13A BID DATE: 05/16/2008

UNIVERSITY OF ILLINOIS INSTITUTE OF AVIATION

UN048 TOTAL SHEETS: 57

UNIVERSITY OF ILLINOIS - WILLARD AIRPORT

ILLINOIS PROJECT CMI-3663 A. I. P. PROJECT 3-17-0016-XX

REHABILITATE AIR CARRIER APRON, PHASE 2, REHABILITATE TAXIWAY A7, AND ENHANCED CENTERLINE MARKINGS Expires 11/30/2009

ADDITIVE ALTERNATE 1 - REHABILITATE TAXIWAY A6

APRIL 18, 2008

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

UNIVERSITY OF ILLINOIS - WILLARD AIRPORT

TOWNSHIP: T 18 N RANGE: R 8 E TOWNSHIP: TOLONO COUNTY: CHAMPAIGN

TAXIWAY A6 GEOMETRIC DESIGN DATA

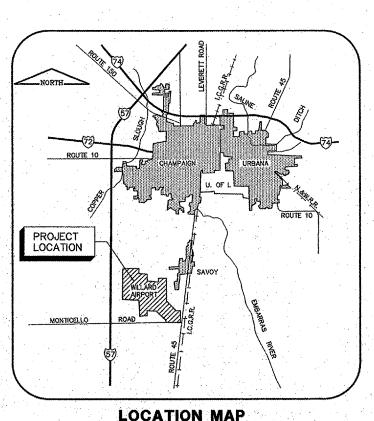
DESIGN GROUP - GROUP IV WINGSPAN - UP TO BUT NOT INCLUDING 171 FT DESIGN APPROACH CATEGORY - C

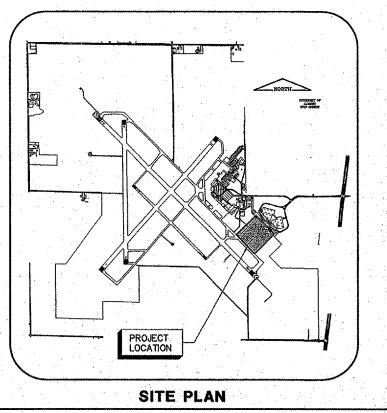
TAXIWAY A7 GEOMETRIC DESIGN DATA

DESIGN GROUP - GROUP III WINGSPAN - UP TO BUT NOT INCLUDING 118 FT. DESIGN APPROACH CATEGORY - C

PAVEMENT STRUCTURE DESIGN DATA

560 ANNUAL OPERATIONS DESIGN AIRCRAFT - 737-700 GROSS WEIGHT - 155,000 LBS. DUAL WHEEL GEAR





GROUND CONTROL RADIO FREQUENCY - 121.8 ATIS FREQUENCY - 124.85 MAXIMUM HEIGHT OF EQUIPMENT ABOVE GROUND IS 25 FT.



CRAWFORD MURPHY & TILLY, INC. CONSULTING ENGINEERS

License No. 184-000613

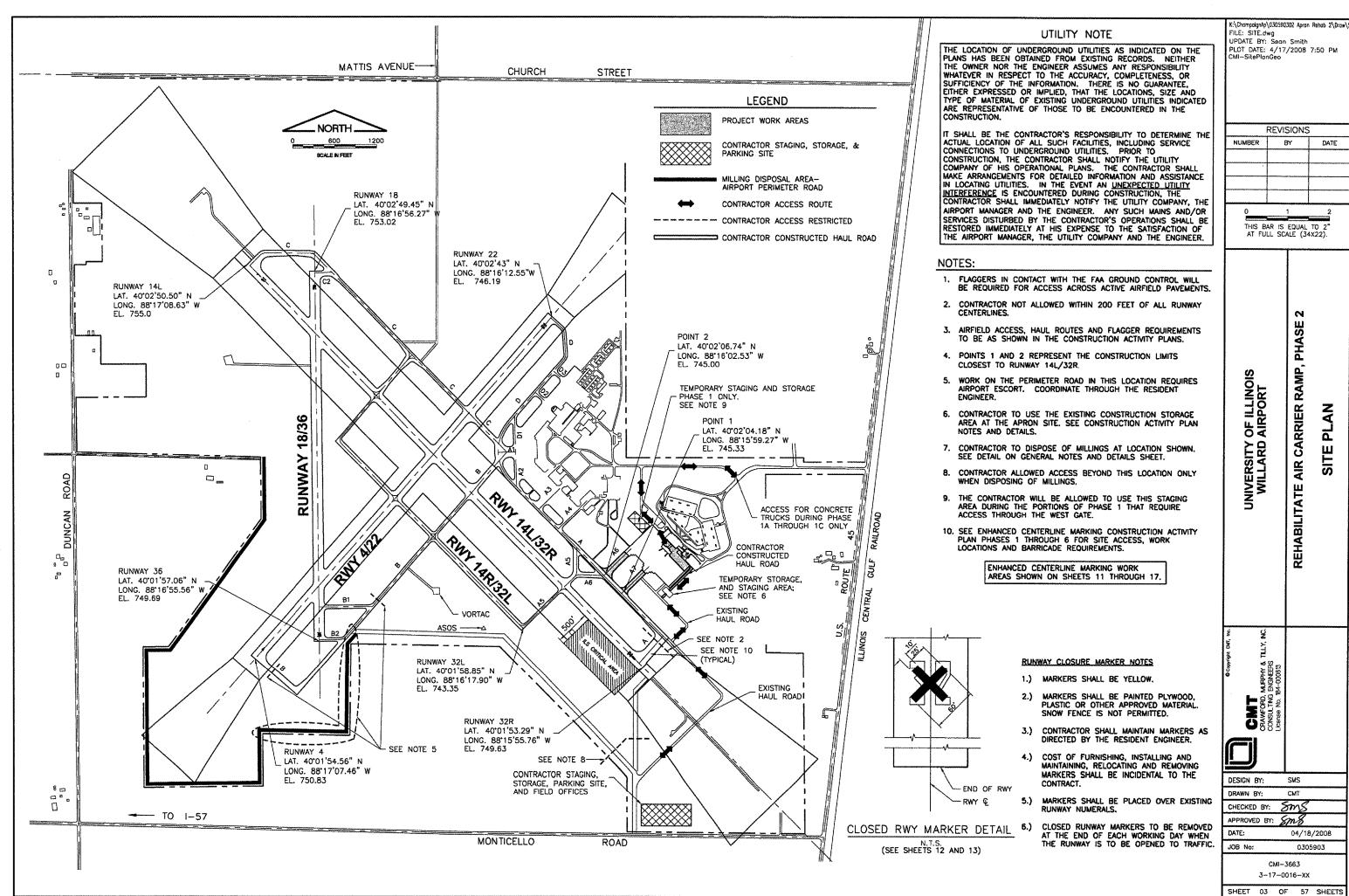
DATE April 18

CM&T JOB NUMBER 03059-03

	Index to Sheets
Sheet	Description
Number 1	Cover Sheet
2	Index to Sheets and Summary of Quantities
3	Site Plan
4	General Notes and Details
5	Horizontal and Vertical Controls
6	Construction Activity General Notes and Details
7	Construction Activity Plan Phase 1 Overview
8	Construction Activity Plan Phase 1 Detailed View
9	Construction Activity Plan Phase 2
10	Construction Activity Plan Additive Alternate 1
11	Enhanced Centerline Marking Work Areas
12	Enhanced Centerline Marking Construction Activity Plan Phase 1
13	Enhanced Centerline Marking Construction Activity Plan Phase 2
14	Enhanced Centerline Marking Construction Activity Plan Phase 3
15 16	Enhanced Centerline Marking Construction Activity Plan Phase 4 Enhanced Centerline Marking Construction Activity Plan Phase 5
17	Enhanced Centerline Warking Construction Activity Plan Phase 5 Enhanced Centerline Marking Construction Activity Plan Phase 6
18	Existing Conditions and Removals - Apron
19	Existing Conditions and Removals - Taxiway A6 & A7
20	Pavement Removal Details Sheet 1
21	Pavement Removal Details Sheet 2
22	Pavement Removal Details Sheet 3
23	Pavement Removal Details Sheet 4
24	Project Improvements - Apron
25	Project Improvements - Taxi and Limousine Waiting Area
26	Project Improvements - Taxiway A6 & A7
27	New Typical Sections - Apron
28	New Typical Sections - Taxiway A6 & A7
29	Jointing Plan - Apron
30 31	New Jointing Details Paving and Miscellaneous Details Sheet 1
32	Paving and Miscellaneous Details Sheet 2
33	Paving at In-Pavement Structures and Crack Sealing Details
34	Sidewalk and Curb Details
35	Staking Plan 1 - Apron
36	Staking Plan 2 - Sidewalk and Curb & Taxi and Limo Drive
37	Staking Plan 3 - Taxiway A6 & A7
38	Underdrain Plan
39	Underdrain Details
40	Marking and Ground Rod Plan
41	Terminal Area Marking Plan and Parking Block Layout
42	Enhanced Taxiway Centerline Marking Details
43 44	Fencing Plan Fence Details
44 45	Electrical Gate Details Sheet 1
46	Electrical Gate Details Sheet 2
47	Electrical Gate Details Sheet 3
48	Electrical Adjustments & Details Sheet 1
49	Electrical Adjustments & Details Sheet 2
50	Grading, Turfing & Erosion Control Plan
.51	Erosion Control Details
52	Index to Cross Sections
53	Cross Sections - Apron Sheet 1 - Baseline C Sta. 24+50.14 to Sta. 28+50
54	Cross Sections - Apron Sheet 2 - Baseline C Sta. 29+00 to Sta. 29+50.22
55	Cross Sections - Taxiway A7 - Sta. 95+50 to Sta. 99+50
56	Cross Sections - Additive Alternate 1 - Taxiway A6 Sheet 1 - Sta. 95+50 to Sta. 99+00
57	Cross Sections - Additive Alternate 1 - Taxiway A6 Sheet 2 - Sta. 99+50

Summary of Quantities				
ltem Number	Description	UNIT	QUANTITY	
ASE BID - R	EHABILITATE AIR CARRIER APRON, PHASE	2 REHABILI	TATE TAXIWA	
	ANCED CENTERLINE MARKINGS	z, ((z) (AB)E)	INIT INNIN	
AR110949	Adjust Cable Marker	I EA	ggrand Alexand	
AR125941	Adjust Stake Mounted Light	EA	100 200 A 1	
AR125942	Adjust Base Mounted Light	EA		
AR125944	Adjust Taxi Guidance Sign	EA		
AR150510	Engineer's Field Office	LS		
AR152410	Unclassified Excavation	CY	80	
AR152480	Shoulder Adjustment Silt Fence	SY	2,90	
AR156510 AR156513	Separation Fabric	LF SY	1,20 6,57	
AR156520	Inlet Protection	EA	0,07	
AR162408	Class E Fence, Vinyl-8'	LF	83	
AR162720	Electric Gate - 20"	EA	360.274553	
AR162900	Remove Class E Fence	LF	83	
AR162908	Remove Electric Gate	EΑ		
AR163000	Temporary Construction Fence	LF	36	
AR201610	Bituminous Base Course	TON	40	
AR201661	Clean and Seal Bituminous Cracks	LF	60	
AR209608	Crushed Aggregate Base Course - 8"	SY	6,57	
AR302900 AR401610	Remove 4" ATPS: Bituminous Surface Course	SY	6,11	
AR401610 AR401655	Butt Joint Construction	TON	52 47	
AR401900	Remove Bituminous Pavement	SY	1,79	
AR501508	8" PCC Pavement	SY	6,11	
AR501530	PCC Test Batch	EA	N. H. N. A. A. M. M. C.	
AR501604	4" PCC Sidewalk	SF	1,12	
AR501690	PCC Sidewalk Removal	SF	1,12	
AR501908	8" PCC Pavement Removal	SY	6,11	
AR510515	Ground Rod	EA		
AR510905	Remove Ground Rod	EA		
AR602510	Bituminous Prime Coat	GAL	20	
AR603510	Bituminous Tack Coat	GAL	1,10	
AR620510	Pavement Marking	SF	16,50	
AR705524 AR754210	4" Perforated Underdrain w/Sock Concrete Curb	I 별	48 17	
AR754410	Comb. Concrete Curb & Gutter	LF LF	11:	
AR754900	Remove Concrete Curb	T LF	24	
AR754904	Remove Comb. Concrete Curb & Gutter	LF	17	
AR800215	Remove Bollard	EA		
AR800283	Clean and Repaint Bollard	EA	1:	
AR800284	Remove, Repaint and Reinstall Guardrail	LF	150	
AR800285	Remove Parking Block	EA	1	
AR800390	PCC Joint Milling	LF	3,45	
AR800391	PCC Partial Depth Patch	LF.	3,45	
AR800420	Reflective Crack Control - ISAC	LF	3,45	
AR901510 AR904510	Seeding Sodding	AC ev	AC.	
AR908510	Sodding Mulching	SY:	650	
AR910410	Parking Block	AC EA	1:	
AR910420	Bollard Bollard	EA	!	
			A Market	
DDITIVE 1 -	REHABILITATE TAXIWAY A6			
AS110949	Adjust Cable Marker	EA		
AS125941	Adjust Stake Mounted Light	EA		
AS125942	Adjust Base Mounted Light	EA		
AS125944	Adjust Taxi Guidance Sign	EA		
AS152480	Shoulder Adjustment	SY	2,500	
AS156510	Silt Fence	LF.	82	
AS156520	Inlet Protection	EA		
AS201610 AS201661	Bituminous Base Course	TON	478	
AS401610	Clean and Seal Bituminous Cracks Bituminous Surface Course	LF	600	
AS401610 AS401655	Butt Joint Construction	TON	525 650	
AS401900	Remove Bituminous Pavement	SY	476	
AS603510	Bituminous Tack Coat	GAL	1,000	
AS620510	Pavement Marking	SF	3,145	
AS705944	Adjust Underdrain Cleanout	ΕA		
A\$800390	PCC Joint Milling	LF	2,400	
AS800391	PCC Partial Depth Patch	LF	2,400	
AS800420	Reflective Crack Control - ISAC	LF.	2,400	
AS901510	Seeding		0.6	
AS904510	Sodding	SY	350	

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UNIVERSITY OF ILLINOIS WILLARD AIRPORT		CARRIER RA	INDEX TO SHEETS AND	SUMMARY OF QUANTITIES	
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SHEET 02	2 OF	57	SHE	ETS	



GENERAL NOTES

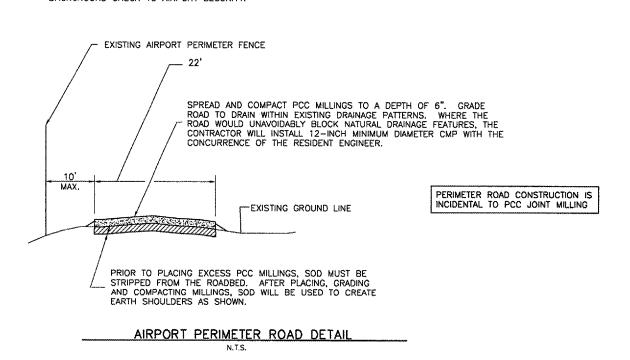
- .) ALL RUNWAYS, TAXIWAYS AND APRONS WILL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED IN THE CONSTRUCTION ACTIVITY PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
- 2.) ALL CONSTRUCTION TRAFFIC OPERATING ON OR CROSSING ACTIVE RUNWAYS AND TAXIWAYS MUST BE UNDER THE CONTROL OF A FLAGMAN IN RADIO CONTACT WITH FAA AIR TRAFFIC CONTROL TOWER PERSONNEL AT ALL TIMES. THE CONTRACTOR WILL PROVIDE HIS OWN RADIOS.
- 3.) WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY WILL TAKE PRECEDENCE AND WILL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CLOSING AND OPENING PAVEMENTS AND CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT MANAGER.
- 4.) THE CONTRACTOR MUST STORE EQUIPMENT AND MATERIALS AT THE LOCATION SHOWN FOR THE "CONTRACTOR'S STAGING, STORAGE, PARKING SITE AND FIELD OFFICE".
- 5.) BROKEN OR WASTE CONCRETE. WILL BE DISPOSED OF BY THE CONTRACTOR OFF AIRPORT PROPERTY, UNLESS DIRECTED BY THE RESIDENT ENGINEER. PCC MILLINGS, AT THE OPTION OF THE CONTRACTOR MAY BE USED TO CONSTRUCT A PORTION OF THE AIRPORT'S PERIMETER ROAD AS SHOWN ON THE SITE PLAN. THE ROAD WILL CONFORM TO THE DETAIL ON THIS SHEET. MILLINGS NOT USED ON THE PERIMETER ROAD WILL BE DISPOSED OF OFF AIRPORT PROPERTY.
- 6.) VEHICLES AND EQUIPMENT WILL NOT BE ALLOWED WITHIN AREAS 80' FROM THE CENTERLINE OF ACTIVE TAXIWAYS OR 200' FROM THE CENTERLINE OF ACTIVE RUNWAYS, UNLESS SHOWN OTHERWISE IN THE CONSTRUCTION ACTIVITY PLAN DRAWNGS.
- 7.) ALL PAVEMENTS, DRIVES AND OTHER AREAS USED BY THE CONTRACTOR FOR HAUL ROADS AND STORAGE AREAS WILL BE MAINTAINED AND REPAIRED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR THIS WORK.
- 8.) EXISTING TURF & AGRICULTURAL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS WILL BE COMPLETELY RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
- THE CONTRACTOR MUST THOROUGHLY CLEAN ALL CONSTRUCTION AREAS PRIOR TO OPENING TO AIR TRAFFIC.
- 10.) REFER TO THE CONSTRUCTION ACTIVITY PLANS AND THE SPECIFICATIONS FOR REQUIREMENTS CONCERNING COORDINATION OF CONSTRUCTION ACTIVITIES.
- 11.) THE FIRE/CRASH/RESCUE VEHICLES MUST HAVE COMPLETE ACCESS TO THE ENTIRE AIRFIELD INCLUDING THE CLOSURE AREAS.
- 12.) THE CONTRACTOR IS REQUIRED TO GIVE SEVEN WORKING DAYS NOTICE TO THE AIRPORT MANAGER PRIOR TO CLOSING WORK AREAS TO AIRCRAFT.
- 13.) AT THE PRECONSTRUCTION MEETING, THE CONTRACTOR MUST SUPPLY THE AIRPORT MANAGER WITH PROPOSED CLOSURE AND PHASING DATES FOR HIS REVIEW AND APPROVAL. THE RESIDENT ENGINEER WILL KEEP THE AIRPORT MANAGER ADVISED OF ANY PROPOSED CHANGES IN CLOSURE AND PHASING DATES.
- 14.) ALL CONTRACTOR VEHICLES AND EQUIPMENT MUST DISPLAY AN ORANGE AND WHITE CHECKED AVIATION FLAG, EXCEPT HAUL VEHICLES.
- 15.) ANY VEHICLE OPERATING WITHIN A MOVEMENT AREA DURING THE HOURS OF DARKNESS MUST BE EQUIPPED WITH AN AMBER REVOLVING OR FLASHING DOME-TYPE LIGHT AS SPECIFIED IN THE SPECIAL PROVISIONS.
- 16.) IF, DURING CONSTRUCTION, AN EMERGENCY IS DECLARED BY THE AIRPORT, THE CONTRACTOR MUST IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, MEN

GROUND CONTROL FREQUENCY 121.8 MHZ

MAXIMUM EQUIPMENT HEIGHT 25 FEET

CONTRACTOR'S ACCESS

- 1.) CONTRACTOR'S ACCESS WILL BE AS FOLLOWS:
 - A) THE CONTRACTOR'S ACCESS TO THE WORK WILL BE AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLANS.
 - B) DURING ADVERSE WEATHER, THE CONTRACTOR MUST MAKE PROVISIONS FOR ACCESS TO THE WORK SITE 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. SEE NOTE 3 BELOW.
 - C) THE CONTRACTOR WILL INSTALL AND MAINTAIN A HEAVY-DUTY PADLOCK ON THE ACCESS GATE. HE MUST PROVIDE KEYS FOR THIS PADLOCK TO THE RESIDENT ENGINEER, AIRPORT SECURITY AND MAINTENANCE SUPERVISOR, NO ADDITIONAL KEYS ARE TO BE DISTRIBUTED UNLESS AUTHORIZED BY THE AIRPORT MANAGER.
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED & SECURED AT ALL TIMES, INCLUDING WORK HOURS. IF THE CONTRACTOR CHOOSES TO LEAVE THE GATE OPEN, HE MUST POST A COMPETENT, FULL TIME SECURITY GUARD TO PREVENT UNAUTHORIZED ENTRIES. THE CONTRACTOR WILL REPLACE ANY UNSATISFACTORY SECURITY GUARDS IF SO DIRECTED BY THE AIRPORT MANAGER OR RESIDENT ENGINEER.
 - E) THE CONTRACTOR MUST CLOSE AND LOCK THE ACCESS GATES UPON LEAVING THE SITE.
 - F) THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGE TO THE ACCESS GATES OR FENCING ADJACENT TO THE PROJECT WILL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE AIRPORT MANAGER.
 - G) ALL COSTS RELATING TO CONTRACTOR'S ACCESS AND SECURITY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - H) THE CONTRACTOR MUST STORE EQUIPMENT AND MATERIALS IN SUCH A WAY AS TO NOT DISTURB AGRICULTURAL AREAS OR VIOLATE THE PART 77 APPROACH AND PRIMARY SURFACES.
 -) EMPLOYEE PERSONAL VEHICLES WILL NOT BE ALLOWED BEYOND THE CONTRACTOR'S PARKING AREA. CONTRACTOR PERSONNEL WILL PARK IN THE CONTRACTOR'S STORAGE AREA. PERSONNEL WILL BE TRANSPORTED TO THE WORK SITE BY COMPANY OWNED VEHICLES.
 - J) THE CONTRACTOR MUST PROVIDE CONSTRUCTION ENTRANCE SIGNAGE ON MONTICELLO ROAD AS REQUIRED BY CHAMPAIGN COUNTY HIGHWAY DEPARTMENT AND THE TOLONO TOWNSHIP. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING ALL ACCESS ROADS WITH THE APPROPRIATE AGENCY RESPONSIBLE FOR THE ROADWAY.
 - K) THE CONTRACTOR WILL HAVE A VACUUM TYPE SWEEPER AVAILABLE AT ALL TIMES.
- AN AREA WILL BE PROVIDED BY THE AIRPORT TO THE CONTRACTOR AS THE STAGING, STORAGE AND EMPLOYEE PARKING SITE, AT THE LOCATION SHOWN.
- 3.) THE CONTRACTOR WILL BE ALLOWED TO USE A PORTION OF THE P.C.C. MILLINGS TO CONSTRUCT THE HAUL/ACCESS ROAD TO SUIT HIS NEEDS AS THE WORK PROGRESSES. CONTRACTOR SUPPLIED MATERIAL WILL BE REQUIRED TO CONSTRUCT THE HAUL ROAD PRIOR TO BEGINNING WORK.
- 4.) A LIST OF AUTHORIZED PERSONNEL PERMITTED TO USE THE GATE MUST BE PROVIDED BY THE CONTRACTOR TO THE RESIDENT ENGINEER.
- THE CONTRACTOR MUST PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY".
- 6.) ALL PERSONNEL ON THE AIRFIELD WILL BE REQUIRED TO SUBMIT A TEN YEAR BACKGROUND CHECK TO AIRPORT SECURITY.



K:\ChampaignAp\030590302 Apron Rehab 2\Draw\ FILE: GENNOTDET.dwg UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:51 PM REVISIONS NUMBER BY DATE THIS BAR IS EQUAL TO 2' AT FULL SCALE (34X22). PHA OF ILLINOIS AIRPORT $\overline{\Box}$ AND CARRIER S UNIVERSITY (NOT AIR REHABILITATE ENERAL Ö

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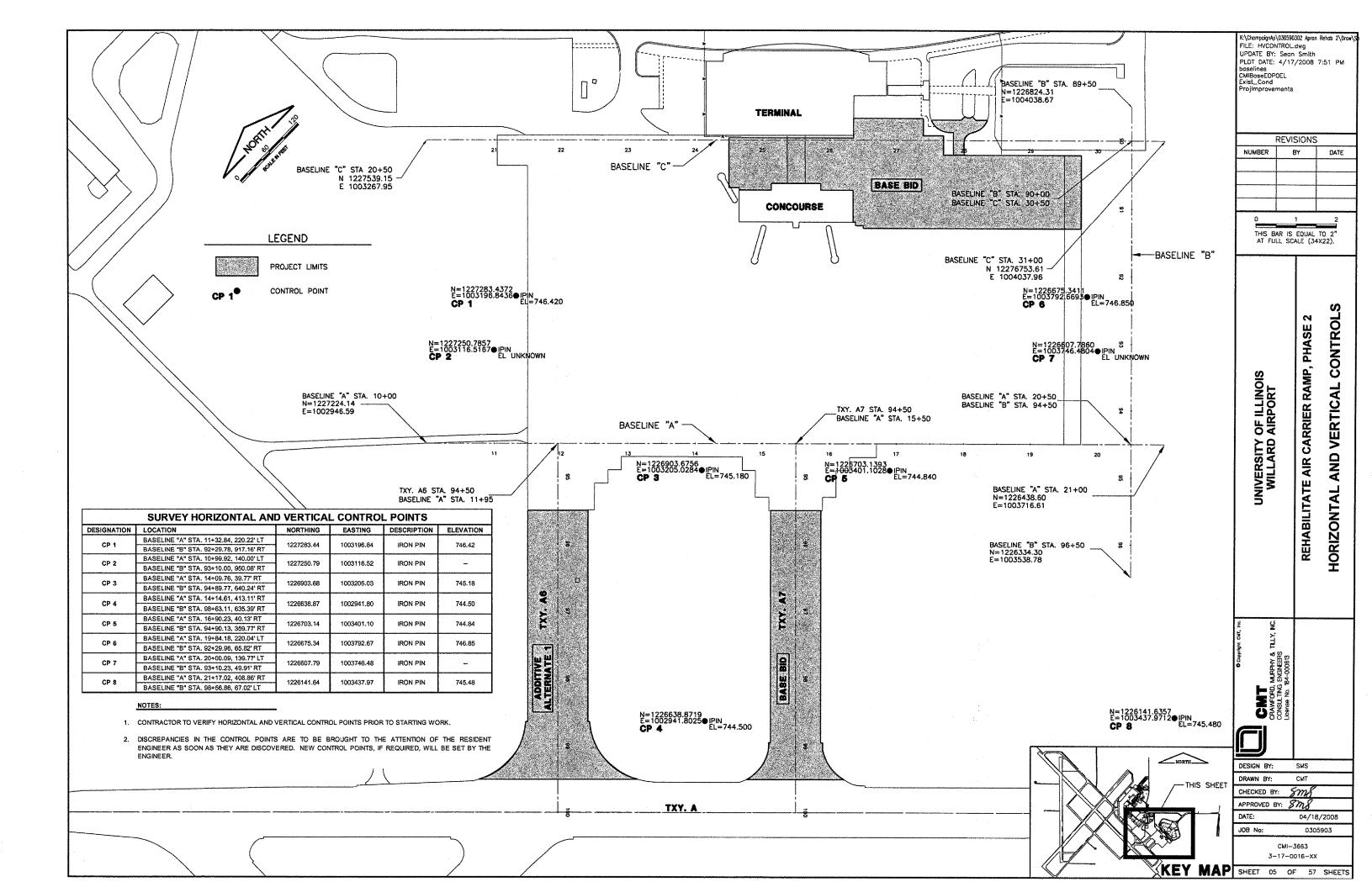
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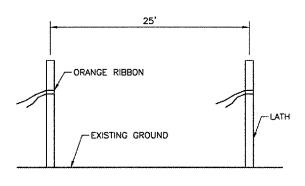
SHEET 04 OF 57 SHEETS

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CONSTRUCTION ACTIVITY AND PHASING GENERAL NOTES

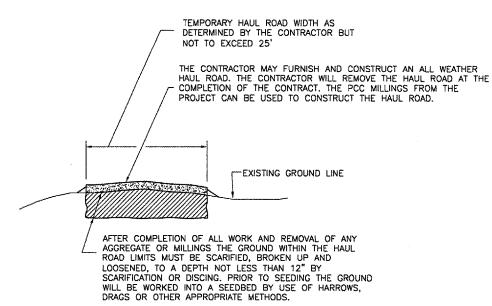
- THE CONTRACTOR WILL PLACE ALL BARRICADES AND RUNWAY CLOSURES MARKERS AS REQUIRED PRIOR TO BEGINNING WORK.
- 2. THE WORK ZONES FOR EACH PHASE ARE ADJACENT TO SECURITY CONTROLLED AREAS (SIDA) OF THE AIRFIELD. THE CONTRACTOR WILL BE AWARE THAT ANY PERSONNEL FOUND OUTSIDE OF HIS DESIGNATED WORK AREA MAY BE IN VIOLATION OF THE REGULATIONS OF THE TRANSPORTATION SECURITY ADMINISTRATION. ANY SUCH VIOLATIONS ARE SUBJECT TO FINES; ANY FINES LEVIED AGAINST THE AIRPORT AS A RESULT OF THE CONTRACTOR'S OPERATIONS WILL BE PAID BY THE CONTRACTOR AT NO COST TO THE CONTRACT.
- 3. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN SECURITY BADGES FOR HIS SUPERINTENDENT AND FOREMEN SUCH THAT THEY MAY ACT AS ESCORT FOR CONTRACTOR PERSONNEL AND VEHICLES THAT REQUIRE ACCESS TO OR ACROSS THE SIDA. BADGING COSTS WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 4. IN CASE OF EMERGENCY, THE CONTRACTOR MUST EXIT THE WORK ZONE VIA HIS DESIGNATED HAUL ROUTE AND RELOCATE TO THE STAGING AND STORAGE LOCATION SHOWN ON THE CONSTRUCTION ACTIVITY PLANS.
- 5. THE STAGING AND STORAGE LOCATION DESIGNATED ON THE CONSTRUCTION ACTIVITY PLANS IS AN EXISTING AGGREGATE SURFACED AREA. THE CONTRACTOR MAY USE THIS AREA FOR STORAGE OF LARGE EQUIPMENT THAT IS NOT ABLE TO BE MOVED TO THE STAGING AREA AT MONTICELLO ROAD AS SHOWN ON THE SITE PLAN. MOBILE EQUIPMENT SUCH AS ROLLERS AND OTHER WHEELED EQUIPMENT SHALL BE MOVED TO THE MONTICELLO ROAD LOCATION AT THE END OF THE WORKING DAY.
- EQUIPMENT AND MATERIAL STORED AT THE TEMPORARY STAGING AREA MUST BE PARKED OR STORED SUCH THAT THE PART 77 AND PRIMARY SURFACES ARE NOT VIOLATED IN ANY WAY.
- WORK THAT MUST BE COMPLETED OUTSIDE OF THE WORK AREAS SHOWN, SUCH AS PAVEMENT MARKING, MUST BE COORDINATED WITH THE AIRPORT. THE AIRPORT WILL BE GIVEN 72 HOURS NOTICE PRIOR TO THE CONTRACTOR BEGINNING THIS WORK.
- B. RADIO FLAGMEN WILL NOT BE REQUIRED TO BE IN CONTACT WITH FAA GROUND CONTROL, UNLESS THE CONTRACTOR REQUIRES ACCESS TO ACTIVE AND GROUND CONTROLLED AIRFIELD PAVEMENTS. THE RADIO FLAGMEN WILL MONITOR THE GROUND CONTROL FREQUENCY IN ORDER TO ASSIST IN DETERMINING IF THE CROSSING VEHICLES WILL BE SAFE TO CROSS THE ACTIVE TAXIWAYS/TAXILANES. GROUND CONTROL WILL BE NOTIFIED IF BROOMING OR OTHER CONSTRUCTION OPERATIONS WILL REQUIRE AIRCRAFT TO HOLD FOR THE CONTRACTOR TO CLEAR THE ACTIVE TAXIWAYS/TAXILANES.
- 9. THE CONTRACTOR WILL BE ALLOWED USE OF THE BITUMINOUS SHOULDER ADJACENT TO THE AIR CARRIER APRON AT THE LOCATION SHOWN ONLY. DAMAGE TO THE SHOULDER AT LOCATIONS OTHER THAN THOSE SHOWN CAUSED BY THE CONTRACTOR WILL BE REPAIRED AT NO COST TO THE CONTRACT.



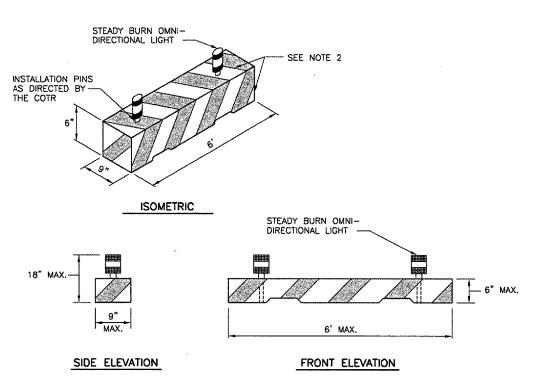
LATHE LINE DETAIL

LATHE LINE NOTES

- 1. SPACE LATHE 25' APART.
- 2. CONTRACTOR SHALL ERECT LATHE LINE WHERE SHOWN IN THE PLANS.



CONTRACTOR CONSTRUCTED HAUL ROAD DETAIL



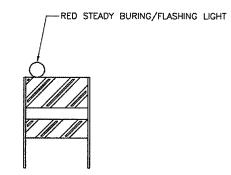
LOW PROFILE BARRICADE DETAILS

BEAM BARRICADE NOTES

- BARRICADE TO BE OF LOW MASS; EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS; AND WEIGHTED OR STURDILY ATTACHED TO THE SURFACE TO PREVENT DISPLACEMENT FROM PROP WASH, JET BLAST, WING VORTEX, OR OTHER SURFACE WIND CURRENTS.
- 2. REFLECTIVE MATERIAL, ORANGE FLORESCENT AND WHITE FLORESCENT DIAGONAL WILL BE PLACED ON ALL FACES. MATERIAL WILL BE EITHER SCOTCHLITE OR REPLEXITE MATERIAL.
- STEADY-BURN LIGHTS WILL HAVE A MINIMUM OF 5 CANDELAS AS EFFECTIVE INTENSITY AND FLASH AT A RATE OF FROM 55 TO 75 FLASHES PER MINUTE.
- 4. BARRICADES TO BE PLACED END TO END.

CONTRACTOR CONSTRUCTED HAUL ROAD

- ACCESS BETWEEN THE END OF TAXIWAY A AND THE WORK SITE WILL BE VIA AN EXISTING HAUL ROAD AT THE ALIGNMENT SHOWN ON THE SITE PLAN. ACCESS WITHIN THE SITE WILL BE AT THE ALIGNMENT SHOWN ON THE CONSTRUCTION ACTIVITY PLANS OR AS PERMITTED BY THE RE.
- AT THE CONTRACTOR'S OPTION, THE CONTRACTOR MAY CONSTRUCT ADDITIONAL ALL WEATHER HAUL ROADS WITH MILLINGS OR AGGREGATE MATERIALS TO EXPEDITE CONSTRUCTION OPERATIONS.
- 3. THE DESIGN OF THE CONTRACTOR CONSTRUCTED HAUL ROAD IS AT THE DISCRETION OF THE CONTRACTOR.
- 4. ALL EXISTING AND CONTRACTOR CONSTRUCTED HAUL ROADS AS SHOWN IN THE PLANS TO BE REMOVED AT THE COMPLETION OF THE CONTRACT. REMOVAL OF THESE HAUL ROADS WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR WILL BE REQUIRED TO REMOVE THE PHASE 3 STORAGE AREA AT THE WEST SIDE OF THE APRON AT THE END OF THE PROJECT.
- 5. AFTER COMPLETION OF THE WORK, THE GROUND WITHIN THE LIMITS OF THE TEMPORARY HAUL ROAD WILL BE RESTORED TO PRE-DISTURBED CONDITION. AS A MINIMUM, THE GROUND WITHIN THE LIMITS OF THE CONTRACTOR CONSTRUCTED HAUL ROAD MUST FIRST BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH NOT LESS THAN 12 INCHES AND RETURNED TO PRE-DISTURBED GRADE. AFTER LOOSENING AND PRIOR TO SEEDING, THE TOP 5 INCHES WILL BE WORKED INTO A SATISFACTORY SEEDBED BY USE OF ROLLERS, DRAGS, HARROWS OR OTHER APPROPRIATE METHODS. THE GROUND WILL THEN BE SEEDED AND MULCHED ACCORDING TO ITEM 901 AND 908.
- 6. WHERE REQUIRED BY LOCAL DRAINAGE PATTERNS, THE CONTRACTOR WILL INSTALL A MINIMUM 12" Ø CMP TO FACILITATE DRAINAGE UNDER THE HAUL ROAD. THE COVER OVER THE PIPE SHALL BE ADEQUATE TO PREVENT CRUSHING OF THE PIPE.
- 7. HAUL ROAD CONSTRUCTION, REMOVAL AND GROUND RESTORATION WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NOT MEASURED FOR PAYMENT. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK. THE COST TO CONSTRUCT, REMOVE AND RESTORE THE GROUND TO PRE-DISTURBED CONDITION WILL BE CONSIDERED INCIDENTAIL TO THE CONTRACT UNIT PRICES FOR THE RESPECTIVE ITEMS UTILIZING THE HAUL ROAD.



HIGH-PROFILE BARRICADE DETAIL

HIGH-PROFILE BARRICADE NOTES

- FLASHERS TO BE BATTERY OPERATED. LENS TO BE RED AND BE ABLE TO ROTATE 90 DEGREES.
- 2. SANDBAGS TO BE PLACED ON EACH SUPPORT BRACE AS REQUIRED TO PREVENT DISPLACEMENT BY WIND, JET OR PROD BLAST
- NO SEPARATE PAYMENT WILL BE MADE FOR THIS ITEM. COSTS TO BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 4. PLACE AT MAXIMUM 15' INTERVALS.
- BARREL/DRUM TYPE BARRICADES WILL NOT BE ALLOWED.

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UPDATE BY: Seon Smith
PLOT DATE: 4/17/200B 7:51 PM

REVISIONS						
NUMBER	BY	DATE				
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THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

UNIVERSITY OF ILLINOIS
WILLARD AIRPORT
WILLARD AIRPORT
REHABILITATE AIR CARRIER RAMP, PHASE
CONSTRUCTION ACTIVITY
GENERAL NOTES AND DETAILS

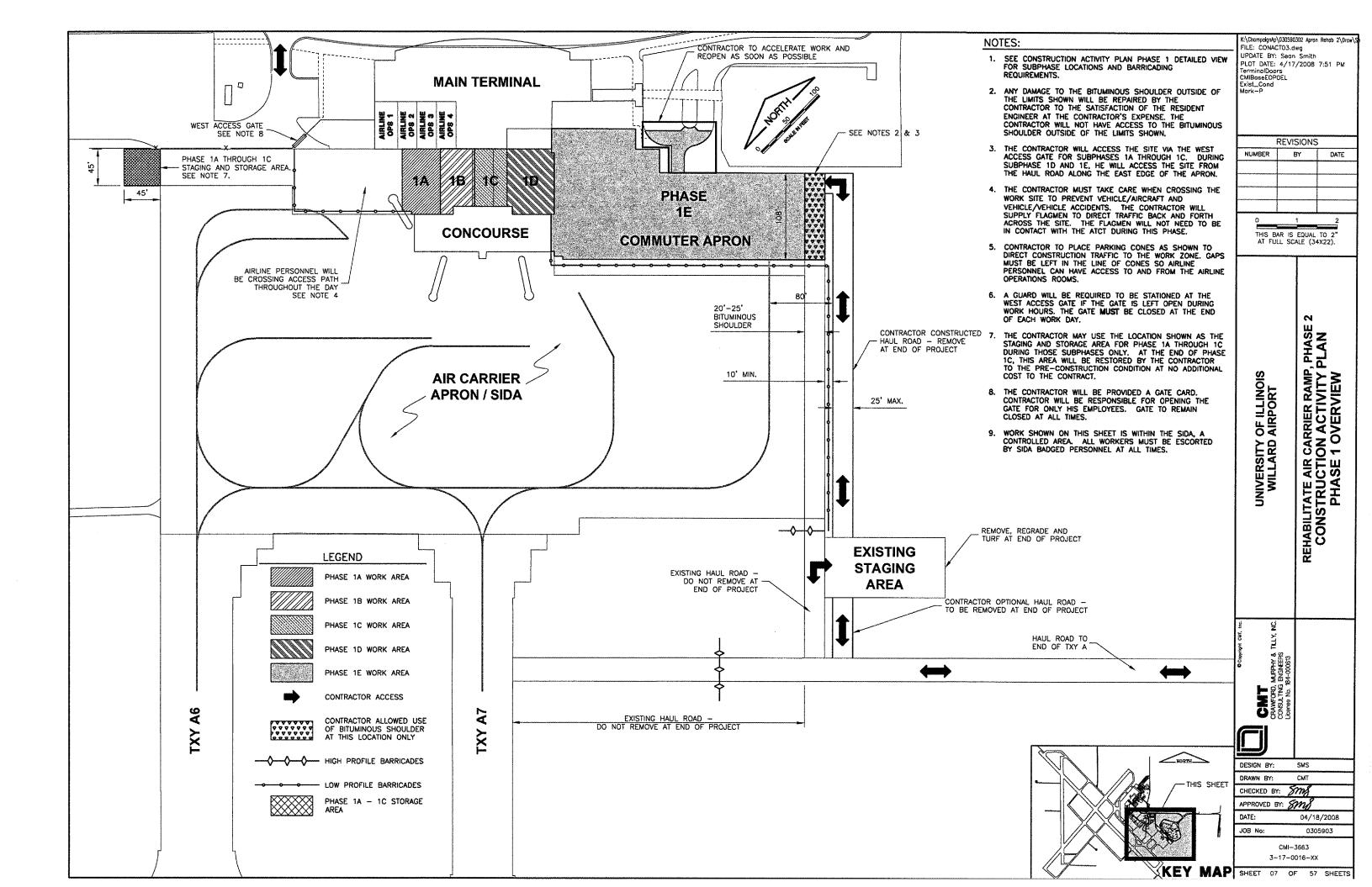
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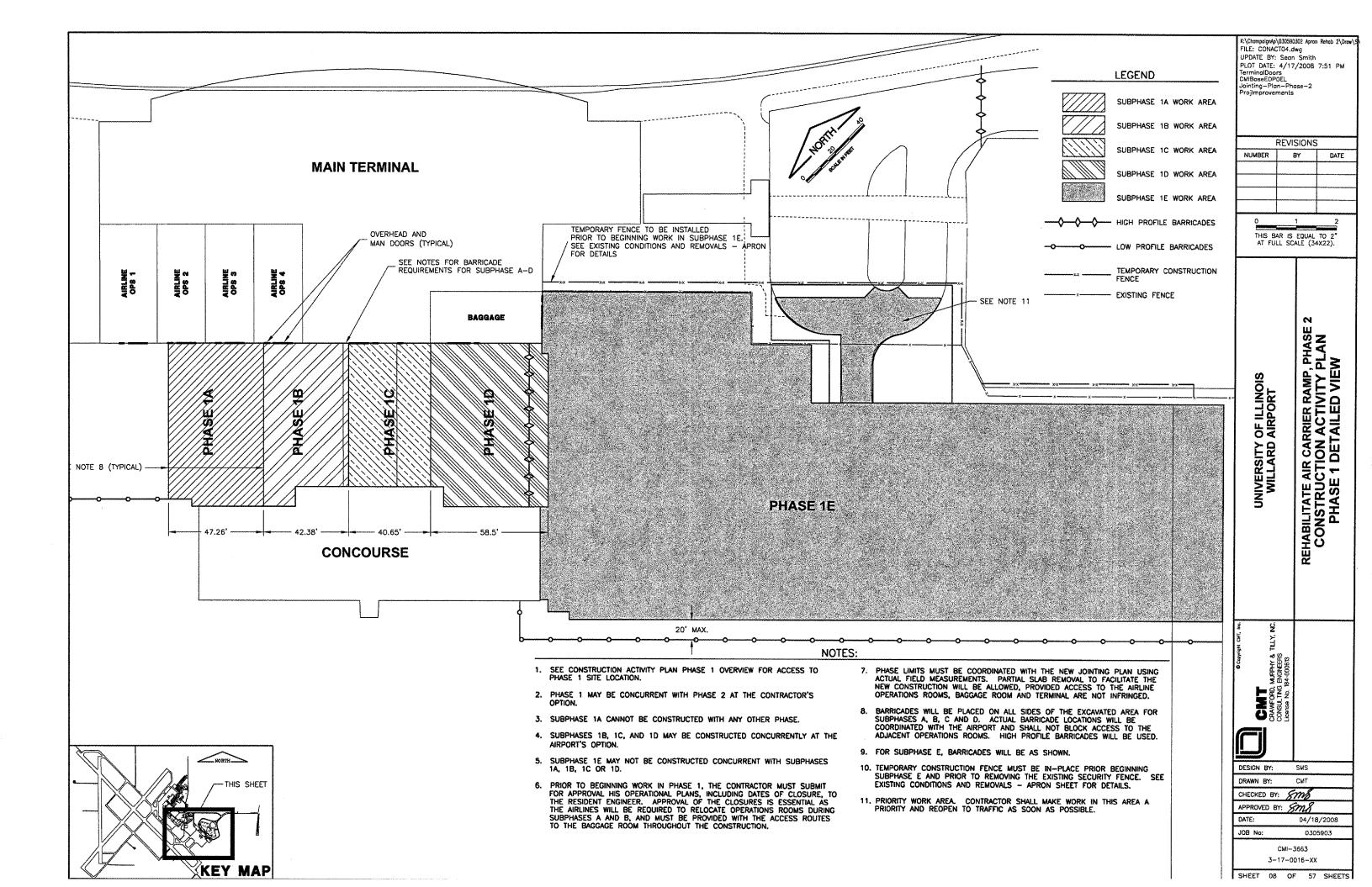
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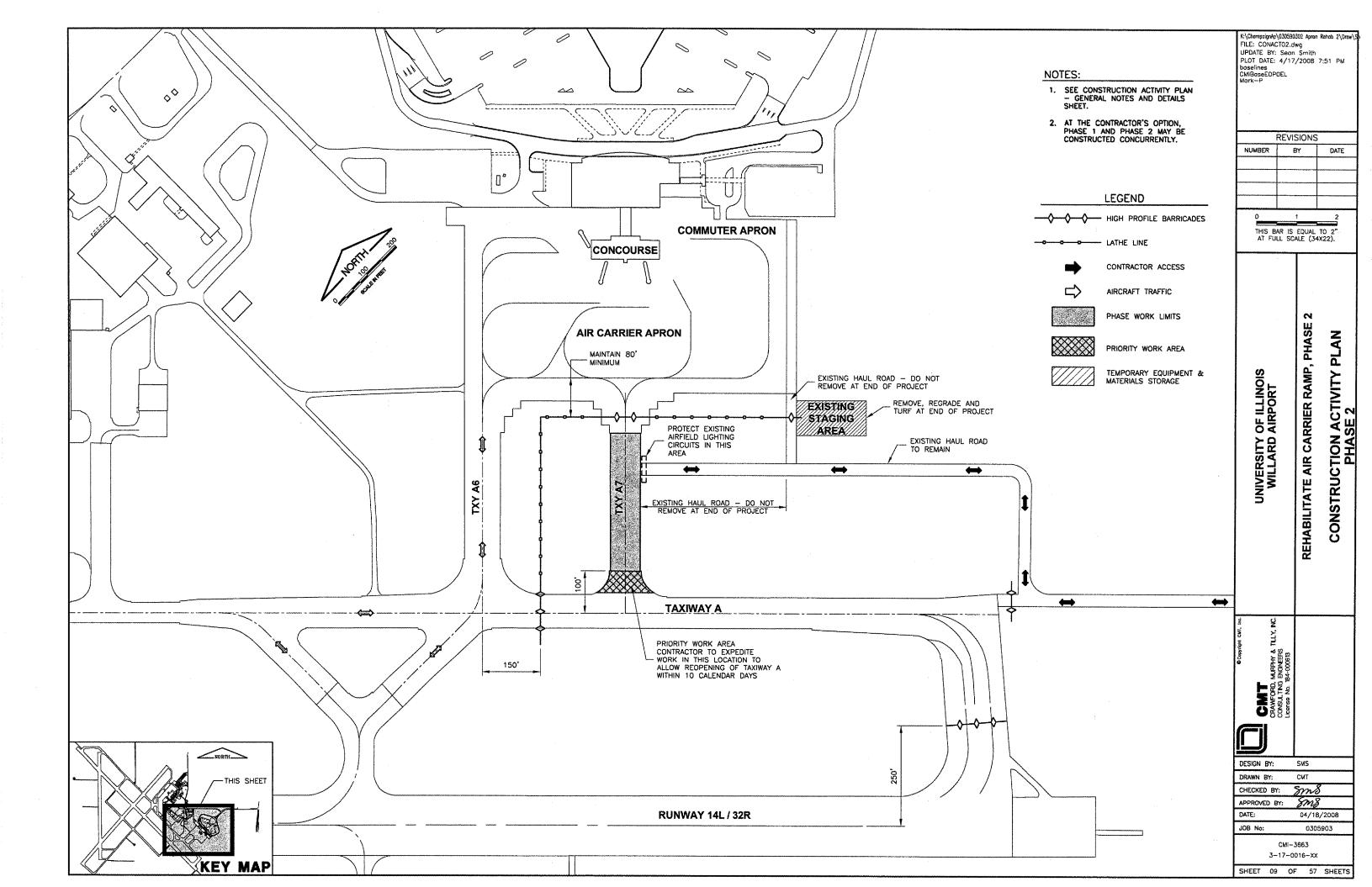
CMI-3663

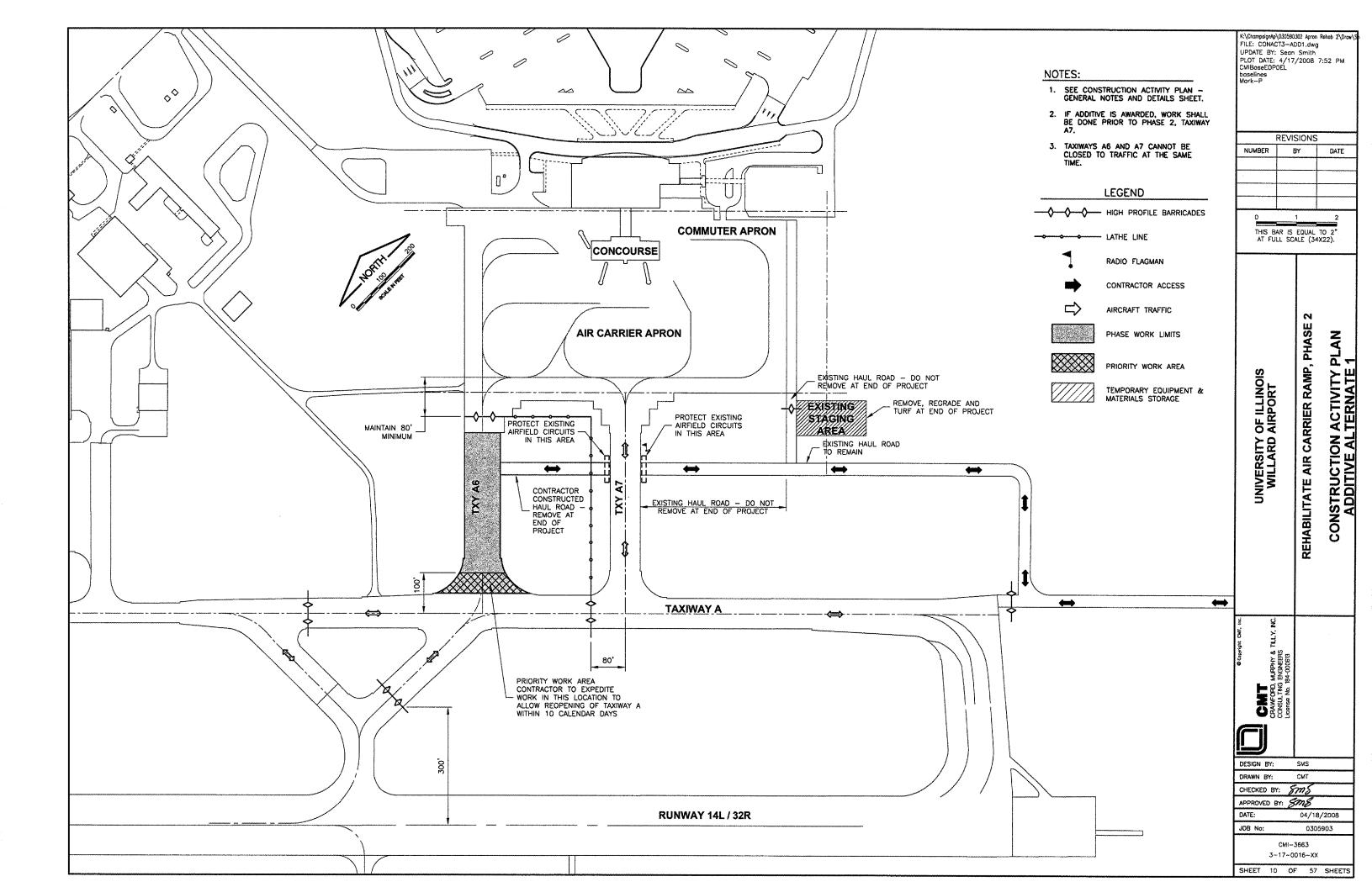
3-17-0016-XX
SHEET 06 OF 57 SHEETS

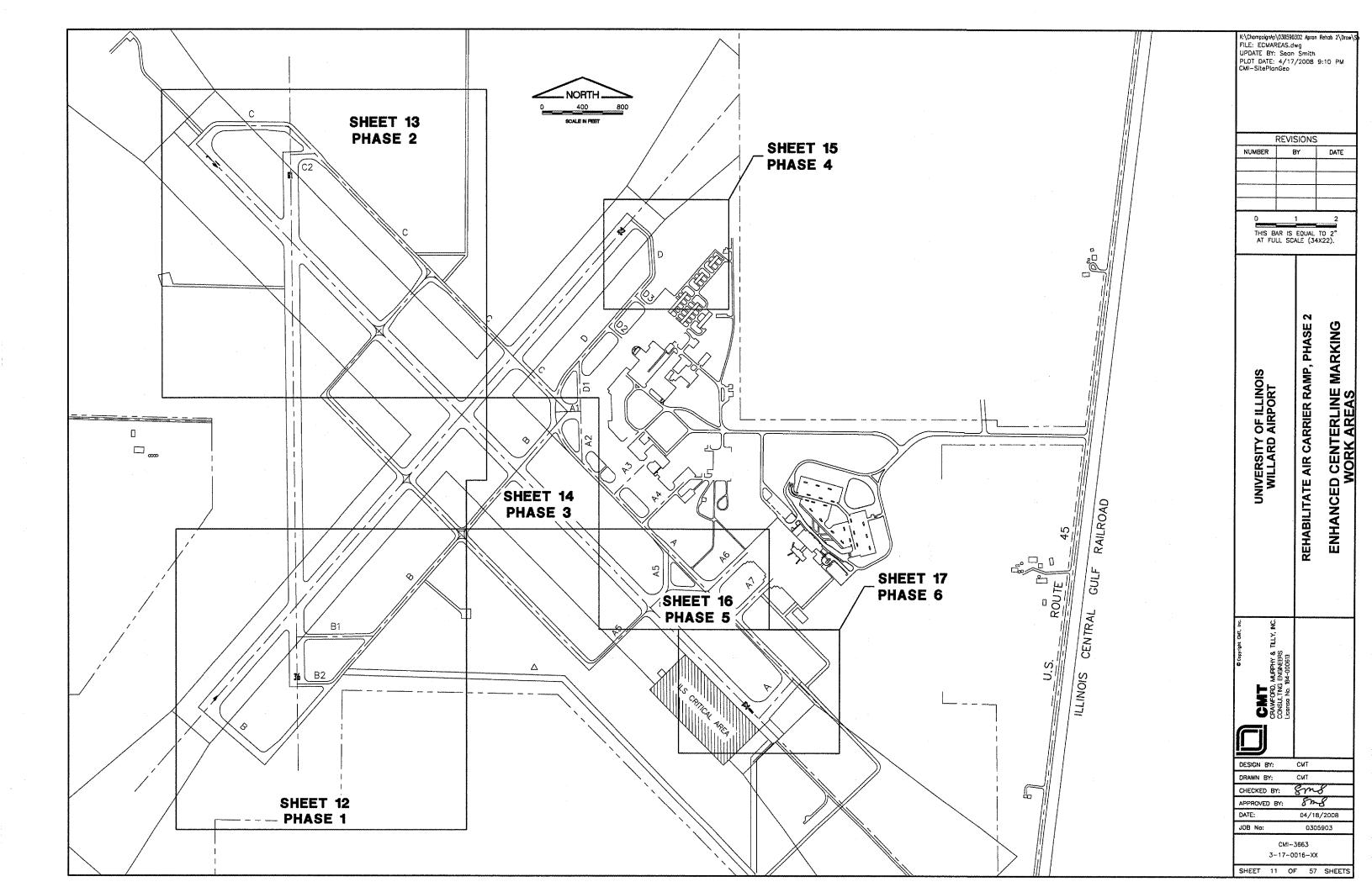
0305903

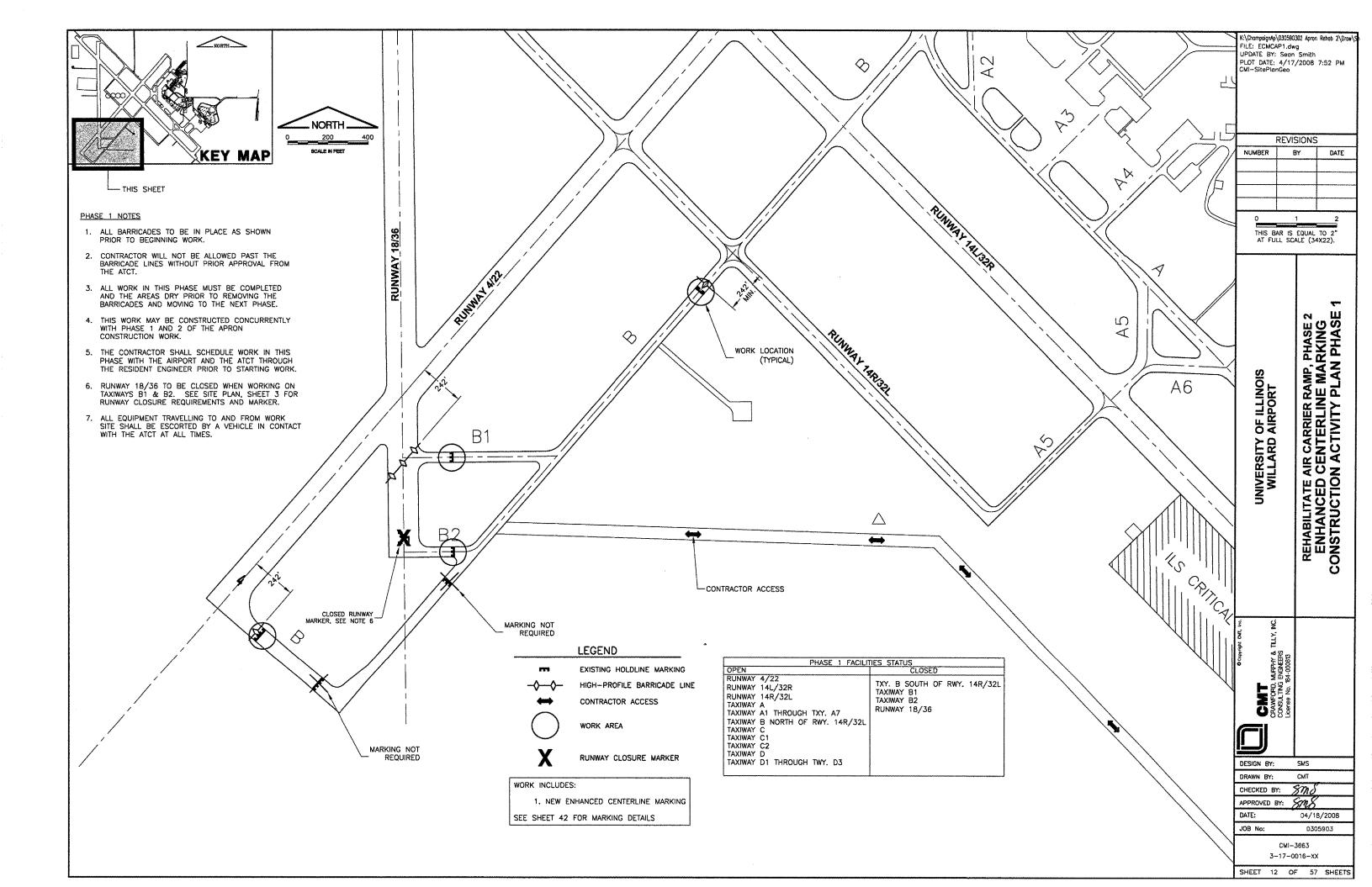


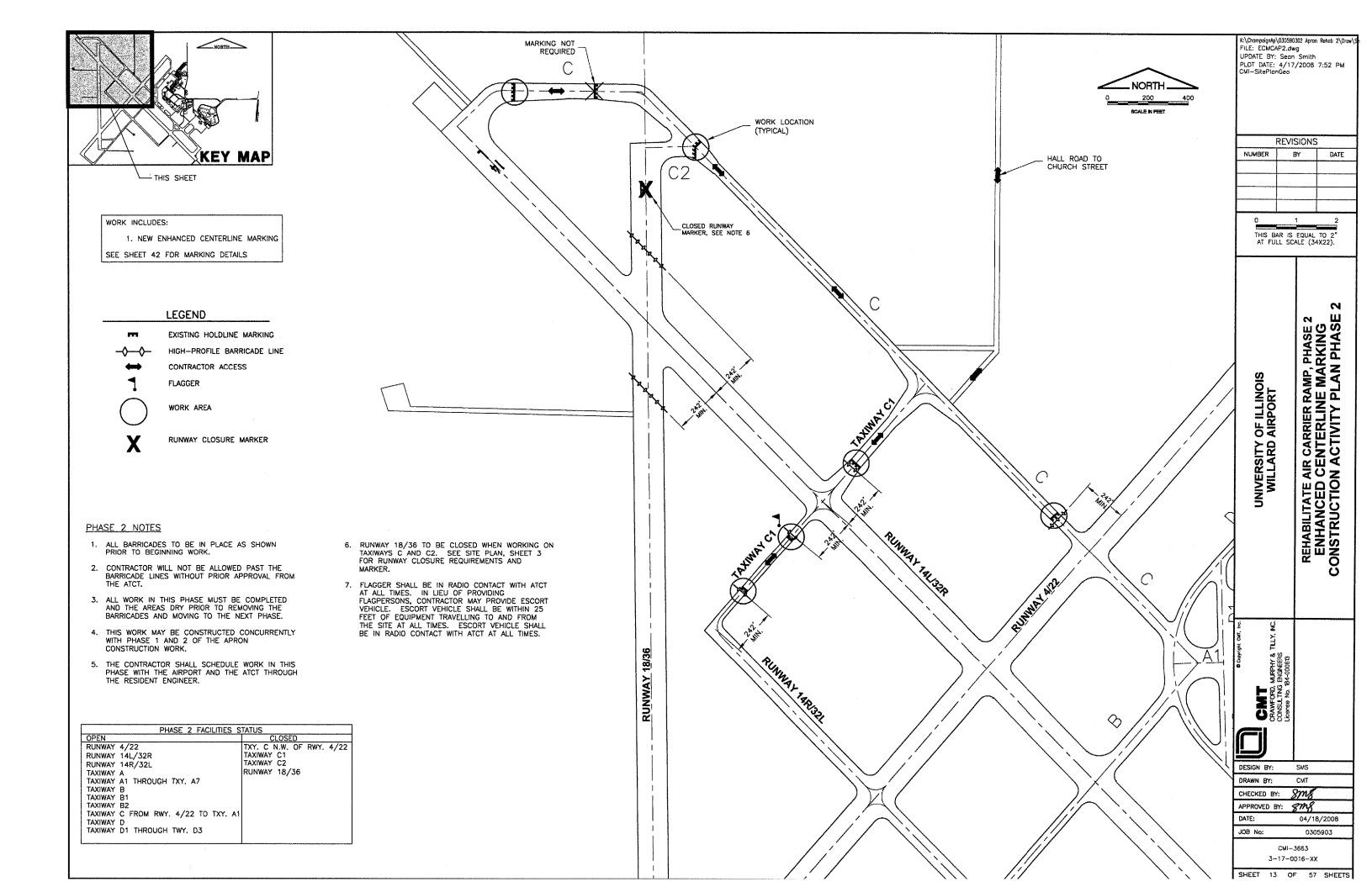


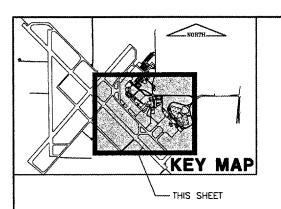












EXISTING HOLDLINE MARKING

→ → HIGH-PROFILE BARRICADE LINE
CONTRACTOR ACCESS

FLAGGER

WORK AREA

WORK INCLUDES:

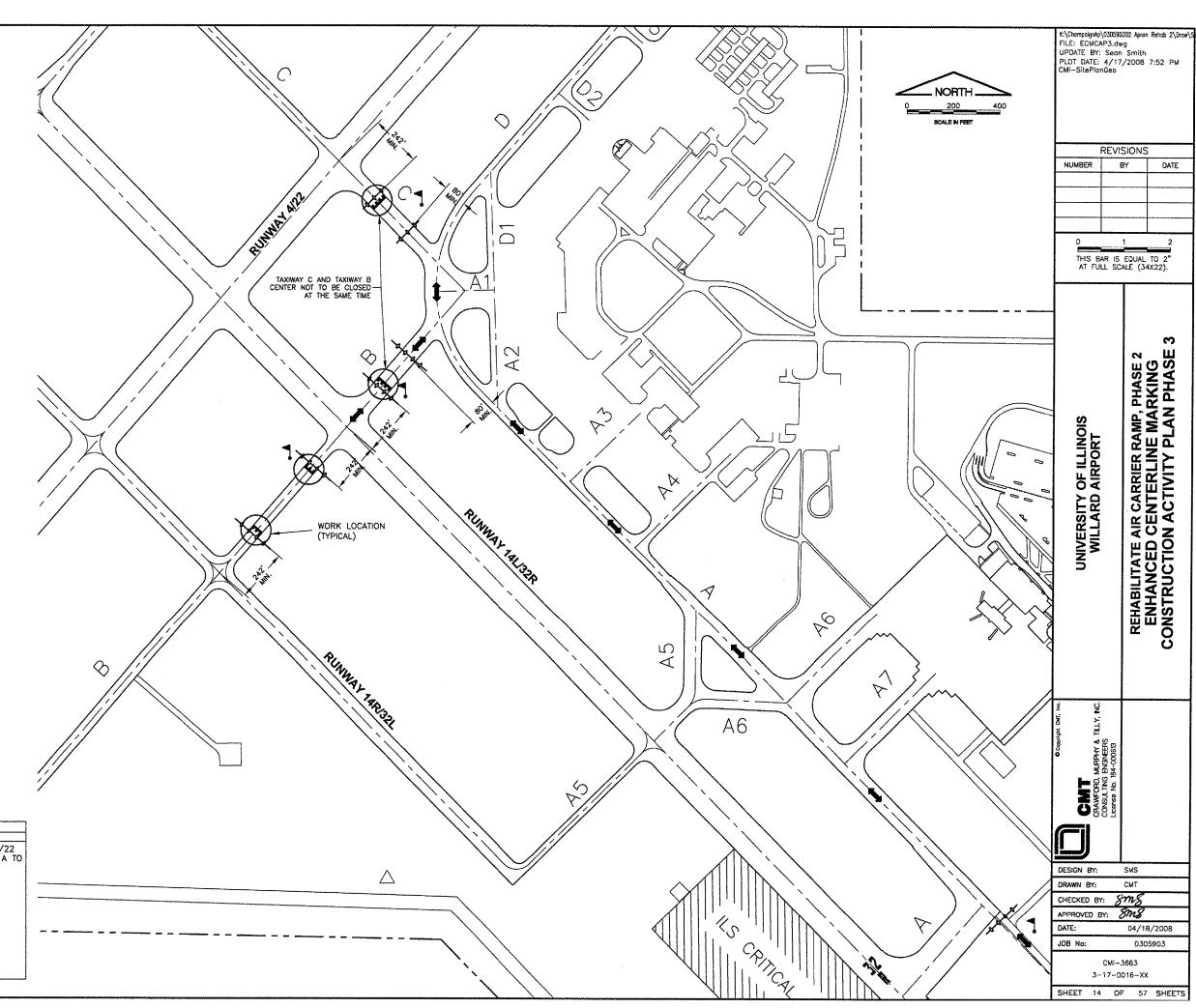
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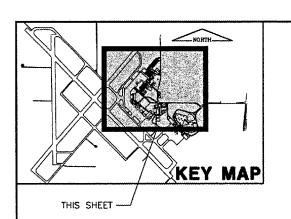
SEE SHEET 42 FOR MARKING DETAILS

PHASE 3 NOTES

- ALL BARRICADES TO BE IN PLACE AS SHOWN PRIOR TO BEGINNING WORK.
- CONTRACTOR WILL NOT BE ALLOWED PAST THE BARRICADE LINES WITHOUT PRIOR APPROVAL FROM THE ATCT
- ALL WORK IN THIS PHASE MUST BE COMPLETED AND THE AREAS DRY PRIOR TO REMOVING THE BARRICADES AND MOVING TO THE NEXT PHASE.
- THIS WORK MAY BE CONSTRUCTED CONCURRENTLY WITH PHASE 1 AND 2 OF THE APRON CONSTRUCTION WORK.
- 5. THE CONTRACTOR SHALL SCHEDULE WORK IN THIS PHASE WITH THE AIRPORT AND THE ATCT THROUGH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.
- 6. FLAGGER SHALL BE IN RADIO CONTACT WITH ATCT AT ALL TIMES. IN LIEU OF PROVIDING FLAGPERSONS, CONTRACTOR MAY PROVIDE ESCORT VEHICLE. ESCORT VEHICLE SHALL BE WITHIN 25 FEET OF EQUIPMENT TRAVELLING TO AND FROM THE SITE AT ALL TIMES. ESCORT VEHICLE SHALL BE IN RADIO CONTACT WITH ATCT AT ALL TIMES.

PHASE 3 FACILIT	TES STATUS
OPEN	CLOSED
RUNWAY 4/22	TXY. C SE OF RWY. 4/22
RUNWAY 14L/32R	TAXIWAY B FROM TXY, A TO
RUNWAY 14R/32L	RWY, 14R/32L
RUNWAY 18/36	,
TAXIWAY A	
TAXIWAY A1 THROUGH TXY, A7	
TAXIWAY B SW OF RWY. 14R/32L	
TAXIWAY B1	
TAXIWAY B2	
TAXIWAY C NW OF RWY, 4/22	
TAXIWAY C1	
TAXIWAY C2	
TAXIWAY D	
TAXIWAY D1 THROUGH TWY, D3	1





EXISTING HOLDLINE MARKING

HIGH-PROFILE BARRICADE LINE

CONTRACTOR ACCESS

WORK AREA

WORK INCLUDES:

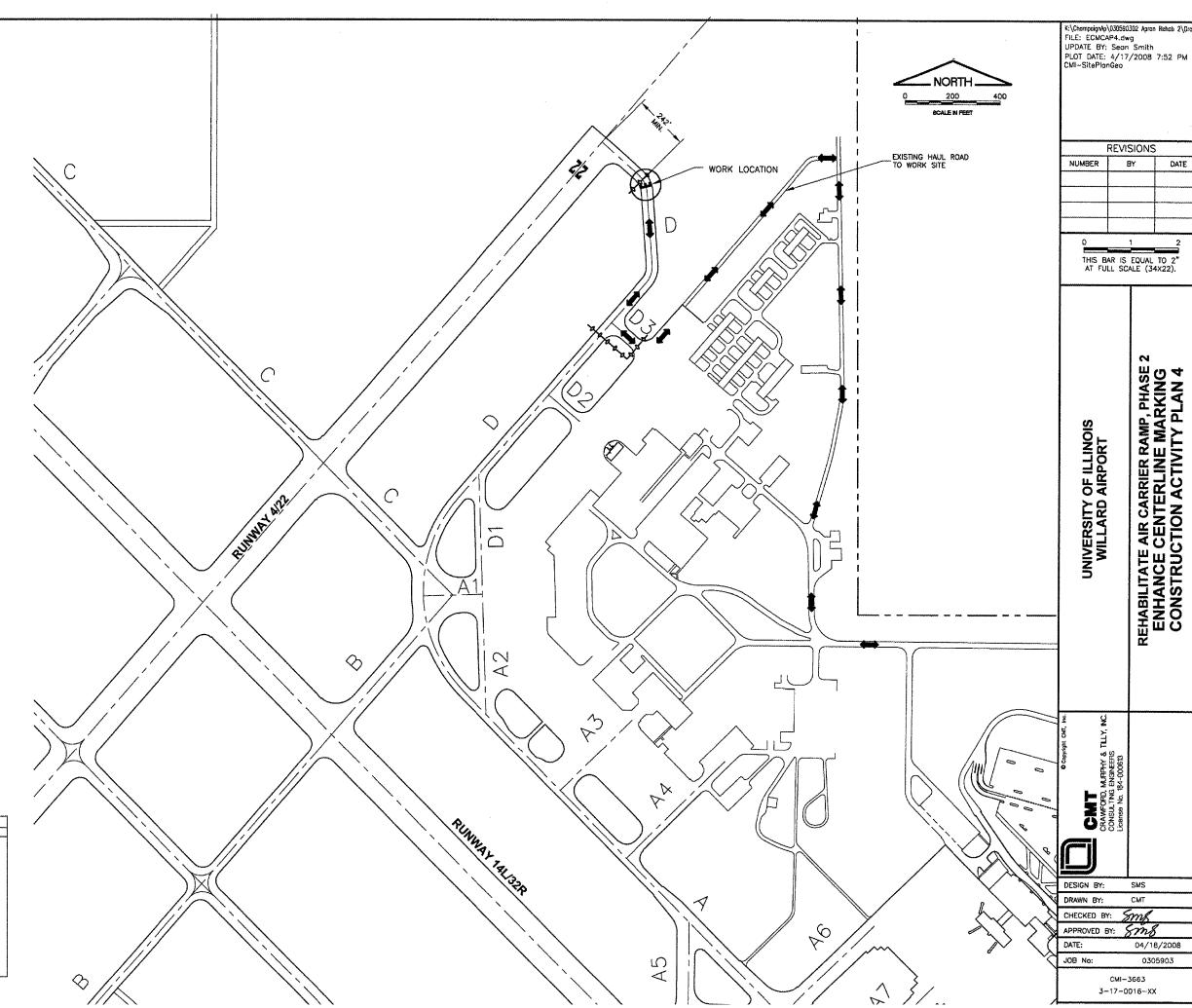
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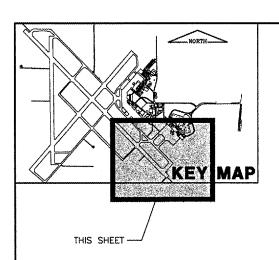
SEE SHEET 42 FOR MARKING DETAILS

PHASE 4 NOTES

- ALL BARRICADES TO BE IN PLACE AS SHOWN PRIOR TO BEGINNING WORK.
- CONTRACTOR WILL NOT BE ALLOWED PAST THE BARRICADE LINES WITHOUT PRIOR APPROVAL FROM THE ATCT.
- ALL WORK IN THIS PHASE MUST BE COMPLETED AND THE AREAS DRY PRIOR TO REMOVING THE BARRICADES AND MOVING TO THE NEXT PHASE.
- THIS WORK MAY BE CONSTRUCTED CONCURRENTLY WITH PHASE 1 AND 2 OF THE APRON CONSTRUCTION WORK.
- THE CONTRACTOR SHALL SCHEDULE WORK IN THIS PHASE WITH THE AIRPORT AND THE ATCT THROUGH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.
- 6. ALL EQUIPMENT TRAVELLING TO AND FROM THE WORK SITE SHALL BE ESCORTED BY A VEHICLE IS RADIO CONTACT WITH THE ATCT AT ALL TIMES.

	PHASE 4 FACILIT	IES STATUS			
OPEN			CLOSED		
RUNWAY	4/22		D NE OF	TXY.	D2
RUNWAY	14L/32R	TAXIWAY	D3		
RUNWAY	14R/32L				
RUNWAY	18/36				
YAXIWAY	A				
TAXIWAY	A1 THROUGH TXY, A7				
TAXIWAY	В				
YAWIXAT	B1				
TAXIWAY	B2	1			
YAXIWAY	С				
YAXIWAY	C1				
TAXIWAY	C2				
YAWIXAT	D SW OF TXY.D3	į			
YAWIXAT	D1 THROUGH TWY, D2				





EXISTING HOLDLINE MARKING

HIGH-PROFILE BARRICADE LINE

CONTRACTOR ACCESS

FLAGGER

WORK AREA

WORK INCLUDES:

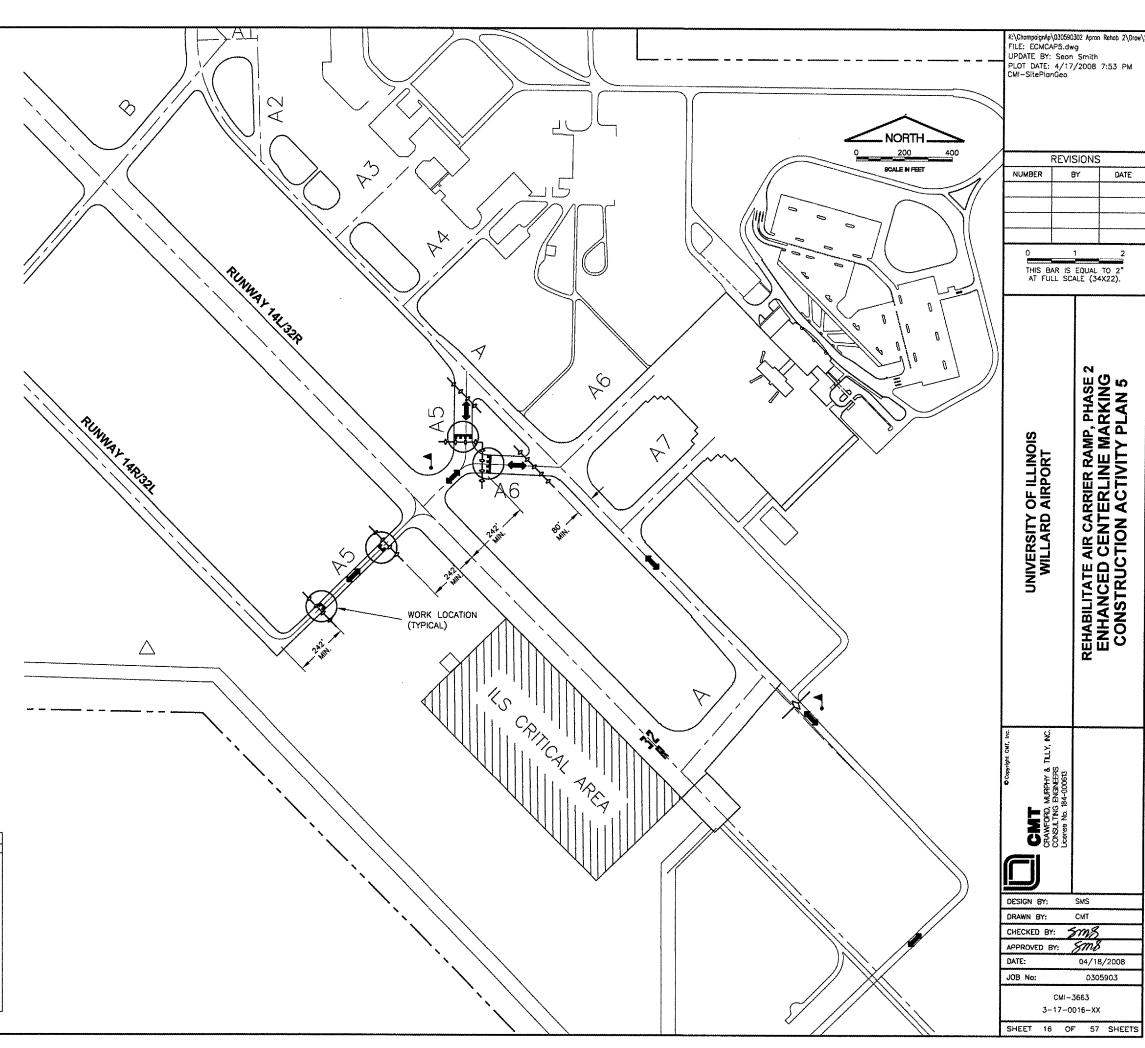
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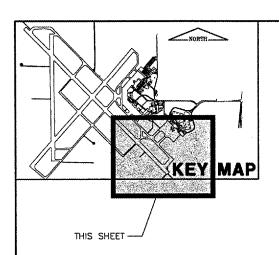
SEE SHEET 42 FOR MARKING DETAILS

PHASE 5 NOTES

- ALL BARRICADES TO BE IN PLACE AS SHOWN PRIOR TO BEGINNING WORK.
- 2. CONTRACTOR WILL NOT BE ALLOWED PAST THE BARRICADE LINES WITHOUT PRIOR APPROVAL FROM THE ATCT.
- ALL WORK IN THIS PHASE MUST BE COMPLETED AND THE REAS DRY PRIOR TO REMOVING THE BARRICADES AND MOVING TO THE NEXT PHASE.
- 4. THIS WORK MAY BE CONSTRUCTED CONCURRENTLY WITH PHASE 1 AND 2 OF THE APRON CONSTRUCTION WORK.
- 5. THE CONTRACTOR SHALL SCHEDULE WORK IN THIS PHASE WITH THE AIRPORT AND THE ATCT THROUGH THE RESIDENT ENGINEER PRIOR TO STARTING WORK
- 6. FLAGGER SHALL BE IN RADIO CONTACT WITH ATCT AT ALL TIMES. IN LIEU OF PROVIDING FLAGPERSONS, CONTRACTOR MAY PROVIDE ESCORT VEHICLE. ESCORT VEHICLE SHALL BE WITHIN 25 FEET OF EQUIPMENT TRAVELLING TO AND FROM THE SITE AT ALL TIMES. ESCORT VEHICLE SHALL BE IN RADIO CONTACT WITH ATCT AT ALL TIMES.

PHASE 5 FACILITIES STATU	S
OPEN	CLOSED
RUNWAY 4/22	TXY'S. A5 AND A6 FROM
RUNWAY 14L/32R	TXY. A TO RWY. 14R/32L
RUNWAY 14R/32L	
RUNWAY 18/36	
TAXIWAY A	
TAXIWAY A1 THROUGH TXY. A4	
TAXIWAY A6 FROM TXY. A TO AIR CARRIER APRON	
TAXIWAY A7	
TAXIWAY B	
TAXIWAY B1	
TAXIWAY B2	
TAXIWAY C	
TAXIWAY C1	
TAXIWAY C2	
TAXIWAY D	
TAXIWAY D1 THROUGH TWY, D3	





EXISTING HOLDLINE MARKING

HIGH-PROFILE BARRICADE LINE

CONTRACTOR ACCESS

WORK AREA

WORK INCLUDES:

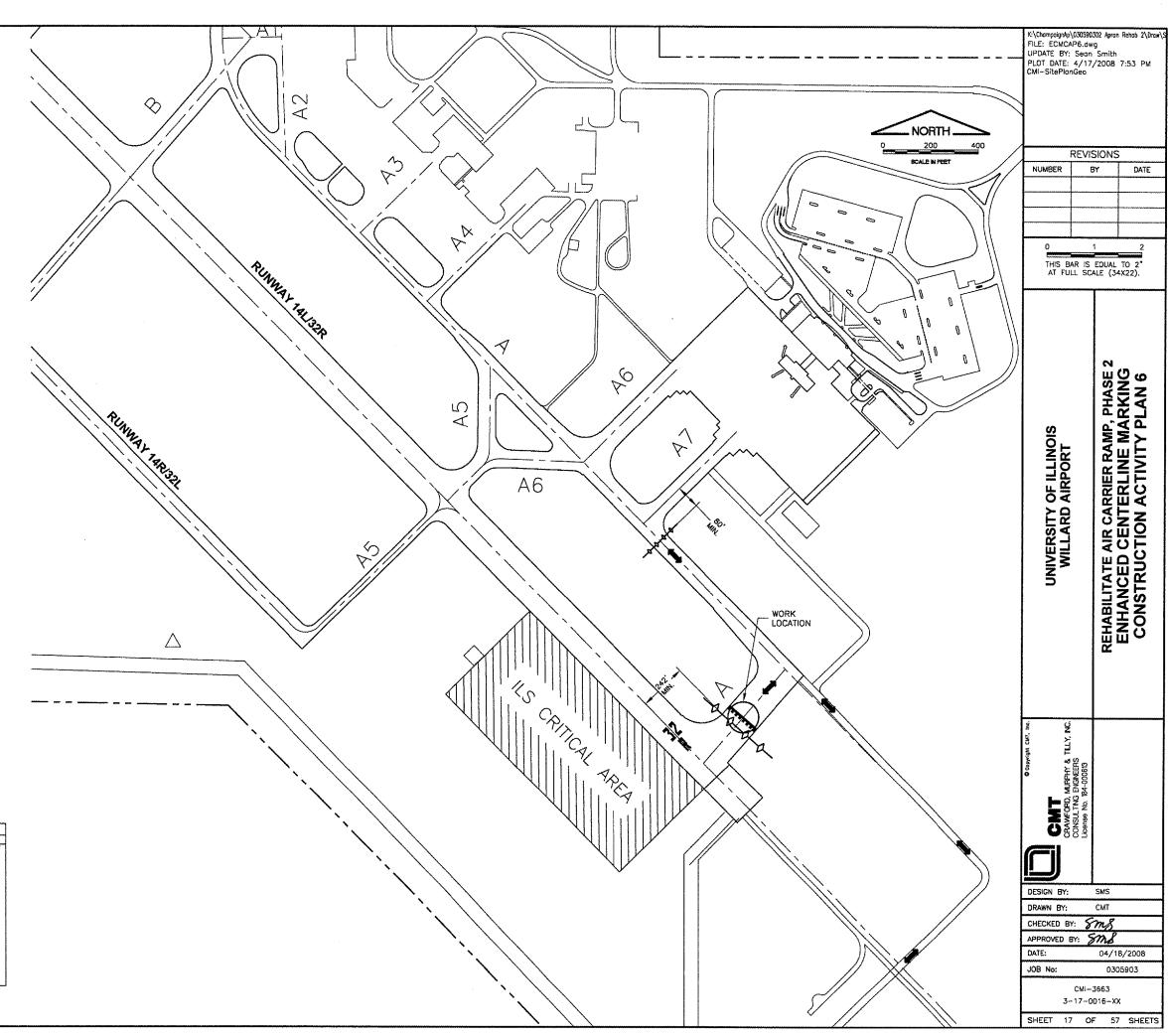
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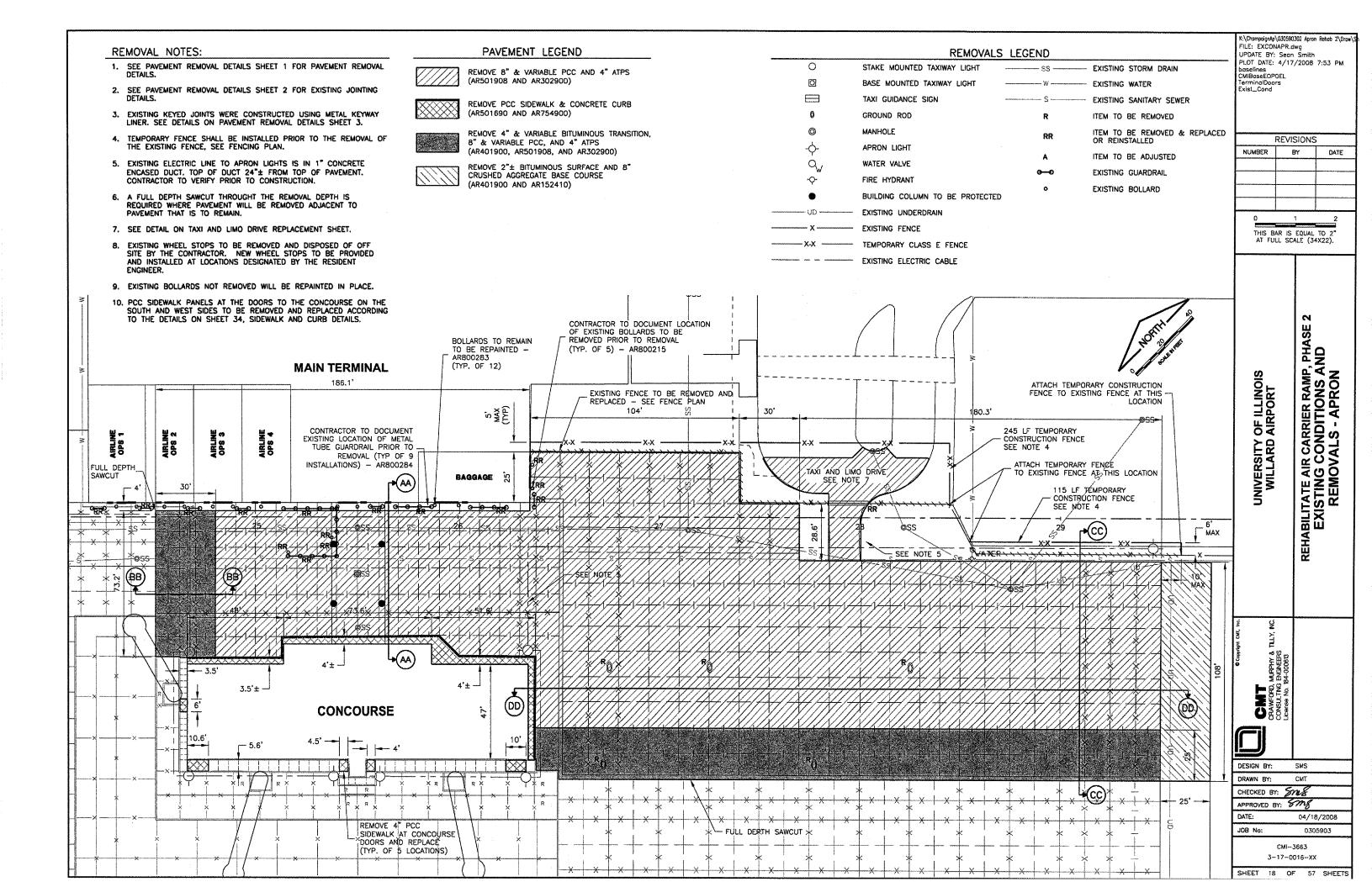
SEE SHEET 42 FOR MARKING DETAILS

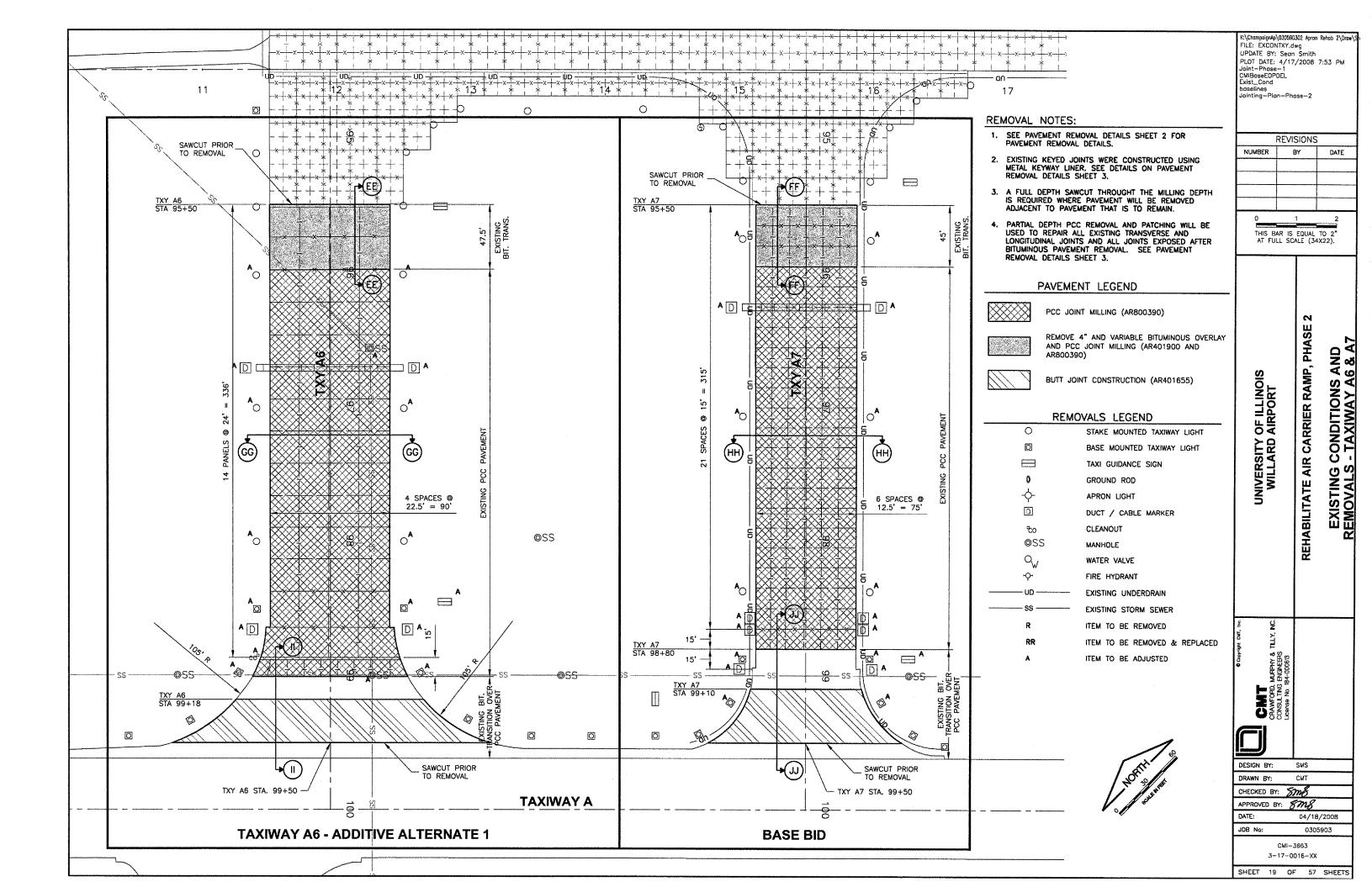
PHASE 6 NOTES

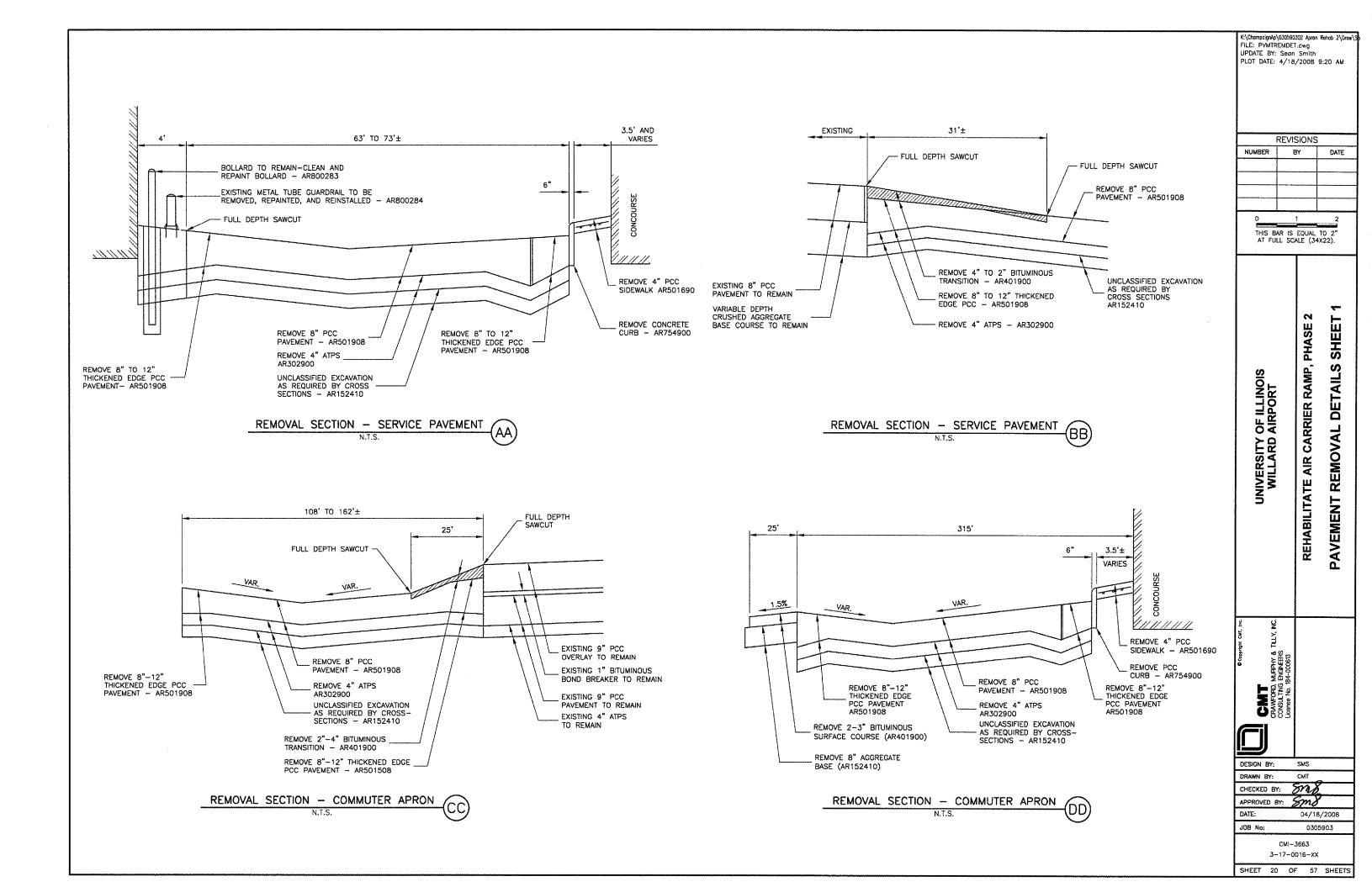
- ALL BARRICADES TO BE IN PLACE AS SHOWN PRIOR TO BEGINNING WORK.
- CONTRACTOR WILL NOT BE ALLOWED PAST THE BARRICADE LINES WITHOUT PRIOR APPROVAL FROM THE ATCT.
- ALL WORK IN THIS PHASE MUST BE COMPLETED AND THE AREAS DRY PRIOR TO REMOVING THE BARRICADES AND MOVING TO THE NEXT PHASE.
- 4. THIS WORK MAY BE CONSTRUCTED CONCURRENTLY WITH PHASE 1 AND 2 OF THE APRON CONSTRUCTION WORK.
- THE CONTRACTOR SHALL SCHEDULE WORK IN THIS PHASE WITH THE AIRPORT AND THE ATCT THROUGH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.
- ALL EQUIPMENT TRAVELLING TO AND FROM THE WORK SITE SHALL BE ESCORTED BY A VEHICLE IS RADIO CONTACT WITH THE ATCT AT ALL TIMES.

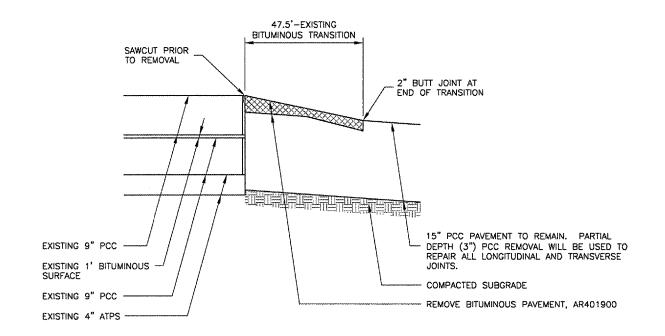
ODEN	PRASE	O FACILIII	ES STATUS		~~~			
OPEN						SEC		
RUNWAY	4/22		TAXIWAY	Α	SE	OF	TAXIWAY	A7
RUNWAY	14L/32R							
RUNWAY	14R/32L							
RUNWAY	18/36							
TAXIWAY	A NW OF TAXIWAY A7							
TAXIWAY	A1 THROUGH TAXIWAY	A7						
TAXIWAY	В							
TAXIWAY	B1							
TAXIWAY	B2							
TAXIWAY	С							
TAXIWAY	- ·							
TAXIWAY	- ·							
TAXIWAY	D							
TAXIWAY	D1 THROUGH TAXIWAY	D3						

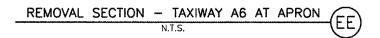


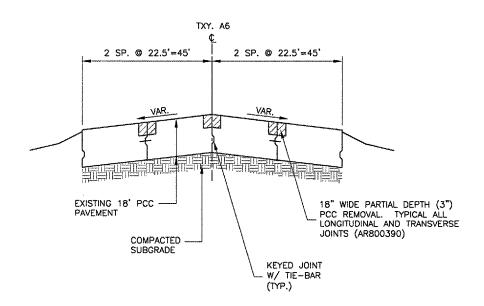






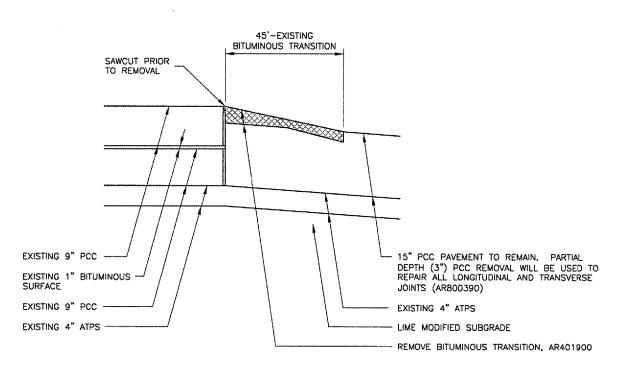




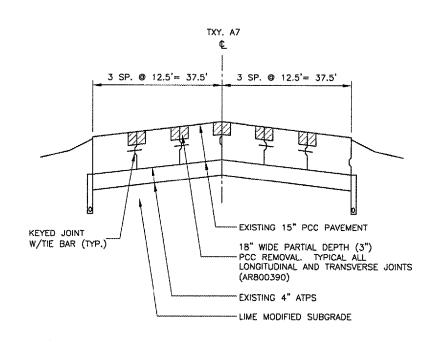


REMOVAL SECTION - TAXIWAY A6

N.T.S. GG



REMOVAL SECTION - TAXIWAY A7 AT APRON FF

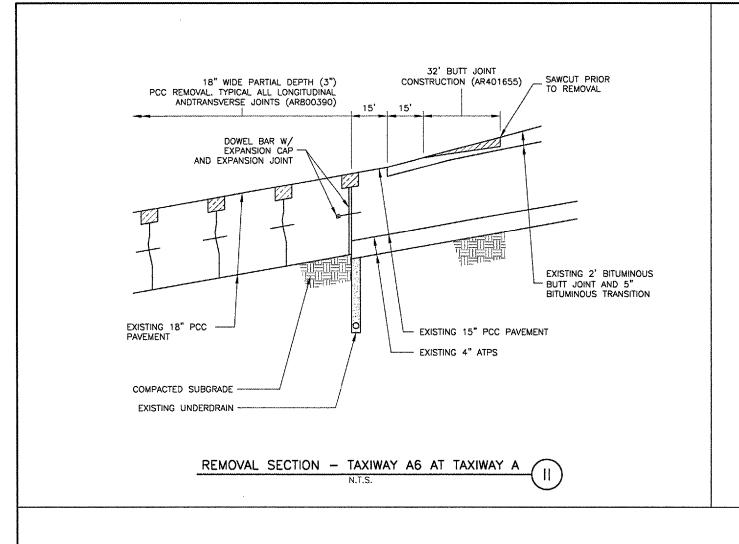


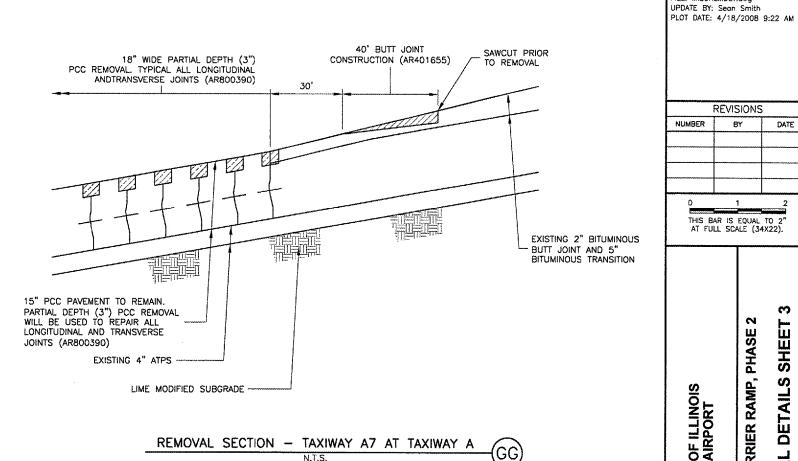
REMOVAL SECTION - TAXIWAY A7

N.T.S.

K:\ChampaignAp\030590302 Apran Rehab 2\Draw\S FILE: PVMTRMVLDET2.dwg UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:53 PM REVISIONS NUMBER BY DATE THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). 2 SHEET REHABILITATE AIR CARRIER RAMP, PHASE PAVEMENT REMOVAL DETAILS UNIVERSITY OF ILLINOIS WILLARD AIRPORT CRAWFORD, CONSULTING LICENSE NO. 18 DESIGN BY: SMS CMT DRAWN BY: CHECKED BY: 8M8 APPROVED BY: 871 DATE: 04/18/2008 JOB No: 0305903 CMI-3663 3-17-0016-XX

SHEET 21 OF 57 SHEETS





K:\ChampaignAp\030590302 Apron Rehab 2\Draw\S

REVISIONS

BY

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

DATE

3

SHEET

PAVEMENT REMOVAL DETAILS

REHABILITATE AIR CARRIER RAMP, PHASE

UNIVERSITY OF ILLINOIS WILLARD AIRPORT

CMT

DESIGN BY:

DRAWN BY:

DATE:

JOB No:

CHECKED BY:

APPROVED BY: 8M8

SMS

CMT

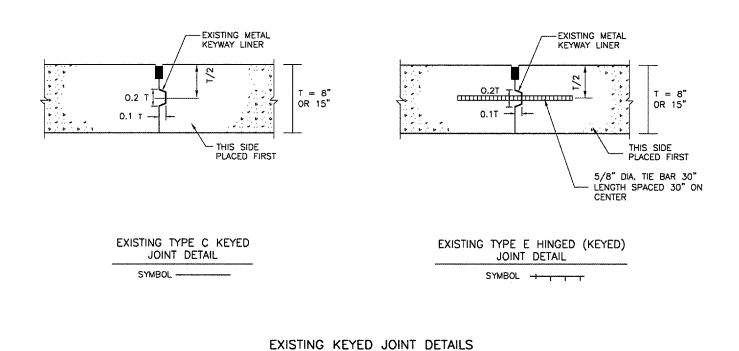
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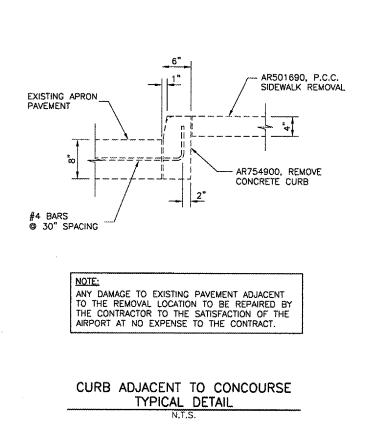
CMI-3663 3-17-0016-XX SHEET 22 OF 57 SHEETS

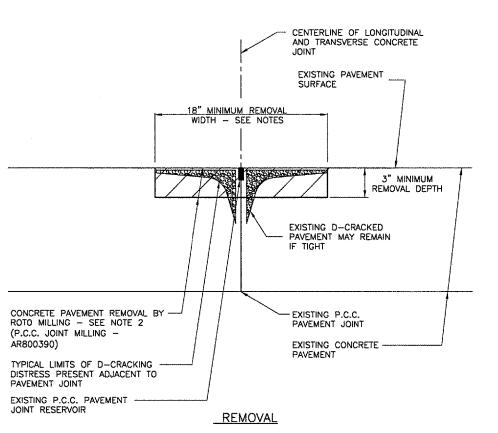
04/18/2008

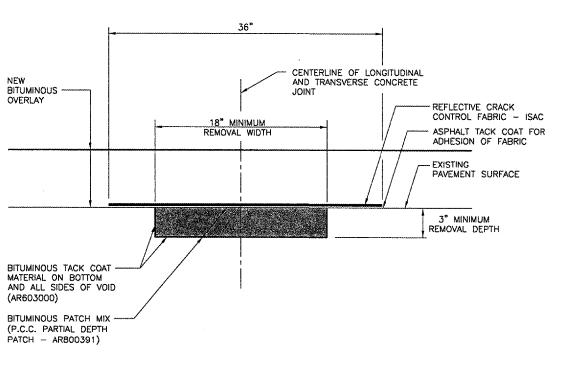
0305903

FILE: MISCREMDET.dwg









REFLECTIVE CRACK CONTROL FABRIC REQUIRED OVER ALL CONCRETE PAVEMENT JOINTS

REPLACEMENT

P.C.C. REMOVAL AND BITUMINOUS REPLACEMENT NOTES

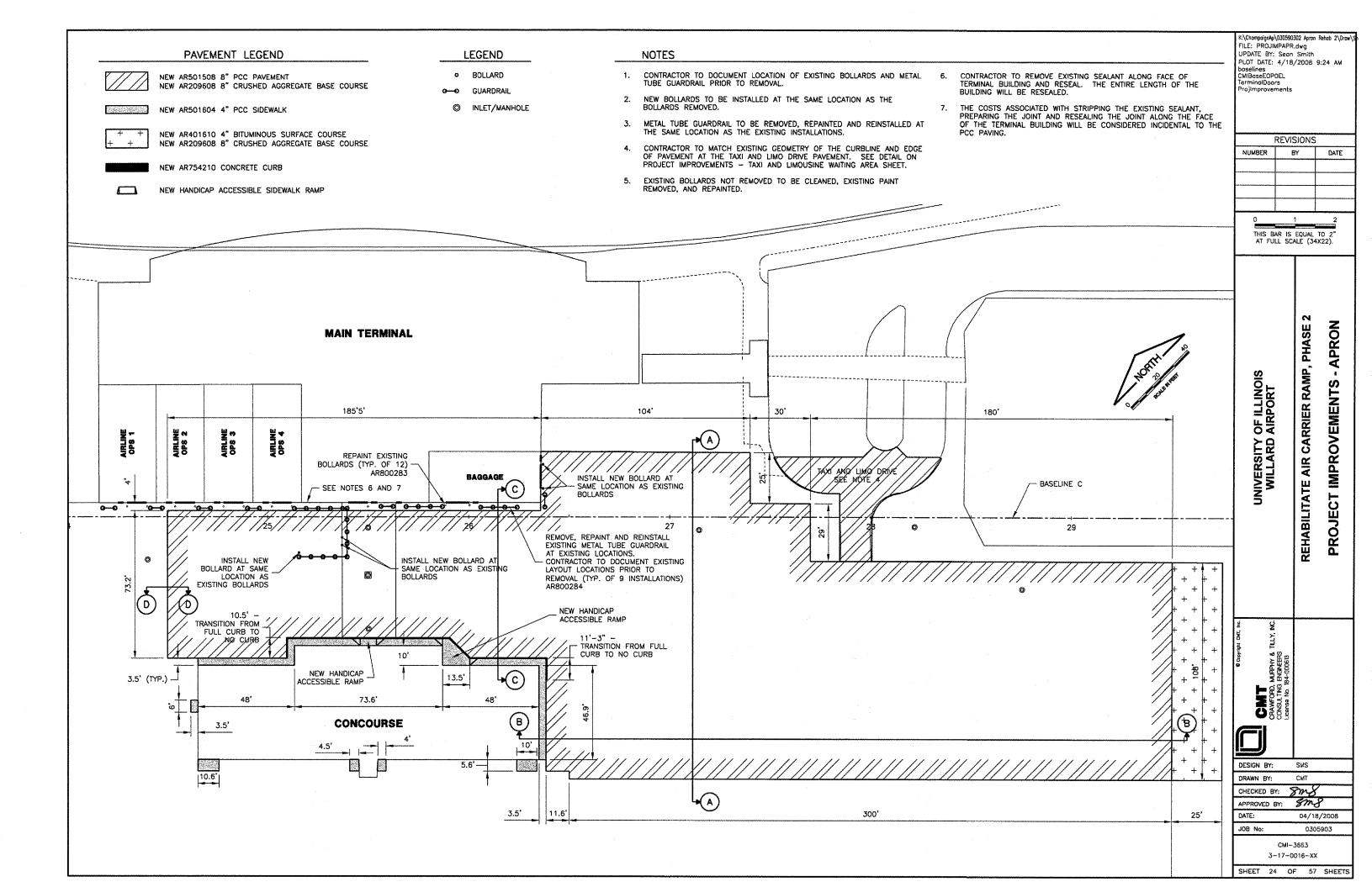
- 1.) THE MINIMUM MILLING CUT WIDTH OF 18 INCHES AND CUT DEPTH OF 3 INCHES WILL BE ACCOMPLISHED BY ONE PASS OF THE MILLING HEAD. THE MILLING HEAD WILL BE A MINIMUM WIDTH OF 18 INCHES.
- THE MILLING HEAD WILL BE CENTERED ON THE EXISTING PAVEMENT JOINT, EXCEPT WHEN OTHERWISE NOTED BY THE ENGINEER.
- 3.) PARTIAL DEPTH P.C.C. REMOVAL AND BITUMINOUS PATCHING WILL BE USED TO REPAIR ALL TRANSVERSE AND LONGITUDINAL PAVEMENT JOINTS WITHIN THE LIMITS OF THE PROJECT ACCORDING TO THE DETAIL ON THIS DRAWING.

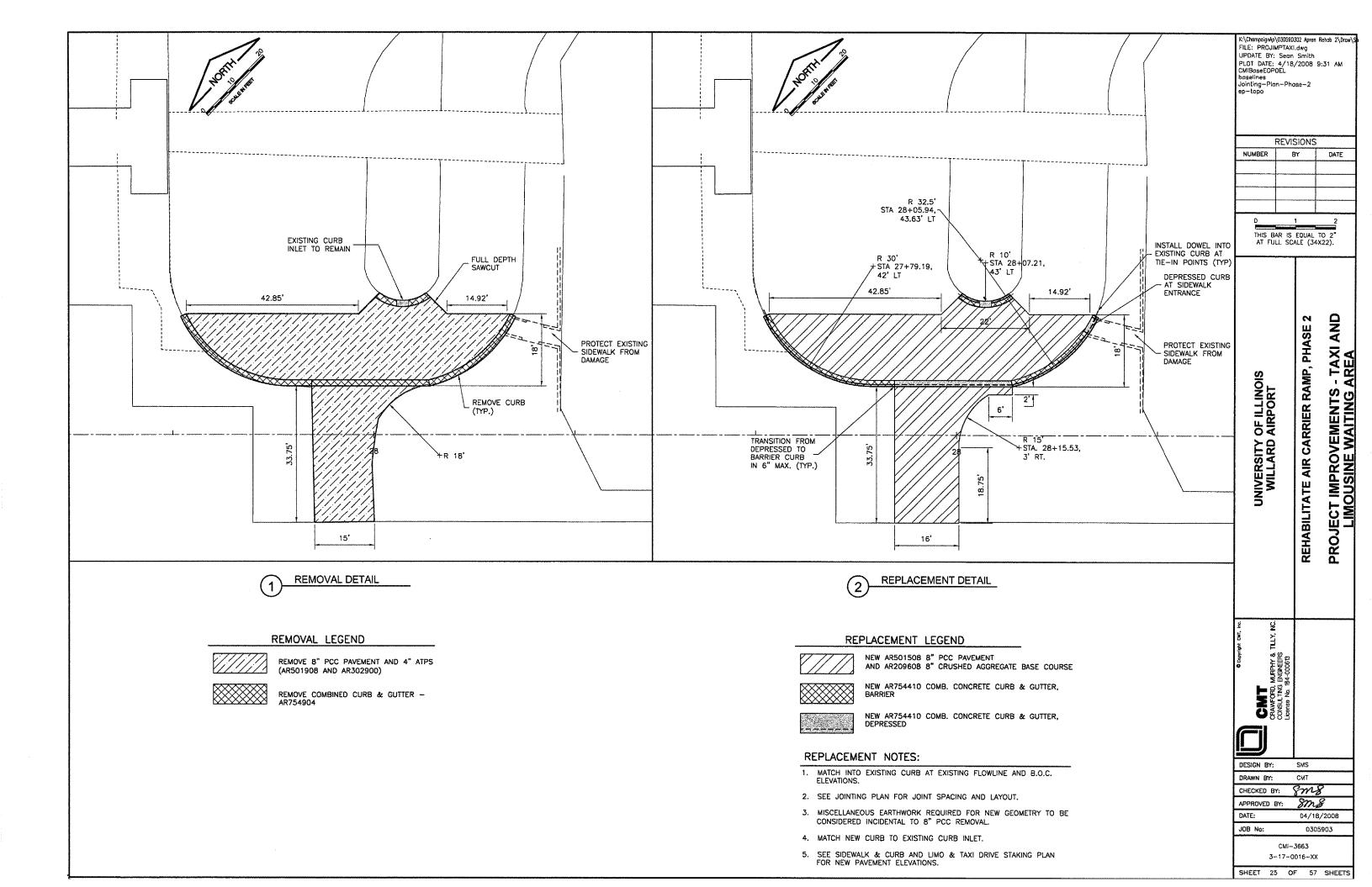
PARTIAL DEPTH P.C.C. REMOVAL AND BITUMINOUS PATCHING DETAIL

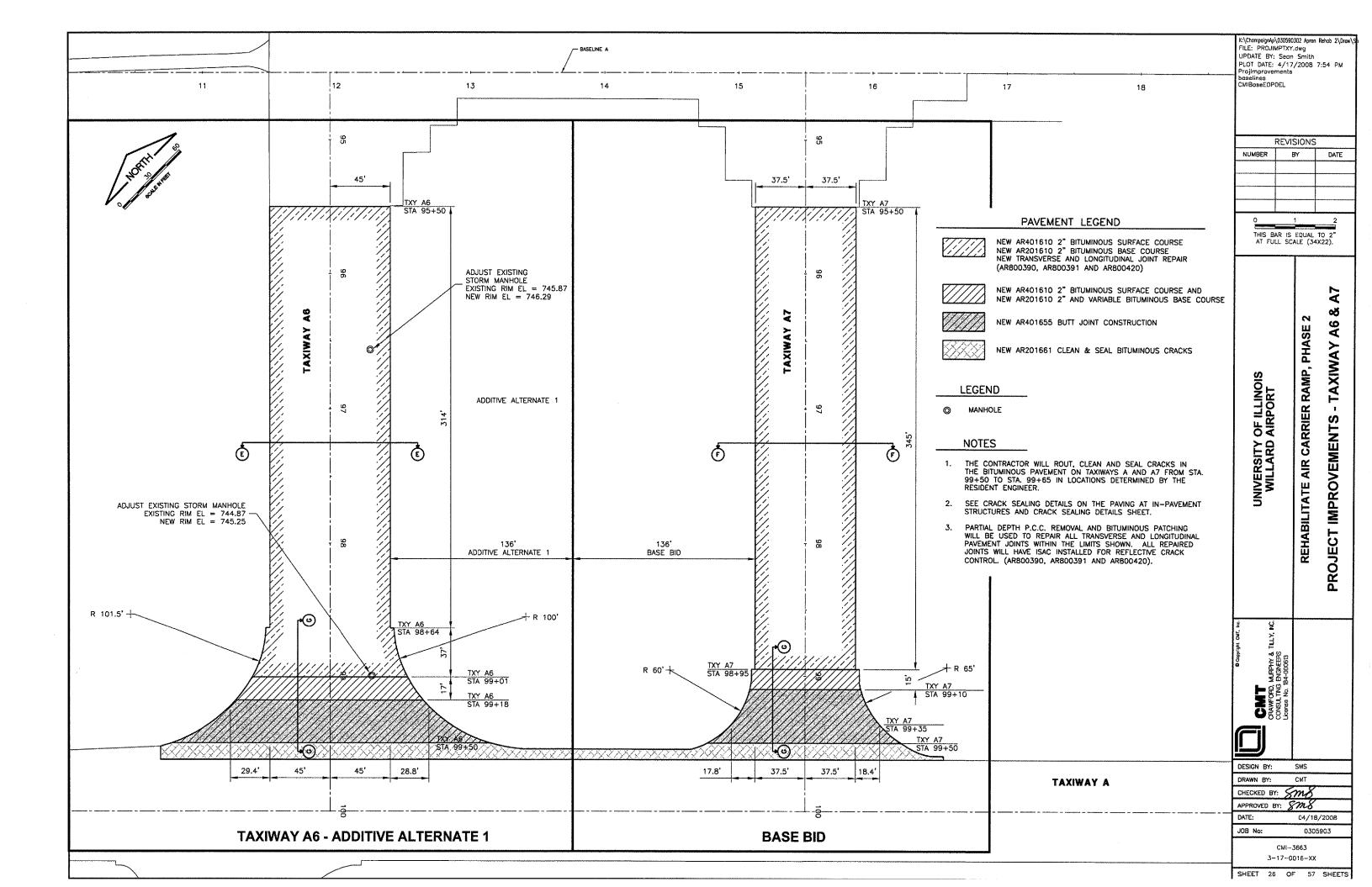
ALT.

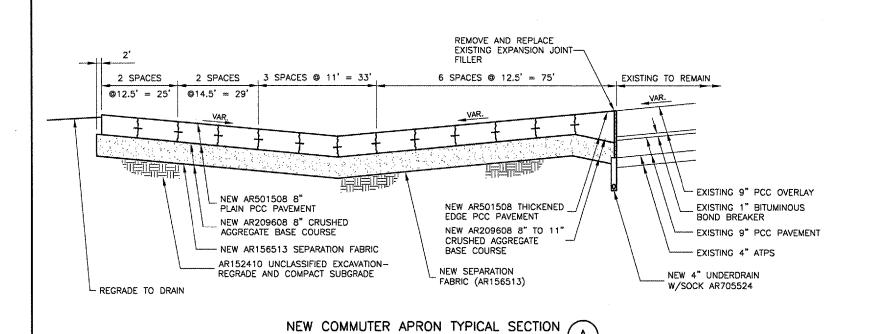
PLOT DATE: 4/18/2008 9:22 AM REVISIONS NUMBER BY DATE THIS BAR IS EQUAL TO 2' AT FULL SCALE (34X22). SHEET PHASE REHABILITATE AIR CARRIER RAMP, PAVEMENT REMOVAL DETAILS UNIVERSITY OF ILLINOIS WILLARD AIRPORT CRAWFORD, P CONSULTING License No. 16 DESIGN BY: SMS DRAWN BY: CMT CHECKED BY: Smy 811 APPROVED BY: DATE: 04/18/2008 JOB No: CMI~3663 3-17-0016-XX SHEET 23 OF 57 SHEETS

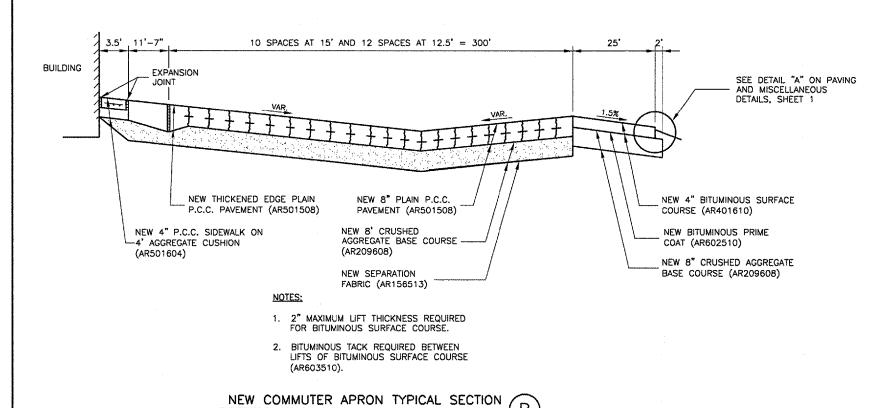
K:\ChampoignAp\0305903 Air Carrier Apron\draw\s FILE: PVT RMVL DTLS SHT 4.dwg UPDATE BY: Sean Smith

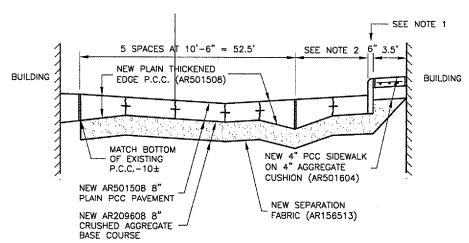






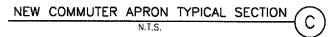


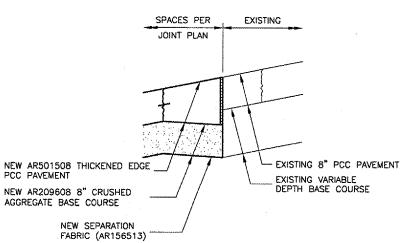




NOTES

- CURBLINE STARTS AT BASELINE C STA. 25+09 AND ENDS AT STA. 26+39.
- BASELINE C STA. 25+09 TO STA. 25+90 = 1 SPACE AT 10'-6". BASELINE C STA. 24+50 TO BASELINE C STA. 25+09 AND BASELINE C STA. 25+90 TO STA. 26+39 =1 SPACE AT 10'-4" AND 1 SPACE AT 10'-6".

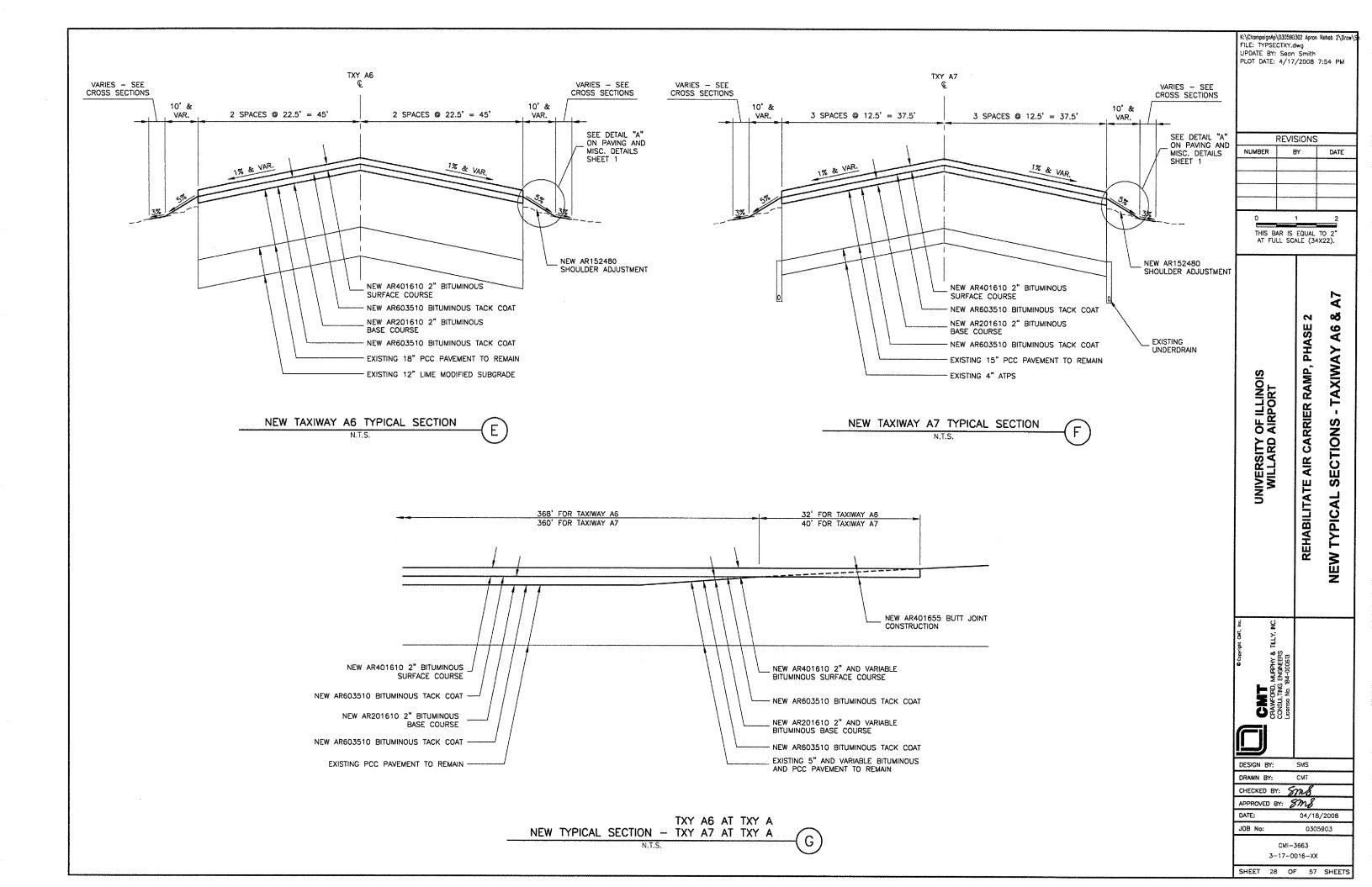




NEW SERVICE PAVEMENT TYPICAL SECTION D

K:\ChampaignAp\030590302 Apron Rehab 2\Draw\ FILE: TYPSECAPR.dwg UPDATE BY: Seon Smith PLOT DATE: 4/18/2008 9:33 AM REVISIONS NUMBER BY DATE THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). APRON REHABILITATE AIR CARRIER RAMP, PHASE UNIVERSITY OF ILLINOIS WILLARD AIRPORT SECTIONS **NEW TYPICAL** CMT DESIGN BY: SMS DRAWN BY: CMT CHECKED BY: 8m8 APPROVED BY: DATE: 04/18/2008 JOB No: 0305903 CMI-3663 3-17-0016-XX

SHEET 27 OF 57 SHEETS



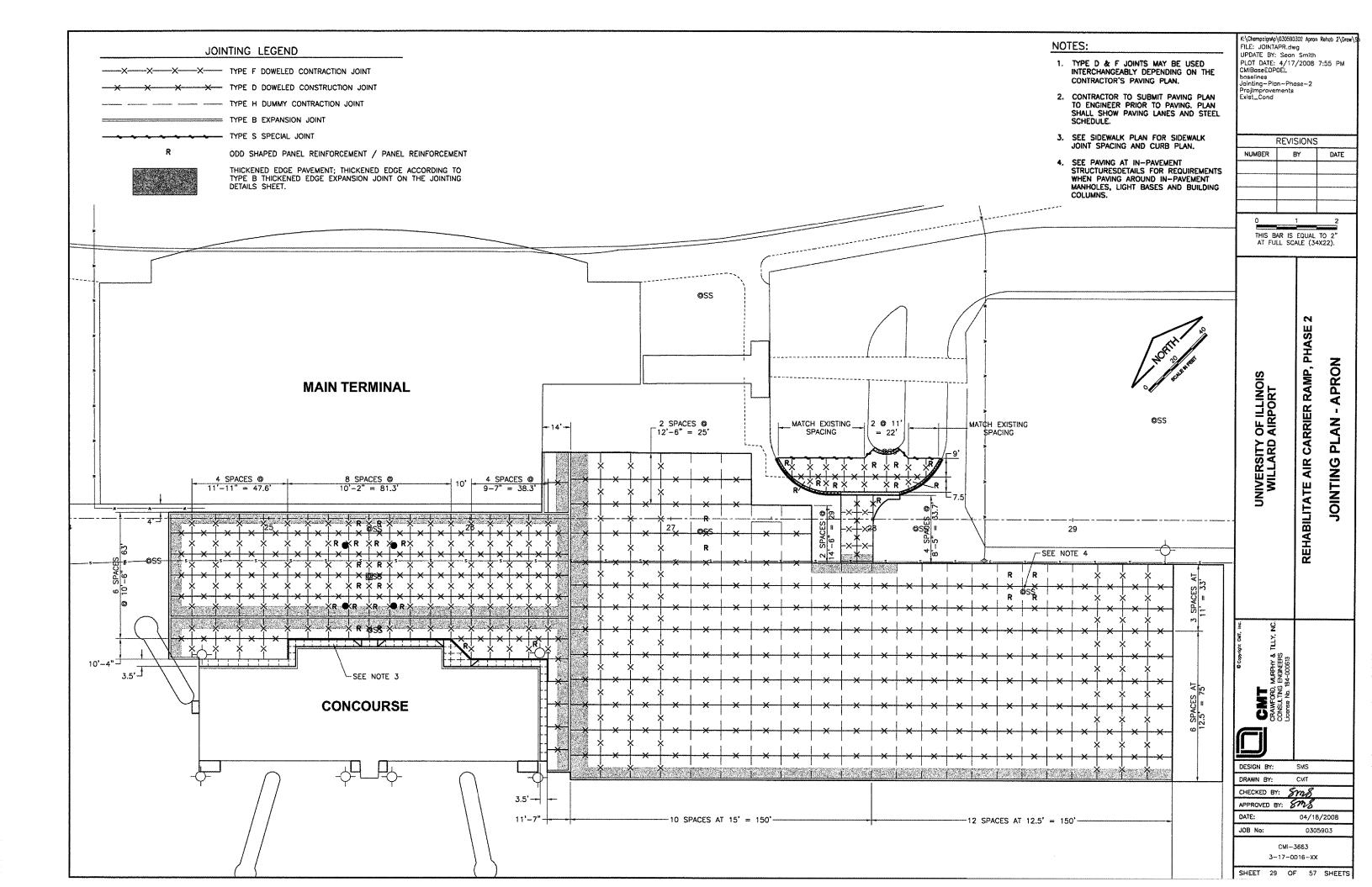


TABLE 1

/\Dimba						
PAVEMENT THICKNESS T - INCHES	DEPTH OF CONTRACTION JOINT INITIAL SAW CUT I, INCHES I=(T/4) ±1/4"					
5	1.25*					
6	1.50"					
7	1.75"					
8	2.00*					
9	2.25*					
10	2.50"					
11	2.75"					
12	3.00"					
13	3.25"					
14	3.50"					
15	3.75*					
16	4,00"					
17	4.25"					
18	4,50"					

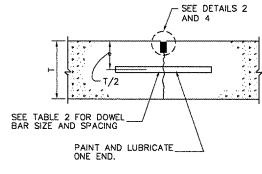
TABLE 2

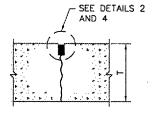
PAVEMENT	DOW	EL BAR DET	BAR DETAILS TIE BAR DETAILS				
THICKNESS T ~ INCHES	DIA.	LENGTH	SPACING	BAR SIZE	LENGTH	SPACING	
5	5/8"	12"	12"	#4	24"	30"	
6	3/4"	18"	12"	#5	30"	30"	
7	3/4"	18"	12"	#5	30*	30"	
8	1"	19"	12"	#5	30*	30"	
9	1*	19*	12"	# 5	30"	30"	
10	1"	19"	12"	#5	30"	30"	
11	1"	19"	12"	#5	30"	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"	

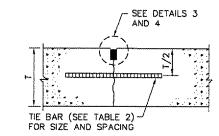
JOINT NOTES

- 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.
- 2.) THE INITIAL SAWCUT FOR ALL LONGITUDINAL & TRANSVERSE CONTRACTION JOINTS SHALL BE SAWED AS SOON AS POSSIBLE AFTER PLACEMENT OF THE
- 3.) ALL TIE BARS & MESH SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR OTHER APPROVED METHODS TO PREVENT SHIFTING DURING & AFTER CONCRETE PLACEMENT.
- 4.) TIE BARS SHALL BE DEFORMED BARS IN CONFORMANCE WITH THE SPECIFICATIONS.
- 5.) THE INITIAL SAWCUT SHALL BE MADE TO THE 1/8" WIDTH INDICATED, INITIAL SAWING TO THE DIMENSIONS OF THE SECOND SAWCUT WILL NOT BE
- 6.) ALL SEALANT TO BE HOT/COLD POUR. SILICONE AND PREFORMED SEALANT SHALL NOT BE USED ON
- 7.) ALL JOINTS THAT ARE THE END OF A CONSTRUCTION PHASE TO BE TYPE D DOWELED CONSTRUCTION

CONTRACTION JOINTS







TYPE F DOWELED

SYMBOL -X-X-X-

TYPE H DUMMY SYMBOL -- -- -- TYPE G HINGED (TIED)

SYMBOL -----|----

K:\ChampaignAp\030590302 Apron Rehab 2\Draw\; FILE: JOINTDET.dwg UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:55 PM

REVISIONS			
NUMBER	BY	DATE	

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

PHASE

REHABILITATE AIR CARRIER RAMP,

OF ILLINOIS
AIRPORT

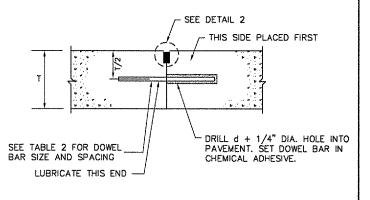
UNIVERSITY (

DETAIL

JOINTING

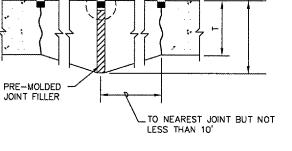
NEW

CONSTRUCTION JOINTS

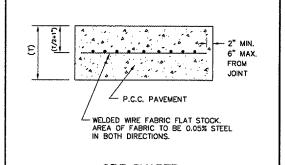


TYPE D DOWELED SYMBOL -x-x-x-

EXPANSION JOINTS SEE DETAIL 1 AS SHOWN ON TYPICAL SECTIONS

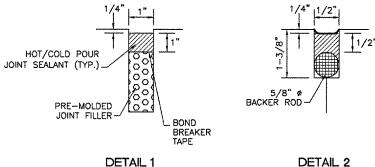


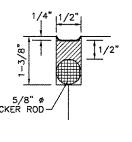
TYPE B THICKENED EDGE SYMBOL

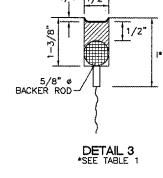


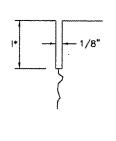
ODD SHAPED PANEL REINFORCEMENT

JOINT SEALING DETAILS









DETAIL 4 *SEE TABLE 1 CMI

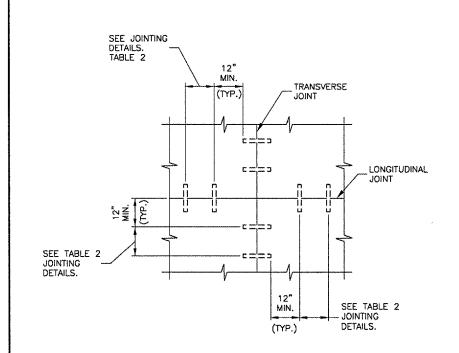
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JOB No:

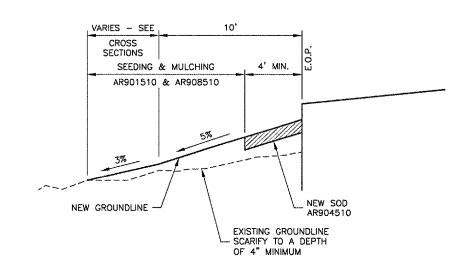
CMI-3663 3-17-0016-XX

SHEET 30 OF 57 SHEETS

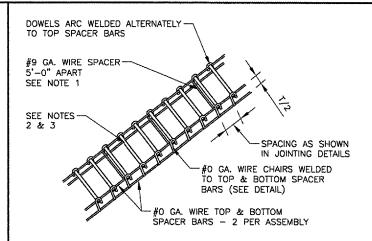
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DOWEL INSTALLATION AT JOINT CORNERS DETAIL N.T.S.



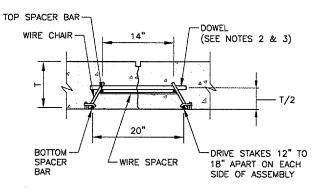
NEW TURF SHOULDER DETAIL "A"



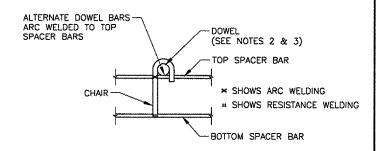
DOWEL BASKET ASSEMBLY DETAIL

DOWEL BASKET NOTES

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

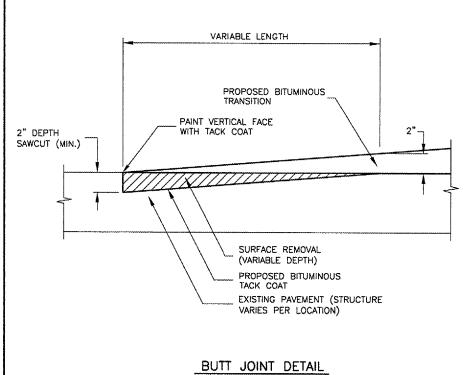


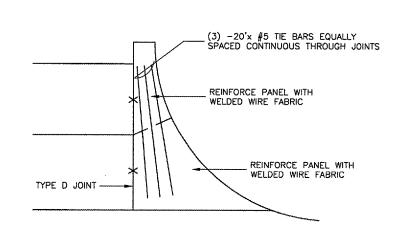
DOWEL BAR INSTALLATION DETAIL



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

DOWEL BASKET DETAILS





FILLET DETAIL AND FILLET REINFORCING DETAIL

:\ChampaignAp\030590302 Apron Rehab 2\Drow\ FILE: PAVMISCDET.dwg UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:55 PM

	REVISIONS	
NUMBER	BY	DATE
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AT FULL SCALE (34X22).

SH CARRIER RAMP, PHASE ETAILS UNIVERSITY OF ILLINOIS WILLARD AIRPORT S MISCELLANEOU REHABILITATE AIR

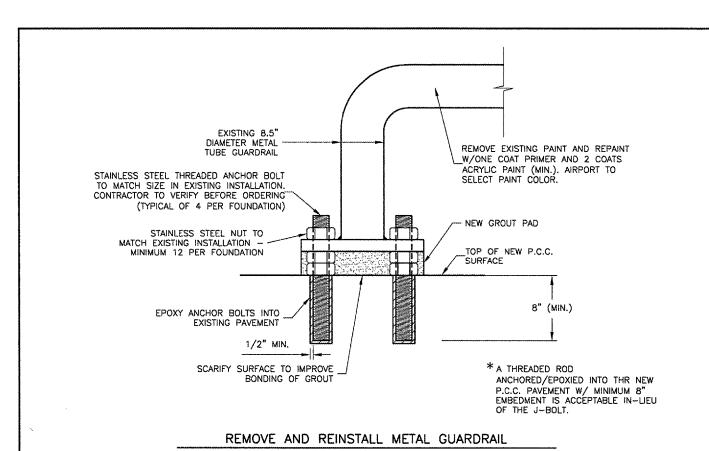
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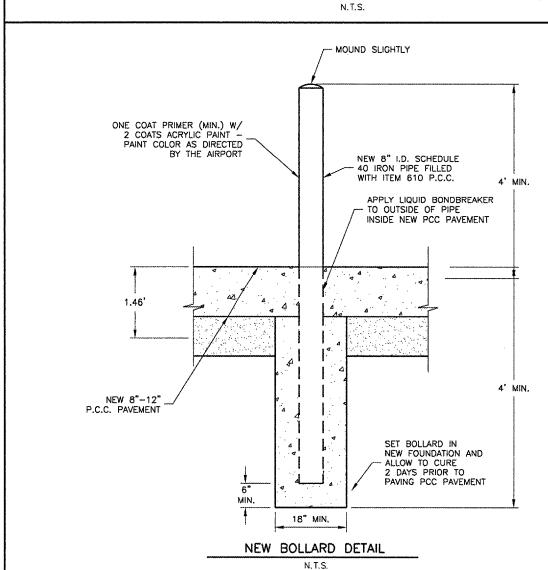
PAVING CRAWFORD, CONSULTING DESIGN BY: SMS

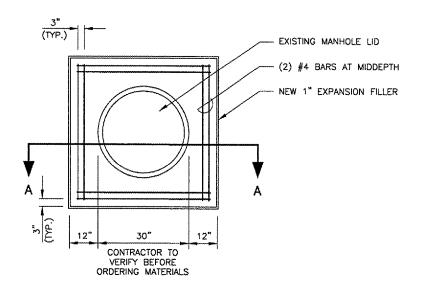
DRAWN BY: СМТ Smo CHECKED BY: APPROVED BY: 8M8 DATE: 04/18/2008 JOB No:

0305903 CM1-3663

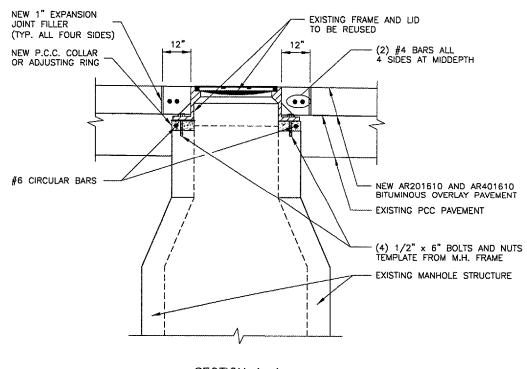
3-17-0016-XX SHEET 31 OF 57 SHEETS







PLAN



SECTION A-A

MANHOLE NOTES

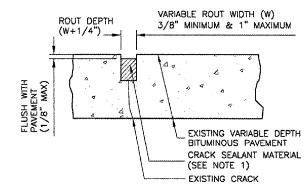
1.) HEIGHT OF ADJUSTMENT SHOWN ON PROJECT IMPROVEMENTS SHEETS.

IN PAVEMENT MANHOLE ADJUSTMENT

N.T.S.

NUMBER O THIS B.	JDET.dwg Sean Smit	S DATE 2		
UNIVERSITY OF ILLINOIS WILLARD AIRPORT	REHABILITATE AIR CARRIER RAMP, PHASE 2	HEET 2		
CCOPPIGN CM. Inc. CAT CRAWFORD, MARPHY & TILLY, NC.				
DESIGN BY: SMS DRAWN BY: CMT				
CHECKED BY: 8768 APPROVED BY: 878				
DATE: 04/18/2008				
DATE:				
JOB No:		305903		

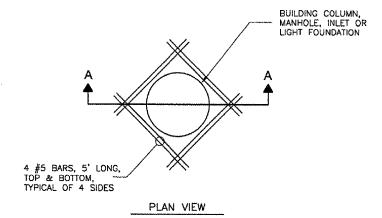
SHEET 32 OF 57 SHEETS

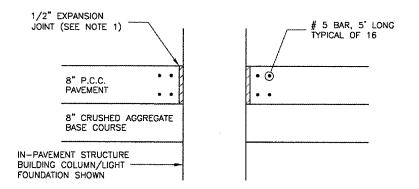


CLEAN & SEAL BITUMINOUS CRACKS (AR201661) N.T.S.

NOTES:

- THE CRACK ROUTING DIMENSIONS WILL PROVIDE A WIDTH
 TO DEPTH RATIO OF 1:1 FOR SEALANT MATERIAL.
- CRACKS TO BE ROUTED, CLEANED AND SEALED AT LOCATIONS DESIGNATED BY THE RESIDENT ENGINEER.





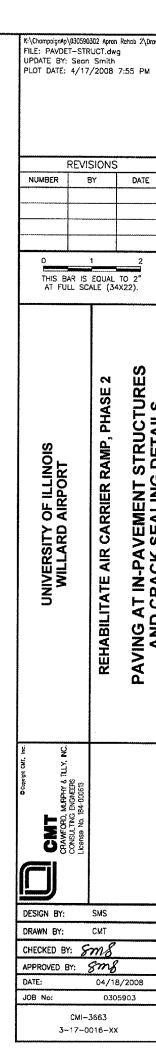
SECTION A-A

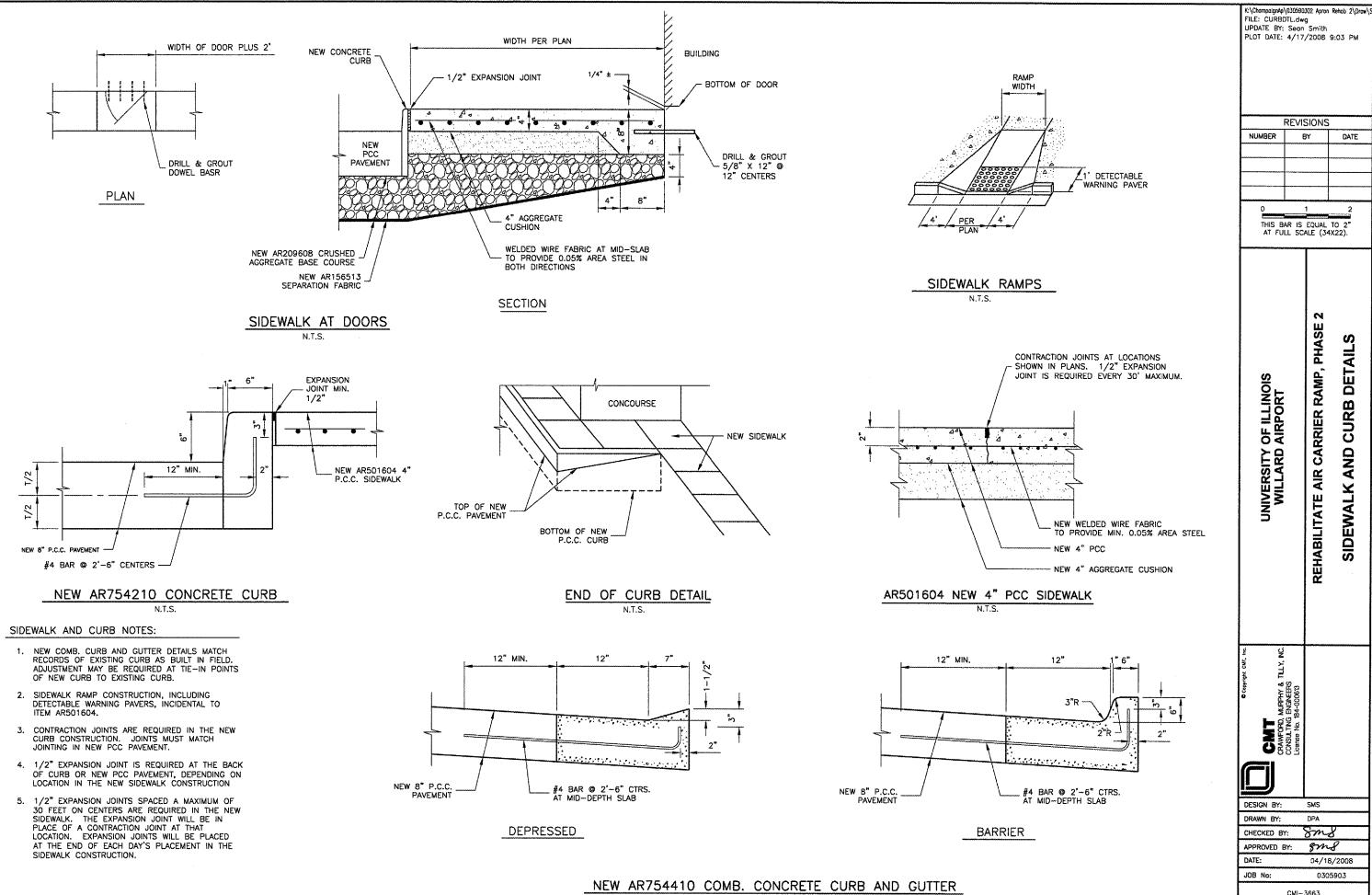
P.C.C. PAVING AT IN-PAVEMENT STRUCTURES

N.T.S.

NOTES:

- 1. A MINIMUM 1/2" EXPANSION IS REQUIRED AT BUILDING COLUMNS AND LIGHT FOUNDATIONS. IN-PAVEMENT MANHOLES AND INLETS MAY HAVE THE EXPANSION JOINT ELIMINATED AT THE DISCRETION OF THE RESIDENT ENGINNER. THE EXPANSION JOINTS WILL BE SEALED.
- 2. JOINT LOCATIONS SHOWN ARE FOR ILLUSTRATIVE PURPOSES AND MAY NOT REFLECT ACTUAL FIELD CONDITIONS.
- PAVEMENT LEADING UP TO IN-PAVEMENT MANHOLES AND INLETS DESIGNED TO ACCEPT STORMWATER RUNOFF WILL BE SLOPED TOWARDS THE DRAIN.
- 4. A MINIMUM OF 2-INCH COVER IS REQUIRED OVER THE TIE BARS LOCATED AS SHOWN IN THE DETAIL.
- ANY DAMAGE TO THE EXISTING IN-PAVEMENT STRUCTURES CAUSED BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED BY HIM AT HIS EXPENSE PRIOR TO COMPLETING THE P.C.C. PAVING.





0305903 SHEET 34 OF 57 SHEETS

REVISIONS NUMBER BY DATE

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

REHABILITATE AIR CARRIER RAMP, PHASE **DETAIL**: OF ILLINOIS
AIRPORT CURB UNIVERSITY (AND SIDEWALK

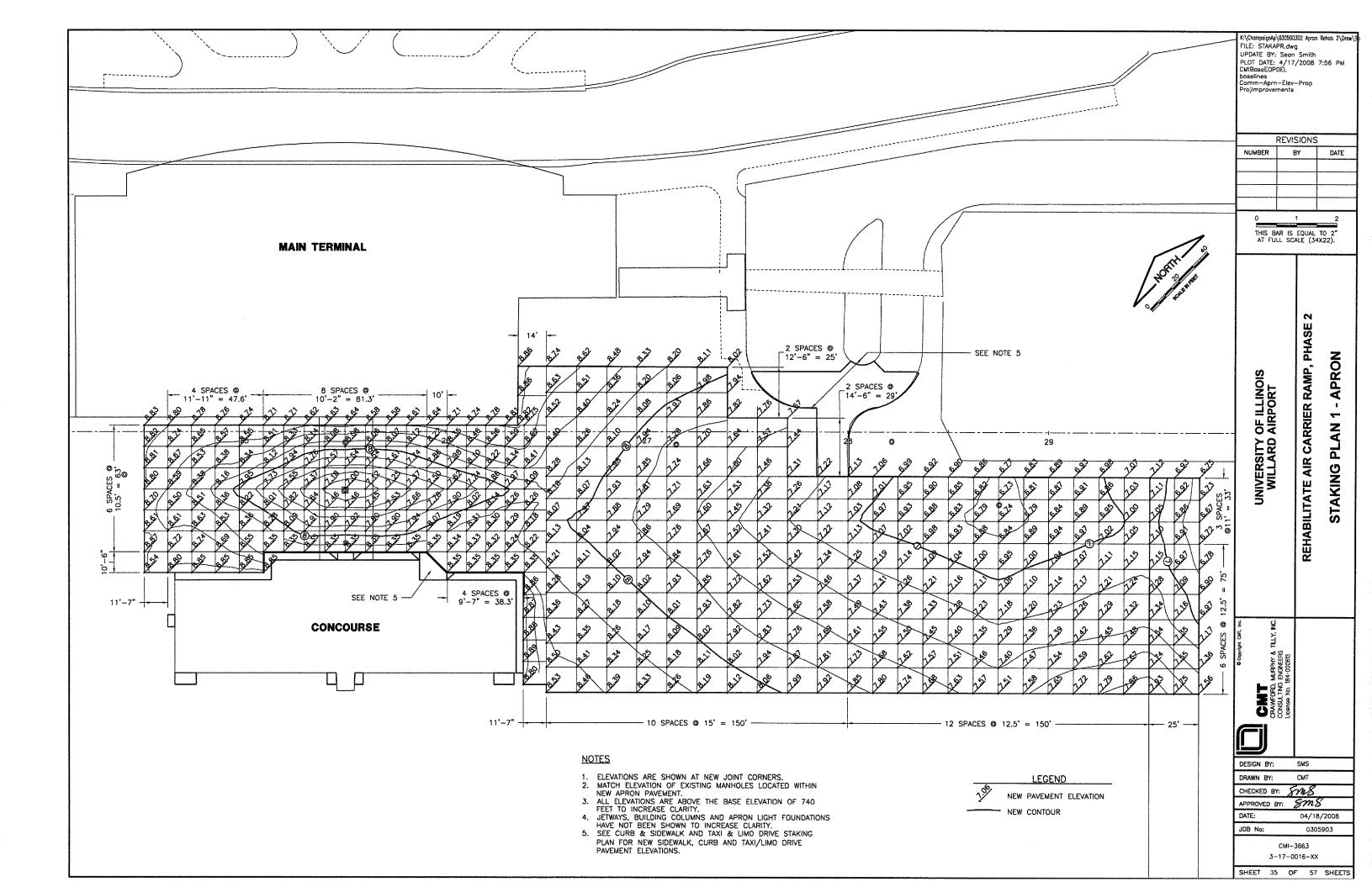
CRAWFORD, CONSULTING

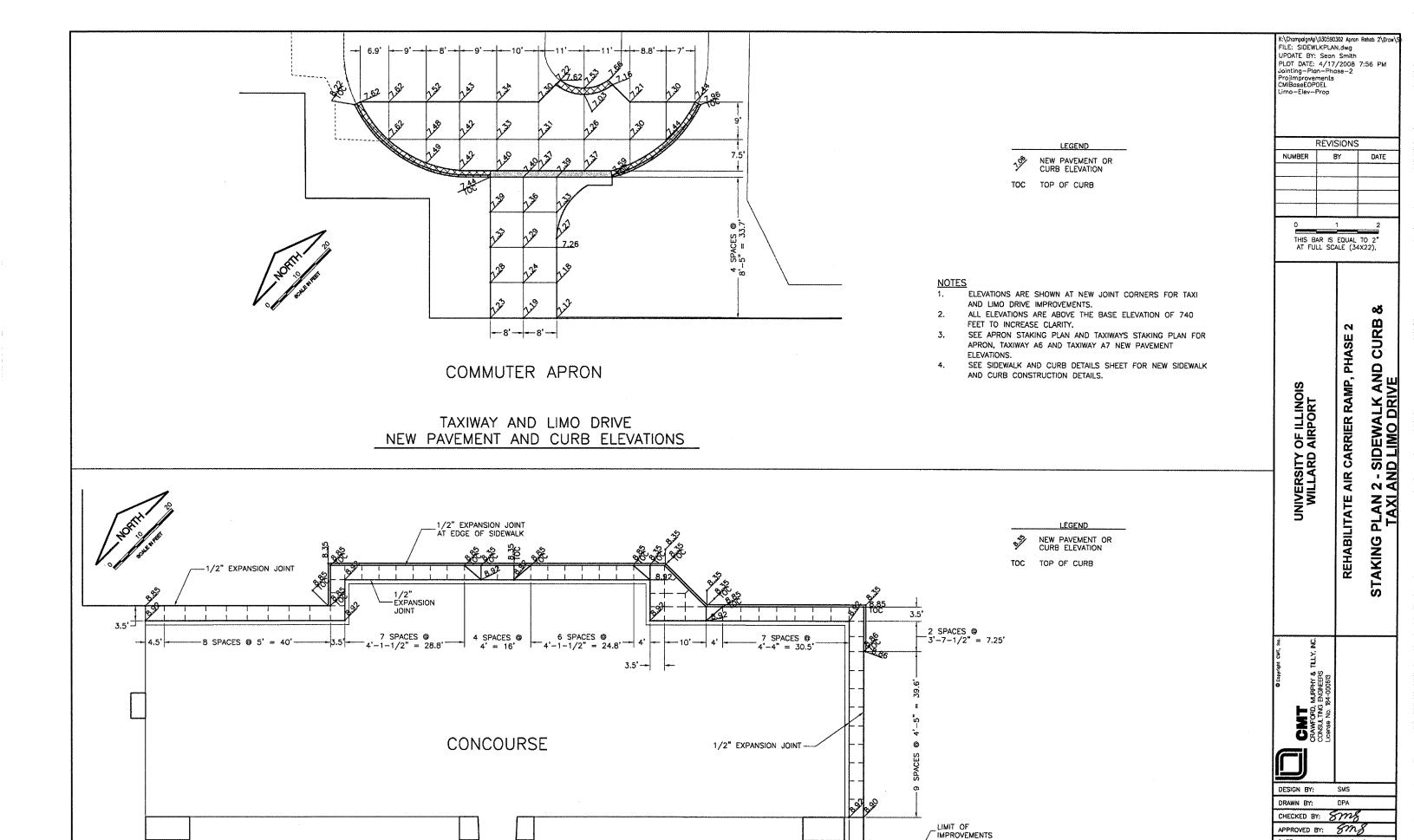
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APPROVED BY: DATE: 04/18/2008 JOB No:

CMI~3663 3-17-0016-XX

N.T.S.





NEW SIDEWALK AND CURB ELEVATIONS

DATE:

JOB No:

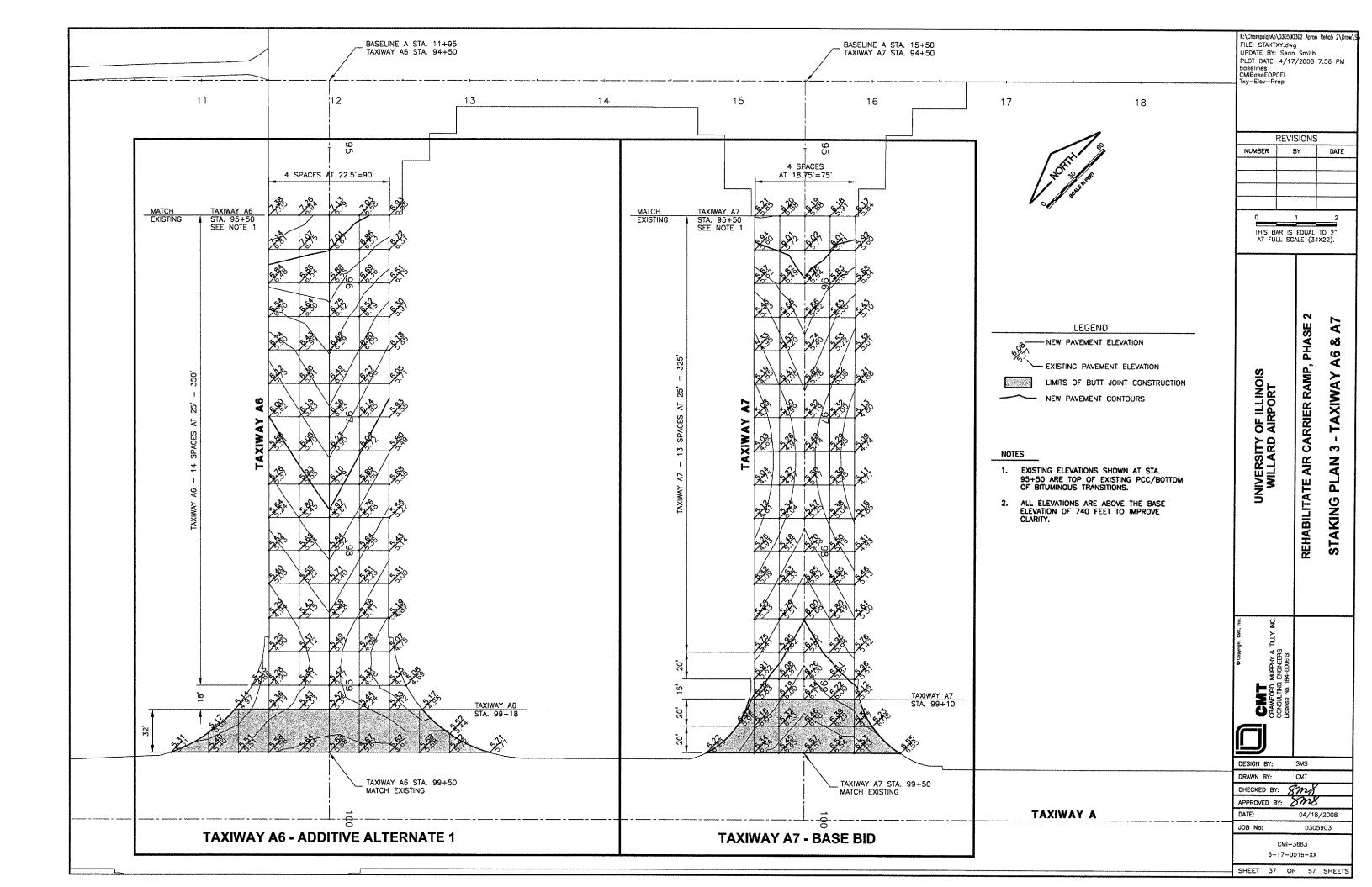
04/18/2008

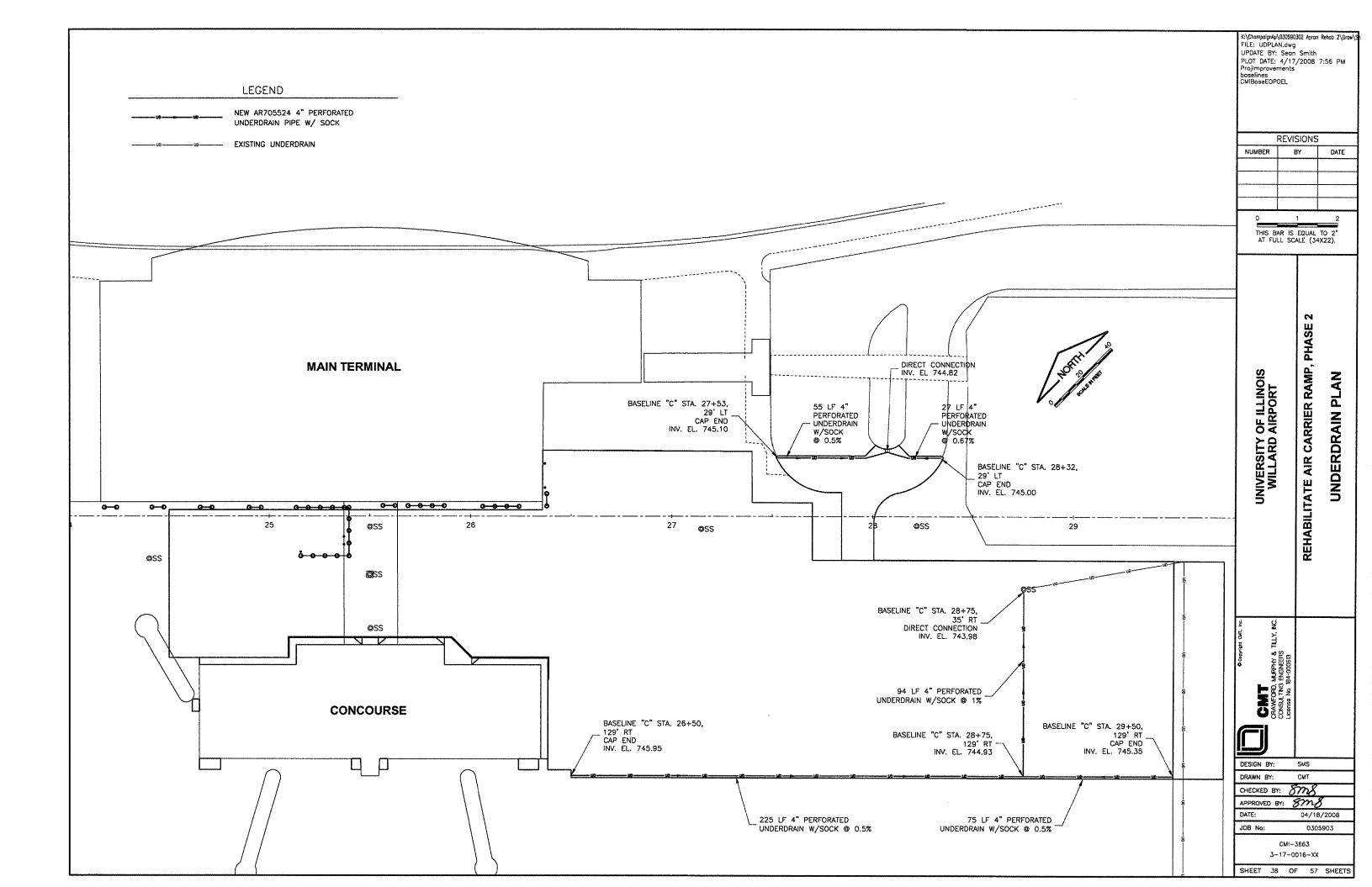
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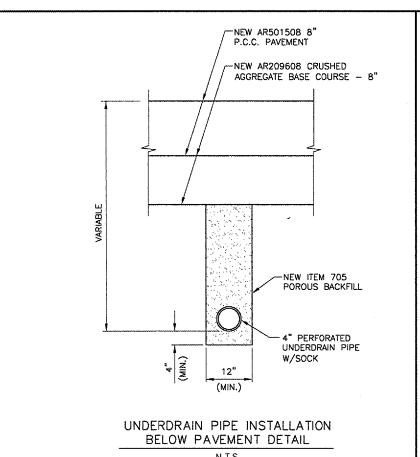
CMI~3663

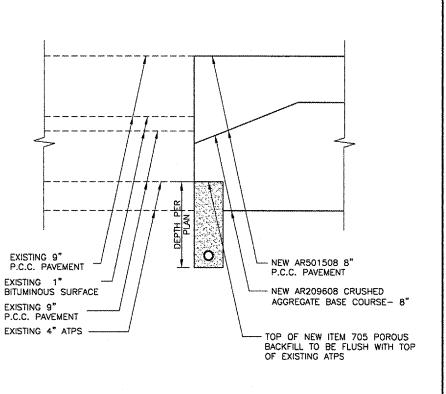
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SHEET 36 OF 57 SHEETS



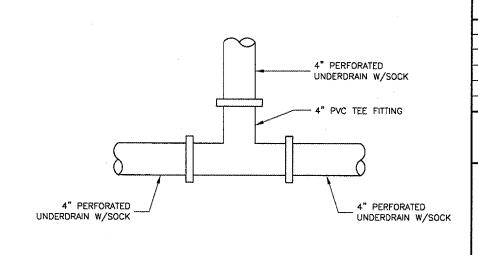






UNDERDRAIN INSTALLATION AT

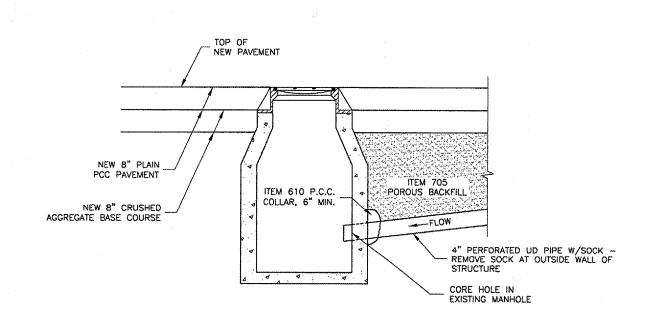
N.T.S.



3-WAY UNDERDRAIN CONNECTION DETAIL

EDGE OF EXISTING ATPS DETAIL

18" SQUARE OR ROUND MATCH EXISTING 2'-6" (TYPICAL) SHAPE NEW LID NEW INSPECTION REMOVE EXISTING LID FRAME R-6013 NEENAH NEW ITEM 610 OR APPROVED EQUAL. #4 REBAR STRUCTURAL CONCRETE (4 SIDES) 3/4" CHAMFER -TYPICAL ALL SIDES NEW GRADELINE OF STRUCTURE PROPOSED SHOULDER EMBANKMENT (TYP.) BITUMINOUS/ CONCRETE ADJUSTMENT DIMENSION VARIES PER LOCATION. THE PROPOSED FRAME TOP ELEVATION IS DETERMINED BY THE OVERLAY DIMENSIONS AND SLOPES SHOWN. EXISTING PAVEMENT PROPOSED GRADELINE NEW SHOULDER EXISTING GRADELINE EMBANKMENT (TYP.) NEW 1/2" GALVANIZED
ANCHOR — FOUR PER ADJUSTMENT EXISTING GRADELINE NEW 1/2" DIAMETER -CONCRETE ANCHOR, FOUR PER ADJUSTMENT NEW 6" INSIDE DIAMETER NON-PERFORATED P.V.C. PIPE EXISTING INSPECTION FRAME EXISTING P.C.C. TO REMAIN IN PLACE EXISTING INSPECTION HOLE (TYPE A) OR CLEANOUT (TYPE B) METHOD OF CONSTRUCTION 1.) ADJUST SHOULDERS TO GRADE. 2.) EXCAVATE CLEANOUT/INSPECTION HOLE AND ADJUST TO PROPER



DIRECT CONNECTION DETAIL N.T.S.

DESIGN BY:

CHECKED BY: SMS 8m8 04/18/2008

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JOB No: 0305903 CMI-3663 3-17-0016-XX

SMS

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PLOT DATE: 4/17/2008 7:56 PM

REVISIONS

BY

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

PHASE

DETAIL

UNDERDRAIN

REHABILITATE AIR CARRIER RAMP,

DATE

FILE: UDDET.dwg
UPDATE BY: Sean Smith

NUMBER

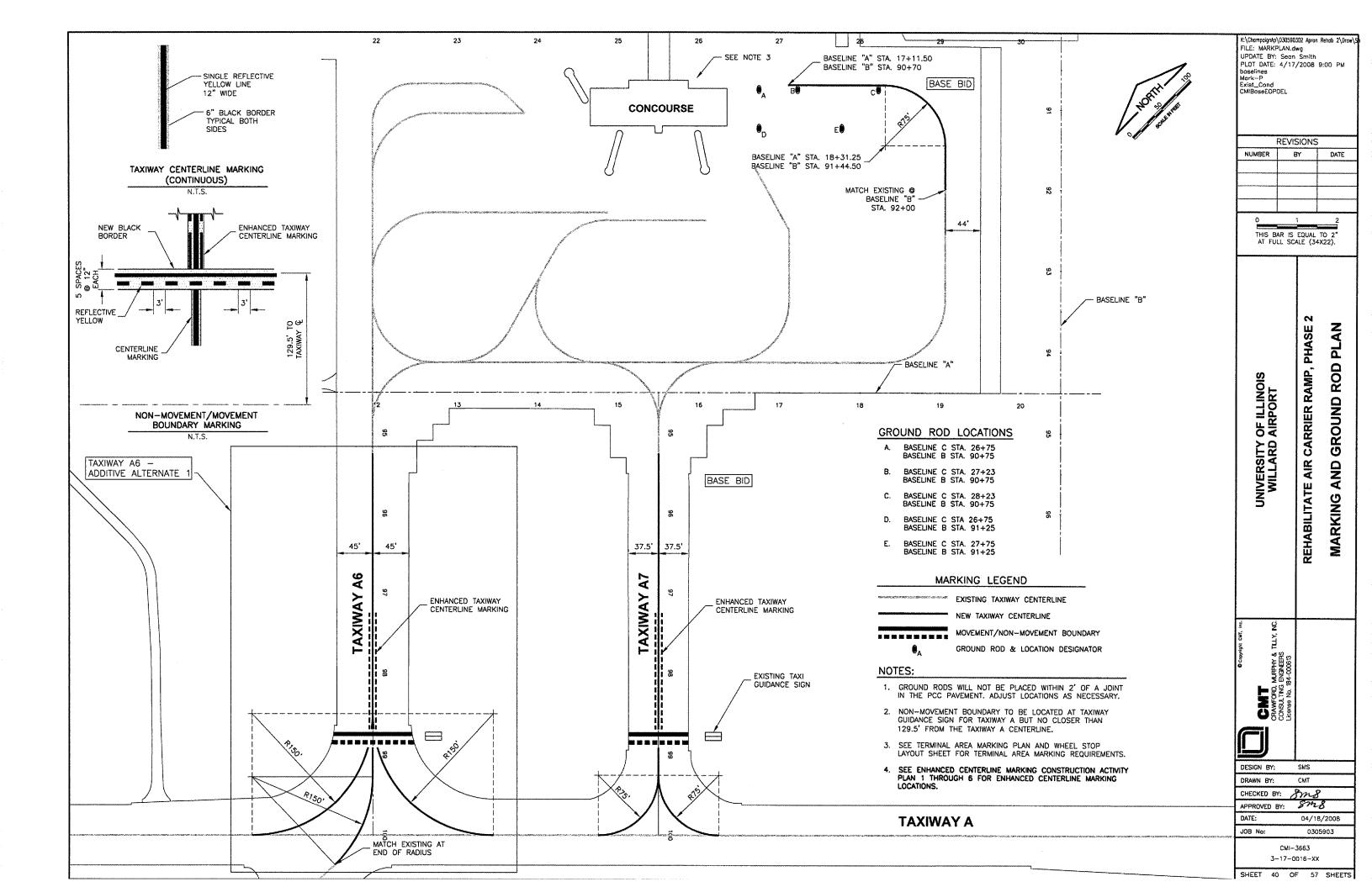
OF ILLINOIS
AIRPORT

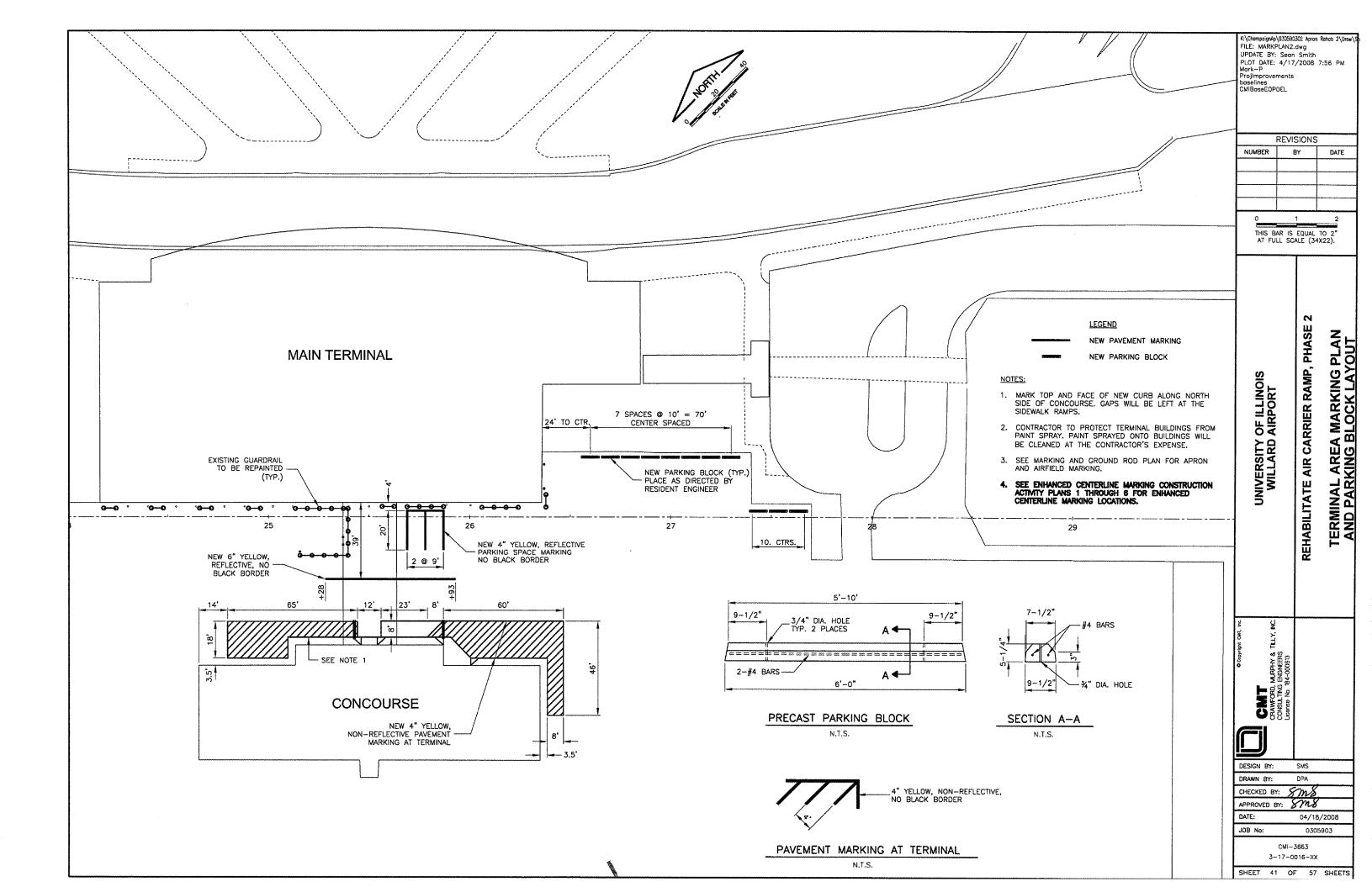
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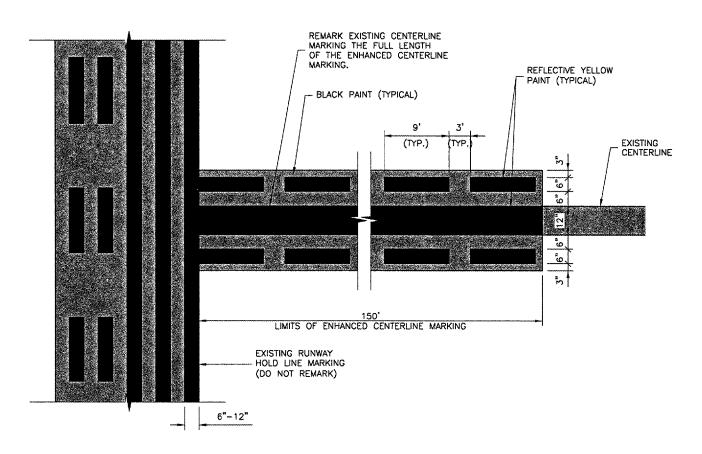
SHEET 39 OF 57 SHEETS

CLEANOUT/INSPECTION HOLE ADJUSTMENT -IN TURF DETAIL

3.) BACKFILL EXCAVATED MATERIAL.



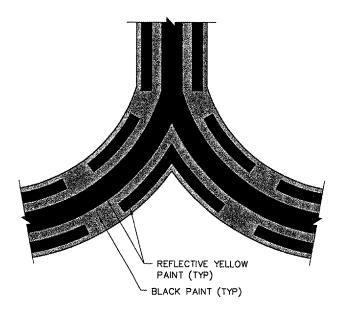




ENHANCED TAXIWAY CENTERLINE - STRAIGHT SECTION
N.T.S.

ENHANCED TAXIWAY CENTERLINE MARKINGS

SHEET	TAXIWAY	NO. OF LOCATIONS	COMMENT
12	8 B1 B2	2 1 1	
13	C C1	3 3	1 - CONVERGENCE
14	C B	1 3	
15	D	1	
16	A5 A6	3	
17	A	1	
TOTAL		20	



NOTE: THERE MUST BE NO PARTIAL DASHED LINES LESS THAN 9-FEET (2.74 m) AT THE POINT OF CONVERGENCE. THE FIRST INSIDE DASHED LINES MUST BE ALIGNED WITH THE OUTSIDE DASHED LINES - STARTING AND STOPPING WITH THE DASHED LINES ON THE OUTSIDE, AS SHOWN.

ENHANCED TAXIWAY CENTERLINE - CONVERGENCE SECTION
N.T.S.

SEE ENHANCED CENTERLINE MARKING CONSTRUCTION ACTIVITY PLANS 1 THROUGH 6 FOR ENHANCED CENTERLINE MARKING LOCATIONS K:\ChompoignAp\030590302 Apron Rehob 2\Drow\S FILE: ENHMARKDET.dwg UPDATE BY: Seon Smith PLOT DATE: 4/17/2008 8:58 PM

REVISIONS			
NUMBER	BY.	DATE	

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

AT FULL SCALE (34X22).

UNIVERSITY OF ILLINOIS
WILLARD AIRPORT
REHABILITATE AIR CARRIER RAMP, PHASE
ENHANCED TAXIWAY CENTERLINE
MARKING DETAILS

CANT
CANT
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CANTONIA
CANFORD, MARPHY & TLLY, NC.
CONSULTING RESPERS
LOSINS NO. 184-000818

DESIGN BY: SMS

DRAWN BY: CMT

CHECKED BY: PMS

APPROVED BY: SMS

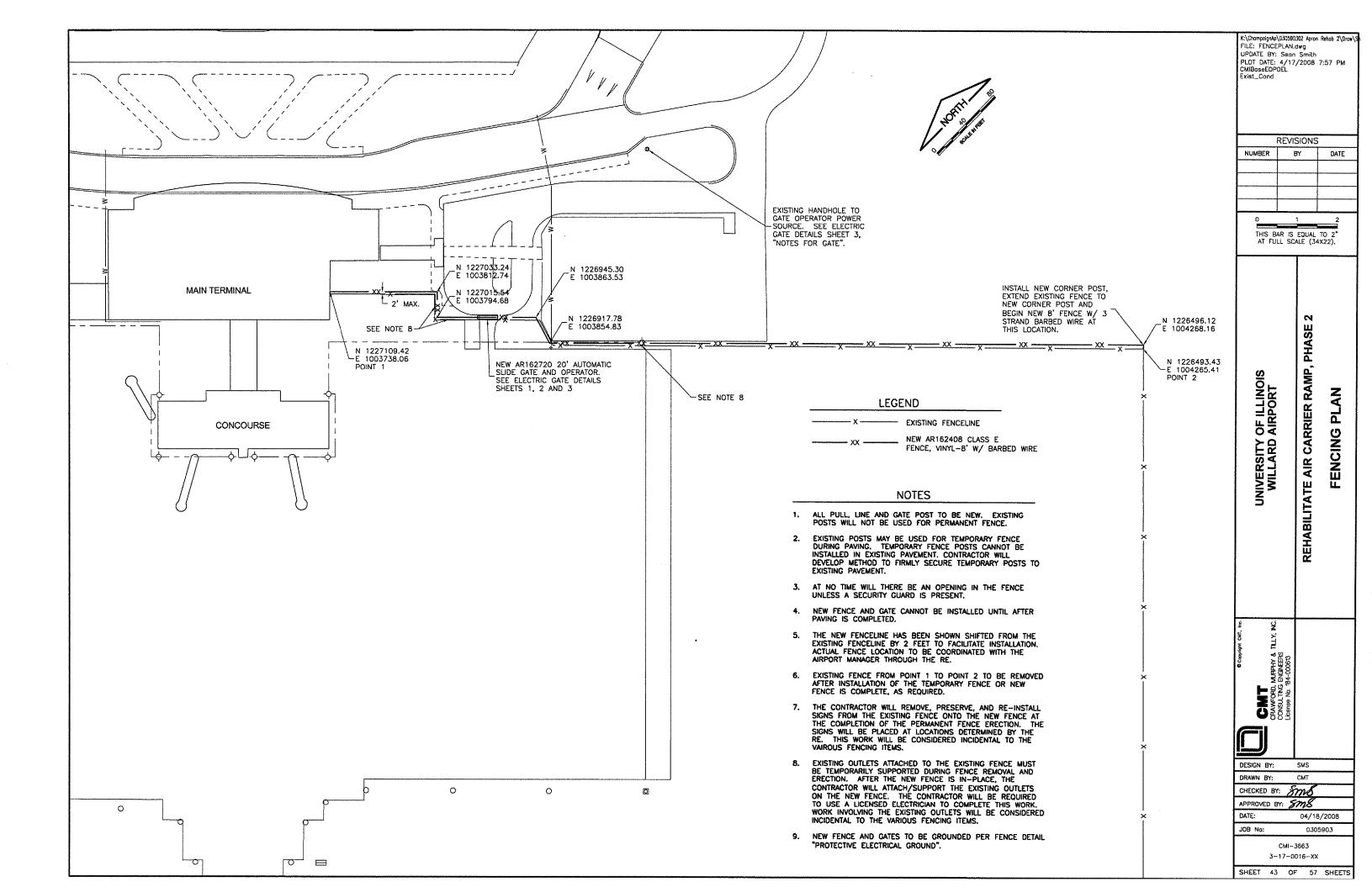
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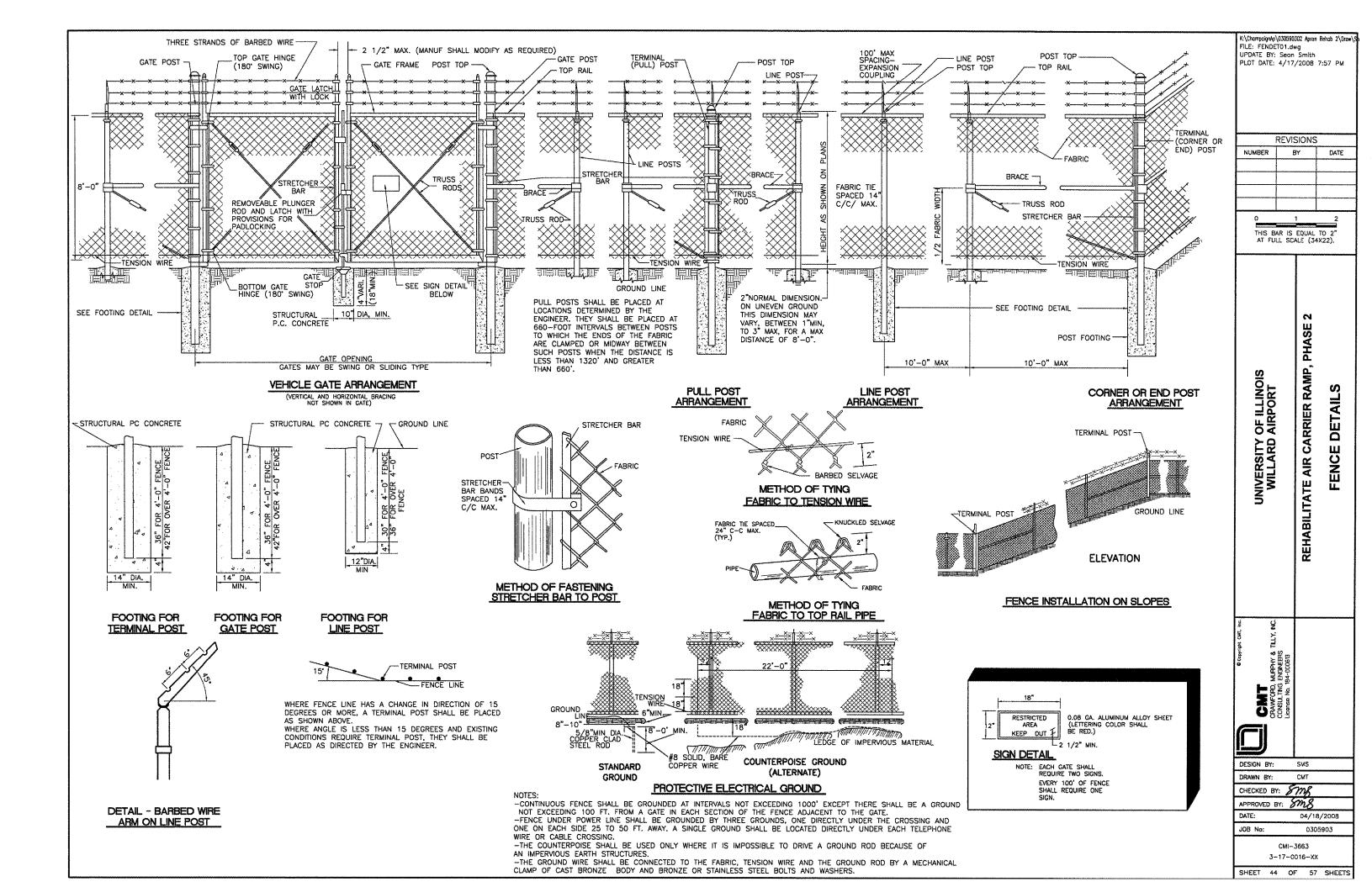
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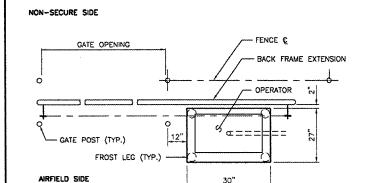
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SHEET 42 OF 57 SHEETS



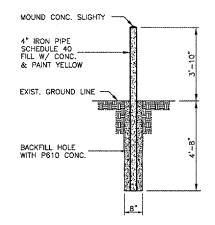




PLAN

GATE OPERATOR DETAIL

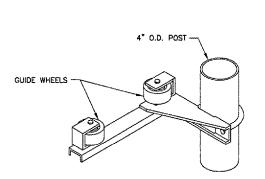
N.T.S.



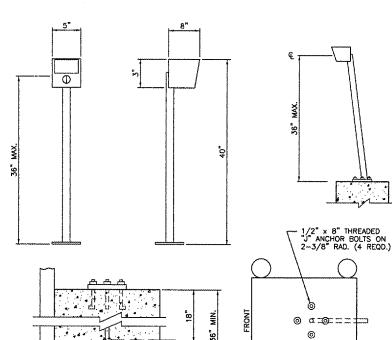
BOLLARD DETAIL

N.T.S.

TYPICAL EACH CORNER OF CARD READER FOUNDATION



STANDARD BOTTOM GUIDE ASSEMBLY



NOTE:
DIMENSIONS OF CONDUIT KEY CONTROL AND ANCHOR
BOLTS MAY BE CHANGED TO MEET MANUFACTURERS
SPECIFICATIONS AND DIMENSIONS.

STUB OUT 2", 2" R.S. CONDUIT

TEM 610 CONCRETE



(DIMENSIONS SHALL BE ADJUSTED FOR ADDITIONAL EQUIPMENT REQUIRED)

BARB ARM LOCATIONS, DETAILS AND CHARACTER OF EQUIPMENT SHOWN ON THIS SHEET ARE GENERIC. EQUIPMENT LOCATIONS SHALL BE AS RECOMMENDED BY THE HANGER ASSEMBLY (TYP.) TRUCK ASSEMBLY 4" O.D. DOUBLE POST SET 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.

11"

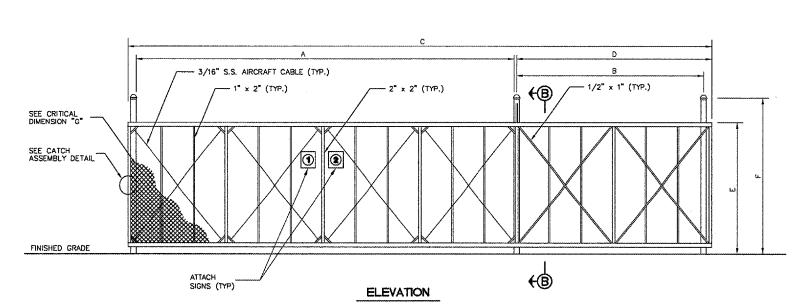
- CONTRACTOR SHALL PROVIDE AND INSTALL GATE AS A COMPLETE WORKING UNIT. THE GATE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: GATE, OPERATOR, CARD READER AND POWER CABLES, CONDUIT, TRENCHING, CIRCUIT BREAKERS, AND ALL CONNECTIONS, LABOR AND MATERIALS NECCESSARY TO COMPLETE OPERATION.
- 3. LOCATION OF THE 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 & FINISH OF THE GATE, MATCH WITH THE 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
- 7. 3 STRANDS OF BARBED WIRE ON TOP OF GATE NOT SHOWN.

4" O.D. POST GATE FRAME LOCKING HANDLE

CATCH ASSEMBLY DETAIL

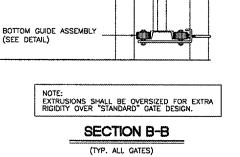
(26' GATE SHOWN)

CRITICAL DIMENSIONS		
CLEAR OPENING	20'~0"	
COUNTER BALANCE POST SPACING C/C	9'-1"	
OVERALL GATE LENGTH	30¹−0 ™	
COUNTERBALANCE LENGTH	11'0"	
NOMINAL GATE HEIGHT	8'-0"	
POST HEIGHT	9'~6"	
FABRIC HEIGHT	7'-0"	
	CLEAR OPENING COUNTER BALANCE POST SPACING C/C OVERALL GATE LENGTH COUNTERBALANCE LENGTH NOMINAL GATE HEIGHT POST HEIGHT	



CANTILEVER SLIDE GATE

(26' GATE SHOWN)



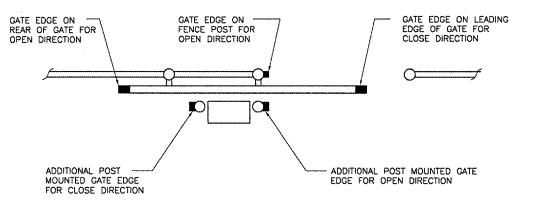
GATE FRAME

(SEE DETAIL)

PIPE BOLLARD (TYP. EA. CORNER)

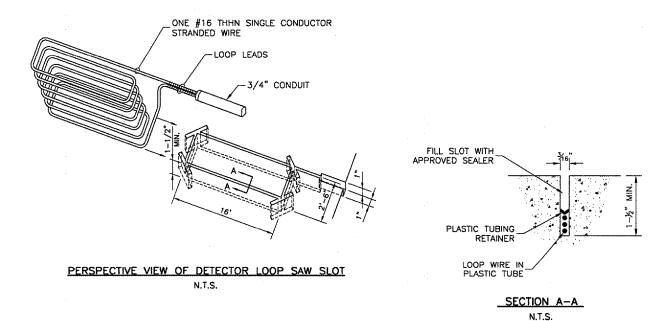
K:\ChampaignAp\030590302 Apron Rehab 2\Draw\ FILE: ELECTRICAL GATE DETAILS SHEE UPDATE BY: Seon Smith PLOT DATE: 4/17/2008 7:57 PM REVISIONS NUMBER ÐΥ DATE THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). PHASE SHEET REHABILITATE AIR CARRIER RAMP, OF ILLINOIS
AIRPORT DETAILS UNIVERSITY (GATE ELECTRICAL CMT DESIGN BY: CMT CMT CHECKED BY: SMS APPROVED BY: 8778 DATE: 04/18/2008 JOB No: 0305903

> CMI-3663 3-17-0016-XX SHEET 45 OF 57 SHEETS



SECONDARY GATE OPERATOR ENTRAPMENT PROTECTION CONTACT SENSORS

N.T.S.



DETECTOR LOOP DETAILS

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).

- 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 RUN, OR STEEL REINFORCEMENT.
- 4.) LOOP LEADS MUST BE IN SEPERATE 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 CONTINOUS WITHOUT SPLICING.

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



STANDARD TRACK (TYP.)

TOP PRIMARY MEMBER

x 2" VERTICAL

2" x 2" VERTICAL (BEHIND)

- 3" PRIMARY VERTICAL (BEHIND)

5" ALUM. CHANNEL

GATE FRAME SECTION N.T.S.

Moving Gate Can Cause Injury or Death

KEEP CLEAR! Gate may move at any time without prior warning. Do not let children operate the gate or

This entrance is for vehicles only Pedestrians must use separate entrance

play in the gate area.

WARNING SIGN DETAIL

SUMMARY OF OPERATION

- THE GATES SHALL HAVE AN AUTOMATIC GATE OPERATOR WITH TWO CARD READERS AND REMOTE CONTROL. ONCE THE GATE IS OPENED IT WILL REMAIN OPEN FOR THE TIME SPECIFIED BY THE OWNER

 OUTDITIONS OF THE TIME SPECIFIED BY THE OWNER. AFTER THE LOOP PICKUPS DETERMINE THAT THERE ARE NO VEHICLES OVER THE PICKUP LOOPS.
- ACTUATING THE GATE OPENERS VIA THE CARD READER REQUIRES THE VEHICLE TO APPROACH THE GATE ENTRANCE AND STOP. THE DRIVER ACTIVATES THE GATE OPENER BY SWEEPING HIS CARD. THE ACCESS CONTROL DEVICE TRANSMITS AN IMPULSE TO ACTIVATE THE GATE OPENER TO OPEN THE GATE. AFTER THE GATE IS FULLY OPENED AND STOPPED, THE VEHICLE PROCEEDS THROUGH THE OPENING, PASSING OVER THE LOOPS. WHILE THE VEHICLE IS IN THE LOOP SENSING RANGE, AN IMPULSE IS TRANSMITTED TO THE GATE OPERATOR TO HOLD THE GATE IN THE OPEN POSITION. WHEN THE LOOP HAS BEEN CLEARED, THE AUTOMATIC TIMER IS ACTIVATED AND, WHEN THE USER-DETERMINED TIME HAS ELAPSED, IT WILL ACTIVATE THE GATE OPENER TO CLOSE THE GATE. EXITING THE AREA IS ACCOMPLISHED IN THE SAME MANNER.

		BACKGROUND	LETT	ERING	
SIGN	DIMENSIONS	COLOR	COLOR	HEIGHT	TEXT
1	24' x 18"	WHITE	RED	1.5"	FAA REGULATIONS REQUIR
					THAT AFTER ENTERING O
		i			EXITING THROUGH THIS
					SECURITY GATE YOU ARE
					REQUIRED TO WAIT UNTIL T
					GATE CLOSES BEFORE
					PROCEEDING. FINES OR
					PENALTIES WILL BE IMPOSE
2	SEE WARNING SIGN DETAIL				

UL 235 COMPLIANCE NOTES

SHALL BE INSTALLED ON "LAND" SIDE OF GATE.

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.
- FOR ADDITIONAL UL 235 REQUIREMENTS FOR THIS GATE INSTALLATION, SEE GATE OPERATOR DETAILS SHEET.

CANTORD, CMT CMT 8mb PROVED BY: 8mg 04/18/2008 JOB No: 0305903 CMI~3663 3-17-0015-XX

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

:\ChampaignAp\030590302 Apron Rehab 2\Draw\ FILE: ELECTRICAL GATE DETAILS SHE UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:57 PM

REVISIONS

BY

DATE

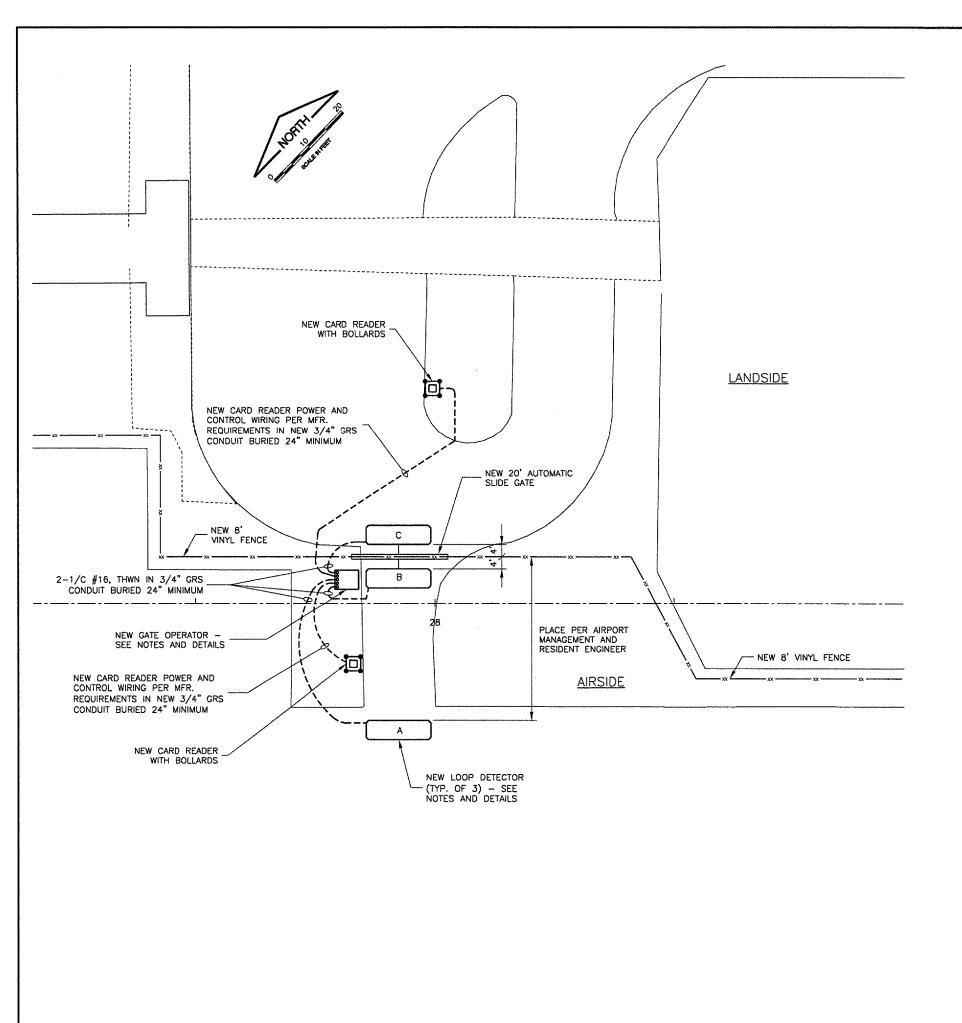
NUMBER

REHABILITATE AIR CARRIER RAMP, PHASE OF ILLINOIS AIRPORT S DETAIL UNIVERSITY (GATE ECTRIC 딥

DESIGN BY:

DRAWN BY: CHECKED BY: DATE:

SHEET 46 OF 57 SHEETS



NOTES FOR GATE

- DISCONNECT AND REMOVE EXISTING GATE OPERATOR. REPLACE WITH NEW GATE OPERATOR, SENTEX SL-580, 3/4 HP, 208V, 1 PHASE, OR EQUIVALENT. GATE OPERATOR TO INCLUDE ALL ACCESSORIES AS REQUIRED TO INTERFACE WITH 1.) REMOTE CONTROL EQUIPMENT LISTED HEREIN.
- 2.) EXISTING GATE OPERATOR IS POWERED FROM AN EXISTING 20A-2P CIRCUIT BREAKER IN A LOAD CENTER LOCATED WEST OF THE TERMINAL BUILDING. PROPOSED GATE OPERATOR SHALL ALSO BE POWERED FROM THIS CIRCUIT BREAKER. EXISTING POWER WIRING SHALL REMAIN IN SERVICE AND BE RECONNECTED TO PROPOSED GATE OPERATOR.
- 3.) DISCONNECT EXISTING POWER CABLE AND, AT NEAREST HANDHOLE (SEE FENCING PLAN), RETRACT EXISTING POWER CABLE TO PROTECT IT DURING REMOVAL OF EXISTING OPERATOR FOUNDATION. PLACE A NEW OPERATOR FOUNDATION PER MANUFACTURE'S INSTRUCTIONS AND CONNECT EXISTING POWER WIRING TO NEW OPERATOR. INSTALL A NEMA-3R JUNCTION BOX AT NEW OPERATOR IF NECESSARY TO SPLICE TO EXISTING WIRING.
- 4.) GATE OPERATOR IS TO INCLUDE 10 PROGRAMMABLE RADIO TRANSMITTERS, FURNISHED WITH GATE OPERATOR. TRANSMITTERS ARE TO BE HAND HELD AND INCLUDE CLIP FOR ATTACHMENT TO VEHICLE SUN VISOR. TRANSMITTERS ARE TO BE LINEAR MODEL #105015 OR EQUIVALENT.
- 5.) GATE OPERATOR TO INCLUDE INTERNAL TWO-CHANNEL RECEIVER, ONE CHANNEL FOR SAFTEY EDGE TRANSMITTER, THE OTHER FOR RADIO TRANSMITTERS. RECEIVER WILL BE LINEAR MODEL 203102 OR EQUIVALENT.
- 6.) GATE OPERATOR TO INCLUDE WEATHERPROOF REMOTE CARD READERS, FURNISHED WITH GATE OPERATOR. CARD READERS WILL BE LOCATED IN SIMILAR MANNER AS EXISTING CARD READERS. CARD READERS WILL BE POWERED BY GATE OPERATOR. REMOVE EXISTING CARD READERS AND TURN THEM OVER TO THE AIRPORT. CARD READERS WILL BE PROGRAMMABLE.
 CONTRACTOR IS TO INSTALL 3/4" GRS CONDUIT WITH ONE 2/C #16 CABLE
 (POWER) AND ONE 2/C #16 CABLE (CONTROL) FROM CARD READER TO GATE
 OPERATOR. CARD READERS WILL BE HID PROXPRO 5355 OR EQUIVALENT.
- 7.) GATE OPERATOR TO INCLUDE THREE IN-PAVEMENT LOOP DETECTORS. ONE IN-PAVEMENT LOOP INSTALLED "OUTSIDE" GATE AND ANOTHER IN-PAVEMENT LOOP INSTALLED "INSIDE" GATE. THESE TWO LOOPS WILL BE USED AS "SAFETY" LOOPS WHEN ENTERING AND EXITING. A THIRD LOOP WILL BE USED AS AN "OPEN" LOOP WHEN EXITING. WIRING WILL BE AS DETAILED. NEW SAW KERF WILL BE SEALED WITH LOOP SEALANT PER DETECTOR LOOP DETAILS ON
- GATE OPERATOR WILL OPERATE ON REMOTE CONTROLLED "OPEN" (FROM RADIO TRANSMITTERS), BY CARD READER STATION, OR BY "OPEN LOOP" AND AUTOMATIC ADJUSTABLE 0-90 SECOND INTERNAL TIMER CONTROLLED "CLOSE" ("SAFETY" LOOP INITIATES TIMING CYCLE).

K:\ChampaignAp\030590302 Apron Rehab 2\Draw\5 FILE: ELECTRICAL GATE DETAILS SHEE UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 8:55 PM CMIBaseEOPOEL

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

3 CARRIER RAMP, PHASE EET SH OF ILLINOIS AIRPORT UNIVERSITY (Ш GAT REHABILITATE AIR ELECTRIC

© CONTRACTOR IN TALY, NC. CONSULTING ENGINEERS LICENSE No. 184-000613	

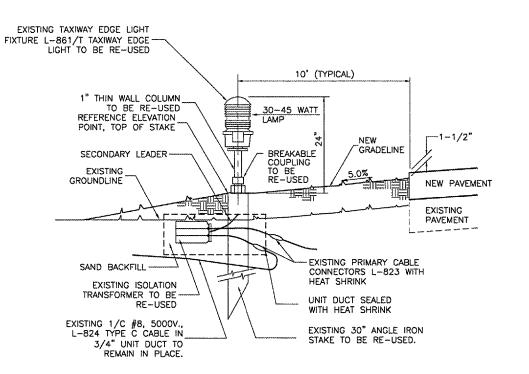
DESIGN BY:	CMT
DRAWN BY:	CMT
CHECKED BY:	8m8
APPROVED BY:	ちから
DATE:	04/18/2008

JOB No:

CMI-3663 3-17-0016-XX

0305903

SHEET 47 OF 57 SHEETS



METHOD OF CONSTRUCTION

- 1.) ADJUST SHOULDERS TO GRADE.
- 2.) EXCAVATE STAKE MOUNTED LIGHT AND TRANSFORMER AND SET AT NEW ELEVATION.
- 3.) BACKFILL EXCAVATED MATERIAL.

TAXIWAY STAKE MOUNTED LIGHT ADJUSTMENT N.T.S.

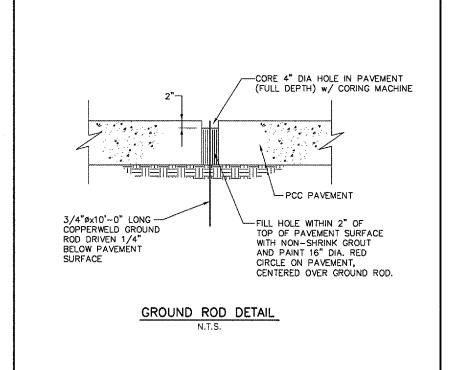
CENTERLINE OF LIGHT EXISTING TAXIWAY EDGE 10' LIGHT FIXTURE L-861/T TO BE RE-USED EXISTING BREAKABLE COUPLING TO BE NEW ITEM 610 CONCRETE. 24" RE-USED ROUND OR SQUARE (MATCH-EXISTING BASE PLATE EXISTING SHAPE) TO BE RE-USED NEW FINISHED GRADELINE 34" CHAMFER - TYPICAL ALL SIDES OF STRUCTURE -EXISTING GRADELINE 1 - 1/2"---NEW FINISHED GRADELINE -EDGE OF NEW EMBANKMENT MATERIAL PAVEMENT NEW 1/2" GALVANIZED - ANCHOR BOLT -- 4 EQUALLY SPACED PER EDGE LIGHT EXISTING GRADELINE-1 - #3 REBAR HOOP MIDWAY IN ADJUSTMENT TOP OF EXISTING LIGHT CAN. CONTRACTOR SHALL RE-TAP EXISTING BOLT HOLES FOR NEW NEW 1/2" DIA. CONCRETE ANCHOR, 4 EACH PER LIGHT. EXTENSION RING BOLTS. THIS WORK SHALL BE INCLUDED IN THE COST TO ADJUST EACH EXTENSION RING -BASE MOUNTED LIGHT. SEE DETAILS THIS SHEET EXISTING RUNWAY LIGHT BASE

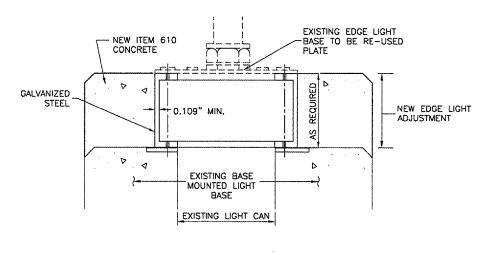
METHOD OF CONSTRUCTION

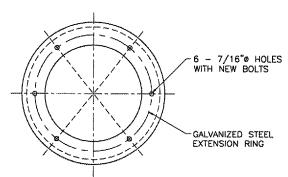
- 1.) ADJUST SHOULDERS TO GRADE.
- 2.) EXCAVATE BASE MOUNTED LIGHT AND INSTALL NEW EXTENSION RING AND CONCRETE TO PROPER GRADE.
- 3.) BACKFILL EXCAVATED MATERIAL.

TAXIWAY BASE MOUNTED LIGHT ADJUSTMENT

N.T.S.







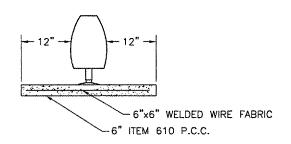
NOTE: 1.) THE CONTRACTOR SHALL FIELD VERIFY EXISTING LIGHT BASE TYPE (MOST ARE L-867, 12" DIA. CLASS 1) AND CALCULATE REQUIRED HEIGHT ADJUSTMENT DIMENSION BASED ON PROPOSED SHOULDER ELEVATION AND THE ELEVATION OF THE TOP OF THE EXISTING LIGHT BASE. NO ADDITIONAL PAYMENT WILL BE MADE FOR ALTERNATE LIGHT CAN TYPES RETAPPING EXISTING BOLT HOLES IF REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE FOR LIGHT ADJUSTMENT,

EXTENSION RING DETAIL

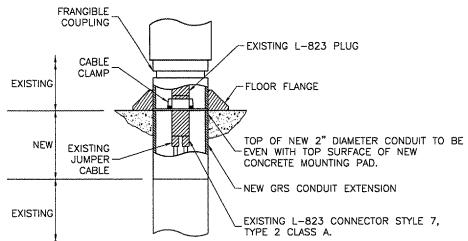
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K:\ChampaignAp\030590302 Apron Rehab 2\Draw\: FILE: ELECDET1.dwg UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:58 PM REVISIONS NUMBER BY DATE THIS BAR IS EQUAL TO 2' AT FULL SCALE (34X22). **DETAIL** PHASE OF ILLINOIS
AIRPORT REHABILITATE AIR CARRIER RAMP, Ø ADJUSTMENTS SHEET 1 UNIVERSITY (ELECTRICAL CRAWFORD, CONSULTING DESIGN BY: SMS DRAWN BY: CMT CHECKED BY: Sms Sm 04/18/2008 JOB No: 0305903 3-17-0016-XX

SHEET 48 OF 57 SHEETS



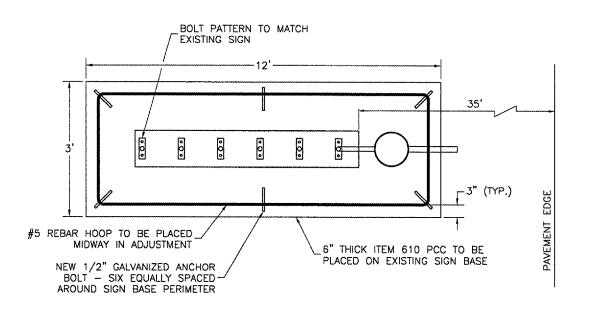
ELEVATION VIEW NOT TO SCALE



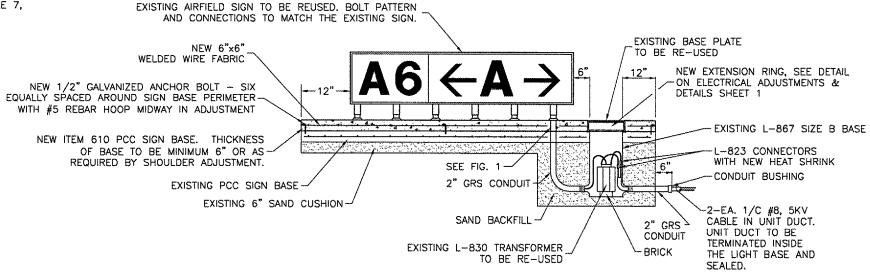
ELECTRICAL CONNECTION DETAIL FIGURE 1

NOTES FOR ADJUSTED SIGN

- THE EXISTING AIRFIELD GUIDANCE SIGN AND LEGEND IS TO BE REMOVED, PRESERVED AND RE-USED AT THE EXISTING SIGN LOCATION.
- 2. THE ADJUSTED SIGN WILL BE REMOUNTED ON THE CONCRETE BASE (ITEM 610) AFTER THE BASE HAS BEEN VERTICALLY ADJUSTED. THE SIGN BASE ADJUSTEMENT WILL INCLUDE THE 6-INCH MINIMUM CONCRETE SLAB POURED IN-PLACE ON TOP OF THE EXISTING SIGN BASE WITH WIRE FABRIC, ANCHOR BOLTS AND REBAR HOOP, 2-INCH DIAMETER GRS CONDUIT EXTENSION, L-867 BASE EXTENSION RING AND HEAT
- THE ADJUSTED SIGN WILL RE-USE THE EXISTING TRANSFORMER AND 3/8" STEEL COVER WITH GASKET.
- THE CONTRACTOR MUST REPLACE IN KIND ANY MOUNTING HARDWARE DAMAGED BY THE ADJUSTMENT PROCESS.



PLAN VIEW
NOT TO SCALE

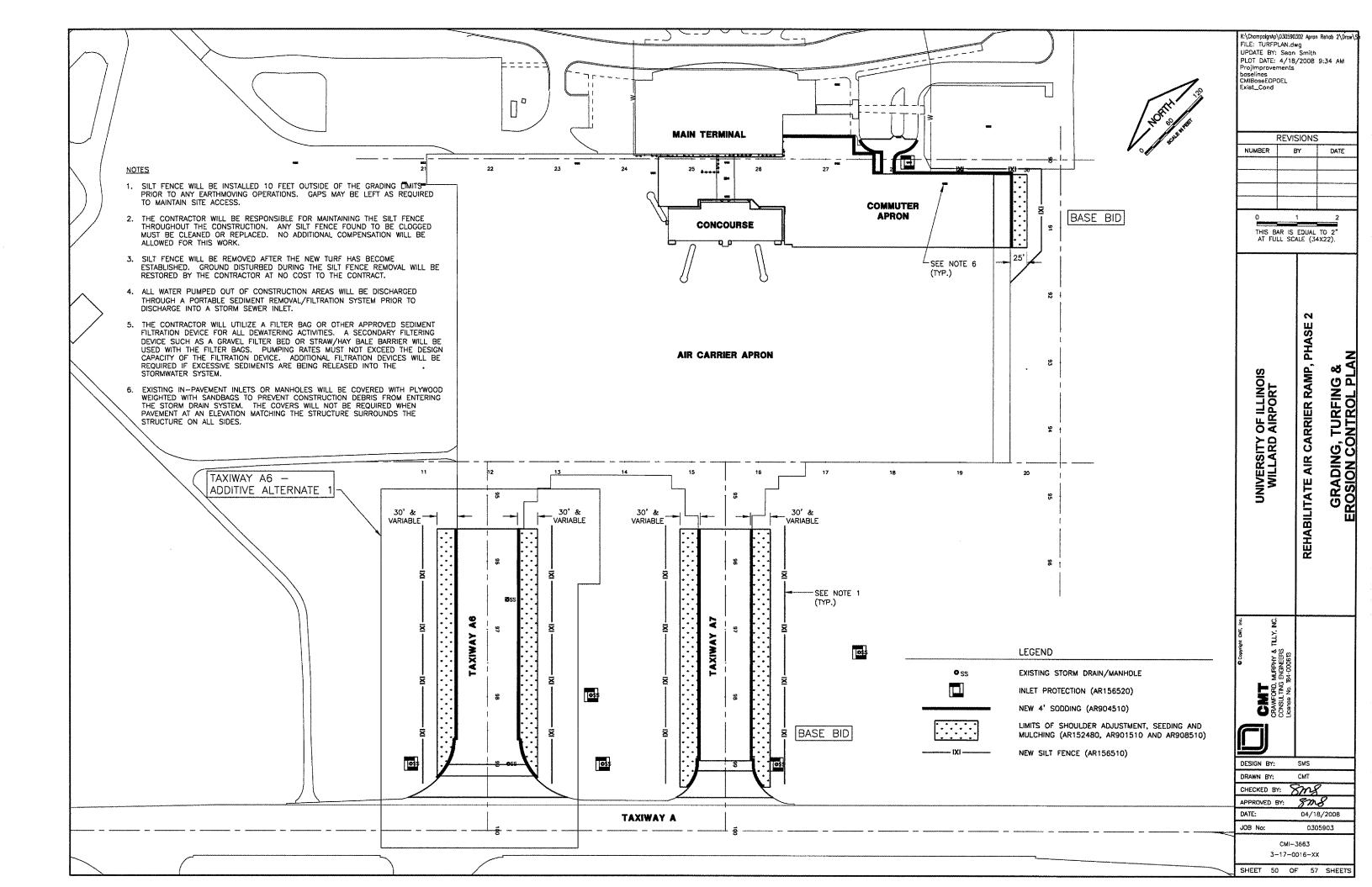


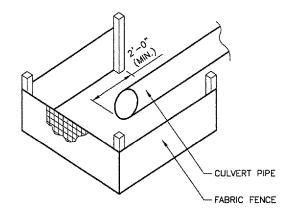
ELEVATION VIEW
NOT TO SCALE

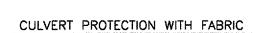
NEW ADJUSTED EXISTING AIRFIELD GUIDANCE SIGN DETAIL

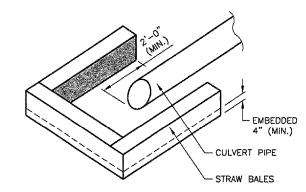
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AIRPORT ADJUSTMENTS SHEET 2 UNIVERSITY (ELECTRICAL MURPHY & ENGINEERS CMT СМТ DESIGN BY: CMT DRAWN BY: CHECKED BY: 8718 APPROVED BY: 8778 DATE: 04/18/2008 JOB No: 0305903 CMI~3663 3-17-0016-XX SHEET 49 OF 57 SHEETS

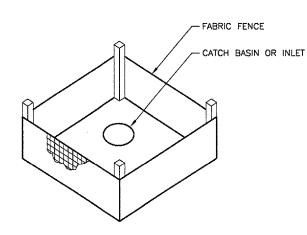




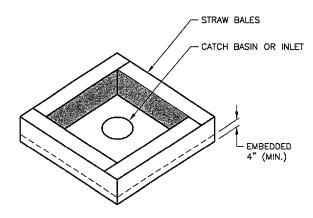




CULVERT PROTECTION WITH STRAW BALES



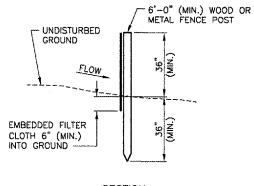
INLET PROTECTION WITH FABRIC



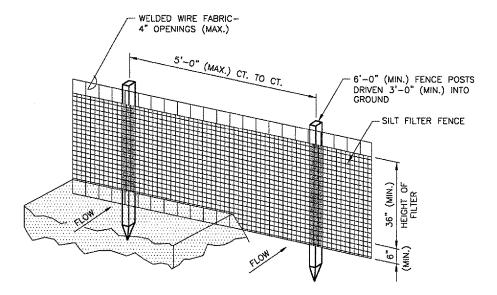
INLET PROTECTION WITH STRAW BALES

NOTES

- IF SILT FENCE IS USED FOR INLET PROTECTION, THE FENCE CONSTRUCTION WILL CONFORM TO THE EROSION CONTROL FABRIC FENCE DETAIL ON THIS SHEET.
- 2. INLET PROTECTION USED AROUND FLARED END SECTIONS OR CULVERTS WILL ONLY REQUIRE 3 SIDES AND WILL BE PAID FOR AS INLET PROTECTION.



SECTION



PERSPECTIVE VIEW

EROSION CONTROL FABRIC FENCE DETAIL

NOTES

- WELDED WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WELDED WIRE FENCE WITH TIES SPACED EVERY 12".
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY MUST BE OVERLAPPED BY 6" MINIMUM AND FOLDED.
- 4. MAINTENANCE WILL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. MAINTENANCE, WHICH INCLUDES THE REPLACEMENT OF DAMAGED FENCE, WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE EROSION CONTROL FENCE.

K:\Chompoign&p\030590302 Apron Rehob 2\0row\S FILE: EROSIONDET.dwg UPDATE BY: Sean Smith PLOT DATE: 4/17/2008 7:58 PM

REVISIONS			
NUMBER	BY	DATE	

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

UNIVERSITY OF ILLINOIS
WILLARD AIRPORT
REHABILITATE AIR CARRIER RAMP, PHASE
EROSION CONTROL DETAILS

CRAT
CRAWFORD, MAPPHY & TLLY, NC.
CONSULTING BIGBREERS
LICETER NO. 184-000633

DESIGN BY: SMS

DRAWN BY: CMT

CHECKED BY: SYNS

APPROVED BY: SYNS

DATE: 04/18/2008

JOB No: 0305903

CMI-3663 3-17-0016-XX

SHEET 51 OF 57 SHEETS

