**TOTAL SHEETS - 24** 

# **CONSTRUCTION PLANS**

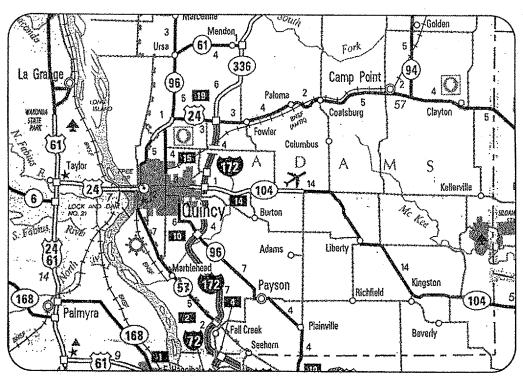
**FOR** 

## QUINCY REGIONAL AIRPORT - BALDWIN FIELD

QUINCY, ADAMS COUNTY, ILLINOIS REALIGN AND WIDEN TAXIWAY "C"

#### SCOPE OF WORK

THE PROJECT SCOPE CONSISTS OF REALIGNING AND WIDENING TAXIWAY "C" FROM A WIDTH OF 50 FT TO A WIDTH OF 60 FT. THE REALIGNMENT WILL UTILIZE 11" PORTLAND CEMENT CONCRETE (PCC) PAVEMENT, THE WIDENING COMPLETED USING BITUMINOUS PAVEMENT. ASSOCIATED WORK WILL INCLUDE PAVEMENT REMOVAL, EXCAVATION. DRAINAGE, CABLING AND LIGHTING, PAVEMENT MARKING, SEEDING, MULCHING, AND THE PLACEMENT OF EROSION CONTROL BLANKET



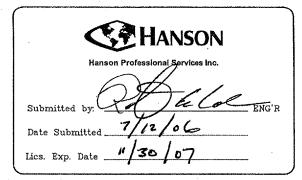
## LOCATION

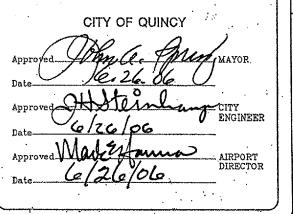
ILL. PROJ.: UIN-3338 3-17-0085-XX A.I.P. PROJ.: 39° 56' 33" LATITUDE:

LONGITUDE: **ELEVATION:** 

91° 11' 40" 769.0' M.S.L. JULY 12, 2006

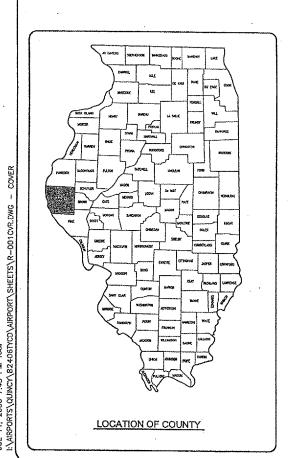






HEJ Project No.	HEI Project No. 82406TYCD 0240	0240
Filenome	R-001CVR,DWG	JWG
Scole	N/A	
- Jack	06/19/06	
	***	
LAYOUT	RAW	06/19
NWAGG	RAK	06/19

HANSON



ADAMS COUNTY, ILLINOIS

HANSON

REALIGN AND
WIDEN TAXIWAY "C"
SUMMARY OF QUANTITIES
AND
INDEX TO SHEETS

SUMMARY OF QUANTITIES						
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES	AS BUILT		
AR108158	1/C #8 5 KV UG CABLE IN UD	L.F.	2,800			
AR110502	2-WAY CONCRETE ENCASED DUCT	L.F.	70			
AR125410	MITL-STAKE MOUNTED	EA.	25			
AR125415	MITL-BASE MOUNTED	EA.	3			
AR125443	TAXI GUIDANCE SIGN, 3 CHARACTER	EA.	1			
AR125565	SPLICE CAN	EA.	1	***************************************		
AR125901	REMOVE STAKE MOUNTED LIGHT	EA.	27			
AR125902	REMOVE BASE MOUNTED LIGHT	EA.	4			
AR125904	REMOVE TAXI GUIDANCE SIGN	EA.	1			
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1			
AR150540	HAUL ROUTE	L.S.	1			
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	1,552			
AR155540	BY-PRODUCT LIME	TON	293			
AR155616	SOIL PROCESSING 16"	S.Y.	6,760			
AR156511	DITCH CHECK	EA.	3			
AR156520	INLET PROTECTION	EA.	5			
AR156531	EROSION CONTROL BLANKET	S.Y.	1,758			
AR209510	CRUSHED AGGREGATE BASE COURSE	TON	2,000	<b></b>		
AR401610	BITUMINOUS SURFACE COURSE	TON	236			
AR401655	BUTT JOINT CONSTRUCTION	S.Y.	323	·		
AR401900	REMOVE BITUMINOUS PAVEMENT	S.Y.	3,395			
AR501511	11" PCC PAVEMENT	S.Y.	6,029	<b></b>		
AR501530	PCC TEST BATCH	EA.	1			
AR602510	BITUMINOUS PRIME COAT	GAL.	145	ļ		
AR603510	BITUMINOUS TACK COAT	GAL.	212			
AR620520	PAVEMENT MARKING — WATERBORNE	S.F.	1,947			
AR620525	PAVEMENT MARKING - BLACK BORDER	S.F.	2,003	<b></b>		
AR620900	PAVEMENT MARKING REMOVAL	S.F.	1.112			
AR701512	12" RCP, CLASS IV	L.F.	246			
AR705526	6" PERFORATED UNDERDRAIN W/SOCK	L.F.	1,882			
AR705546	6" NON PERFORATED UNDERDRAIN	L.F.	50			
AR705630	UNDERDRAIN INSPECTION HOLE	EA.	6			
AR705640	UNDERDRAIN CLEANOUT	EA.	2			
AR705900	REMOVE UNDERDRAIN	L.F.	1,653			
AR751410	INET	EA.	1,000			
AR800449	WEED CONTROL LIGHT RING	EA.	28			
AR901510	SEEDING SEEDING	AC.	3.2			
AR908510	MULCHING	AC.	3.2			

	INDEX TO SHEETS						
SHE		DESCRIPTION					
	1	COVER SHEET					
	2	SUMMARY OF QUANTITIES AND INDEX TO SHEETS					
	3	PROPOSED SAFETY PLAN					
	4	PROPOSED CONSTRUCTION PLAN					
	5	TYPICAL SECTIONS, PAVING NOTES, AND EARTHWORK DISTRIBUTION					
	6	PROPOSED STORMWATER POLLUTION PREVENTION PLAN					
	7	PROPOSED PLAN AND PROFILE					
	8	Proposed Staking Plan					
!	9	PROPOSED DRAINAGE PLAN					
-	10	Proposed drainage details					
	11	PROPOSED JOINTING PLAN					
	12	PROPOSED JOINTING DETAILS					
	13	EXISTING ELECTRICAL PLAN					
	14	PROPOSED ELECTRICAL PLAN					
	15	PROPOSED ELECTRICAL DETAILS					
	16	PROPOSED ELECTRICAL DETAILS					
<u> </u>	17	PROPOSED ELECTRICAL NOTES					
	18	PROPOSED ELECTRICAL NOTES					
	19	PROPOSED MARKING PLAN					
	20	PROPOSED CROSSSECTIONS STA. 145+47 TO STA. 148+50					
	21	PROPOSED CROSS-SECTIONS STA. 149+00 TO STA. 150+58					
	22	PROPOSED CROSS-SECTIONS STA. 151+00 TO STA. 153+38,13					
	23	PROPOSED CROSS-SECTIONS STA. 153+68.13 TO STA. 156+00					
	24	PROPOSED CROSS-SECTIONS STA. 156+18.13 TO STA. 158+23.49					

THE PROJECT SCOPE CONSISTS OF REALIGNING AND WIDENING TAXIWAY "C" FROM A WIDTH OF 50 FT TO A WIDTH OF 60 FT. THE REALIGNMENT WILL UTILIZE 11" PORTLAND CEMENT CONCRETE (PCC) PAVEMENT, THE WIDENING COMPLETED USING BITUMINOUS PAVEMENT. ASSOCIATED WORK WILL INCLUDE PAVEMENT REMOVAL, EXCAVATION, DRAINAGE, CABLING AND LIGHTING. PAVEMENT MARKING, SEEDING, MULCHING, AND THE PLACEMENT OF EROSION

#### AIRPORT SECURITY NOTE

THE AIRPORT SPONSOR MAY PROVIDE ADDITIONAL GUIDANCE AND TRAINING FOR AIRPORT SECURITY MEASURES. AIRPORT SECURITY WILL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR WILL CLOSE AND LOCK THE EXISTING GATE IN THE HAUL ROUTE AT THE END OF EACH WORKING DAY. ANY ACCESS GATES WILL BE CLOSED AT ALL TIMES WHEN NOT IN USE. IF CONTINOUS HAULING IS REQUIRED, THEN THE GATE ACCESS WILL BE MONITORED TO PREVENT A BREACH FROM OUTSIDE, NON-CONSTRUCTION RELATED TRAFFIC.

#### UTILITY NOTE

THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND AGENCIES WHICH HAVE LINES OR CONDUITS IN THE PROPOSED WORK AREA. ALL LINES AND CONDUITS SHALL BE LOCATED AND IDENTIFIED FOR DEPTH BEFORE ANY EXCAVATION BEGINS. THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO ACCOMPLISH THE ABOVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL UNDERGROUND NON-JULIE UTILITIES LOCATED WITHIN THE PROPOSED CONSTRUCTION LIMITS. THESE UNDERGROUND IMPROVEMENTS WILL BE LOCATED AT THE CONTRACTOR'S OWN EXPENSE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

#### HEIGHT OF CONSTRUCTION EQUIPMENT

THE MAXIMUM ANTICIPATED HEIGHT OF THE CONSTRUCTION EQUIPMENT WILL BE 25 FEET. THE TALLEST EQUIPMENT IS EXPECTED TO BE A SEMI TRUCK WITH TRAILER IN THE UP POSITION.

#### HAUL ROUTE AND VEHICLE PARKING

THE CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND PARKING AREA AS SHOWN ON THIS SHEET AND IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE PROPOSED PARKING AREA WILL BE APPROXIMATELY 250' X 250', POSITIONED AS SHOWN. THE HAUL ROUTE WILL BE LOCATED AS SHOWN. A SWING GATE (10' HT.) SHALL BE INSTALLED AT THE LOCATION SHOWN, AND WILL REMAIN FOLLOWING THE CONCLUSION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE OF THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AND AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL GRADE, FERTILIZE, SEED AND MULCH THE HAUL ROUTE AND PARKING AREA AS NEEDED TO RESTORE IT TO ITS ORIGINAL STATE. CONSTRUCTION, MAINTENANCE, AND ANY REQUIRED RESTORATION OF THE HAUL ROUTE AND PARKING AREA. INCLUDING LABOR. MATERIALS, AND FOLIPMENT TO INSTALL THE PROPOSED SWING GATE, PIPE CULVERT, PERMIT FEES, AND OTHER INCIDENTAL ITEMS ASSOCIATED WITH ESTABLISHING THE TEMPORARY ACCESS TO IL ROUTE 104 WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

#### CONTRACTOR RESPONSIBILITIES

THE CONTRACTOR'S EQUIPMENT PARKING AND STORAGE AREA WILL BE AS SHOWN ON THIS SHEET. THE CONTRACTOR'S EMPLOYEES WILL PARK THEIR VEHICLES IN THIS AREA. ONLY CONTRACTOR VEHICLES WILL BE ALLOWED OUTSIDE THIS AREA.

THE CONTRACTOR AND HIS EMPLOYEES WILL BE RESTRICTED TO THE WORK AREA AND ALL OTHER AREAS OF THE AIRPORT ARE "OFF LIMITS" TO THEM.

THE CONTRACTOR SHALL KEEP RUNWAY 4-22 OPEN AT ALL TIMES AND MAINTAIN CONTINUOUS ACCESS TO ALL HANGARS AND ADMINISTRATIVE AREAS.

ALL WORK PERFORMED SHALL BE DONE IN A ORDERLY AND EFFECTIVE MANNER TO MINIMIZE ALL RUNWAY CLOSURES.

TRENCHES AND/OR HOLES THAT REMAIN OPEN OVERNIGHT WILL REQUIRE BARRICADES AND/OR CONES TO INDICATE THEIR LOCATION AND PREVENT ACCIDENTAL ENTRANCE, WITHIN THE PROJECT AREA AND OUTSIDE ANY ACTIVE SAFETY AREAS.

#### BARRICADES AND TRAFFIC CONES

IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND TRAFFIC CONES AS DIRECTED BY THE AIRPORT MANAGER OR HIS DESIGNATED REPRESENTATIVE. THE BARRICADES WILL BE EQUIPPED WITH RED FLASHING OR RED STEADY-BURN LIGHTS AND 20" SQUARE ORANGE FLAGS. THE BARRICADES, THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IM SHALL AL RESTORE ADDITION.

SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE			CRITICAL POINT (	DATA		
RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.	POIN	T NO.	DESCRIPTION	LATITUDE	LONGITUDE	ELEVATION
CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 1-800-892-0123.		1	AIRCRAFT OPERATION LINE @ C OF TXY C	39*56'05.87"	91"11'15.26"	767.20

4 PK NAIL AT RUNWAY END 31

BENCHMARK DATA

NORTHING

1,192,998.5670

EASTING

2,009,012.5220

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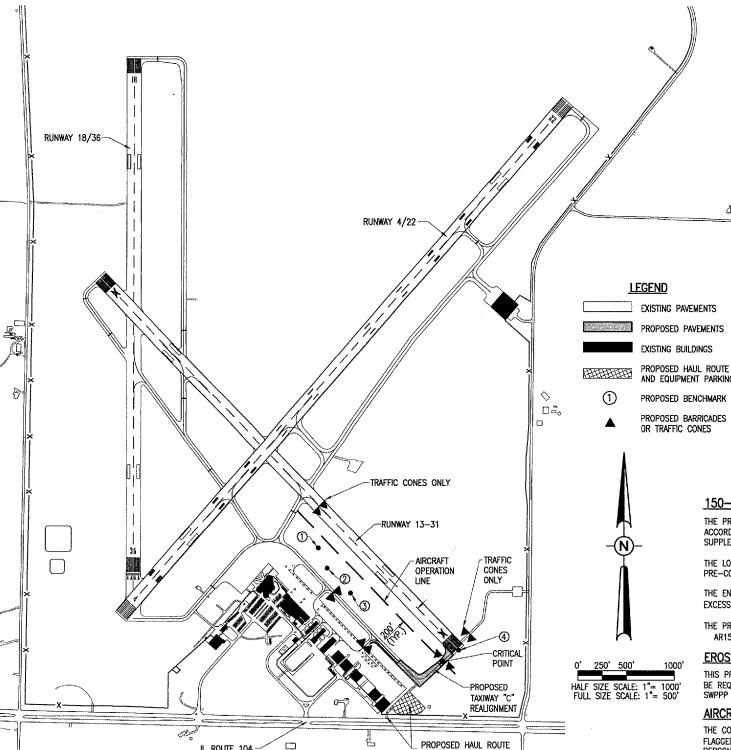
1.191.936.0250 2.010.470.4040

DESCRIPTION

1 CP #61 STAINLESS STEEL ROD IN SLEEVE ±200' SE OF WINDSOCK POST

CB-25 CHISELED "□" NE CORNER CONCRETE AROUND DROP INLET

2 CB-24 CHISELED "□" NE CORNER CONCRETE AROUND DROP INLET



AND FOUIPMENT PARKING

IL ROUTE 104



RUNWAY C YELLOW IN COLOR

#### DETAIL OF CROSS FOR CLOSED RUNWAY "NOT TO SCALE"

NOTE:

COST OF CONSTRUCTING, PLACING, MAINTAINING AND REMOVING CROSSES WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. ALL RUNWAY CLOSURES WILL BE IN ACCORDANCE WITH ALL FAA ADVISORY CIRCULARS THAT RELATE TO RUNWAY CLOSURES DURING CONSTRUCTION OPERATIONS. THE RUNWAY CLOSURE PROCEDURES SHALL BE REVIEWED BY THE AIRPORT MANAGER AND COORDINATED WITH THE RESIDENT ENGINEER. THE CROSSES WILL BE YELLOW IN COLOR AND SHALL BE MADE OF A SUITABLE MATERIAL AS APPROVED BY THE RESIDENT ENGINEER AND REVIEWED BY THE AIRPORT MANAGER. THE CROSSES WILL BE PLACED OVER THE NUMERALS AND SECURED IN A MANNER APPROVED BY THE AIRPORT MANAGER. PROPOSED CROSSES WILL BE PLACED EACH DAY THE RUNWAY IS CLOSED AND REMOVED WHEN THE RUNWAY IS RE-OPENED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PLACEMENT AND REMOVAL OF THE CROSSES.

#### J.U.L.I.E. INFORMATION

COUNTY: OUINCY TOWNSHIP GLIMER SECTION NO.:

NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

QUINCY REGIONAL AIRPORT - BALDWIN FIELD ADDRESS:

1645 HIGHWAY 104 QUINCY, ILLINOIS 62305 217-885-3285

#### PROPOSED SAFETY PLAN

GENERAL - THE QUINCY REGIONAL AIRPORT IS COMPRISED OF THREE RUNWAYS. RUNWAY 4-22 WILL REMAIN OPEN AT ALL TIMES. THE PROPOSED CONSTRUCTION WILL NECESSITATE CLOSING RUNWAY 13-31 ANY TIME THE CONTRACTOR IS WORKING WITHIN 200' OF THE RUNWAY CENTERLINE. PRIOR TO OPENING RUNWAY 13-31 FOR USE, THE CONTRACTOR WILL SMOOTH GRADE ALL AREAS WITHIN THE SAFETY AREA TO THE SATISFACTION OF THE RESIDENT ENGINEER, ENSURE RUNWAY LIGHTING IS OPERABLE, AND REMOVE ALL TRAFFIC CONES, BARRICADES, AND CLOSURE CROSSES. ALL WORK INCLUDED IN OPENING AND CLOSING THE RUNWAY WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. THE AIRPORT MANAGER, OR HIS DESIGNATED REPRESENTATIVE, WILL ISSUE ALL NOTICES TO AIRMAN (NOTAM) RELATED TO OPENING AND CLOSING PAVEMENTS THROUGHOUT THE PROJECT

IDENTIFICATION - WHEN THE CONTRACTORS VEHICLES AND EQUIPMENT ARE ON AND EQUIPMENT PARKING AREA THE AIRPORT THEY SHALL BE PROPERLY MARKED WITH THREE (3') FOOT SQUARE CHECKERED FLAGS (INTERNATIONAL ORANGE AND WHITE). THE CONTRACTOR WILL ALSO PROVIDE WORKERS WITH SOME TYPE OF TAG OR GARMENT TO IDENTIFY THE PERSON AS BEING PART OF THE CONSTRUCTION CREW.

> RADIO CONTROL - THE CONTRACTOR WILL BE REQUIRED TO BE IN TWO-WAY RADIO CONTACT (123.00 MHz.) WITH THE AIRPORT UNICOM. THIS WILL KEEP THE CONTRACTOR IN CONSTANT CONTACT WITH THE QUINCY REGIONAL AIRPORT AND ENABLE THE AIRPORT TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTIC EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

#### 150-ENGINEER'S FIELD OFFICE NOTES

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE FURNISHED, MAINTAINED, AND REMOVED IN ACCORDANCE WITH ITEM AR150510 "ENGINEER'S FIELD OFFICE" AS STATED ON PAGE 168 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THE LOCATION OF THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE DETERMINED AT THE

THE ENGINEERING FIRM WILL MAKE PAYMENT FOR ALL LONG DISTANCE TELEPHONE CALLS IN EXCESS OF ONE HUNDRED DOLLARS (\$100.00) PER MONTH.

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE PAID FOR UNDER ITEMS: AR150510 ENGINEER'S FIELD OFFICE \_\_\_\_\_ 1 L.S.

#### **EROSION CONTROL**

THIS PROJECT WILL DISTURB MORE THAN 1 ACRE OF LAND, THEREFORE A N.P.D.E.S. PERMIT WILL BE REQUIRED AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IMPLEMENTED. THE SWPPP IS SHOWN ON SHEET 6.

#### AIRCRAFT OPERATION LINE

THE CONTRACTOR WILL LOCATE THIS LINE AT THE START OF CONSTRUCTION AND WILL PLACE FLAGGED LATH EVERY 150' ALONG IT. THIS LINE WILL BE THE LIMITS THAT ALL CONTRACTOR PERSONNEL MAY VENTURE WHEN A RUNWAY IS NOT CLOSED. THE CONTRACTOR WILL MAINTAIN THE LATH LINE FOR RUNWAYS THROUGHOUT THE PROJECT.

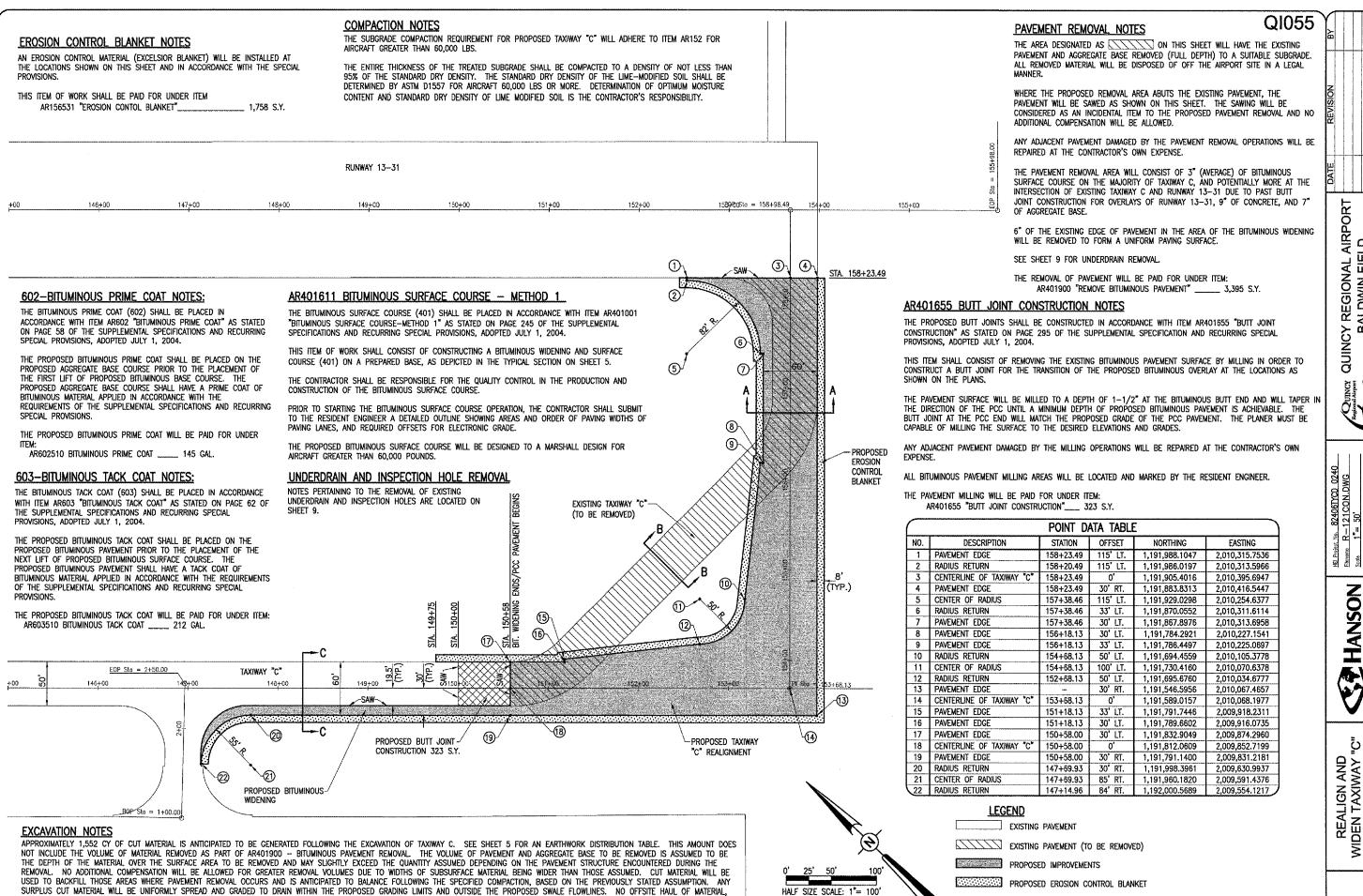
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BALDWIN FIELD AS COUNTY, ILLINOIS REGIONAL AIRP ADAMS QUINCY

HANSON

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REALIGN AND WIDEN TAXIWAY



FULL SIZE SCALE:

OTHER THAN THE PAVEMENT TO BE REMOVED, IS ANTICIPATED.

PROPOSED BUTT JOINT CONSTRUCTION

**AIRPORT** 

REGIONAL

QUINCY

HANSON

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ALDWIN

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ILLINO

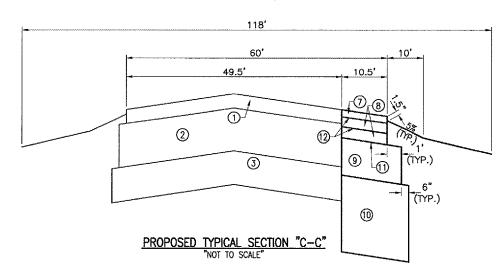
ADAMS

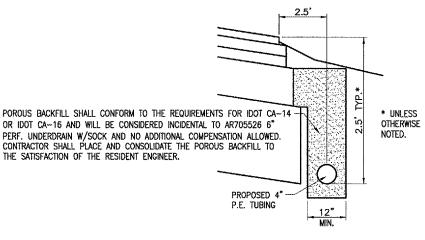
#### LEGEND FOR TYPICAL SECTIONS "A-A". "B-B" & "C-C"

- 1) EXISTING 401 BITUMINOUS SURFACE COURSE (3" AVG. DEPTH)
- 2 EXISTING 501 PCC PAVEMENT (9" DEPTH)
- (3) EXISTING 209 CRUSHED AGGREGATE BASE COURSE (7" DEPTH)
- 4 PROPOSED 501 PCC PAVEMENT (11" DEPTH)
- 5 PROPOSED 209 AGGREGATE BASE (5" DEPTH)
- (6) PROPOSED 155 LIME MODIFIED SUBGRADE (16" DEPTH)
- 7 PROPOSED 401 BITUMINOUS SURFACE COURSE (1-1/2" DEPTH, COMPACTED)
- (8) PROPOSED 401 BITUMINOUS BASE COURSE (2-1/4" DEPTH, COMPACTED)
- (9) PROPOSED 209 CRUSHED AGGREGATE BASE COURSE (8" DEPTH)
- (10) PROPOSED 155 LIME MODIFIED SUBGRADE (16" DEPTH)
- 11) PROPOSED 602 BITUMINOUS PRIME COAT (0.35 GAL./S.Y.)
- (12) PROPOSED 603 BITUMINOUS TACK COAT (0.05 GAL./S.Y., MIN.\*)

#### NOTE:

\* QUANTITY BASED ON RATE OF 0.15 GAL/SY.





### UNDERDRAIN DETAIL "NOT TO SCALE"

#### SOIL PROCESSING:

THE STANDARD DRY DENSITY OF THE LIME—MODIFIED SOIL SHALL BE DETERMINED BY ASTM D1557 FOR AIRCRAFT 60,000 LBS OR MORE. DETERMINATION OF OPTIMUM MOISTURE CONTENT AND STANDARD DRY DENSITY OF LIME MODIFIED SOIL IS THE CONTRACTOR'S RESPONSIBILITY.

LIME MODIFIED SOIL PROCESSING SHALL CONSIST OF CONSTRUCTING A 16 INCH COURSE OF A MIXTURE OF SOIL, LIME, AND WATER IN ACCORDANCE WITH THE RATES AND METHODS PROVIDED.

THE BY-PRODUCT LIME QUANTITY WAS CALCULATED AT 6% OF THE DRY SOIL WEIGHT (120 LBS/CF) MAXIMUM DENSITY. THE ACTUAL AMOUNT SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO CONSTRUCTION.

THE SUBGRADE SHALL BE CUT AND WITHIN GRADE TOLERANCE PRIOR TO LIME MODIFICATION. THE CONTRACTOR SHALL PROCESS THE SOIL TO 1-1/2' OUTSIDE THE PROPOSED PAVEMENT SURFACE ON ALL SIDES.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACCOUNT FOR ANY "FLUFF" OR "SWELL" IN THE MODIFIED SUBGRADE.

ANY SWELL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL PAYMENT WILL BE MADE FOR REMOVAL OF SWELL.

ONCE THE SPECIFIED DENSITY OF THE LIME-SOIL MIXTURE IS ACHIEVED, THE CONTRACTOR MAY START FINAL TRIMMING OPERATIONS AND PLACEMENT OF THE OVERLYING COURSE IF THE COMPACTED LIME MODIFIED LAYER IS NOT RUTTED OR DISTORTED BY THE EQUIPMENT.

THE CONTRACTOR SHALL KEEP THE LIME-SOIL MIXTURE MOIST CURED FOR A MINIMUM OF SEVEN (7) DAYS BY WATERING OR BY PLACEMENT OF THE OVERLYING COURSE.

#### PCC PAVING NOTE:

THE PROPOSED PCC CONCRETE SHALL COMPLY WITH ITEM AR501002 "PORTLAND CEMENT CONCRETE PAVEMENT METHOD II". DESIGNED FOR AIRCRAFT WEIGHT GREATER THAN 60,000 LBS.

#### AR209-CRUSHED AGGREGATE BASE COURSE NOTES

THE CRUSHED AGGREGATE BASE COURSE (209) SHALL BE PLACED IN ACCORDANCE WITH ITEM 209 "CRUSHED AGGREGATE BASE COURSE" AS STATED ON PAGE 45 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THE CRUSHED AGGREGATE BASE COURSE MATERIAL (CA-6) WILL BE USED TO CONSTRUCT A BASE COURSE FOR THE PROPOSED PAVEMENTS. THE CRUSHED AGGREGATE BASE COURSE MATERIAL WILL BE CONSTRUCTED TO THE DEPTHS SHOWN IN THE TYPICAL SECTIONS AND COMPACTED TO NOT LESS THAN 95 PERCENT DENSITY.

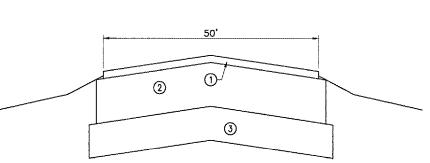
THE PROPOSED AGGREGATE FOR THE BASE COURSE MATERIAL SHALL MEET THE REQUIREMENTS OF (GRADATION "B") IN TABLE 1 OF THE SUPPLEMENTAL SPECIFICATIONS.

PROVISIONS SHALL BE MADE BY THE CONTRACTOR FOR FURNISHING WATER AT THE PLANT AND AT THE SITE OF THE WORK BY EQUIPMENT OF AMPLE CAPACITY AND OF SUCH DESIGN AS TO ASSURE UNIFORM MIXING AND APPLICATION.

THE CONTRACTOR WILL PROVIDE THE RESIDENT ENGINEER A PROCTOR CURVE SHOWING OPTIMUM DENSITY AND MOISTURE FOR THE SUPPLIED BASE COURSE MATERIAL.

THE COMPACTION CONTROL TEST TO BE USED SHALL BE FOR AIRCRAFT GREATER THAN 60,000 LBS.

IF AT THE TIME THE AGGREGATES ARE WEIGHED THEY CONTAIN MORE THAN SIX (6) PERCENT OF ABSORBED AND FREE MOISTURE BY WEIGHT, A DEDUCTION FOR THE MOISTURE IN EXCESS OF THIS AMOUNT SHALL BE MADE IN DETERMINING THE PAY QUANTITY.



	EA	RTHWORK	DISTRIBU	TION TAB	LE	
	AREA (SQUARE FEET)		VOLUME (CUBIC YARDS)		CUMULATIVE COLUMNS (CUBIC YARDS)	
STATION	CUT	FILL	CUT	FILL	CUT	FILL
145+47.00	0.00	0.00	0.00	0.00	0.00	0.00
146+00.00	1.10	0.00	1.08	0.00	1.08	0.00
147+00.00	2.10	0.00	5.93	0.00	7.01	0.00
147+14.95	20.20	0.00	6.17	0.00	13.18	0.00
147+50.00	17.60	0.20	24.53	0.13	37.71	0.13
147+73.00	21.30	0.00	16.57	0.09	54.28	0.21
148+00.00	18.10	0.30	19.70	0.15	73.98	0.36
148+50.00	15.90	0.60	31.48	0.83	105.46	1.20
149+00.00	21.90	0.90	35.00	1.39	140.46	2.59
149+50.00	21.50	1.00	40.19	1.76	180.65	4.35
150+00.00	26.80	4.30	44.72	4.91	225.37	9.25
150+15.00	53.20	3.00	22.22	2.03	247.59	11.28
150+50.00	45.20	23.50	63.78	17.18	311.37	28.46
150+58.00	41.20	52.10	12.80	11.20	324.17	39.66
151+00.00	50.70	60.90	71.48	87.89	395.65	127.55
151+18.13	63.80	59.70	38.44	40.49	434.09	168.04
151+50.00	67.50	51.20	77.49	65.45	511.58	233.49
152+00.00	76.30	57.60	133.15	100.74	644.73	334.23
152+04.00	64.20	48.40	10.41	7.85	655.14	342.08
152+68.13	31.30	40.90	113.42	106.05	768.55	448.13
153+38.13	2.40	51.60	43.69	119.91	812.24	568.04
153+68.13	3.20	48.20	3.11	55.44	815.35	623.48
153+98.13	16.30	24.40	10.83	40.33	826.18	663.82
154+68.13	120.10	13,80	176.81	49.52	1,003.00	713.34
155+00.00	62.30	21.20	107.65	20.66	1,110.65	733.99
155+50.00	72.30	39.30	124.63	56.02	1,235.28	790.01
156+00.00	82.80	59.00	143.61	91.02	1,378.89	881.03
156+18.13	39.20	53.80	40.96	37.87	1,419.85	918.90
156+50.00	8.70	37.10	28.27	53.65	1,448.12	972.55
157+00.00	9.60	30.10	16.94	62.22	1,465.12	1,034.77
157+38.46	13.40	25,60	16.38	39.67	1,481.44	1,074.44
157+50.00	0.60	19.90	2.99	9.72	1,484.44	1,084.17
158+00.00	29.40	35.40	37.78	51.20	1,512.21	1,135.37
158+23.49	60.20	45.80	38.98	35.32	1,551.19	1,170.69
				TOTAL:	1,551.19	1,170.69

#### NOTE:

THE CUT VOLUME SHOWN IS EARTHWORK ONLY AND DOES NOT INCLUDE THE VOLUME OF PAVEMENT AND AGGREGATE BASE REMOVED. THE FILL VOLUME SHOWN INCLUDES THE FILL REQUIRED TO BACKFILL THE VOID CREATED BY THE REMOVAL OF THE EXISTING PAVEMENT AND AGGREGATE BASE.

QUINCY REGIONAL AIRPORT

BALDWIN FIELD

ADAMS COUNTY, ILLINOIS

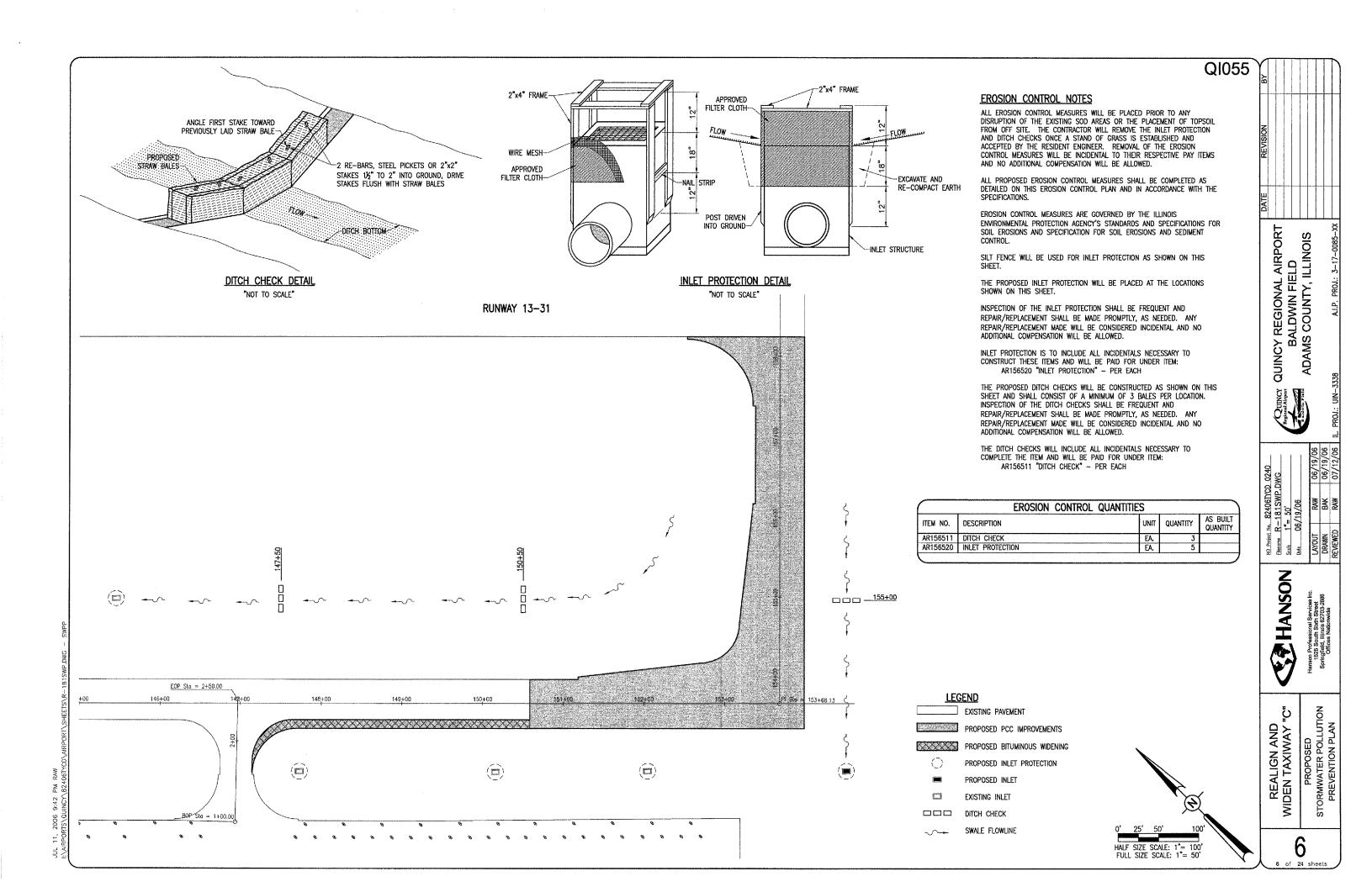
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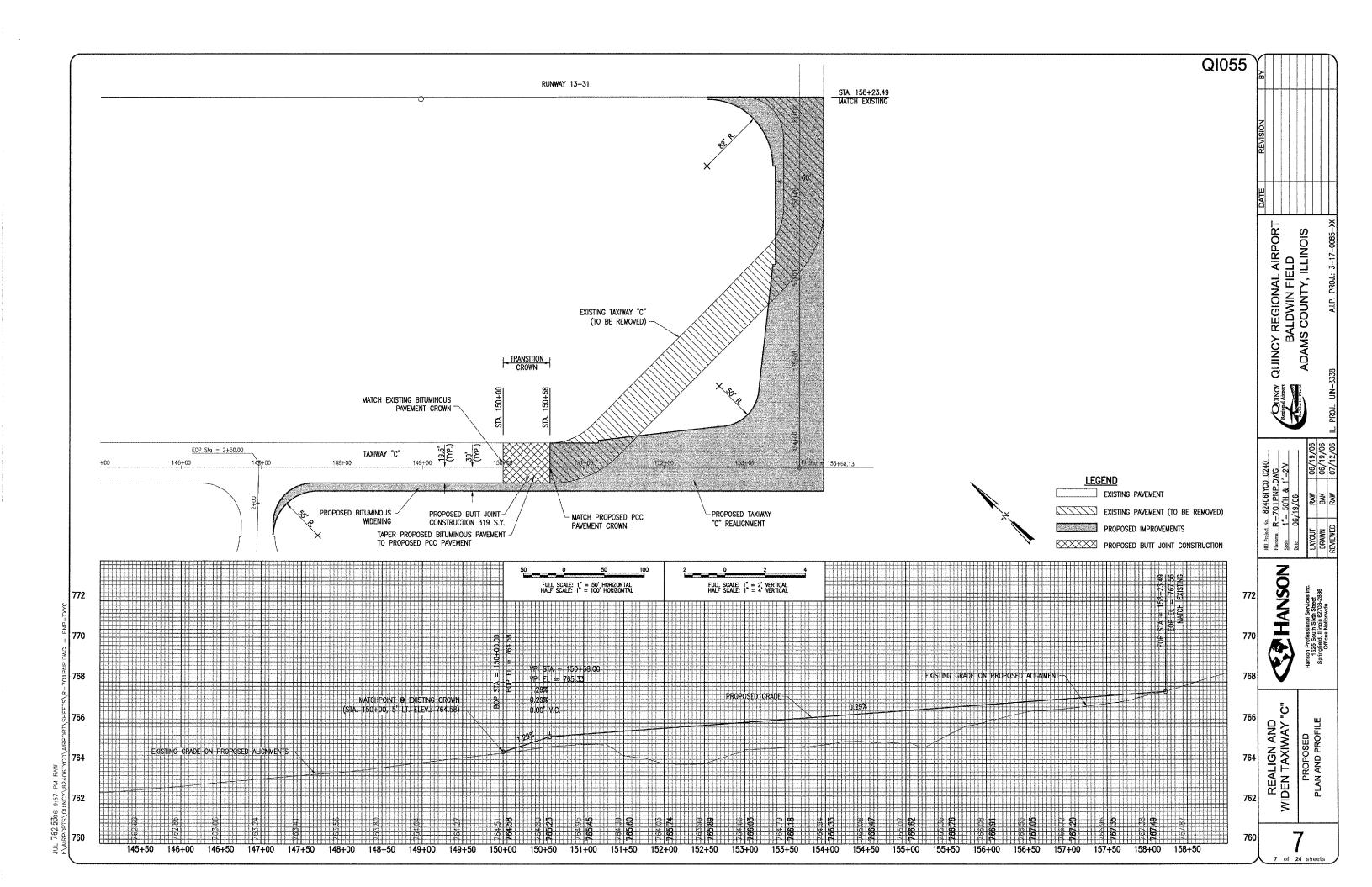
Hanson Professional Services Inc.

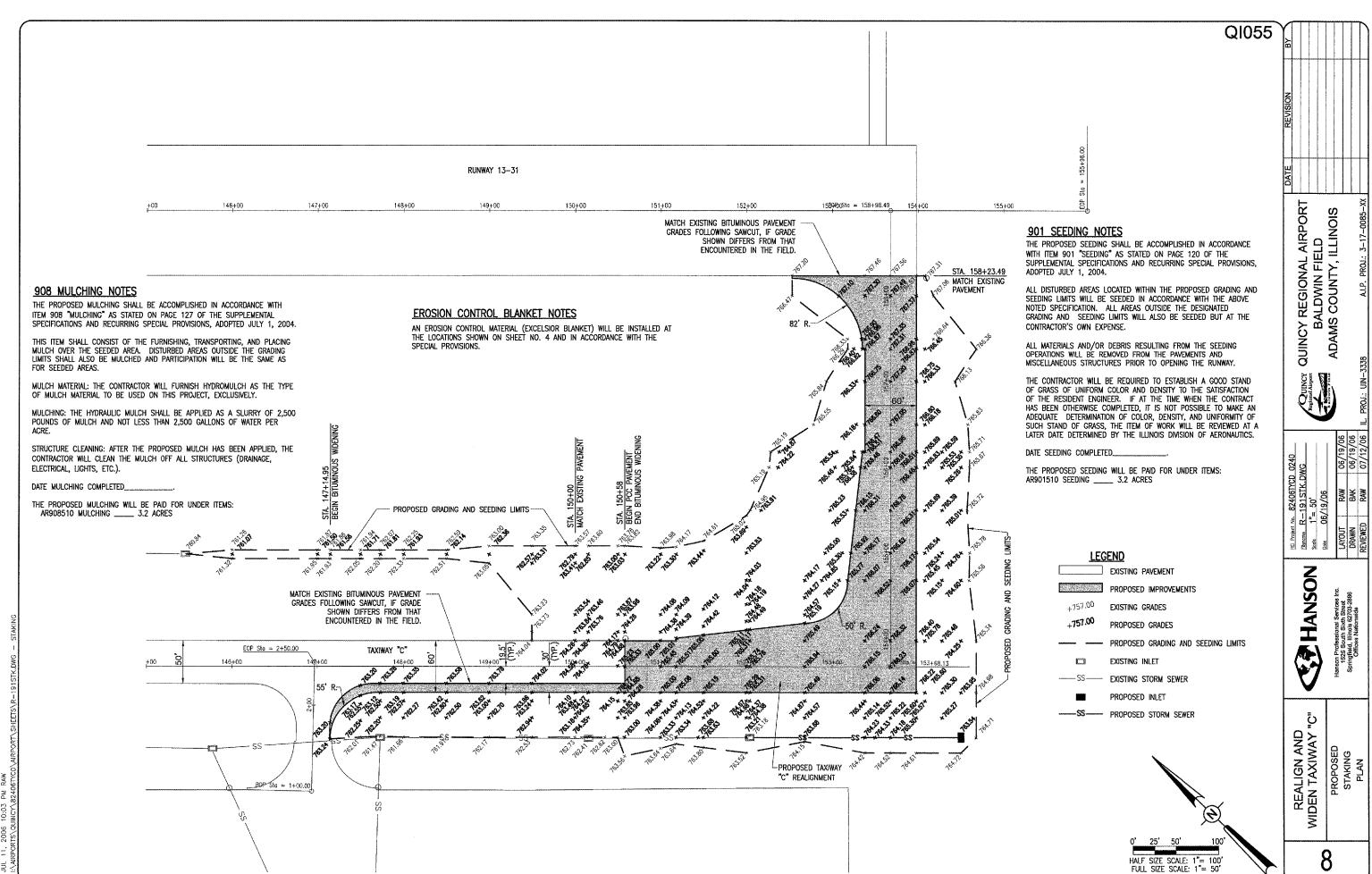
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TYPICAL SECTIONS,
PAVING NOTES, AND

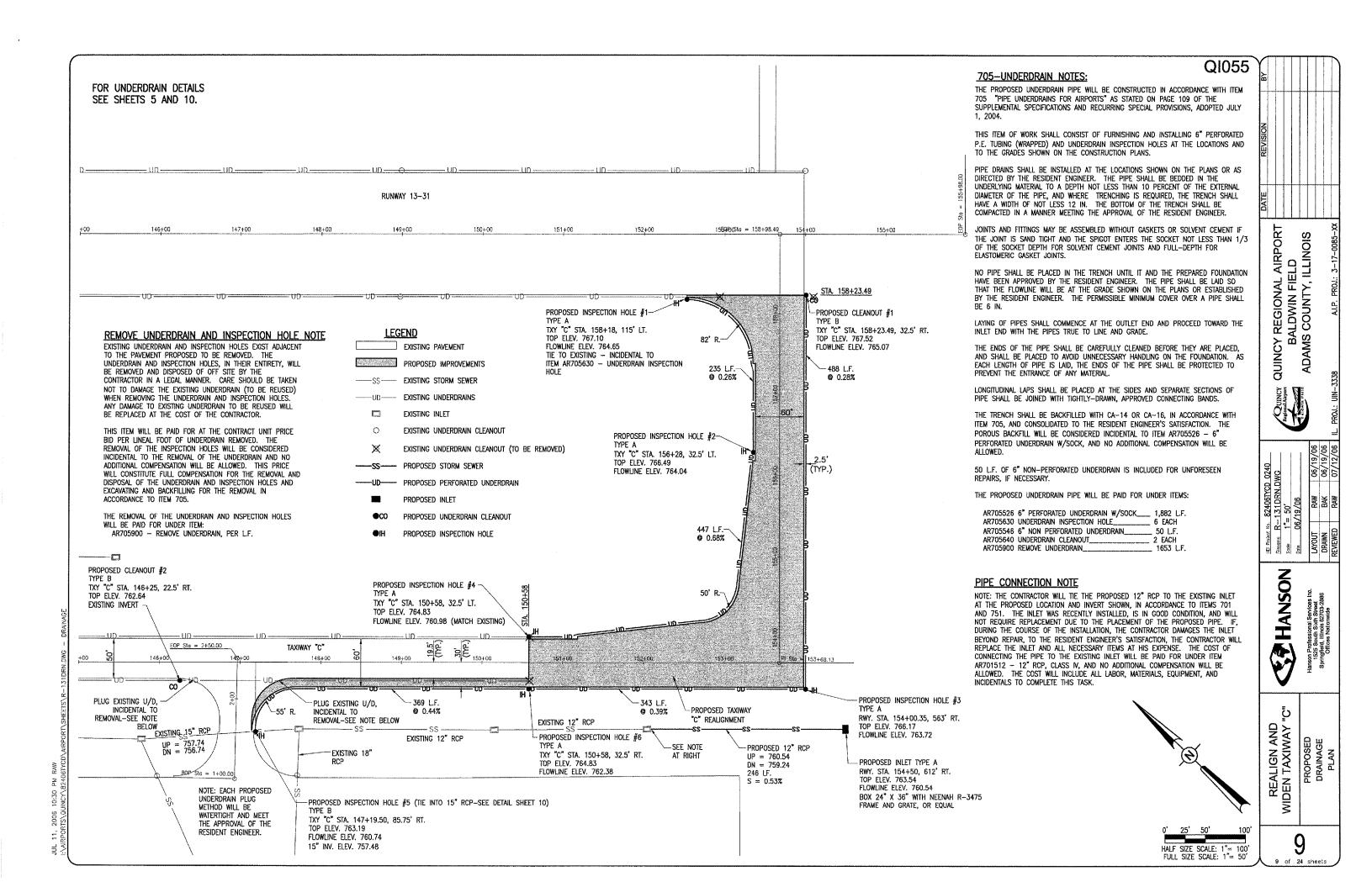
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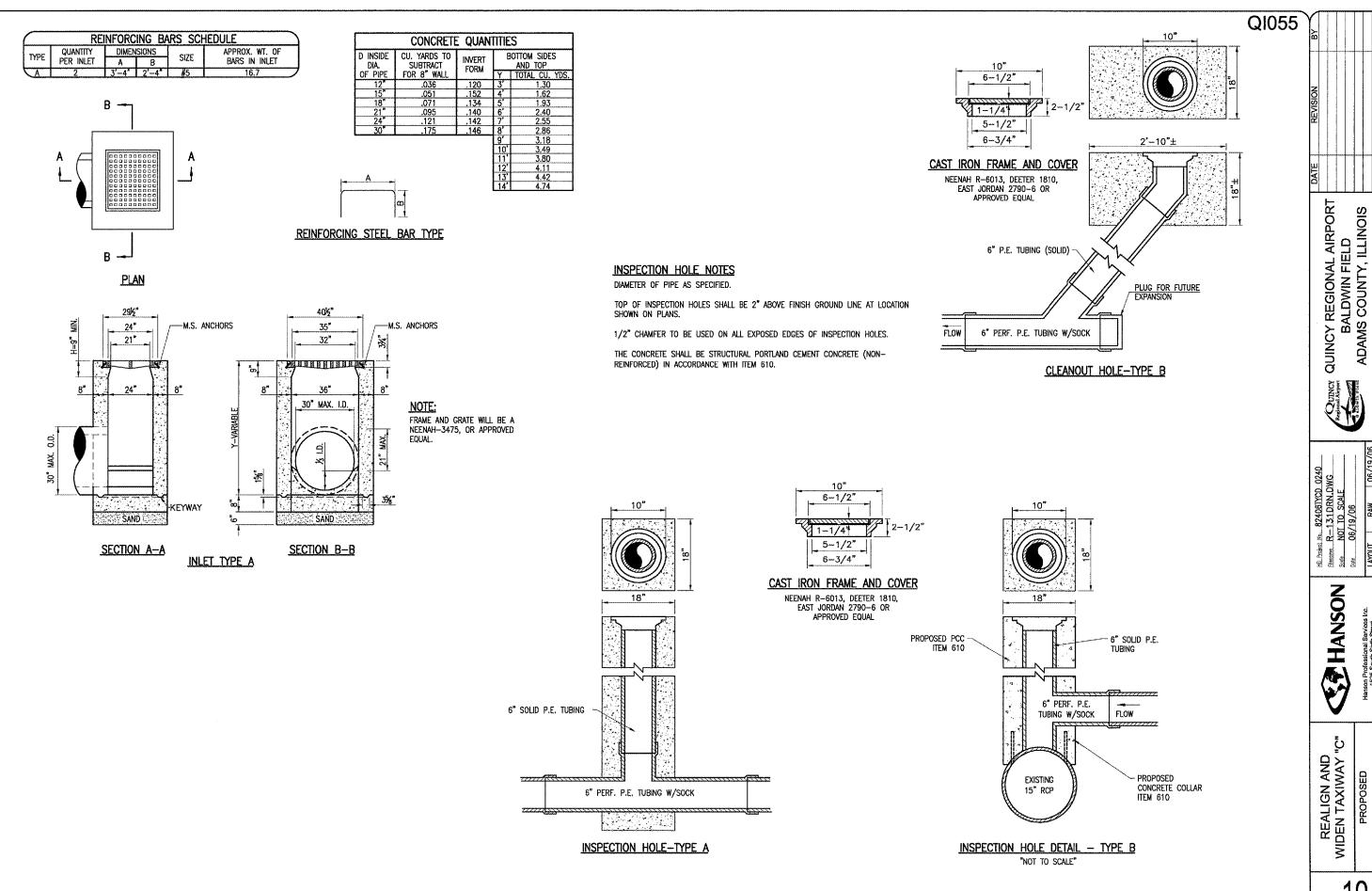
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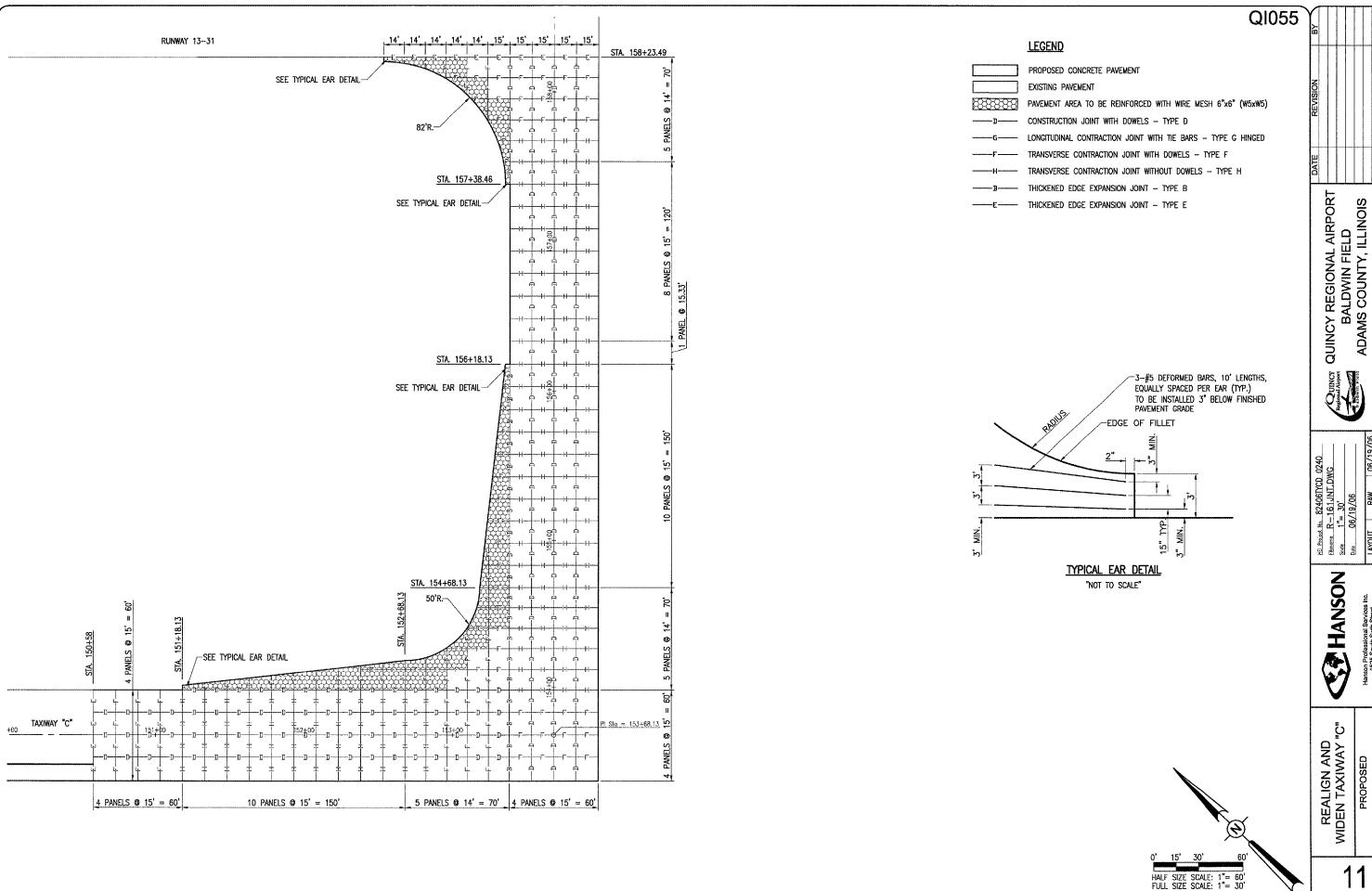




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CONSTRUCTION JOINT

OPERATION BY THE ENGINEER.

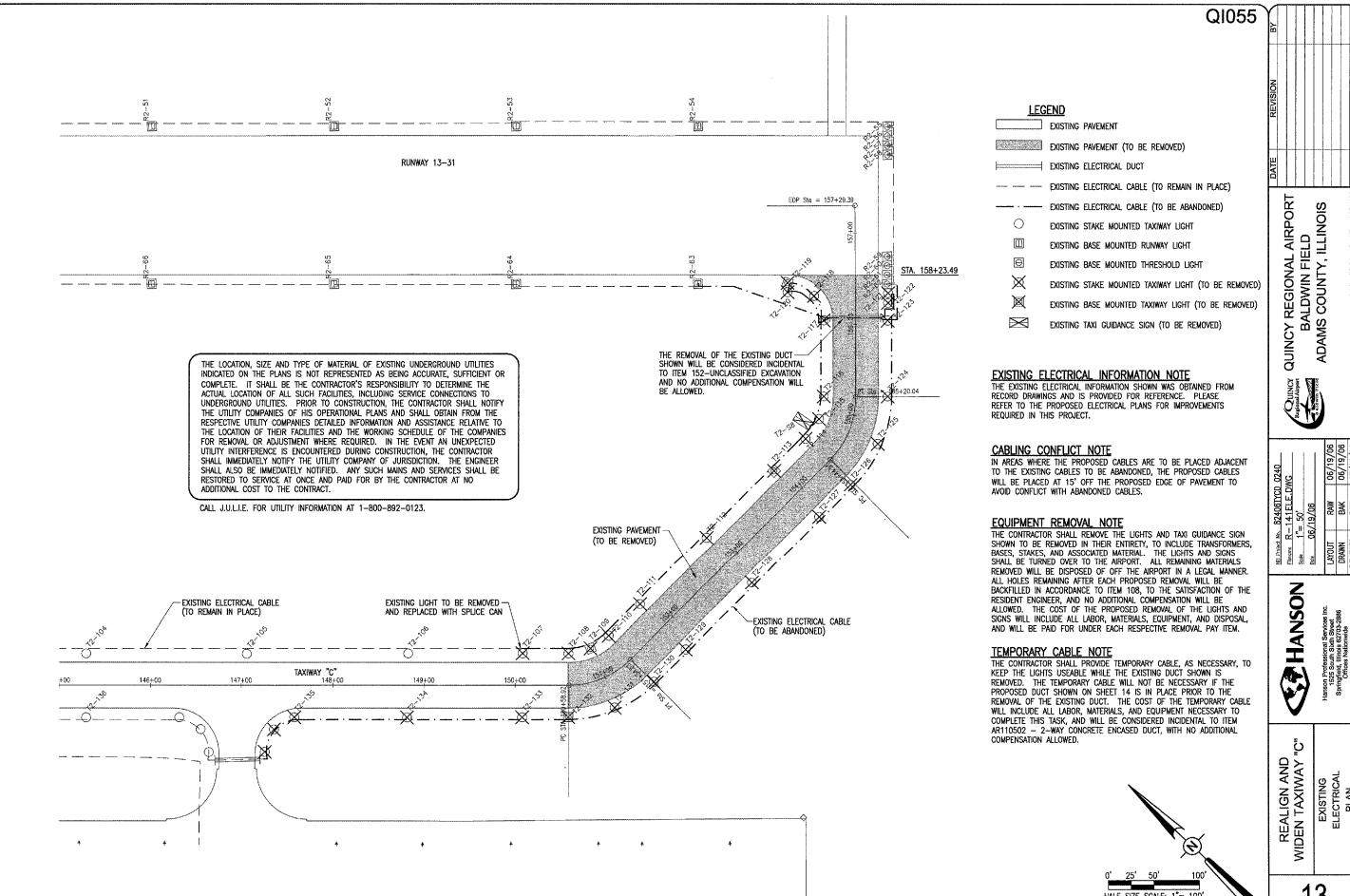
14. ALL NON-ALIGNED EDGES WILL BE SAWED FULL DEPTH.

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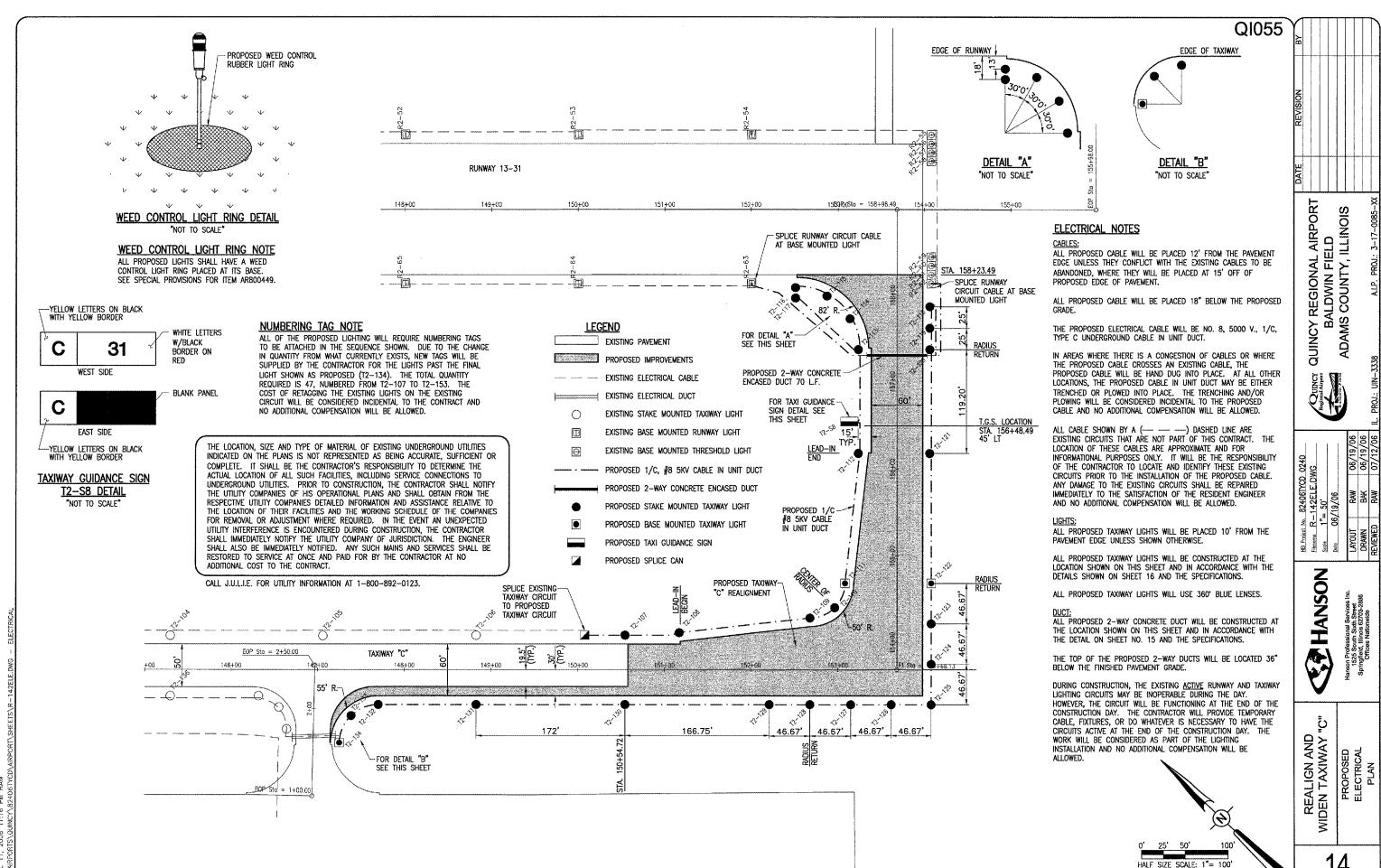
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**EXPANSION JOINT** 

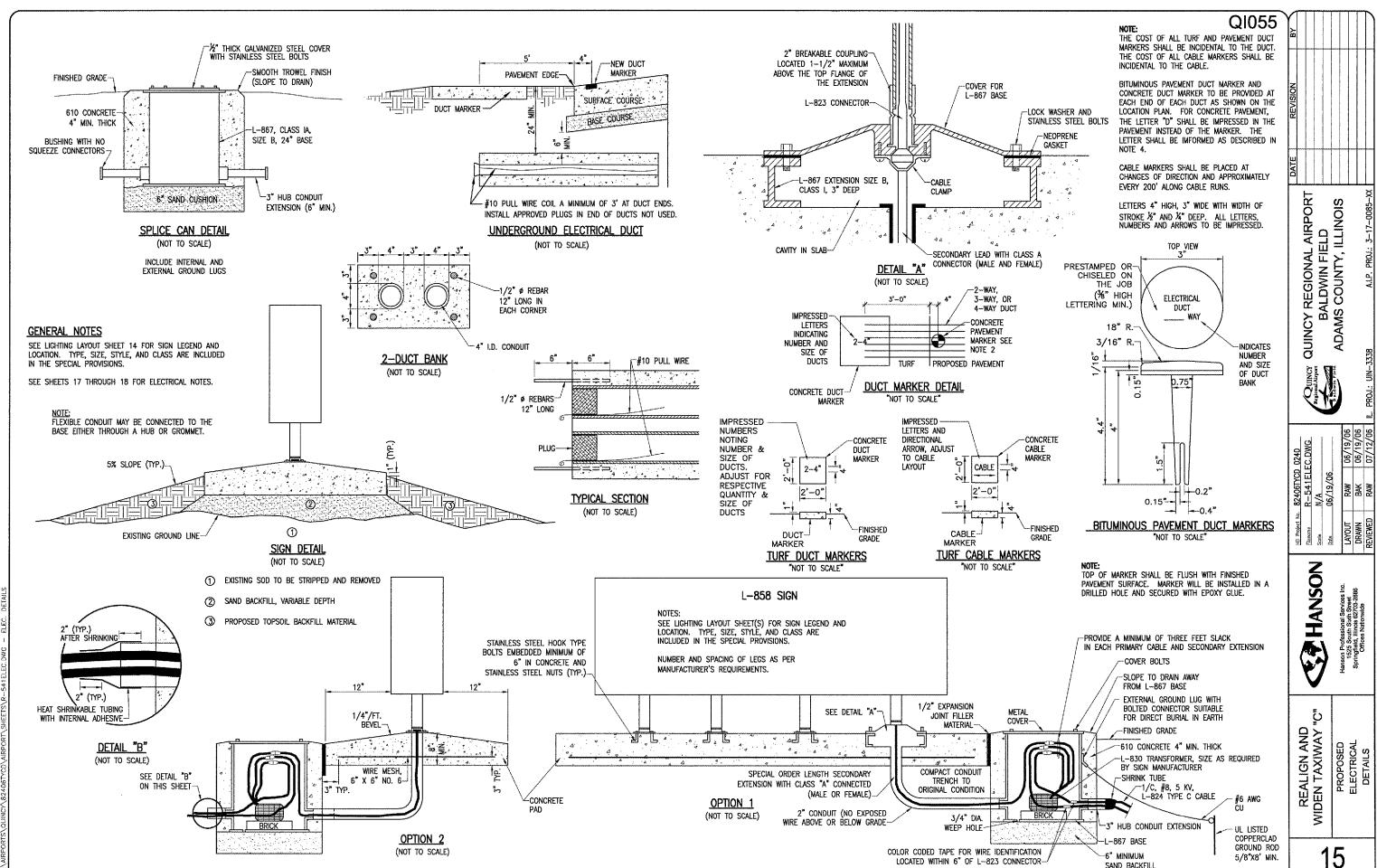
12 of 24 sheet



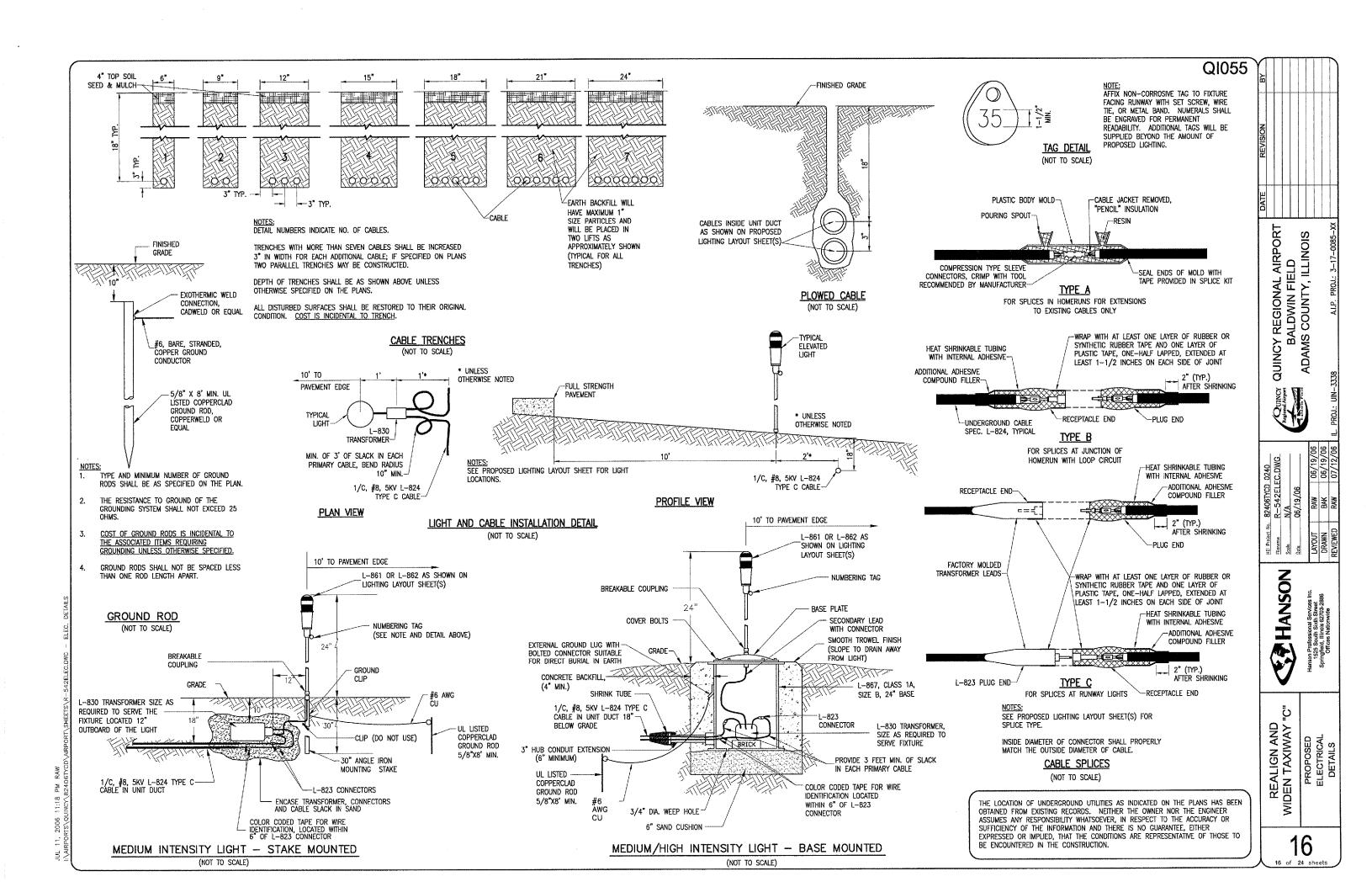
HALF SIZE SCALE: 1"= 100 FULL SIZE SCALE: 1"= 50



FULL SIZE SCALE: 1"= 50



15 of 24 sheets



# REALIGN AND WIDEN TAXIWAY

PROPOSED ELECTRICAL NOTES

#### **GENERAL**

- THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET THE NATIONAL ELECTRICAL CODE (LATEST RECOGNIZED VERSION) AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM, INCLUDING FAA APPROVED EQUIPMENT, ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM ANY NONCOMPATIBLE COMPONENTS
  FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO
  ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OR DIFFERENT MANUFACTURER) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT
- IN CASE THE CONTRACTOR ELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTORS, MOUNTINGS, ETC., TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATION, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE EQUIPMENT COST.
- THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH THE EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC. OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES, STYLES, CLASSES, ETC. MAY BE
- ANY AND ALL INSTRUCTIONS FROM THE ENGINEER TO THE CONTRACTOR REGARDING CHANGES IN OR DEVIATIONS FROM THE PLANS AND SPECIFICATIONS SHALL BE IN WRITING WITH COPIES SENT TO THE AIRPORT SPONSOR AND THE FAA FIELD OFFICE (ADO/AFO). THE CONTRACTOR SHALL NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE RESIDENT ENGINEER REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS.
- A MINIMUM OF THREE COPIES OF THE INSTRUCTION BOOK SHALL BE SUPPLIED WITH EACH DIFFERENT TYPE OF EQUIPMENT. THE BOOKS DESCRIBING A MORE SOPHISTICATED TYPE OF EQUIPMENT, SUCH AS REGULATORS, PAPI, REIL, ETC. AS A MINIMUM SHALL CONTAIN THE
- A DETAILED DESCRIPTION OF THE OVERALL EQUIPMENT AND ITS INDIVIDUAL COMPONENTS.
- THEORY OF OPERATION INCLUDING THE FUNCTION OF EACH
- INSTALLATION INSTRUCTIONS.
- START-UP INSTRUCTIONS.
- PREVENTATIVE MAINTENANCE REQUIREMENTS.
- CHART FOR TROUBLE-SHOOTING.
- COMPLETE POWER AND CONTROL DETAILED WIRING DIAGRAM(S) SHOWING EACH CONDUCTOR/CONNECTION/COMPONENT - "BLACK BOXES ARE NOT ACCEPTABLE. THE DIAGRAM OF THE NARRATIVE SHALL SHOW VOLTAGE/CURRENTS/WAVE SHAPES AT STRATEGIC LOCATIONS TO BE USED WHEN CHECKING AND/OR TROUBLE—SHOOTING THE EQUIPMENT. WHEN THE EQUIPMENT HAS SEVERAL MODES OF OPERATION, SUCH AS SEVERAL BRIGHTNESS STEPS, THESE PARAMETERS SHALL BE INDICATED FOR ALL DIFFERENT MODES.
- PARTS LIST WHICH WILL INCLUDE ALL MAJOR AND MINOR COMPONENTS SUCH AS RESISTORS, DIODES, ETC. IT SHALL INCLUDE A COMPLETE NOMENCLATURE OF EACH COMPONENT AND, IF APPLICABLE, THE NAME OF ITS MANUFACTURER AND THE CATALOG NUMBER.
- SAFETY INSTRUCTIONS.

#### POWER AND CONTROL

- 1. STENCIL ALL ELECTRICAL EQUIPMENT TO IDENTIFY FUNCTION, CIRCUIT VOLTAGE AND PHASE. WHERE THE EQUIPMENT CONTAINS FUSES, ALSO STENCIL THE FUSE OR FUSE LINK AMPERE RATING. WHERE THE EQUIPMENT DOES NOT HAVE SUFFICIENT STENCILING AREA, THE STENCILING SHALL BE DONE ON THE WALL NEXT TO THE UNIT. THE LETTERS SHALL BE ONE INCH-HIGH AND PAINTED IN WHITE OR BLACK TO PROVIDE THE HIGHEST CONTRACT WITH THE BACKGROUND.
- 2. COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK, BLACK AND RED SHALL BE USED FOR SINGLE-PHASE, THREE WIRE SYSTEMS AND BLACK, RED AND BLUE SHALL BE USED FOR THREE-PHASE SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS LARGER THAN NO. 6 AWG SHALL BE IDENTIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE WIREWAYS.
- ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZATION.
- IN CONTROL WIRING THE SAME COLOR SHALL BE USED THROUGHOUT THE SYSTEM FOR THE SAME FUNCTION, SUCH AS 10%, 30%, 100% BRIGHTNESS
- LOW VOLTAGE (600 V.) AND HIGH VOLTAGE (5000 V.) CONDUCTORS SHALL BE INSTALLED IN SEPÁRATE WIREWAYS.
- 6. NEATLY LACE WIRING IN DISTRIBUTION PANELS, WIREWAYS, SWITCHES AND JUNCTION/PULL BOXES.
- THE MINIMUM SIZE OF PULL/JUNCTION BOXES, REGARDLESS OF THE QUANTITY AND SIZE OF THE CONDUCTORS SHOWN, SHALL BE AS FOLLOWS:
  - IN STRAIGHT PULLS THE LENGTH OF THE BOX SHALL NOT BE LESS THAN EIGHT TIMES THE TRADE DIAMETER OF THE LARGER CONDUIT. THE TOTAL AREA (INCLUDING THE CONDUIT CROSS—SECTIONAL AREA) OF A BOX END SHALL BE AT LEAST 3 TIMES GREATER THAN THE TOTAL TRADE CROSS-SECTIONAL AREA OF THE CONDUITS TERMINATING AT THE END.
  - IN ANGLE PULLS OR 'U' PULLS THE DISTANCE BETWEEN EACH CONDUIT ENTRY INSIDE THE BOX AND THE OPPOSITE WALL OF THE BOX SHALL NOT BE LESS THAN SIX (6) TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT. THIS DISTANCE SHALL BE INCREASED FOR ADDITIONAL ENTRIES BY THE AMOUNT OF THE SUM OF THE DIAMETERS OF ALL OTHER CONDUIT ENTRIES ON THE SAME WALL AS THE BOX. THE DISTANCE BETWEEN CONDUIT ENTRIES ENCLOSING THE SAME CONDUCTOR SHALL NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT.
- A RUN OF CONDUIT BETWEEN TERMINATIONS AT EQUIPMENT ENCLOSURES, SQUARE DUCTS AND PULL/JUNCTION BOXES, SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL), INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE TERMINATIONS, CAST, CONDUIT TYPE OUTLETS SHALL NOT BE TREATED AS PULL/JUNCTION BOXES.
- EQUIPMENT CABINETS SHALL NOT BE USED AS PULL/JUNCTION BOXES. ONLY WIRING TERMINATING AT THE EQUIPMENT SHALL BE BROUGHT INTO THESE
- SPLICES AND JUNCTION POINTS SHALL BE PERMITTED ONLY IN JUNCTION BOXES, DUCTS EQUIPPED WITH REMOVABLE COVERS, AND AT EASILY
- CIRCUIT BREAKERS IN POWER DISTRIBUTION PANEL(S) SHALL BE THERMAL-MAGNETIC MOLDED CASE, PERMANENT TRIP WITH 100 AMPERE, MINIMUM FRAME.

- 12. DUAL LUGS SHALL BE USED WHERE TWO (2) WIRES, SIZE NO. 6 OR LARGER, ARE TO BE CONNECTED TO THE SAME TERMINAL.
- 13. ALL WALL MOUNTED EQUIPMENT ENCLOSURES SHALL BE MOUNTED ON WOODEN MOUNTING BOARDS.
- 14. WOODEN EQUIPMENT MOUNTING BOARDS SHALL BE PLYWOOD, EXTERIOR TYPE, 3/4 INCH, MINIMUM, THICKNESS, BOTH SIDES PAINTED WITH ONE COAT OF PRIMER AND TWO COATS OF GRAY OIL-BASED PAINT.
- 15. RIGID STEEL CONDUIT SHALL BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED. THE MINIMUM TRADE SIZE SHALL BE 3/4
- 16. ALL RIGID CONDUIT SHALL BE TERMINATED AT CONSTANT CURRENT REGULATORS WITH A SECTION (10" MINIMUM) OF FLEXIBLE CONDUIT.
- 17. UNLESS OTHERWISE SHOWN, ALL EXPOSED CONDUITS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE LINES OF THE STRUCTURE.
- 18. ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC. SHALL BE GALVANIZED.
- 19. USE CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION. WHERE NO. 4 AWG OR LARGER UNDERGROUND WIRE IS INSTALLED, USE INSULATED BUSHINGS.
- 20. USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
- WRAP ALL PRIMARY AND SECONDARY POWER TRANSFORMER CONNECTIONS WITH SUFFICIENT LAYERS OF INSULTING TAPE AND COVER WITH INSULATING VARNISH FOR FULL VALUE OF CABLE INSULATION VOLTAGE.
- 22. UNLESS OTHERWISE NOTED, ALL INDOOR SINGLE CONDUCTOR CONTROL WIRING SHALL BE NO. 12 AWG. MINUMUM.
- THE FOLLOWING SHALL APPLY TO RELAY/CONTACTOR PANELS/ENCLOSURES:
  - ALL COMPONENTS SHALL BE MOUNTED IN DUST PROOF ENCLOSURE(S) WITH VERTICALLY HINGED COVERS.
  - THE ENCLOSURE(S) SHALL HAVE AMPLE SPACE FOR THE CIRCUIT COMPONENTS, TERMINAL BLOCKS AND INCOMING AND INTERNAL WIRING.
  - ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED CLOSED-EYE TERMINATIONS, OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
  - WHEN THE ENCLOSURE COVER IS OPENED, ALL CIRCUIT COMPONENTS, WIRING AND TERMINALS SHALL BE EXPOSED AND ACCESSIBLE WITHOUT REMOVAL OF ANY PANELS, COVERS, ETC., EXCEPT THOSE COVERING HIGH VOLTAGE COMPONENTS.
  - ACCESS TO, OR REMOVAL OF A CIRCUIT COMPONENT OR TERMINAL BLOCK WILL NOT REQUIRE THE REMOVAL OF ANY OTHER CIRCUIT COMPONENT OR TERMINAL BLOCK.
  - EACH CIRCUIT COMPONENT SHALL BE CLEARLY IDENTIFIED INDICATING ITS CORRESPONDING NUMBER SHOWN ON THE DRAWINGS AND ITS FUNCTION.
  - A COMPLETE WIRING DIAGRAM (NOT A SCHEMATIC DIAGRAM) SHALL BE MOUNTED ON THE INSIDE OF THE COVER. THE DIAGRAM SHALL REPRESENT EACH CONDUCTOR BY A SEPARATE LINE.
  - THE DIAGRAM SHALL IDENTIFY EACH CIRCUIT COMPONENT AN NUMBERING AND COLOR OF EACH TERMINAL CONDUCTOR AND TERMINAL.
  - ALL WIRING SHALL BE NEATLY TRAINED AND LACED.
  - MINIMUM WIRE SIZE SHALL BE NO. 12 AWG.

QUINCY REGIONAL A BALDWIN FIEL ADAMS COUNTY, ILI

#### FIELD LIGHTING NOTES

- 1. UNLESS OTHERWISE NOTED, ALL UNDERGROUND FIELD POWER MULTIPLE AND SERIES CIRCUIT CONDUCTORS WHETHER DEB OR IN DUCT/CONDUIT SHALL BE FAA APPROVED L-824 TYPE. INSULATION VOLTAGE AND SIZE SHALL BE AS SPECIFIED.
- 2. NO COMPONENTS OF PRIMARY CIRCUIT SUCH AS CABLE, CONNECTORS AND TRANSFORMERS SHALL BE BROUGHT ABOVE GROUND AT EDGE LIGHTS, SIGNS, REIL, PAPI, ETC.
- 3. THERE SHALL BE NO EXPOSED POWER/CONTROL CABLES BETWEEN THE POINT WHERE THEY LEAVE THE UNDERGROUND (DEB OR L-867 BASES) AND WHERE THEY ENTER THE EQUIPMENT (SUCH AS TAXIWAY SIGNS, PAPI, REIL, ETC.) ENCLOSURES. THESE CABLES SHALL BE ENCLOSED IN RIGID CONDUIT OR IN FLEXIBLE, WATERTIGHT CONDUIT WITH BREAKABLE COUPLING(S) AT THE GRADE OR THE HOUSING COVER, AS SHOWN IN APPLICABLE DETAILS.
- 4. THE JOINTS OF THE L-823 PRIMARY CONNECTORS SHALL BE WRAPPED WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF THE JOINT, AS SHOWN ON SHEET NO. 16.
- 5. THE CABLE ENTRANCE INTO THE FIELD-ATTACHED L-823 CONNECTORS SHALL BE ENCLOSED BY A HEAT-SHRINKABLE TUBING WITH CONTINUOUS INTERNAL ADHESIVE, AS SHOWN ON SHEET NO.
- 6. L-823 TYPE II, TWO-CONDUCTOR SECONDARY CONNECTORS SHALL BE CLASS 'A' (FACTORY MOLDED).
- 7. THERE SHALL BE NO SPLICES IN THE SECONDARY CABLE(S) WITHIN THE STEMS OF A RUNWAY/TAXIWAY EDGE/THRESHOLD LIGHTING FIXTURE AND THE WIREWAYS LEADING TO TAXIWAY SIGNS AND PAPI/REIL EQUIPMENT.
- 8. ELECTRICAL INSULATING GREASE SHALL BE APPLIED WITHIN THE L-823, SECONDARY, TWO CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THESE CONNECTORS SHALL NOT BE
- 9. DEB ISOLATION TRANSFORMERS SHALL BE BURIED AT A DEPTH OF TEN (10") INCHES ON A LINE CROSSING THE LIGHT AND PERPENDICULAR TO THE RUNWAY/TAXIWAY CENTERLINE AT A LOCATION TWELVE (12") INCHES FROM THE LIGHT OPPOSITE FROM THE RUNWAY/TAXIWAY.
- 10. A SLACK OF THREE (3') FEET, MINIMUM, SHALL BE PROVIDED IN THE PRIMARY CABLE AT EACH TRANSFORMER/CONNECTOR TERMINATION. AT STAKE-MOUNTED LIGHTS, THE SLACK SHALL BE LOOSELY COILED IMMEDIATELY BELOW THE ISOLATION TRANSFORMER
- 11. DIRECTION OF PRIMARY CABLES SHALL BE IDENTIFIED BY COLOR CODING AS FOLLOWS: WHEN FACING LIGHT WITH BACK TO PAVEMENT, CABLE TO THE LEFT IS CODED RED AND CABLE TO RIGHT IS CODED BLUE. THIS APPLIES TO STAKE MOUNTED LIGHTS AND BASE MOUNTED LIGHTS WHERE THE BASE HAS ONLY ONE ENTRANCE.
- 12. L-867 BASES SHALL BE SIZE B, 24" DEEP, CLASS I, UNLESS OTHERWISE NOTED.
- 13. BASE MOUNTED BREAKABLE COUPLINGS SHALL NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED UP HOLES SHALL NOT BE ACCEPTABLE. IT SHALL BE A 1/4" DIAMETER, MINIMUM, OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE SECONDARY CONNECTOR INTO THE L-867 BASE.
- 14. THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1-1/2" ABOVE THE EDGE OF THE COVER IN CASE OF BASE MOUNTED COUPLINGS, OR THE TOP OF THE STAKE IN CASE OF STAKE MOUNTED COUPLINGS.

- 15. WHERE THE BREAKABLE COUPLING IS NOT AN INTEGRAL PART OF THE LIGHT FIXTURE STEM OR MOUNTING LEG, A BEAD OF SILICON SEAL SHALL BE APPLIED COMPLETELY AROUND LIGHT STEM OR WIREWAY AT BREAKABLE COUPLING TO PROVIDE A WATERTIGHT SEAL.
- 16. TOPS OF THE STAKES SUPPORTING LIGHT FIXTURES SHALL BE FLUSH WITH THE SURROUNDING GRADE.
- 17. PLASTIC LIGHTING FIXTURE COMPONENTS, SUCH AS LAMP HEADS, STEMS, BREAKABLE COUPLINGS, BASE COVERS, BRACKETS, STAKES, SHALL NOT BE ACCEPTABLE.
- 18. THE TOLERANCE FOR THE HEIGHT OF RUNWAY/TAXIWAY EDGE LIGHTS SHALL BE: ONE (1) INCH. IN CASE OF STAKE MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE STAKE AND THE TOP OF THE LENS. IN CASE OF BASE MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE BASE FLANGE AND THE TOP OF THE LENS, THUS INCLUDING THE BASE COVER, THE FRANGIBLE COUPLING, THE STEM. THE LAMP HOUSING AND THE LENS.
- 19. THE TOLERANCE FOR THE LATERAL SPACING (LIGHT LANE TO RUNWAY/TAXIWAY CENTERLINE) OF RUNWAY/TAXIWAY EDGE LIGHTS SHALL BE ONE (1) INCH. THIS ALSO APPLIES AT INTERSECTIONS TO LATERAL SPACING BETWEEN LIGHTS OF A RUNWAY/TAXIWAY AND THE INTERSECTING RUNWAY/TAXIWAY.
- 20. ENTRANCES INTO L-867 BASES SHALL BE SEALED WITH HEAT SHRINK AS SHOWN IN DETAIL "B" ON SHEET NO. 15.
- 21. GALVANIZED/PAINTED EQUIPMENT/COMPONENT SURFACES SHALL NOT BE DAMAGED BY DRILLING, FILING, ETC. DRAIN HOLES IN METAL TRANSFORMER HOUSINGS SHALL BE MADE BEFORE GALVANIZING.
- 22. EDGE LIGHT NUMBERING TAGS SHALL BE FACING THE PAVEMENT.
- 23. CABLE/SPLICE/DUCT MARKERS SHALL BE PRECAST CONCRETE OF THE SIZE SHOWN. LETTERS/NUMBERS/ARROWS FOR THE LEGEND TO BE IMPRESSED INTO THE TOPS OF THE MARKERS SHALL BE PRE-ASSEMBLED AND SECURED IN THE MOLD BEFORE THE CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE SHALL NOT BE ACCEPTABLE.
- 24. ALL UNDERGROUND CABLE RUNS SHALL BE IDENTIFIED BY CABLE MARKERS AT 200 FEET MAXIMUM SPACING, WITH AN ADDITIONAL MARKER AT EACH CHANGE OF DIRECTION OF THE CABLE RUN. CABLE MARKERS SHALL BE INSTALLED IMMEDIATELY ABOVE THE
- 25. THERE SHALL BE NO SPLICES BETWEEN THE ISOLATION TRANSFORMERS. L-823 CONNECTORS ARE ALLOWED AT TRANSFORMER CONNECTIONS ONLY, UNLESS OTHERWISE SHOWN.
- 26. APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS AND BREAKAGE COUPLING THREADS.
- 27. LOCATIONS OF ENDS OF ALL UNDERGROUND DUCTS SHALL BE IDENTIFIED BY DUCT MARKERS.
- 28. WHERE A PARALLEL, CONSTANT VOLTAGE PAPI SYSTEM IS PROVIDED, THE "T" SPLICES SHALL BE OF THE CAST TYPE.
- 29. CONCRETE USED FOR SLABS, FOOTINGS, BACKFILL AROUND TRANSFORMER HOUSINGS, MARKINGS, ETC. SHALL BE 3000 PSI,
- 30. ALL POWER AND CONTROL CABLES IN MAN/HAND HOLES SHALL BE TAGGED. USE EMBOSSED COPPER STRIPS TO BE ATTACHED AT BOTH ENDS TO THE CABLE BY THE USE OF PLASTIC STRAPS. MINIMUM OF TWO TAGS SHALL BE PROVIDED ON EACH CABLE IN A MAN/HAND HOLE-ONE AT THE CABLE ENTRANCE AND ONE AT THE

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AIRPORT

ALDWIN FIELD COUNTY, ILLINOI REGIONAL QUINCY F BAI ADAMS

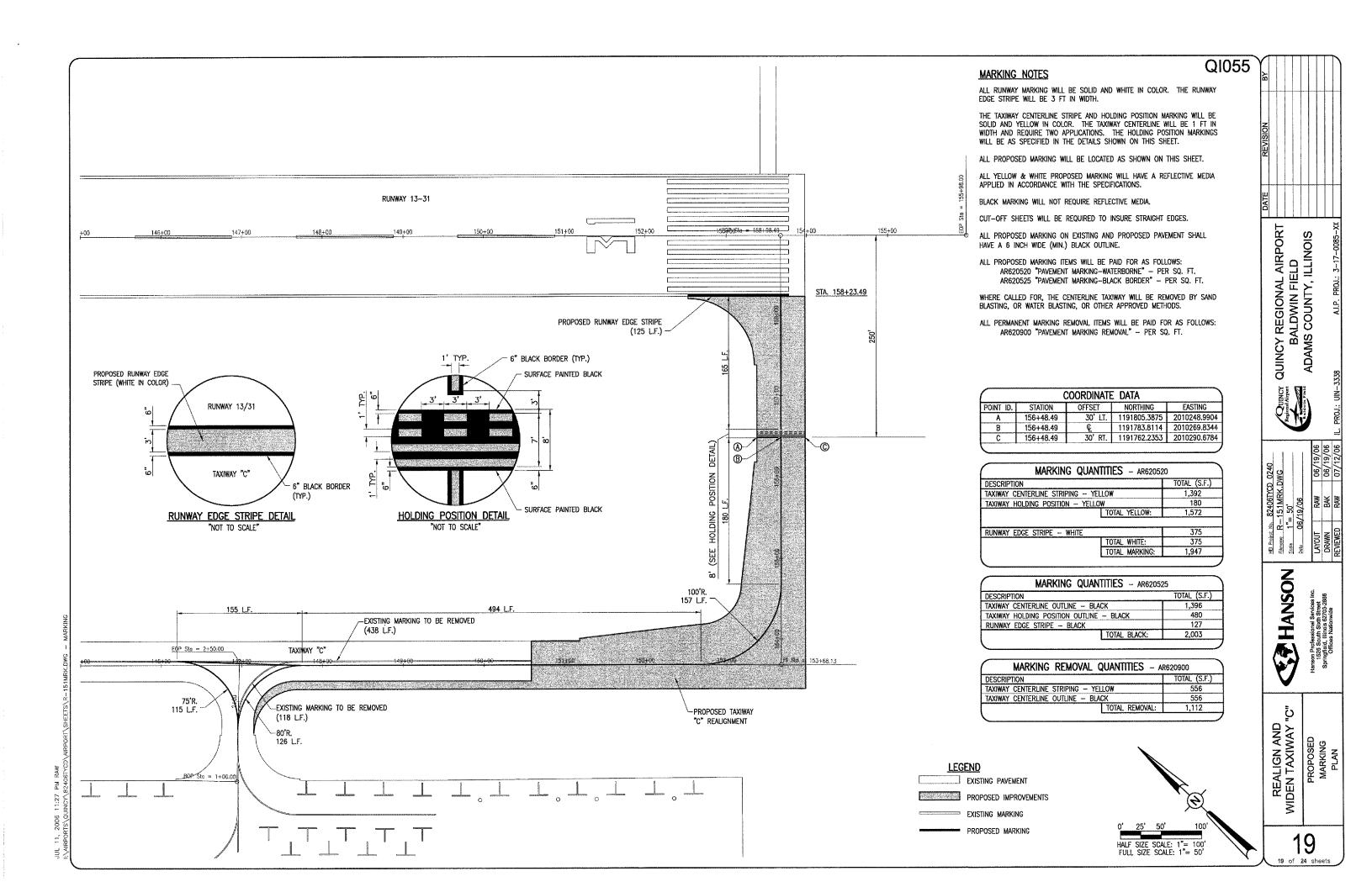
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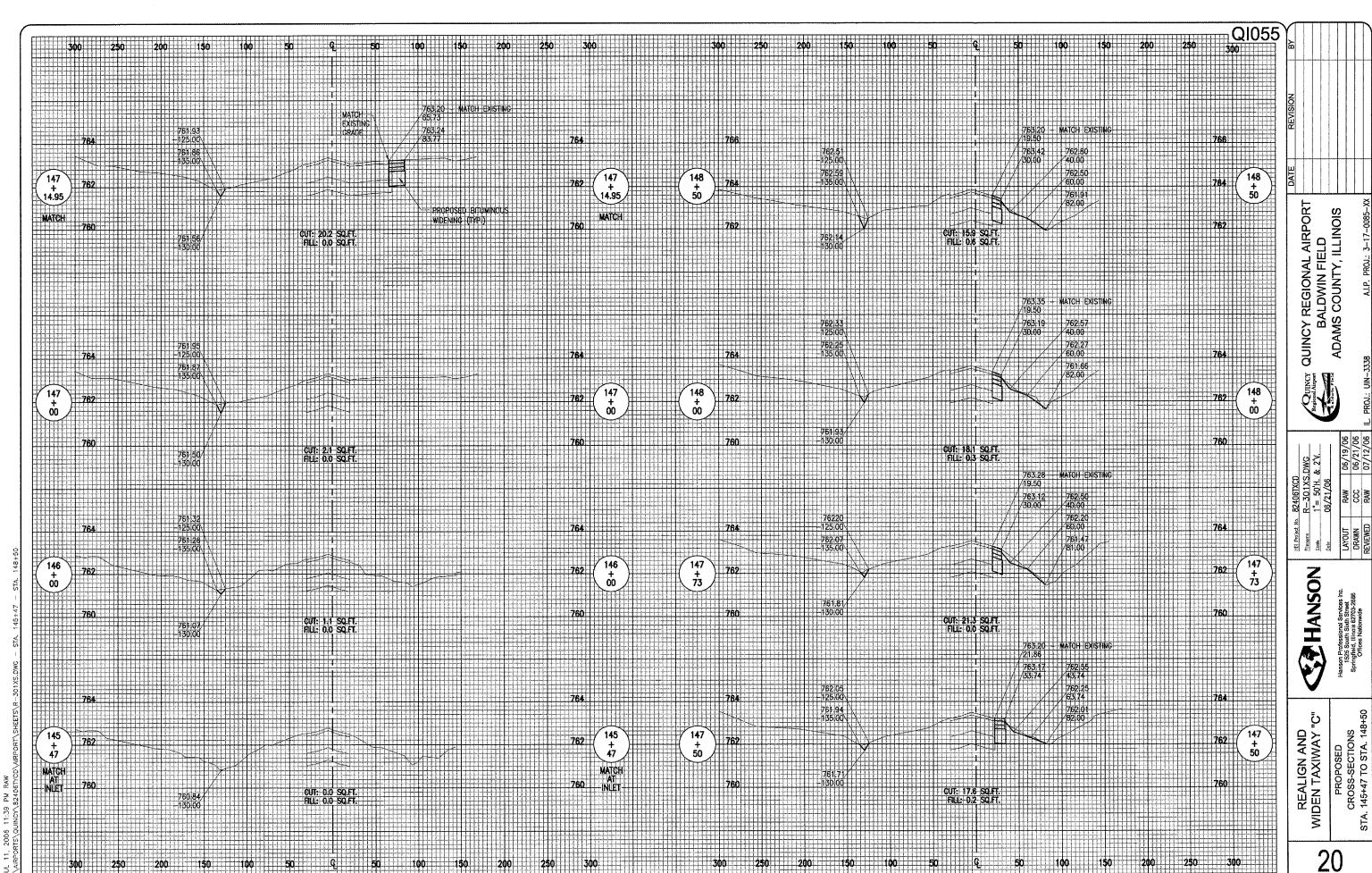
REALIGN AND WIDEN TAXIWAY

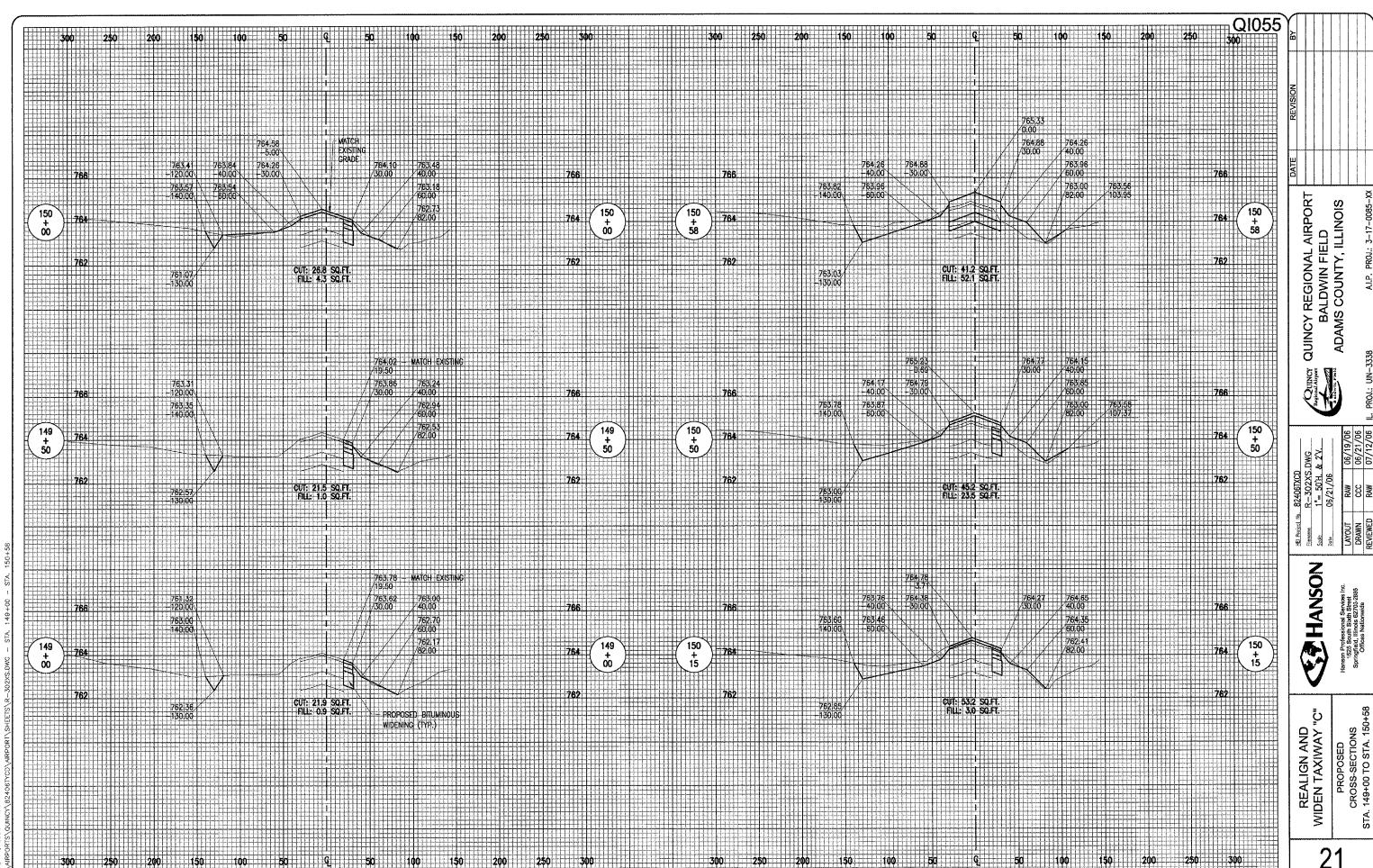
PROPOSED ELECTRICAL NOTES

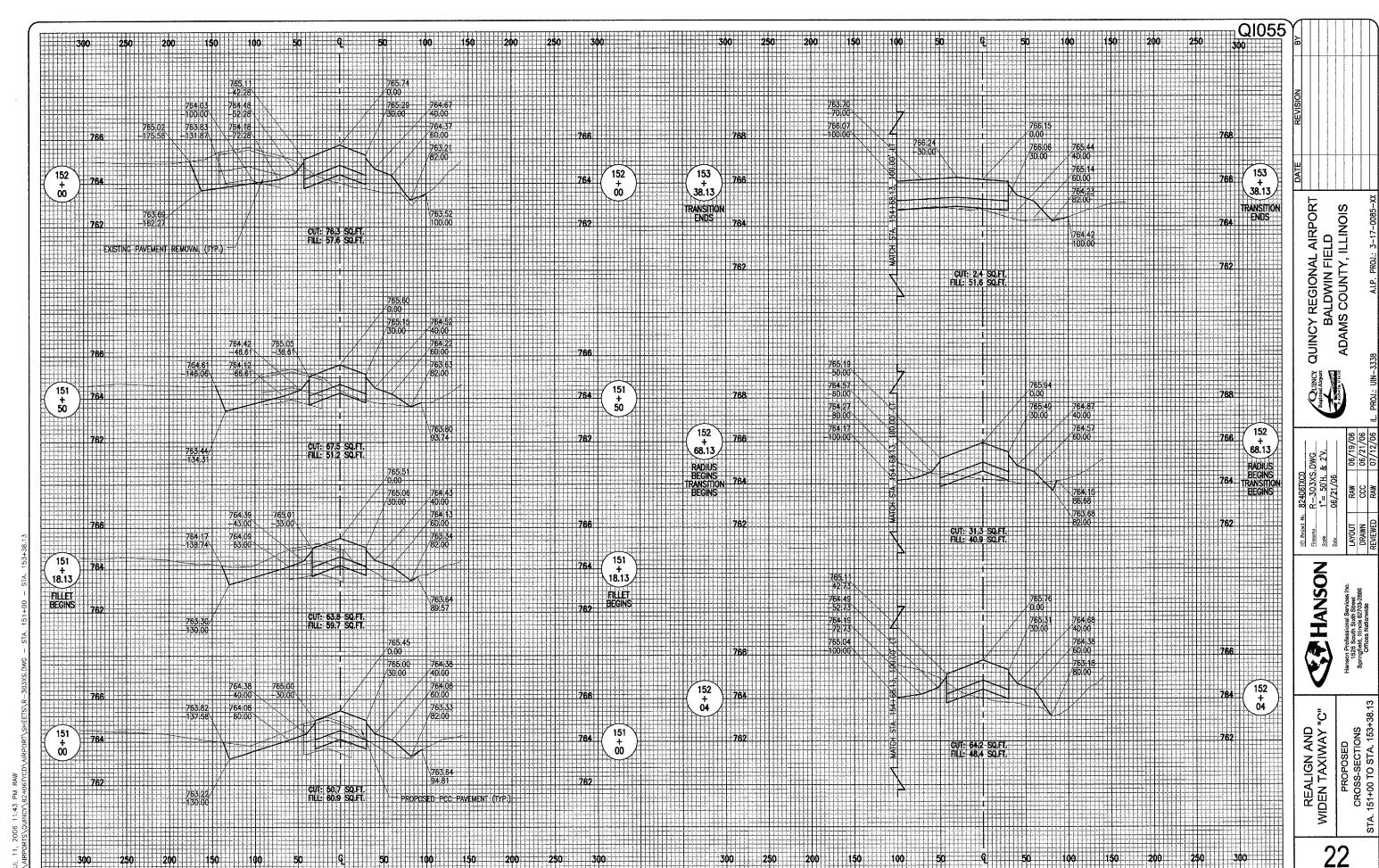
GROUNDING NOTES

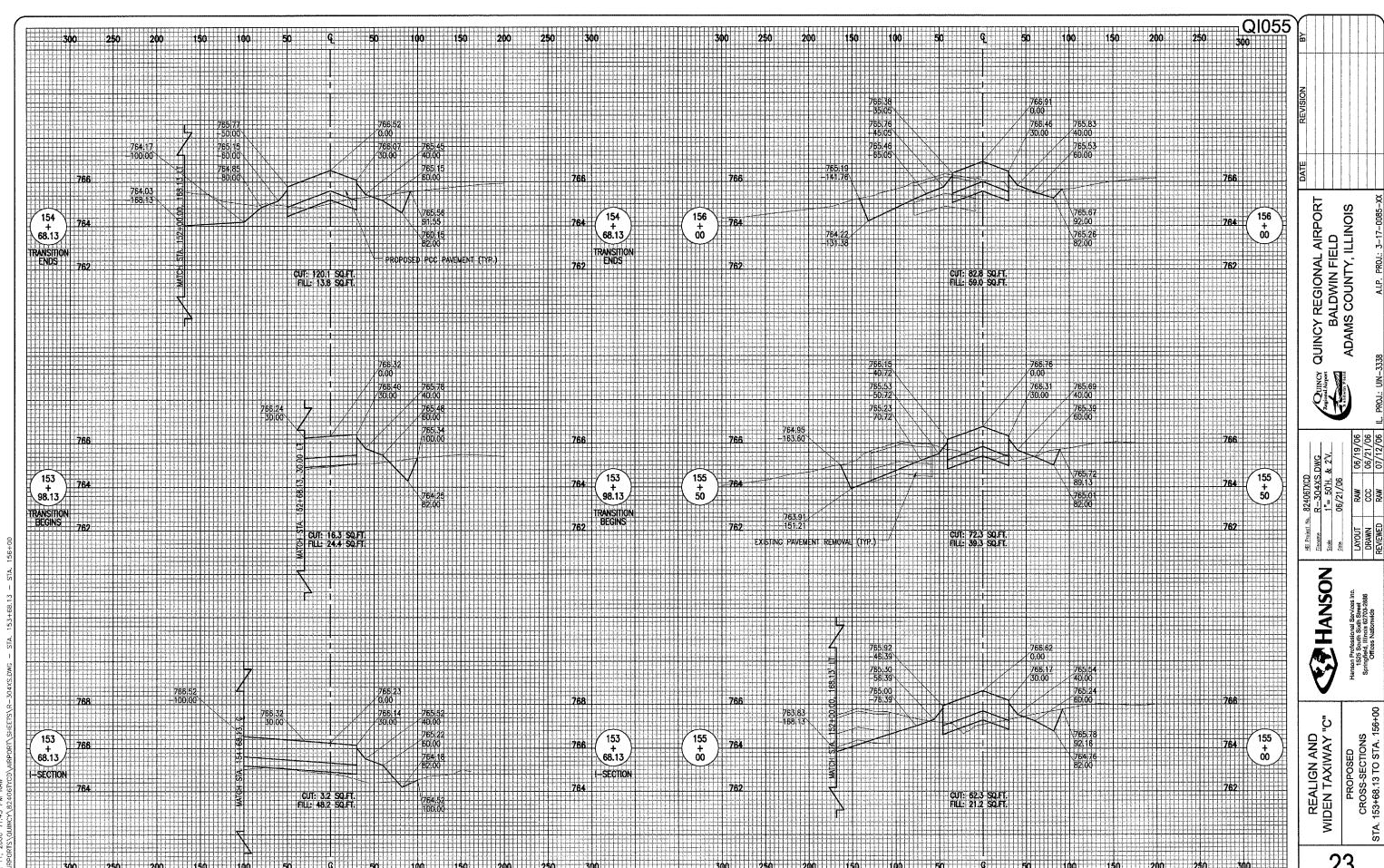
- 1. ALL GROUND CONNECTIONS TO GROUND RODS, BUSSES, PANELS, ETC. SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS LUGS AND GROUND CLAMPS SOLDERED OR BOLT AND WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELD WHERE SPECIFIED HEREIN.
- 2. TOP OF GROUND RODS SHALL BE TEN (10) INCHES BELOW GRADE, UNLESS SPECIFIED OTHERWISE HEREIN, FOR RESPECTIVE APPLICATIONS.
- 3. THE RESISTANCE TO GROUND OF THE VAULT GROUNDING SYSTEM WITH THE COMMERCIAL POWER LINE NEUTRAL DISCONNECTED SHALL NOT EXCEED 10 OHMS.

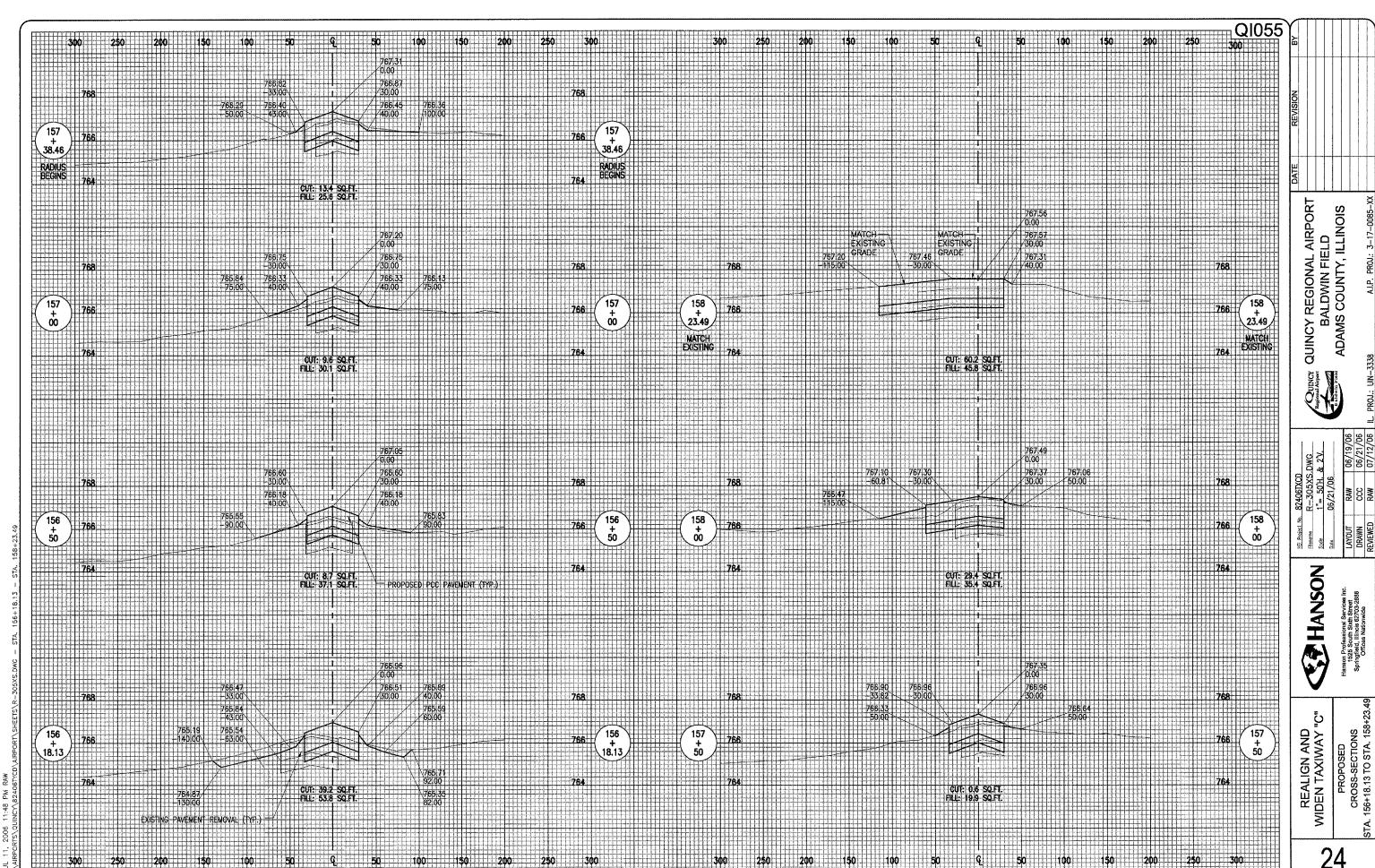












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