

# VILLAGE OF LANSING LANSING, ILLINOIS

## CONSTRUCTION PLANS FOR LANSING MUNICIPAL AIRPORT

INSTALL PERIMETER SECURITY FENCE - PHASE 2

ILLINOIS PROJECT: IGQ-4424  
SBGP PROJECT: 3-17-SBGP-120

APRIL 15, 2016

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SUMMARY OF QUANTITIES

ITEM NUMBER	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY
<b>BASE BID</b>				
AR150510	ENGINEER'S FIELD OFFICE	LS	1.0	
AR162216	CLASS E MANUAL SLIDE GATE-16'	EACH	5	
AR162505	CLASS E FENCE 5'	LF	510	
AR162506	CLASS E FENCE 6'	LF	4,200	
AR162604	CLASS E GATE - 4'	EACH	2	
AR162605	CLASS E GATE - 5'	EACH	3	
AR162900	REMOVE CLASS E FENCE	LF	650	
AR162905	REMOVE GATE	EACH	13	
AR162920	REMOVE MANUAL SLIDE GATE	EACH	3	
AR162964	RELOCATE GATE	EACH	4	
AR800002	CLASS E FENCE 6', IN PAVEMENT	LF	230	
AR800153	CONCRETE WASHOUT	LS	1	
AR901510	SEEDING	ACRE	6.0	
AR908510	MULCHING	ACRE	6.0	
<b>ADDITIVE ALTERNATE NO 1</b>				
AS800006	UPGRADE CLASS E FENCE 6'	LF	275	
AS800008	UPGRADE CLASS E MANUAL SLIDE GATE-16'	EACH	1	
AS800021	UPGRADE CLASS E GATE - 5'	EACH	2	
<b>ADDITIVE ALTERNATE NO. 2</b>				
AT800849	ACCESS CONTROL SYSTEM UPGRADES	LS	1	



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SUBMITTED BY *Antonio R. Marin*  
ANTONIO R. MARIN, P.E.

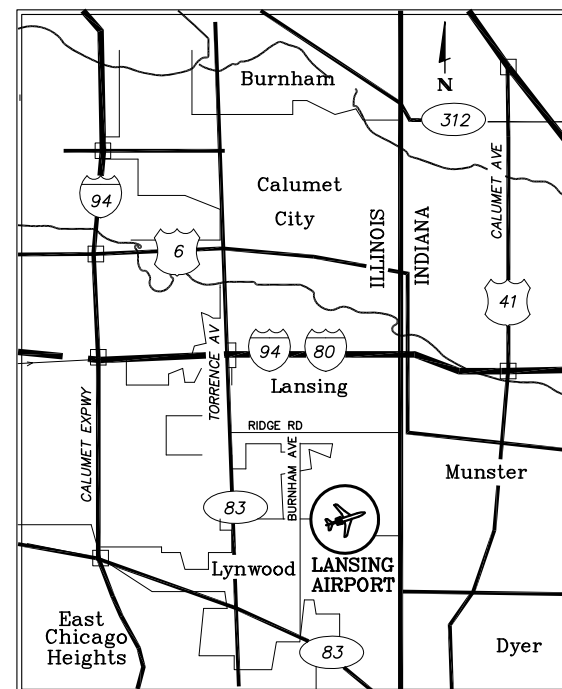
DATE *April 15, 2016*

Lansing Municipal  
**airport**

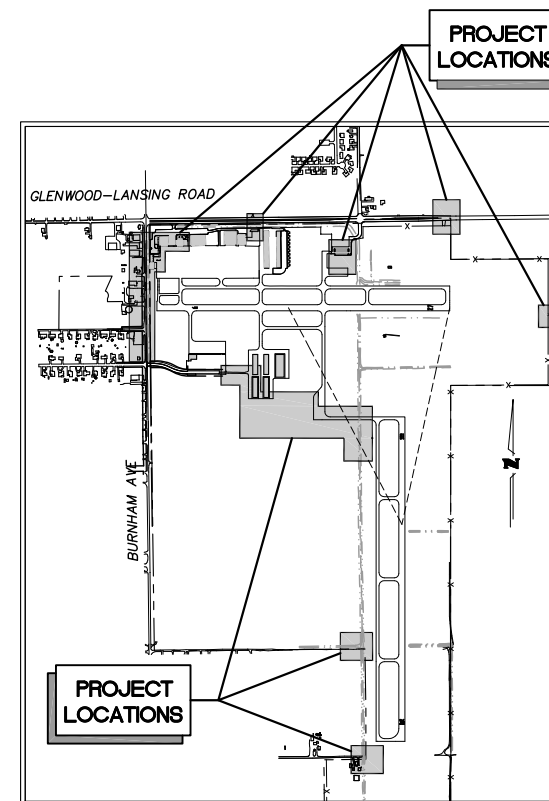
APPROVED BY *Norman Abbott* MAYOR  
NORMAN ABBOTT

APPROVED BY *John DeLaurentis* AIRPORT MANAGER  
JOHN DELAURENTIS

DATE *5-3-16*



LOCATION MAP



SITE PLAN

**811** Know what's below.  
Call before you dig.

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.

DESIGN INFORMATION

APPROACH CATEGORY B  
DESIGN GROUP II

LANSING MUNICIPAL AIRPORT

TOWNSHIP: 35 NORTH  
RANGE: 15 EAST  
COOK COUNTY

BLOOM TOWNSHIP  
(SECTION: 8 AND 17)  
OPPOSITE GLENWOOD-LANSING  
ROAD

UNICOM RADIO FREQUENCY - 123.0

DATE: Friday, April 15, 2016 5:22:42 PM  
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 KREF DWG: Fencing Base.dwg  
 Editted: 3/31/16

VERTICAL CONTROL				
NO.	STATION/OFFSET	ELEVATION	DESCRIPTION	
BM#1	STA. 3+10.61, 215.31' RT, C RUNWAY 9/27	613.53	AZ MARKER "LANSPORT" (ROD IN CAN)	
BM#2	STA. 23+37.02, 209.83' RT, C RUNWAY 9/27	613.56	MARKER "LANSPORT 1990" (ROD IN CAN)	
BM#3	STA. 37+49.70, 195.54' RT, C RUNWAY 9/27	613.69	GPS IGOA MONUMENT	
BM#4	STA. 146+22.3, 582' RT. C RUNWAY 18/36	614.13	CHISELED "X" ON CONCRETE BOX CULVERT	
BM#5	STA. 237+89.5, 181.1' LT. C TAXIWAY B	616.19	BRASS DISC	

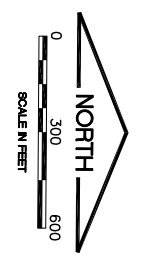
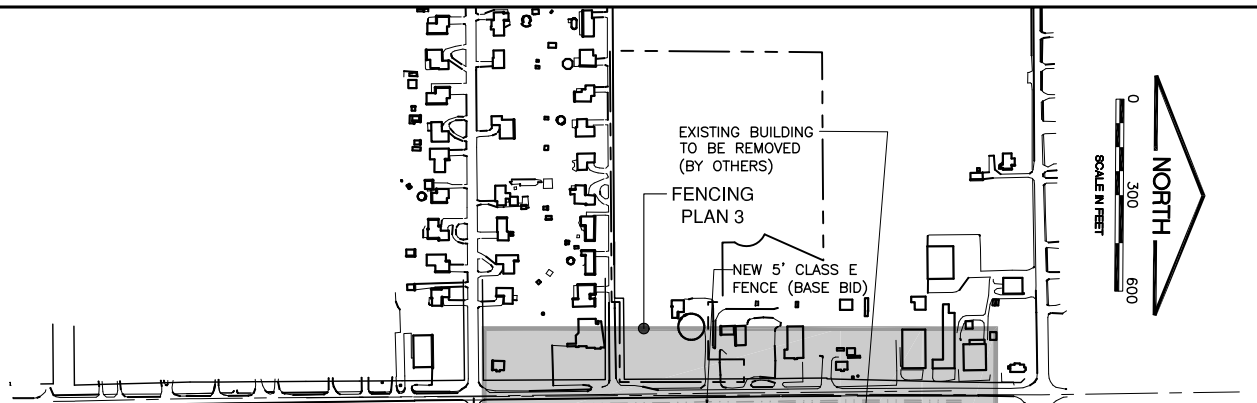
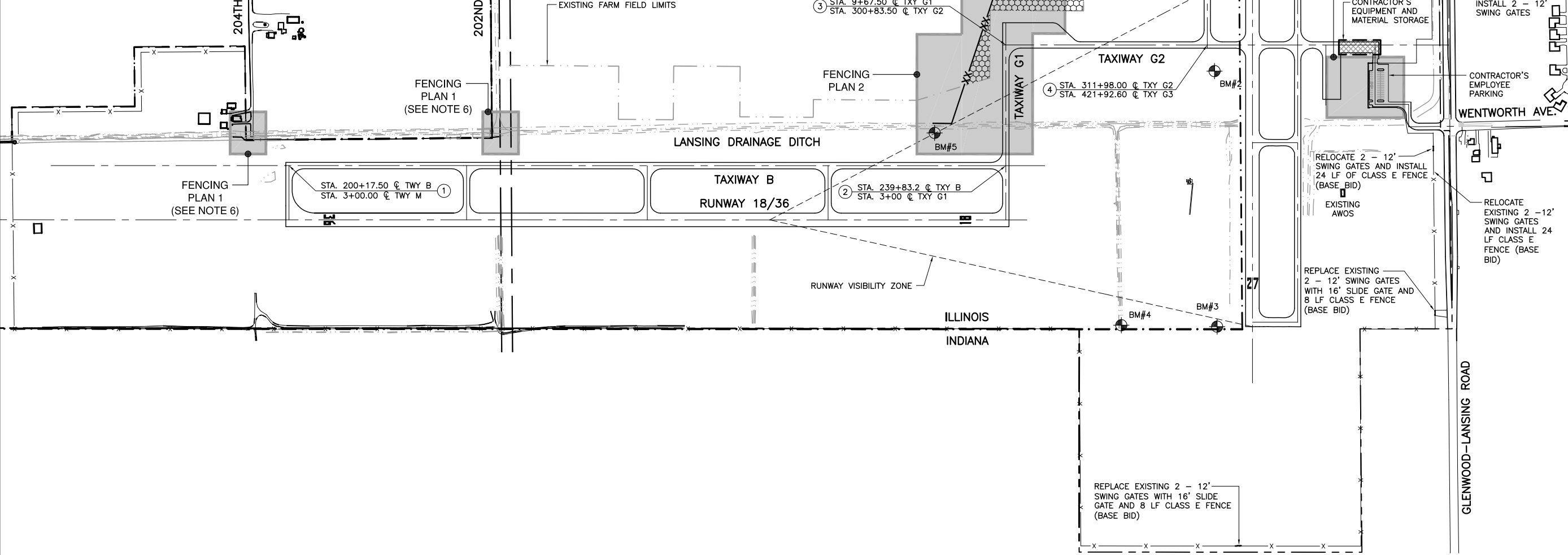
HORIZONTAL CONTROL			
NO.	DESCRIPTION	NORTHING	EASTING
①	TAXIWAY B AND TAXIWAY M	1770574.5362	720318.7540
②	TAXIWAY B AND TAXIWAY G1	1774540.4440	720291.8044
③	TAXIWAY G1 AND TAXIWAY G2	1774535.9082	719624.3206
④	TAXIWAY G2 AND TAXIWAY G3	1775650.3810	719616.7474

**GENERAL NOTES**

- ALL LENGTHS SHOWN FOR FENCE REMOVALS OR NEW FENCE ARE FOR THE SECTIONS SHOWN ON THAT SHEET ONLY.
- SHOULD THE AIRPORT NOT WANT THE REMOVED MATERIALS, ALL FENCING MATERIALS REMOVED SHALL BE DISPOSED OF OFF AIRPORT PROPERTY.
- HOLES FROM REMOVED POSTS SHALL BE BACKFILLED, COMPACTED AND SEEDED. RESTORATION COSTS SHALL BE INCLUDED IN THE COSTS TO REMOVE THE EXISTING FENCE.
- NEW FENCE SHALL BE INSTALLED NO CLOSER THAN 1' FROM THE PROPERTY OR RIGHT-OF-WAY LINE UNLESS OTHERWISE SHOWN.
- NEW FENCE ROUTING MAY BE ADJUSTED IN THE FIELD BY RESIDENT ENGINEER FOR EXISTING CONDITIONS ENCOUNTERED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR SAID FIELD ADJUSTMENTS.
- THE SITE OF THE FENCE SHALL BE SUFFICIENTLY CLEARED OF OBSTRUCTIONS, AND SURFACE IRREGULARITIES SHALL BE GRADED, SEEDED AND MULCHED SO THAT THE FENCE WILL CONFORM TO THE GENERAL CONTOUR OF THE GROUND. THE FENCE LINE SHALL BE CLEARED TO A MINIMUM WIDTH OF 5 FEET ON EACH SIDE OF THE CENTERLINE OF THE FENCE. THIS CLEARING SHALL CONSIST OF THE REMOVAL OF ALL STUMPS, BRUSH, ROCKS, TREES OR OTHER OBSTRUCTIONS WHICH WILL INTERFERE WITH PROPER CONSTRUCTION OF THE SAME FENCE. STUMPS WITHIN THE CLEARED AREA OF THE FENCE LINE SHALL BE GRUBBED OR EXCAVATED. THE BOTTOM OF THE FENCE SHALL BE PLACED A UNIFORM DISTANCE ABOVE THE GROUND, AS SPECIFIED ON PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. THE EXISTING FENCES WHICH COINCIDE WITH, OR ARE IN A POSITION TO INTERFERE WITH, THE NEW FENCE LOCATION SHALL BE REMOVED BY THE CONTRACTOR AS PART OF THE CONSTRUCTION WORK, AND SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE FENCING PAY ITEMS. ALL HOLES REMAINING AFTER POST AND STUMP REMOVAL SHALL BE REFILLED WITH SUITABLE SOIL. GRAVEL OR OTHER MATERIAL ACCEPTABLE TO THE RESIDENT ENGINEER AND SHALL BE COMPACTED PROPERLY WITH TAMPERS, SEEDED AND GRADED.
- CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 1 BUREAU OF TRAFFIC FOR WORKING WITHIN THE BURNHAM AVE. RIGHT-OF-WAY. ALL COSTS ASSOCIATED WITH OBTAINING THE PERMITS SHALL BE INCIDENTAL TO THE CONTRACT.

**LEGEND**

- EXISTING BUILDING
- EXISTING PAVEMENT
- FENCING PLAN KEY
- NEW SEEDING (901) AND MULCHING (908)
- NEW 6' FENCE (162)
- EXISTING FENCE
- CORPORATE LIMITS
- FARM FIELD LIMITS
- AIRPORT PROPERTY LINE
- RUNWAY VISIBILITY ZONE
- FUTURE/PROPOSED HANGAR (BY OTHERS)
- BENCHMARK



IL. CONTRACT: **LA040**  
 IL. LETTING ITEM: **3A**  
 IL. PROJECT: **IGQ-4424**  
 S.B.G. PROJECT: **3-17-SBGP-120**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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

**LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**

**INSTALL PERIMETER SECURITY FENCE - PHASE 2**

**SITE PLAN/PROJECT CONTROL**

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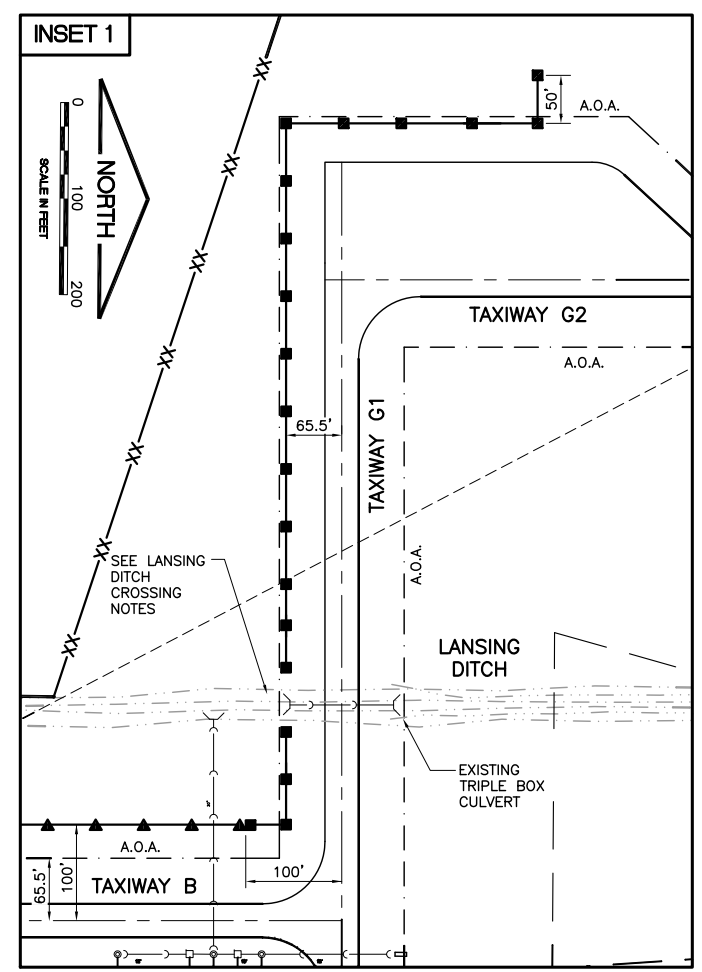
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CHECKED BY:	AKM
APPROVED BY:	DKP
DATE:	APRIL 15, 2016
JOB No:	14297-03-00

**FINAL**

SHEET 2 OF 13 SHEETS

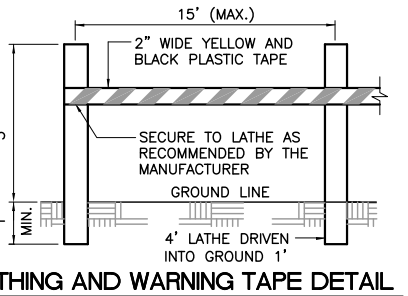
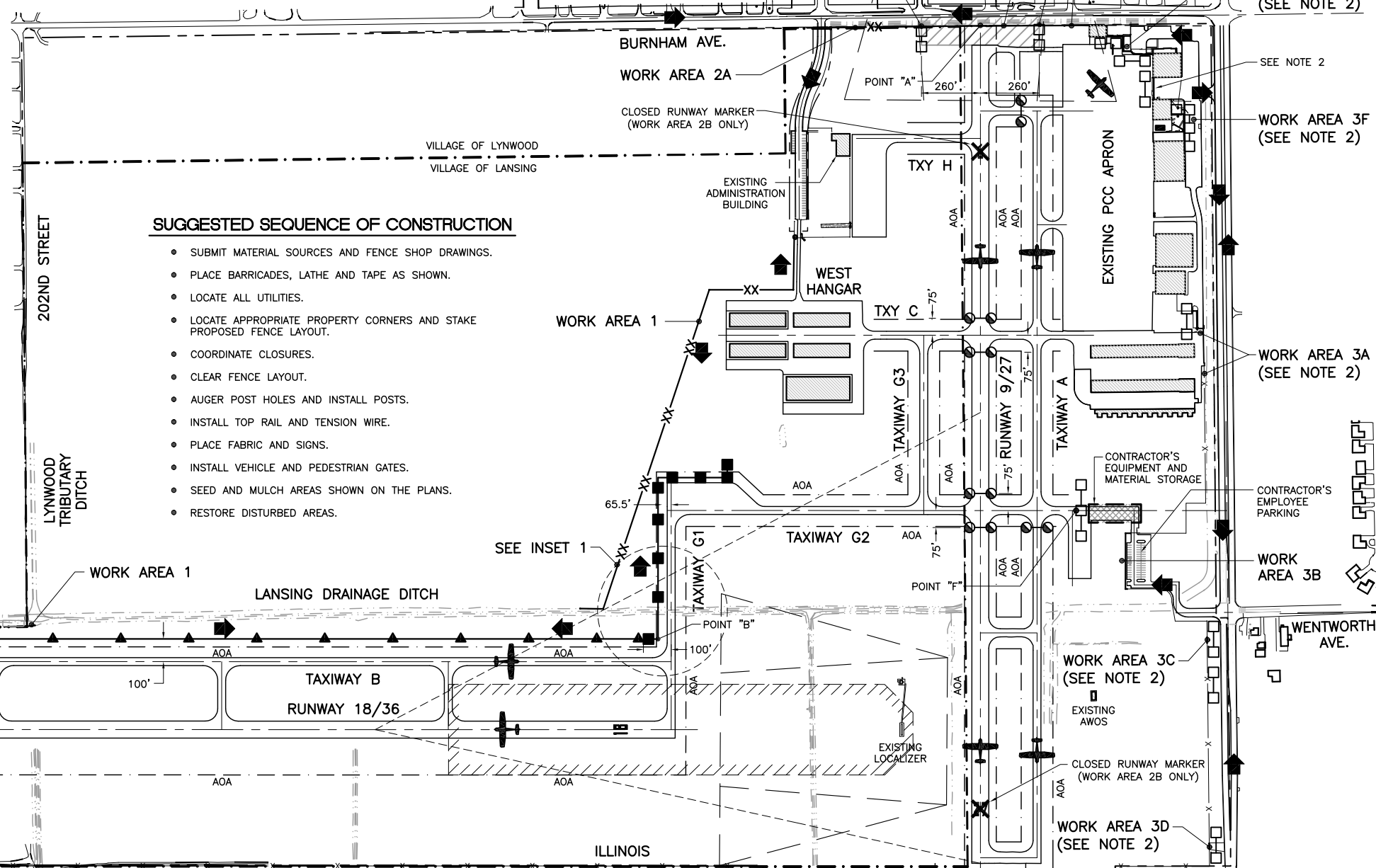
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WORK AREA	ALLOWABLE WORK PERIODS	OPERATIONAL STATUS/RESTRICTIONS
AREA 1	NO RESTRICTIONS (SEE NOTE 1)	ALL RUNWAYS AND TAXIWAYS OPEN
AREA 2A	NO RESTRICTIONS (SEE NOTE 2)	ALL RUNWAYS AND TAXIWAYS OPEN
AREA 2B	CONTRACTOR IS ALLOWED TO CLOSE RUNWAY 9/27 FOR TWO (2) CONSECUTIVE DAYS AT A TIME. THE MAXIMUM NUMBER OF RUNWAY CLOSURE REQUEST IS TWO (2)	RUNWAY 9/27 TEMPORARILY CLOSED RUNWAY 18/36 OPEN TAXIWAY H CLOSED TAXIWAY A PARTIAL CLOSURE ALL OTHER TAXIWAYS OPEN
AREAS 3A, 3B, 3C, 3D, 3E AND 3F	NO RESTRICTIONS (SEE NOTE 2)	ALL RUNWAYS AND TAXIWAYS OPEN

**SUGGESTED SEQUENCE OF CONSTRUCTION**

- SUBMIT MATERIAL SOURCES AND FENCE SHOP DRAWINGS.
- PLACE BARRICADES, LATHE AND TAPE AS SHOWN.
- LOCATE ALL UTILITIES.
- LOCATE APPROPRIATE PROPERTY CORNERS AND STAKE PROPOSED FENCE LAYOUT.
- COORDINATE CLOSURES.
- CLEAR FENCE LAYOUT.
- AUGER POST HOLES AND INSTALL POSTS.
- INSTALL TOP RAIL AND TENSION WIRE.
- PLACE FABRIC AND SIGNS.
- INSTALL VEHICLE AND PEDESTRIAN GATES.
- SEED AND MULCH AREAS SHOWN ON THE PLANS.
- RESTORE DISTURBED AREAS.



- LEGEND**
- XX NEW 6" CLASS E FENCE
  - [Symbol] IDOT TYPE 2 BARRICADE OR DRUM W/ RED LIGHT
  - [Symbol] IDOT TYPE 2 BARRICADE OR DRUM W/ RED LIGHT (WORK AREA 2B ONLY)
  - [Symbol] TEMPORARY FLAGGED LATHE @ 50' INCREMENTS
  - [Symbol] TEMPORARY STAKE LATHE W/ WARNING TAPE
  - [Symbol] CONTRACTOR'S EQUIPMENT/MATERIAL STORAGE
  - [Symbol] AIRCRAFT MOVEMENT AREA
  - AOA AIR OPERATIONS AREA (A.O.A.)  
ACTIVE RUNWAY 75' CENTERLINE TO A.O.A.  
ACTIVE TAXIWAY 65.5' CENTERLINE TO A.O.A.  
ACTIVE TAXILANE 57.5' CENTERLINE TO A.O.A.
  - [Symbol] HAUL ROUTE

**NOTES**

- PRIOR TO REMOVAL OF EXISTING FENCE AND GATES, CONTRACTOR SHALL PLACE TYPE II BARRICADES/DRUMS TO DISCOURAGE ACCESS TO AIRFIELD. BARRICADES SHALL BE SPACED NO GREATER THAN 4' AND SHALL BE CONTINUOUSLY LINKED WITH ROPES OR OTHER APPROVED MATERIAL. EXACT LOCATIONS SHALL BE COORDINATED WITH THE AIRPORT MANAGER AND RESIDENT ENGINEER IN THE FIELD.
- WORK WITHIN AIR OPERATIONS AREA (A.O.A.) AT RUNWAY'S 9 APPROACH WILL NOT BE ALLOWED UNLESS RUNWAY 9 IS TEMPORARILY CLOSED.

**LANSING DITCH CROSSING NOTES**

- CONTRACTOR SHALL BE ALLOWED TO CROSS THE LATHE AND WARNING TAPE TO CROSS THE LANSING DRAINAGE DITCH ON TAXIWAY G1 TURF SHOULDER.
- CONTRACTOR SHALL NOT BE ALLOWED ON TAXIWAY G1 PAVEMENT. AT THE AIRPORT'S DISCRETION, CONTRACTOR MAY BE ALLOWED ON AIRFIELD PAVEMENTS TO GAIN ACCESS TO THE WORK ZONE WHEN IN RADIO CONTACT WITH THE AIRFIELD. THE CONTRACTOR SHALL PROVIDE THEIR OWN RADIOS AND PERSONNEL (COST INCIDENTAL TO CONTRACT).
- CONTRACTOR SHALL HAVE AN AIRPORT APPROVED FLAGGER PRESENT WHEN CROSSING LANSING DRAINAGE DITCH.

IL. CONTRACT: **LA040**  
 IL. LETTING ITEM: **3A**  
 IL. PROJECT: **IGQ-4424**  
 S.B.G. PROJECT: **3-17-SBGP-120**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**LANSING MUNICIPAL AIRPORT**  
**LANSING, ILLINOIS**  
**INSTALL PERIMETER SECURITY FENCE - PHASE 2**  
**SEQUENCE OF CONSTRUCTION**  
**PER AC 150/5370-2F (LATEST EDITION)**

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 DRAWN BY: JRO  
 CHECKED BY: AKM  
 APPROVED BY: DKP  
 DATE: APRIL 15, 2016  
 JOB No: 14297-03-00

**FINAL**  
 SHEET 3 OF 13 SHEETS

DATE: Friday, April 15, 2016 5:24:51 PM  
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UPDATE BY: Tony Merrin  
LAYOUT: Layout1  
IMAGE TILES:  
XREF DWG: Fencing - Detail.dwg

### GENERAL NOTES

- THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT MANAGER AND RESIDENT ENGINEER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION.
- ALL OPERATIONS SHALL BE IN CONFORMANCE WITH AC 150/5370-2F (LATEST EDITION) SAFETY DURING CONSTRUCTION.
- CONTRACTOR'S EQUIPMENT SHALL BE STORED IN THE EQUIPMENT AND MATERIAL STORAGE AREA WHEN CONSTRUCTION IS NOT IN PROGRESS.
- THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER SHALL HAVE FINAL SAY IN THE APPROVAL OF THE CONSTRUCTION OPERATING SEQUENCE AS IT RELATES TO PEDESTRIAN, VEHICULAR AND AIRCRAFT SAFETY.
- ALL EXISTING PAVEMENTS, DRIVES OR ANY OTHER AREAS USED AS A HAUL ROAD OR STORAGE AREA BY THE CONTRACTOR SHALL BE RESTORED IN KIND TO THEIR PRE-CONSTRUCTION CONDITION OR TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER. THE COST OF MAINTAINING, REPAIRING OR CONSTRUCTING THESE PAVEMENTS AND AREAS SHALL BE INCIDENTAL TO THE CONTRACT. EXISTING AREAS OUTSIDE THE PROJECT LIMITS WHICH ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.
- THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING TAXIWAYS, APRONS AND RUNWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE ENGINEER.
- WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF MOVABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE THE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL BE AS APPROVED BY THE ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY. CONTRACTOR'S WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
- THE CONTRACTOR SHALL PROVIDE PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION. SUFFICIENT UNITS SHALL BE PROVIDED SO THAT WORK AREAS ARE ILLUMINATED TO A LEVEL OF FIVE HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. LIGHTS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS.
- THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. WHEN ACTIVE AIRFIELD PAVEMENTS ARE UTILIZED AS HAUL ROADS BY THE CONTRACTOR, MATERIAL TRACKED ON TO THE PAVEMENT SHALL BE CONTINUALLY REMOVED WITH SAID SWEEPER. THIS SWEEPING SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- MATERIALS REMOVED FROM THE PROJECT WILL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
- FOR WORK ON AIRPORT PROPERTY: PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, SIGNING, RUNWAY CLOSED MARKERS, AIR OPERATIONS AREA (A.O.A.) LATHE AND RIBBON, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. BARRICADES AT 10-FOOT CENTERS WITH ONE ORANGE FLAG (24" x 24") BETWEEN EACH SET OF BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE WEIGHTED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE A FLASHING RED LIGHT AND CONFORM TO IDOT STANDARD 702001, TYPE II. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE A.O.A. BY CONTRACTOR'S WORKERS, EQUIPMENT OR MATERIAL. SIGNS SHALL BE PLACED AT EACH TAXIWAY/RUNWAY CLOSURE LOCATION AND SHALL BE ATTACHED TO THE BARRICADES. EACH BARRICADE LOCATION SHALL CONSIST OF ONE "DO NOT ENTER" SIGN AND ONE "AIRCRAFT MOVEMENT AREA" SIGN. SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF THE START OF CONSTRUCTION SO THAT THE APPROPRIATE NOTAMS MAY BE ISSUED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED DURING NON WORKING HOURS. THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY". THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE UPON LEAVING THE SITE. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGES TO THE ACCESS ROAD, ACCESS GATE OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL COST RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL, THIS SHEET.
- IN THE CASE OF AN EMERGENCY, CONTRACTOR SHALL NOTIFY AIRPORT MANAGER AND THE ENGINEER IMMEDIATELY.
- DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK.
- THE TALLEST PIECE OF CONSTRUCTION EQUIPMENT IS ANTICIPATED TO BE A READY MIX CONCRETE TRUCK WHICH HAS A MAXIMUM HEIGHT OF 15 FEET.
- IF RUNWAY NUMERALS ARE PRESENT DURING CONSTRUCTION THEN CONTRACTOR SHALL PLACE CLOSED RUNWAY MARKER OVER NUMERALS AS DETAILED, OTHERWISE PLACE RUNWAY CLOSED MARKER IN TURF AT ENDS OF RUNWAY AS DETAILED.
- LANSING MUNICIPAL AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF WORK WITH THE AIRPORT IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.
- APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT AND THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.

- MOBILIZATION/EQUIPMENT STORAGE AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THIS AREA SHALL BE RESTORED TO THE ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT. THE RESTORATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO AR150520 MOBILIZATION.
- LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER OF THE CABLE, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM POINT TO POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF A FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
- COORDINATION MEETINGS - THE CONTRACTOR SHALL CONDUCT WEEKLY COORDINATION MEETINGS TO DISCUSS WORK AREAS AND SCHEDULING, ETC. WITH THE ENGINEER, AIRPORT OPERATIONS, FAA, AND OTHER APPROPRIATE OFFICIALS. MINUTES FROM THE WEEKLY MEETINGS SHALL BE PREPARED BY THE CONTRACTOR, FURNISHED TO ALL ATTENDEES PRIOR TO THE SUBSEQUENT MEETING, AND KEPT ON FILE AT THE FIELD OFFICE. THE COORDINATION MEETING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.
- DRAINAGE MODIFICATIONS SHALL BE SEQUENCED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE CONTRACT. EXISTING LANSING DRAINAGE FLOWS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN 65.5' FROM ACTIVE TAXIWAYS AND 200' FROM ACTIVE RUNWAYS UNLESS OTHERWISE APPROVED BY THE AIRPORT MANAGER.
- CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE FEDERAL AVIATION ADMINISTRATION PART 77 SURFACES OR RUNWAY AND TAXIWAY SAFETY AREAS.
- ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER ELECTRICAL CABLES SHALL REMAIN IN SERVICE AT ALL TIMES. ALL EXISTING LIGHTING AND VAULT EQUIPMENT SHALL REMAIN IN SERVICE UNTIL PROPOSED IMPROVEMENTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE ENGINEER. ANY CABLES DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED AT HIS EXPENSE.
- COORDINATION BY THE CONTRACTOR WITH THE EXISTING UTILITIES SHALL BE COMPLETED BEFORE CONSTRUCTION IS STARTED. CONTRACTOR IS REFERRED TO SECTION 50-17 OF THE SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE DESIGN ENGINEER ASSUME ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED THAT THE LOCATIONS, SIZE AND TYPE MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE RESIDENT ENGINEER AND THE AIRPORT MANAGER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.
- AIRFIELD LIGHTING AND LIGHTING GUIDANCE SYSTEMS (NAVAIDS) LOCATED WITHIN AND IMMEDIATELY ADJACENT TO THE CONTRACTOR'S WORK ZONE SHALL BE CHECKED FOR OPERATIONAL CONDITION PRIOR TO THE DEPARTURE FROM THE AIRPORT WITH THE AIRPORT MANAGER AND/OR AIRPORT MAINTENANCE. ANY DEFICIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.

### CONTRACTOR CROSSING RUNWAY AND TAXIWAY AIR OPERATIONS AREA (A.O.A.)

ANYTIME THE CONTRACTOR IS REQUIRED TO UTILIZE OR CROSS ACTIVE AIRFIELD PAVEMENTS FOR ACCESS TO AND FROM THE WORK ZONE, A CROSSING GUARD OR ESCORT IN RADIO CONTACT WITH THE AIR FIELD SHALL BE FURNISHED BY THE CONTRACTOR FOR MOVEMENTS OF VEHICLES OR EQUIPMENT TO AND FROM THE WORK ZONE. THE RADIO OPERATOR SHALL BE FAMILIAR WITH AIRPORT GROUND CONTROL PROCEDURES AND DEMONSTRATE KNOWLEDGE OF SAME TO THE AIRPORT. THE AIRPORT RESERVES THE RIGHT TO APPROVE THE CROSSING GUARDS. THE CONTRACTOR SHALL PROVIDE THEIR OWN RADIOS. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF MUNICIPAL FINES (\$500 PER OCCURRENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.

ANY PAVEMENT DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY HIM TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER AT NO ADDITIONAL COST TO THE OWNER. PAVEMENT SHALL BE CONTINUALLY SWEEPED TO PROVIDE DEBRIS FREE SURFACE DURING ALL HAUL ROAD OPERATIONS. THIS COST SHALL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

### LIMITATIONS ON CONSTRUCTION WITHIN RUNWAY SAFETY AREA (RSA) AND TAXIWAY/TAXILANE OBJECT FREE AREA (TOFA)

#### RUNWAYS:

THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. WORK SHALL BE EXPEDITED IN THESE AREAS AND AT THE END OF EACH WORKING DAY THESE AREAS SHALL BE SMOOTHLY GRADED TO ALLOW THE RUNWAY TO BE REOPENED. AT LEAST ONE OF THE RUNWAYS SHALL REMAIN IN OPERATION AT ALL TIMES. IF NECESSARY STEEL PLATES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE RSA IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN AND EQUIPMENT. REFERENCE TABLE ON PREVIOUS SHEET FOR SAFETY AREA WIDTHS.

#### TAXIWAYS / TAXILANES:

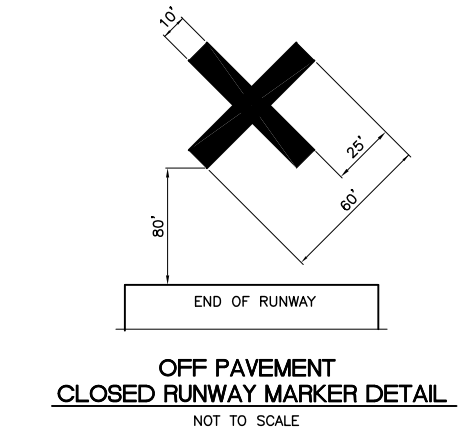
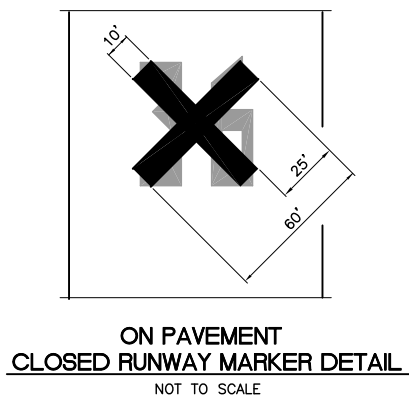
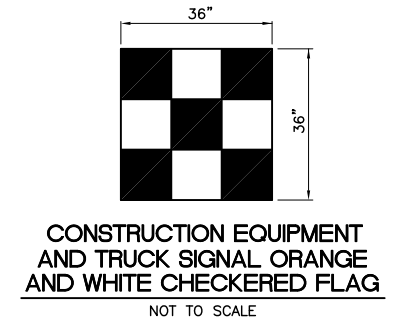
ANY WORK WITHIN TAXIWAY / TAXILANE OBJECT FREE AREA (TOFA) WILL REQUIRE A TAXIWAY / TAXILANE CLOSURE. WORK WITHIN THE TOFA SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE TOFA. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER FIVE (5) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. REFERENCE TABLE ON PREVIOUS SHEET FOR OBJECT FREE AREA WIDTHS. NO DROP-OFFS OR OPEN EXCAVATIONS WILL BE ALLOWED WITHIN THE TAXIWAY / TAXILANE SAFETY AREAS OF OPEN TAXIWAYS / TAXILANES.

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE SPECIAL PROVISIONS SECTION 30-05). THE PRIME CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE CONSTRUCTION ACTIVITIES AND ACCESS BETWEEN ALL ON-SITE CONTRACTORS SUBCONTRACTORS.

### DESIGN AIRCRAFT APPROACH CATEGORY: B DESIGN AIRPORT GROUP: II

RUNWAY 18/36 SAFETY AREA TOTAL WIDTH = 150'  
RUNWAY 9/27 SAFETY AREA TOTAL WIDTH = 150'  
TAXIWAY CENTERLINE TO OBJECT SEPARATION = 65.5'  
TAXILANE CENTERLINE TO OBJECT SEPARATION = 57.5'

MAXIMUM ANTICIPATED HEIGHT OF CONSTRUCTION EQUIPMENT: 15'	
NEAREST POINT ON RUNWAY 9/27	POINT "A" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°32'23.62" LONGITUDE: - 87°32'20.41" EXISTING ELEVATION: 613.5
NEAREST POINT ON RUNWAY 18/36	POINT "B" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°32'09.43" LONGITUDE: - 87°31'44.86" EXISTING ELEVATION: 614.0
NEAREST POINT ON RUNWAY 18/36	POINT "C" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°31'27.76" LONGITUDE: - 87°31'45.00" EXISTING ELEVATION: 618.0
NEAREST POINT ON RUNWAY 9/27	POINT "D" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°32'21.05" LONGITUDE: - 87°32'20.39" EXISTING ELEVATION: 613.6
NEAREST POINT ON RUNWAY 9/27	POINT "E" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°32'26.19" LONGITUDE: - 87°32'20.41" EXISTING ELEVATION: 613.3
NEAREST POINT ON RUNWAY 9/27	POINT "F" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°32'27.63" LONGITUDE: - 87°31'52.12" EXISTING ELEVATION: 616.0
NEAREST POINT ON RUNWAY 9/27	POINT "G" CONSTRUCTION SITE TO ACTIVE LATITUDE: 41°32'22.45" LONGITUDE: - 87°31'15.34" EXISTING ELEVATION: 615.0



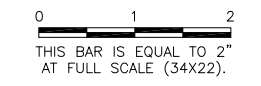
### CLOSED RUNWAY MARKER DETAIL NOTES

- CLOSED RUNWAY MARKERS SHALL BE YELLOW.
- MARKERS SHALL BE MATERIAL APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION
- MARKERS ON PAVEMENT SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN.
- COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- DURING VARIOUS PHASES OF WORK, IT WILL BE NECESSARY TO CLOSE RUNWAYS TO AIR TRAFFIC ON A TEMPORARY BASIS AS COORDINATED WITH THE AIRPORT. THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING A YELLOW CROSS AT THE LOCATION AND DIMENSIONS DETAILED ON THIS SHEET. THE CROSSES ARE SHOWN ON THE RESPECTIVE RUNWAYS ACCORDING TO THE VARIOUS PHASES OF WORK AS DELINEATED IN THE SUGGESTED SEQUENCE OF CONSTRUCTION.

NOTE - ALL PHASES ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

IL. CONTRACT: LA040  
IL. LETTING ITEM: 3A  
IL. PROJECT: IGQ-4424  
S.B.G. PROJECT: 3-17-SBGP-120

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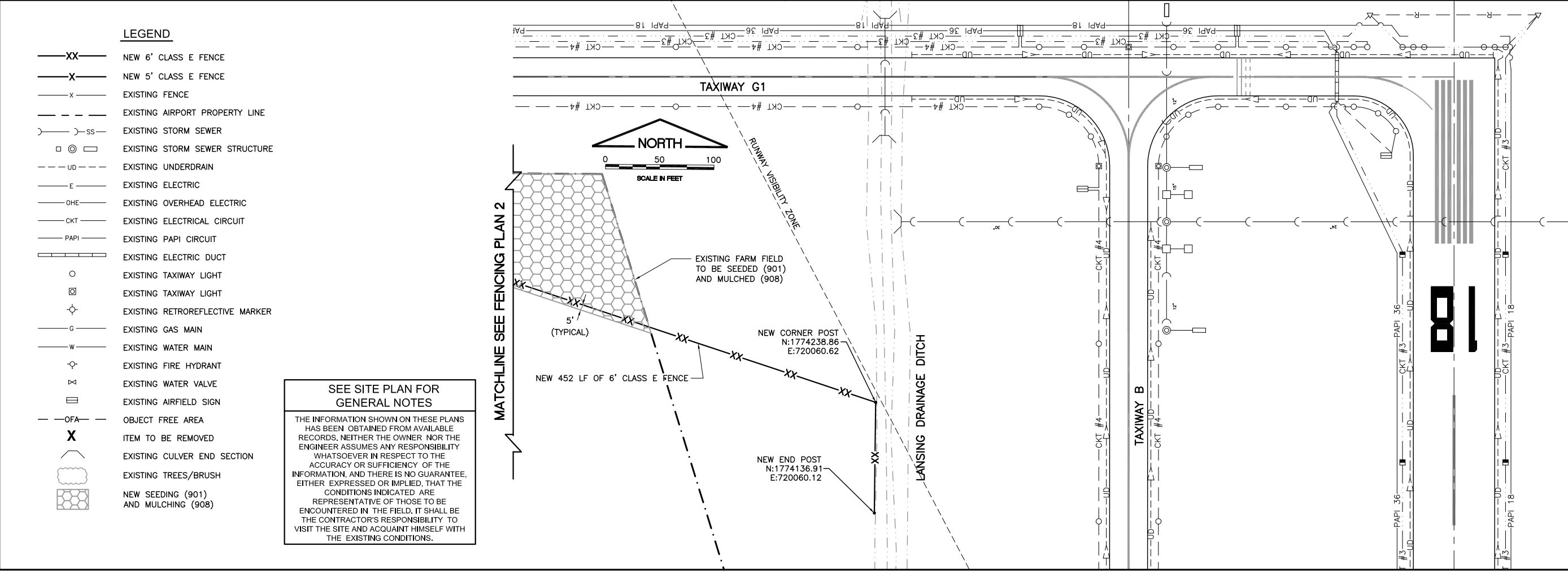
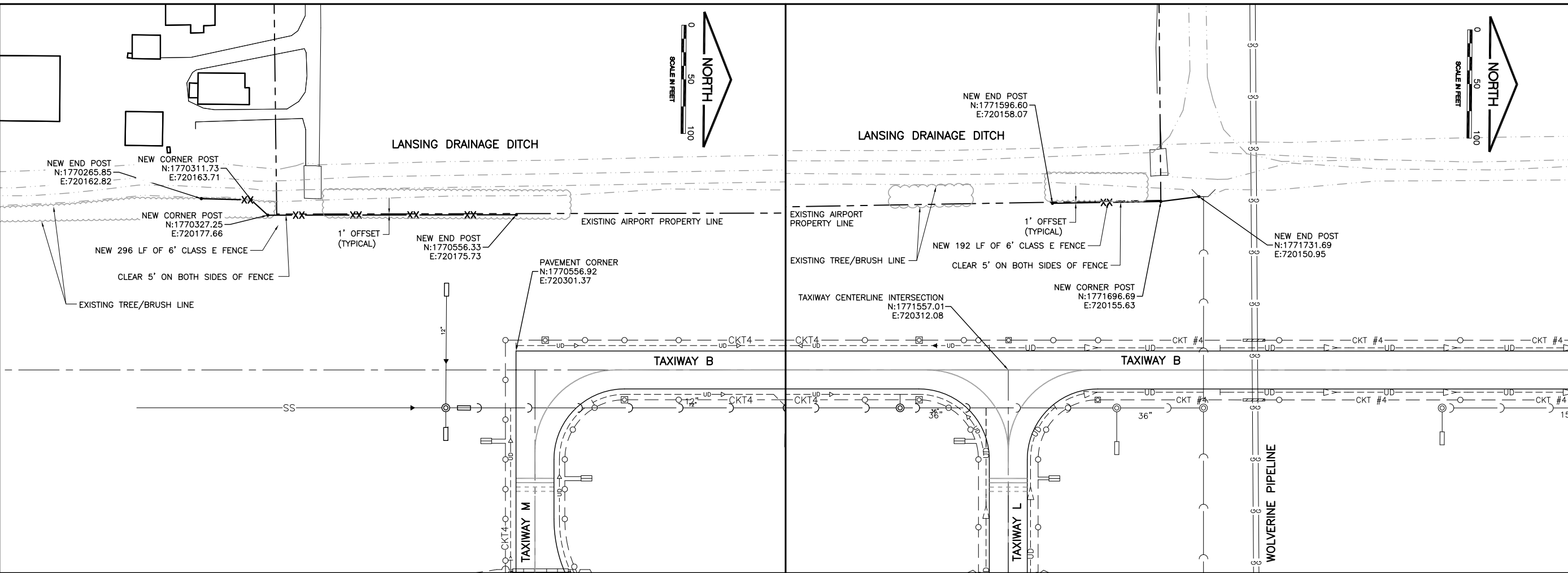
LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS  
INSTALL PERIMETER SECURITY FENCE - PHASE 2  
SEQUENCE OF CONSTRUCTION  
GENERAL NOTES AND DETAILS

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**LEGEND**

- XX— NEW 6' CLASS E FENCE
- X— NEW 5' CLASS E FENCE
- x— EXISTING FENCE
- - - EXISTING AIRPORT PROPERTY LINE
- (-SS-) EXISTING STORM SEWER
- ⊙ □ EXISTING STORM SEWER STRUCTURE
- - - UD - - - EXISTING UNDERDRAIN
- - - E - - - EXISTING ELECTRIC
- - - OHE - - - EXISTING OVERHEAD ELECTRIC
- - - CKT - - - EXISTING ELECTRICAL CIRCUIT
- - - PAPI - - - EXISTING PAPI CIRCUIT
- E— EXISTING ELECTRIC DUCT
- EXISTING TAXIWAY LIGHT
- ⊙ EXISTING TAXIWAY LIGHT
- ⊙ EXISTING RETROREFLECTIVE MARKER
- G- EXISTING GAS MAIN
- W- EXISTING WATER MAIN
- ⊕ EXISTING FIRE HYDRANT
- ⊕ EXISTING WATER VALVE
- ⊕ EXISTING AIRFIELD SIGN
- OFA- OBJECT FREE AREA
- X ITEM TO BE REMOVED
- C— EXISTING CULVER END SECTION
- ⊕ EXISTING TREES/BRUSH
- ⊕ NEW SEEDING (901) AND MULCHING (908)

**SEE SITE PLAN FOR GENERAL NOTES**

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I.L. CONTRACT: **LA040**  
 I.L. LETTING ITEM: **3A**  
 I.L. PROJECT: **IGQ-4424**  
 S.B.G. PROJECT: **3-17-SBGP-120**

SURVEY BOOK # BOOK #

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0 1 2  
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**LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**  
**INSTALL PERIMETER SECURITY FENCE - PHASE 2**  
**FENCING PLAN 1**

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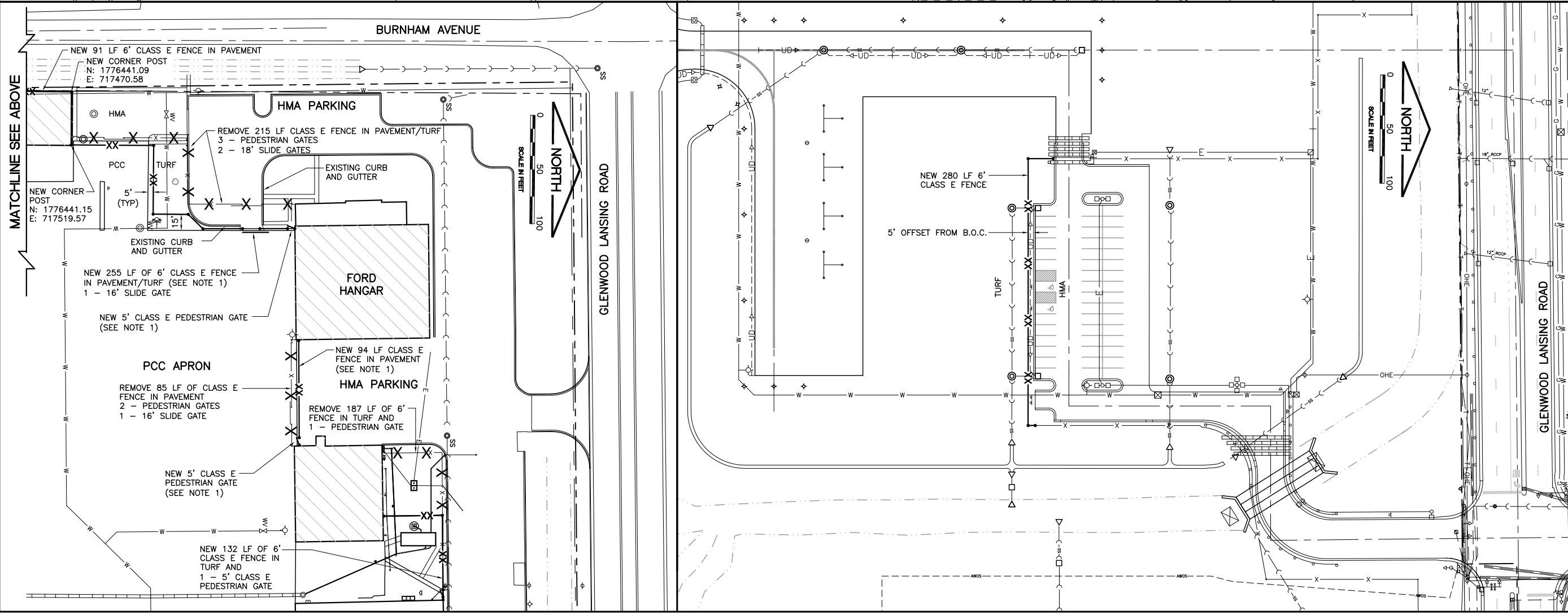
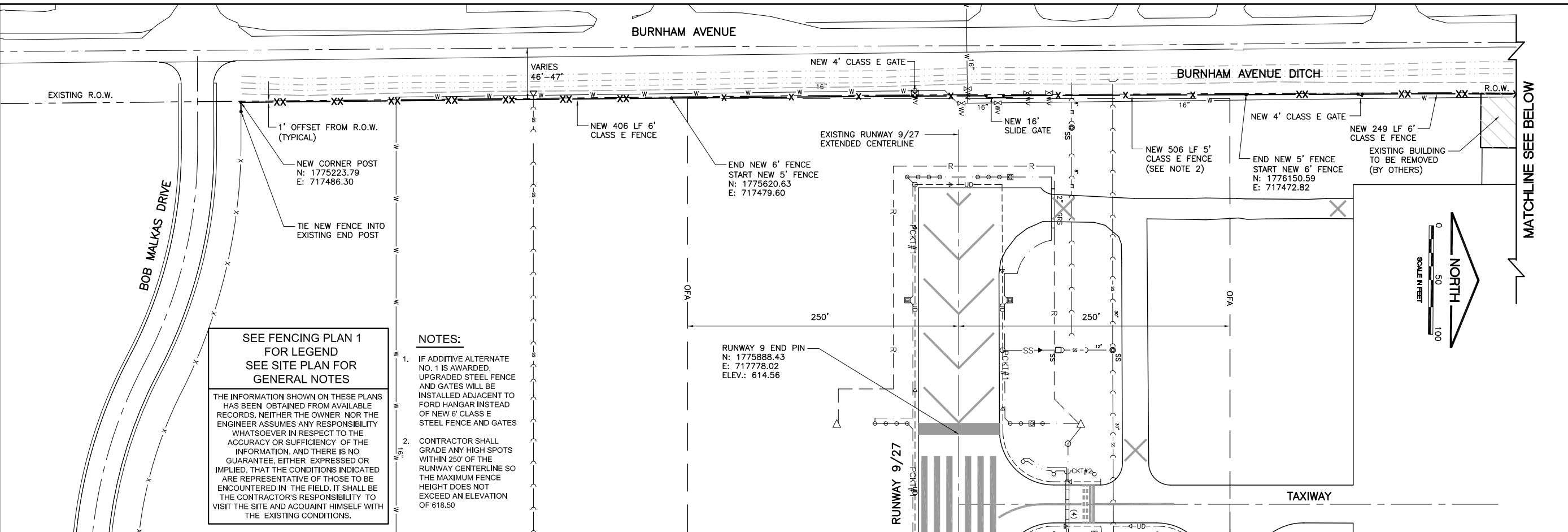
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SHEET 5 OF 13 SHEETS



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 Ed: 13.13.109  
 KREF DWG: Fencing Base Drawing  
 ROW: 13.13.109



**SEE FENCING PLAN 1 FOR LEGEND**  
**SEE SITE PLAN FOR GENERAL NOTES**

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- NOTES:**
- IF ADDITIVE ALTERNATE NO. 1 IS AWARDED, UPGRADED STEEL FENCE AND GATES WILL BE INSTALLED ADJACENT TO FORD HANGAR INSTEAD OF NEW 6' CLASS E STEEL FENCE AND GATES
  - CONTRACTOR SHALL GRADE ANY HIGH SPOTS WITHIN 250' OF THE RUNWAY CENTERLINE SO THE MAXIMUM FENCE HEIGHT DOES NOT EXCEED AN ELEVATION OF 618.50

IL CONTRACT: **LA040**  
 IL LETTING ITEM: **3A**  
 IL PROJECT: **IGQ-4424**  
 S.B.G. PROJECT: **3-17-SBGP-120**

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**LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**

**INSTALL PERIMETER SECURITY FENCE - PHASE 2**

**FENCING PLAN 3**

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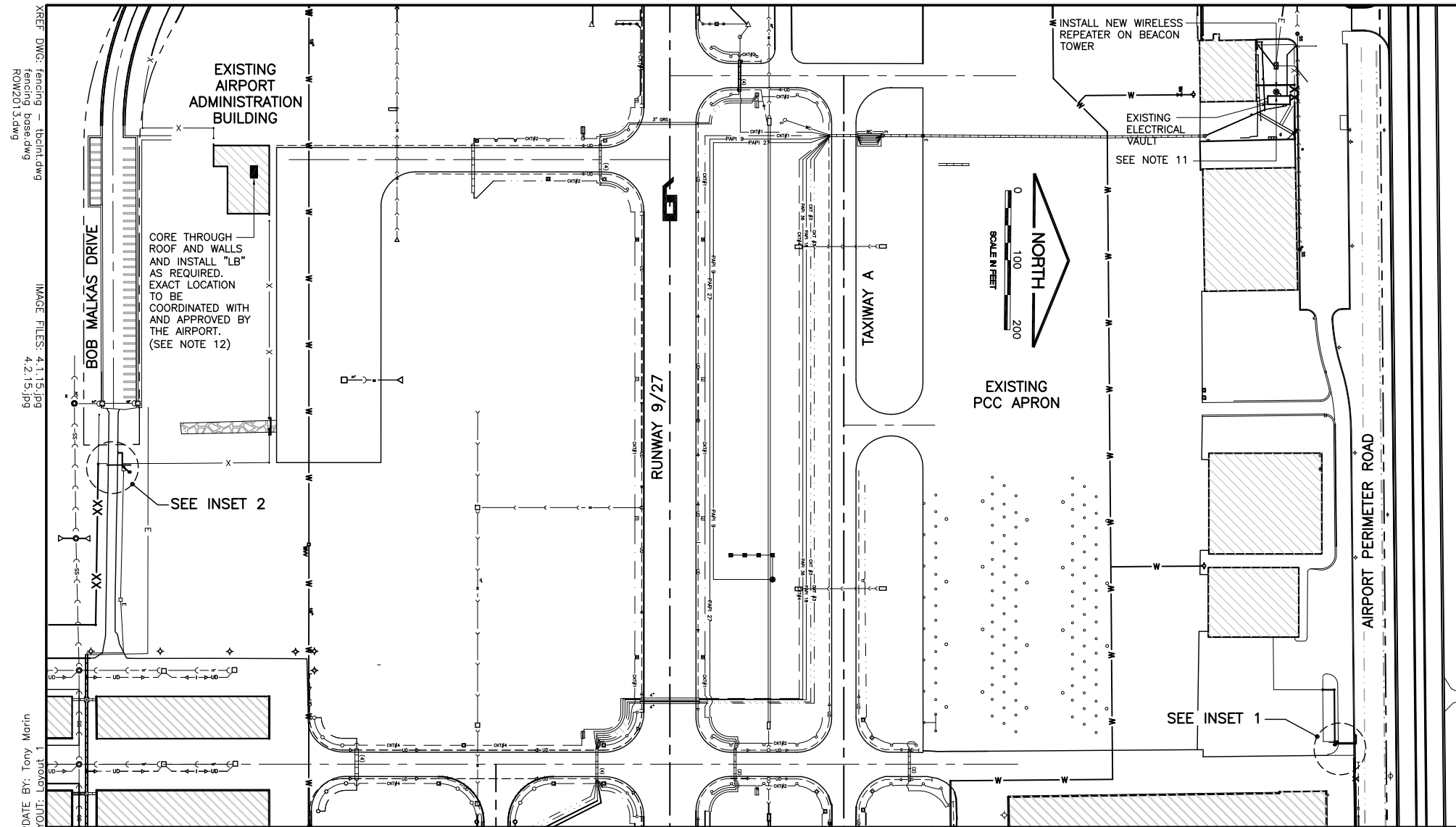


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SHEET 7 OF 13 SHEETS



## ADDITIVE ALTERNATE NO. 2

### INSTALLATION NOTES

- INSTALL NEW CARD READERS ON GOOSENECK STANDS WITH WEATHER SHIELDS.
- INSTALL NEW ACCESS CONTROL ENCLOSURE.
- INSTALL NEW ACCESS CONTROL COMMUNICATION CABLES FROM GATE OPERATOR TO WIRELESS NETWORK AND ETHERNET SWITCH IN NEMA 3R ENCLOSURE.
- ETHERNET SWITCH INSIDE THE BUILDING.
- CONNECT AND PROGRAM NEW ACCESS CONTROL SYSTEMS TO NEW WIRELESS COMMUNICATION AND ACCESS CONTROL SYSTEM.
- ACCESS CONTROL SYSTEM UPGRADES SHALL INCLUDE FURNISHING AND INSTALLATION OF NEW CARD READERS ON GOOSENECK STANDS, ACCESS CONTROLLER IN NEMA 3R ENCLOSURE FIBER CONVERTER POWER SUPPLIES, FIBER OPTIC CABLE, CONDUIT, LB'S, J-BOX, WIRELESS NETWORK, TERMINATION, TESTING AND PROGRAMMING OF ACCESS CONTROL SYSTEM. THIS WORK SHALL BE PAID UNDER PAY ITEM "AT800849 ACCESS CONTROL SYSTEM UPGRADES - PER LUMP SUM".
- NEW LAN/ETHERNET WIRELESS TRANSCEIVER INET-II, GE-MDS WITH ANTENNA. INSTALL ON POST. POST TYPE, SIZE, AND MOUNTING HEIGHT SHALL BE DETERMINED BY SITE STUDY. INSTALL POWER AND ANTENNA CABLES AS REQUIRED.
- CONTRACTOR SHALL CONDUCT A LINE OF SITE STUDY TO DETERMINE THE LOCATION AND HEIGHT OF WIRELESS TRANSCEIVERS AND RELAYS. THIS WORK SHALL BE PAID UNDER PAY ITEM AT800849.
- NEW CARD READER POWER AND CONTROL WIRING, AND POWER WIRING, PER MANUFACTURER OR AS REQUIRED BY SECURITY SYSTEM MANUFACTURER, IN NEW 1" GRS CONDUIT. POWER SHALL BE OBTAINED FROM THE GATE OPERATOR.
- NEW ACCESS CONTROL COMMUNICATIONS CABLE IN NEW DIRECT BURIED 2" GRS CONDUIT (6 STRAND MMFO CABLE).
- CONTRACTOR SHALL POWER REPEATER FROM VAULT BUILDING. CONTRACTOR SHALL BE REQUIRED TO CORE THROUGH EXISTING ELECTRICAL HAND HOLE TO RUN POWER INSIDE THE BUILDING. INSTALL 1 - 20A, 1-POLE CIRCUIT BREAKER IN EXISTING PANEL. THIS WORK SHALL BE PAID FOR UNDER PAY ITEM AR800849.
- NEW LAN/ETHERNET WIRELESS TRANSCEIVER INET-11, GE-MOS WITH ANTENNA. INSTALL ACCESS POINT ON BUILDING AND TRANSCEIVER ON BUILDING ROOF, AS APPROVED BY OWNER. INSTALL POWER AND ANTENNA CABLES AS REQUIRED.

**SEE FENCING PLAN 1 FOR LEGEND**

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IL CONTRACT: **LA040**  
 IL LETTING ITEM: **3A**  
 IL PROJECT: **IGQ-4424**  
 S.B.G. PROJECT: **3-17-SBGP-120**

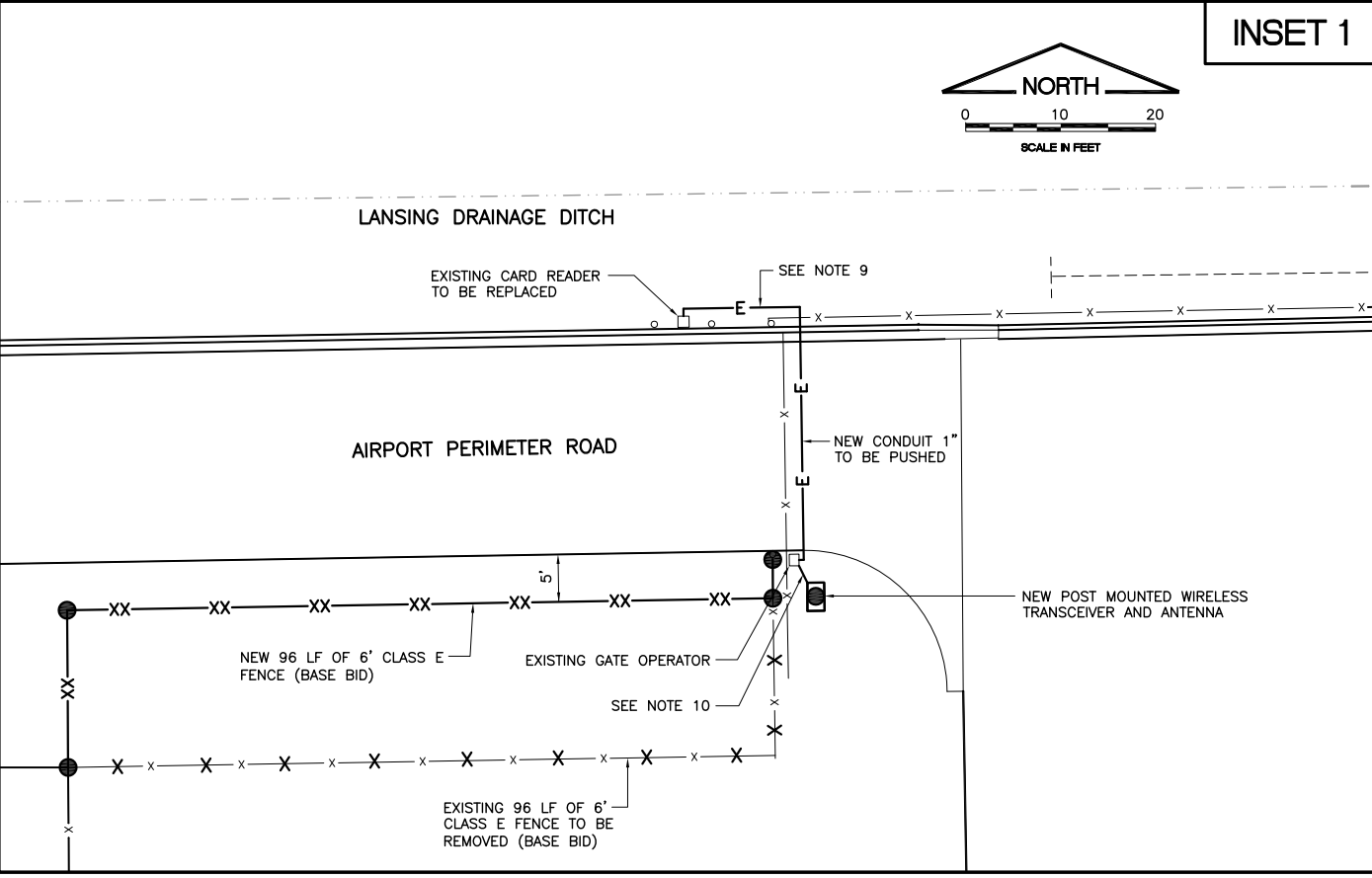
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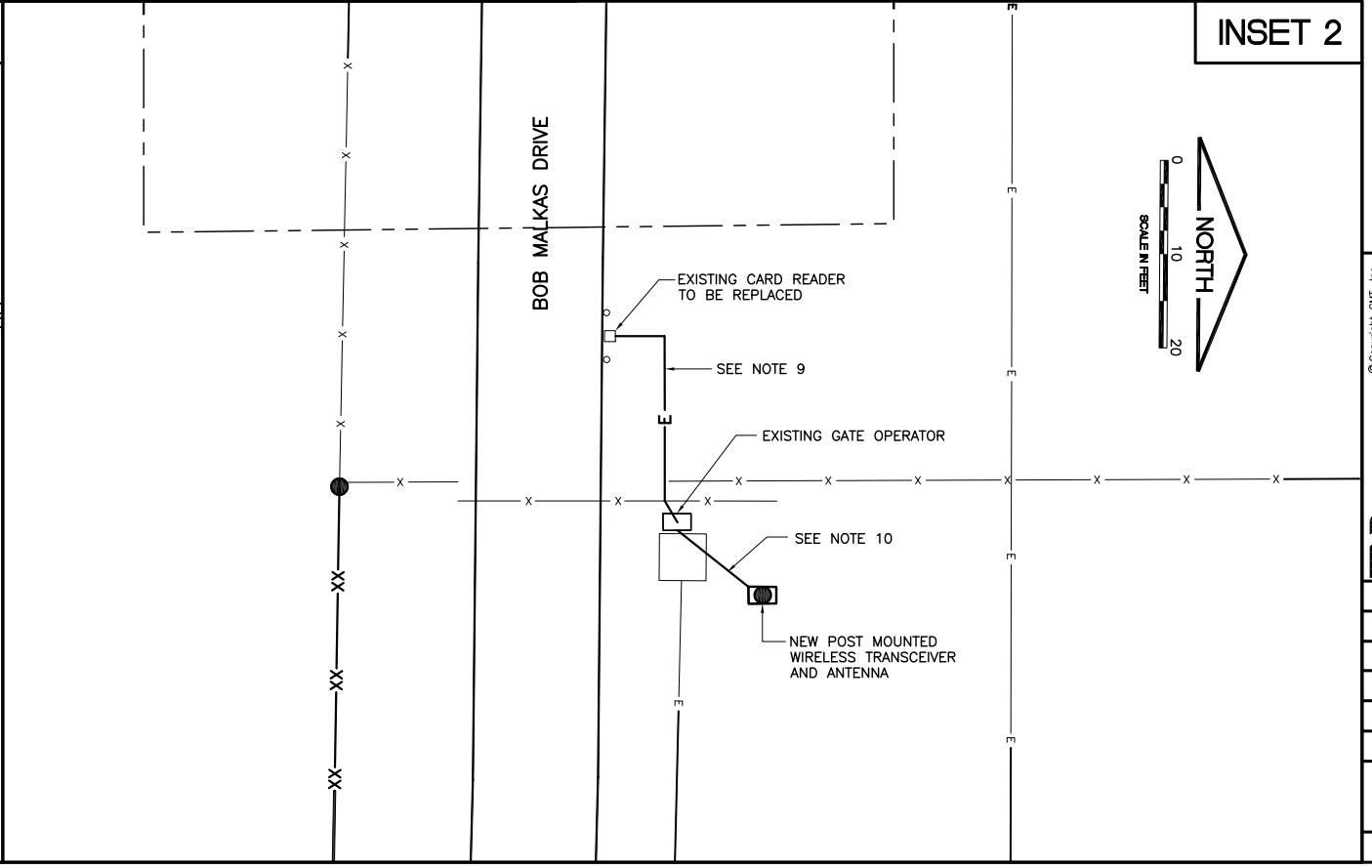
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**INSET 1**



**INSET 2**



**LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**  
**INSTALL PERIMETER SECURITY FENCE - PHASE 2**  
**GATE ACCESS CONTROL PLAN  
 ADDITIVE ALTERNATE NO. 2**

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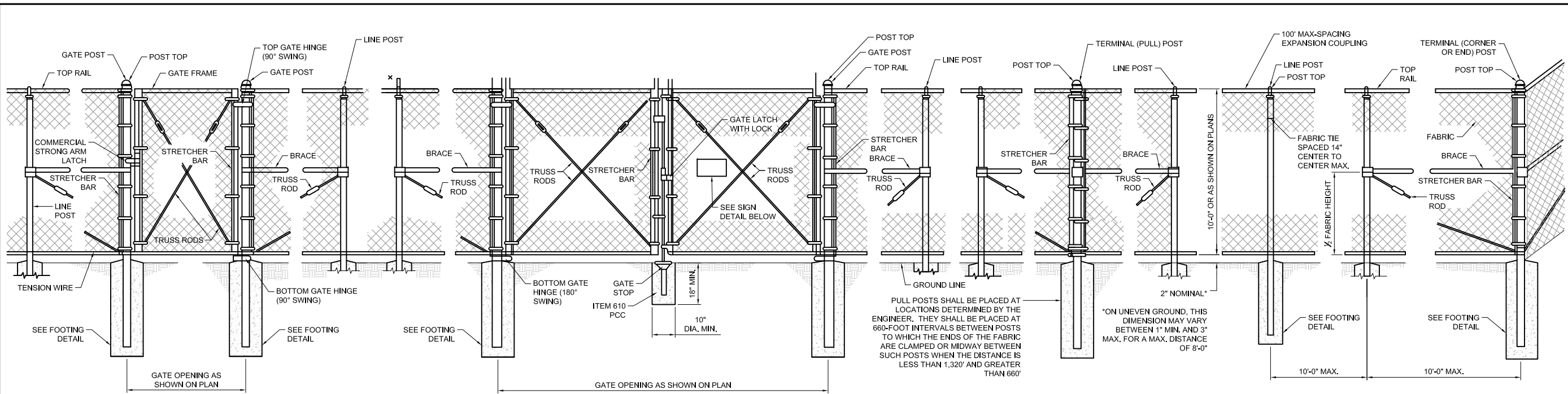
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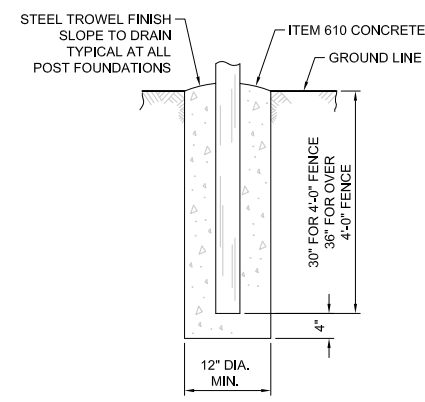
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**VEHICLE GATE ARRANGEMENT**

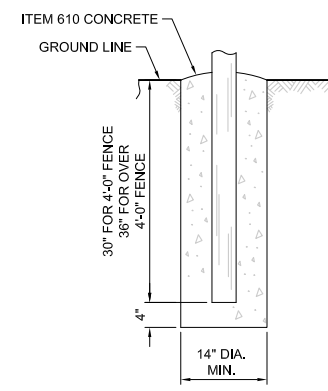
**PULL POST ARRANGEMENT**

**LINE POST ARRANGEMENT**

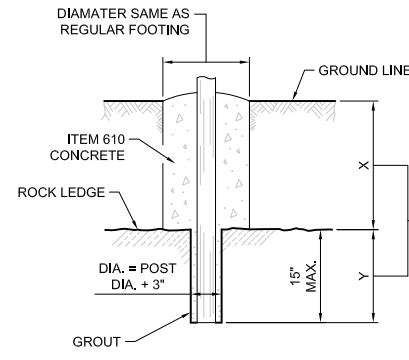
**CORNER OR END POST ARRANGEMENT**



**FOOTING FOR LINE POST**

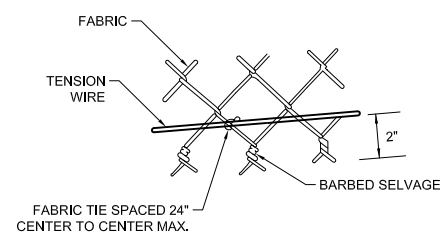


**FOOTING FOR GATE & TERMINAL POST**

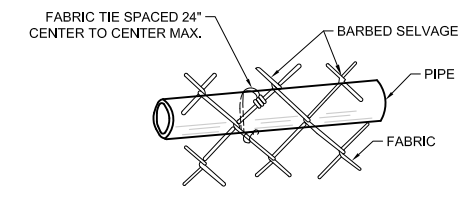


**FOOTING FOR POST IN ROCK LEDGE**

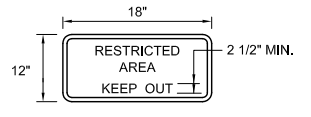
X + Y SHALL NOT EXCEED 36 INCHES. WHEN X IS 21 INCHES, THEN Y = 15 INCHES AND THE POST SHALL BE SHORTENED AS REQUIRED. WHEN X EXCEEDS 21 INCHES, THEN Y SHALL BE DECREASED CORRESPONDINGLY.



**METHOD OF TYING FABRIC TO TENSION WIRE**

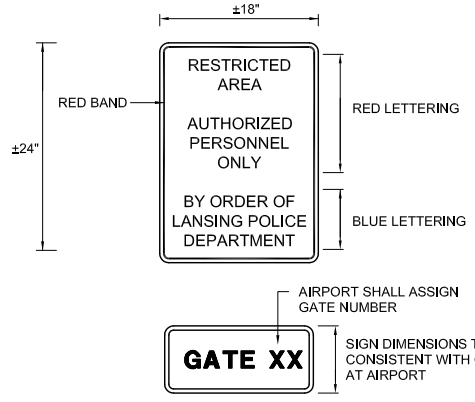


**METHOD OF TYING FABRIC TO PIPE**



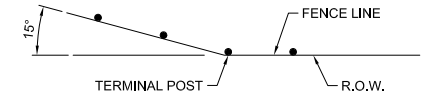
**SIGN DETAILS**

- NOTES:**
- EVERY 100' OF FENCE SHALL REQUIRE ONE "RESTRICTED" SIGN. COST INCIDENTAL TO FENCE.
  - 0.08 GA ALUMINUM ALLOY SHEET. LETTERING SHALL BE RED ON A WHITE BACKGROUND.



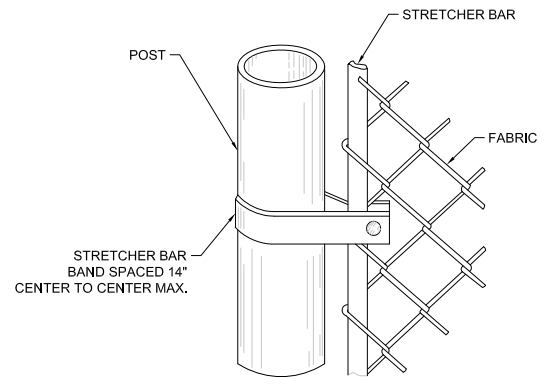
**SIGN DETAILS**

- NOTES:**
- EACH PEDESTRIAN, SWING OR SLIDE GATE SHALL REQUIRE ONE "RESTRICTED" AND ONE "NUMBER" SIGN ON OR ADJACENT TO THE GATE. AIRPORT SHALL PROVIDE GATE NUMBER.
  - 0.08 GA ALUMINUM ALLOY WITH A WHITE BACKGROUND.
  - CONTRACTOR SHALL VERIFY PANEL AND FONT SIZE WITH EXISTING AIRPORT SIGNS.
  - CANTILEVERED SLIDE GATES SHALL INCLUDE ONE ADDITIONAL SIGN AS DETAILED ON THE CANTILEVER GATE DETAIL SHEETS.



**INSTALLATION AT CORNERS**

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



**METHOD OF FASTENING STRETCHER BAR TO POST**

IL. CONTRACT: **LA040**  
 IL. LETTING ITEM: **3A**  
 IL. PROJECT: **IGQ-4424**  
 S.B.G. PROJECT: **3-17-SBGP-120**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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

**LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS**  
**INSTALL PERIMETER SECURITY FENCE - PHASE 2**  
**FENCING DETAILS - SHEET 1**

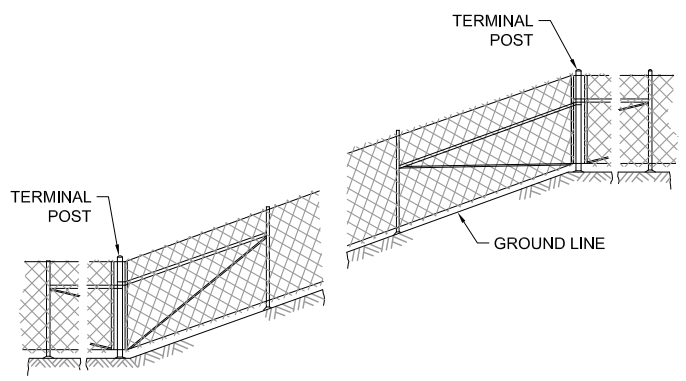
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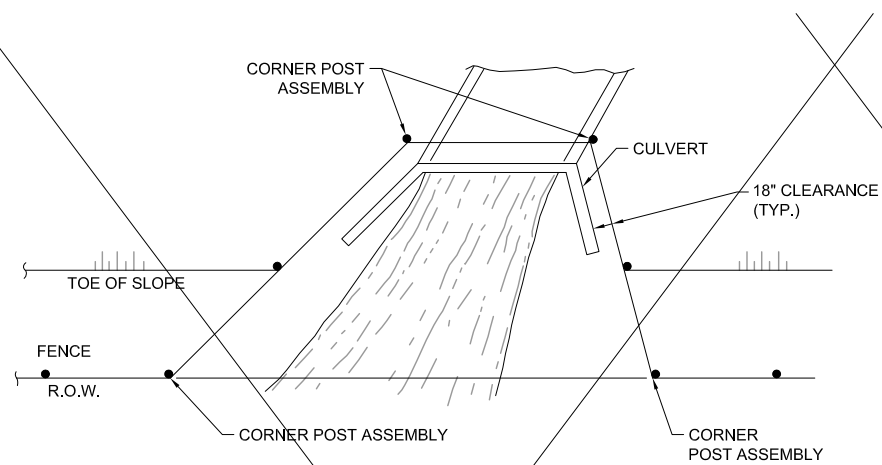
DESIGN BY:	ARM
DRAWN BY:	JRO
CHECKED BY:	ARM
APPROVED BY:	DKP
DATE:	APRIL 15, 2016
JOB No:	14297-03-00

**FINAL**

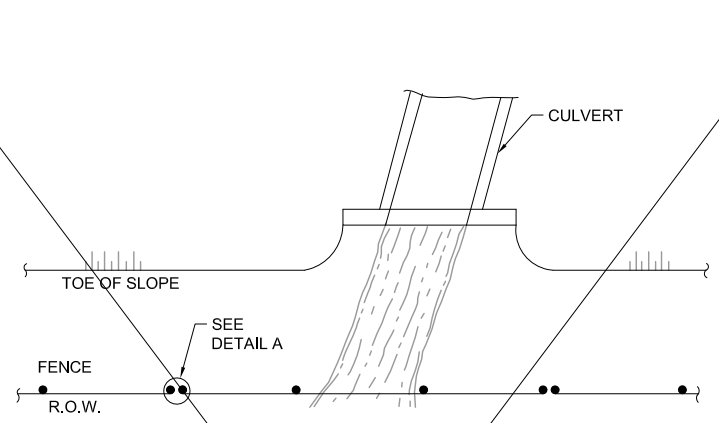
SHEET 9 OF 13 SHEETS



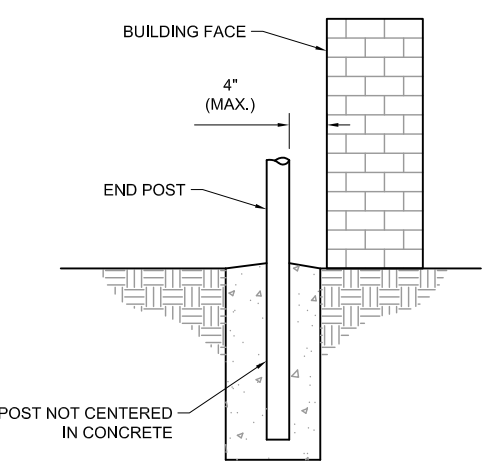
**INSTALLATION ON SLOPES**



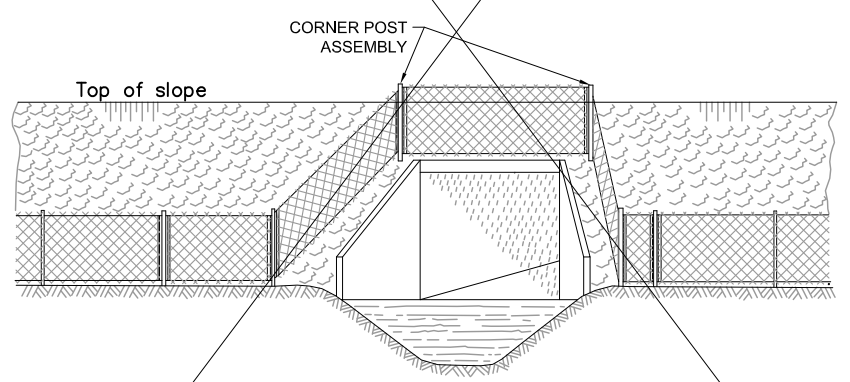
**PLAN AT HEADWALL**



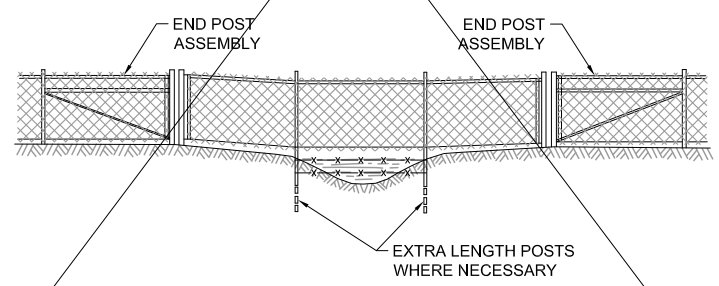
**PLAN AT STREAM CROSSING**



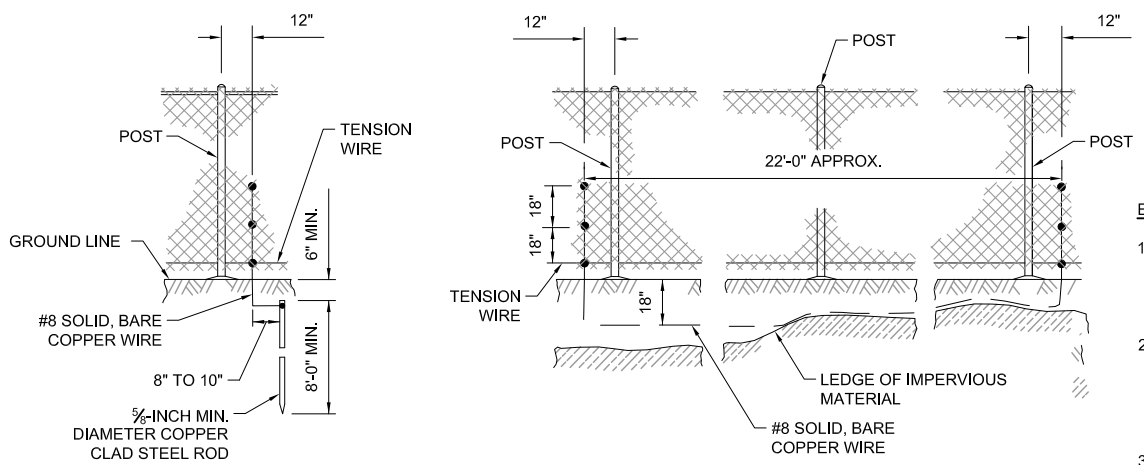
**FENCE INSTALLATION AT BUILDING FACE**



**ELEVATION INSTALLATION AROUND HEADWALL**

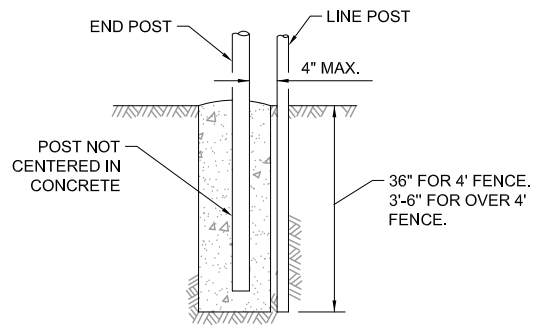


**ELEVATION INSTALLATION OVER STREAM**



**PROTECTIVE ELECTRICAL GROUNDS**

- ELECTRICAL GROUNDING NOTES:**
1. CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 1000' EXCEPT THERE SHALL BE A GROUND NOT EXCEEDING 100 FT. FROM A GATE IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE.
  2. FENCE UNDER POWER LINE SHALL BE GROUNDED BY THREE 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 CROSSING.
  3. THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF AN 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.

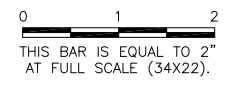


**DETAIL A**

IL. CONTRACT: **LA040**  
IL. LETTING ITEM: **3A**  
IL. PROJECT: **IGQ-4424**  
S.B.G. PROJECT: **3-17-SBGP-120**

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**LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS  
INSTALL PERIMETER SECURITY FENCE - PHASE 2**

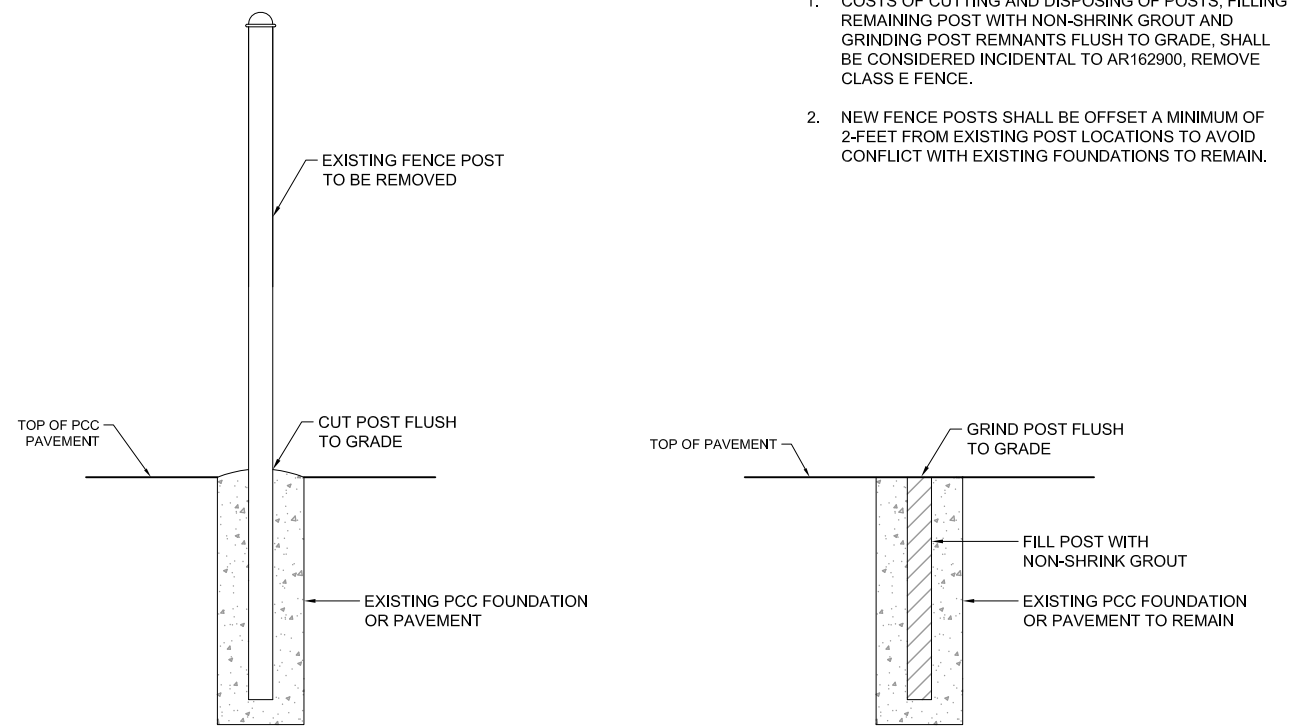
**FENCING DETAILS - SHEET 2**

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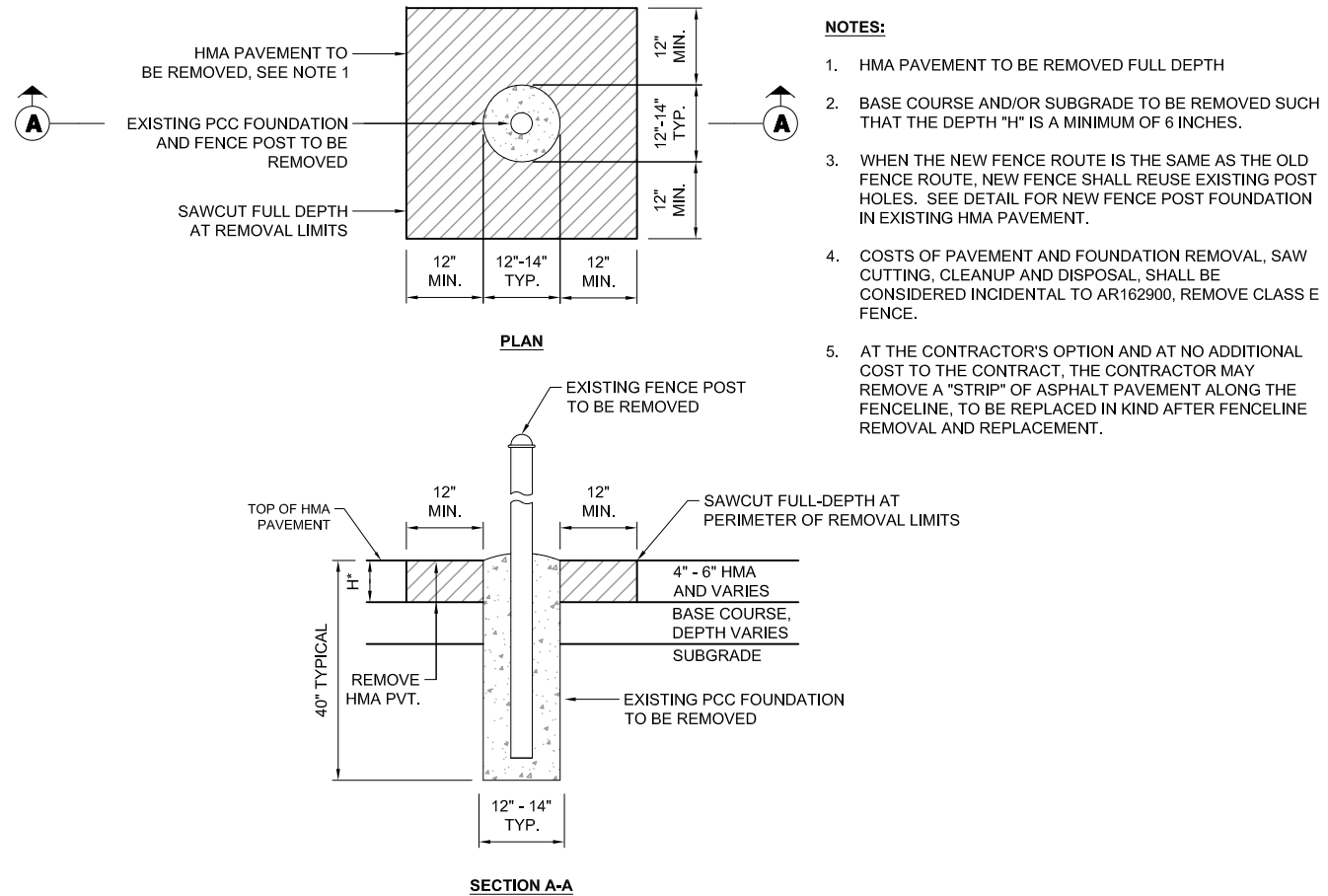
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CHECKED BY:	ARM
APPROVED BY:	DKP
DATE:	APRIL 15, 2016
JOB No:	14297-03-00

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**FENCE POST REMOVAL IN PCC PAVEMENT**

- NOTES:**
- COSTS OF CUTTING AND DISPOSING OF POSTS, FILLING REMAINING POST WITH NON-SHRINK GROUT AND GRINDING POST REMNANTS FLUSH TO GRADE, SHALL BE CONSIDERED INCIDENTAL TO AR162900, REMOVE CLASS E FENCE.
  - NEW FENCE POSTS SHALL BE OFFSET A MINIMUM OF 2-FEET FROM EXISTING POST LOCATIONS TO AVOID CONFLICT WITH EXISTING FOUNDATIONS TO REMAIN.



**FENCE POST REMOVAL IN HMA PAVEMENT**

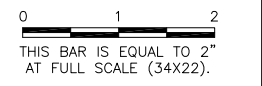
- NOTES:**
- HMA PAVEMENT TO BE REMOVED FULL DEPTH
  - BASE COURSE AND/OR SUBGRADE TO BE REMOVED SUCH THAT THE DEPTH "H" IS A MINIMUM OF 6 INCHES.
  - WHEN THE NEW FENCE ROUTE IS THE SAME AS THE OLD FENCE ROUTE, NEW FENCE SHALL REUSE EXISTING POST HOLES. SEE DETAIL FOR NEW FENCE POST FOUNDATION IN EXISTING HMA PAVEMENT.
  - COSTS OF PAVEMENT AND FOUNDATION REMOVAL, SAW CUTTING, CLEANUP AND DISPOSAL, SHALL BE CONSIDERED INCIDENTAL TO AR162900, REMOVE CLASS E FENCE.
  - AT THE CONTRACTOR'S OPTION AND AT NO ADDITIONAL COST TO THE CONTRACT, THE CONTRACTOR MAY REMOVE A "STRIP" OF ASPHALT PAVEMENT ALONG THE FENCELINE, TO BE REPLACED IN KIND AFTER FENCELINE REMOVAL AND REPLACEMENT.

IL. CONTRACT: **LA040**  
IL. LETTING ITEM: **3A**  
IL. PROJECT: **IGQ-4424**  
S.B.G. PROJECT: **3-17-SBGP-120**

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**LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS  
INSTALL PERIMETER SECURITY FENCE - PHASE 2**

**FENCING DETAILS - SHEET 3**

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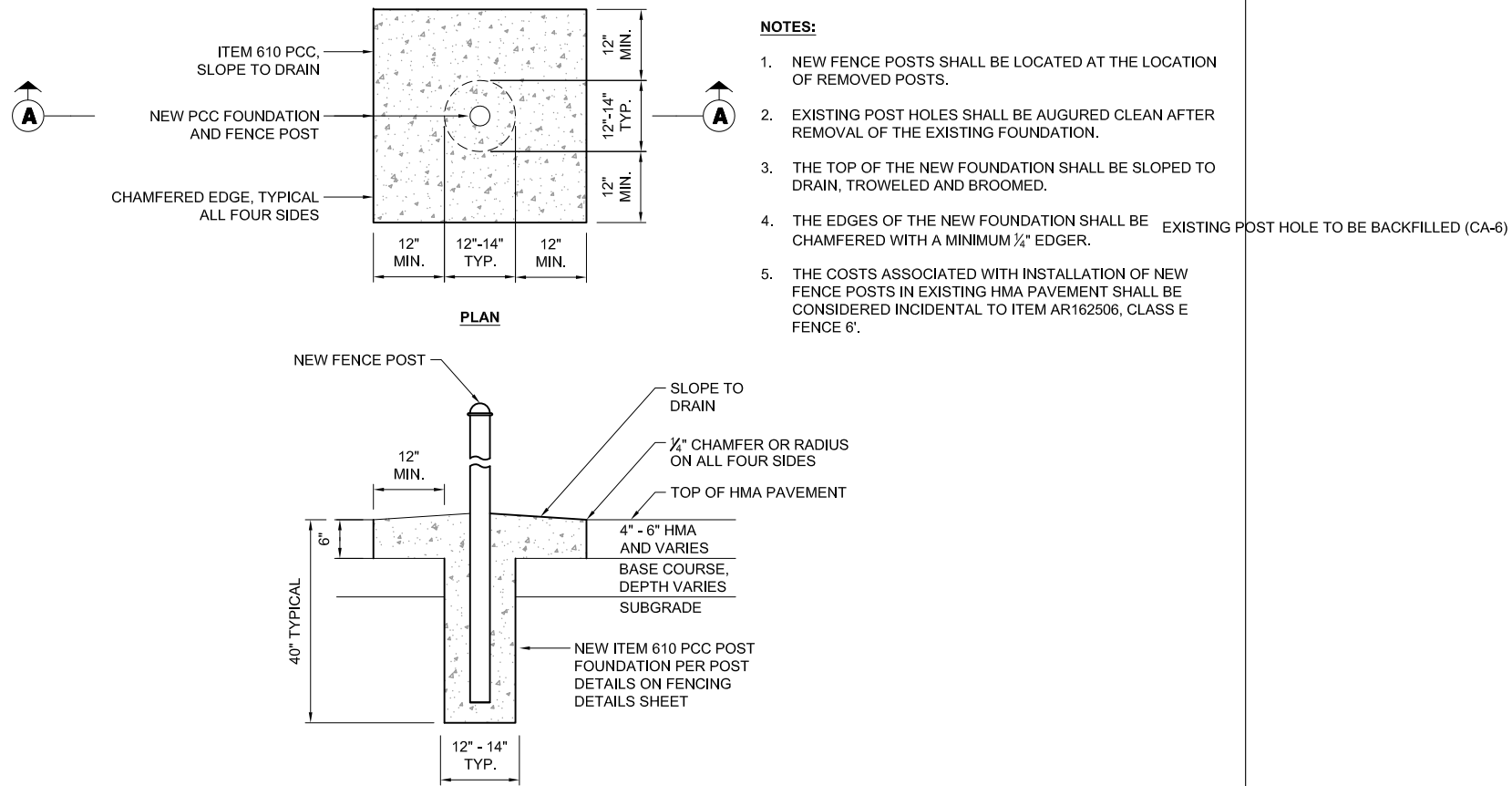


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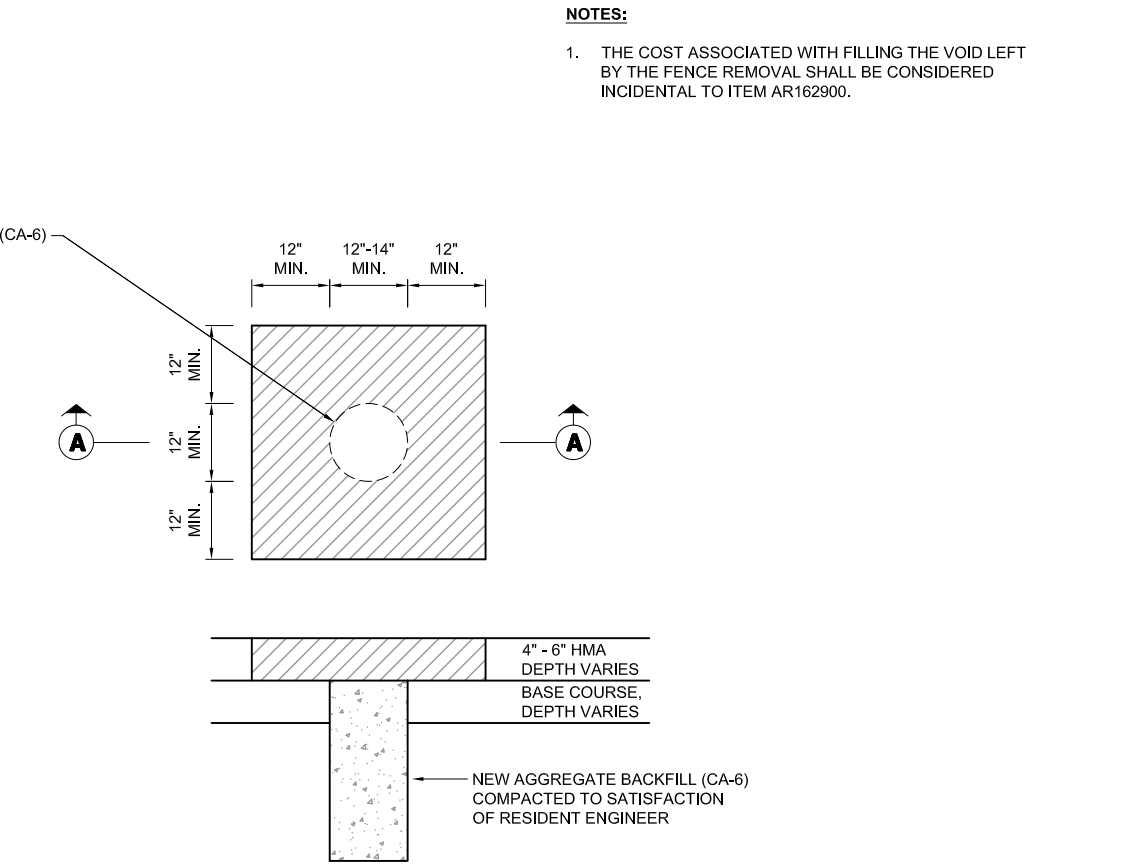
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SHEET 11 OF 13 SHEETS



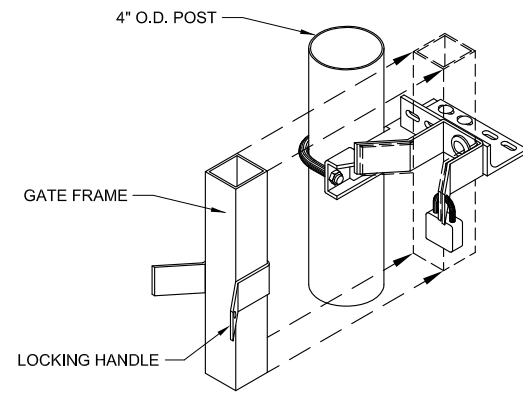
**NEW FENCE POST FOUNDATION IN EXISTING HMA PAVEMENT**

- NOTES:**
- NEW FENCE POSTS SHALL BE LOCATED AT THE LOCATION OF REMOVED POSTS.
  - EXISTING POST HOLES SHALL BE AUGURED CLEAN AFTER REMOVAL OF THE EXISTING FOUNDATION.
  - THE TOP OF THE NEW FOUNDATION SHALL BE SLOPED TO DRAIN, TROWELED AND BROOMED.
  - THE EDGES OF THE NEW FOUNDATION SHALL BE CHAMFERED WITH A MINIMUM 1/4" EDGER.
  - THE COSTS ASSOCIATED WITH INSTALLATION OF NEW FENCE POSTS IN EXISTING HMA PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO ITEM AR162506, CLASS E FENCE 6'.



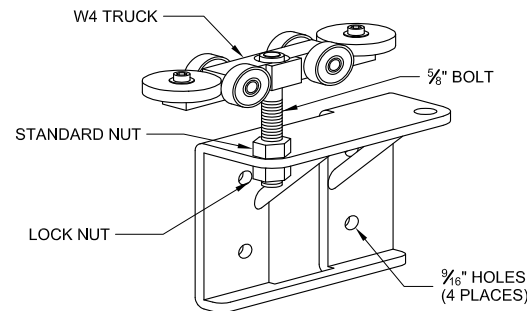
**FENCE POST HOLE REPAIR IN EXISTING HMA PAVEMENT**

- NOTES:**
- THE COST ASSOCIATED WITH FILLING THE VOID LEFT BY THE FENCE REMOVAL SHALL BE CONSIDERED INCIDENTAL TO ITEM AR162900.



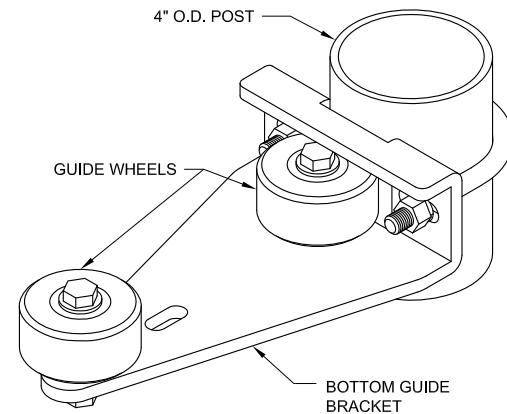
**CATCH ASSEMBLY DETAIL**

N.T.S.



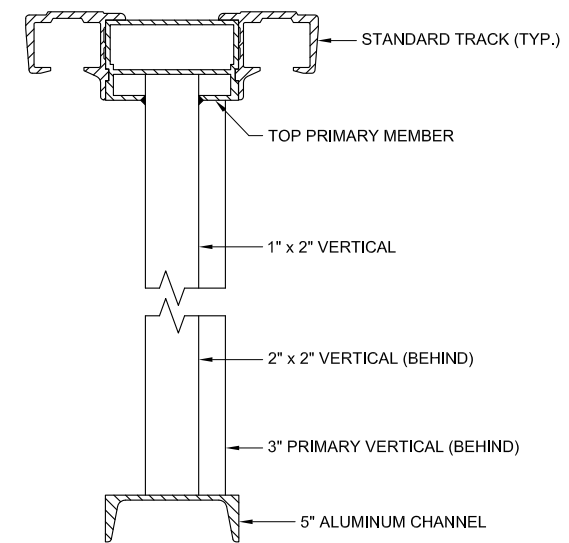
**GATE HANGER ASSEMBLY**

N.T.S.



**STANDARD BOTTOM GUIDE ASSEMBLY**

N.T.S.



**GATE FRAME SECTION**

N.T.S.

IL. CONTRACT: **LA040**  
IL. LETTING ITEM: **3A**  
IL. PROJECT: **IGQ-4424**  
S.B.G. PROJECT: **3-17-SBGP-120**

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

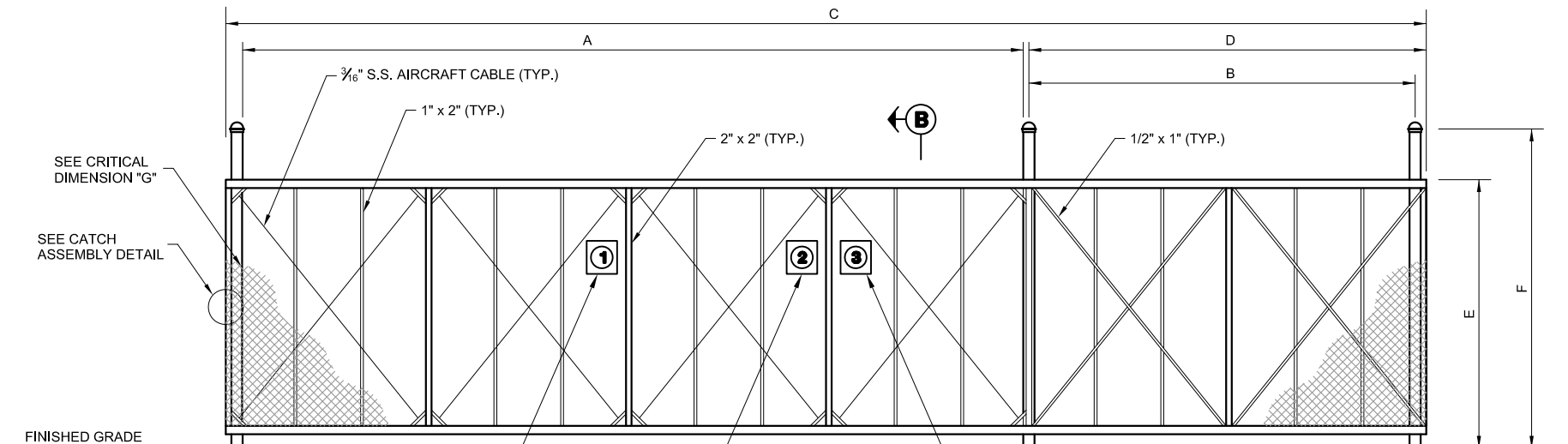
**LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS  
INSTALL PERIMETER SECURITY FENCE - PHASE 2  
CANTILEVER GATE DETAILS**

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**ELEVATION**

**CANTILEVER SLIDE GATE**

N.T.S.

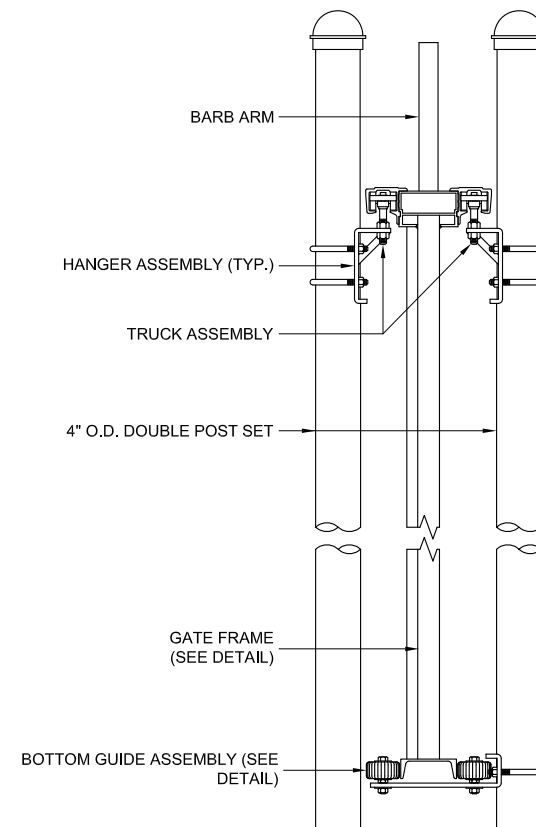
CRITICAL DIMENSIONS			
A	CLEAR OPENING	* 16'-0"	** 16'-0"
B	COUNTER BALANCE POST SPACING, CENTER TO CENTER	7'-1"	7'-1"
C	OVERALL GATE LENGTH	24'-0"	24'-0"
D	COUNTERBALANCE LENGTH	8'-0"	8'-0"
E	NOMINAL GATE HEIGHT	5'-0"	6'-0"
F	POST HEIGHT	5'-3"	7'-6"
G	FABRIC HEIGHT	4'-0"	5'-0"

\* GATE FOR 5' CLASS E FENCE  
\*\* GATE FOR 6' CLASS E FENCE

**UL 235 COMPLIANCE NOTES**

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

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



**SECTION B-B**

(TYPICAL ALL GATES)

NOTE:  
EXTRUSIONS SHALL BE OVERSIZED FOR EXTRA RIGIDITY OVER "STANDARD" GATE DESIGN.

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

**MANUAL SLIDE GATE NOTES:**

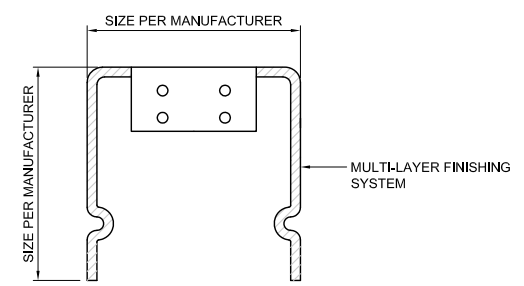
- CANTILEVERED GATE SHALL BE SUFFICIENTLY RIGID TO WITHSTAND FLEXING OR BENDING DURING WINDY CONDITIONS. CONTRACTOR SHALL PROVIDE STIFFENERS, STRUCTURAL SHAPES IN EXCESS OF THE MINIMUM SPECIFIED DIMENSIONS OR ADDITIONAL ROLLERS AND POSTS SUFFICIENT TO PREVENT DISPLACEMENT OF THE GATE BY WIND OR BY UNAUTHORIZED PERSONNEL.
- CONTRACTOR SHALL PROVIDE AND INSTALL GATE AS A COMPLETE WORKING UNIT. THE GATE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: GATE, POSTS, AND ALL CONNECTIONS, SIGNS, LABOR AND MATERIALS NECESSARY FOR COMPLETE OPERATION.
- THE FABRIC TYPE & FINISH OF THE GATE SHALL MATCH THE PROPOSED FENCE OR BE AS DIRECTED BY THE ENGINEER.
- ALL SLIDING GATES SHALL HAVE ALL ROLLERS ENCLOSED IN STEEL OR PLASTIC SHROUDS TO PREVENT ACCIDENTAL INJURY.
- SEE FENCING DETAILS SHEET 1 FOR ADDITIONAL SIGN DETAILS.



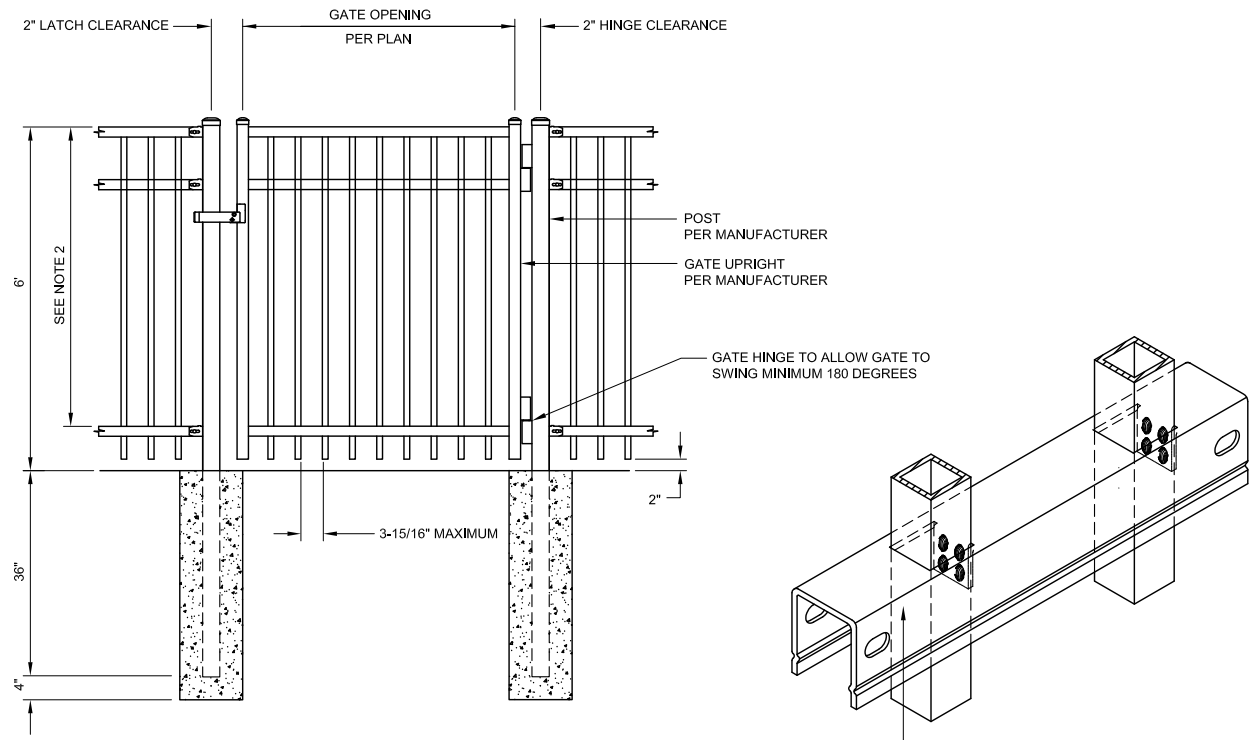
**WARNING SIGN DETAIL**

**FENCE AND GATE NOTES:**

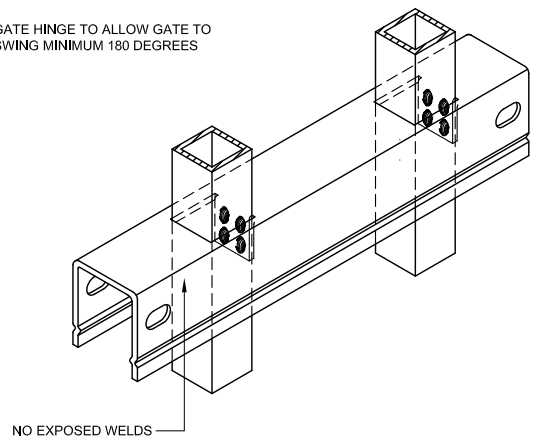
- DIMENSIONS SHOWN ARE GENERIC. ACTUAL DIMENSIONS OF STRUCTURAL MEMBERS SHALL BE IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S SHOP DRAWINGS TO MEET THE SPECIFIED WIND LOAD.
- THE FENCE SHALL HAVE 3 RAILS AND RAIL SPACING PER MANUFACTURER. GATES SHALL HAVE THE SAME NUMBER OF RAILS AS THE FENCE TO PROVIDE CONTINUITY IN APPEARANCE.
- RAILS SHALL BE SECURELY FASTENED TO POSTS. POSTS ARE TO BE SOLID WALL WITHOUT PUNCHES. BRACKET FASTENERS SHALL BE EQUIPPED WITH TAMPER PROOF HEADS.
- ALL FENCE AND GATE POSTS SHALL BE CAPPED.
- THE PICKET SHALL BE ABLE TO WITHSTAND A MINIMUM LOAD OF 125 POUNDS APPLIED VERTICALLY TO THE OUTERMOST END OF THE PICKET.
- THE FENCING SYSTEM SHALL BE ABLE TO WITHSTAND A WIND LOADING OF 116 MPH. MANUFACTURER'S CERTIFICATION SHALL BE REQUIRED TO STATE THE METHOD USED IN DETERMINING WIND LOAD CAPACITY OF THE FENCING SYSTEM.
- GATE LATCHES SHALL ALLOW A PADLOCK WITH A SHACKLE OF 7/16" DIAMETER TO BE EASILY INSERTED.
- GATE PICKETS SHALL BE WELDED TO THE RAILS PRIOR TO FINISH COAT APPLICATION.
- ANY FINISH COAT MARRED DURING INSTALLATION OR DEEMED UNACCEPTABLE TO THE RESIDENT ENGINEER SHALL BE REAPPLIED OR REPAIRED IN A MANNER ACCEPTABLE TO THE RESIDENT ENGINEER AND APPROVED BY THE ENGINEER.
- TO PROVIDE CONTINUITY IN APPEARANCE THE FENCE, PEDESTRIAN GATE AND SLIDE GATE SHALL BE SUPPLIED FROM THE SAME MANUFACTURER, INCLUDING ALL BRACKETS, FASTENERS, SCREWS, AND OTHER MISCELLANEOUS ITEMS.
- IF ADDITIVE ALTERNATE NO. 1 IS AWARDED, IN ADDITION TO THE BASE BID UNIT PRICE PER LINEAR FOR FOR CLASS E FENCE AND PER EACH GATE IN TURF AND PAVEMENT AN ADDITIONAL PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT UPGRADED CLASS E FENCE 6' AND PER EACH UPGRADED CLASS E GATE - 5' AND UPGRADED CLASS E MANUAL SLIDE GATE - 16' AT THE LOCATIONS SHOWN ON THE PLANS. THE ADDITIONAL PAYMENT WILL BE FULL COMPENSATION TO INCLUDE THE DIFFERENCE IN COST BETWEEN THE BASE BID FENCE AND THE ADDITIVE ALTERNATE NO. 1 UPGRADED FENCE, WHICH INCLUDES LABOR, MATERIALS, PREPARATION, ERECTION, INSTALLATION TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.



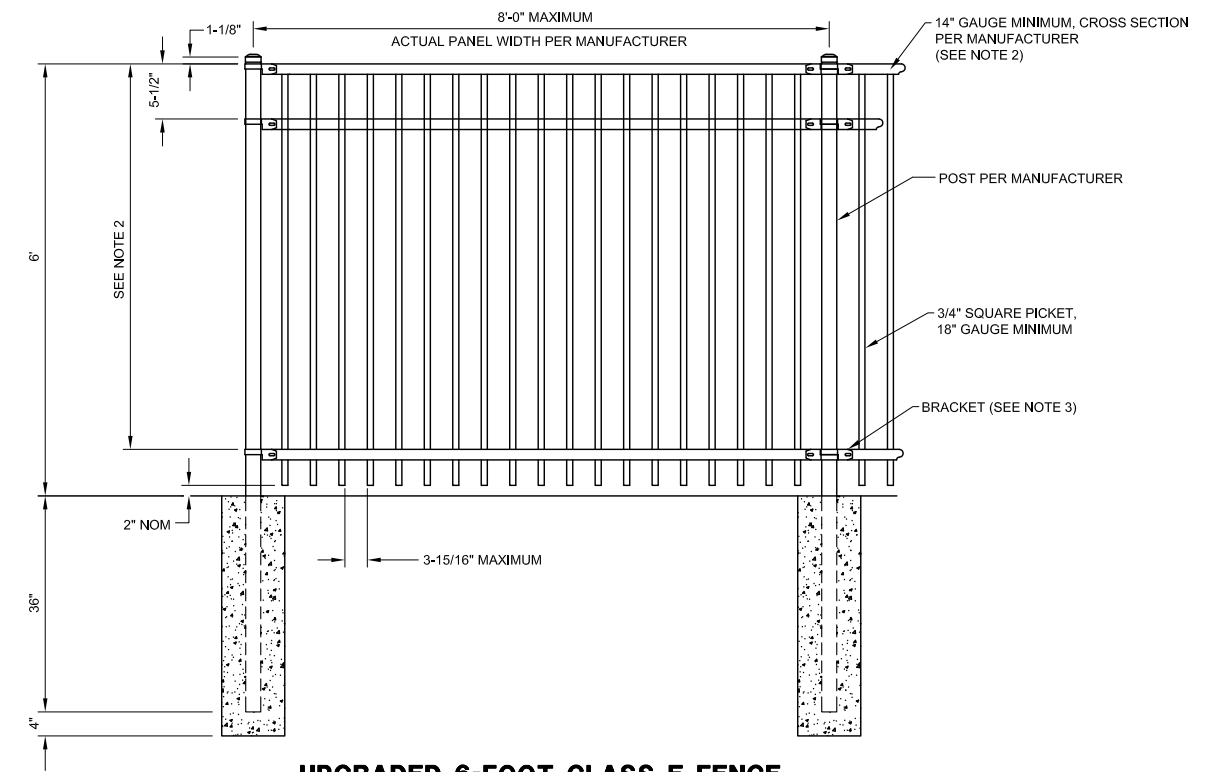
**EXAMPLE FENCE RAIL CROSS SECTION**



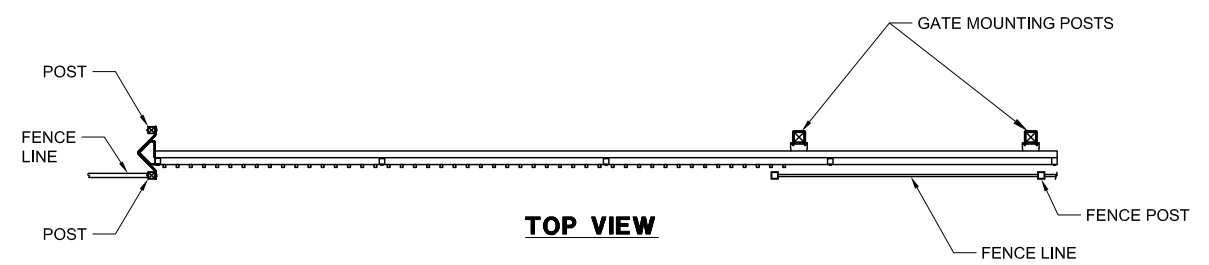
**UPGRADED PEDESTRIAN GATE**



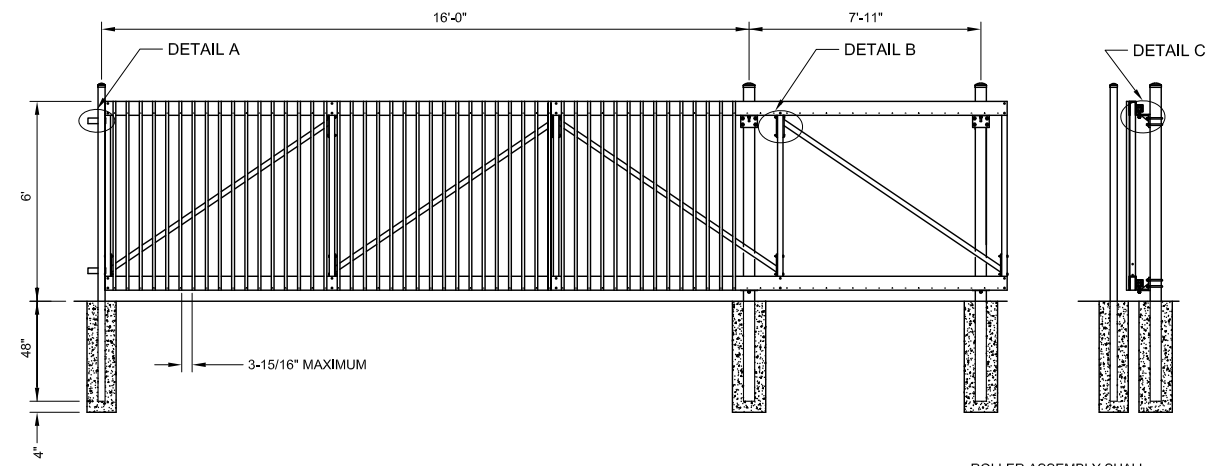
**RAIL DETAIL**



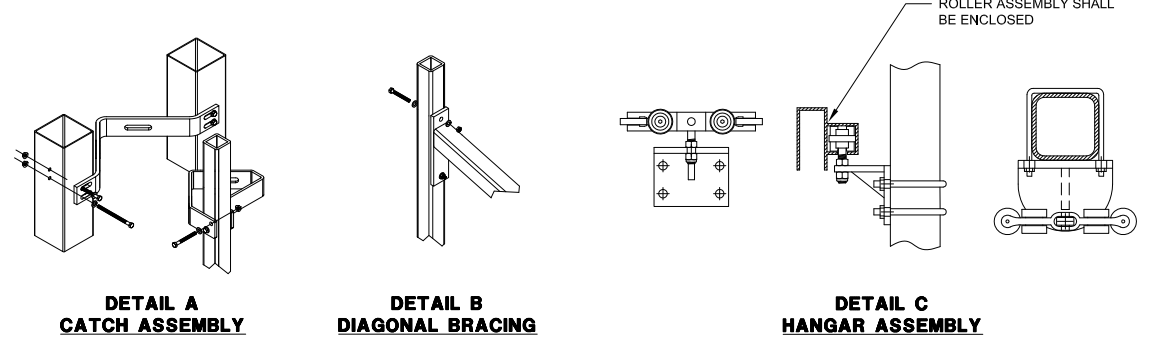
**UPGRADED 6-FOOT CLASS E FENCE**



**TOP VIEW**



**UPGRADED CANTILEVER SLIDE GATE DETAIL**



**DETAIL A  
CATCH ASSEMBLY**

**DETAIL B  
DIAGONAL BRACING**

**DETAIL C  
HANGAR ASSEMBLY**

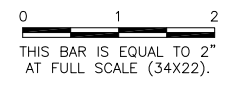
NOT TO SCALE

IL. CONTRACT: **LA040**  
IL. LETTING ITEM: **3A**  
IL. PROJECT: **IGQ-4424**  
S.B.G. PROJECT: **3-17-SBGP-120**

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**LANSING MUNICIPAL AIRPORT  
LANSING, ILLINOIS  
INSTALL PERIMETER SECURITY FENCE - PHASE 2**

**FENCING DETAILS  
ADDITIVE ALTERNATE NO. 1**

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