TOTAL SHEETS: 38 BL067

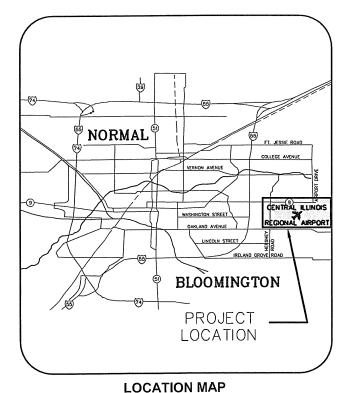
CONSTRUCTION PLANS FOR CENTRAL ILLINOIS REGIONAL AIRPORT

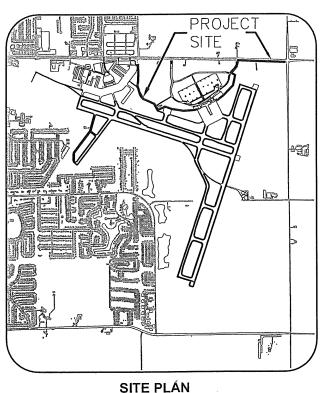
BLOOMINGTON-NORMAL AIRPORT AUTHORITY BLOOMINGTON, ILLINOIS

> IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX

INSTALL 10' PERIMETER FENCE PHASE 4

APRIL 22, 2011





FRANK 062-054100

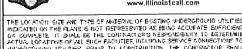
> BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT



CRAWFORD MURPHY & TILLY, INC. CONSULTING ENGINEERS

■ SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO

CMT JOB NUMBER: 1008501



JOINT UTILITY LOCATING before you die INFORMATION FOR EXCAVATORS

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

CALL J.U.L.I.E. BEFORE EXCAVATING 1-800-892-0123

TOWNSHIP: 23 NORTH RANGE: 3 EAST OF 4TH P.M. CIVIL TOWNSHIP:BLOOMINGTON CITY
AND OLDTOWN

SUMMARY OF QUANTITIES

			TOTAL
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
BASE BID			
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1
AR152440	BORROW EXCAVATION	C.Y.	500
AR156513	SEPARATION FABRIC	SY	350
AR156543	RIPRAP GRADATION NO 3	SY	350
AR162510	CLASS E FENCE 10'	L.F.	5440
AR162620	CLASS E GATE - 20'	EACH	2
AR162624	CLASS E GATE - 24'	EACH	1
AR162720	ELECTRIC GATE - 20'	EACH	1
AR162724	ELECTRIC GATE - 24'	EACH	1
AR162900	REMOVE CLASS E FENCE	L.F.	8800
AR162905	REMOVE GATE	EACH	8
AR162908	REMOVE ELECTRIC GATE	EACH	2
AR501508	8" PCC PAVEMENT	SY	135
AR701024	24" PVC STORM SEWER	LF	30
AR701512	12" RCP, CLASS IV	LF	32
AR701524	24" RCP, CLASS IV	LF	40
AR752412	Precast Reinforced Conc. FES 12"	EACH	2
AR752424	Precast Reinforced Conc. FES 24"	EACH	3
AR752512	Grating for Conc. FES 12"	EACH	1
AR752524	Grating for Conc. FES 24"	EACH	2
AR752536	Grating for Conc. FES 36"	EACH	2
AR800224	Regrade Swale	S.Y.	1500
AR801207	Re-block Architectural Split Face Block Wall	L.S.	1
AR901510	SEEDING	ACRE	4
AR908510	MULCHING	ACRE	4
AR908520	EXCELSIOR BLANKET	S.Y.	2000

ALTERNATE #1 - VINYL COATED CLASS E FENCE AND GATES AT TERMINAL				
AS162304	CLASS E GATE - 4' - VINYL	EACH	1	
AS162408	CLASS E FENCE 8' - VINYL	L.F.	3360	
AS162724	ELECTRIC GATE - 24' - VINYL	EACH	2	

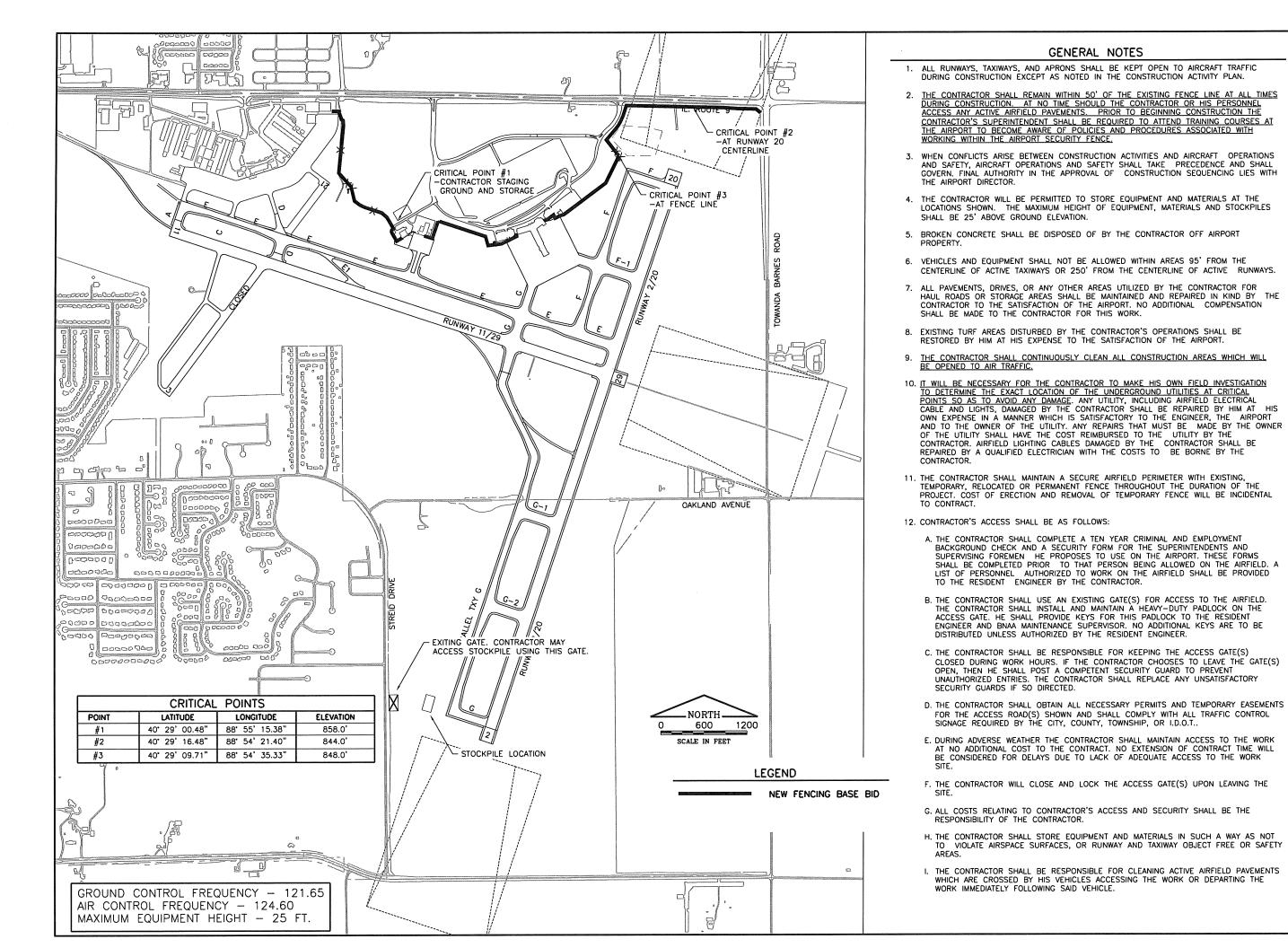
ALTERNATE #2 - CLASS E FENCE AND GATES AT TERMINAL				
AT162508	CLASS E FENCE 8'	L.F.	3360	
AT162604	CLASS E GATE - 4'	EACH	1	
AT162724	ELECTRIC GATE - 24'	EACH	2	

ALTERNATE #3 - ELECTRIC GATE AND PAVEMENT REMOVAL AND REPLACEMENT					
AU501508	8" PCC PAVEMENT	SY	135		
AU501900	REMOVE PCC PAVEMENT	SY	135		
AU162724	ELECTRIC GATE - 24'	EACH	1		

INDEX TO SHEETS

Sheet Number	Sheet Title
1	COVER SHEET
2	INDEX TO SHEETS & SUMMARY OF QUANTITIES
3	SITE PLAN
4	CONSTRUCTION ACTIVITY PLAN 1
5	CONSTRUCTION ACTIVITY PLAN 2
6	CONSTRUCTION ACTIVITY PLAN 3
7	CONSTRUCTION ACTIVITY PLAN 4
8	CONSTRUCTION ACTIVITY PLAN 5
9	CONSTRUCTION ACTIVITY PLAN 6
10	CONSTRUCTION ACTIVITY PLAN 7
11	CONSTRUCTION ACTIVITY PLAN 8
12	PROPOSED IMPROVEMENTS 1
13	PROPOSED IMPROVEMENTS 2
14	PROPOSED IMPROVEMENTS 3
15	PROPOSED IMPROVEMENTS 4
16	PROPOSED IMPROVEMENTS 5
17	PROPOSED IMPROVEMENTS 6
18	PROPOSED IMPROVEMENTS 7
19	PROPOSED IMPROVEMENTS 8
20	FENCE DETAILS 1
21	FENCE DETAILS 2
22	GATE PLAN AND SCHEDULE
23	TEMPORARY FENCE DETAILS
24	ELECTRIC GATE DETAILS 1
25	ELECTRIC GATE DETAILS 2
26	ELECTRIC GATE DETAILS 3
27	ELECTRIC GATE DETAILS 4
28	ELECTRIC GATE DETAILS 5
29	BLOCKWALL DETAIL
30	EROSION CONTROL AND GRATING DETAILS
31	DRAINAGE DETAILS
32	JOINTING 1
33	JOINTING 2
34	ROUTE 9 GATE ELECTRICAL
35	GROWMARK GATE ELECTRICAL
36	TERMINAL EAST AND WEST GATES ELECTRICAL
37	ALT-3 ELECTRIC GATE
38	REGRADE SWALE

K:\BloominglonAp\1008501\Draw\Sheets
FILE: INDEXSUN.dwg
UPDATE BY: Jason Frank
PLOT DATE: 5/5/2011 10:31 AM BL067 REVISIONS NUMBER BY DATE 0 1 2 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). SUMMARY OF QUANTITIES BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS INSTALL 10' PERIMETER FENCE PHASE 4 INDEX TO SHEETS & DESIGN BY: JEF DRAWN BY: СМТ JEG CHECKED BY: APPROVED BY: 04/22/2011 DATE: 1008501 IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX SHEET 2 OF 38 SHEETS



FILE: SITE.dwa UPDATE BY: Jason Frank

PLOT DATE: 5/5/2011 10:35 AM BASE_EXISTGEO AERIAL EXIST_TOPO

(:\BloomingtonAp\1008501\Drow\Sheets

|BL067

REVISIONS					
NUMBER	BY	DATE			
0	1	2			

THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

MAL AIRPORT AUTHO IS REGIONAL AIRPORGETON, ILLINOIS PHAS PERIMETER FENCE OOMINGTON-NORN CENTRAL ILLINOIS BLOOMING

10

INSTALL

Ω

U83

DESIGN BY JFF СМТ

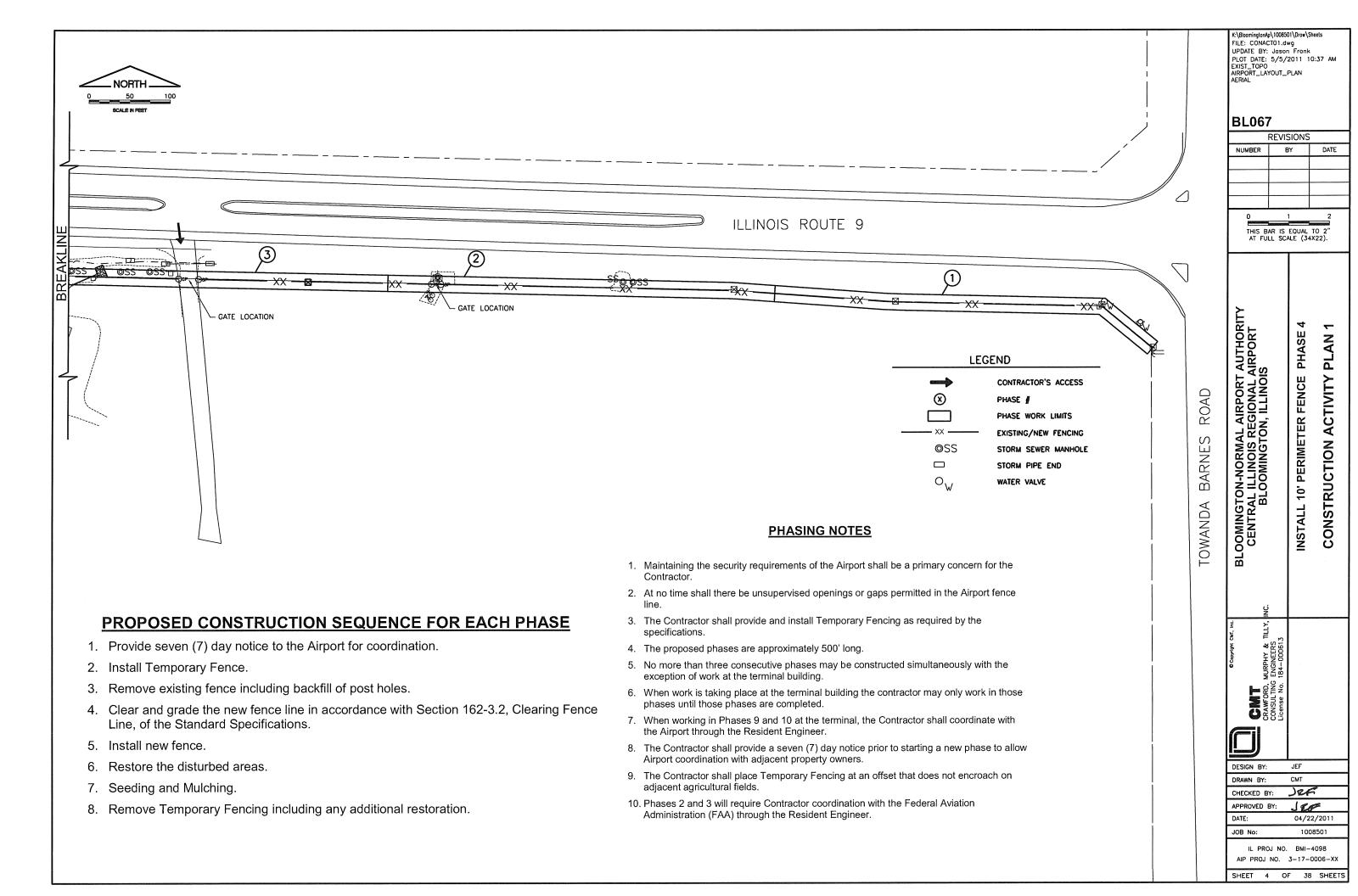
CHECKED BY:

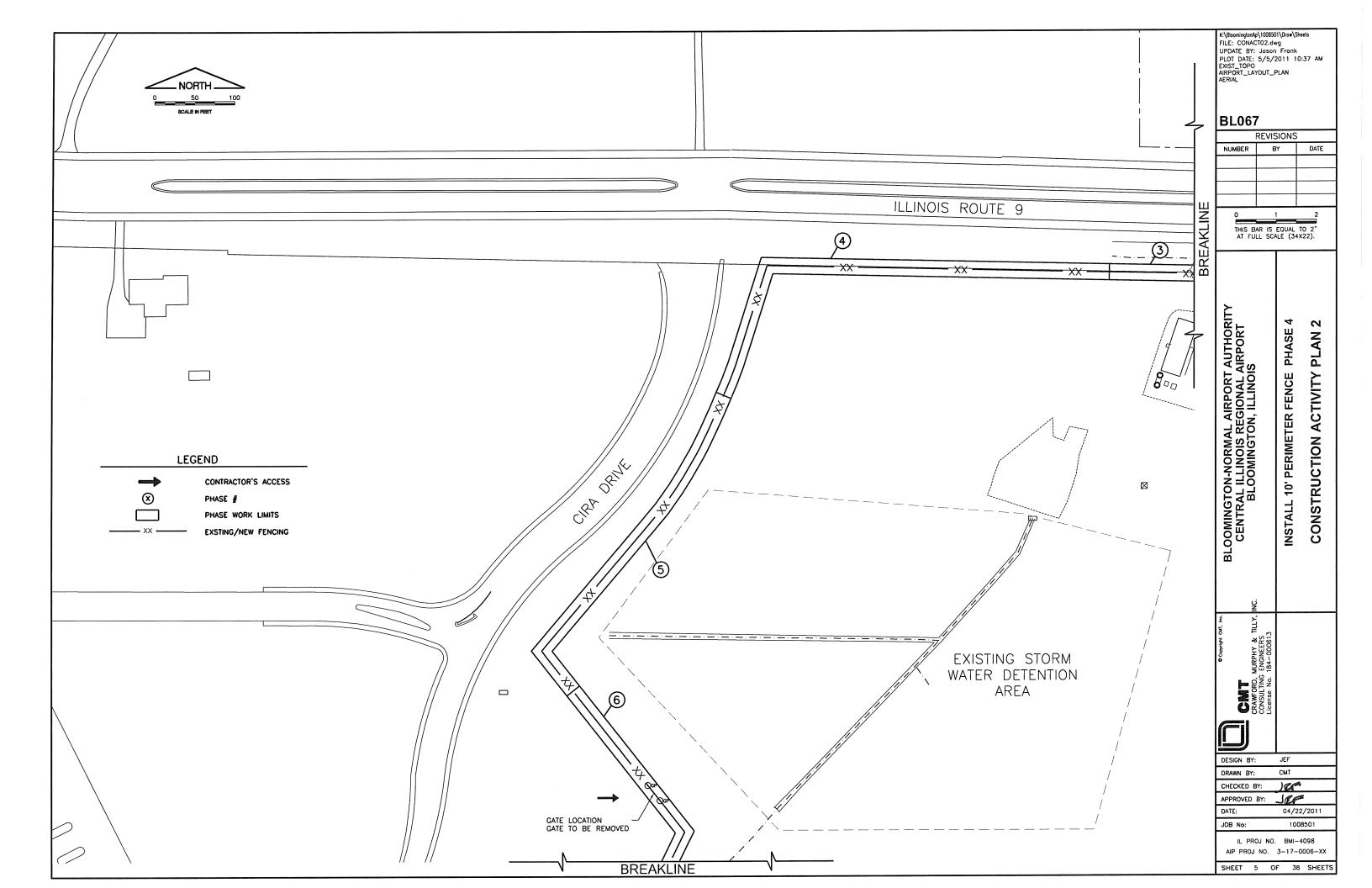
) CC APPROVED BY:)包件

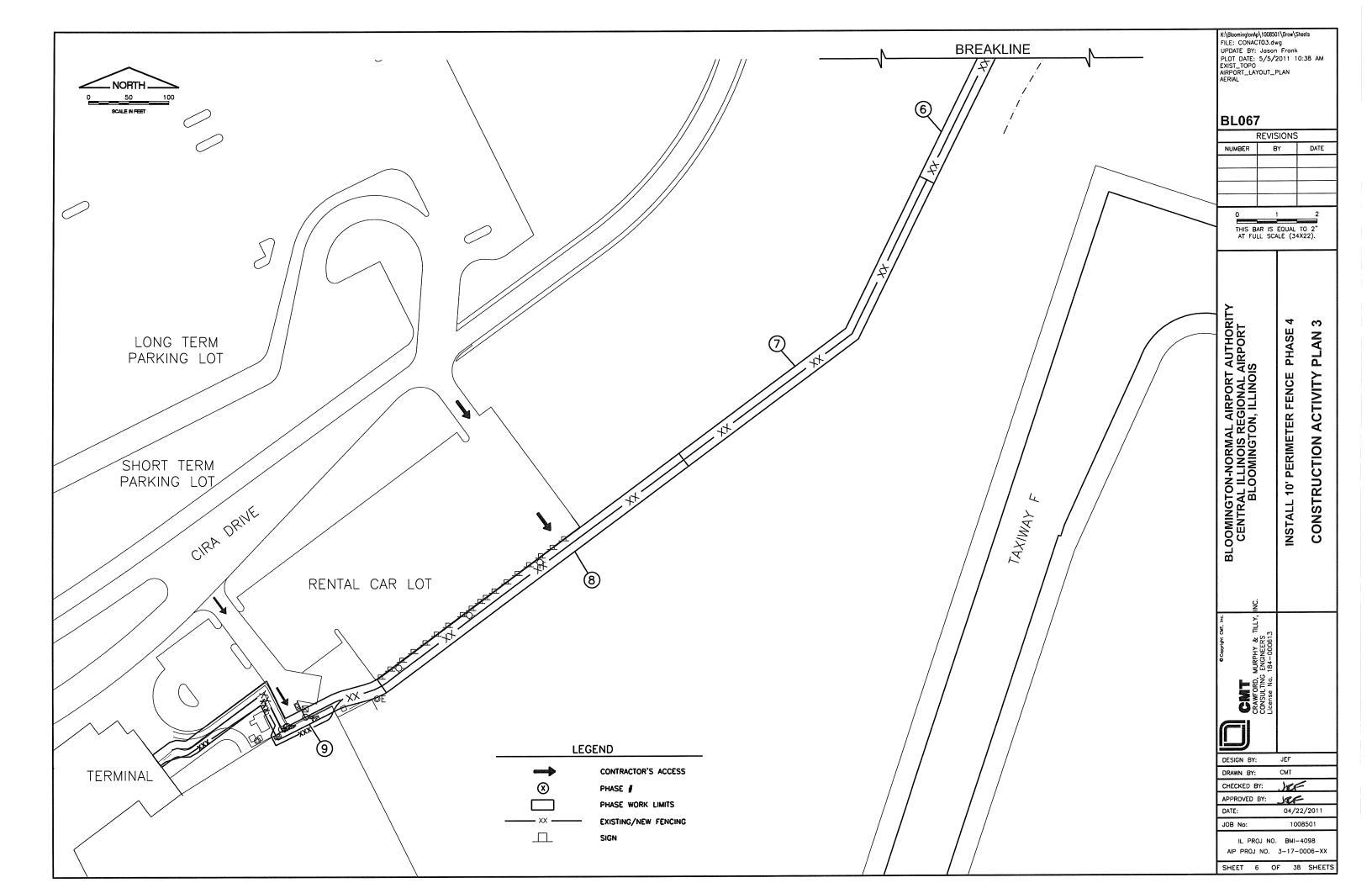
> 04/22/2011 1008501

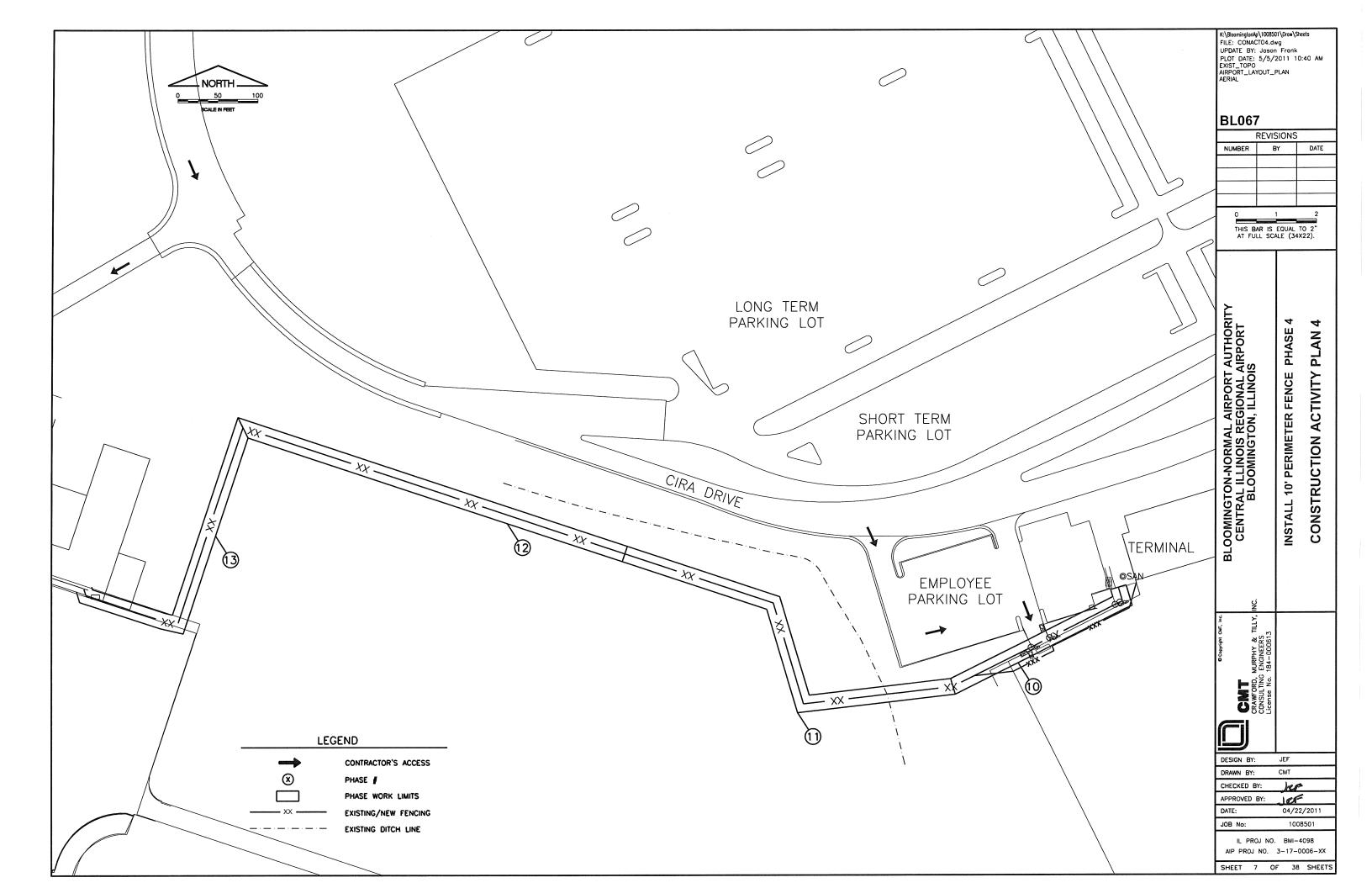
IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX

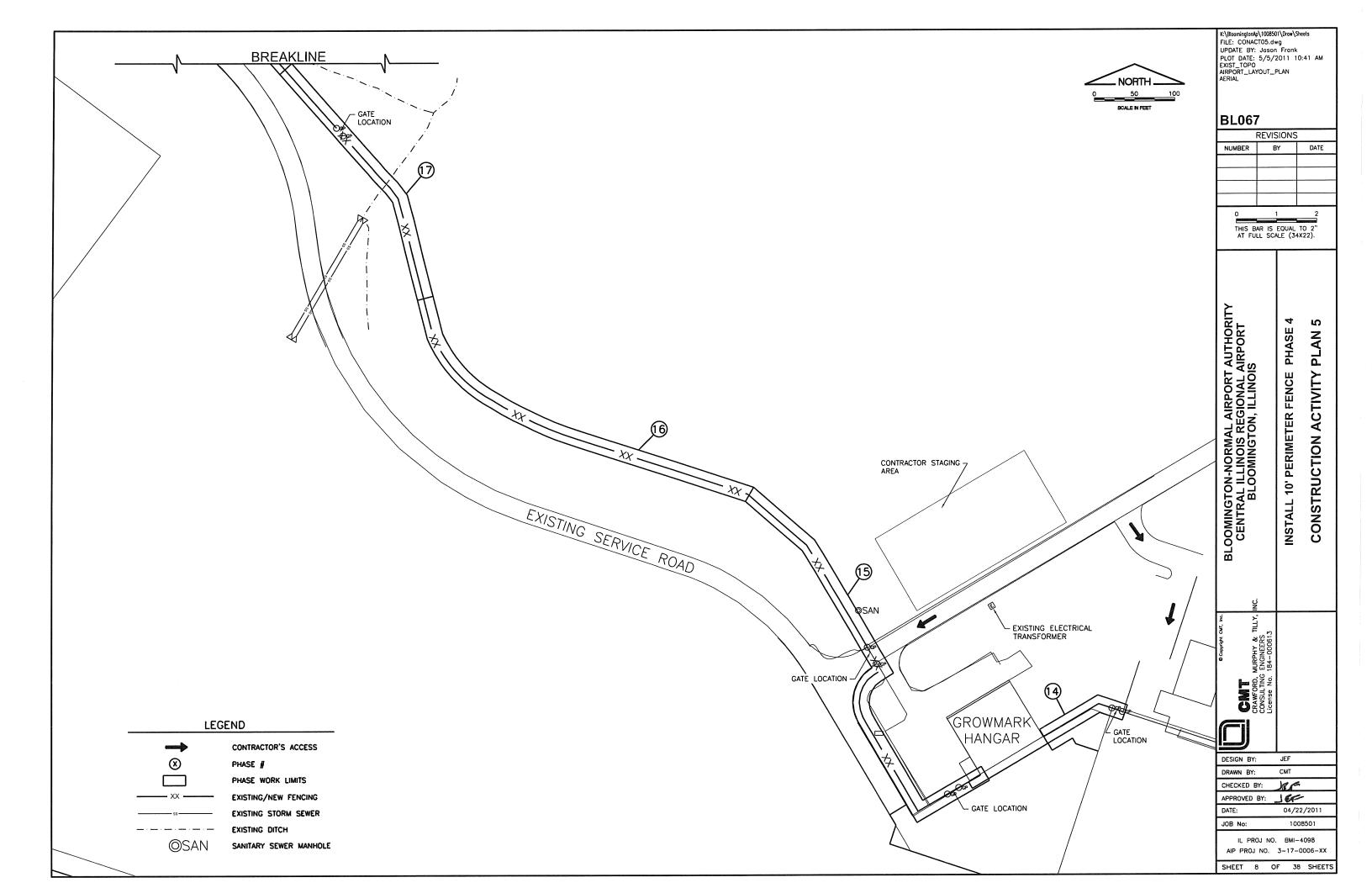
SHEET 3 OF 38 SHEETS

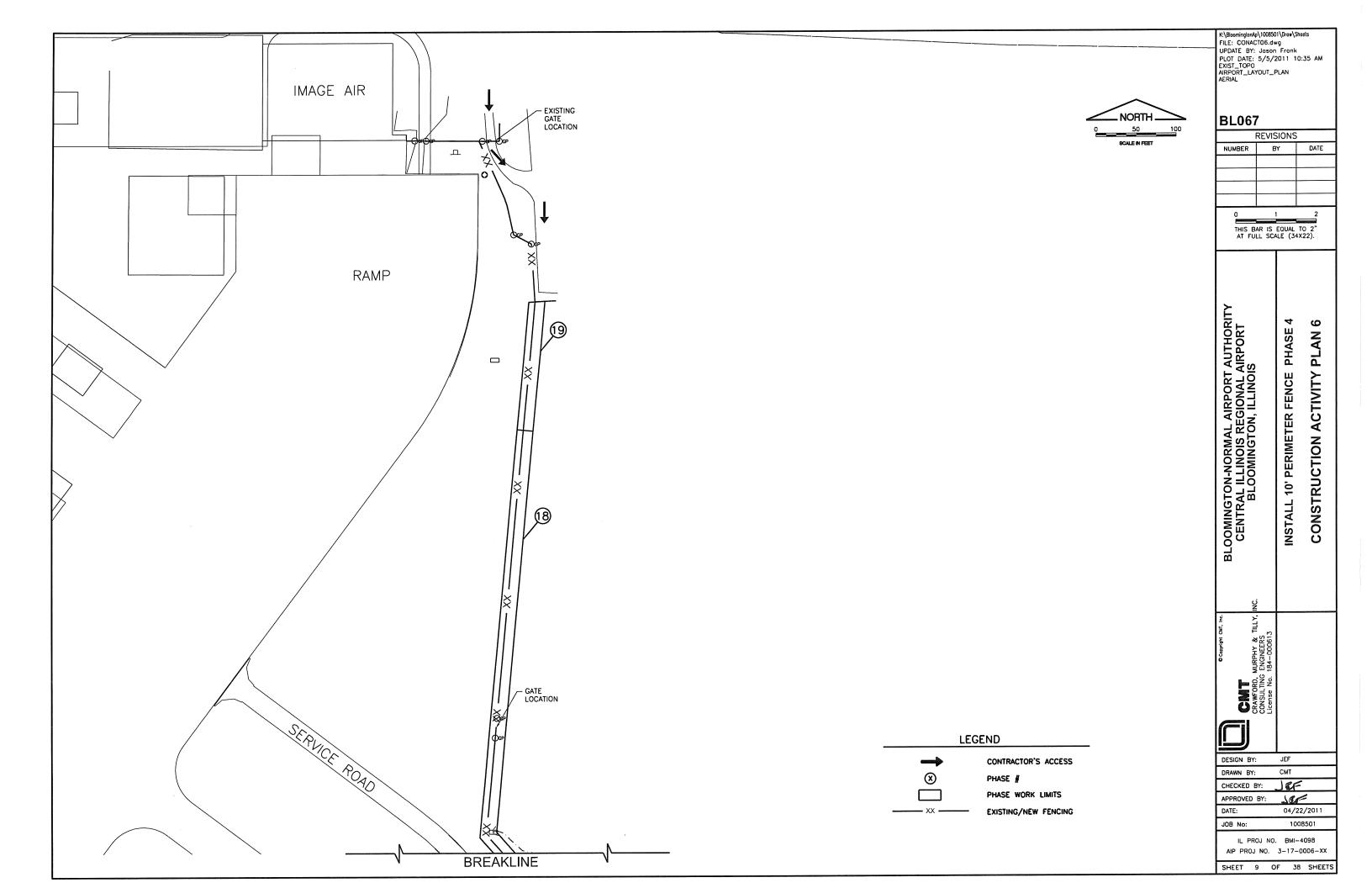


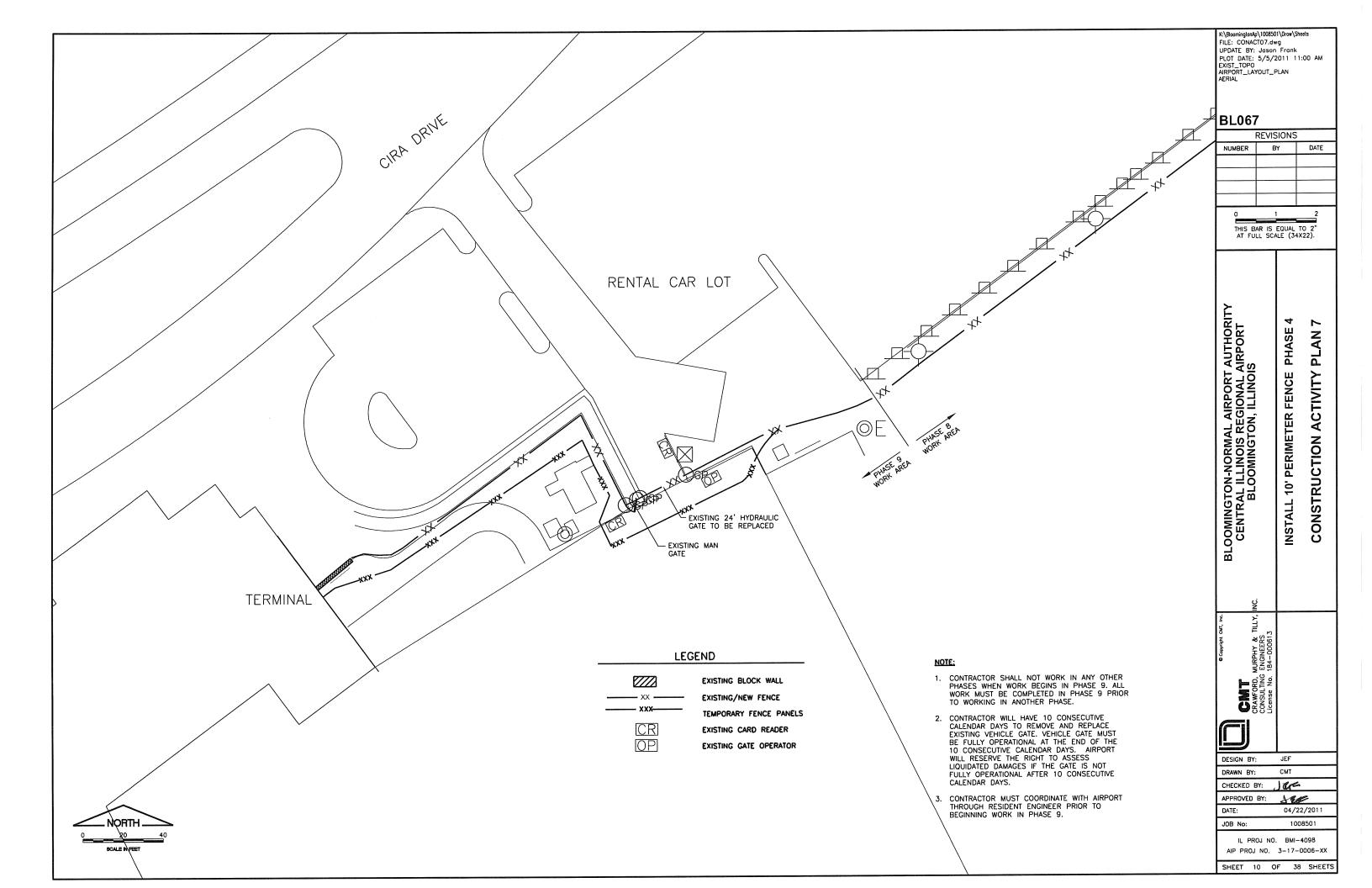


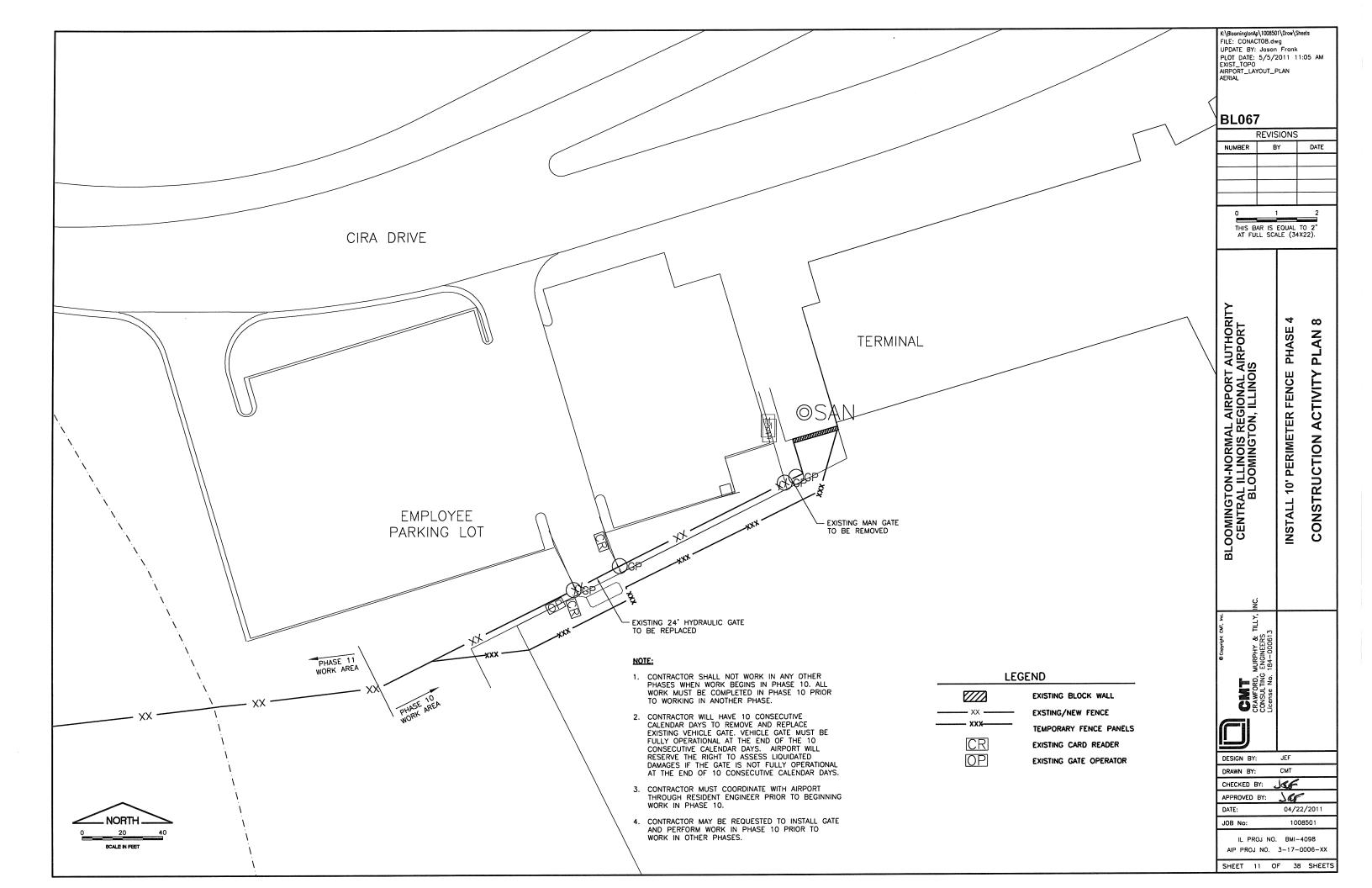


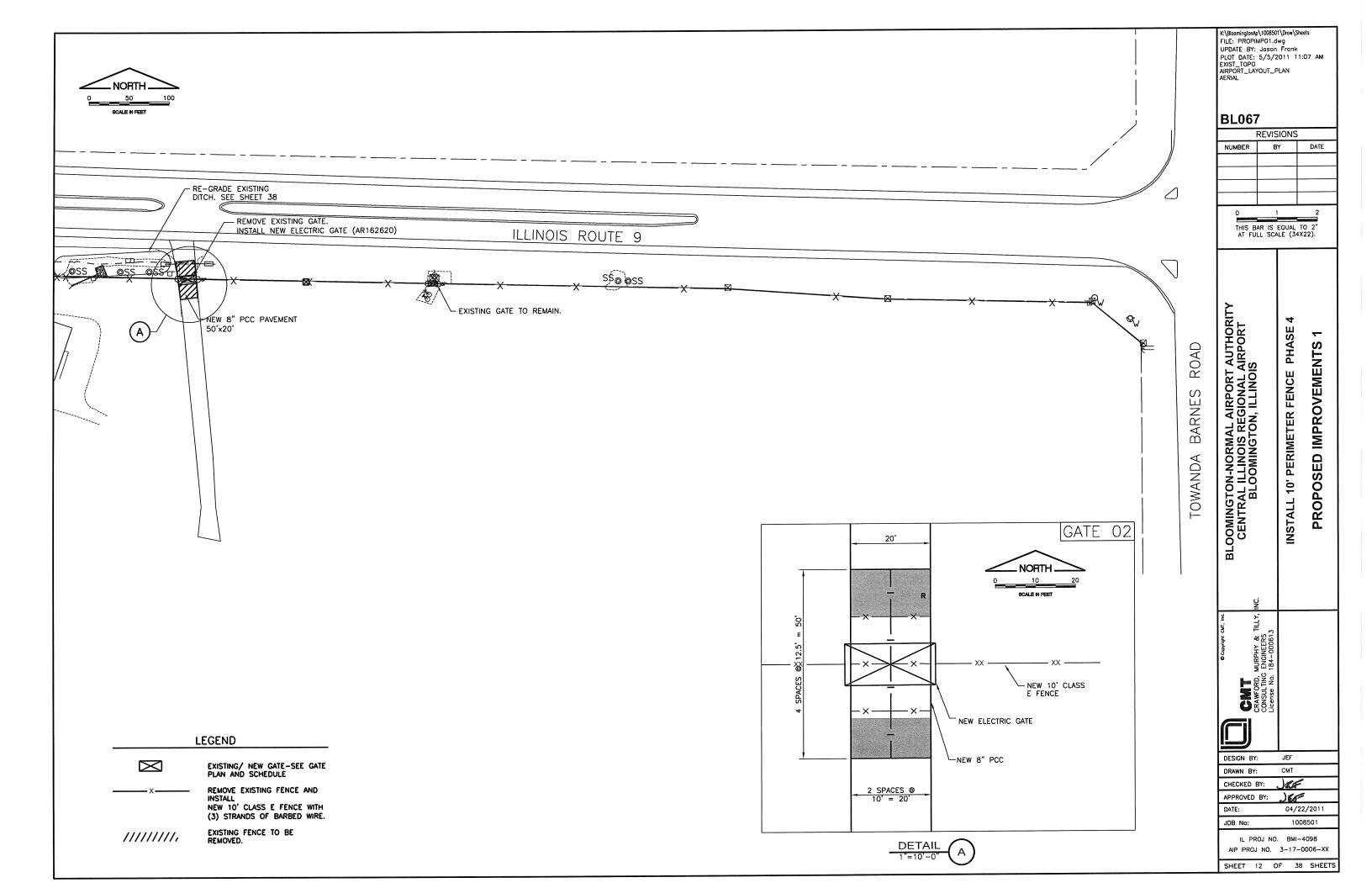


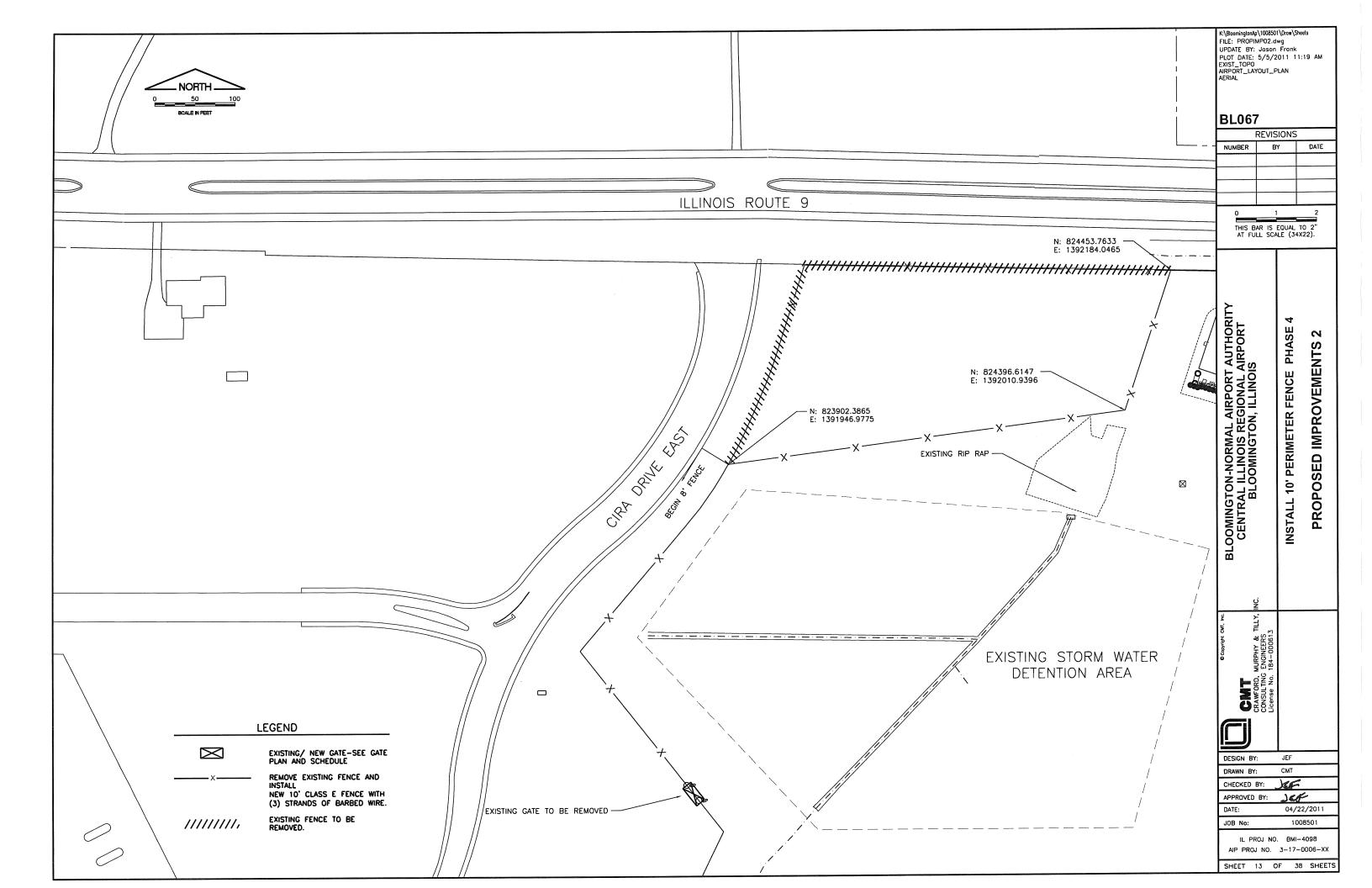


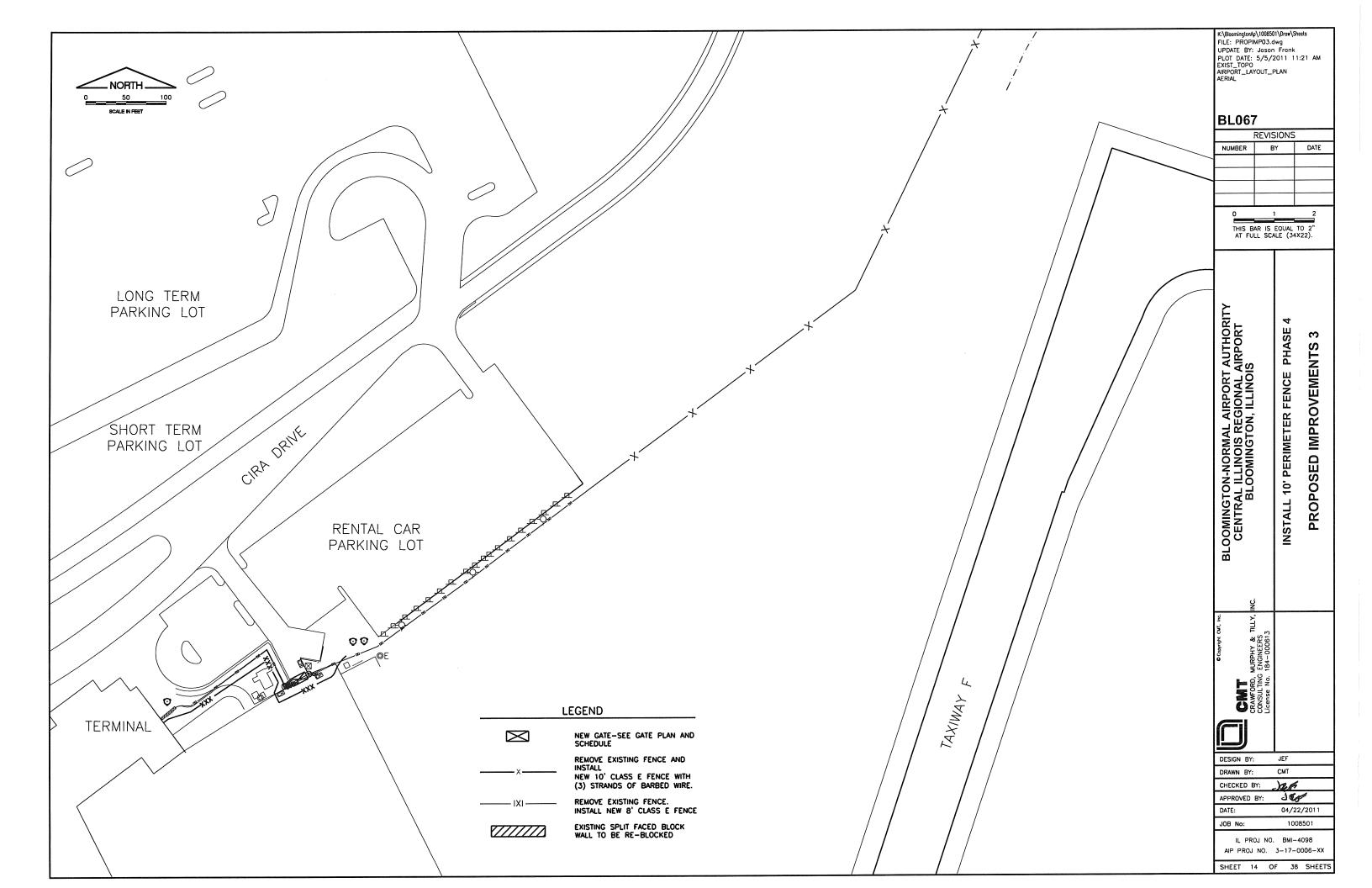


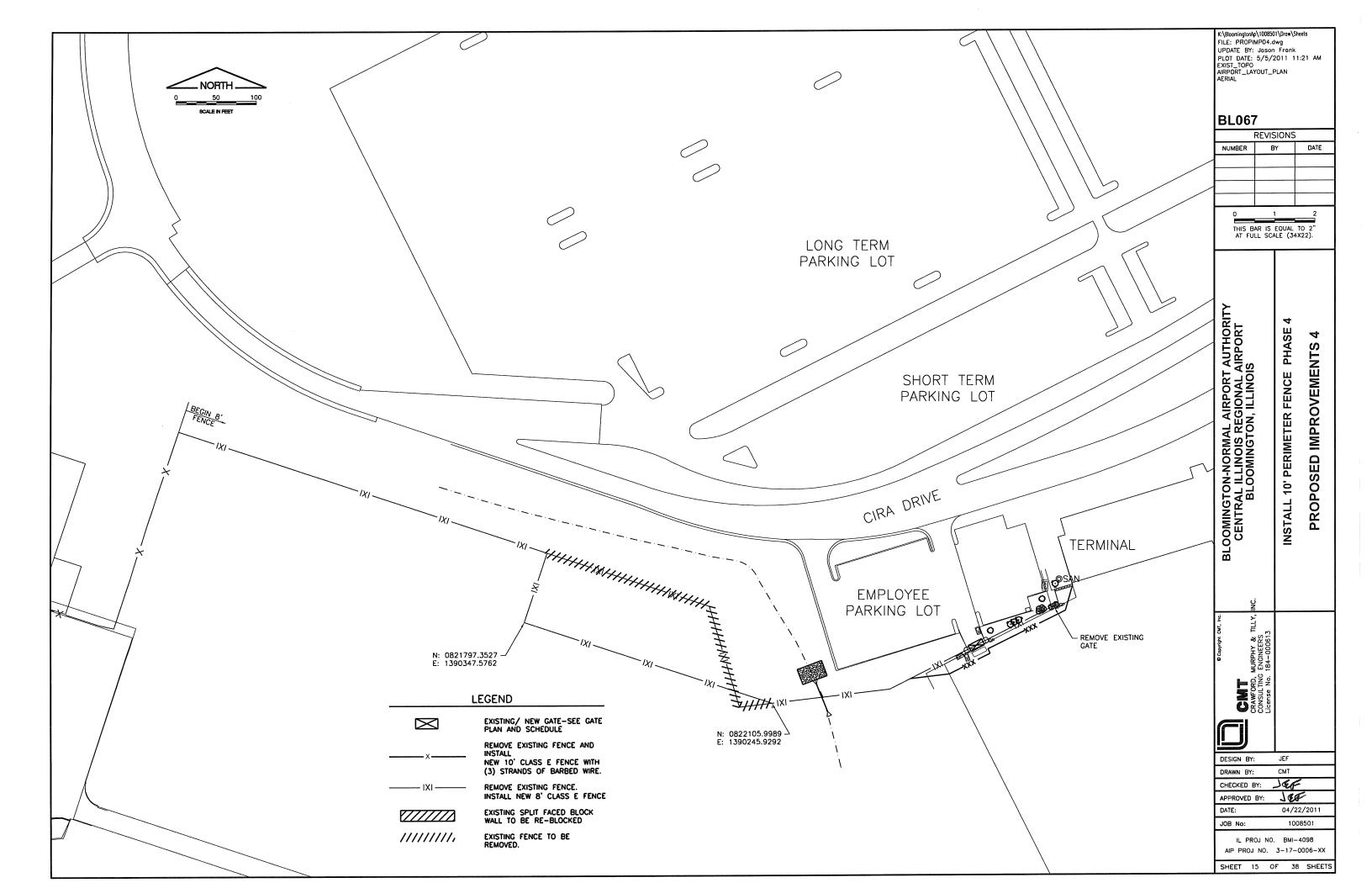


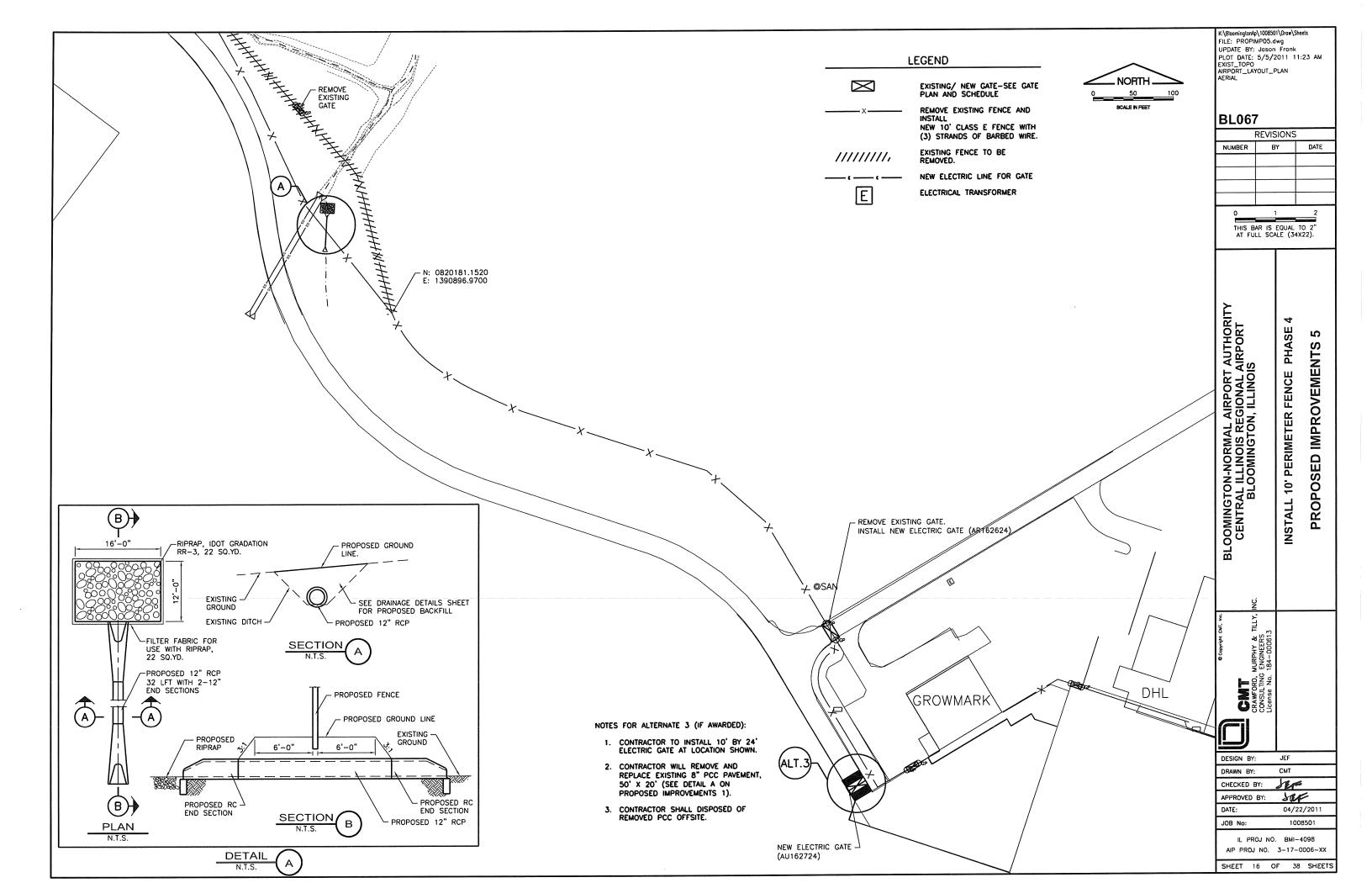


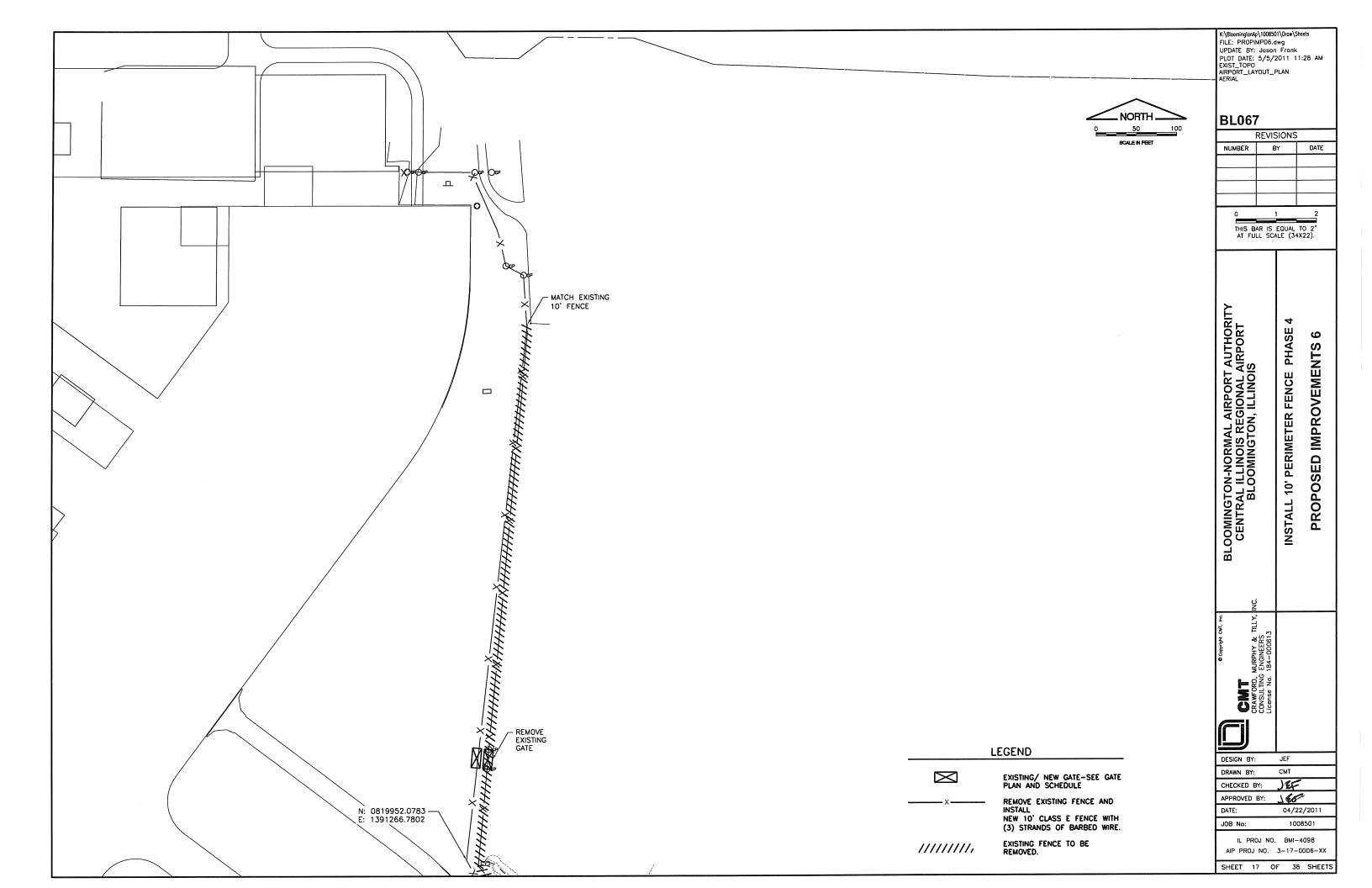


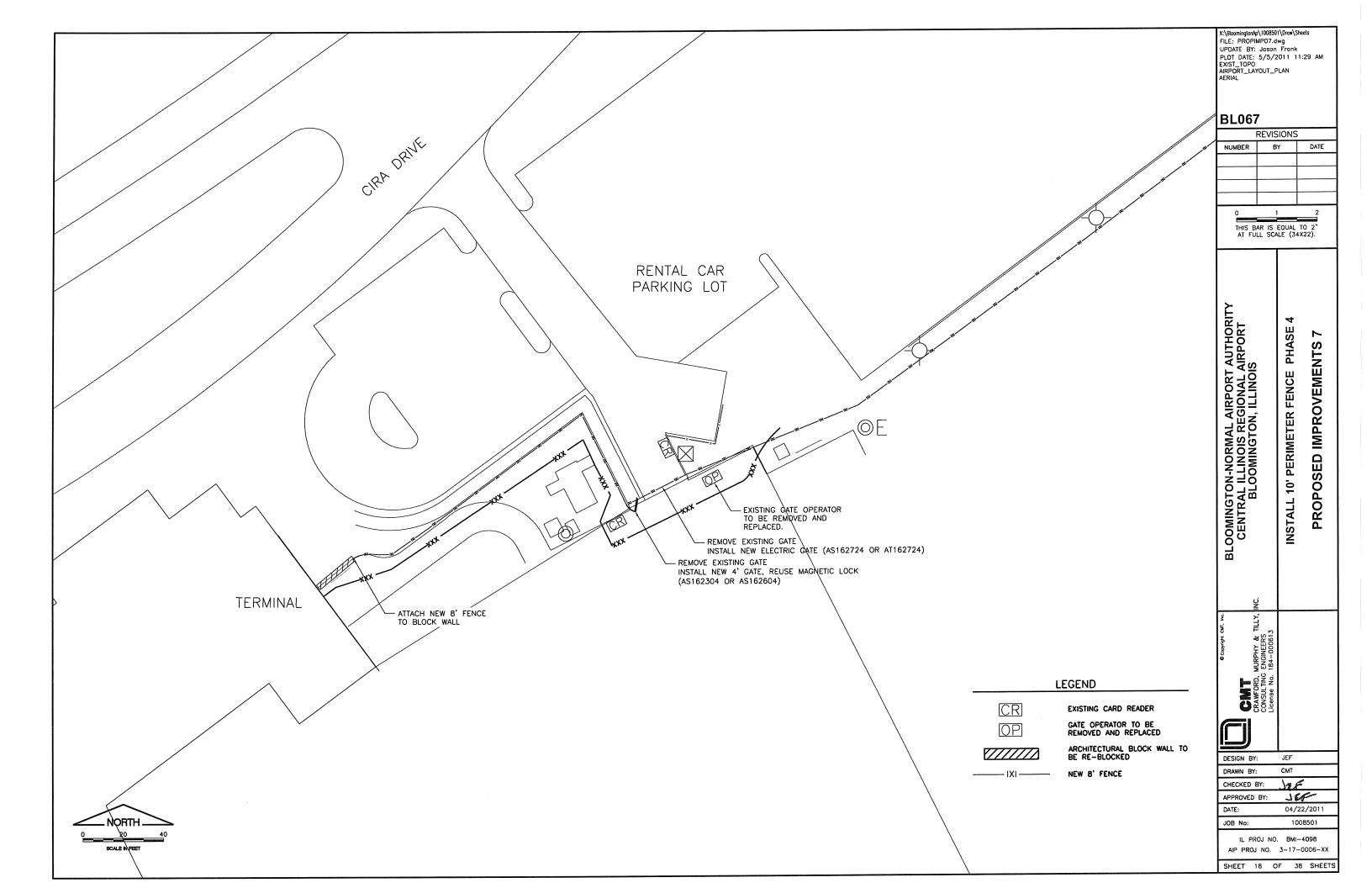


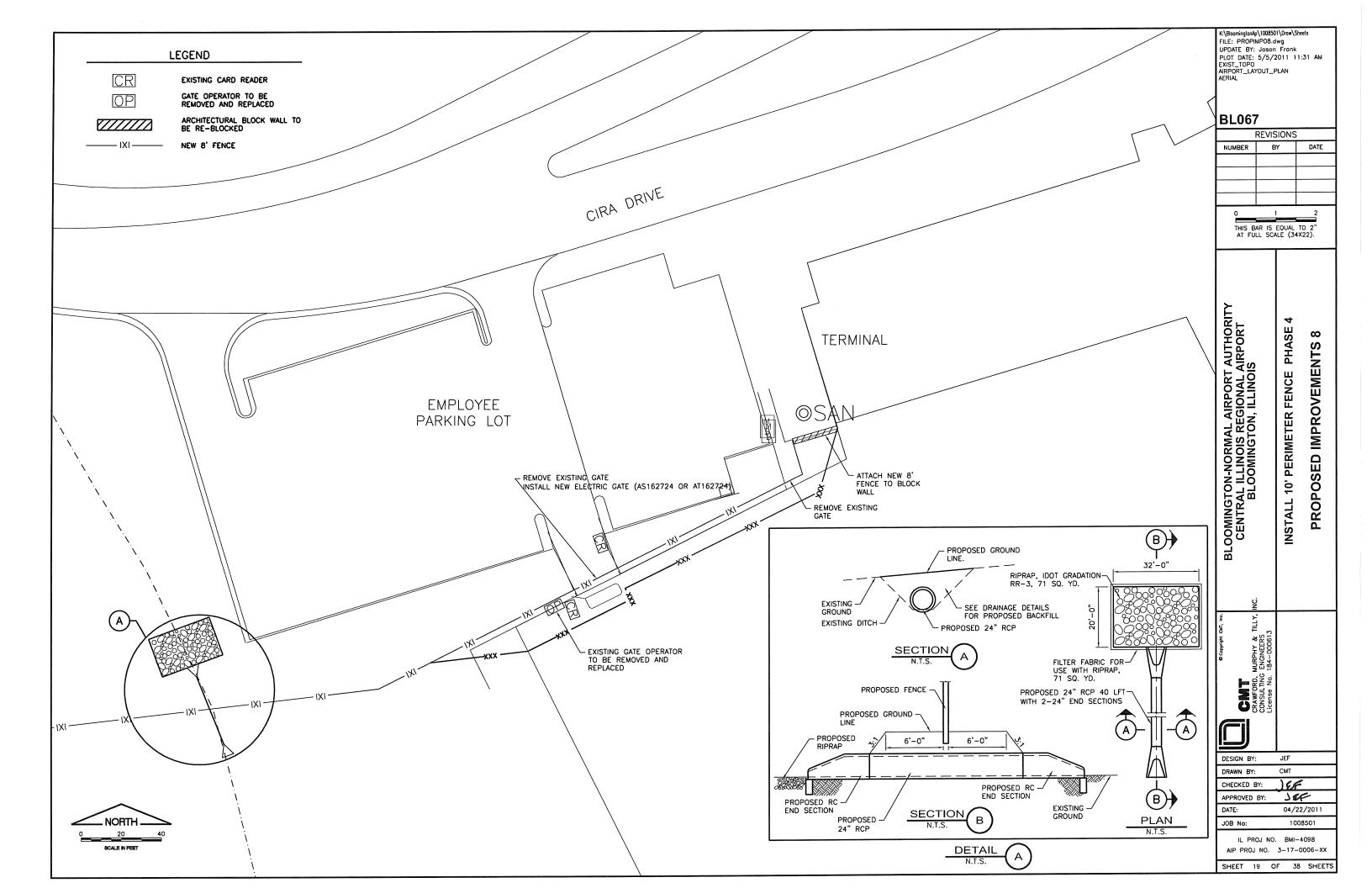


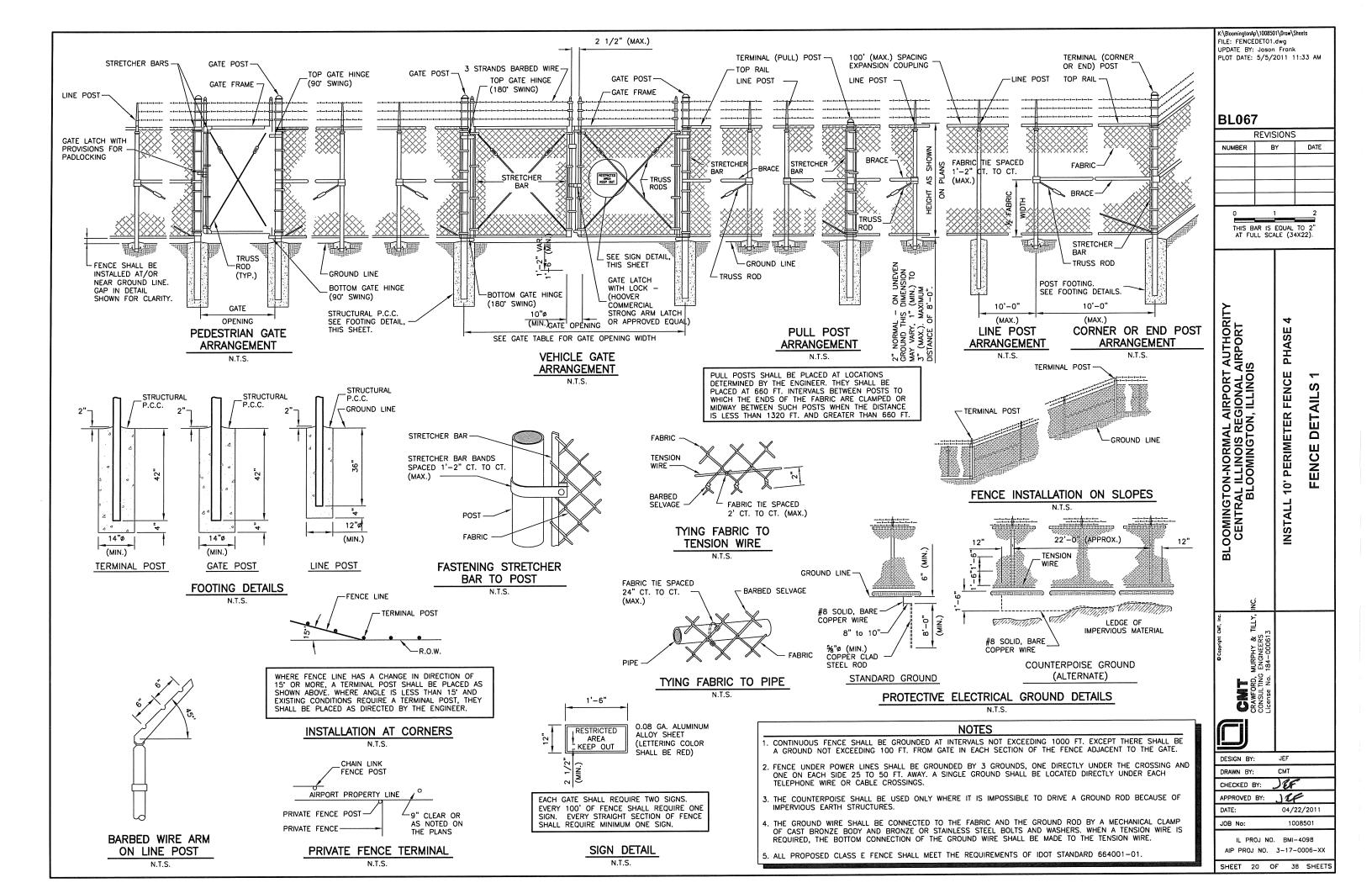


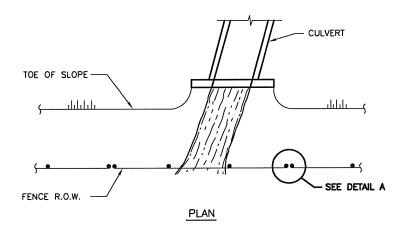


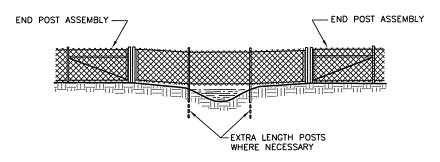






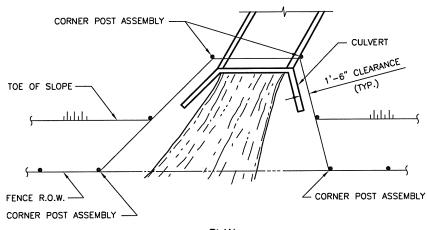




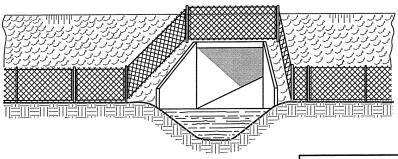


THE CHAIN LINK FABRIC SHALL BE REPLACED BY BARBED WIRE STRANDS AT 12" MAXIMUM CENTERS BETWEEN THE DOUBLE POSTS SHOWN ON DETAIL A WHEN SHOWN ON THE PLANS.

ELEVATION



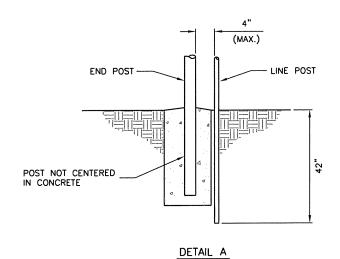
PLAN



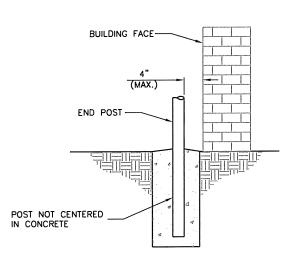
WHEN THE WIDTH OF THE CULVERT MAKES IT NECESSARY TO ANCHOR A POST TO THE TOP OF THE CULVERT, A CAST IRON SHOE OR OTHER DEVICE APPROVED BY THE ENGINEER SHALL BE USED.

ELEVATION

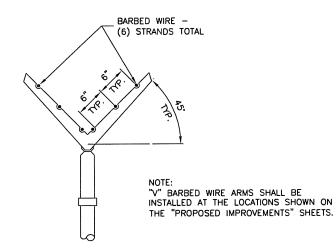
FENCE INSTALLATION AROUND HEADWALL DETAILS



FENCE INSTALLATION OVER STREAM DETAILS



FENCE INSTALLATION AT BUILDING FACE

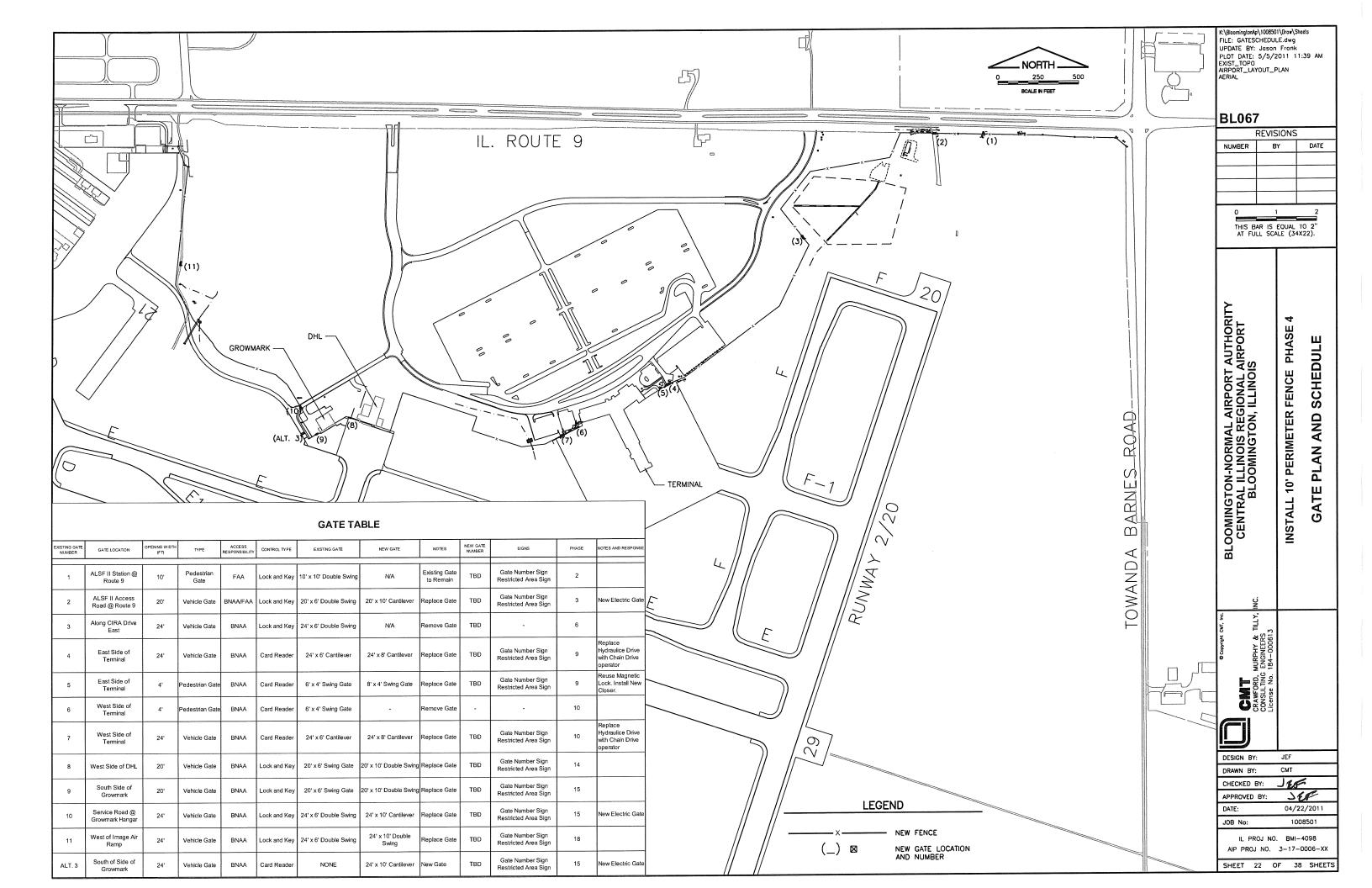


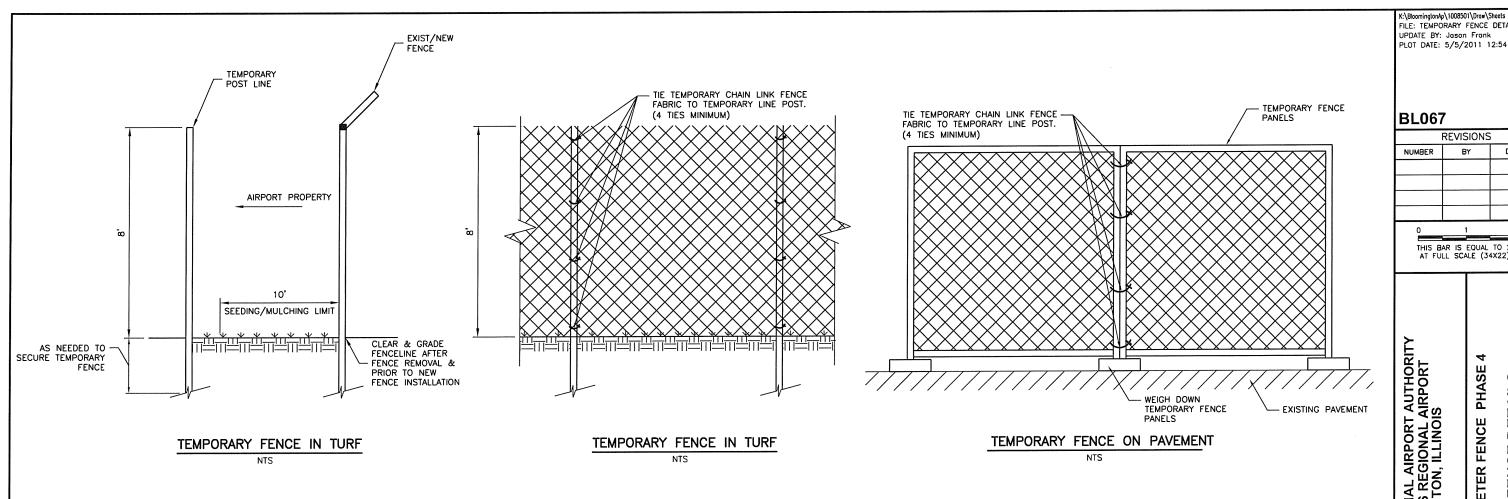
"V" BARBED WIRE ARM ON LINE POST

(1) n; 1 i i	\ .ccarc	11 D 1 Ct.	-1-	
K:\BloomingtonAp\1008501\Draw\Sheets FILE: FENCEDETO2.dwg				
UPDATE BY: Joson Frank				
PLOT DATE: 5/5/2011 11:33 AM				
BL067	7			
	REVIS	IONS		
NUMBER	В		DATE	
NOMBER			DAIL	
0	1		2	
Town Street Street	- College (see			
THIS B	AR IS I LL SCA	EQUAL 1 LE (34X	O 2" (22).	
		(/-	
≅⊢		4		
Οĸ		災		
Ξδ		¥		
AUTHOR AIRPORT S		PHASE		
_				
GTON-NORMAL AIRPORT AUTHORITY RAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS		CE	7	
ö≰≚		Ž	ENCE DETAILS	
RMAL AIRPO OIS REGION/ NGTON, ILLIN		FEN(
<u> </u>		<u> </u>	⋖	
ΔMZ		IMETER	<u> </u>	
FR		E	7	
≨ຮຽ		¥		
⊼ O Z		5	뽔	
9Z _≥		ALL 10' PER	\supseteq	
7 7 8		<u>С</u>	Ш	
בַרַ סַּ		ō	ட	
FAB		~		
<u> </u>				
MINGT NTRAI B		⋖		
BLOOM CEN		T		
S_{Ω}		INS		
7		_		
$\overline{\mathbf{\Omega}}$				
t	,			
CRANCORD MIRPHY & TILLY INC.		-		
<u> </u>				
© Copyright CMT, Inc.	_ m			
įξ &	18. E			
K Copy	Ψĕ			
0 8	Ş 4			
2	<u>"</u> "			
- 2	ŽΖ			
1	걸ᇵ			
70 2	S E			
2	ĕĕ			
لاكا				
DESIGN BY:		JEF		
DRAWN BY:		CMT		
CHECKED E) Res		
APPROVED	BY:		1/2011	
DATE:			2/2011	
JOB No:		100	8501	
l	או ור	BMI-4	100E	
IL PR	JU INU.	DIMI	+030	

AIP PROJ NO. 3-17-0006-XX

SHEET 21 OF 38 SHEETS

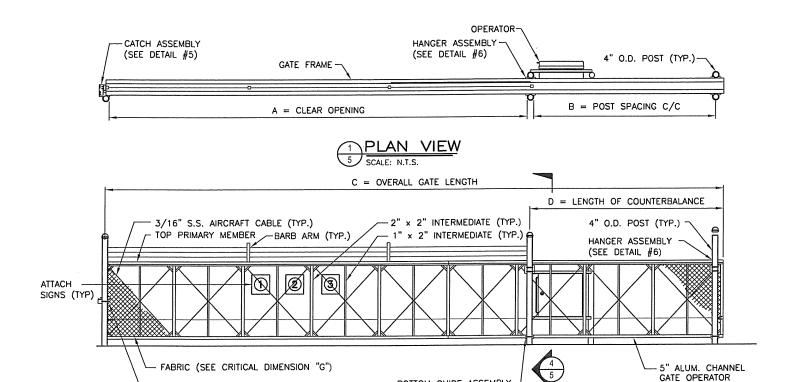




NOTES:

- CONTRACTOR MUST ERECT TEMPORARY FENCE PRIOR TO OR CONCURRENT WITH REMOVAL OF EXISTING FENCE
- CONTRACTOR WILL NOT BE ALLOWED TO LEAVE OPENINGS IN TEMPORARY FENCE UNLESS OPENING IS GUARDED.
- CONTRACTOR SHALL SECURE TEMPORARY FENCE TO EXISTING FENCE DURING EACH PHASE OF WORK
- CONTRACTOR MAY USE REMOVED FENCE MATERIAL FOR TEMPORARY FENCE.

BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT AT FULL, INC. BLOOMINGTON-NORMAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT AT FULL SCAIR (34x22). BLOOMINGTON-ILLINOIS BLOOMINGTON-ILLINOIS CONSULTING ENGINEERS CONSULTING ENGINEERS ILCANFORD BLOOMINGTON-NO BLOOMINGTON-NO	UPDATE BY: Joson Frank PLOT DATE: 5/5/2011 12:54 PM			
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT ALLY, INC. BLOOMINGTON, ILLINOIS CGAWGORD, MURPHY & TILLY, INC. BLOOMINGTON, ILLINOIS BLOOMINGTON, ILLINOIS CGNSULTING ENGINEERS ILCEGUSE BY: DETAIL 10' PERIMETER FENCE PHASE 4 TEMPORARY FENCE DETAILS TEMPORARY FENCE DETAILS INSTALL 10' BRIH-4088	BL067	,		
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT ALLY, INC. CHAWGORD, MURPHY & TILLY, INC. BLOOMINGTON, ILLINOIS BLOOMINGTON, ILLINOIS CONSULTING ENGINEERS License No. 184-000613 INSTALL 10' PERIMETER FENCE PHASE 4 TEMPORARY FENCE DETAILS IN 1008201 IL BOOM NO. 184-008801		REVISIO	NS	
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS CRAWFORD, MURPHY & TILLY, INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. CENTRAL ILLINOIS CONSULTING ENGINEERS ILCONSULTING ENGINEERS CONSULTING ENGINEERS INSTALL 10' PERIMETER FENCE PHASE 4 INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS	NUMBER	BY	_	DATE
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS CRAWFORD, MURPHY & TILLY, INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. CENTRAL ILLINOIS CONSULTING ENGINEERS ILCONSULTING ENGINEERS CONSULTING ENGINEERS INSTALL 10' PERIMETER FENCE PHASE 4 INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS				
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS CRAWFORD, MURPHY & TILLY, INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. CENTRAL ILLINOIS CONSULTING ENGINEERS ILCONSULTING ENGINEERS CONSULTING ENGINEERS INSTALL 10' PERIMETER FENCE PHASE 4 INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS				
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS CRAWFORD, MURPHY & TILLY, INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. CENTRAL ILLINOIS CONSULTING ENGINEERS ILCONSULTING ENGINEERS CONSULTING ENGINEERS INSTALL 10' PERIMETER FENCE PHASE 4 INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS				
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS CRAWFORD, MURPHY & TILLY, INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. BLOOMINGTON-INC. CENTRAL ILLINOIS CONSULTING ENGINEERS ILCONSULTING ENGINEERS CONSULTING ENGINEERS INSTALL 10' PERIMETER FENCE PHASE 4 INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS	^	1		2
BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS CONSULTING ENGINEERS License No. 184-000613 INSTALL 10' PERIMETER FENCE PHASE 4 INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS INSTALL 10' PERIMETER FENCE DETAILS		politica de la composición dela composición de la composición dela composición de la composición de la composición de la composición de la composición dela composición dela composición de la c	IAL TO	No.
DESIGN BY: JEF DRAWN BY: DJW CHECKED BY: DJW APPROVED BY: DJW DATE: 04/22/2011 JOB No: 1008501	AT FU	L SCALE		2).
DESIGN BY: JEF DRAWN BY: DJW CHECKED BY: X APPROVED BY: 04/22/2011 JOB No: 1008501 IL PROJ NO. BMI-4098	BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS		INSTALL 10. PERIMETER FENCE PHASE 4	TEMPORARY FENCE DETAILS
DESIGN BY: JEF DRAWN BY: DJW CHECKED BY: X APPROVED BY: 04/22/2011 JOB No: 1008501 IL PROJ NO. BMI-4098	Copyright Cut', Inc.	CONSULTING ENGINEERS icense No. 184-000613		
DRAWN BY: DJW CHECKED BY:			-	
CHECKED BY:				
APPROVED BY: V DATE: 04/22/2011 JOB No: 1008501 IL PROJ NO. BMI-4098				
DATE: 04/22/2011 JOB No: 1008501 IL PROJ NO. BMI-4098			_	
JOB No: 1008501 IL PROJ NO. BMI-4098				2011
IL PROJ NO. BMI-4098				Section 1
		י מאור		
SHEET 23 OF 38 SHEET				SHEETS



BOTTOM GUIDE ASSEMBLY -

(TYP. - SEE DETAIL #3)

CANTILEVER SLIDE GATE CRITICAL DIMENSION CHART						
	GATE #2 GATE #10 GATE #4					
Α	CLEAR OPENING	20'-0"	24'-0"	24'-0"		
В	COUNTERBALANCE POST SPACING C/C	9'-1"	11'-1"	11'-1"		
С	OVERALL GATE LENGTH	30'-0"	36'-0"	36'-0"		
D	COUNTERBALANCE LENGTH	10-0"	12'-0"	12'-0"		
Е	NOMINAL GATE HEIGHT	10'-0"	10'-0"	8'-0"		
F	POST HEIGHT	11'-6"	11'-6"	9'-6"		
G	FABRIC HEIGHT	9'-0"	9'-0"	7'-0"		

	SIGNS					
CONT	RACTOR SHAL	L FURNISH AND	INSTALL	SIGNS A	AS INDICATED IN TABLE BELOW	
		BACKGROUND	LETTI	RING		
SIGN	DIMENSIONS	COLOR	COLOR	HEIGHT	TEXT	
1	24' x 18"	WHITE	RED	1.5"	FAA REGULATIONS REQUIRE	
					THAT AFTER ENTERING OR	
					EXITING THROUGH THIS	
					SECURITY GATE YOU ARE	
					REQUIRED TO WAIT UNTIL THE	
					GATE CLOSES BEFORE	
					PROCEEDING, FINES OR	
					PENALTIES WILL BE IMPOSED.	
2	8" x 8"	WHITE	RED	4"	GATE (SEE NOTE #2)	
3	SEE WARNING SIGN DETAIL					

NOTES

1) SIGNS #1 AND #3 SHALL BE INSTALLED ON BOTH SIDES OF GATE. SIGN #2 SHALL BE INSTALLED ON "LAND" SIDE OF GATE. 2) REPLACE WITH GATE #. SEE CRITICAL DIMENSION CHART.



CATCH ASSEMBLY (SEE DETAIL #5)

WARNING SIGN DETAIL

This entrance is for vehicles only

Pedestrians must use separate entrance

play in the gate area.

UL 235 COMPLIANCE NOTES

GATE INSTALLATION SHALL COMPLY WITH ALL REQUIREMENTS OF UL 235, INCLUDING, BUT NOT LIMITED TO:

- ALL OPENINGS OF THE SLIDE GATE ARE GUARDED OR SCREENED FROM THE BOTTOM OF THE GATE TO A MINIMUM OF 4 FEET ABOVE GROUND TO PREVENT A 2-1/4" DIAMETER SPHERE FROM PASSING THROUGH THE OPENINGS ANYWHERE IN THE GATE, AND IN THAT PORTION OF THE ADJACENT FENCE THAT THE GATE COVERS IN THE OPEN POSITION.
- 2. ALL EXPOSED PINCH POINTS ARE ELIMINATED OR GUARDED AND GUARDING IS SUPPLIED FOR ALL EXPOSED ROLLERS.
- A WARNING SIGN (SEE DETAIL, THIS SHEET) MUST BE AFFIXED TO BOTH SIDES OF THE SLIDE GATE.
- FOR ADDITIONAL UL 235 REQUIREMENTS FOR THIS GATE INSTALLATION, SEE GATE OPERATOR DETAILS SHEET.

NOTES

- 1. CANTILEVERED GATE SHALL BE SUFFICIENTLY RIGID TO WITHSTAND FLEXING OR BENDING DURING WINDY CONDITIONS. CONTRACTOR SHALL PROVIDE STIFFENERS, STRUCTURAL SHAPES IN EXCESS OF THE MINIMUM SPECIFIED DIMENSIONS OR ADDITIONAL ROLLERS AND POSTS SUFFICIENT TO PREVENT DISPLACEMENT OF THE GATE BY WIND OR BY UNAUTHORIZED PERSONNEL.
- CONTRACTOR SHALL PROVIDE AND INSTALL GATE AS COMPLETE WORKING UNIT.
 THE GATE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: GATE, OPERATOR,
 DIGITAL CODE CONTROL AND POWER CABLES, CONDUIT, TRENCHING, CIRCUIT
 BREAKERS, AND ALL CONNECTIONS, LABOR AND MATERIALS NECESSARY TO
 COMPLETE OPERATION.
- 3. LOCATION OF THE GATE OPERATOR SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- 4. PIPE BOLLARDS SHALL BE INSTALLED AT LOCATIONS SHOWN IN PLAN VIEW.
- 5. THE FABRIC TYPE AND FINISH OF THE GATE, MATCH WITH PROPOSED FENCE OR AS DIRECTED BY THE ENGINEER.
- ALL SLIDING GATES SHALL HAVE ALL ROLLERS ENCLOSED IN STEEL OR PLASTIC SHROUDS TO PREVENT ACCIDENTAL INJURY.

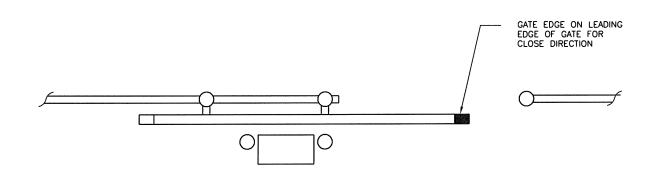
LOCATIONS, DETAILS AND CHARACTER OF EQUIPMENT SHOWN ON THIS SHEET IS GENERIC. EQUIPMENT LOCATIONS SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

BL067 REVISIONS BY DATE THIS BAR IS EQUAL TO 2 AT FULL SCALE (34X22). T AUTHORITY AIRPORT **PHASI** FENCE LOOMINGTON-NORMAL AIRPORT CENTRAL ILLINOIS REGIONAL A BLOOMINGTON, ILLINOIS $\overline{\Box}$ PERIMETER Ш Q 10 ш NS. CRAWFORD, I CONSULTING LICENSE No. DESIGN BY JEF СМТ DRAWN BY: wR CHECKED BY: SEF DATE: 04/22/2011 1008501 JOB No

IL PROJ NO. BMI-4098
AIP PROJ NO. 3-17-0006-XX

SHEET 24 OF 38 SHEETS

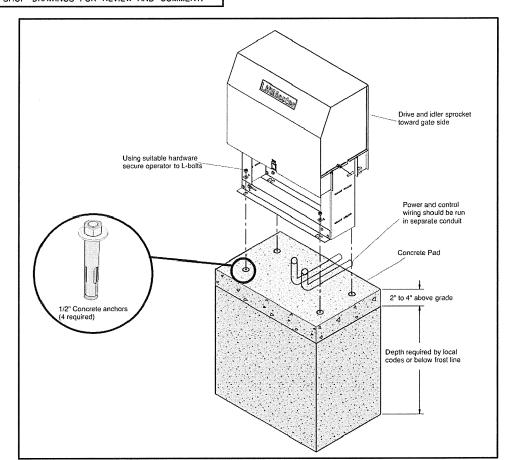
K:\BloomingtonAp\1008501\Draw\Sheets
FILE: ELECGATEDETO1.dwg
UPDATE BY: Joson Fronk
PLOT DATE: 5/5/2011 12:56 PM



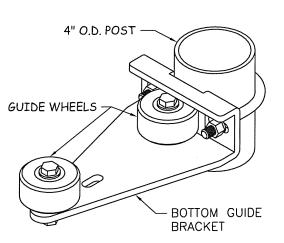
GATE OPERATOR CONTACT SENSOR

N.T.S.

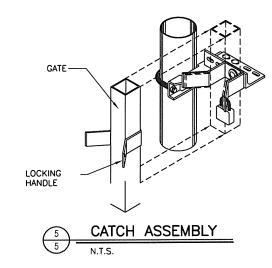
GATE FOUNDATION DETAIL SHOWN IS FOR INFORMATION ONLY. CONTRACTOR SHALL INSTALL FOUNDATION AS RECOMMENDED BY SUPPLIED GATE OPERATOR MANUFACTURER, AND SHALL INCLUDE DETAILS OF THIS FOUNDATION WITH SHOP DRAWINGS FOR REVIEW AND COMMENT.

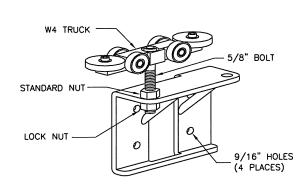


GATE OPERATOR FOUNDATION



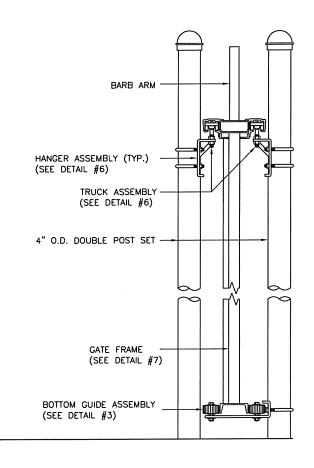




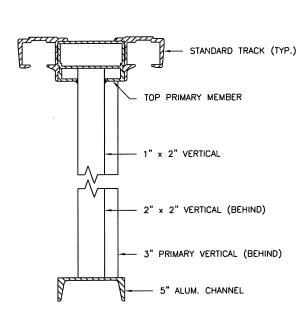




CANTILEVER SLIDE GATE DETAILS







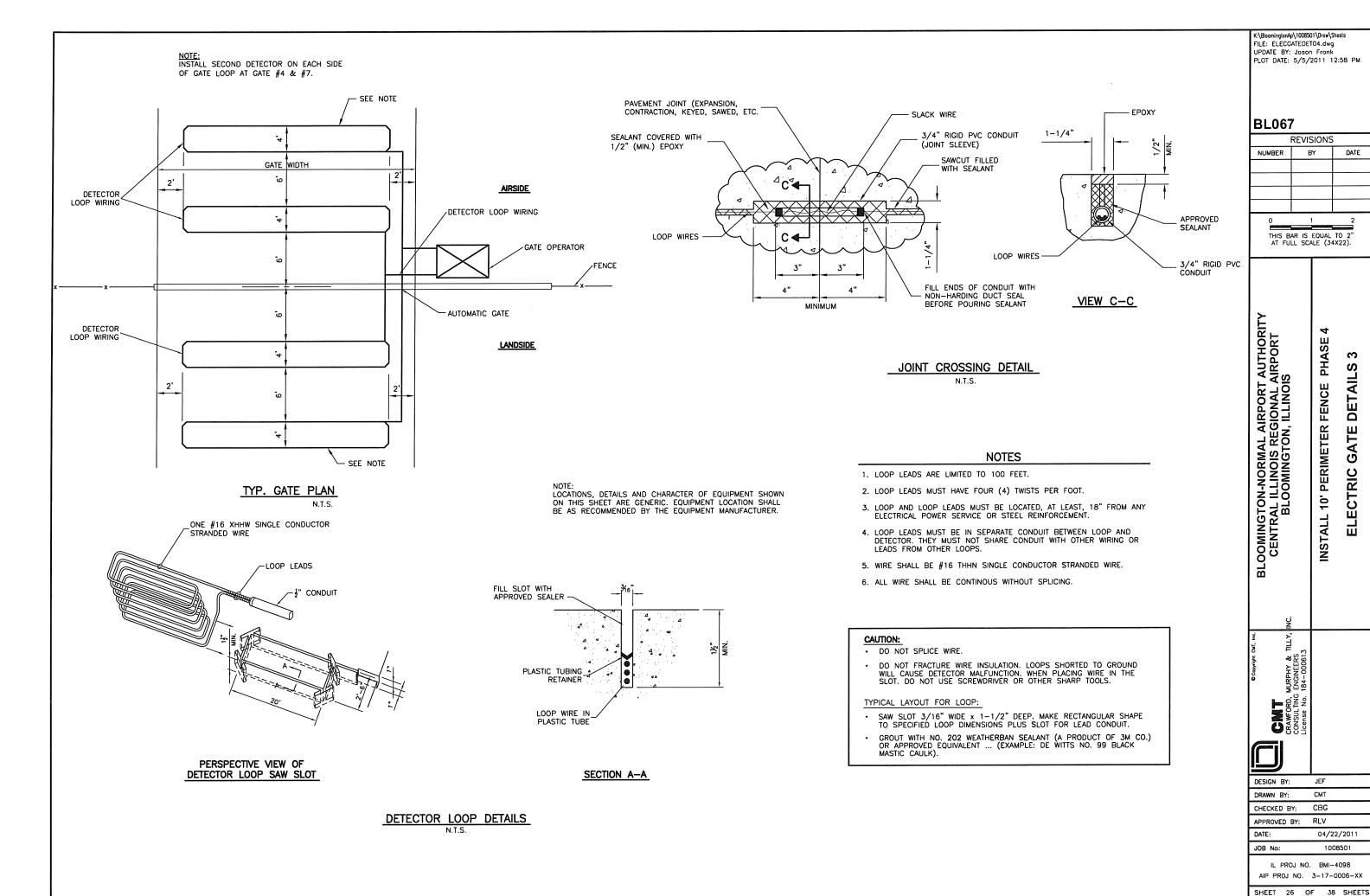


K:\BloominglonAp\1008501\Draw\Sheets
FILE: ELECGATEDET02.dwg
UPDATE BY: Joson Frank
PLOT DATE: 5/5/2011 12:57 PM
SPI-LOGO BL067 REVISIONS NUMBER BY THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). BLOOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS INSTALL 10' PERIMETER FENCE PHASE DETAILS GATE DESIGN BY: DRAWN BY: CMT CBG CHECKED BY: RLV APPROVED BY: DATE: 04/22/2011

IL PROJ NO. BMI-4098

AIP PROJ NO. 3-17-0006-XX

SHEET 25 OF 38 SHEETS

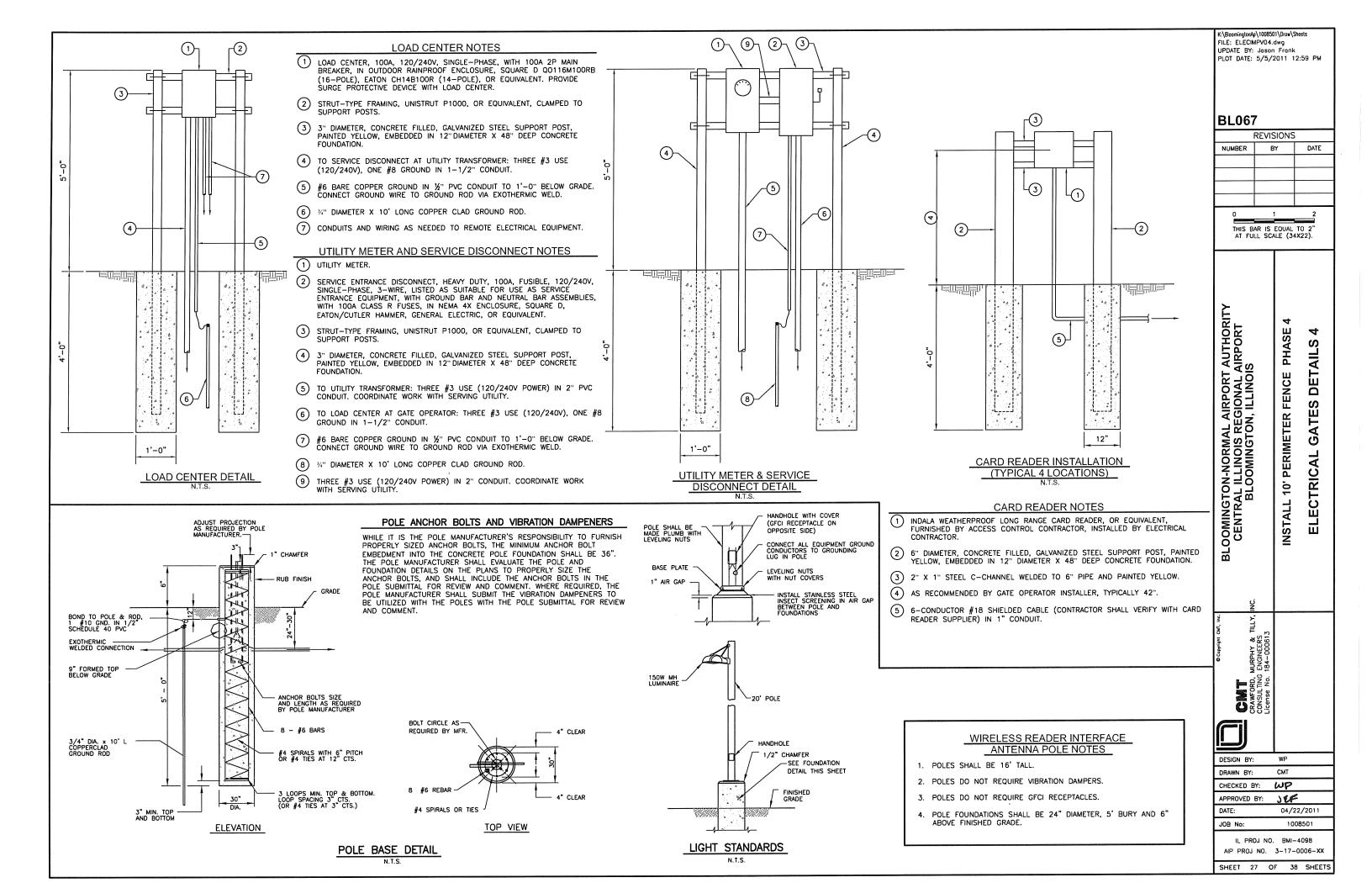


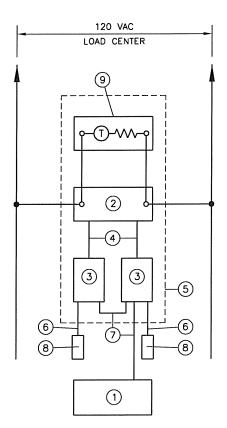
DATE

DETAIL

GATE

CTRIC





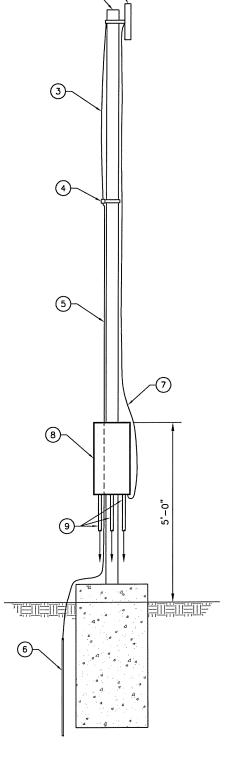
ROUTE 9 GATE & GROWMARK GATE OPERATOR CONTROL BLOCK DIAGRAM

GATE OPERATOR CONTROL BLOCK DIAGRAM NOTES

- (1) GATE OPERATOR.
- (2) WIRELESS CARD READER INTERFACE POWER SUPPLY.
- (3) WIRELESS CARD READER INTERFACE.
- (4) 2/C #14 SHIELDED CABLE (12VDC POWER).
- 5) NEMA 4X STAINLESS STEEL HINGED COVER ENCLOSURE, HOFFMAN, OR EQUIVALENT, SIZED AS REQUIRED TO HOUSE EQUIPMENT.
- (6) 6-CONDUCTOR #16 SHIELDED CABLE (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIËR).
- (7) 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL).
- (8) INDALA LONG RANGE CARD READER, OR EQUIVALENT.
- (9) THERMOSTATICALLY CONTROLLED SPACE HEATER SIZED AS REQUIRED TO MAINTAIN TEMPERATURE INSIDE ENCLOSURE ABOVE 32°F AT OUTSIDE TEMPERATURE OF -10°F.

NOTES:

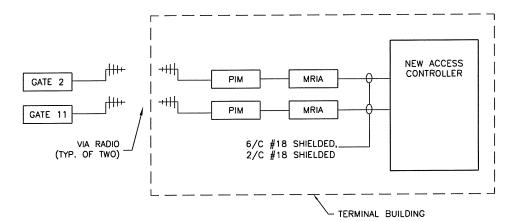
- THE ENCLOSURE, COMPLETE WITH ALL EQUIPMENT AND INTERNAL WIRING, SHALL BE FURNISHED BY THE ACCESS CONTROL CONTRACTOR TO THE ELECTRICAL CONTRACTOR FOR MOUNTING ON ANTENNA POLE AND WIRING TO REMOTE EQUIPMENT.



ACCESS CONTROL ANTENNA DETAIL

ACCESS CONTROL ANTENNA NOTES

- 1) ANTENNA POLE, ROUND STRAIGHT ALUMINUM, 16-TALL, KIM LIGHTING, MODEL PRA16-1488/LG-P, MOUNTED ON 24" DIAMETER CONCRETE FOUNDATION, BY ELECTRICAL CONTRACTOR.
- 2) ANTENNA, SUPPLIED BY ACCESS CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR (TYPICAL OF TWO PER POLE).
- (3) 5-FOOT GROUNDING CONNECTION CABLE, SUPPLIED BY ACCESS CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR (TYPICAL OF TWO PER
- GROUNDING BLOCK, SUPPLIED BY ACCESS CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
- (5) GROUND WIRE, INSTALLED BY ELECTRICAL CONTRACTOR PER ACCESS CONTROL SUPPLIER REQUIREMENTS. CONNECTION TO GROUND ROD SHALL BE VIA EXOTHERMIC WELD.
- (6) 3/4" DIAMETER X 10' LONG COPPERCLAD GROUND ROD, MINIMUM BURY 1'-0", BY ELECTRICAL CONTRACTOR.
- 7) COAXIAL ANTENNA CABLE, SUPPLIED BY ACCESS CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR (TYPICAL OF TWO PER POLE). PROVIDE SEALING GROMMETS IN OPENINGS IN BOTTOM OF NEMA 4X ENCLOSURE FOR CABLE ENTRY. PROVIDE "DRIP LOOP" IN COAXIAL CABLES WHEN INSTALLING CABLES. THE NEMA 4 WATER—TIGHTNESS OF ENCLOSURE SHALL BE MAINTAINED.
- (8) NEMA 4X STAINLESS STEEL HINGED COVER ENCLOSURE WITH SPACE HEATER, POWER SUPPLY AND WIRELESS READER INTERFACES, FURNISHED COMPLETE BY ACCESS CONTROL SUPPLIER, INSTALLED BY ELECTRICAL CONTRACTOR.
- (9) CONDUITS AND WIRING AS NEEDED TO REMOTE EQUIPMENT, BY ELECTRICAL



NOTES:

THE ACCESS CONTROL CONTRACTOR SHALL FURNISH AND INSTALL ALL LABOR, MATERIALS AND EQUIPMENT IN TERMINAL BLDG, INCLUDING ANY CABLES, CONDUITS, ANTENNAS, MASTS, PANEL INTERFACE MODULES (PIM), MATCH READER INTERFACE MODULES (MRIA), NEW ACCESS CONTROLLER, ACCESSORIES, ETC., AS REQUIRED FOR A COMPLETE AND ACCEPTED ACCESS CONTROL INSTALLATION IN THE TERMINAL BUILDING.

> TERMINAL BUILDING ACCESS CONTROL BLOCK DIAGRAM

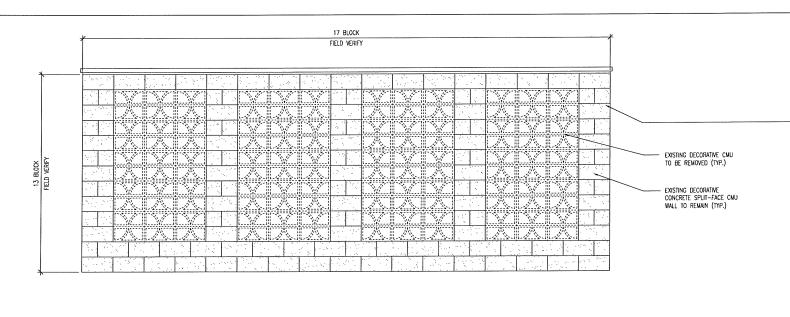
:\BloomingtonAp\1008501\Draw\Sheets FILE: ELECIMPV05.dwg UPDATE BY: Jason Frank PLOT DATE: 5/5/2011 12:59 PM BL067 REVISIONS DATE NUMBER BY THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). OOMINGTON-NORMAL AIRPORT AUTHOR CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS PHASE FENCE DETAI PERIMETER CTRI

10 INSTALL $\overline{\mathbf{a}}$ OSS O

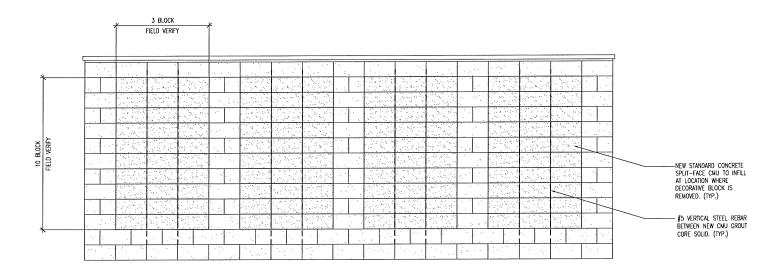
JEF DESIGN BY: CMT DRAWN BY: 60 P CHECKED BY: APPROVED BY: WP DATE: 04/22/2011 JOB No: IL PROJ NO. BMI-4098

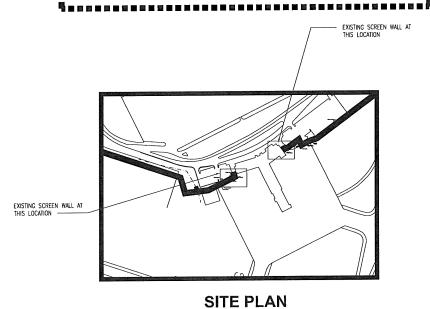
AIP PROJ NO. 3-17-0006-XX

SHEET 28 OF 38 SHEETS



SCREEN WALL ELEVATION (DEMO) SCALE: 1/2" = 1'-0"





SCREEN WALL ELEVATION (INFILL) SCALE: 1/2" = 1'-0"

GENERAL NOTES:

- 1. CONTRACTOR TO ENSURE STABILITY OF EXISTING WALL BY REMOVING DECORATIVE CMU AND INFILLING WITH NEW CONCRETE SPLIT FACE CMU INTO WALL IN PHASES.
- 2. EXISTING SCREEN WALL IN TWO LOCATIONS ON EAST AND WEST SIDE OF EXISTING TERMINAL BUILDING.
- 3. CONTRACTOR SHALL TAKE PRECAUTIONS IN ORDER TO PROTECT THE EXISTING BLOCK THAT IS TO REMAIN IN PLACE OR THAT WILL BE REUSED. ANY BLOCK DAMAGED BY THE CONTRACTOR WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 4. CONTRACTOR SHALL TAKE CARE TO PROVIDE PROPER SUPPORT TO ALL ITEMS
 THAT ARE CURRENTLY ATTACHED TO THE BLOCK WALLS WHILE REPLACEMENT OF
 BLOCK IS TAKING PLACE. WHEN BLOCK WALL HAS BEEN COMPLETED, THE
 CONTRACTOR SHALL REATTACH ITEMS IN KIND. ANY DAMAGE DONE TO ITEMS
 ATTACHED TO BLOCK WALL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

- 5. CONTRACTOR SHALL INSPECT EXISTING BLOCK WALLS PRIOR TO CONSTRUCTION.
- 6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE AIRPORT COLOR SAMPLES OF PROPOSED BLOCK FOR APPROVAL. THE COLOR SAMPLES SHOULD CLOSELY MATCH THE EXISTING CMU BLOCK. THE CONTRACTOR SHALL ALSO PROVIDE SAMPLES THAT ARE TWO SHADES LIGHTER AND TWO SHADES DARKER THAN THE EXISTING CMU BLOCK.
- 7. PROVIDE HORIZONTAL JOINT REINFORCEMENT AT 16" O.C., SEE SPECIFICATIONS.

K:\BioomingtonAp\1008501\Drow\Sheets
FILE: BLOCKWALL.dwg
UPDATE BY: Joson Fronk
PLOT DATE: 5/5/2011 1:08 PM
BASE_EXISTGEO
AERIAL
EXIST_TOPO

BL067

REVISIONS					
NUMBER	BY	DATE			

THIS BAR IS EQUAL TO 2 AT FULL SCALE (34X22).

BLOOMINGTON-NORMAL AIRPORT AUTHORITY
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
INSTALL 10' PERIMETER FENCE PHASE 4

DETAIL

© Copyright CMT, Inc.

ORD, MURPHY & TILLY, INC.
LING ENGINEERS

CRAWFORD, N CONSULTING LIcense No.

DESIGN BY: GTC

DRAWN BY: CMT

CHECKED BY: G7C

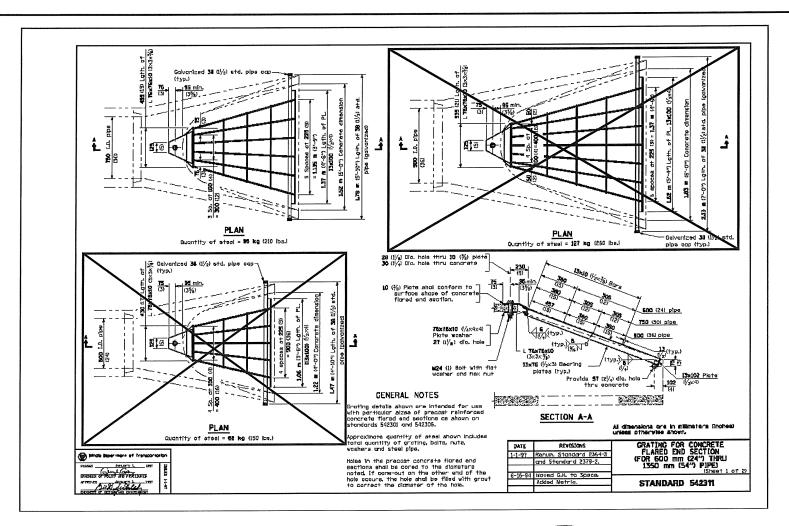
APPROVED BY: C-1C

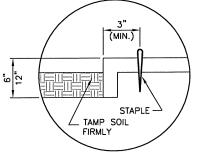
DATE: 04/22/2011

JOB No: 1008501

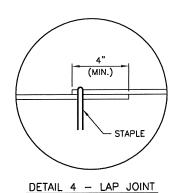
IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX

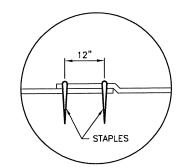
SHEET 29 OF 38 SHEETS



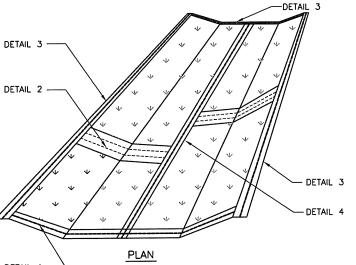


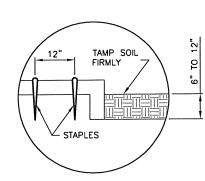
DETAIL 1 - TERMINAL FOLD



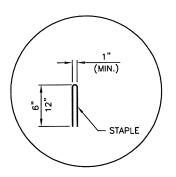








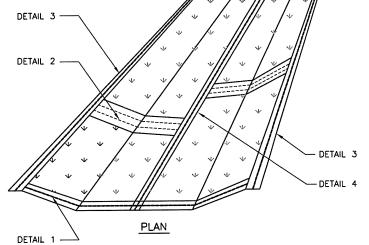
DETAIL 3 - ANCHOR SLOT



DETAIL 5 - STAPLE DETAIL

NOTES

- STAPLES TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART.
- 2. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
- ALL TERMINALS ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.



EXCELSIOR BLANKET DETAILS N.T.S.

:\BloomingtonAp\1008501\Drow\Sheets FILE: MISCEROSIONDETO1.dwg UPDATE BY: Jason Frank PLOT DATE: 5/5/2011 1:00 PM

BL067

REVISIONS					
NUMBER	BY	DATE			

THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

GRATING DETAILS OOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS PHASE FENCE AND PERIMETER CONTROL 10. INSTALL EROSION

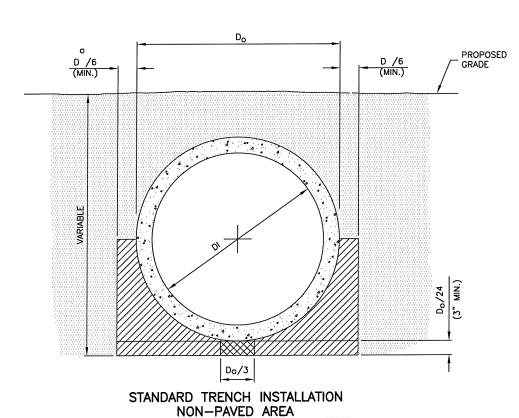
CRAWFORD, NCONSULTING

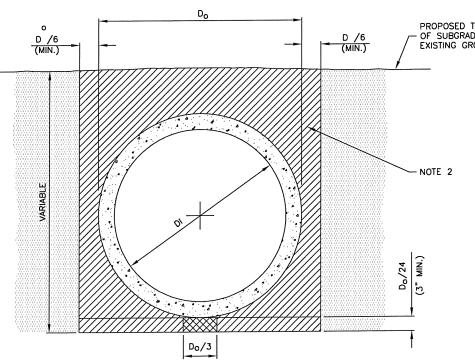
В

JEF CMT DRAWN BY: 165 CHECKED BY: APPROVED BY: SEF 04/22/2011 1008501 JOB No:

IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX

SHEET 30 OF 38 SHEETS





		Do	<u>_1</u>			
0 D /6 (MIN.)	-		D /6 (MIN.)	PROPOSED TOP OF SUBGRADE OR EXISTING GROUND		LEGEND
				<u>/</u>	A A A	DRAINAGE CONDUIT MATERIA
						MIDDLE BEDDING LOOSELY UNCOMPACTED BEDDING
						HAUNCH AND OUTER BEDDI COMPACTION— TO ENGINEER OR 95% STANDARD PROCTO
				NOTE 2		LOWER SIDE AND OVERFILL SAME AS EMBANKMENT REC ON AIRPORT BORROW MATE
VARIABLE	0	+			D _o	PIPE OUTSIDE DIAMETER PIPE INSIDE DIAMETER
			•	/24 MIN.)		NOTES
				, Do,	EMBANKMENT BEDDING FAC	DWN IS IN ACCORDANCE WITH INSTALLATIONS", STANDARD I CTORS FOR THE INDIRECT DES A 40), AMERICAN CONCRETE
	<i>\////////////////////////////////////</i>	D ₀ /3	<u>////</u>	1	2. BACKFILL TO PAVEMENT.	EXTEND 3' BEYOND EDGES (

STANDARD TRENCH INSTALLATION PROPOSED PAVED AREAS N.T.S. OPTIONAL 24" DIA. SPLICE (MIN.) -END VIEW NOTE: END CONNECTION TO FILL PIPE USED SLOPE X TO Y DIA.<36" DIA.>36" 6" SAND CUSHION SAME REINFORCEMENT FOR AS INNER CAGE 2-#4 BARS PRECAST OR CAST IN PLACE <36" END BLOCK (SEE NOTE 3) 10" >36" STANDARD REINFORCEMENT FOR CIRCULAR CLASS III, WALL B REINFORCED CONCRETE PIPE PLAN LONGITUDINAL SECTION

RIAL-CONCRETE PLACED

EER'S SATISFACTION CTOR

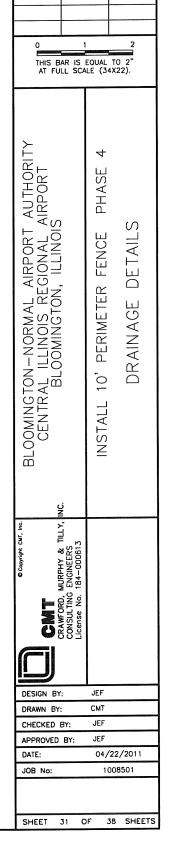
LL COMPACTION-EQUIREMENTS. (USE TERIAL)

- TH "STANDARD INSTALLATION & ESIGN METHOD PIPE ASSOCIATION.
- OF PROPOSED

	DIMENSIONS - TABLE 1									
PIPE DIA.	APPROX WT.(lbs.)	WALL	Α	В	С	D	E	G	R	SLOPE
12"	530	2"	4"	2'-0"	4'-0 7/8"	6'-0 7/8"	2'-0"	2"	9"	3:1
15"	740	2 1/4"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2 1/4"	11"	3:1
18"	990	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	12"	3:1
21"	1280	2 3/4"	9"	2'-11"	3'-2"	6'-1"	3'-6"	2 3/4"	13"	3:1
24"	1520	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	14"	3:1
27"	1930	3 1/4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	3 1/4"	14 1/2"	3:1
30"	2190	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3 1/2"	15"	3: 1
33"	3200	3 3/4"	1-1 1/2"	4'-10 1/2"	3'-3 1/4"	8'-1 3/4"	5'-6"	3 3/4"	17 1/2"	3:1
36"	4100	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	4"	20"	3:1
42"	5380	4 1/2"	1'9"	5'-3"	2'-11"	8'-2"	6'-6"	4 1/2"	22"	3:1
48"	6550	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	5"	22"	3:1
54"	8240	5 1/2"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	5 1/2"	24"	2.4:1
60"	8730	6"	2'-11"	5'-0"	3'-3"	8'-3"	8'-0"	5"	*	2:1
66"	10710	6 1/2"	2'-6"	6'-0"	2'-3"	8'-3"	8'-6"	5 1/2"	*	2:1
72"	12520	7"	3'-0"	6'-6"	1'-9"	8'-3"	9'-0"	6"	*	1,86:1
78"	14770	7 1/2"	3'-0"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	•	1.82:1
84"	18160	8"	3'-0"	7'-6 1/2"	1'-9"	9'-3 1/2"	10'-0"	6 1/2"	٠	1.5:1
	RADIUS AS FURNISHED BY MANUFACTURER.									

NOTES

- PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-170 CLASS III, WALL B REINFORCED CONCRETE PIPE.
- 2. PRECAST CONCRETE FLARED END SECTION FOR PIPE DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.



(:\BloomingtonAp\1008501\Draw\Sheets FILE: DRNDETL.dwg UPDATE BY: Joson Frank
PLOT DATE: 5/5/2011 1:01 PM

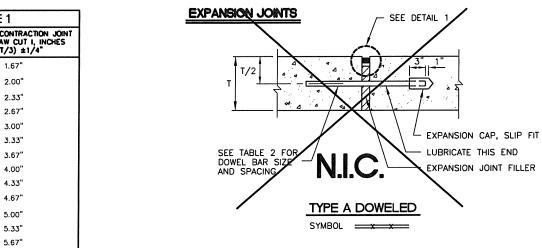
REVISIONS

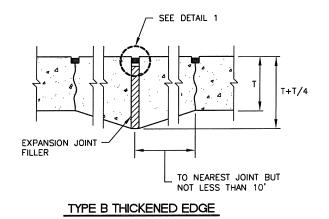
BY

DATE

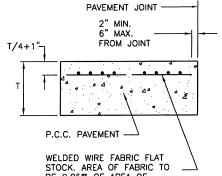
NUMBER

TABLE 1				
PAVEMENT THICKNESS T - INCHES	DEPTH OF CONTRACTION JOINT INITIAL SAW CUT I, INCHES I=(T/3) ±1/4"			
5	1.67"			
6	2.00"			
7	2.33"			
8	2.67"			
9	3.00"			
10	3.33"			
11	3.67"			
12	4.00"			
13	4.33"			
14	4.67"			
15	5.00"			
16	5.33"			
17	5.67"			
18	6.00"			





SYMBOL



BE 0.05% OF AREA OF P.C.C. IN BOTH DIRECTIONS ODD SHAPED

PANEL REINFORCEMENT

SYMBOL "R"

CONSTRUCTION JOINTS

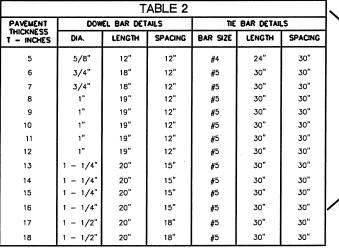
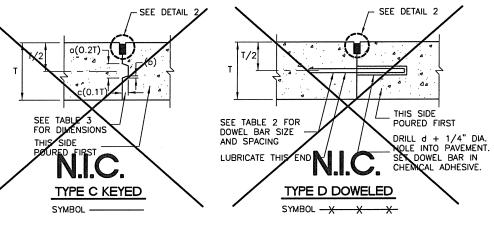
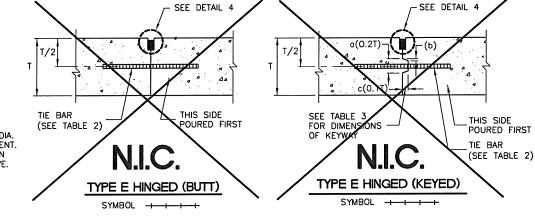


TABLE 3							
PAVEMENT THICKNESS	KEYED JOINT DIMENSIONS						
T - INCHES	Ó	b	c				
6							
7							
8	0.133' (1-5/8" ±)	0.017' (3/16" ±)	0.067' (7/8" ±)				
9	0.150' (1-13/16"±)	0.019' (3/16" ±)	0.075' (7/8" ±)				
10	0.167' (2")	0.021' (1/4" ±)	0.083' (1")				
11	0.183' (2-13/16"±)	0.023' (1/4" ±)	0.092' (1-1/8" ±)				
12	0.200' (2-3/8" ±)	0.025' (5/16" ±)	0.100' (1-1/4" ±)				
13	0.217' (2-5/8" ±)	0.027' (5/16" ±)	0.108' (1-5/16" ±)				
14	0.233' (2-13/16"±)	0.029' (3/8" ±)	0.117' (1-7/16" ±)				
15	0.250' (3")	0.031' (3/8" ±)	0.125' (1-1/2" ±)				
16	0.267' (3-13/16"±)	0.033' (7/16" ±)	0.133' (1-5/8" ±)				

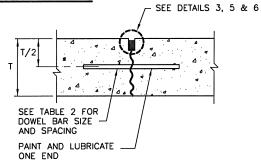
JOINT NOTES

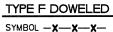
- 1.) ALL EDGES OF NEW SLABS, FREE STANDING OR CLOSURE, SHALL BE EDGED WITH AN APPROVED TOOL HAVING A RADIUS OF 1/8" TO 1/4" TO FACILITATE SAWING OF THE SEALANT RESERVOIR. A RADIUS > 1/4" WILL NOT BE ACCEPTABLE.
- 2.) THE INITIAL SAWCUT FOR ALL LONGITUDINAL & TRANSVERSE CONTRACTION JOINTS SHALL BE SAWED AS SOON AS POSSIBLE AFTER PLACEMENT OF THE PAVEMENT.
- 3.) ALL TIE BARS & MESH SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR OTHER APPROVED METHODS TO PREVENT SHIFTING DURING & AFTER CONCRETE PLACEMENT.
- 4.) TIE BARS SHALL BE DEFORMED BARS IN CONFORMANCE WITH THE SPECIFICATIONS.
- 5.) THE INITIAL SAWCUT SHALL BE MADE TO THE 1/8" WIDTH INDICATED, INITIAL SAWING TO THE DIMENSIONS OF THE SECOND SAWCUT WILL NOT BE ALLOWED.



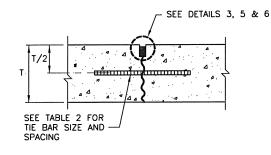


CONTRACTION JOINTS

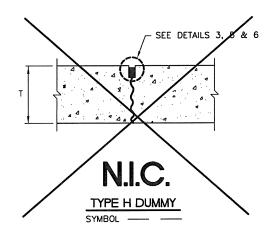




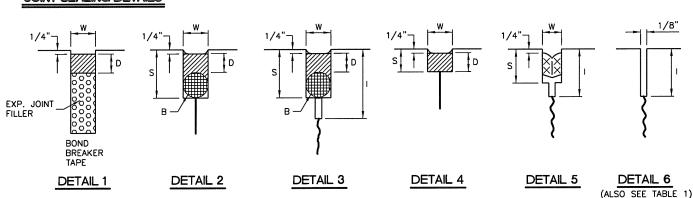
	DETAIL 1	DETAIL 2	DETAIL 3	DETAIL 4	DETAIL 5
	HOT/ COLD POUR	HOT/ COLD POUR	HOT/ COLD POUR	HOT/ COLD POUR	PRE- FORMED
W=WIDTH OF SEALANT RESERVOIR (IN.)	1	1/2	1/2	1/2	3/8 (COM- PRESSED)
D=DEPTH OF SEALANT RESERVOIR (IN.)	1	1/2	1/2	1/2	N/A
B=BACKER ROD DIAMETER (IN.)	N/A	5/8	5/8	N/A	N/A
S=SECOND SAWCUT DEPTH (IN.) MINIMUM	N/A	1-3/8	1-3/8	3/4	1-1/2



TYPE G HINGED (TIED) SYMBOL



JOINT SEALING DETAILS

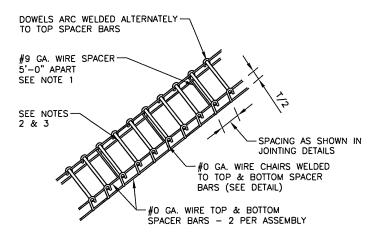


N.I.C. - NOT IN THIS CONTRACT

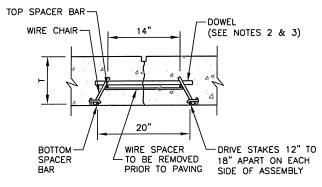
K:\BloomingtonAp\1008501\Drow\Sheets FILE: JOINTING_1.dwg UPDATE BY: Joson Frank PLOT DATE: 5/5/2011 1:01 PM					
BL067					
	REVISIONS	5			
NUMBER	BY	DATE			
0	1	2			
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).					
	- 1				
	I				

PHASE

OOMINGTON-NORMAL AIRPORT AUTHORITY CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS FENCE 10' PERIMETER $\overline{\Box}$ G JOINTING INSTALL B DESIGN BY JEF СМТ DRAWN BY: XG CHECKED BY: APPROVED BY: SEE DATE: 04/22/2011 JOB No: 1008501 IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX SHEET 32 OF 38 SHEETS



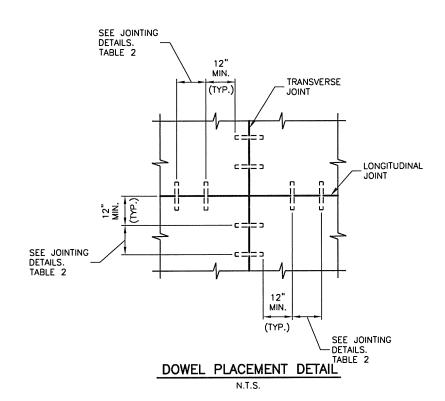
DOWEL BASKET ASSEMBLY DETAILS AND NOTES

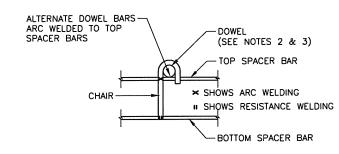


DOWEL BAR INSTALLATION DETAIL

DOWEL BASKET DETAILS

N.T.S.





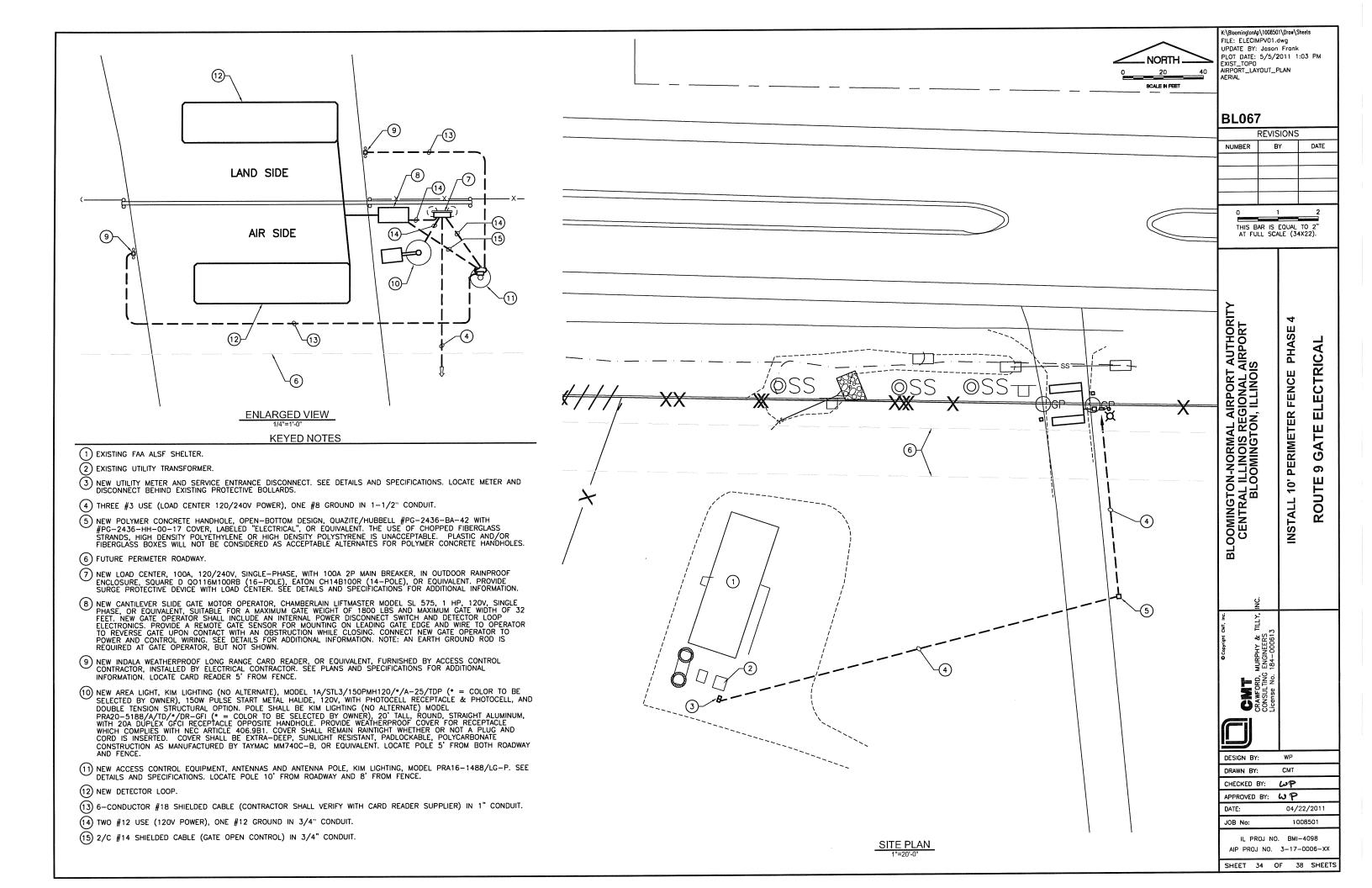
TYPICAL DOWEL BASKET ELEVATION DETAIL SHOWING CHAIR

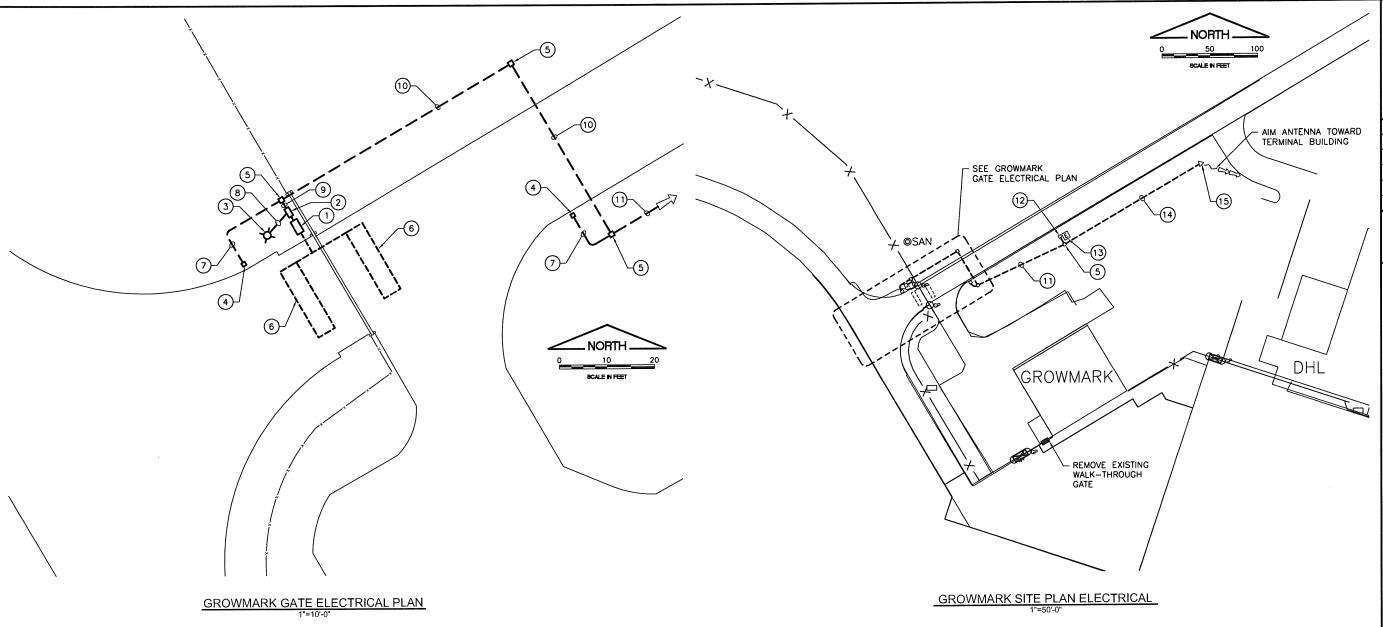
DOWEL BASKET NOTES

- 1.) #9 GA. WIRE SPACER BAR ARC WELDED TO THE BOTTOM OF TOP SPACER BAR. (MAY BE MECHANICALLY ATTACHED IN LIEU OF WELDING) 3 REQUIRED PER UNIT. THIS WIRE MUST BE CUT OR REMOVED PRIOR TO PAVING.
- 2.) DOWEL BAR DIAMETER, LENGTH & SPACING SHALL BE AS SHOWN IN TABLE 2 JOINTING DETAILS 1.
- 3.) DOWELS SHALL BE EPOXY COATED FULL LENGTH OF DOWEL. IMMEDIATELY PRIOR TO PAVING, THE FREE END OF EACH DOWEL SHALL BE LUBRICATED OR OILED, FOR HALF THE LENGTH OF THE DOWEL.

			······································			
K:\BloomingtonAp\1008501\Drow\Sheets FILE: JOINTING_2.dwg						
UPDATE BY: Jason Frank						
PLOT DATE: 5/5/2011 1:02 PM						
D. 00-						
BL067	<i>'</i>					
	REVIS	SIONS				
NUMBER	В	Υ	DATE			
0		1	2			
THIS B	AR IS	FOLIAL	TO 2"			
THIS B AT FU	LL SCA	ALE (34	1X22).			
		·	concess.			
		l				
>						
AIRPORT AUTHORITY EGIONAL AIRPORT N, ILLINOIS		4				
THOR		ш				
ΞŌ		NCE PHASE				
AUTI AIRP(IS		Ĭ				
₽₩s		_	7			
무그리		川	S			
Ιö⊈≅		S	DETAILS			
무용성			₹			
55=		N	<u> </u>			
		山山	7			
MAI IS F		ETEI	<u> </u>			
\(\S \cdot \cd		ME	N G			
B Z €		N	<u> </u>			
INGTON-NORMAI ITRAL ILLINOIS R BLOOMINGTC ALL 10' PERIMET						
ZZO		[5			
무무되		1	3			
<u>5</u> 27 _		ALL ,				
≅╘		I ₹				
BLOOMII CEN		_				
ဗ္ဗ		INS				
Ä						
ш						
		l				
ن	,	1				
<u>Z</u>						
O CODYGN CUT. Inc.						
ਰ ⊢ ਵ ⇒	S13					
ginydo 7		1				
o d	15 4 1 5 1	1				
3	Ç.₩					
- 2	ξŠ					
	SUE SE	1				
4 2 8	ic S					
- 001						
DEC.O		L				
DESIGN BY: JEF						
DRAWN BY:		СМТ	_			
CHECKED BY:						
APPROVED BY:						
DATE: 04/22/2011						
JOB No: 1008501						
IL PROJ NO. BMI-4098						
AIP PROJ NO. 3-17-0006-XX						
SHEET 3	3 0	c 3	B SHEETS			

SHEET 33 OF 38 SHEETS





- NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 120V, SINGLE PHASE, OR EQUIVALENT, SUITABLE FOR A MAXIMUM GATE WEIGHT OF 1800 LBS AND MAXIMUM GATE WIDTH OF 32 FEET. NEW GATE OPERATOR SHALL INCLUDE AN INTERNAL POWER DISCONNECT SWITCH AND DETECTOR LOOP ELECTRONICS. PROVIDE A REMOTE GATE SENSOR FOR MOUNTING ON LEADING GATE EDGE AND WIRE TO OPERATOR TO REVERSE GATE UPON CONTACT WITH AN OBSTRUCTION WHILE CLOSING. CONNECT NEW GATE OPERATOR TO POWER AND CONTROL WIRING. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED AT GATE OPERATOR, BUT NOT SHOWN.
- 2 NEW LOAD CENTER, 100A, 120/240V, SINGLE-PHASE, WITH 100A 2P MAIN BREAKER, IN OUTDOOR RAINPROOF ENCLOSURE, SQUARE D Q0116M100RB (16-POLE), EATON CH14B100R (14-POLE), OR EQUIVALENT. PROVIDE SURGE PROTECTIVE DEVICE WITH LOAD CENTER. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 3 NEW AREA LIGHT, KIM LIGHTING (NO ALTERNATE), MODEL
 1A/STL3/150PMH120/*/A-25/TDP (* = COLOR TO BE SELECTED BY OWNER), 150W
 PULSE START METAL HALIDE, 120V, WITH PHOTOCELL RECEPTACLE & PHOTOCELL,
 AND DOUBLE TENSION STRUCTURAL OPTION. POLE SHALL BE KIM LIGHTING (NO
 ALTERNATE) MODEL PRA20-5188/A/TD/*/DR-GFI (* = COLOR TO BE SELECTED BY
 OWNER), 20' TALL, ROUND, STRAIGHT ALUMINUM, WITH 20A DUPLEX GFCI RECEPTACLE
 OPPOSITE HANDHOLE. PROVIDE WEATHERPROOF COVER FOR RECEPTACLE WHICH
 COMPLIES WITH NEC ARTICLE 406.9B1. COVER SHALL REMAIN RAINTIGHT WHETHER OR
 NOT A PLUG AND CORD IS INSERTED. COVER SHALL BE EXTRA—DEEP, SUNLIGHT
 RESISTANT, PADLOCKABLE, POLYCARBONATE CONSTRUCTION AS MANUFACTURED BY
 TAYMAC MM740C-B, OR EQUIVALENT. LOCATE POLE 5' FROM BOTH ROADWAY AND
- NEW INDALA WEATHERPROOF LONG RANGE CARD READER, OR EQUIVALENT, FURNISHED BY ACCESS CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. LOCATE "AIR SIDE" READER 15' (NOM.) FROM GATE. LOCATE "LAND SIDE" READER NEAR END OF RADIUS OF ENTRANCE TO GROWMARK.

KEYED NOTES

- (5) NEW POLYMER CONCRETE HANDHOLE, OPEN-BOTTOM DESIGN, QUAZITE/HUBBELL #PG-2436-BA-42 WITH #PG-2436-HH-00-17 COVER, LABELED "ELECTRICAL", OR EQUIVALENT. THE USE OF CHOPPED FIBERGLASS STRANDS, HIGH DENSITY POLYETYLENE OR HIGH DENSITY POLYSTYRENE IS UNACCEPTABLE. PLASTIC AND/OR FIBERGLASS BOXES WILL NOT BE CONSIDERED AS ACCEPTABLE ALTERNATES FOR POLYMER CONCRETE HANDHOLES.
- (6) NEW DETECTOR LOOP. SEE DETAILS AND SPECIFICATIONS.
- 6-CONDUCTOR #18 SHIELDED CABLE (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1" CONDUIT.
- (8) TWO #12 USE (AREA LIGHT/RECEPTACLE 120V POWER), ONE #12 GROUND IN 1"
- 9 FROM HANDHOLE TO LOAD CENTER: THREE #3 USE (120/240V POWER FROM UTILITY), ONE #8 GROUND IN 1-1/2" CONDUIT.
 - FROM HANDHOLE TO GATE OPERATOR: 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL FROM WIRELESS READER INTERFACE) IN 1" CONDUIT.
 - FROM LOAD CENTER TO GATE OPERATOR: TWO #12 USE (GATE 120V POWER), ONE #12 GROUND IN 1" CONDUIT.
 - FROM LOAD CENTER TO HANDHOLE: TWO #12 USE (WIRELESS READER INTERFACE 120V POWER), ONE #12 GROUND IN 1" CONDUIT.

- THREE #3 USE (LOAD CENTER 120/240V POWER FROM UTILITY), ONE #8
 GROUND IN 1-1/2" CONDUIT.
- TWO #12 USE (WIRELESS READER INTERFACE 120V POWER), ONE #12 GROUND,
 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1" CONDUIT.
- 6-CONDUCTOR #18 SHIELDED CABLE (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1" CONDUIT.
- THREE #3 USE (LOAD CENTER 120/240V POWER FROM UTILITY), ONE #8 GROUND IN 1-1/2" CONDUIT.
 - TWO #12 USE (WIRELESS READER INTERFACE 120V POWER), ONE #12 GROUND,
 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1" CONDUIT.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1-1/2" CONDUIT.
- NEW UTILITY METER AND SERVICE ENTRANCE DISCONNECT. SEE DETAILS AND SPECIFICATIONS.
- EXISTING UTILITY TRANSFORMER.
 - TWO #12 USE (WIRELESS READER INTERFACE 120V POWER), ONE #12 GROUND, 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1" CONDUIT.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1-1/2" CONDUIT.
- NEW ACCESS CONTROL EQUIPMENT, ANTENNAS AND ANTENNA POLE, KIM LIGHTING, MODEL PRA16-1488/LG-P. SEE DETAILS AND SPECIFICATIONS.

BloomingtonAp\1008501\Draw\Sheets FILE: ELECIMPV02.dwg UPDATE BY: Joson Frank PLOT DATE: 5/5/2011 1:04 PM AIRPORT_LAYOUT_PLAN **BL067** REVISIONS BY DATE NUMBER THIS BAR IS EQUAL TO 2' AT FULL SCALE (34X22). T AUTHORI AIRPORT CTRICAL PHAS FENCE OOMINGTON-NORMAL AIRPORT CENTRAL ILLINOIS REGIONAL / BLOOMINGTON, ILLINOI PERIMETER GAT ROWMAR 10. INSTALL $\overline{\mathfrak{O}}$ 0 СМТ DRAWN BY: CHECKED BY: WP WP APPROVED BY: 04/22/2011

JOB No

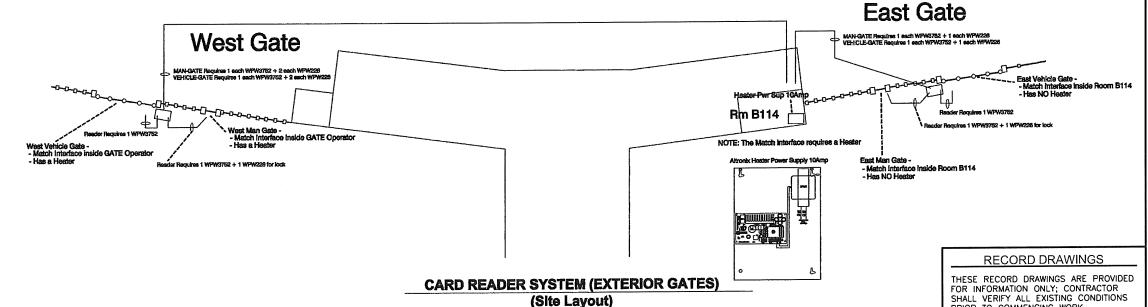
100850

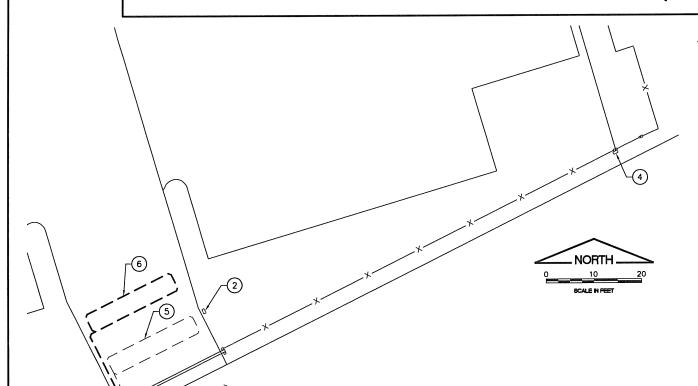
IL PROJ NO. BMI-4098

AIP PROJ NO. 3-17-0006-XX

SHEET 35 OF 38 SHEETS

Central Illinois Regional Airport- Hirsch Security System East / West Gate Wiring Diagram





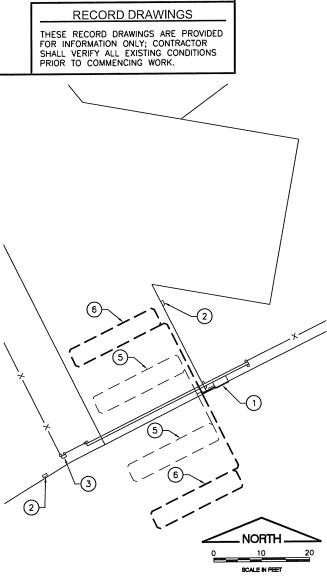
KEYED NOTES

DISCONNECT AND REMOVE EXISTING GATE OPERATOR. INSTALL NEW GATE OPERATOR ON EXISTING CONCRETE PAD AND RECONNECT TO EXISTING POWER AND CONTROL WIRING.

NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 120V, SINGLE PHASE, OR EQUIVALENT, SUITABLE FOR A MAXIMUM CATE WEIGHT OF 1800 LBS AND MAXIMUM GATE WIDTH OF 32 FEET. NEW GATE OPERATOR SHALL INCLUDE AN INTERNAL POWER DISCONNECT SWITCH AND DETECTOR LOOP ELECTRONICS FOR BOTH EXISTING AND NEW DETECTOR LOOPS. PROVIDE A REMOTE GATE SENSOR FOR MOUNTING ON LEADING GATE EDGE AND WIRE TO OPERATOR TO REVERSE GATE UPON CONTACT WITH AN OBSTRUCTION WHILE CLOSING, SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED AT GATE OPERATOR, BUT NOT SHOWN.

AT WEST GATE OPERATOR, DISCONNECT AND REMOVE EXISTING ACCESS CONTROL "MATCH INTERFACE" AND "HEATER" INSIDE EXISTING GATE OPERATOR AND INSTALL IN NEW GATE OPERATOR. RECONNECT TO EXISTING WIRING. COORDINATE THIS WORK WITH THE ACCESS CONTROL CONTRACTOR.

- (2) EXISTING CARD READERS TO REMAIN UNDISTURBED. VERIFY OPERATION OF CARD READERS BOTH BEFORE AND AFTER MODIFICATIONS. COORDINATE THIS WORK WITH THE ACCESS CONTROL CONTRACTOR.
- (3) EXISTING PEDESTRIAN GATE MAGNETIC LOCK AND CARD READER. REINSTALL TO NEW PEDESTRIAN GATE TO MATCH EXISTING INSTALLATION. VERIFY OPERATION BOTH BEFORE AND AFTER MODIFICATIONS. COORDINATE THIS WORK WITH THE ACCESS CONTROL CONTRACTOR.
- 4 EXISTING PEDESTRIAN GATE MAGNETIC LOCK AND CARD READER TO BE DISCONNECTED AND REMOVED. NOTE THAT THE EXISTING ACCESS CONTROL "MATCH INTERFACE" AND "HEATER" INSIDE GATE OPERATOR SHALL BE DISCONNECTED AND REMOVED. DISCONNECT ALL POWER WIRING AT THE SOURCE. COORDINATE THIS WORK WITH THE ACCESS CONTROL CONTRACTOR.
- (5) EXISTING DETECTOR LOOP, TO BE REUSED WITH NEW GATE OPERATOR.
- (6) NEW DETECTOR LOOP.



TERMINAL EAST GATE
ELECTRICAL

K:\BloomingtonAp\1008501\Drow\Sheets
FILE: ELECIMPVO3.dwg
UPLOT DATE: BY: Joson Fronk
UPLOT DATE: 5/5/2011 1:05 PM
EXIST_TOPO
AIRPORT_LAYOUT_PLAN
AERIAL
AERIAL

BL067

REVISIONS					
NUMBER	NUMBER BY DATE				
0	1	2			
CONTRACTOR					

THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

CENTRAL ILLINOIS REGIONAL AUTHORIT
CENTRAL ILLINOIS REGIONAL AIRPORT
BLOOMINGTON, ILLINOIS
INSTALL 10' PERIMETER FENCE PHASE 4
TERMINAL EAST AND WEST
GATES ELECTRICAL

CODYIGH CM. INC.
SULTING ENGINEERS
AND 184-000613

CRAWFORD CONSULTIN License No

DESIGN BY: WP
DRAWN BY: CMT
CHECKED BY: WP
APPROVED BY: WP

DATE: 04/22/2011

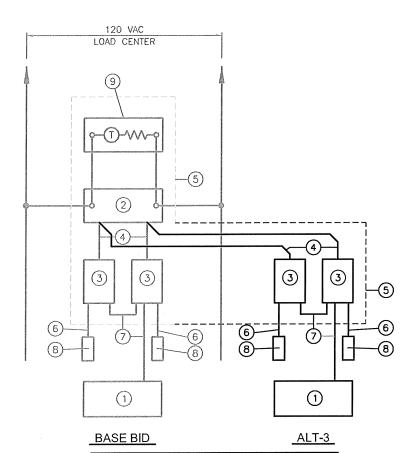
JOB No: 1008501

IL PROJ NO. BMI-4098

IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX

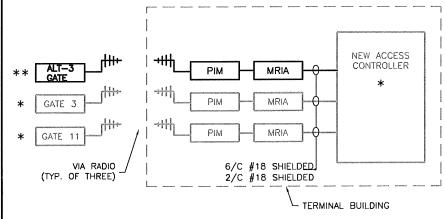
SHEET 36 OF 38 SHEETS

TERMINAL WEST GATE
ELECTRICAL



SEE ELECTRIC GATE DETAILS FOR NOTES

GROWMARK GATE #11 & ALT-3 GATE OPERATOR CONTROL BLOCK DIAGRAM



NOTES:

* = BASE BID

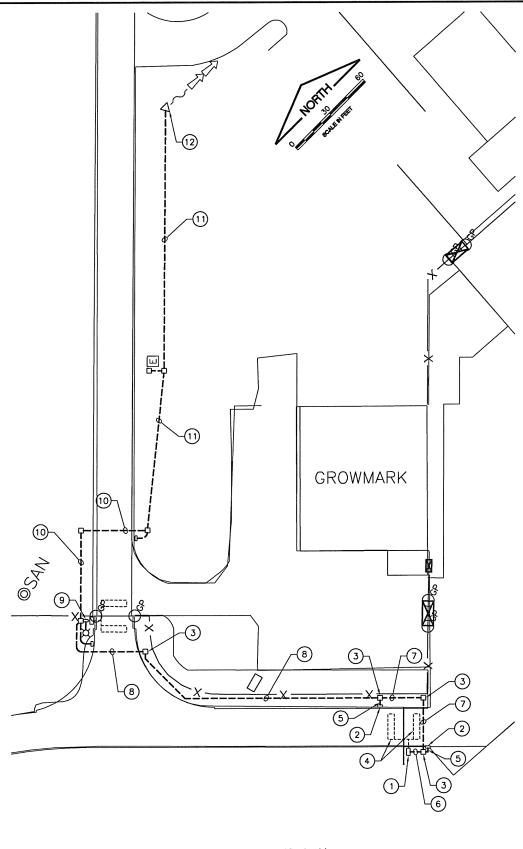
** = ALT-3

ALT-3
TERMINAL BUILDING
ACCESS CONTROL BLOCK DIAGRAM

KEYED NOTES

NOTE: THE FOLLOWING DESCRIBES WORK TO BE DONE TO PERFORM THE ELECTRICAL WORK FOR ALT—3 ELECTRIC GATE AT GROWMARK. IT DESCRIBES NEW WORK TO BE DONE AND MODIFICATIONS TO BASE—BID WORK TO FURNISH AND INSTALL ALT—3 ELECTRIC GATE.

- NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 120V, SINGLE PHASE, OR EQUIVALENT, SUITABLE FOR A MAXIMUM GATE WEIGHT OF 1800 LBS AND MAXIMUM GATE WIDTH OF 32 FEET. NEW GATE OPERATOR SHALL INCLUDE AN INTERNAL POWER DISCONNECT SWITCH AND DETECTOR LOOP ELECTRONICS. PROVIDE A REMOTE GATE SENSOR FOR MOUNTING ON LEADING GATE EDGE AND WIRE TO OPERATOR TO REVERSE GATE UPON CONTACT WITH AN OBSTRUCTION WHILE CLOSING. CONNECT NEW GATE OPERATOR TO POWER AND CONTROL WIRING. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED AT GATE OPERATOR, BUT NOT SHOWN.
- (2) NEW INDALA WEATHERPROOF LONG RANGE CARD READER, OR EQUIVALENT. SEE PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. LOCATE BOTH CARD READERS 15' (NOM.) FROM GATE.
- (3) NEW POLYMER CONCRETE HANDHOLE, OPEN-BOTTOM DESIGN, QUAZITE/HUBBELL #PG-2436-BA-42 WITH #PG-2436-HH-00-17 COVER, LABELED "ELECTRICAL", OR EQUIVALENT. THE USE OF CHOPPED FIBERGLASS STRANDS, HIGH DENSITY POLYETHYLENE OR HIGH DENSITY POLYSTYRENE IS UNACCEPTABLE. PLASTIC AND/OR FIBERGLASS BOXES WILL NOT BE CONSIDERED AS ACCEPTABLE ALTERNATES FOR POLYMER CONCRETE HANDHOLES.
- (4) NEW DETECTOR LOOP. SEE DETAILS AND SPECIFICATIONS.
- (5) 6-CONDUCTOR #18 SHIELDED CABLE (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1" CONDUIT.
- 6 TWO #6 USE (GATE 120V POWER), ONE #10 GROUND, 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1" CONDUIT.
- 7 TWO #6 USE (GATE 120V POWER), ONE #10 GROUND, 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1" CONDUIT.
 - 6-CONDUCTOR #18 SHIELDED CABLE (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1" CONDUIT.
- (8) TWO #6 USE (GATE 120V POWER), ONE #10 GROUND, 2/C #14 SHIELDED CABLE (GATE OPEN CONTROL) IN 1" CONDUIT.
 - TWO 6-CONDUCTOR #18 SHIELDED CABLES (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER) IN 1-1/2" CONDUIT.
- 9 TWO #6 USE, ONE #10 GROUND IN 1" CONDUIT FROM HANDHOLE INSTALLED AS PART OF BASE BID TO 20A, 1P CIRCUIT BREAKER IN LOAD CENTER INSTALLED AS PART OF BASE BID.
- TO THE CONDUIT WITH ONE 6-CONDUCTOR #18 SHIELDED CABLE INSTALLED
 AS PART OF THE BASE BID, ADD TWO 6-CONDUCTOR #18 SHIELDED CABLES
 (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER). INCREASE
 CONDUIT SIZE FROM 1" TO 2" CONDUIT.
 - TO THE CONDUIT WITH TWO #12 USE (WIRELESS READER INTERFACE 120V POWER), ONE #12 GROUND, 2/C #14 SHIELDED CABLE (GROWMARK GATE #11 OPEN CONTROL) IN 1" CONDUIT, ADD 2/C #14 SHIELDED CABLE (ALT-3 GATE OPEN CONTROL). CONDUIT SIZE DOES NOT CHANGE.
- TO THE CONDUIT WITH TWO 6-CONDUCTOR #18 SHIELDED CABLES INSTALLED
 AS PART OF THE BASE BID, ADD TWO 6-CONDUCTOR #18 SHIELDED CABLES
 (CONTRACTOR SHALL VERIFY WITH CARD READER SUPPLIER). INCREASE
 CONDUIT SIZE FROM 1-1/2" TO 2" CONDUIT.
 - TO THE CONDUIT WITH TWO #12 USE (WIRELESS READER INTERFACE 120V POWER), ONE #12 GROUND, 2/C #14 SHIELDED CABLE (GROWMARK GATE #11 OPEN CONTROL) IN 1" CONDUIT, ADD 2/C #14 SHIELDED CABLE (ALT—3 GATE OPEN CONTROL). CONDUIT SIZE DOES NOT CHANGE.
- AT THE ANTENNA POLE INSTALLED AS PART OF BASE BID, ADD TWO ANTENNAS AND RELATED HARDWARE, CABLES, ETC., FOR ALT-3 GATE USE, SAME AS DETAILED IN THE BASE BID.
 - IN NEMA 4X ENCLOSURE INSTALLED AS PART OF BASE BID AT ANTENNA
 POLE, INSTALL TWO WIRELESS READER INTERFACE UNITS AND ASSOCIATED
 WIRING AND HARDWARE, SAME AS DETAILED IN THE BASE BID.



ALT-3 GATE PLAN 1"=30'-0" **BL067** REVISIONS BY DATE NUMBER THIS BAR IS EQUAL TO 2' AT FULL SCALE (34X22). PHASE OOMINGTON-NORMAL AIRPORT AUTHOI CENTRAL ILLINOIS REGIONAL AIRPORT BLOOMINGTON, ILLINOIS FENCE PERIMETER 10. INSTALL В DESIGN BY JEF CMT DRAWN BY: GP CHECKED BY: APPROVED BY: WP DATE 04/22/2011 JOB No: 1008501 IL PROJ NO. BMI-4098 AIP PROJ NO. 3-17-0006-XX SHEET 37 OF 38 SHEETS

K:\BloomingtonAp\1008501\Draw\Sheet: FILE: ELECIMPV06.dwg

UPDATE BY: Jason Frank PLOT DATE: 5/5/2011 1:05 PM

IRPORT_LAYOUT_PLAN

