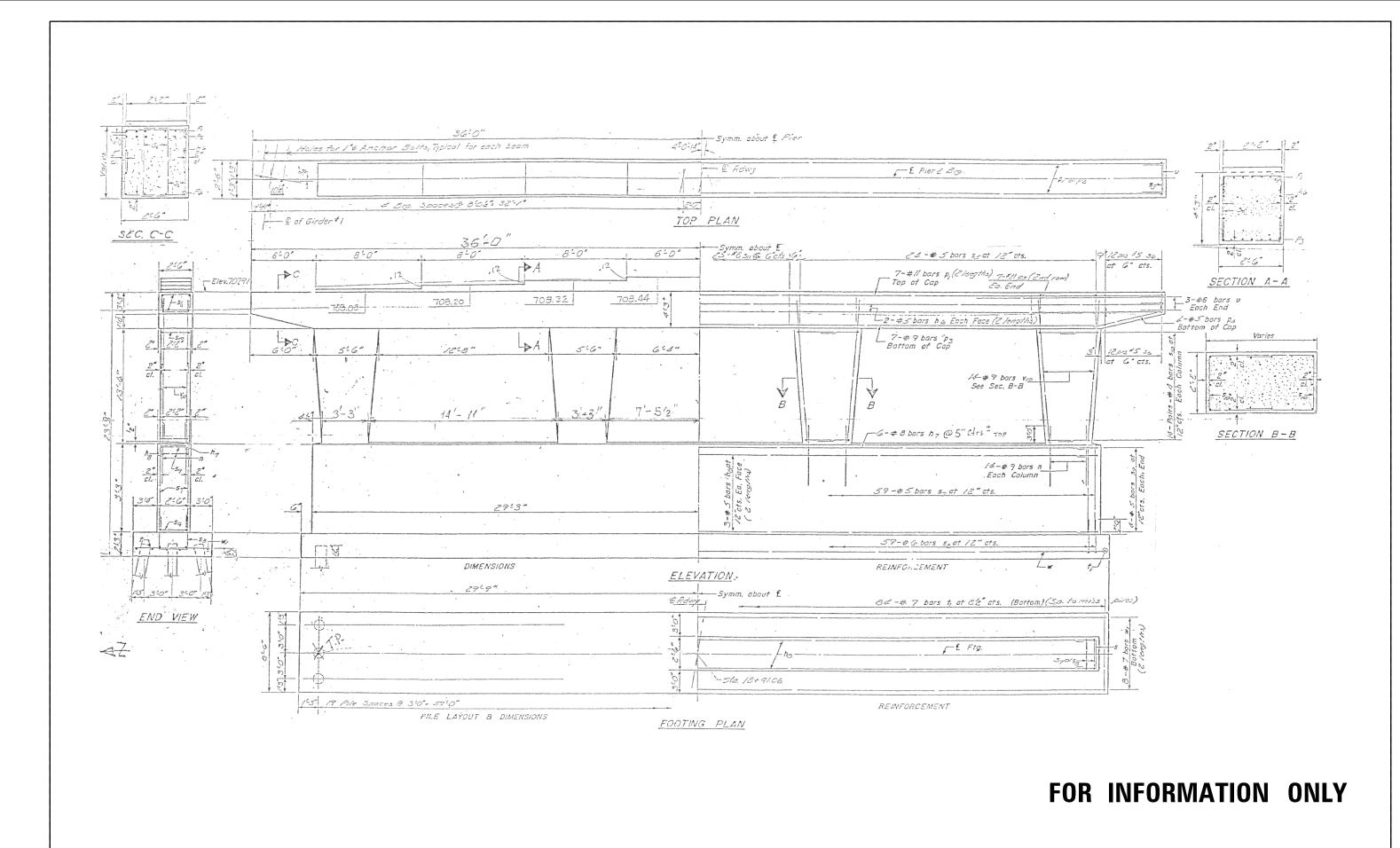
**¥** FAI 290 & FAP 342

FILE NAME =	USER NAME = gorengautab	DESIGNED -	KENIZED	
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	PLOT SCALE = 100.0000 '/ in.	CHECKED	REVISED	
Default	PLOT DATE = 8/28/2012	DATE	REVISED	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091)

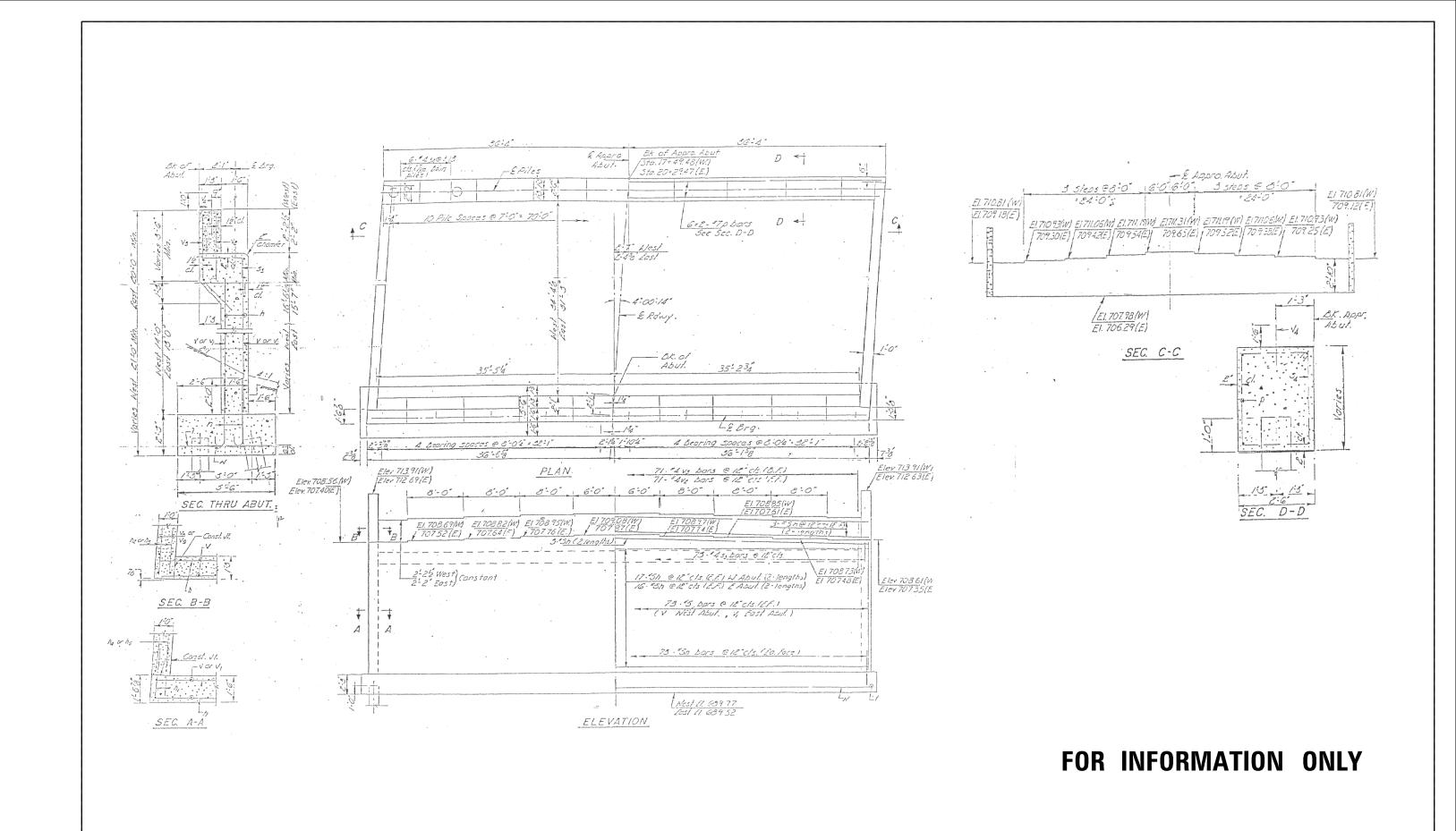
CURTAIN WALL REPAIRS

CALE: \_\_\_\_\_\_ SHEET 6 OF 8 SHEETS STA. TO STA.



**★** FAI 290 & FAP 342

FILE NAME =	USER NAME = midyja	DESIGNED	REVISED		LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091)	RTE.	SECTION	COUNTY	SHEETS NO.
c:\pw_work\pwidot\midyja\d0101671\022-00°	II.dgn	DRAWN	REVISED	STATE OF ILLINOIS	, , , , , , , , , , , , , , , , , , , ,	*	2012-026 BR	COOK & DuPAGE	29 27
	PLOT SCALE = 100.0000 ' / in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	PIER	<u> </u>			
\$MODELNAME\$	PLOT DATE = 8/28/2012	DATE	REVISED		SCALE: SHEET 7 OF 8 SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT	



\* FAI 290 & FAP 342

F	ILE NAME =	USER NAME = gorengautab	DESIGNED	REVISED		LOCATION NO 3. I-290 AT IL 19 (IRVING PARK RD) (SN 022-0091)	F.A.I RTF.	SECTION	COUNTY	TOTAL SHEET
	:\pw_work\pwidot\gorengautab\d0101671\0	22-0091.dgn	DRAWN	REVISED	STATE OF ILLINOIS	l ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		2012-026 BR	COOK & DuPAGE	£ 29 28
		PLOT SCALE = 100.00000 ' / 10.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	ABUTMENTS			CONTRACT	NO. 60T70
4	MODELNAME\$	PLOT DATE = 8/28/2012	DATE	REVISED		SCALE: SHEET 8 OF 8 SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT	

