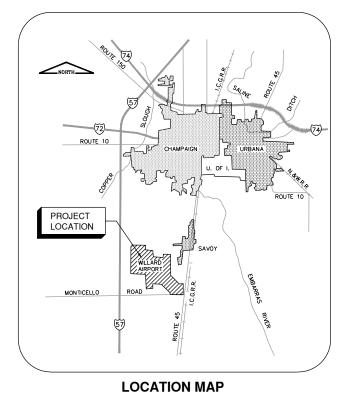
TOTAL SHEETS: 39 UN058

# CONSTRUCTION PLANS FOR WILLARD AIRPORT

UNIVERSITY OF ILLINOIS SAVOY, ILLINOIS

IL. PROJ. NO. CMI-4606 AIP PROJ. NO. 3-17-0016-033 CONSTRUCT TAXIWAY A5

## **NOVEMBER 15, 2019**



PROJECT SITE PLAN

Churton Shot

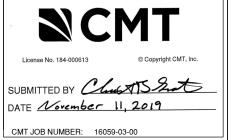
November 11,2019

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

UNIVERSITY OF ILLINOIS
WILLARD AIRPORT

PPROVED

November 11, 2019



BEFORE EXCAVATING
1-800-892-0123

UNIVERSITY OF ILLINOIS - WILLARD AIRPORT
TOWNSHIP: T 18 N

TOWNSHIP: T 18 N RANGE: R 8 E COUNTY: CHAMPAIGN SECTION 2, 3, 10 AND 11

CALL J.U.L.I.E.

#### TAXIWAY A

AIRPLANE DESIGN GROUP - ADG IV TAXIWAY DESIGN GROUP 5 DESIGN APPROACH CATEGORY - C

PAVEMENT STRUCTURE DESIGN DATA

GROSS WEIGHT - 361,000 LBS. DUAL WHEEL GEAR

PLOT DATE: 11/12/2019 9:01 AM

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2	GI002	INDEX TO SHEETS & SUMMARY OF QUANTITIES					
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License No. 184-000613

CONSULTANTS

NOVEMBER 15, 2019

CONSTRUCT TAXIWAY A5

OWNER



UNIVERSITY OF ILLINOIS
WILLARD AIRPORT
SAVOY, ILLINOIS

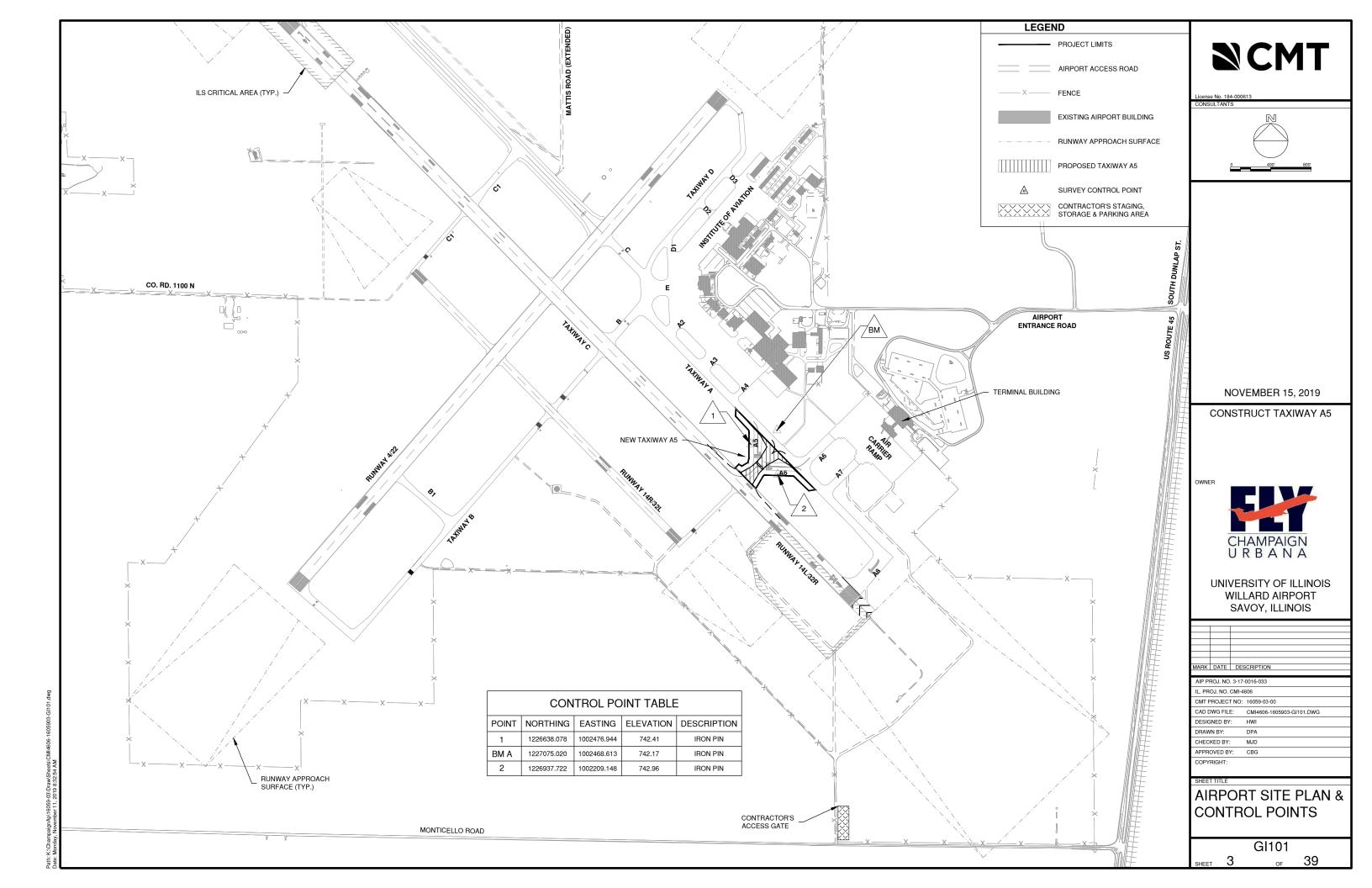
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AIP P	ROJ. NO	3-17-0016-033	

AIP PROJ. NO. 3-17	-0016-033
IL. PROJ. NO. CMI-4	606
CMT PROJECT NO:	16059-03-00
CAD DWG FILE:	CMI4606-1605903-GI002.DWG
DESIGNED BY:	HWI
DRAWN BY:	DPA
CHECKED BY:	MJD
APPROVED BY:	CBG
COPYRIGHT:	

INDEX TO SHEETS & SUMMARY OF QUANTITIES

GI002

неет 2



 ALL CONSTRUCTION TRAFFIC OPERATING ON OR CROSSING ACTIVE RUNWAYS, TAXIWAYS AND APRONS SHALL BE UNDER CONTROL OF A FLAGGER IN RADIO CONTACT WITH FAA AIR TRAFFIC CONTROL TOWER PERSONNEL AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE HIS OWN RADIOS & FLAGGING PERSONNEL.

3. WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CLOSING AND OPENING PAVEMENTS AND CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT MANAGER.

4. THE CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS AT THE LOCATION SHOWN FOR THE "CONTRACTOR'S STAGING, STORAGE PARKING SITE AND FIELD OFFICE"

5. BROKEN OR WASTE CONCRETE AND ASPHALT SHALL BE DISPOSED OF BY THE CONTRACTOR OFF AIRPORT PROPERTY. UNLESS DIRECTED BY THE AIRPORT MANAGER.

6. VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN AREAS 129.5' (ADG IV - OFA) FROM THE CENTERLINE OF ACTIVE TAXIWAYS OR 250' FROM THE CENTERLINE OF ACTIVE RUNWAYS.

 ALL PAVEMENTS, DRIVES AND OTHER AREAS USED BY THE CONTRACTOR FOR HAUL ROADS AND STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED IN KIND BY THE CONTRACTOR TO THE SATISFACTION OF THE AIRPORT MANAGER. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR THIS WORK.

8. EXISTING TURF & AGRICULTURAL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE OF THE TURFING LIMITS SHALL BE COMPLETELY RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE AIRPORT MANAGER. DAMAGE TO EXISTING CROPS ADJACENT TO THE WORK AREA SHALL BE QUANTIFIED BY THE AIRPORT AND COST TO COMPENSATE THE FARMER REIMBURSED BY THE CONTRACTOR AT (\$2500/AC).

9. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS PRIOR TO OPENING TO AIR TRAFFIC

10. REFER TO THE CONSTRUCTION ACTIVITY PLANS AND THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS CONCERNING COORDINATION OF CONSTRUCTION ACTIVITIES.

11. THE AIRFIELD RESCUE AND FIREFIGHTING VEHICLES SHALL HAVE COMPLETE ACCESS TO THE ENTIRE AIRFIELD INCLUDING THE CLOSURE AREAS.

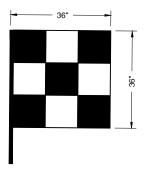
12. THE CONTRACTOR IS REQUIRED TO GIVE TEN (10) FULL WORKING DAYS NOTICE TO THE AIRPORT MANAGER PRIOR TO CLOSING WORK AREAS TO AIRCRAFT.

13. AT THE PRECONSTRUCTION MEETING, CONTRACTOR SHALL PROVIDE THE AIRPORT MANAGER WITH PROPOSED CLOSURE AND PHASING DATES FOR HIS REVIEW AND APPROVAL. THE RESIDENT ENGINEER SHALL KEEP THE AIRPORT MANAGER ADVISED OF ANY PROPOSED CHANGES IN CLOSURE AND PHASING DATES.

14. ALL CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL DISPLAY AN ORANGE AND WHITE CHECKERED AVIATION SIGNAL FLAG, EXCEPT HAUL VEHICLES.

15. ANY VEHICLE OPERATING WITHIN A MOVEMENT AREA DURING THE HOURS OF DARKNESS SHOULD 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 SHALL IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, PERSONNEL AND EQUIPMENT.



VEHICLE SIGNAL FLAG (ORANGE / WHITE)

NOTES:

 CONTRACTOR VEHICLES SHALL CONTAIN COMPANY LOGO PLACARDS.

WHEN WORKING PRIOR TO DAWN OR AFTER DUSK, A
 360 DEGREE ROTATING AMBER BEACON IS REQUIRED
 ON ALL EQUIPMENT AND TRUCKS.

3. CONTRACTOR SHALL REPLACE FLAGS THAT ARE WORN AND INEFFECTIVE.

#### CONTRACTOR'S ACCESS

1. CONTRACTOR'S ACCESS SHALL BE AS FOLLOWS:

A. THE CONTRACTOR'S ACCESS TO THE WORK SHALL BE AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLANS.

B. DURING ADVERSE WEATHER, THE CONTRACTOR SHALL 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.

C. THE CONTRACTOR SHALL INSTALL AND MAINTAIN A HEAVY-DUTY PADLOCK ON THE ACCESS GATE. HE SHALL 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.

D. THE CONTRACTOR SHALL 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 DURING HAULING OPERATIONS, HE SHALL POST A COMPETENT, FULL TIME SECURITY GUARD TO PREVENT UNAUTHORIZED ENTRIES. THE CONTRACTOR SHALL REPLACE ANY UNSATISFACTORY SECURITY GUARDS IF SO DIRECTED BY THE AIRPORT MANAGER OR ENGINEER.

E. THE CONTRACTOR SHALL 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 SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE AIRPORT MANAGER.

G. ALL COSTS RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

H. EMPLOYEE PERSONAL VEHICLES SHALL NOT BE ALLOWED BEYOND THE CONTRACTOR'S PARKING AREA. CONTRACTOR PERSONNEL SHALL PARK IN THE CONTRACTOR'S STAGING & STORAGE CONSISTENT AREA. PERSONNEL SHALL BE TRANSPORTED TO THE WORK SITE BY COMPANY OWNED VEHICLES.

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL ACCESS ROADS WITH THE APPROPRIATE LOCAL AGENCY RESPONSIBLE FOR THE ROADWAY.

J. THE CONTRACTOR SHALL HAVE A VACUUM TYPE SWEEPER AVAILABLE AT ALL TIMES.

 A LIST OF AUTHORIZED PERSONNEL PERMITTED TO USE THE GATE SHALL BE PROVIDED BY THE CONTRACTOR TO THE RESIDENT ENGINEER.

THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL & CONSTRUCTION ACCESS ONLY".

4. ALL CONTRACTOR PERSONNEL AND SECURITY GUARDS ON THE AIRFIELD WILL BE REQUIRED TO SUBMIT A TEN YEAR BACKGROUND CHECK TO AIRPORT SECURITY AND WILL BE REQUIRED TO BE TRAINED BY THE AIRPORT TO GAIN ACCESS TO THE WORK AREA. CONTRACTOR SHALL COORDINATE THE BADGING PROCESS A MINIMUM OF 30 DAYS PRIOR TO REQUESTING ACCESS TO THE FIELD.

#### CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE

THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER 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 OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDER- GROUND 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 OWNER AND THE ENGINEER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.

GROUND CONTROL FREQUENCY 121.8 MHZ

MAXIMUM EQUIPMENT HEIGHT = 25'

CSPP

**≥**CMT

License No. 184-000613

CONSULTA

NOVEMBER 15, 2019

CONSTRUCT TAXIWAY A5

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UNIVERSITY OF ILLINOIS WILLARD AIRPORT SAVOY, ILLINOIS

١RK	DATE	DESCRIPTION	

AIP PROJ. NO. 3-17-0016-033

IL. PROJ. NO. CMI-4606

CMT PROJECT NO: 16059-03-00

CAD DWG FILE: GENERAL NOTES.DWG
DESIGNED BY: HWI

DRAWN BY: DPA
CHECKED BY: MJD

APPROVED BY: COPYRIGHT:

SHEET TITLE

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OF

#### **SEQUENCE OF CONSTRUCTION NOTES**

THE GENERAL PROGRESSION OF THE WORK SHALL BE AS FOLLOWS:

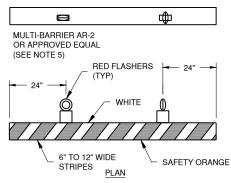
- A. SUBMIT EQUIPMENT AND SHOP, PLAN AND WORKING DRAWINGS FOR REVIEW. INCLUDE WITH THE SUBMITTALS ALL BUY AMERICAN CERTIFICATIONS FOR ALL MATERIALS.
- B. SUBMIT NOTICE OF OBSTRUCTION EVALUATION- AIRPORT AIRSPACE ANALYSIS (OE/AAA) INFORMATION FOR ANTICIPATED EQUIPMENT HEIGHTS IF IN EXCESS OF 25', NOTE THAT THIS PROCESS MAY REQUIRE UP TO 90 DAYS FOR FAA APPROVAL EQUIPMENT ABOVE 25' HEIGHT SHALL NOT BE UTILIZED UNTIL FAA APPROVAL HAS BEEN PROVIDED.
- C. SUBMIT PROJECT SCHEDULE SHOWING RELATIONSHIP BETWEEN CONSTRUCTION DURATION FOR PAY ITEMS IN RELATION TO THE PHASES OF WORK WHERE THEY ARE BEING PERFORMED. CLEARLY IDENTIFY DATES OF RUNWAY CLOSURES AND WHAT PHASES WILL BE WORKED IN DURING THAT CLOSURE
- D. SUBMIT PRELIMINARY MATERIALS CERTIFICATIONS INCLUDING BUY AMERICAN CERTIFICATIONS AND WAIVER REQUEST FOR MATERIALS THAT DO NOT MEET THE CONTRACT REQUIREMENTS.
- E. INSTALL BARRICADES AS OUTLINED ON THE CONSTRUCTION ACTIVITY PLANS. INITIATE DEMOLITION AND REMOVAL OF EXISTING PAVEMENTS. FIELD-VERIFY LOCATION OF EXISTING CIRCUITS, AND PERFORM TESTING ON EXISTING AIRFIELD CIRCUITS TO VERIFY CONDITION OF CIRCUIT CABLES. THE R.F. SHALL BE PRESENT AT THE TIME OF TESTING AND SHALL BE GIVEN A COPY OF THE TEST RESULTS.
- F. INITIATE CONSTRUCTION WITHIN THE VARIOUS PHASES OF THE PROJECT. REMOVAL OF TAXIWAYS A5 & A6 SHALL BE CONSIDERED THE PRIMARY WORK AREAS. WORK IN THESE AREAS SHALL INCLUDE REMOVAL OF PAVEMENT/ELECTRICAL EQUIPMENT, EARTH EMBANKMENT EXCAVATION, PAVEMENT CONSTRUCTION, DRAINAGE IMPROVEMENTS, ELECTRICAL/LIGHTING IMPROVEMENTS, PAVEMENT MARKING
- G. UPON COMPLETION OF ALL PHASES, THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION OF THE PROJECT

#### **RUNWAY SAFETY AREAS**

- 1. WORK IN THE RUNWAY 14L/32R SAFETY AREA SHALL BE LIMITED TO THE WORK NECESSARY TO REMOVE THE TAXIWAY A5/A6 PAVEMENT, CONSTRUCT NEW TAXIWAY A5, INCLUDING DRAINAGE ELECTRICAL, AND GRADE AND SEED.
- 2. RUNWAY 4/22 AND RUNWAY 14R/32L SHALL REMAIN OPEN AT ALL
- 3. EQUIPMENT OR PERSONNEL SHALL REMAIN CLEAR OF THE RUNWAY PAVEMENTS AT ALL TIMES UNLESS INSTRUCTED BY A FLAGGER IN RADIO CONTACT WITH THE CONTROL TOWER
- 4. NO EQUIPMENT, STOCKPILES OR EXCAVATIONS SHALL REMAIN INSIDE THE BUNWAY SAFETY AREAS AFTER WORKING HOURS.

#### **APRON / TAXIWAY OBJECT FREE AREAS**

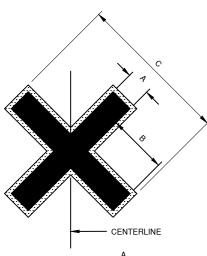
- 1. WORK IN THE TAXIWAY OBJECT FREE AREAS SHALL REQUIRE THAT TAXIWAY TO BE CLOSED. WORK WITHIN THE TAXIWAY OBJECT FREE AREAS BUT NOT ON THE HARD SURFACE OF THE TAXIWAY SHALL INCLUDE TAXIWAY GUIDANCE SIGN INSTALLATION, TRENCHING CABLE, DRAINAGE IMPROVEMENT AND LIGHT INSTALLATION. WORK WITHIN THE TAXIWAY OBJECT FREE AREAS ON THE HARD SURFACE WILL INCLUDE PAVEMENT REMOVAL & REPLACEMENT, MARKING AND PAVEMENT MARKING REMOVAL.
- 2. NO EQUIPMENT, OPEN TRENCHES OR EXCAVATIONS SHALL REMAIN INSIDE THE TAXIWAY OBJECT FREE AREAS AFTER WORKING HOURS.
- 3. THE TAXIWAYS SHALL BE CLOSED WITH BARRICADES AT 15' MAXIMUM SPACING PRIOR TO WORKING IN THE CRITICAL WORK AREAS.



#### LOW PROFILE LIGHTED BARRICADE

#### **BARRICADE NOTES**

- FLASHERS SHALL BE BATTERY OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
- 2. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT
- BARRICADES ARE TO BE PLACED WITH A MAXIMUM OF 15' SPACING BETWEEN ENDS OF BARRICADES ALONG
  OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER. ROTATE EVERY OTHER
- 4. FLASHERS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
- 5. BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS, AND WEIGHTED TO THE SURFACE.
- 6. IF INTENDED TO EXCLUDE VEHICLES, GAPS BETWEEN BARRICADES MUST BE SMALLER THAN WIDTH OF VEHICLES.

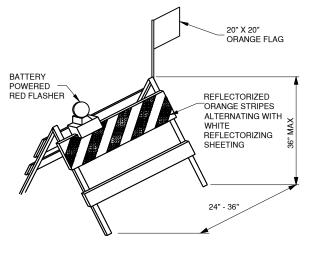


#### **CLOSED RUNWAY/ TAXIWAY MARKER DETAIL**

SYMBOL TYPE DIMENSION	Α	В	С
CLOSED RUNWAY	10'-0"	25'-0"	60'-0"
CLOSED TAXIWAY	5'-0"	12'-6"	30'-0"

#### **NOTES**

- CLOSURE MARKERS SHALL BE SOLID YELLOW.
- MARKERS SHALL BE PLACED ON TAXIWAYS AT THE RUNWAY INTERSECTIONS INSIDE THE RUNWAY SAFETY AREA.
- MARKERS MAY BE PAINTED ON THE TAXIWAY LISING TEMPORARY PAINT OR CONSTRUCTED OF FABRIC, COLORED PLASTIC, PAINTED SHEETS OF PLYWOOD OR SIMILAR MATERIALS.
- NON PAINTED MARKERS SHALL BE SECURED TO PREVENT MOVEMENT BY PROP WASH, JET BLAST OR OTHER WIND CURRENTS. METHODS OF SECURING THE MARKERS SHALL NOT PROTRUDE MORE THAN 3" ABOVE THE PAVEMENT.



NOTE:
BARRICADES SHALL BE PLACED AS SHOWN ON THE CONSTRUCTION ACTIVITY PLANS 20' ON CENTER AT DESIGNATED LOCATIONS. BARRICADE SHALL BE WEIGHTED TO PREVENT THEM FROM BEING BLOWN

#### **IDOT TYPE 1 BARRICADE DETAIL**





**LIGHTED RUNWAY CLOSURE MARKER** 

#### **NOTES**

1. TO BE PLACED ON PAVEMENT AT THE RUNWAY NUMERALS.

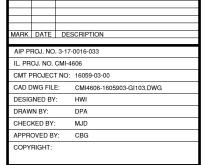
PAIR OF LIGHTED 'X'S TO BE PROVIDED BY THE AIRPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE (FUEL, OIL, LIGHT BULBS) WHEN USED DURING CONSTRUCTION CLOSURES. CONTRACTOR SHALL RETURN EQUIPMENT TO THE EXCELLENT WORKING CONDITION, WITH ALL NECESSARY REPAIRS COMPLETED BY THE CONTRACTOR AT HIS EXPENSE.

**NOVEMBER 15, 2019** 

**CONSTRUCT TAXIWAY A5** 



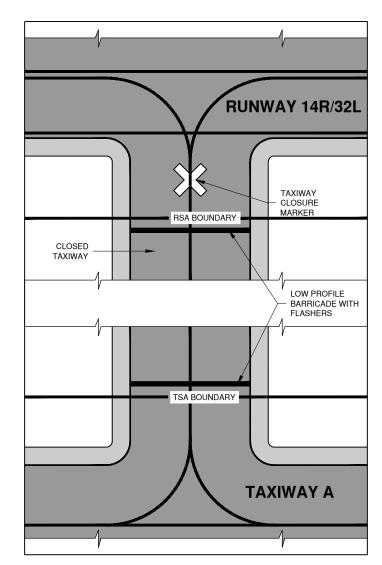
UNIVERSITY OF ILLINOIS WILLARD AIRPORT SAVOY, ILLINOIS



CONSTRUCTION **ACTIVITY NOTES &** 

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**DETAILS** GI103



- 2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE AIRPORT FOR APPROVAL A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) IN ACCORDANCE WITH FAA AC 150/5370-2G OR LATEST. NO CONSTRUCTION ACTIVITY SHALL BEGIN UNTIL THE AIRPORT HAS APPROVED THE SPCD.
- THE CSPP COVERS OPERATIONAL SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INDIVIDUAL SAFETY OF HIS/HER PERSONNEL AND MEETING OSHA REQUIREMENTS.
- A MINIMUM OF 10 DAYS PRIOR TO THE NOTICE TO PROCEED THE CONTRACTOR SHALL PROVIDE A LIST OF SUBCONTRACTORS AND MATERIAL SUPPLIERS.
- 5. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL SIGN THE SWPPP CERTIFICATION STATEMENT.
- ALL CONTRACTOR COSTS ASSOCIATED WITH THE REQUIREMENTS LISTED ON THIS SHEET SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A SPECIFIC PAY ITEM IS PROVIDED.

#### 1. COORDINATION

- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE WITH THE AIRPORT, ENGINEER, AND ILLINOIS DIVISION OF AERONAUTICS (IDA). THE COST OF PREPARING FOR AND ATTENDING THE PRECONSTRUCTION CONFERENCE SHALL BE INCIDENTAL TO THE CONTRACT.
- 2. ON OR BEFORE THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE FOR THE PROJECT. THE SCHEDULE SHALL INCLUDE A START AND COMPLETION DATE FOR EACH ITEM OF WORK. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS. ALL COSTS ASSOCIATED WITH THE SCHEDULE SHALL BE INCIDENTAL TO THE CONTRACT.
- DURING CONSTRUCTION THE CONTRACTOR SHALL ATTEND A WEEKLY COORDINATION MEETING WITH THE AIRPORT STAFF, LOCAL FAA ATO AND RESIDENT ENGINEER. ALL COSTS ASSOCIATED WITH ATTENDING THE WEEKLY MEETING SHALL BE INCIDENTAL TO THE CONTRACT.
- 4. THE CSPP AS WRITTEN HAS BEEN APPROVED BY THE AIRPORT AND THE FAA. PROPOSED CHANGES TO THE WORK LIMITS SHALL BE COORDINATED THROUGH THE FAA FOR AIRSPACE ANALYSIS AND WILL REQUIRE A MINIMUM OF 30 DAYS TO REVIEW.

#### 2. PHASING

- 1. TOTAL CONTRACT TIME SHALL BE 142 CALENDAR DAYS.
- PHASING SHALL BE AS NOTED BELOW AND AS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN (CAP) SHEET.

# 3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

- ALL RUNWAYS, TAXIWAYS AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED ON THE PHASING PLAN.
- WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT.
- ALL CONSTRUCTION TRAFFIC SHALL IMMEDIATELY YIELD TO ONCOMING AIRCRAFT AT ALL TIMES.

#### 4. WORK ZONE LIGHTING FOR NIGHTTIME CONSTRUCITON

- 1. WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL AREA LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTION. LIGHTS SHALL CONSIST OF VEHICLE OR MOVEABLE 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 NOT INTERFERE WITH AIR OPERATIONS OR ATCT CONTROLLER SIGHT LINES.ANY WORK BEING PERFORMED UNDER INSUFFICIENT ARTIFICIAL LIGHTING, IN THE R.E.'S JUDGMENT, SHALL BE STOPPED UNTIL SUCH TIME AS ADDITIONAL LIGHTING IS PROVIDED. ALL WORK PERFORMED DURING THAT TIME WILL NOT BE ACCEPTABLE UNTIL PROPER INSPECTION & TESTING CAN BE MADE.
- 2. ARTIFICIAL LIGHTING SHALL NOT BE AIMED AT THE ATCT OR THE APPROACH ENDS OF AN ACTIVE RUNWAY.

#### 5. CONTRACTOR ACCESS

- CONTRACTOR ACCESS SHALL BE AS NOTED BELOW AND AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLAN SHEETS. ALL COSTS RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. THE CONTRACTOR IS TO ACCESS THE SITE USING THE GATES SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE ACCESS GATE(S) CLOSED DURING WORK HOURS. THE CONTRACTOR SHALL POST A COMPETENT SECURITY GUARD TO CONTROL ACCESS AT THE GATE. THE CONTRACTOR SHALL REPLACE ANY UNSATISFACTORY SECURITY GUARDS AS DIRECTED.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND TEMPORARY EASEMENTS FOR THE PUBLIC ACCESS ROAD(S) SHOWN AND SHALL COMPLY WITH ALL REQUIREMENTS, LOAD RESTRICTIONS, & TRAFFIC CONTROL SIGNAGE REQUIRED BY THE VILLAGE, UNIVERSITY, COUNTY, TOWNSHIP, OR I.D.O.T.
- 4. ALL CONTRACTOR EMPLOYEES WHO ARE DESIGNATED AS DRIVERS FOR THE CONTRACTOR WITHIN THE AIRFIELD OPERATIONS AREA (AOA) SHALL ALSO ATTEND AND PASS THE AIRPORT DRIVERS TRAINING PROGRAM. ONLY THOSE INDIVIDUALS WHO RECEIVE THIS DESIGNATION WILL BE PERMITTED TO OPERATE VEHICLES OR EQUIPMENT ON THE AIRPORT. ALL COSTS ASSOCIATED WITH THE DRIVER TRAINING PROGRAM SHALL BE BORNE BY THE CONTRACTOR.
- 5. DRIVERS OF TRUCKS CONTAINING MATERIAL DELIVERIES (AGGREGATE, CONCRETE, ETC.) NEED NOT OBTAIN AN AIRPORT ID BADGE BUT SHALL BE REQUIRED TO SUBMIT THEIR NAME, DRIVER'S LICENSE NUMBER, TRUCK LICENSE PLATE NUMBER AND NAME OF TRUCKING COMPANY TO THE PRIME CONTRACTOR PRIOR TO ENTERING THE JOBSITE. WHILE INSIDE THE AOA, THE TRUCK DRIVERS SHALL BE ESCORTED BY THE CONTRACTOR PERSONNEL THAT HAS OBTAINED PROPER DRIVING PRIVELAGES.
- 6. CONTRACTOR WORK CREWS MUST MAINTAIN RADIO CONTACT WITH THE AIR TRAFFIC CONTROL TOWER (ATCT) AT ALL TIMES WHEN INSIDE THE AIRPORT OPERATIONS AREA (AOA). THE CONTRACTOR SHALL SUPPLY ALL APPROPRIATE RADIOS NEEDED FOR COMMUNICATIONS AND ONLY HIS PERSONNEL WHO HAVE SUCCESSFULLY COMPLETED THE APPROVED CMI/FAA SAFETY COURSE MAY OPERATE THESE RADIOS.
- WHEN THE CONTRACTOR IS NOT WORKING, EQUIPMENT SHALL BE STORED AT THE STAGING AREA.
- 3. THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN. PARKED EQUIPMENT AND MATERIAL STOCKPILES SHALL NOT PENETRATE SURFACES DEFINED BY F.A.R. TITLE 14 PART 77 - OBJECTS AFFECTING NAVIGABLE AIRSPACE.
- ALL CONSTRUCTION TRAFFIC OPERATING ON, OR CROSSING RUNWAYS, TAXIWAYS AND APRONS OPEN TO AIRCRAFT TRAFFIC SHALL BE UNDER CONTROL BY A FLAGMAN OR ESCORT IN RADIO CONTACT WITH THE ATCT. THE CONTRACTOR SHALL PROVIDE HIS OWN FLAGMEN.
- 10. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS AND HAUL ROUTES WHICH WILL BE OPENED TO AIR TRAFFIC TO THE SATISFACTION OF AIRPORT OPERATIONS OR THE RESIDENT ENGINEER. A POWER BROOM AND OPERATOR SHALL BE ON SITE AT ALL TIMES WHEN ACTIVE PAVEMENTS ARE UTILIZED FOR CONSTRUCTION TRAFFIC.
- 11. ALL VEHICLE AND EQUIPMENT OPERATORS USED BY THE CONTRACTOR SHALL BE PROPERLY TRAINED BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOTIFY THE AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) FACILITY IF CONSTRUCTION ACTIVITY WILL REQUIRE THE BLOCKAGE OF EMERGENCY ACCESS TO THE AIRPORT.

#### 6. PROTECTION OF NAVAIDS

- THE CONTRACTOR SHALL DISCARD ANY FOREIGN OBJECT DEBRIS (FOD) ON THE AIRFIELD PAVEMENTS.
- ALL PAVEMENTS, DRIVES OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED TO THE SAME CONDITION OR BETTER THAN THEY WERE PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS AND HAUL ROUTES AT THE END OF EACH WORKING DAY, REGARDLESS OF THE WORK AREA BEING OPEN OR CLOSED TO AIR TRAFFIC.

#### 7. FOD MANAGEMENT

- THE CONTRACTOR SHALL MAINTAIN A 100' DISTANCE BETWEEN HIS OPERATIONS AND ANY FAA-OWNED NAVAID (TYPICALLY ORANGE). CONTRACTOR SHALL CONTACT ATCT PRIOR TO ENTERING AN ILS CRITICAL AREA AS SHOWN ON THE SITE PLAN.
- 2. ANY WORK WHICH AFFECTS A NAVAID WILL BE COORDINATED WITH FAA ATO THROUGH THE AIRPORT. WORK IN A NAVAID CRITICAL AREA IS RESTRICTED AND SUBJECT TO AVAILABILITY BASED ON RUNWAY CONFIGURATION AND WEATHER CONDITIONS AND MAY BE POSTPONED BY THE AIRPORT AT ANY TIME.

#### 8. WILDLIFE MANAGEMENT

- THE CONTRACTOR SHALL NOTIFY PUBLIC SAFETY OR THE ENGINEER IF ANY WILDLIFE IS SEEN ENTERING THE AIRPORT.
- 2. CONTRACTOR ACCESS GATES SHALL REMAIN CLOSED AND LOCKED WHEN THE CONTRACTOR IS NOT WORKING.
- 3. THE CONTRACTOR SHALL DISPOSE OF ALL TRASH INCLUDING FOOD SCRAPS IN APPROVED CONTRACTOR PROVIDED CONTAINERS.
- 4. THE CONTRACTOR SHALL MAINTAIN THE SITE TO LIMIT STANDING WATER AND TALL GRASS TO REDUCE THEIR ATTRACTION AND DISRUPTION TO WILDLIFE HABITAT.

#### 9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

- THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.
- THE CONTRACTOR SHALL GIVE A MINIMUM OF 72 HOURS NOTICE TO AIRPORT OPERATIONS/ARFF PRIOR TO CLOSING ANY PAVEMENTS SO THAT PROPER NOTAMS MAY BE ISSUED BY THE AIRPORT.
- 6. FOR ANY EQUIPMENT USED BY THE CONTRACTOR WITH A HEIGHT GREATER THAN 25', THE CONTRACTOR SHALL PROVIDE TO THE AIRPORT THE TYPE OF EQUIPMENT, TOTAL HEIGHT, AND LOCATION WHERE THE EQUIPMENT WILL BE USED. THE AIRPORT WILL SUBMIT FAA FORM 7460-1 TO THE FAA FOR AN AIRSPACE STUDY. NO EQUIPMENT WITH A HEIGHT GREATER THAN 40' SHALL BE USED UNTIL A DETERMINATION FROM FAA IS RECEIVED.
- 4. IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL CALL
- i. CONTACTS FOR THIS PROJECT ARE AS LISTED BELOW.
  PUBLIC SAFETY
  CHIEF JOHN RIEGEL DIRECTOR OF PUBLIC SAFETY
  OFFICE (217) 244-8764
  CELL (217) 202-8213

AIRPORT OPERATIONS
TIM BANNON - DIRECTOR OF OPERATIONS & MAINTENANCE
OFFICE (217) 300-8225
CELL (815) 370-2265

ENGINEER
CHRIS GROTH P.E. - PROJECT ENGINEER
(217) 787-8050
RESIDENT ENGINEER TO BE DETERMINED
OFFICE (217) 787-8050

#### **10. INSPECTION REQUIREMENTS**

- THE CONTRACTOR SHALL INSPECT THE JOB SITE DAILY TO ENSURE COMPLIANCE WITH THE CSPP. THE CHECKLIST FOUND IN APPENDIX 3 OF FAA AC 150/5370-2G OR LATEST MAY BE USED TO AID IN THE INSPECTIONS.
- THE CONTRACTOR SHALL REQUEST FINAL OPERATIONAL INSPECTION OF EACH PHASE WORK AREA PRIOR THE AREA BEING REOPENED. PUBLIC SAFETY WILL DETERMINE IF THE WORK AREA IS ALLOWED TO BE OPENED.

#### 11. UNDERGROUND UTILITIES

- IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS. LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. ANY UTILITY, INCLUDING AIRFIELD FLECTRICAL CABLE AND LIGHTS DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE IN A MANNER WHICH IS SATISFACTORY TO THE ENGINEER AND TO THE OWNER OF THE UTILITY. ANY REPAIRS THAT MUST BE MADE BY THE OWNER OF THE UTILITY SHALL HAVE THE COST REIMBURSED TO THE UTILITY BY THE CONTRACTOR. AIRFIELD LIGHTING CABLES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY A QUALIFIED ELECTRICIAN WITH THE COSTS TO BE BORNE BY THE CONTRACTOR
- BEFORE INITIATING ANY DIGGING, DRILLING OR EXCAVATING ON THE AIRPORT PROPERTY, THE CONTRACTOR SHALL CALL J.U.L.I.E. AND CONTACT THE LOCAL FAA OFFICE TO ARRANGE FOR UTILITY LOCATES. SEE SECTION 50-17 OF THE SPECIAL PROVISIONS FOR UTILITY CONTACT INFORMATION.

#### 12. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

- THE CONTRACTOR SHALL DEVELOP A HAZMAT MANAGEMENT & RESPONSE PLAN AND KEEP COPIES ON THE OBSITE OF MATERIAL SAFETY DATA SHEETS FOR ALL MATERIALS HANDLED ON THE JOBSITE.
- FUELING OPERATIONS SHALL NOT OCCUR IN ANY ACTIVE OBJECT FREE AREAS.

#### 13. PENALTIES

 NONCOMPLIANCE BY THE CONTRACTOR WITH AIRPORT RULES AND REGULATIONS OR FAILURE TO COMPLY WITH THE AIRPORT'S APPROVED CSPP AND THE CONTRACTOR'S APPROVED SPCD MAY RESULT IN FINES AS ALLOWED BY LAW.

#### 14. SPECIAL CONDITIONS

ADJACENT CONSTRUCTION MAY IMPACT THE OPERATIONS OF THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH ADJACENT CONTRACTOR(S) TO PROVIDE UNHINDERED ACCESS TO EACH WORK AREA AND ALLOW FOR THE TIMELY PROSECUTION AND PROGRESS OF ANY OTHER WORK BEING PERFORMED AT THE AIRPORT.

#### 15. RUNWAY AND TAXIWAY VISUAL AIDS

- ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRPORT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED IN THE CONSTRUCTION ACTIVITY PLAN.
- IF ANY RUNWAY OR TAXIWAY CLOSURES ARE REQUESTED BY THE CONTRACTOR AND APPROVED BY THE AIRPORT, THE CONTRACTOR SHALL USE MARKING, LIGHTING AND SIGNS THAT FOLLOWING THE REQUIREMENTS OF FAA AC 150/5370-2G OR LATEST EDITION.

#### 16. MARKING AND SIGNS FOR ACCESS ROUTES

. BARRICADES AND SIGNS SHALL BE USED ALONG THE CONTRACTOR'S ACCESS ROUTE AS DETAILED ON THIS SHEET AND THE CONSTRUCTION ACTIVITY PLAN SHEET.

#### 17. HAZARD MARKING AND LIGHTING

- THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, AND HIS/HER CONSTRUCTION EQUIPMENT.
- ALL CONSTRUCTION EQUIPMENT SHALL BE FLAGGED AND/OR LIGHTED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2G AND 150/5210-5C OR LATEST EDITIONS AT ALL TIMES WHILE OPERATING ON AIRPORT PROPERTY. THE MAXIMUM EQUIPMENT HEIGHT IS 25'.
- BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
- 4. THE CONTRACTOR SHALL INSPECT THE BARRICADES ONCE DURING EACH WORK DAY TO INSURE PROPER PLACEMENT AND PROPER OPERATION OF THE RED LIGHTS AND FLAG PLACEMENT.
- 5. THE AIRPORT WILL PROVIDE TWO PORTABLE CLOSED RUNWAY MARKERS FOR USE DURING THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF THE RUNWAY CLOSURE MARKERS INCLUDING FUEL, OIL CHANGES AND REPLACEMENT OF THE LIGHTS. UPON COMPLETION OF THE PROJECT, THE PORTABLE CLOSED RUNWAY MARKERS SHALL BE TURNED OVER TO THE AIRPORT.

#### 18. PROTECTION

- ALL WORK REQUIRED INSIDE OF THE RUNWAY 4-22 OR 14L/32R SAFETY AREAS, WHICH EXTENDS 250' FROM THE RUNWAY CENTERLINE, WILL REQUIRE THE RUNWAY TO BE CLOSED. THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT A MINIMUM OF 72 HOURS PRIOR TO THE REQUESTED CLOSURE TIME.
- 2. ALL WORK REQUIRED ON AN ACTIVE TAXIWAY OR INSIDE OF AN ACTIVE TAXIWAY OBJECT FREE AREA, WHICH EXTENDS 93' FROM THE TAXIWAY CENTERLINE OF 50' TAXIWAYS AND 130' FROM THE CENTERLINE OF 75' TAXIWAYS, WILL REQUIRE THE TAXIWAY TO BE CLOSED. THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT A MINIMUM OF 72 HOURS PRIOR TO THE REQUESTED CLOSURE TIME.
- 3. ALL WORK REQUIRED ON AN ACTIVE APRON OR INSIDE OF AN ACTIVE SAFETY AREA, WHICH EXTENDS 70' FROM THE APRON'S EDGE OF PAVEMENT, WILL REQUIRE A PORTION OF THAT APRON TO BE CLOSED. THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT A MINIMUM OF 72 HOURS PRIOR TO THE REQUESTED CLOSURE TIME.

#### 19. OTHER LIMITATIONS ON CONSTRUCTION

- IF, DURING CONSTRUCTION, AN EMERGENCY IS DECLARED BY THE AIRPORT, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, PERSONNEL AND EQUIPMENT.
- BROKEN CONCRETE, BROKEN ASPHALT, RUBBISH FROM DEMO, AND OTHER MISCELLANEOUS DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS OTHERWISE SPECIFIED.
- 3. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING THE AIRSPACE FOR THE CONSTRUCTION EQUIPMENT THAT IS TALLER THAN THAT SPECIFIED ON THE PLANS WITH THE FAA. THIS PROCESS MAY TAKE UP TO 12 WEEKS TO COMPLETE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEGGAR TESTING ALL EXISTING CIRCUITS PRIOR TO CONSTRUCTION AND FOLLOWING CONSTRUCTION AS SPECIFIED IN THE CONTRACT DOCUMENTS.

**≥**CMT

cense No. 184-000613

ONSULTANTS

**CSPP** 

NOVEMBER 15, 2019

CONSTRUCT TAXIWAY A5

OWNER



UNIVERSITY OF ILLINOIS
WILLARD AIRPORT
SAVOY, ILLINOIS

MARK	DATE	DESCRIPTION	
AIP PI	ROJI NO	3-17-0016-033	

AIP PROJ. NO. 3-17-0016-033

IL. PROJ. NO. CMI-4606

CMT PROJECT NO: 16059-03-00

CAD DWG FILE: CMI4606-1605903-GC001.DWG

DESIGNED BY: HWI

DRAWN BY: DPA

CHECKED BY: MJD

APPROVED BY: CBG

COPYRIGHT:

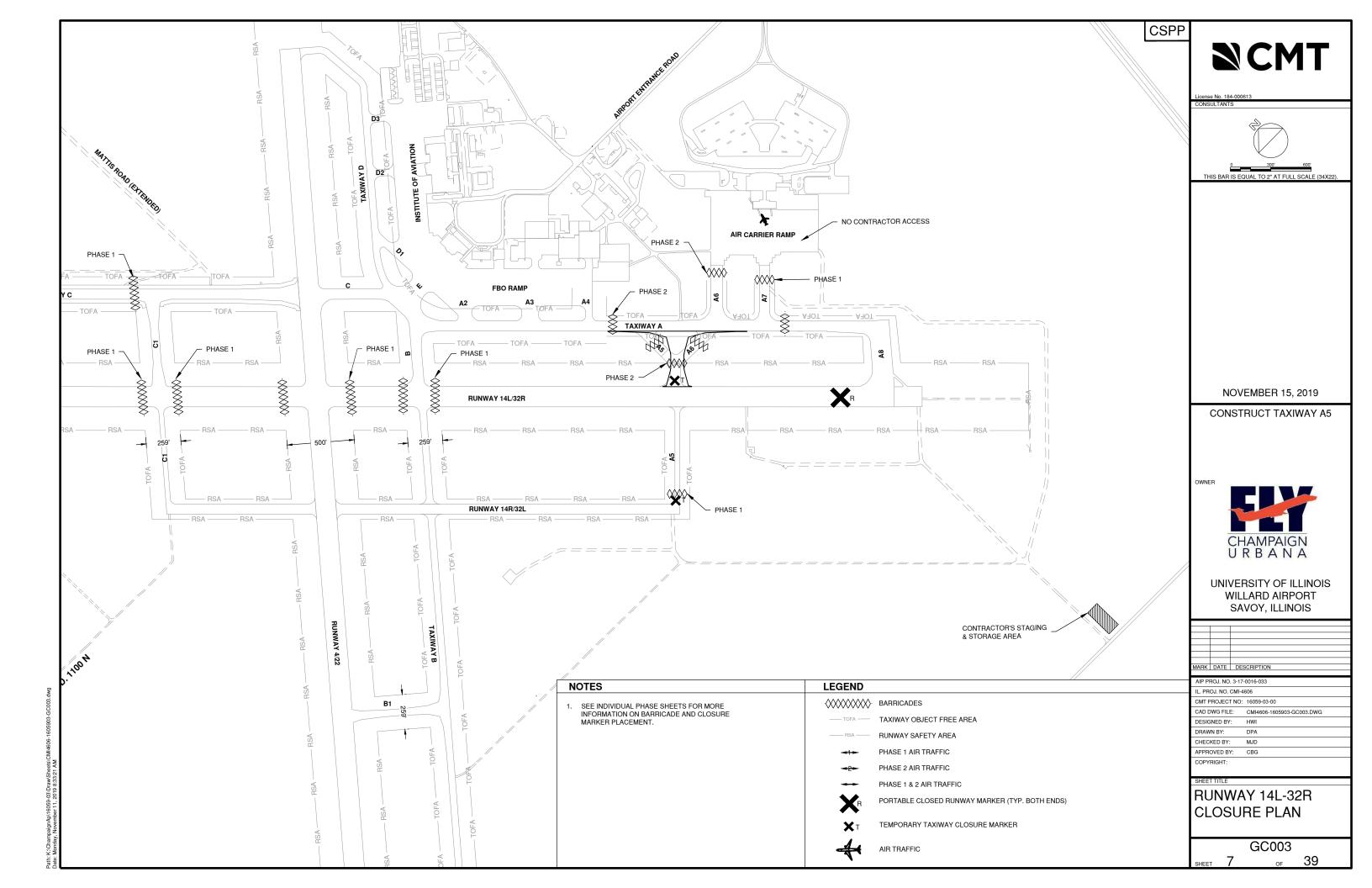
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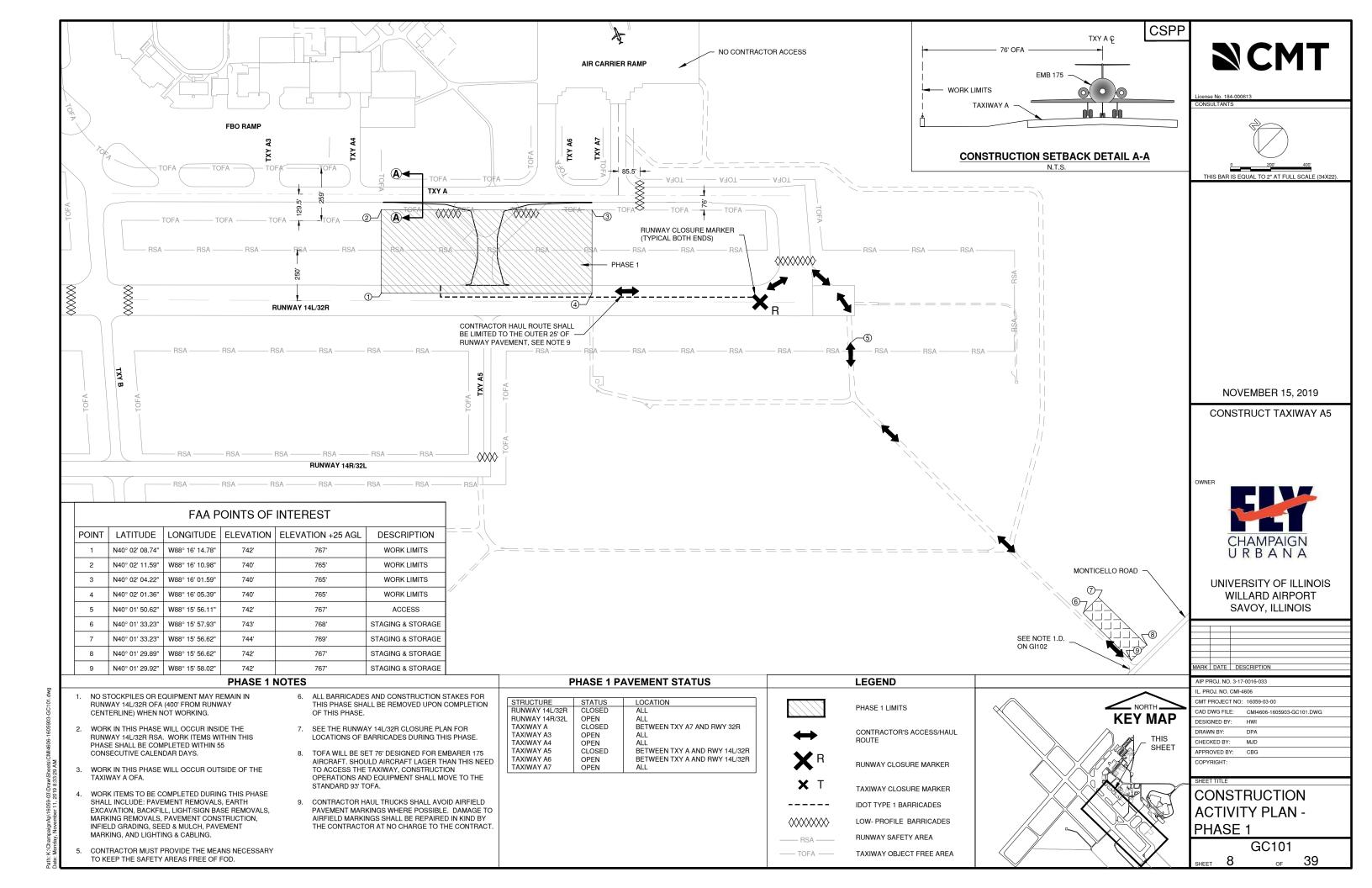
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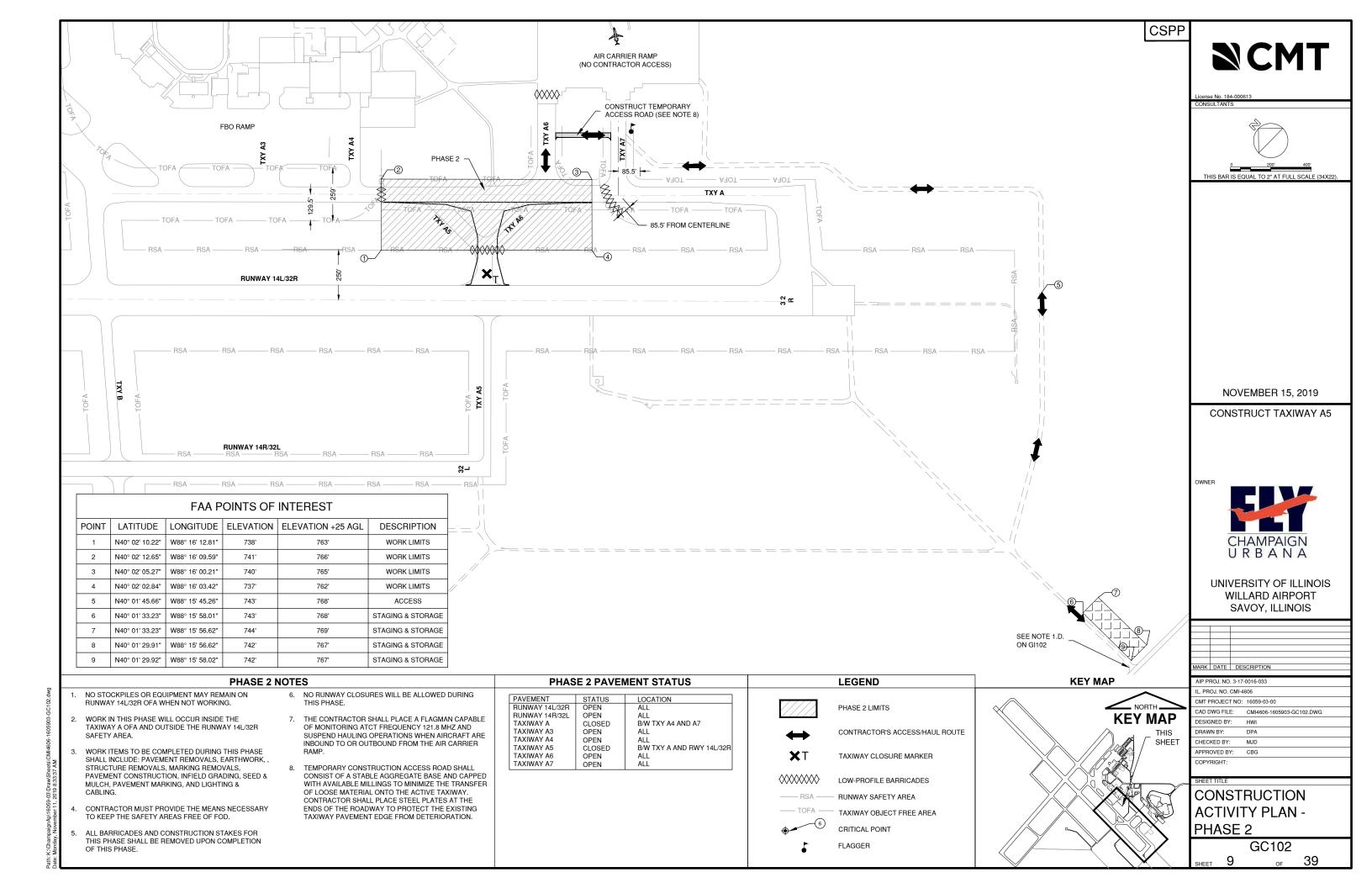
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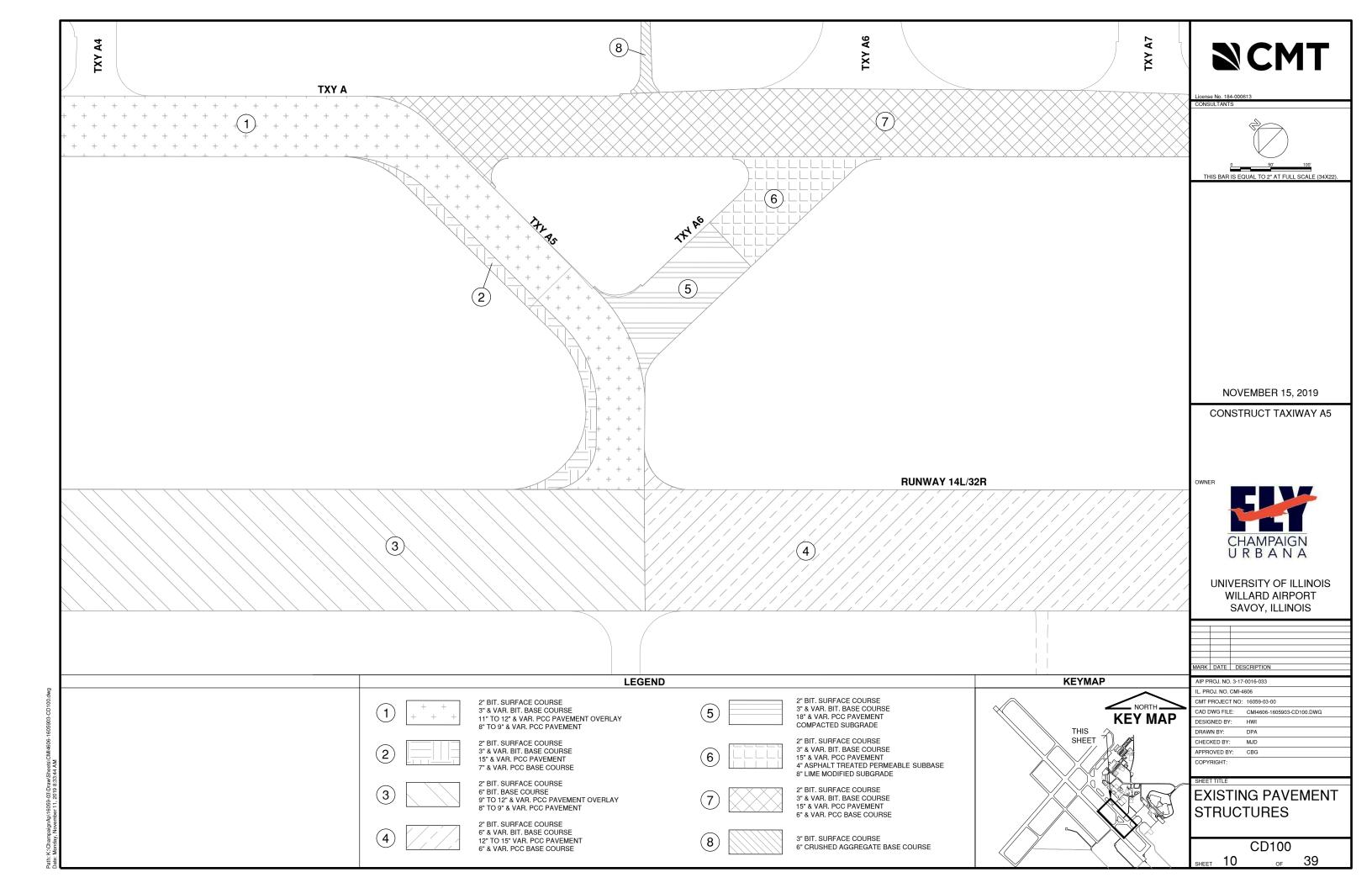
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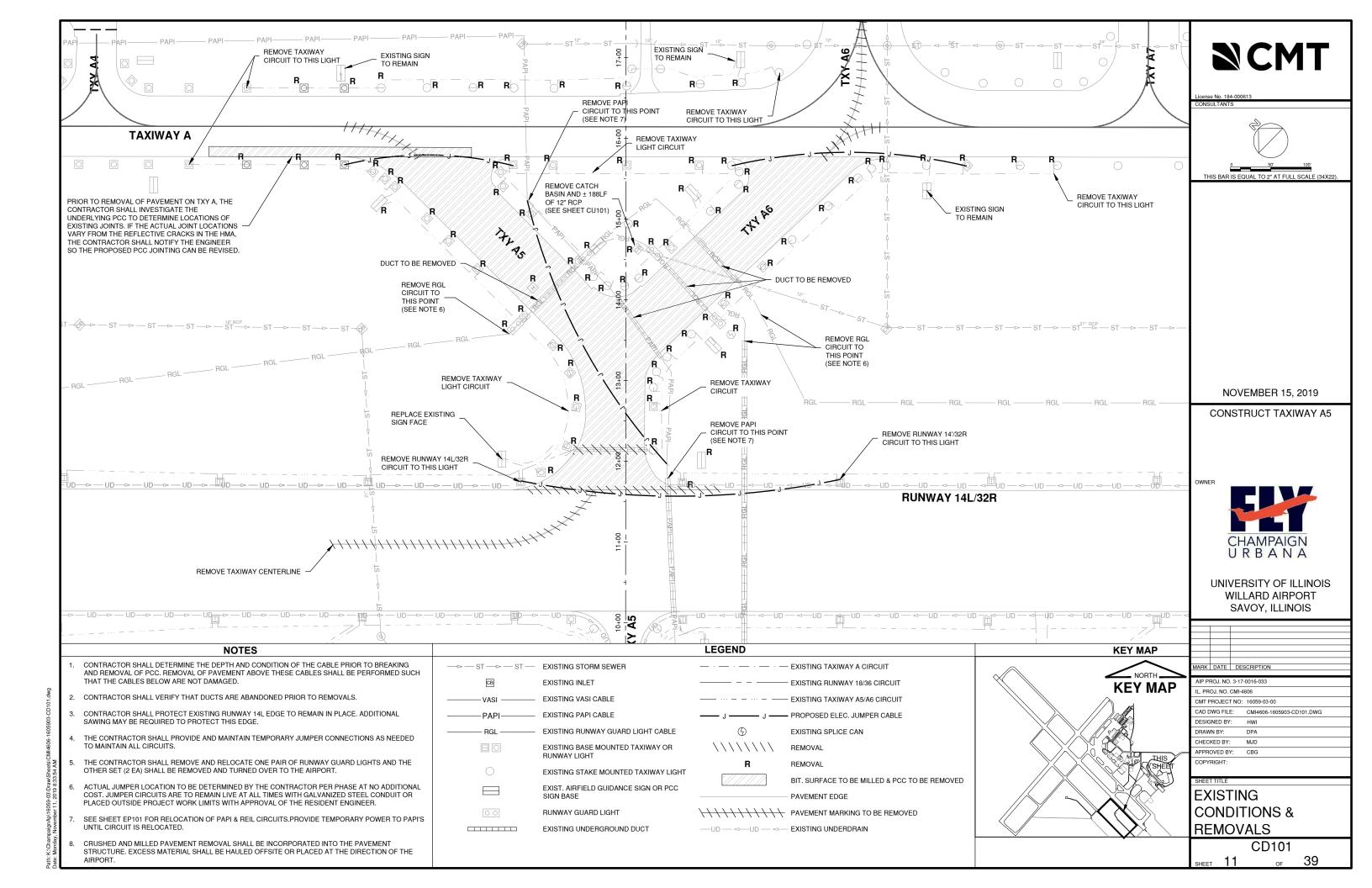
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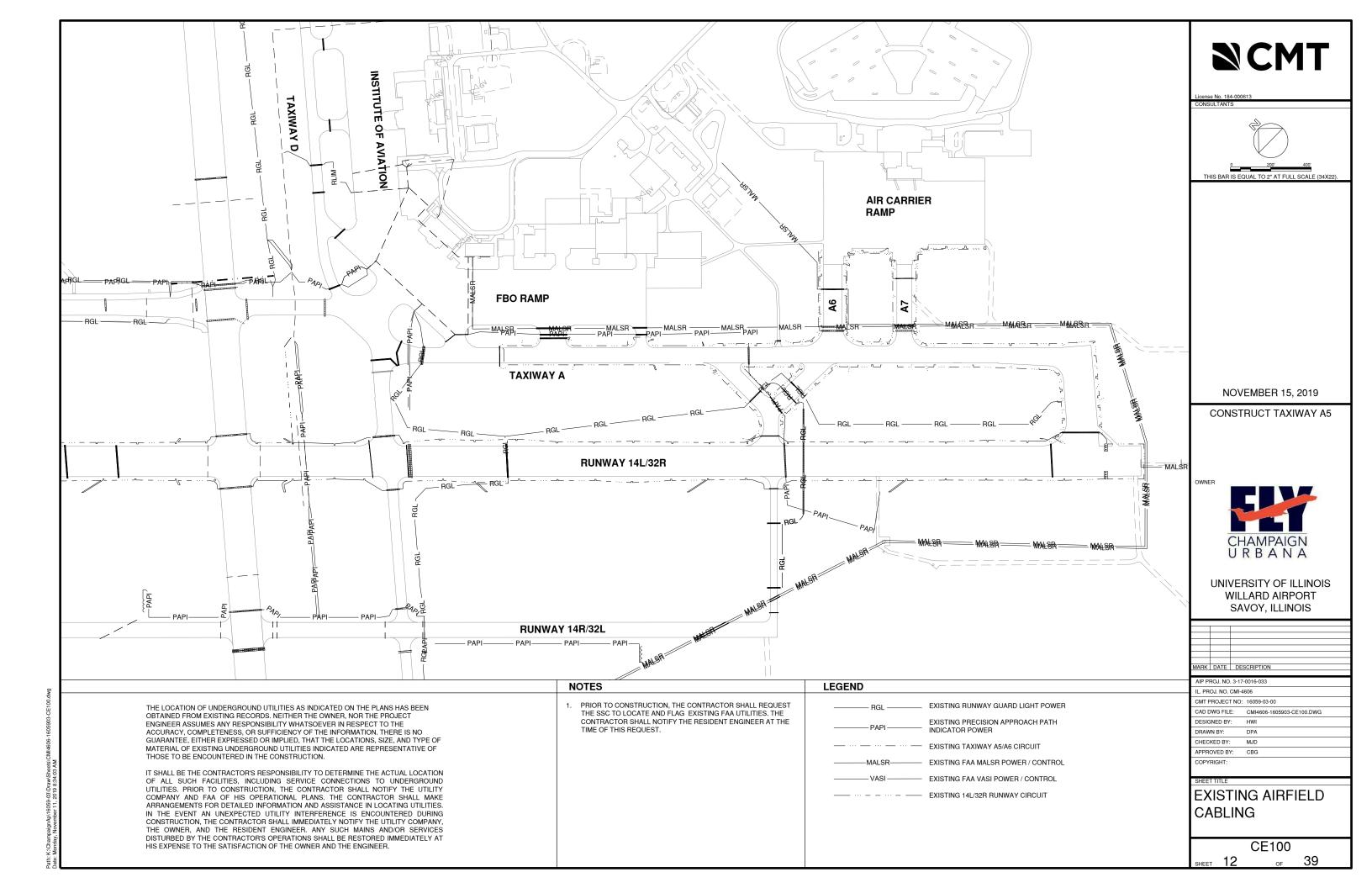


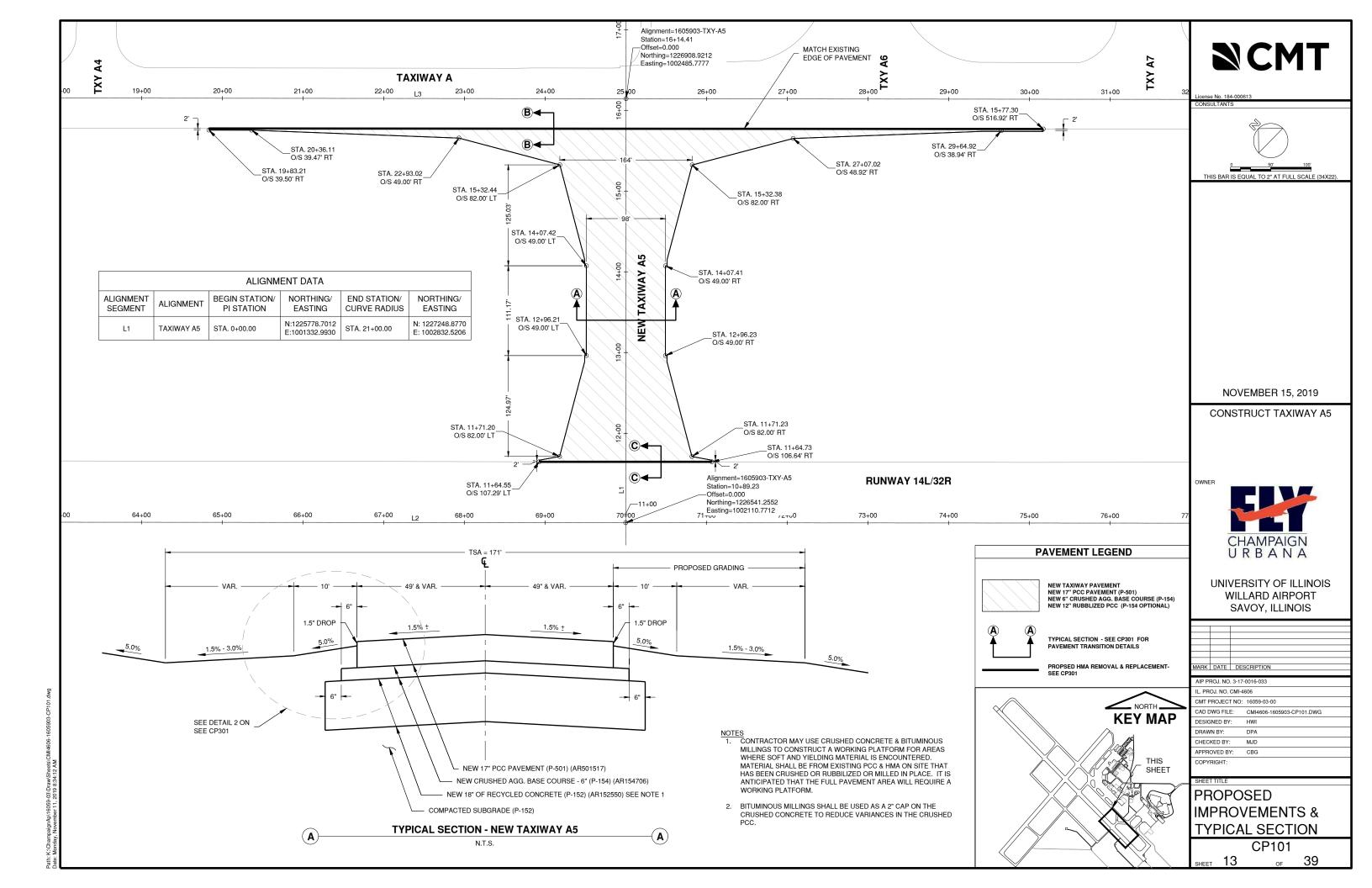


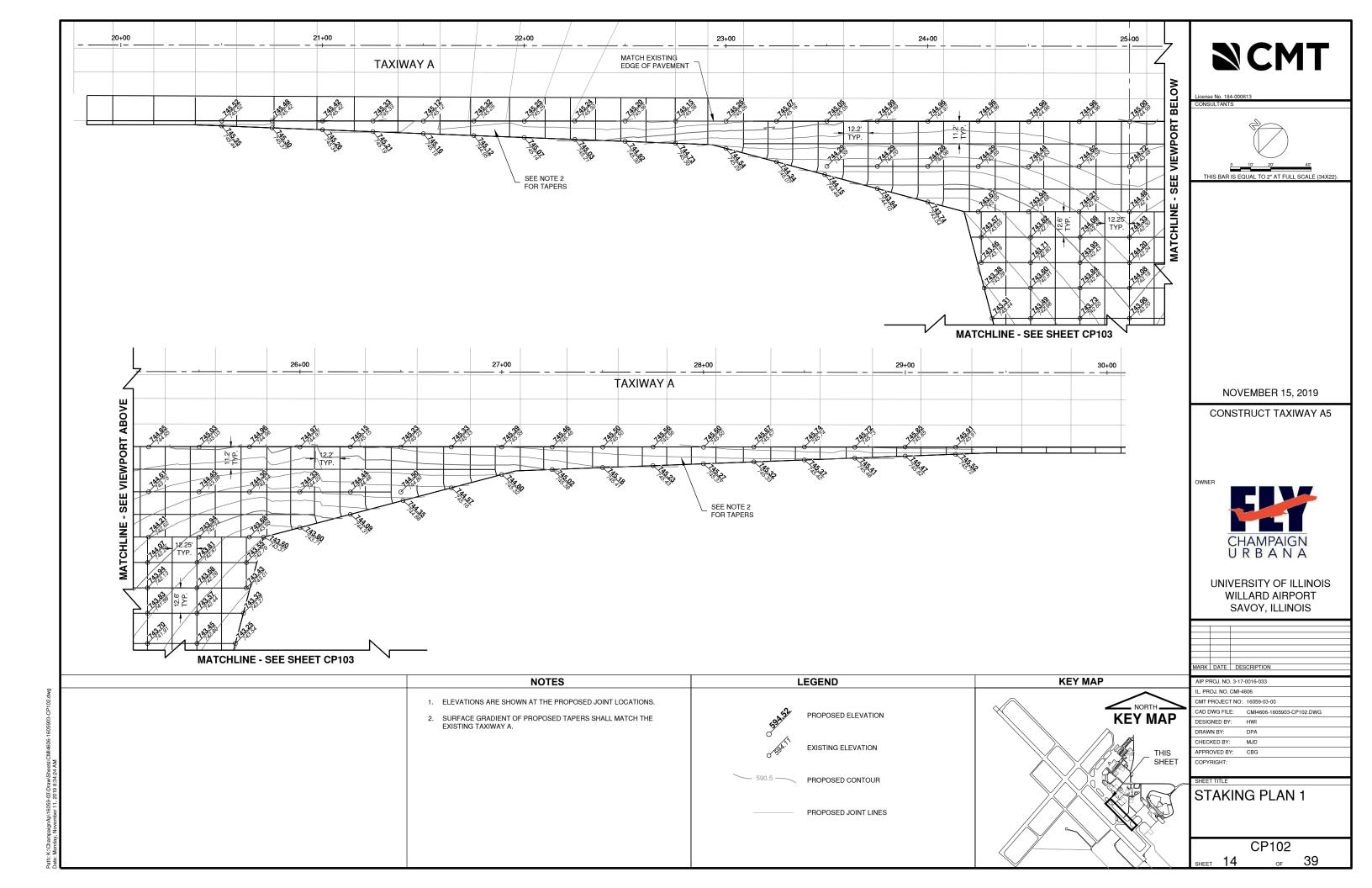


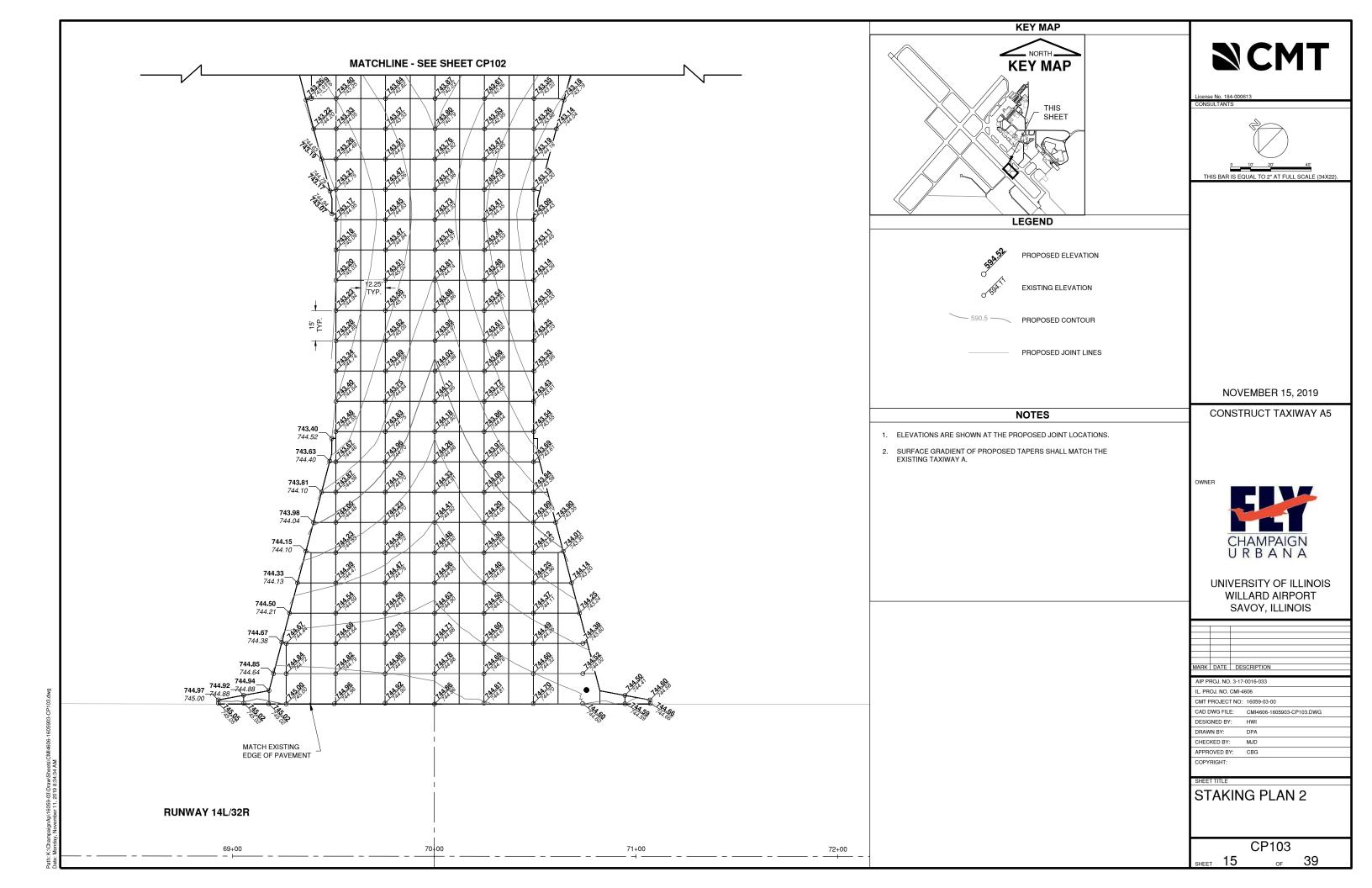


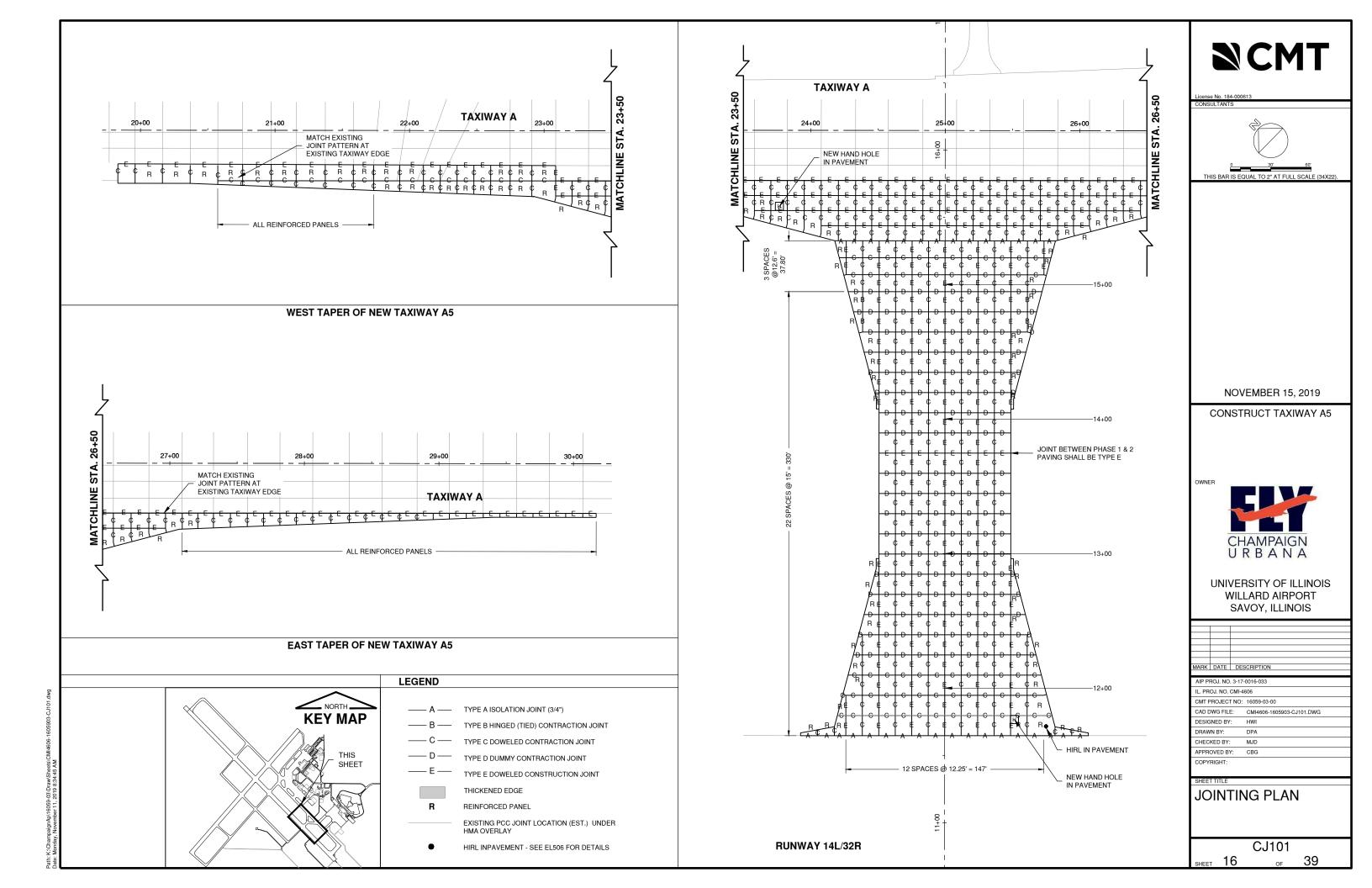


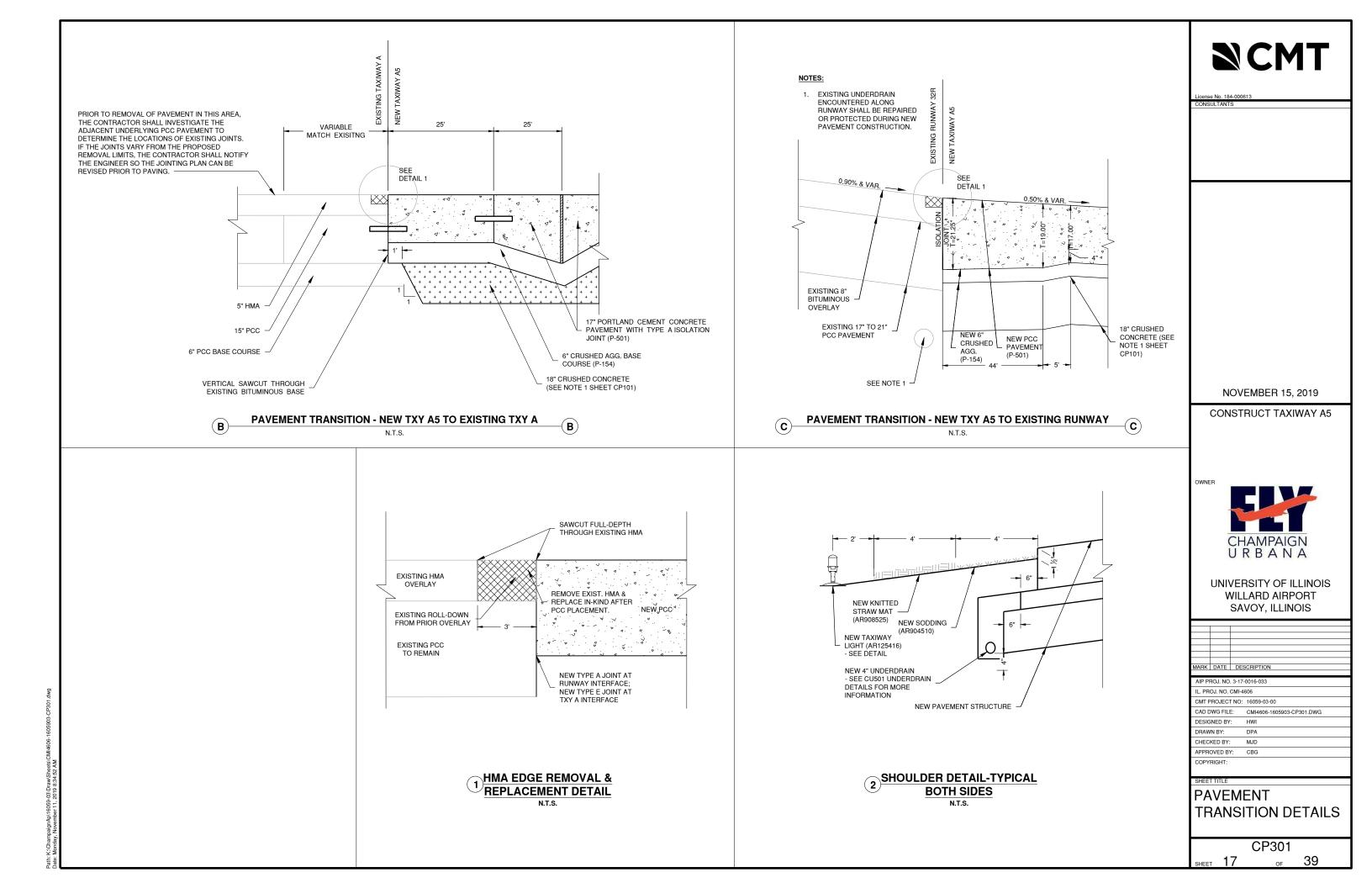


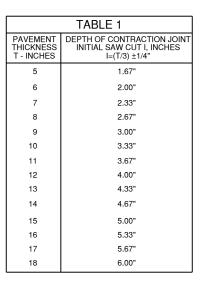


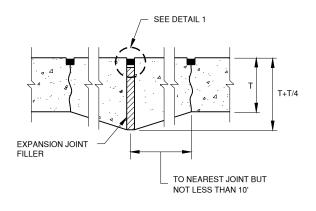


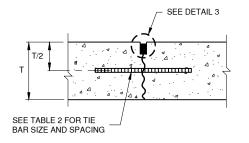






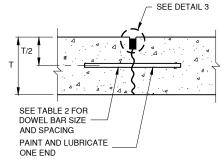


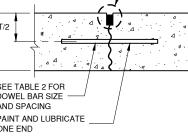




TYPE B HINGED (TIED) CONTRACTION

SYMBOL -

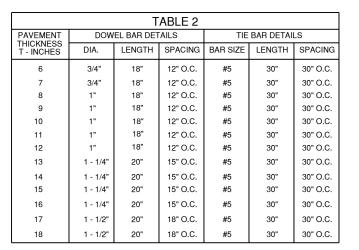


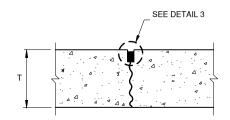


TYPE C DOWELED CONTRACTION SYMBOL C

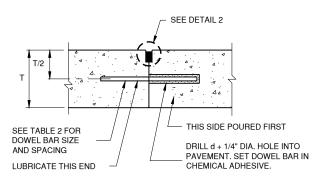
#### TYPE A THICKENED ISOLATION

SYMBOL

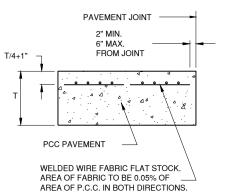




TYPE D DUMMY CONTRACTION SYMBOL -



TYPE E DOWELED CONSTRUCTION



#### **ODD SHAPED PANEL** REINFORCEMENT

SYMBOL R

INCLUDES ALL ODD-SHAPED PANELS AND RECTANGULAR PANELS WHERE LENGTH / WIDTH RATIO EXCEEDS 1.25. SEE SHEET CJ502 FOR TAPER

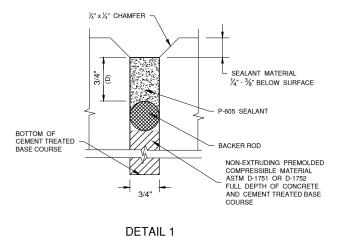
## JOINT SEALING DETAILS

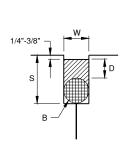
JOINT SI	EALING	DIMENS	SIONS
	DETAIL 2	DETAIL 3	
W=WIDTH OF SEALANT RESERVOIR (IN.)	3/4	1/2	1/2
D=DEPTH OF SEALANT RESERVOIR (IN.)	3/8	1/4	1/4
B=BACKER ROD DIAMETER (IN.)	N/A	5/8	5/8
S=SECOND SAWCUT DEPTH (IN.) MINIMUM	N/A	1-1/8	1-1/8

1.) ALL EDGES OF NEW SLABS, FREE STANDING OR CLOSURE, SHALL BE EDGED WITH AN APPROVED TOOL HAVING A RADIUS OF 1/8" TO 1/4" TO FACILITATE SAWING OF THE SEALANT RESERVOIR. A RADIUS > 1/4" WILL NOT BE ACCEPTABLE.

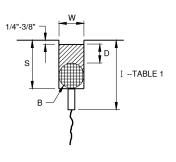
JOINT NOTES

- 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.
- THE INITIAL SAWCUT SHALL BE MADE TO THE 1/8" WIDTH INDICATED. INITIAL SAWING TO THE DIMENSIONS OF THE SECOND SAWCUT WILL NOT BE ALLOWED.





DETAIL 2



DETAIL 3

**NOVEMBER 15, 2019** 

**CONSTRUCT TAXIWAY A5** 

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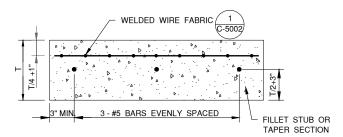


UNIVERSITY OF ILLINOIS **WILLARD AIRPORT** SAVOY, ILLINOIS

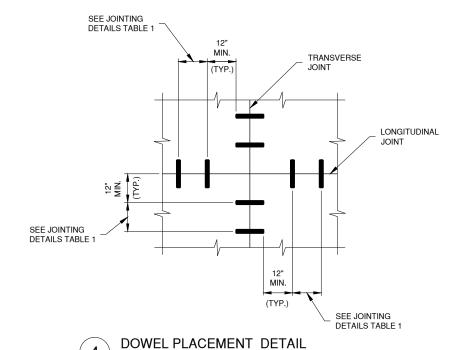
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IL. PR	OJ. NO.	CMI-4	606
CMT F	ROJECT	NO:	16059-03-00
CAD	WG FILE	≣:	CMI4606-1605903-CJ501.DWG
DESIG	NED BY	:	HWI
DRAW	/N BY:		DPA
CHEC	KED BY:		MJD
APPR	OVED BY	<b>/</b> :	CBG
COPY	RIGHT:		

JOINTING DETAILS

CJ501 39 SHEET 18



1 REINFORCED FILLET STEEL DETAIL



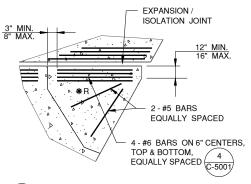
ALTERNATE DOWEL BARS
ARC WELDED TO TOP
SPACER BARS

TOP SPACER BAR

CHAIR

SHOWS ARC WELDING
II SHOWS RESISTANCE WELDING
BOTTOM SPACER BAR

TYPICAL DOWEL BASKET
ELEVATION DETAIL W/ CHAIR
N.T.S.

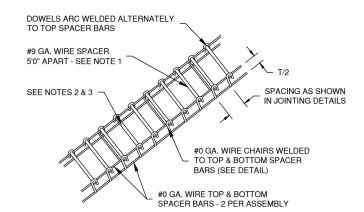


STUB DETAIL

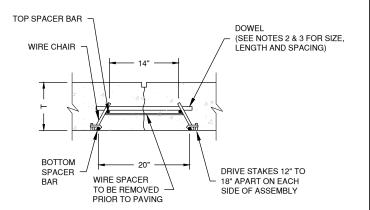
N.T.S.

TYPICAL AT ODD-SHAPED PANEL
AT EXPANSION / ISOLATION JOINT

\*R = ODD SHAPED PANEL REINFORCEMENT



3 DOWEL BASKET ASSEMBLY DETAIL



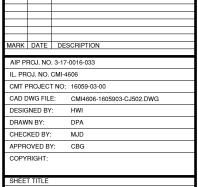
6 DOWEL BAR INSTALLATION DETAIL



CONSTRUCT TAXIWAY A5



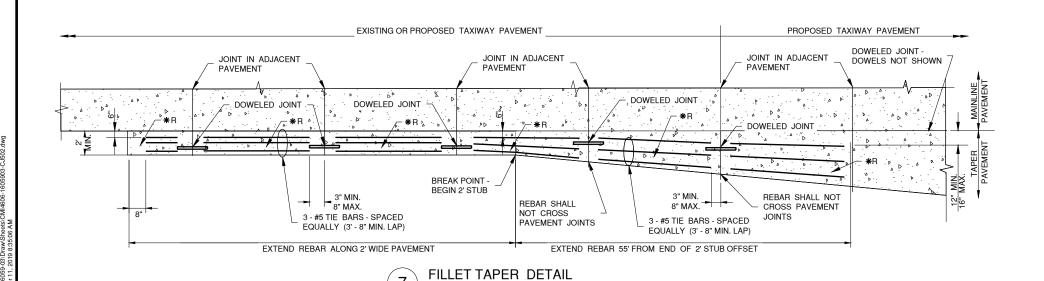
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WILLARD AIRPORT
SAVOY, ILLINOIS



PAVING & MISCELLANEOUS DETAILS

CJ502

39

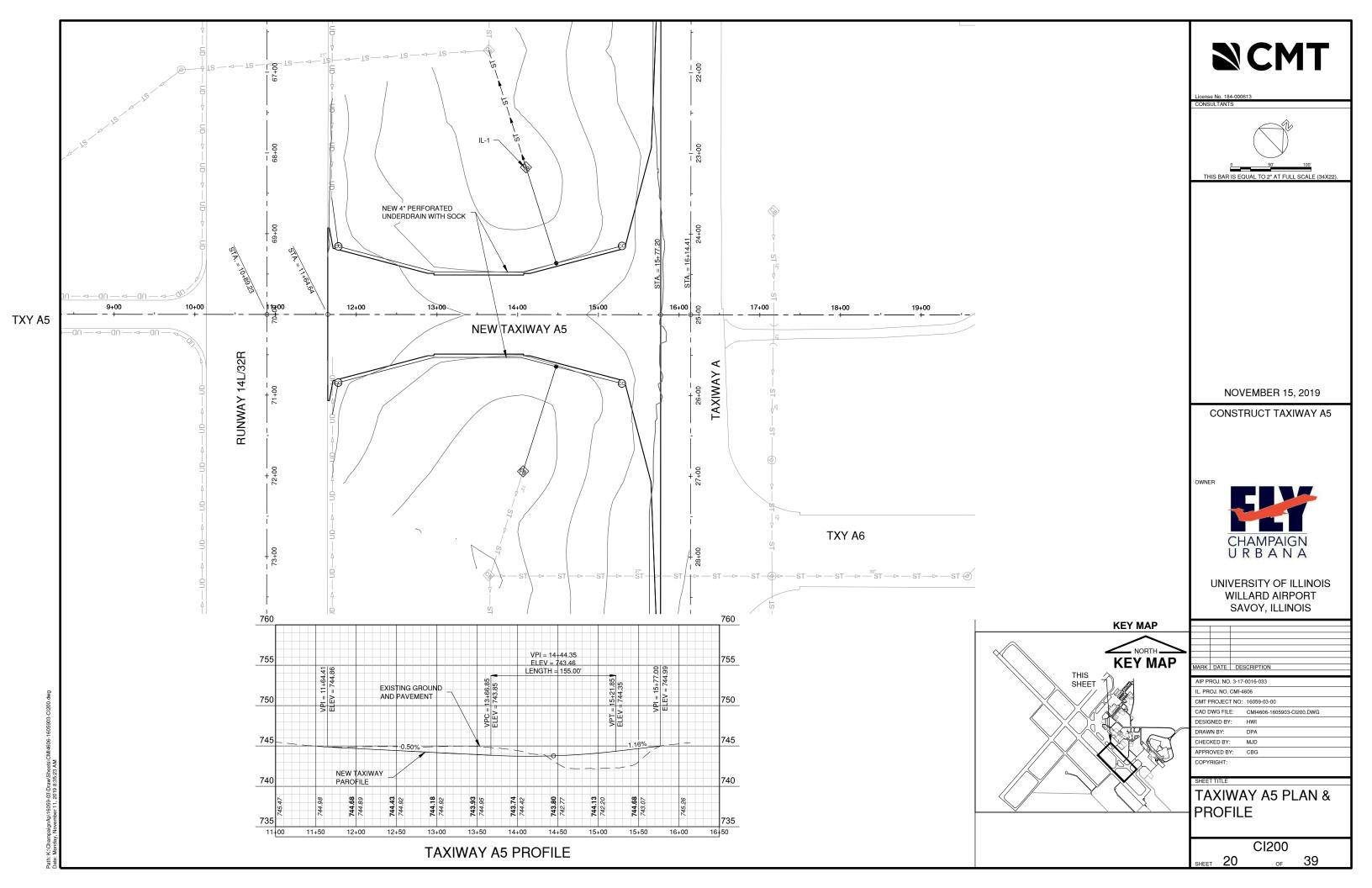


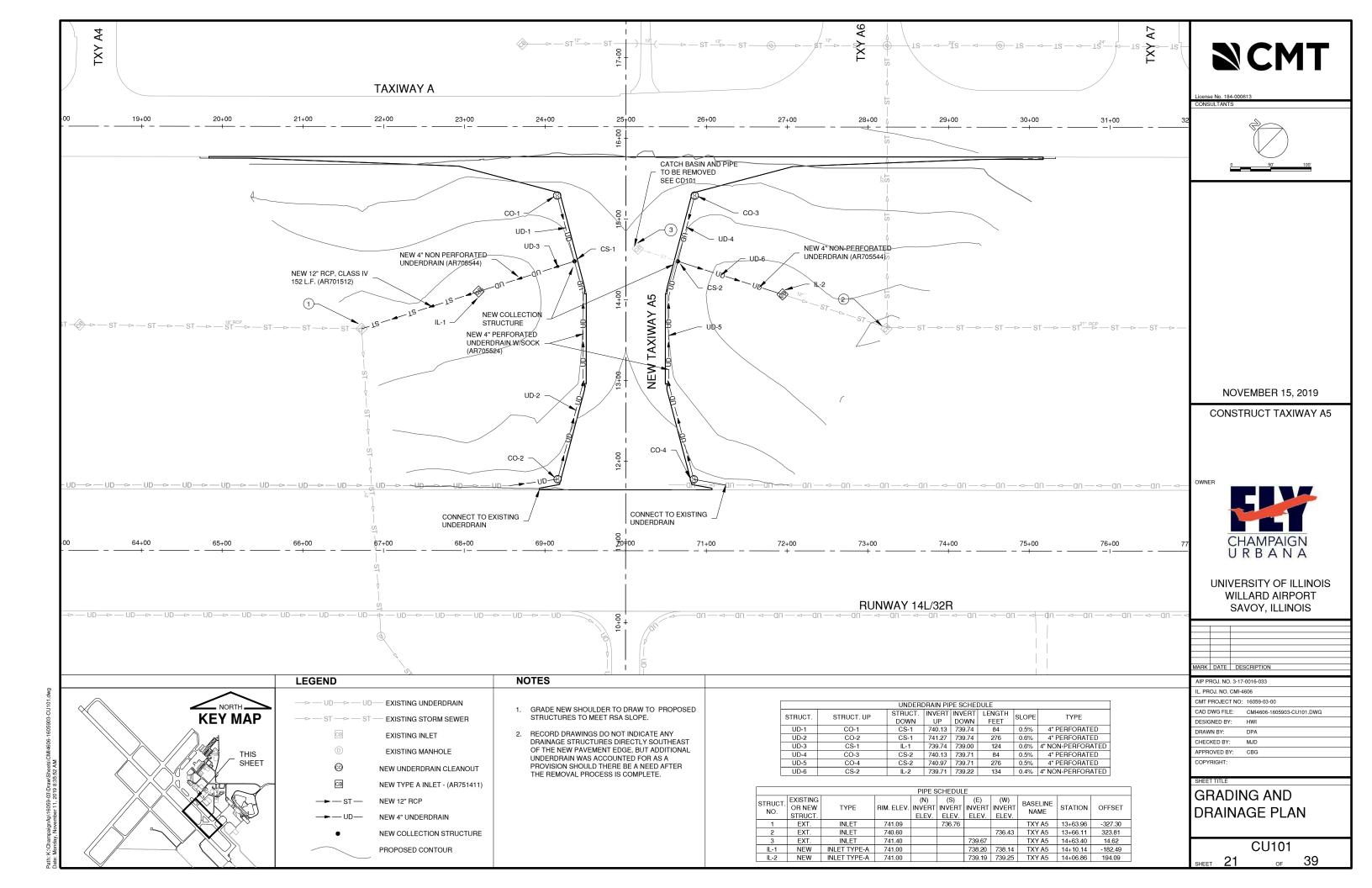
\*R = TAPER REINFORCEMENT WITH REBAR

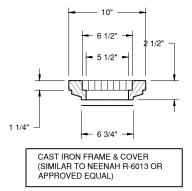
SEE DETAILS 1 AND 5 ON THIS SHEET

DOWEL BASKET NOTES

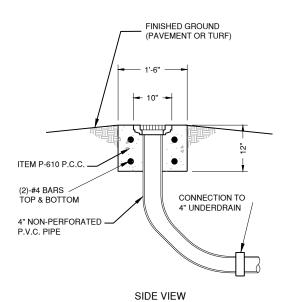
- . #9 GA. WIRE SPACER BAR ARC WELDED TO THE BOTTOM OF TOP SPACER BAR. (MAY BE MECHANICALLY ATTACHED IN LIEU OF WELDING) 3 REQUIRED PER UNIT. THIS WIRE MUST BE CUT OR REMOVED PRIOR TO PAVING.
- 2. DOWEL BAR DIAMETER, LENGTH & SPACING SHALL BE AS SHOWN IN TABLE 2.
- 3. DOWELS SHALL BE EPOXY COATED FULL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

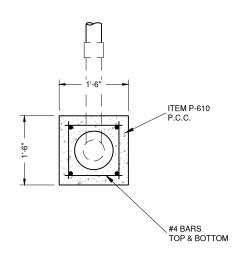












PLAN

## **UNDERDRAIN CLEAN-OUT DETAILS**

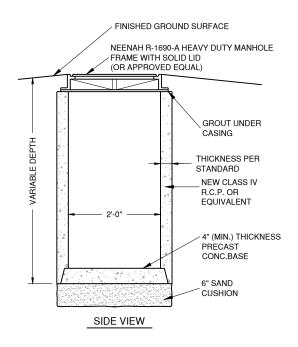
NEW EARTH BACKFILL & SHOULDER ADJUSTMENT NEW PAVEMENT STRUCTURE — 18" MAX — NEW AGGREGATE BASE AND RECYCLED CONCRETE (MIN.) NEW POROUS BACKFILL 12" - NEW 4" UNDERDRAIN W/FILTER SOCK (MIN.)

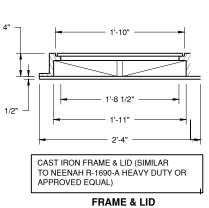
#### **PAVEMENT EDGE**

## TYPICAL UNDERDRAIN DETAIL

NOVEMBER 15, 2019 CONSTRUCT TAXIWAY A5

**NCMT** 





#### **UNDERDRAIN COLLECTION** STRUCTURE DETAIL



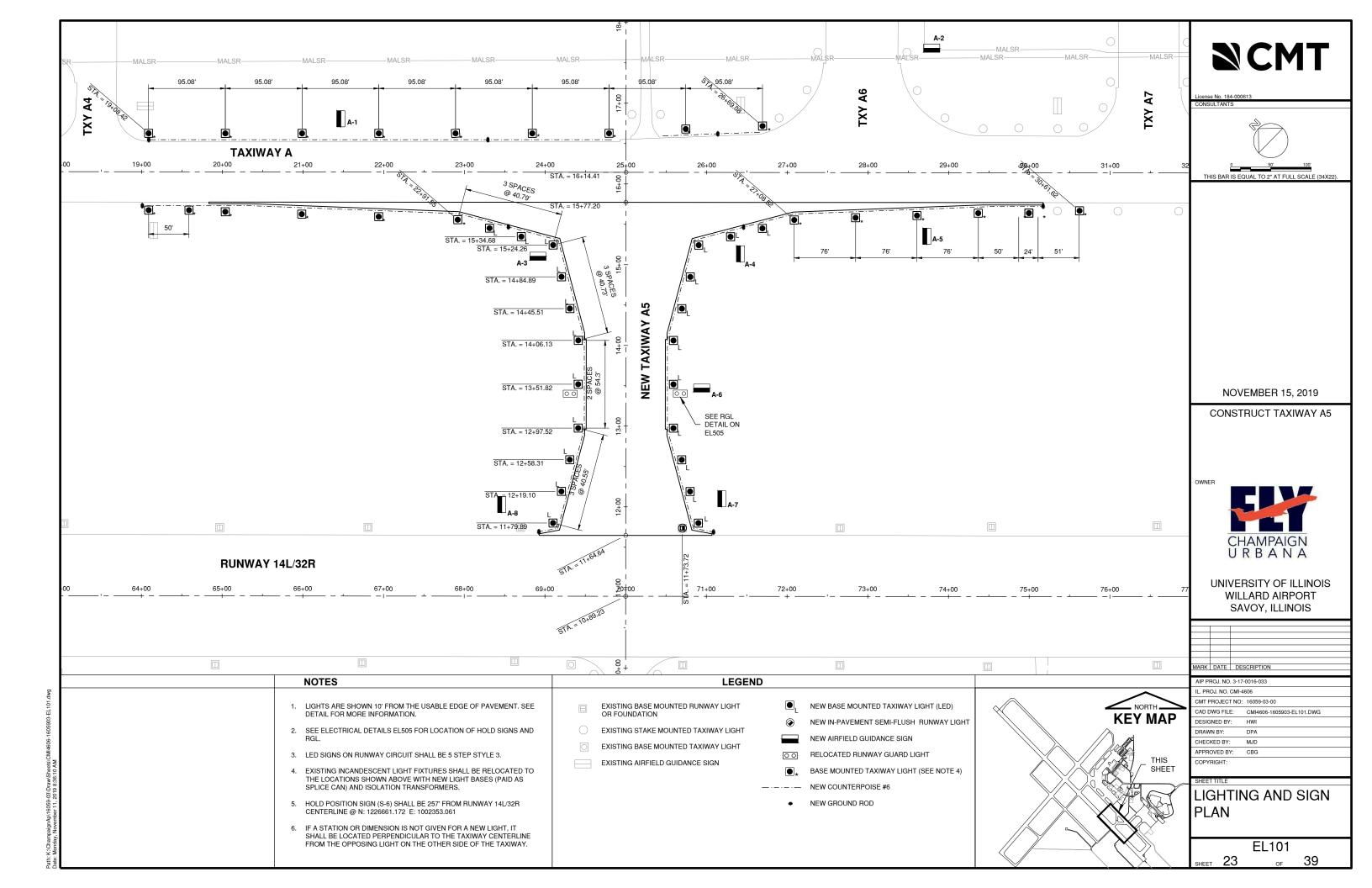
UNIVERSITY OF ILLINOIS WILLARD AIRPORT SAVOY, ILLINOIS

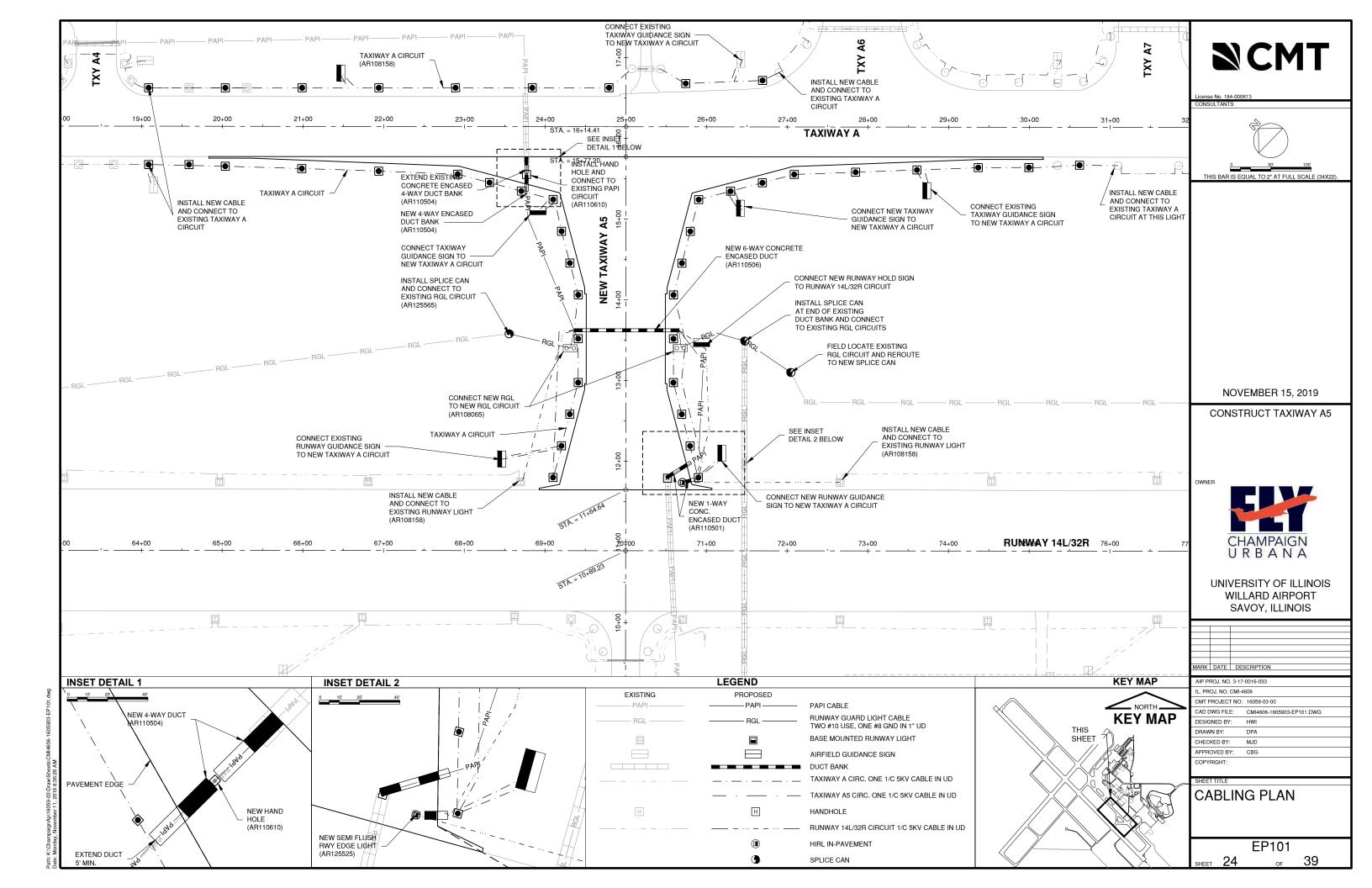
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IL. PRO	OJ. NO. (	CMI-4	606
CMT P	ROJEC1	NO:	16059-03-00
CAD D	WG FILE	≣:	CMI4606-1605903-CU501.DWG
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**DETAILS** 

CU501 39 SHEET 22

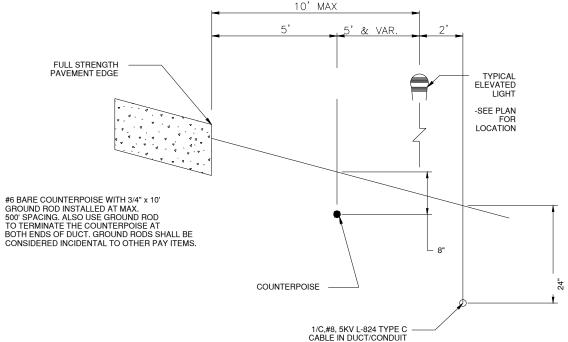




# L-861(T) BASE MOUNTED TAXIWAY EDGE LIGHT

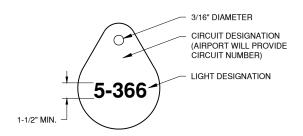
#### **NOTES**

- 1. THE LIGHT FIXTURE SHALL BE BONDED TO THE LIGHT BASE INTERNAL GROUND LUG VIA A #6 AWG STRANDED COPPER WIRE RATED FOR 600 VOLTS WITH GREEN XHHW INSULATION. THE GROUND WIRE LENGTH SHALL BE SUFFICIENT TO ALLOW THE REMOVAL OF THE LIGHT FIXTURE FROM THE LIGHT BASE FOR ROUTINE MAINTENANCE. SEE THE LIGHT FIXTURE MANUFACTURER'S INSTRUCTIONS FOR PROPER METHODS OF ATTACHING THIS BONDING WIRE.
- LIGHT FIXTURES SHALL BE L-861, L-861E, AS INDICATED ON THE PLANS AND SPECIFICATIONS. LED EDGE LIGHTS SHALL BE INDICATED WITH THE SUFFIX (L). WHERE INDICATED TO BE QUART LAMPS SHALL BE 30W OR 45W AS REQUIRED BY LIGHT FIXTURE MANUFACTURER TO MEET MINIMUM DISTRIBUTION AND OUTPUT REQUIREMENTS OF AC 150/5345-46 (LATEST EDITION).
- 3. L-830 ISOLATION TRANSFORMERS FOR QUARTZ EDGE LIGHTS AND LED EDGE LIGHTS WITH HEATERS SHALL BE L-830-1 30/45 WATT. LED EDGE LIGHTS WITHOUT HEATERS SHALL BE L-830-16, 10/15 WATT OR L-830-17, 20/25 WATT, AS RECOMMENDED BY LIGHT MANUFACTURER.
- 4. THE TOLERANCE FOR THE HEIGHT OF RUNWAY/TAXIWAY EDGE LIGHTS MUST BE ± 1 INCH. THE TOLERANCE FOR THE LATERAL SPACING (LIGHT LANE TO RUNWAY/TAXIWAY CENTERLINE) OF RUNWAY/TAXIWAY EDGE LIGHTS MUST BE ± 1 INCH.
- 5. DIRECTION OF PRIMARY CABLES MUST BE IDENTIFIED BY COLOR CODING AS FOLLOWS: WHEN FACING LIGHT WITH BACK FACING PAVEMENT, CABLE TO THE LEFT IS CODED RED AND CABLE TO THE RIGHT IS CODED BLUE.
- 6. APPLY A CORROSION INHIBITING, ANTI-SEIZE COMPOUND TO ALL SCREWS, NUTS AND FRANGIBLE COUPLING THREADS. IF COATED BOLTS ARE USED PER ENGINEERING BRIEF #83, DO NOT APPLY ANTI-SEIZE COMPOUND.
- 7. ELECTRICAL INSULATING GREASE MUST BE APPLIED WITHIN THE L-830 ISOLATION TRANSFORMER SECONDARY TWO CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THE CONNECTORS MUST NOT BE TAPED.
- 8. ENTRANCES IN L-867 BASES MUST BE PLUGGED FROM THE INSIDE WITH DUCT SEAL TO MAKE WATERTIGHT.



#### COUNTERPOISE LOCATION DETAIL

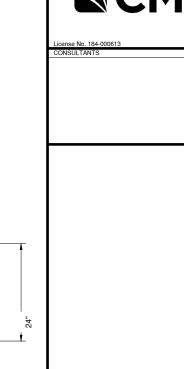
N.T.S



### LIGHT IDENTIFICATION TAG DETAIL

#### NOTES

- INSTALL A NONCORROSIVE DISC OF 2" MINIMUM DIAMETER WITH THE NUMBER PERMANENTLY STAMPED, CUT OUT, OR ENGRAVED UNDER THE HEAD OF THE BASE PLATE BOLT OR ATTACHED TO LIGHT FLANGE WITH SET SCREW.
- 2. NUMERALS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY, AND SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER.
- 3. AIRFIELD SIGNS SHALL BE TAGGED AND NUMBERED.
- 4. THE CONTRACTOR SHALL NUMBER THE EXISTING AND PROPOSED LIGHTS AND SIGNS IN EACH CIRCUIT, STARTING AT THE HOMERUN AND CONTINUING AROUND THE ENTIRE CIRCUIT, BACK TO THE HOMERUN.



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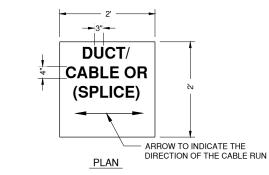
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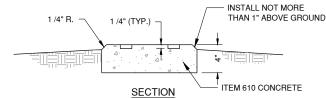
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CMT F	ROJECT	T NO:	16059-03-00
CAD	WG FILE	E:	CMI4606-1605903-EL501.DWG
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ELECTRICAL DETAILS

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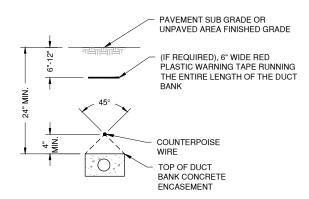
EL501 <sub>MEET</sub> 25 OF 39





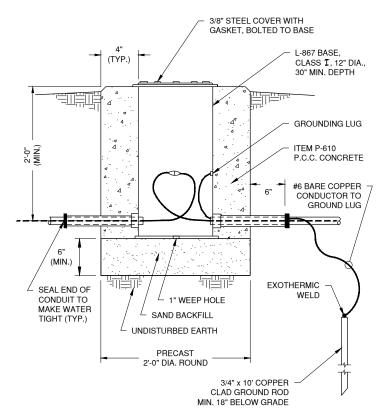
#### TURF CABLE /DUCT/ SPLICE MARKER DETAIL

- 1. DUCT MARKERS SHALL BE INSTALLED AT BOTH EDGES OF PAVEMENT WHERE PROPOSED ELECTRICAL DUCTS CROSS BOTH NEW AND EXISTING PAVEMENTS.
- 2. CABLE MARKERS SHALL BE INSTALLED AT ALL BENDS AND EVERY 200' ALONG THE HOMERUN.
- 3. ITEM 610 CONCRETE SHALL BE USED.
- 4. ALL EXPOSED EDGES SHALL BE EDGED WITH A 1/4" RADIUS TOOL.
- 5. THE COST OF FURNISHING AND INSTALLING NEW MARKERS SHALL BE INCIDENTAL TO THE ASSOCIATED ITEMS.
- 6. 0.049 CU. YD. CONCRETE PER MARKER.
- 7. A MARKER CONFORMING TO THIS DETAIL MARKED "SPLICE" SHALL BE INSTALLED AT ALL SPLICE LOCATIONS NOT IN LIGHT CANS OR MANHOLES.

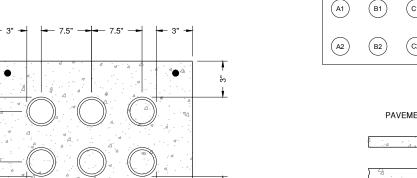


#### **LOCATION OF COUNTERPOISE WIRE** (LIGHTING PROTECTION) N.T.S.

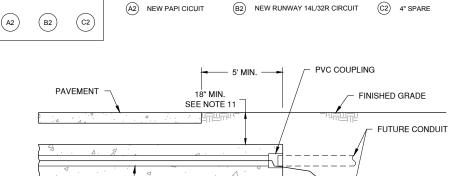
- THE HEIGHT ABOVE THE CABLE AND/OR CONDUIT IS CALCULATED TO ENSURE THE CABLES AND/OR CONDUITS TO BE PROTECTED ARE WITHIN THE  $45^\circ$  ZONE OF PROTECTION BELOW THE COUNTERPOISE.
- COUNTERPOISE WIRES MUST BE INSTALLED ABOVE MULTIPLE CONDUITS/DUCT BANKS FOR AIREFIELD LIGHTING CABLES. WITH THE INTENT BEING TO PROVIDE A COMPLETE CONE OF PROTECTION OVER THE AIRFIELD LIGHTING CABLES. WHEN MULTIPLE CONDUITS AND/OR DUCT BANKS FOR AIRFIELD CABLE ARE INSTALLED IN THE SAME TRENCH, THE NIMBER AND LOCATION OF THE COUNTERPOISE WIRES ABOVE THE CONDUITS SHALL BE ADEQUATE TO PROVIDE A COMPLETE ZONE OF PROTECTION MEASURED 22-1 /2°EACH SIDE OF VERTICAL.
- 3. REFER TO THE CURRENT VERSIONS OF FAA AC 150/5340-30 AND AC 150/5370-10 FOR MORE DETAILS ON COUNTERPOISE INSTALLATION.



## **SPLICE CAN- IN TURF DETAIL**



#4 REBAR EACH CORNER (TYP. ALL DUCT BANK) 6-WAY DUCT BANK DETAIL



MOUND SLIGHTLY.

GRADE AND SEED

BACKFILL

RESTORATION

PER SPEC. 108

EARTH OR SAND BACKFILL PER

SPEC. 108

METHOD.

DIRECT BURY CABLE OF

PERMITTED BY ENGINEER.

(A1) NEW RGL CIRCUIT

CABLE IN UNIT DUCT

**GRADE** 

LAYER 3

LAYER 2

LAYER 1

CABLES SHALL NOT BE PLACED LESS THAN 24" DEEP IN ANY ONE TRENCH UNLESS

2. WHERE PERMITTED, CONTRACTOR MAY INSTALL CABLE IN UNIT DUCT BY PLOWING

**CABLE TRENCH DETAIL** 

NEW TAXIWAY A5 CIRCUIT

NEW RUNWAY 14L/32R CIRCUIT

LAYER 3

LAYER 2

LAYER 1

**TYPICAL SECTION** 

#### NOTES:

- 1. DIMENSIONS SHOWN ARE MINIMUM.
- 2. TOP OF CONCRETE ENCASEMENT SHALL BE NOT LESS THAN 24 BELOW FINISHED SUBGRADE BELOW PAVEMENTS AND NOT LESS THAN 24 BELOW FINISHED GRADE IN UNPAVED AREAS, EXCEPT WHERE DIRECTED OTHERWISE BY ENGINEER. AVOID ALL CONFLICTS WITH OTHER UTILITIES (UNDERDRAINS, WATER LINES, SEWER LINES, TELEPHONE, ELECTRICAL) OR OTHER OBSTACLES, ADJUSTING DEPTH AS NECESSARY

**PVC CONDUIT** 

- 3. CONCRETE SHALL BE ITEM P-610.
- 4. CONDUIT FOR CONCRETE ENCASEMENT SHALL BE SCHEDULE 40 PVC, 4 NOMINAL DIAMETER, OR AS INDICATED ON THE PLANS.
- 5. CONCRETE ENCASEMENT SHALL EXTEND A MINIMUM OF 5:-0 BEYOND EDGES OF PAVEMENT, OR AS SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
- 6. #4 REBAR SHALL BE INSTALLED CONTINUOUS THE LENGTH OF THE CONCRETE ENCASEMENT.
- 7. DUCT BANK SHALL BE STACKED NO MORE THAN THREE CONDUITS HIGH UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 8. AT ENDS OF DUCT BANKS, INSTALL A PVC COUPLING FLUSH WITH END OF CONCRETE FOR CONNECTING FUTURE CONDUIT. INSTALL POLYETHELENE PULL STRING, GREENLEE, OR EQUIVALENT. PLUG THE ENDS OF UNUSED SPARE CONDUITS WITH WOODEN PLUGS
- 9. HIGH VOLTAGE WIRING, RUNWAY & TAXIWAY SERIES CIRCUIT WIRING, ETC., AND POWER WIRING OVER 480V SHALL BE INSTALLED IN SEPARATE CONDUITS FROM LOW VOLTAGE WIRING, 480V OR LESS.
- 10.IF POSIBLE, INSTALL FIBER OPTIC CABLES AND COMMUNICATION CABLES (FAA, ETC.) IN THEIR OWN CONDUITS; OTHERWISE, INSTALL THEM IN THE CONDUITS WITH LOW VOLTAGE WIRING.

11. DEPTH AS REQUIRED TO NOT IMPACT EDGE DRAIN.



MOUND SLIGHTLY.

GRADE AND SEED

BACKFILL RESTORATION PER SPEC. 108

FARTH OR SAND

BACKFILL PER SPEC. 108

C1) 4" SPARE

**PULL STRING** 

4" SPARE

**NOVEMBER 15, 2019** 

**CONSTRUCT TAXIWAY A5** 



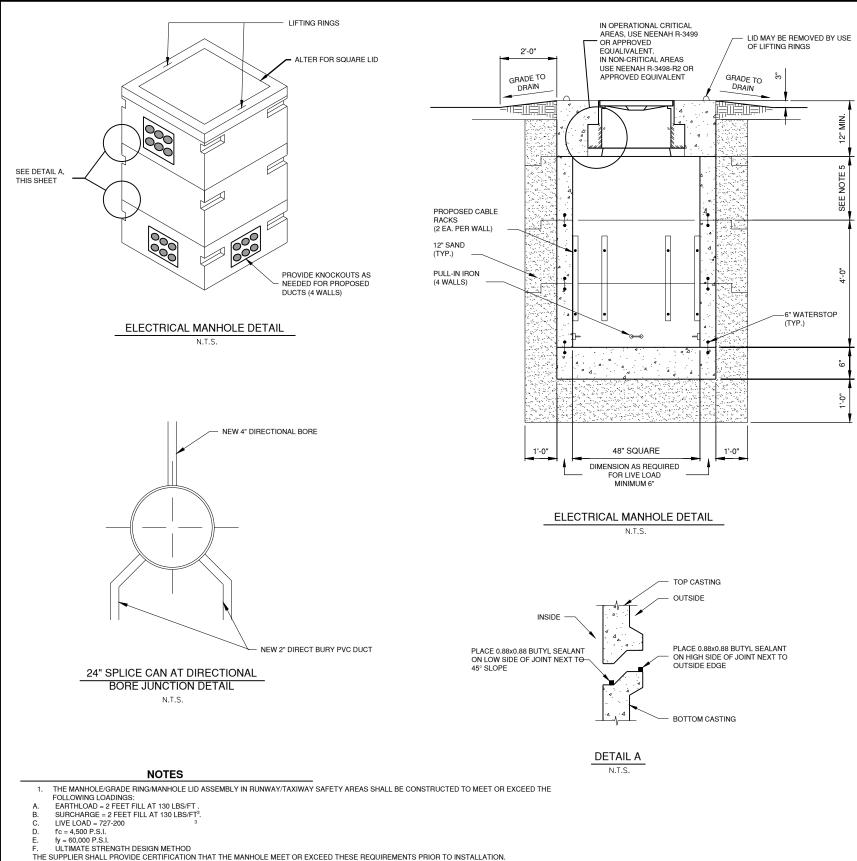
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CAD	WG FILE	E:	CMI4606-1605903-EL502.DWG
DESIG	NED BY	:	HWI
DRAW	N BY:		DPA
CHEC	KED BY:		MJD
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**ELECTRICAL DETAILS** 

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NOTES:

1. MATCH THE OUTSIDE DIAMETER OF CABLE.

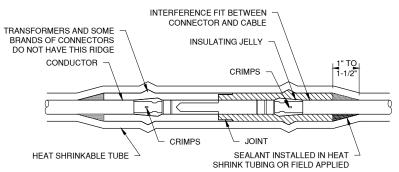
2. WRAP WITH AT LEAST ONE LAYER OF RUBBER OR TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.

INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH OUTSIDE DIA. OF CABLE.

IN LIFTLOF HEAT SHRINKING CONTRACTOR SHALL INSTALL

CONNECTOR KIT MUST HAVE 25" BEND/STRAIN IN RELIEF. CONNECTOR KIT MUST BE MOLDED IN THEROPLASTIC.

COMPLETE KIT OR EQUIVALENT CONNECTOR KIT MUST HAVE THREE O-RINGS MOLDED INTEGRALLY INTO CONNECTOR KIT

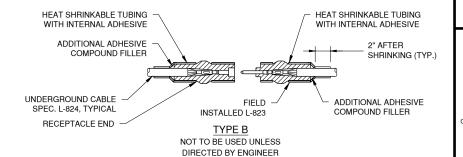


**PLUG** 

PLASTIC BODY MOLD CABLE JACKET REMOVED, "PENCIL" INSULATION POURING SPOUT SEAL ENDS OF MOLD WITH COMPRESSION TYPE SLEEVE TAPE PROVIDED IN SPLICE KIT CONNECTOR, CRIMP WITH TOOI RECOMMENDED BY MANUFACTURER

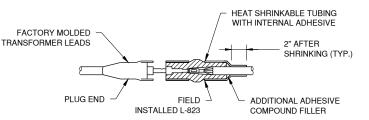
TYPE A FOR SPLICES IN HOMERUNS AND FOR EXTENSIONS TO EXISTING CABLES ONLY

RECEPTACLE



HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE RECEPTACLE END 2" AFTFR SHRINKING (TYP.) **==(**] ← **\*\*** FACTORY MOLDED FIFI D ADDITIONAL ADHESIVE INSTALLED L-823 TRANSFORMER LEADS COMPOUND FILLER

> TYPE C FOR SPLICES AT RUNWAY LIGHTS, TAXIWAY LIGHT AND SIGNS



TYPE D FOR SPLICES AT RUNWAY LIGHTS TAXIWAY LIGHT AND SIGNS

**CABLE CONNECTOR DETAILS** N.T.S.

MARK DATE DESCRIPTION

AIP PROJ. NO. 3-17-0016-033 L. PROJ. NO. CMI-4606 CMT PROJECT NO: 16059-03-00 CAD DWG FILE: CMI4606-1605903-EL503.DWG DESIGNED BY DRAWN BY: CHECKED BY: MJD APPROVED BY:

**NOVEMBER 15, 2019** 

**CONSTRUCT TAXIWAY A5** 

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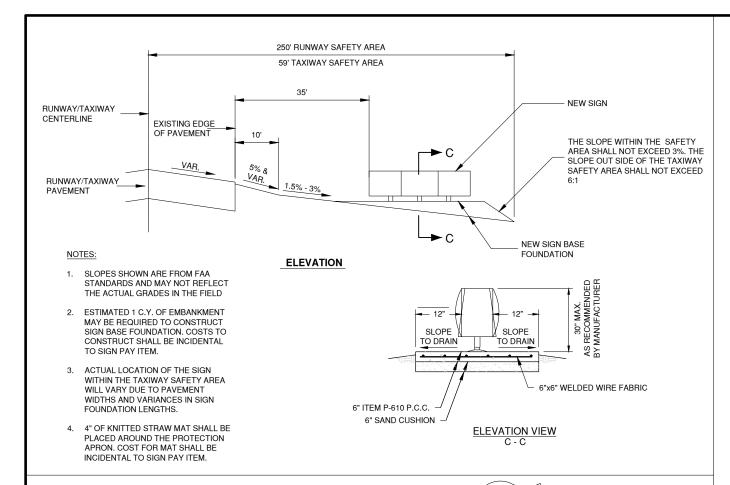
THE MANHOLE CONSTRUCTION AND INSTALLATION SHALL BE WATERTIGHT. ALL CONSTRUCTION JOINTS AND DUCTS SHALL BE SEALED TO PREVENT WATER ENTRY. ALL UNUSED DUCT BANK OPENINGS IN MANHOLE SHALL BE SEALED WITH METAL PLATES TREATED FOR CORROSION RESISTANCE AND BOLTED INTO PLACE. MATING SURFACES SHALL BE SEALED USING BUTYL SEALANT.

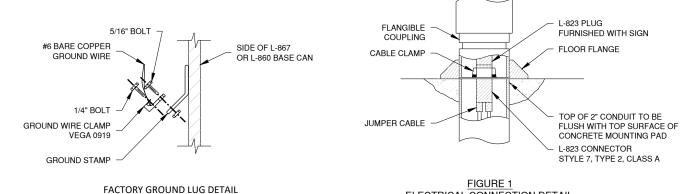
THE MANHOLE LID ASSEMBLY SHALL BE INSTALLED SLIGHTLY ABOVE THE SURROUNDING FINAL GRADE AND THE EARTH SHALL BE GRADED UP TO IT.

THE MANHOLE COVER SHALL BE LOCKABLE UTILIZING A PENTAGON BOLT ASSEMBLY.

ULTIMATE GRADES WILL BE LOWER. CONTRACTOR SHALL PROVIDE GRADE RING, AS DETAILED, OF THE HEIGHT THAT IS CALLED FOR ON THE LAYOUT SO AS TO ALLOW FOR FUTURE ADJUSTMENT.

DUCTS SHALL BE SET SO AS TO MAINTAIN SPECIFIED COVER IN FUTURE CONDITION.



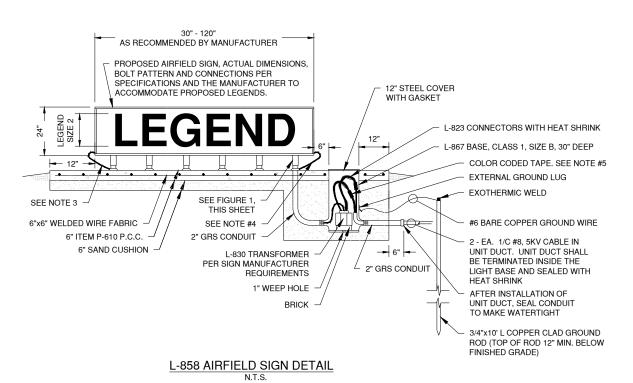


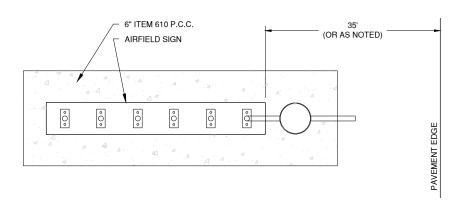
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**ELECTRICAL CONNECTION DETAIL** 

	SIGN#	SIDE	EX SIGN LEGEND	NEW SIGN LEGEND	WHITE WITH BLACK OUTLINE ON RED BACKGROUND	BLACK LEGEND ON YELLOW BACKGROUND	YELLOW LEGEND ON BLACK BACKGROUND	NUMBER OF CHARACTERS	NEW POWER CIRCUIT	SIGN STYLE	INTENSITY
*	A-1 (EX)	NW SE	A A5 ⊅ FBO→	A A5 → FBO→		A5 → FBO→	А	4	TXY A	2	MEDIUM
*	A-2 (EX)	NE SW	←A 7A6 A→ A6	A6 ←A→ A6		<del>←</del> A→	A6 A6	5	TXY A	2	MEDIUM
	A-3 (NEW)	NE SW	$\times$	A5 ←A→		<b>←</b> A→	<b>A</b> 5	5	TXY A	2	MEDIUM
	A-4 (NEW)	NW SE	$\times$	←A5 A		<b>←</b> A5	Α	4	TXY A	2	MEDIUM
*	A-5 (EX)	NW SE	⊼A6 A A6→	A A6→		A6→	А	4	TXY A	2	MEDIUM
	A-6 (NEW)	NE SW	$\times$	A5 32R-14L A5	32R-14L		A5 A5	9	RNWY 14L 32R	3	HIGH
	A-7 (NEW)	NW SE	$\times$	A5 →		A5 <del>→</del>		3	TXY A	2	MEDIUM
	A-8 (NEW)	NW SE	$\times$	<b>←</b> A5		<b>←</b> A5		3	TXY A	2	MEDIUM

NOTE: SIGNS A-1, A-2, AND A-5 ARE TO BE REMOVED, BUT THE CONCRETE BASE AND SPLICE CAN ARE TO REMAIN. CONTRACTOR SHALL INSTALL NEW SIGNS AND NEW LEGENDS ON EXISTING PCC BASE.





#### **PLAN VIEW**

#### AIRFIELD SIGN NOTES

- TRANSFORMER WATTAGE SHALL BE AS REQUIRED BY SIGN MANUFACTURER, SIGN ON RUNWAY CIRCUIT SHALL BE STYLE 3.
- SIGN LEGEND SHALL BE AS SHOWN IN THE PLANS. SIGN SCHEDULE IS SUBJECT TO FAA APPROVAL OF THE SIGNAGE PLAN. CHANGES TO NEW LEGENDS MAY OCCUR DURING CONSTRUCTION.
- 3. SIGN ANCHOR TETHERS AND GROUND WIRES ARE REQUIRED. SEE SPECIFICATIONS.
- 4. SIGNS SHALL BE SIZE 2, STYLE 2 OR 3, CLASS 2, AND MODE 2. SEE SIGN SCHEDULE FOR DETAILS
- 5. LIGHT I.D. TAG FOR SIGN SHALL INCLUDE SIGN DESIGNATOR SHOWN IN THE PLAN TABLES.
- 6. DIRECTION OF PRIMARY CABLES MUST BE IDENTIFIED BY COLOR CODING AS FOLLOWS: WHEN FACING SIGN IN BACK FACING THE RELATED RUNWAY OR TAXIWAY PAVEMENT, THE CABLE FOR THE CIRCUIT TO THE LEFT IS CODED RED AND CABLE FOR THE CIRCUIT TO THE RIGHT IS CODED BLUE.



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NOVEMBER 15, 2019

CONSTRUCT TAXIWAY A5

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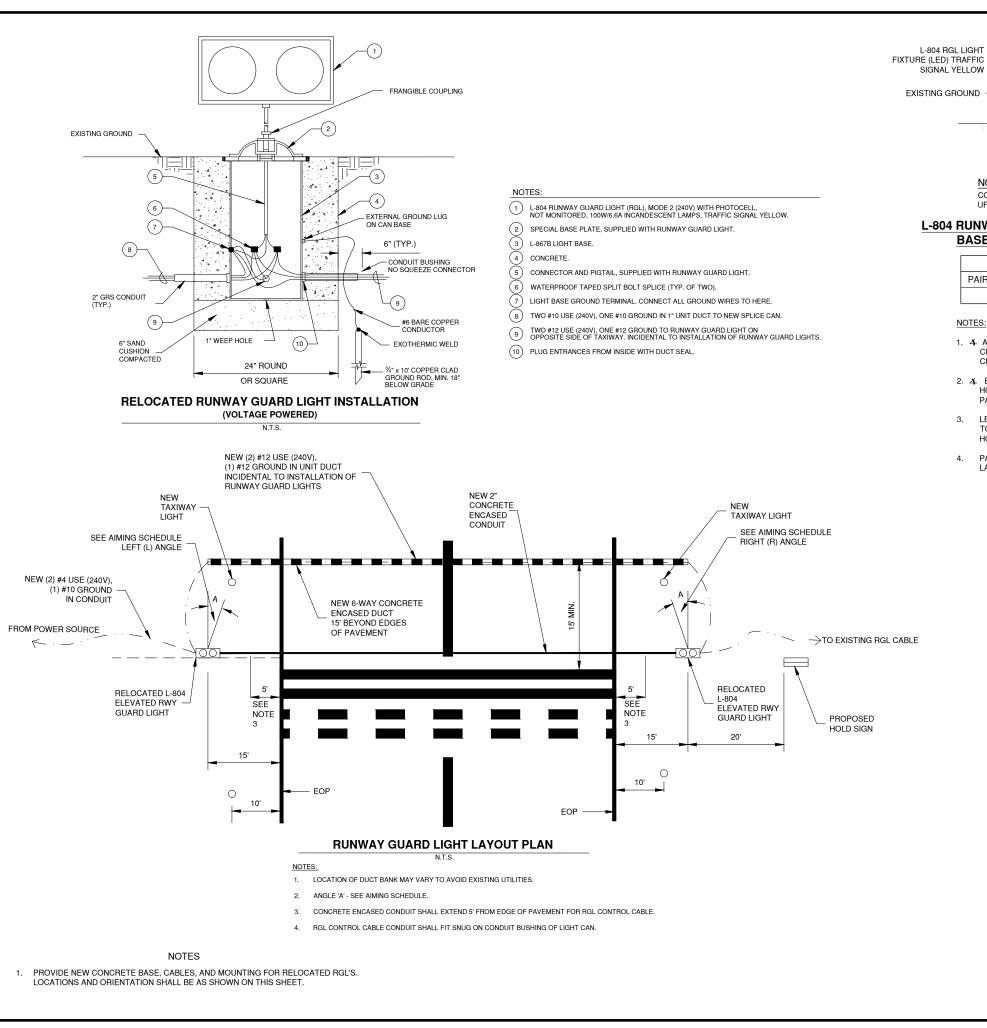
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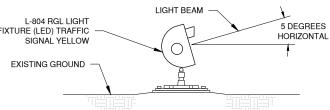
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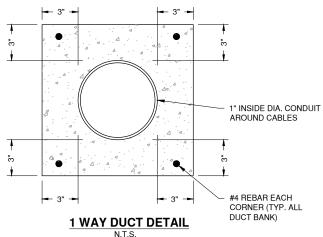
#### L-804 RUNWAY GUARD LIGHT HORIZONTAL AIMING DETAIL

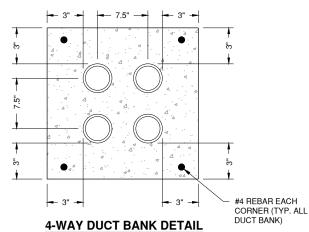
CONTRACTOR SHALL AIM THE RGL UNITS 5 DEGREES UPWARD PER MANUFACTURER'S INSTRUCTIONS.

#### L-804 RUNWAY GUARD LIGHT INSTALLATION DETAILS **BASE MOUNTED, 6.6 AMP SERIES CIRCUIT**

RUNWAY GUARD LIGHT AIMING SCHEDULE				
PAIR NUMBER	L 4	A R	∡B	
1	23.4°	23.4°	5°	

- 4 A IS ANGLE UNIT SHOULD BE AIMED TOWARD TAXIWAY CENTERLINE AND IS SYMMETRICAL ABOUT THE TAXIWAY
- 2. 4 B IS ANGLE UNIT SHOULD BE AIMED UPWARD FROM THE HORIZONTAL AND IS THE SAME FOR EACH UNIT IN EVERY PAIR OF RUNWAY GUARD LIGHTS.
- LEFT (L) AND RIGHT (R) ARE DESIGNATED BY LOOKING TOWARD THE RUNWAY FROM THE HOLD SIDE OF THE
- PAIR NUMBER IS DESIGNATED ON PROPOSED LIGHTING LAYOUT AND RGL AND SIGN LOCATIONS SHEETS.







**NOVEMBER 15, 2019 CONSTRUCT TAXIWAY A5** 

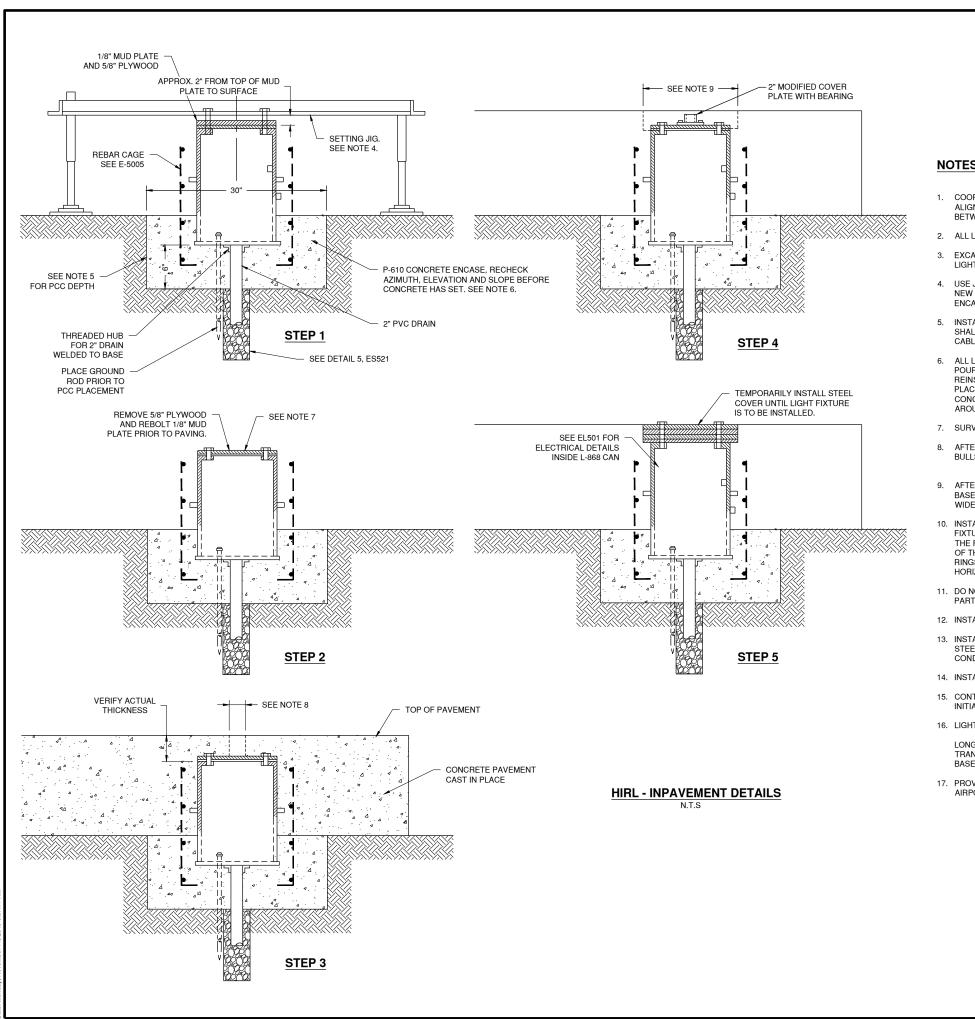


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CMT PROJECT NO: 16	059-03-00					
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NOTES FOR INSTALLATION OF NEW HIRL IN PCC PAVEMENT

 COORDINATE LIGHT BASE INSTALLATION WITH PAVING OPERATION. ESTABLISH ALIGNMENT OF LIGHTS BASED ON LAYOUT SHEETS, MINIMUM OF 2' OFFSET BETWEEN BASE CAN AND PCC PAVEMENT JOINT.

- 2. ALL LIGHT BASES SHALL BE CAST-IN-PLACE.
- 3. EXCAVATE 30" CORE TO PROPER DEPTH TO ALLOW 6" CONCRETE ENCASEMENT UNDER NEW LIGHT BASES. COMPACT BOTTOM OF EXCAVATION.
- 4. USE JAQUITH #AW9101 4 LEGGED SETTING JIG WITH SCREW JACKS FOR PROPERLY ALIGNING NEW L-868 BASES. SECURE SETTING JIG TO PREVENT MOVEMENT DURING CONCRETE ENCASEMENT. INSTALL AND SECURE REBAR CAGE.
- INSTALL PVC CONDUIT CONNECTING LIGHT BASES AS SHOWN ON LAYOUT. NO SHARP ANGLES SHALL BE MADE IN CONNECTING CONDUIT TO A NEW LIGHT BASE THAT MIGHT INHIBIT PULLING CARI F.
- 6. ALL LIGHT BASES SHALL BE PROPERLY POSITIONED, ALIGNED, AND INSPECTED PRIOR TO POURING CONCRETE. ANY BASE INSTALLED INCORRECTLY SHALL BE REMOVED AND REINSTALLED ACCORDING TO DESIGN CRITERIA. ALL CONDUIT SHALL BE PROPERLY SECURED IN PLACE BEFORE PLACING CONCRETE. TIGHT CONNECTIONS MUST BE ASSURED TO PREVENT CONCRETE FROM ENTERING BASE OR CONDUIT. ENSURE CONCRETE DEPTH TO BE 6" MINIMUM AROUND AND BELOW LIGHT BASE, AND AROUND CONDUIT AS SHOWN BY DETAILS.
- 7. SURVEY LOCATION OF BULLSEYE PRIOR TO PLACING PCC PAVEMENT.
- 8. AFTER INITIAL CONCRETE SET, CORE 4" DIAMETER PILOT HOLE TO LOCATE THE CENTER OF THE BULLSEYE PLATE.
- 9. AFTER FIXTURE OR COVER INSTALLATION, FILL THE ANNULAR SPACE BETWEEN THE FIXTURE BASE AND SURROUNDING PAVEMENT WITH P-606 SEALANT. ANNULAR SPACE SHALL BE 3/4" WIDE. TOLERANCE: LESS THAN 1/2" ON ANY SIDE WILL NOT BE ACCEPTED.
- 10. INSTALL FIXTURE, EXTENSION AND SPACER RINGS SO THAT THE EDGE OF THE LIGHT FIXTURE ON THE LOW SIDE OF THE PAVEMENT SLOPE SHALL MATCH THE ELEVATION OF THE FINISHED PAVEMENT SURFACE TO (+) 0" (-) 1/16" TOLERANCE. THE TOTAL THICKNESS OF THE SPACER RINGS SHALL BE NO MORE THAN 3/4" IN HEIGHT. NO MORE THAN THREE RINGS SHALL BE USED. FIXTURES (AND LIGHT BASES) TO BE INSTALLED LEVEL ON A HORIZONTAL PLANE ±1/2 DEGREE.
- 11. DO NOT USE SHIPPING BOLTS. USE ONLY CERAMIC/TEFLON COATED BOLTS, MCB INDUSTRIES PART NO. LSO-1 OR EQUAL. TORQUE PER MANUFACTURERS INSTRUCTIONS.
- 12. INSTALL 6" TRANSFORMER STAND. STAND MUST NOT CONFLICT WITH GROUND ROD OR DRAIN.
- 13. INSTALL ISOLATION TRANSFORMER AND CONNECT TO NEW CABLE AS SHOWN ON EL501. IF A 3/4" STEEL COVER IS TEMPORARILY INSTALLED, DO NOT INSTALL ISOLATION TRANSFORMER OR CONDUCTORS UNTIL LIGHT FIXTURE IS TO BE INSTALLED.
- 14. INSTALL GROUND WIRE AND COUNTERPOISE.
- 15. CONTRACTOR SHALL HAVE A MANUFACTURER'S REPRESENTATIVE ON SITE TO AID WITH THE INITIAL INSTALLATION OF LIGHT BASES.
- 16. LIGHT POSITION TOLERANCES:

LONGITUDINAL -  $\pm 2^{\circ}$  FROM STATIONING. TRANSVERSE -  $\pm 1/4^{\circ}$  TRANSVERSE FROM LINE OF LIGHTS BASE ORIENTATION: ALIGN WITH CENTERLINE OF RUNWAY OR TAXIWAY  $\pm$  1/2 DEGREE.

17. PROVIDE THREE (3) COPIES OF AN INSTRUCTION AND MAINTENANCE MANUAL TO THE AIRPORT 15 DAYS PRIOR TO START OF INSTALLATION.

NOVEMBER 15, 2019

**CONSTRUCT TAXIWAY A5** 

OWNER



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WILLARD AIRPORT
SAVOY. ILLINOIS

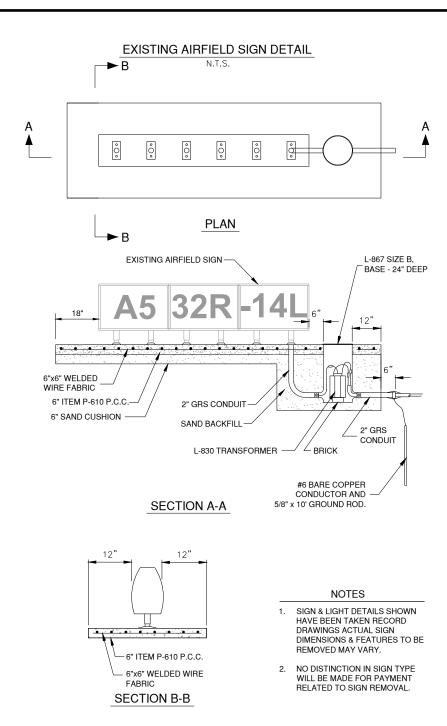
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IL. PROJ. NO. CMI-4606				
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DRAWN BY:			DPA	
CHECKED BY:			MJD	
ADDDOVED BY:			CBC	

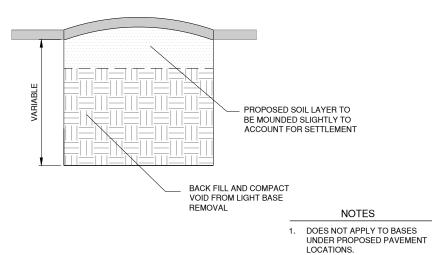
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EL506

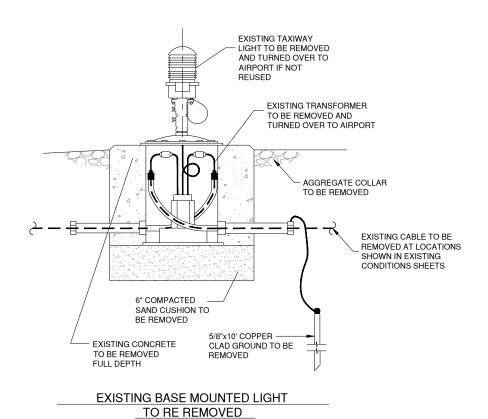
39





COMPLETED BASE MOUNTED LIGHT REMOVAL

N.T.S.



N.T.S.

**NOVEMBER 15, 2019** CONSTRUCT TAXIWAY A5



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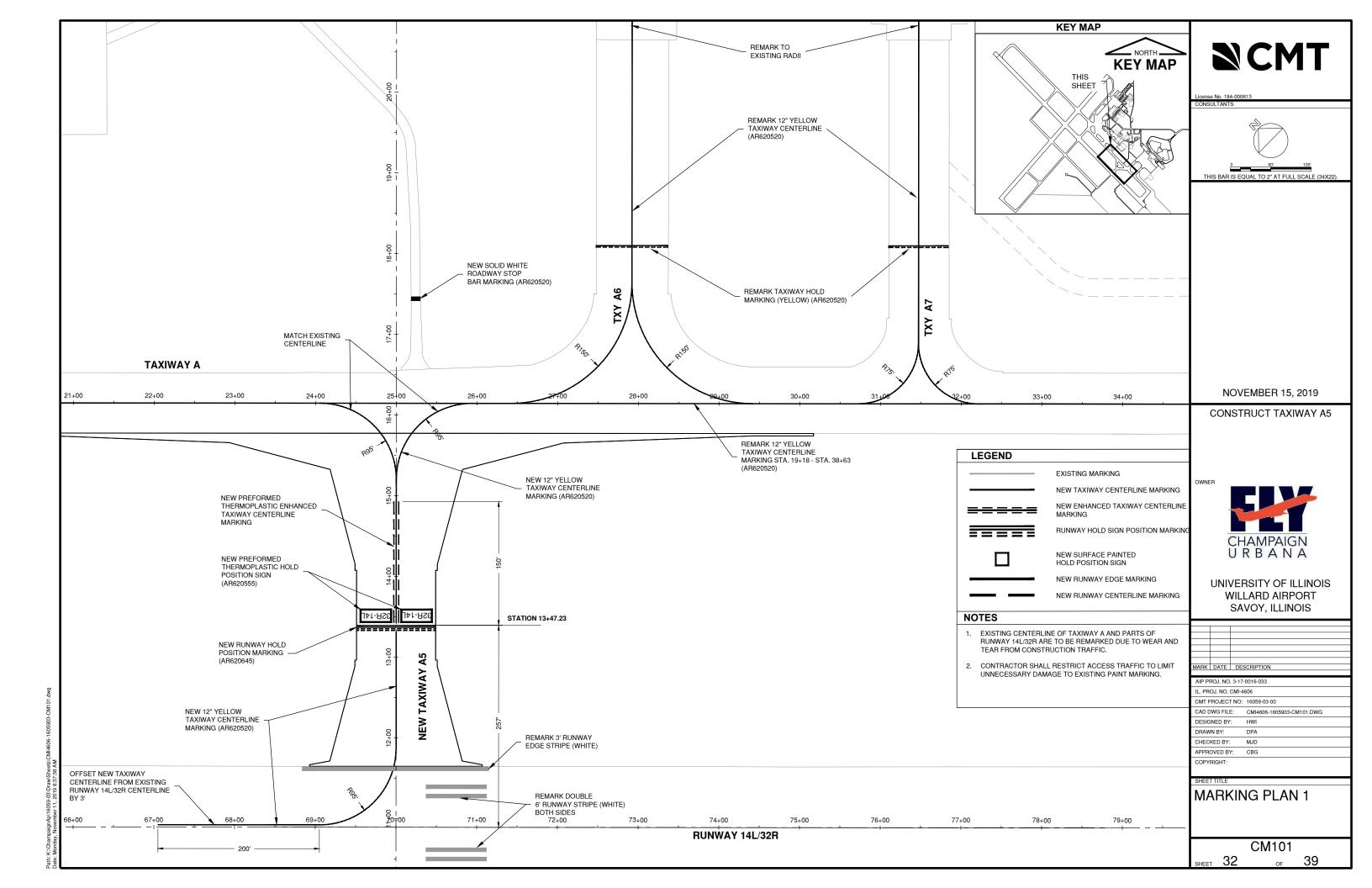
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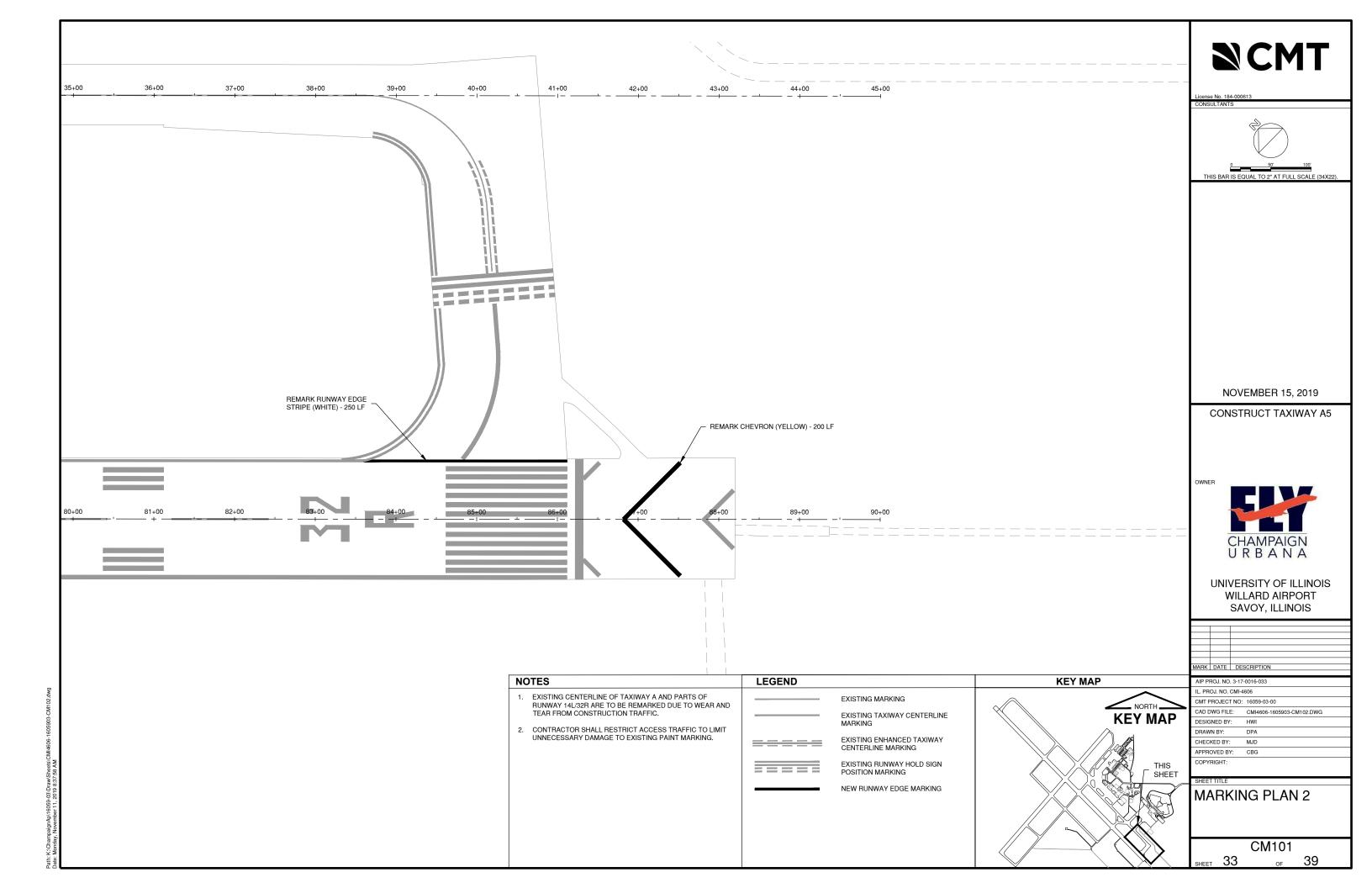
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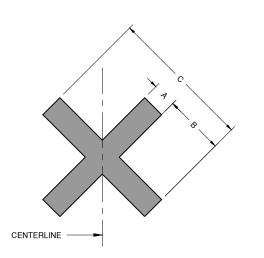
SHEET 31

SIGN BASE AND LIGHT REMOVAL DETAIL

> EL507 39





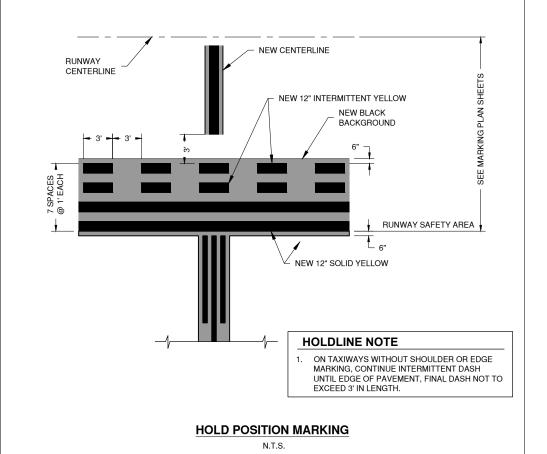


	DIMENSION			
MARKING TYPE	Α	В	С	
CLOSED RUNWAY	8'	25'	60'	
CLOSED TAXIWAY	4'	12.5'	30'	

#### **TEMPORARY RUNWAY CLOSURE** MARKING

#### TEMPORARY CLOSURE NOTE

PAINTING OF THE TEMPORARY CLOSURE MARKINGS IS NOT REQUIRED, MARKING IS TO BE AN OPTION.



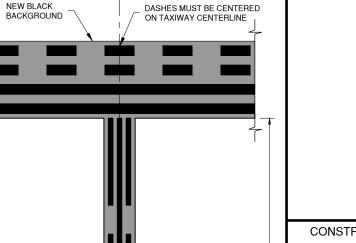
#### MARKING NOTE

12" YELLOW

**TAXIWAY CENTERLINE ENHANCED** 

- ALL NEW WATER BORNE PAVEMENT MARKING (RED, YELLOW, WHITE) WILL BE PAID UNDER AR620520.
- 2. ALL NEW AIRFIELD PAVEMENT MARKING SHALL HAVE REFLECTIVE BEADS & 6" BLACK BORDER PAID UNDER AR620525.
- 3. BLACK BORDER DOES NOT RECEIVE REFLECTIVE BEADS.
- 4. CLOSED 'X' MARKERS DO NOT RECEIVE BLACK BORDERS.



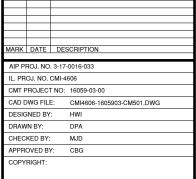


CONSTRUCT TAXIWAY A5



CHAMPAIGN URBANA

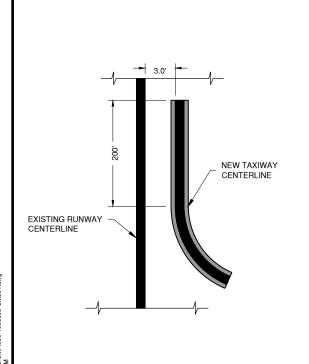
UNIVERSITY OF ILLINOIS **WILLARD AIRPORT** SAVOY, ILLINOIS



**MARKING DETAILS 1** 

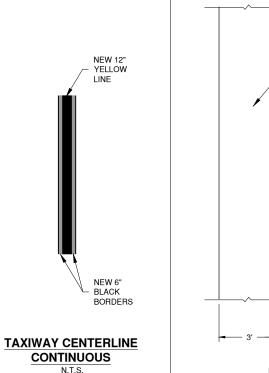
CM501 HEFT 34 39

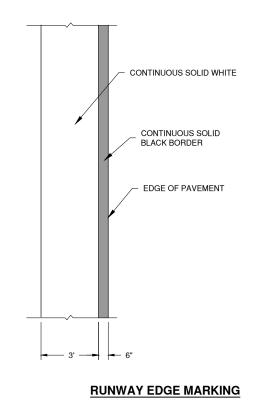
6" BLACK 6" BLACK 6" YELLOW 6" YELLOW CONTINUOUS SOLID WHITE 3" BLACK 3" BLACK / 3" BLACK CONTINUOUS SOLID OUTER BLACK BORDER BORDER EDGE OF PAVEMENT **ENHANCED TXY CENTERLINE NOTE** REGARDLESS OF CENTERLINE WIDTH, THE DASHED LINES PROVIDED BY THE ENHANCEMENTS WILL ALWAYS BE 6" IN 2. FIRST DASHED MUST START 6" FROM NEW 6" OR 12" CENTERLINE (SEE MARKING PLAN)

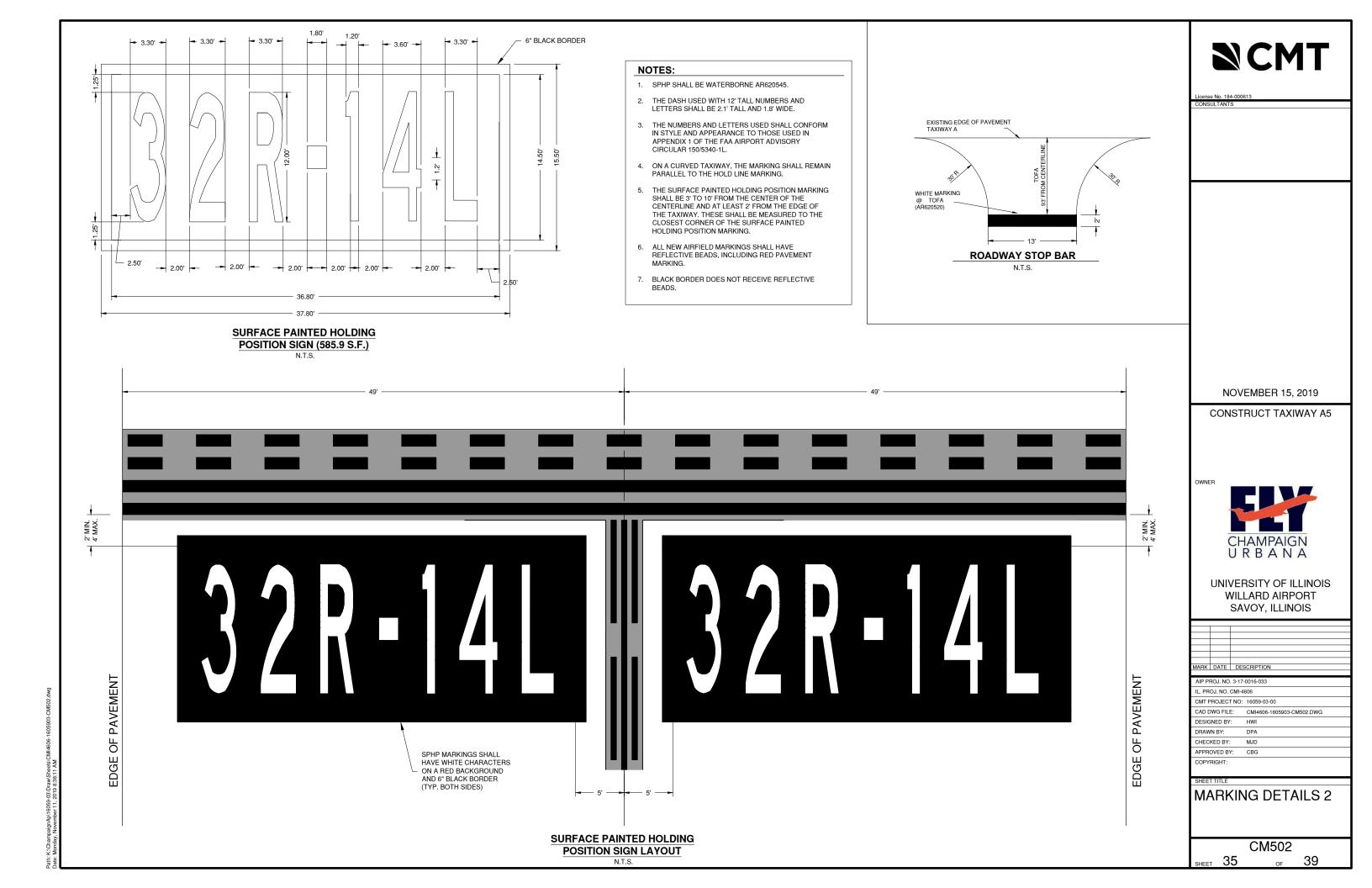


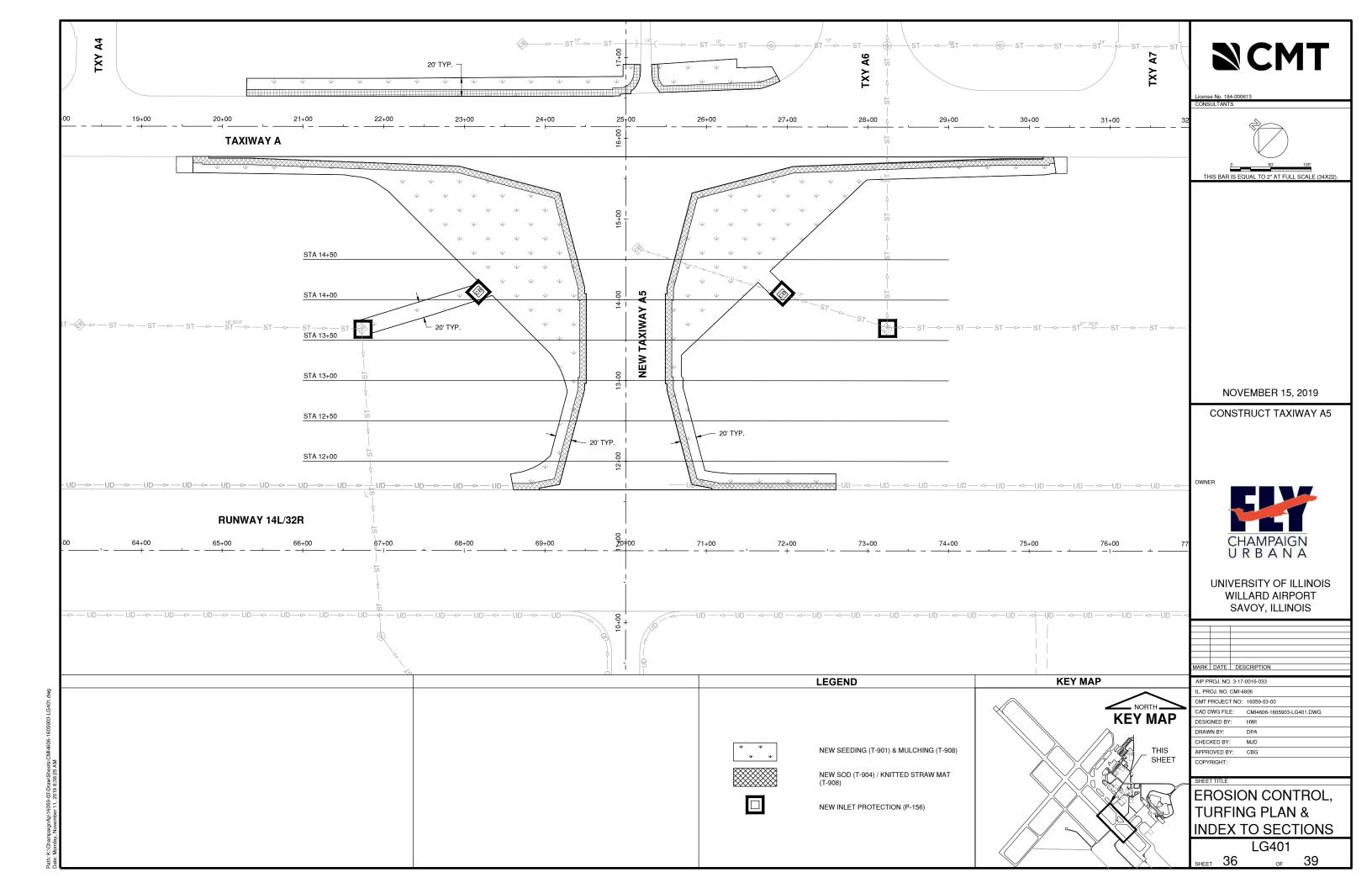
**TAXIWAY CENTERLINE AT** 

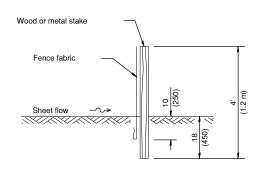
**RUNWAY CENTERLINE MARKING** 



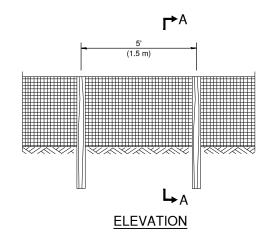


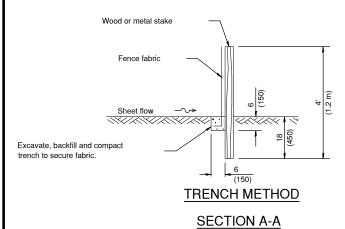




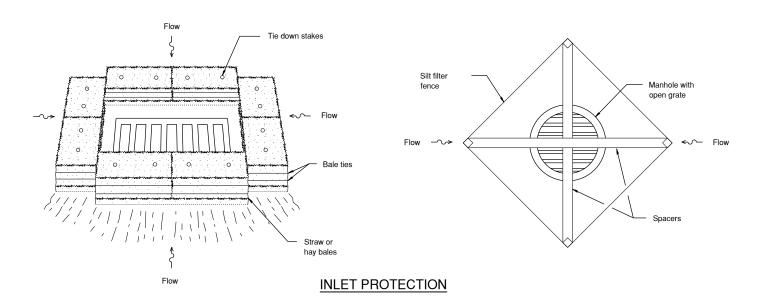


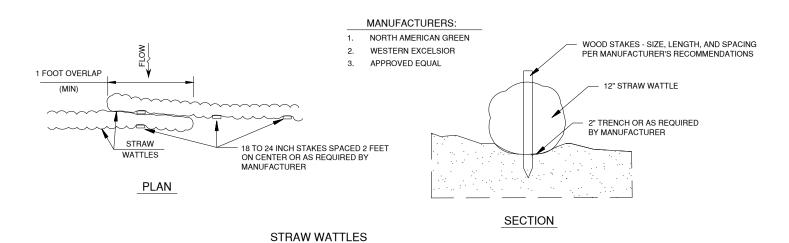
#### SLICE METHOD





SILT FILTER FENCE AS A PERIMETER EROSION BARRIER





N.T.S.

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**NCMT** 

CHAMPAIGN U R B A N A

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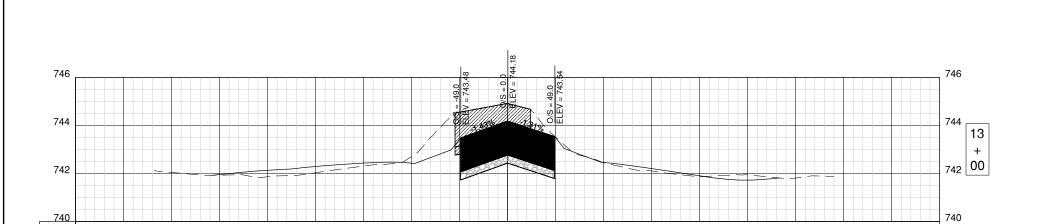
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DESIGNED BY:		HWI			
DRAWN BY:		DPA			
CHECKED BY:		MJD			
APPR	OVED B	Y:	CBG		
COPY	RIGHT:				

SHEET TITLE

EROSION CONTROL DETAILS

LG501 of 39

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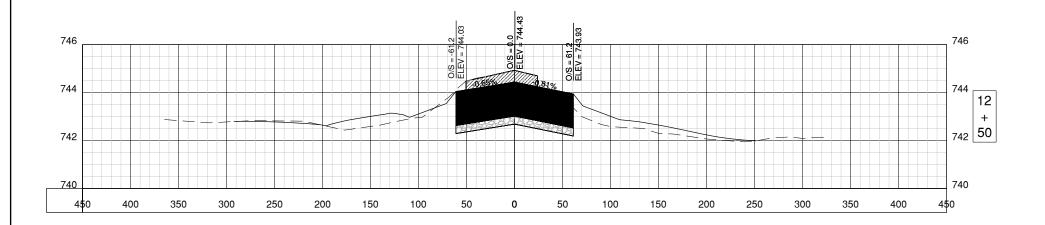
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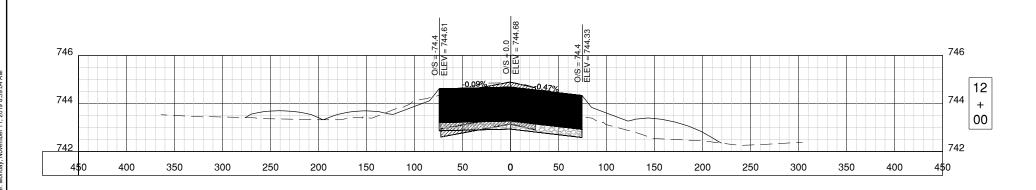
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COPYRIGHT: SHEET TITLE

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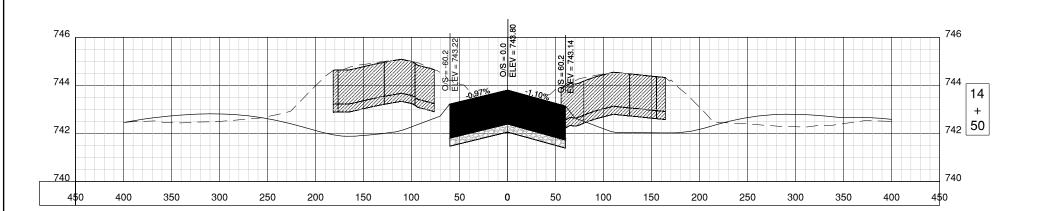
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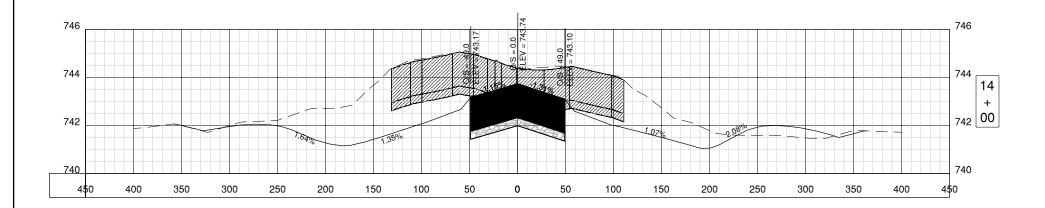
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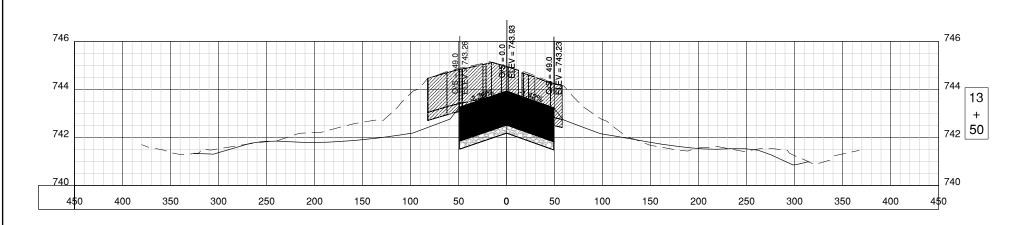
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MARK DATE DESCRIPTION AIP PROJ. NO. 3-17-0016-033

IL. PROJ. NO. CMI-4606 CMT PROJECT NO: 16059-03-00

CAD DWG FILE: 1605903-C-7200.DWG

DESIGNED BY: HWI DRAWN BY: CHECKED BY: MJD

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CROSS SECTIONS 2

CS702 SHEET 39 39 OF