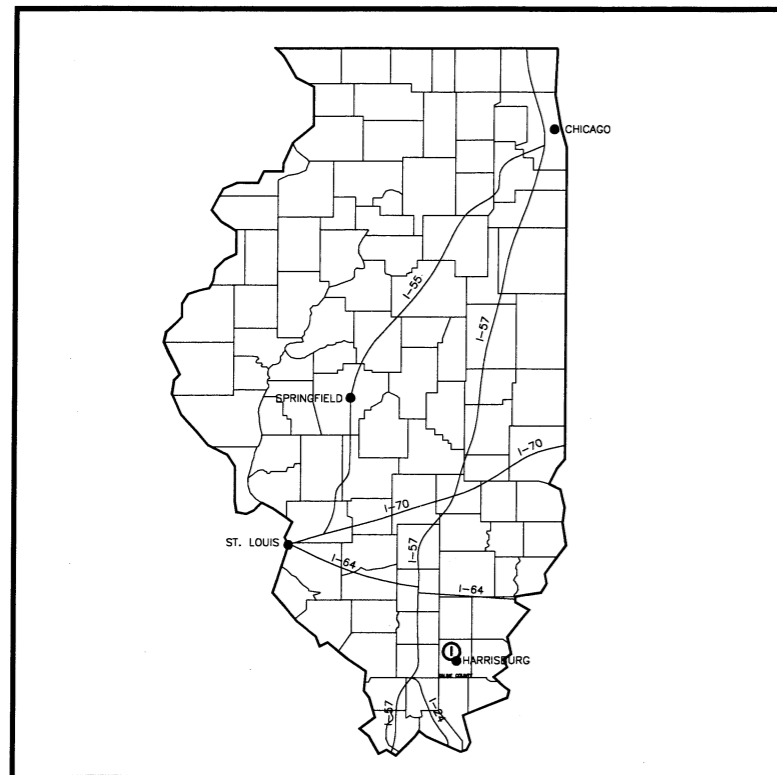


CONSTRUCTION PLANS

FOR

HARRISBURG-RALEIGH AIRPORT

CONSTRUCT A PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24

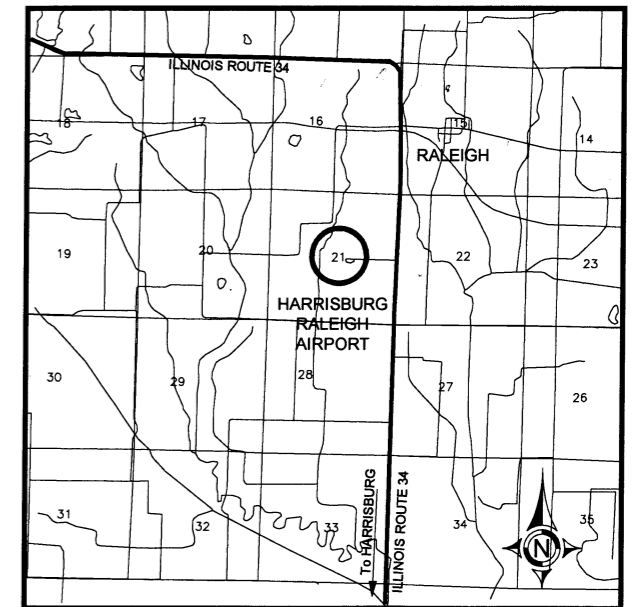
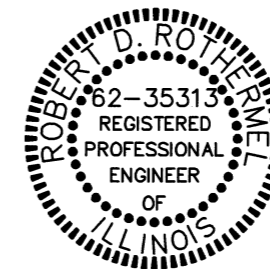
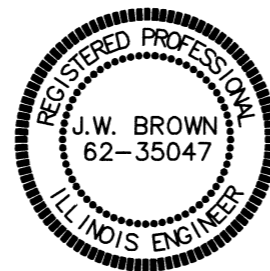


LOCATION MAP

ILLINOIS PROJECT NUMBER: HSB-4311
SBG PROJECT NUMBER: 3-17-SBGP-XX

HARRISBURG, ILLINOIS
SALINE COUNTY

DATE: JUNE 13, 2014



VICINITY MAP

PLANS PREPARED BY:



BROWN AND ROBERTS, INC.
1 WESTRIDGE ROAD
HARRISBURG, IL. 62946
(618) 252-8111

BROWN AND ROBERTS, INC.
CONSULTING ENGINEER
PRESIDENT

SUBMITTED BY: *Jim W. Brown*
JIM W. BROWN, PRESIDENT

DATE SUBMITTED: 6/13/14

LICENSE NUMBER: 062-035047
LICENSE EXPIRATION DATE: NOVEMBER 30, 2015

ROTHERMEL ENGINEERING
ELECTRICAL ENGINEER

SUBMITTED BY: *Robert Rothermel*
ROBERT ROTHEMEL

DATE SUBMITTED: 6/13/14

LICENSE NUMBER: 062-035313
LICENSE EXPIRATION DATE: NOVEMBER 30, 2015

HARRISBURG RALEIGH AIRPORT AUTHORITY

CHAIRMAN

APPROVED BY: *Brad Henshaw* DATE: 6/12/14
BRAD HENSHAW

SECRETARY

ATTESTED BY: *Ken Wallace* DATE: 6/12/14
KEN WALLACE

GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, AND TRANSPORTATION NECESSARY TO CONSTRUCT ALL ELEMENTS OF THE PROJECT AS DESCRIBED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.
2. THE RULES, REGULATIONS, AND SPECIFICATIONS ENUMERATED HEREIN SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS. THEY SHALL NOT PROHIBIT THE CONTRACTOR FROM FURNISHING AND INSTALLING HIGHER GRADES OF MATERIAL THAN ARE SPECIFIED HEREIN.
3. THE CONSTRUCTION ENTRANCE AS SHOWN ON THE SAFETY PLAN ARE ONLY TO BE USED FOR THIS PROJECT. ACCESS TO THE PROJECT FOR ALL HAULING OF MATERIALS AND EQUIPMENT SHALL BE RESTRICTED TO THE DESIGNATED CONSTRUCTION ENTRANCE AND HAUL ROUTE. ACCESS TO THE WORK AREAS FROM THE STAGING AREA SHALL BE COORDINATED WITH THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE AND AIRPORT MANAGEMENT.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT, PRESERVE, AND REPAIR THE EXISTING AIRFIELD AND ROADWAY PAVEMENTS AT ALL TIMES. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ELECTRICAL, DRAINAGE, AND PAVEMENT STRUCTURES AT NO ADDITIONAL COST TO THE CONTRACT.
5. NO EQUIPMENT SHALL BE PERMITTED TO CROSS OR USE ANY EXISTING PAVEMENT OUTSIDE THE CONSTRUCTION LIMITS, GENERAL PROJECT AREA OR ACCESS ROUTE.
6. CONTRACTOR IS REQUIRED TO PROVIDE THEIR OWN RESTROOM FACILITIES.
7. UNLESS OTHERWISE NOTED, ALL DISTURBED AREAS OUTSIDE OF THE PROPOSED CONSTRUCTION LIMITS SHALL BE GRADED, SEEDED AND/OR HYDROMULCH SEEDED AT NO ADDITIONAL COST TO THE CONTRACT.
8. ALL WASTE MATERIAL SHALL BE HAULED FROM THE AIRPORT AND PROPERLY DISPOSED OF UNLESS OTHERWISE SPECIFIED HEREIN.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMITS FOR HAULING ON PUBLIC ROADS, AS APPLICABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGES TO ANY PAVEMENTS (PUBLIC OR PRIVATE) CAUSED BY HIS/HER CONSTRUCTION EQUIPMENT OR PERSONNEL.
10. THE OWNER SHALL HAVE THE RIGHT OF FIRST REFUSAL FOR ALL SALVAGEABLE MATERIAL REMOVED ON THE PROJECT.
11. THE CONTRACTOR SHALL PROVIDE ONE SET OF REDLINED AS-BUILT DRAWINGS TO THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE AT THE COMPLETION OF THE PROJECT.
12. CONTRACTOR SHALL NOTE THAT ALL AREAS WITHIN THE AIRPORT PROPERTY LINE AND OUTSIDE THE CONSTRUCTION LIMITS MAY BE USED FOR AGRICULTURAL PURPOSES. THE CONSTRUCTION LIMITS SHALL BE RESTRICTED TO AREAS THAT ARE ABSOLUTELY NECESSARY TO DISTURB TO COMPLETE THE REQUIRED WORK ITEMS. LIMITS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER PRIOR TO BEGINNING ANY WORK. ALL AREAS WHICH HAVE BEEN FARMED AND/OR DESIGNATED TO BE FARMED AFTER THE PROJECT COMPLETION, AND HAVE BEEN DISTURBED BY CONSTRUCTION ACTIVITY, SHALL BE CHISEL PLOWED (36" MAX) OR OTHERWISE SCARIFIED TO RETURN THE AREA TO A REASONABLE TILLABLE CONDITION (IF SO PERMITTED BY THE AIRPORT MANAGER.)
13. CONTRACTOR SHALL RESTORE TO ORIGINAL CONDITION ALL GRASS, STONE, OR PAVEMENT DISTURBED BY CONTRACTOR'S CONSTRUCTION OPERATIONS, STAGING, AND CONSTRUCTION ACCESS ROUTES. DISTURBED AREAS TO BE REPAIRED, GRADED, AND MULCHED SEEDED UNLESS OTHERWISE NOTED. STAGING AREA AND SITE ACCESS RESTORATION WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
14. THE PROJECT PAY ITEMS ARE INTENDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THESE PLANS. ALL INCIDENTAL WORK REQUIRED TO COMPLETE THE PROJECT TO THE SATISFACTION OF THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE IS TO BE INCLUDED IN THE COSTS OF PERFORMING THESE ITEMS.
15. APPROXIMATE LOCATIONS OF UNDERGROUND UTILITIES ARE SHOWN THROUGHOUT THESE PLANS. THE CONTRACTOR SHALL DETERMINE EXACT LOCATIONS AND PROTECT THESE UTILITIES DURING CONSTRUCTION. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL COORDINATE WITH THE PROPER PERSONS FOR THE PURPOSE OF LOCATING AND PROTECTING EXISTING UNDERGROUND UTILITIES.
16. THE CONTRACTOR MUST AT ALL TIMES MAINTAIN PROPER DRAINAGE FOR ALL AREAS AFFECTED BY HIS WORK, TO INCLUDE PIPE CULVERT(S) FOR HAUL/ACCESS ROUTE IF NECESSARY.
17. ANY FENCING OR FENCE POST REMOVAL ON ACCESS ROUTE NECESSARY FOR EQUIPMENT TO ACCESS THE PROJECT AREA SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.

SUMMARY OF QUANTITIES			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
AR107712	L-807 WIND CONE - 12' LIGHTED	EA	1
AR107900	REMOVE WIND CONE	EA	1
AR107901	REMOVE WIND TEE	L SUM	1
AR108158	1/C #8 5 KV UG CABLE IN UD	FT	5100
AR108258	2/C #8 5 KV UG CABLE IN UD	FT	300
AR108654	3/C #4 600 V UG CABLE IN UD	FT	950
AR108656	3/C #6 600 V UG CABLE IN UD	FT	790
AR109200	INSTALL ELECTRICAL EQUIPMENT	L SUM	1
AR109301	4 KW REGULATOR, STYLE 1	EA	1
AR110014	4" DIRECTIONAL BORE	FT	525
AR110502	2-WAY CONCRETE ENCASED DUCT	FT	110
AR110610	ELECTRICAL HANDHOLE	EA	6
AR125411	MITL-STAKE MOUNTED-LED	EA	65
AR125445	TAXI GUIDANCE SIGN, 5 CHARACTER	EA	3
AR125505	MIRL, STAKE MOUNTED	EA	2
AR125901	REMOVE STAKE MOUNTED LIGHT	EA	3
AR125902	REMOVE BASE MOUNTED LIGHT	EA	1
AR125904	REMOVE TAXI GUIDANCE SIGN	EA	1
AR150520	MOBILIZATION	L SUM	1
AR152410	UNCLASSIFIED EXCAVATION	CU YD	10700
AR156514	DITCH CHECK	FT	100
AR156520	INLET PROTECTION	EA	4
AR156530	TEMPORARY SEEDING	AC	4.3
AR209510	CRUSHED AGG. BASE COURSE	TON	5950
AR401613	BITUMINOUS SURFACE COURSE - METHOD I, SUPERPAVE	TON	1200
AR401900	REMOVE BITUMINOUS PAVEMENT	SQ YD	2960
AR403613	BITUMINOUS BASE COURSE - METHOD I, SUPERPAVE	TON	1210
AR501900	REMOVE PCC PAVEMENT	SQ YD	390
AR602510	BITUMINOUS PRIME COAT	GAL	3085
AR603510	BITUMINOUS TACK COAT	GAL	1020
AR620520	PAVEMENT MARKING - WATERBORNE	SQ FT	3360
AR620525	PAVEMENT MARKING - BLACK BORDER	SQ FT	2010
AR620900	PAVEMENT MARKING REMOVAL	SQ FT	740
AR701312	12" RCP, CLASS II	FT	144
AR701315	15" RCP, CLASS II	FT	258
AR701318	18" RCP, CLASS II	FT	93
AR751416	TYPE 1 INLET	EA	2
AR751940	ADJUST INLET	EA	1
AR752412	PRECAST REINFORCED CONC FES 12"	EA	2
AR752415	PRECAST REINFORCED CONC FES 15"	EA	2
AR801257	MODIFY WIRING IN HANGAR SHOP	L SUM	1
AR901510	SEEDING	AC	4.3
AR908510	MULCHING	AC	4.3

HARRISBURG-RALEIGH AIRPORT
IL PROJECT NO. HSB-4311
SBG NO. 3-17-SBGP-XX
INDEX, SUMMARY OF QUANTS AND GENERAL NOTES
SHEET 2 OF 32
HA027

INDEX OF SHEETS	
SHEET NUMBER	DESCRIPTION
1	COVER SHEET
2	INDEX, SUMMARY OF QUANTITIES AND GENERAL NOTES
3	RUNWAY SAFETY PLAN
4	TYPICAL SECTIONS
5-8	PLAN AND PROFILE SHEETS
9-11	GEOMETRIC SHEETS
12	PAVEMENT MARKING SHEET
13	TYPE 1 INLET DETAIL SHEET
14-16	ELECTRICAL PLAN SHEETS
17	LIGHTING NOTES AND SCHEDULES
18-19	ELECTRICAL DETAIL SHEETS
20	WIND CONE DETAIL SHEET
21-32	CROSS SECTION SHEETS

SCOPE OF WORK

THE PROJECT SCOPE CONSISTS OF THE CONSTRUCTION OF A PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24 FROM THE TAXILANE TO THE NORTHEAST END OF RUNWAY 6/24, ASSOCIATED GRADING, DRAINAGE AND OTHER NECESSARY AND RELATED WORK.

PROPOSED SAFETY PLAN

GENERAL- THE HARRISBURG-RALEIGH AIRPORT AUTHORITY CURRENTLY HAS A PAVED RUNWAY 6-24 WHICH IS 5013 FT. x 75 FT. AND A PAVED RUNWAY 14-32 WHICH IS 2820 FT. x 75 FT.

CONTRACTOR'S RESPONSIBILITIES

IDENTIFICATION- THE CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE PROPERLY MARKED WITH 3-FOOT SQUARE INTERNATIONAL ORANGE AND WHITE CHECKERED FLAGS ANYTIME THEY ARE ON AIRPORT PROPERTY.

THE CONTRACTOR AND HIS EMPLOYEES SHALL BE RESTRICTED TO THE WORK AREA.

EQUIPMENT PARKING AND STORAGE- THE CONTRACTOR'S EQUIPMENT PARKING, STORAGE, AND EMPLOYEE PARKING WILL BE AT THE LOCATION SHOWN ON THIS SHEET. ONLY CONTRACTOR VEHICLES AND EQUIPMENT REQUIRED FOR CONSTRUCTION WILL BE ALLOWED OUTSIDE THIS AREA.

BARRICADES AND TRAFFIC CONES - IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND TRAFFIC CONES AS REQUIRED AND AS DIRECTED BY THE RESIDENT ENGINEER. BARRICADES WILL BE LIGHTED WITH RED FLASHING LIGHTS. BARRICADES, THEIR MAINTENANCE, PLACEMENT, AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING PAVEMENTS CAUSED BY HIS PERSONNEL OR EQUIPMENT.

NONCOMPLIANCE WITH CONTRACTOR'S APPROVED SAFETY PLAN MAY RESULT IN FINES AS ALLOWED BY LAW.

HAUL ROUTE AND EQUIPMENT PARKING

THE CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND EQUIPMENT PARKING AREA SHOWN ON THIS SAFETY PLAN. THE PROPOSED EQUIPMENT PARKING AREA WILL BE APPROXIMATELY 150-FT BY 150-FT. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. AT THE CONCLUSION OF THE PROJECT, ALL AREAS DISTURBED WILL BE RESTORED AS NEEDED TO ITS ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND EQUIPMENT PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

UTILITY NOTE

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES AND ORGANIZATIONS THAT 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 SHALL CALL JULIE (1-800-892-0123) TO ACCOMPLISH THESE REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL NON-JULIE UTILITIES LOCATED WITHIN THE PROPOSED CONSTRUCTION LIMITS. THESE UTILITIES ARE TO BE LOCATED PRIOR TO THE START OF CONSTRUCTION.

J.U.L.I.E. INFORMATION

COUNTY.....SALINE
 CITY.....HARRISBURG (5 MI NORTH)
 TOWNSHIP.....RALEIGH
 SECTION NO.....21
 NEAREST MAJOR ROAD INTERSECTION...ILLINOIS RT. 34 & AIRPORT DRIVE
 AIRPORT ADDRESS...HARRISBURG-RALEIGH AIRPORT
 PO BOX 33
 HARRISBURG, IL 62946

HEIGHT OF CONSTRUCTION EQUIPMENT

THE MAXIMUM ANTICIPATED HEIGHT OF THE CONSTRUCTION EQUIPMENT IS 20 FEET. THE TALLEST EQUIPMENT IS EXPECTED TO BE A SEMI TRUCK WITH TRAILER IN THE UP POSITION.

NOTE:

THE COST OF CONSTRUCTING, PLACING, MAINTAINING, AND REMOVING CROSSES WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. THE CROSSES WILL BE YELLOW IN COLOR AND SHALL BE MADE OF A SUITABLE MATERIAL AS APPROVED BY THE RESIDENT ENGINEER. THE CROSSES WILL BE PLACED AT THE ENDS OF THE RUNWAY AND SECURED IN A MANNER APPROVED BY THE RESIDENT ENGINEER. THE PROPOSED CROSSES WILL BE PLACED WHEN 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 AT NO ADDITIONAL COST TO THE CONTRACT.

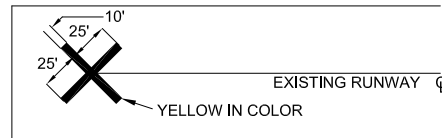
AIRPORT SECURITY

AIRPORT SECURITY WILL BE MAINTAINED AT ALL TIMES. THE PROPOSED HAUL ROUTE SHOWN ON THIS SAFETY PLAN IS THE ONLY ACCESS CONTRACTOR EQUIPMENT AND PERSONNEL WILL BE ALLOWED TO USE. THE CONTRACTOR SHALL PROVIDE BARRICADES AT THIS ACCESS AND ENSURE THE BARRICADES ARE IN PLACE AT THE END OF EACH WORKING DAY.

CLOSURE OF RUNWAY 6/24:

WHEN CONSTRUCTION OPERATIONS MAKE IT NECESSARY FOR THE CONTRACTOR TO BE WORKING CLOSER THAN 200 FEET OF THE CENTERLINE OF RUNWAY 6/24, THE RUNWAY SHALL BE CLOSED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES WITHIN 200 FEET OF THE CENTERLINE OF RUNWAY 6/24. THE CONSTRUCTION ACTIVITIES SHALL BE STAGED TO MINIMIZE THE CLOSURE TIME OF RUNWAY 6/24.

RUNWAY SHALL REMAIN CLOSED IF THERE ARE ANY OPEN TRENCHES OR PITS EXCEEDING 3" DEPTH WITHIN 200' OF THE CENTERLINE OF RUNWAY 6/24 CAUSED BY EXCAVATING OR CONSTRUCTION ACTIVITIES. THE RUNWAY SHALL NOT BE REOPENED UNTIL THE TRENCHES OR PITS HAVE BEEN RESTORED TO ORIGINAL GRADES.



- RUNWAY CLOSURE PROCEDURES:**
- * CONTACT THE AIRPORT MANAGER OR HIS ASSIGNED REPRESENTATIVE.
 - * ISSUANCE OF NOTAM BY THE AIRPORT MANAGER OR HIS ASSIGNED REPRESENTATIVE.
 - * PLACEMENT OF CROSSES (SEE DETAIL THIS SHEET).
 - * PLACEMENT OF LIGHTED BARRICADES. ONLY AT THE TIME THAT ALL OF THE ABOVE ARE COMPLETED MAY ANY CONSTRUCTION OPERATIONS WITHIN 200' OF THE RUNWAY CENTERLINE BEGIN.
 - * RUNWAY LIGHTS SHALL BE DISABLED

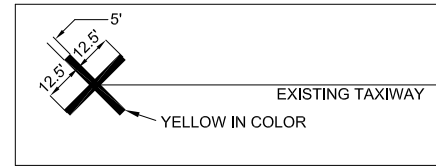
- RUNWAY RE-OPENING PROCEDURES:**
- * REMOVE CROSSES.
 - * REMOVE LIGHTED BARRICADES.
 - * NOTIFY THE AIRPORT MANAGER OR HIS REPRESENTATIVE TO CANCEL THE NOTAM.
 - * CANCELLATION OF THE NOTAM. A CLOSED RUNWAY WILL NOT BE RE-OPENED UNTIL ALL EQUIPMENT AND WORK ARE NOT WITHIN 200' OF THE RUNWAY CENTERLINE.
 - * RUNWAY LIGHTS SHALL BE REACTIVATED.

CONSTRUCTION AREA FLAGGER

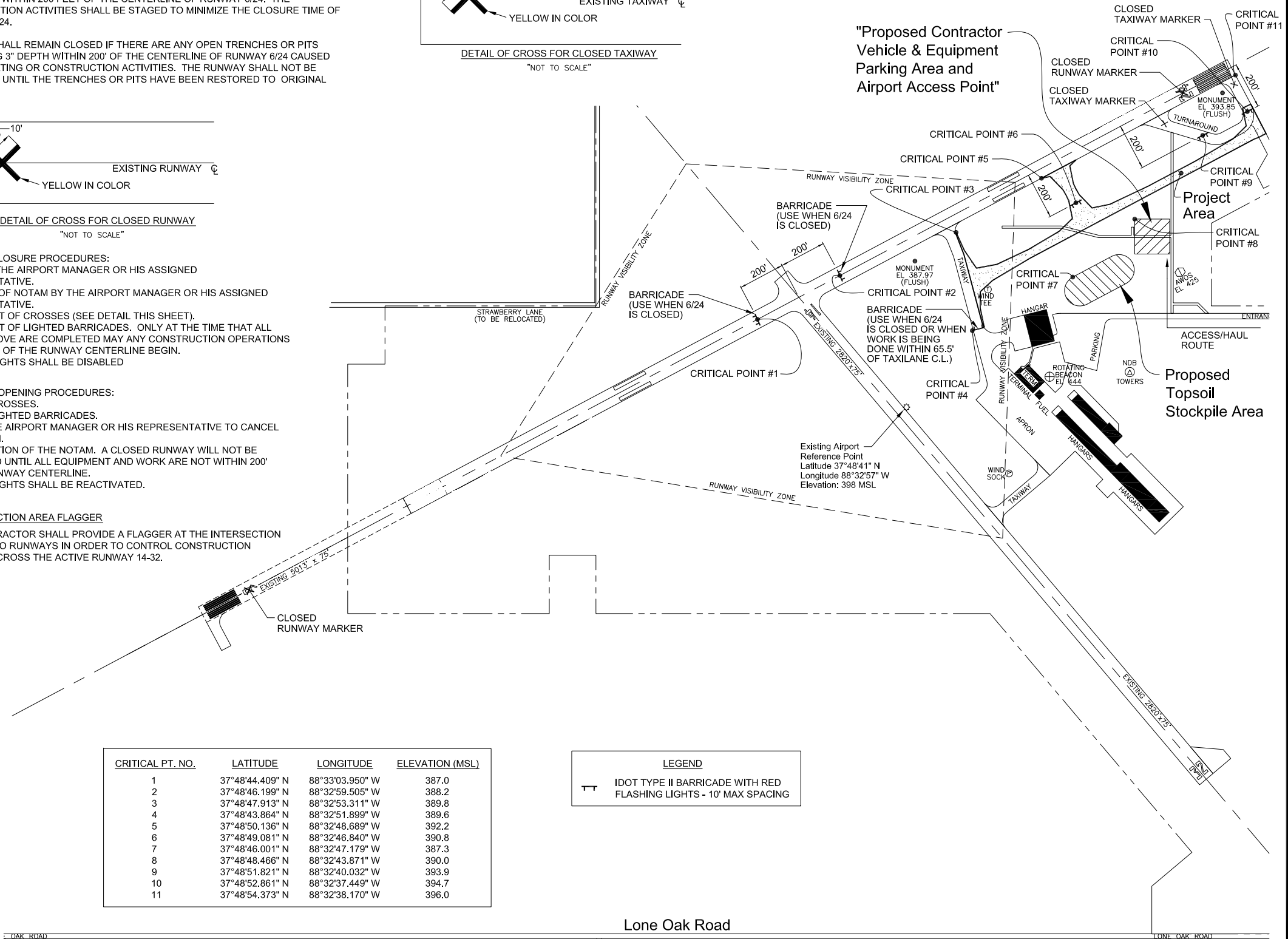
THE CONTRACTOR SHALL PROVIDE A FLAGGER AT THE INTERSECTION OF THE TWO RUNWAYS IN ORDER TO CONTROL CONSTRUCTION TRAFFIC ACROSS THE ACTIVE RUNWAY 14-32.

CLOSURE OF TAXIWAY TURNAROUND

IN THE CASE THAT RUNWAY 6/24 IS OPEN AND THE TAXIWAY TURNAROUND AT THE END OF RUNWAY 24 IS TEMPORARILY CLOSED FOR ANY PERIOD LASTING LONGER THAN THREE CONSECUTIVE DAYS, TAXIWAY CLOSURE MARKERS SHALL BE PLACED AT THE ENTRANCES TO THE TAXIWAY TURNAROUND.

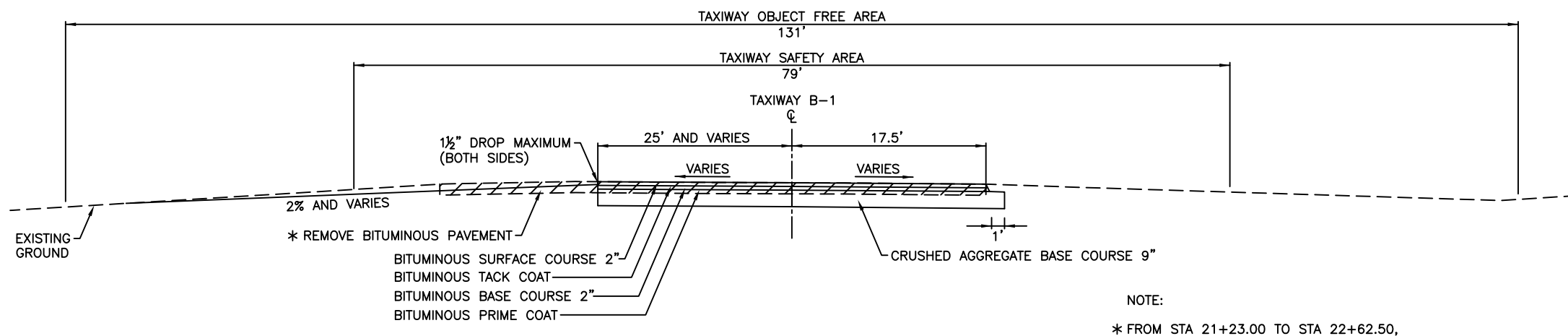
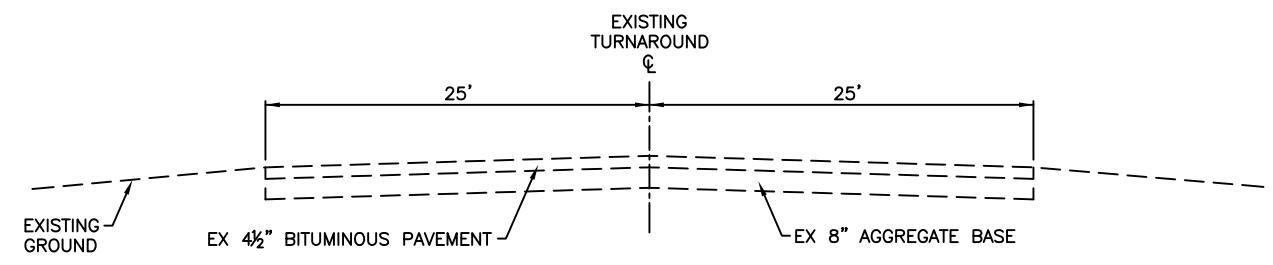
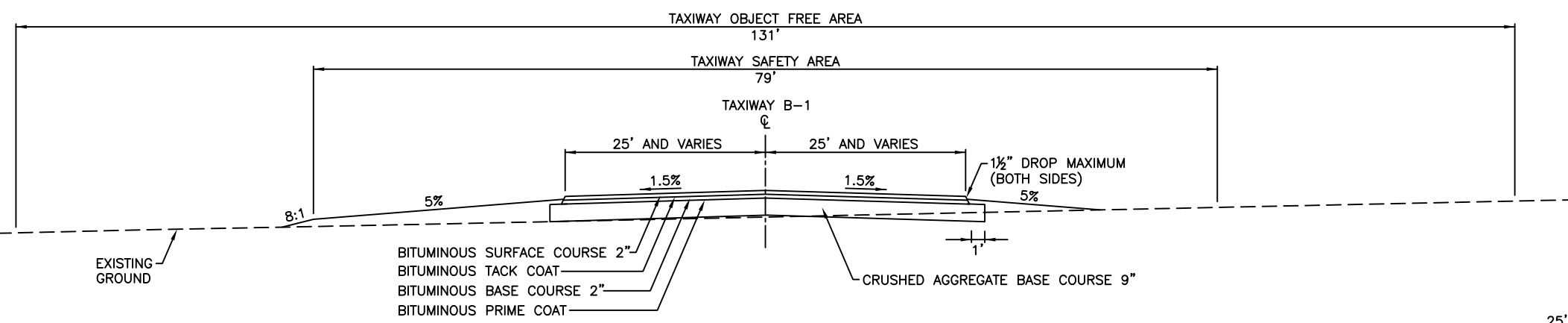
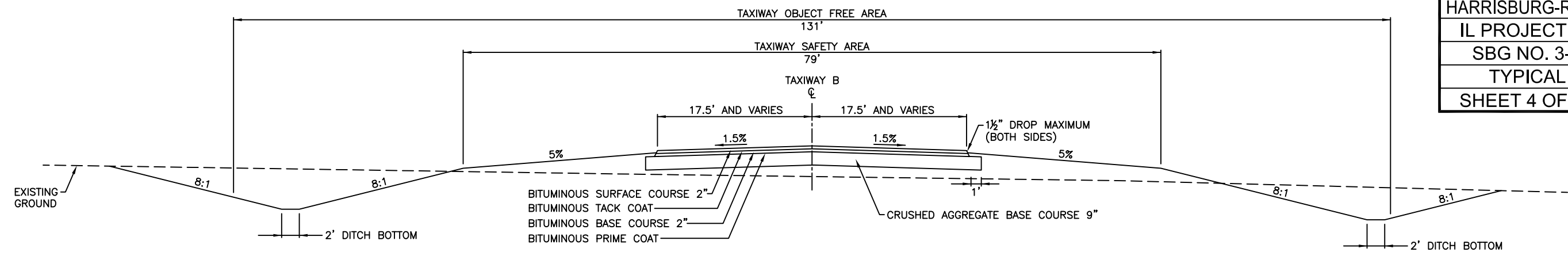


"Proposed Contractor Vehicle & Equipment Parking Area and Airport Access Point"



CRITICAL PT. NO.	LATITUDE	LONGITUDE	ELEVATION (MSL)
1	37°48'44.409" N	88°33'03.950" W	387.0
2	37°48'46.199" N	88°32'59.505" W	388.2
3	37°48'47.913" N	88°32'53.311" W	389.8
4	37°48'43.864" N	88°32'51.899" W	389.6
5	37°48'50.136" N	88°32'48.689" W	392.2
6	37°48'49.081" N	88°32'46.840" W	390.8
7	37°48'46.001" N	88°32'47.179" W	387.3
8	37°48'48.466" N	88°32'43.871" W	390.0
9	37°48'51.821" N	88°32'40.032" W	393.9
10	37°48'52.861" N	88°32'37.449" W	394.7
11	37°48'54.373" N	88°32'38.170" W	396.0

LEGEND	
TT	IDOT TYPE II BARRICADE WITH RED FLASHING LIGHTS - 10' MAX SPACING

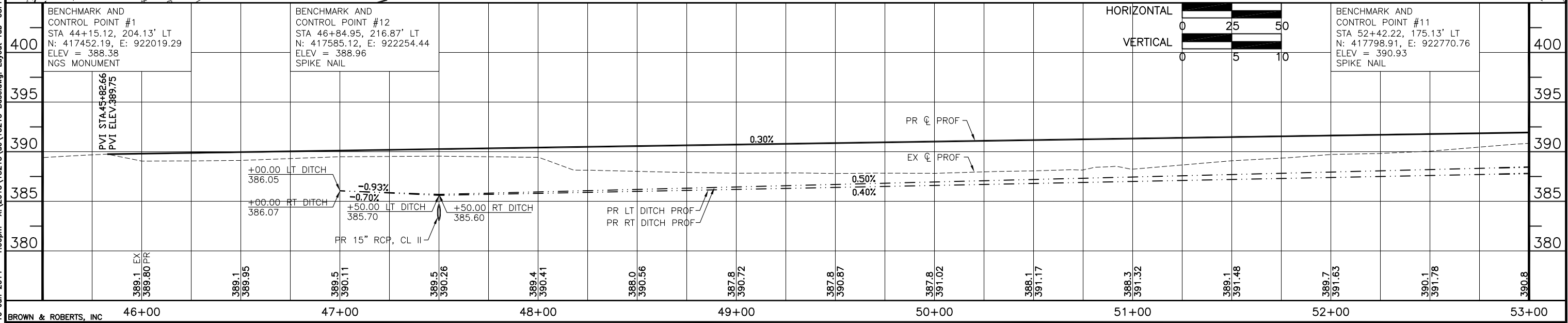
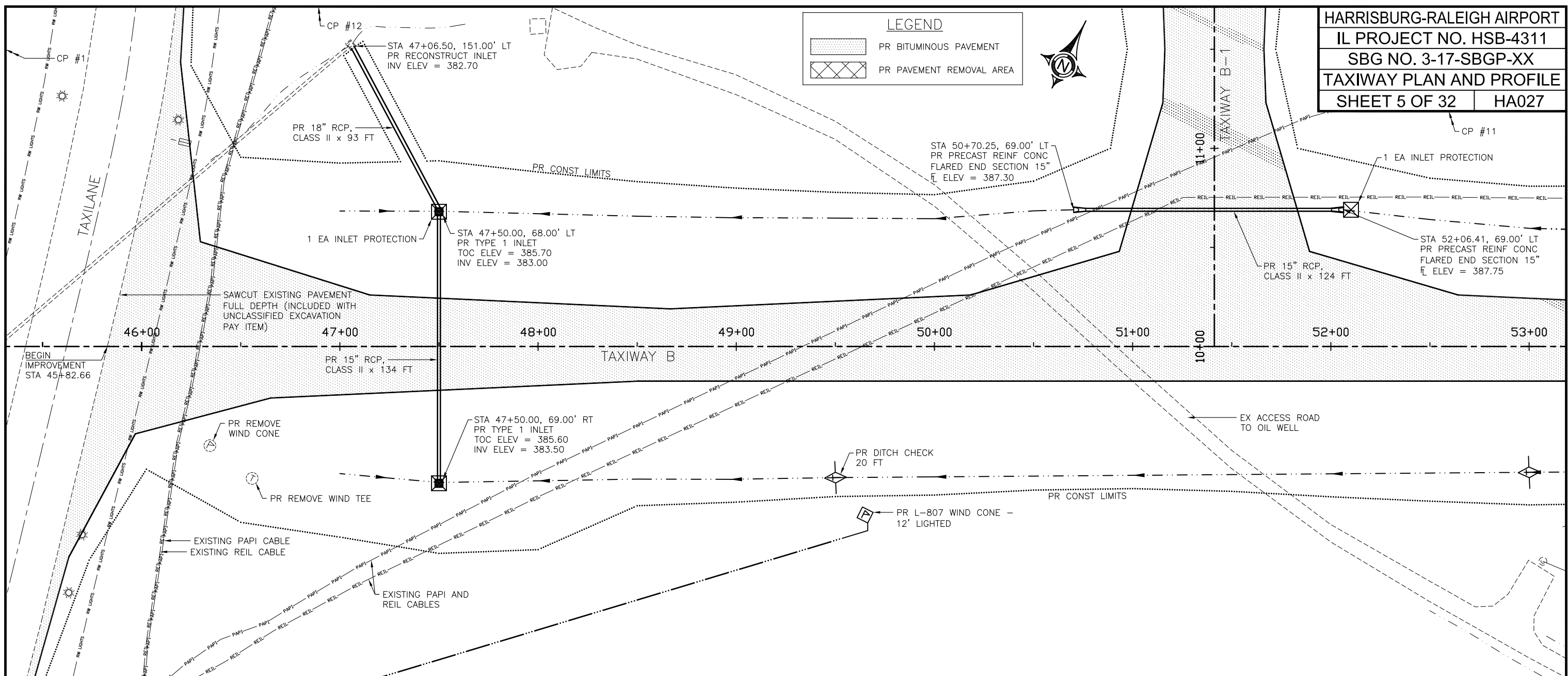


NOTE:
* FROM STA 21+23.00 TO STA 22+62.50, EXISTING PAVEMENT TO REMAIN IN PLACE AS SHOWN IN PLANS. EXCESS PAVEMENT TO BE SAWCUT AND REMOVED.

HARRISBURG-RALEIGH AIRPORT
IL PROJECT NO. HSB-4311
SBG NO. 3-17-SBGP-XX
TAXIWAY PLAN AND PROFILE
SHEET 5 OF 32 | **HA027**

LEGEND

- PR BITUMINOUS PAVEMENT
- PR PAVEMENT REMOVAL AREA

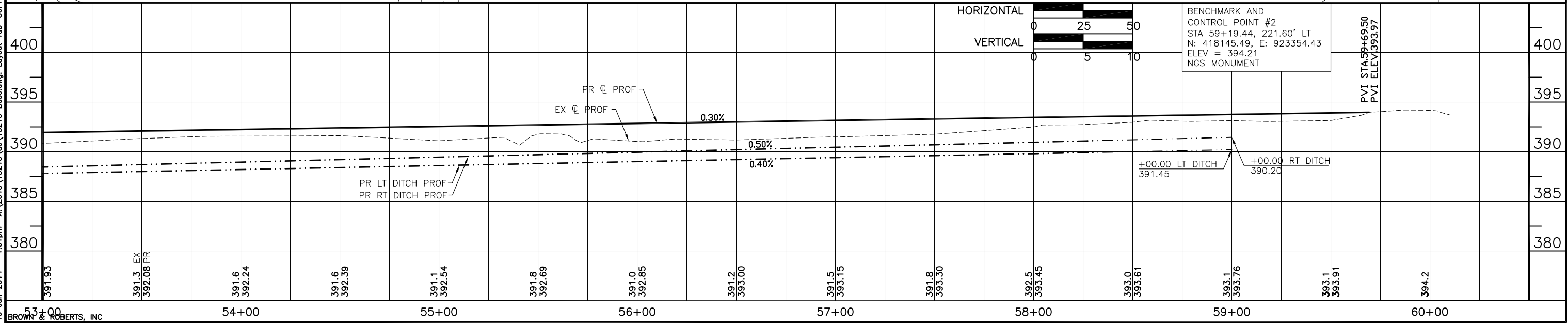
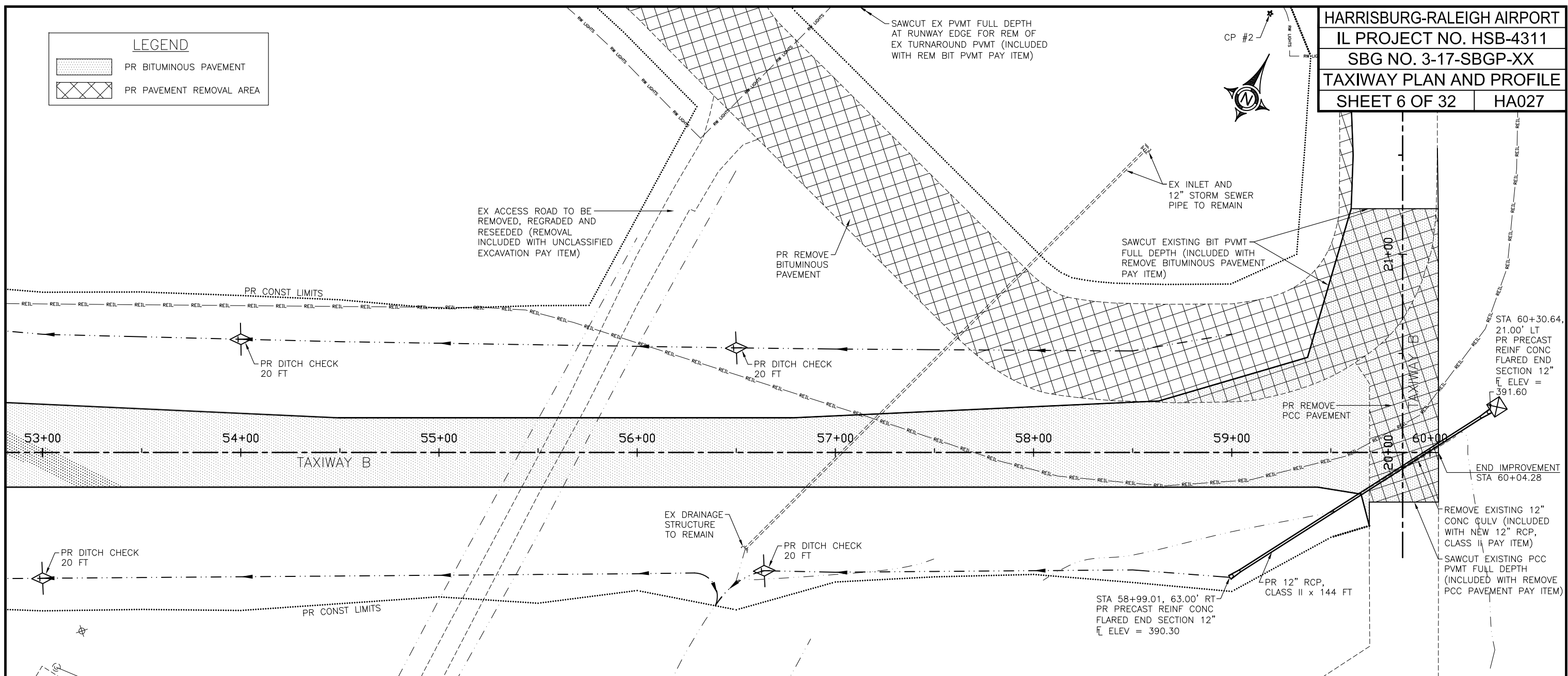


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HARRISBURG-RALEIGH AIRPORT
IL PROJECT NO. HSB-4311
SBG NO. 3-17-SBGP-XX
TAXIWAY PLAN AND PROFILE
SHEET 6 OF 32 **HA027**

LEGEND

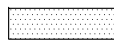
- PR BITUMINOUS PAVEMENT
- PR PAVEMENT REMOVAL AREA




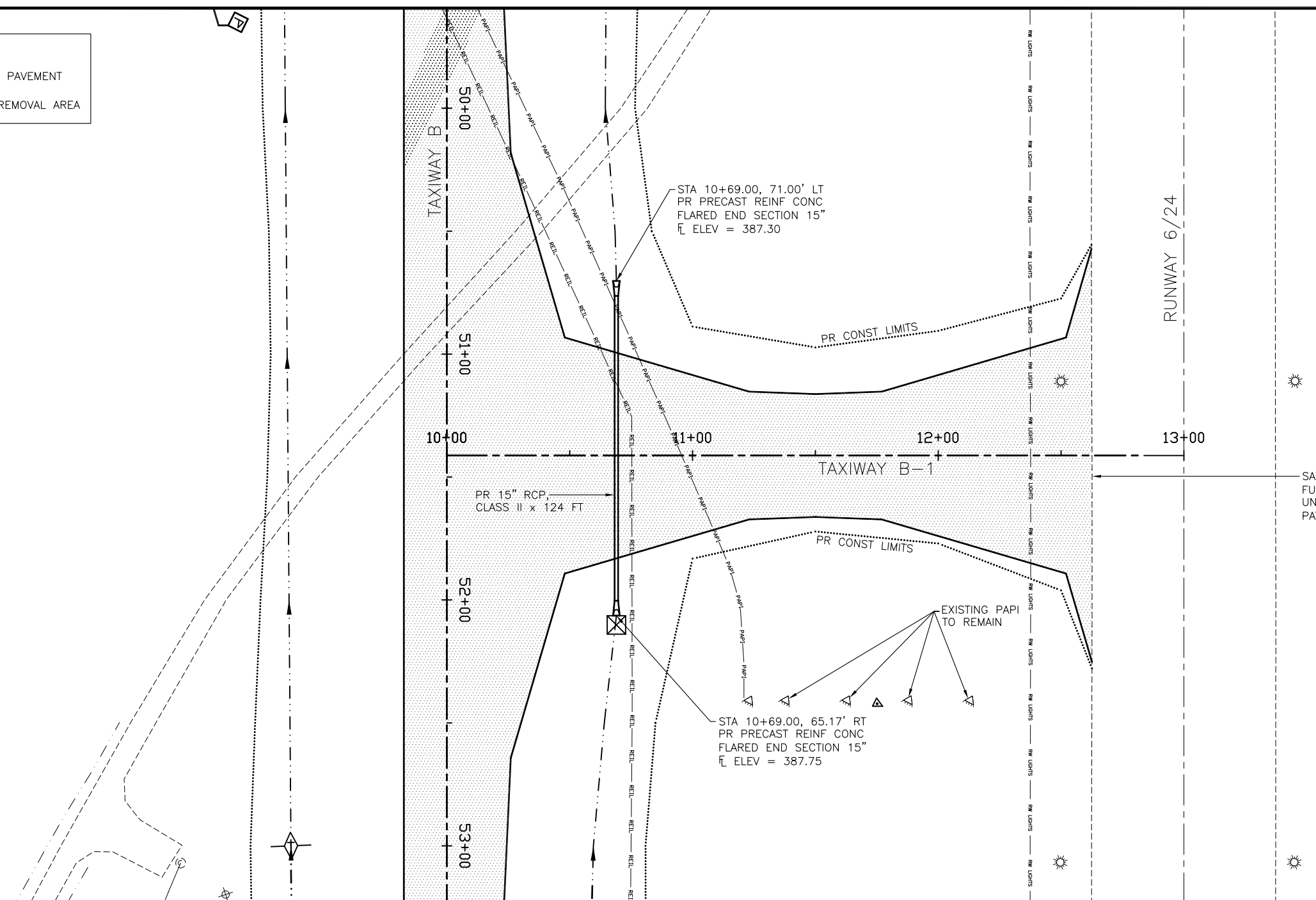
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HARRISBURG-RALEIGH AIRPORT
 IL PROJECT NO. HSB-4311
 SBG NO. 3-17-SBGP-XX
 TAXIWAY PLAN AND PROFILE
 SHEET 7 OF 32 | HA027

LEGEND

 PR BITUMINOUS PAVEMENT

 PR PAVEMENT REMOVAL AREA



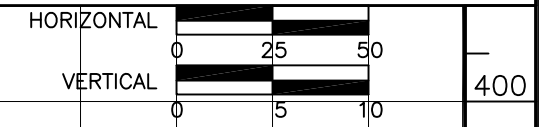
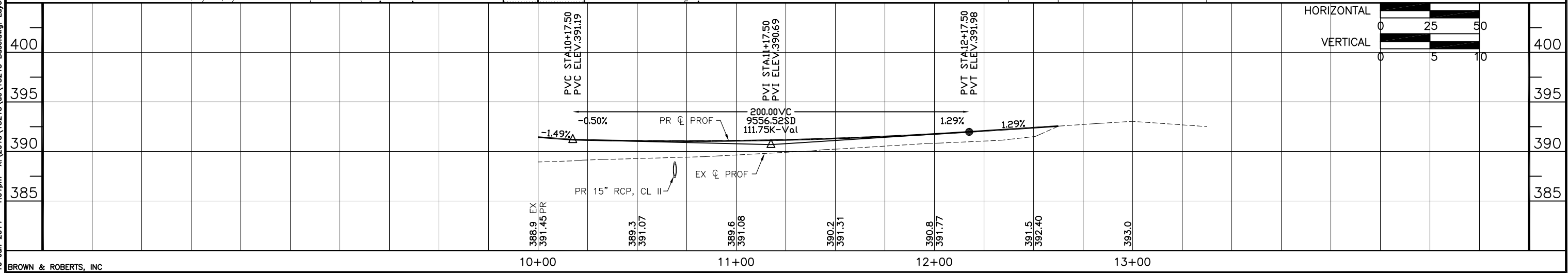
PR 15" RCP,
CLASS II x 124 FT

STA 10+69.00, 71.00' LT
PR PRECAST REINF CONC
FLARED END SECTION 15"
ELEV = 387.30

STA 10+69.00, 65.17' RT
PR PRECAST REINF CONC
FLARED END SECTION 15"
ELEV = 387.75

SAWCUT EXISTING PAVEMENT
FULL DEPTH (INCLUDED WITH
UNCLASSIFIED EXCAVATION
PAY ITEM)

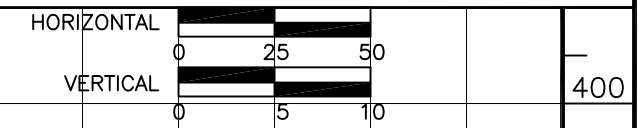
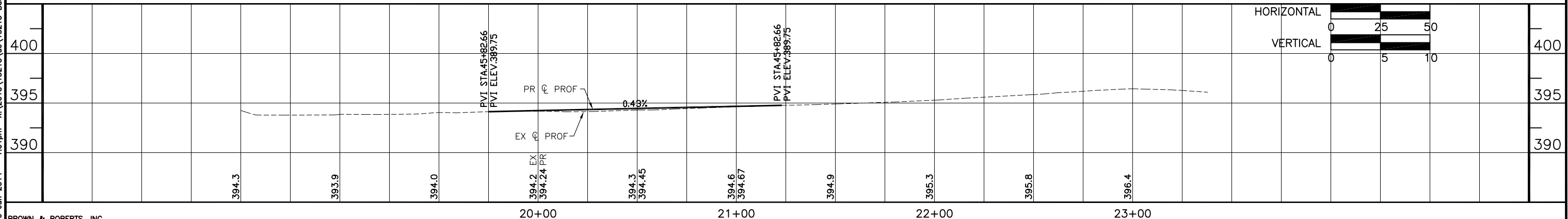
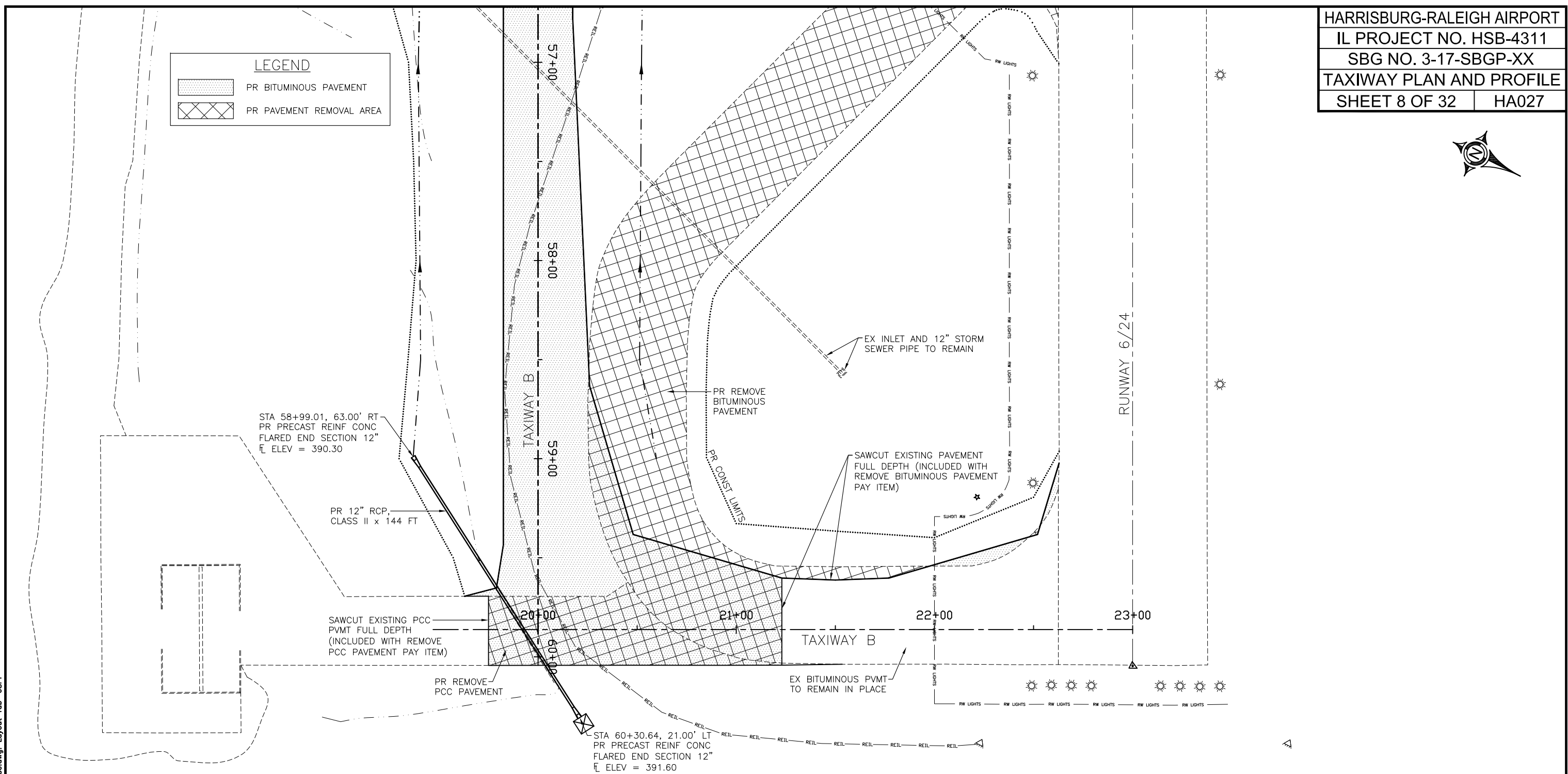
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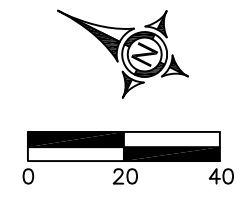


LEGEND

- PR BITUMINOUS PAVEMENT (stippled pattern)
- PR PAVEMENT REMOVAL AREA (cross-hatched pattern)



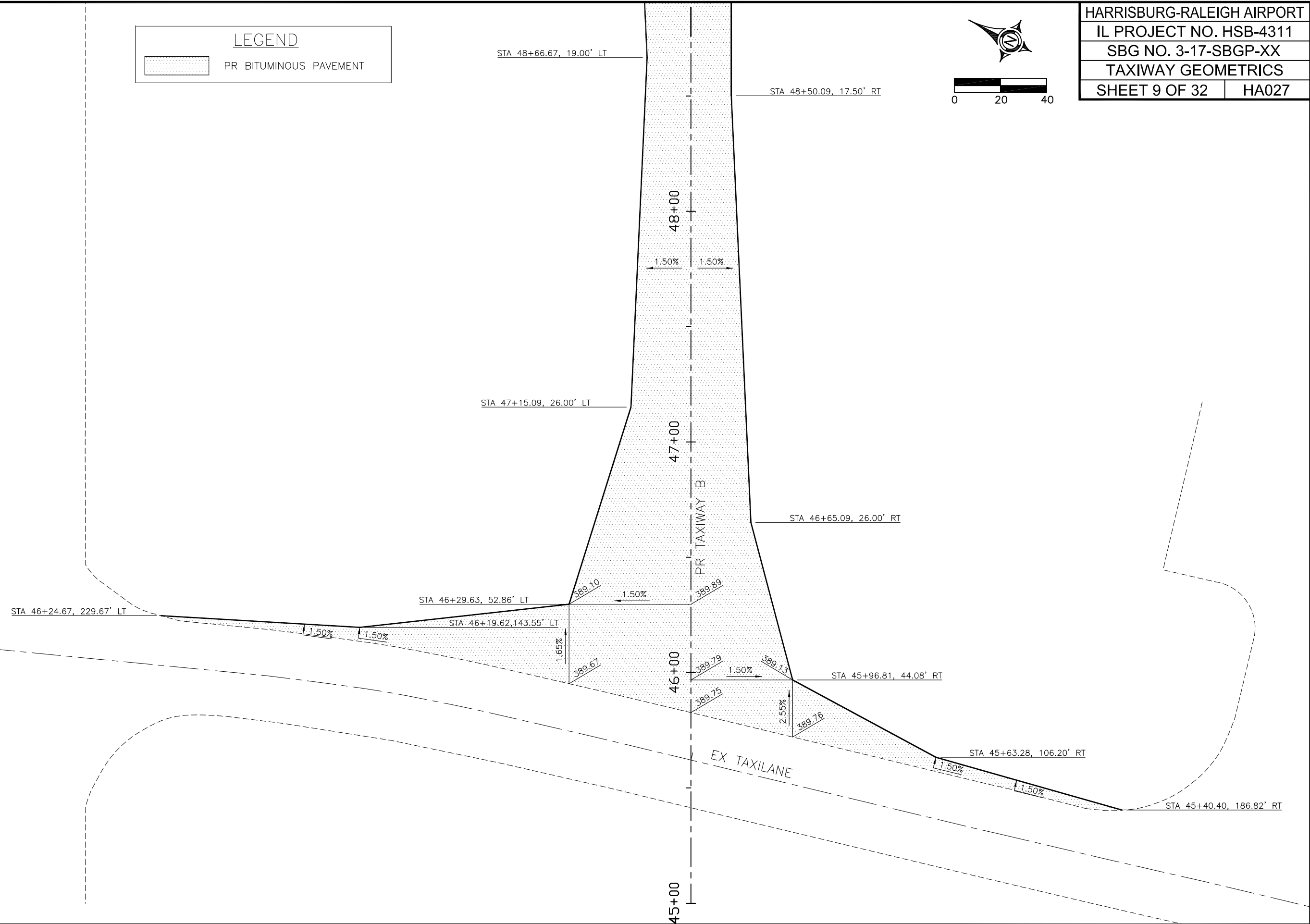
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LEGEND

 PR BITUMINOUS PAVEMENT

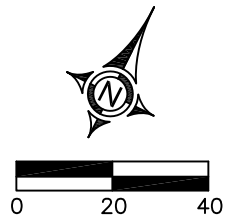
EX RUNWAY 6/24



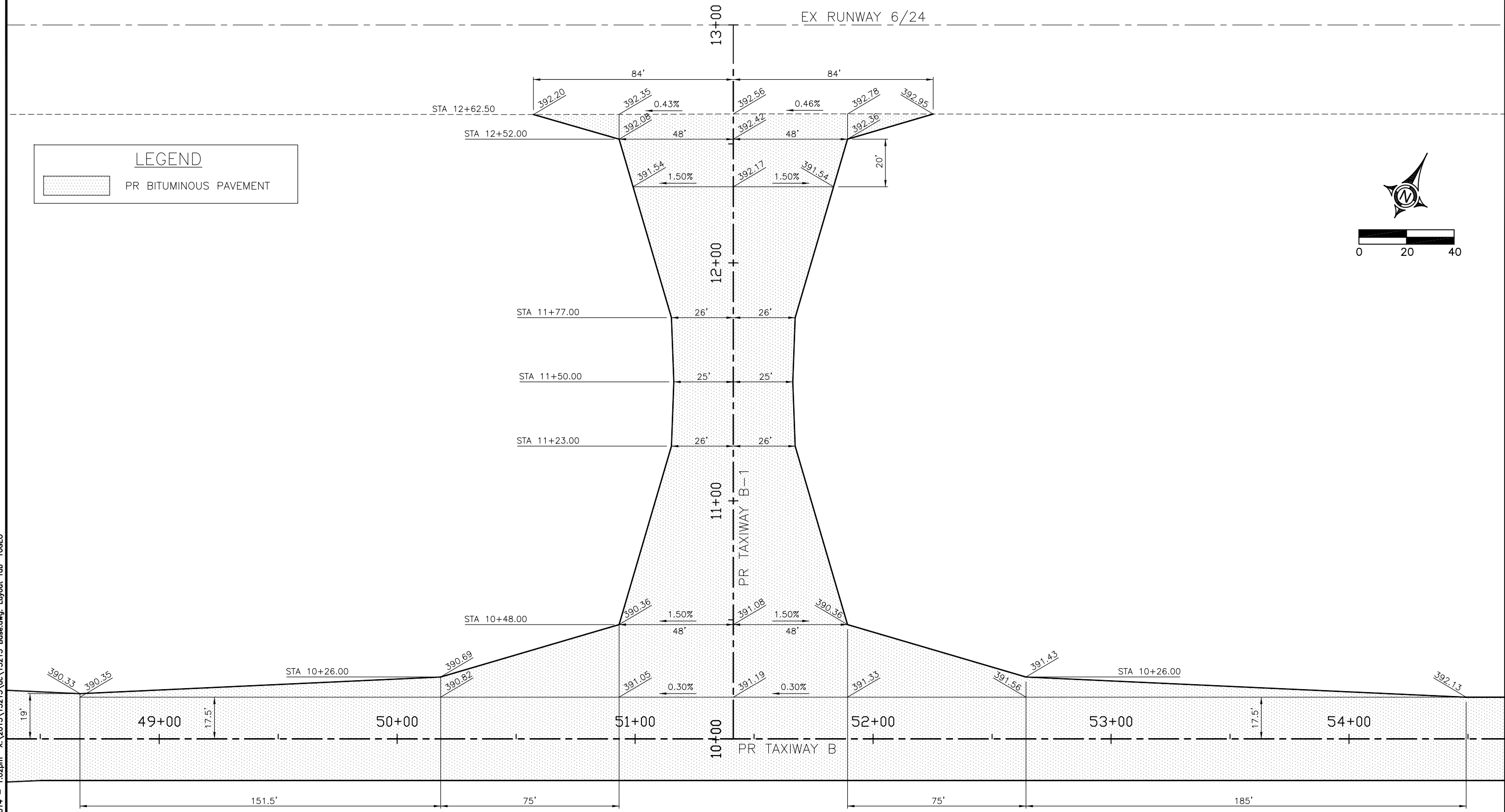
EX RUNWAY 6/24

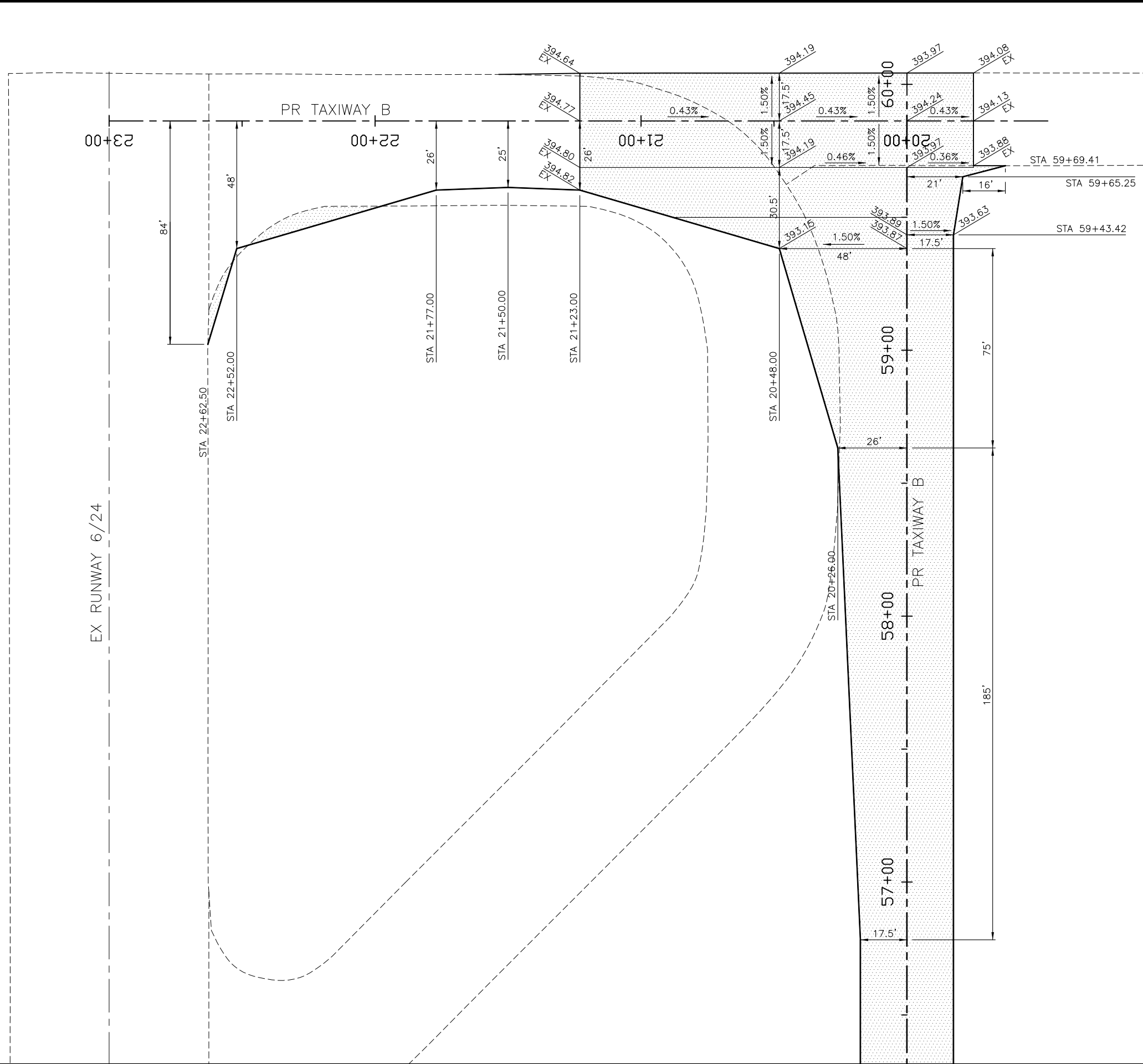
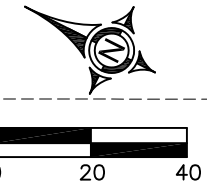
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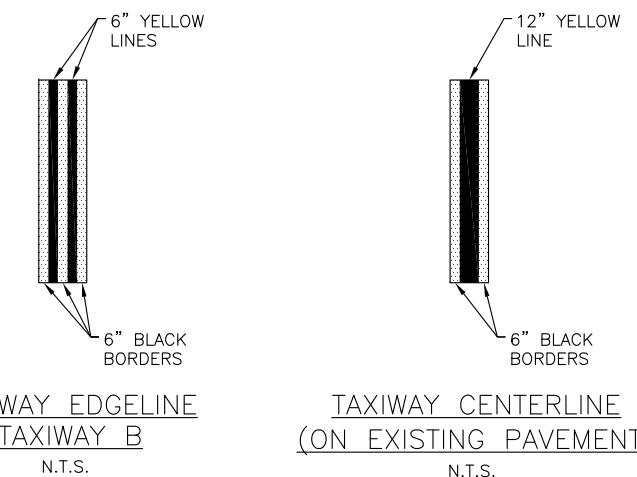
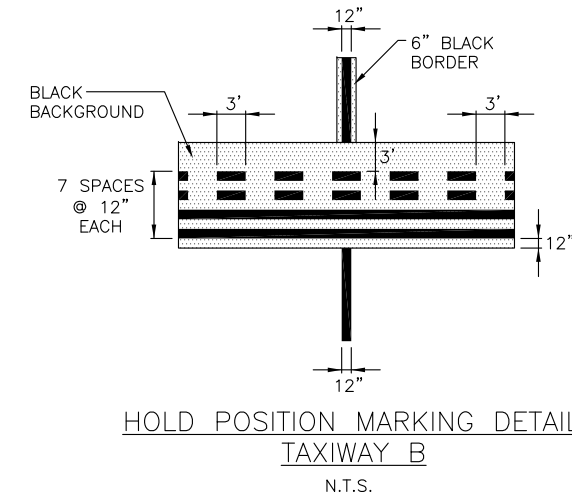
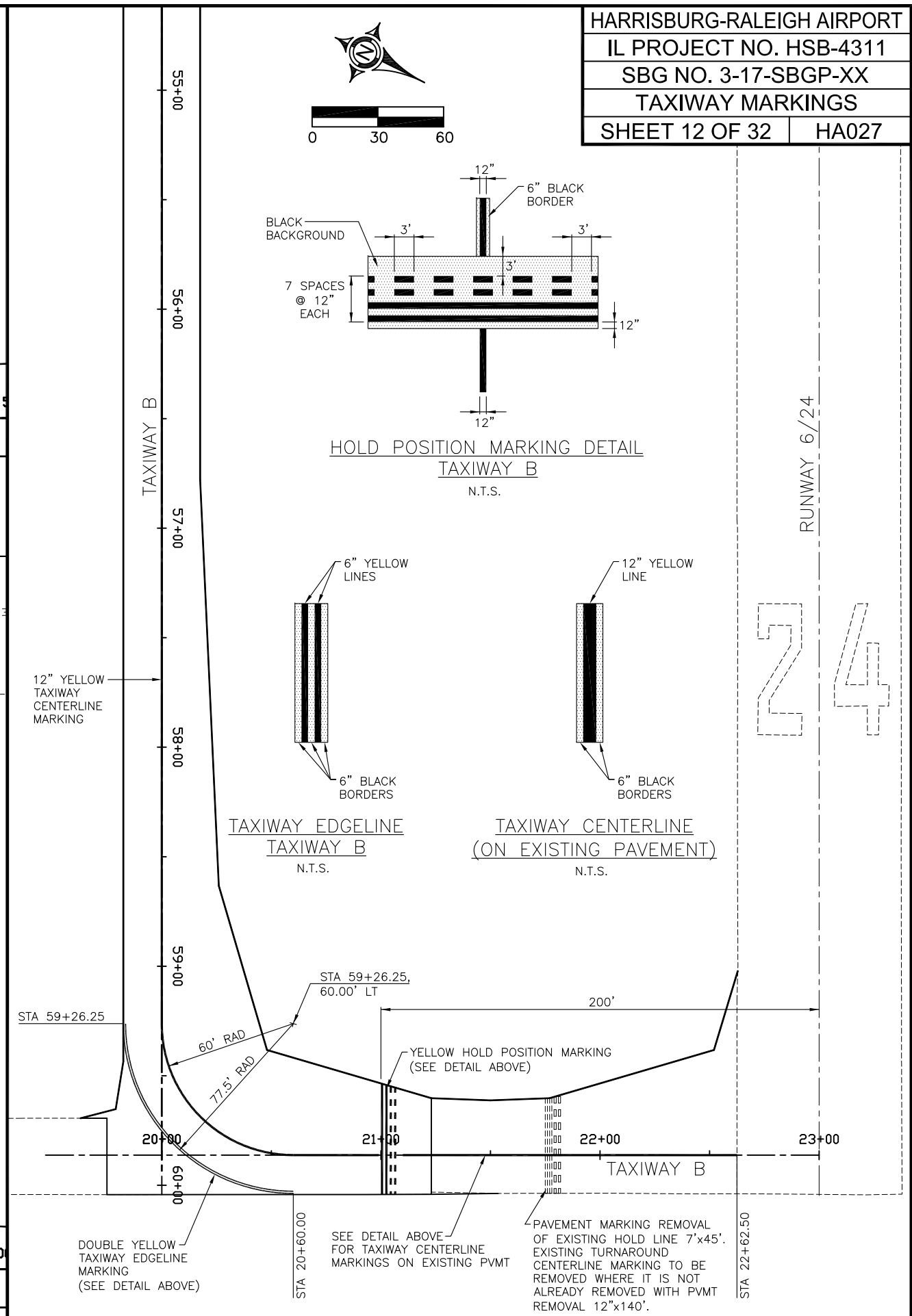
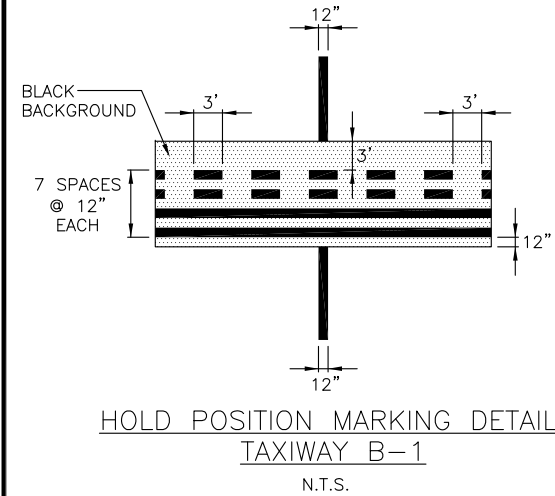
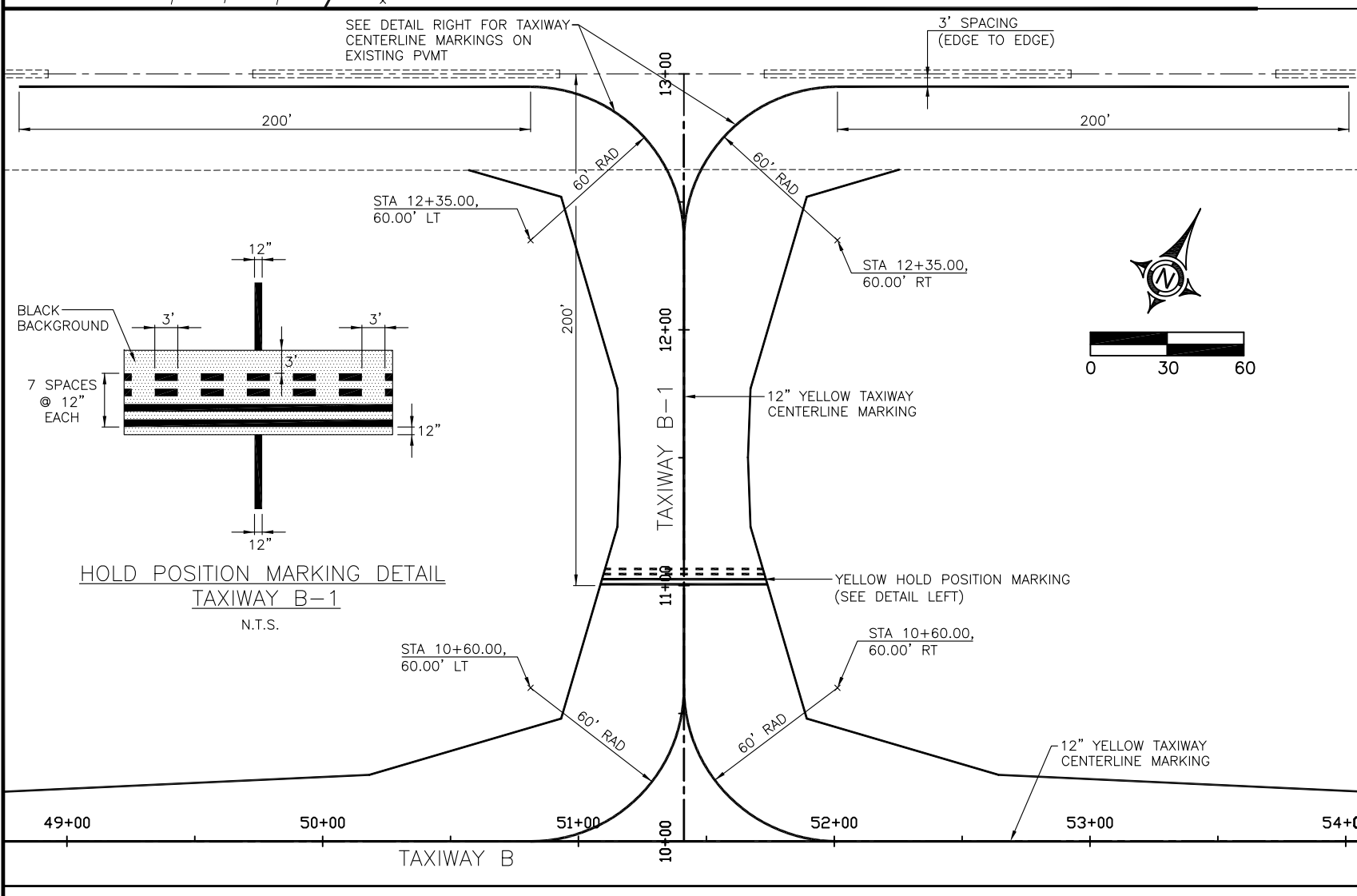
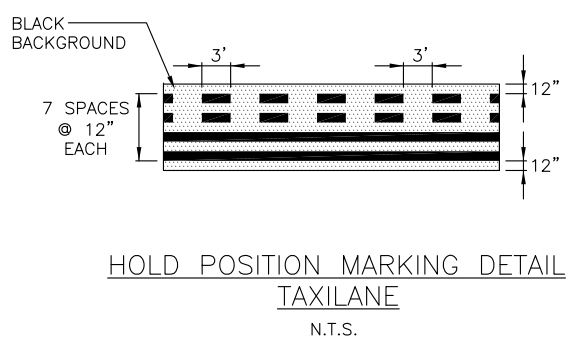
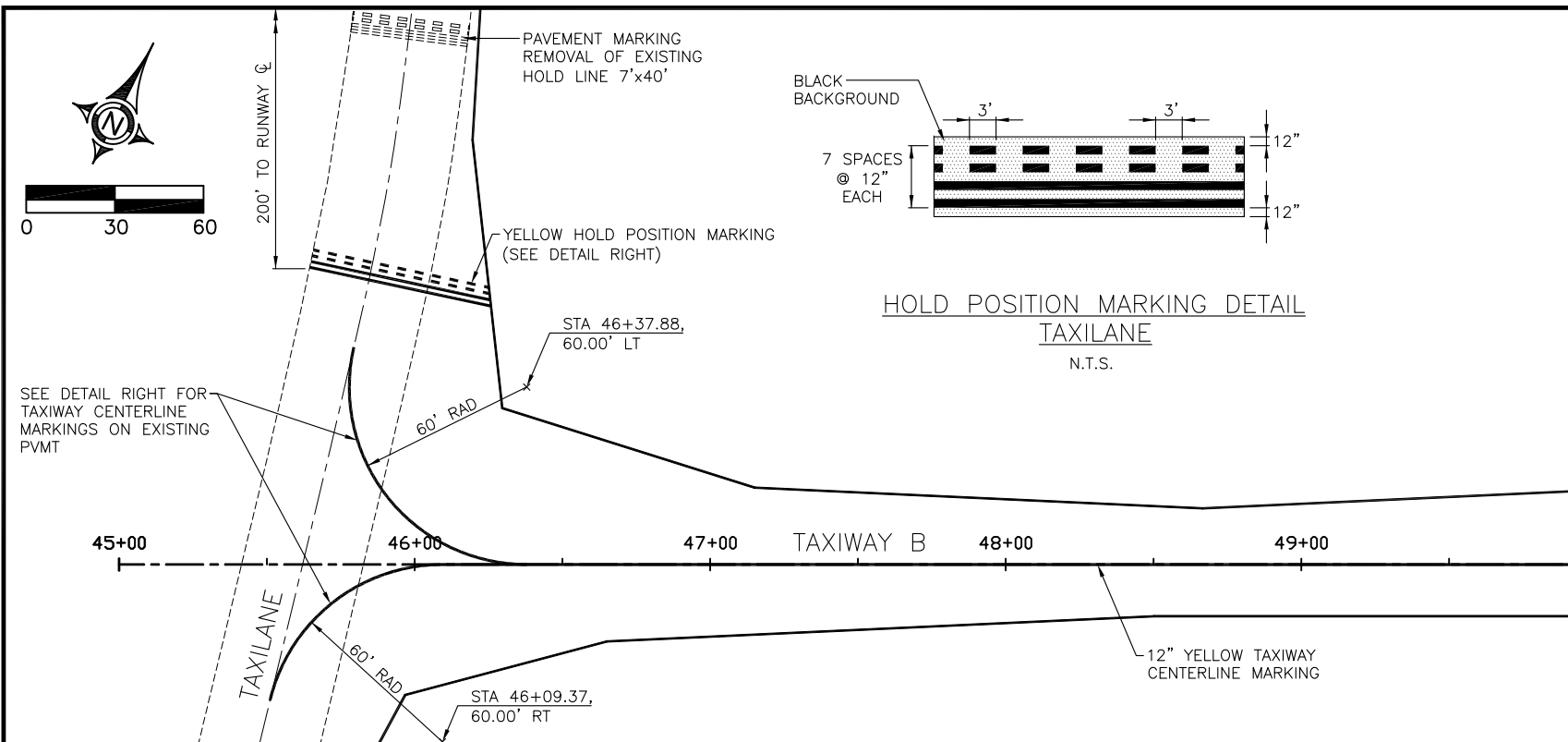
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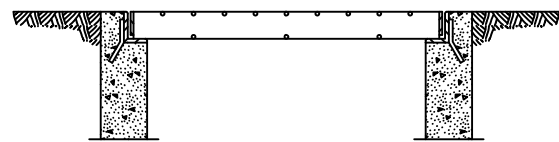
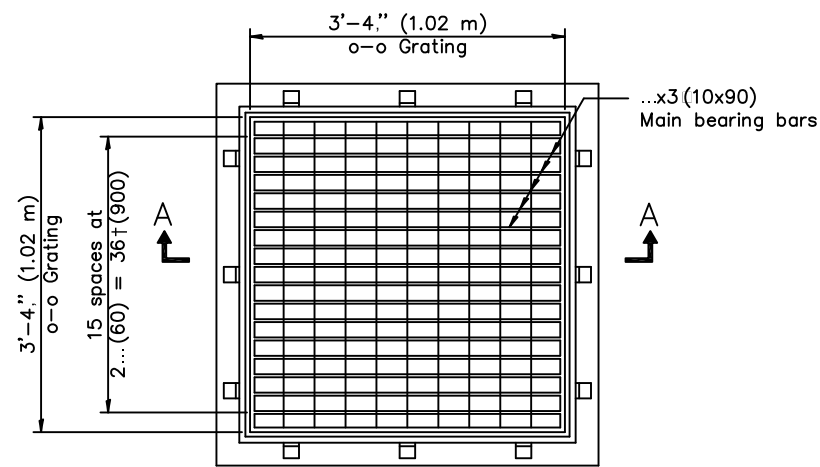




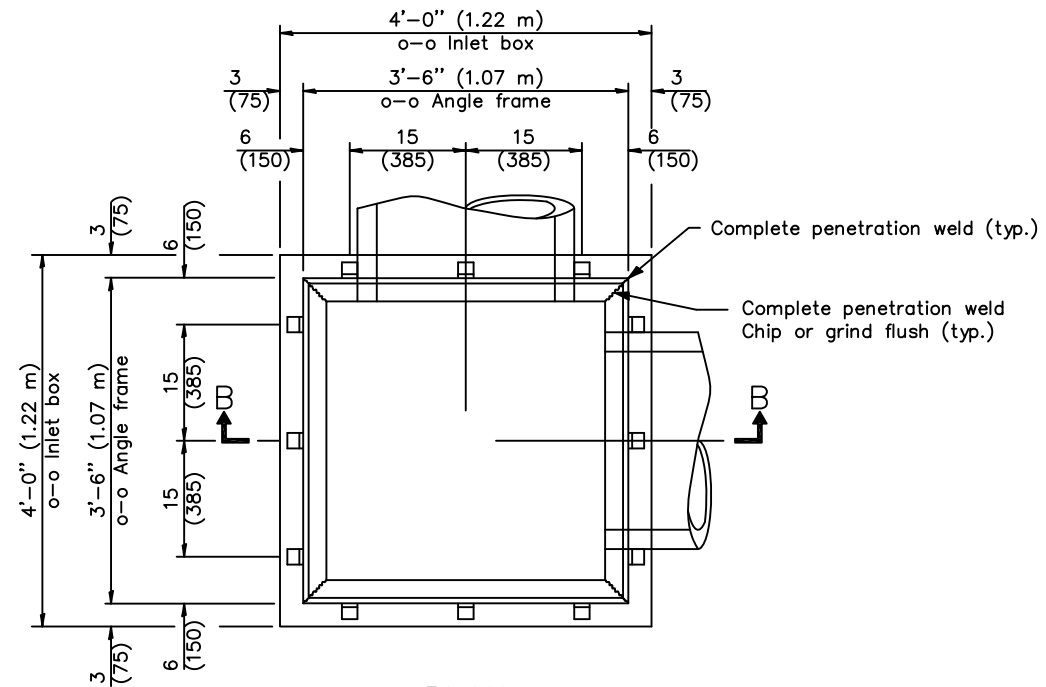


24

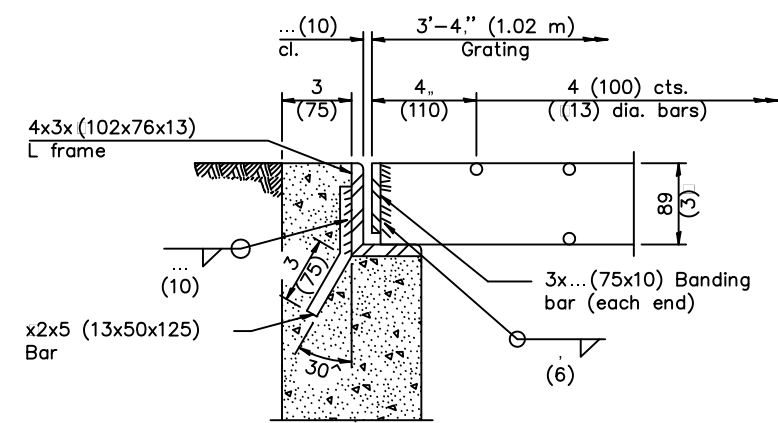
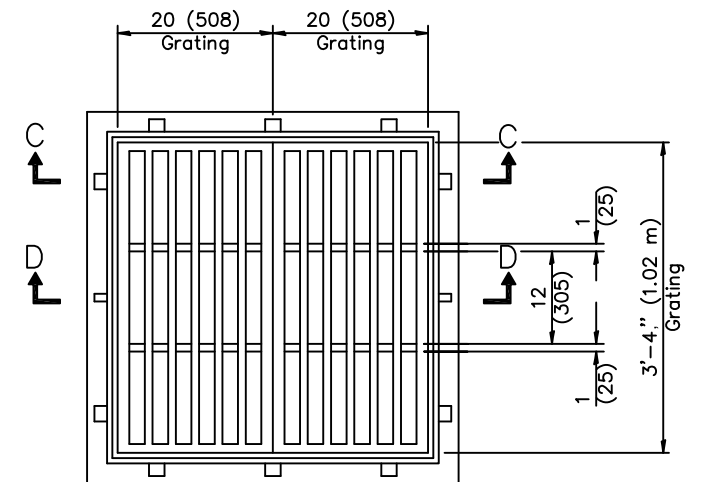
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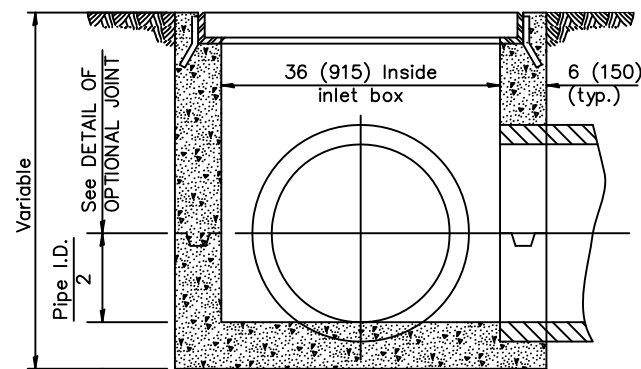
SECTION A-A



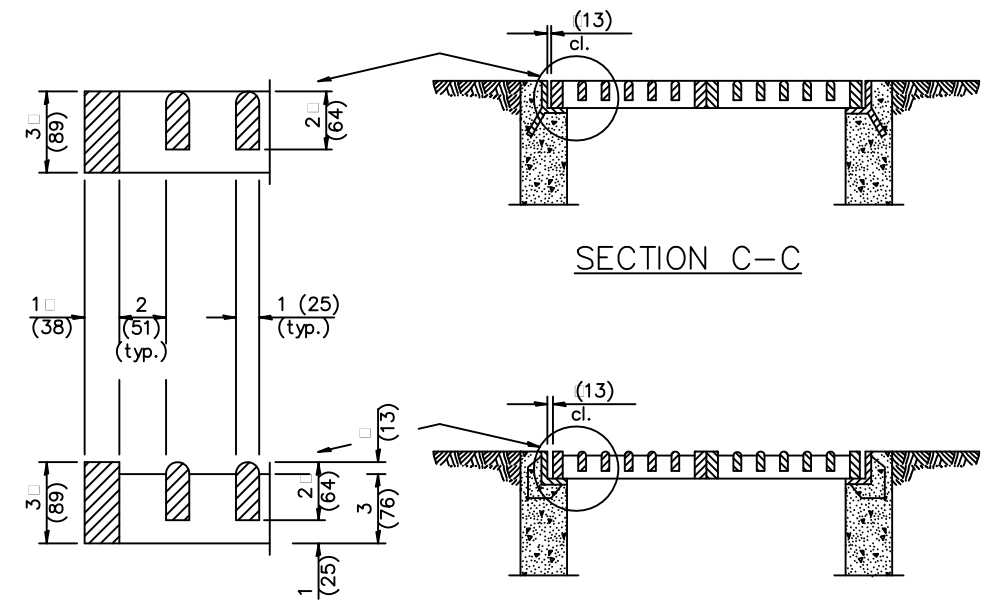
PLAN
(Grating omitted for clarity)



STEEL FRAME & GRATE

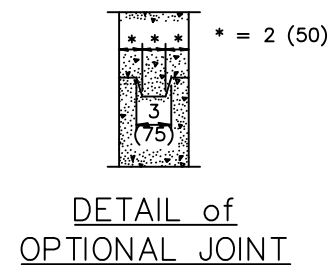


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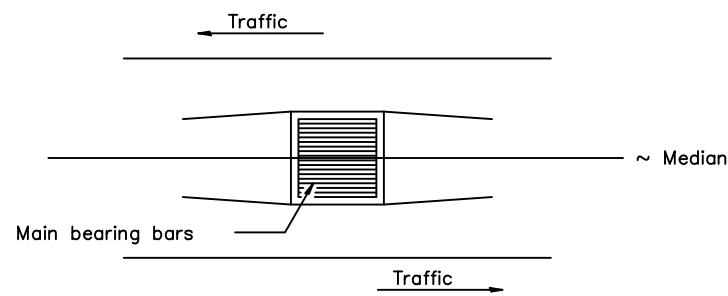


SECTION C-C

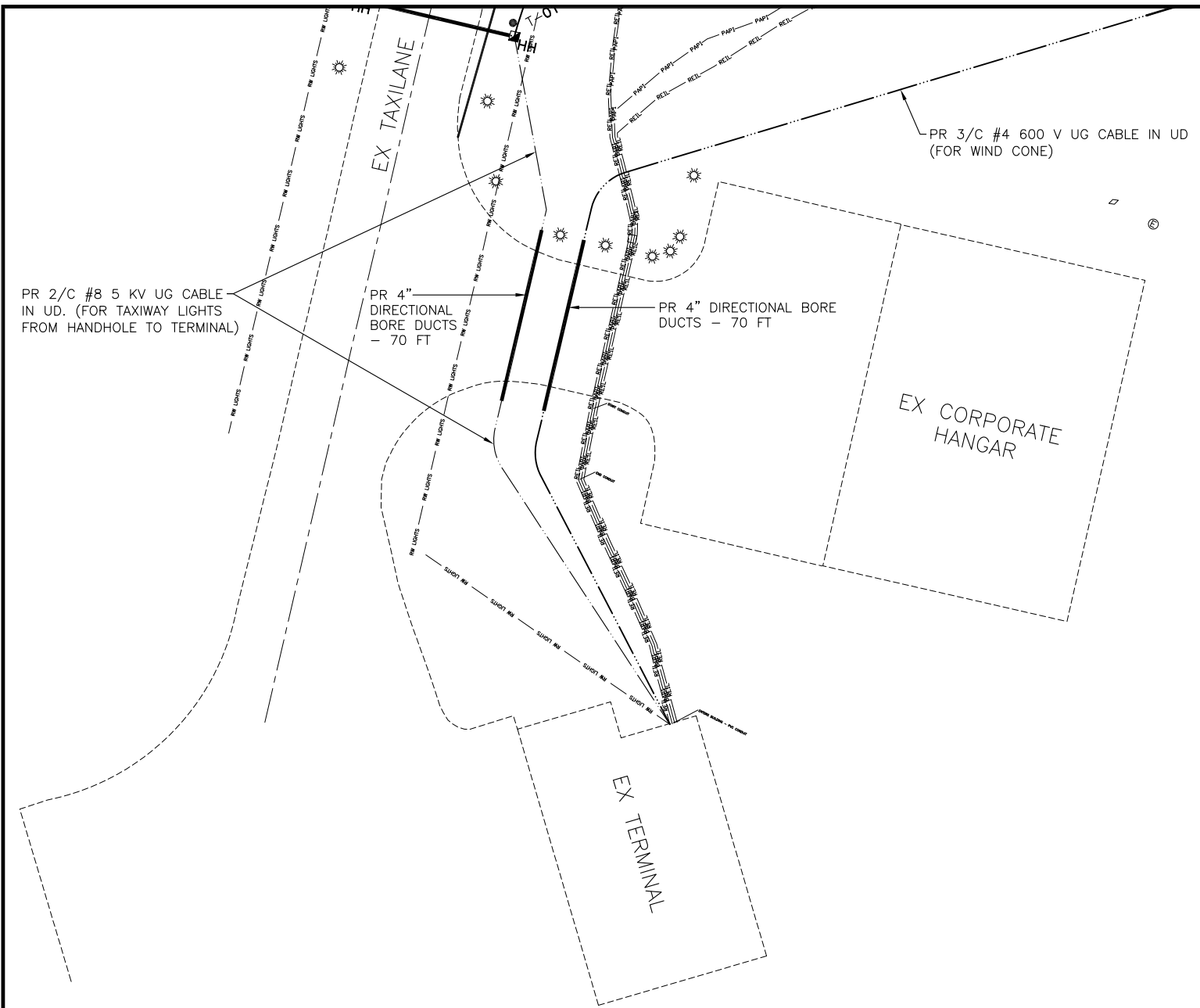
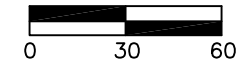
SECTION D-D
CAST FRAME & GRATE



DETAIL of
OPTIONAL JOINT



Sketch showing location and direction of
main bearing bars in relation to ~ median



LEGEND

— REIL — REIL —	EX REIL CABLE
— PAPI — PAPI —	EX PAPI CABLE
— RW LIGHTS —	EX RUNWAY OR TAXIWAY CABLE
— PR ELECTRICAL DUCT —	PR ELECTRICAL DUCT
— PR 1/C #8 5 KV UG CABLE IN UD —	PR 1/C #8 5 KV UG CABLE IN UD
— PR 2/C #8 5 KV UG CABLE IN UD —	PR 2/C #8 5 KV UG CABLE IN UD
— PR 3/C (#4 OR #6 AS CALLED OUT) 600 V UG CABLE IN UD —	PR 3/C (#4 OR #6 AS CALLED OUT) 600 V UG CABLE IN UD
☼	EX RUNWAY OR TAXIWAY LIGHT
■	PR STAKE MOUNTED RUNWAY LIGHT
●	PR STAKE MOUNTED LED TAXIWAY LIGHT
▬	EX TAXI GUIDANCE SIGN
▬	PR TAXI GUIDANCE SIGN
⊞	PR ELECTRICAL HANDHOLE
◁	EX REIL OR PAPI
⊕	EX WIND TEE
⊙	EX WIND CONE
⊞	PR WIND CONE

NOTES:

PROPOSED TAXIWAY LIGHTS TO BE SPACED 10' FROM TAXIWAY PAVEMENT EDGE.

PROPOSED TAXIWAY GUIDANCE SIGNS TO BE A MINIMUM 15' FROM TAXIWAY PAVEMENT EDGE.

ALL CONCRETE ENCASED DUCTS MUST BE A MINIMUM OF 24" DEPTH FROM TOP OF CONCRETE TO GROUND SURFACE.

ALL DUCTS NOT ENCASED MUST BE A MINIMUM OF 24" DEPTH FROM TOP OF DUCT TO GROUND SURFACE

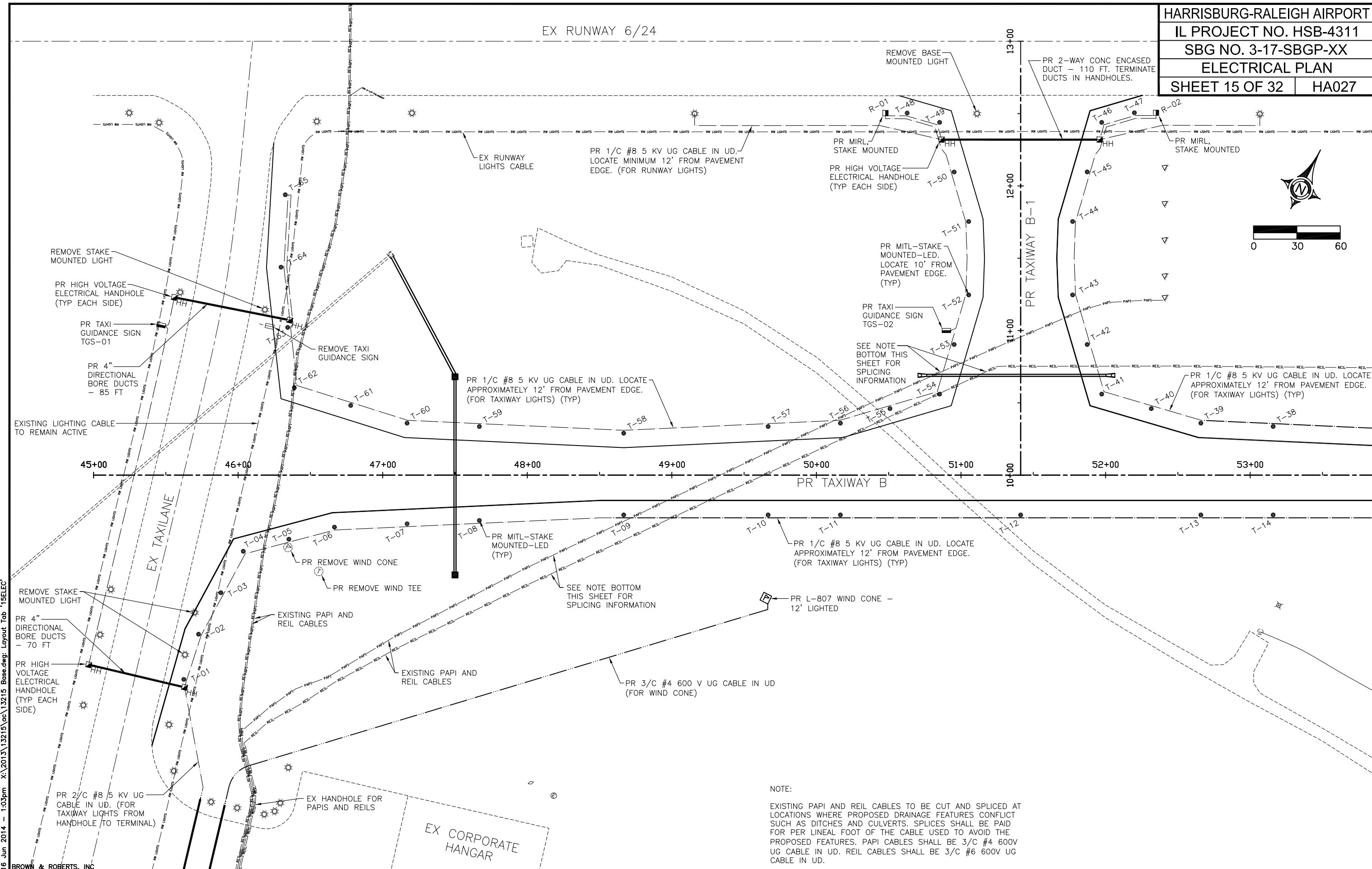
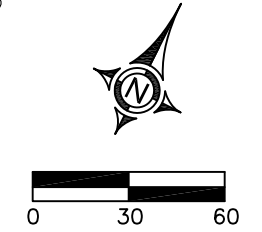
TO ALLOW CLEARANCE FOR UNIT DUCT SERIES CABLE, CONTRACTOR SHALL USE CAUTION WHEN CROSSING DUCT AREAS WITH OTHER CABLES

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY 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 AND ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGES TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT JULIE (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS) FOR UTILITY INFORMATION, PHONE: 1-800-892-0123. CONTACT THE FAA FOR ASSISTANCE IN LOCATING FAA CABLES AND UTILITIES. LOCATION OF FAA POWER, CONTROL, AND COMMUNICATION CABLES SHALL BE COORDINATED WITH AND/OR LOCATED BY THE FAA. ALSO CONTACT AIRPORT DIRECTOR/MANAGER AND AIRPORT PERSONNEL FOR ASSISTANCE IN LOCATING UNDERGROUND AIRPORT CABLES AND/OR UTILITIES. ALSO COORDINATE WORK WITH ALL ABOVEGROUND UTILITIES.

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EX RUNWAY 6/24



PR 1/C #8 5 KV UG CABLE IN UD. LOCATE MINIMUM 12' FROM PAVEMENT EDGE. (FOR RUNWAY LIGHTS)

PR 1/C #8 5 KV UG CABLE IN UD. LOCATE APPROXIMATELY 12' FROM PAVEMENT EDGE. (FOR TAXIWAY LIGHTS) (TYP)

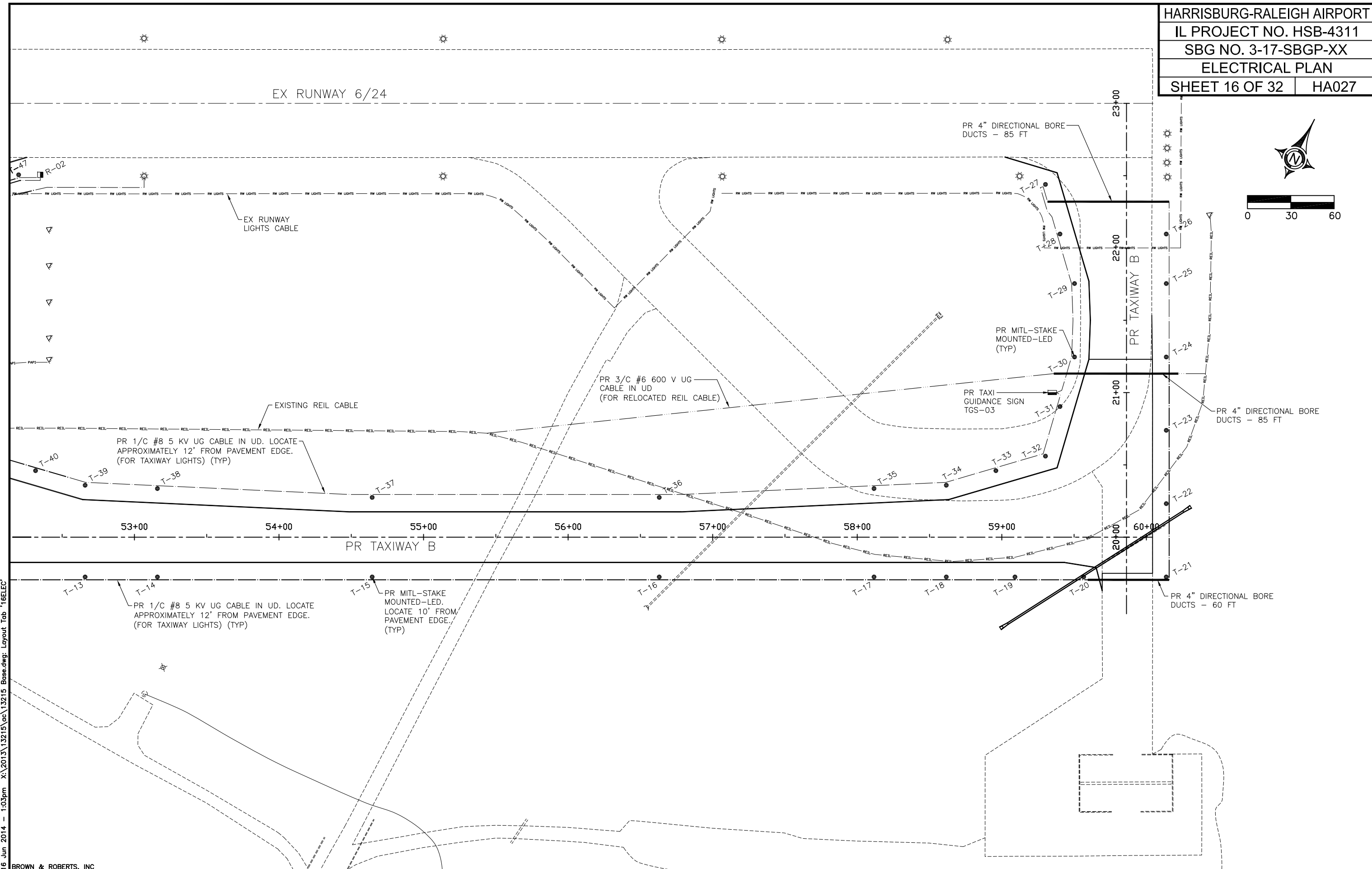
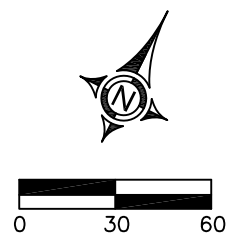
PR 1/C #8 5 KV UG CABLE IN UD. LOCATE APPROXIMATELY 12' FROM PAVEMENT EDGE. (FOR TAXIWAY LIGHTS) (TYP)

PR 1/C #8 5 KV UG CABLE IN UD. LOCATE APPROXIMATELY 12' FROM PAVEMENT EDGE. (FOR TAXIWAY LIGHTS) (TYP)

PR 3/C #4 600 V UG CABLE IN UD (FOR WIND CONE)

NOTE:
 EXISTING PAPI AND REIL CABLES TO BE CUT AND SPLICED AT LOCATIONS WHERE PROPOSED DRAINAGE FEATURES CONFLICT SUCH AS DITCHES AND CULVERTS. SPLICES SHALL BE PAID FOR PER LINEAL FOOT OF THE CABLE USED TO AVOID THE PROPOSED FEATURES. PAPI CABLES SHALL BE 3/C #4 600V UG CABLE IN UD. REIL CABLES SHALL BE 3/C #6 600V UG CABLE IN UD.

16 Jun 2014 - 1:03pm X:\2013\13215\13215.dwg Base.dwg Layout Tab '15ELEC'



16 Jun 2014 - 1:03pm X:\2013\13215\13215 Base.dwg: Layout Tab '16ELEC'

AIRFIELD LIGHTING NOTES

1. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT DIRECTOR/MANAGER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)
2. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS. CONTRACTOR SHALL FIELD VERIFY RESPECTIVE CIRCUITS AND POWER SOURCES PRIOR TO REMOVING OR DISCONNECTING THE RESPECTIVE AIRFIELD LIGHTING, NAVAID, OR OTHER DEVICE.
3. PROPOSED RUNWAY AND TAXIWAY LIGHTS SHALL BE PLACED 10 FEET FROM THE PAVEMENT EDGE UNLESS SHOWN OTHERWISE ON THESE CONSTRUCTION DRAWINGS. PROPOSED TAXI GUIDANCE SIGNS SHALL BE LOCATED SUCH THAT THE CLOSEST SIDE OF THE SIGN IS 15 FEET FROM THE PAVEMENT EDGE, UNLESS SHOWN OTHERWISE.
4. PROPOSED RUNWAY LIGHTS, TAXIWAY LIGHTS, GUIDANCE SIGNS, OTHER AIRFIELD LIGHTING, SPLICE CANS, HANDHOLES, ELECTRICAL DUCTS, AND CABLE SHALL BE INSTALLED AT THE LOCATIONS SHOWN AND IN COMPLIANCE WITH THE SPECIFICATIONS, SPECIAL PROVISIONS, RESPECTIVE DETAILS, AND MANUFACTURERS'S RECOMMENDATIONS.
5. PROPOSED CABLE FOR RUNWAY AND TAXIWAY LIGHTING SHALL BE INSTALLED APPROXIMATELY 12 FEET FROM THE PAVEMENT EDGE. CABLES SHALL BE PLACED AT A MINIMUM OF 18" BELOW FINISHED GRADE.
6. IN AREAS WHERE THERE IS A CONGESTION OF CABLES OR WHERE THE PROPOSED CABLE CROSSES AN EXISTING CABLE, THE CONTRACTOR IS REQUIRED TO HAND DIG THE TRENCH NECESSARY FOR THE PROPOSED CABLE. AT OTHER LOCATIONS, THE PROPOSED CABLE MAY BE TRENCHED OR PLOWED INTO PLACE. HAND DIGGING, TRENCHING AND/OR PLOWING WILL BE CONSIDERED INCIDENTAL TO THE PROPOSED CABLES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. PROPOSED RUNWAY LIGHTS AND TAXIWAY LIGHTS SHALL BE FITTED WITH LENSES IN ACCORDANCE WITH THE "LIGHT LENS SCHEDULE".
8. ALL PROPOSED RUNWAY, THRESHOLD, AND TAXIWAY LIGHTS SHALL BE TAGGED BY THE CONTRACTOR IN ACCORDANCE WITH THE LIGHT NUMBERS SHOWN ON THESE CONSTRUCTION DRAWINGS.
9. SEE "TAXI GUIDANCE SIGN SCHEDULE" FOR INFO ON SIGN LEGENDS.
10. THE CONTRACTOR SHALL SECURE, IDENTIFY AND PLACE ALL TEMPORARY EXPOSED WIRING IN CONDUIT, DUCT OR UNIDUCT TO PREVENT ELECTROCUTION AND FIRE IGNITION SOURCES AS PER THE REQUIREMENTS OF FAA AC 150/5370-2F, PART 218, PARAGRAPH C. ALL LABOR, MATERIALS, AND TIME NECESSARY TO COMPLY WITH THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
11. HOMERUN CABLES FOR A RESPECTIVE CIRCUIT THAT ARE INSTALLED IN CONDUIT OR DUCT SHALL BE RUN TOGETHER IN THE SAME RACEWAY OR DUCT.

TAXIWAY LIGHT LOCATION TABLE					
LIGHT #	NORTHING	EASTING	STATION	OFFSET	ALIGNMENT
T-01	417210.19	922306.36	45+62.39	141.25' RT	TXY B
T-02	417242.71	922301.38	45+72.60	109.98' RT	TXY B
T-03	417275.28	922302.28	45+88.08	81.31' RT	TXY B
T-04	417307.85	922303.18	46+03.55	52.64' RT	TXY B
T-05	417329.50	922327.57	46+35.08	44.29' RT	TXY B
T-06	417351.16	922351.97	46+66.62	35.94' RT	TXY B
T-07	417375.85	922395.77	47+16.85	33.63' RT	TXY B
T-08	417400.43	922439.38	47+66.85	31.34' RT	TXY B
T-09	417448.82	922526.76	48+66.67	27.50' RT	TXY B
T-10	417493.84	922615.97	49+66.59	27.50' RT	TXY B
T-11	417516.36	922660.61	50+16.59	27.50' RT	TXY B
T-12	417572.52	922771.90	51+41.25	27.50' RT	TXY B
T-13	417628.68	922883.19	52+65.91	27.50' RT	TXY B
T-14	417651.21	922927.83	53+15.91	27.50' RT	TXY B
T-15	417718.13	923060.46	54+64.47	27.50' RT	TXY B
T-16	417807.58	923237.73	56+63.03	27.50' RT	TXY B
T-17	417874.51	923370.36	58+11.59	27.50' RT	TXY B
T-18	417897.04	923415.00	58+61.59	27.50' RT	TXY B
T-19	417918.44	923457.42	59+09.10	27.50' RT	TXY B
T-20	417939.84	923499.83	59+56.61	27.50' RT	TXY B
T-21	417965.58	923550.85	60+13.75	27.50' RT	TXY B
T-22	418010.85	923528.00	60+13.75	23.21' LT	TXY B
T-23	418056.12	923505.16	20+73.91	27.50' RT	TXY B
T-24	418101.39	923482.32	21+24.62	27.50' RT	TXY B
T-25	418146.71	923459.45	21+75.38	27.50' RT	TXY B
T-26	418177.32	923444.00	22+09.67	27.50' RT	TXY B
T-27	418170.28	923353.96	22+43.95	56.06' LT	TXY B
T-28	418144.21	923378.38	22+09.67	46.00' LT	TXY B
T-29	418118.13	923402.80	21+75.38	35.95' LT	TXY B
T-30	418072.81	923425.67	21+24.62	35.95' LT	TXY B
T-31	418037.67	923432.14	20+90.34	46.00' LT	TXY B
T-32	418002.54	923438.61	59+30.19	56.06' LT	TXY B
T-33	417978.10	923412.51	58+95.89	46.00' LT	TXY B
T-34	417953.67	923386.42	58+61.59	35.93' LT	TXY B
T-35	417929.09	923342.82	58+11.59	33.64' LT	TXY B
T-36	417856.69	923212.95	56+63.03	27.50' LT	TXY B
T-37	417767.23	923035.69	54+64.47	27.50' LT	TXY B
T-38	417705.79	922900.29	53+15.91	33.64' LT	TXY B
T-39	417685.31	922854.62	52+65.91	35.93' LT	TXY B
T-40	417678.84	922819.46	10+46.00	90.36' RT	TXY B-1
T-41	417672.37	922784.30	10+56.06	56.06' RT	TXY B-1
T-42	417698.45	922759.88	10+90.34	46.00' RT	TXY B-1
T-43	417724.52	922735.46	11+24.62	35.95' RT	TXY B-1
T-44	417769.84	922712.59	11+75.38	35.95' RT	TXY B-1
T-45	417804.98	922706.13	12+09.66	46.00' RT	TXY B-1
T-46	417840.11	922699.66	12+43.94	56.06' RT	TXY B-1
T-47	417856.23	922716.85	12+50.59	78.67' RT	TXY B-1
T-48	417785.23	922576.64	12+50.37	78.50' LT	TXY B-1
T-49	417789.58	922599.59	12+43.91	56.05' LT	TXY B-1
T-50	417763.52	922624.00	12+09.65	46.00' LT	TXY B-1
T-51	417737.46	922648.41	11+75.38	35.95' LT	TXY B-1
T-52	417692.13	922671.28	11+24.62	35.95' LT	TXY B-1
T-53	417657.00	922677.74	10+90.34	46.00' LT	TXY B-1
T-54	417621.86	922684.21	10+56.06	56.06' LT	TXY B-1
T-55	417597.43	922658.12	10+46.00	90.36' LT	TXY B-1
T-56	417572.99	922632.03	50+16.59	35.93' LT	TXY B
T-57	417548.41	922588.43	49+66.59	33.62' LT	TXY B
T-58	417499.27	922501.31	48+66.67	29.01' LT	TXY B
T-59	417458.42	922410.11	47+66.85	33.62' LT	TXY B
T-60	417437.96	922364.43	47+16.85	35.93' LT	TXY B
T-61	417431.33	922324.09	46+77.85	48.19' LT	TXY B
T-62	417424.70	922283.75	46+38.85	60.44' LT	TXY B
T-63	417459.84	922260.87	46+34.25	102.13' LT	TXY B
T-64	417494.98	922237.99	46+29.65	143.81' LT	TXY B
T-65	417541.02	922218.04	46+32.59	193.89' LT	TXY B

RUNWAY LIGHT LOCATION TABLE					
LIGHT #	NORTHING	EASTING	STATION	OFFSET	ALIGNMENT
R-01	417778.44	922563.26	12+50.34	93.50' LT	TXY B-1
R-02	417862.96	922730.26	12+50.56	93.67' RT	TXY B-1

TAXI GUIDANCE SIGN SCHEDULE			
SIGN NUMBERS	LOCATION	SIDE A	SIDE B
TGS-01	EXISTING TAXILANE INTERSECTION WITH RUNWAY 6-24 AT HOLD LINE	6-24	RAMP ↑
TGS-02	TAXIWAY B-1 INTERSECTION WITH RUNWAY 6-24 AT HOLD LINE	6-24	RAMP →
TGS-03	TAXIWAY B INTERSECTION WITH RUNWAY 24 AT HOLD LINE	24	RAMP →

TAXI GUIDANCE SIGN LEGEND

- 6-24 TYPE L-858R MANDATORY INSTRUCTION SIGN - BLACK OUTLINE ON OUTSIDE EDGE OF WHITE LEGEND ON A RED BACKGROUND
- RAMP ↑ TYPE L-858Y DIRECTION, DESTINATION, AND BOUNDARY SIGN - BLACK LEGEND ON A YELLOW BACKGROUND

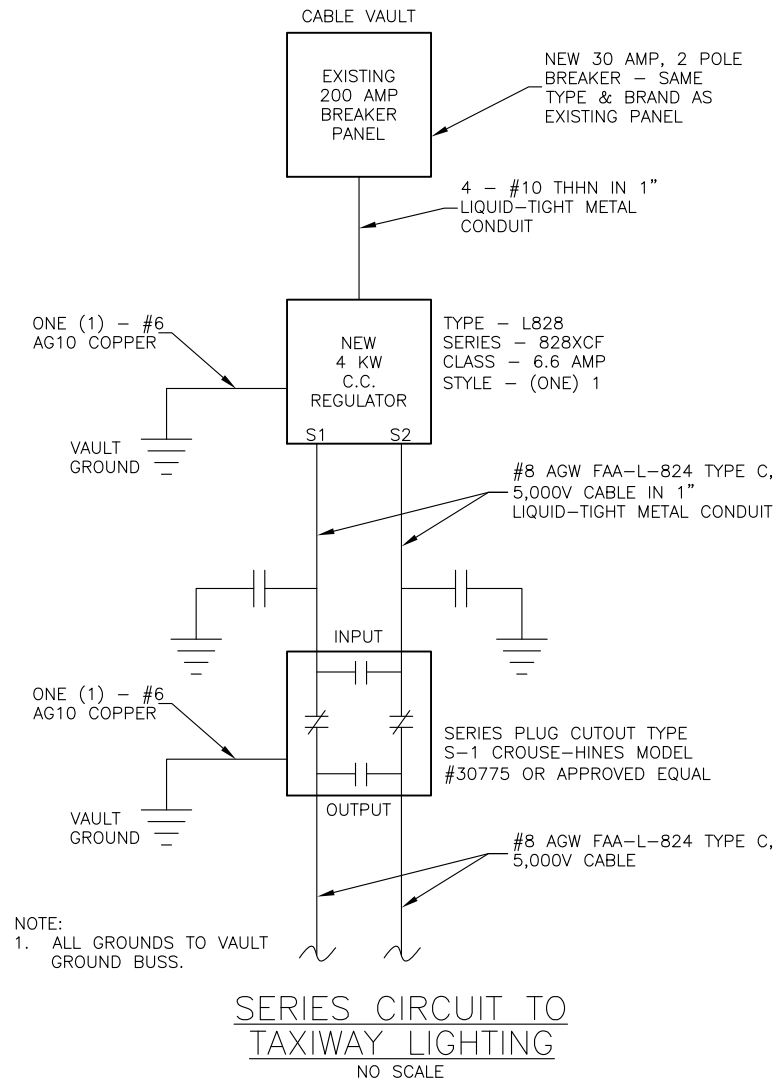
TAXI GUIDANCE SIGN NOTES

1. SIGN SCHEDULE IS SUBJECT TO FAA APPROVAL OF THE SIGNAGE PLAN.
2. CHANGES TO SIGN LEGEND MAY OCCUR SUBJECT TO #1 ABOVE.
3. PROPOSED TAXI GUIDANCE SIGNS SHALL BE SIZE 2, MODULES 2, DOUBLE FACED L-858.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH LEGENDS FOR APPROVAL PRIOR TO MANUFACTURING.
5. PROPOSED TAXI GUIDANCE SIGNS SHALL BE COMPLETE WITH ALL MOUNTING LEGS AND HARDWARE AND ISOLATION TRANSFORMER.
6. PROPOSED TAXI GUIDANCE SIGNS MUST COMPLY WITH AC 150/5345-44J (LATEST EDITION)
7. THE PROPOSED TAXI GUIDANCE SIGNS SHALL BE LOCATED SUCH THAT THE CLOSEST SIDE OF THE SIGN IS 15 FEET FROM THE PAVEMENT EDGE OR RESPECTIVE RUNWAY SURFACE EDGE.

LIGHT LENS SCHEDULE	
LIGHT NUMBERS	LENS
T-01 TO T-65	BLUE
R-01 TO R-02	WHITE

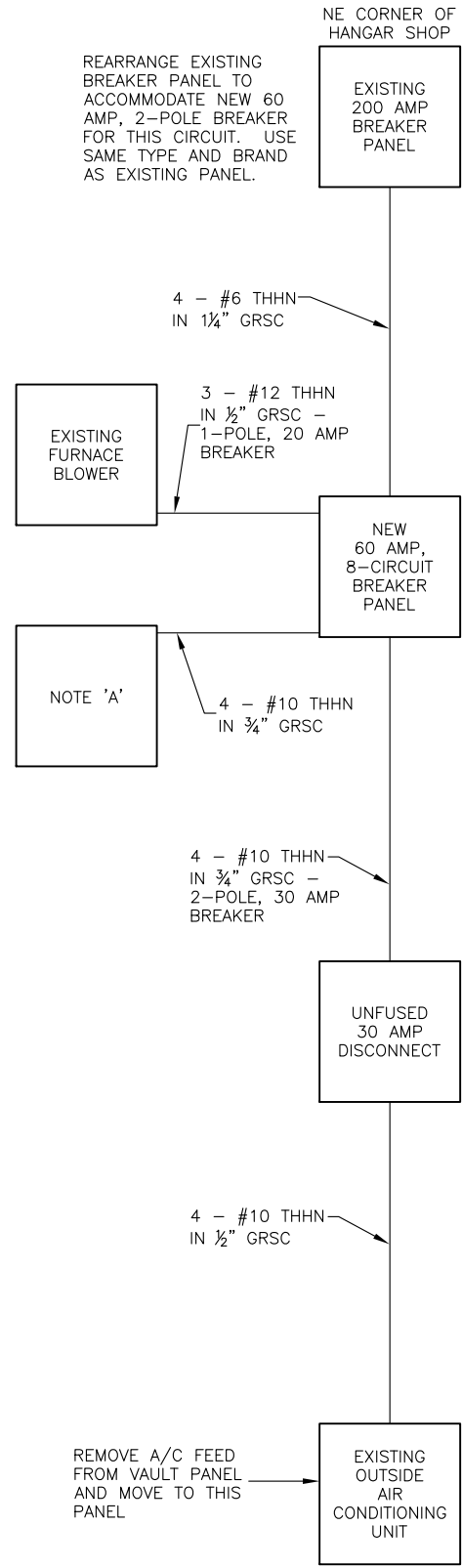
- CONDUCTORS**
- 3 WIRE CIRCUIT:
 (1) BLACK
 (1) WHITE
 (1) GREEN
- 4 WIRE CIRCUIT:
 (1) BLACK
 (1) RED
 (1) WHITE
 (1) GREEN

NOTE 'A':
 1 - 30 AMP, 2-POLE
 CIRCUIT TO BE RELOCATED
 FROM PANEL IN CABLE
 VAULT TO NEW 60 AMP
 PANEL (AS SHOWN)



REMOVE FEED TO FURNACE
 FROM PANEL IN VAULT AND
 CONNECT TO THIS PANEL

REMOVE FEED TO NOTE 'A'
 FROM PANEL IN VAULT TO
 THIS PANEL

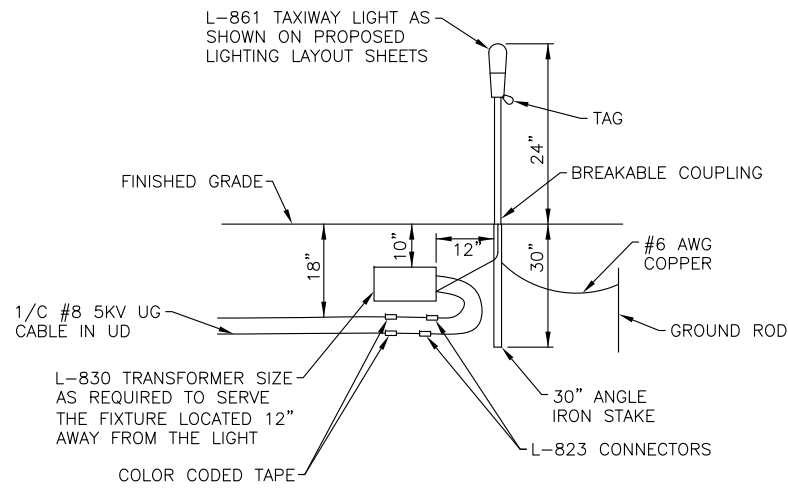


NOTE 'A' - TO BE DETERMINED IN FIELD

MODIFY HANGAR SHOP PANEL
 NO SCALE

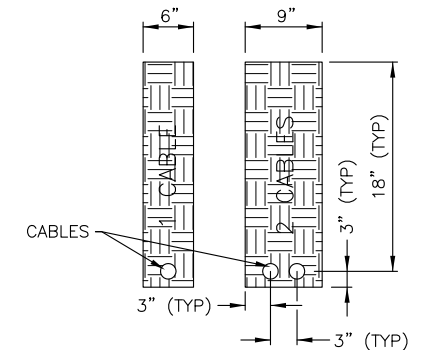
ELECTRICAL NOTES

- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 – NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- 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 LIGHTING SYSTEM.
- 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.
- ANY AND ALL INSTRUCTIONS FROM THE RESIDENT 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 ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS). THE CONTRACTOR SHALL NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE RESIDENT ENGINEER REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS.
- ALL CABLE AND DUCT MARKERS SHALL BE INSTALLED PER FAA STANDARD SPECIFICATIONS, CURRENT ADVISORY CIRCULARS AND MANUFACTURERS RECOMMENDATIONS.
- 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 PHASE CONDUCTORS ON 120/240VAC SINGLE-PHASE, THREE WIRE SYSTEMS AND BLACK, ORANGE (FOR HIGH LEG) AND BLUE SHALL BE USED FOR PHASE CONDUCTORS ON 240/120VAC THREE-PHASE, FOUR WIRE 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. INSULATED GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTOR SIZES (AWG OR KCML).
- INSTALLATION OF ELECTRICAL EQUIPMENT SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE ELECTRICAL ITEMS BEING INSTALLED.
- THE EXISTING WIND CONE AND WIND TEE SHALL BE REMOVED AND TURNED OVER TO THE AIRPORT MANAGER. THE EXISTING CONCRETE FOUNDATIONS SHALL BE REMOVED AND DISPOSED OF OFF THE AIRPORT SITE. THE HOLES LEFT FROM THE WIND TEE AND WIND CONE FOUNDATION REMOVAL SHALL BE FILLED WITH EARTH MATERIAL AND COMPACTED TO PREVENT FUTURE SETTLEMENT.
- ALL CABLE SPLICES SHALL BE INSTALLED IN CONFORMANCE WITH LATEST FAA ADVISORY CIRCULARS AND STANDARD SPECIFICATIONS.
- FOR HANDHOLES, ALL CORING, INTERFACE, AND LABOR ASSOCIATED WITH CONDUIT, DUCT, CABLE IN UNIT DUCT, AND/OR CABLE ENTRIES WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE HANDHOLE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ALL TAXIWAY GUIDANCE SIGNS SHALL BE INSTALLED PER FAA STANDARD SPECIFICATIONS, CURRENT ADVISORY CIRCULARS AND MANUFACTURERS RECOMMENDATIONS.



NOTE:
 TRANSFORMER, CONNECTORS AND CABLE
 SLACK SHALL BE ENCASED IN SAND

MEDIUM INTENSITY LIGHT – STAKE MOUNTED
 NOT TO SCALE



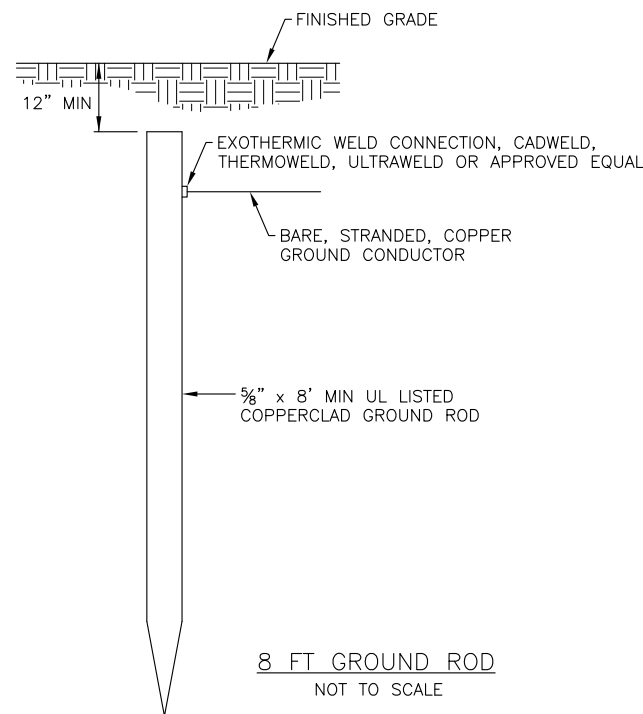
NOTES:

- EARTH BACKFILL SHALL HAVE 1" MAX SIZE PARTICLES AND WILL BE PLACED IN NO LESS THAN TWO LIFTS
- TOP 4" SHALL BE TOPSOIL SEEDED AND MULCHED
- DEPTH OF TRENCHES SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED IN PLANS

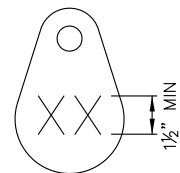
CABLE TRENCHES
 NOT TO SCALE

GROUNDING NOTES

- GROUNDING FOR RUNWAY LIGHTS, TAXIWAY LIGHTS, AND LIGHTED TAXI GUIDANCE SIGNS SHALL BE AS DETAILED ON THE PLANS AND AS SPECIFIED PER THE LATEST EDITION OF FAA AC 150/5340-30G DESIGN AND INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS, CHAPTER 12, PART 12.6. A GROUND MUST BE INSTALLED AT EACH LIGHT FIXTURE.
- IT IS THE INTENT OF THIS SPECIFICATION THAT ALL MOTOR FRAMES, PUMP BASES ELECTRICAL EQUIPMENT ENCLOSURES, PANEL HOUSINGS, CONDUITS, BOXES, ETC. HAVE A CONTINUOUS COPPER WIRE GROUND CONNECTION AND SHALL BE POSITIVELY BONDED TO THE RESPECTIVE GROUNDING SYSTEM. CONDUIT CONNECTORS WILL NOT BE CONSIDERED AS ADEQUATE GROUNDING.
- EACH AND ALL GROUNDED CASED AND METAL PARTS ASSOCIATED WITH ELECTRICAL EQUIPMENT SHALL BE TESTED FOR CONTINUITY OF CONNECTION WITH GROUND BUS SYSTEM BY CONTRACTOR IN PRESENCE OF OWNER'S REPRESENTATIVE.
- BOND ALL NONCURRENT-CARRYING PARTS OF METAL EQUIPMENT TO GROUND SYSTEM.
- WHERE A CONFLICT IS DETERMINED WITH RESPECT TO GROUNDING REQUIREMENTS PER MANUFACTURER INSTALLATION INSTRUCTIONS, NEC, AND/OR THE CONTRACT DOCUMENTS, CONTACT THE RESIDENT ENGINEER OR PROJECT ENGINEER FOR FURTHER DIRECTIONS.
- TYPE AND MINIMUM NUMBER OF GROUND RODS SHALL BE AS SPECIFIED ON THE PLAN OR AS DICTATED BY LATEST COPY OF NEC.
- THE RESISTANCE TO GROUND OF THE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS.
- COST OF GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.
- GROUND RODS SHALL BE SPACED AS DETAILED ON THE PLANS AND SHALL NOT BE SPACED LESS THAN ONE ROD LENGTH APART.
- TOP OF GROUND RODS SHALL BE 12" MINIMUM BELOW GRADE UNLESS DETAILED OTHERWISE HEREIN. TOP OF GROUND RODS FOR VAULT SHALL BE 30" MINIMUM BELOW GRADE. GROUND RING CONDUCTORS SHALL BE 40" MINIMUM BELOW GRADE TO BE BELOW FROST LINE.
- GROUND RODS FOR RUNWAY LIGHTING, TAXIWAY LIGHTING AND TAXI GUIDANCE SIGNS SHALL BE A MINIMUM OF 3/8" DIAMETER BY 8 FEET LONG UL LISTED COPPER CLAD.
- GROUND RODS FOR WIND CONES AND OTHER NAVAIDS SHALL BE A MINIMUM 3/4" DIAMETER BY 10 FEET LONG UL LISTED COPPER CLAD.



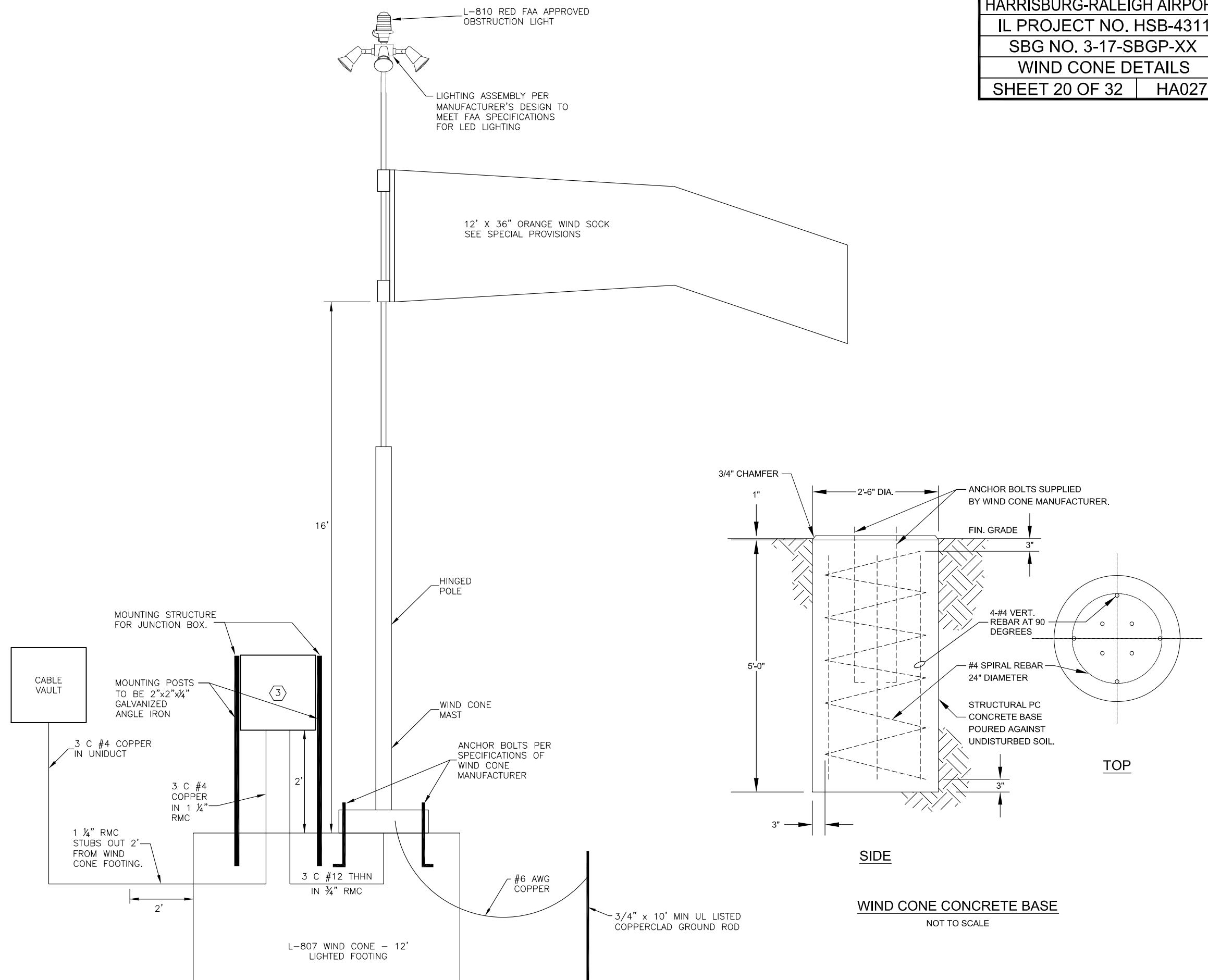
8 FT GROUND ROD
 NOT TO SCALE



NOTE:

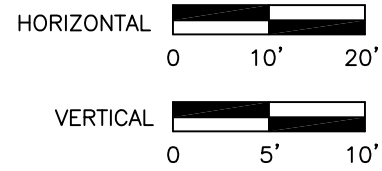
AFFIX NON-CORROSIVE TAG TO FIXTURE
 FACING RUNWAY WITH SET SCREW, WIRE TIE
 OR METAL BAND. NUMERALS SHALL BE
 ENGRAVED FOR PERMANENT READABILITY

TAG DETAIL
 NOT TO SCALE

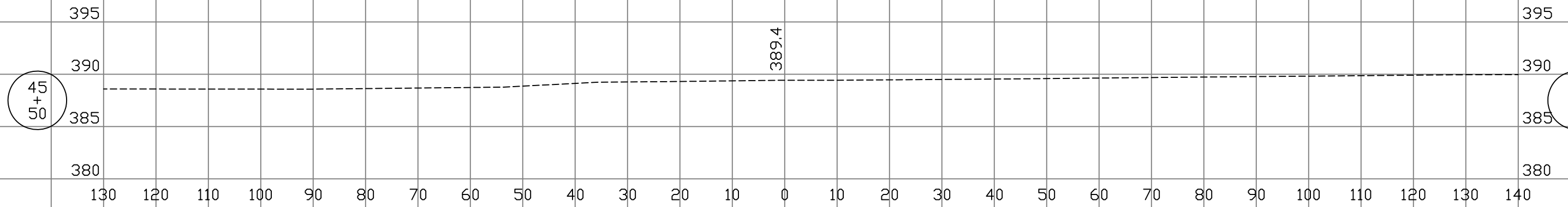
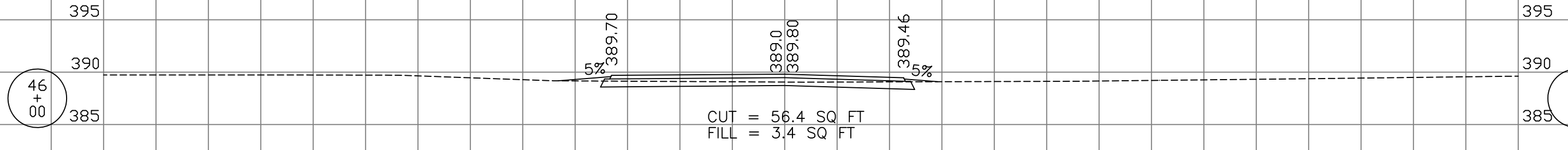
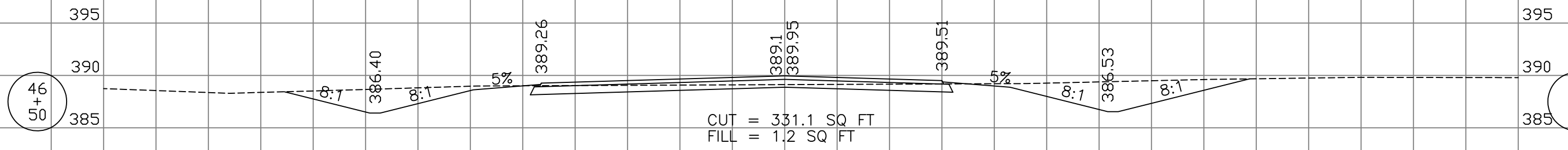
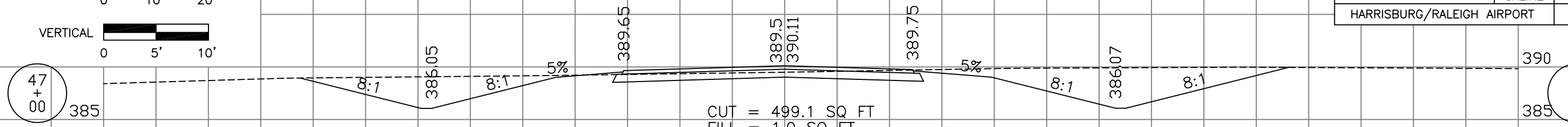


- NOTES:
- CONTRACTOR MAY USE EXISTING CONDUIT FROM WIND TEE CIRCUIT TO ENTER CABLE VAULT IF POSSIBLE. OTHERWISE, INSTALL NEW CONDUIT TO JUNCTION BOX IN VAULT AND SPLICE INTO EXISTING CABLES. EITHER METHOD WILL BE INCIDENTAL TO THE PAY ITEM "L-807 WIND CONE - 12' LIGHTED".
 - WIND CONE SHALL BE TYPE L807 THAT IS FAA PHOTOELECTRIC CONTROLLED.
 - WEIGMAN MODEL BN4121206C WATERTIGHT JUNCTION BOX (OR EQUAL) THAT IS 12" HIGH, 10" WIDE AND 6" DEEP.

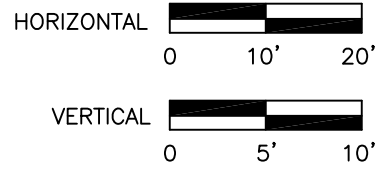
16 Jun 2014 - 1:07pm x:\2013\13215\oc\13215 Wind Cone Details.dwg: Layout Tab '20 WIND CONE DET'



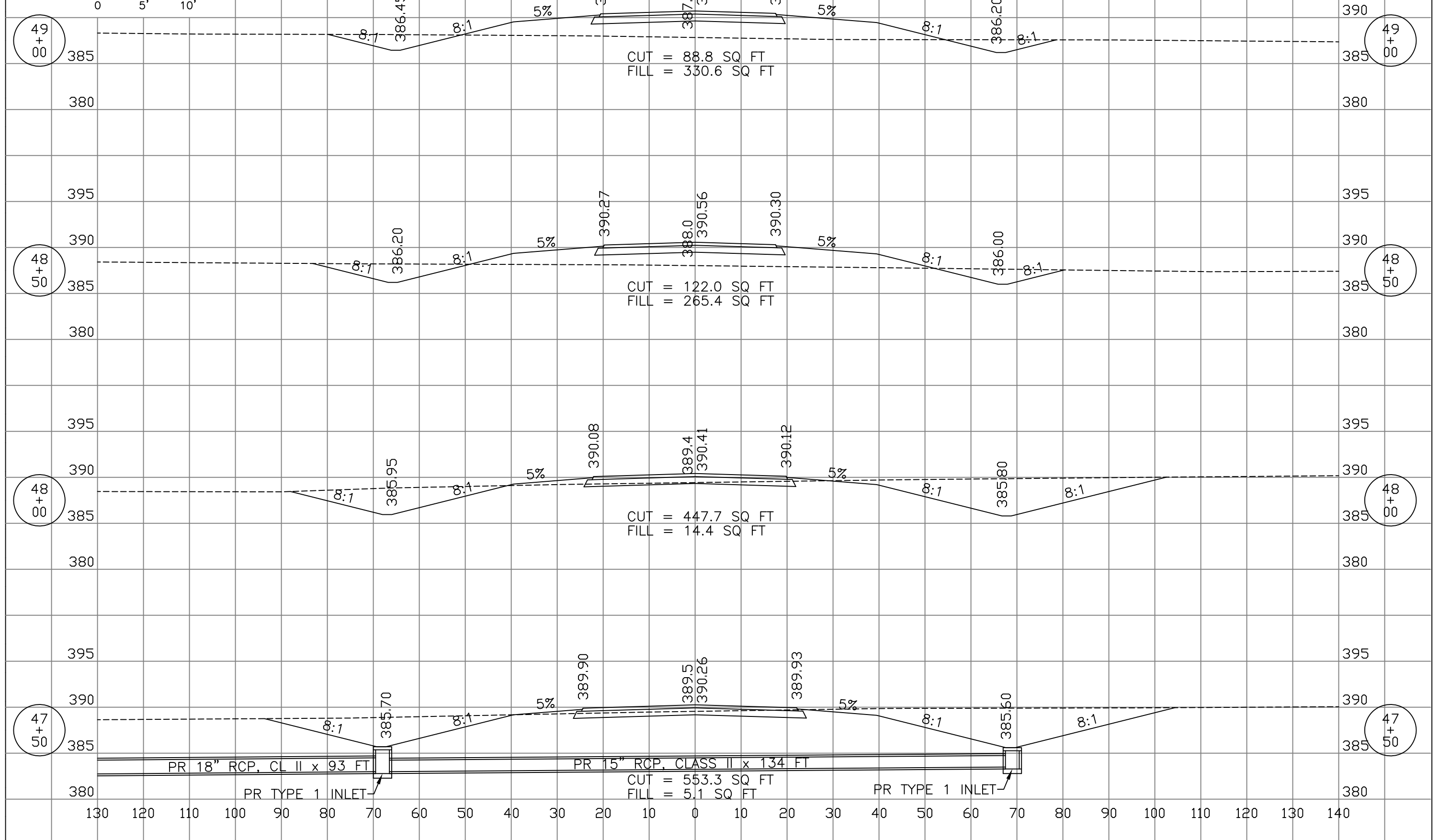
PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	21
HARRISBURG/RALEIGH AIRPORT		HA027	

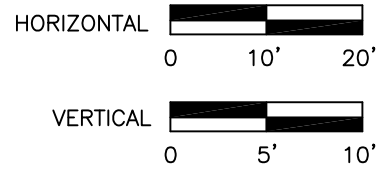


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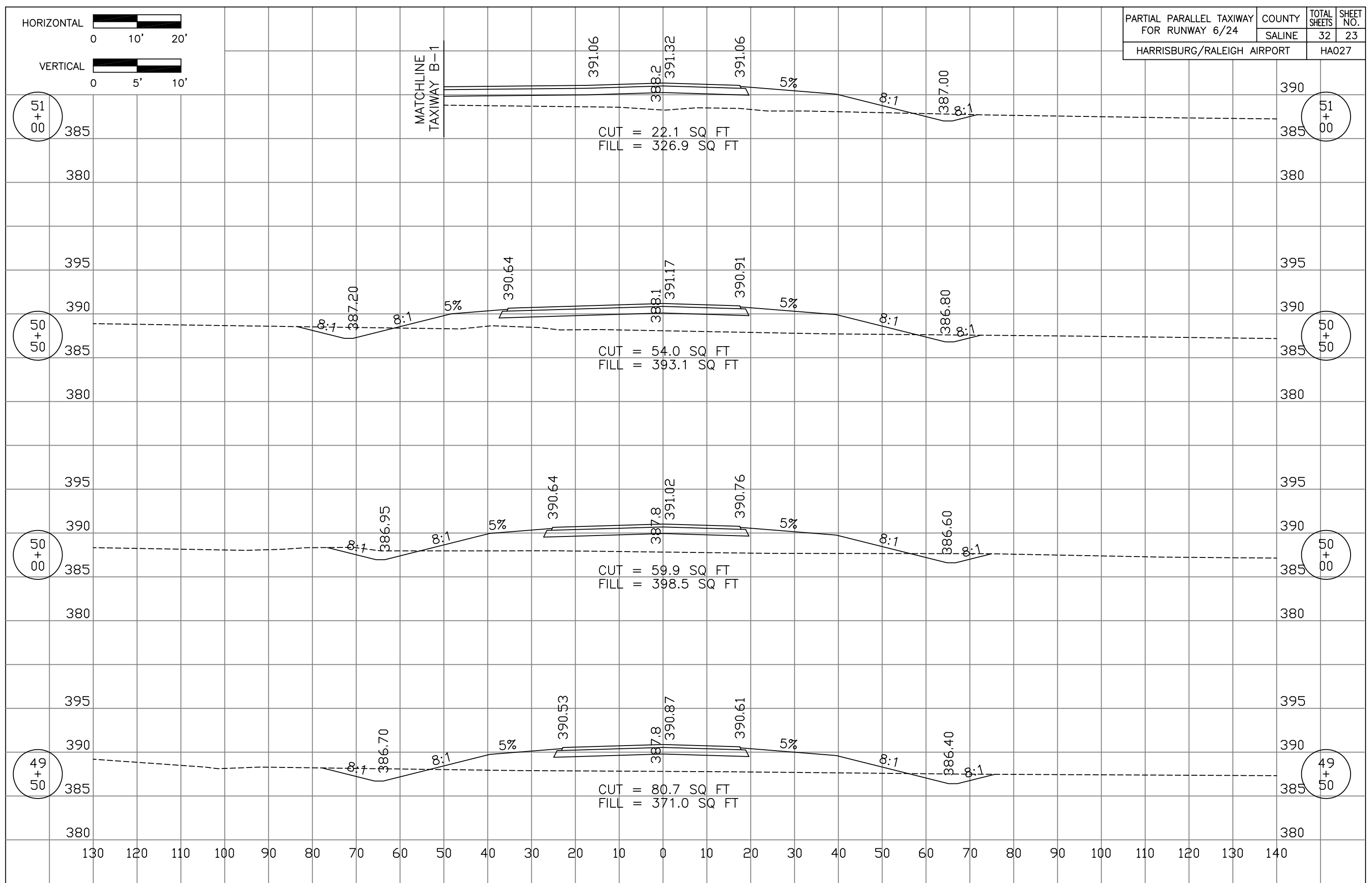


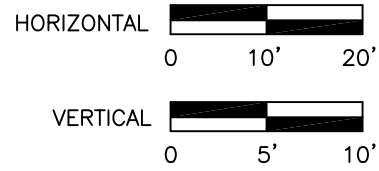
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	SALINE	32	22
HARRISBURG/RALEIGH AIRPORT		HA027	



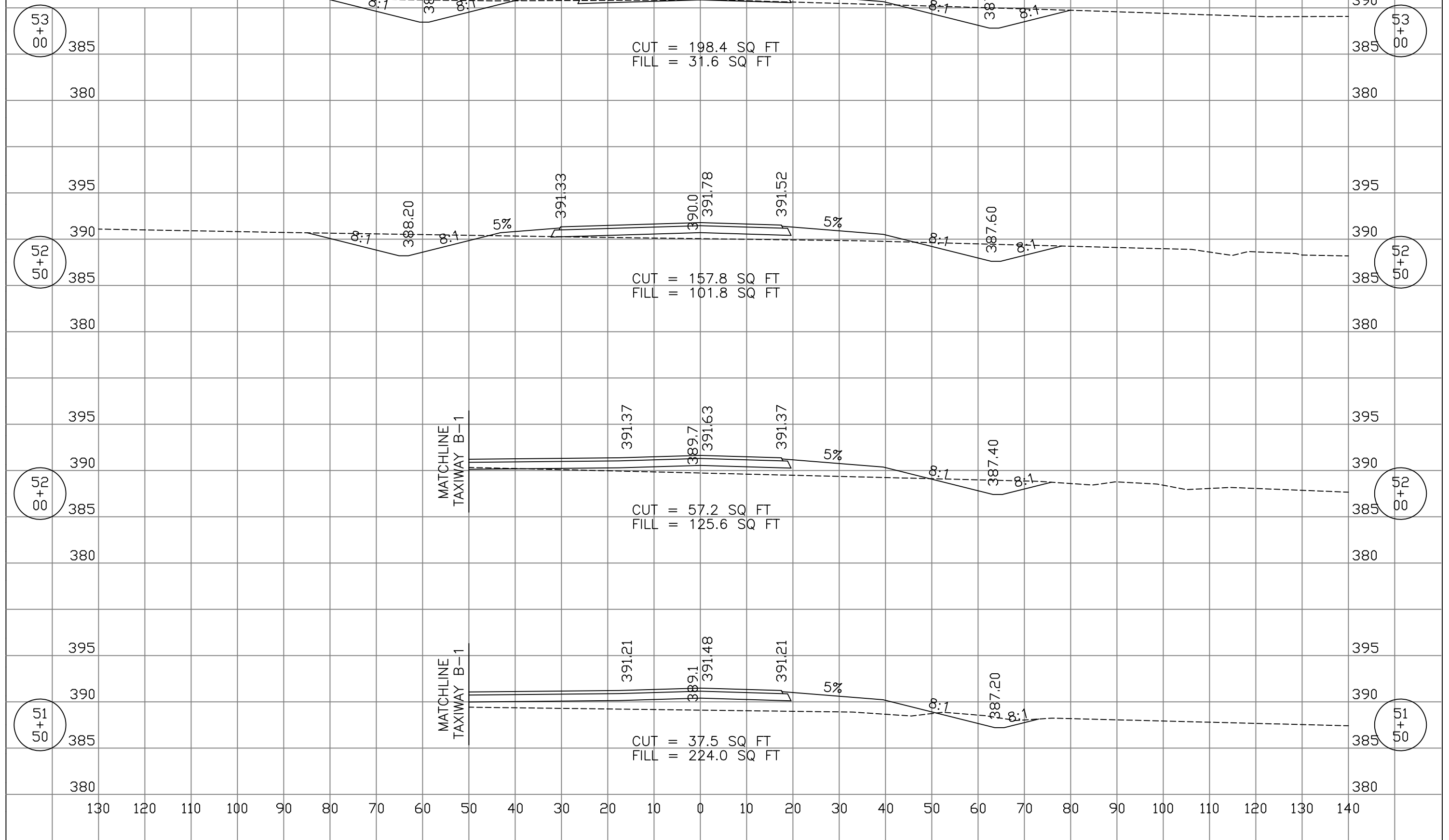


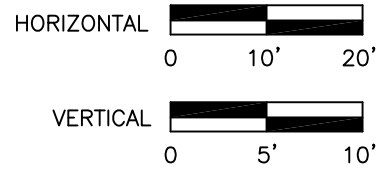
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	SALINE	32	23
HARRISBURG/RALEIGH AIRPORT		HA027	



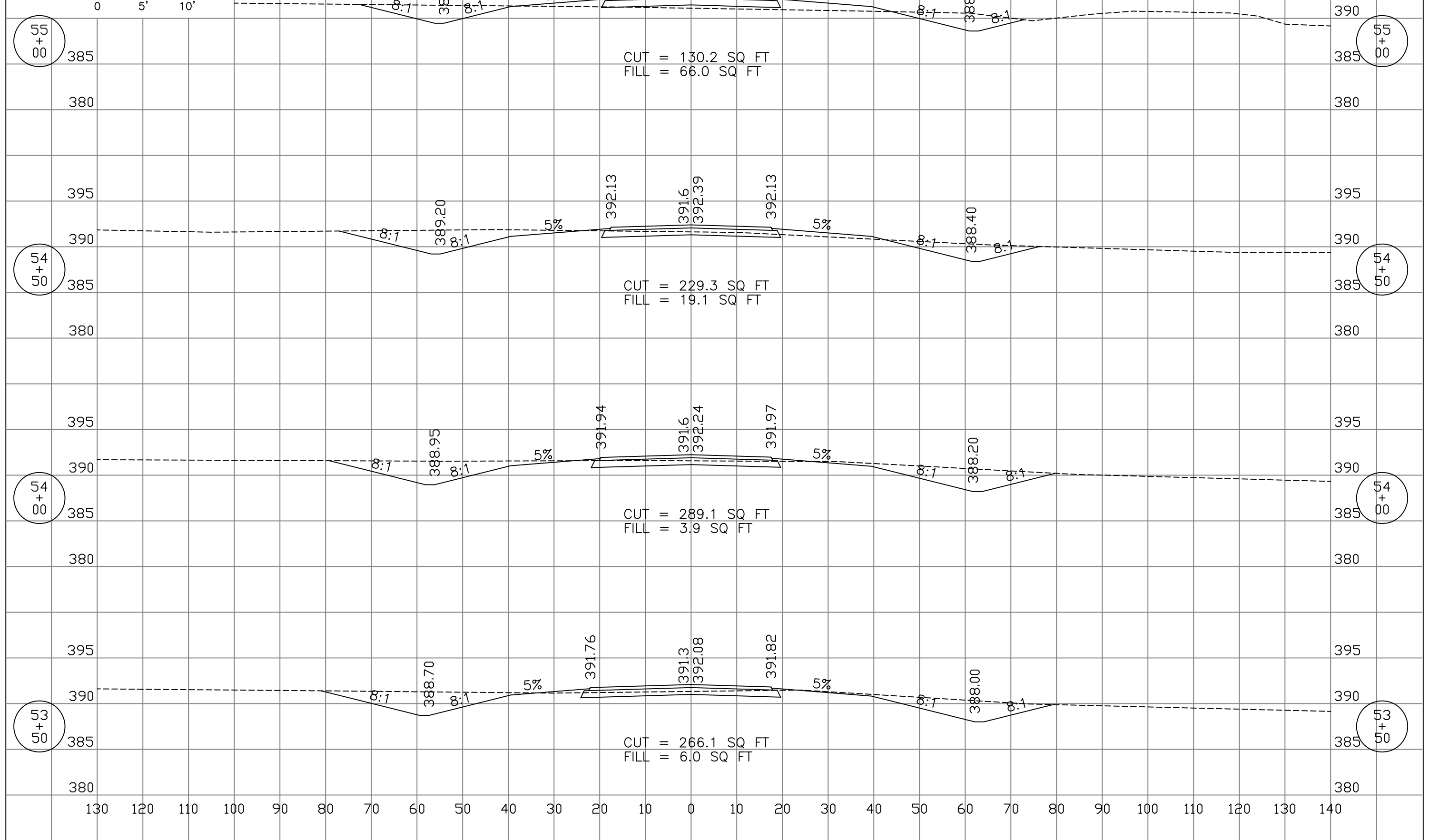


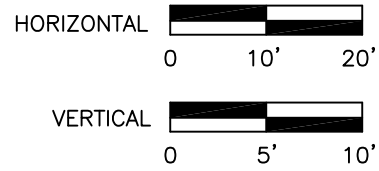
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	SALINE	32	24
HARRISBURG/RALEIGH AIRPORT		HA027	



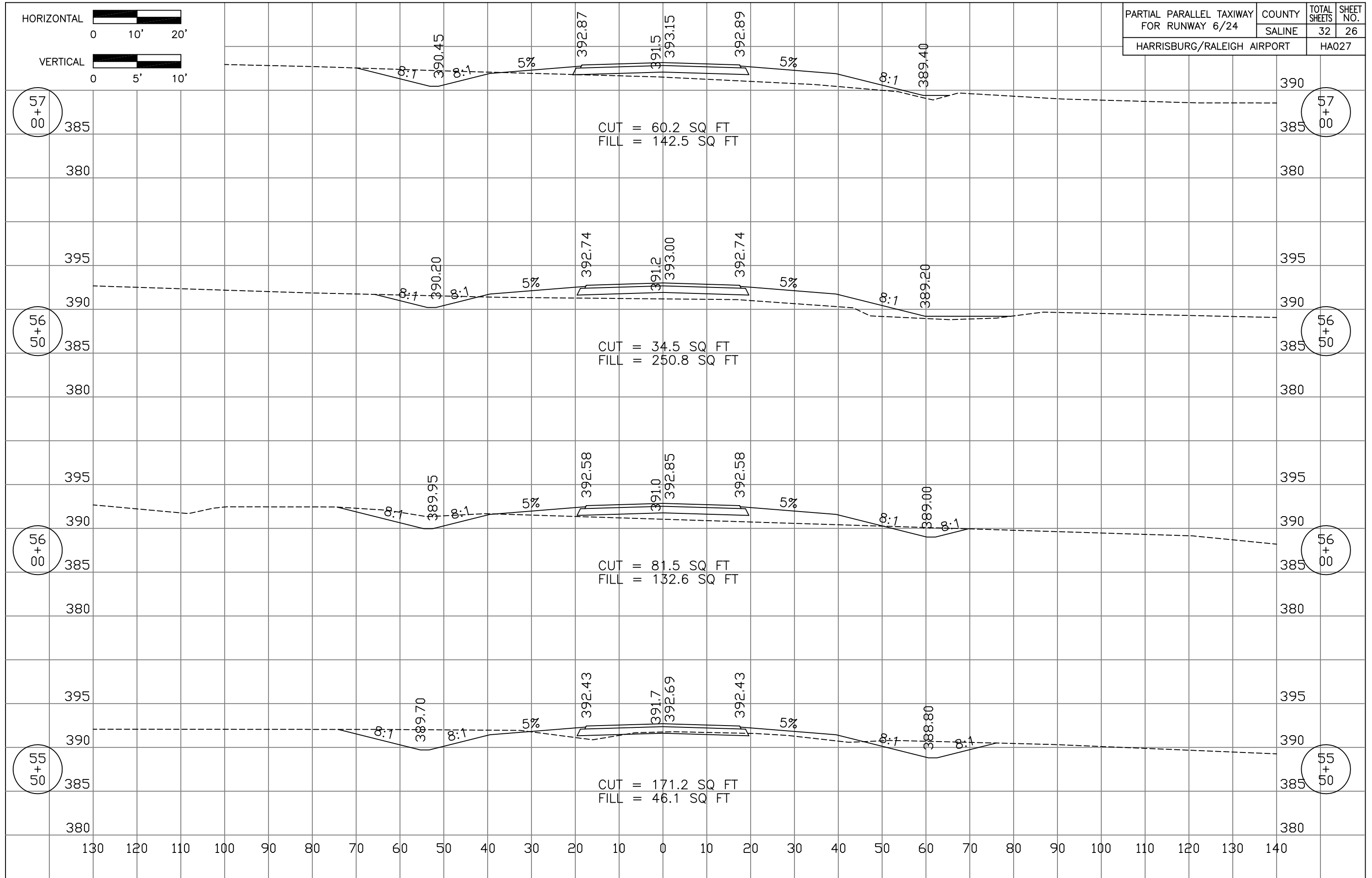


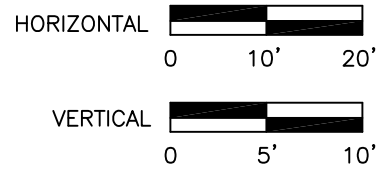
PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	25
HARRISBURG/RALEIGH AIRPORT		HA027	



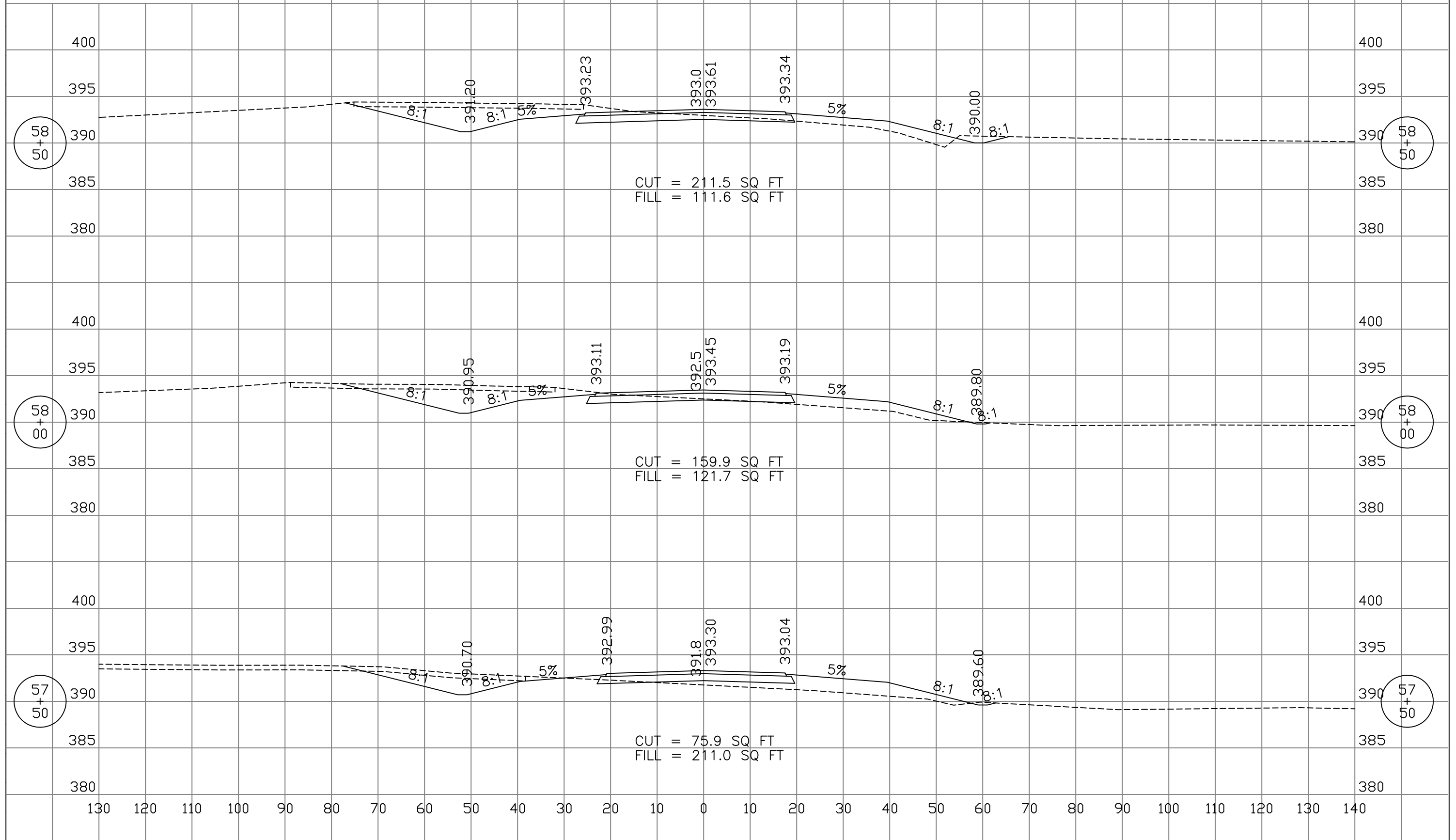


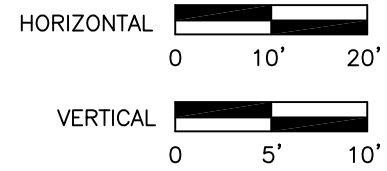
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	SALINE	32	26
HARRISBURG/RALEIGH AIRPORT		HA027	



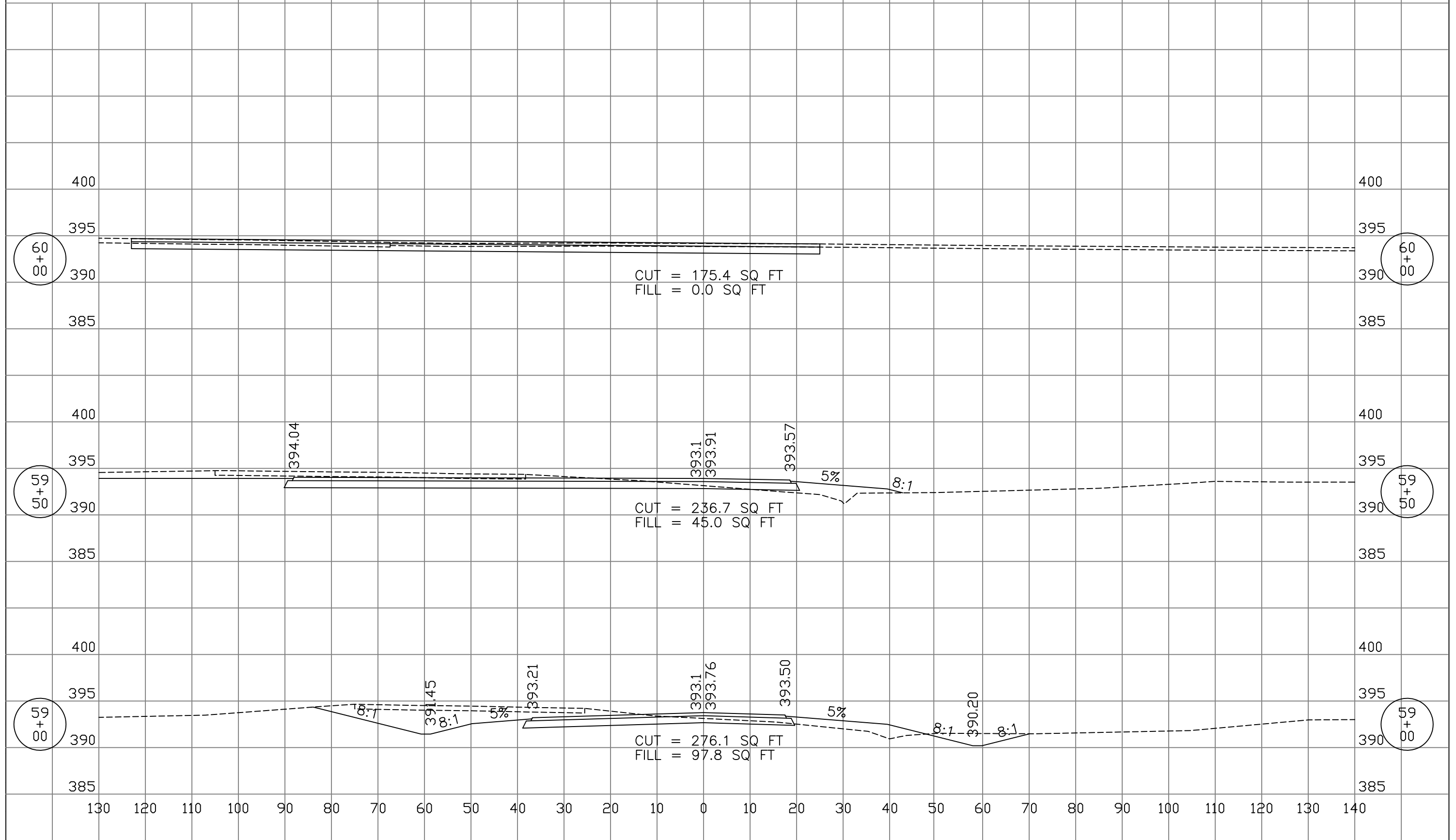


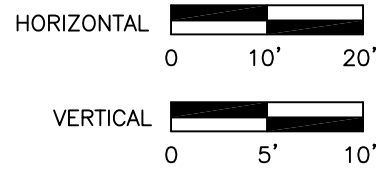
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	SALINE	32	27
HARRISBURG/RALEIGH AIRPORT		HA027	



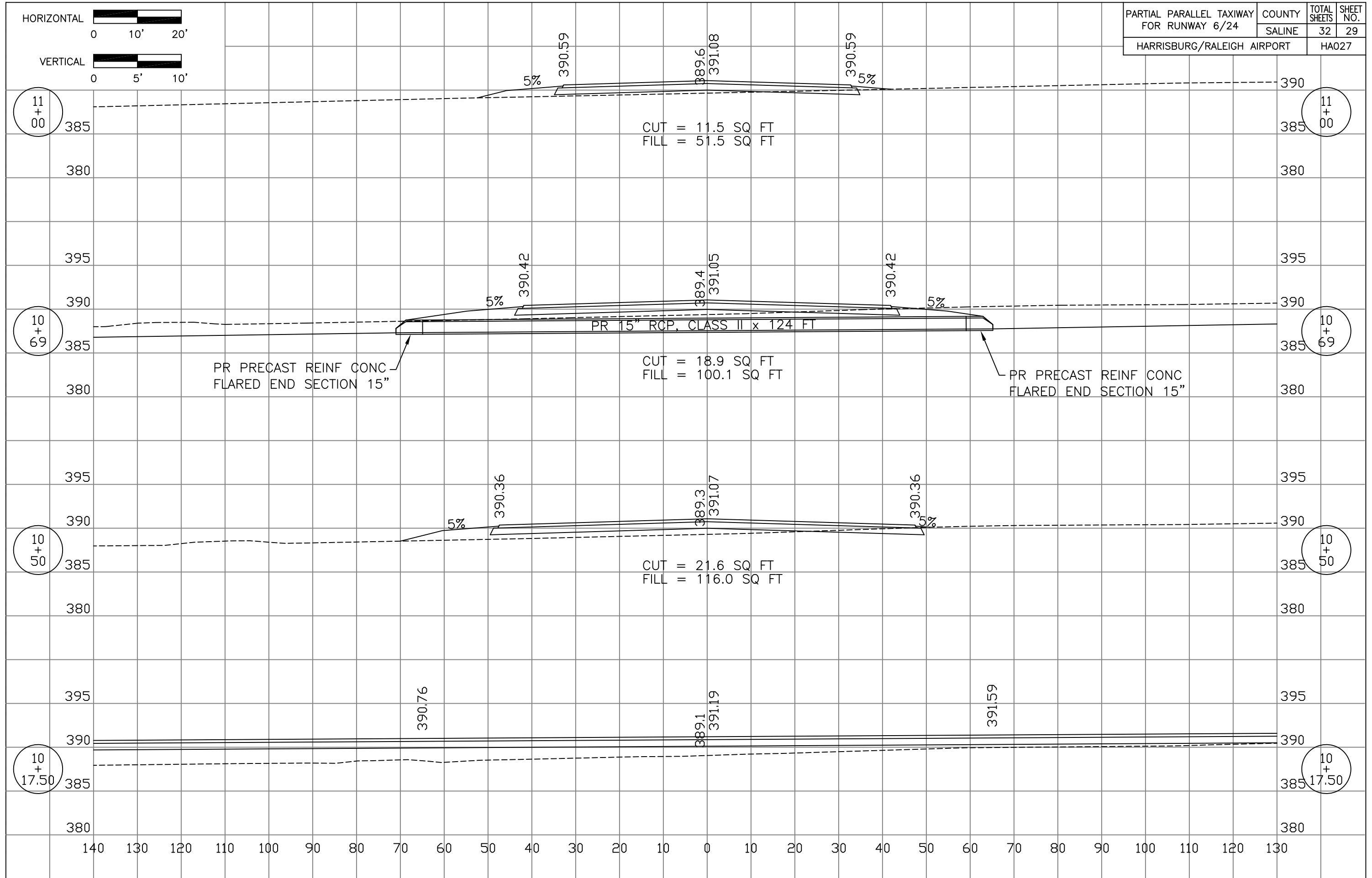


PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	28
HARRISBURG/RALEIGH AIRPORT		HA027	





PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	29
HARRISBURG/RALEIGH AIRPORT		HA027	



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17.50

CUT = 11.5 SQ FT
FILL = 51.5 SQ FT

CUT = 18.9 SQ FT
FILL = 100.1 SQ FT

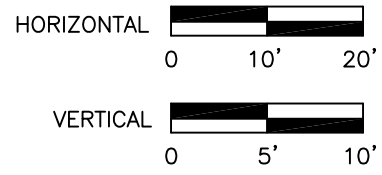
CUT = 21.6 SQ FT
FILL = 116.0 SQ FT

PR 15" RCP, CLASS II x 124 FT

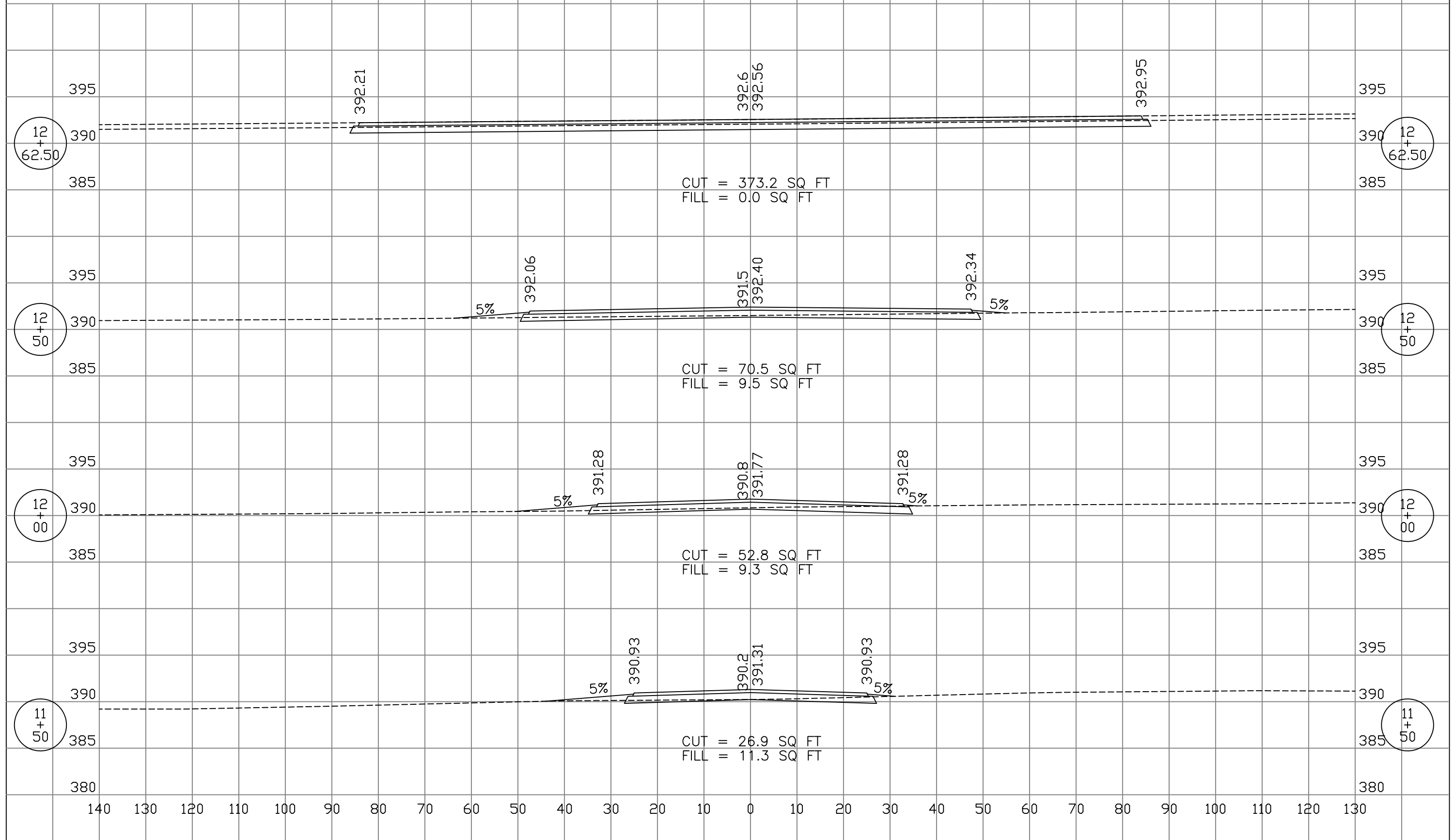
PR PRECAST REINF CONC
FLARED END SECTION 15"

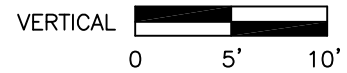
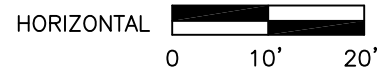
PR PRECAST REINF CONC
FLARED END SECTION 15"

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

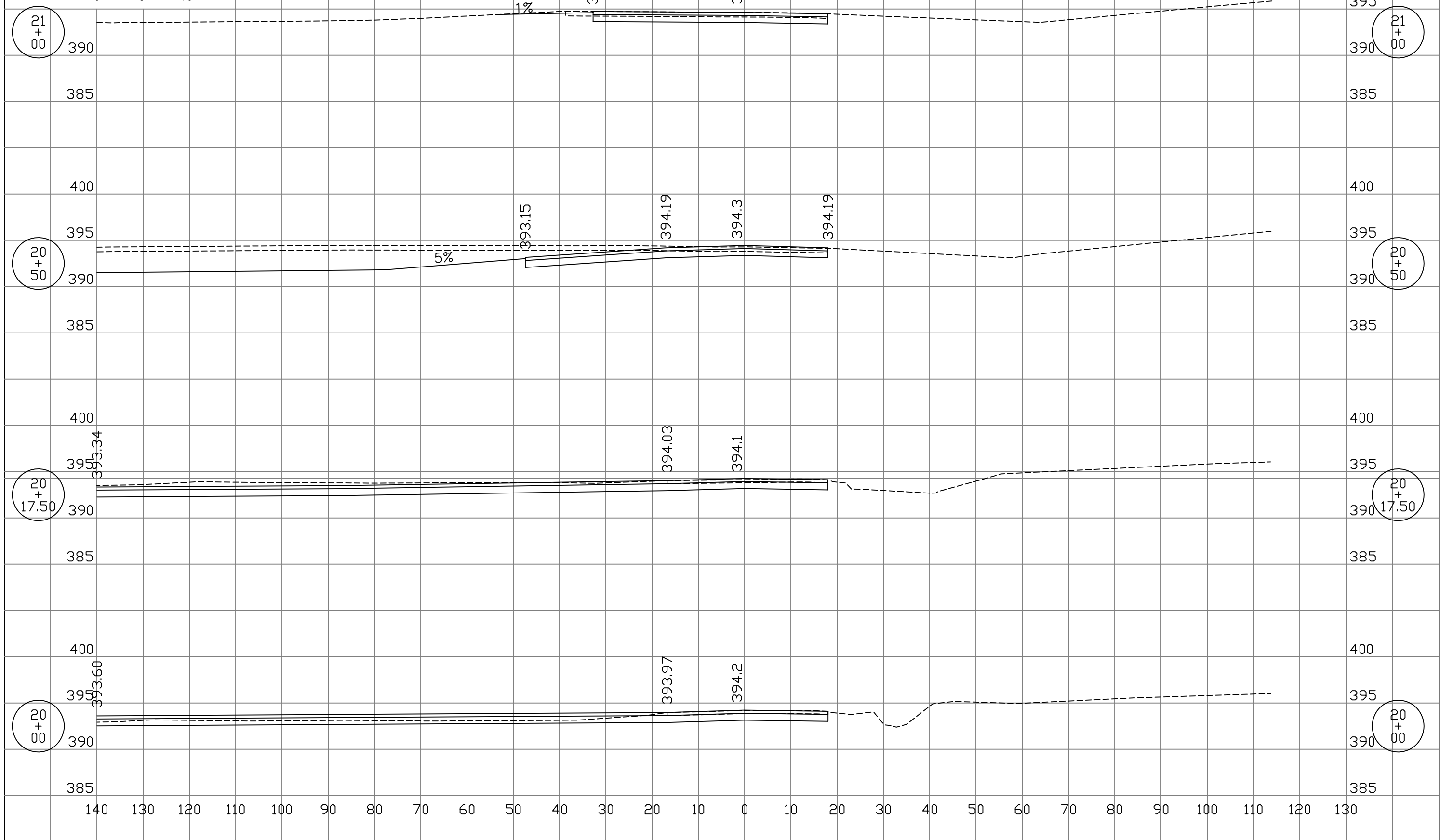


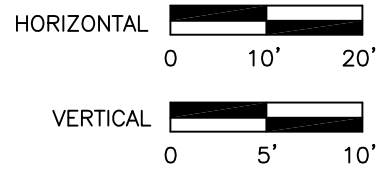
PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	30
HARRISBURG/RALEIGH AIRPORT		HA027	



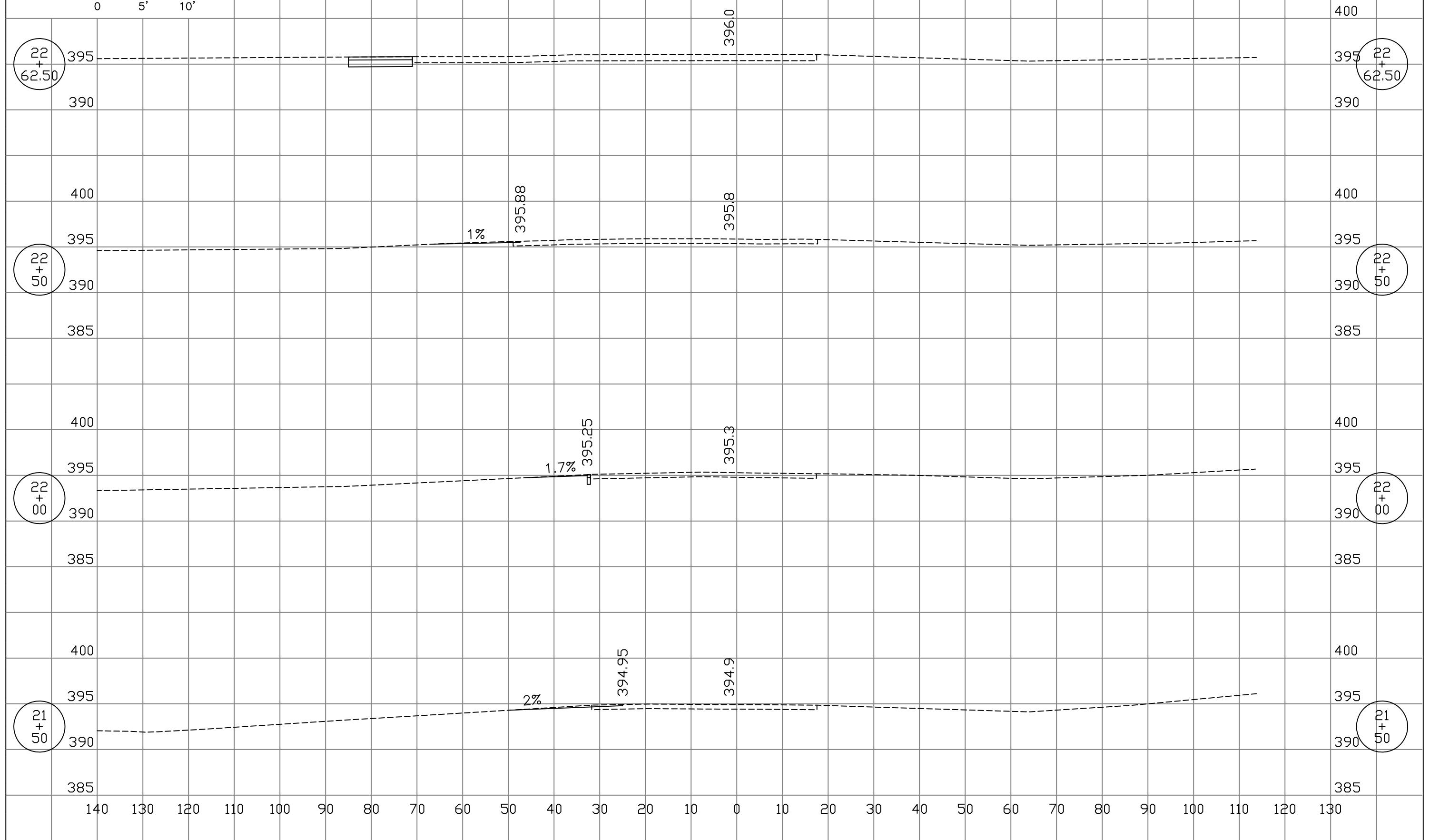


PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	31
HARRISBURG/RALEIGH AIRPORT		HA027	





PARTIAL PARALLEL TAXIWAY FOR RUNWAY 6/24	COUNTY	TOTAL SHEETS	SHEET NO.
	SALINE	32	32
HARRISBURG/RALEIGH AIRPORT		HA027	



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