

# CONSTRUCTION PLANS FOR ABRAHAM LINCOLN CAPITAL AIRPORT

## SPRINGFIELD AIRPORT AUTHORITY SPRINGFIELD, ILLINOIS

### ILLINOIS PROJECT SPI - 4088 A. I. P. PROJECT 3-17-0096-XX UPGRADE PERIMETER FENCE - PHASE 3

JANUARY 14, 2011

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31	GATE SIGN DETAIL 2

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
BASE BID			
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1
AR151455	CLEARING AND GRUBBING	L.S.	1
AR156510	SILT FENCE	L.F.	250
AR156543	RIPRAP-GRADATION NO. 3	S.Y.	150
AR800241	CLASS E FENCE 10' W/ 2' BURIED	L.F.	8590
AR162510	CLASS E FENCE 10'	L.F.	3300
AR162604	CLASS E GATE - 4'	EACH	6
AR162606	CLASS E GATE - 6'	EACH	1
AR800243	PEDESTRIAN ACCESS	EACH	3
AR162624	CLASS E GATE - 24'	EACH	3
AR162714	ELECTRIC GATE - 14'	EACH	1
AR162716	ELECTRIC GATE - 16'	EACH	2
AR162720	ELECTRIC GATE - 20'	EACH	3
AR162724	ELECTRIC GATE 24'	EACH	3
AR162726	ELECTRIC GATE - 26'	EACH	2
AR162900	REMOVE CLASS E FENCE	L.F.	11650
AR162905	REMOVE GATE	EACH	15
AR162908	REMOVE ELECTRIC GATE	EACH	11
AR401900	REMOVE HMA PAVEMENT	SY	680
AR501508	8" PCC PAVEMENT	SY	700
AR901510	SEEDING	ACRE	5
AR908510	MULCHING	ACRE	5
AR908520	EXCELSIOR BLANKET	S.Y.	600

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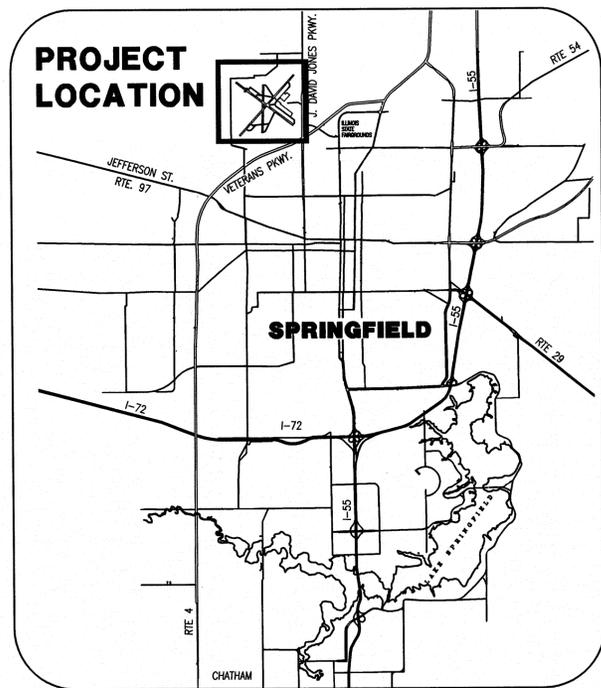
J.U.L.I.E. JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS  
www.illinois1call.com

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

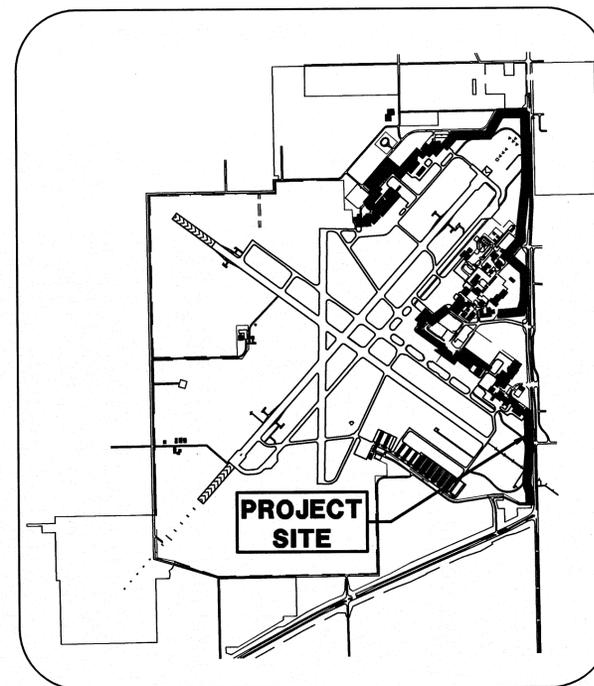
CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

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1-800-892-0123

TOWNSHIP: 16 NORTH  
RANGE: 5 WEST OF THE 4TH P.M.  
SECTION: 8 & 9 & 16 & 17  
COUNTY: SANGAMON  
CIVIL TOWNSHIP: CAPITAL



LOCATION MAP



SITE PLAN

2-3-2011



Christopher B. Grate  
Exp. 11-30-11

**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**  
APPROVED *Mark S. Flannery*  
EXECUTIVE DIRECTOR OF AVIATION  
DATE 1/31/2011

**CMT**  
**CRAWFORD MURPHY & TILLY, INC.**  
CONSULTING ENGINEERS  
■ SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO

SUBMITTED BY *Christopher B. Grate*  
DATE 2-3-2011

CMT JOB NUMBER 08035-04

CRITICAL POINTS			
POINT	LATITUDE	LONGITUDE	ELEVATION
A	39° 51' 02.19"	89° 40' 32.97"	592'
B	39° 51' 19.55"	89° 40' 02.26"	596'
C	39° 51' 21.13"	89° 39' 52.43"	597'
D	39° 50' 58.35"	89° 39' 53.85"	587'
E	39° 50' 43.20"	89° 40' 19.02"	587'
F	39° 50' 35.07"	89° 40' 13.48"	587'
G	39° 50' 26.30"	89° 40' 01.35"	585'
H	39° 50' 22.77"	89° 39' 52.25"	580'
I	39° 50' 10.86"	89° 39' 52.83"	584'
J	39° 50' 03.88"	89° 39' 52.04"	540'

LEGEND	
	EXISTING PAVEMENT
	EXISTING FENCE
	EXISTING GATE
	NEW FENCE
	CRITICAL POINT

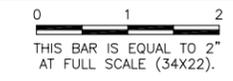
**GENERAL NOTES**

- ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRPORT TRAFFIC DURING CONSTRUCTION.
- THE CONTRACTOR SHALL REMAIN WITHIN 25' OF THE EXISTING FENCE LINE AT ALL TIMES DURING CONSTRUCTION. AT NO TIME SHOULD THE CONTRACTOR OR HIS PERSONNEL ACCESS ANY ACTIVE AIRFIELD PAVEMENTS. PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR'S SUPERINTENDENT WILL BE REQUIRED TO ATTEND TRAINING COURSES AT THE AIRPORT TO BECOME AWARE OF POLICIES AND PROCEDURES ASSOCIATED WITH WORKING WITHIN THE AIRPORT SECURITY FENCE.
- WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT DIRECTOR.
- THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS AT THE LOCATIONS SHOWN.
- BROKEN CONCRETE AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF OF AIRPORT PROPERTY.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN 95' FROM THE CENTERLINE OF ACTIVE TAXIWAYS OR 250' FROM THE CENTERLINE OF ACTIVE RUNWAYS.
- ALL PAVEMENTS, DRIVES, OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AND THE AIRPORT. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR THIS WORK.
- EXISTING TURF AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND THE AIRPORT.
- IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS SO AS TO AVOID ANY DAMAGE. ANY UTILITY, INCLUDING AIRFIELD ELECTRICAL CABLE AND LIGHTS, DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE IN A MANNER WHICH IS SATISFACTORY TO THE ENGINEER AND TO THE OWNER OF THE UTILITY. ANY REPAIRS THAT MUST BE MADE BY THE OWNER OF THE UTILITY SHALL HAVE THE COST REIMBURSED TO THE UTILITY BY THE CONTRACTOR. AIRFIELD LIGHTING CABLES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY A QUALIFIED ELECTRICIAN WITH THE COSTS TO BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL MAINTAIN A SECURE AIRFIELD PERIMETER WITH EXISTING, TEMPORARY, RELOCATED OR PERMANENT MINIMUM 6' TALL FENCE THROUGHOUT THE DURATION OF THE PROJECT, COST OF ERECTION AND REMOVAL OF TEMPORARY FENCE WILL BE INCIDENTAL TO CONTRACT.
- CONTRACTOR'S ACCESS SHALL BE AS FOLLOWS:
  - THE CONTRACTOR'S ACCESS TO WORK SHALL BE AS SHOWN IN THE PLANS.
  - THE CONTRACTOR SHALL COMPLETE A SECURITY FORM FOR ALL PERSONNEL HE PROPOSES TO USE ON THE AIRPORT. THESE FORMS SHALL BE COMPLETED PRIOR TO THAT PERSON BEING ALLOWED ON THE AIRFIELD. A LIST OF PERSONNEL AUTHORIZED TO WORK ON THE AIRFIELD SHALL BE PROVIDED TO THE RESIDENT ENGINEER BY THE CONTRACTOR.
  - THE CONTRACTOR SHALL USE AN EXISTING GATE(S) FOR ACCESS TO THE AIRFIELD. THE CONTRACTOR SHALL INSTALL AND MAINTAIN A HEAVY-DUTY PADLOCK ON THE ACCESS GATE. HE SHALL PROVIDE KEYS FOR HIS PADLOCK TO THE RESIDENT ENGINEER, S.A.A. MAINTENANCE SUPERVISOR, AND S.A.A. SECURITY CHIEF. NO ADDITIONAL KEYS ARE TO BE DISTRIBUTED UNLESS AUTHORIZED BY THE AIRPORT.
  - CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND TEMPORARY EASEMENTS FOR THE PUBLIC ACCESS ROAD(S) SHOWN AND SHALL COMPLY WITH ALL REQUIREMENTS, LOAD RESTRICTIONS, & TRAFFIC CONTROL SIGNAGE REQUIRED BY THE CITY, COUNTY, TOWNSHIP, OR I.D.O.T.
  - DURING ADVERSE WEATHER THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF THE CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK SITE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE ACCESS GATE(S) CLOSED DURING WORK HOURS. THE CONTRACTOR SHALL POST A COMPETENT SECURITY GUARD TO CONTROL ACCESS AT THE GATE WHEN OPEN. THE CONTRACTOR SHALL REPLACE ANY UNSATISFACTORY SECURITY GUARDS AS DIRECTED.
  - THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE(S) UPON LEAVING THE SITE.
  - ALL COSTS RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - THE CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A WAY AS NOT TO VIOLATE AIRPORT PART 77 SURFACES, OR RUNWAY AND TAXIWAY OBSTACLE FREE AREAS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ACTIVE AIRFIELD PAVEMENTS WHICH ARE CROSSED BY HIS VEHICLES ACCESSING THE WORK OR DEPARTING THE WORK IMMEDIATELY FOLLOWING SAID VEHICLE.
- PORTIONS OF THE PROJECT WILL REQUIRE THE CONTRACTOR TO WORK WITHIN THE BOUNDARY OF THE ILLINOIS AIR NATIONAL GUARD (ILANG). THE CONTRACTOR MAY BE REQUIRED TO ATTEND SECURITY TRAINING FOR PERSONNEL THAT WILL BE WORKING ON OR WITHIN THE ILANG BOUNDARY. AT A MINIMUM THE CONTRACTOR SHALL WORK WITH THE RESIDENT ENGINEER TO SCHEDULE AN ILANG ESCORT FOR WORK IN THIS AREA.

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 UPDATE BY: Chris Groth  
 PLOT DATE: 2/3/2011 1:50 PM  
 Capital\_Base  
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**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**

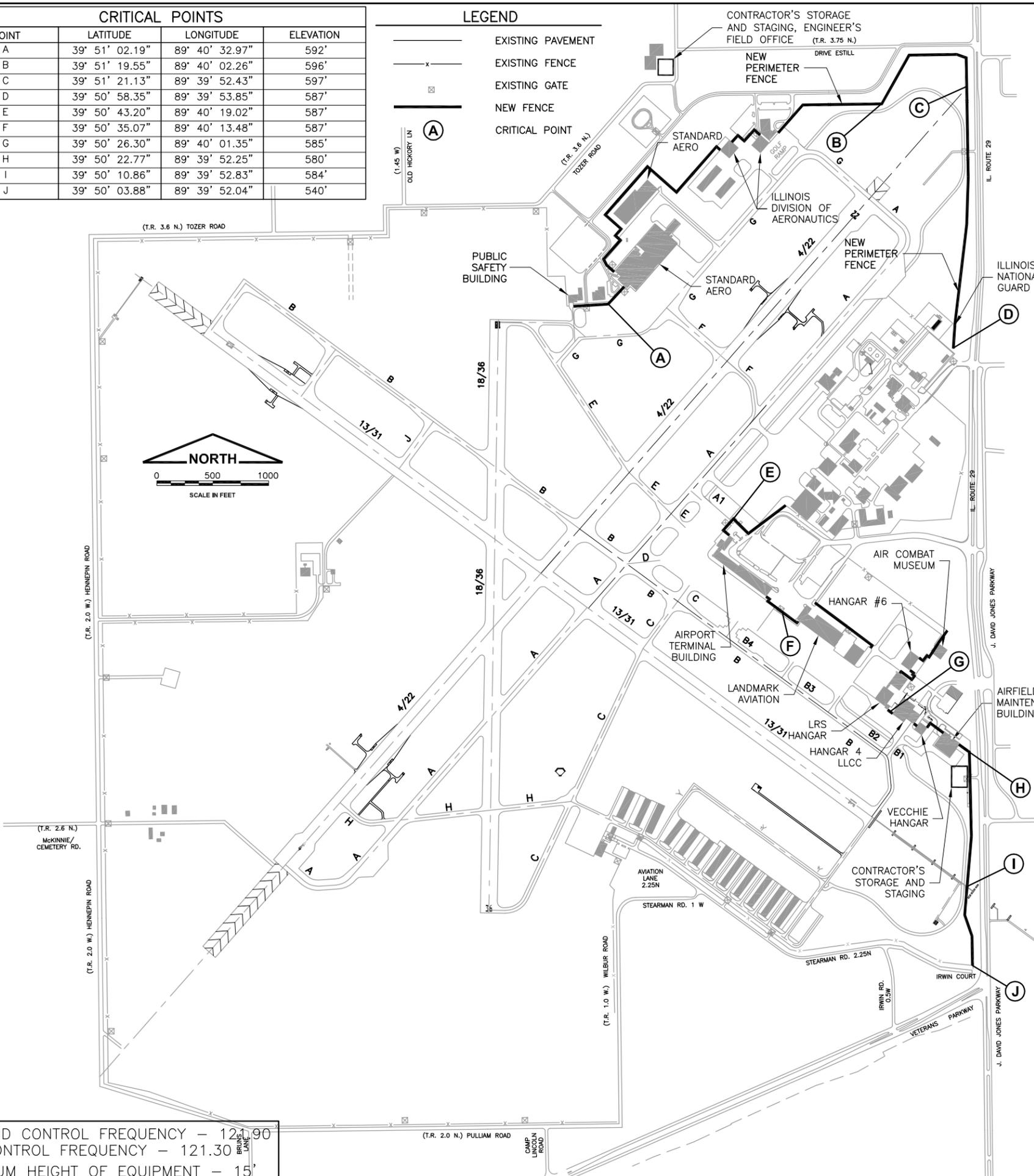
**UPGRADE PERIMETER FENCE PHASE 3**  
**SITE PLAN**

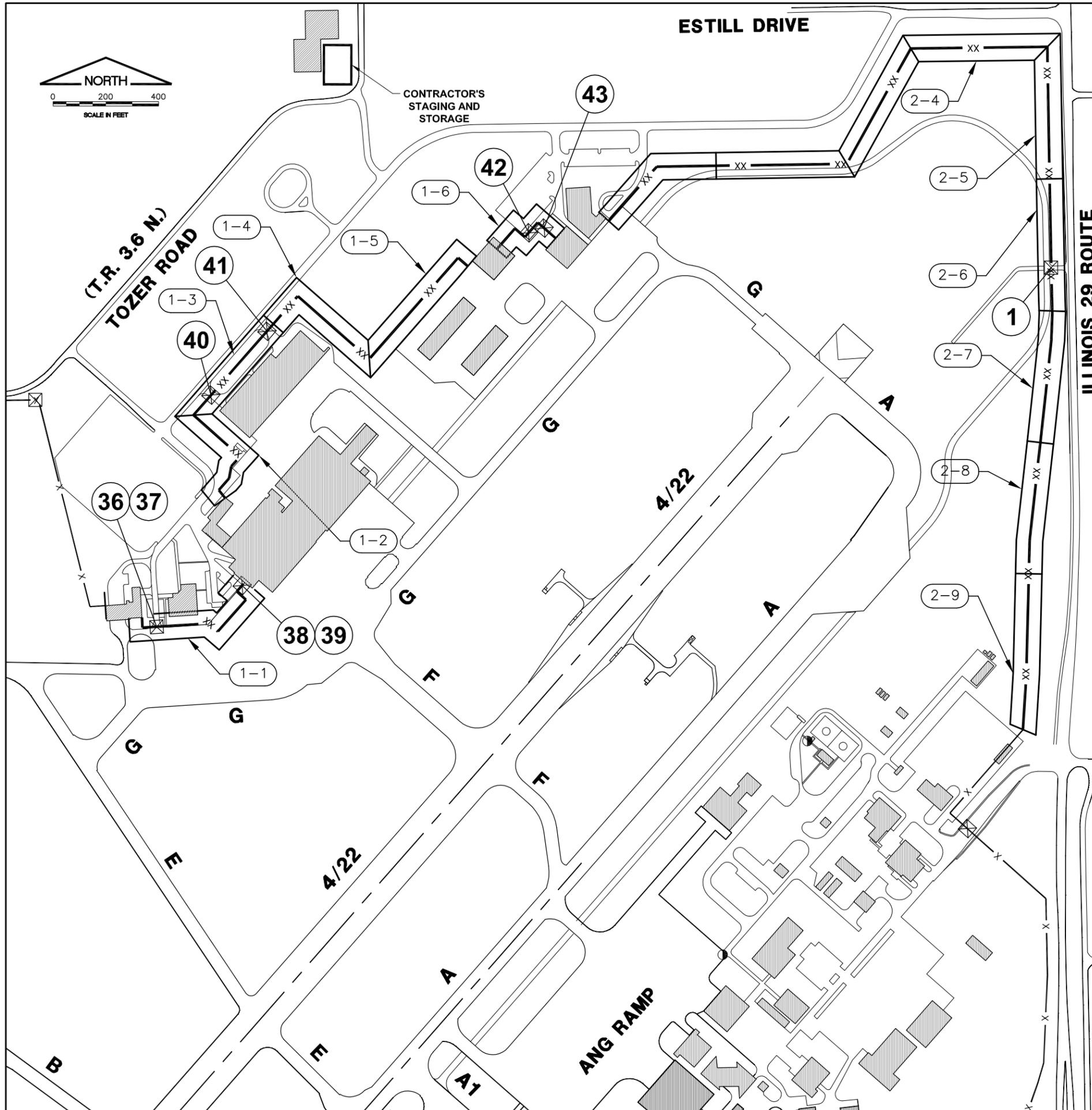
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DATE:	01/14/2011
JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	02 OF 31 SHEETS

GROUND CONTROL FREQUENCY - 124.90  
 AIR CONTROL FREQUENCY - 121.30  
 MAXIMUM HEIGHT OF EQUIPMENT - 15'





**PHASING NOTES**

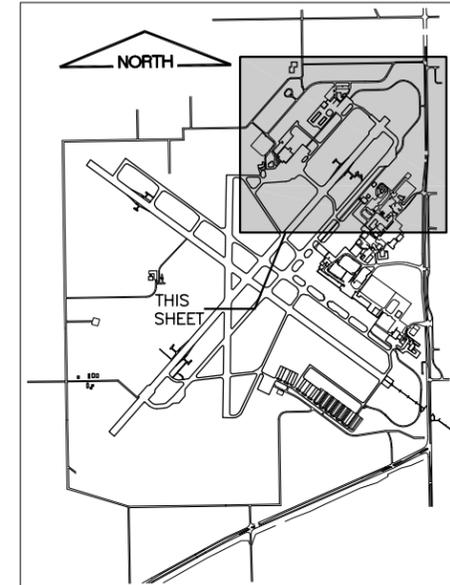
1. MAINTAINING THE SECURITY REQUIREMENTS OF THE AIRPORT SHALL BE A PRIMARY ACTIVITY FOR THE CONTRACTOR.
2. THE CONTRACTOR'S METHOD FOR CONSTRUCTING TEMPORARY FENCE SHALL BE APPROVED IN ADVANCE BY THE AIRPORT AND RESIDENT ENGINEER.
3. AT NO TIME SHALL THERE BE UNSUPERVISED OPENINGS OR GAPS PERMITTED IN THE AIRPORT FENCE LINE.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY FENCING AS REQUIRED BY THE SPECIFICATIONS.
5. THE PROPOSED PHASES ARE APPROXIMATELY 500' LONG.
6. NO MORE THAN THREE CONSECUTIVE PHASES MAY BE UNDER CONSTRUCTION SIMULTANEOUSLY.
7. THE CONTRACTOR SHALL PROVIDE A THREE (3) DAY NOTICE PRIOR TO STARTING A NEW PHASE TO ALLOW AIRPORT COORDINATION WITH ADJACENT PROPERTY OWNERS.
8. THE CONTRACTOR SHALL PLACE TEMPORARY FENCING AT AN OFFSET THAT DOES NOT ENCROACH ON/OR INTERFERE WITH TENANT OR AIRPORT OPERATIONS.
9. CONTRACTOR SHALL PROVIDE TEMPORARY SWING GATES AT ALL GATE LOCATIONS WHILE THAT GATE IS INOPERABLE. GATE SHALL BE LOCKED BY METHODS APPROVED BY THE AIRPORT. COST TO PROVIDE TEMPORARY GATES SHALL BE INCIDENTAL.

**PROPOSED CONSTRUCTION SEQUENCE FOR EACH PHASE**

1. PROVIDE THREE (3) DAY NOTICE TO THE AIRPORT FOR COORDINATION.
2. INSTALL TEMPORARY FENCE.
3. REMOVE EXISTING FENCE INCLUDING BACKFILL AND COMPACTION OF POST HOLES.
4. CLEAR AND GRADE THE NEW FENCE LINE IN ACCORDANCE WITH SECTION 162-3.1, CLEARING FENCE LINE, OF THE STANDARD SPECIFICATIONS.
5. TRENCH MINIMUM 2' DEPTH FOR FABRIC BURIAL.
6. BORE HOLES FOR FENCE POSTS.
7. INSTALL NEW FENCE.
8. INSTALL FENCE FABRIC AND BACKFILL TRENCH.
9. RESTORE THE DISTURBED AREAS.
10. REMOVE TEMPORARY FENCING INCLUDING ANY ADDITIONAL RESTORATION.

**LEGEND**

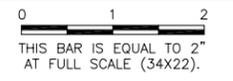
- XX — NEW FENCE
- X — EXISTING FENCE
- ⊠ EXISTING GATE
- (1-16) PHASE - SUBPHASE
- [ ] PHASE WORK LIMITS
- (15) EXISTING GATE NUMBER



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 PLOT DATE: 2/3/2011 1:50 PM  
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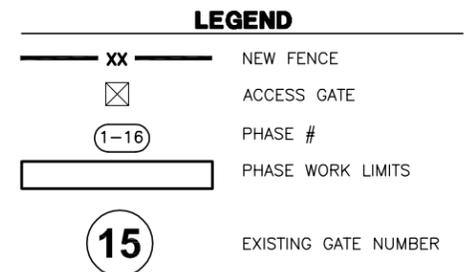
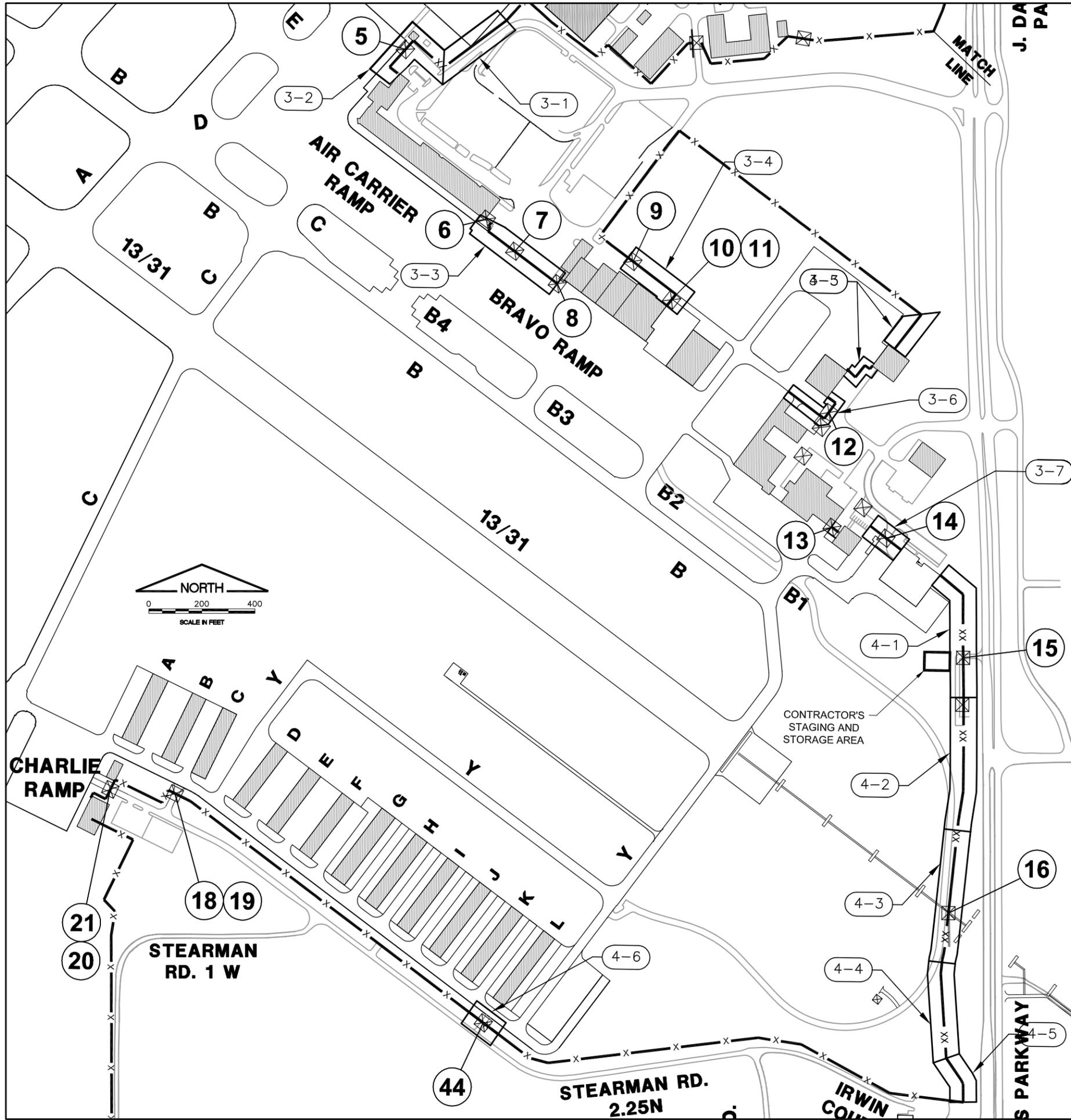


SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

UPGRADE PERIMETER FENCE PHASE 3  
 CONSTRUCTION ACTIVITY PLAN 1

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IL PROJ. NO.	SPI-4088
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SHEET	03 OF 31 SHEETS

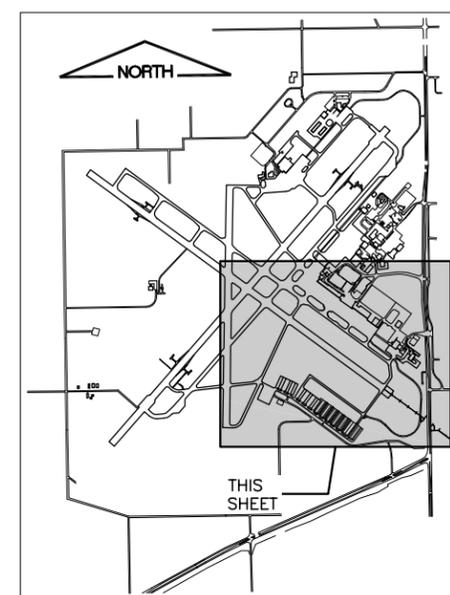


**PHASING NOTES**

1. MAINTAINING THE SECURITY REQUIREMENTS OF THE AIRPORT SHALL BE A PRIMARY ACTIVITY FOR THE CONTRACTOR.
2. THE CONTRACTOR'S METHOD FOR CONSTRUCTING TEMPORARY FENCE SHALL BE APPROVED IN ADVANCE BY THE AIRPORT AND RESIDENT ENGINEER.
3. AT NO TIME SHALL THERE BE UNSUPERVISED OPENINGS OR GAPS PERMITTED IN THE AIRPORT FENCE LINE.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY FENCING AS REQUIRED BY THE SPECIFICATIONS.
5. THE PROPOSED PHASES ARE APPROXIMATELY 500' LONG.
6. NO MORE THAN THREE CONSECUTIVE PHASES MAY BE UNDER CONSTRUCTION SIMULTANEOUSLY.
7. THE CONTRACTOR SHALL PROVIDE A THREE (3) DAY NOTICE PRIOR TO STARTING A NEW PHASE TO ALLOW AIRPORT COORDINATION WITH ADJACENT PROPERTY OWNERS.
8. THE CONTRACTOR SHALL PLACE TEMPORARY FENCING AT AN OFFSET THAT DOES NOT ENCR OACH ON/OR INTERFERE WITH TENANT OR AIRPORT OPERATIONS.
9. CONTRACTOR SHALL PROVIDE TEMPORARY SWING GATES AT ALL GATE LOCATIONS WHILE THAT GATE IS INOPERABLE. GATE SHALL BE LOCKED BY METHODS APPROVED BY THE AIRPORT. COST TO PROVIDE TEMPORARY GATES SHALL BE INCIDENTAL.

**PROPOSED CONSTRUCTION SEQUENCE FOR EACH PHASE**

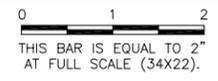
1. PROVIDE THREE (3) DAY NOTICE TO THE AIRPORT FOR COORDINATION.
2. INSTALL TEMPORARY FENCE.
3. REMOVE EXISTING FENCE INCLUDING BACKFILL AND COMPACTION OF POST HOLES.
4. CLEAR AND GRADE THE NEW FENCE LINE IN ACCORDANCE WITH SECTION 162-3.1, CLEARING FENCE LINE, OF THE STANDARD SPECIFICATIONS.
5. TRENCH MINIMUM 2' DEPTH FOR FABRIC BURIAL.
6. BORE HOLES FOR FENCE POSTS.
7. INSTALL NEW FENCE.
8. INSTALL FENCE FABRIC AND BACKFILL TRENCH.
9. RESTORE THE DISTURBED AREAS.
10. REMOVE TEMPORARY FENCING INCLUDING ANY ADDITIONAL RESTORATION.



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 SPRINGFIELD, ILLINOIS

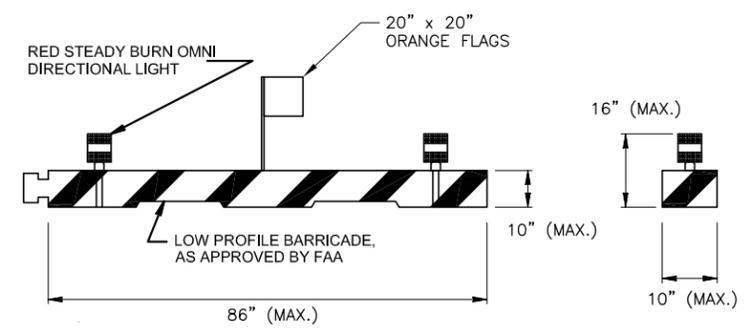
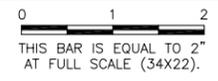
UPGRADE PERIMETER FENCE PHASE 3  
 CONSTRUCTION ACTIVITY PLAN 2

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SHEET	04 OF 31 SHEETS

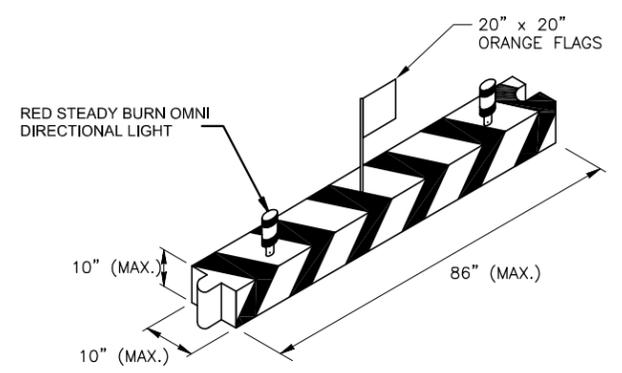
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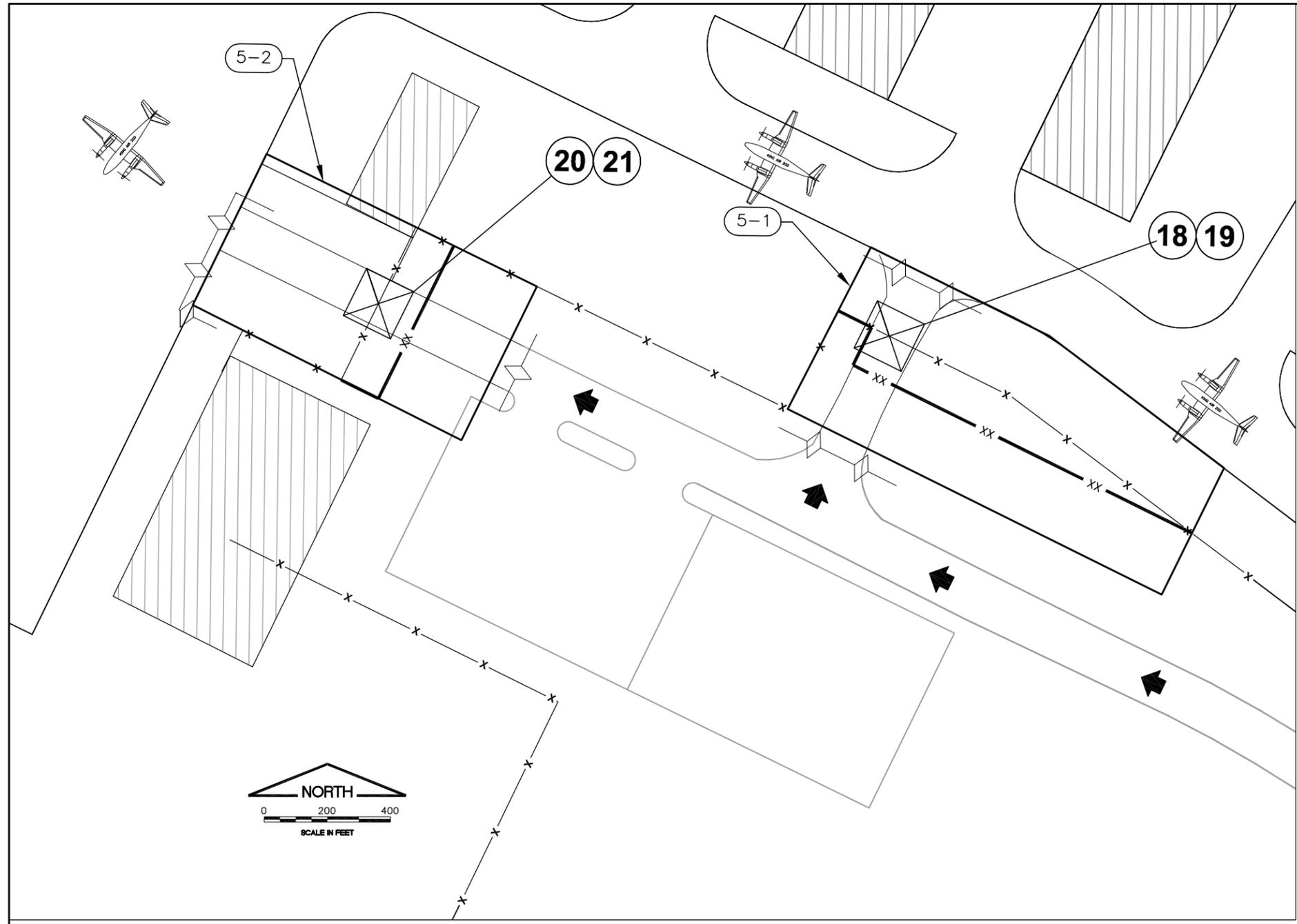
**TYPE 1 BEAM BARRICADE DETAIL**

N.T.S.



**BEAM BARRICADE NOTES**

1. BARRICADE SHALL BE WEIGHTED TO WITHSTAND DISPLACEMENT BY WIND, JET OR PROP BLAST.
2. BARRICADE MUST BE OF LOW MASS AND EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT.
3. NO SEPARATE PAYMENT WILL BE MADE FOR THIS ITEM. COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
4. PLACE AS SHOWN IN PLANS AS DIRECTED BY THE ENGINEER.



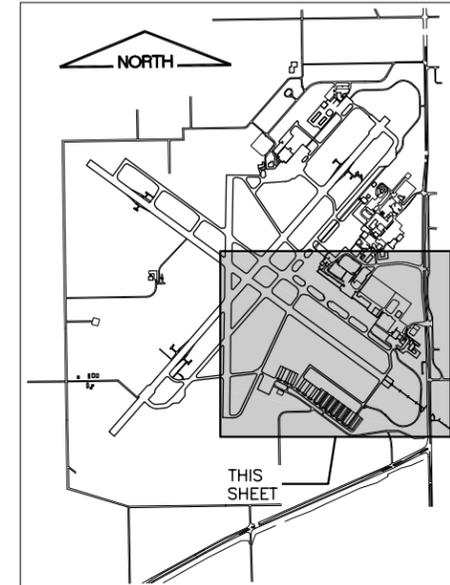
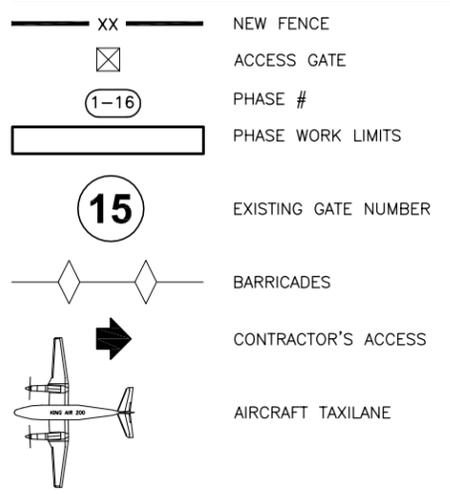
**PROPOSED CONSTRUCTION SEQUENCE FOR EACH PHASE**

1. PROVIDE THREE (3) DAY NOTICE TO THE AIRPORT FOR COORDINATION.
2. INSTALL TEMPORARY FENCE.
3. REMOVE EXISTING FENCE INCLUDING BACKFILL AND COMPACTION OF POST HOLES.
4. CLEAR AND GRADE THE NEW FENCE LINE IN ACCORDANCE WITH SECTION 162-3.1, CLEARING FENCE LINE, OF THE STANDARD SPECIFICATIONS.
5. TRENCH MINIMUM 2' DEPTH FOR FABRIC BURIAL.
6. BORE HOLES FOR FENCE POSTS.
7. INSTALL NEW FENCE.
8. INSTALL FENCE FABRIC AND BACKFILL TRENCH.
9. RESTORE THE DISTURBED AREAS.
10. REMOVE TEMPORARY FENCING INCLUDING ANY ADDITIONAL RESTORATION.

**PHASE 5-1 & 5-2 NOTES**

1. THE CONTRACTOR SHALL ERECT BARRICADES AS SHOWN TO DELINEATE THE WORK AREA.
2. THE CONTRACTOR BE ALLOWED TO REMOVE PORTIONS OF THE FENCE AS NEEDED TO REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENTS. THE CONTRACTOR SHALL NOT LEAVE ANY PORTIONS OF THE GATE UNATTENDED DURING CONSTRUCTION.
3. MAINTAINING THE SECURITY REQUIREMENTS OF THE AIRPORT SHALL BE A PRIMARY ACTIVITY FOR THE CONTRACTOR.
4. TEMPORARY FENCE SHALL BE PLACED A MAXIMUM OF 5' FROM THE EXISTING FENCE.
5. THE CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY FENCING AS REQUIRED BY THE SPECIFICATIONS.
6. THE CONTRACTOR SHALL PROVIDE A SEVEN (7) DAY NOTICE PRIOR TO STARTING A NEW PHASE TO ALLOW AIRPORT COORDINATION WITH ADJACENT PROPERTY OWNERS.
7. CONTRACTOR SHALL PROVIDE TEMPORARY SWING GATES AT ALL GATE LOCATIONS WHILE THAT GATE IS INOPERABLE. GATE SHALL BE LOCKED BY METHODS APPROVED BY THE AIRPORT. COST TO PROVIDE TEMPORARY GATES SHALL BE INCIDENTAL.

**LEGEND**



**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

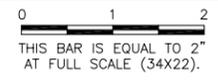
**UPGRADE PERIMETER FENCE PHASE 3  
 CONSTRUCTION ACTIVITY PLAN 3**

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APPROVED BY:	RLV
DATE:	01/14/2011
JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	05 OF 31 SHEETS

**CA011**

REVISIONS		
NUMBER	BY	DATE



**EXISTING UTILITY/TOPO LEGEND**

- ⊠-E ELECTRICAL JUNCTION BOX
- ⊠ ELECTRICAL EQUIPMENT
- ⊠ T TELEPHONE PEDESTAL
- <sub>w</sub> WATER VALVE
- FIRE HYDRANT
- GUARD POST
- ⊠ ROAD SIGN
- ⊠ LIGHT
- ▽ MAILBOX
- ⊠ GATE POST
- ⊠ POWER POLE
- ↑ GUY WIRE

**NOTE:**

- REMOVAL QUANTITIES SHOWN ARE FROM EXISTING GATE POST TO EXISTING GATE POST.
- FENCE TO BE REMOVED IS 6' TO 8' CLASS E CHAIN LINK FENCE UNLESS OTHERWISE NOTED.
- PORTIONS OF THE FENCE NOTED ARE WITHIN PCC OR BITUMINOUS PAVEMENT OF UNKNOWN DEPTH.
- NEW PEDESTRIAN ACCESS WILL REQUIRE PARTIAL REMOVAL OF EXISTING PAVEMENT. COST FOR REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL BE INCIDENTAL TO THE PEDESTRIAN ACCESS PAY ITEM.
- REMOVAL OF THE EXISTING FENCE WITHIN THE ILANG WILL INCLUDE THE REMOVAL OF COMPACTED AGGREGATE AT THE BASE OF THE FENCE. AGGREGATE IS APPROXIMATELY 1' TALL X 2' WIDE.
- REMOVAL OF GATES NOTED SHALL INCLUDE THE REMOVAL OF EXISTING ELECTRICAL LOCKING SYSTEM. REMOVAL OF THIS SYSTEM SHALL BE INCIDENTAL TO THE GATE REMOVAL ITEM.



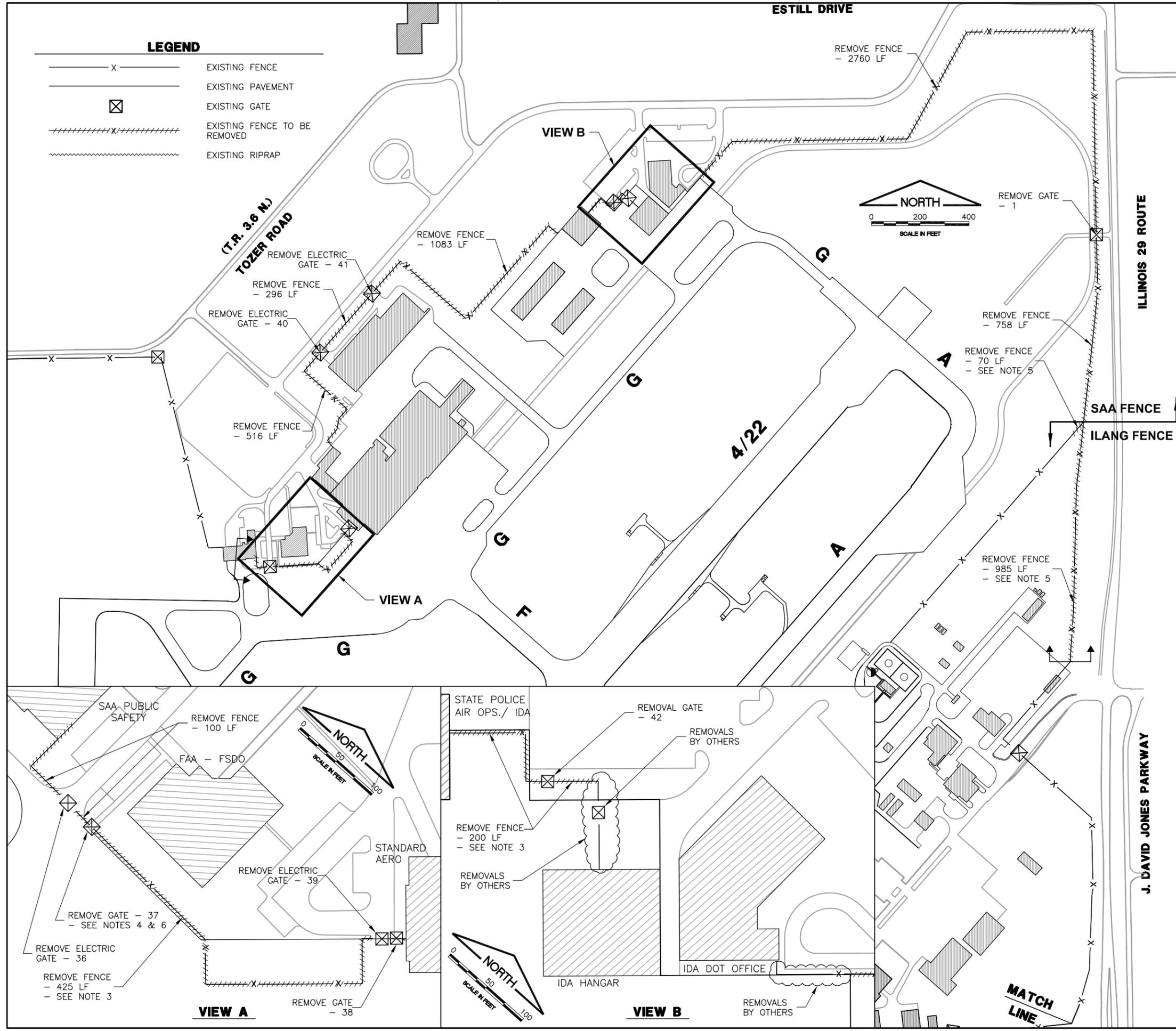
**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 EXISTING CONDITIONS AND REMOVAL SHEET 1**

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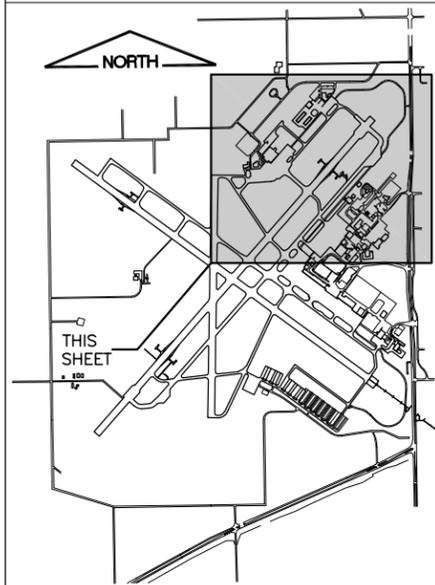
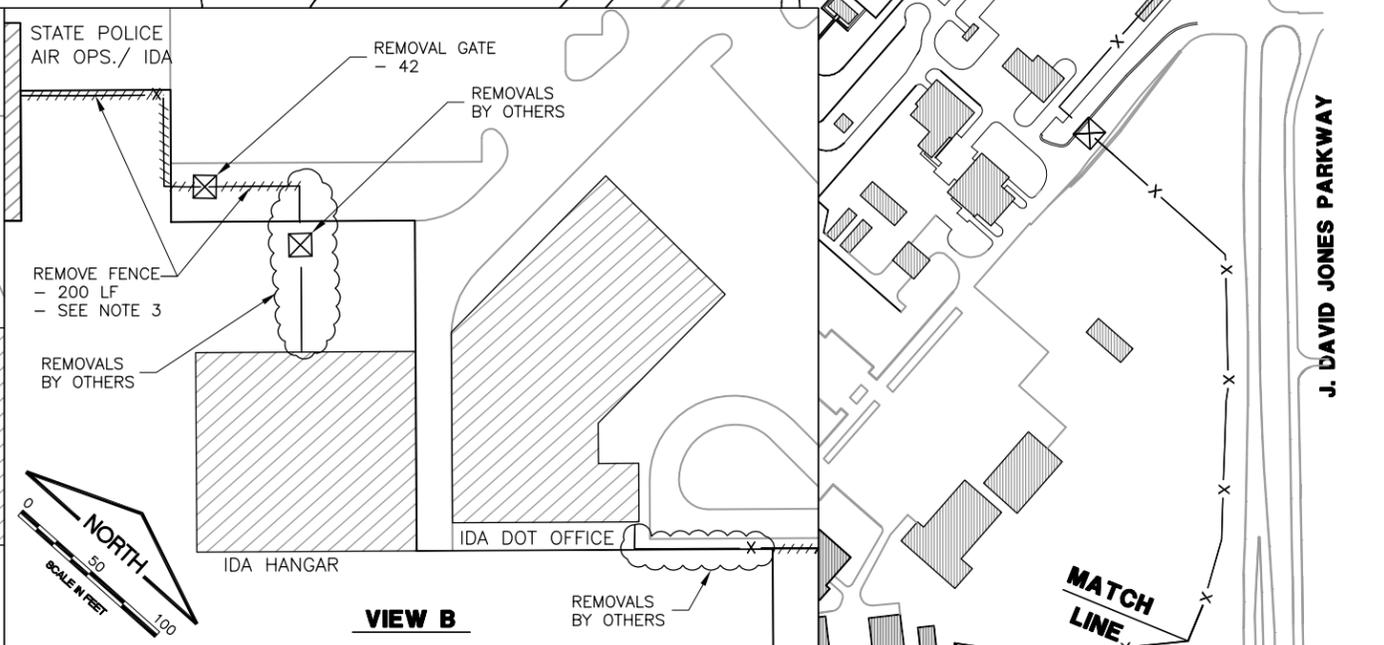
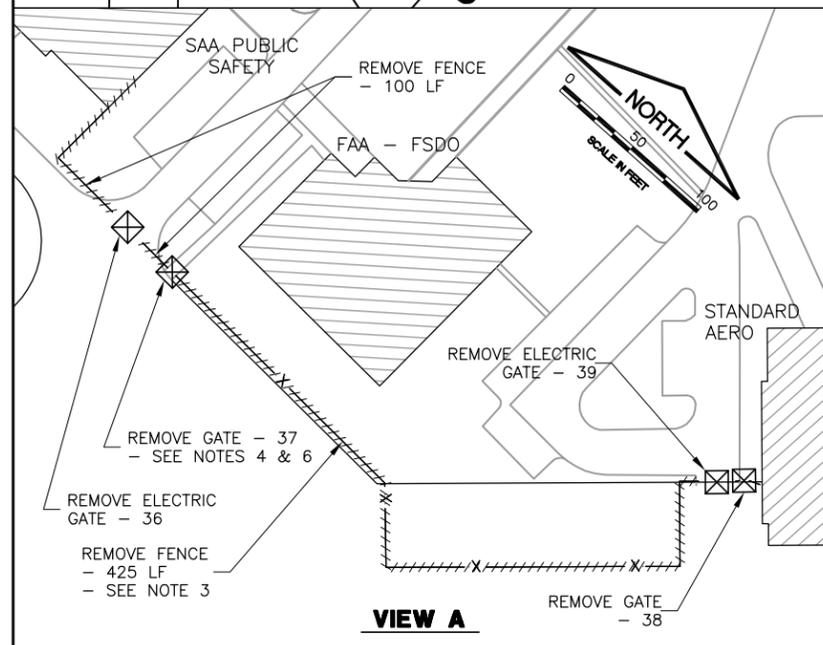


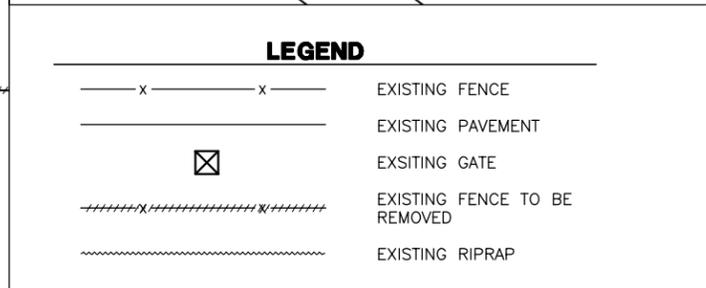
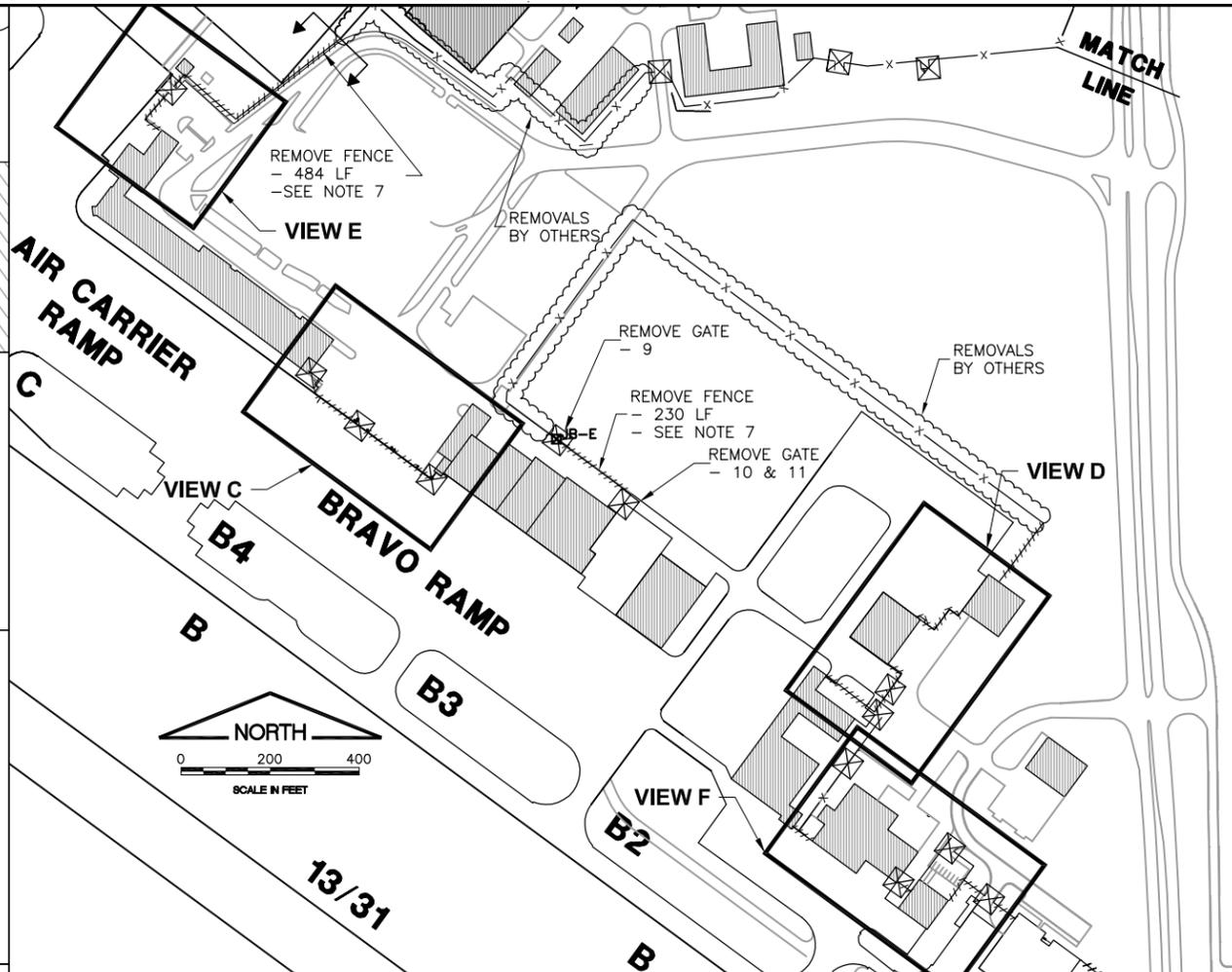
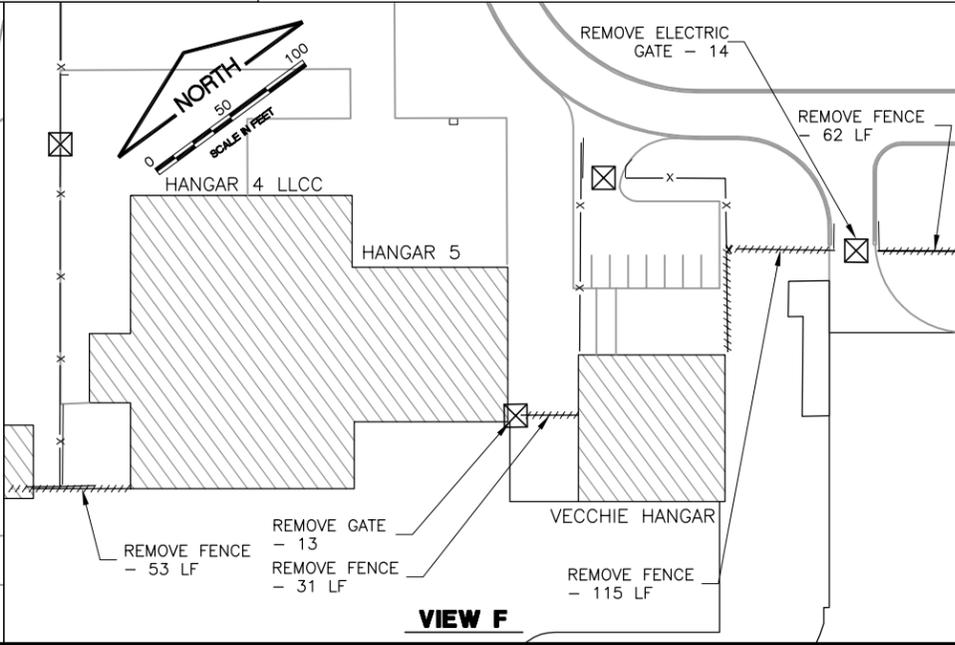
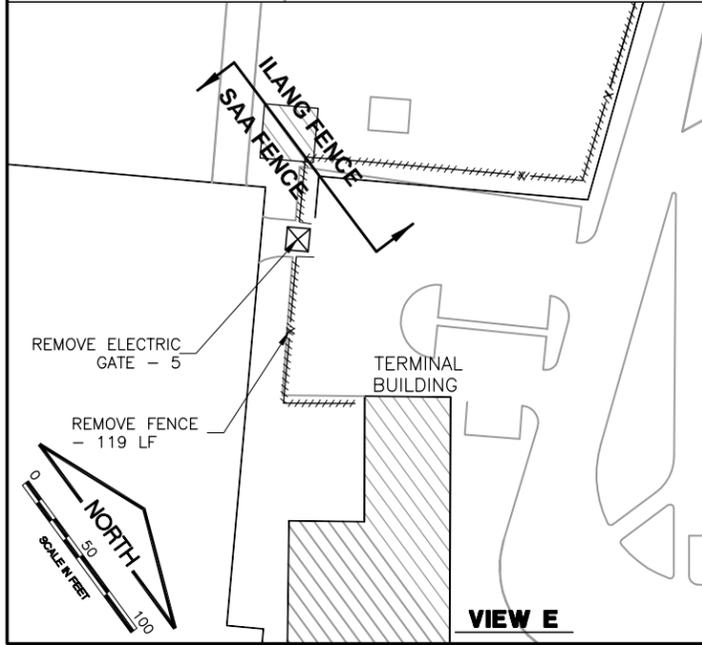
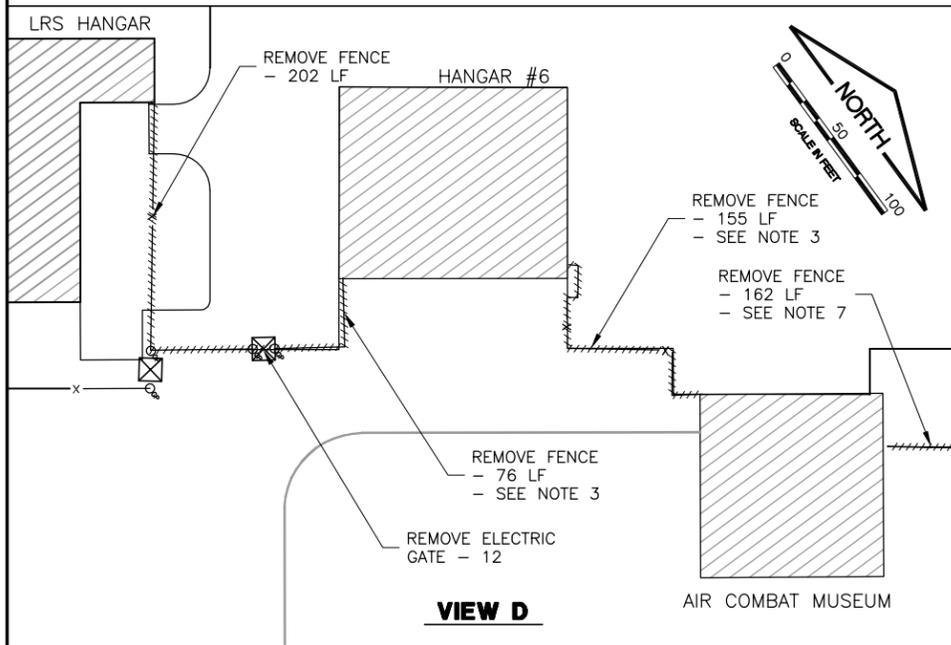
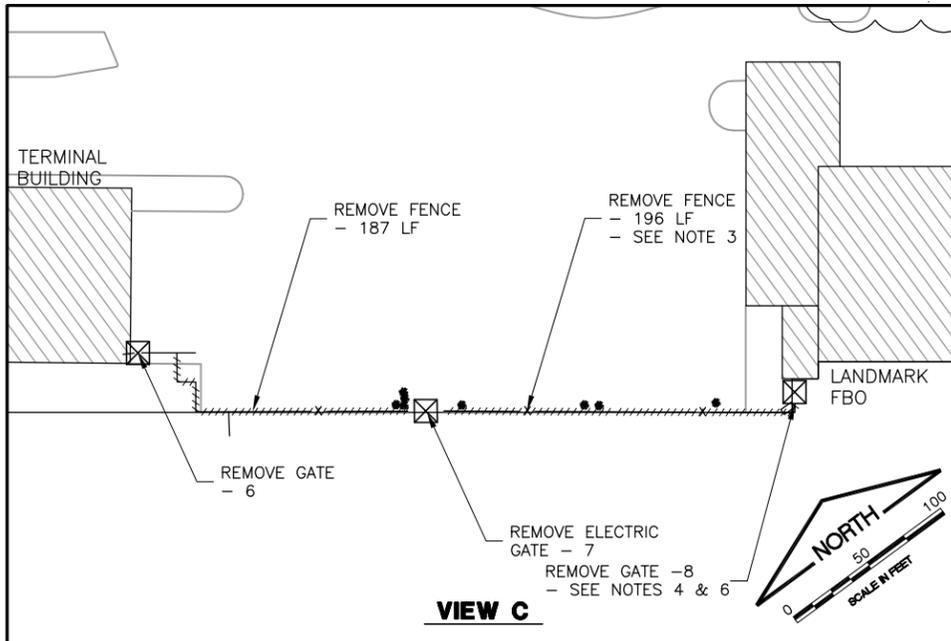
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DRAWN BY:	CMT
CHECKED BY:	CBG
APPROVED BY:	RLV
DATE:	01/14/2011
JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	06 OF 31 SHEETS



**LEGEND**

— X —	EXISTING FENCE
—	EXISTING PAVEMENT
⊠	EXISTING GATE
X	EXISTING FENCE TO BE REMOVED
~~~~~	EXISTING RIPRAP

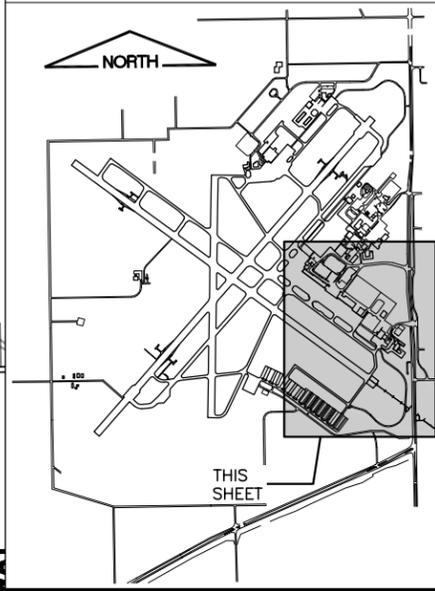




**EXISTING UTILITY/TOPO LEGEND**

⊠-E	ELECTRICAL JUNCTION BOX
⊠	ELECTRICAL EQUIPMENT
⊠ T	TELEPHONE PEDESTAL
○ <sub>w</sub>	WATER VALVE
⊕	FIRE HYDRANT
○	GUARD POST
⊠	ROAD SIGN
⊕	LIGHT
▽	MAILBOX
⊕	GATE POST
⊕	POWER POLE
↑	GUY WIRE
—	CULVERT

- NOTE:**
1. REMOVAL QUANTITIES SHOWN ARE FROM EXISTING GATE POST TO EXISTING GATE POST.
  2. FENCE TO BE REMOVED IS 6' TO 8' CLASS E CHAIN LINK FENCE UNLESS OTHERWISE NOTED.
  3. PORTIONS OF THE FENCE NOTED ARE WITHIN PCC OR BITUMINOUS PAVEMENT OF UNKNOWN DEPTH.
  4. NEW PEDESTRIAN ACCESS WILL REQUIRE PARTIAL REMOVAL OF EXISTING PAVEMENT. COST FOR REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL BE INCIDENTAL TO THE PEDESTRIAN ACCESS PAY ITEM.
  5. REMOVAL OF THE EXISTING FENCE WITHIN THE ILANG WILL INCLUDE THE REMOVAL OF COMPACTED AGGREGATE AT THE BASE OF THE FENCE. AGGREGATE IS APPROXIMATELY 1' TALL X 2' WIDE.
  6. REMOVAL OF GATES NOTED SHALL INCLUDE THE REMOVAL OF EXISTING ELECTRICAL LOCKING SYSTEM. REMOVAL OF THIS SYSTEM SHALL BE INCIDENTAL TO THE GATE REMOVAL ITEM.
  7. PORTIONS OF THIS PROJECT WILL OVERLAP REMOVALS FOR ANOTHER PROJECT. THE LOCATION AND QUANTITY OF REMOVALS MAY VARY AT THESE LOCATIONS. CONTRACTOR SHALL VERIFY REMOVAL LIMITS WITH THE RESIDENT ENGINEER.



K:\Springfield\0803504\Draw\Sheets\Phase 3  
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 UPDATE BY: Chris Groth  
 PLOT DATE: 2/3/2011 1:51 PM  
 BASE\_EXISTGEO  
 survey\topo  
 SPI-BASE-1  
 KEYMAP

**CA011**

REVISIONS		
NUMBER	BY	DATE

0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).

**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3**

**EXISTING CONDITIONS AND REMOVAL SHEET 2**

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APPROVED BY:	RLV
DATE:	01/14/2011
JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX

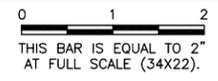
SHEET 07 OF 31 SHEETS

**EXISTING UTILITY/TOPO LEGEND**

- ⊠-E ELECTRICAL JUNCTION BOX
- ⊠ ELECTRICAL EQUIPMENT
- ⊠ T TELEPHONE PEDESTAL
- <sub>w</sub> WATER VALVE
- FIRE HYDRANT
- GUARD POST
- ▭ ROAD SIGN
- ⊕ LIGHT
- ▽ MAILBOX
- ⊙ GATE POST
- ⊕ POWER POLE
- BUSH
- ⊙ TREE

**CA011**

REVISIONS		
NUMBER	BY	DATE

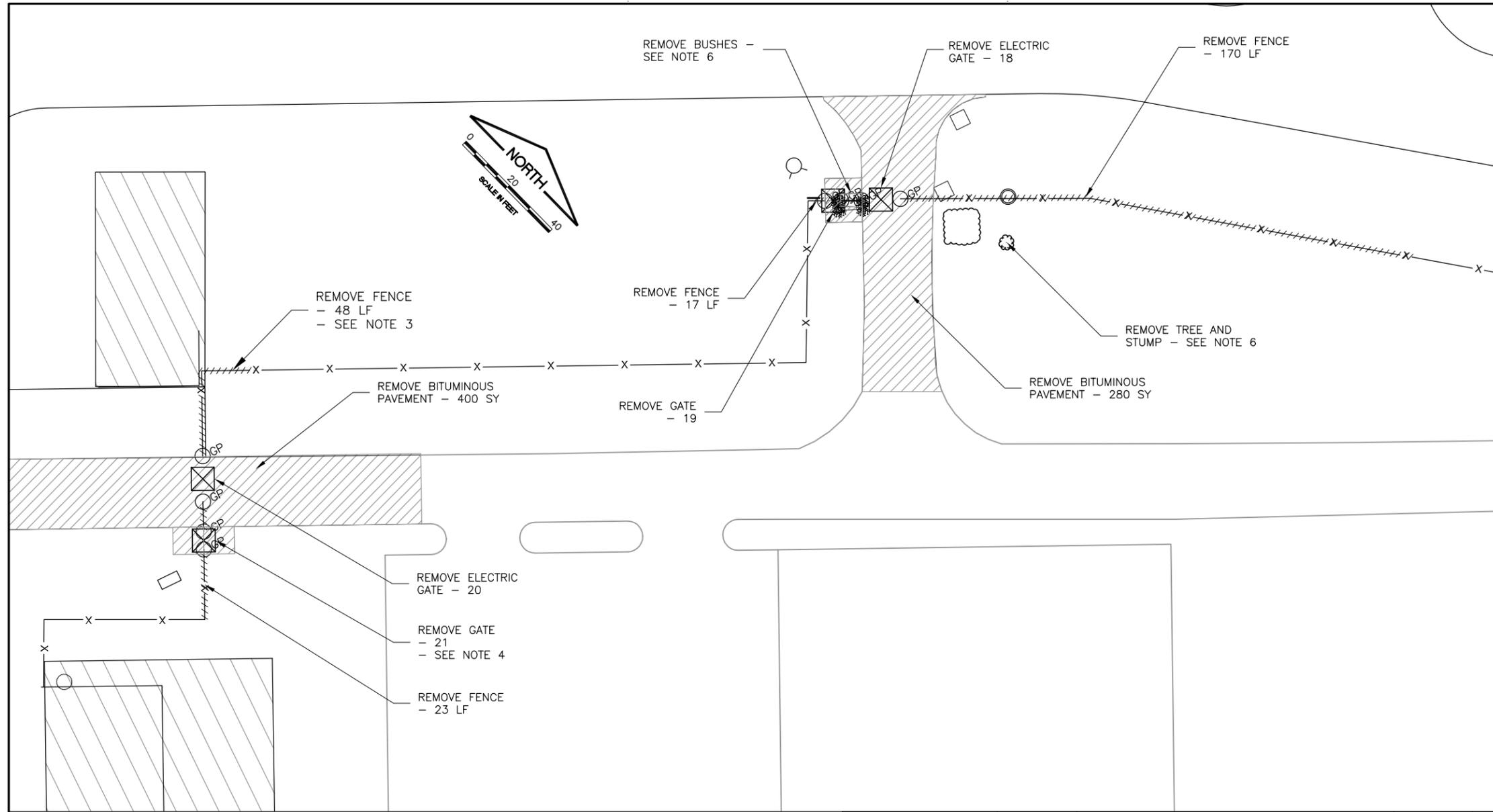


**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 EXISTING CONDITIONS AND REMOVAL SHEET 3**

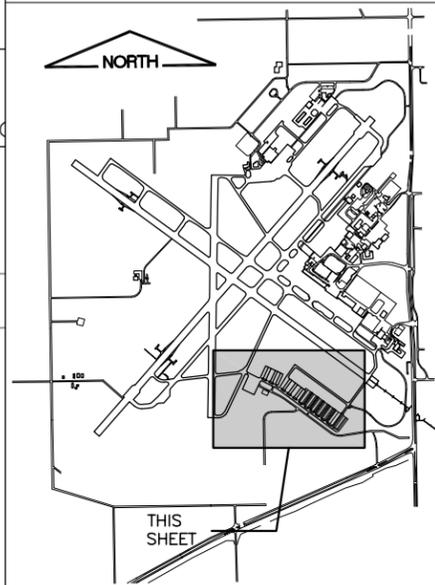
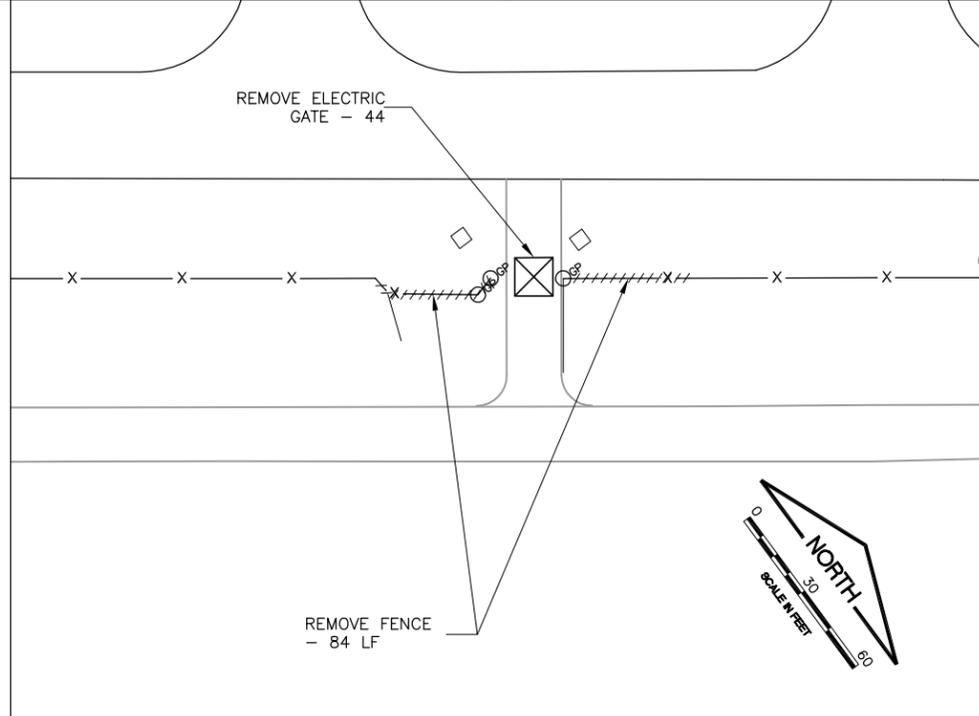
**NOTE:**

1. REMOVAL QUANTITIES SHOWN ARE FROM EXISTING GATE POST TO EXISTING GATE POST.
2. FENCE TO BE REMOVED IS 6' TO 8' CLASS E CHAIN LINK FENCE UNLESS OTHERWISE NOTED.
3. PORTIONS OF THE FENCE NOTED ARE WITHIN PCC OR BITUMINOUS PAVEMENT OF UNKNOWN DEPTH.
4. NEW PEDESTRIAN ACCESS WILL REQUIRE PARTIAL REMOVAL OF EXISTING PAVEMENT. COST FOR REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL BE INCIDENTAL TO THE PEDESTRIAN ACCESS PAY ITEM.
5. REMOVAL OF BITUMINOUS PAVEMENT SHALL INCLUDE THE REMOVAL OF SIDEWALK AT EXISTING GATES 19 AND 21.
6. REMOVAL OF TREE AND BUSHES TO BE PAID AS CLEARING AND GRUBBING. VERIFY WITH RE PRIOR TO REMOVAL.



**LEGEND**

— X —	EXISTING FENCE
—	EXISTING PAVEMENT
⊠	EXISTING GATE
X	EXISTING FENCE TO BE REMOVED
~~~~~	EXISTING RIPRAP



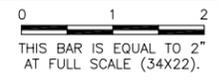
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DATE:	01/14/2011
JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	08 OF 31 SHEETS

**CA011**

REVISIONS		
NUMBER	BY	DATE



**LEGEND**

— XX —	NEW FENCE
— X —	EXISTING FENCE
—	EXISTING PAVEMENT
⊠	NEW ACCESS GATE

- NOTE:**
- 50 SQUARE YARDS OF RIPRAP AND 200 SQUARE YARDS OF EXCELSIOR BLANKET HAVE BEEN ADDED TO THE CONTRACT TO COVER MISCELLANEOUS ERODED AREAS ALONG THE FENCE LINE. INSTALL AS DIRECTED BY THE ENGINEER, QUANTITY PER THIS SHEET.
  - FENCING QUANTITIES SHOWN ARE FROM NEW GATE POST TO NEW GATE POST OR FENCE CHANGE.
  - SEE PROPOSED GATE PLAN FOR DETAILED GATE INFORMATION.
  - NEW FENCE SHALL BE PLACED IN APPROXIMATELY THE SAME LOCATION AS THE EXISTING FENCE, UNLESS OTHERWISE SHOWN.
  - TERMINATE/BEGIN FENCE AT EXISTING BUILDING.
  - PORTIONS OF THE FENCE NOTED ARE WITHIN PCC OR BITUMINOUS PAVEMENT.
  - PEDESTRIAN ACCESS WILL REQUIRE PCC FOOTING AND FINISH WORK. PCC SHALL MEET THE REQUIREMENTS OF ITEM 610. PCC WORK SHALL BE INCIDENTAL TO THE PAY ITEM PEDESTRIAN ACCESS.

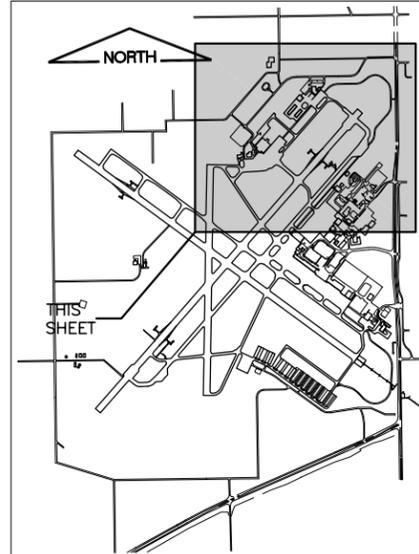
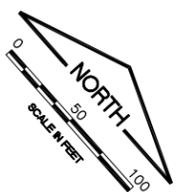
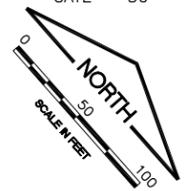
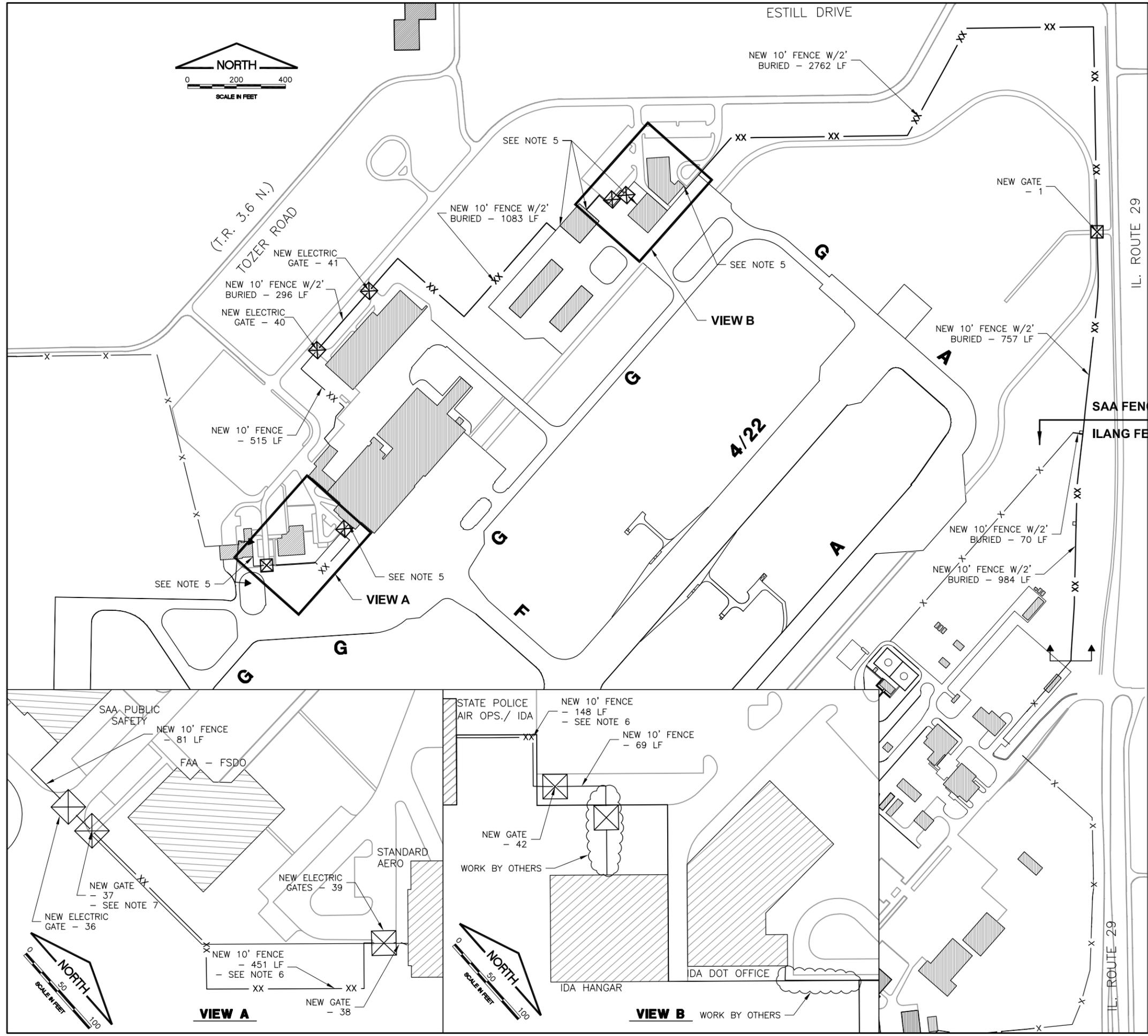


**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 PROPOSED IMPROVEMENTS 1**

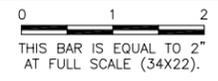
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APPROVED BY:	RLV
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JOB No:	08035-04-00
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SHEET	09 OF 31 SHEETS



**CA011**

REVISIONS		
NUMBER	BY	DATE



**LEGEND**

— XX —	NEW FENCE
— X —	EXISTING FENCE
—	EXISTING PAVEMENT
⊠	NEW ACCESS GATE

**NOTE:**

- 50 SQUARE YARDS OF RIPRAP AND 200 SQUARE YARDS OF EXCELSIOR BLANKET HAVE BEEN ADDED TO THE CONTRACT TO COVER MISCELLANEOUS ERODED AREAS ALONG THE FENCE LINE. INSTALL AS DIRECTED BY THE ENGINEER, QUANTITY PER THIS SHEET.
- FENCING QUANTITIES SHOWN ARE FROM NEW GATE POST TO NEW GATE POST OR FENCE CHANGE.
- SEE PROPOSED GATE PLAN FOR DETAILED GATE INFORMATION.
- NEW FENCE SHALL BE PLACED IN APPROXIMATELY THE SAME LOCATION AS THE EXISTING FENCE, UNLESS OTHERWISE SHOWN.
- TERMINATE/BEGIN FENCE AT EXISTING BUILDING.
- PORTIONS OF THE FENCE NOTED ARE WITHIN PCC OR BITUMINOUS PAVEMENT.
- PEDESTRIAN ACCESS WILL REQUIRE PCC FOOTING AND FINISH WORK. PCC SHALL MEET THE REQUIREMENTS OF ITEM 610. PCC WORK SHALL BE INCIDENTAL TO THE PAY ITEM PEDESTRIAN ACCESS. GATE AND FENCE WILL BE RELOCATED APPROXIMATELY 15' TO THE SOUTHWEST FROM THEIR EXISTING LOCATION. FENCING SHALL TIE INTO THE BUILDING CORNER.
- PORTIONS OF THE PROJECT MAY VARY FROM WHAT IS SHOWN. THE LOCATION AND QUANTITY OF NEW FENCE MAY VARY AT THESE LOCATIONS. CONTRACTOR SHALL VERIFY NEW FENCE LOCATIONS WITH RE.



**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

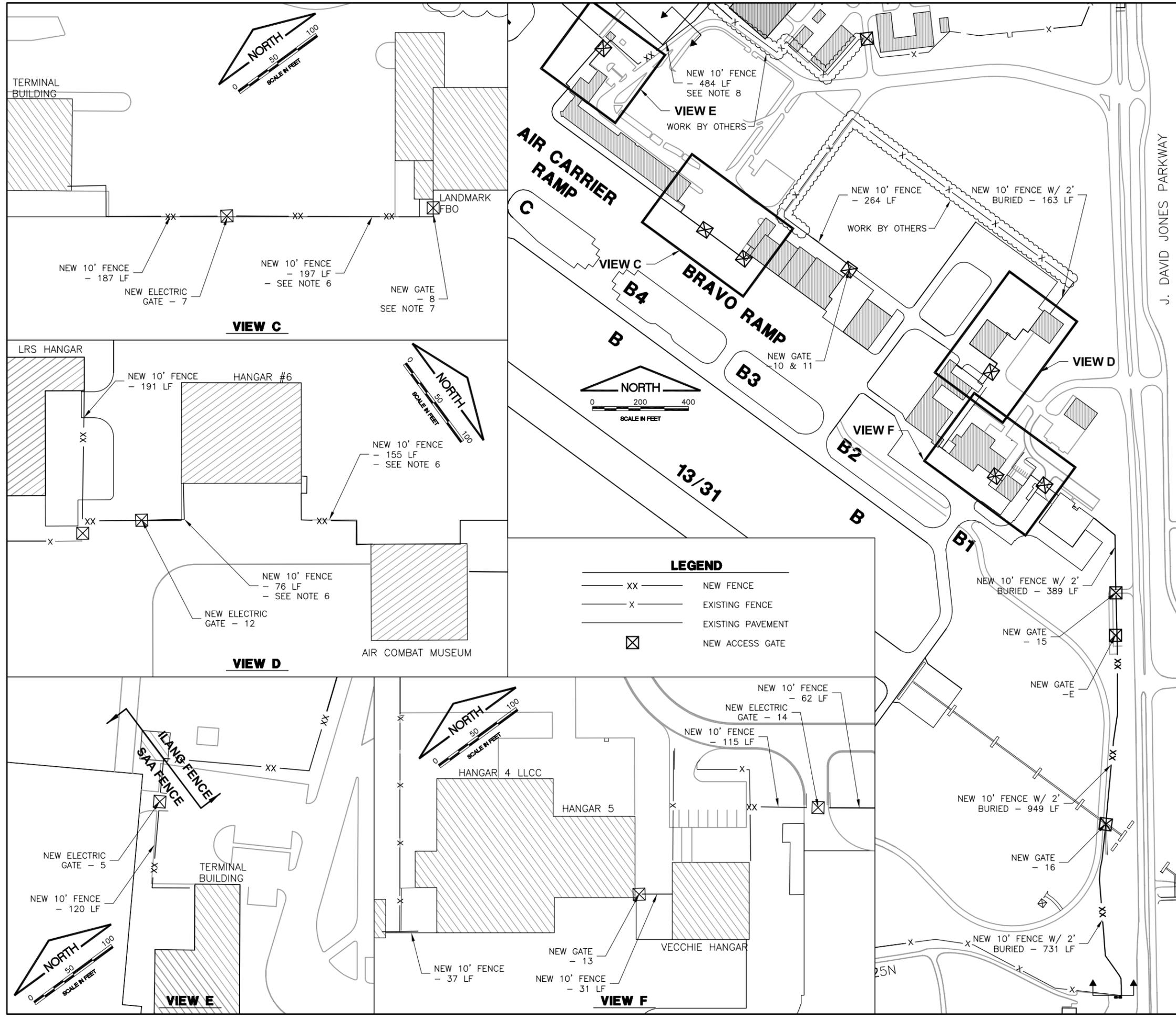
**UPGRADE PERIMETER FENCE PHASE 3  
 PROPOSED IMPROVEMENTS 2**

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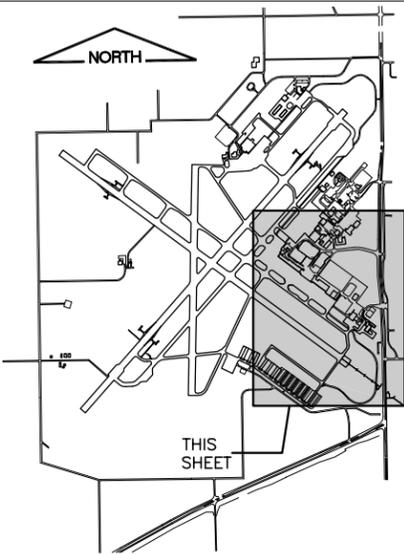


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SHEET	10 OF 31 SHEETS

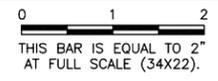


J. DAVID JONES PARKWAY



**CA011**

REVISIONS		
NUMBER	BY	DATE



**NOTE:**

- 50 SQUARE YARDS OF RIPRAP AND 200 SQUARE YARDS OF EXCELSIOR BLANKET HAVE BEEN ADDED TO THE CONTRACT TO COVER MISCELLANEOUS ERODED AREAS ALONG THE FENCE LINE. INSTALL AS DIRECTED BY THE ENGINEER, QUANTITY PER THIS SHEET.
- FENCING QUANTITIES SHOWN ARE FROM NEW GATE POST TO NEW GATE POST OR FENCE CHANGE.
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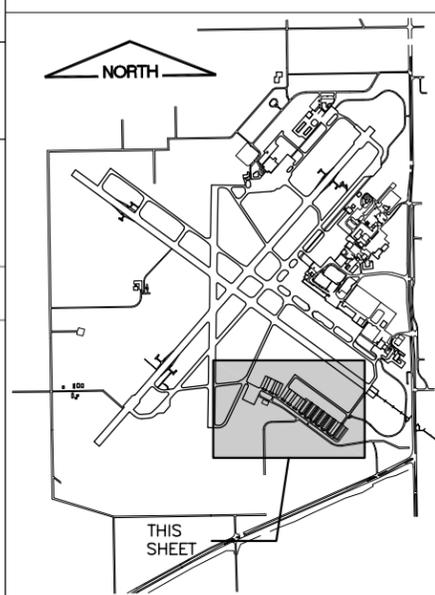
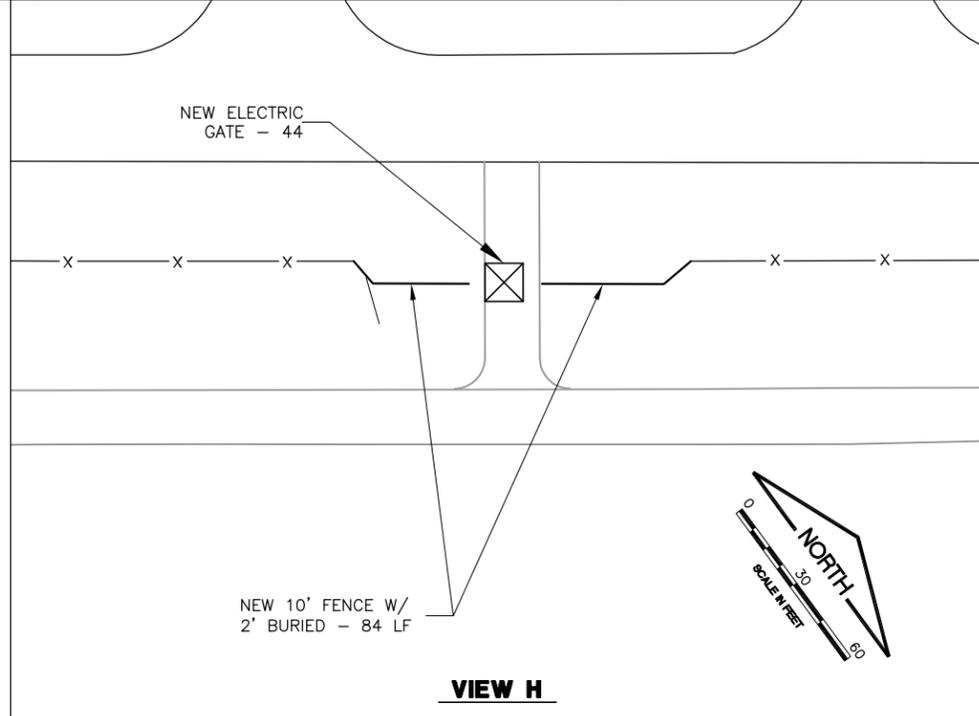
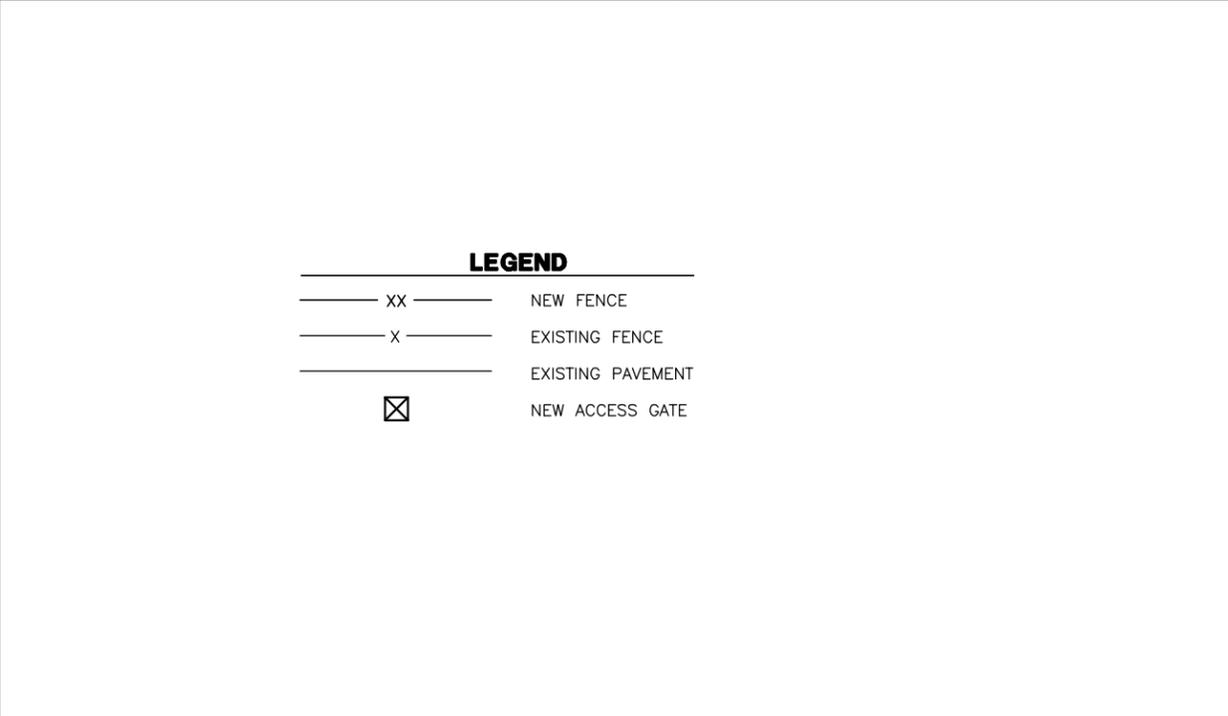
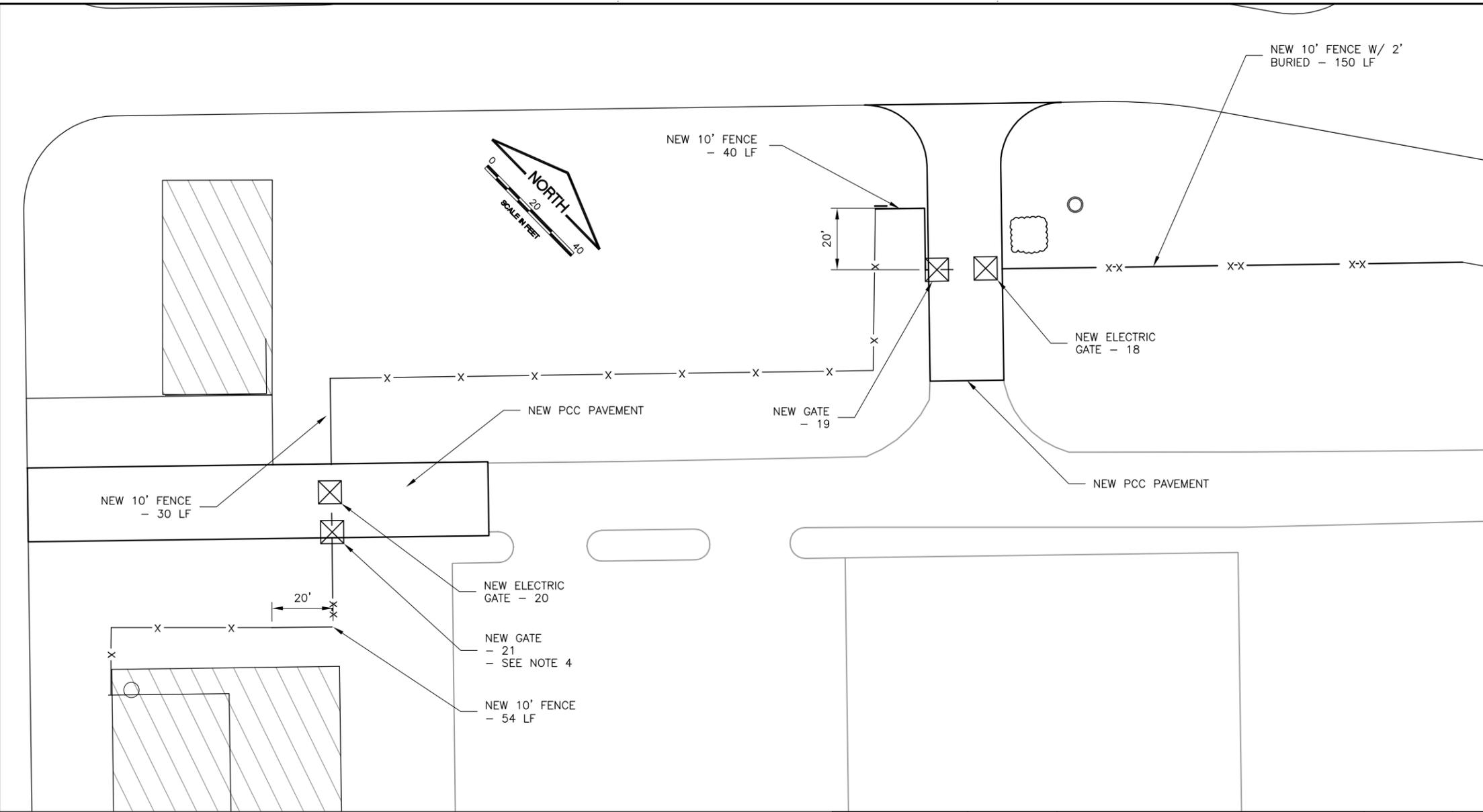
**SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 PROPOSED IMPROVEMENTS 3**

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APPROVED BY:	RLV
DATE:	01/14/2011
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IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	11 OF 31 SHEETS



**CA011**

REVISIONS		
NUMBER	BY	DATE

0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).



**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3**

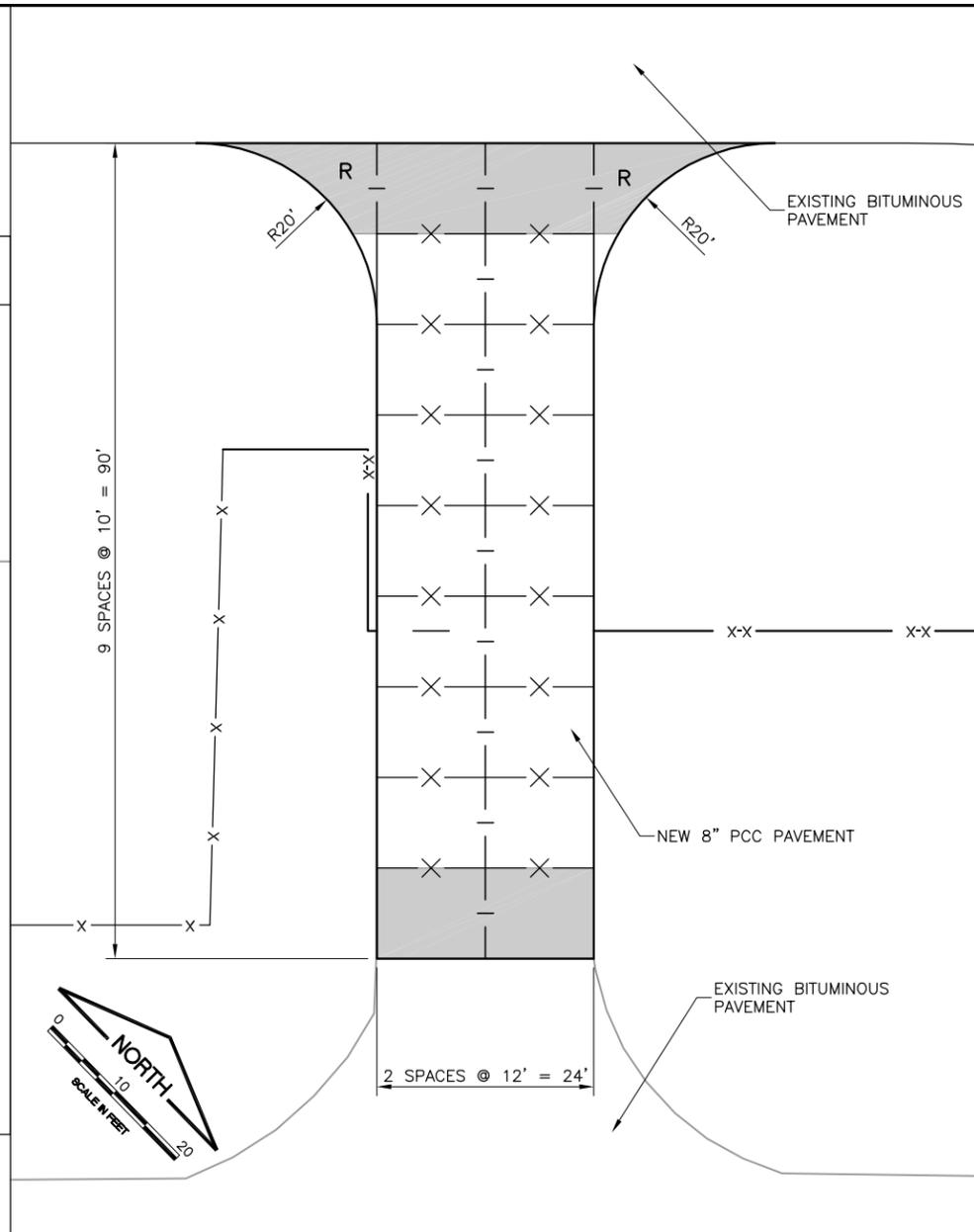
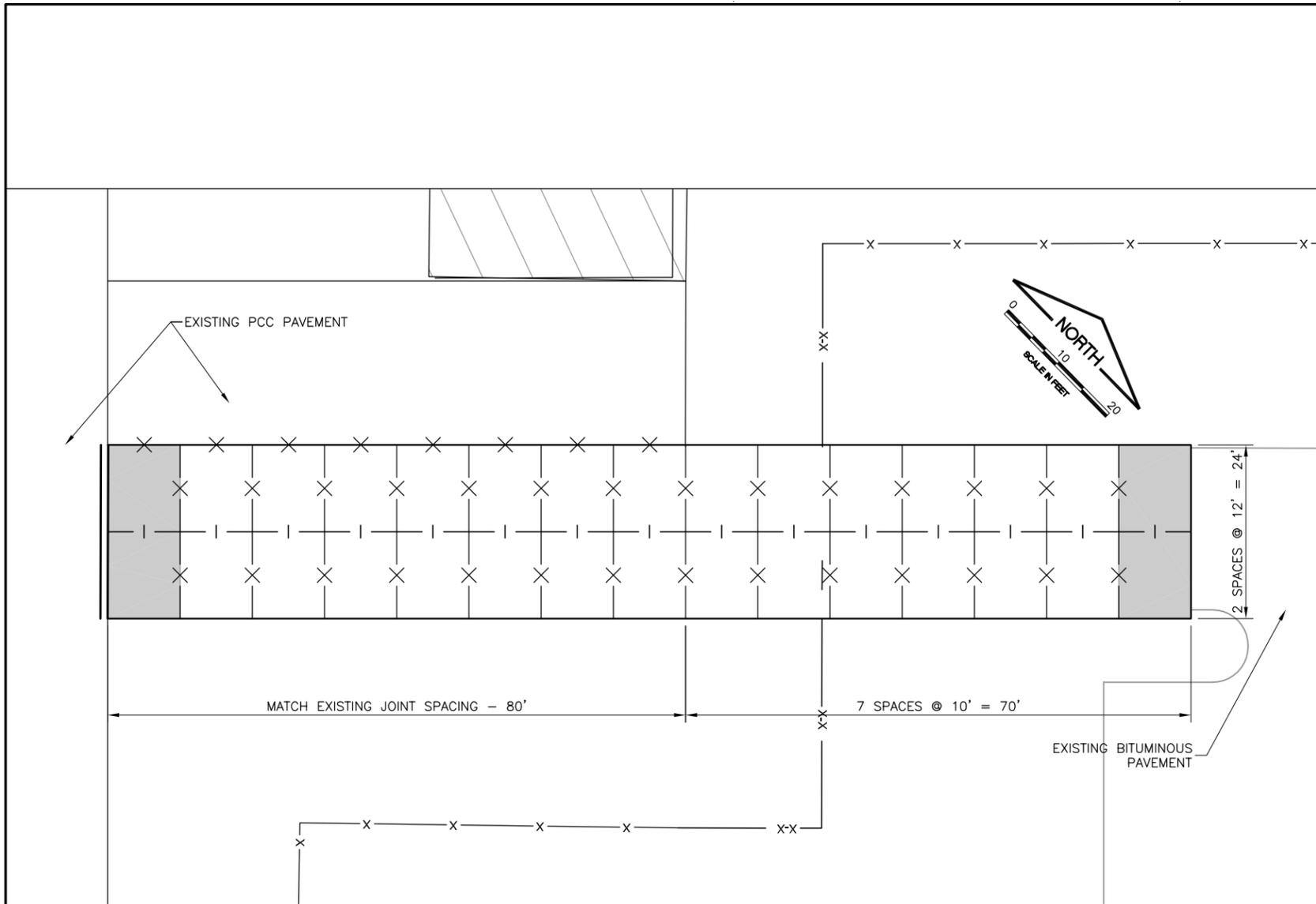
**JOINT PLAN**

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JOB No:	08035-04-00
IL. PROJ. NO. SPI-4088 AIP PROJ. NO. 3-17-0096-XX	
SHEET 12	OF 31 SHEETS



**JOINTING LEGEND**

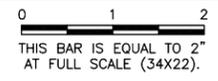
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- |—|—|—|— TYPE G HINGED (TIED) CONTRACTION JOINT
- X—X—X—X— TYPE D DOWELED CONSTRUCTION JOINT
- ==== TYPE B EXPANSION JOINT
- R** ODD SHAPED PANEL REINFORCEMENT
- THICKENED EDGE PAVEMENT

**NOTES:**

1. EXISTING GRADES SHALL BE MAINTAINED.
2. EARTHWORK, TURFING AND RESTORATION ASSOCIATED WITH NEW PCC SHALL BE INCIDENTAL TO PCC.

**CA011**

REVISIONS		
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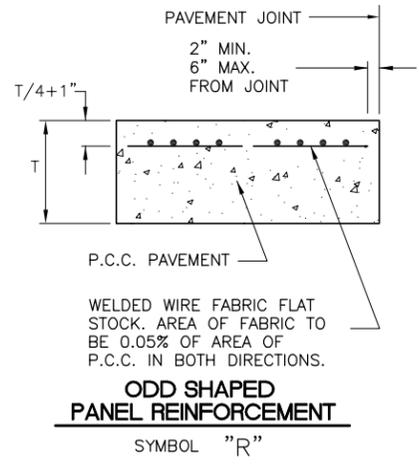
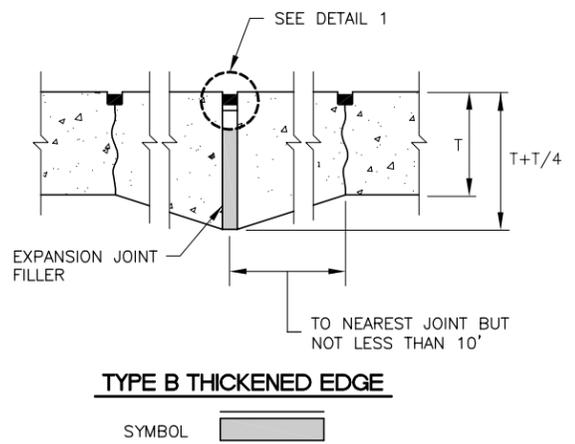
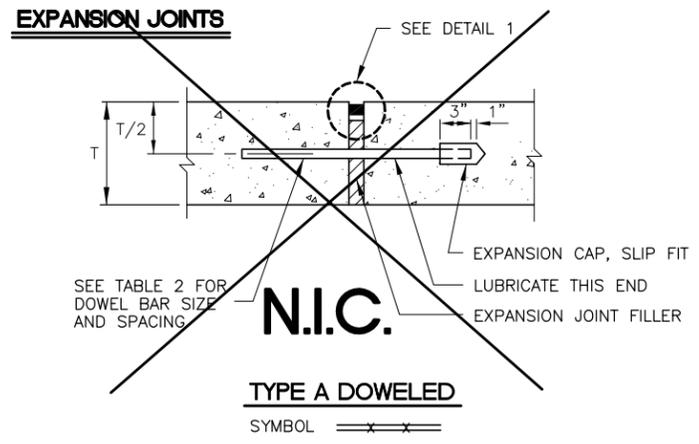
**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3**  
**JOINTING DETAILS 1**

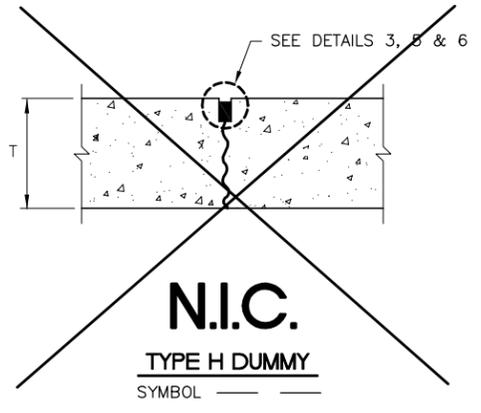
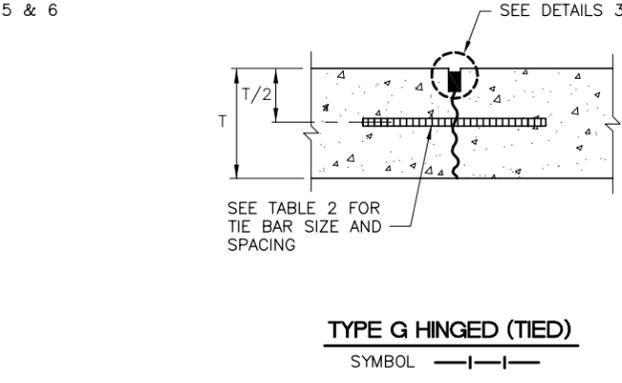
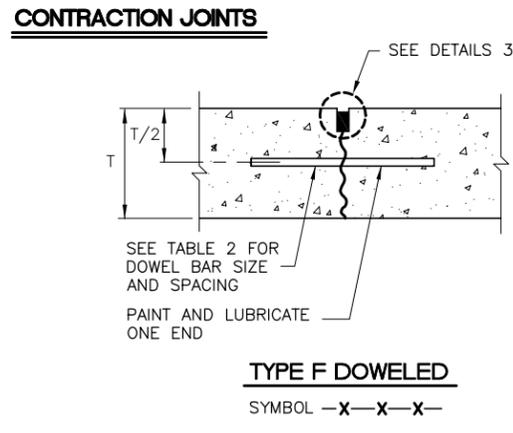
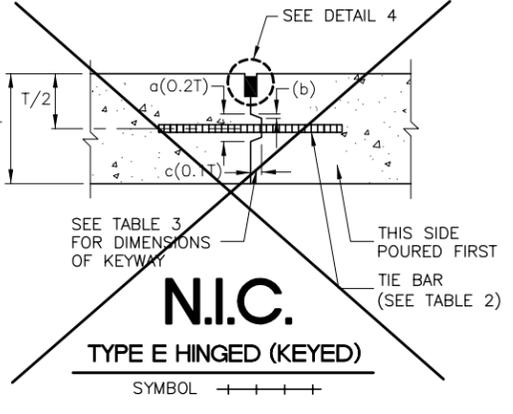
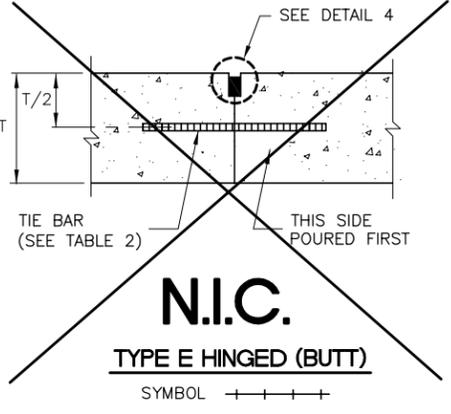
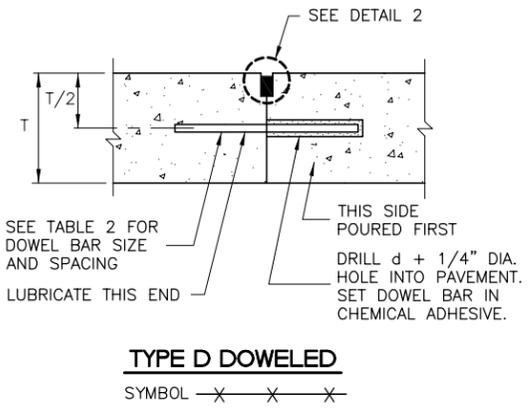
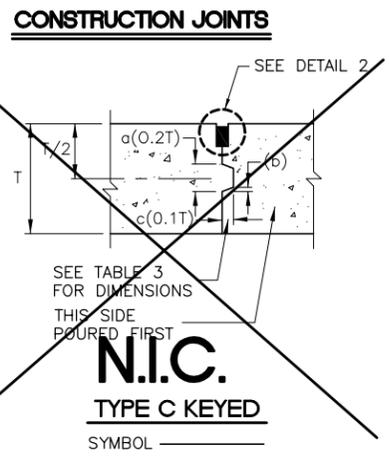
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AIP PROJ. NO.	3-17-0096-XX
SHEET	13 OF 31 SHEETS

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"



PAVEMENT THICKNESS T - INCHES	DOWEL BAR DETAILS			TIE BAR DETAILS		
	DIA.	LENGTH	SPACING	BAR SIZE	LENGTH	SPACING
5	5/8"	12"	12"	#4	24"	30"
6	3/4"	18"	12"	#5	30"	30"
7	3/4"	18"	12"	#5	30"	30"
8	1"	19"	12"	#5	30"	30"
9	1"	19"	12"	#5	30"	30"
10	1"	19"	12"	#5	30"	30"
11	1"	19"	12"	#5	30"	30"
12	1"	19"	12"	#5	30"	30"
13	1 - 1/4"	20"	15"	#5	30"	30"
14	1 - 1/4"	20"	15"	#5	30"	30"
15	1 - 1/4"	20"	15"	#5	30"	30"
16	1 - 1/4"	20"	15"	#5	30"	30"
17	1 - 1/2"	20"	18"	#5	30"	30"
18	1 - 1/2"	20"	18"	#5	30"	30"

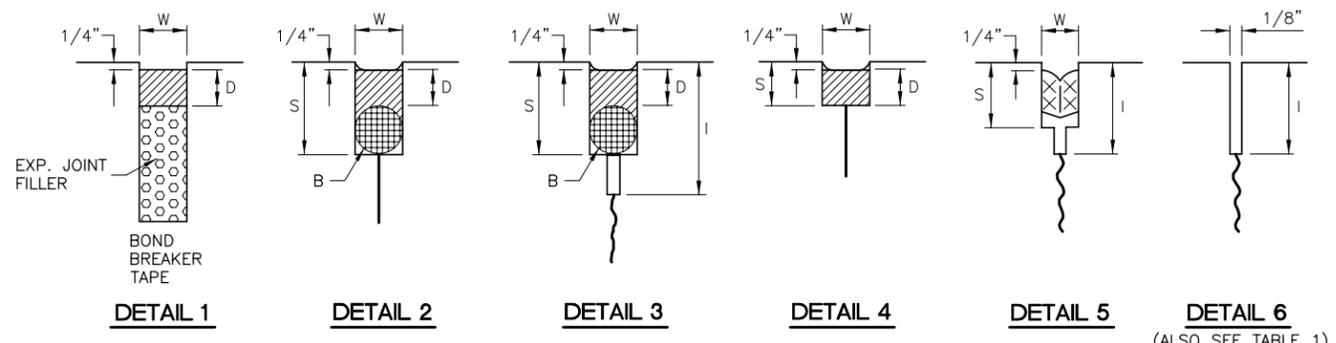


PAVEMENT THICKNESS T - INCHES	KEYED JOINT DIMENSIONS		
	a	b	c
6	—	—	—
7	—	—	—
8	0.133' ( 1-5/8" ± )	0.017' ( 3/16" ± )	0.067' ( 7/8" ± )
9	0.150' ( 1-13/16" ± )	0.019' ( 3/16" ± )	0.075' ( 7/8" ± )
10	0.167' ( 2" )	0.021' ( 1/4" ± )	0.083' ( 1" )
11	0.183' ( 2-13/16" ± )	0.023' ( 1/4" ± )	0.092' ( 1-1/8" ± )
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" ± )

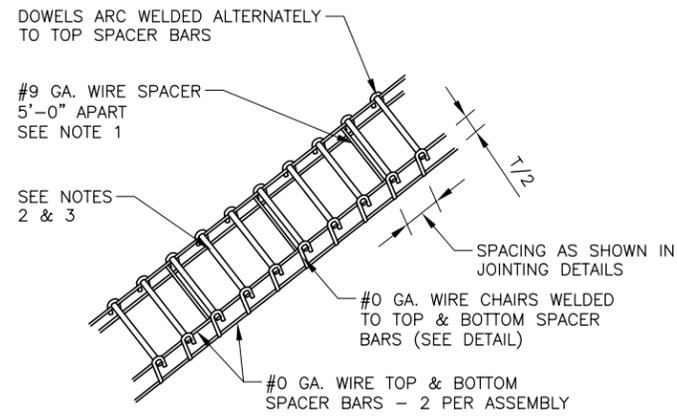
- JOINT NOTES**
- ALL EDGES OF NEW SLABS, FREE STANDING OR CLOSURE, SHALL BE EDGED WITH AN APPROVED TOOL HAVING A RADIUS OF 1/8" TO 1/4" TO FACILITATE SAWING OF THE SEALANT RESERVOIR. A RADIUS > 1/4" WILL NOT BE ACCEPTABLE.
  - THE INITIAL SAWCUT FOR ALL LONGITUDINAL & TRANSVERSE CONTRACTION JOINTS SHALL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

	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

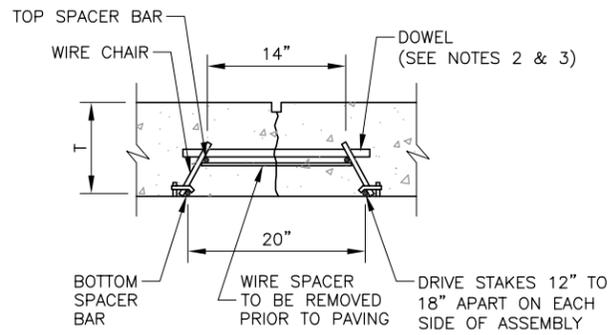
**JOINT SEALING DETAILS**



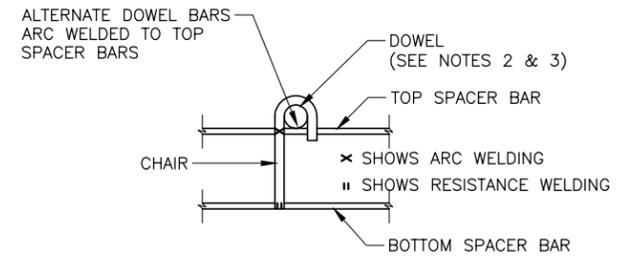
N.I.C. - NOT IN THIS CONTRACT



**DOWEL BASKET ASSEMBLY DETAILS AND NOTES**  
 N.T.S.



**DOWEL BAR INSTALLATION DETAIL**  
 N.T.S.

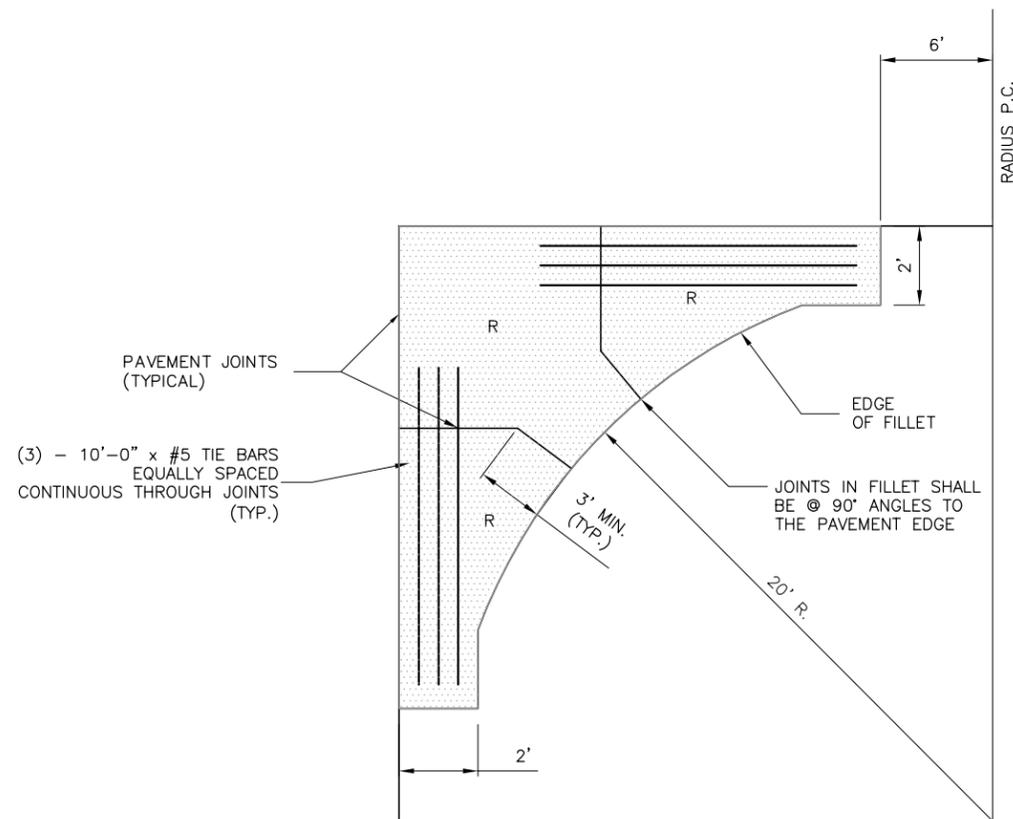


**TYPICAL DOWEL BASKET ELEVATION DETAIL SHOWING CHAIR**  
 N.T.S.

**DOWEL BASKET NOTES**

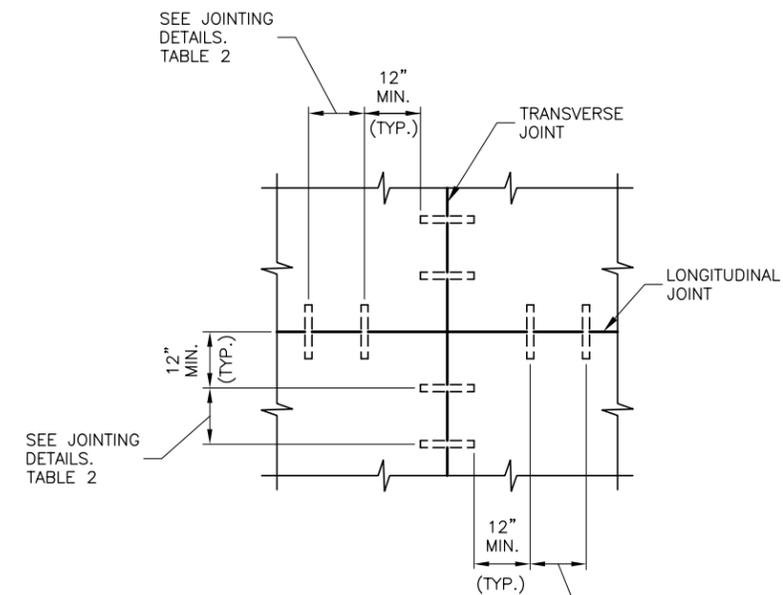
- #9 GA. WIRE SPACER BAR ARC WELDED TO THE BOTTOM OF TOP SPACER BAR. (MAY BE MECHANICALLY ATTACHED IN LIEU OF WELDING) 3 REQUIRED PER UNIT. THIS WIRE MUST BE CUT OR REMOVED PRIOR TO PAVING.
- DOWEL BAR DIAMETER, LENGTH & SPACING SHALL BE AS SHOWN IN TABLE 2 JOINTING DETAILS 1.
- DOWELS SHALL BE EPOXY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

**DOWEL BASKET DETAILS**  
 N.T.S.



**FILLET DETAIL AND FILLET REINFORCING LAYOUT**  
 N.T.S.

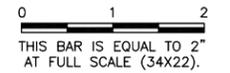
Ⓡ DENOTES ODD SHAPED REINFORCED PANELS TO BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN ON JOINTING DETAILS SHEET. ALL NON RECTANGULAR SHAPED PANELS SHALL BE REINFORCED. (REINFORCEMENT NOT SHOWN)



**DOWEL PLACEMENT DETAIL**  
 N.T.S.

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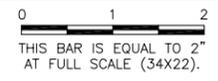
UPGRADE PERIMETER FENCE PHASE 3  
 JOINTING DETAILS 2



DESIGN BY:	CBG
DRAWN BY:	CMT
CHECKED BY:	CBG
APPROVED BY:	RLV
DATE:	01/14/2011
JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	14 OF 31 SHEETS

**CA011**

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SPRINGFIELD AIRPORT AUTHORITY  
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UPGRADE PERIMETER FENCE PHASE 3

**PROPOSED ELECTRIC GATE IMPROVEMENTS 1**

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IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	15 OF 31 SHEETS

**NOTES:**

- ① DISCONNECT AND REMOVE EXISTING GATE OPERATOR. INSTALL NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 240V, 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. RECONNECT NEW GATE OPERATOR ON EXISTING CONCRETE PAD. RECONNECT NEW GATE OPERATOR TO EXISTING POWER AND CONTROL WIRING AS NECESSARY. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.
- ② NEW PUSH TO EXIT PUSHBUTTON STATION MOUNTED ON GOOSENECK PEDESTAL, ILLUMINATED, MUSHROOM HEAD, NEMA 4X, AND PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE THAT AT THIS LOCATION THE CONCRETE PIERS FOR BOTH THE PUSHBUTTON STATION AND THE PROTECTIVE BOLLARDS WILL BE INSTALLED IN THE EXISTING 2-FOOT CONCRETE FILLET. SAWCUT AND REMOVE FILLET TO INSTALL PIERS.
- ③ TWO #14 THWN (GATE OPEN CONTROL), TWO #14 THWN (24VAC POWER FOR ILLUMINATION) IN 1" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ④ INSTALL CONDUIT IN SAWKERF IN EXISTING CONCRETE PAVEMENT. SEE DETAIL A FOR ADDITIONAL INFORMATION.
- ⑤ NEW 20'x4' "SAFETY" DETECTOR LOOP. INSTALL IN SAWKERF AND NEW 1/2" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑥ EXISTING PROXIMITY CARD READER (AND PROTECTIVE BOLLARDS, IF SHOWN). CARD READER IS PART OF THE EXISTING AIRPORT ACCESS CONTROL SYSTEM AND SHALL REMAIN IN SERVICE. CONTRACTOR SHALL VERIFY WIRING METHODS AND CABLE ROUTING FROM CARD READER TO PROTECT AND MAINTAIN THE EXISTING CONDITIONS.
- ⑦ EXISTING DISCONNECT SWITCH. TO REMAIN. RECONNECT NEW GATE OPERATOR 240V POWER WIRING TO THIS DISCONNECT.
- ⑧ EXISTING ACCESS CONTROL INTERFACE PANEL. TO REMAIN.
- ⑨ DISCONNECT AND REMOVE EXISTING GATE OPERATOR. INSTALL NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 208V, THREE 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. SAWCUT AND REMOVE EXISTING PAVEMENT AND INSTALL NEW GATE OPERATOR ON A NEW CONCRETE PAD PER MANUFACTURER'S INSTRUCTIONS. RECONNECT NEW GATE OPERATOR TO EXISTING POWER AND CONTROL WIRING AS NECESSARY. RELOCATE FENCE MOUNTED FLASHING LIGHT TO NEW FENCE AND RECONNECT TO NEW GATE OPERATOR - LIGHT FLASHES WHENEVER GATE IS IN USE. NO "SAFETY" DETECTOR LOOPS SHALL BE INSTALLED. NO PUSH TO EXIT PUSHBUTTON SHALL BE INSTALLED. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.
- ⑩ DISCONNECT AND REMOVE EXISTING GATE OPERATOR. INSTALL 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. INSTALL NEW GATE OPERATOR ON EXISTING CONCRETE PAD. RECONNECT NEW GATE OPERATOR TO EXISTING POWER AND CONTROL WIRING AS NECESSARY. INSTALL A "GATE OPEN" PUSHBUTTON IN GATE OPERATOR COVER AS SHOWN IN DETAILS. EXISTING LIGHT FIXTURE AT GATE SHALL BE REUSED AND RECONNECTED TO OPERATE AS EXISTING. REMOVE EXISTING TELEPHONE CALL BOX AND TURN OVER TO STANDARD AERO. NO "SAFETY" DETECTOR LOOPS SHALL BE INSTALLED. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.

**EXISTING GATE OPERATOR POWER SOURCES:**

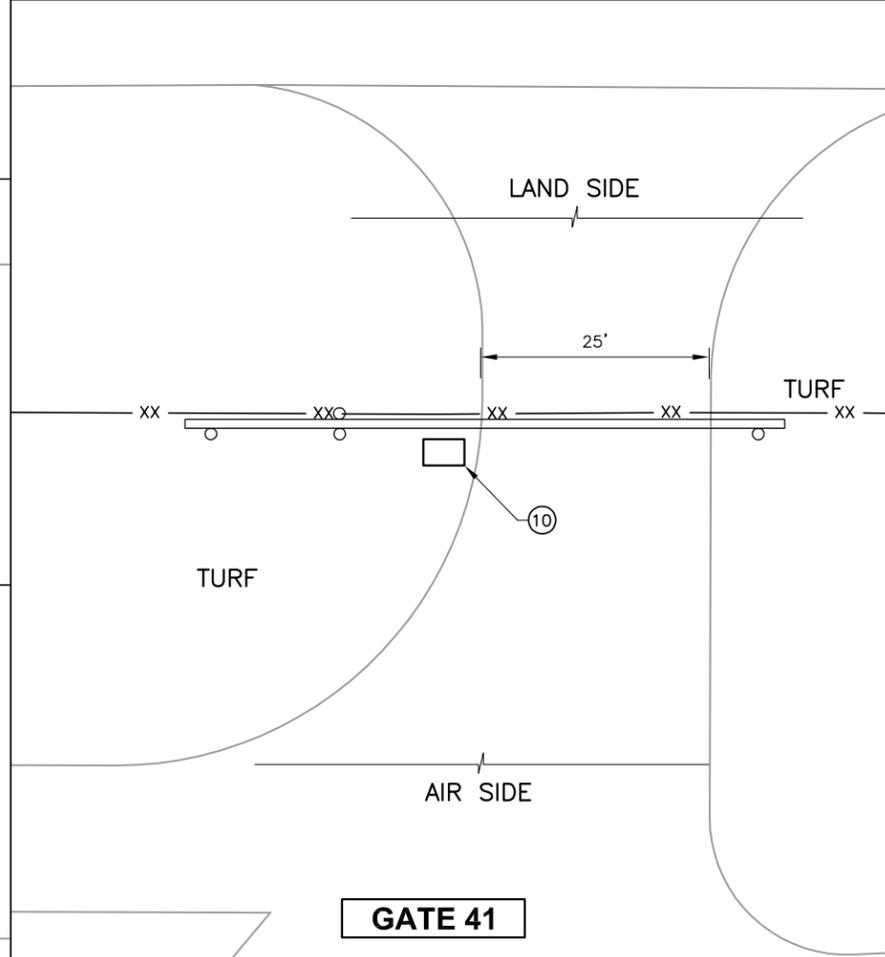
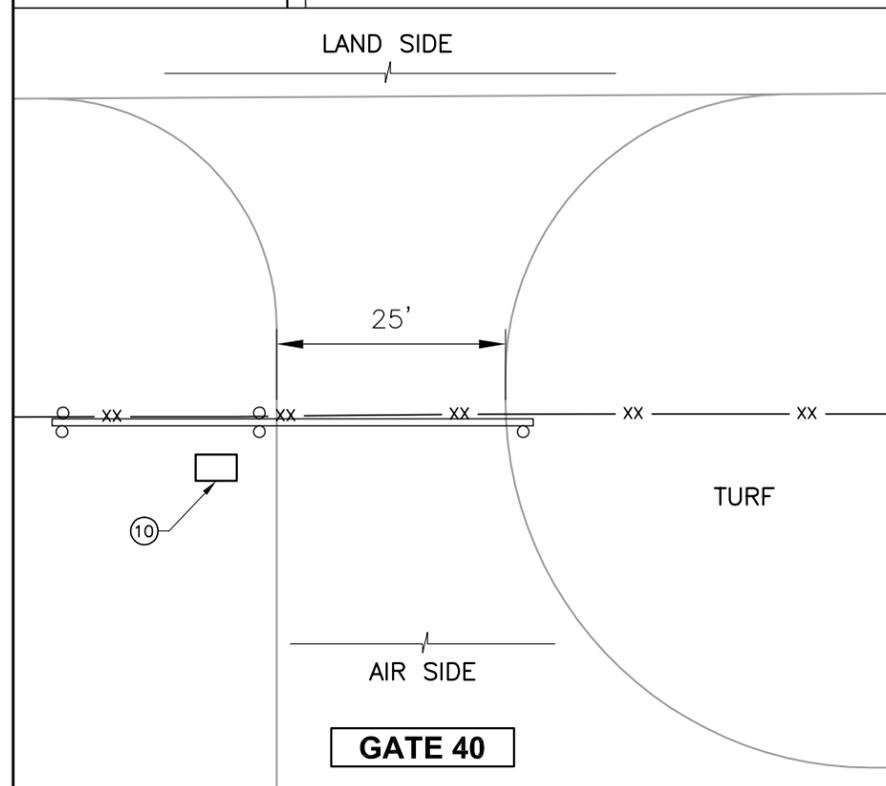
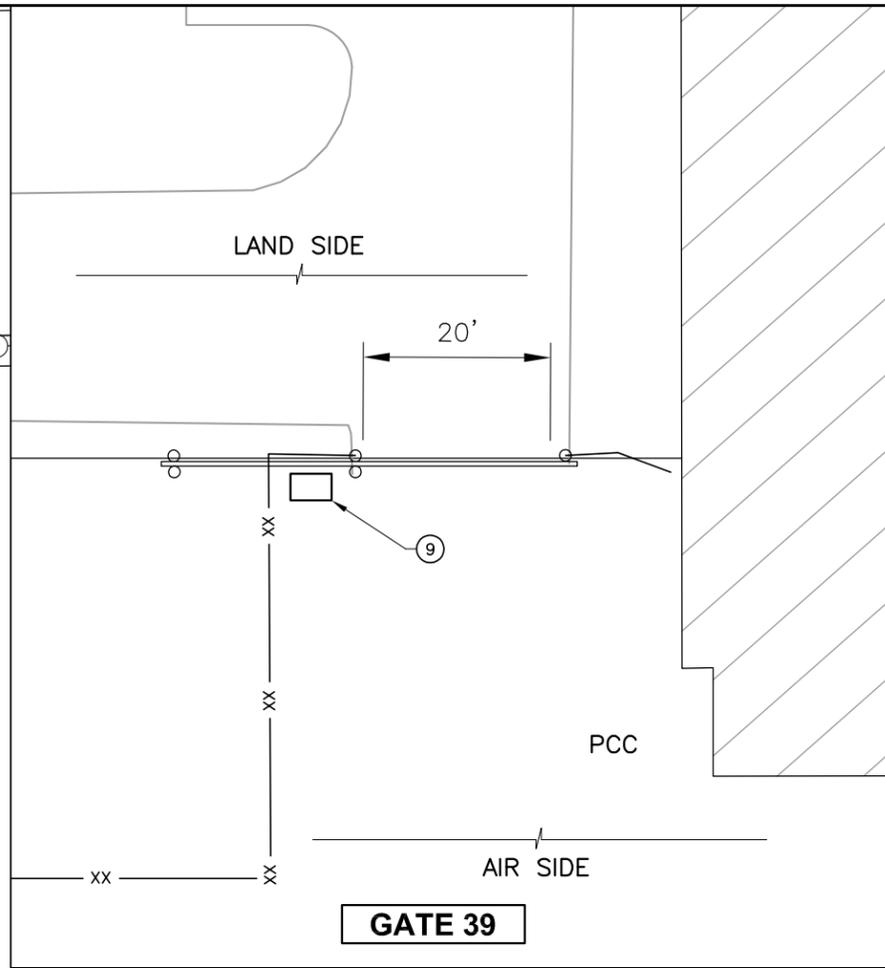
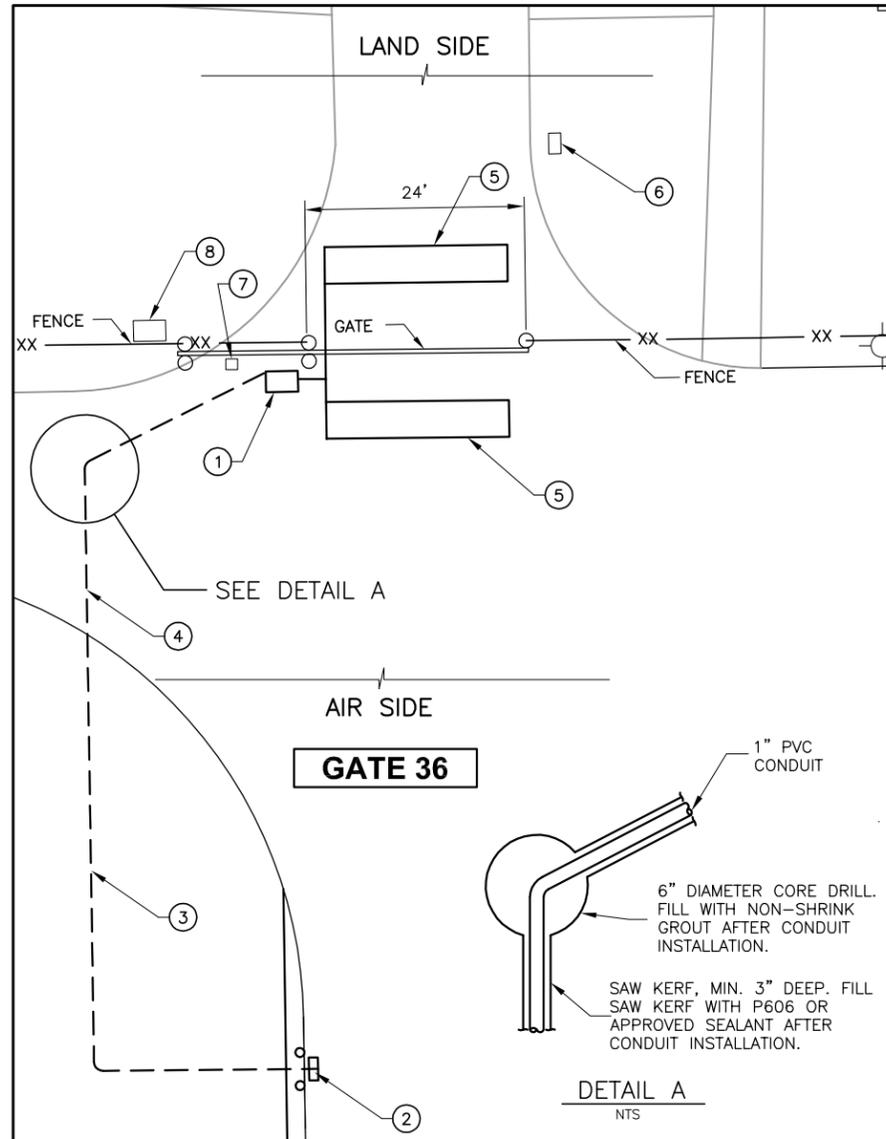
ALL POWER SOURCES LISTED BELOW ARE FROM BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ALL POWER SOURCE LOCATIONS, VOLTAGES, PHASES AND AMPACITY PRIOR TO ORDERING GATES AND COMMENCING WORK ON GATE OPERATOR REPLACEMENT.

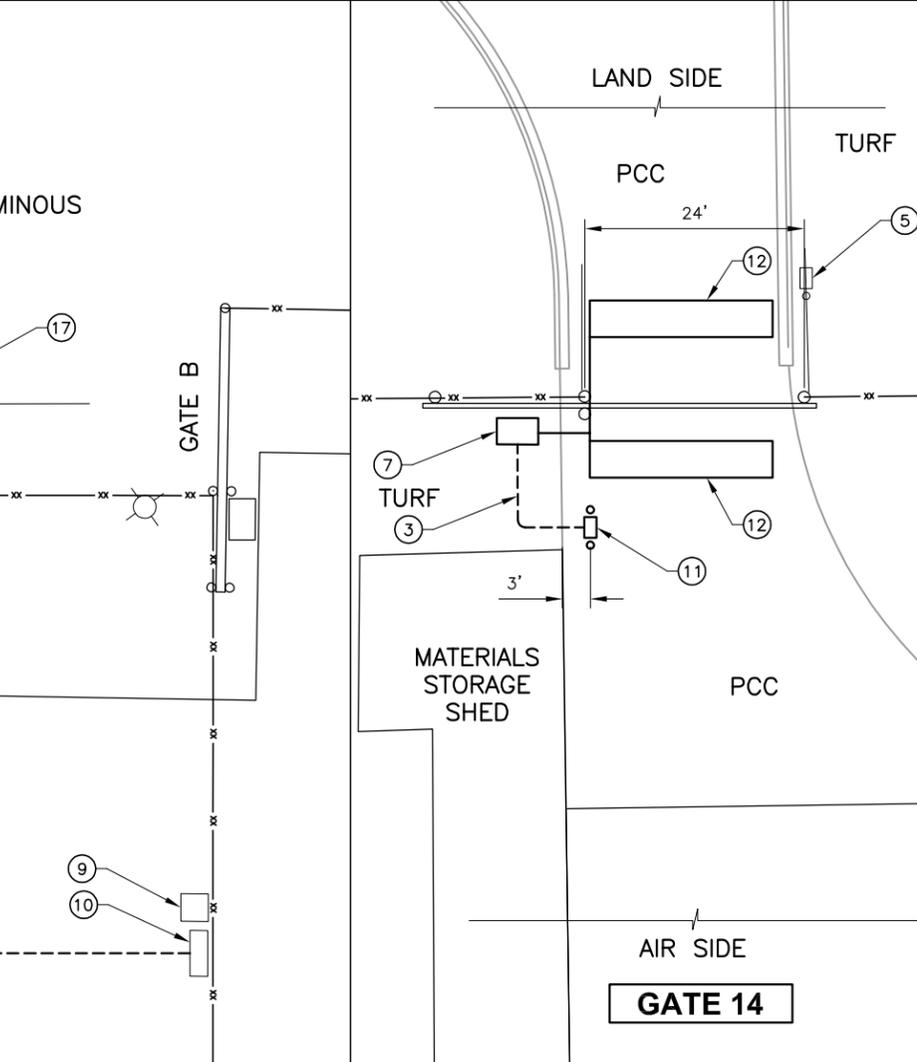
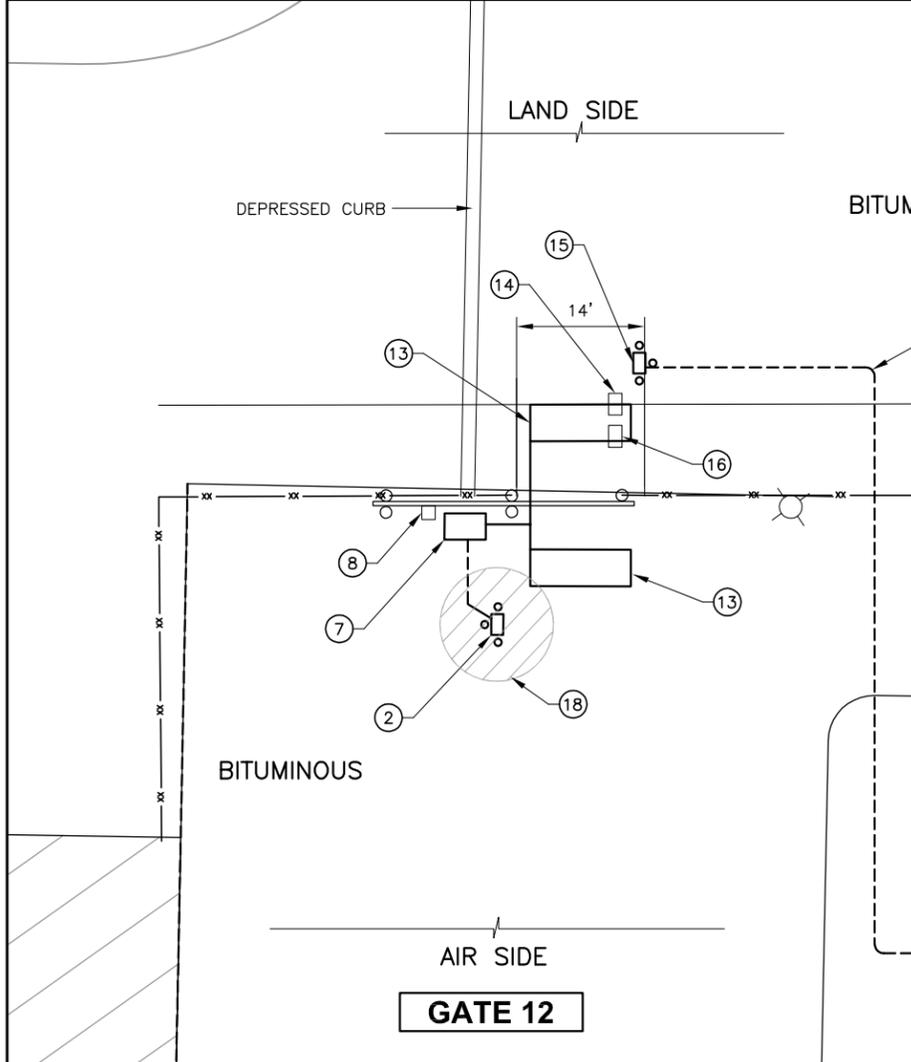
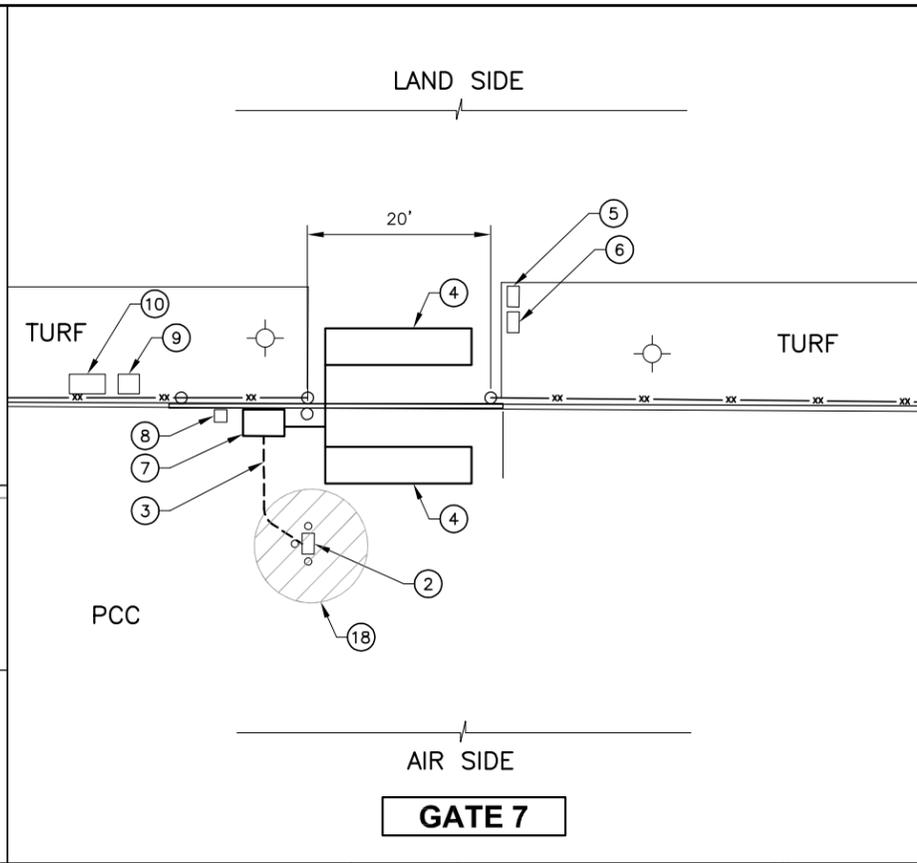
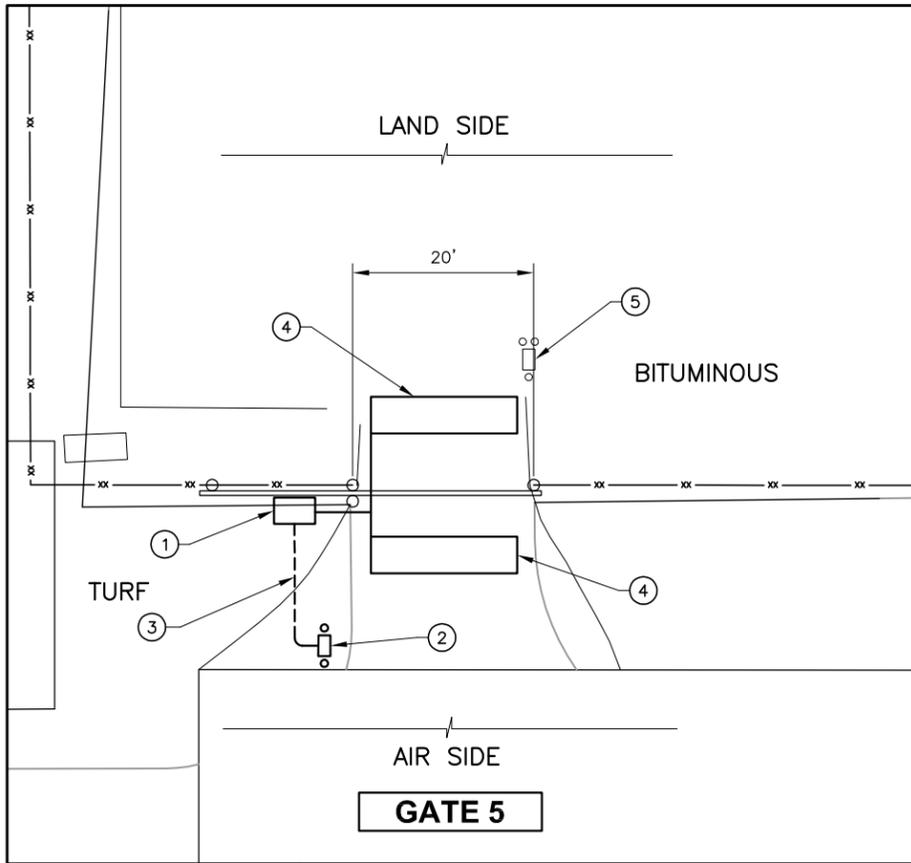
GATE #36: EXISTING 30A, 2P CIRCUIT BREAKER IN EXISTING PANELBOARD IN SAFETY BUILDING.

GATE #39: EXISTING 30A, 3P CIRCUIT BREAKER IN EXISTING PANELBOARD IN STANDARD AERO.

GATE #40: EXISTING 20A, 1P CIRCUIT BREAKER IN EXISTING PANELBOARD IN STANDARD AERO PAINT SHOP.

GATE #41: EXISTING 20A, 1P CIRCUIT BREAKER IN EXISTING PANELBOARD IN STANDARD AERO PAINT SHOP.





**NOTES:**

- ① DISCONNECT AND REMOVE EXISTING GATE OPERATOR. INSTALL NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1/2 HP, 120V, SINGLE PHASE, OR EQUIVALENT, SUITABLE FOR A MAXIMUM GATE WEIGHT OF 1200 LBS AND MAXIMUM GATE WIDTH OF 25 FEET. NEW GATE OPERATOR SHALL INCLUDE AN INTERNAL POWER DISCONNECT SWITCH. INSTALL NEW GATE OPERATOR ON EXISTING CONCRETE PAD. RECONNECT NEW GATE OPERATOR TO EXISTING POWER AND CONTROL WIRING AS NECESSARY. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.
- ② NEW PUSH TO EXIT PUSHBUTTON STATION MOUNTED ON GOOSENECK PEDESTAL, ILLUMINATED, MUSHROOM HEAD, NEMA 4X, AND PROTECTIVE BOLLARDS. LOCATE 15' FROM FENCE LINE. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ③ TWO #14 THWN (GATE OPEN CONTROL), TWO #14 THWN (24VAC POWER FOR ILLUMINATION) IN 1" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ④ NEW 16'x4' "SAFETY" DETECTOR LOOP. INSTALL IN SAWKERF AND NEW 1/2" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑤ EXISTING PROXIMITY CARD READER (AND PROTECTIVE BOLLARDS, IF SHOWN). CARD READER IS PART OF THE EXISTING AIRPORT ACCESS CONTROL SYSTEM AND SHALL REMAIN IN SERVICE. CONTRACTOR SHALL VERIFY WIRING METHODS AND CABLE ROUTING FROM CARD READER TO PROTECT AND MAINTAIN THE EXISTING CONDITIONS.
- ⑥ EXISTING CALL BOX. NOT USED. TO REMAIN.
- ⑦ DISCONNECT AND REMOVE EXISTING GATE OPERATOR. INSTALL NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 240V, 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. INSTALL NEW GATE OPERATOR ON EXISTING CONCRETE PAD. RECONNECT NEW GATE OPERATOR TO EXISTING POWER AND CONTROL WIRING AS NECESSARY. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.
- ⑧ EXISTING DISCONNECT SWITCH. TO REMAIN. RECONNECT NEW GATE OPERATOR 240V POWER WIRING TO THIS DISCONNECT.
- ⑨ EXISTING MINI-POWER CENTER. TO REMAIN.
- ⑩ EXISTING ACCESS CONTROL INTERFACE PANEL. TO REMAIN.
- ⑪ TWO NEW PUSH TO EXIT PUSHBUTTON STATIONS MOUNTED ON DUAL-HEIGHT GOOSENECK PEDESTAL, ILLUMINATED, MUSHROOM HEAD, NEMA 4X, AND PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL INFORMATION. LOCATE 15' FROM FENCE LINE. LOCATE FACE OF PUSHBUTTON ENCLOSURE NO CLOSER THAN 3 FEET FROM THE FRONT FACE OF THE STORAGE BINS EXTENDED.
- ⑫ NEW 22'x4' "SAFETY" DETECTOR LOOP. INSTALL IN SAWKERF AND NEW 1/2" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑬ NEW 10'x4' "SAFETY" DETECTOR LOOP. INSTALL IN SAWKERF AND NEW 1/2" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑭ EXISTING SWIPE CARD READER AND GOOSENECK TO BE RELOCATED TO NEW LOCATION. REMOVE EXISTING CONCRETE PIER FOUNDATION.
- ⑮ RELOCATED SWIPE CARD READER AND GOOSENECK ON NEW CONCRETE PIER FOUNDATION AND PROTECTIVE BOLLARDS. ADJUST CONCRETE PIER HEIGHT AS NEEDED TO PROVIDE 42" MOUNTING HEIGHT FOR SWIPE CARD READER.
- ⑯ EXISTING CALL BOX TO BE DISCONNECTED AND REMOVED. REMOVE CONCRETE PIER FOUNDATION.
- ⑰ 6-CONDUCTOR #18 SHIELDED CABLE IN 1" CONDUIT TO EXISTING ACCESS CONTROL INTERFACE PANEL. RECONNECT TO MATCH EXISTING CONDITIONS.
- ⑱ NEW YELLOW WARNING MARKING. MARKING SHALL BE 10' DIAMETER CIRCLE CENTERED AT THE PUSHBUTTON STATION. MARKING SHALL BE 6" WIDE WITH HATCH LINES AT 45 ANGLE FROM FENCE SPACED 2' APART. MARKING SHALL BE IN ACCORDANCE WITH ITEM 620 AND INCIDENTAL TO GATE.

**EXISTING GATE OPERATOR POWER SOURCES:**

ALL POWER SOURCES LISTED BELOW ARE FROM BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ALL POWER SOURCE LOCATIONS, VOLTAGES, PHASES AND AMPACITY PRIOR TO ORDERING GATES AND COMMENCING WORK ON GATE OPERATOR REPLACEMENT.

GATE #5: EXISTING 20A, 1P CIRCUIT BREAKER IN EXISTING PANELBOARD IN OLD STATE POLICE AREA IN TERMINAL BUILDING.

GATE #7: EXISTING 20A, 2P CIRCUIT BREAKER IN EXISTING MINI-POWER CENTER NEXT TO GATE #7.

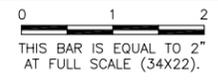
GATE #12: EXISTING 20A, 2P CIRCUIT BREAKER IN EXISTING MINI-POWER CENTER NEAR GATE #12.

GATE #14: EXISTING 20A, 2P CIRCUIT BREAKER IN EXISTING PANELBOARD "AA" IN MAINTENANCE BUILDING.

K:\Springfield\0803504\Draw\Sheets\Phase 3  
 FILE: PROPFENIMP-4.dwg  
 UPDATE BY: Chris Groth  
 PLOT DATE: 2/3/2011 1:53 PM  
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 SPI-BASE-1

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UPGRADE PERIMETER FENCE PHASE 3  
 PROPOSED ELECTRIC GATE IMPROVEMENTS 2



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JOB No:	08035-04-00
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0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).



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UPGRADE PERIMETER FENCE PHASE 3

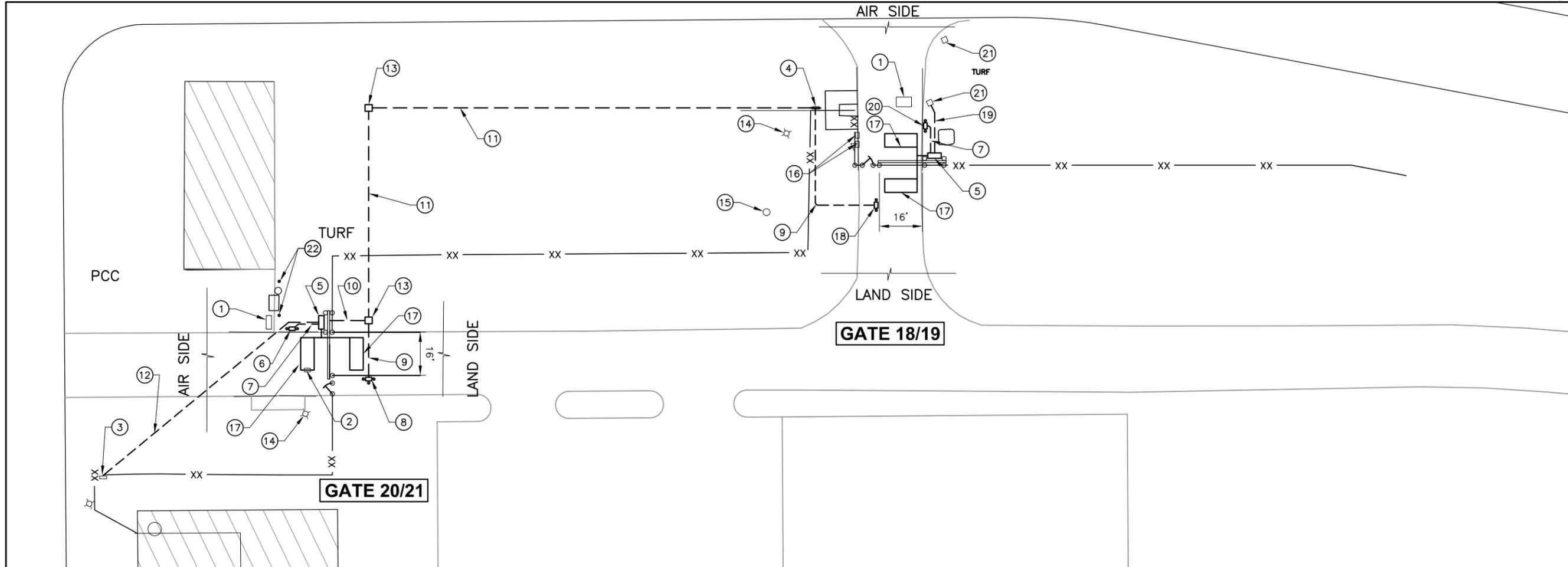
PROPOSED ELECTRIC GATE IMPROVEMENTS 3

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SHEET	17 OF 31 SHEETS

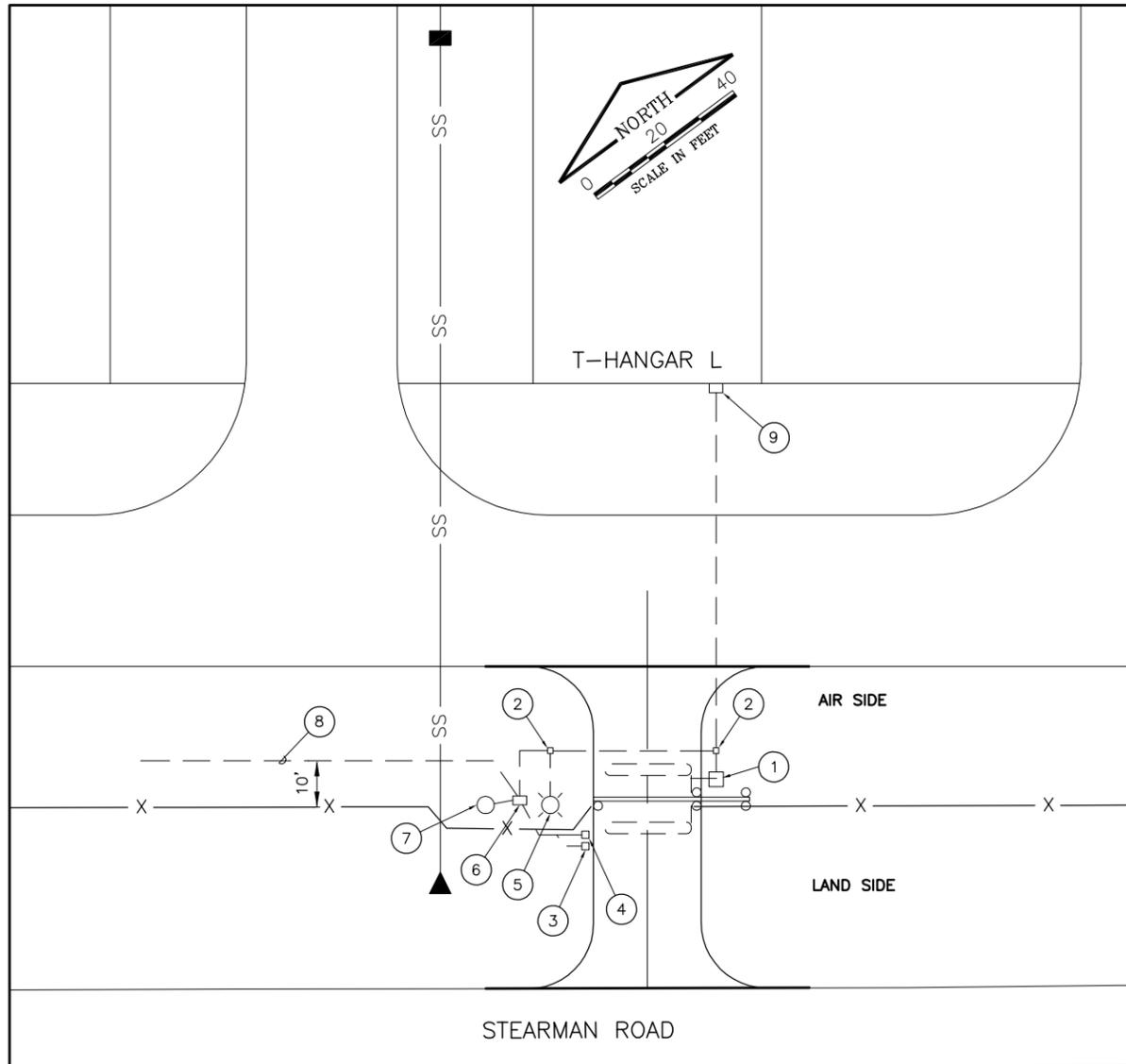


- ① DISCONNECT AND REMOVE EXISTING GATE OPERATOR AND FOUNDATION.
- ② EXISTING CARD READER GOOSENECK (CARD READER HAS BEEN REMOVED) AND PIER FOUNDATION TO BE REMOVED.
- ③ EXISTING PANELBOARD WITH 20A, 2P, 240V CIRCUIT BREAKER FOR GATE 20 OPERATOR. DISCONNECT AND REMOVE EXISTING GATE 20 POWER WIRING. NOTE: THIS PANELBOARD ALSO HAS 20A, 2P, 240V CIRCUIT BREAKER FOR GATE 18 POWER, WHICH IS TO REMAIN UNDISTURBED. SEE NOTE 19 FOR GATE 18 POWER WIRING MODIFICATIONS.
- ④ EXISTING ACCESS CONTROL INTERFACE PANEL. DISCONNECT AND REMOVE 6/C #18 SHIELDED CABLE TO EXISTING GATE GATE 18 & GATE 20 CARD READERS AND #14 THWN GATE OPEN CONTROL WIRING TO EXISTING GATE 20 OPERATOR. CONNECT NEW 6/C #18 SHIELDED CABLE FROM NEW GATE 18 & GATE 20 CARD READERS AND NEW #14 THWN GATE OPEN CONTROL WIRING FROM NEW GATE 20 OPERATOR TO MATCH EXISTING.
- ⑤ INSTALL NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 240V, 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. INSTALL NEW GATE OPERATOR ON NEW CONCRETE PAD. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.
- ⑥ TWO NEW PUSH TO EXIT PUSHBUTTON STATIONS MOUNTED ON DUAL-HEIGHT GOOSENECK PEDESTAL, ILLUMINATED, MUSHROOM HEAD, NEMA 4X, AND TWO PROTECTIVE BOLLARDS. LOCATE 15' FROM FENCE LINE. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑦ NEW TWO #14 THWN (GATE OPEN CONTROL), TWO #14 THWN (24VAC POWER FOR ILLUMINATION) IN 1" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑧ NEW PROXIMITY CARD READER, HID MAXI-PROX MODEL 5375, EXTENDED RANGE, WIEGAND PROTOCOL, OR EQUIVALENT, MOUNTED ON GOOSENECK PEDESTAL AND CONCRETE PIER FOUNDATION, AND THREE PROTECTIVE BOLLARDS. LOCATE 15' FROM FENCE LINE. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑨ NEW 6/C #18 SHIELDED CABLE IN 1" CONDUIT.
- ⑩ NEW TWO #14 THWN (GATE OPEN CONTROL) IN 1" CONDUIT TO NEW GATE OPERATOR.
- ⑪ NEW 6/C #18 SHIELDED CABLE (CARD READER SIGNAL) AND NEW TWO #14 THWN (GATE OPEN CONTROL) IN 1" CONDUIT TO EXISTING ACCESS CONTROL INTERFACE PANEL AT GATE 18.
- ⑫ NEW TWO #12 THWN (240V POWER), ONE #12 GROUND IN 1" CONDUIT TO EXISTING GATE 20 CIRCUIT BREAKER IN EXISTING PANELBOARD. DO NOT ROUTE CONDUIT CLOSER THAN 3 FEET TO DETECTOR LOOPS.
- ⑬ NEW POLYMER CONCRETE HANDHOLE, OPEN-BOTTOM DESIGN, QUAZITE/HUBBELL #PG-2436-BA-42 WITH #PG-2436-HH-00-17 COVER, LABELED "ELECTRICAL", OR EQUIVALENT.
- ⑭ EXISTING AREA LIGHT TO REMAIN IN SERVICE.
- ⑮ EXISTING SECURITY CAMERA TO REMAIN IN SERVICE.
- ⑯ EXISTING PROXIMITY CARD READER AND EXISTING CALL BOX. REMOVE CALL BOX. REMOVE EXISTING CONCRETE PIER FOUNDATIONS. EXISTING PROXIMITY CARD READER AND GOOSENECK TO BE RELOCATED TO NEW LOCATION AS INDICATED.
- ⑰ NEW 16'x4' "SAFETY" DETECTOR LOOP. INSTALL IN SAWKERF AND NEW 1/2" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ⑱ RELOCATED PROXIMITY CARD READER AND GOOSENECK ON NEW CONCRETE PIER FOUNDATION AND PROTECTIVE BOLLARDS. ADJUST CONCRETE PIER HEIGHT AS NEEDED TO PROVIDE 42" MOUNTING HEIGHT FOR PROXIMITY CARD READER.
- ⑲ NEW GATE POWER AND CONTROL WIRING: TWO #12 THWN (240V POWER), 2 #14 THWN (GATE OPEN CONTROL), ONE #12 GROUND IN 3/4" CONDUIT TO EXISTING HANDHOLE. SPLICE TO EXISTING POWER AND CONTROL WIRING IN EXISTING HANDHOLE. ALL SPLICES SHALL BE MADE USING TWIST-ON CONNECTORS PRE-FILLED WITH SILICONE-BASED SEALANT TO PROTECT AGAINST MOISTURE AND CORROSION. NOTE: ROUTE CONDUIT TO AVOID EXISTING CHARLIE WELLS MEMORIAL MONUMENT.
- ⑳ NEW PUSH TO EXIT PUSHBUTTON STATION MOUNTED ON GOOSENECK PEDESTAL, ILLUMINATED, MUSHROOM HEAD, NEMA 4X, AND PROTECTIVE BOLLARDS. LOCATE 15' FROM FENCE LINE. SEE DETAILS FOR ADDITIONAL INFORMATION.
- ㉑ EXISTING HANDHOLE.
- ㉒ INSTALL 2 ADDITIONAL BOLLARDS APPROXIMATELY 2' FROM EXISTING PAVEMENT AT LOCATIONS SHOWN. RESIDENT ENGINEER SHALL DETERMINE FINIAL LOCATION IN THE FIELD.

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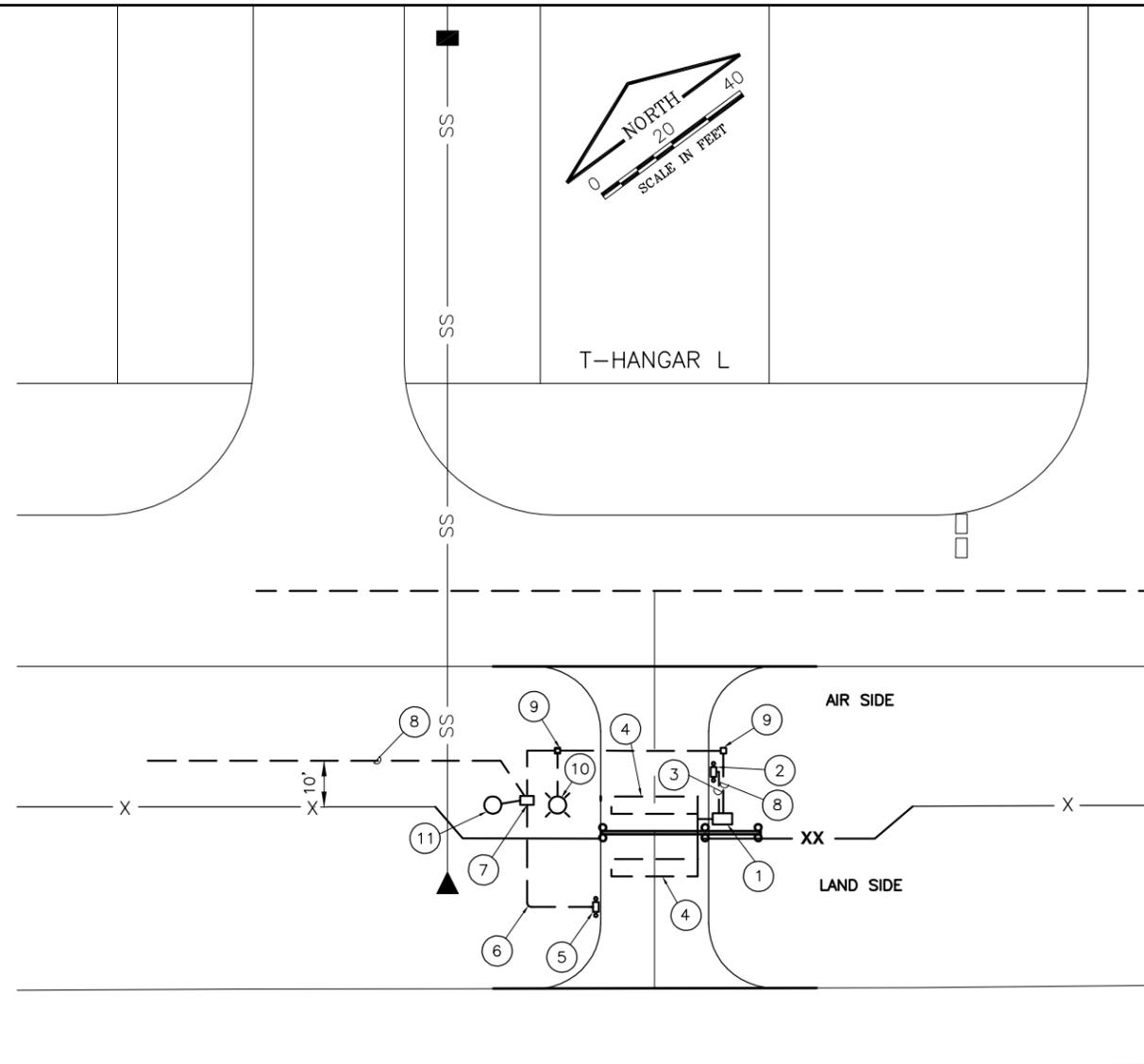
0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).



**GATE 44 - EXISTING**

**NOTES**

- 1 EXISTING GATE OPERATOR TO BE DISCONNECTED AND REMOVED.
- 2 EXISTING ELECTRICAL HANDHOLE TO REMAIN.
- 3 EXISTING PROXIMITY CARD READER AND GOOSENECK TO BE RELOCATED.
- 4 EXISTING CALL BOX TO BE DISCONNECTED AND REMOVED.
- 5 EXISTING AREA LIGHT TO REMAIN.
- 6 EXISTING ACCESS CONTROL INTERFACE PANEL TO REMAIN.
- 7 EXISTING SECURITY CAMERA TO REMAIN.
- 8 EXISTING FIBER OPTIC CABLE TO GATE 18 ACCESS CONTROL INTERFACE PANEL TO REMAIN.
- 9 EXISTING PANELBOARD WITH 20A, 2P, 240V CIRCUIT BREAKER FOR GATE #44 POWER TO REMAIN.



**GATE 44 - PROPOSED**

**NOTES**

- 1 NEW CANTILEVER SLIDE GATE MOTOR OPERATOR, CHAMBERLAIN LIFTMASTER MODEL SL 575, 1 HP, 240V, 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. INSTALL NEW GATE OPERATOR ON NEW CONCRETE PAD PER MANUFACTURER'S INSTRUCTIONS. SEE DETAILS FOR ADDITIONAL INFORMATION. NOTE: AN EARTH GROUND ROD IS REQUIRED, BUT NOT SHOWN.
- 2 NEW PUSH TO EXIT PUSHBUTTON STATION MOUNTED ON GOOSENECK PEDESTAL, ILLUMINATED, MUSHROOM HEAD, NEMA 4X, AND PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL INFORMATION.
- 3 TWO #14 THWN (GATE OPEN CONTROL), TWO #14 THWN (24VAC POWER FOR ILLUMINATION) IN 1" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- 4 NEW 20'x4' "SAFETY" DETECTOR LOOP. INSTALL IN SAWKERF AND NEW 1/2" CONDUIT TO NEW GATE OPERATOR. SEE DETAILS FOR ADDITIONAL INFORMATION.
- 5 RELOCATED PROXIMITY CARD READER MOUNTED ON GOOSENECK GOOSENECK, AND PROTECTIVE BOLLARDS. ADJUST CONCRETE PIER HEIGHT AS NEEDED TO PROVIDE 42" MOUNTING HEIGHT FOR SWIPE CARD READER.
- 6 NEW 6-CONDUCTOR #18 SHIELDED CABLE IN 1" CONDUIT TO EXISTING ACCESS CONTROL INTERFACE PANEL. RECONNECT TO MATCH EXISTING CONDITIONS.
- 7 EXISTING ACCESS CONTROL INTERFACE PANEL.
- 8 NEW GATE POWER AND CONTROL WIRING: TWO #12 THWN (240V POWER), 2 #14 THWN (GATE OPEN CONTROL), ONE #12 GROUND IN 3/4" CONDUIT TO EXISTING HANDHOLE. SPLICE TO EXISTING POWER AND CONTROL WIRING IN EXISTING HANDHOLE. ALL SPLICES SHALL BE MADE USING TWIST-ON CONNECTORS PRE-FILLED WITH SILICONE-BASED SEALANT TO PROTECT AGAINST MOISTURE AND CORROSION.
- 9 EXISTING HANDHOLE.
- 10 EXISTING AREA LIGHT.
- 11 EXISTING SECURITY CAMERA.

SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS  
 UPGRADE PERIMETER FENCE PHASE 3  
 PROPOSED ELECTRIC GATE IMPROVEMENTS 4



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CHECKED BY:	CBG
APPROVED BY:	RLV
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JOB No:	08035-04-00
IL PROJ. NO.	SPI-4088
AIP PROJ. NO.	3-17-0096-XX
SHEET	18 OF 31 SHEETS

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



**SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 PROPOSED GATE PLAN 1**

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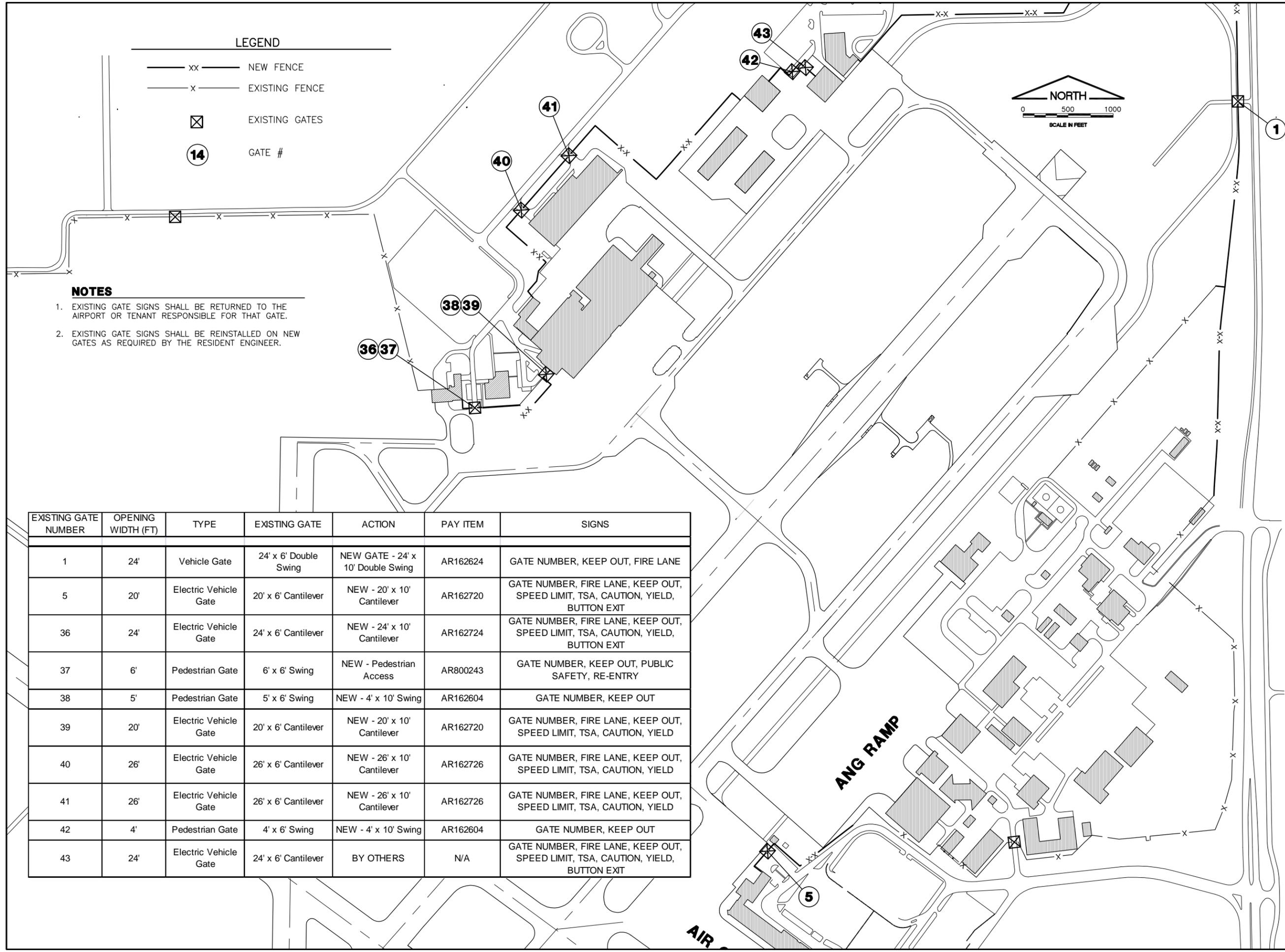
**LEGEND**

- xx — NEW FENCE
- x — EXISTING FENCE
- ⊠ EXISTING GATES
- ⑭ GATE #

**NOTES**

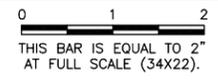
- EXISTING GATE SIGNS SHALL BE RETURNED TO THE AIRPORT OR TENANT RESPONSIBLE FOR THAT GATE.
- EXISTING GATE SIGNS SHALL BE REINSTALLED ON NEW GATES AS REQUIRED BY THE RESIDENT ENGINEER.

EXISTING GATE NUMBER	OPENING WIDTH (FT)	TYPE	EXISTING GATE	ACTION	PAY ITEM	SIGNS
1	24'	Vehicle Gate	24' x 6' Double Swing	NEW GATE - 24' x 10' Double Swing	AR162624	GATE NUMBER, KEEP OUT, FIRE LANE
5	20'	Electric Vehicle Gate	20' x 6' Cantilever	NEW - 20' x 10' Cantilever	AR162720	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
36	24'	Electric Vehicle Gate	24' x 6' Cantilever	NEW - 24' x 10' Cantilever	AR162724	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
37	6'	Pedestrian Gate	6' x 6' Swing	NEW - Pedestrian Access	AR800243	GATE NUMBER, KEEP OUT, PUBLIC SAFETY, RE-ENTRY
38	5'	Pedestrian Gate	5' x 6' Swing	NEW - 4' x 10' Swing	AR162604	GATE NUMBER, KEEP OUT
39	20'	Electric Vehicle Gate	20' x 6' Cantilever	NEW - 20' x 10' Cantilever	AR162720	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD
40	26'	Electric Vehicle Gate	26' x 6' Cantilever	NEW - 26' x 10' Cantilever	AR162726	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD
41	26'	Electric Vehicle Gate	26' x 6' Cantilever	NEW - 26' x 10' Cantilever	AR162726	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD
42	4'	Pedestrian Gate	4' x 6' Swing	NEW - 4' x 10' Swing	AR162604	GATE NUMBER, KEEP OUT
43	24'	Electric Vehicle Gate	24' x 6' Cantilever	BY OTHERS	N/A	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT



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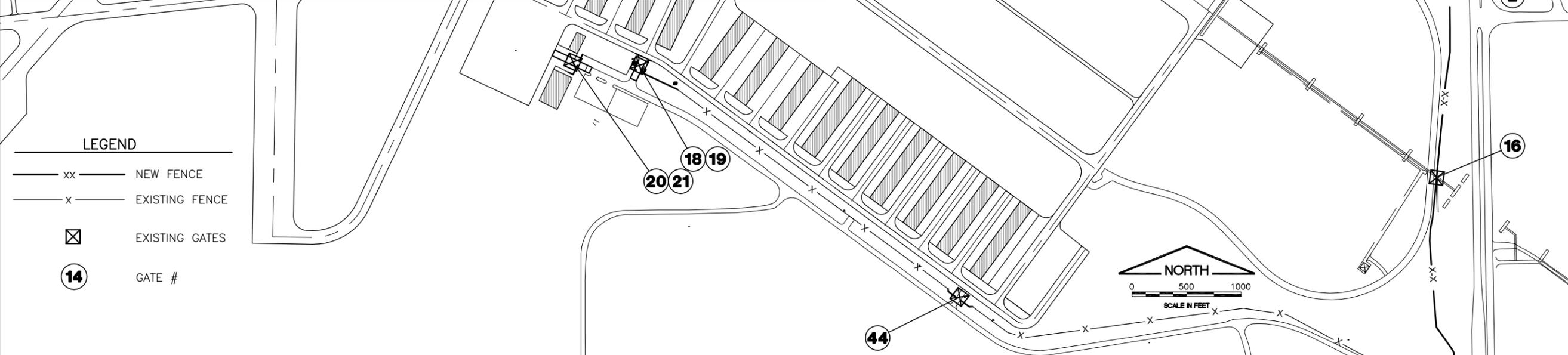


  
**SPRINGFIELD AIRPORT AUTHORITY**  
**ABRAHAM LINCOLN CAPITAL AIRPORT**  
**SPRINGFIELD, ILLINOIS**  
 UPGRADE PERIMETER FENCE PHASE 3  
**PROPOSED GATE PLAN 2**

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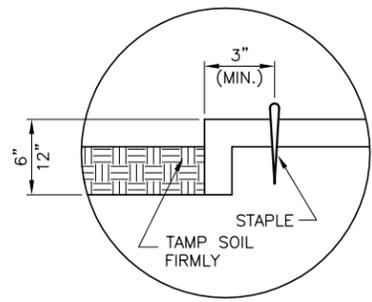
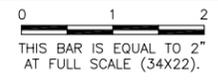
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SHEET	20 OF 31 SHEETS

EXISTING GATE NUMBER	OPENING WIDTH (FT)	TYPE	EXISTING GATE	ACTION	PAY ITEM	SIGNS
6	4'	Pedestrian Gate	4' x 6' Swing	Remove Gate	AR162905	None
7	20'	Electric Vehicle Gate	20' x 6' Cantilever	NEW - 20' x 10' Cantilever	AR162720	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
8	5'	Pedestrian Gate	5' x 6' Swing	NEW - Pedestrian Access	AR800243	GATE NUMBER, KEEP OUT, PUBLIC SAFETY, RE-ENTRY
9	4'	Pedestrian Gate	4' x 6' Swing	Remove Gate	AR162905	None
10	24'	Vehicle Gate	24' x 6' Double Swing	NEW - 24' x 10' Double Swing	AR162624	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD
11	4'	Pedestrian Gate	4' x 6' Swing	NEW - 4' x 10' Swing	AR162604	GATE NUMBER, KEEP OUT
12	12'	Electric Vehicle Gate	12' x 6' Cantilever	NEW - 14' x 10' Cantilever	AR162714	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
13	6'	Pedestrian Gate	6' x 6' Swing	NEW - 6' x 10' Swing	AR162606	GATE NUMBER, KEEP OUT, PUBLIC SAFETY
14	24'	Electric Vehicle Gate	24' x 6' Cantilever	NEW - 24' x 10' Cantilever	AR162724	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
15	24'	Vehicle Gate	24' x 6' Double Swing	NEW - 24' x 10' Double Swing	AR162624	GATE NUMBER, KEEP OUT, FIRE LANE
E	4'	Pedestrian Gate	4' x 6' Swing	NEW - 4x 10' Swing	AR162604	KEEP OUT
16	5'	Pedestrian Gate	5' x 6' Swing	NEW - 4' x 10' Swing	AR162604	GATE NUMBER, KEEP OUT
18	12'	Electric Vehicle Gate	12' x 11' Cantilever	NEW - 16' X 10' Cantilever	AR162716	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
19	5'	Pedestrian Gate	5' x 6' Swing	NEW - 4' x 10' Swing	AR162604	GATE NUMBER, KEEP OUT, PUBLIC SAFETY
20	14'	Electric Vehicle Gate	14' x 6' Cantilever	NEW - 16' x 10' Cantilever	AR162716	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT
21	5'	Pedestrian Gate	5' x 6' Swing	NEW - Pedestrian Access	AR800243	GATE NUMBER, KEEP OUT, PUBLIC SAFETY, RE-ENTRY
44	24'	Electric Vehicle Gate	24' x 7' Cantilever	NEW - 24' x 10' Cantilever	AR162724	GATE NUMBER, FIRE LANE, KEEP OUT, SPEED LIMIT, TSA, CAUTION, YIELD, BUTTON EXIT

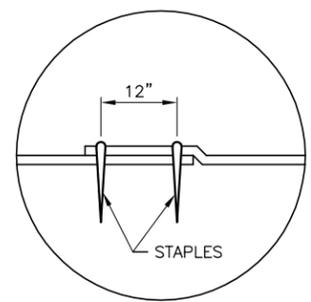


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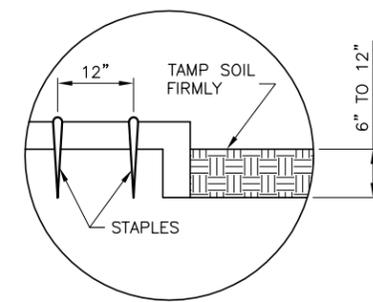
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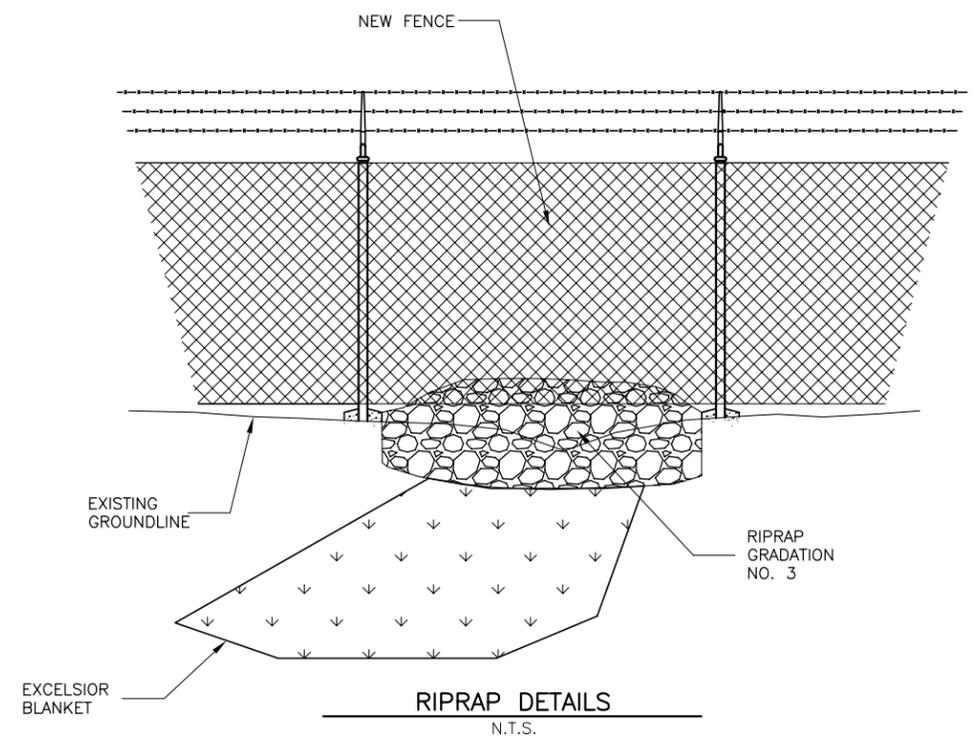
**DETAIL 1 - TERMINAL FOLD**



**DETAIL 2 - JUNCTION SLOT**



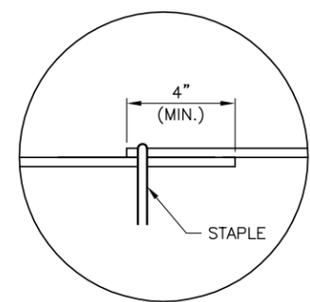
**DETAIL 3 - ANCHOR SLOT**



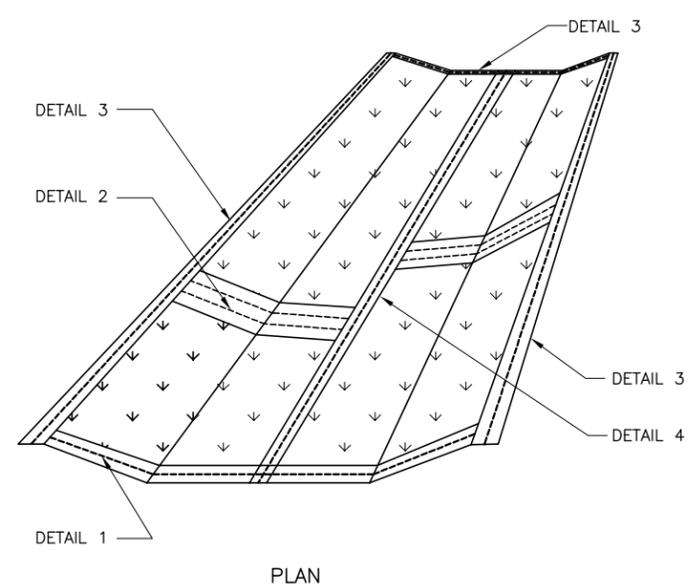
**RIPRAP DETAILS**  
N.T.S.

**RIPRAP DETAIL NOTES**

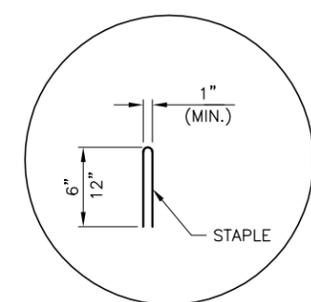
1. PLACE RIPRAP IN DRAINAGE AREAS AS DIRECTED BY THE ENGINEER.
2. INSTALL EXCELSIOR BLANKET IN AREAS THAT SHOW SIGNS OF EROSION AS DIRECTED BY ENGINEER.
3. RIPRAP IS ASSUMED TO BE 18" WIDE BY 18" TALL WHEN PLACED AGAINST THE FENCE FABRIC.
4. CONTRACTOR MAY INSTALL THE RIPRAP ALONG THE FENCE WITHOUT THE USE OF FILTER FABRIC WHERE APPROVED BY THE RESIDENT ENGINEER.



**DETAIL 4 - LAP JOINT**



**PLAN**



**DETAIL 5 - STAPLE DETAIL**

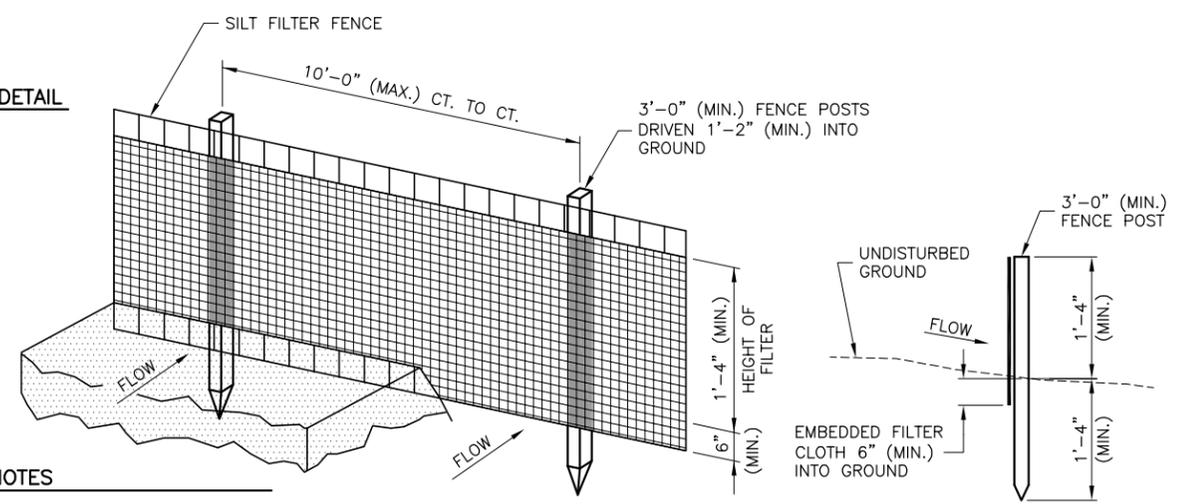
**EXCELSIOR BLANKET NOTES**

1. 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.
3. ALL TERMINALS ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

**EXCELSIOR BLANKET DETAILS**  
N.T.S.

**SILT FENCE DETAIL NOTES**

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 2'-0" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" MINIMUM AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. MAINTENANCE, WHICH INCLUDES THE REPLACEMENT OF DAMAGED FENCE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE EROSION CONTROL FENCE.



**PERSPECTIVE VIEW**

**SECTION**

**SILT FENCE DETAIL**  
N.T.S.



**SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 EROSION CONTROL DETAILS**

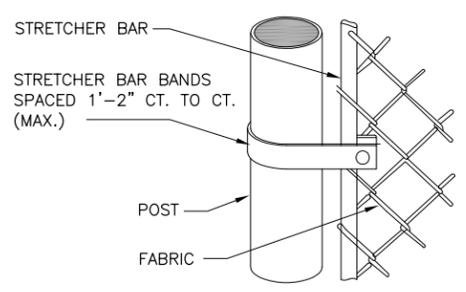
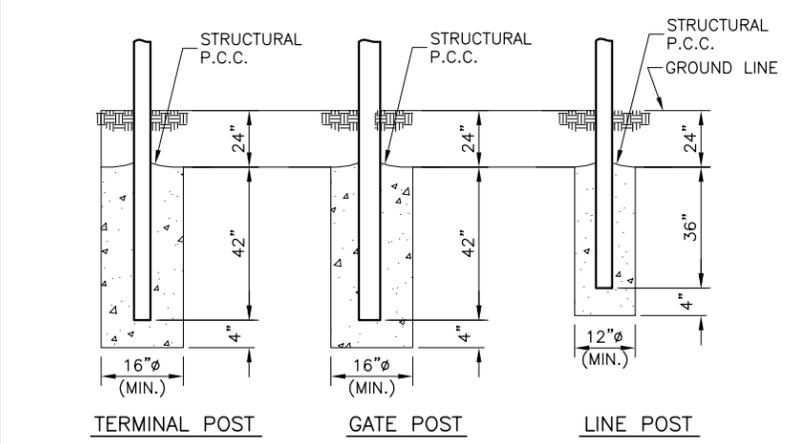
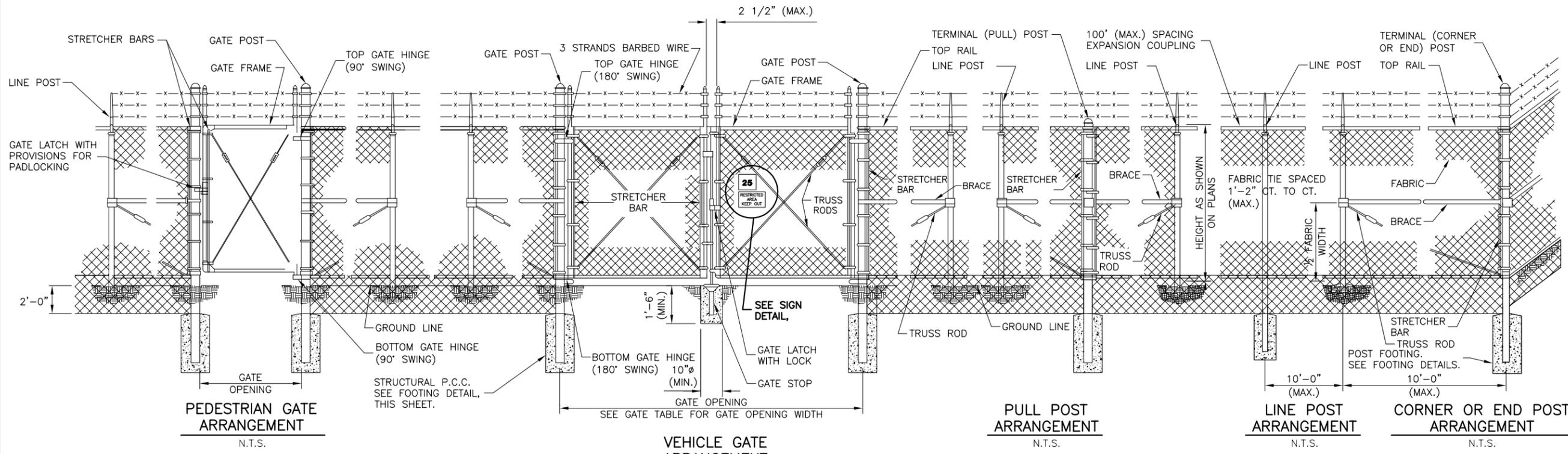
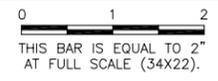
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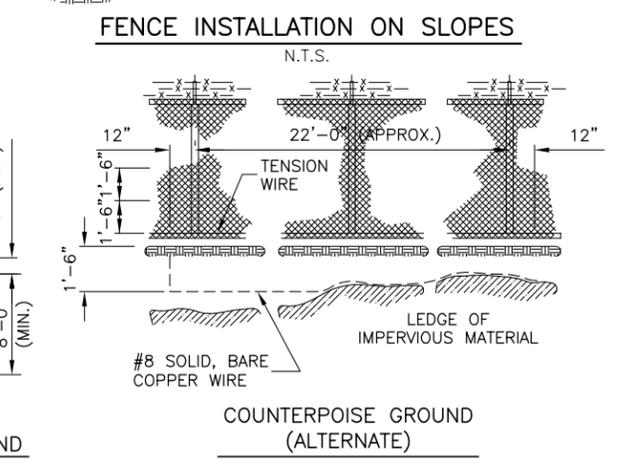
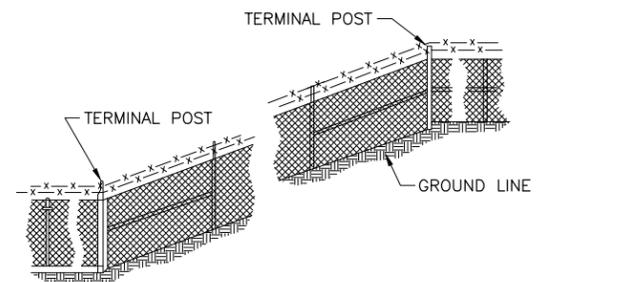
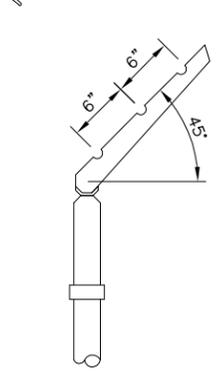
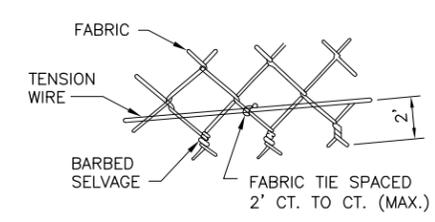
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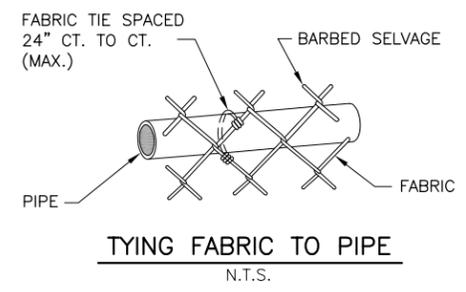
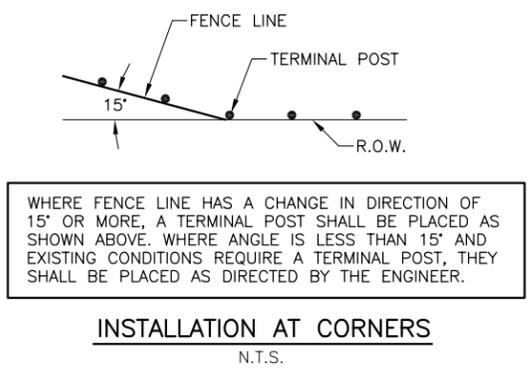
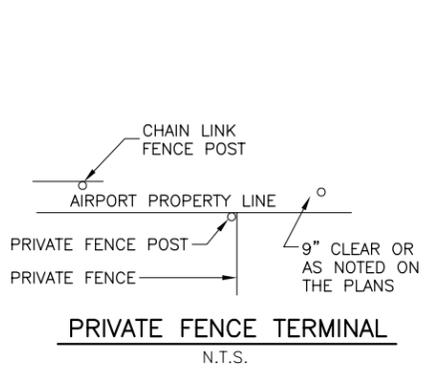
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PULL POSTS SHALL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER. THEY SHALL BE PLACED AT 500 FT. INTERVALS BETWEEN POSTS TO WHICH THE ENDS OF THE FABRIC ARE CLAMPED OR MIDWAY BETWEEN SUCH POSTS WHEN THE DISTANCE IS LESS THAN 1000 FT. AND GREATER THAN 500 FT.



POST TYPE	FENCE POST SHAPE, SIZE AND WEIGHT					
	FENCE POST MATERIAL					
	ROUND STEEL PIPE SCH. 40		ROUND STEEL PIPE SS 40		ROLL FORMED C SECTION	
CORNER, END, PULL	4.0" O.D.	9.11 LB/FT	4.0" O.D.	6.57 LB/LF	3.25" X 2.5"	4.50 LB/FT
LINE POST	3.5" O.D.	5.79 LB/FT	3.5" O.D.	5.71 LB/LF	3.25" X 2.5"	4.50 LB/FT
TOP RAIL	1.66" O.D.	2.77 LB/FT	1.66" O.D.	1.84 LF/LF	1.625" X 1.25"	1.35 LB/FT
GATE POST	6.25" O.D.	18.97 LB/FT	N/A	N/A	N/A	N/A



- NOTES**
1. CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 500 FT. EXCEPT THERE SHALL BE A GROUND NOT EXCEEDING 100 FT. FROM GATE IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE.
  2. FENCE UNDER POWER LINES SHALL BE GROUNDED BY 3 GROUNDS, ONE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE 25 TO 50 FT. AWAY. A SINGLE GROUND SHALL BE LOCATED DIRECTLY UNDER EACH TELEPHONE WIRE OR CABLE CROSSINGS.
  3. THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF IMPERVIOUS EARTH STRUCTURES.
  4. THE GROUND WIRE SHALL BE CONNECTED TO THE FABRIC AND THE GROUND ROD BY A MECHANICAL CLAMP OF CAST BRONZE BODY AND BRONZE OR STAINLESS STEEL BOLTS AND WASHERS. WHEN A TENSION WIRE IS REQUIRED, THE BOTTOM CONNECTION OF THE GROUND WIRE SHALL BE MADE TO THE TENSION WIRE.
  5. ALL PROPOSED CLASS E FENCE SHALL MEET THE REQUIREMENTS OF IDOT STANDARD 664001-01 WHERE APPLICABLE.



SPRINGFIELD AIRPORT AUTHORITY  
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 SPRINGFIELD, ILLINOIS

UPGRADE PERIMETER FENCE PHASE 3  
 FENCE DETAIL 1  
 BURIED FENCE

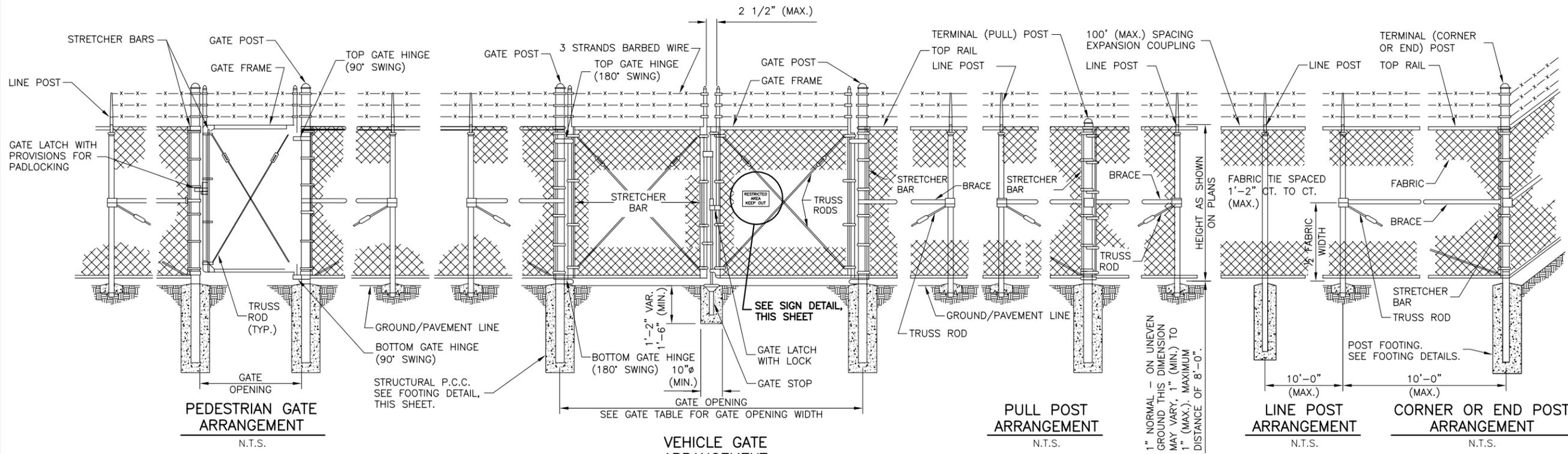
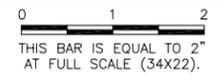
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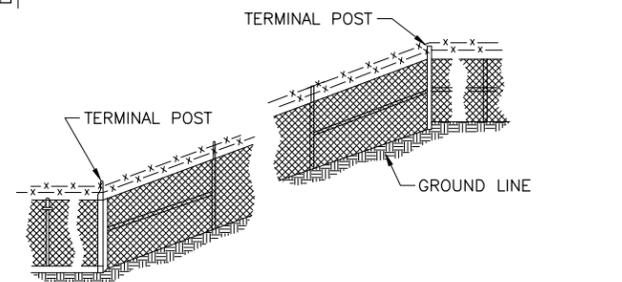
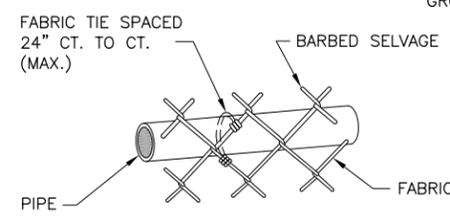
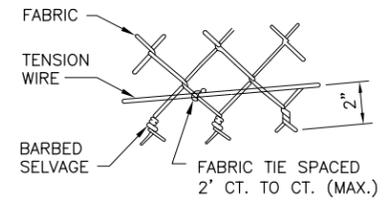
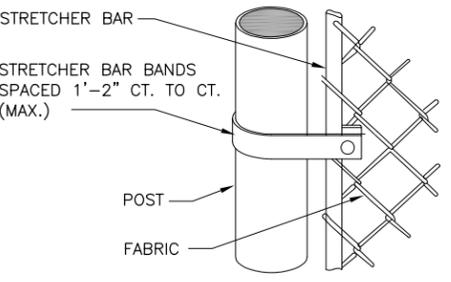
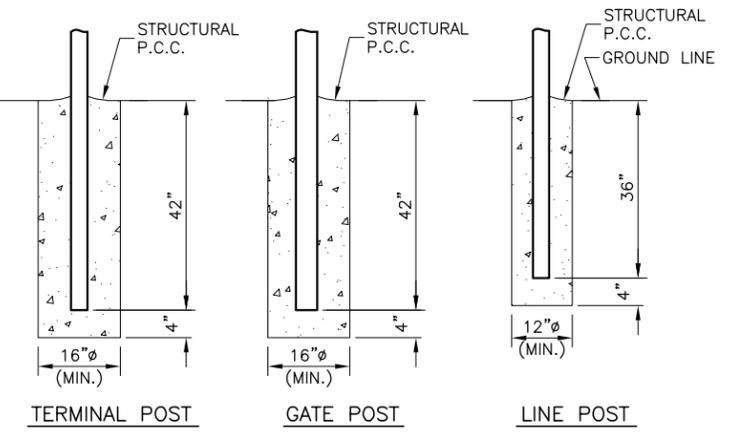
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SHEET	22 OF 31 SHEETS

**CA011**

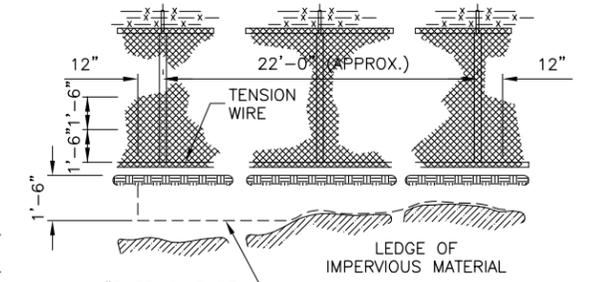
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PULL POSTS SHALL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER. THEY SHALL BE PLACED AT 500 FT. INTERVALS BETWEEN POSTS TO WHICH THE ENDS OF THE FABRIC ARE CLAMPED OR MIDWAY BETWEEN SUCH POSTS WHEN THE DISTANCE IS LESS THAN 1000 FT. AND GREATER THAN 500 FT.



**FENCE INSTALLATION ON SLOPES**  
N.T.S.

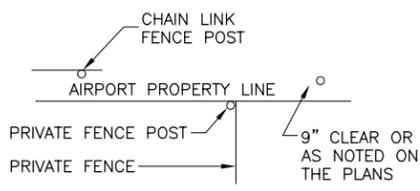


**COUNTERPOISE GROUND (ALTERNATE)**

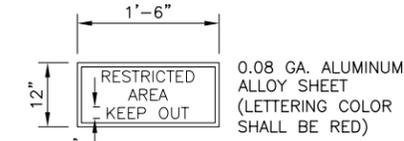
**PROTECTIVE ELECTRICAL GROUND DETAILS**  
N.T.S.

WHERE FENCE LINE HAS A CHANGE IN DIRECTION OF 15° OR MORE, A TERMINAL POST SHALL BE PLACED AS SHOWN ABOVE. WHERE ANGLE IS LESS THAN 15° AND EXISTING CONDITIONS REQUIRE A TERMINAL POST, THEY SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

**INSTALLATION AT CORNERS**  
N.T.S.



**PRIVATE FENCE TERMINAL**  
N.T.S.



EACH GATE SHALL REQUIRE TWO SIGNS. EVERY 100' OF FENCE SHALL REQUIRE ONE SIGN. EVERY STRAIGHT SECTION OF FENCE SHALL REQUIRE MINIMUM ONE SIGN.

**SIGN DETAIL**  
N.T.S.

- NOTES**
1. CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 500 FT. EXCEPT THERE SHALL BE A GROUND NOT EXCEEDING 100 FT. FROM GATE IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE.
  2. FENCE UNDER POWER LINES SHALL BE GROUNDED BY 3 GROUNDS, ONE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE 25 TO 50 FT. AWAY. A SINGLE GROUND SHALL BE LOCATED DIRECTLY UNDER EACH TELEPHONE WIRE OR CABLE CROSSINGS.
  3. THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF IMPERVIOUS EARTH STRUCTURES.
  4. THE GROUND WIRE SHALL BE CONNECTED TO THE FABRIC AND THE GROUND ROD BY A MECHANICAL CLAMP OF CAST BRONZE BODY AND BRONZE OR STAINLESS STEEL BOLTS AND WASHERS. WHEN A TENSION WIRE IS REQUIRED, THE BOTTOM CONNECTION OF THE GROUND WIRE SHALL BE MADE TO THE TENSION WIRE.
  5. ALL PROPOSED CLASS E FENCE SHALL MEET THE REQUIREMENTS OF IDOT STANDARD 664001-01.

**BARBED WIRE ARM ON LINE POST**  
N.T.S.



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**UPGRADE PERIMETER FENCE PHASE 3  
 FENCE DETAIL 2**

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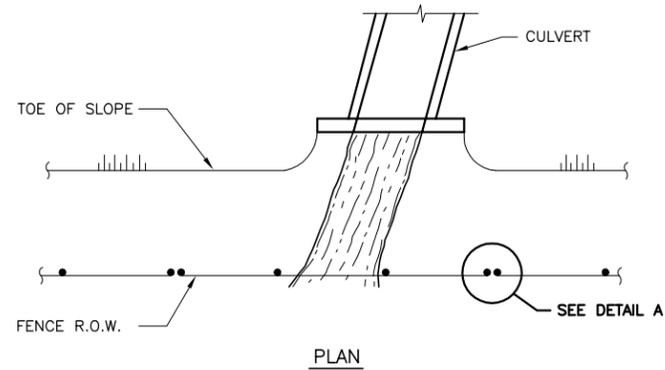


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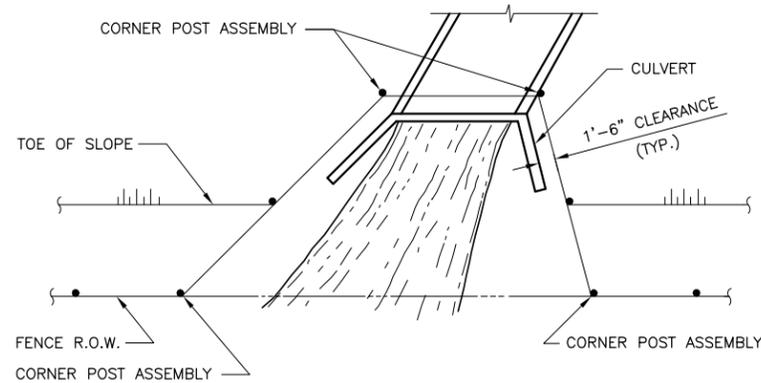
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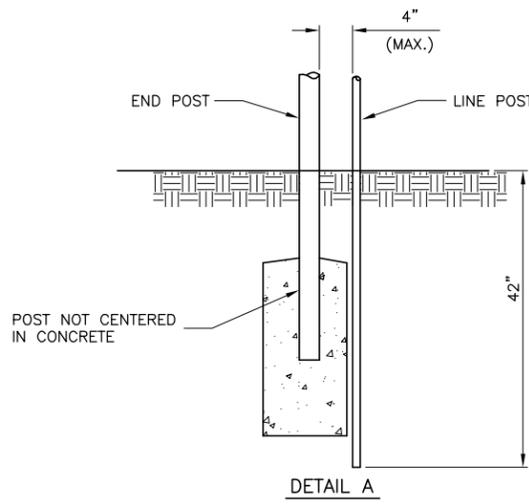
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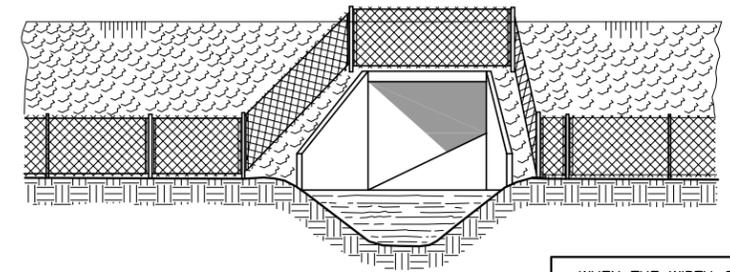
PLAN



PLAN



DETAIL A

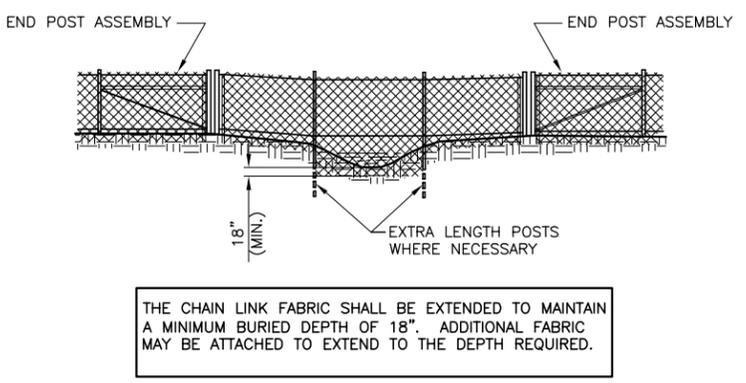


ELEVATION

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.

**FENCE INSTALLATION AROUND HEADWALL DETAILS**

N.T.S.

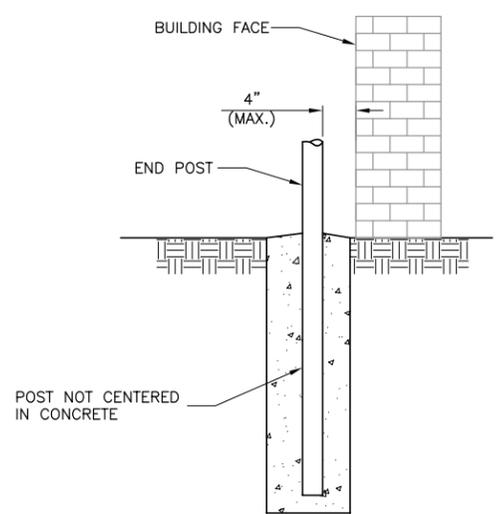


ELEVATION

THE CHAIN LINK FABRIC SHALL BE EXTENDED TO MAINTAIN A MINIMUM BURIED DEPTH OF 18". ADDITIONAL FABRIC MAY BE ATTACHED TO EXTEND TO THE DEPTH REQUIRED.

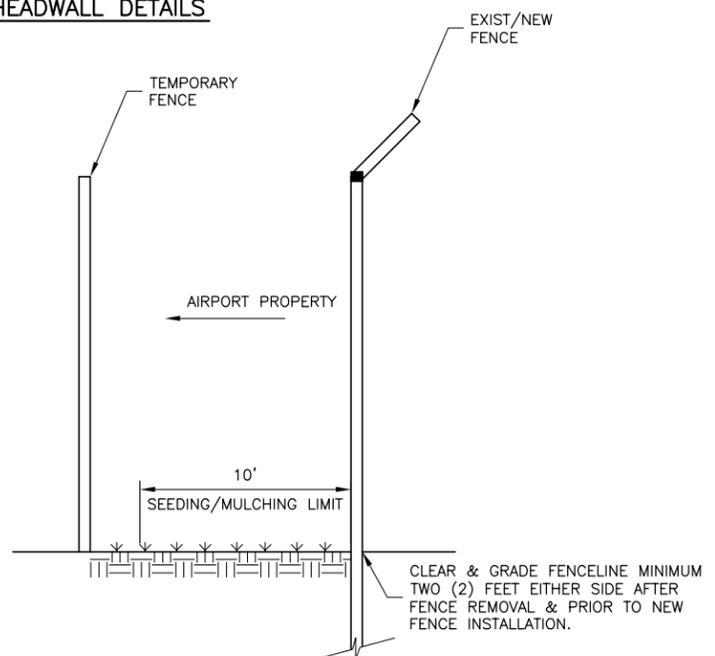
**FENCE INSTALLATION OVER STREAM OR SWALES DETAILS**

N.T.S.



**FENCE INSTALLATION AT BUILDING FACE**

N.T.S.



**TEMPORARY FENCING - TYPICAL SECTION**

NTS



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 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

UPGRADE PERIMETER FENCE PHASE 3  
 FENCE DETAIL 3

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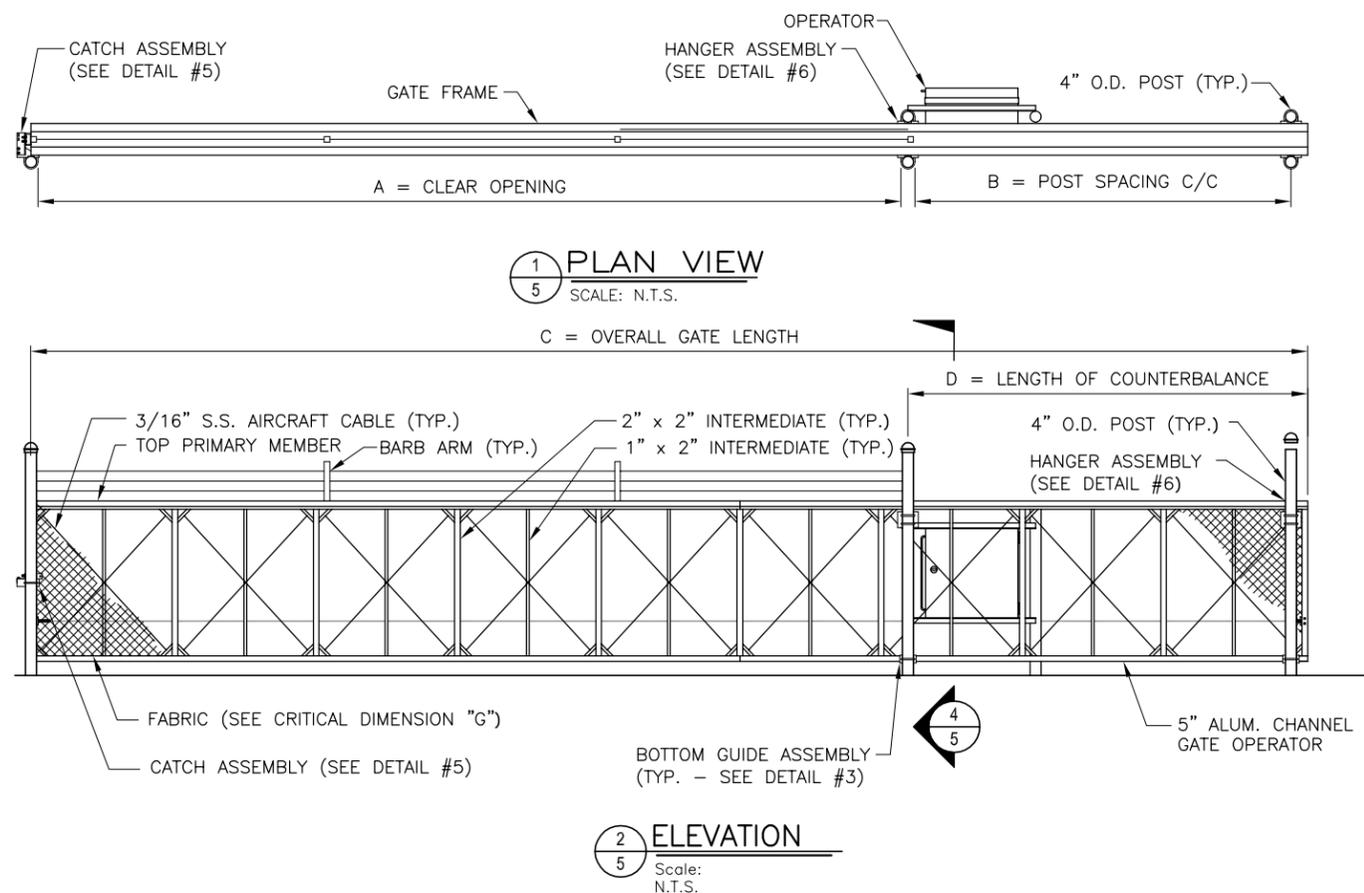


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UPGRADE PERIMETER FENCE PHASE 3  
 ELECTRIC GATE DETAIL 1

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CANTILEVER SLIDE GATE CRITICAL DIMENSION CHART						
		14' GATE	16' GATE	20' GATE	24' GATE	26' GATE
A	CLEAR OPENING	14'-0"	16'-0"	20'-0"	24'-0"	26'-0"
B	COUNTERBALANCE POST SPACING C/C	6'-1"	7'-1"	9'-1"	11'-1"	12'-1"
C	OVERALL GATE LENGTH	21'-0"	24'-0"	30'-0"	36'-0"	39'-0"
D	COUNTERBALANCE LENGTH	7'-0"	8'-0"	10'-0"	12'-0"	13'-0"
E	NOMINAL GATE HEIGHT	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
F	POST HEIGHT	11'-6"	11'-6"	11'-6"	11'-6"	11'-6"
G	FABRIC HEIGHT	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"



WARNING SIGN DETAIL

UL 235 COMPLIANCE NOTES

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

1. 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 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.
3. A WARNING SIGN (SEE DETAIL, THIS SHEET) MUST BE AFFIXED TO BOTH SIDES OF THE SLIDE GATE.

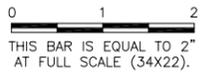
NOTES

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.
2. 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.
6. 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.

**CA011**

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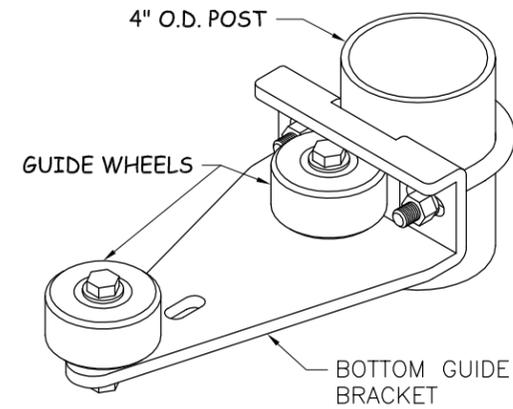
UPGRADE PERIMETER FENCE PHASE 3

ELECTRIC GATE DETAIL 2

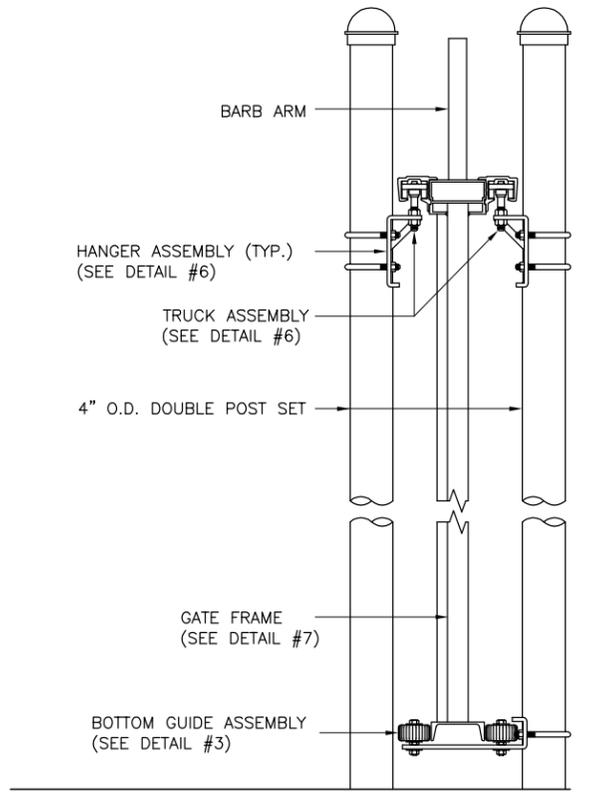
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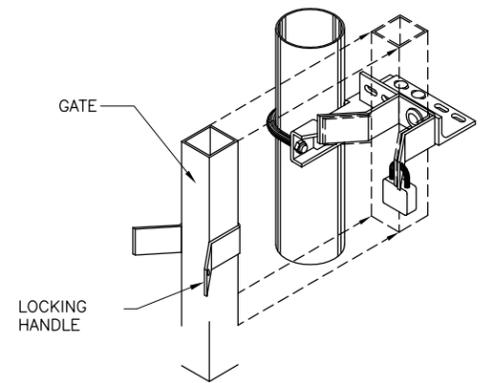
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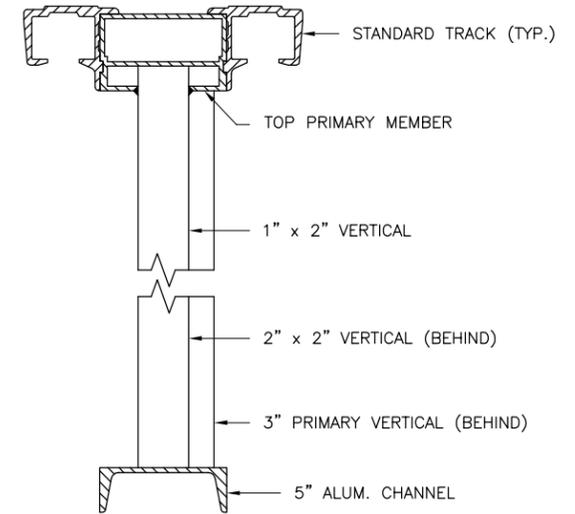
**3**  
**5** BOTTOM GUIDE  
N.T.S.



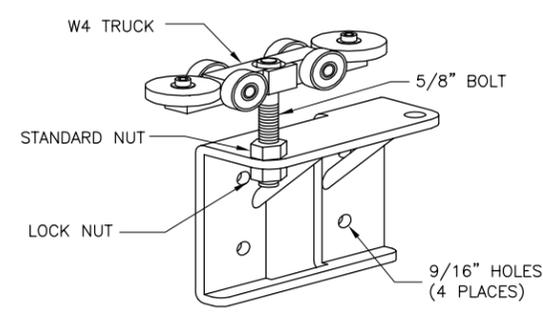
**4**  
**5** ASSEMBLY SECTION  
N.T.S.



**5**  
**5** CATCH ASSEMBLY  
N.T.S.

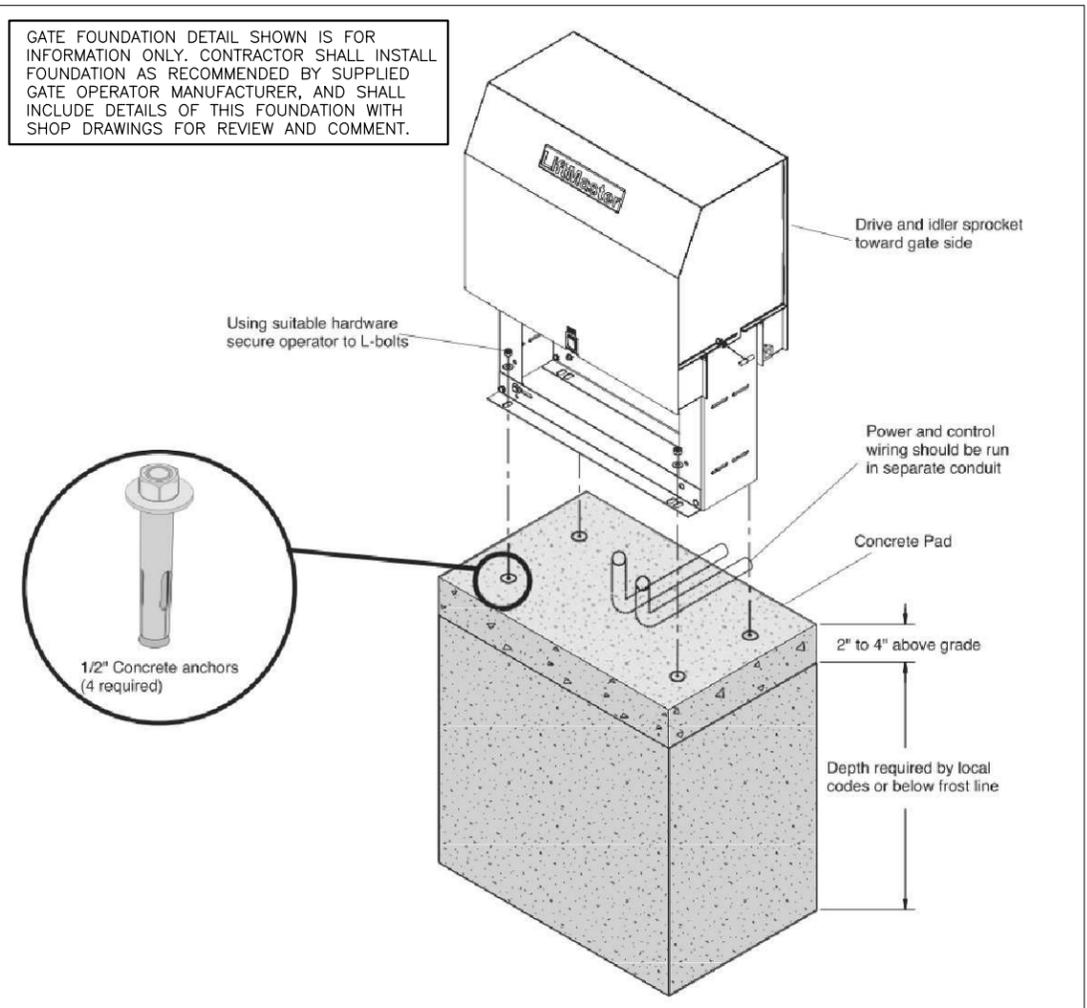


**7**  
**5** GATE FRAME SECTION  
N.T.S.



**6**  
**5** GATE HANGER ASSEMBLY  
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

**CA011**

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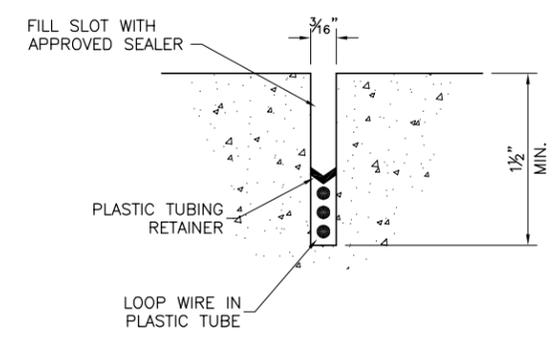
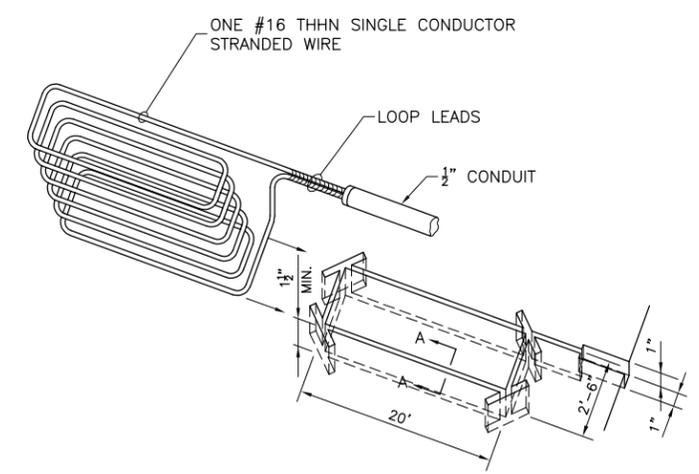
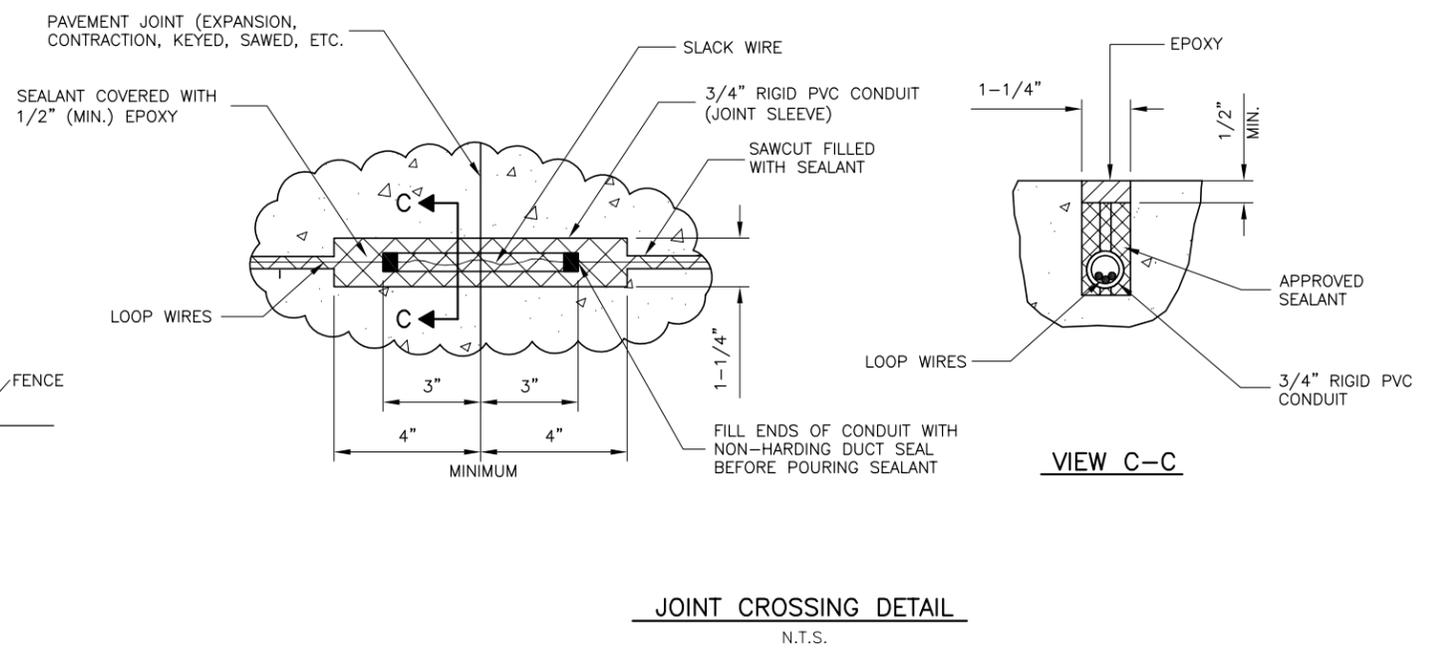
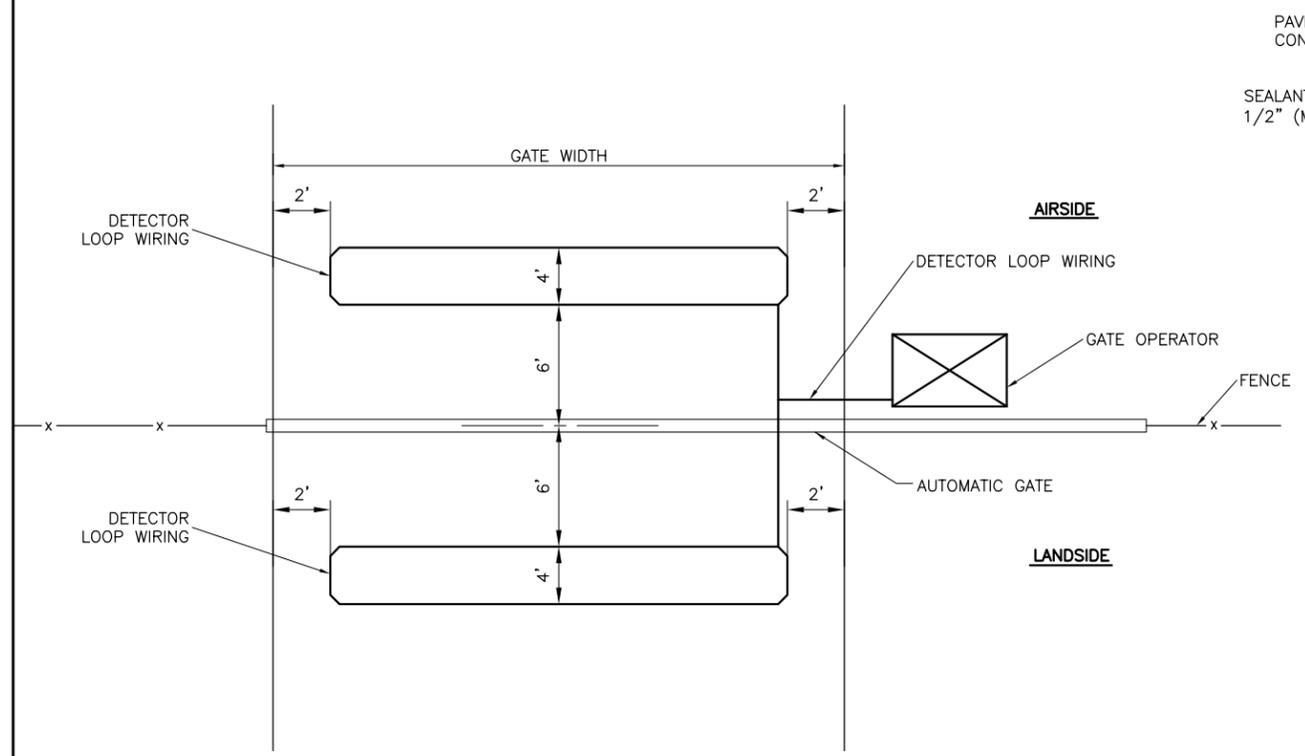
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 THIS BAR IS EQUAL TO 2"  
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UPGRADE PERIMETER FENCE PHASE 3  
 ELECTRIC GATE DETAIL 3

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

**NOTES**

1. LOOP LEADS ARE LIMITED TO 100 FEET.
2. LOOP LEADS MUST HAVE FOUR (4) TWISTS PER FOOT.
3. LOOP AND LOOP LEADS MUST BE LOCATED, AT LEAST, 18" FROM ANY ELECTRICAL POWER SERVICE OR STEEL REINFORCEMENT.
4. LOOP LEADS MUST BE IN SEPARATE CONDUIT BETWEEN LOOP AND DETECTOR. THEY MUST NOT SHARE CONDUIT WITH OTHER WIRING OR LEADS FROM OTHER LOOPS.
5. WIRE SHALL BE #16 THHN SINGLE CONDUCTOR STRANDED WIRE.
6. ALL WIRE SHALL BE CONTINUOUS WITHOUT SPLICING.

**CAUTION:**

- DO NOT SPLICE WIRE.
- DO NOT FRACTURE WIRE INSULATION. LOOPS SHORTED TO GROUND WILL CAUSE DETECTOR MALFUNCTION. WHEN PLACING WIRE IN THE SLOT. DO NOT USE SCREWDRIVER OR OTHER SHARP TOOLS.

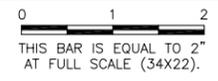
**TYPICAL LAYOUT FOR LOOP:**

- SAW SLOT 3/16" WIDE x 1-1/2" DEEP. MAKE RECTANGULAR SHAPE TO SPECIFIED LOOP DIMENSIONS PLUS SLOT FOR LEAD CONDUIT.
- GROUT WITH NO. 202 WEATHERBAN SEALANT (A PRODUCT OF 3M CO.) OR APPROVED EQUIVALENT ... (EXAMPLE: DE WITTS NO. 99 BLACK MASTIC CAULK).

**DETECTOR LOOP DETAILS**  
 N.T.S.

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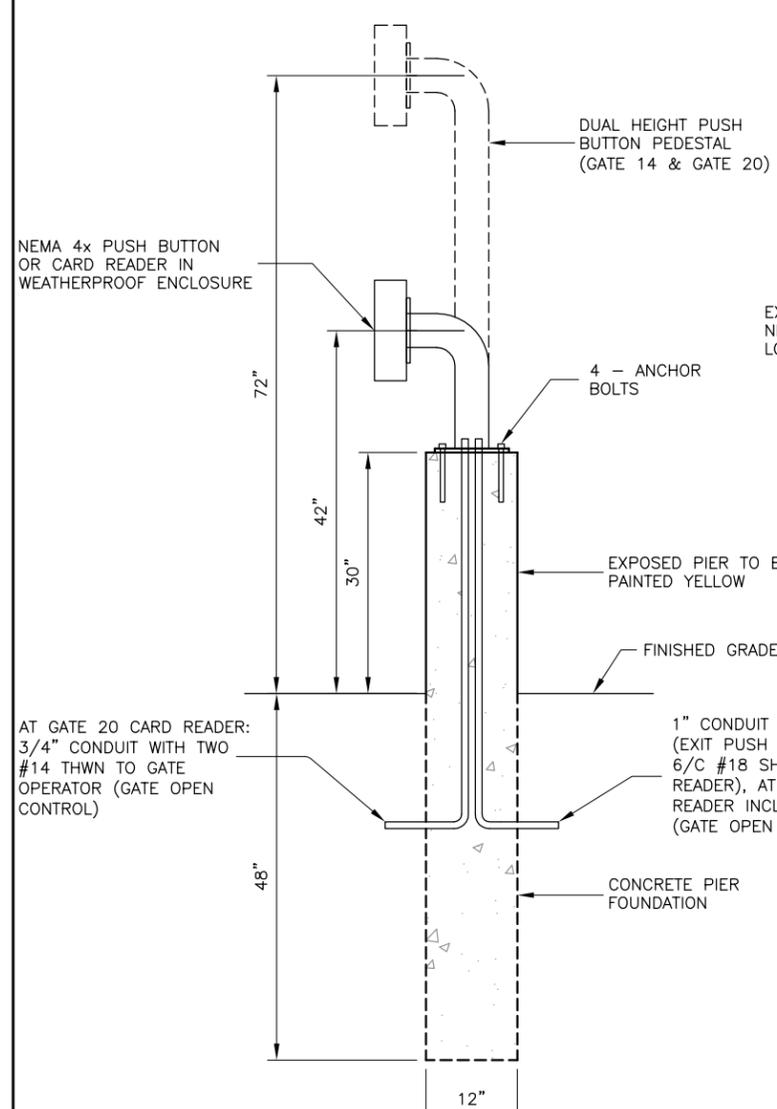


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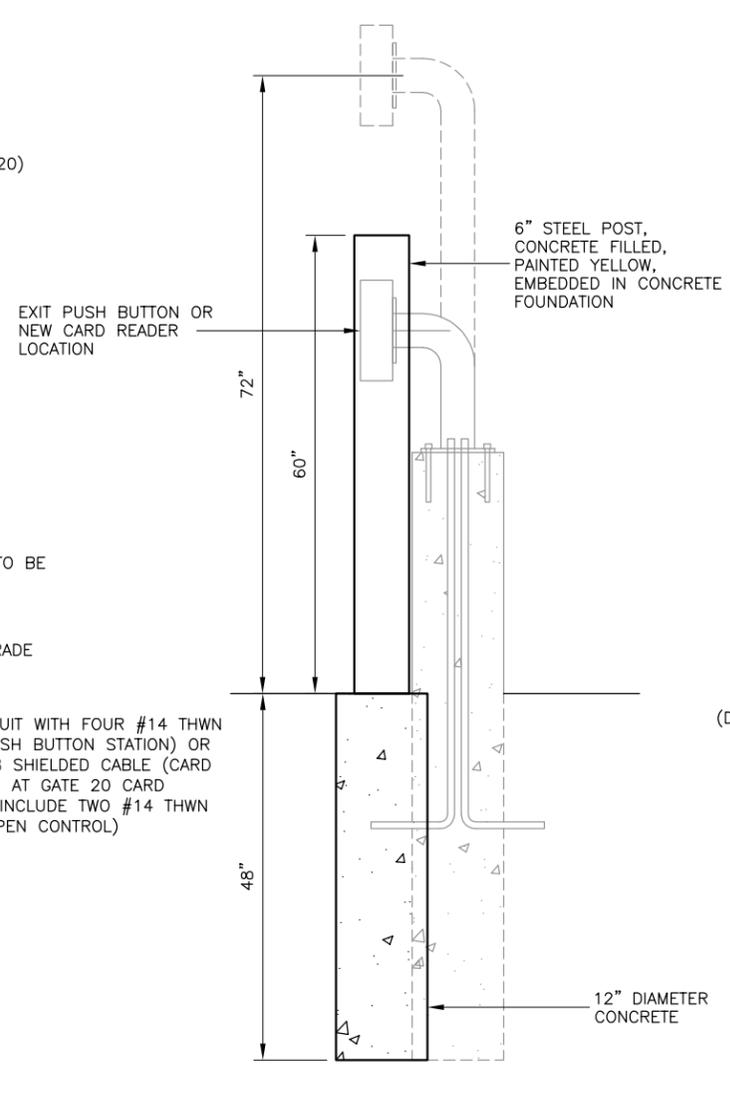
UPGRADE PERIMETER FENCE PHASE 3  
 ELECTRIC GATE DETAIL 4

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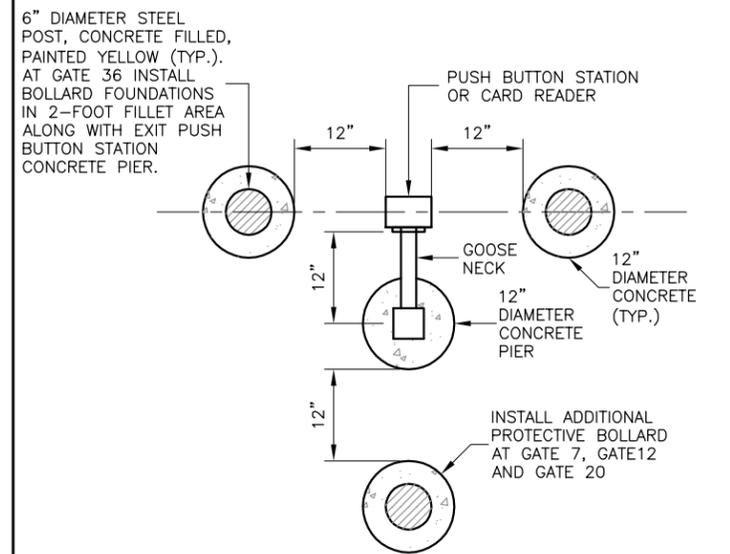
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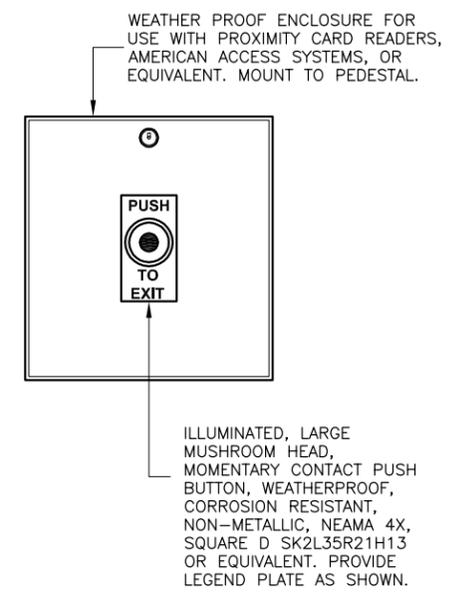
**EXIT PUSH BUTTON STATION OR CARD READER ELEVATION PEDESTAL**  
 NTS



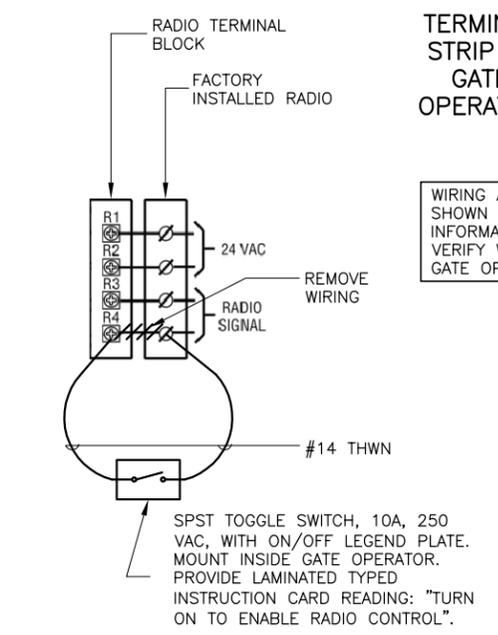
**PROTECTIVE BOLLARD ELEVATION**  
 NTS



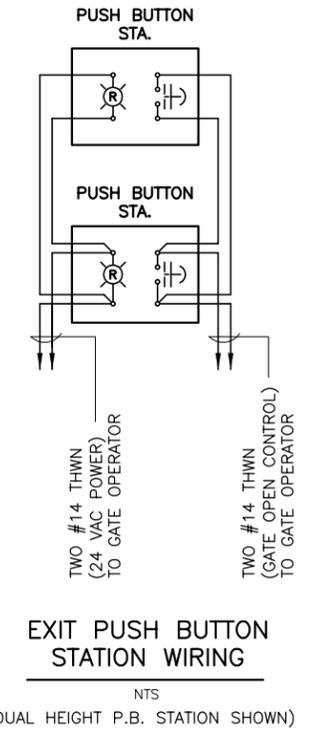
**NEW EXIT PUSH BUTTON STATION OR NEW/RELOCATED CARD READER PLAN**  
 NTS



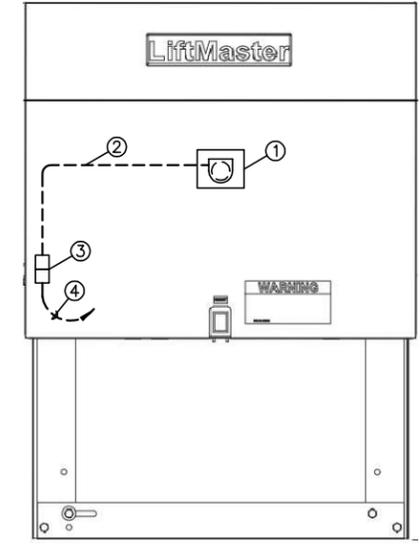
**EXIT P.B. STATION DETAIL**  
 NTS



**RADIO CONTROL ENABLE WIRING**  
 NTS



**EXIT PUSH BUTTON STATION WIRING**  
 NTS  
 (DUAL HEIGHT P.B. STATION SHOWN)

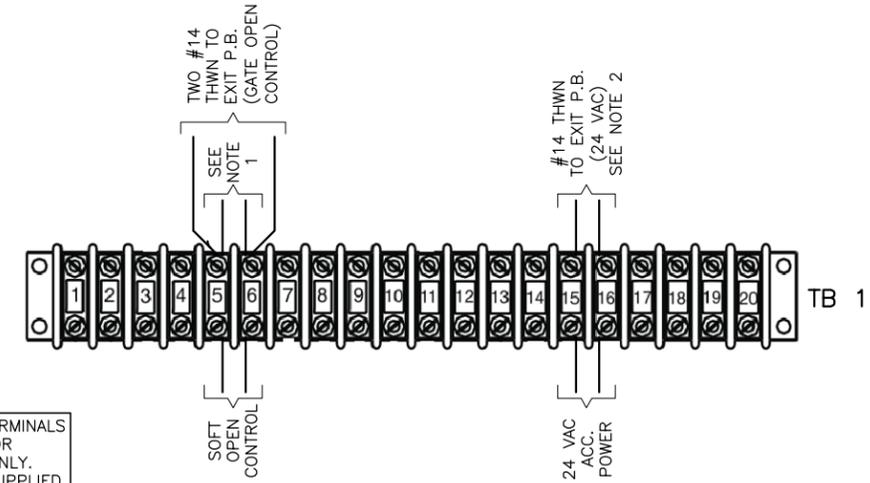


**EXIT P.B. STATION AT GATE 40 AND GATE 41**  
 NTS

**GATE 40 & GATE 41 EXIT PUSHBUTTON NOTES**

- NON-ILLUMINATED, MOMENTARY-CONTACT PUSHBUTTON, WEATHERPROOF, CORROSION-RESISTANT, NON-METALLIC, NEMA 4X, SQUARE D SKR3RH13, WITH TYPE K60 HINGED COVER ATTACHMENT AND TYPE KN799RP LEGEND PLATE, READING "EXIT", OR EQUIVALENT. MOUNT ON OPERATOR COVER.
- TWO #14 THWN. NEATLY TRAIN AND TIE-WRAP WIRING, ATTACHING TO INSIDE OF OPERATOR COVER AS NEEDED.
- QUICK-DISCONNECT. TO PERMIT REMOVAL OF GATE OPERATOR COVER.
- TWO #14 THWN TO GATE "OPEN" INPUT ON GATE OPERATOR CONTROLS. NEATLY TRAIN AND TIE-WRAP WIRING. AT GATE 40, THIS WIRING WILL BE CONNECTED IN PARALLEL WITH EXISTING CONTROL WIRING FROM PUSHBUTTON STATION INSIDE STANDARD AERO PAINT SHOP.

**TERMINAL STRIP IN GATE OPERATOR**



**EXIT WIRING AT GATE OPERATOR TERMINAL STRIP**  
 NTS

**GATE OPEN WIRING AT GATE OPERATOR TERMINAL STRIP NOTES**

- AT GATES 5, 7, 12, 14, 18, 20, 36 & 44, THIS IS GATE OPEN CONTROL FROM EXISTING ACCESS CONTROL SYSTEM. AT GATE 39, THIS IS GATE OPEN CONTROL FROM PUSHBUTTON IN RECEPTION AREA AT STANDARD AERO. AT GATE 40, THIS IS GATE OPEN CONTROL FROM PUSHBUTTON IN STANDARD AERO PAINT SHOP. AT GATE 41 THERE IS NO REMOTE GATE OPEN CONTROL.
- DO NOT PROVIDE THIS WIRING AT GATE 40 & GATE 41.
- WIRING AND TERMINALS SHOWN ARE FOR INFORMATION ONLY. VERIFY WITH SUPPLIED GATE OPERATOR.

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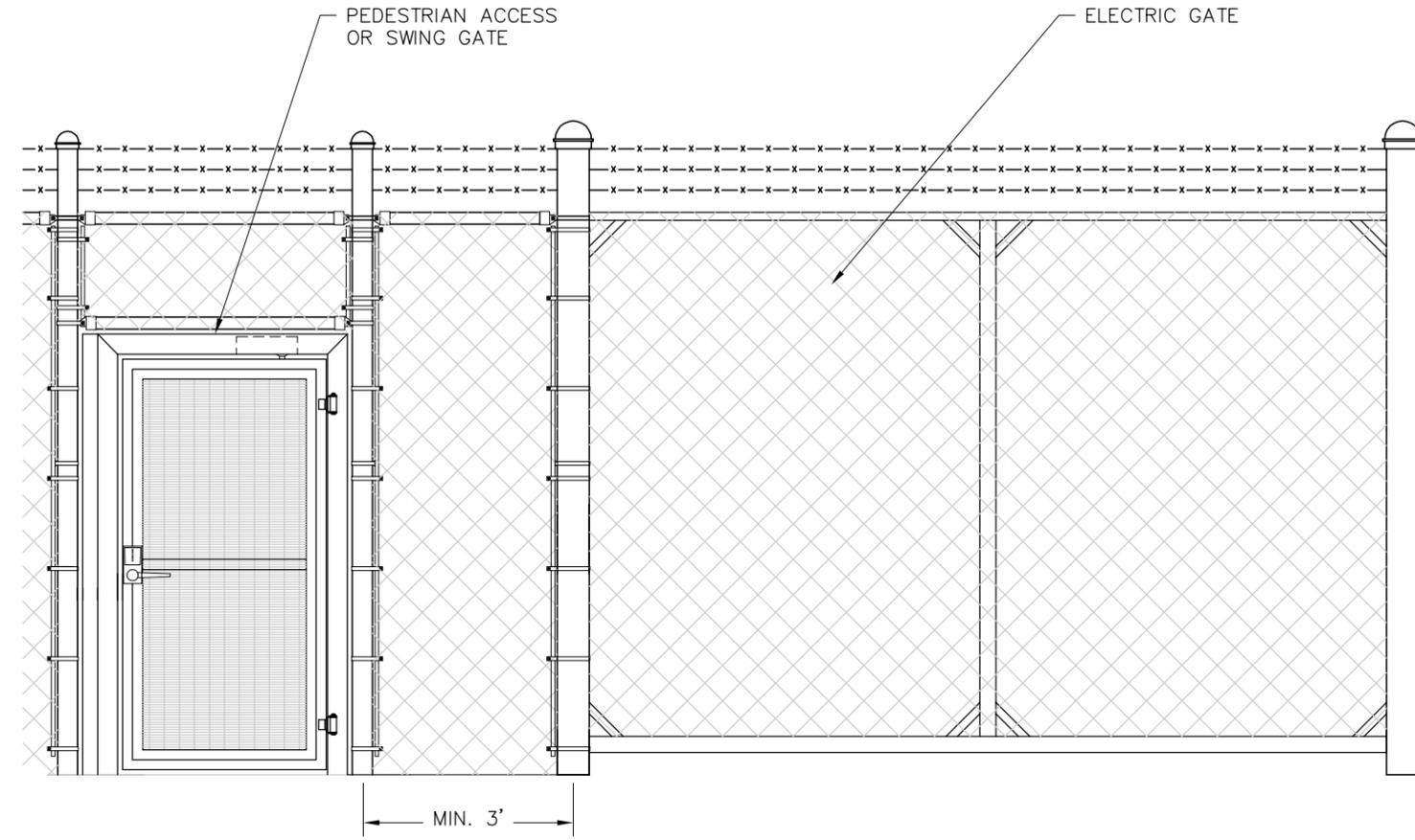
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 PEDESTRIAN ACCESS DETAIL

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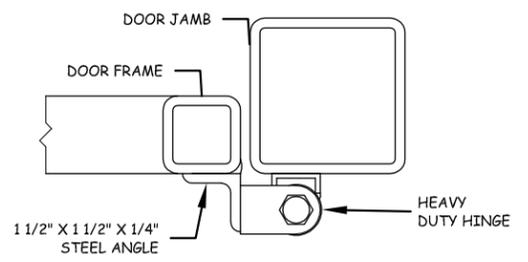
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SHEET	29 OF 31 SHEETS



**PEDESTRIAN ACCESS AND ELECTRIC GATE**

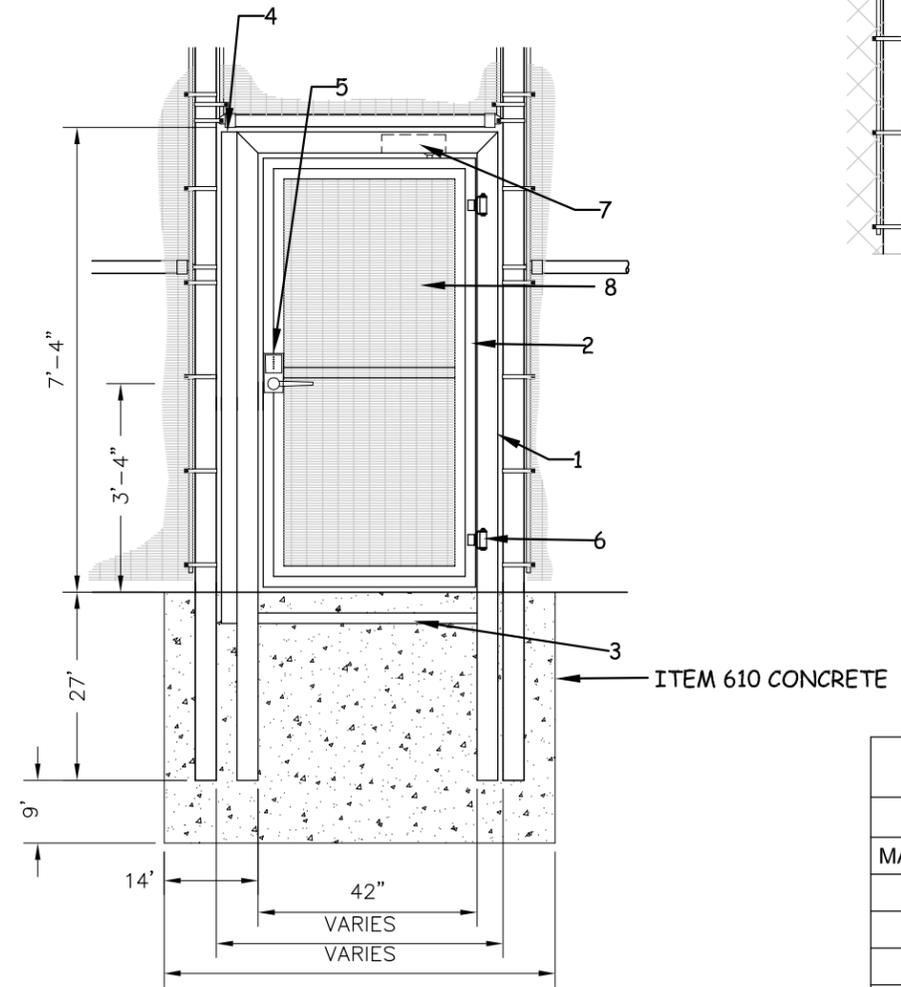
NOTES:

1. AT GATES 18/19 AND 20/21 CONTRACTOR SHALL PROVIDE MINIMUM 3' BETWEEN THE ELECTRIC GATE AND THE SWING GATE.
2. FRAMING AROUND PEDESTRIAN GATE SHALL EXTEND AND CONNECT TO THE BARBED WIRE AND TOP RAIL.
3. FABRIC SHALL BE PLACED ABOVE THE PEDESTRIAN ACCESS.



**2 HINGE DETAIL**

Scale: None



**1 SWING GATE ELEVATION**

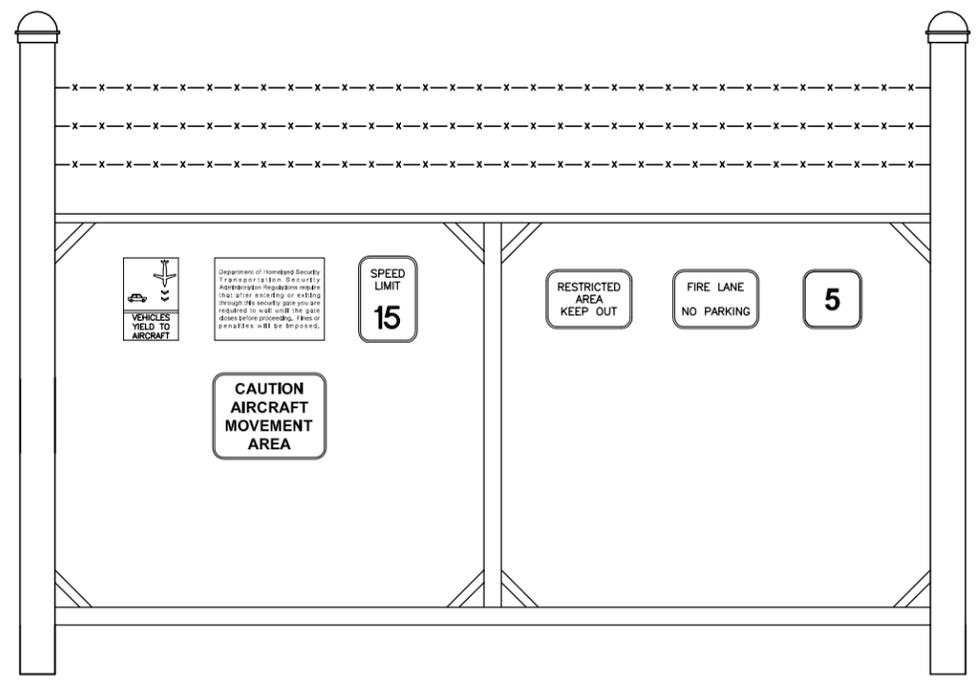
Scale: None

PEDESTRIAN ACCESS	
MARK	DESCRIPTION
1	DOOR JAMB (4" X 4" STEEL TUBE)
2	DOOR FRAME (2" X 2" STEEL TUBE)
3	C3 X 4.1 CHANNEL
4	3" X 3" X 3/16" STEEL ANGLE
5	MECHANICAL PUSHBUTTON LOCK
6	HEAVY DUTY HINGE
7	DOOR CLOSER
8	FABRIC

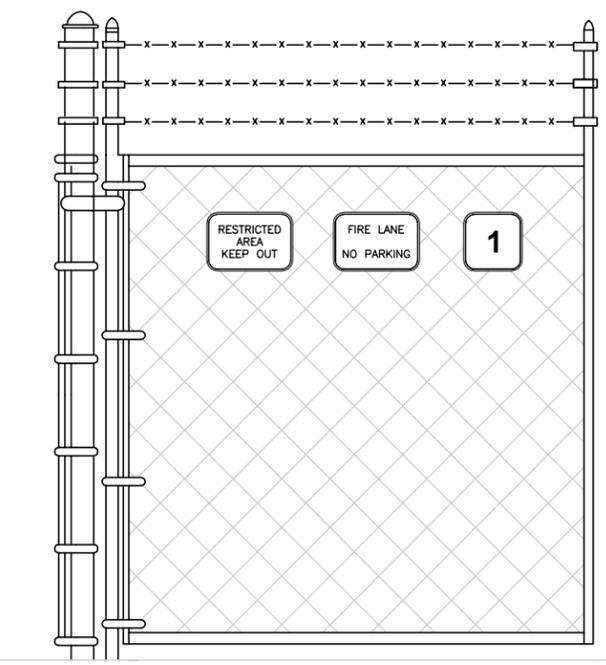
**CA011**

REVISIONS		
NUMBER	BY	DATE

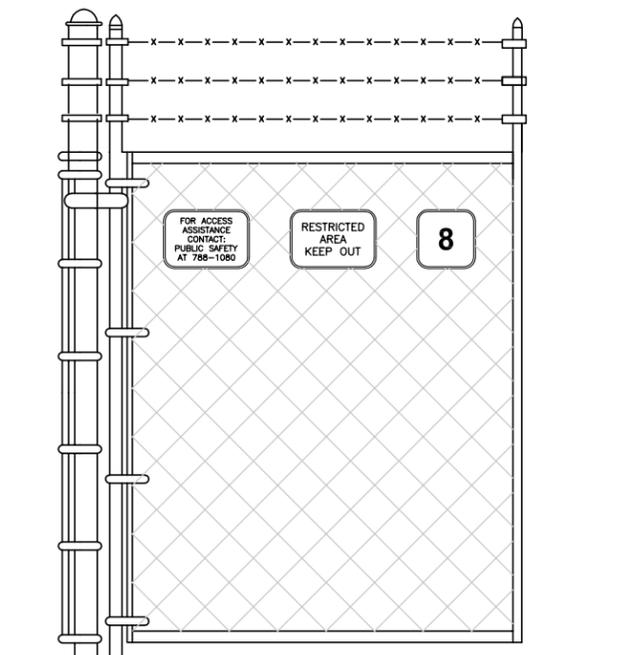
0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).



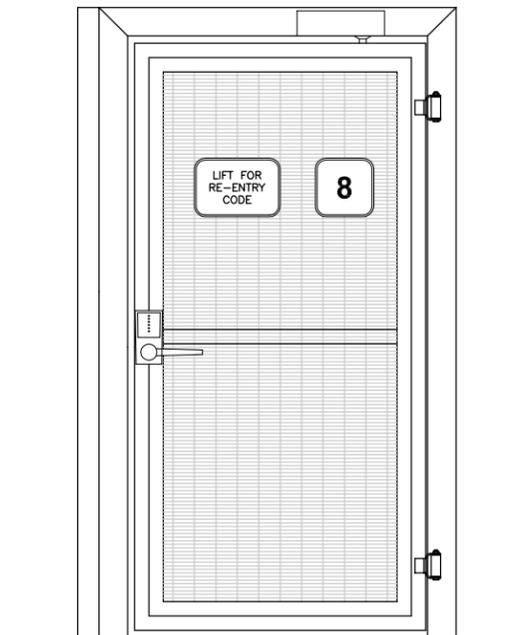
**ELECTRIC GATE**



**VEHICLE GATE**



**PEDESTRIAN GATE**



**PEDESTRIAN ACCESS**

NOTES:

1. SEE PROPOSED GATE PLAN FOR TYPES OF SIGNS REQUIRED AT EACH GATE.
2. GATE NUMBER AND RESTRICTED AREA SIGNS SHALL BE INSTALLED ON ALL NEW GATES. COST TO PROVIDE AND INSTALL SIGNS SHALL BE INCIDENTAL TO THE COST TO PROVIDE THE ASSOCIATED GATE.
3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF EACH SIGN. SHOP DRAWINGS SHALL MEET THE APPROVAL OF THE AIRPORT AND ENGINEER PRIOR TO MANUFACTURE AND INSTALLATION.
4. SEE ELECTRIC GATE DETAIL 1 FOR ADDITIONAL GATE RELATED SIGNS.



**SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS**

**UPGRADE PERIMETER FENCE PHASE 3  
 GATE SIGN DETAIL 1**

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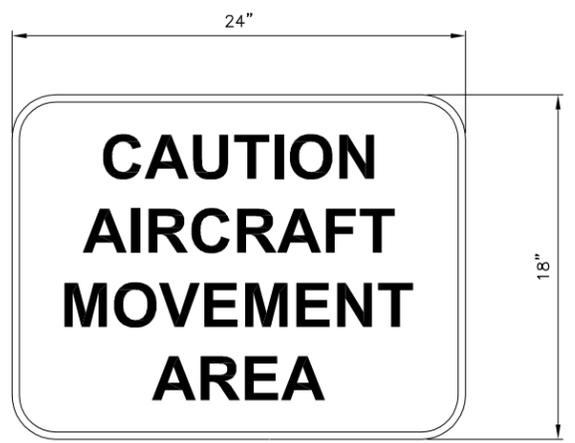
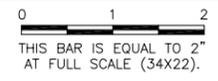


**CMT**  
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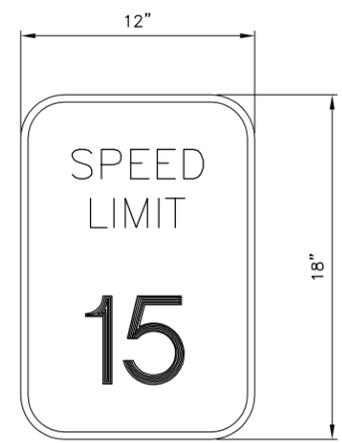
DESIGN BY:	CBG
DRAWN BY:	CMT
CHECKED BY:	CBG
APPROVED BY:	RLV
DATE:	01/14/2011
JOB No:	08035-04-00
IL. PROJ. NO. SPI-4088 AIP PROJ. NO. 3-17-0096-XX	
SHEET	30 OF 31 SHEETS

**CA011**

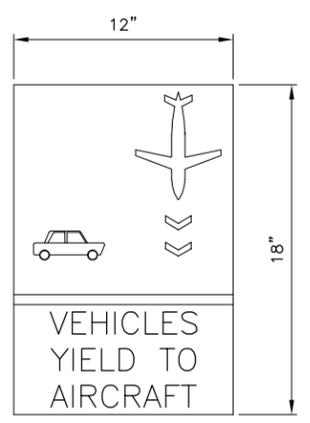
REVISIONS		
NUMBER	BY	DATE



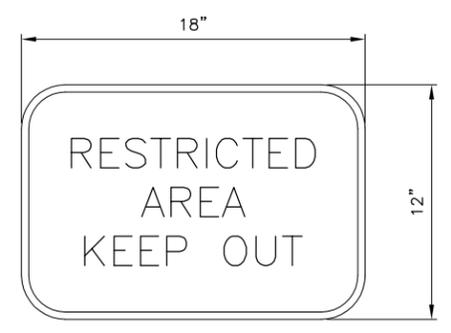
**CAUTION SIGN - L**



**SPEED LIMIT SIGN - L**



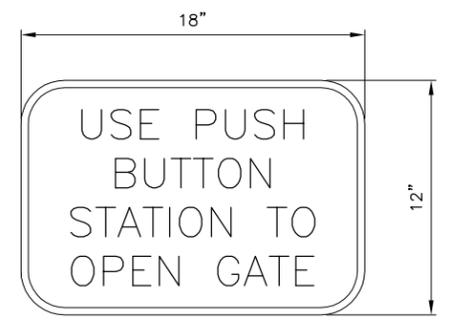
**YIELD SIGN - L**



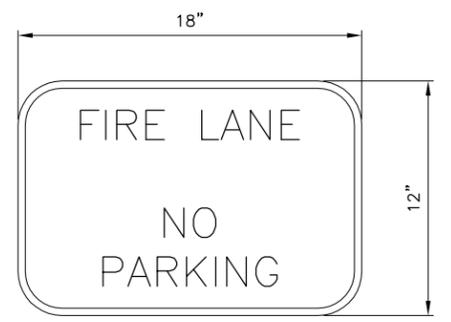
**KEEP OUT SIGN - L**



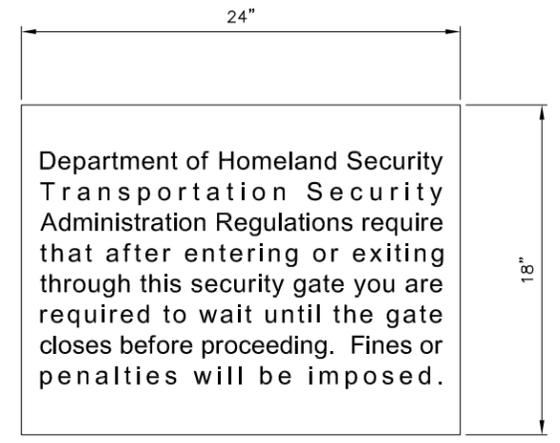
**PUBLIC SAFETY SIGN - L**



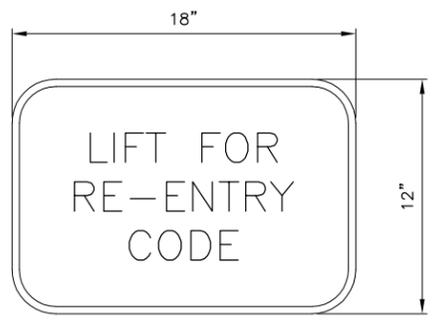
**BUTTON EXIT - A**



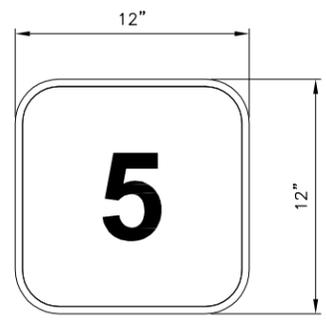
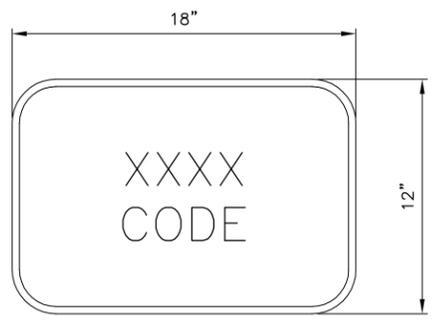
**FIRE LANE SIGN - A/L**



**TSA SIGN - A/L**



**RE-ENTRY - A**



**GATE NUMBER SIGN - A/L**

**NOTES:**

- SEE PROPOSED GATE PLAN FOR TYPES OF SIGNS REQUIRED AT EACH GATE.
- GATE NUMBER AND RESTRICTED AREA SIGNS SHALL BE INSTALLED ON ALL NEW GATES. COST TO PROVIDE AND INSTALL SIGNS SHALL BE INCIDENTAL TO THE COST TO PROVIDE THE ASSOCIATED GATE.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF EACH SIGN. SHOP DRAWINGS SHALL MEET THE APPROVAL OF THE AIRPORT AND ENGINEER PRIOR TO MANUFACTURE AND INSTALLATION.
- LETTERING COLOR SHALL BE RED ON WHITE BACKGROUND.
- EVERY 100' OF FENCE SHALL REQUIRE ONE RESTRICTED AREA SIGN. EVERY STRAIGHT SECTION OF FENCE SHALL REQUIRE MINIMUM ONE RESTRICTED AREA SIGN.
- SEE ELECTRIC GATE DETAIL 1 FOR ADDITIONAL GATE RELATED SIGNS.
- COSTS TO PROVIDE AND INSTALL SIGNS SHALL BE INCIDENTAL TO CONTRACT PAY ITEMS.
- SIGNS NOTED WITH AN "A" SHALL BE INSTALLED ON THE AIRSIDE OF THE GATE. SIGNS NOTED WITH A "L" SHALL BE INSTALLED ON THE LAND SIDE OF THE GATE.
- RE-ENTRY SIGN SHALL BE COMPRISED OF 2 INDIVIDUAL SIGNS WITH A HINGE AT THE TOP CONNECTING THE SIGNS. THE LIFT SIGN SHALL BE OUTER MOST WITH A HANDLE MOUNTED ON THE BOTTOM OF THE SIGN.



SPRINGFIELD AIRPORT AUTHORITY  
 ABRAHAM LINCOLN CAPITAL AIRPORT  
 SPRINGFIELD, ILLINOIS

UPGRADE PERIMETER FENCE PHASE 3  
 GATE SIGN DETAIL 2

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CHECKED BY:	CBG
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