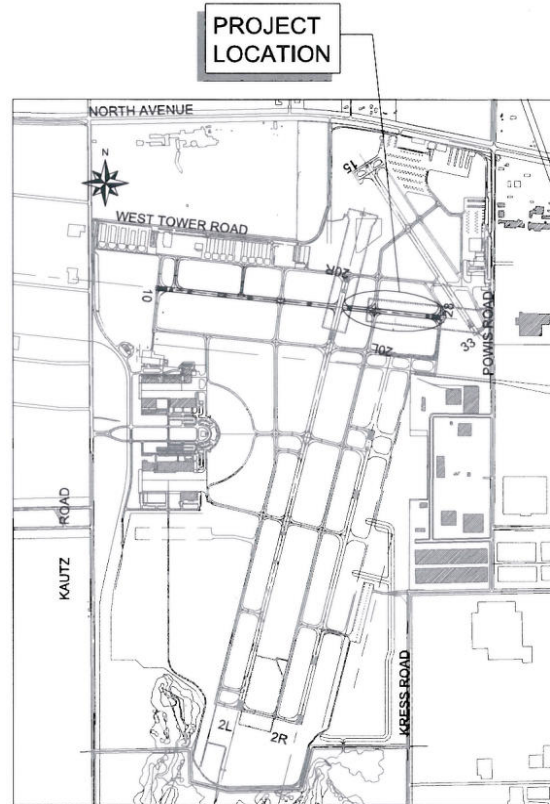
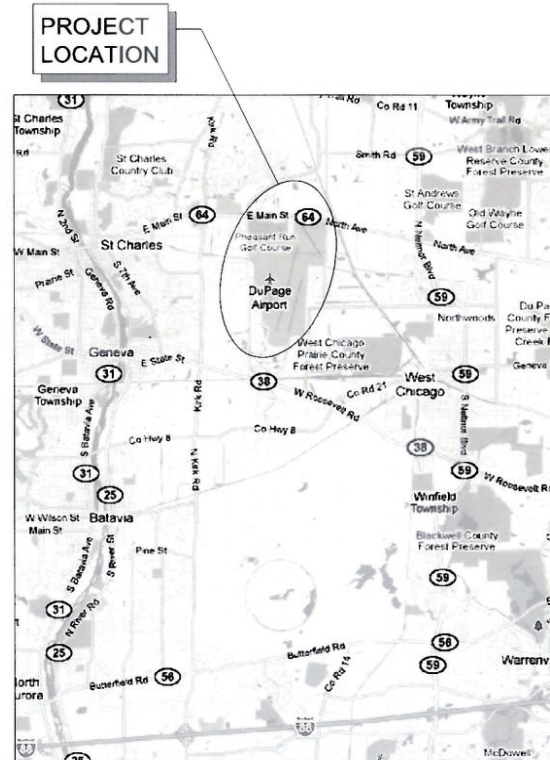


DUPAGE AIRPORT AUTHORITY WEST CHICAGO, ILLINOIS



SITE PLAN



LOCATION MAP

CONSTRUCTION PLANS FOR DUPAGE AIRPORT

RUNWAY 10-28 EAST AND ASSOCIATED TAXIWAY CONNECTOR OVERLAY

ILLINOIS PROJECT: DPA-4122
A.I.P. PROJECT: 3-17-0017-B25
IDOT LETTING MARCH 9, 2012



RUNWAY 10-28 EAST AND ASSOCIATED
TAXIWAY CONNECTOR OVERLAY
DESIGN AIRCRAFT APPROACH CATEGORY B
DESIGN AIRCRAFT GROUP II



DUPAGE AIRPORT
AUTHORITY
2700 INTERNATIONAL DRIVE
SUITE 200
WEST CHICAGO, IL 60185
APPROVED BY *[Signature]*
DAVID BIRD - EXECUTIVE DIRECTOR
DATE 2/3/2012

CH2MHILL
8501 WEST HIGGINS ROAD
SUITE 300
CHICAGO, IL 60631
(773) 693-3809 (PHONE)
(773) 693-3823 (FAX)
SUBMITTED BY *[Signature]*
JOHNNY M. JACKSON, P.E.
DATE 2/3/12
SUBMITTED BY *[Signature]*
PETER BUTLER, P.E. (SHEETS E-001, E-103, E-102, E-104, E-110)
DATE 2/3/2012

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

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X-533	55	CROSS SECTION PROFILES
X-534	56	CROSS SECTION PROFILES
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SUMMARY OF QUANTITIES :

DU080

Item No.	Bid Item No.	Description	Units	Quantity
RUNWAY 10-28 & ASSOCIATED TAXIWAY CONNECTOR OVERLAY EAST				
1	AR150510	Engineer's Field Office	LS	1
2	AR150520	Mobilization	LS	1
3	AR150530	Traffic Maintenance	LS	1
4	AR801754	Safety and Security	LS	1
5	AR156500	Temporary Erosion Control	LS	1
6	AR401610	Bituminous Surface Course	TN	2,350
7	AR401640	Bituminous Pavement Grooving	SY	9,594
8	AR401650	Bituminous Pavement Milling	SY	18,036
9	AR801755	Bituminous Patching	TN	62
10	AR401620	Bituminous Surface Course, Leveling	TN	326
11	AR603510	Bituminous Tack Coat	GAL	4,067
12	AR620520	Pavement Marking-Waterborne	SF	99,081
13	AR620590	Temporary Marking	SF	99,081
14	AR620900	Pavement Marking Removal	SF	9,908
15	AR801756	Remove Existing In-Pavement Edge Light Fixture and Install Blank Coverplate	EA	1
16	AR108706	1/C #6 Counterpoise	LF	100
17	AR110202	2" PVC Duct, Direct Bury	LF	50
18	AR110501	1-Way Concrete Encased Duct	LF	50
19	AR801750	Remove Existing and Install Proposed Pavement Surface Sensor	EA	1
20	AR801752	Pavement Surface Sensor System Commissioning	LS	1
21	AR801753	Remove Blank Coverplate and Re-install In-Pavement Edge Light on Existing Light Base	EA	1



NO.	2012/02/03	DATE	DSGN
REVISION		CHK	HF
ISSUE FOR BID		APVD	DCT
BY		APVD	MV

8501 W. HIGGINS ROAD
SUITE 300
CHICAGO, IL 60631

RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

CH2MHILL®

GENERAL
**DRAWING INDEX &
SUMMARY OF QUANTITIES**

AS SHOWN
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE	2012/02/03
PROJ	424278
DWG	G-101
SHEET	2 of 57

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ABBREVIATIONS

Table of abbreviations including AB, ABV, A/C, AC, ADJ, AGG, AGS, ALD, ALSF, ARFF, AS, ASPH, ASTM, AUX, AVE., ATCT, AX, B-B, BLVD, BM, BV, CL, CB, CC, CED, CI, CM, CMH, CMP, COMED, COMM, CONC, C.Y., CSPN, DAA, DET, DIA, DIP, DME, DOA, E, ED or E.D., EMH, EL or ELEV, ES/CP, EX, FAA, FFM, FH, FT, G, GRND, GS, HR, HV, IDOT, ILS, IE or I.E., ID, IH, INV., JC, JV, KV, K=L/A, L, L.S., LOC, MAX, MH, MIN, MJ, MPR, N, NAVD, N.C., N.O., N.I.C.

ABBREVIATIONS

Table of abbreviations including NTS, NO, NPR, O.D., OFA, OZ, PAPI, PC, PCC, PCCP, P.I., PL, PT, PVC, PVI, PVT, PSI, R, RAD, RC, RCP, RPP, RPU, REV., RGS, RD., RSA, R/W, RPZ, SA, SCH, SD, SHT, S, SQR, S.F., S.Y., STA, ST, ST., T, T.S., TSA, T/W, TDZ, TYP, UD or U.D., UMH, U.N.O., VERT., VPI, W, W/, WMG, YD.

SYMBOLS

Table of symbols for existing and proposed features including Catch Basin, Power Pole, Drainage Manhole, Inlet, Ditch or Swale, Fire Hydrant, Electrical Handhole, High Voltage/Low Voltage Communication Manholes, Combined Elec. Ductbank (CED) Handhole Cluster, 2" Combination Air Release Valve Assembly, Inspection Manhole, MJ Butterfly Valve, MJ Gate Valve, Pitometer Tap.

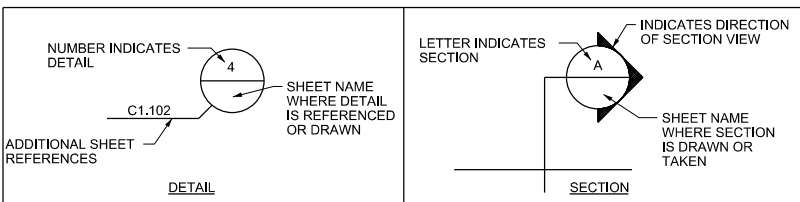
SYMBOLS

Table of symbols for fire cistern, roundway, cap, tie into existing system, and remove airfield lighting fixture.

LEGEND

Legend table with columns for EXISTING and PROPOSED, listing items like Cable TV, City Electric, Closed Circuit TV, Comed, Common Electric Duct Bank, FAA, Fiber Optic, Fueling Facilities, Natural Gas, Oil Pipe, Pipe Underdrain, Railroad, Telephone, Sanitary Sewer, Storm Sewer, Supervisory Monitoring System, Water Distribution, Weather Sensor & Gauges, Fence, AOA Fencing, Demo or Remove, Runway Safety Area, Runway Object Free Area, Taxiway Safety Area, Taxiway Object Free Area, Agricultural Area Limits.

METHOD OF IDENTIFYING SECTIONS AND DETAILS



8501 W. HIGGINS ROAD SUITE 300 CHICAGO, IL 60631

RUNWAY 10-28 AND ASSOCIATED TAXIWAY OVERLAY DUPAGE AIRPORT (DPA) DUPAGE COUNTY, ILLINOIS

CH2MHILL GENERAL

CIVIL LEGEND & ABBREVIATIONS

Table with project information: AS SHOWN, VERIFY SCALE, BAR IS ONE INCH ON ORIGINAL DRAWING., DATE 2012/02/03, PROJ 424278, DWG G-102, SHEET 3 of 57.

GENERAL NOTES

- 1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS AND SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE DUPAGE AIRPORT AUTHORITY (DAA), THE FEDERAL AVIATION ADMINISTRATION (FAA), THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT), AND OTHER GOVERNING AGENCIES.
2. THE PROJECT IS TO BE COMPLETED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE. THE SCHEDULE SHALL BE PROVIDED FOR COMPLETION OF THE WORK AS SHOWN ON THE PLANS AND DESCRIBED IN THE CONTRACT SPECIFICATIONS. THE CONTRACTOR SHALL KEEP AIRPORT OPERATIONS INFORMED OF UPDATES TO THE PROJECT SCHEDULE AT ALL TIMES.
3. THE CONTRACTOR SHALL COMPLETE THE ENTIRE PROJECT WITHIN THE TIME STATED IN THE CONTRACT.
4. THE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF WORK WITH THE DAA, FAA, IDOT AND LOCAL ATCT REPRESENTATIVES IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.
5. CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT. CONTRACTOR COORDINATION WITH APPROPRIATE GOVERNMENT AND UTILITY AGENCIES IS ALSO REQUIRED PRIOR TO AND DURING CONSTRUCTION.
6. ACCESS TO THE SITE - THE CONTRACTOR'S ACCESS POINTS TO THE SITE SHALL BE THROUGH DESIGNATED SECURITY GATES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VEHICLES AND PERSONNEL THAT ENTER THROUGH THESE DESIGNATED AIRPORT SECURITY GATES. AIRPORT SECURITY GATES SHALL BE SECURED AT ALL TIMES WHEN NOT IN USE.
7. HAUL ROUTES - THE CONTRACTOR'S ON-AIRPORT HAUL ROUTES AND CONSTRUCTION ACCESS SHALL BE EXISTING HAUL ROADS WHERE AVAILABLE. ANY DEBRIS (WHETHER CAUSED BY THE CONTRACTOR OR NOT) SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS, OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES/CONSTRUCTION ACCESS SHALL BE MAINTAINED AND STABILIZED BY THE CONTRACTOR AS REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT THROUGHOUT THE DURATION OF THIS PROJECT AND SHALL BE RESTORED, AT THE CONTRACTOR'S EXPENSE, TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE/CONSTRUCTION ACCESS UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES/CONSTRUCTION ACCESS SHALL BE JOINTLY INSPECTED AND AGREED UPON BY THE CONTRACTOR AND THE CONSTRUCTION MANAGER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT/REMOVE TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE CONSTRUCTION MANAGER PRIOR TO COMMENCING THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
8. CONTRACTOR'S STAGING AREAS - AN AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES, FENCE, TREES, ETC. WITHIN THE STAGING AREA AND THE SITE SHALL BE RESTORED TO ITS ORIGINAL CONDITION WITHIN THIRTY (30) DAYS OF THE COMPLETION OF USE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
9. DISPOSAL AREAS - EXCESS SOILS, MILLED ASPHALT, CONCRETE RUBBLE AND UNSUITABLE EXCAVATION MUST BE DISPOSED AT APPROVED LOCATIONS OFFSITE. OFFSITE DISPOSAL AREAS SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL LAWS.
10. SAFETY - THE CONTRACTOR SHALL CONDUCT ALL ACTIVITIES IN A SAFE MANNER AS SPECIFIED BY LOCAL, STATE AND FEDERAL LAWS.
11. PROTECTION AND REPAIR OF EXISTING UTILITIES - LOCATIONS OF KNOWN EXISTING AIRPORT UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS FOR INFORMATION ONLY. THE CONTRACTOR SHALL VERIFY ALL UTILITIES, BY VISUAL, ELECTRICAL AND BY HAND EXCAVATION OR OTHER METHODS IN COORDINATION WITH ALL UTILITY COMPANIES AND DAA FACILITIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES BY THE PROPOSED IMPROVEMENTS SHALL BE RESOLVED WITH THE CONSTRUCTION MANAGER PRIOR TO BEGINNING THE CONSTRUCTION ACTIVITIES. ANY REPAIRS TO EXISTING UTILITIES DAMAGED BY CONTRACTOR ACTIVITIES SHALL BE COMPLETED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS, IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS AT NO ADDITIONAL EXPENSE TO THE OWNER.

- 12. EXISTING AIRFIELD LIGHTING SYSTEMS - INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT SHALL BE TEMPORARILY MAINTAINED BY THE CONTRACTOR DURING OPERATIONAL PERIODS AND COORDINATED THROUGH THE CONSTRUCTION MANAGER. THE CONTRACTOR SHALL IMMEDIATELY REPLACE RUNWAY/TAXIWAY SIGNS AND LIGHTS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION AT THE CONTRACTOR'S EXPENSE.
13. CONSTRUCTION LIMITS - ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED STAGING AREA, CONSTRUCTION LIMITS AND HAUL ROUTES. CONSTRUCTION, STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION".
14. PORTABLE FLOODLIGHTING - IF NEEDED, THE CONTRACTOR SHALL PROVIDE PORTABLE FLOODLIGHTING AS REQUIRED FOR NIGHT CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT UNITS SO THAT ALL WORK AREAS ARE ILLUMINATED TO A MINIMUM LEVEL OF 5 HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. THE CONTRACTOR SHALL COORDINATE THE USE OF FLOODLIGHTING WITH THE AIR TRAFFIC CONTROL TOWER TO ENSURE LIGHTING DOES NOT COMPROMISE THE CONTROL TOWER PERSONNEL'S VISIBILITY OR CAUSE CONFUSION TO PILOTS.
15. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION WORK. REFER TO THE SPECIAL CONDITIONS AND GENERAL CONDITIONS SECTIONS OF THE CONTRACT DOCUMENTS.
16. EXISTING TOPOGRAPHIC, UNDERGROUND AND ABOVE GROUND UTILITY DATA FOR THIS PROJECT WERE OBTAINED FROM "AS BUILTS", VISUAL INSPECTIONS AND TOPOGRAPHIC SURVEY PERFORMED.
17. IF ANY UNUSUAL ODORS, SOIL STAINS OR BURIED WASTES ARE ENCOUNTERED, STOP WORK IMMEDIATELY AND NOTIFY THE OWNER, AND/OR CONSTRUCTION MANAGER.
19. THE CONTRACTOR SHALL FURNISH THE OWNER FIVE (5) SETS OF OPERATION AND MAINTENANCE MANUALS FOR ALL NEW EQUIPMENT INSTALLED.
20. WORK PERFORMED UNDER THIS CONTRACT WILL NOT BE CONSIDERED COMPLETE UNTIL FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER AND RECEIPT AND APPROVAL OF THE FOLLOWING DOCUMENTS:
A) CONTRACTOR'S WAIVER AND RELEASE OF LIEN.
B) ABSOLUTE BILL OF SALE.
C) CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT).
D) CONTRACTOR AS-BUILTS.
E) FINAL PUNCH LIST COMPLETED AND ACCEPTED BY THE CONSTRUCTION MANAGER.
F) TRANSFER OF OWNER WARRANTY.
21. IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, PREVAILING WAGE RATES SHALL BE POSTED AT THE CONTRACTOR STAGING AREA IN A WEATHERPROOF ENCLOSURE AND COPIES SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER AND THE OWNER.

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1-800-892-0123

SECURITY NOTES

- 1. THE CONTRACTOR SHALL DESIGNATE TO THE CONSTRUCTION MANAGER IN WRITING THE NAME OF ITS 'CONTRACTOR SECURITY OFFICER' (C.S.O.). THE C.S.O. SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS FOR THE CONTRACT. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF/HERSELF WITH THE VARIOUS ASPECTS OF FAR 49 CFR PART 1542: "AIRPORT SECURITY", ADMINISTERED BY THE TRANSPORTATION SECURITY ADMINISTRATION (TSA). ANY VIOLATION OF CFR PART 1542 BY THE CONTRACTOR AND ANY SUBSEQUENT FINES IMPOSED DUE TO THE VIOLATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. CONTRACTOR PERSONNEL SECURITY ORIENTATION: THE C.S.O. SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS AND PROVISIONS ADOPTED BY THE DUPAGE AIRPORT AUTHORITY (DAA). ALL NEW CONTRACTOR EMPLOYEES SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREA.
3. ACCESS TO SITE: THE AIRPORT WILL NOT PROVIDE AIRFIELD OPERATIONS AREA ESCORTS. CONTRACTOR'S ACCESS TO THE SITE SHALL BE AS SHOWN ON THE SAFETY PLAN OR AS DIRECTED BY THE CONSTRUCTION MANAGER. NO OTHER ACCESS POINT SHALL BE ALLOWED UNLESS APPROVED BY THE CONSTRUCTION MANAGER. IF GATE IS TO BE LEFT UNLOCKED, CONTRACTOR SHALL PROVIDE GATE GUARDS FOR THE DURATION OF THE UNLOCKED CONDITION. ALL CONTRACTOR TRAFFIC AUTHORIZED TO ENTER THE SITE SHALL BE EXPERIENCED IN THE ROUTE OR ESCORTED BY THE CONTRACTOR PERSONNEL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE ACCESS GATE TO THE SITE. A CONTRACTOR'S FLAGMAN OR TRAFFIC CONTROL PERSON SHALL MONITOR AND COORDINATE ALL CONTRACTOR TRAFFIC AT THE ACCESS GATE. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE AIRPORT OPERATIONS AREA (AOA). DIRECTIONAL SIGNING ALONG THE DELIVERY ROUTE TO THE STORAGE AREA OR WORK SITE SHALL BE AS DIRECTED BY THE CONSTRUCTION MANAGER.
4. CONSTRUCTION AREA LIMITS: THE LIMITS OF CONSTRUCTION, MATERIAL STORAGE AREAS, PARKING AREA AND OTHER AREAS DEFINED FOR THE CONTRACTOR'S EXCLUSIVE USE DURING CONSTRUCTION SHALL BE MARKED AND LIGHTED. THE CONTRACTOR SHALL ERECT AND MAINTAIN FENCING AROUND THE PERIMETER OF THESE AREAS AND VISIBLE DEVICES FOR DAY/NIGHT USE. TEMPORARY BARRICADES, FLAGGING AND FLASHING WARNING LIGHTS WILL BE REQUIRED AT CRITICAL ACCESS POINTS. THE TYPE OF MARKING AND WARNING DEVICES SHALL BE APPROVED BY THE CONSTRUCTION MANAGER AND AIRPORT OPERATIONS.
5. THE C.S.O. SHALL PROVIDE OPERATIONS AND THE CONSTRUCTION MANAGER A CURRENT LIST OF COMPANIES AUTHORIZED TO CONDUCT WORK ON THE AIRPORT. CONTRACTOR EMPLOYEE PERSONAL VEHICLES SHALL BE RESTRICTED TO THE CONTRACTORS EMPLOYEE PARKING AREA AND ARE NOT ALLOWED ON THE AIRFIELD AT ANY TIME.

DU080



Table with columns: NO., DATE, DSGN, DR, JRT, HF, CHK, REVISION, ISSUE FOR BID, APVD, BY, APVD, MV. Includes date 2012/02/03 and various initials.

8501 W. HIGGINS ROAD
SUITE 300
CHICAGO, IL 60631
RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

CH2MHILL logo and GENERAL AND SECURITY NOTES. Includes scale information: AS SHOWN, VERIFY SCALE, BAR IS ONE INCH ON ORIGINAL DRAWING. 1" = 100'. Includes metadata: DATE 2012/02/03, PROJ 424278, DWG G-103, SHEET 4 of 57.

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SAFETY REQUIREMENTS DURING CONSTRUCTION

DEFINITIONS AND ABBREVIATIONS:
AOA - AIRPORT OPERATIONS AREA
FAR - FEDERAL AVIATION REGULATION
AC - ADVISORY CIRCULAR

A. FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULAR (AC), ORDERS AND FEDERAL AVIATION REGULATION (FAR).

THE FOLLOWING PUBLICATIONS CONTAIN DEFINITIONS & DESCRIPTIONS OF CRITICAL AIRPORT OPERATING AREAS. THE AREAS DEFINED BELOW PERTAIN TO AIRFIELD SAFETY REQUIREMENTS AND ARE REFERENCED THROUGHOUT THE CONTRACT DOCUMENTS. COPIES OF THESE PUBLICATIONS ARE AVAILABLE ON-LINE (FAA.GOV) AND THROUGH THE FAA.

1. AC 150/5370-2E, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", OR CURRENT EDITION, SETS FORTH GUIDELINES TO ASSIST AIRPORT OPERATORS IN COMPLYING WITH FAR PART 139, "CERTIFICATION AND OPERATION": LAND AIRPORTS SERVING CERTAIN AIR CARRIERS AND WITH THE REQUIREMENTS OF FEDERALLY FUNDED CONSTRUCTION PROJECTS.

2. FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE", CURRENT EDITION:

a. ESTABLISHES STANDARDS FOR DETERMINING OBSTRUCTIONS TO NAVIGABLE AIRSPACE. CIVIL AIRPORT IMAGINARY SURFACES ARE DEFINED IN THE PUBLICATION AND ARE SHOWN ON THE SAFETY PLAN.

b. SETS FORTH REQUIREMENTS FOR NOTICE OF CERTAIN PROPOSED CONSTRUCTION OR ALTERATION. NOTICE OF CONSTRUCTION PROVIDES A BASIS FOR RECOMMENDATIONS FOR IDENTIFYING THE CONSTRUCTION OR ALTERATION IN ACCORDANCE WITH AC 70/7460-1K "OBSTRUCTION MARKING AND LIGHTING," CURRENT EDITION.

3. AC 150/5300-13. "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:

a. OBSTACLE FREE ZONE (OFZ) - A VOLUME OF SPACE WHICH IS FREE OF ALL FIXED OBJECTS AND CLEAR OF VEHICLES IN THE PROXIMITY OF AN AIRPLANE CONDUCTING AN APPROACH, MISSED APPROACH, LANDING, TAKEOFF, OR DEPARTURE.

b. RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USEABLE FOR TAKEOFF OR LANDING.

c. OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXI LANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.

d. SAFETY AREA - THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS, AND TAXI LANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS WITHOUT INCURRING ANY SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH MUST BE THERE BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.

B. GENERAL SAFETY REQUIREMENTS

1. THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO DUPAGE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.

2. PROTECTION OF ALL PERSONS, PROPERTY, AND EQUIPMENT SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AIRPORT PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS. THE CONTRACTOR MUST PROVIDE SAFETY MEASURES TO GUARD AGAINST INJURY INCLUDING, BUT NOT LIMITED TO, ITEMS SUCH AS SAFETY VESTS, HARD HATS, AND HEARING PROTECTION.

3. DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK SHALL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE AIRPORT OPERATIONS. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT OPERATIONS AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.

4. ALL WORK WHICH IS TO BE PERFORMED WITHIN THE SAFETY AREA OF AN ACTIVE RUNWAY, TAXIWAY, APRON OR AIRPORT ROADWAY UNDER NORMAL OPERATIONAL CONDITIONS SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL NOT BE ACCOMPLISHED WITHOUT PRIOR PERMISSION FROM THE CONSTRUCTION MANAGER AND AIRPORT OPERATIONS. REQUESTED CLOSINGS SHALL BE DIRECTED A MINIMUM OF 2 WORKING DAYS (48 HOURS) IN ADVANCE TO THE CONSTRUCTION MANAGER WHO WILL COORDINATE WITH OPERATIONS.

C. CONSTRUCTION

1. ANY OF THE FOLLOWING CONDITIONS ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS. THE CONTRACTOR SHALL CORRECT/ELIMINATE THESE HAZARDS TO THE SATISFACTION OF THE CONSTRUCTION MANAGER AND AIRPORT OPERATIONS.

a. TRENCHES, HOLES, PAVEMENT DROP-OFFS OR EXCAVATION IN EXCESS OF 3 INCHES IN DEPTH WITHIN AN RSA OR TSA.

b. UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.

c. MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF OPEN RUNWAYS, TAXIWAYS, TAXILANES, OR IN A RELATED SAFETY, APPROACH, DEPARTURE OR TRANSITIONAL SURFACE AREAS.

d. VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH OR DEPARTURE AREA.

e. VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD DEGRADE OR OTHERWISE INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).

f. PAVEMENT DROP-OFFS OR PAVEMENT TURF - LIPS (EITHER PERMANENT OR TEMPORARY), WHICH COULD CAUSE DAMAGE TO AIRCRAFT IF CROSSED AT NORMAL OPERATING SPEEDS. THE MAXIMUM DROP-OFF OR PERMITTED LIP IS 3 INCHES.

g. UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY/TAXIWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.

h. OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.

i. UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND OTHER CONSTRUCTION EQUIPMENT IN EXCESS OF 12 FT. IN HEIGHT ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH, DEPARTURE OR TRANSITIONAL SURFACE AREAS.

j. MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.

k. INADEQUATE APPROACH/DEPARTURE SURFACES (THESE SURFACES ARE NEEDED TO ASSURE ADEQUATE LANDING/TAKEOFF CLEARANCE OVER OBSTRUCTIONS, WORK OR STORAGE AREAS).

l. INADEQUATE, CONFUSING OR MISLEADING (TO USER PILOTS) MARKING/LIGHTING OF RUNWAYS, TAXIWAYS, OR TAXILANES INCLUDING DISPLACED OR RELOCATED THRESHOLDS.

m. WATER, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAVEMENT EDGES, OR DEGRADATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS AND/OR LIGHTING.

n. INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AOA.

o. TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DEBRIS (FOD) POTENTIAL; WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS; OR IN RELATED SAFETY AREAS.

p. INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.

q. FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS FROM ACTIVE AIRCRAFT OPERATING AREAS.

r. DUST CLOUDS FROM HAUL ROADS. SUFFICIENT WATERING SHALL BE PERFORMED DURING WORK HOURS TO MITIGATE/ELIMINATE THE FORMATION OF DUST CLOUDS FROM HAUL ROADS.

s. CONSTRUCTION ACTIVITIES OR MATERIALS WHICH COULD HAMPER THE RESPONSE OF AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING AIRCRAFT ALL OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND TO AIRCRAFT PARKING LOCATIONS.

t. BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.

D.MOTORIZED VEHICLES

1. THIS PROJECT INCLUDES WORK WITHIN THE ACTIVE AIRCRAFT OPERATIONS AREA (AOA) (I.E., THE SECURE PORTION OF THE AIRPORT). ALL PERMITTED CONSTRUCTION VEHICLES (HEAVEY EQUIPMENT) SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3 FOOT X 3 FOOT OR LARGER, ORANGE AND WHITE CHECKERBOARD, PLASTIC/CLOTH FLAG. EACH CHECKERBOARD COLOR SHALL BE 1 FOOT SQUARE. ANY VEHICLE OPERATING IN THE AOA DURING THE HOURS OF DARKNESS AND/OR IFR CONDITIONS SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES. DARKNESS SHALL BE DEFINED AS 30 MINUTES BEFORE OFFICIAL SUNSET UNTIL 30 MINUTES AFTER OFFICIAL SUNRISE. ALL VEHICLES OPERATING WITHIN THE AOA AND AIRPORT PROPERTY SHALL BE IDENTIFIED WITH A SIGN 6-INCH MINIMUM LETTER SIZE ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME PER THE DAA VEHICLE BADGE APPLICATION.

2. VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE REQUIRED TO HAVE A SIGN WITH A 6-INCH MINIMUM LETTER SIZE ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTORS NAME AND OBTAIN A VISITOR/VEHICLE BADGE WHEN WORK IS REQUIRED WITHIN THE SIDA (TERMINAL) AREA AND ARE TO BE ESCORTED THROUGH, AND OUT OF, THE AIRPORT OPERATIONS AREA BY A PROPERLY IDENTIFIED VEHICLE WITH APPROVED ESCORTING CERTIFICATION AND PRIVILEGES.

3. CONTRACTOR SHALL USE ROUTES AS SHOWN ON PLANS OR AS APPROVED IN ADVANCE FOR TRANSIT BETWEEN WORK SITES, STOCKPILE LOCATIONS AND STAGING AREAS. THE CONTRACTOR SHALL NOT CROSS ACTIVE RUNWAYS AND/OR TAXIWAYS WHEN MOVING ANYWHERE ON THE AIRFIELD WITHOUT PRIOR APPROVAL OF THE AIR TRAFFIC CONTROL TOWER.

4. THE MAXIMUM ALLOWABLE HEIGHT OF CONSTRUCTION EQUIPMENT OPERATING IN THE AIRSIDE OPERATION AREA IS GOVERNED BY F.A.A. ADVISORY CIRCULAR (AC) 150/5370-2E, CURRENT EDITION. WHEN EQUIPMENT IS EXPECTED TO PENETRATE A RUNWAY APPROACH OR TRANSITIONAL SURFACE (DEFINED BY CONTOURS ON SAFETY PLAN) OR WHEN CRANES WILL BE USED ON SITE, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER AND DAA AT LEAST 85 DAYS PRIOR TO START OF CONSTRUCTION TO COORDINATE THE SUBMITTAL OF FAA FORM 7460-1 TO THE FAA REGIONAL OFFICE. PERMISSION TO USE CRANES SHALL BE ISSUED BY DAA AIRSIDE OPERATIONS AFTER APPROVAL BY THE FAA. BOOMS SHALL BE LOWERED WHEN NOT IN OPERATION AND LIGHTED WITH A 360 DEGREE RED OBSTRUCTION LIGHT AND 3 FOOT X 3 FOOT OR LARGER, ORANGE AND WHITE CHECKERBOARD, PLASTIC/CLOTH FLAG WHEN ERECT AND/OR WORKING AT NIGHT.

E. RADIO COMMUNICATIONS

1. RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S ON-SITE REPRESENTATIVE AND THE AIR TRAFFIC CONTROL TOWER (ATCT). RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT IN AN ACTIVE AOA OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 121.8 MHZ AND TOWER CONTROL FREQUENCY OF 120.9 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES AND PRIOR TO ENTERING SAFETY AREAS. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR SUPERVISORS WORKING IN AN ACTIVE AOA WITHIN ONE MINUTE AFTER RECEIPT FROM THE ATCT. COST OF RADIOS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

F. FOREIGN OBJECT DEBRIS

1. FOREIGN OBJECT DEBRIS (FOD), WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE PERMITTED IN THE ACTIVE AOA. MATERIALS OBSERVED TO BE WITHIN THE ACTIVE AOA SHALL BE REMOVED IMMEDIATELY AND/OR CONTINUOUSLY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE FAA APPROVED POWERED VACUUM SWEEPER(S) AND OPERATOR(S) ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY, AS NECESSARY TO CONTROL POTENTIAL FOR FOD GENERATED BY CONSTRUCTION ACTIVITIES. WHERE TRAVEL ON OR ACROSS RUNWAYS, TAXILANES, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS. APPROVED POWERED VACUUM SWEEPER(S) SHALL ALSO BE IN PLACE OUTSIDE SAFETY AREAS AT PROSPECTIVE ACTIVE AIRFIELD PAVEMENT CONSTRUCTION CROSSINGS WHERE APPROVED AND REQUIRED. IN ADDITION DUST MUST BE CONTROLLED FOR ALL HAUL ROUTES ON THE AOA AT ALL TIMES.

G. FLAGMEN

1. IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL, AT HIS/HER OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL CONSTRUCTION TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER). ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMAN OR ESCORT WHO IS IN DIRECT RADIO CONTACT WITH THE AIR TRAFFIC CONTROL TOWER. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER SAFETY AREAS OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION OBTAINED THROUGH ATCT. NO WORK OR ACTIVITY SHALL BEGIN UNTIL ALL REQUIRED SAFETY ITEMS AND PERSONNEL ARE IN THEIR PROPER POSITIONS, AND FLAGMEN/ESCORTS HAVE RADIO CONTACT WITH ATCT.

DU080



Table with columns: NO., DATE, DSGN, DR, JRT, HF, CHK, APVD, BY, APVD, MV

8501 W. HIGGINS ROAD
SUITE 300
CHICAGO, IL 60631
RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

CH2MHILL logo and CONSTRUCTION SAFETY NOTES I

Table with rows: AS SHOWN, VERIFY SCALE, DATE (2012/02/03), PROJ (424278), DWG (G-104), SHEET (5 of 57)

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SAFETY REQUIREMENTS DURING CONSTRUCTION (CON'T)

DU080

H. AIRPORT FAR PART 139 COMPLIANCE

1. AT NO TIME SHALL CONSTRUCTION EQUIPMENT BE PARKED OR STAGED WITHIN 400' OF AN OPEN RUNWAY CENTERLINE OR 93' OF AN OPEN TAXIWAY CENTERLINE. WORK IS PERMITTED WITHIN THE 400' AND 93' OBJECT FREE AREAS, HOWEVER AT THE END OF THE WORK DAY ALL EQUIPMENT, STOCKPILES AND MATERIALS MUST BE REMOVED FROM THE AREA.

2. ALL BARRICADES USED ON THE AOA TO DELINEATE PAVEMENT CLOSURE OR HAZARDOUS AREAS MUST BE EQUIPED WITH RED 360 DEGREE VISIBILITY OBSTRUCTION LIGHTS.

3. VEHICLES THAT OPERATE WITHIN THE AOA, MUST HAVE EITHER A ROTATING OR YELLOW STROBE LIGHT MOUNTED ON THE TOP OF THE VEHICLE. STROBE MOUNTED IN HEAD LIGHTS AND TAIL LIGHTS DO NOT COMPLY TO THE FAA STANDARD. DURING HOURS OF LOW VISIBILITY AND DARKNESS, VEHICLES MUST HAVE THE HEADLIGHTS ON. FOR ADDED SAFETY HAZARD LIGHTS SHOULD BE ON. (AC 150-5370-2E SECTION 9.A), (AC 150-5210-5C SECTION 5), (FAA CERT ALERT 09-11 ISSUED 7-1-09).

4. VEHICLE TRAILERS MUST BE CONNECTED TO THEIR RESPECTIVE TOW VEHICLES WITH OPERATIONAL PARKING LIGHTS. IF A TRAILER MUST BE DETACHED FROM THE TOW VEHICLE, BARRICADES ARE TO BE PLACED AT THE FOUR CORNERS OF THE TRAILER FOR ADDED VISIBILITY.

5. ALL "HEAVY" EQUIPMENT ARE REQUIRED TO HAVE THE 3'X3' ORANGE AND WHITE FLAG MOUNTED ON THE VEHICLE WHILE WORKING ON THE AIRFIELD. (AC 150-5370-2E SECTION 9A). VEHICLES NOT CONSIDERED "HEAVY" EQUIPMENT: PICK-UP TRUCKS, DUMP TRUCKS, BOX AND PANEL VANS, STAKE BODIES, PASSENGER VEHICLES, MECHANIC/SERVICE TRUCKS, SKID STEERS, COMBINATION BACKHOES AND BUSES. THESE VEHICLES MUST HAVE AN OPERATIONAL YELLOW ROTATING/STROBE LIGHT. EQUIPMENT THAT DOES NOT REQUIRE A FLAG OR ROTATING/STROBE LIGHT ARE: HAND OPERATED EQUIPMENT (CONCRETE SAWS, DOWEL MACHINES, ETC.) TOW BEHIND EQUIPMENT/VEHICLES (LIGHT WAGONS, COMPRESSORS, TRAILERS, ETC.).

6. ALL STOCKPILES SHALL BE PLACED AND MAINTAINED IN AN AREA THAT IS CLEAR OF ALL RUNWAY AND TAXIWAY OBJECT FREE AREAS AND HEIGHTS OF ANY STOCKPILED MATERIAL DOES NOT PENETRATE FAR PART 77 SURFACES.

7. IF THE CONTRACTOR WISHES TO USE A HAUL ROUTE OTHER THAN THOSE IDENTIFIED IN THE APPROVED CONSTRUCTION PLANS, THEY MUST SUBMIT THEIR REQUEST IN WRITING TO THE CONSTRUCTION MANAGER AND DAA. NO HAUL ROUTES SHALL PENETRATE RUNWAY OR TAXIWAY SAFETY AREAS OR OBJECT FREE AREAS WHEN THEY ARE OPEN TO AIR TRAFFIC OPERATIONS.

8. ALL VEHICLES AND EQUIPMENT SHALL BE PARKED AND STORED IN AN AREA THAT IS CLEAR OF ALL RUNWAY AND TAXIWAY SAFETY AREAS AND OBJECT FREE AREAS AND THE HEIGHTS OF ANY VEHICLES OR EQUIPMENT DO NOT PENETRATE ANY FAR PART 77 SURFACES.

9. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DUPAGE AIRPORT FIRE STATIONS AND ARFF FIRE ACCESS ROADS AT ALL TIMES DURING THE PROJECT. UNOBSTRUCTED PATHS MUST BE MAINTAINED TO AND FROM THE FIRE STATION AND FIRE ACCESS ROADS.

10. ANY EQUIPMENT THAT CANNOT BE REASONABLY MOVED TO THE CONTRACTOR STAGING ARE AND MUST REMAIN ON OR NEAR THE JOB SITE, MUST BE PARKED OR STAGED IN A MANNER THAT THE EQUIPMENT/VEHICLES ARE NOT IN THE RUNWAY OR TAXIWAY SAFETY AREA OR OBJECT FREE AREAS AND DO NOT PENETRATE FAR PART 77 SURFACES.

11. FOR THE DURATION OF THIS PROJECT RUNWAYS AND TAXIWAYS WILL BE OPEN AND AVAILABLE FOR USE BY AIR TRAFFIC OPERTIONS. IT IS IMPERATIVE FOR EACH CONTRACTOR TO BE AWARE OF SPECIFIC RULES AND REGULATIONS THAT MIGHT AFFECT YOUR PROJECT.

12. RECOMMENDED FAA PUBLICATIONS FOR CONTRACTORS (INCLUDING BUT NOT LIMITED TO):

- A. FAR 139 - CERTIFICATION AND OPERATIONS: LAND AIRPORTS SERVING CERTAIN AIR CARRIERS:
- B. FAR 77 - OBJECTS AFFECTING NAVIGABLE AIRSPACE
- C. AC 150/5370-2E - OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION
- D. AC 150/5370-10E - STANDARDS FOR SPECIFYING CONSTRUCTION OF AIRPORTS
- E. AC 150/5370-13A - OFF-PEAK CONSTRUCTION OF AIRPORT PAVEMENTS USING HOT MIX ASPHALT
- F. AC 150/5370-14A - HOT MIX ASPHALT PAVING HANDBOOK

13. ALL RUNWAY SAFETY AREAS ARE TO REMAIN CLEAR OF ALL MEN AND EQUIPMENT WHILE THE RUNWAY IS OPEN AND AVAILABLE FOR USE. NO WORK SHALL TAKE PLACE IN THE RSA UNLESS THE RUNWAY IS CLOSED TO AIR TRAFFIC OPERATIONS. WORK IS PERMITTED WITHIN THE TAXIWAY SAFETY AREA PROVIDED ALL WORK IS SCHEDULED AND APPROVED THROUGH THE CONSTRUCTION MANAGER AND DAA.

14. WORK IS PERMITTED IN THE RUNWAY AND TAXIWAY OBJECT FREE AREA, HOWEVER AT THE COMPLETION OF EACH WORK DAY, NO STOCKPILES, MATERIAL, OR EQUIPMENT ARE PERMITTED WITHIN THE ROFA. EXCAVATIONS ARE ALLOWED PROVIDED THEY ARE BARRICADED AND PROTECTED TO A LEVEL APPROVED BY THE CONSTRUCTION MANAGER AND DAA. ALL EXCAVATIONS WILL BE PROTECTED WITH BARRICADES WITH RED 360 DEGREE VISIBLE OBSTRUCTION LIGHTS. VEHICLES, EQUIPMENT, MATERIAL AND STOCKPILES ALLOWED TO REMAIN OUTSIDE THE ROFA WILL NOT PENETRATE FAR PART 77 SURFACES.

15. RUNWAY SAFETY AREA SPECIFICS FOR ACTIVE RUNWAYS:

- A. NO WORK PERMITTED WHEN RUNWAY IS OPEN.
- B. NO EXCAVATIONS OF ANY KIND.
- C. NO ELEVATION CHANGES OF MORE THAN 3".
- D. NO STANDING OR PONDING WATER.
- E. ALL STRUCTURES SHALL BE GRADED TO SURROUNDING GROUND ELEVATIONS.
- F. GRADE CHANGES OR SLOPES IN THE RSA SHALL NOT EXCEED 5%.

16. AIRFIELD ELECTRICAL CIRCUITS:

- A. ALL TEMPORARY ELECTRICAL CIRCUITS MUST BE PLACED IN PIPE.
- B. TEMPORARY CABLES IN GRASS AREAS SHALL BE PLACED IN PVC OR STEEL CONDUIT.
- C. TEMPORARY CABLES ON PAVEMENT SHALL BE PLACED IN STEEL CONDUIT.
- D. WHERE VEHICLES AND EQUIPMENT CROSS TEMPORARY ELECTRICAL CONDUITS, RAMPS ARE TO BE CONSTRUCTED TO PREVENT DAMAGE TO THE PIPE AND/OR CABLE.
- E. PIPES ENTERING/EXITING MANHOLE COVERS ARE TO BE POSITIONED IN A MANNER SO THE MANHOLE COVER RESTS FLUSH WITH THE MANHOLE. LIDS SHALL NOT REST ON TOP OF TEMPORARY CONDUITS.
- F. DUE TO THE DANGEROUS NATURE OF AIRFIELD ELECTRICAL CIRCUITS, ALL TEMPORARY CIRCUIT LOCATIONS SHALL BE APPROVED BY THE CONSTRUCTION MANAGER AND DAA PRIOR TO INSTALLATION AND CLEARLY MARKED AT ALL TIMES.



NO.	2012/02/03	DATE	ISSUE FOR BID
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		DR	JRT
		APVD	APVD
		DCT	MV

8501 W. HIGGINS ROAD
SUITE 300
CHICAGO, IL 60631

RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

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GENERAL
CONSTRUCTION SAFETY NOTES II

AS SHOWN
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE 2012/02/03
PROJ 424278
DWG G-105
SHEET 6 of 57

- NOTE:**
- PART 77 SURFACE DEPICTED DOES NOT INCLUDE CONTOURS ASSOCIATED WITH RUNWAY 10-28. THIS RUNWAY WILL BE CLOSED DURING THE CONSTRUCTION DURATION.
 - TAXIWAY SAFETY AND OBJECT FREE AREAS NOT SHOWN. SEE TABLE THIS SHEET FOR DIMENSIONS.

CRITICAL AREAS		ADG-II
TSA - TAXIWAY SAFETY AREA FROM CENTERLINE		40'
TOFA - TAXIWAY OBJECT FREE AREA FROM CENTERLINE		66'

EXISTING RUNWAY 20R
APPROACH/DEPARTURE
RPZ (500',1010',1700')

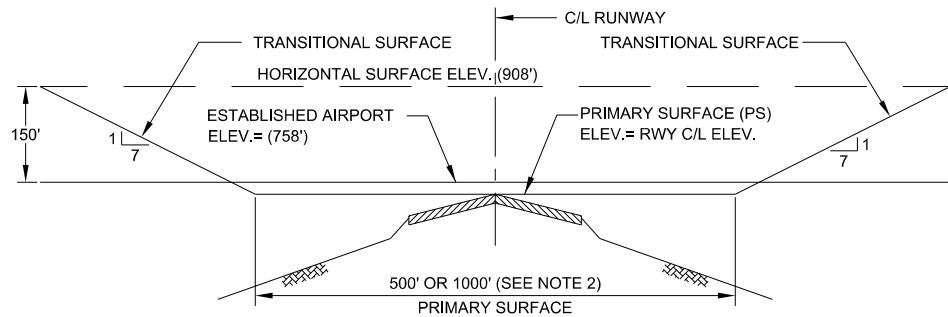
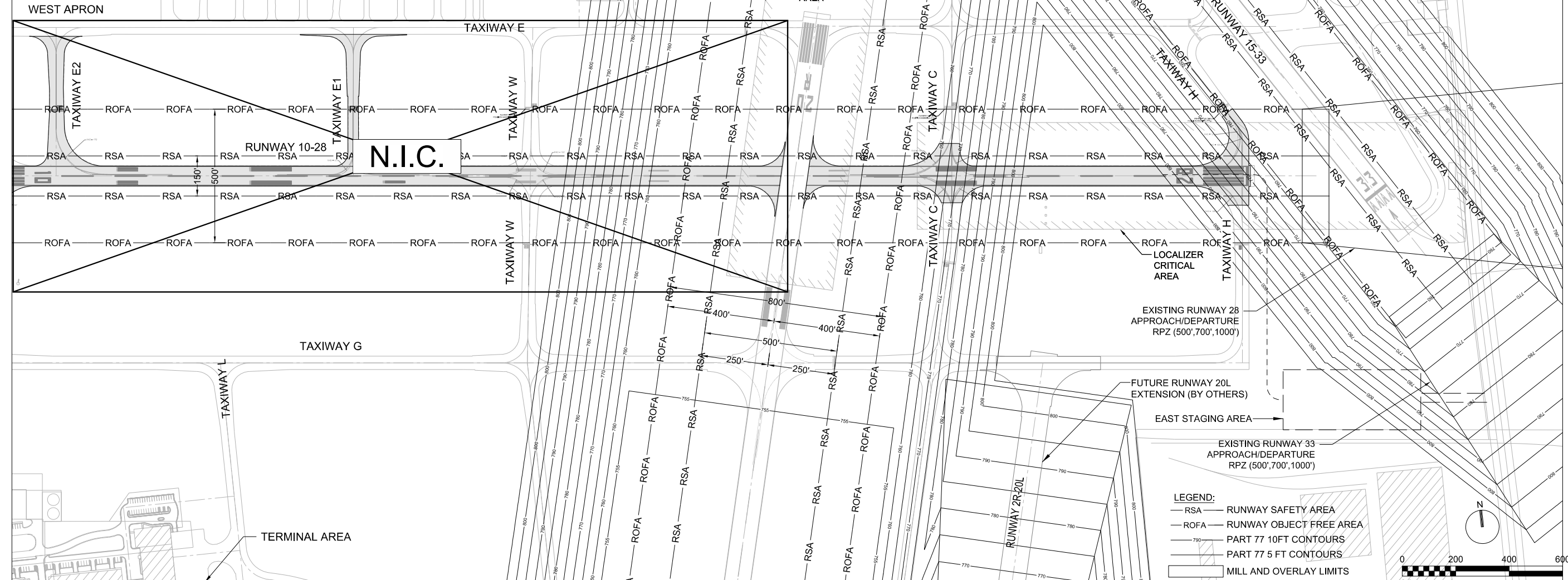
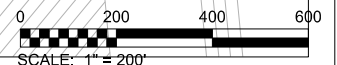
LOCALIZER
CRITICAL AREA

EXISTING RUNWAY 28
APPROACH/DEPARTURE
RPZ (500',700',1000')

FUTURE RUNWAY 20L
EXTENSION (BY OTHERS)

EXISTING RUNWAY 33
APPROACH/DEPARTURE
RPZ (500',700',1000')

- LEGEND:**
- RSA - RUNWAY SAFETY AREA
 - ROFA - RUNWAY OBJECT FREE AREA
 - 750' - PART 77 10FT CONTOURS
 - 770' - PART 77 5 FT CONTOURS
 - MILL AND OVERLAY LIMITS



**TYPICAL SECTION
FAR PART 77 IMAGINARY SURFACES**
N.T.S.

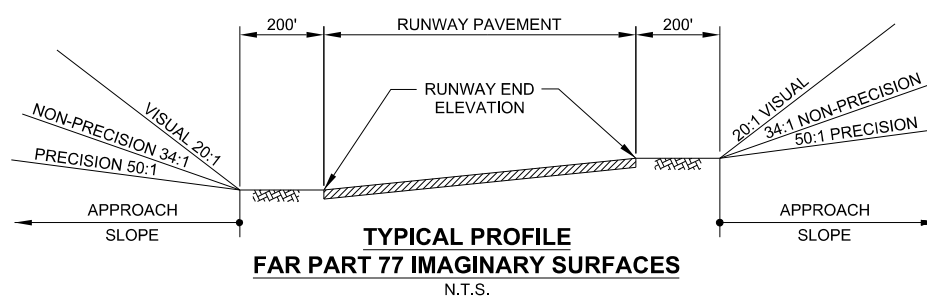
PART 77 NOTES:

- SEE "SAFETY NOTES" AS CONTAINED IN THE PLANS REGARDING RESTRICTED AREAS IN THE VICINITY OF ACTIVE RUNWAYS, TAXIWAYS, AND NAVAIDS.
- IMAGINARY SURFACE REQUIREMENTS FOR EXISTING ACTIVE RUNWAYS ARE SIMILAR. PRIMARY SURFACE (P.S.) DIMENSIONS VARY BASED ON RUNWAY APPROACH CATEGORY.

RUNWAY 2L-20R P.S. = 1000' (500' LT. & RT. OF C/L)
 RUNWAY 2R-20L P.S. = 500' (250' LT. & RT. OF C/L)
 RUNWAY 10-28 P.S. = 1000' (500' LT. & RT. OF C/L)
 RUNWAY 15-33 P.S. = 500' (250' LT. & RT. OF C/L)

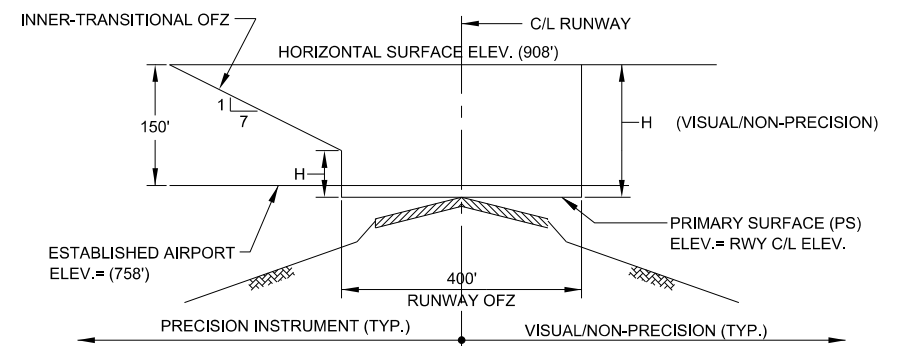
3. MSL = MEAN SEA LEVEL

SUBTRACT GROUND ELEVATION FROM MSL ELEVATION FOR ABOVE GROUND CLEARANCE.



**TYPICAL PROFILE
FAR PART 77 IMAGINARY SURFACES**
N.T.S.

RUNWAY END	ELEVATION (FT.)	APPROACH SLOPE	RUNWAY END	ELEVATION (FT.)	APPROACH SLOPE
2L	751.25'	50:1	20R	755.91'	34:1
2R	750.92'	20:1	20L	754.00'	20:1
10	753.75'	50:1	28	756.36'	34:1
15	756.87'	20:1	33	757.89'	20:1



RUNWAY	TYPE OF RUNWAY	H (AGL) (FEET)
2L-20R	PRECISION INSTRUMENT	50
2R-20L	VISUAL	150
10-28	PRECISION INSTRUMENT	50
15-33	VISUAL	150

**TYPICAL SECTION
OBSTACLE FREE ZONE (OFZ)**
N.T.S.

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RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

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GENERAL
SAFETY PLAN

AS SHOWN	
VERIFY SCALE	
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DATE	
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SHEET	7 of 57

RUNWAY CLOSURE NOTES:

1. ALL AIRFIELD PAVEMENT CLOSURES SHALL BE TEMPORARY CLOSURES AS DESCRIBED IN FAA AC 150/5370-2E, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION." THE CONTRACTOR SHALL COMPLY WITH ALL THE REQUIREMENTS SET FORTH IN THE CONTRACT DOCUMENTS REGARDING AIRFIELD CLOSURES, SAFETY, AND SECURITY.

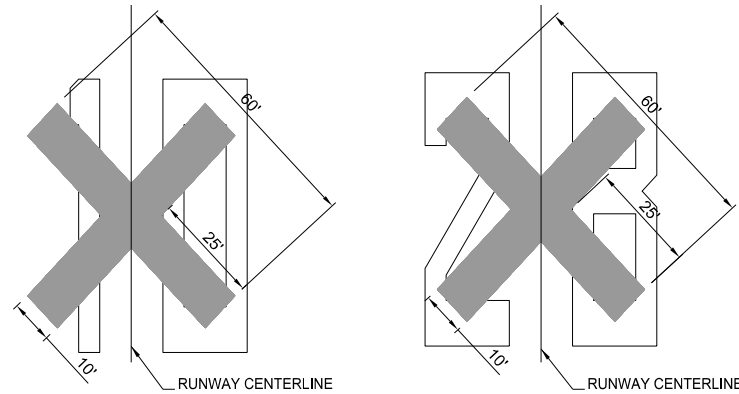
2. LIGHTED RUNWAY CLOSURE X EQUIPMENT SHALL MEET THE REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5345-55A. TWO UNITS OF LIGHTED RUNWAY CLOSURE X EQUIPMENT MEETING THIS REQUIREMENT SHALL BE PROVIDED BY THE CONTRACTOR FOR USE ON THE PROJECT AND DELIVERED TO THE DAA AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS REQUIRED TO FURNISH ALL FUEL AND/OR TEMPORARY POWER NECESSARY TO RUN THE EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EQUIPMENT AND TRANSPORTING IT TO AND FROM THE WORK AREA EACH PERIOD. THE LIGHTED RUNWAY CLOSURE X EQUIPMENT SHALL BE MOUNTED ON A TRAILER AND TOWED BY THE CONTRACTORS VEHICLE. CONTRACTOR SHALL PROVIDE REPLACEMENT BULBS FOR LIGHTED RUNWAY CLOSURE X EQUIPMENT. THE COST FOR PROVIDING AND MAINTAINING TWO UNITS OF LIGHTED RUNWAY X CLOSURE EQUIPMENT SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR MAINTENANCE OF AOA TRAFFIC.

IN THE EVENT LIGHTED RUNWAY CLOSURE EQUIPMENT IS NOT OPERATIONAL, NON-LIGHTED CLOSURE X'S CONSTRUCTED OF DOUBLE-LAYERED PAINTED SNOW FENCE, COLORED PLASTIC, OR SIMILAR MATERIALS SHALL BE USED AND APPROVED BY THE CONSTRUCTION MANAGER FOR USE ON THIS PROJECT. X'S SHALL BE PROPERLY SECURED TO PREVENT MOVEMENT BY JET BLAST OR WIND CURRENTS.

3. PRIOR TO REOPENING CLOSED AIRFIELD PAVEMENTS, THE ENTIRE SAFETY AREA MUST MEET FAA CRITERIA UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER.

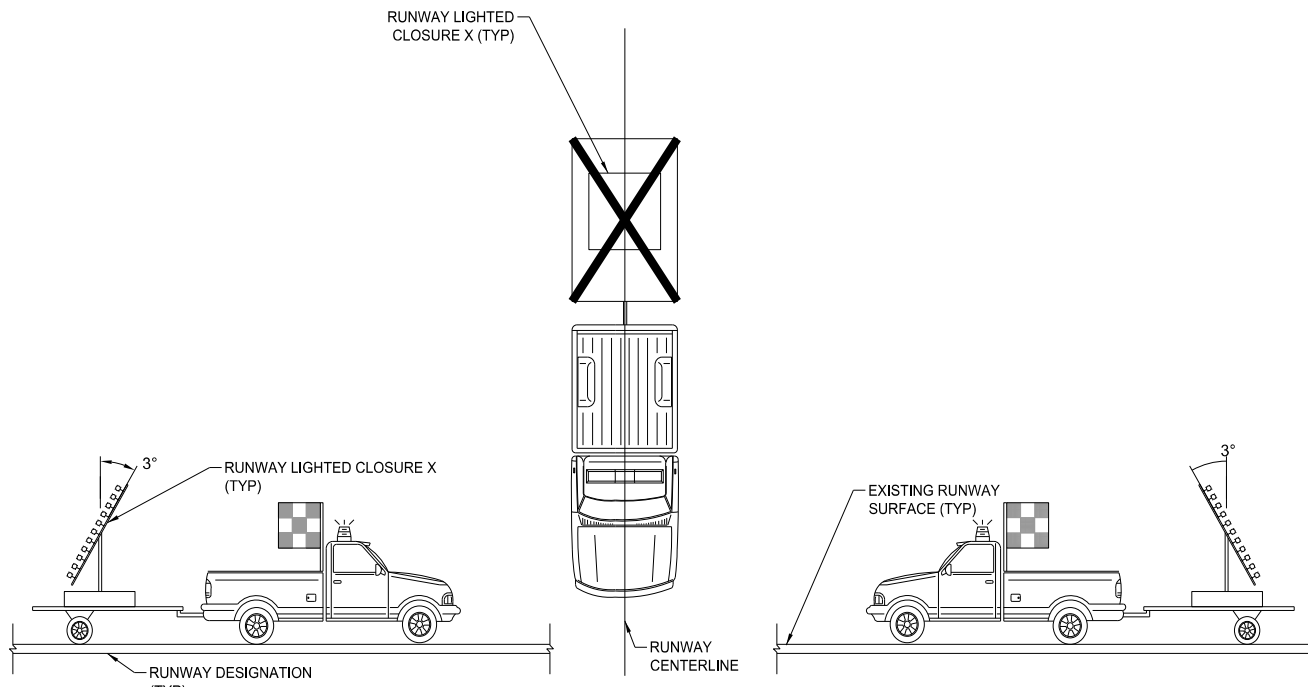
4. NON-LIGHTED CLOSURE X'S SHALL BE ASSEMBLED IN A MANNER APPROVED BY THE CONSTRUCTION MANAGER AND PLACED AT THE DIRECTION OF THE CONSTRUCTION MANAGER. THE COST FOR PROVIDING AND MAINTAINING NON-LIGHTED CLOSURE X'S SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR MAINTENANCE OF AOA TRAFFIC.

X'S SHALL BE PLACED AT EACH END OF THE RUNWAY ON TOP OF THE RUNWAY DESIGNATION MARKINGS.



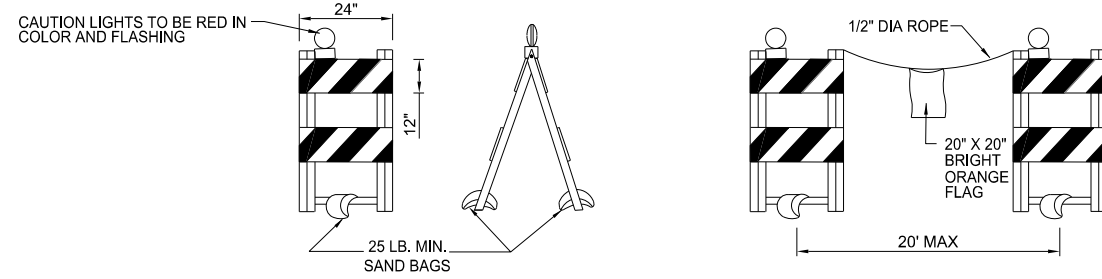
NON-LIGHTED TYPICAL RUNWAY CLOSURE DETAIL

N.T.S.



LIGHTED RUNWAY CLOSURE DETAIL

N.T.S. PROFILE VIEW



BARRICADE DETAIL

N.T.S.

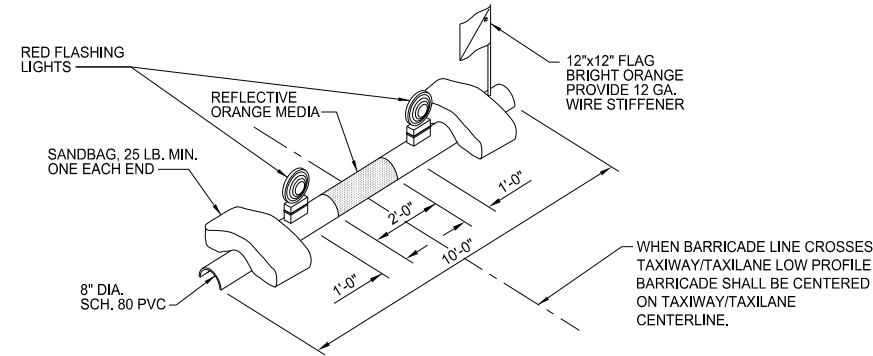
BARRICADE NOTES:

1. CLOSED SERVICE ROADS SHALL BE MARKED BY CONSTRUCTION BARRIER LINES CONSISTING OF IDOT TYPE II BARRICADES PAINTED WHITE W/ ORANGE STRIPES. BARRICADES SHALL BE PLACED AT A MAXIMUM INTERVAL OF 20' ON CENTER. THE BARRICADES SHALL BE CONNECTED WITH 1/2" DIA. ROPE WITH 20"x20" BRIGHT ORANGE FLAGS ON CENTER. THE FLAG SHALL BE INSTALLED SO THAT THEY ARE ALWAYS IN THE EXTENDED POSITION AND PROPERLY ORIENTED.

2. BARRICADES SHALL BE WEIGHTED WITH SANDBAGS TO PREVENT DISPLACEMENT, MINIMUM WEIGHT OF 50 LBS. PER BARRICADE.

3. ALL BARRICADES SHALL BE CHECKED VISUALLY FOR SIGNS OF WEAR AND TEAR ON A DAILY BASIS AND SHALL BE REPAINTED OR REPLACED WHEN DEEMED APPROPRIATE BY THE CONSTRUCTION MANAGER. THE CONDITIONS OF LIGHTING UNITS SHALL BE CHECKED DAILY. ALL LIGHT FIXTURES SHALL BE VERIFIED IN OPERATING CONDITION AND GOOD WORKING ORDER BY THE CONTRACTOR ON A DAILY BASIS, BEFORE THE CONTRACTOR CEASES OPERATIONS FOR THE DAY.

4. CAUTION LIGHTS SHALL BE RED IN COLOR AND FLASHING DURING HOURS OF DARKNESS. THERE WILL BE NO SEPARATE MEASUREMENT OR DIRECT PAYMENT FOR FURNISHING, MAINTAINING, RELOCATION OR REMOVAL OF THESE BARRICADES. PRICE FOR BARRICADES SHALL BE INCLUDED IN LUMP SUM BID PRICE FOR MAINTENANCE OF AOA TRAFFIC.



LOW PROFILE BARRICADE DETAIL

N.T.S.

LOW PROFILE BARRICADE NOTES:

1. TYPICAL BARRICADE TO BE PLACED, ALONG THE LIMITS OF THE PHASES OF WORK, AS SHOWN IN THESE PLANS TO DELINEATE THE CONTRACTOR'S WORK AREAS AND CLOSED TAXIWAYS/TAXILANES.

2. BARRICADE SECTIONS SHALL BE ALL WHITE WITH REFLECTIVE ORANGE MEDIA AS SHOWN ON DETAIL. ALL INCIDENTAL CONNECTORS, SPACERS, SPLICE PLATES, ETC. SHALL BE PAINTED WHITE.

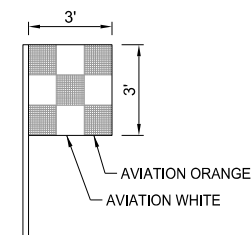
3. ALL BARRICADES SHALL BE CHECKED VISUALLY FOR SIGNS OF WEAR AND TEAR ON A DAILY BASIS AND SHALL BE REPAINTED WHEN DEEMED APPROPRIATE BY THE CONSTRUCTION MANAGER. THE CONDITIONS OF LIGHTING UNITS SHALL BE CHECKED DAILY. ALL LIGHT FIXTURES SHALL BE VERIFIED IN OPERATING CONDITION AND GOOD WORKING ORDER BY THE CONTRACTOR ON A DAILY BASIS BEFORE THE CONTRACTOR CEASES OPERATIONS FOR THE DAY.

4. ALL BARRICADES SHALL BE MOVED AT LEAST ONCE EACH WEEK AND THE CONTRACTOR SHALL SWEEP THE ACCUMULATED DEBRIS AND REMOVE AND DISPOSE OF THE DEBRIS OFFSITE AT AN APPROVED DISPOSAL FACILITY. THE BARRICADES SHALL THEN BE REPLACED AT THE APPROPRIATE LOCATION.

5. CAUTION LIGHTS SHALL BE RED IN COLOR AND FLASHING DURING HOURS OF DARKNESS. THERE WILL BE NO SEPARATE MEASUREMENT OR DIRECT PAYMENT FOR FURNISHING, MAINTAINING, RELOCATION OR REMOVAL OF THESE BARRICADES. PRICE FOR BARRICADES SHALL BE INCLUDED IN LUMP SUM BID PRICE FOR MAINTENANCE OF AOA TRAFFIC.

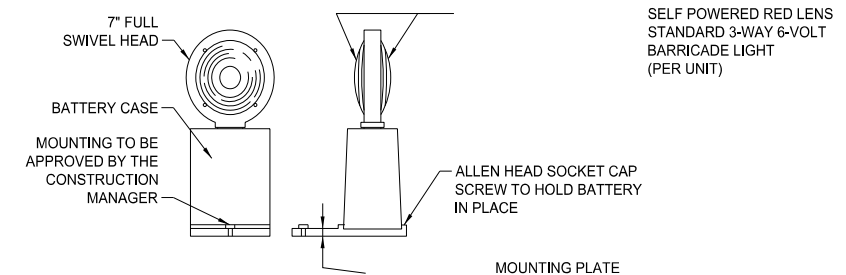
6. ALL LOW PROFILE BARRICADES ARE TO BE PLACED AT A MAXIMUM INTERVAL OF TWENTY FEET (20') ON CENTER.

7. THE CONTRACTOR MAY SUBSTITUTE AN APPROVED EQUAL LOW PROFILE BARRICADE GENERALLY CONFORMING TO THE ABOVE DETAILS AND CONFORMING TO THE SPECIFICATIONS FOR APPROVAL BY THE CONSTRUCTION MANAGER.



VEHICLE FLAG

N.T.S.



BARRICADE LIGHT DETAIL

N.T.S.

DU080

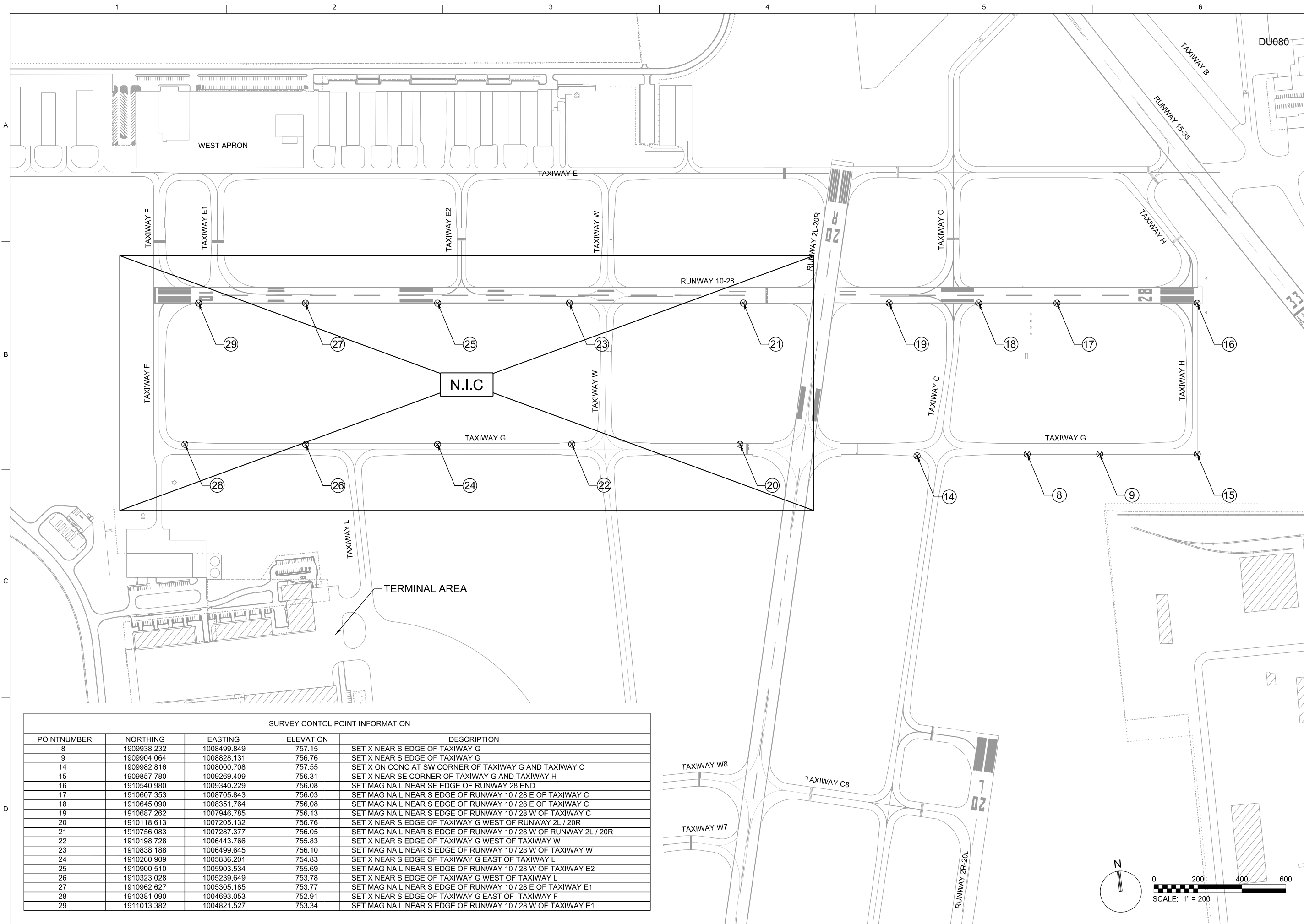


NO.	2012/02/03	DATE	DR	JRT	APVD	MV
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CHICAGO, IL 60631

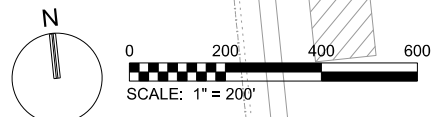
RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

GENERAL SAFETY PLAN DETAILS	
AS SHOWN	VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	2012/02/03
PROJ	424278
DWG	G-107
SHEET	8 of 57



SURVEY CONTROL POINT INFORMATION

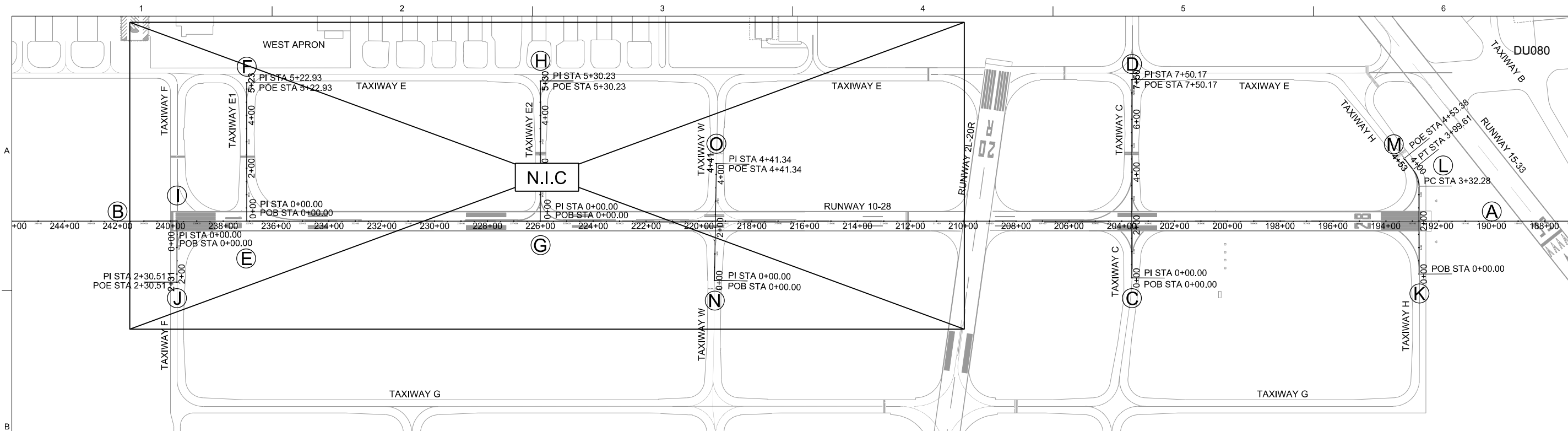
POINTNUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
8	1909938.232	1008499.849	757.15	SET X NEAR S EDGE OF TAXIWAY G
9	1909904.064	1008828.131	756.76	SET X NEAR S EDGE OF TAXIWAY G
14	1909982.816	1008000.708	757.55	SET X ON CONC AT SW CORNER OF TAXIWAY G AND TAXIWAY C
15	1909857.780	1009269.409	756.31	SET X NEAR SE CORNER OF TAXIWAY G AND TAXIWAY H
16	1910540.980	1009340.229	756.08	SET MAG NAIL NEAR SE EDGE OF RUNWAY 28 END
17	1910607.353	1008705.843	756.03	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 E OF TAXIWAY C
18	1910645.090	1008351.764	756.08	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 E OF TAXIWAY C
19	1910687.262	1007946.785	756.13	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 W OF TAXIWAY C
20	1910118.613	1007205.132	756.76	SET X NEAR S EDGE OF TAXIWAY G WEST OF RUNWAY 2L / 20R
21	1910756.083	1007287.377	756.05	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 W OF RUNWAY 2L / 20R
22	1910198.728	1006443.766	755.83	SET X NEAR S EDGE OF TAXIWAY G WEST OF TAXIWAY W
23	1910838.188	1006499.645	756.10	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 W OF TAXIWAY W
24	1910260.909	1005836.201	754.83	SET X NEAR S EDGE OF TAXIWAY G EAST OF TAXIWAY L
25	1910900.510	1005903.534	755.69	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 W OF TAXIWAY E2
26	1910323.028	1005239.649	753.78	SET X NEAR S EDGE OF TAXIWAY G WEST OF TAXIWAY L
27	1910962.627	1005305.185	753.77	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 E OF TAXIWAY E1
28	1910381.090	1004693.053	752.91	SET X NEAR S EDGE OF TAXIWAY G EAST OF TAXIWAY F
29	1911013.382	1004821.527	753.34	SET MAG NAIL NEAR S EDGE OF RUNWAY 10 / 28 W OF TAXIWAY E1



DUPAGE AIRPORT AUTHORITY

NO.	DATE	BY	APVD	REVISION	APVD	MV
20120203		JA	JA	CHK	JJ	
8501 W. HIGGINS ROAD SUITE 300 CHICAGO, IL 60631						
RUNWAY 10-28 AND ASSOCIATED TAXIWAY OVERLAY DUPAGE AIRPORT (DPA) DUPAGE COUNTY, ILLINOIS						
CH2MHILL® GENERAL HORIZONTAL & VERTICAL CONTROL PLAN						
AS SHOWN VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.						
DATE	2012/02/03					
PROJ	424278					
DWG	G-108					
SHEET	9 of 57					

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DSGN		DR	JA	

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RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

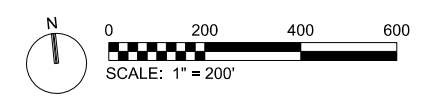
CH2MHILL®

GENERAL
CONTROL LINE PLAN

AS SHOWN	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	2012/02/03
PROJ	424278
DWG	G-109
SHEET	10 of 57

CONTROL LINE DATA - BASELINE RUNWAY 10-28											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
	N 84°02'05.62" W	1800.00'	1910363.61	1011384.90		172+00.00					
A		5200.00'	1910550.67	1009594.67		190+00.00					
B		1850.00'	1911091.07	1004422.82		242+00.00					
			1911283.32	1002582.84		260+50.00					
CONTROL LINE DATA - BASELINE TAXIWAY C											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
C	N 5°59'46.55" E	750.17'	1910478.80	1008217.90		0+00.00					
D			1911224.87	1008296.27		7+50.17					
CONTROL LINE DATA - BASELINE TAXIWAY E1											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
E	N 6°02'50.44" E	522.93'	1910924.81	1006013.97		0+00.00					
F			1911452.09	1006069.83		5+22.93					
CONTROL LINE DATA - BASELINE TAXIWAY E2											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
G	N 5°59'32.01" E	522.93'	1911040.27	1004908.99		0+00.00					
H			1911560.34	1004963.58		5+22.93					
CONTROL LINE DATA - BASELINE TAXIWAY F											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
I	S 5°55'49.82" W	230.51'	1911067.70	1004646.45		0+00.00					
J			1910838.42	1004622.64		2+30.51					
CONTROL LINE DATA - BASELINE TAXIWAY H											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
K	N 5°50'33.30" E	332.28'	1910380.69	1009300.49		0+00.00					
L	N 32°44'06.68" W	88.77'	1910746.06	1009337.88	3+32.28		3+99.61	38°34'39.98"	100.00'	67.33'	35.00'
M	N 32°44'06.68" W		1910820.73	1009289.88		4+53.38					
CONTROL LINE DATA - BASELINE TAXIWAY W											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
N	N 6°52'43.02" E	441.34'	1910633.74	1006646.44		0+00.00					
O			1911071.90	1006699.29		4+41.34					

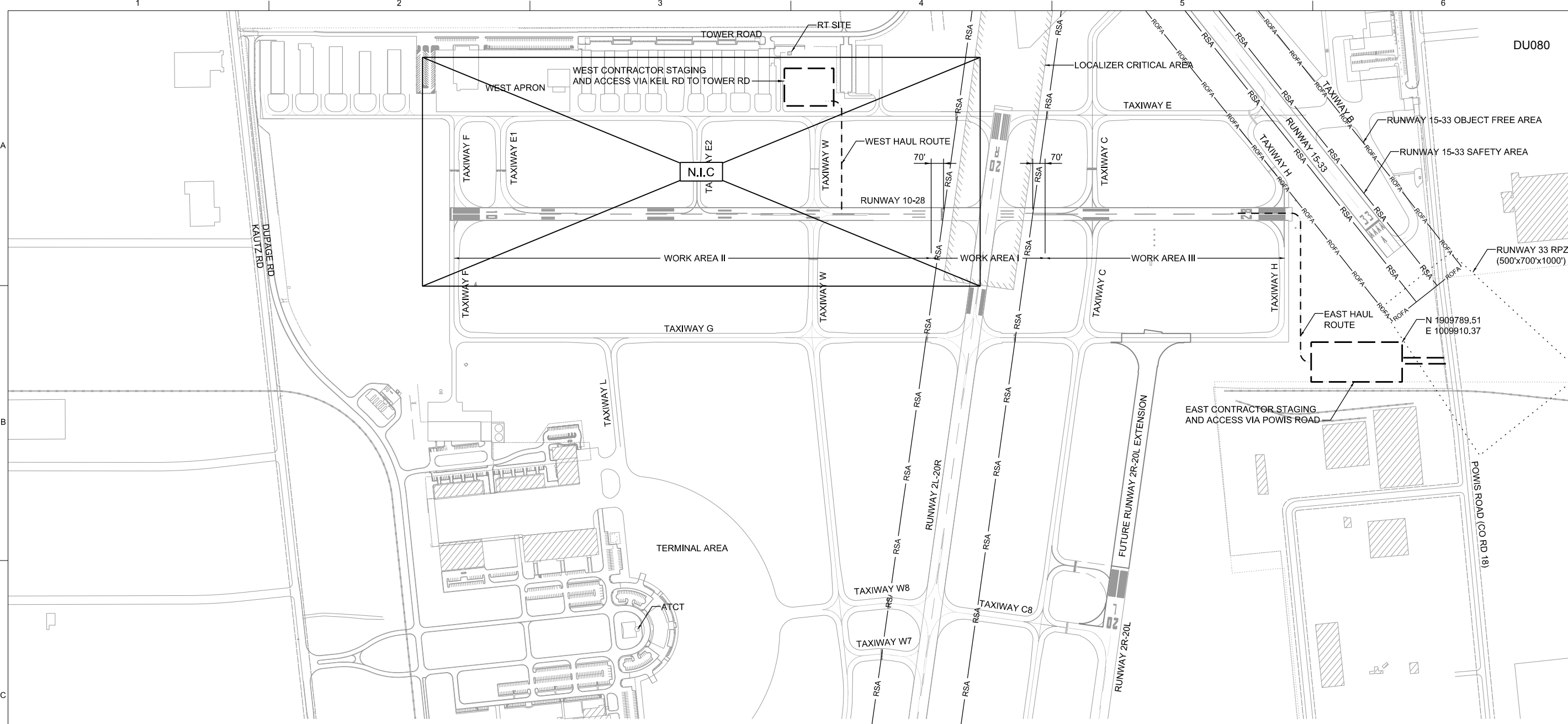
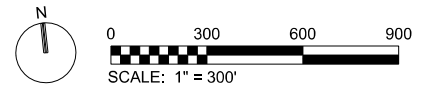
- NOTES:
1. VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
 2. HORIZONTAL CONTROL IS BASED ON THE NORTH AMERICAN DATUM 83 (NAD83).



SCHEDULE	DURATION	LIQUATED DAMAGES
WORK AREA I	5 PM FRIDAY TO 6 AM MONDAY	\$1,000/HOUR MAXIMUM OF \$10,000/DAY THAT RUNWAY 2L-20R REMAINS CLOSED AFTER 6:00AM
WORK AREA II	50 CALENDAR DAYS	N/A
WORK AREA III	50 CALENDAR DAYS	\$1,500 to \$2,000/DAY

GENERAL NOTES:

- PRIOR TO OPENING PAVEMENTS TO AIRCRAFT TRAFFIC, THE AIRFIELD PAVEMENTS SHALL BE THOROUGHLY CLEANED TO REMOVE ALL MILLINGS, TRASH, DIRT, DEBRIS OR ANY OTHER OBJECT WHICH COULD PRESENT A FOD CONCERN FOR TAXIING AIRCRAFT. TAXIWAY CENTERLINE AND HOLD LINE MARKINGS SHALL BE APPLIED TO THE MILLED AND INTERMEDIATE PAVEMENT SURFACES, AS APPLICABLE. EDGE LIGHTING CIRCUITS SHALL BE FULLY OPERATIONAL, AS REQUIRED, ON OPEN AIRFIELD PAVEMENTS FOR AIRCRAFT TAXIING.
- THE RSA DELINEATION OF RW 2L-20R WITHIN THE WORK AREAS SHALL CONSIST OF CONTINUOUS ORANGE SNOW FENCE.
- THE CONTRACTOR SHALL LOCK-OUT/TAG-OUT RUNWAY 10-28 CENTERLINE AND EDGE CIRCUITS FOR THE DURATION OF THIS PROJECT.
- WORK AREAS I, II AND III DO NOT CORRESPOND TO SEQUENCE OF CONSTRUCTION BUT RATHER WORK AREAS.
- AFTER SUBSTANTIAL COMPLETION OF PAVING THE CONTRACTOR MUST WAIT 30 CALENDAR DAYS BEFORE GROOVING AND APPLYING FINAL PAINT MARKINGS WITH REFLECTIVE BEADS.
- HAUL ROADS ARE INCIDENTAL TO THE CONTRACT AND MUST BE RESTORED TO THE ORIGINAL CONDITION UNLESS OTHERWISE DIRECTED BY CONSTRUCTION MANAGER.
- CONTRACTOR TO COORDINATE WITH LOCAL FAA TECH OPS TO NOTAM OFF RUNWAY 10 LOCALIZER, RUNWAY 10 GLIDE SLOPE, RUNWAY 10 APPROACH LIGHT SYSTEM



CH2MHILL®

GENERAL
OVERALL WORK AREA PLAN

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2012/02/03

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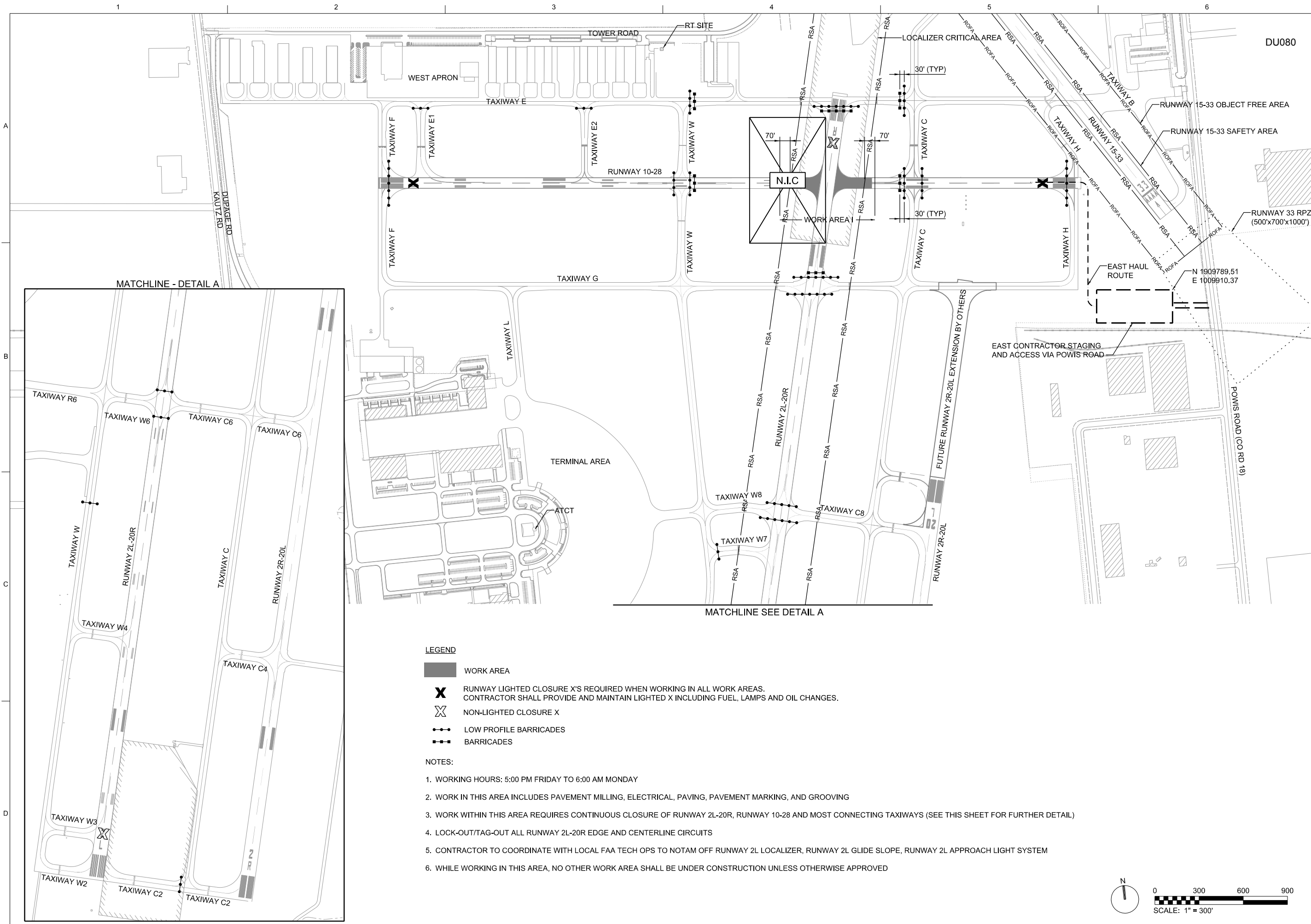
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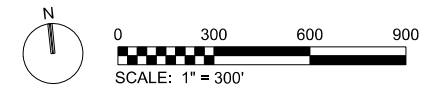


LEGEND

- WORK AREA
- X RUNWAY LIGHTED CLOSURE X'S REQUIRED WHEN WORKING IN ALL WORK AREAS. CONTRACTOR SHALL PROVIDE AND MAINTAIN LIGHTED X INCLUDING FUEL, LAMPS AND OIL CHANGES.
- X NON-LIGHTED CLOSURE X
- LOW PROFILE BARRICADES
- BARRICADES

NOTES:

1. WORKING HOURS: 5:00 PM FRIDAY TO 6:00 AM MONDAY
2. WORK IN THIS AREA INCLUDES PAVEMENT MILLING, ELECTRICAL, PAVING, PAVEMENT MARKING, AND GROOVING
3. WORK WITHIN THIS AREA REQUIRES CONTINUOUS CLOSURE OF RUNWAY 2L-20R, RUNWAY 10-28 AND MOST CONNECTING TAXIWAYS (SEE THIS SHEET FOR FURTHER DETAIL)
4. LOCK-OUT/TAG-OUT ALL RUNWAY 2L-20R EDGE AND CENTERLINE CIRCUITS
5. CONTRACTOR TO COORDINATE WITH LOCAL FAA TECH OPS TO NOTAM OFF RUNWAY 2L LOCALIZER, RUNWAY 2L GLIDE SLOPE, RUNWAY 2L APPROACH LIGHT SYSTEM
6. WHILE WORKING IN THIS AREA, NO OTHER WORK AREA SHALL BE UNDER CONSTRUCTION UNLESS OTHERWISE APPROVED



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RUNWAY 10-28 AND
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DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

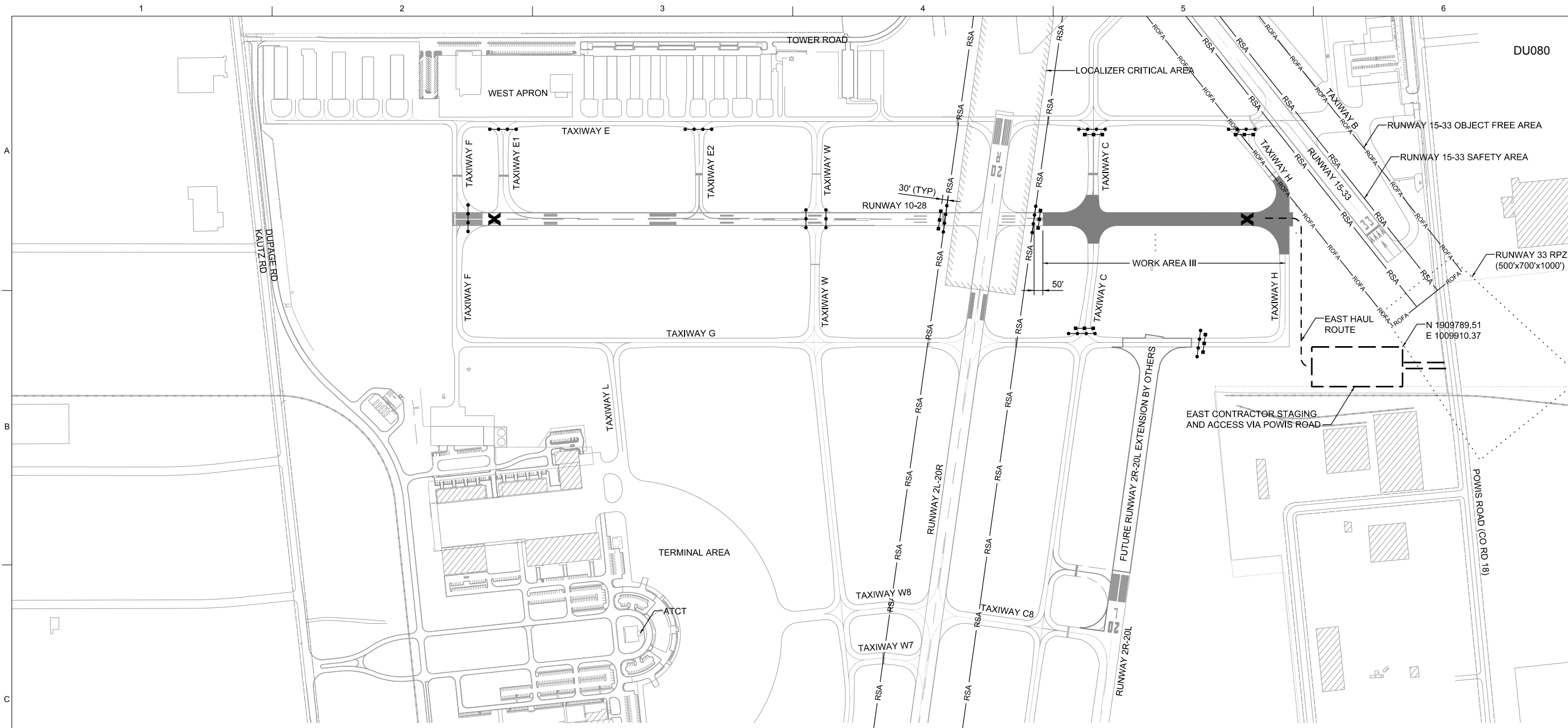
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GENERAL
WORK AREA I PLAN

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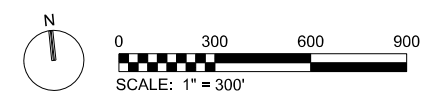


LEGEND

- WORK AREA
- X RUNWAY LIGHTED CLOSURE X'S REQUIRED WHEN WORKING IN ALL WORK AREAS. CONTRACTOR SHALL PROVIDE AND MAINTAIN LIGHTED X INCLUDING FUEL, LAMPS AND OIL CHANGES.
- X NON-LIGHTED CLOSURE X
- LOW PROFILE BARRICADES
- BARRICADES

NOTES:

1. WORK IN THIS AREA INCLUDES PAVEMENT MILLING, ELECTRICAL, PAVING, PAVEMENT MARKING AND GROOVING
2. WORK WITHIN THIS AREA REQUIRES CONTINUOUS CLOSURE OF RUNWAY 10-28 AND COORDINATION OF CONNECTING TAXIWAY CLOSURES (SEE THIS SHEET FOR FURTHER DETAIL)
3. EITHER TAXIWAY C OR TAXIWAY H MUST BE OPEN DURING CONSTRUCTION EAST OF RUNWAY 2L-20R.
4. TAXIWAY W AND TAXIWAY C MAY NOT BE CLOSED SIMULTANEOUSLY.
5. ALL ACTIVE WORK AREAS TO BE BARRICADED.
6. BARRICADE LOCATIONS TO BE APPROVED BY THE CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.



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GENERAL
WORK AREA III PLAN

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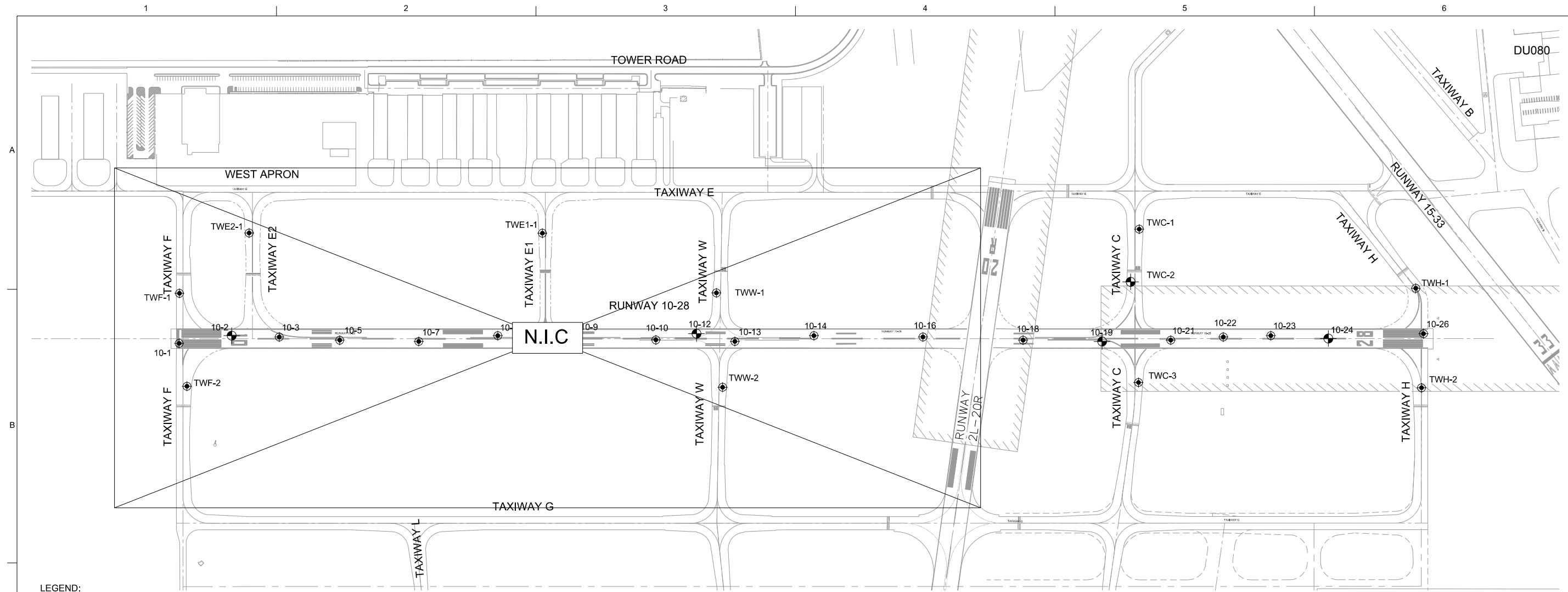
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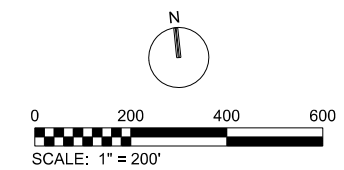
LEGEND:
 CORE LOCATION
 BORING LOCATION

PAVEMENT CORES SUMMARY

BORING/CORING LOCATIONS		
NO.	NORTHING	EASTING
10-1	1911051.61	1004630.69
10-2	1911059.80	1004832.24
10-3	1911036.08	1005011.14
10-5	1911000.20	1005238.09
10-7	1910964.15	1005536.03
10-8	1910954.86	1005836.70
10-9	1910918.71	1006134.55
10-10	1910876.60	1006431.79
10-12	1910883.90	1006587.58
10-13	1910839.46	1006729.54
10-14	1910830.17	1007030.20
10-16	1910782.30	1007441.38
10-18	1910730.75	1007818.17
10-19	1910694.60	1008116.09
10-21	1910672.53	1008375.53
10-22	1910663.72	1008575.30
10-23	1910649.95	1008755.24
10-24	1910616.58	1008971.29
10-26	1910597.13	1009332.48
TWC-1	1911103.75	1008300.26
TWC-2	1910908.21	1008247.15
TWC-3	1910525.48	1008237.18
TWYE1-1	1911323.99	1006045.43
TWYE2-1	1911440.33	1004938.55
TWF-1	1911240.25	1004651.52
TWF-2	1910886.48	1004643.29
TWH-1	1910771.54	1009321.08
TWH-2	1910393.82	1009303.71
TWW-1	1911030.11	1006678.87
TWW-2	1910671.48	1006665.08

Core No.	Asphalt Pavement						PCC Pavement	Asphalt Treated Base	Total Thickness (inch)
	PFC	Surface	Binder	Surface	Binder	Total (Inch)			
10-1	1.5 ^d	--	5.5	2.25	3.00	12.25	5.50	--	17.75
10-2	0.75 ^d	--	2.5 ^d	3.50	2.25 ^d	9.00	7.00 ^F	--	16.00
10-3	0.75	--	3.50	3.75	2.50 ^d	10.50	5.50 ^F	--	16.00
10-5	0.75	--	4.25 ^d	3.00	3.50 ^d	11.50	5.50 ^{SF}	--	17.00
10-7	0.50	--	4.00 ^d	2.75	3.50 ^d	10.75	5.50 ^{SF}	--	16.25
10-8	0.75 ^d	--	3.75 ^d	3.50	3.50 ^d	11.50	5.75 ^F	--	17.25
10-9	0.75	--	3.50 ^d	3.00	2.00 ^d	9.25	6.00	--	15.25
10-10	0.75	--	4.00 ^d	2.75	2.50	10.00	5.25 ^{SF}	--	15.25
10-12	0.75	--	4.25	2.00 ^d	2.50 ^d	9.50	6.25	--	15.75
10-13	0.75 ^d	--	4.5	2.50	3.00	10.75	6.75 ^F	--	17.50
10-14	0.75 ^d	--	3.75 ^d	3.00	2.75	10.25	7.50 ^{SF}	--	17.75
10-16	1.00	--	3.25	3.25	2.75 ^d	10.25	5.75	--	16.00
10-18	0.50	--	4.00	3.50	2.75 ^d	10.75	6.50	--	17.25
10-19	0.75	--	4.00 ^d	2.75	3.00	10.50	6.50 ^F	--	17.00
10-21	0.75	--	3.75 ^d	2.50	2.50 ^d	9.50	6.50 ^{SF}	--	16.00
10-22	0.75	--	2.50 ^d	4.00	2.25	9.50	6.00 ^F	--	15.50
10-23	0.75	--	3.25 ^d	4.00	3.00	11.00	--	3.50	14.50
10-24	0.75 ^d	--	3.00 ^d	3.25	6.00 ^F	13.00	--	--	13.00
10-26	0.75	--	3.50 ^d	2.50	8.75	15.50	--	--	15.50
TWC-1	--	2.00	3.50	--	--	5.50	--	4.00	9.50
TWC-2	--	2.00	4.75	--	--	6.75	--	2.75	9.50
TWC-3	--	--	--	--	--	0.00	10.00	2.00	12.00
TWYE1-1	--	2.00 ^d	--	1.25	4.25 ^d	7.50	6.50 ^{SF}	--	14.00
TWYE2-1	--	2.25	4.25	--	--	6.50	--	3.50	10.00
TWF-1	--	--	--	--	--	0.00	8.25	--	8.25
TWF-2	--	--	--	--	--	0.00	8.50	--	8.50
TWH-1	--	2.5 ^d	10.25	--	--	12.75	--	--	12.75
TWH-2	--	--	--	--	--	0.00	9.00 ^d	4.00	13.00
TWW-1	--	--	--	--	--	0.00	9.25	4.50	13.75
TWW-2	--	--	--	--	--	0.00	9.50	4.75	14.25

Notes: PFC - Porous Friction Course, d - Debonded, td - Top Disintegrated, F - Fractured, SF - Severely Fractured



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GEOTECHNICAL INVESTIGATION LOCATIONS PLAN & CORING TABLE

AS SHOWN
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: 2012/02/03
PROJ: 424278
DWG: B-100
SHEET: 14 of 57

ISSUE FOR BID
2012/02/03
NO. DATE
DSGN

REVISION
CHK
HF

APVD
DCT
DA
DR

BY
APVD
MV

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SOIL IDENTIFICATION TERMINOLOGY

Soils are identified and classified in this report in accordance with ASTM D 2487 and ASTM D 2488 (Unified Soil Classification System) with the following modifiers:

RELATIVE DENSITY OF GRANULAR SOILS

DESCRIPTION	BLOWS PER FOOT
Very Loose	0 to 4
Loose	4 to 10
Medium Dense	10 to 30
Dense	30 to 50
Very Dense	50 to 80
Extremely Dense	80+

CONSISTENCY OF COHESIVE SOILS

DESCRIPTION	qu (tsf)
Very Soft	0 to 0.25
Soft	0.25 to 0.50
Medium	0.50 to 1.0
Stiff	1.0 to 2.0
Very Stiff	2.0 to 4.0
Hard	4.0 to 8.0
Very Hard	8.0+

PARTICLE SIZE

COMPONENT	SIZE
Boulders	Over 8"
Cobbles	3" to 8"
Gravel - Coarse	3/4" to 3"
Gravel - Fine	* No. 4 to 3/4"
Sand - Coarse	* No. 10 to *No. 4
Sand - Medium	* No. 40 to *No. 10
Sand - Fine	* No. 200 to *No. 40
Fines - Silt and Clay	Below *No. 200

RELATIVE PROPORTIONS

DESCRIPTIVE TERM	PERCENT
Trace	0 to 5
Few	5 to 10
Little	15 to 25
Some	30 to 45
Mostly	50 to 100

ABBREVIATIONS ON LOGS OF SUBSURFACE DATA

- *Denotes U.S. Standard Sieves (ASTM E 11)
- STRATIFICATION**
- Pertling: 0 to 1/16"
 - Seam: 1/16" to 1/2"
 - Layer: 1/2" to 12"
 - Stratum: Greater than 12"
 - Varved Clay: Alternating seams or layers of sand, silt and clay
 - Pocket: Small, erratic deposits, usually less than 12"
 - Lens: Lenticular deposit, One or less per 12"
 - Occasional: More than one per 12"
 - Frequent: More than one per 12"

LEGEND

WATER LEVELS

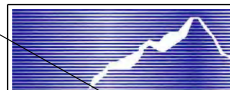
- ▽ WATER LEVEL DURING DRILLING
- ▽ WATER LEVEL AT COMPLETION
- ▽ WATER LEVEL HRS. AFTER COMPLETION

SOIL TYPES

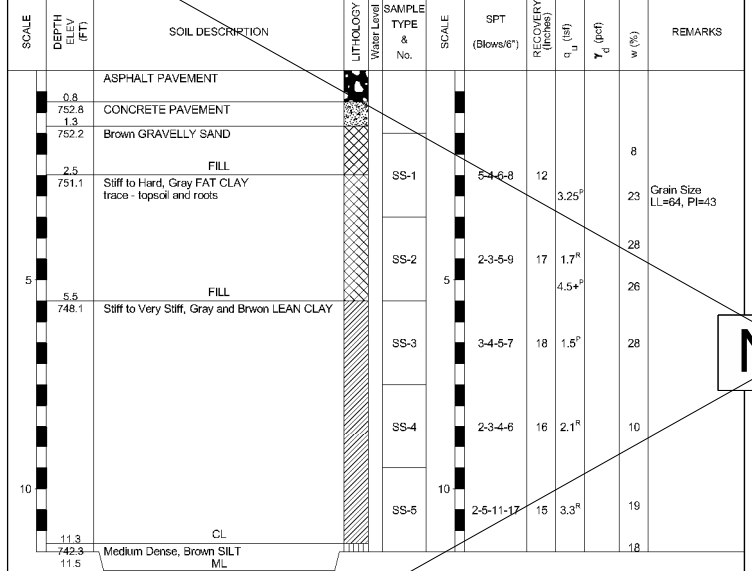
- WATER
- MUD
- TOPSOIL
- FILL
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- CRUSHED STONE
- LEAN CLAY
- SILTY CLAY / CLAYEY SILT
- SILT
- SAND
- GRAVEL
- SILTY SAND
- CLAYEY SAND
- SILTY GRAVEL
- CLAYEY GRAVEL
- DOLOMITE
- FAT CLAY
- ELASTIC SILT

MARKERS

- B-1 --- BORING NO.
- 18--- WATER CONTENT (%)



JOB NO.: 1213 CLIENT: CH2M Hill
 PROJECT: Runway 10-28 Overlay
 LOCATION: DuPage Airport, West Chicago, IL
 NORTH: 1,911,059.80 EAST: 1,004,832.24 SURFACE ELEV.: 753.6
 BORING NO.: 10-2 LOGGED BY: K. Vaghiasa SHEET 1 OF 1



N.I.C.

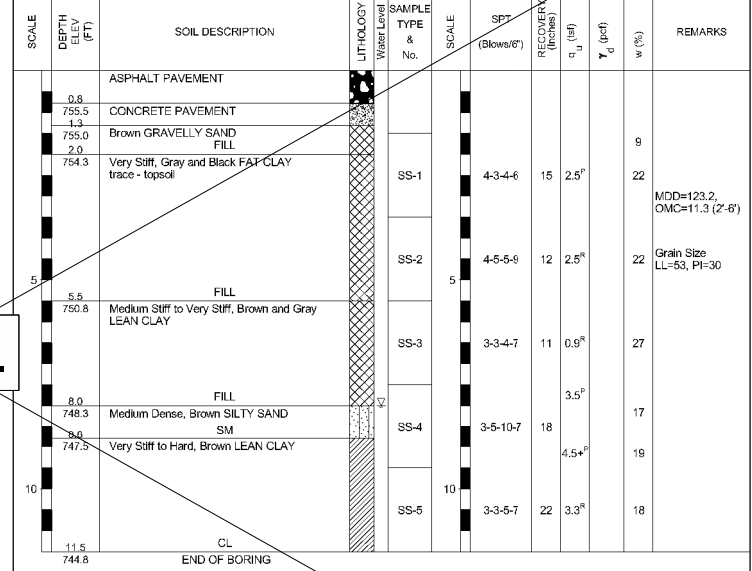
DRILLED BY: DLZ Industrial, LLC
 DRILL RIG: Diedrich D-120, Truck Mounted
 HAMMER TYPE: Automatic DRILLING METHOD: Hollow Stem Auger
 BORING STARTED: July 8, 2011 BORING COMPLETED: July 8, 2011

WATER LEVELS

- ▽ DURING DRILLING
- ▽ AT COMPLETION
- ▽ AFTER COMPLETION



JOB NO.: 1213 CLIENT: CH2M Hill
 PROJECT: Runway 10-28 Overlay
 LOCATION: DuPage Airport, West Chicago, IL
 NORTH: 1,910,883.90 EAST: 1,005,587.58 SURFACE ELEV.: 756.3
 BORING NO.: 10-12 LOGGED BY: K. Vaghiasa SHEET 1 OF 1



DRILLED BY: DLZ Industrial, LLC
 DRILL RIG: Diedrich D-120, Truck Mounted
 HAMMER TYPE: Automatic DRILLING METHOD: Hollow Stem Auger
 BORING STARTED: July 8, 2011 BORING COMPLETED: July 8, 2011

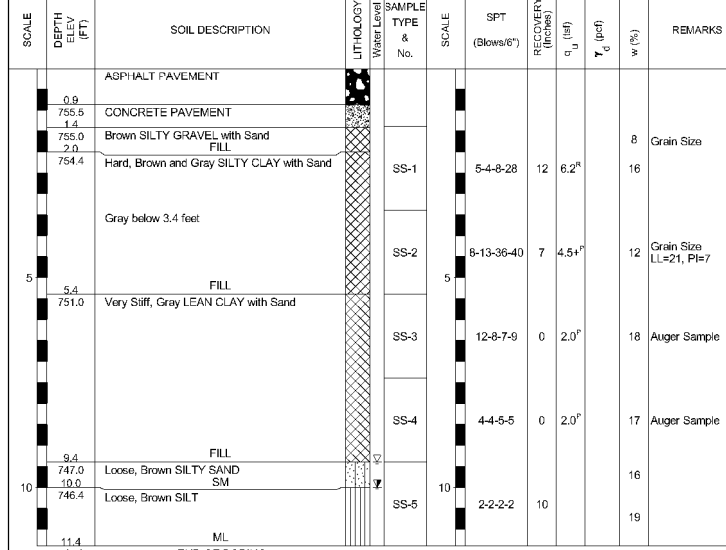
WATER LEVELS

- ▽ DURING DRILLING
- ▽ AT COMPLETION
- ▽ AFTER COMPLETION

DU080



JOB NO.: 1213 CLIENT: CH2M Hill
 PROJECT: Runway 10-28 Overlay
 LOCATION: DuPage Airport, West Chicago, IL
 NORTH: 1,910,694.60 EAST: 1,008,116.09 SURFACE ELEV.: 756.4
 BORING NO.: 10-19 LOGGED BY: K. Vaghiasa SHEET 1 OF 1



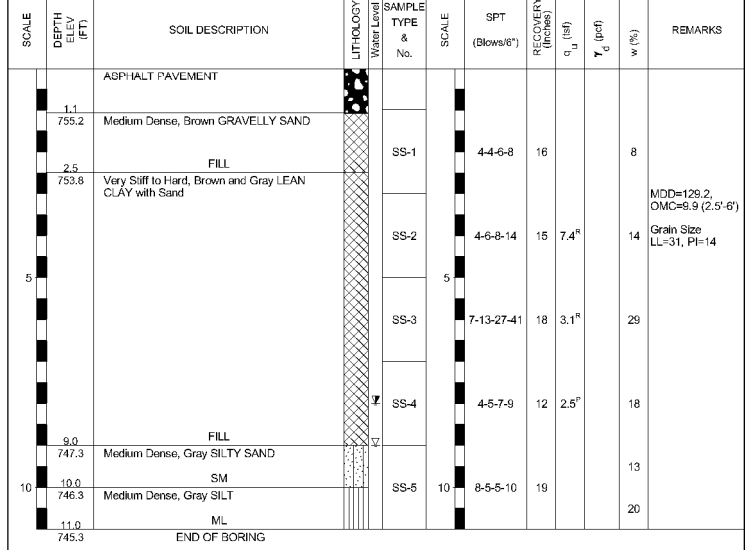
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 DRILL RIG: Diedrich D-120, Truck Mounted
 HAMMER TYPE: Automatic DRILLING METHOD: Hollow Stem Auger
 BORING STARTED: July 8, 2011 BORING COMPLETED: July 8, 2011

WATER LEVELS

- ▽ 9.4 DURING DRILLING
- ▽ 10 AT COMPLETION
- ▽ AFTER COMPLETION



JOB NO.: 1213 CLIENT: CH2M Hill
 PROJECT: Runway 10-28 Overlay
 LOCATION: DuPage Airport, West Chicago, IL
 NORTH: 1,910,616.58 EAST: 1,008,971.29 SURFACE ELEV.: 756.3
 BORING NO.: 10-24 LOGGED BY: K. Vaghiasa SHEET 1 OF 1



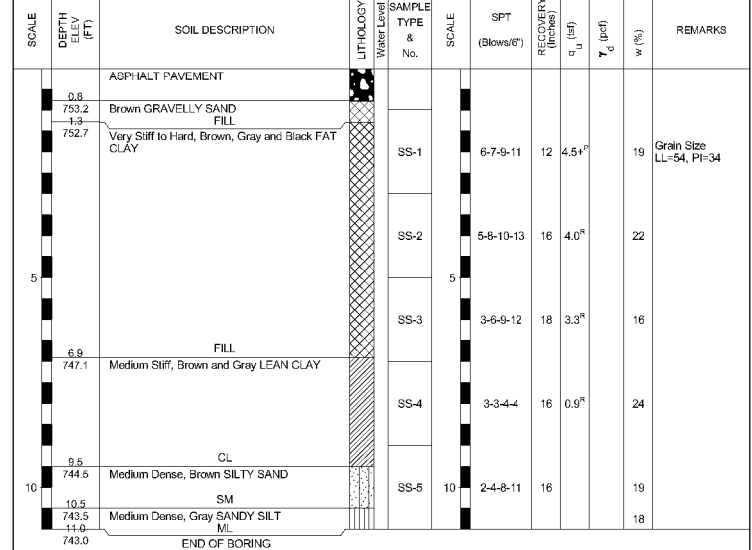
DRILLED BY: DLZ Industrial, LLC
 DRILL RIG: Diedrich D-120, Truck Mounted
 HAMMER TYPE: Automatic DRILLING METHOD: Hollow Stem Auger
 BORING STARTED: July 8, 2011 BORING COMPLETED: July 8, 2011

WATER LEVELS

- ▽ 9 DURING DRILLING
- ▽ 8 AT COMPLETION
- ▽ AFTER COMPLETION



JOB NO.: 1213 CLIENT: CH2M Hill
 PROJECT: Runway 10-28 Overlay
 LOCATION: DuPage Airport, West Chicago, IL
 NORTH: 1,910,908.21 EAST: 1,003,247.15 SURFACE ELEV.: 754.0
 BORING NO.: TWC-2 LOGGED BY: K. Vaghiasa SHEET 1 OF 1



DRILLED BY: DLZ Industrial, LLC
 DRILL RIG: Diedrich D-120, Truck Mounted
 HAMMER TYPE: Automatic DRILLING METHOD: Hollow Stem Auger
 BORING STARTED: July 8, 2011 BORING COMPLETED: July 8, 2011

WATER LEVELS

- ▽ DURING DRILLING
- ▽ Dry AT COMPLETION
- ▽ AFTER COMPLETION



ISSUE FOR BID	NO.	2012/02/03	DATE	DR	DA	DR	DA	DR	DA
REVISION	BY	APVD	BY	APVD	BY	APVD	BY	APVD	BY
CHK	CHK	CHK	CHK	CHK	CHK	CHK	CHK	CHK	CHK
HF	HF	HF	HF	HF	HF	HF	HF	HF	HF
DCT	DCT	DCT	DCT	DCT	DCT	DCT	DCT	DCT	DCT

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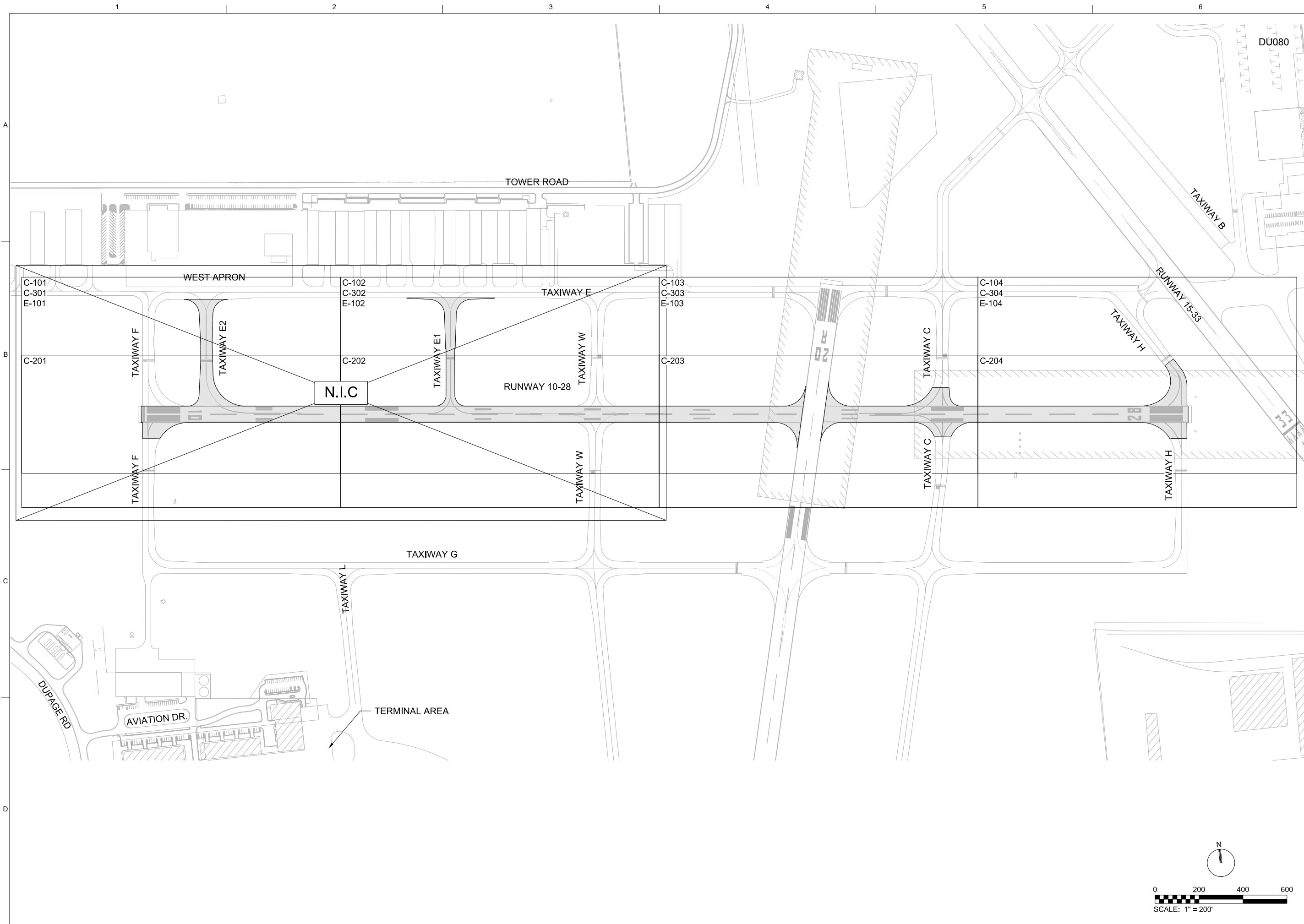
RUNWAY 10-28 AND ASSOCIATED TAXIWAY OVERLAY
 DUPAGE AIRPORT (DPA)
 DUPAGE COUNTY, ILLINOIS

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ELECTRICAL
BORING LEGEND AND PROFILES

AS SHOWN
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DATE: 2012/02/03
 PROJ: 424278
 DWG: B-101
 SHEET: 15 OF 57



NO.	DATE	DR	CHK	BY	MV
2012/02/03		JA	HF	APVD	APVD
ISSUE FOR BID			REVISION		

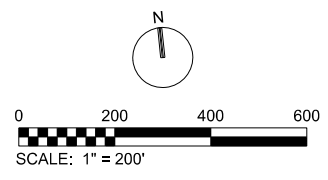
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CHICAGO, IL 60631

RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

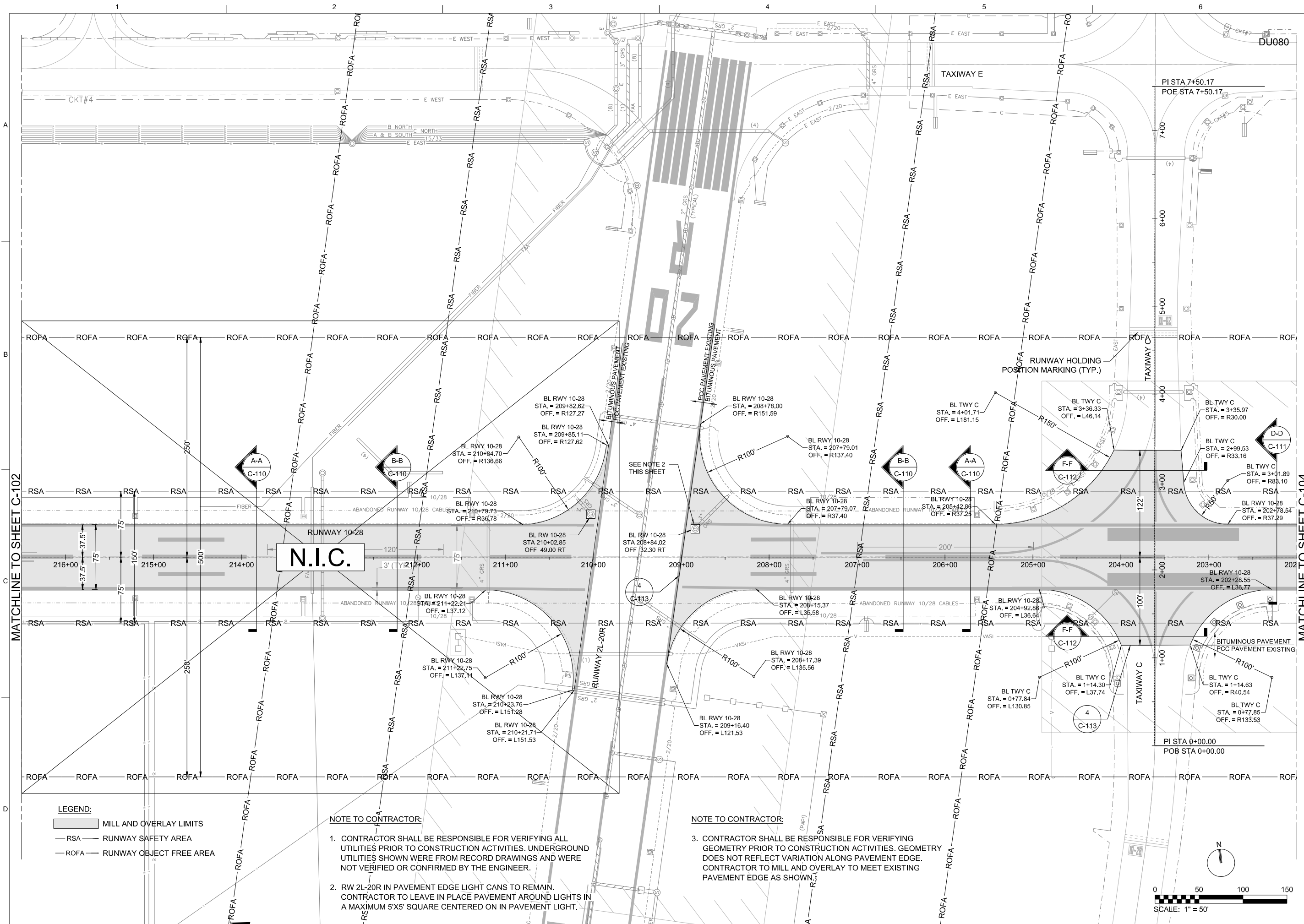
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SHEET LAYOUT PLAN

AS SHOWN	DATE	2012/02/03
VERIFY SCALE	PROJ	424278
BAR IS ONE INCH ON ORIGINAL DRAWING.	DWG	C-100
0 200 400 600	SHEET	16 of 57



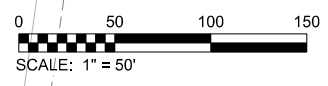
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LEGEND:
 [Shaded Area] MILL AND OVERLAY LIMITS
 [Dashed Line] RSA RUNWAY SAFETY AREA
 [Solid Line] ROFA RUNWAY OBJECT FREE AREA

NOTE TO CONTRACTOR:
 1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES. UNDERGROUND UTILITIES SHOWN WERE FROM RECORD DRAWINGS AND WERE NOT VERIFIED OR CONFIRMED BY THE ENGINEER.
 2. RW 2L-20R IN PAVEMENT EDGE LIGHT CANS TO REMAIN. CONTRACTOR TO LEAVE IN PLACE PAVEMENT AROUND LIGHTS IN A MAXIMUM 5'X5' SQUARE CENTERED ON IN PAVEMENT LIGHT.

NOTE TO CONTRACTOR:
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING GEOMETRY PRIOR TO CONSTRUCTION ACTIVITIES. GEOMETRY DOES NOT REFLECT VARIATION ALONG PAVEMENT EDGE. CONTRACTOR TO MILL AND OVERLAY TO MEET EXISTING PAVEMENT EDGE AS SHOWN.



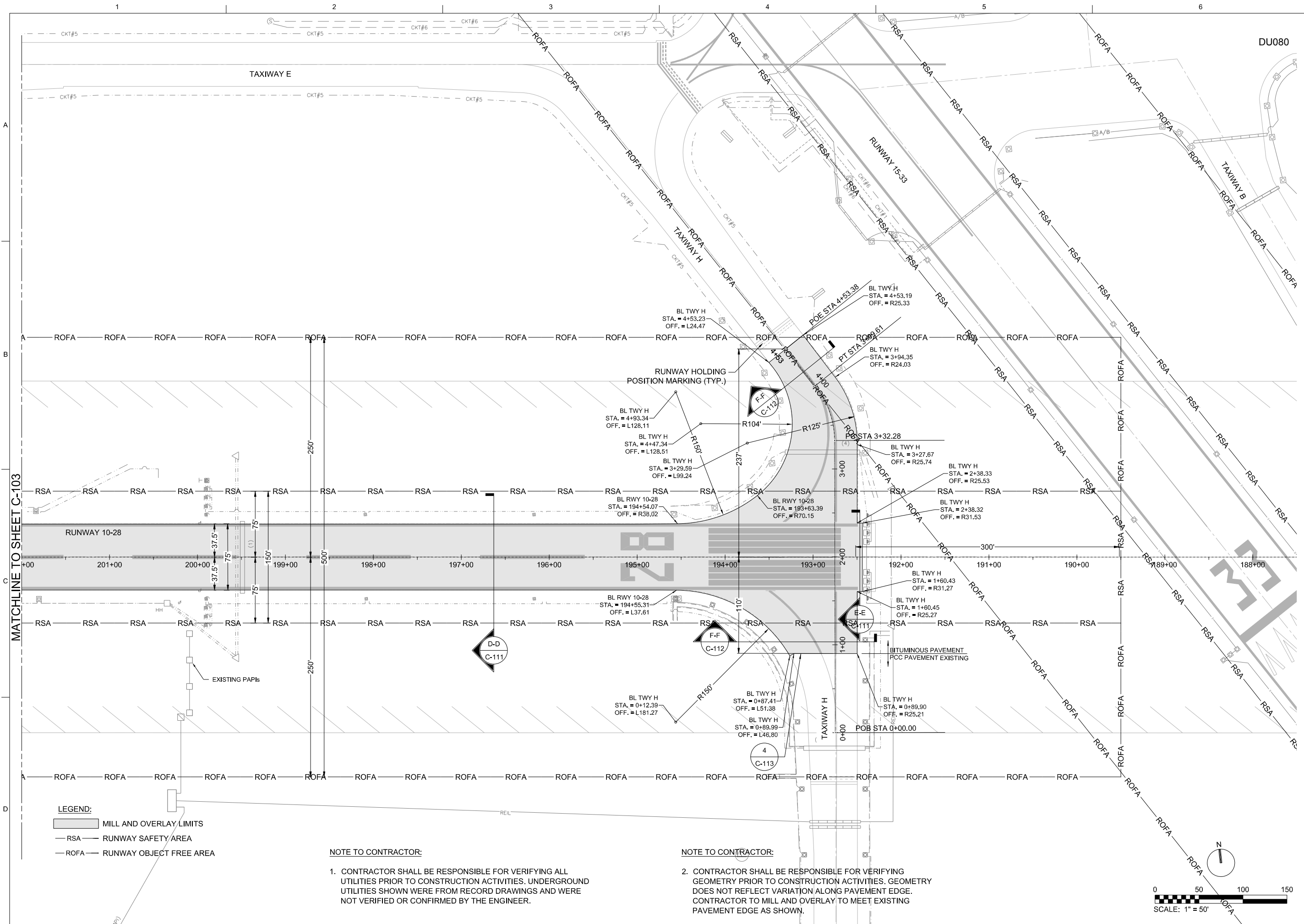
NO.	DATE	DSGN	CHK	HF	DR	JRT	APVD	DCI	MV
2012/02/03									

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RUNWAY 10-28 AND
 ASSOCIATED TAXIWAY OVERLAY
 DUPAGE AIRPORT (DPA)
 DUPAGE COUNTY, ILLINOIS

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DATE	2012/02/03
PROJ	424278
DWG	C-103
SHEET	17 of 57

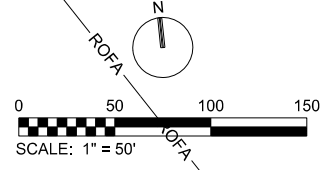
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LEGEND:
 [Hatched Area] MILL AND OVERLAY LIMITS
 [Dashed Line] RSA — RUNWAY SAFETY AREA
 [Solid Line] ROFA — RUNWAY OBJECT FREE AREA

NOTE TO CONTRACTOR:
 1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES. UNDERGROUND UTILITIES SHOWN WERE FROM RECORD DRAWINGS AND WERE NOT VERIFIED OR CONFIRMED BY THE ENGINEER.

NOTE TO CONTRACTOR:
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING GEOMETRY PRIOR TO CONSTRUCTION ACTIVITIES. GEOMETRY DOES NOT REFLECT VARIATION ALONG PAVEMENT EDGE. CONTRACTOR TO MILL AND OVERLAY TO MEET EXISTING PAVEMENT EDGE AS SHOWN.



NO.	DATE	DSGN	JRT	DR	HF	CHK	REVISION	ISSUE FOR BID	BY	APVD	MV
2012/02/03											

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RUNWAY 10-28 AND
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DATE 2012/02/03
PROJ 424278
DWG C-104
SHEET 18 of 57

(A-A) TYPICAL SECTION - RUNWAY - APPROX MILL DEPTHS							
OFFSET FROM CL (FEET)	37.5' LT	17.5' LT	17.5' - LT	CL	17.5' - RT	17.5' + RT	37.5' RT
MILLING DEPTH (INCH)	2"	1-1/4"	2-1/4"	1-1/4"	2-1/4"	1-1/4"	2"

DU080



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NO.	DATE	DSGN	JRT	DR	HF	CHK	REVISION	ISSUE FOR BID	BY	APVD	MV
2012/02/03											

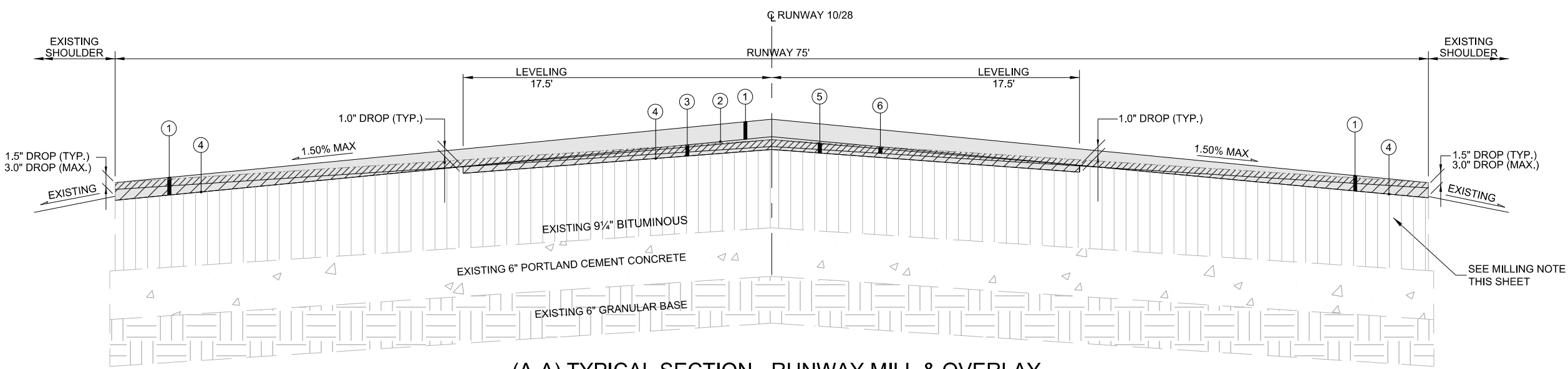
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RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

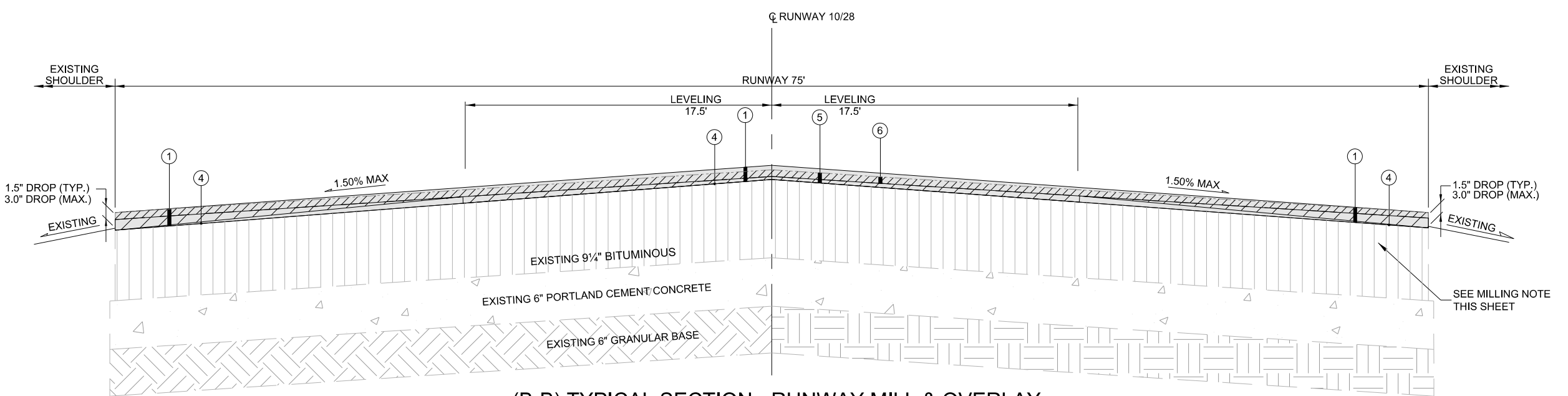
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TYPICAL SECTIONS I

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VERIFY SCALE
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DATE 2012/02/03
PROJ 424278
DWG C-110
SHEET 19 of 57



(A-A) TYPICAL SECTION - RUNWAY MILL & OVERLAY
STA 203+00 TO STA 206+20
STA 212+80 TO STA 240+00
NOT TO SCALE



(B-B) TYPICAL SECTION - RUNWAY MILL & OVERLAY
STA 206+20 TO STA 209+00
STA 210+00 TO STA 212+80
STA 240+00 TO STA 240+06
NOT TO SCALE

LEGEND:

- ① 2" MINIMUM BITUMINOUS SURFACE COURSE (P-401)
- ② BITUMINOUS TACK COAT (P-603) BETWEEN LIFTS
- ③ 1" MINIMUM BITUMINOUS LEVELING COURSE (P-401)
- ④ BITUMINOUS TACK COAT (P-603) ON MILLED SURFACE
- ⑤ PAVEMENT MILLING (P-150)
- ⑥ EXISTING 3/4" POROUS FRICTION COURSE TO BE REMOVED

NOTE:
MILLING DEPTH IS VARIABLE, TYPICALLY BETWEEN 1 1/4" AT CENTERLINE TO 2" AT PAVEMENT EDGE. SEE CROSS SECTIONS FOR MILLING DEPTH. MINIMUM OF 1/8" MILLING FOR SURFACE TEXTURING PRIOR TO OVERLAY.

CONTRACTOR MUST SURVEY THE RUNWAY AFTER MILLING IS COMPLETE, EACH LIFT OF LEVELING COURSE, AND EACH LIFT OF SURFACE COURSE FOR QUANTITY TAKE OFF AND QUALITY CONTROL.

LEGEND:

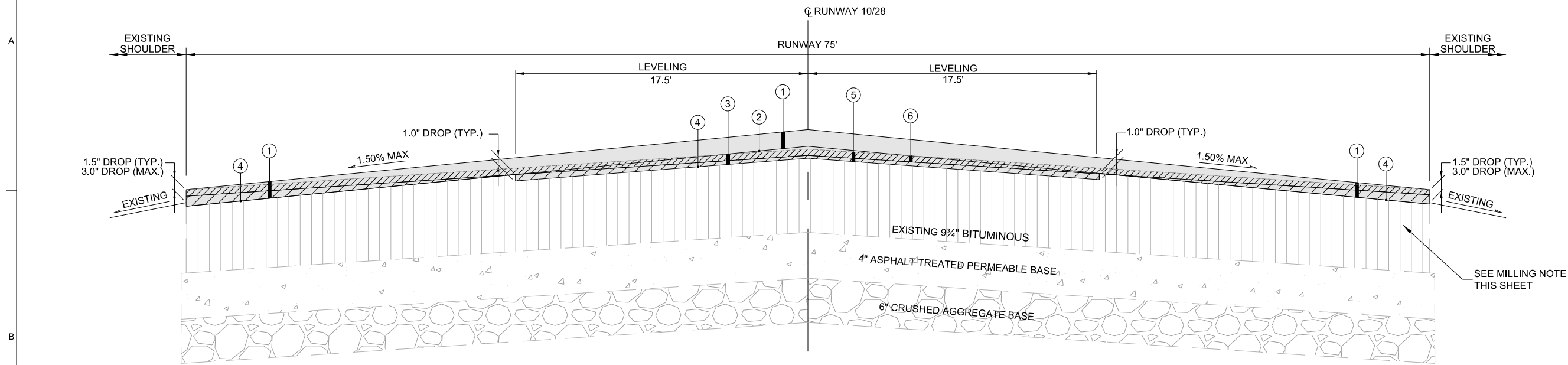
- EXISTING 3/4" POROUS FRICTION COURSE TO BE REMOVED
- ADDITIONAL MILLING BEYOND EXISTING 3/4" POROUS FRICTION COURSE TO BE REMOVED
- TOTAL PAVEMENT MILLING (P-150)

(D-D) TYPICAL SECTION - RUNWAY - APPROX MILL DEPTHS							
OFFSET FROM CL (FEET)	37.5' LT	17.5' LT	17.5' RT	CL	17.5' RT	17.5' RT	37.5' RT
MILLING DEPTH (INCH)	2"	1-1/4"	2-1/4"	1-1/4"	2-1/4"	1-1/4"	2"

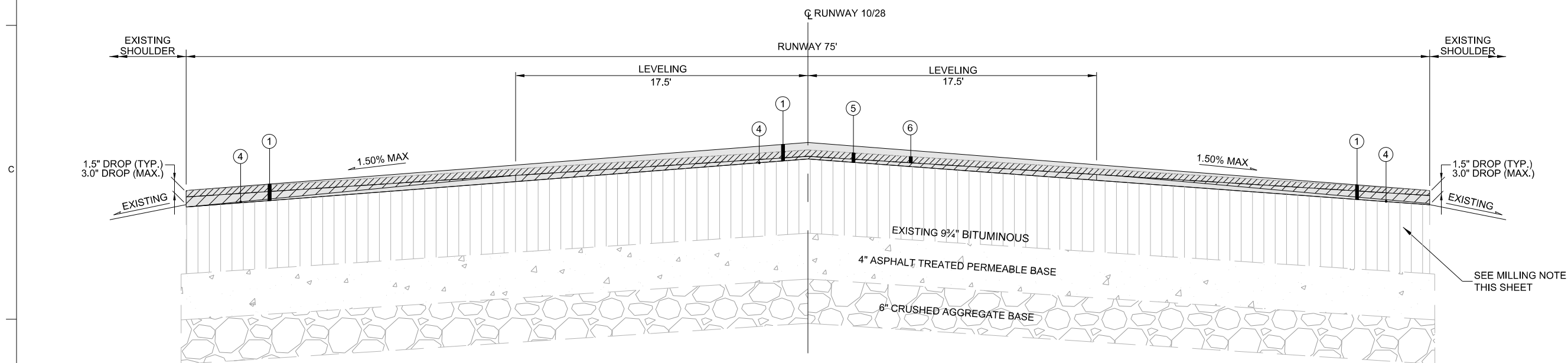
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(D-D) TYPICAL SECTION - RUNWAY - MILL & OVERLAY
STA 192+50 TO STA 203+00 NOT TO SCALE



(E-E) TYPICAL SECTION - RUNWAY - MILL & OVERLAY
STA 192+44 TO STA 192+50 NOT TO SCALE

LEGEND:

- ① 2" BITUMINOUS SURFACE COURSE (P-401)
- ② BITUMINOUS TACK COAT (P-603) BETWEEN LIFTS
- ③ 1" MINIMUM BITUMINOUS LEVELING COURSE (P-401)
- ④ BITUMINOUS TACK COAT (P-603) ON MILLED SURFACE
- ⑤ PAVEMENT MILLING (P-150)
- ⑥ EXISTING 3/4" POROUS FRICTION COURSE TO BE REMOVED

NOTE:
MILLING DEPTH IS VARIABLE, TYPICALLY BETWEEN 1 1/4" AT CENTERLINE TO 2" AT PAVEMENT EDGE. SEE CROSS SECTIONS FOR MILLING DEPTH. MINIMUM OF 1#8" MILLING FOR SURFACE TEXTURING PRIOR TO OVERLAY.

CONTRACTOR MUST SURVEY THE RUNWAY AFTER MILLING IS COMPLETE, EACH LIFT OF LEVELING COURSE, AND EACH LIFT OF SURFACE COURSE FOR QUANTITY TAKE OFF AND QUALITY CONTROL.

LEGEND:

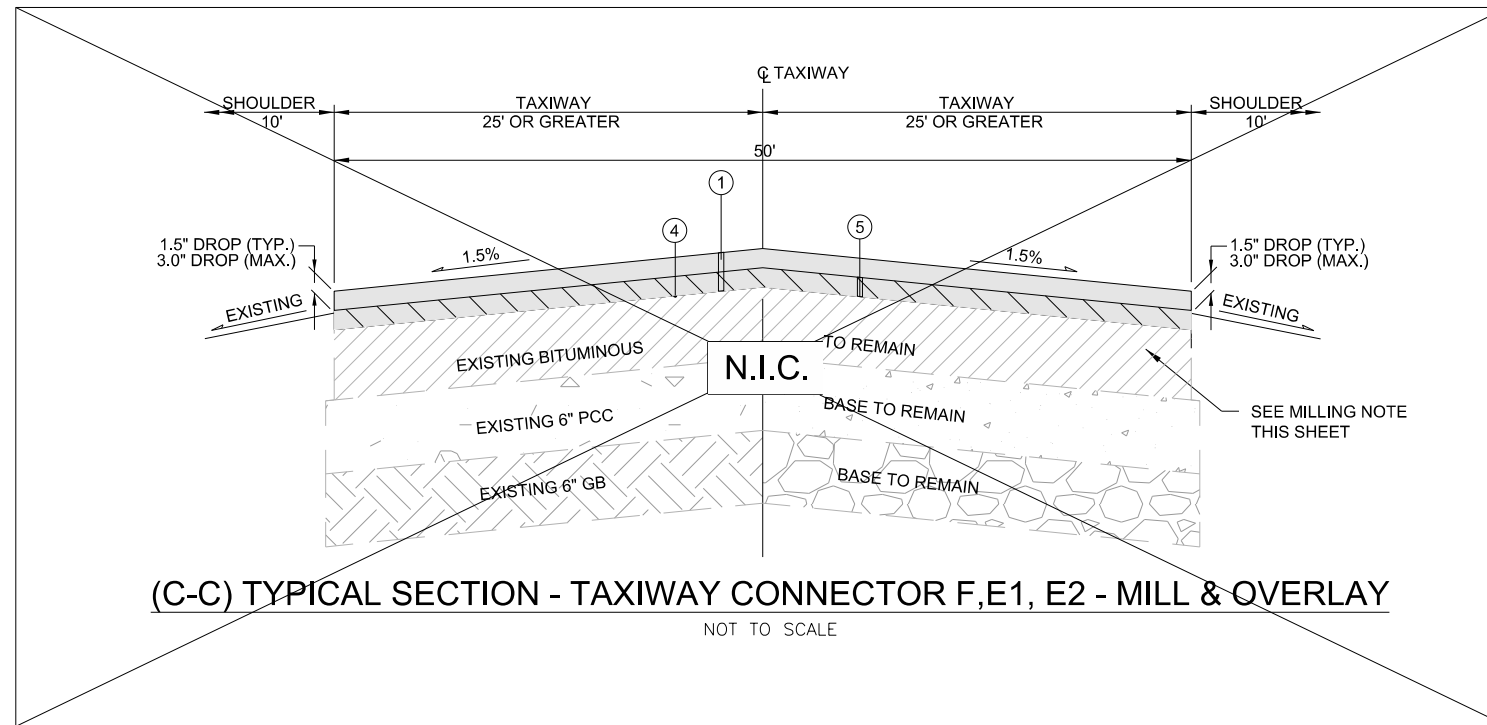
- EXISTING 3/4" POROUS FRICTION COURSE TO BE REMOVED
- ADDITIONAL MILLING BEYOND EXISTING 3/4" POROUS FRICTION COURSE TO BE REMOVED
- TOTAL PAVEMENT MILLING (P-150)

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RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

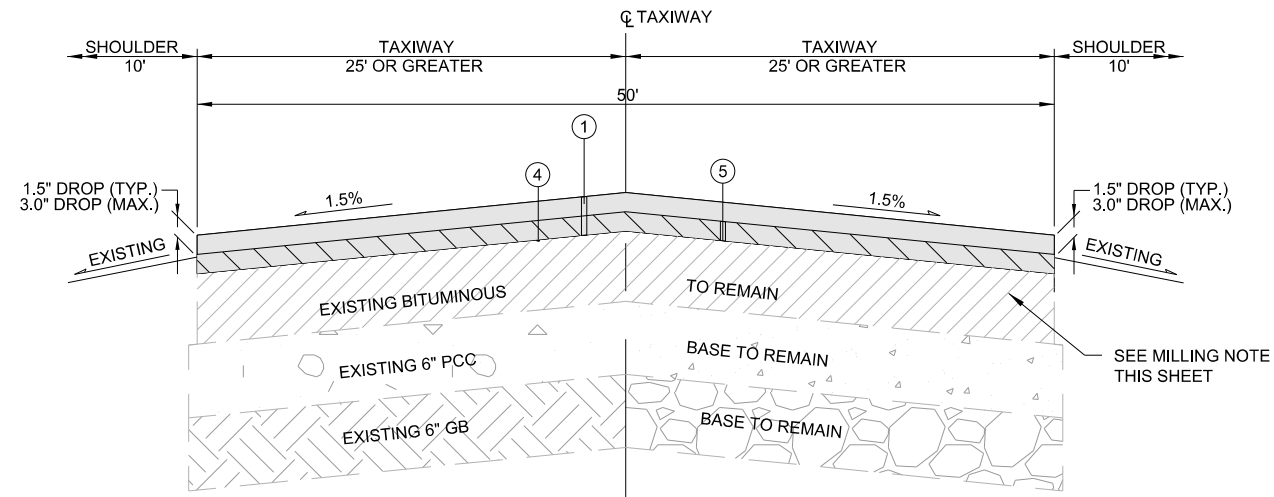
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TYPICAL SECTIONS II

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(C-C) TYPICAL SECTION - TAXIWAY CONNECTOR F, E1, E2 - MILL & OVERLAY

NOT TO SCALE



(F-F) TYPICAL SECTION - TAXIWAY CONNECTOR C, H - MILL & OVERLAY

NOT TO SCALE

LEGEND:

- ① 2" BITUMINOUS SURFACE COURSE (P-401)
- ② BITUMINOUS TACK COAT (P-603) BETWEEN LIFTS
- ③ 1" MINIMUM BITUMINOUS LEVELING COURSE (P-401)
- ④ BITUMINOUS TACK COAT (P-603) ON MILLED SURFACE
- ⑤ PAVEMENT MILLING (P-150)
- ⑥ EXISTING ¾" POROUS FRICTION COURSE TO BE REMOVED

NOTE:
MILLING DEPTH IS VARIABLE, TYPICALLY BETWEEN 1¼" AT CENTERLINE TO 2" AT PAVEMENT EDGE. SEE CROSS SECTIONS FOR MILLING DEPTH. MINIMUM OF 1/8" MILLING FOR SURFACE TEXTURING PRIOR TO OVERLAY.

CONTRACTOR MUST SURVEY THE RUNWAY AFTER MILLING IS COMPLETE, EACH LIFT OF LEVELING COURSE, AND EACH LIFT OF SURFACE COURSE FOR QUANTITY TAKE OFF AND QUALITY CONTROL.

LEGEND:

- 2" BITUMINOUS SURFACE COURSE AFTER MILLING
- TOTAL PAVEMENT MILLING (P-150)

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RUNWAY 10-28 AND
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TYPICAL SECTIONS III

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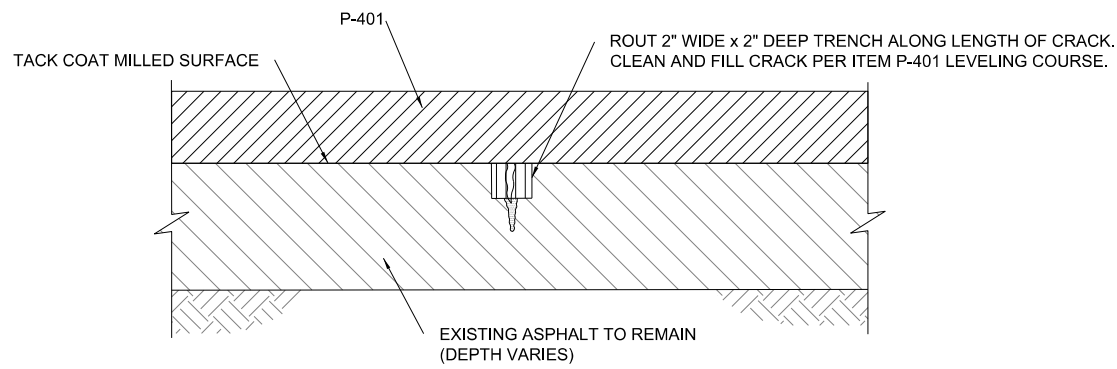
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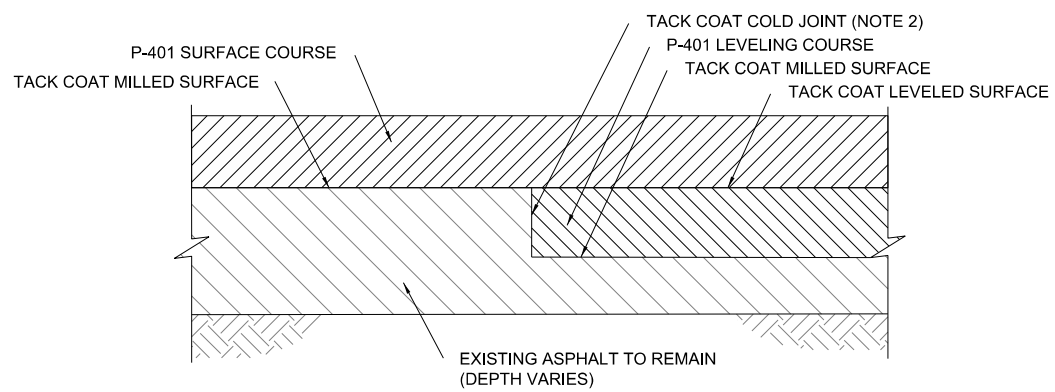
TYPICAL SECTIONS IV

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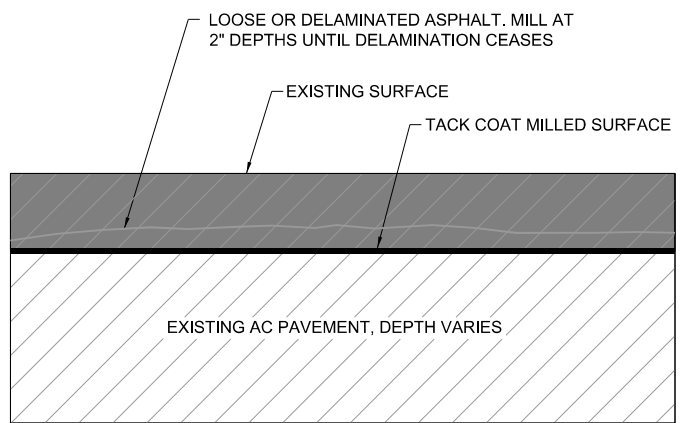
NOTE:
CRACKS SHALL BE FIELD LOCATED BY THE ENGINEER.

1 CRACK REPAIR - CRACKS GREATER THAN 1/2" WIDE BUT LESS THAN 1" WIDE AFTER MILL
NTS



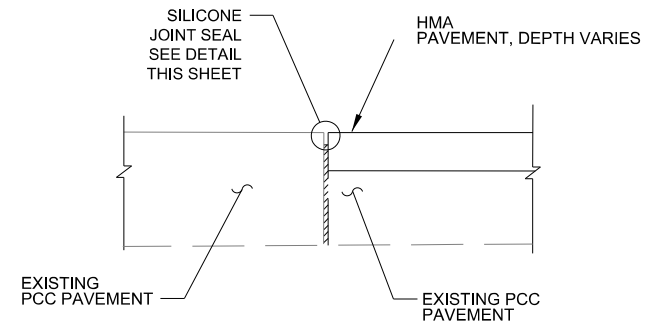
NOTES:
1. CRACKS SHALL BE FIELD LOCATED BY THE ENGINEER.
2. VERTICAL FACE OF MILLED SURFACE IS TO BE CLEANED PROPERLY FOR GOOD TACK COAT BOND. LEVELING COURSE SHOULD BE COMPACTED ADEQUATELY ALONG THE MILLED EDGE. PAVING CONSTRUCTION JOINT FOR THE SURFACE COURSE SHOULD BE OFFSET.

2 COLD JOINT - LEVELING COURSE TO EXISTING PAVEMENT
NTS

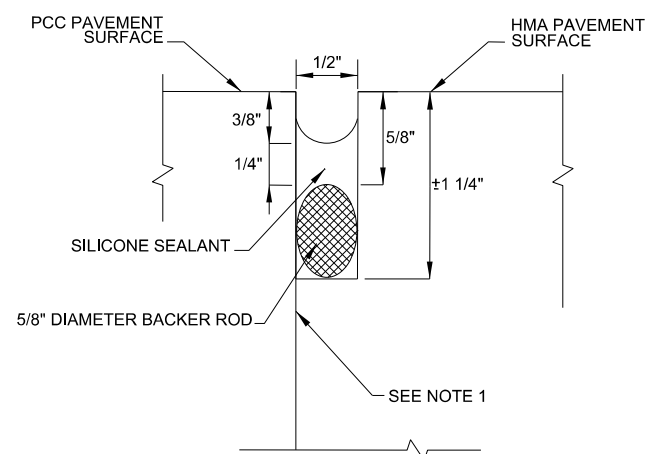


NOTES:
1. PATCHING WILL BE FIELD LOACATED BY THE ENGINEER.
2. THE MINIMUM PATCHING WIDTH WILL BE 10 FEET.

3 PATCHING TYPICAL SECTION
NTS

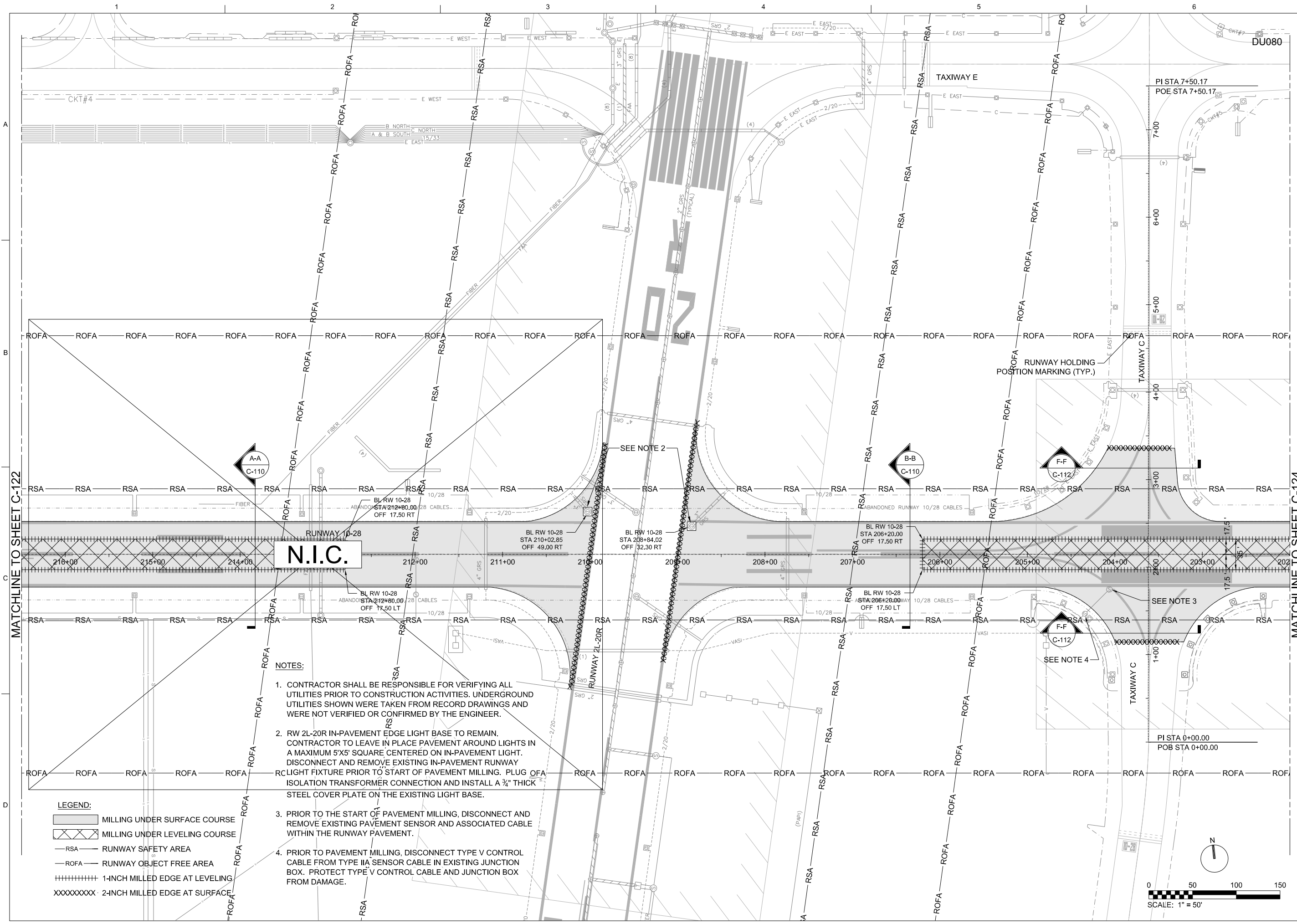


4 PCC/HMA JOINT
NTS



NOTES:
1. FOR PLACEMENT OF HMA PAVEMENT AGAINST EXISTING PCC, PROVIDE BITUMINOUS TACK COAT ALONG THE EXPOSED PCC FACE PRIOR TO PLACING HMA.
2. COST FOR PCC/HMA JOINT SHALL BE CONSIDERED INCIDENTAL TO ITEM 401.

5 SILICONE JOINT SEAL
NTS



MATCHLINE TO SHEET C-122

MATCHLINE TO SHEET C-124

N.I.C.

NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES. UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM RECORD DRAWINGS AND WERE NOT VERIFIED OR CONFIRMED BY THE ENGINEER.
2. RW 2L-20R IN-PAVEMENT EDGE LIGHT BASE TO REMAIN. CONTRACTOR TO LEAVE IN PLACE PAVEMENT AROUND LIGHTS IN A MAXIMUM 5'X5' SQUARE CENTERED ON IN-PAVEMENT LIGHT. DISCONNECT AND REMOVE EXISTING IN-PAVEMENT RUNWAY LIGHT FIXTURE PRIOR TO START OF PAVEMENT MILLING. PLUG OFF ISOLATION TRANSFORMER CONNECTION AND INSTALL A 3/4" THICK STEEL COVER PLATE ON THE EXISTING LIGHT BASE.
3. PRIOR TO THE START OF PAVEMENT MILLING, DISCONNECT AND REMOVE EXISTING PAVEMENT SENSOR AND ASSOCIATED CABLE WITHIN THE RUNWAY PAVEMENT.
4. PRIOR TO PAVEMENT MILLING, DISCONNECT TYPE V CONTROL CABLE FROM TYPE IIA SENSOR CABLE IN EXISTING JUNCTION BOX. PROTECT TYPE V CONTROL CABLE AND JUNCTION BOX FROM DAMAGE.

LEGEND:

- MILLING UNDER SURFACE COURSE
- MILLING UNDER LEVELING COURSE
- RUNWAY SAFETY AREA
- RUNWAY OBJECT FREE AREA
- 1-INCH MILLED EDGE AT LEVELING
- 2-INCH MILLED EDGE AT SURFACE



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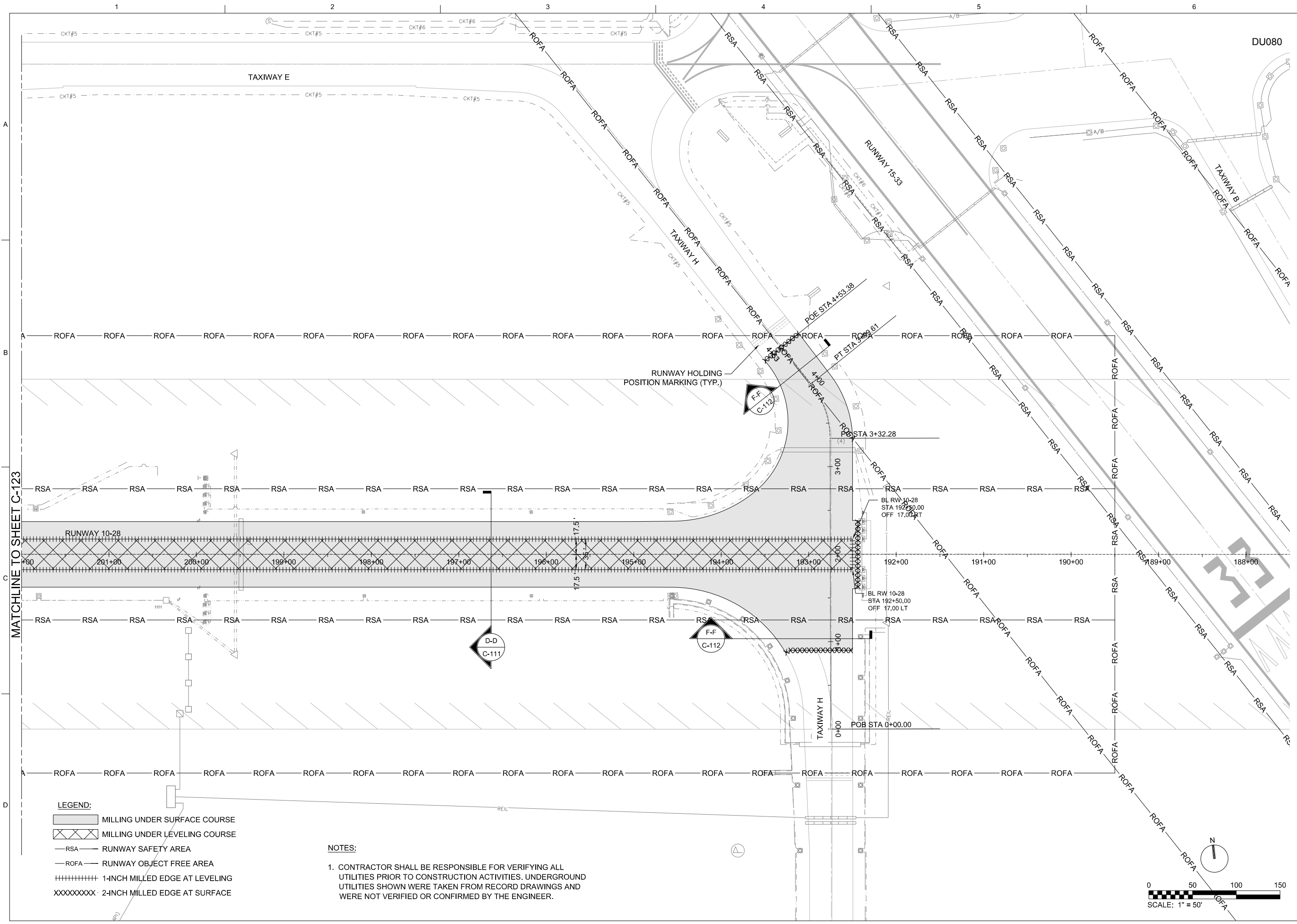
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**SITE DEMOLITION
PLAN III**

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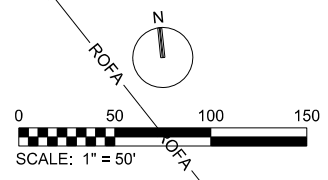


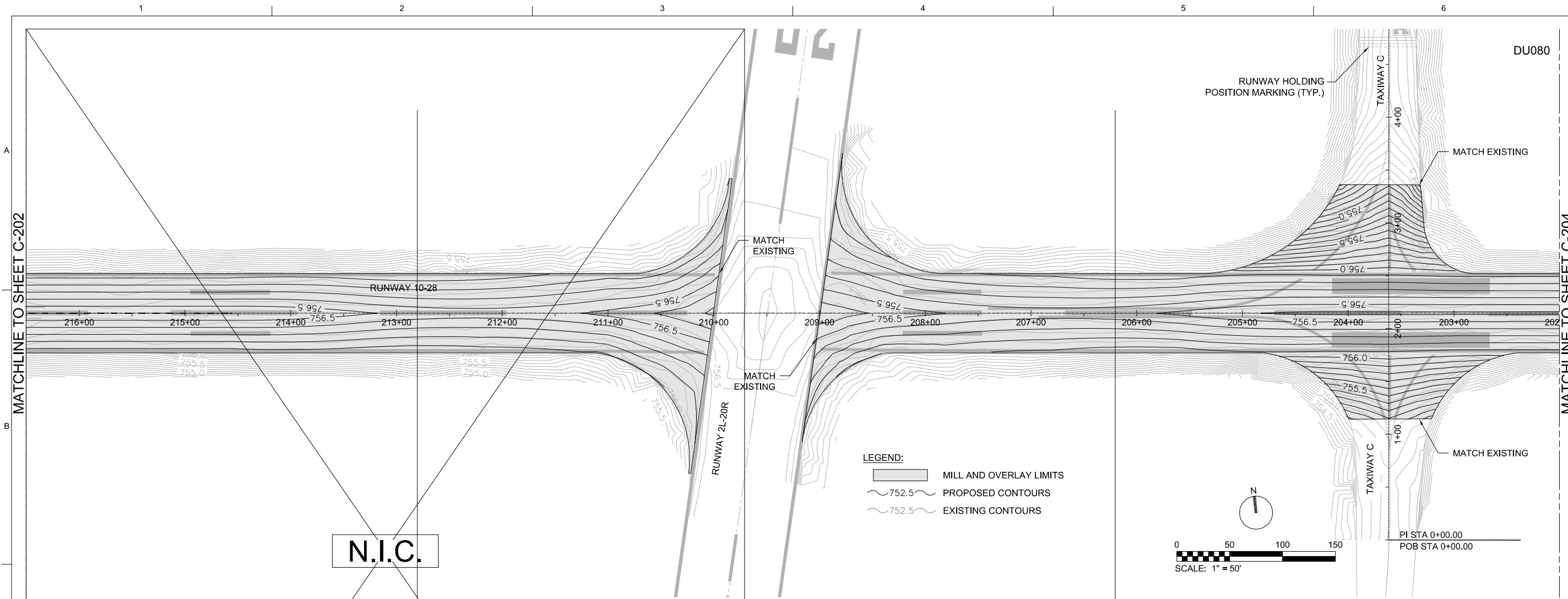
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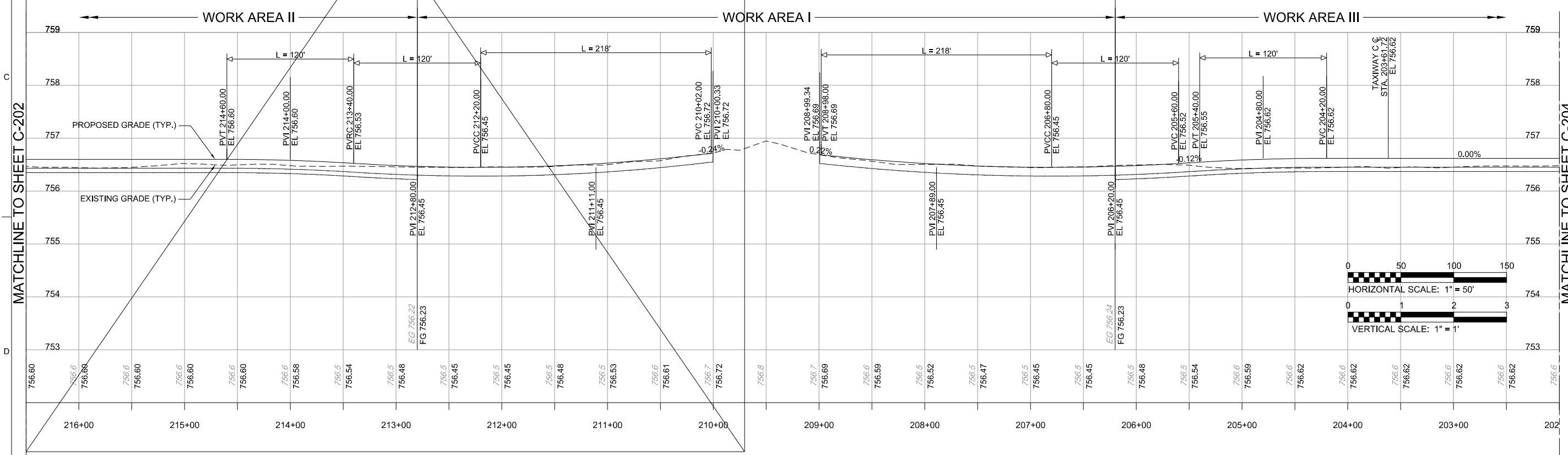
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PLAN



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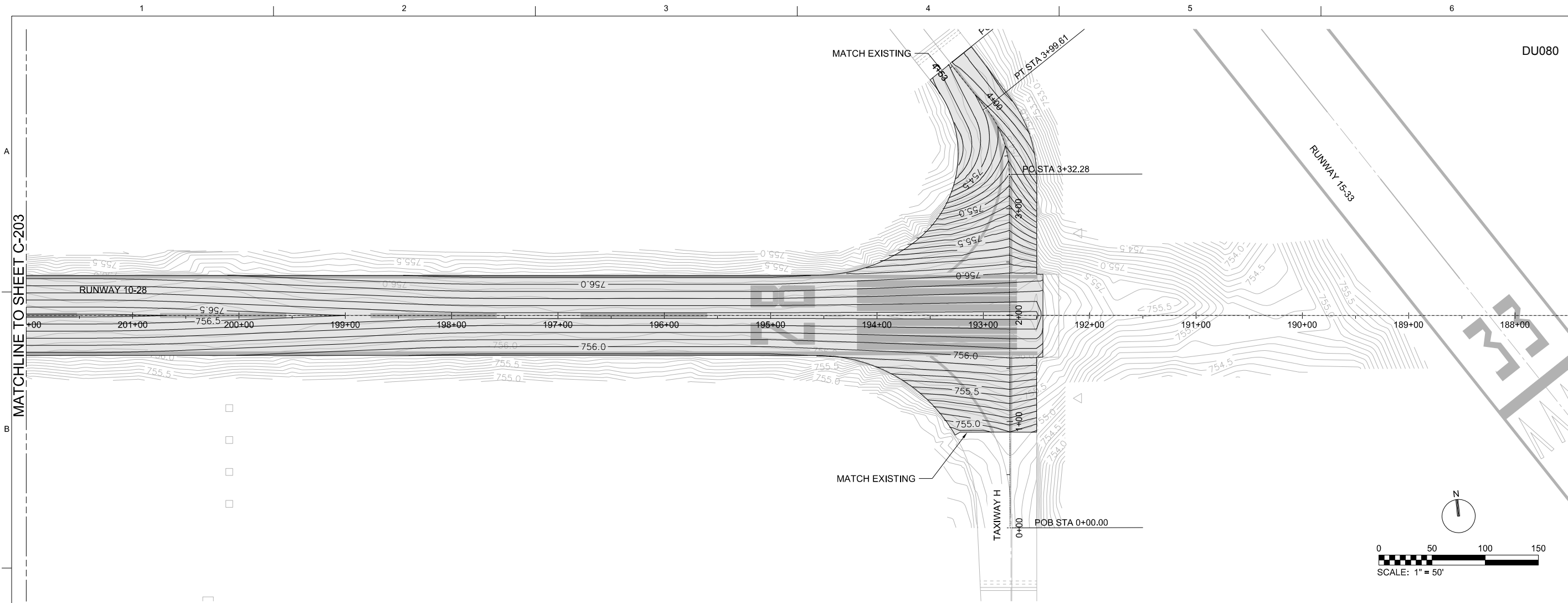
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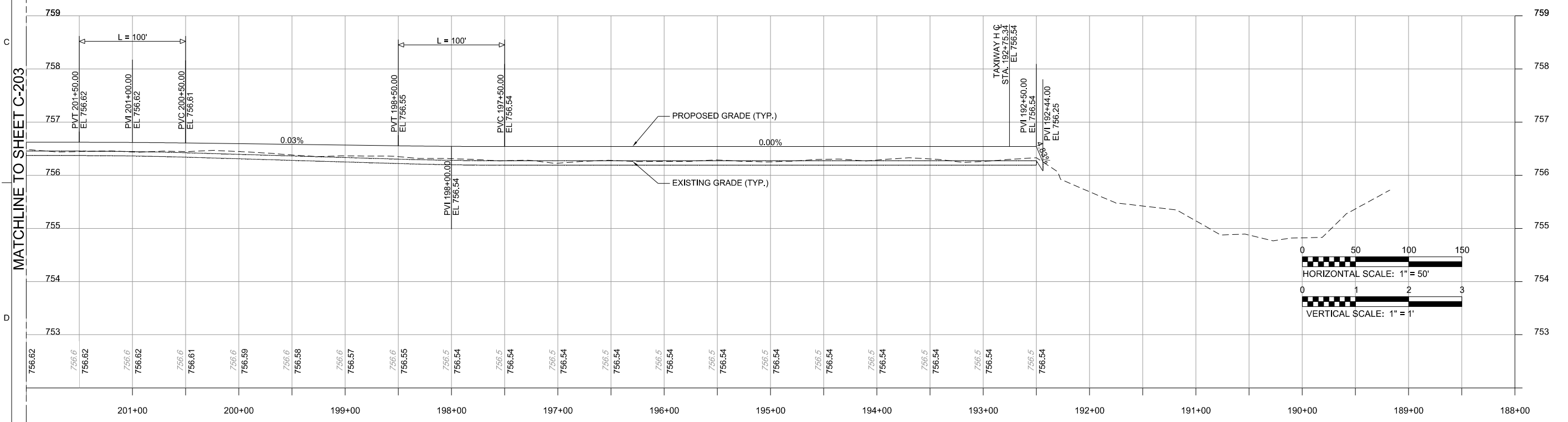
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& PROFILE III

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PLAN



PROFILE

MATCHLINE TO SHEET C-203

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& PROFILE IV**

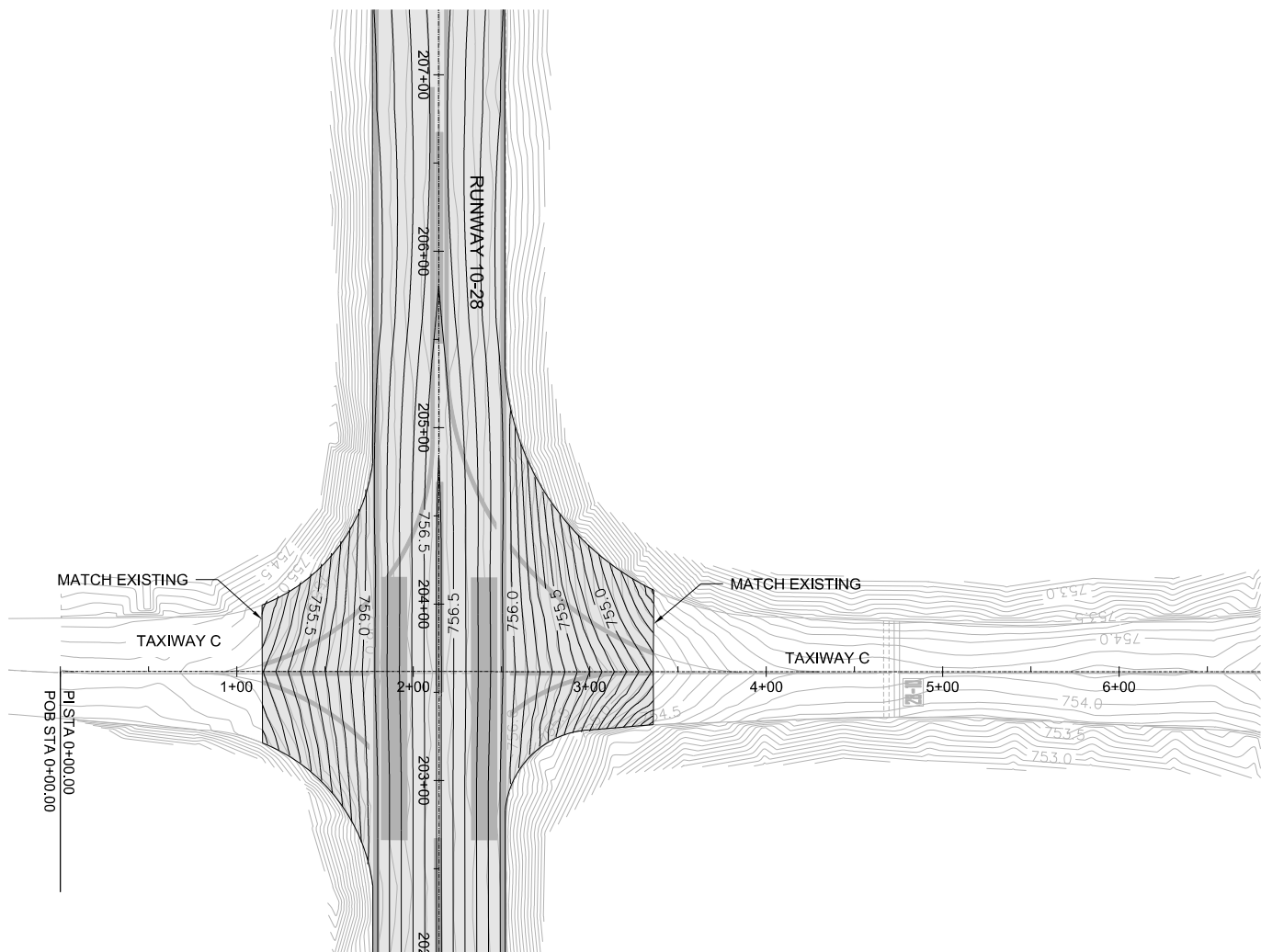
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DWG	C-204
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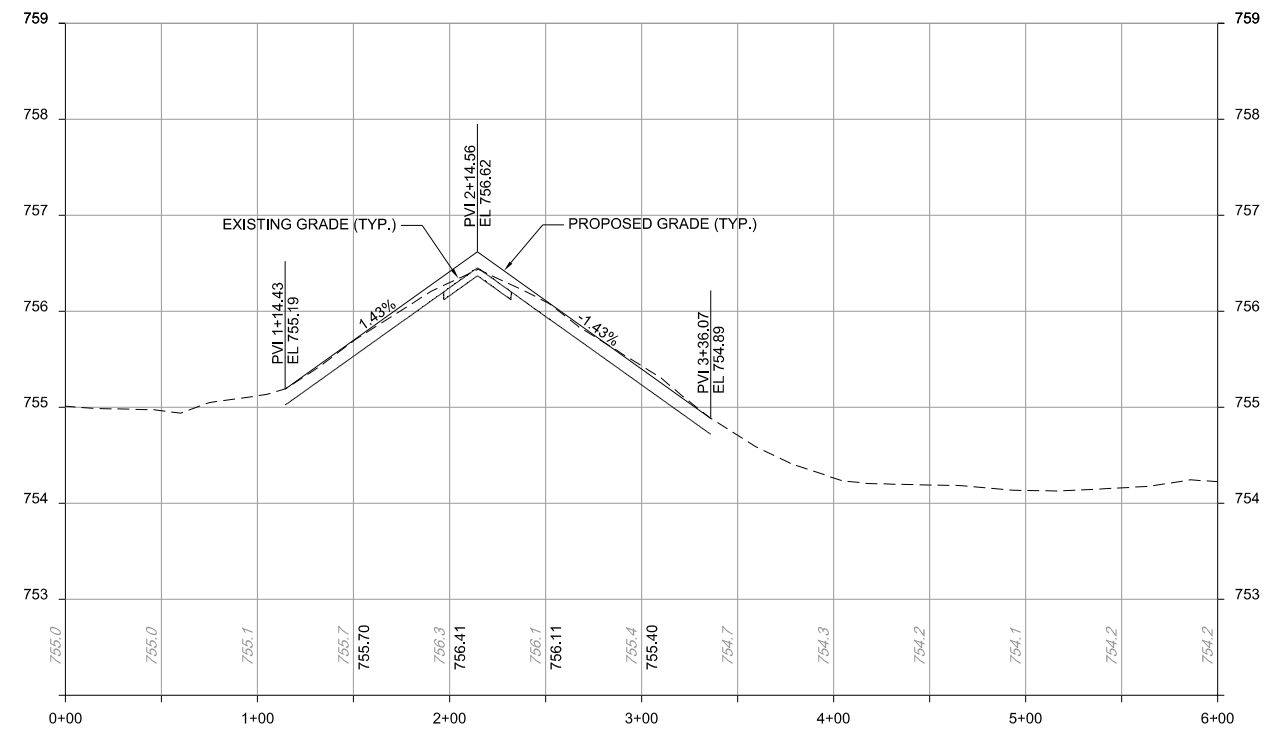
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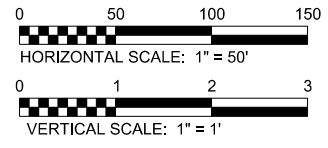
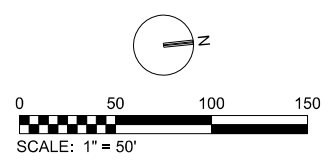
A
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C
D



TAXIWAY C PLAN



TAXIWAY C PROFILE



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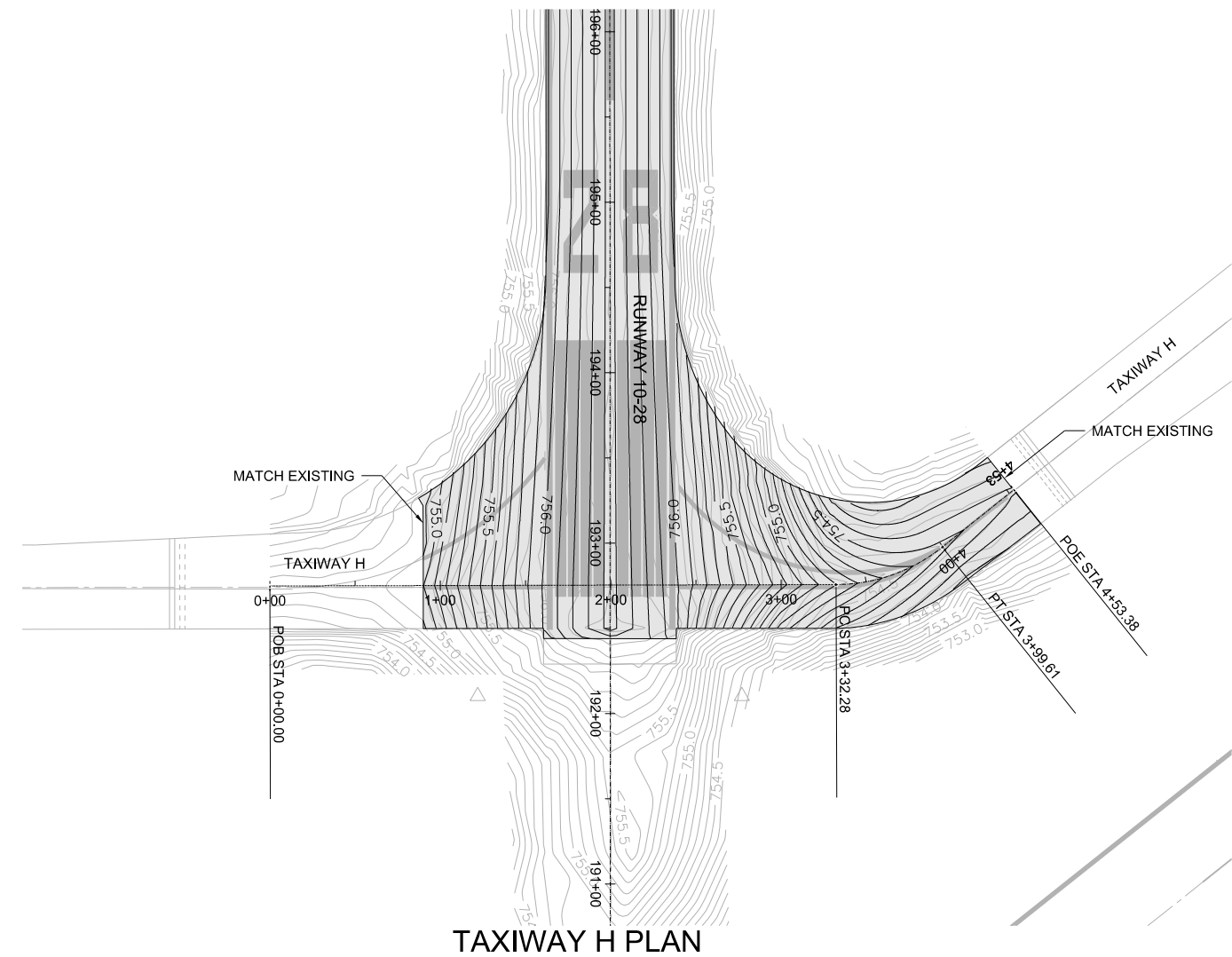
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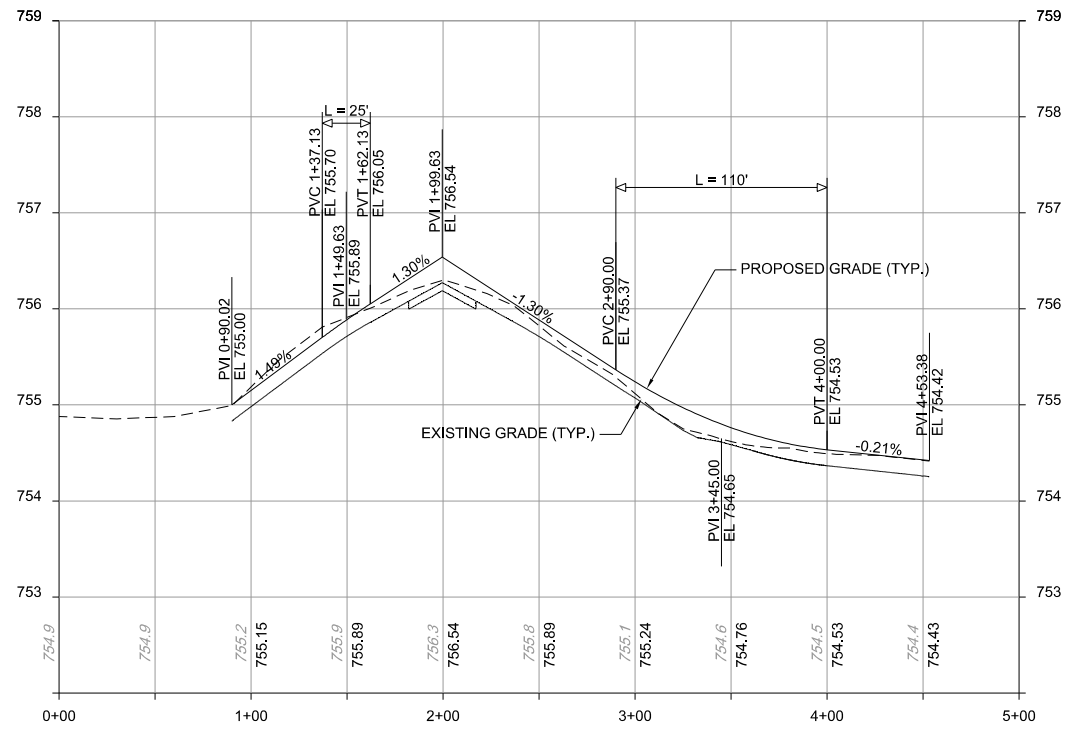
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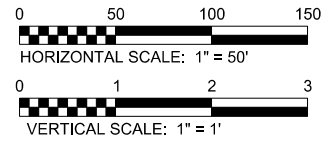
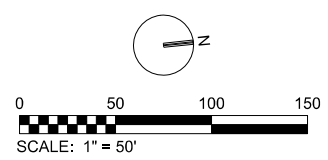
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TAXIWAY H PLAN



TAXIWAY H PROFILE



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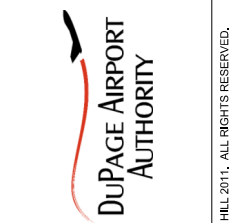
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SOIL EROSION CONTROL AND SEDIMENT CONTROL NOTES

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1. THE CONTRACTOR SHALL CONTACT KANE DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) AS APPROPRIATE, ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO LAND DISTURBING ACTIVITY, AS SOON AS THE INITIAL EROSION CONTROL ITEMS ARE INSTALLED AND ONE WEEK PRIOR TO FINAL INSPECTION.
2. THE CONTRACTOR IS REQUIRED TO SUBMIT A NOTICE OF INTENT (NOI) TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) FOR THE PROJECT. THE CONTRACTOR IS NOT PERMITTED TO BEGIN WORK UNTIL 30 DAYS FOLLOWING THE SUBMITTAL OF THE NOI.
3. SOIL EROSION AND SEDIMENT CONTROL (SESC) FEATURES MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE MUST BE PHASED OR ENACTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES MUST CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES. DISTURBANCE OF AREAS NOT INCLUDED IN THE DESIGN WILL REQUIRE NOTIFICATION OF THE KDSWCD IN ACCORDANCE WITH THE 404 PERMIT SPECIAL CONDITIONS.
4. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED AT MINIMUM ACCORDING TO THE STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, REVISED TO LATEST VERSION AS AMENDED. A COPY OF THE APPROVED STORMWATER POLLUTION PREVENTION PLAN MUST BE MAINTAINED ON THE SITE AT ALL TIMES.
5. THE EROSION CONTROL SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY KDSWCD, OR USACE. ALL ADDITIONAL MEASURES MUST BE IN PLACE WITHIN 3 DAYS OF DISTURBANCE AND ANY EMERGENCY SESC MEASURES MUST BE INSTALLED IMMEDIATELY AT THE DISCRETION KDSWCD, OR USACE.
6. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES OTHER THAN THOSE INDICATED ON THE PLANS (INCLUDING BUT NOT LIMITED TO ADDITIONAL PHASES OF THE DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS), A SUPPLEMENTAL EROSION CONTROL PLAN MUST BE SUBMITTED FOR REVIEW BY KDSWCD. THE CONTRACTOR BASED ON THE CONSTRUCTION SCHEDULE WEEKLY MEETING, WILL MODIFY STORM WATER POLLUTION PREVENTION PLAN IF NECESSARY. DEPENDING ON MODIFICATION TO THE WORK SCHEDULE, THE CONTRACTOR MUST SUBMIT DRAWINGS TO THE NORTH COOK COUNTY SOIL & WATER CONSERVATION DISTRICT (NCCSWCD) OR KANE DUPAGE SOIL & WATER CONSERVATION DISTRICT (KDSWCD) FOR REVIEW.
7. THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREA AS THE PROJECT PROGRESSES, AND INSTALL EROSION PROTECTION TO ELIMINATE THE CONCENTRATION OF RUNOFF, OR MUST INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE EARTHEN MATERIAL TO THE SATISFACTION OF KDSWCD.
8. ALL CONTROL MEASURES NECESSARY TO MEET THE REQUIREMENTS OF THE DUPAGE COUNTY COUNTYWIDE STORMWATER AND FLOOD PLAIN ORDINANCE OR THE WAIVER COMMUNITY ORDINANCE MUST BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
9. THE CONTRACTOR AND SUBCONTRACTORS MUST SUBMIT A WRITTEN AND SIGNED (BY CONTRACTOR) STORM WATER POLLUTION PREVENTION PLAN (SWPPP), MEETING THE REQUIREMENTS OF THE IEPA'S CURRENT NPDES STORM WATER PERMIT FOR CONSTRUCTION SITE ACTIVITIES, INCLUDING DETAILS OF SPECIFIC DEVICES SUCH AS SILT FENCE, DITCH CHECK, ETC. TO BE UTILIZED FOR EROSION AND SEDIMENT CONTROL. THE PLAN MUST BE SUBMITTED AND APPROVED BY THE DAA A MINIMUM OF TEN (10) DAYS PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES. A COPY OF THE APPROVED SWPPP MUST BE GIVEN TO THE DAA FIVE DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
10. THE CONTRACTOR MUST MAKE INSPECTIONS A MINIMUM OF ONCE EVERY SEVEN DAYS OF THE FOLLOWING: 1) DISTURBED AREAS OF THE PROJECT SITE THAT HAVE NOT BEEN FULLY STABILIZED, 2) STRUCTURAL CONTROL MEASURES (SILT FENCES, ETC.), AND 3) LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE. AN ADDITIONAL INSPECTION OF THE ITEMS LISTED ABOVE MUST BE MADE WITHIN TWENTY-FOUR (24) HOURS OF A 0.5-INCH OR GREATER RAINFALL OR EQUIVALENT SNOWFALL.
11. THE CONTRACTOR MUST KEEP A WRITTEN REPORT SUMMARIZING THE REQUIRED INSPECTION EACH TIME AN INSPECTION TAKES PLACE. THE REPORTS MUST BE KEPT AT THE SITE DURING CONSTRUCTION. THE REPORTS MUST ALSO BE RETAINED FOR THREE YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED.
12. THE CONTRACTOR MUST NOTIFY THE APPROPRIATE AGENCY FIELD OPERATIONS OFFICE OF THE IEPA BY EMAIL, TELEPHONE OR FAX WITHIN 24 HOURS OF ANY INCIDENCE OF NONCOMPLIANCE AND MUST FILL OUT AND FILE WITHIN FIVE (5) DAYS WITH THE EPA AN INCIDENCE OF NONCOMPLIANCE (ION) FORM WHEN REQUIRED BY THE PERMIT.
13. THE CONTRACTOR MUST COOPERATE WITH THE COMMISSIONER'S REPRESENTATIVES WHO WILL MAKE SITE VISITS TO REVIEW COMPLIANCE WITH THE PLAN IN THE FIELD AND AUDIT THE LOGS AND RECORDS REQUIRED BY THE PERMIT.
14. THE INSTALLATION, MAINTENANCE, REMOVAL AND RESTORATION OF THE AREA DISTURBED BY THE PLACEMENT OF THE PERIMETER EROSION BARRIER ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR EROSION CONTROL. AFTER ALL PERIMETER EROSION BARRIER IS REMOVED, THE AREAS DAMAGED BY THE PERIMETER EROSION BARRIER MUST BE RESTORED.
15. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO FILTER BAGS, SEDIMENT TRAPS, SILT TRAPS, OR POLYMER TREATMENT CHANNELS. FILTERED WATER SHOULD BE DISCHARGED ONTO STABILIZED SURFACE TO PREVENT ADDITIONAL EROSION AND/OR SEDIMENTATION. DEWATERING DIRECTLY INTO FIELD TILES, STORM WATER STRUCTURES, OR "WATERS OF THE U.S." IS PROHIBITED.
16. THE CONTRACTOR MUST CONSULT WITH A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) FOR THE DESIGN AND MAINTENANCE OF SEDIMENTATION BASINS WITH BAFFLE SYSTEM AND TRAPS AS WELL AS POLYMERS AND FLOC LOGS.
17. ALL STORM SEWER INLET STRUCTURES MUST BE PROTECTED WITH STORM SEWER INLET PROTECTION (I.E. INLET FILTERS) PER INLET PROTECTION DETAILS IN THE PLANS. ALTERNATE TYPES OF PROTECTION MAY BE SUBMITTED FOR REVIEW AND APPROVAL BY KDSWCD.
18. THE CONTRACTOR MUST MAINTAIN AND PRESERVE ANY EXISTING SUB-SURFACE DRAINAGE SYSTEMS.
19. ON PROJECTS WHICH INCLUDE STREAMWORK OR IN-STREAM WORK, THE CONTRACTOR MUST MAINTAIN AN OIL ABSORBENT BOOM DOWNSTREAM OF EQUIPMENT IN THE CHANNEL AT ALL TIMES. THE CONTRACTOR MUST REPLACE THE OIL ABSORBENT BOOM WHEN IT BECOMES SATURATED WITH OIL.
20. ON PROJECTS WHICH INCLUDE STREAM WORK OR IN-STREAM WORK, NO WORK IS ALLOWED BEYOND THE PERMITTED AREA. ANY WORK WITHIN A STREAM OR DITCH CAPABLE OF CONVEYING WATER MUST BE CONDUCTED IN THE DRY. PROVISIONS MUST BE MADE TO BY-PASS PUMP OR DEWATER ANY AREAS WITHIN THE STREAM OR DITCH IN WHICH WORK WILL BE CONDUCTED. IN HIGH FLOW CHANNELS WHERE DE-WATERING IS NOT POSSIBLE OR PRACTICAL, SILT OR SEDIMENT CURTAINS MAY BE INSTALLED PARALLEL TO THE STREAM BANK. IN NO CASE WILL THE CURTAINS BE INSTALLED PERPENDICULAR TO THE FLOW.
21. CONSTRUCTION ACTIVITIES MUST BE SCHEDULED TO MINIMIZE THE TIME SOIL IS EXPOSED AND UNPROTECTED. IN NO CASE WILL THE EXISTING VEGETATION BE DESTROYED, REMOVED, OR DISTURBED MORE THAN FOURTEEN (14) DAYS PRIOR TO THE INITIATION OF IMPROVEMENTS.
22. TEMPORARY CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES THE SITE.
23. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, MUST BE PROVIDED TO PREVENT THE DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING PUBLIC OR PRIVATE ROADWAY MUST BE REMOVED IMMEDIATELY.
24. STOCK PILES OF SOIL MUST NOT BE LOCATED IN FLOOD PLAINS, RIPARIAN AREAS (VEGETATED FLOOD PLAINS), WETLANDS AND WATERS OF THE U.S. UNLESS OTHERWISE AUTHORIZED BY THE RELEVANT PERMITTING AUTHORITY. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, PERIMETER EROSION BARRIER MUST BE PROVIDED. IF THE STOCKPILE IS INACTIVE FOR MORE THAN 14 DAYS, SOIL STABILIZATION MUST BE PROVIDED BY THE 7TH DAY AFTER ACTIVITY HAS STOPPED.
25. WHEN FILLING A WETLAND ADJACENT TO A W.U.S., EROSION CONTROL MEASURES MUST BE IN PLACE SO THAT WHEN FILL MATERIAL IS PLACED, OVERLAND FLOW IS NOT ALLOWED TO ACCUMULATE SEDIMENT AND ENTER W.U.S.
26. IF THE VOLUME, VELOCITY, SEDIMENT LOAD, OR PEAK FLOW RATE OF STORMWATER RUNOFF ARE TEMPORARILY INCREASED DURING CONSTRUCTION, THEN PROPERTIES AND SPECIAL MANAGEMENT AREAS DOWNSTREAM FROM SUCH DEVELOPMENT SITES MUST BE PROTECTED FROM EROSION.
27. KDSWCD MUST APPROVE SIZE AND NUMBER OF TEMPORARY STREAM CROSSINGS. TEMPORARY STREAM CROSSINGS MUST BE DESIGNED BY A QUALIFIED ENGINEER SUCH THAT ADDITIONAL FLOODING AND EROSION DO NOT OCCUR. AN APPROVED TEMPORARY STREAM CROSSING DETAIL IS PROVIDED IN THE CONTRACT DOCUMENTS. IN CASE OF REGULATED WATERWAYS, A TEMPORARY STREAM CROSSING PERMIT MUST BE OBTAINED FROM THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES - OFFICE OF WATER RESOURCES (IDNR-OWR) PRIOR TO INSTALLATION. THE COMMISSIONER WILL FACILITATE THE PERMIT APPLICATION PROCESS THROUGH THE (IDNR-OWR). TEMPORARY STREAM CROSSINGS BUILT IN A REGULATED WATERWAY, MUST BE DESIGNED AND INSTALLED PER IDNR-OWR PERMIT REQUIREMENTS.
28. WHEN THE CONSTRUCTION IS COMPLETED, THE SITE HAS BEEN FULLY STABILIZED AND ALL DISCHARGES OF STORMWATER AUTHORIZED BY THE PERMIT HAVE BEEN ELIMINATED, THE CONTRACTOR MUST PROVIDE A LETTER TO THE DAA REPRESENTATIVE STATING THESE FACTS.
29. AFTER THE SITE HAS BEEN PERMANENTLY STABILIZED AND ANY/ALL STORMWATER DISCHARGES, AUTHORIZED UNDER THE ILR10 PERMIT ARE ELIMINATED, THE CONTRACTOR WILL SUBMIT A COMPLETED NOTICE OF TERMINATION (NOT) SIGNED IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THE ILR10 PERMIT TO IEPA.



APVD	MV
BY	
APVD	JJ
CHK	JA
DR	JA
NO. DATE	2012/02/03
DSGN	

8501 W. HIGGINS ROAD
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RUNWAY 10-28 AND
ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

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EROSION CONTROL NOTES

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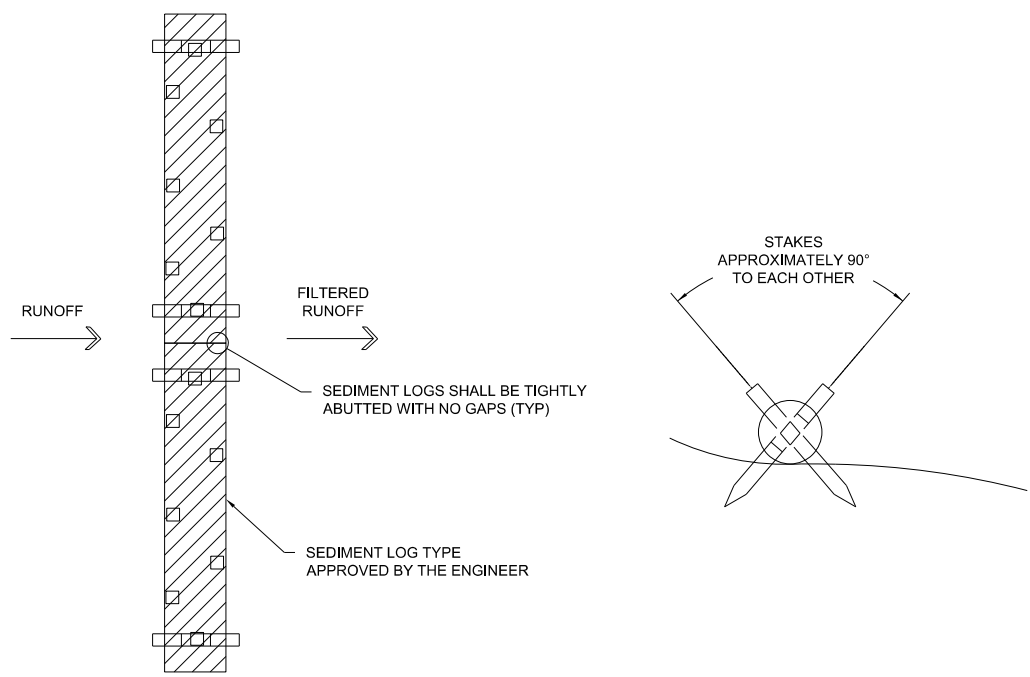
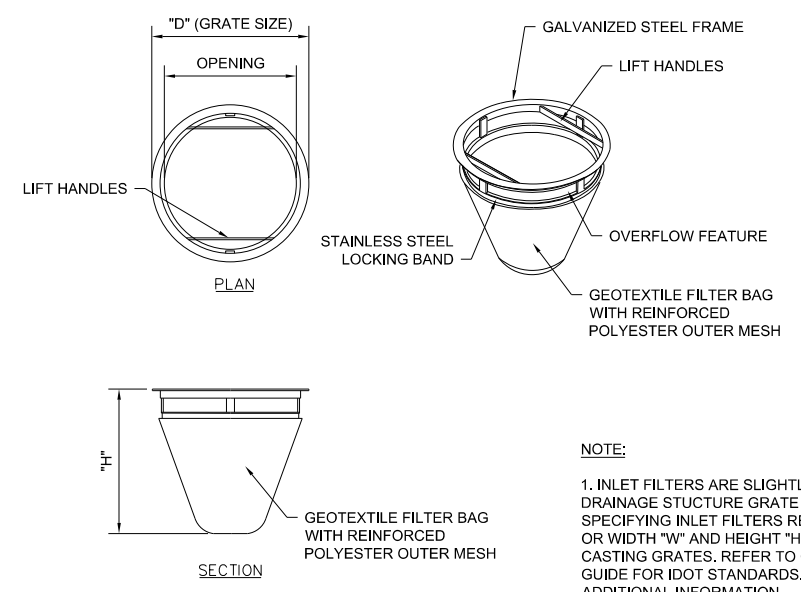
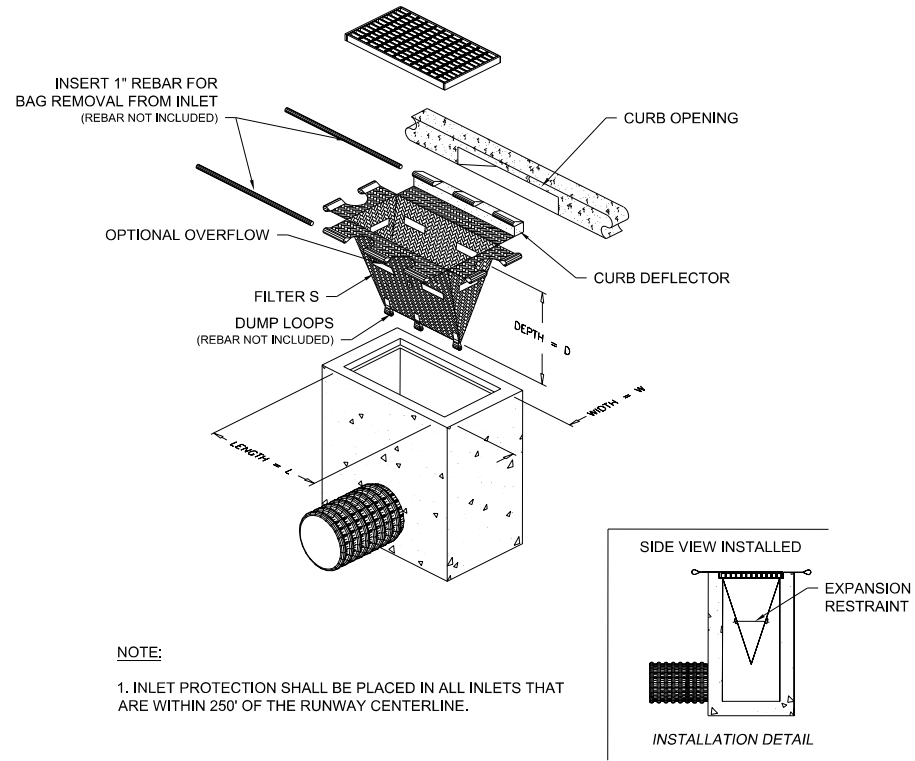
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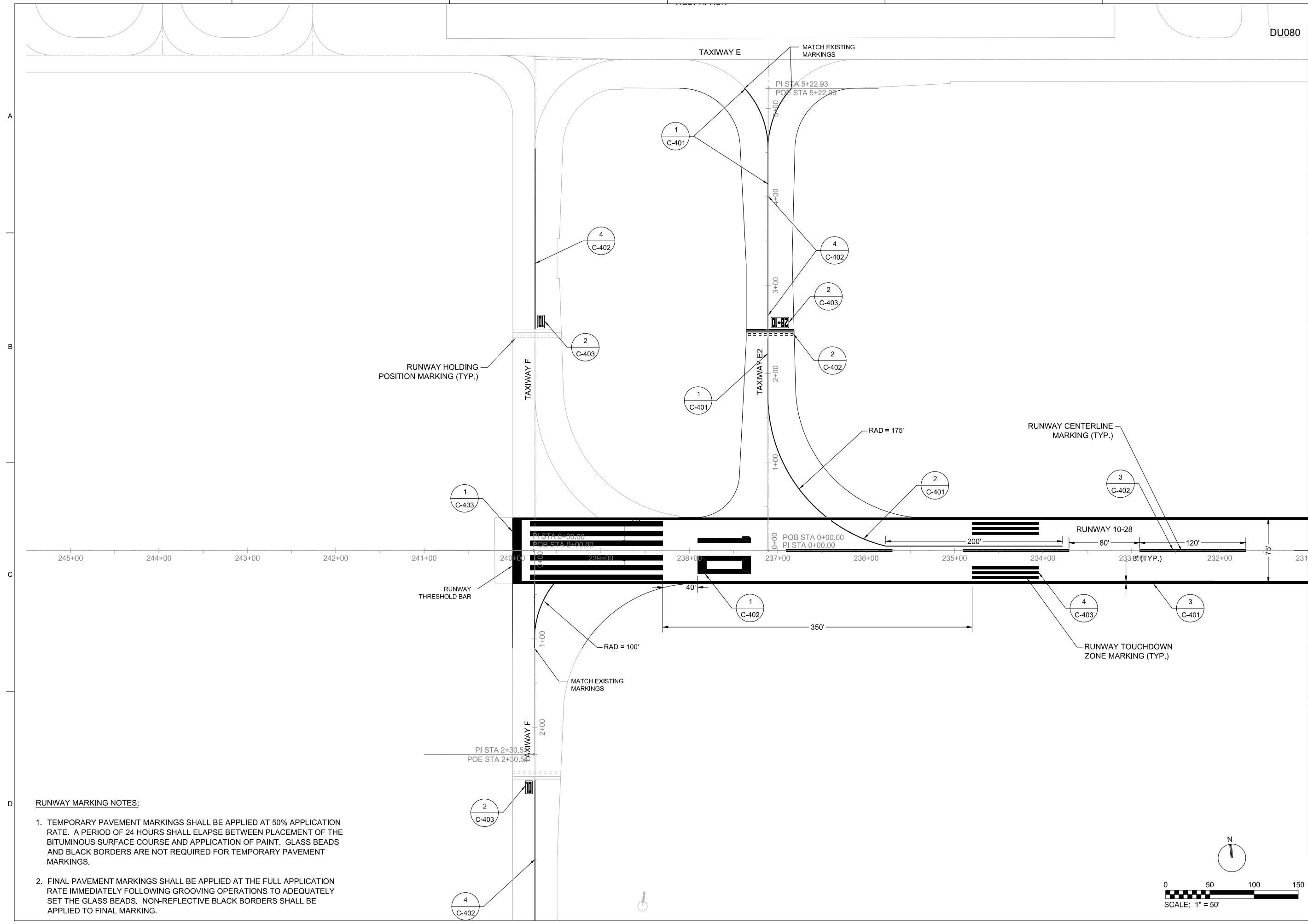
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DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

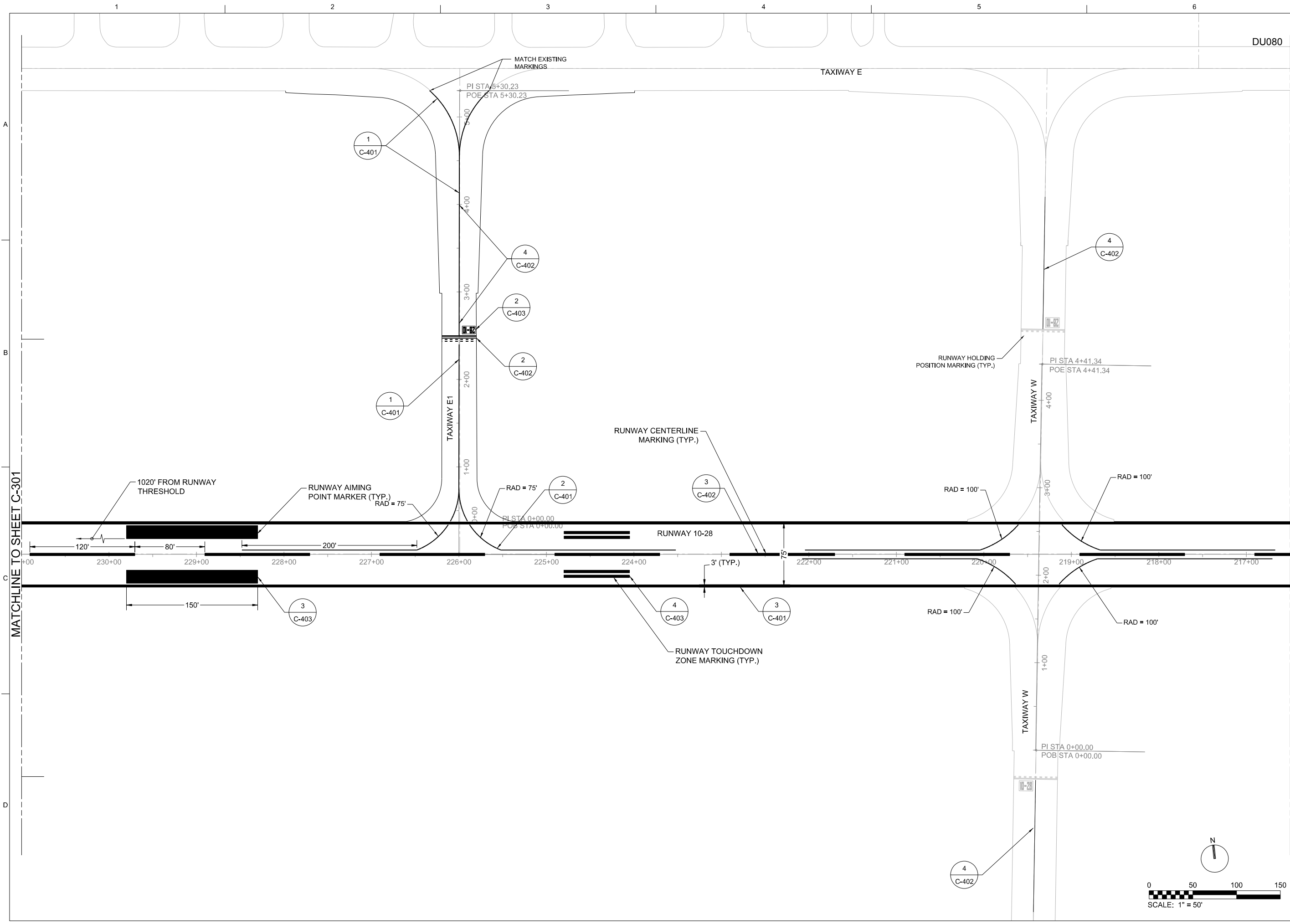
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PLAN 1**

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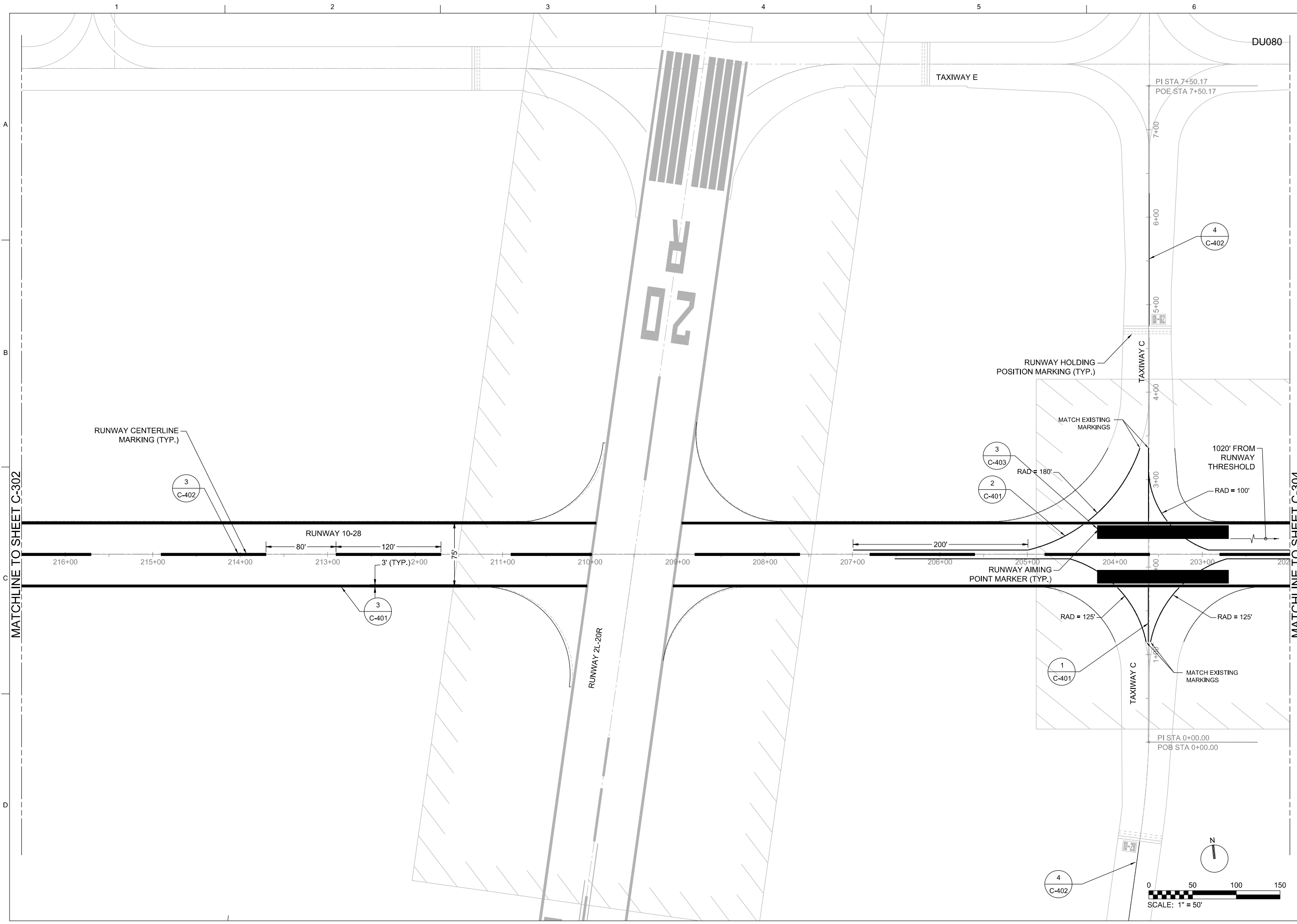
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RUNWAY 10-28 AND
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**PAVEMENT MARKING
PLAN II**

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**PAVEMENT MARKING
 PLAN III**

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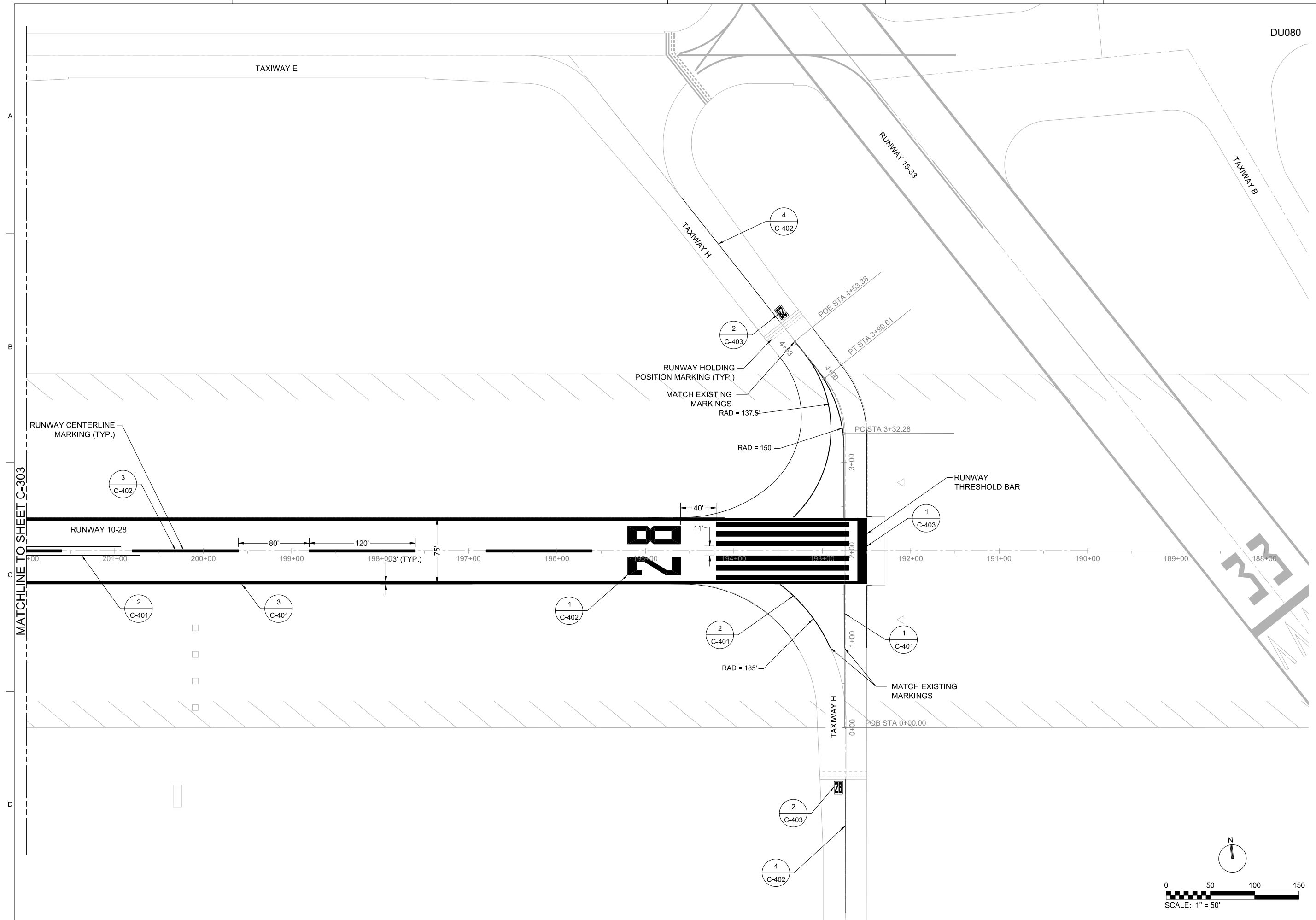
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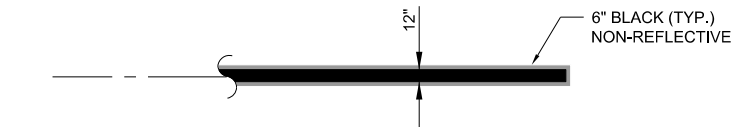
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**PAVEMENT MARKING
PLAN IV**

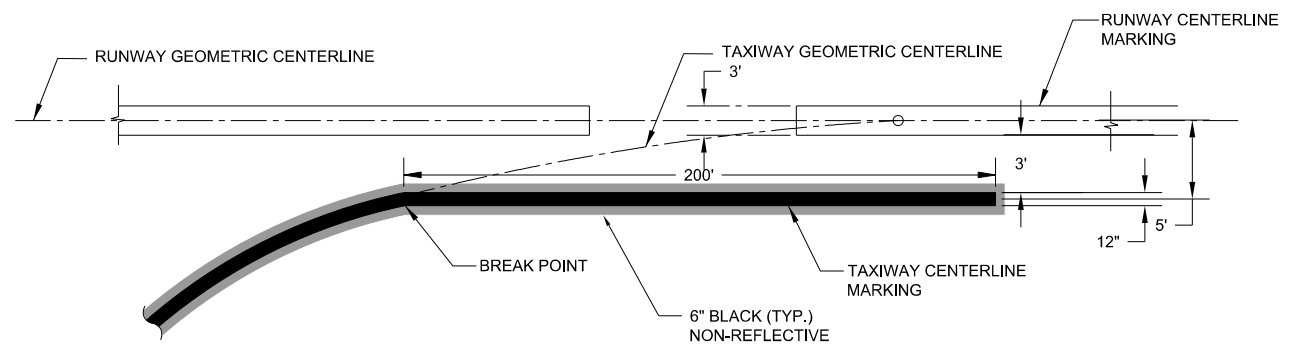
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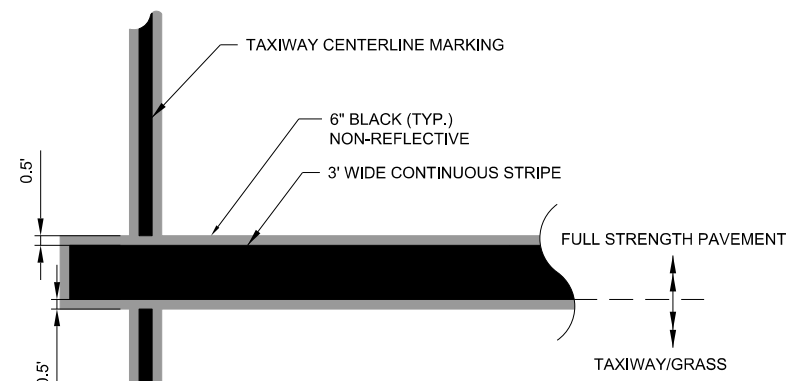
1 TAXIWAY CENTERLINE MARKING
N.T.S.

NOTE:
 1. ALL TAXIWAY CENTERLINE MARKINGS SHALL BE YELLOW WITH GLASS BEADS.
 2. 6" BLACK BORDER AND/OR BACKGROUND SHALL BE APPLIED TO MARKINGS APPLIED ON PROPOSED/EXISTING ASPHALT AND/OR CONCRETE PAVEMENT. PAYMENT SHALL BE MADE UNDER ITEM P-620.



2 TAXIWAY/RUNWAY INTERSECTION MARKINGS
N.T.S.

NOTE:
 1. 6" BLACK BORDER AND/OR BACKGROUND SHALL BE APPLIED TO MARKINGS APPLIED ON PROPOSED/EXISTING ASPHALT AND/OR CONCRETE PAVEMENT. PAYMENT SHALL BE MADE UNDER ITEM P-620.



3 RUNWAY SIDE STRIPE MARKING
N.T.S.

NOTE:
 1. ALL RUNWAY SIDE STRIPE MARKINGS SHALL BE WHITE WITH GLASS BEADS.
 2. 6" BLACK BORDER AND/OR BACKGROUND SHALL BE APPLIED TO MARKINGS APPLIED ON PROPOSED/EXISTING ASPHALT AND/OR CONCRETE PAVEMENT. PAYMENT SHALL BE MADE UNDER ITEM P-620.

GENERAL NOTES:
 1. ALL RUNWAY MARKINGS SHALL BE WHITE.
 2. ALL TAXIWAY MARKINGS SHALL BE YELLOW.
 3. ALL BORDERS/BACKGROUNDS/OUTLINES SHALL BE BLACK.

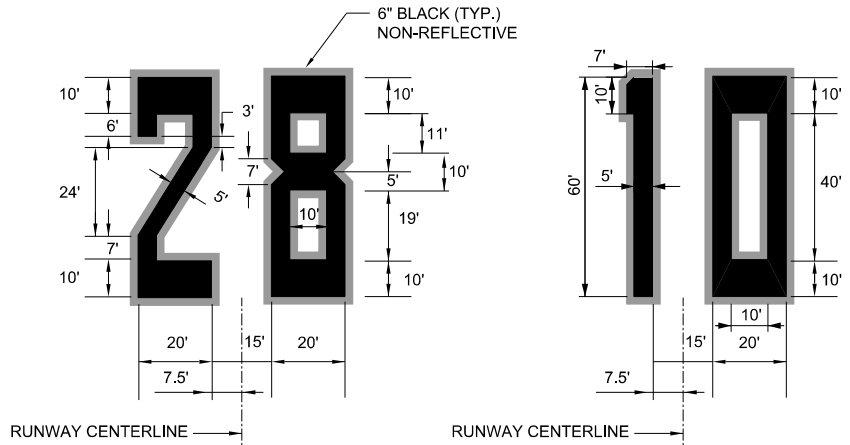
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RUNWAY 10-28 AND
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 DUPAGE AIRPORT (DPA)
 DUPAGE COUNTY, ILLINOIS

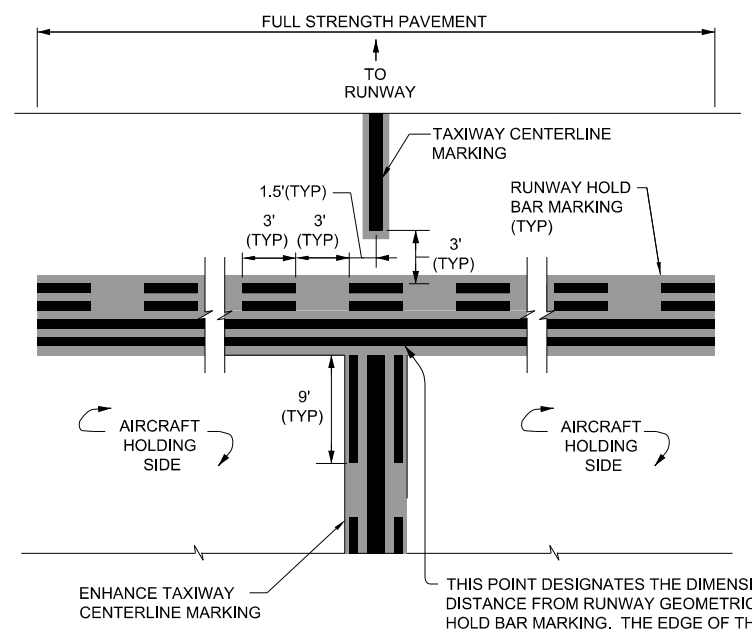
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**PAVEMENT MARKING
 DETAILS I**

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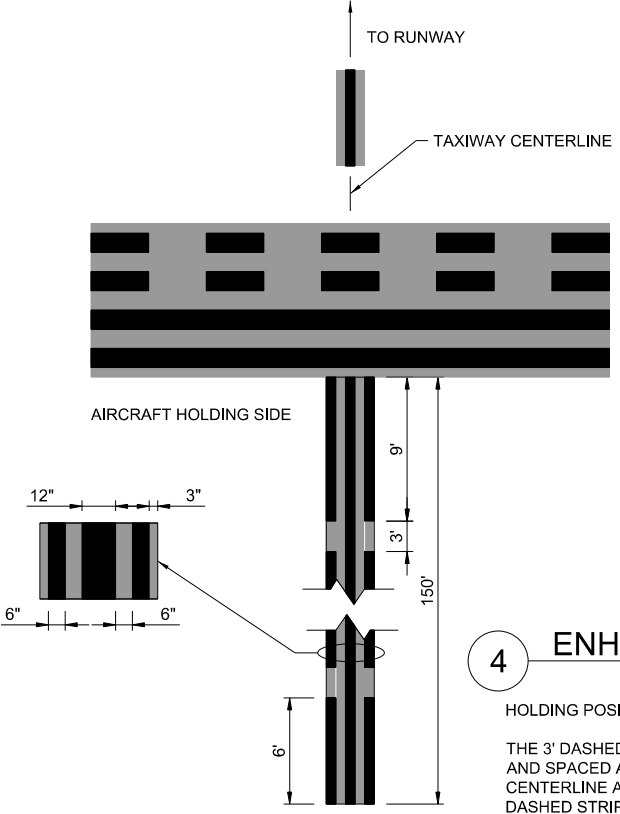
1 RUNWAY DESIGNATION MARKINGS
N.T.S.

NOTE:
1. ALL RUNWAY SIDE STRIPE MARKINGS SHALL BE WHITE WITH GLASS BEADS.
2. 6" BLACK BORDER AND/OR BACKGROUND SHALL BE APPLIED TO MARKINGS APPLIED ON PROPOSED/EXISTING ASPHALT AND/OR CONCRETE PAVEMENT. PAYMENT SHALL BE MADE UNDER ITEM P-620.



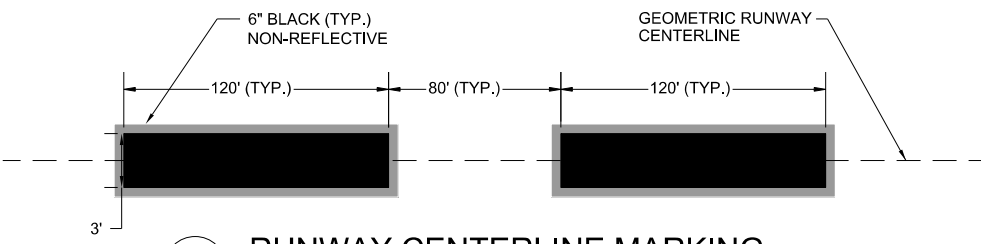
2 RUNWAY HOLD BAR MARKING
N.T.S.

NOTE:
1. 6" BLACK BORDER AND/OR BACKGROUND SHALL BE APPLIED TO HOLDING POSITION MARKINGS APPLIED ON PROPOSED/EXISTING ASPHALT AND/OR CONCRETE PAVEMENT. PAYMENT SHALL BE MADE UNDER ITEM P-620.



4 ENHANCED TAXIWAY CENTERLINE MARKING
N.T.S.

HOLDING POSITION NOTE:
THE 3" DASHED STRIPES SHALL BE CENTERED AND SPACED AS SHOWN FROM THE GEOMETRIC CENTERLINE AND IN SOME CASES A PARTIAL DASHED STRIPE OR PARTIAL SPACE WILL ABUT AGAINST THE TAXIWAY EDGE MARKINGS.



3 RUNWAY CENTERLINE MARKING
N.T.S.

NOTE:
1. ALL RUNWAY SIDE STRIPE MARKINGS SHALL BE WHITE WITH GLASS BEADS.
2. 6" BLACK BORDER AND/OR BACKGROUND SHALL BE APPLIED TO MARKINGS APPLIED ON PROPOSED/EXISTING ASPHALT AND/OR CONCRETE PAVEMENT. PAYMENT SHALL BE MADE UNDER ITEM P-620.

GENERAL NOTES:
1. ALL RUNWAY MARKINGS SHALL BE WHITE.
2. ALL TAXIWAY MARKINGS SHALL BE YELLOW.
3. ALL BORDERS/BACKGROUNDS/OUTLINES SHALL BE BLACK.

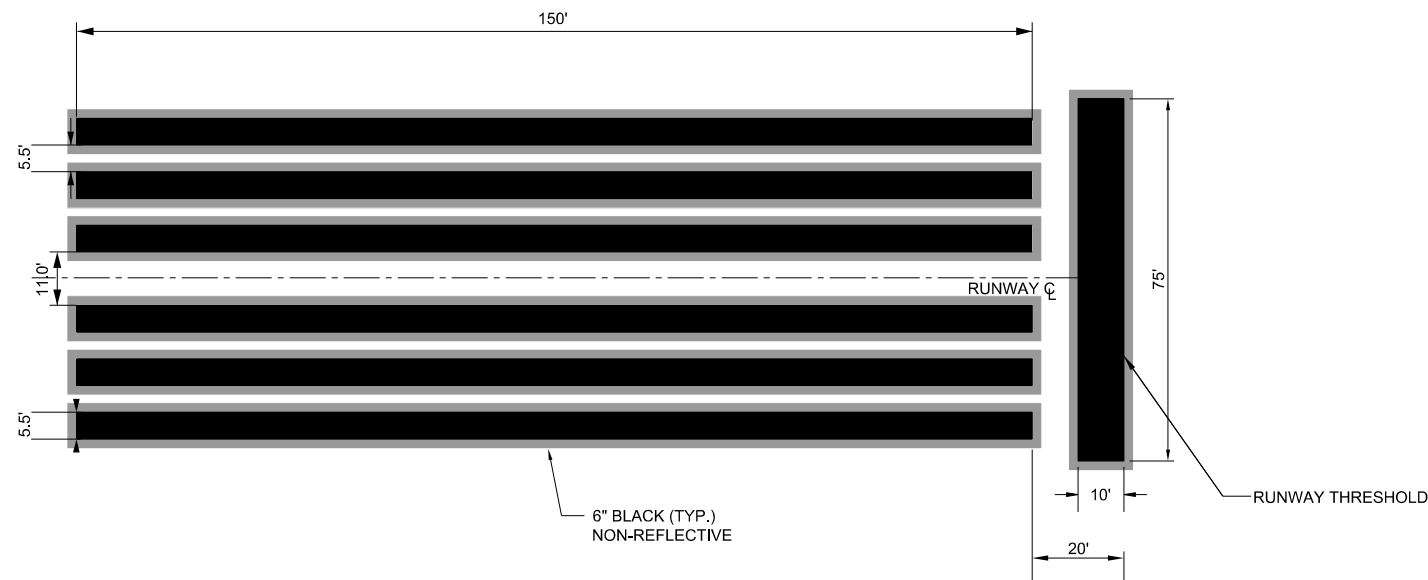
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RUNWAY 10-28 AND
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DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

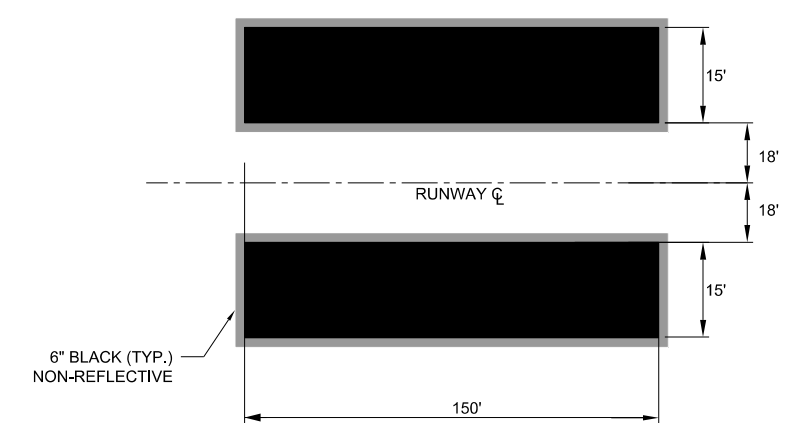
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**PAVEMENT MARKING
DETAILS II**

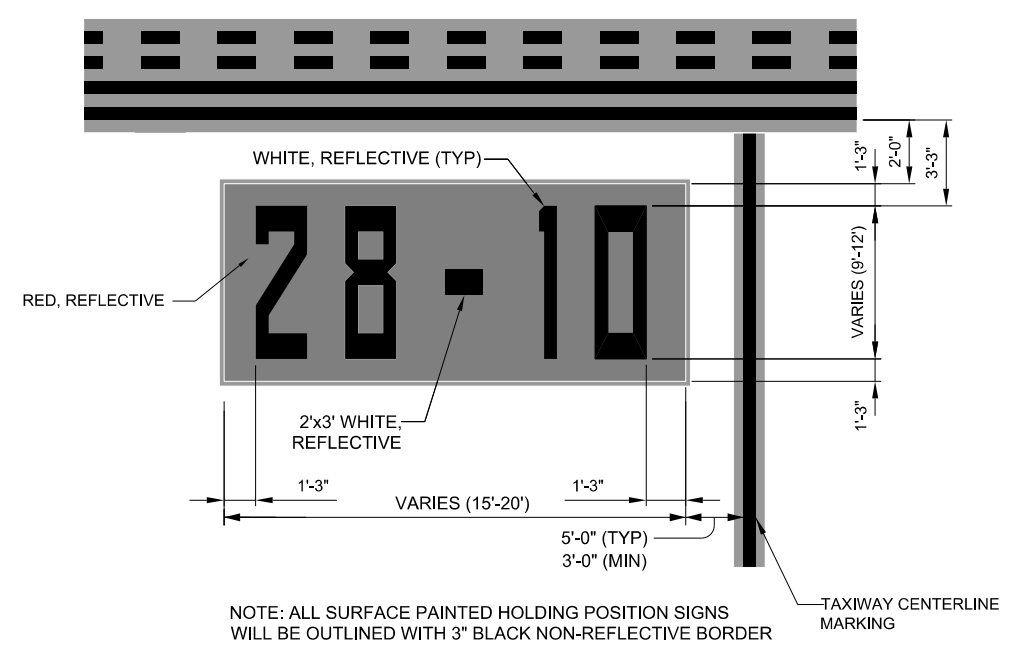
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SHEET 36 of 57



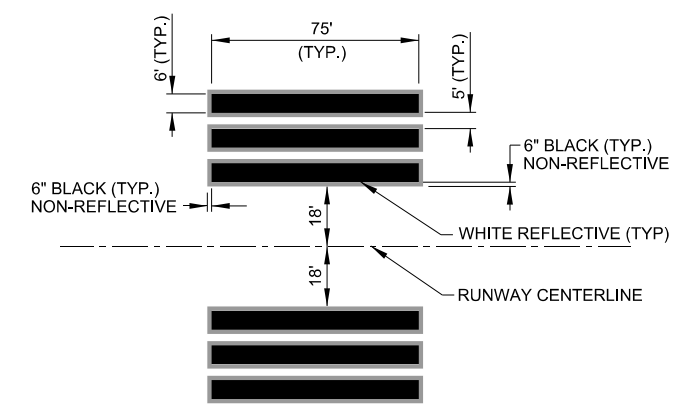
1 RUNWAY THRESHOLD MARKINGS (WHITE)
N.T.S.



3 RUNWAY AIMING POINT MARKER DETAIL
N.T.S.



2 SURFACE PAINTED HOLDING POSITION SIGN
N.T.S.



NOTES:

1. OUTERMOST STRIPE IS REMOVED AS STATIONING DECREASES. SEE PAVEMENT MARKING PLAN FOR NUMBER OF STRIPES.
2. DIMENSIONS SHOWN DO NOT INCLUDE 6" NON-REFLECTIVE BLACK OUTLINE.

4 RUNWAY TOUCHDOWN ZONE MARKINGS DETAIL
N.T.S.

GENERAL NOTES:
1. ALL RUNWAY MARKINGS SHALL BE WHITE.
2. ALL TAXIWAY MARKINGS SHALL BE YELLOW.
3. ALL BORDERS/BACKGROUNDS/OUTLINES SHALL BE BLACK.

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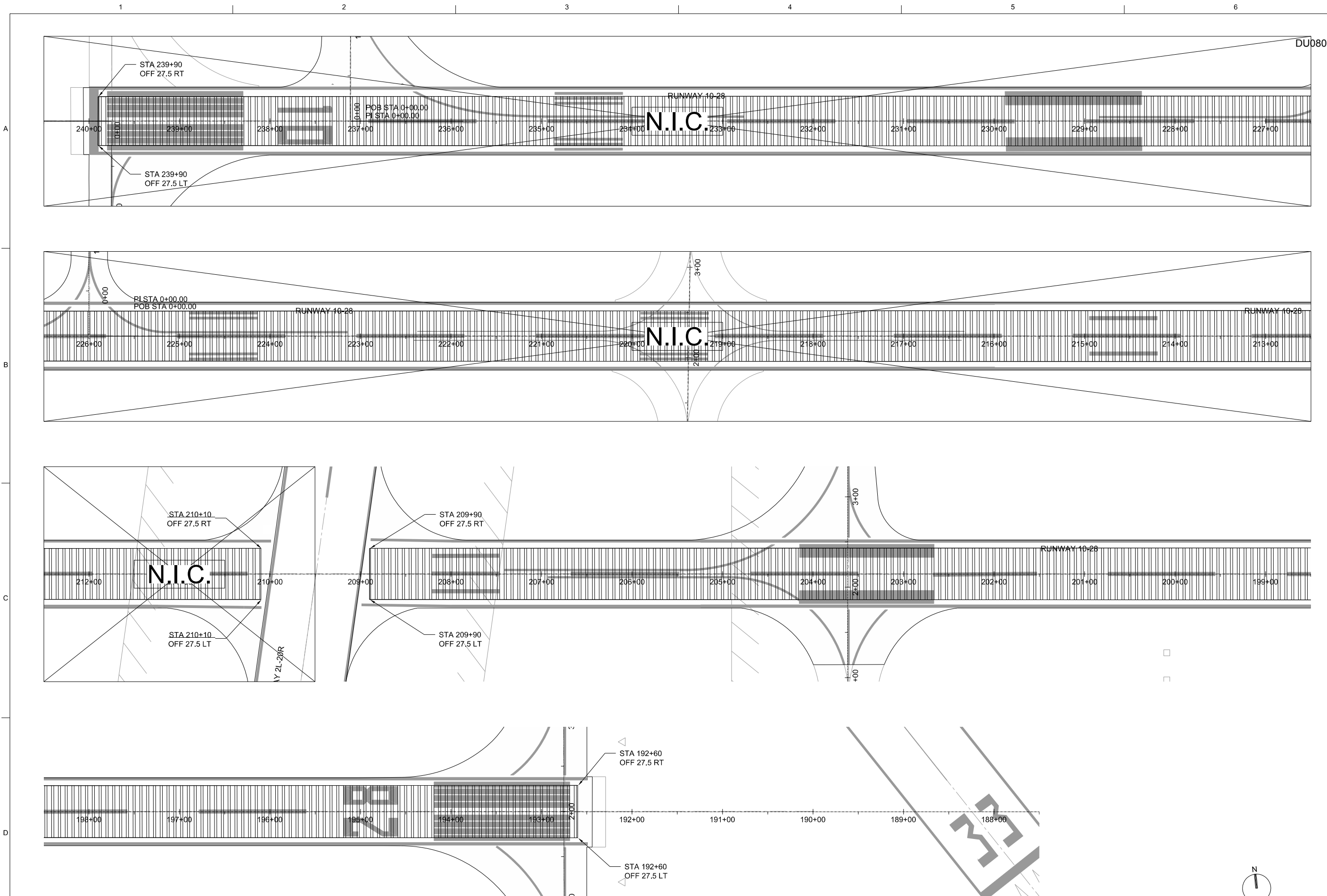
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RUNWAY 10-28 AND
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DUPAGE AIRPORT (DPA)
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PAVEMENT MARKING
DETAILS III

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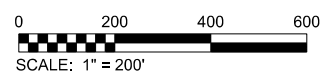
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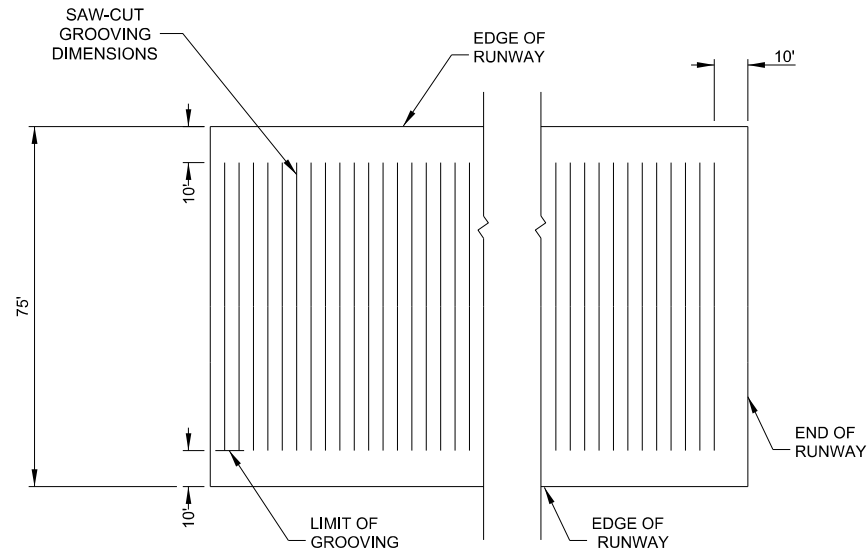
RUNWAY 10-28 AND
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DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

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PAVEMENT GROOVING PLAN

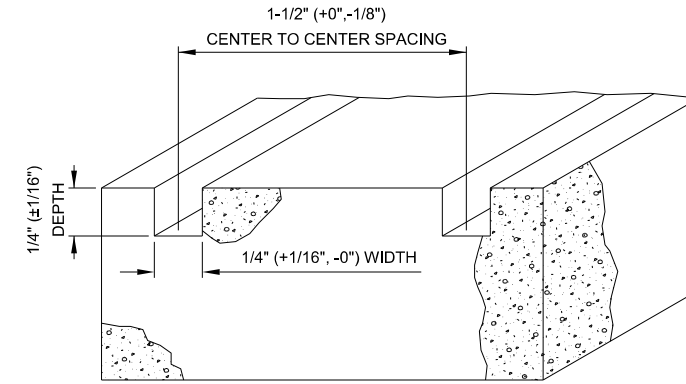
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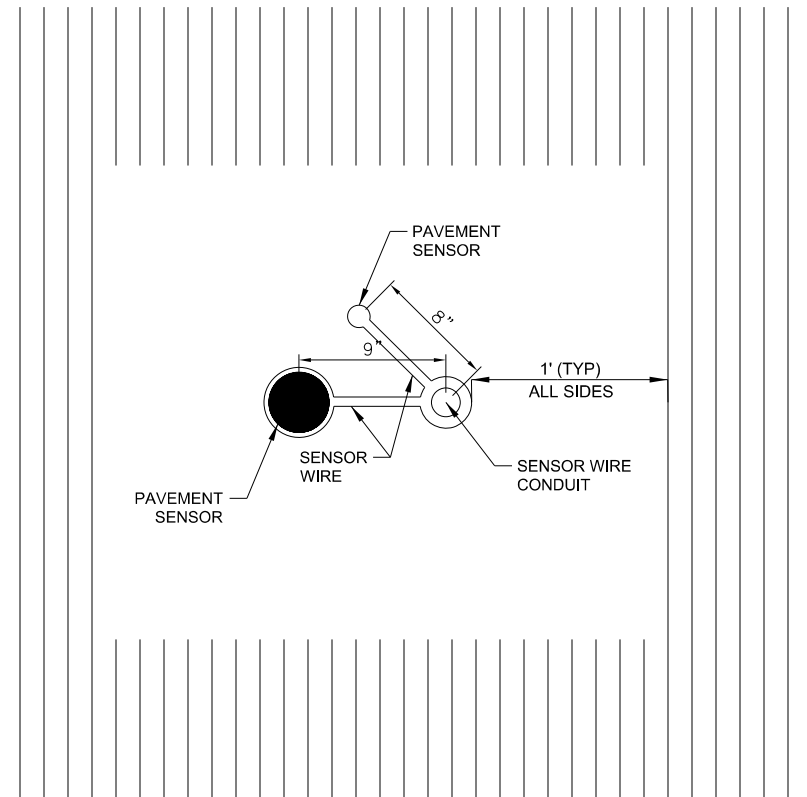
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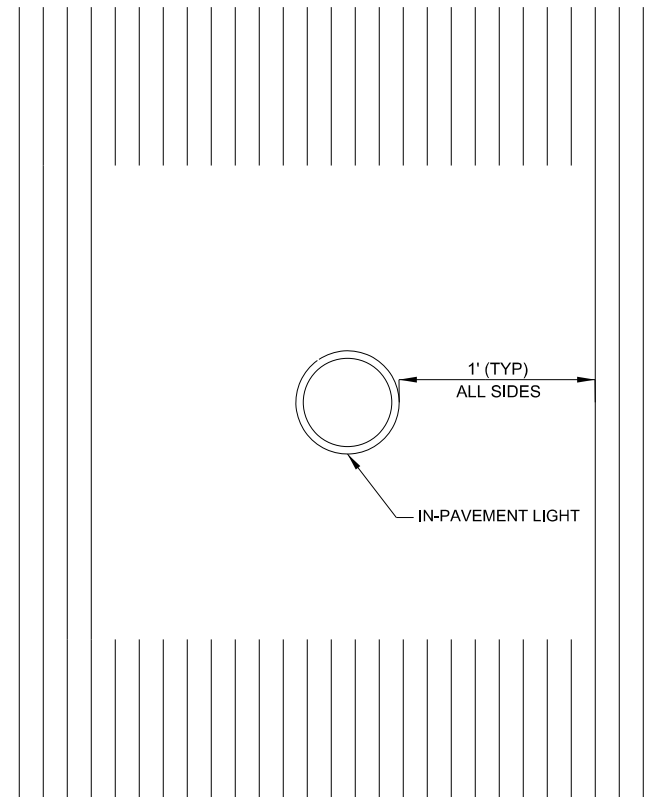
1 SAW-CUT GROOVING
NTS



2 SAW-CUT GROOVING DIMENSIONS
NTS



3 SAW-CUT GROOVING AT PAVEMENT SENSORS
NTS



4 SAW-CUT GROOVING AT IN-PAVEMENT LIGHTS
NTS

NOTES:

1. THE PROPOSED GROOVES SHALL BE CUT PERPENDICULAR TO THE RUNWAY CENTERLINE.
2. RUNWAY 10-28 SHALL BE GROOVED FROM STA. 192+60.00 TO STA. 209+90.00 AND STA. 210+10.00 TO STA. 239+90.00.
3. THE FAA STANDARD GROOVE CONFIGURATION IS 1/4 INCH ($\pm 1/16$ INCH) IN DEPTH BY 1/4 INCH ($+1/16$ INCH, -0 INCH) IN WIDTH BY 1 1/2 INCH ($- 1/8$ INCH, $+ 0$ INCH) CENTER TO CENTER SPACING.
4. THE DEPTH OF 60 PERCENT OR MORE OF THE GROOVES SHALL NOT BE LESS THAN 1/4 INCH.
5. THE GROOVES SHALL BE TERMINATED WITHIN 10 FEET OF THE RUNWAY PAVEMENT EDGE TO ALLOW ADEQUATE SPACE FOR OPERATION OF THE GROOVING EQUIPMENT.
6. THE GROOVES SHALL NOT VARY MORE THAN 3 INCHES IN ALIGNMENT FOR 75 FEET ALONG THE RUNWAY LENGTH, ALLOWING FOR REALIGNMENT EVERY 500 FEET ALONG THE RUNWAY LENGTH.
7. PAVEMENT FOR 1' ON ALL SIDES OF PAVEMENT SENSORS SHALL NOT BE GROOVED.
8. ALL SOLID MATERIAL GENERATED FROM THE GROOVING OPERATIONS SHALL BE PICKED UP AND DISPOSED OF AT AN APPROVED LAND FILL OFF THE AIRPORT SITE, AT THE CONTRACTORS OWN EXPENSE.
9. NO MATERIAL WHICH IS HARMFUL TO VEGETATION SHALL BE FLUSHED FROM THE GROOVED PAVEMENT ONTO THE TURFED SHOULDER, BUT SHALL BE PICKED UP AND HAULED TO A LOCATION OFF THE AIRPORT SITE AT THE CONTRACTOR'S OWN EXPENSE.
10. IMMEDIATELY FOLLOWING THE GROOVING MACHINE THE PAVEMENT SHALL BE FLUSHED, CLEANED AND CLEARED OF ALL MATERIAL GENERATED BY THE GROOVING OPERATION.

BITUMINOUS PAVEMENT CURE TIME

THE CONTRACTOR SHALL NOT PROCEED WITH GROOVING UNTIL NEW BITUMINOUS SURFACE COURSE HAS CURED FOR A MINIMUM OF 30 CALENDAR DAYS. IF GROOVING OPERATIONS RESULT IN TEARING OF THE MAT OR DISPLACEMENT OF THE AGGREGATE IN THE MAT THE CONTRACTOR SHALL CEASE GROOVING OPERATIONS UNTIL THE PAVEMENT HAS ADEQUATELY CURED.

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PAVEMENT GROOVING
DETAILS

















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ELECTRICAL NOTES

1. THE WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL SAFETY CODE, NATIONAL ELECTRICAL CODE, FEDERAL AVIATION ADMINISTRATION SPECIFICATIONS/ ADVISORY CIRCULARS AND ORDERS, AND APPLICABLE LOCAL BUILDING CODES.
2. NEW MATERIALS SHALL BE U.L. LISTED.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS AND APPROVALS.
4. ALL MATERIALS SCHEDULED FOR REMOVAL SUCH AS EXISTING LIGHTS, TRANSFORMERS, ETC. WHICH ARE DEEMED SALVAGABLE BY DAA, SHALL BE DELIVERED TO THE LOCATION ON AIRPORT PROPERTY AS INDICATED BY THE OWNER'S REPRESENTATIVE. ALL NON SALVAGABLE MATERIALS REMOVED SUCH AS CONCRETE FOUNDATIONS, CONDUIT, CONDUCTORS, ETC. SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
5. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATIONS. NOT ALL UTILITIES MAY BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY/AGENCY PRIOR TO STARTING WORK FOR THE LOCATION OF EXISTING UTILITIES. ANY INTERRUPTION OF AN EXISTING SYSTEM OR UTILITY SERVICE SHALL BE COORDINATED AND APPROVED BY THE AUTHORITY, AGENCY OR UTILITY HAVING JURISDICTION. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL CONTACT ALL LOCAL UTILITIES TO ALLOW THEM TIME TO PROPERLY LOCATE ALL UTILITIES.
6. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE DAA AND FEDERAL AVIATION ADMINISTRATION PRIOR TO AND DURING CONSTRUCTION TO ENSURE THAT ALL ELECTRICAL CIRCUITS AND FACILITIES HAVE BEEN LOCATED, FLAGGED AND ACCOUNTED FOR AND THAT ALL NECESSARY CIRCUITS HAVE BEEN DETERMINED PRIOR TO INITIATING CONSTRUCTION IN ANY LOCATION.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THAT ALL CIRCUITS, EXCEPT THOSE THAT ARE SERVING CLOSED TAXIWAYS OR RUNWAYS, ARE COMPLETELY OPERATIONAL USING TOWER CONTROLS AT THE END OF EACH WORK DAY AND SHALL SO CERTIFY TO THE OWNER'S REPRESENTATIVE BEFORE LEAVING THE SITE EACH DAY.
8. ALL EXISTING SYSTEMS/UTILITIES TO REMAIN SHALL BE PROTECTED FROM DAMAGE. REPLACEMENT OF ANY DAMAGED EXISTING SYSTEMS/UTILITIES SHALL BE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGED ELECTRICAL SYSTEMS AND SHALL MAKE REPAIRS IMMEDIATELY, AT HIS OWN COST, IN ACCORDANCE WITH APPLICABLE FAA SPECIFICATIONS. DAMAGED ELECTRICAL SYSTEMS SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S REPRESENTATIVE.

9. THE CONTRACTOR SHALL UTILIZE A LOCATION SERVICE AS WELL HAVE A CABLE TRACER AVAILABLE TO LOCATE THE EXISTING CABLES AND HAND DIGGING SHALL BE UNDERTAKEN WITHIN TEN (10) FEET OF ANY KNOWN OR SUSPECTED EXISTING UNDERGROUND CABLES AND UTILITIES WHICH ARE NOT TO BE DISTURBED.
10. ITEMS SHOWN IN GREY OR THIN ARE EXISTING ITEMS AND ITEMS SHOWN IN SOLID (BOLD) ARE NEW AND TO BE INSTALLED UNDER THIS CONTRACT UNLESS OTHERWISE NOTED.
11. REFER TO CIVIL PLANS FOR AIRFIELD GEOMETRY AND MARKING PLANS WITH RESPECT TO PAVEMENT SENSOR LOCATIONS.
12. THE PROJECT PAY ITEMS ARE PROVIDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THESE PLANS. ALL WORK TO BE IDENTIFIED WITH A SPECIFIC PAY ITEM IS TO BE CONSIDERED REQUIRED WORK TO COMPLETE THE PROJECT AND IS TO BE SUBSIDIARY TO THE COST OF PROJECT PAY ITEMS PROVIDED.
13. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK.
14. THE CONTRACTOR SHALL CONDUCT INSULATION RESISTANCE TO GROUND TESTS (MEGGER) ON EACH CIRCUIT AFFECTED BY THIS WORK BEFORE COMMENCING WORK ON THAT CIRCUIT. CONTRACTOR SHALL PREPARE AND FORWARD TO THE OWNER'S REPRESENTATIVE A WRITTEN REPORT, BY CIRCUIT, OF THESE RESULTS. THE CONTRACTOR SHALL REPEAT THIS TEST ON EACH AFFECTED CIRCUIT AFTER COMPLETION OF THE WORK. RESULTS OF BOTH TESTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE.
15. THE IDENTITY AND ROUTING OF ALL CABLES SHOWN ON THE PLANS SHALL BE VERIFIED IN THE FIELD. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND RECORDED IN THE AS-BUILT DRAWINGS TO PROVIDE AN ACCURATE RECORD OF CONDITIONS. THE CONTRACTOR SHALL COORDINATE INFORMATION SHOWN ON THE PLAN SHEETS WITH EXISTING RECORD INFORMATION AVAILABLE THROUGH DAA. THESE PLANS DO NOT PURPORT TO SHOW ALL EXISTING CABLES/CONCEALED UTILITIES WHICH WILL REQUIRE STAKE OUT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING CIRCUIT ROUTING PRIOR TO COMMENCING WORK.
16. DEMOLITION OF EXISTING SYSTEMS, INTERIM OPERATION OF REMAINING SYSTEMS, AND CONSTRUCTION OF NEW SYSTEMS SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PHASING PLANS AND COORDINATED WITH THE OWNER'S REPRESENTATIVE.
17. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO INSTALL THE EQUIPMENT AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE INCLUDED.
18. THE CONTRACTOR SHALL HAVE A TONE GENERATOR TYPE CABLE TRACER ON SITE AT ALL TIMES TO LOCATE EXISTING CABLES.
19. THE AUTHORITY AND FAA "LOCK/TAG/TRY" PROCEDURE AND NFPA 70E SHALL BE COMPLIED WITH BY THIS CONTRACTOR. THE CONTRACTOR SHALL MANUALLY LOCK OUT EACH CIRCUIT AT THE VAULT WHEN WORK IS BEING PERFORMED ON THE CIRCUIT. THE CIRCUIT SHALL BE TAGGED AND THE CONTRACTOR'S NAME SHALL BE CLEARLY IDENTIFIED ON EACH TAG. THE CONTRACTOR SHALL HAVE A LOCK OUT KIT ON SITE AT ALL TIMES. THE OWNER SHALL BE NOTIFIED EACH TIME A CIRCUIT IS SECURED AND EACH TIME THE CIRCUIT IS RETURNED TO REMOTE CONTROL. THE CONTRACTOR WILL DESIGNATE ONE INDIVIDUAL IN WRITING WHO WILL BE RESPONSIBLE FOR VAULT ACCESS AND FOR LOCK-OUT/TAG-OUT PROCEDURES. THE CONTRACTOR SHALL PROVIDE DAILY COORDINATION WITH THE ENGINEER FOR VAULT ACCESS AND CIRCUIT INTERRUPTION. WEATHER AND OTHER CONSIDERATION MAY PRECLUDE CIRCUIT INTERRUPTION.

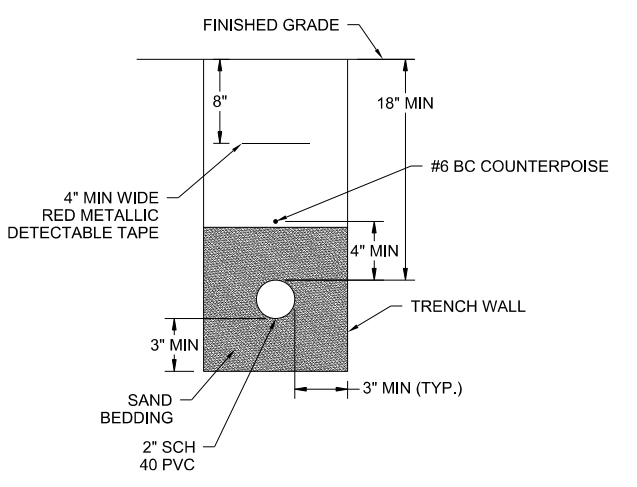
LEGEND:

-  EXISTING TAXIWAY EDGE LIGHT
-  EXISTING GUIDANCE SIGN
-  EXISTING SEMI FLUSH RUNWAY EDGE LIGHT
-  EXISTING RUNWAY EDGE LIGHT
-  EXISTING RUNWAY CENTERLINE LIGHT
-  EXISTING RUNWAY THRESHOLD LIGHT
-  SURFACE SENSOR TYPE V CONTROL CABLE DEB
-  EXISTING SURFACE SENSOR JUNCTION BOX
-  EXISTING DUCTBANK
-  EXISTING MANHOLE/HANDHOLE
-  EXISTING REIL
-  PROPOSED L-867B 24" DEEP PULL CAN
-  PROPOSED IN-PAVEMENT SURFACE SENSOR
-  PROPOSED SUB-SURFACE TEMPERATURE PROBE
-  PROPOSED 2" SCH. 80 PVC UNDER PAVEMENT
-  PROPOSED 2" SURFACE SENSOR TYPE V CONTROL CABLES IN 2" DEB CONDUIT, SEE DETAIL 1 THIS SHEET

ELECTRICAL ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BL	BASE LINE
CKT	CIRCUIT
C/L	CENTERLINE
DAA	DUPAGE REGIONAL AIRPORT AUTHORITY
DEB	DIRECT EARTH BURIED
FAA	FEDERAL AVIATION ADMINISTRATION
HH	HANDHOLE
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
NEC	PER LATEST NATIONAL ELECTRIC CODES
NO., #	NUMBER
NTS	NOT TO SCALE
PAPI	PRECISION APPROACH PATH INDICATOR
PCC	PORTLAND CEMENT CONCRETE
PVC	POLYVINYL CHLORIDE
REILS	RUNWAY END IDENTIFIER LIGHTS
RPU	REMOTE PROCESSING UNIT
RW, R/W	RUNWAY
SCH. 40	SCHEDULE 40
SCH. 80	SCHEDULE 80
SS	SURFACE SENSOR
STA	STATION
TW, T/W	TAXIWAY
TYP., (TYP)	TYPICAL
V	VOLT
VASI	VISUAL APPROACH SLOPE INDICATOR

DU080



1 DIRECT-BURIED 2" PVC CONDUIT
N.T.S.



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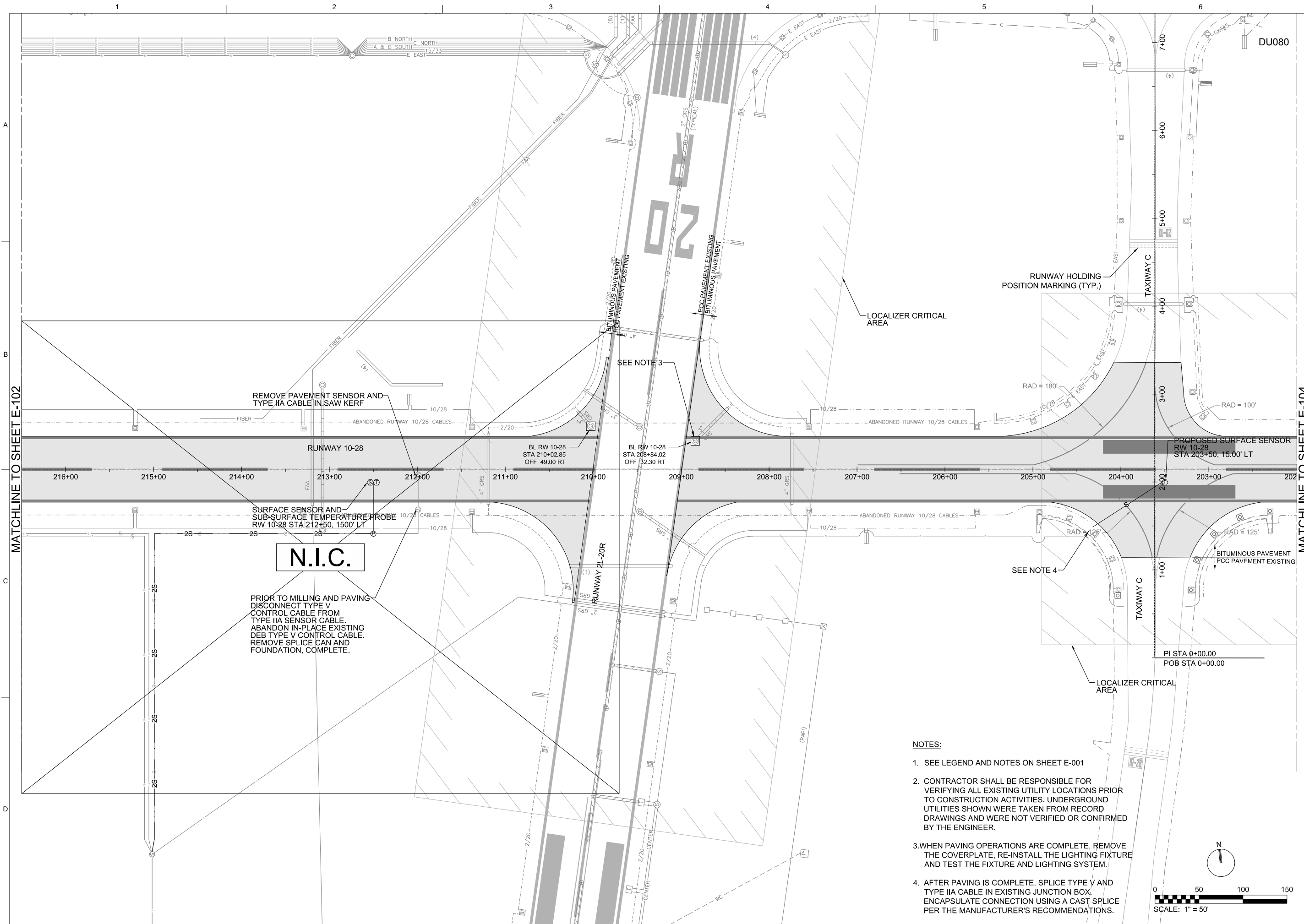
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**ELECTRICAL NOTES
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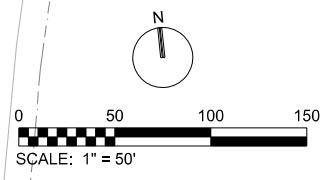


N.I.C.

PRIOR TO MILLING AND PAVING DISCONNECT TYPE V CONTROL CABLE FROM TYPE IIA SENSOR CABLE. ABANDON IN-PLACE EXISTING DEB TYPE V CONTROL CABLE. REMOVE SPLICE CAN AND FOUNDATION, COMPLETE.

NOTES:

- SEE LEGEND AND NOTES ON SHEET E-001
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION ACTIVITIES. UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM RECORD DRAWINGS AND WERE NOT VERIFIED OR CONFIRMED BY THE ENGINEER.
- WHEN PAVING OPERATIONS ARE COMPLETE, REMOVE THE COVERPLATE, RE-INSTALL THE LIGHTING FIXTURE AND TEST THE FIXTURE AND LIGHTING SYSTEM.
- AFTER PAVING IS COMPLETE, SPLICE TYPE V AND TYPE IIA CABLE IN EXISTING JUNCTION BOX. ENCAPSULATE CONNECTION USING A CAST SPLICE PER THE MANUFACTURER'S RECOMMENDATIONS.



MATCHLINE TO SHEET E-102

MATCHLINE TO SHEET E-104



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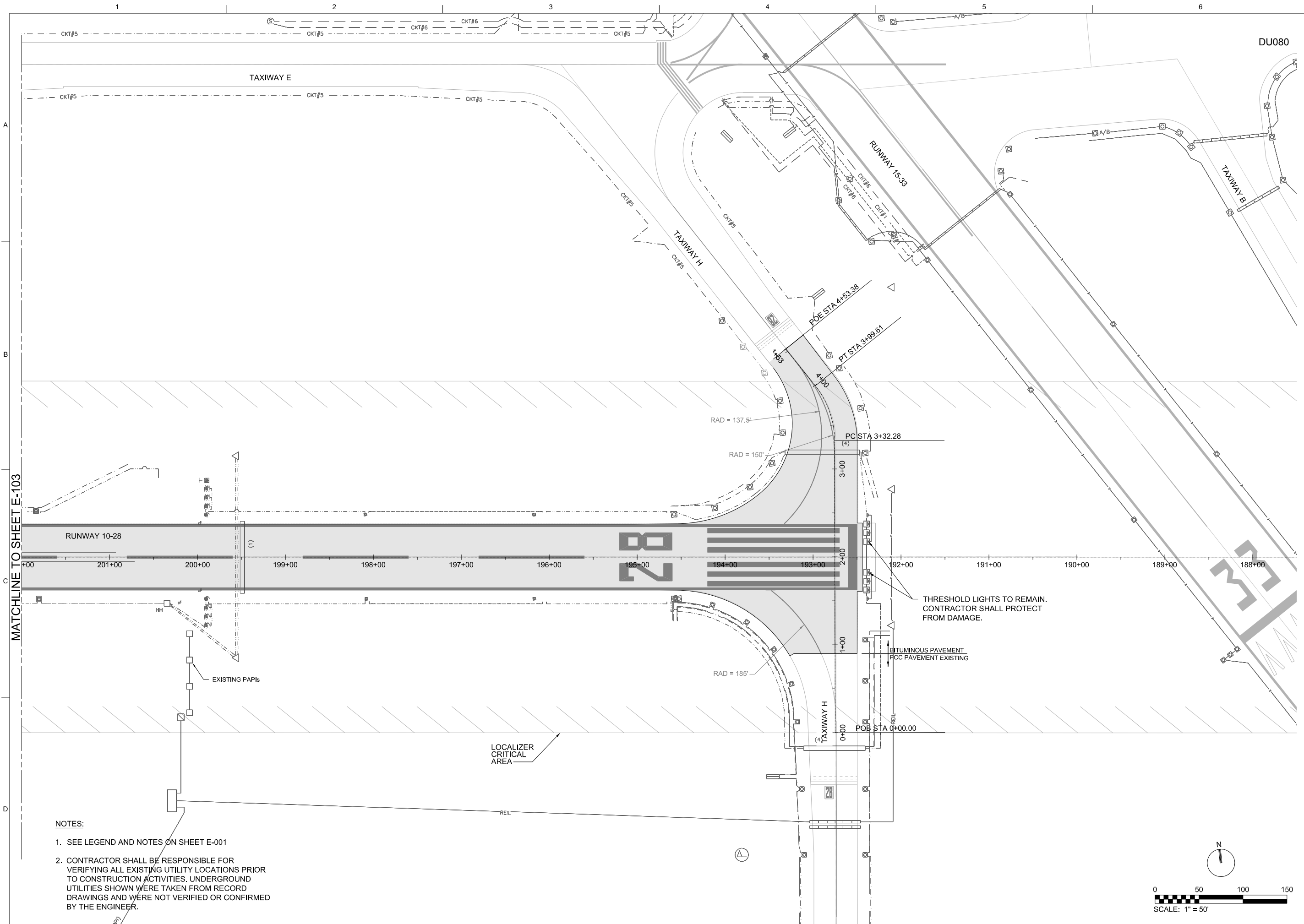
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- NOTES:**
1. SEE LEGEND AND NOTES ON SHEET E-001
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION ACTIVITIES. UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM RECORD DRAWINGS AND WERE NOT VERIFIED OR CONFIRMED BY THE ENGINEER.



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SENSOR PLAN IV	
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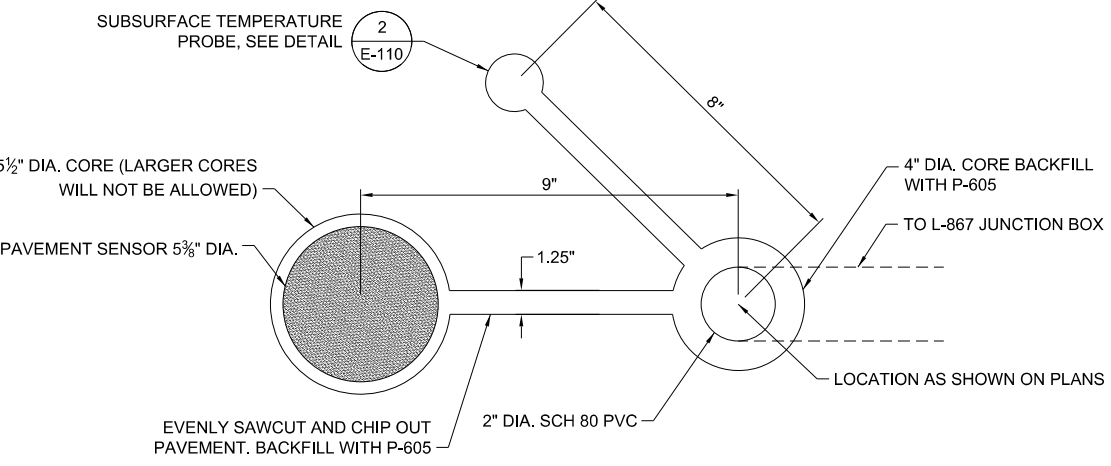
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DU080

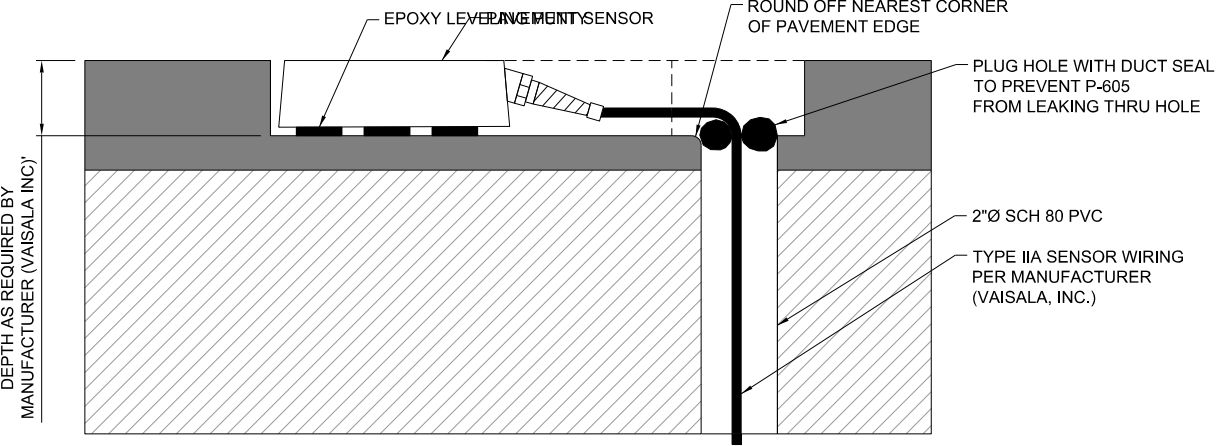
- 1. VERIFY EXACT INSTALLATION REQUIREMENTS WITH SURFACE SENSOR MANUFACTURER.
- 2. CONTRACTOR SHALL INSTALL THE VERTICAL 2" PVC CONDUIT AT THE EXACT LOCATION REQUIRED FOR EACH SURFACE SENSOR. PERMANENT METAL CONDUIT SUPPORTS SHALL NOT BE USED, AS THEY AFFECT THE SENSOR.
- 3. THE PAVEMENT SENSOR SYSTEM SHALL BE MANUFACTURED BY VAISALA, INC. THE CONTRACTOR MAY CONTACT BENNY BORRELLI AT VAISALA, INC. (314)569-1002.
- 4. REPRESENTATIVE.
- 5. CUT TYPE IIA SENSOR CABLES LONG ENOUGH TO MAKE CONNECTIONS A MINIMUM OF 2' ABOVE THE BASE CAN.

INSTALLATION NOTES:

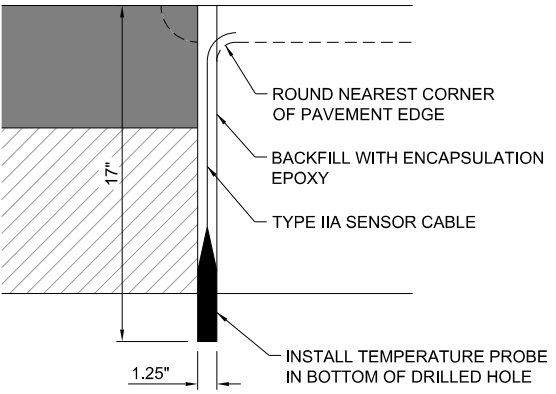
- 1. AFTER PAVEMENT MILLING, SAWCUT THE REMAINING PAVEMENT FOR INSTALLATION OF SENSOR DUCT.
- 2. INSTALL DUCT AND CAP THE VERTICAL END. SURVEY THE EXACT LOCATION OF THE DUCT CAP.
- 3. BACKFILL THE TRENCH TO GRADE WITH P-610.
- 4. NOT UNTIL AFTER THE PAVEMENT IS GROOVED SHALL CORING COMMENCE ON SENSOR PLACEMENT.
- 5. PLACE THE TOP EDGE OF THE PAVEMENT SENSOR TO MATCH THE TOP EDGE OF PAVEMENT GRADE.



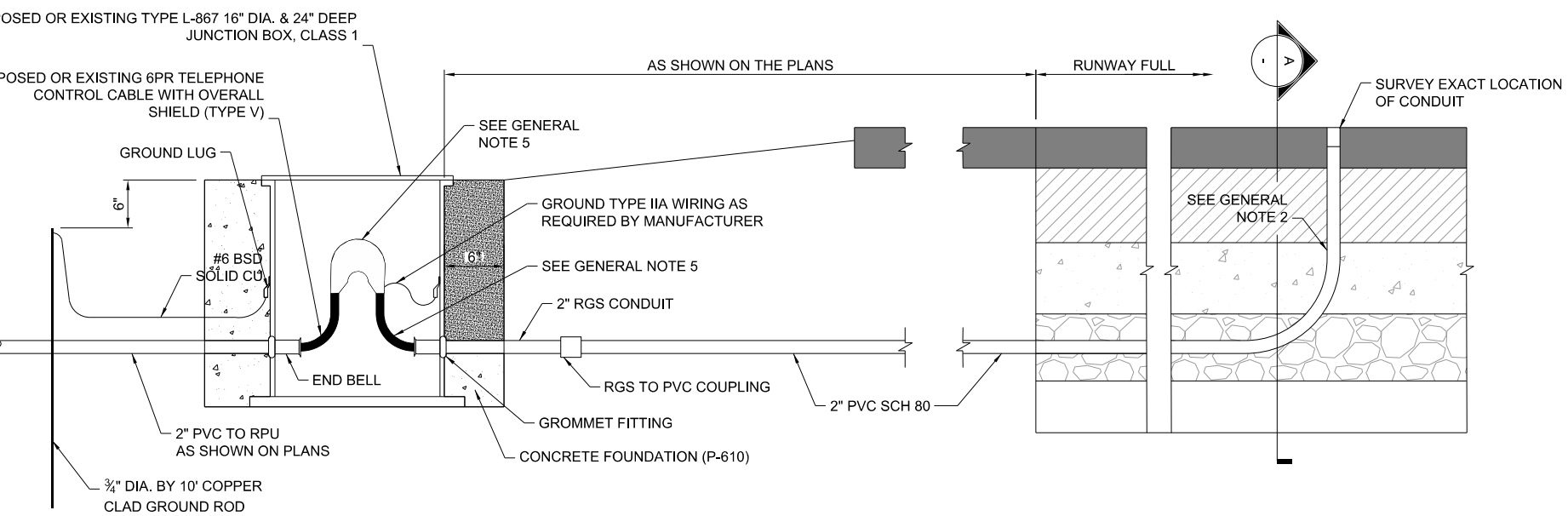
B PAVEMENT SENSOR AND SUB-SURFACE PROBE PLAN DETAIL
NTS



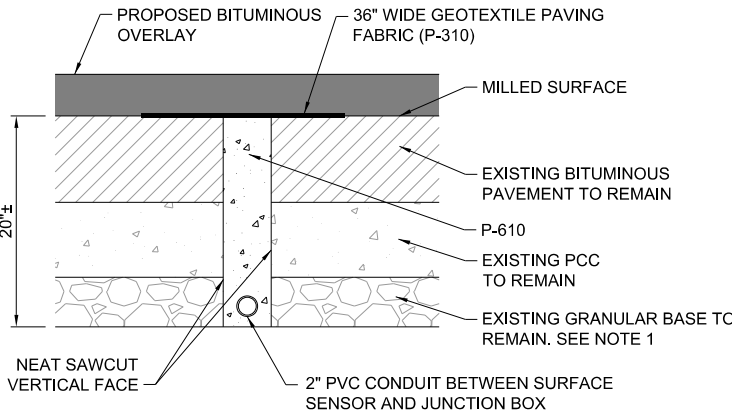
1 PAVEMENT SENSOR ELEVATION DETAIL
NTS



2 SUB-SURFACE TEMPERATURE PROBE ELEVATION DETAIL
NTS



3 RUNWAY SURFACE CONDITION SENSOR CONDUIT INSTALLATION
NTS



A SURFACE SENSOR CONDUIT INSTALLATION IN RUNWAY PAVEMENT - SECTION
NTS

- NOTES:**
- 1. BETWEEN THE RUNWAY EDGE-OF-PAVEMENT AND THE JUNCTION BOX, CONCRETE ENCASE THE PVC CONDUIT WITH 3" ENCASEMENT ALL AROUND.
 - 2. THE SURFACE SENSOR AND CABLE BETWEEN SENSOR AND JUNCTION BOX, AND ALL INCIDENTALS ARE PAYABLE UNDER THE SURFACE SENSOR PAY ITEM. JUNCTION BOX AND CONDUIT ARE PAYABLE UNDER THEIR RESPECTIVE PAY ITEM.



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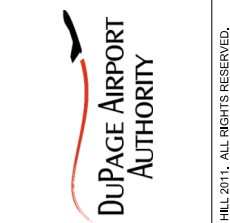
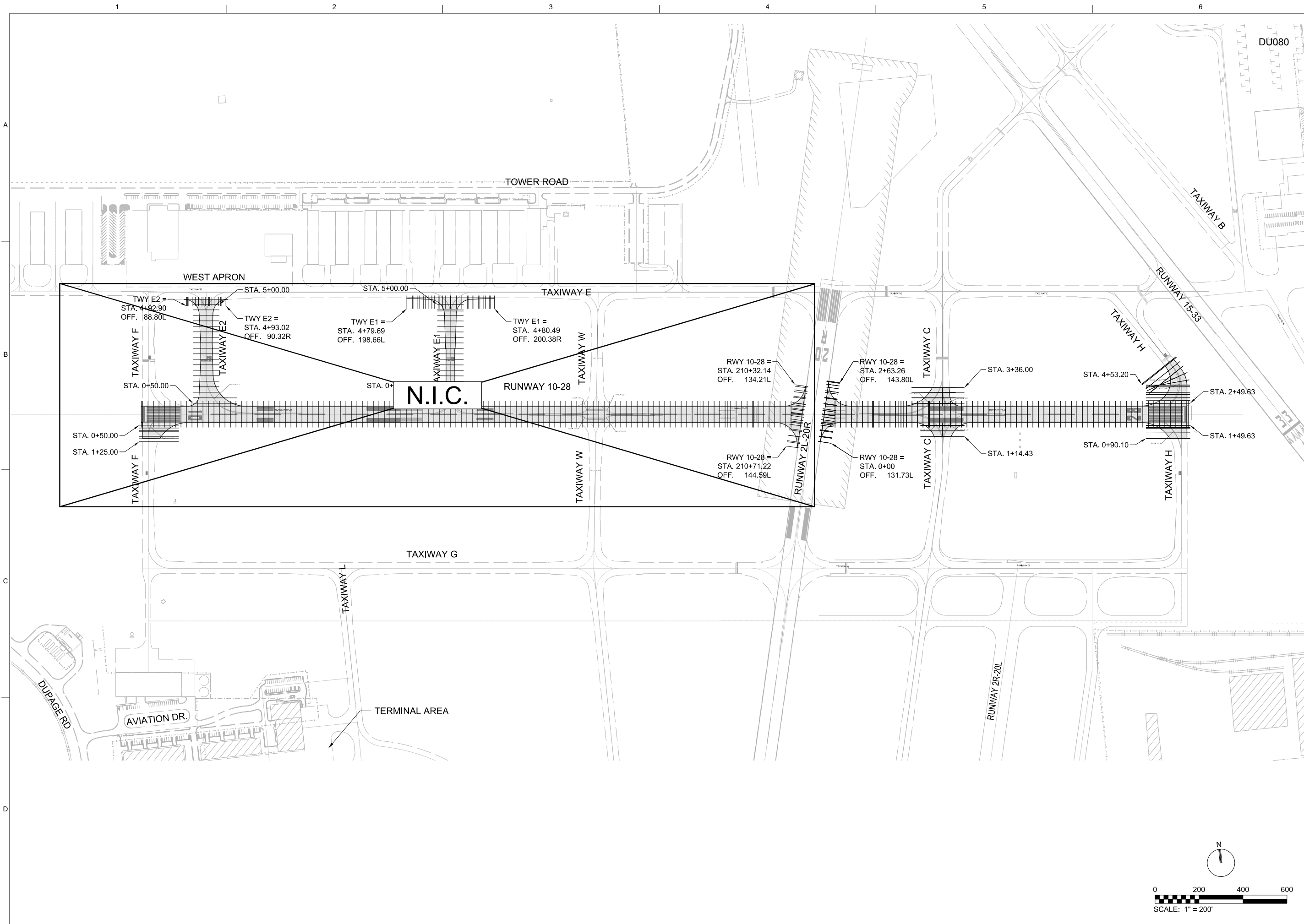
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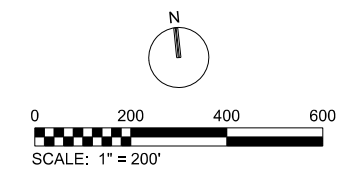


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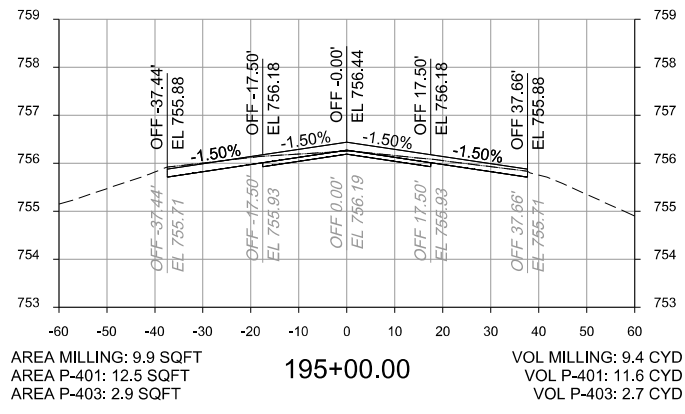
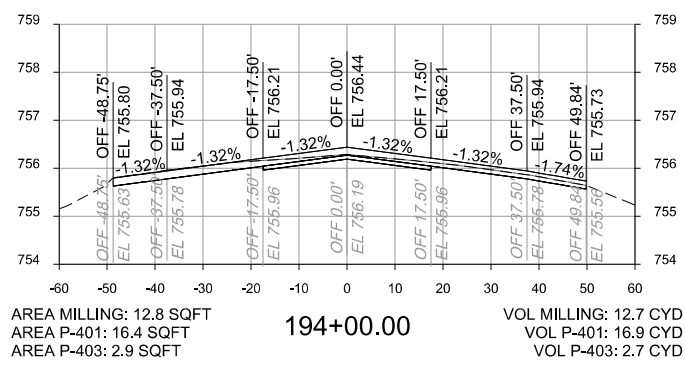
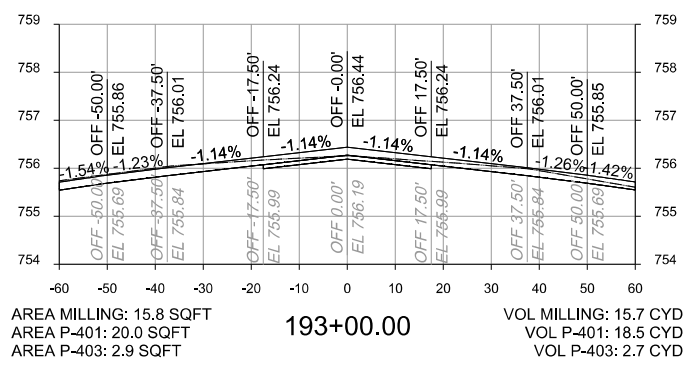
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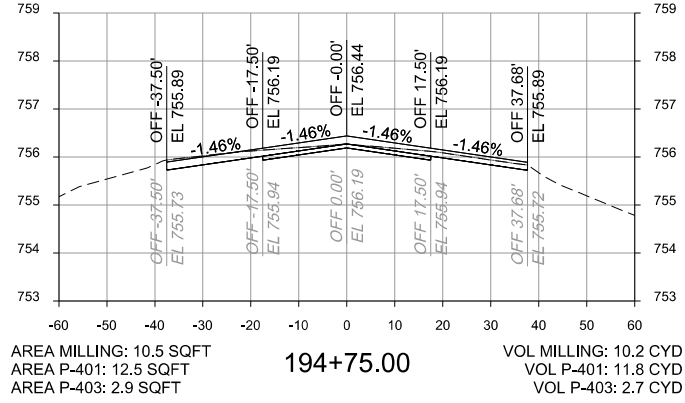
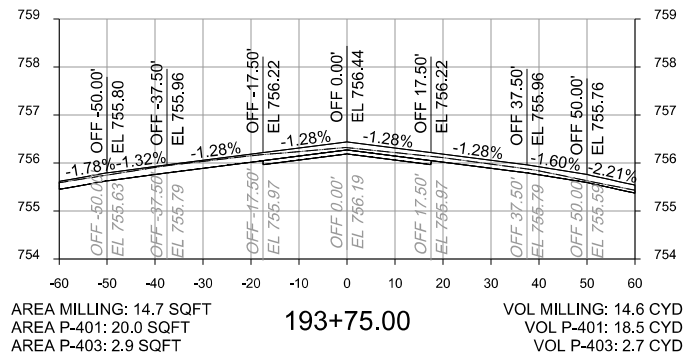
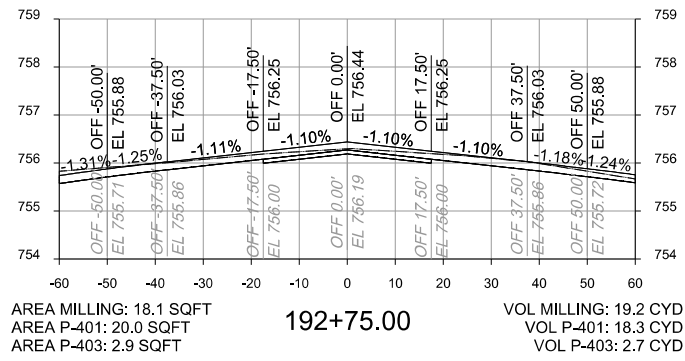


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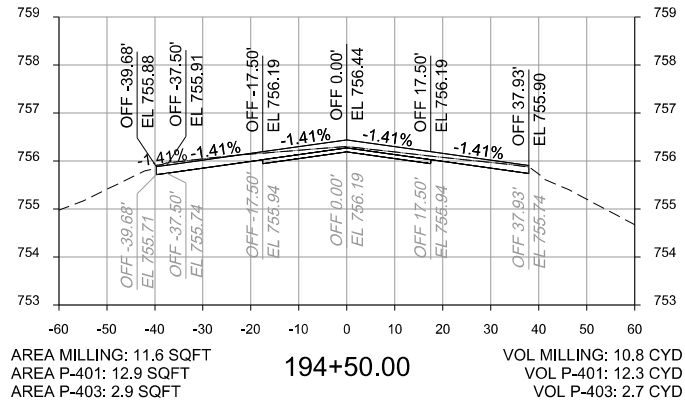
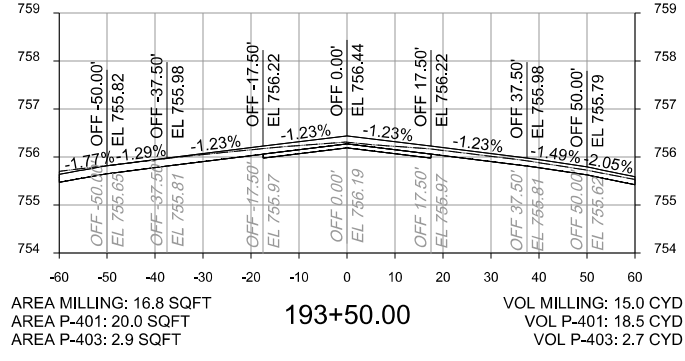
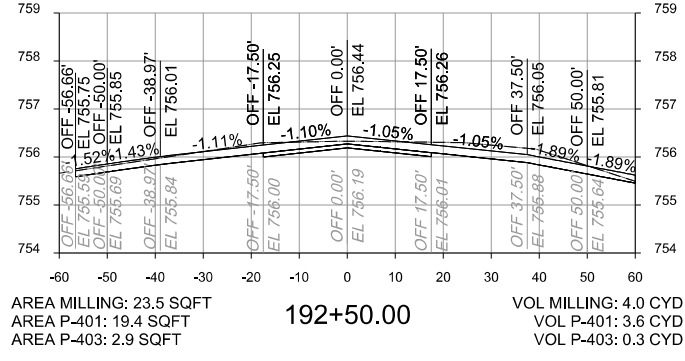
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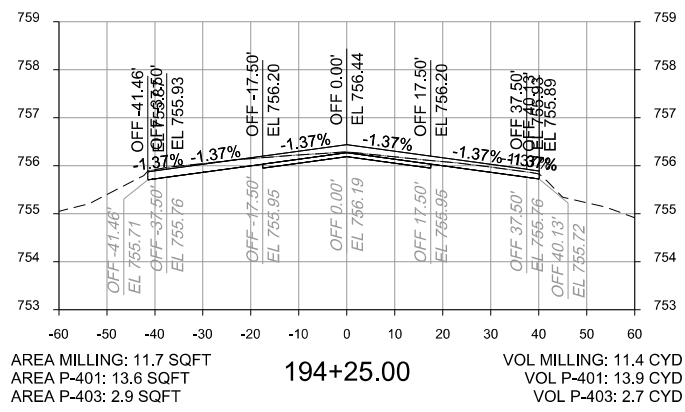
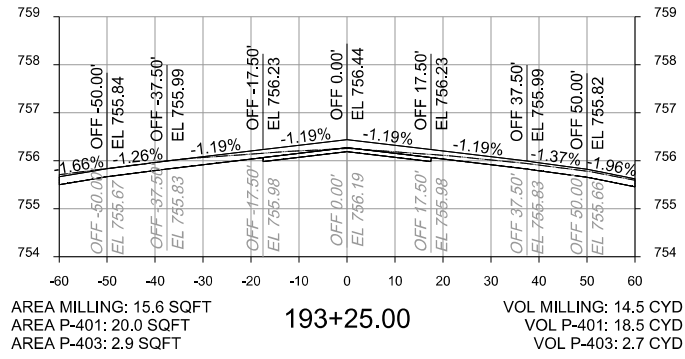
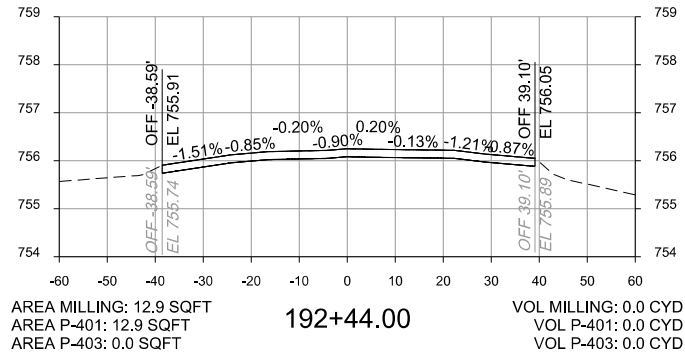
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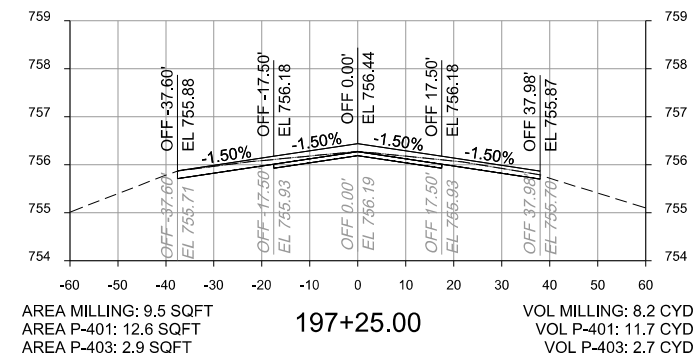
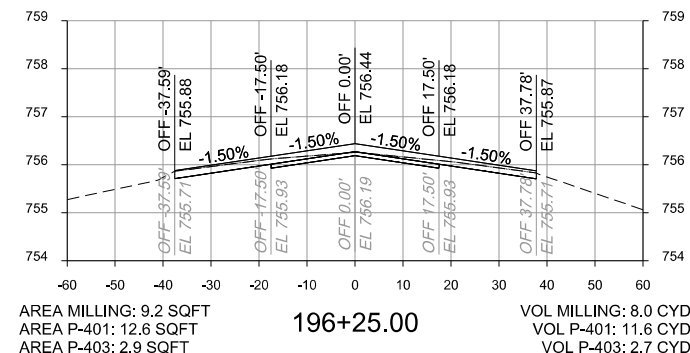
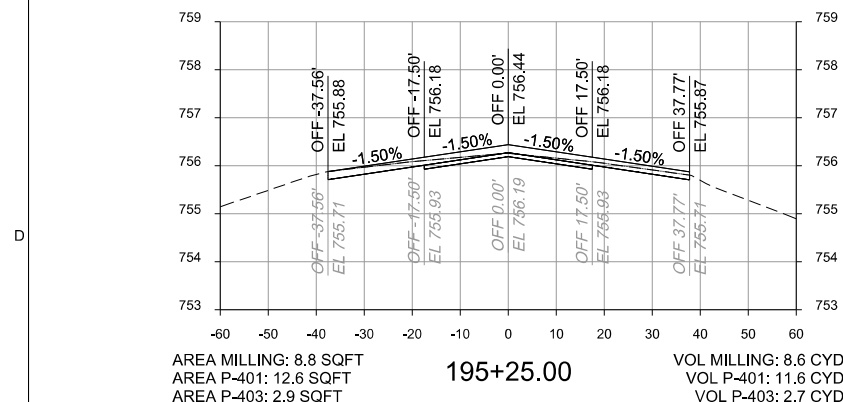
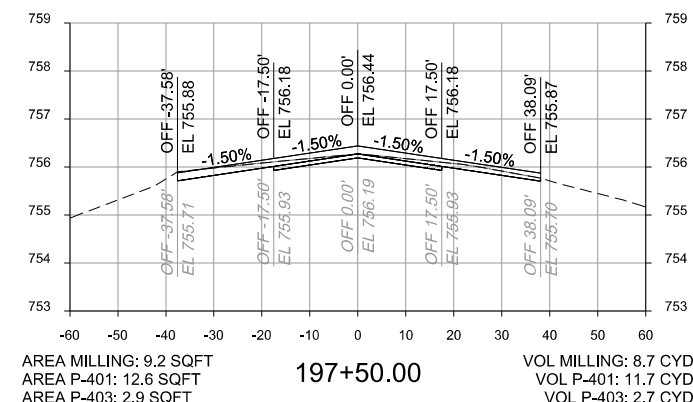
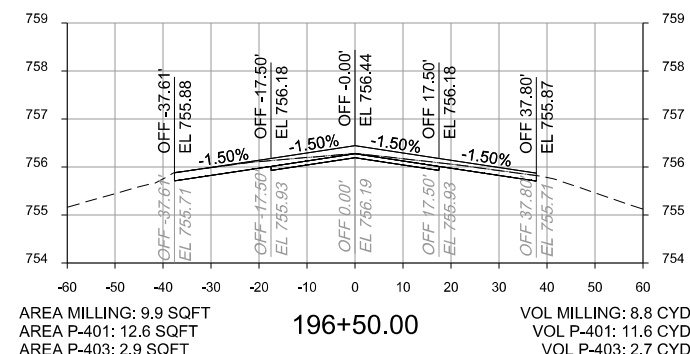
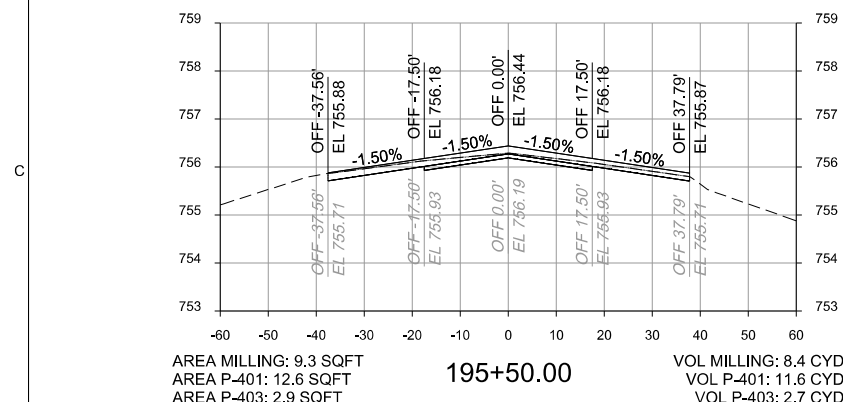
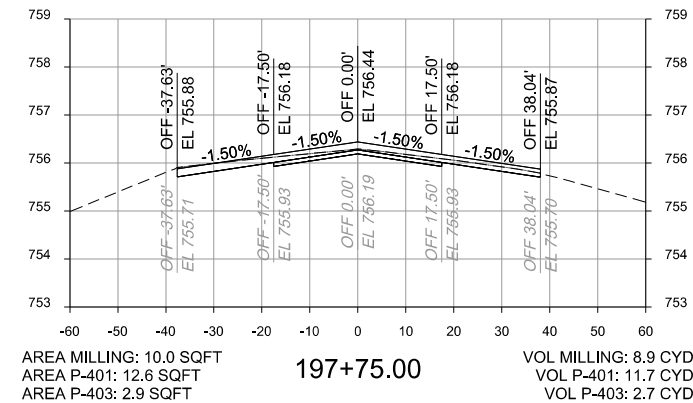
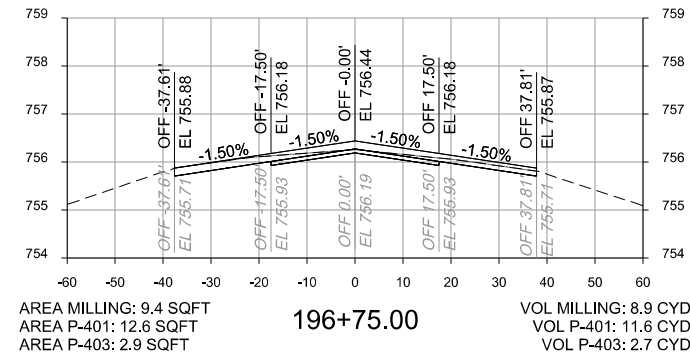
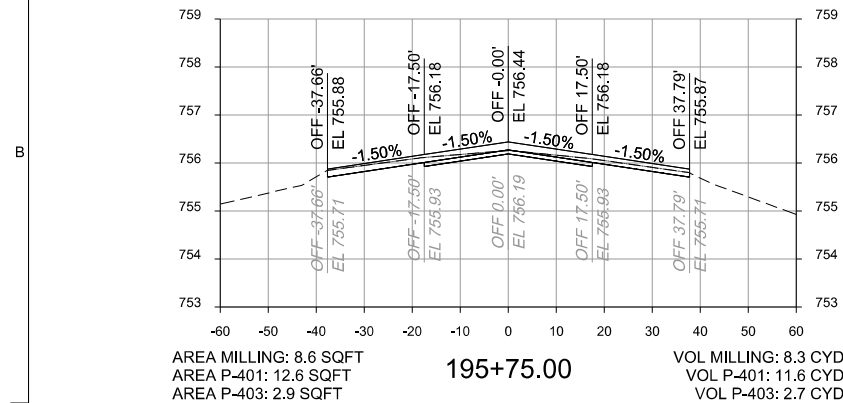
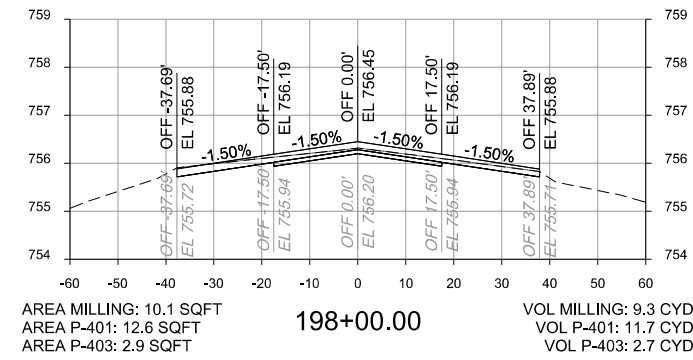
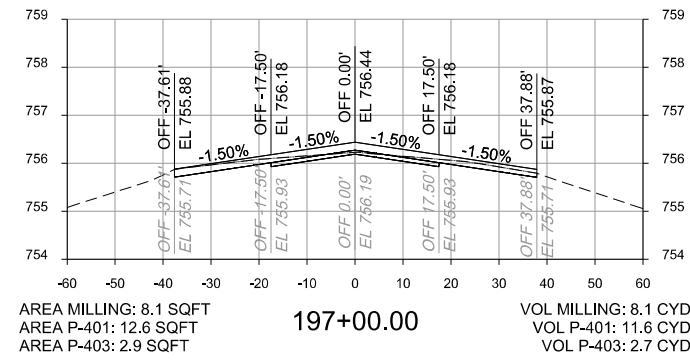
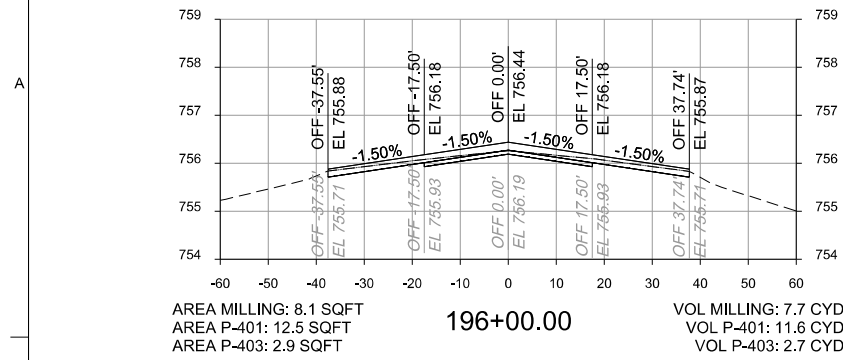
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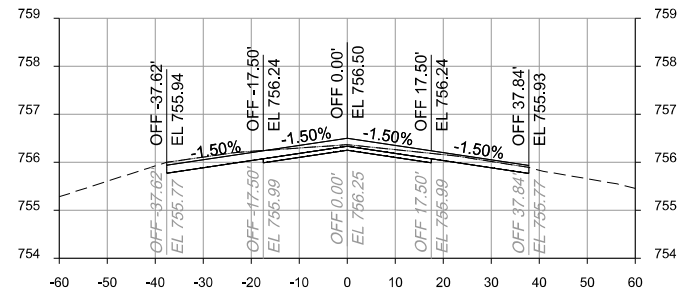
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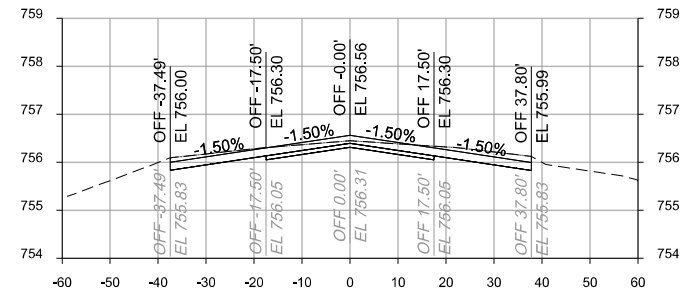
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AREA MILLING: 12.9 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

199+00.00

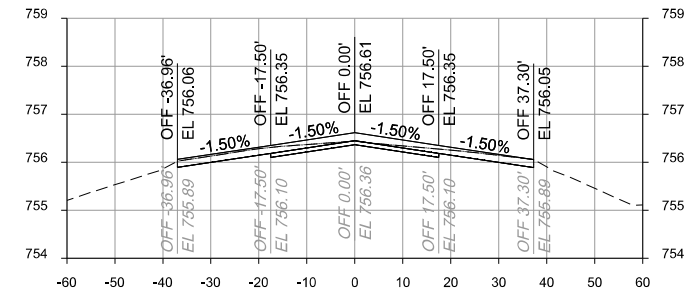
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 VOL P-401: 11.6 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 16.7 SQFT
 AREA P-401: 12.5 SQFT
 AREA P-403: 2.9 SQFT

200+00.00

VOL MILLING: 14.6 CYD
 VOL P-401: 11.6 CYD
 VOL P-403: 2.7 CYD

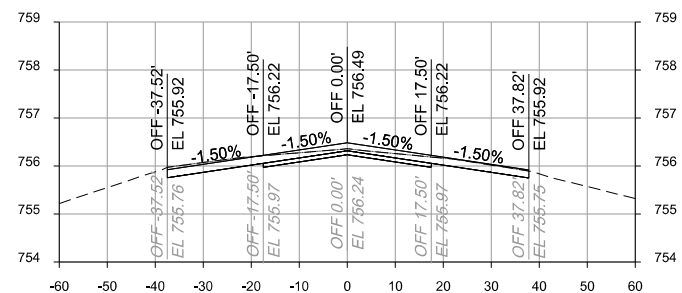


AREA MILLING: 9.9 SQFT
 AREA P-401: 12.4 SQFT
 AREA P-403: 2.9 SQFT

201+00.00

VOL MILLING: 10.2 CYD
 VOL P-401: 11.5 CYD
 VOL P-403: 2.7 CYD

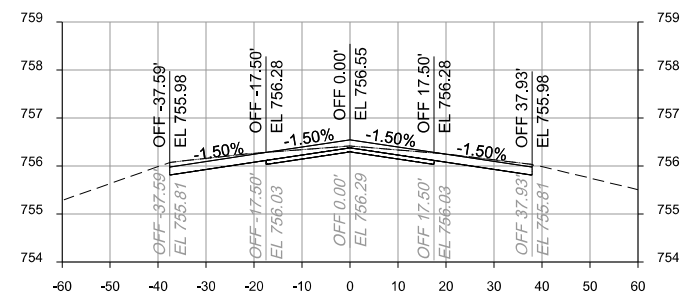
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AREA MILLING: 13.2 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

198+75.00

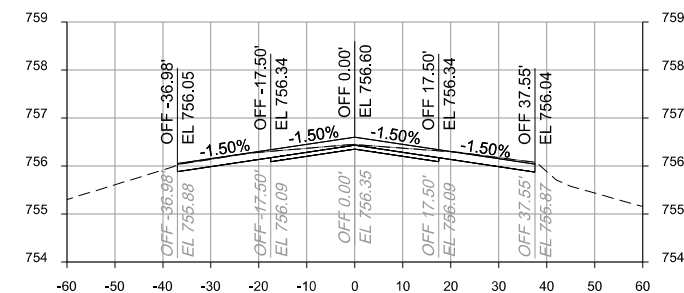
VOL MILLING: 11.9 CYD
 VOL P-401: 11.6 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 14.9 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

199+75.00

VOL MILLING: 12.9 CYD
 VOL P-401: 11.7 CYD
 VOL P-403: 2.7 CYD

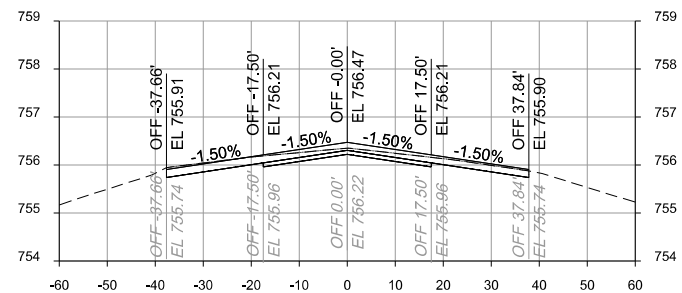


AREA MILLING: 12.2 SQFT
 AREA P-401: 12.4 SQFT
 AREA P-403: 2.9 SQFT

200+75.00

VOL MILLING: 12.4 CYD
 VOL P-401: 11.5 CYD
 VOL P-403: 2.7 CYD

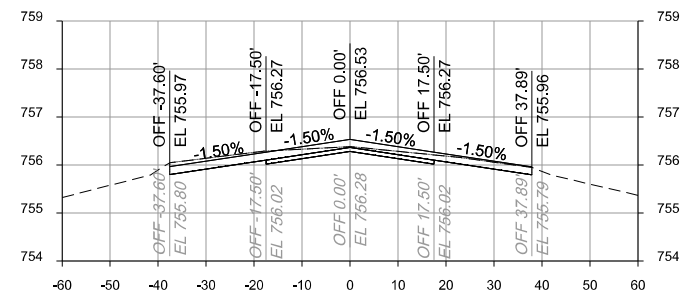
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AREA MILLING: 12.5 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

198+50.00

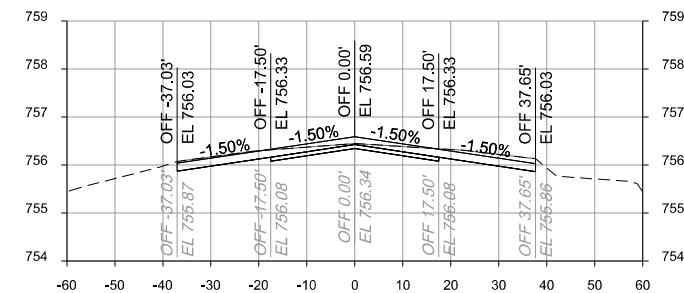
VOL MILLING: 10.7 CYD
 VOL P-401: 11.6 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 13.0 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

199+50.00

VOL MILLING: 11.3 CYD
 VOL P-401: 11.7 CYD
 VOL P-403: 2.7 CYD

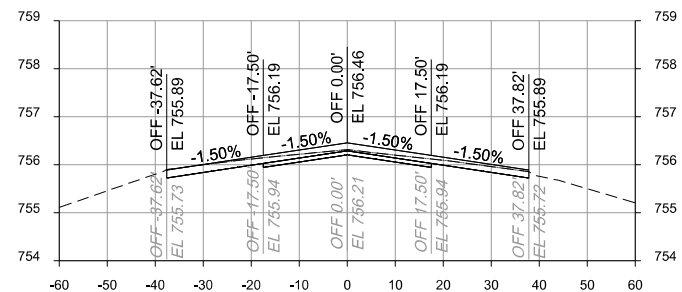


AREA MILLING: 14.5 SQFT
 AREA P-401: 12.4 SQFT
 AREA P-403: 2.9 SQFT

200+50.00

VOL MILLING: 15.0 CYD
 VOL P-401: 11.5 CYD
 VOL P-403: 2.7 CYD

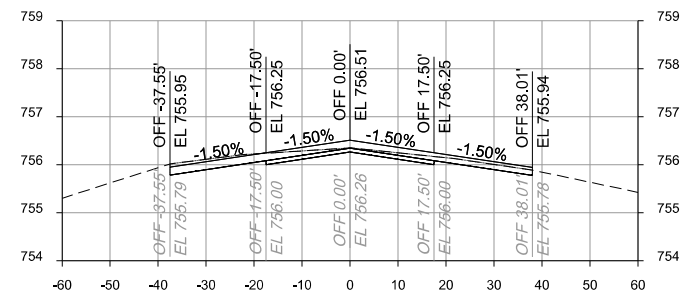
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AREA MILLING: 10.6 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

198+25.00

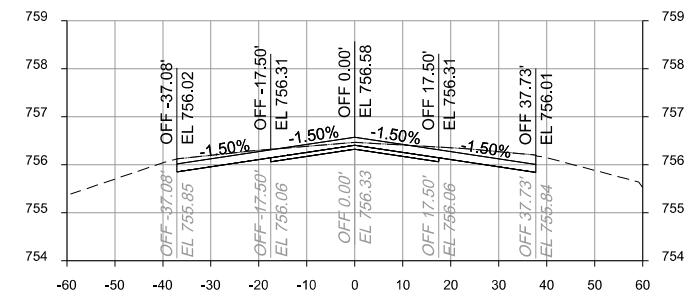
VOL MILLING: 9.6 CYD
 VOL P-401: 11.7 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 11.4 SQFT
 AREA P-401: 12.6 SQFT
 AREA P-403: 2.9 SQFT

199+25.00

VOL MILLING: 11.3 CYD
 VOL P-401: 11.7 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 17.9 SQFT
 AREA P-401: 12.5 SQFT
 AREA P-403: 2.9 SQFT

200+25.00

VOL MILLING: 16.0 CYD
 VOL P-401: 11.6 CYD
 VOL P-403: 2.7 CYD

8501 W. HIGGINS ROAD
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CROSS SECTIONS
 PROFILES
 RUNWAY

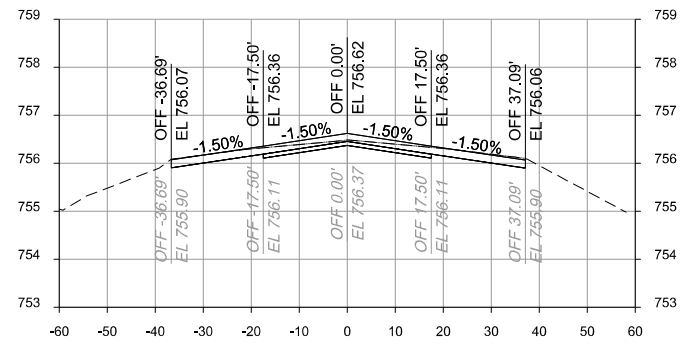
AS SHOWN	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	2012/02/03
PROJ	424278
DWG	X-514
SHEET	47 of 57

DU080



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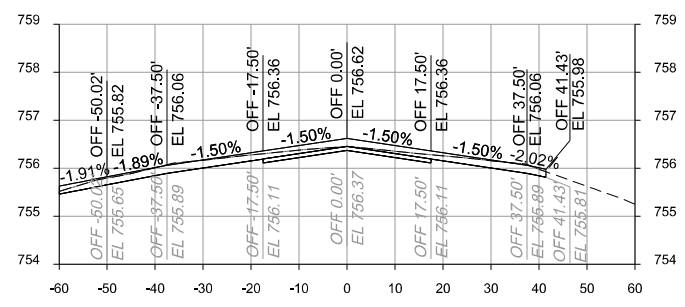
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AREA MILLING: 12.4 SQFT
 AREA P-401: 12.3 SQFT
 AREA P-403: 2.9 SQFT

202+00.00

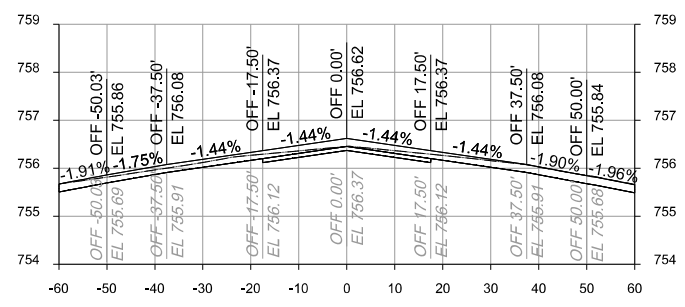
VOL MILLING: 10.2 CYD
 VOL P-401: 11.4 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 14.3 SQFT
 AREA P-401: 16.9 SQFT
 AREA P-403: 2.9 SQFT

203+00.00

VOL MILLING: 12.5 CYD
 VOL P-401: 14.5 CYD
 VOL P-403: 2.7 CYD

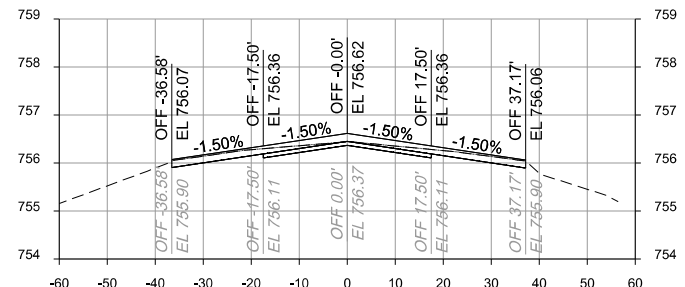


AREA MILLING: 15.8 SQFT
 AREA P-401: 20.0 SQFT
 AREA P-403: 2.9 SQFT

204+00.00

VOL MILLING: 14.5 CYD
 VOL P-401: 18.5 CYD
 VOL P-403: 2.7 CYD

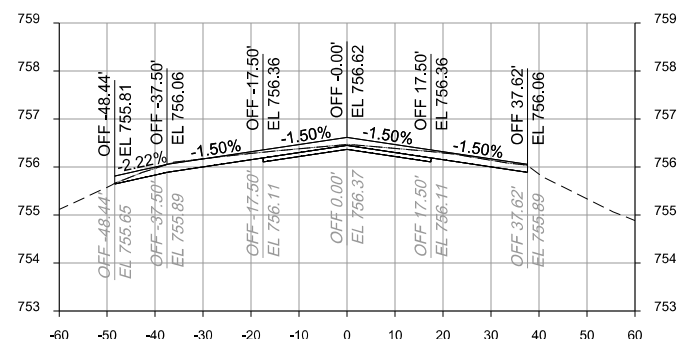
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AREA MILLING: 9.7 SQFT
 AREA P-401: 12.3 SQFT
 AREA P-403: 2.9 SQFT

201+75.00

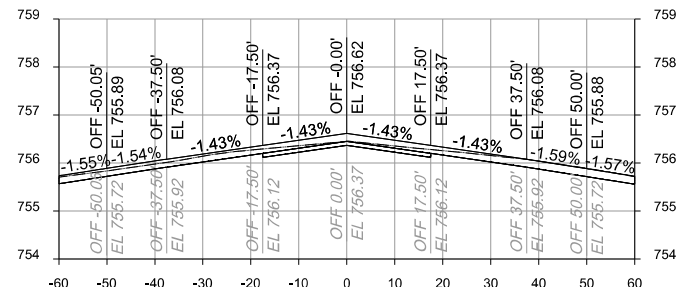
VOL MILLING: 8.4 CYD
 VOL P-401: 11.4 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 12.6 SQFT
 AREA P-401: 14.3 SQFT
 AREA P-403: 2.9 SQFT

202+75.00

VOL MILLING: 11.2 CYD
 VOL P-401: 12.6 CYD
 VOL P-403: 2.7 CYD

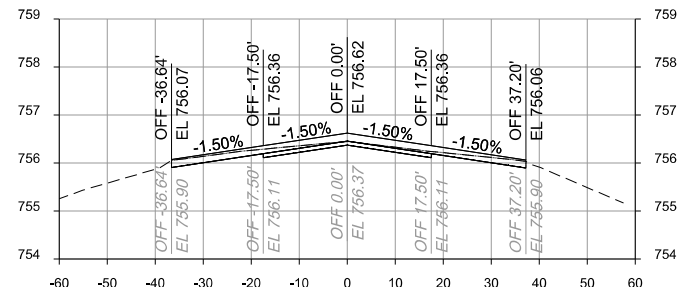


AREA MILLING: 15.5 SQFT
 AREA P-401: 20.0 SQFT
 AREA P-403: 2.9 SQFT

203+75.00

VOL MILLING: 15.2 CYD
 VOL P-401: 18.5 CYD
 VOL P-403: 2.7 CYD

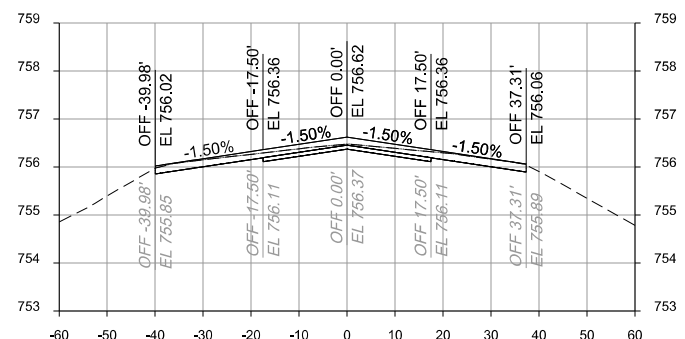
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AREA MILLING: 8.4 SQFT
 AREA P-401: 12.3 SQFT
 AREA P-403: 2.9 SQFT

201+50.00

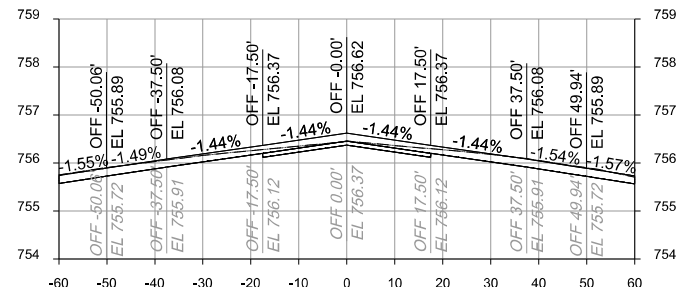
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 VOL P-401: 11.4 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 11.5 SQFT
 AREA P-401: 12.9 SQFT
 AREA P-403: 2.9 SQFT

202+50.00

VOL MILLING: 10.3 CYD
 VOL P-401: 11.7 CYD
 VOL P-403: 2.7 CYD

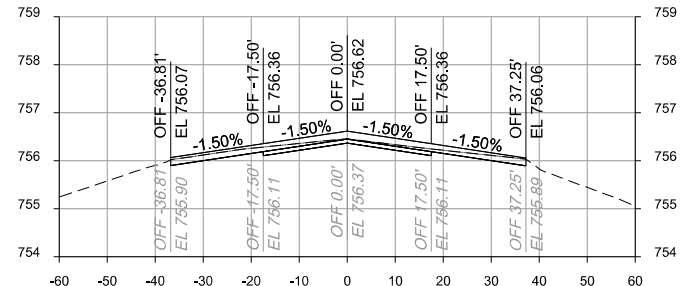


AREA MILLING: 17.3 SQFT
 AREA P-401: 20.0 SQFT
 AREA P-403: 2.9 SQFT

203+50.00

VOL MILLING: 16.5 CYD
 VOL P-401: 18.5 CYD
 VOL P-403: 2.7 CYD

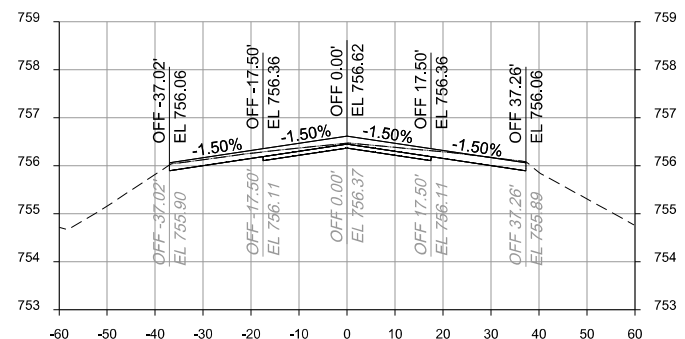
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AREA MILLING: 8.6 SQFT
 AREA P-401: 12.3 SQFT
 AREA P-403: 2.9 SQFT

201+25.00

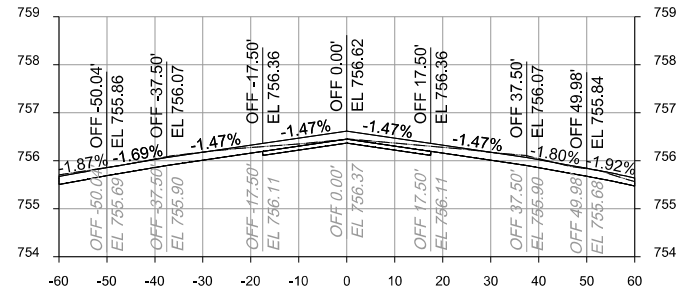
VOL MILLING: 8.6 CYD
 VOL P-401: 11.4 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 10.8 SQFT
 AREA P-401: 12.4 SQFT
 AREA P-403: 2.9 SQFT

202+25.00

VOL MILLING: 10.7 CYD
 VOL P-401: 11.4 CYD
 VOL P-403: 2.7 CYD



AREA MILLING: 18.3 SQFT
 AREA P-401: 20.0 SQFT
 AREA P-403: 2.9 SQFT

203+25.00

VOL MILLING: 15.1 CYD
 VOL P-401: 17.1 CYD
 VOL P-403: 2.7 CYD

NO.	DATE	DR	CHK	APVD	MV
2012/02/03		JA	JA	JJ	
ISSUE FOR BID			REVISION	BY	APVD
			CHK		

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 DUPAGE COUNTY, ILLINOIS

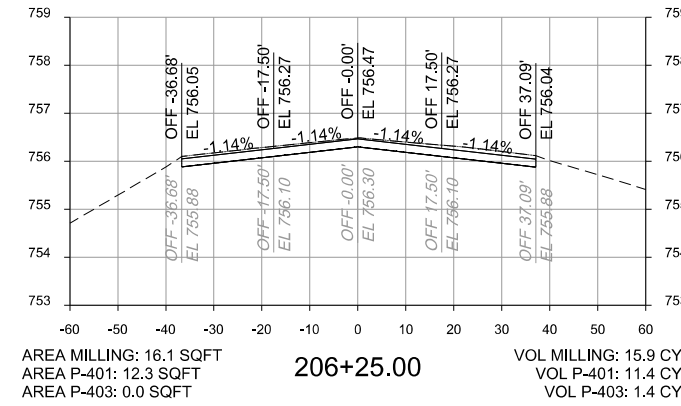
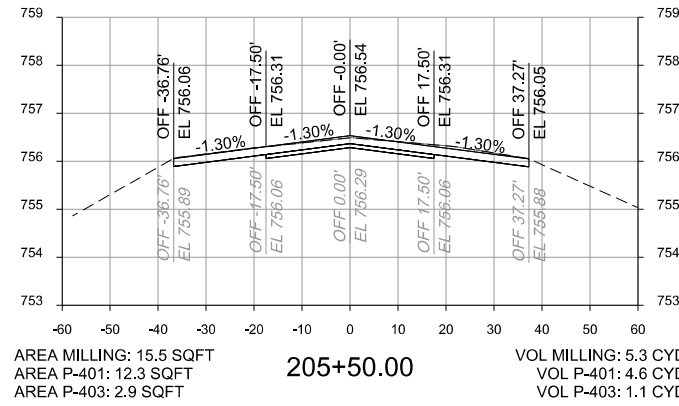
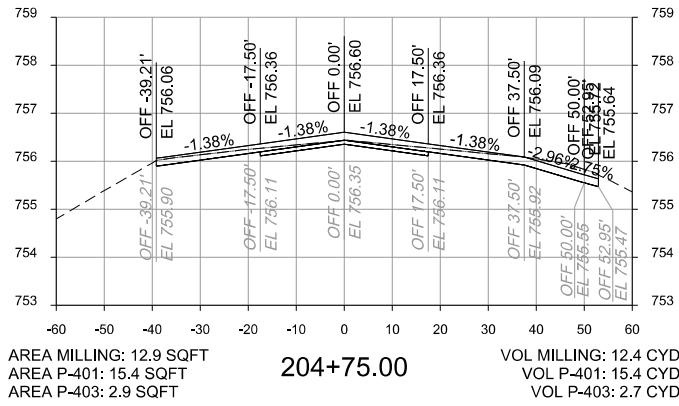
CH2MHILL[®]

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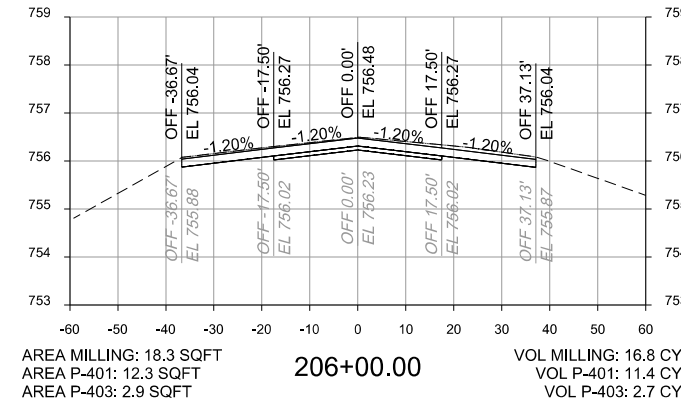
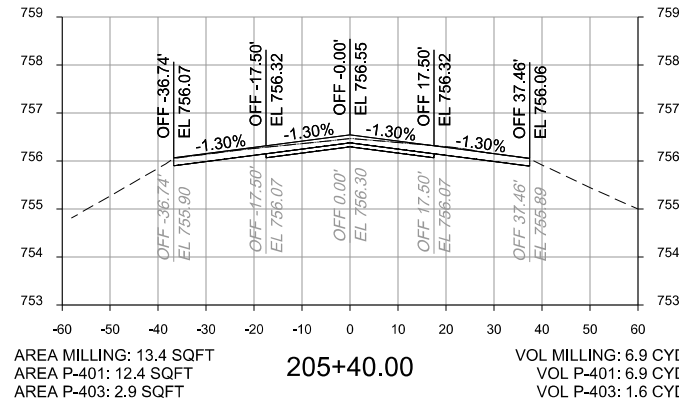
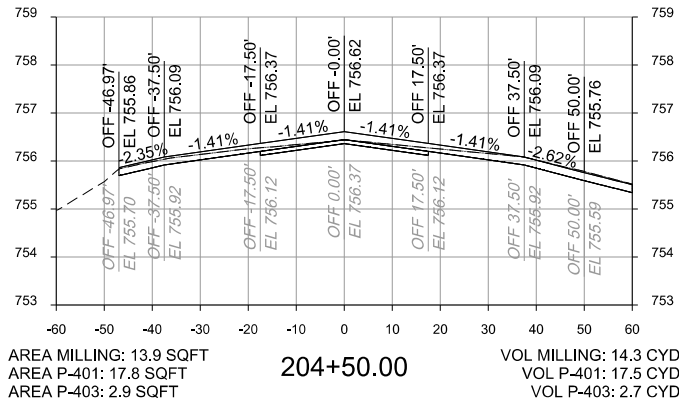
**CROSS SECTIONS
 PROFILES
 RUNWAY**

AS SHOWN
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE 2012/02/03
PROJ 424278
DWG X-515
SHEET 48 of 57

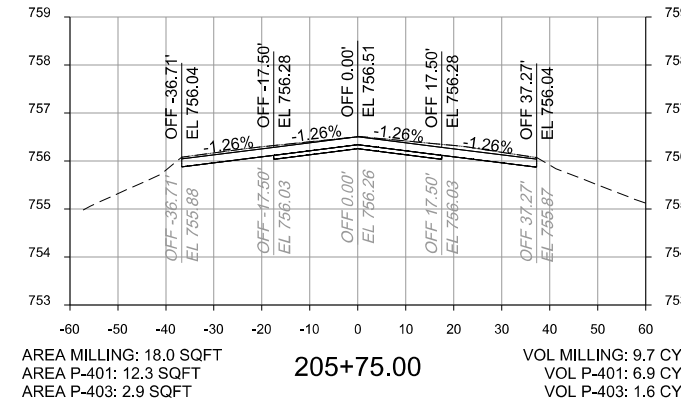
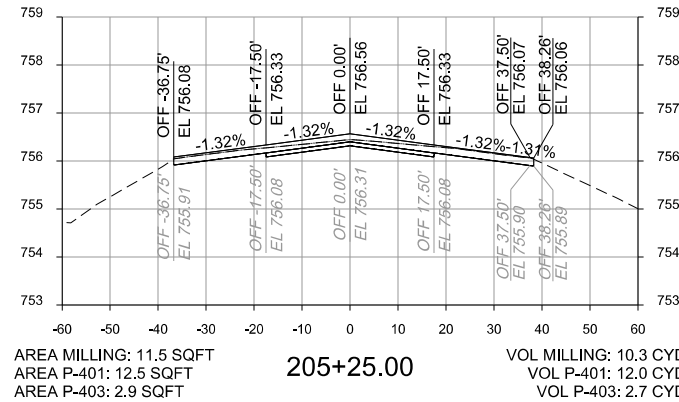
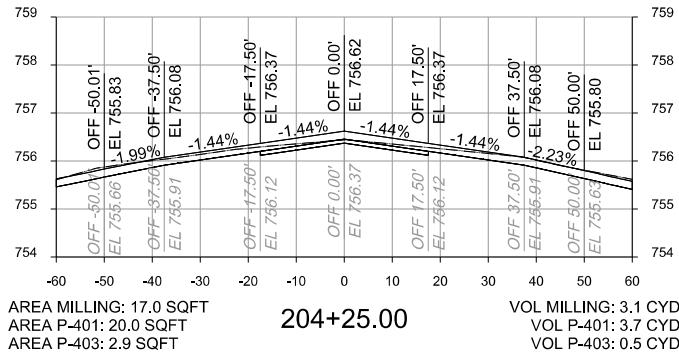
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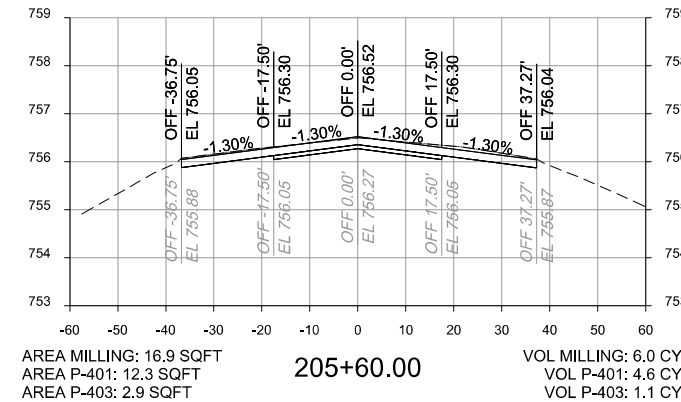
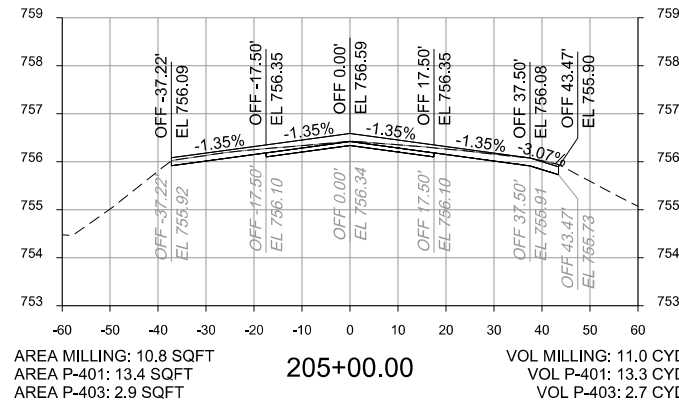
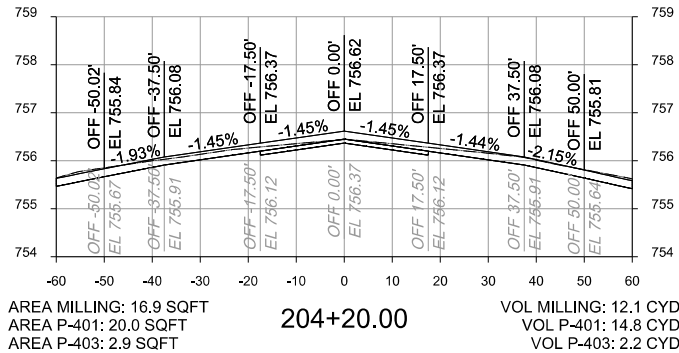
B



C



D



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ASSOCIATED TAXIWAY OVERLAY
DUPAGE AIRPORT (DPA)
DUPAGE COUNTY, ILLINOIS

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PROFILES
RUNWAY

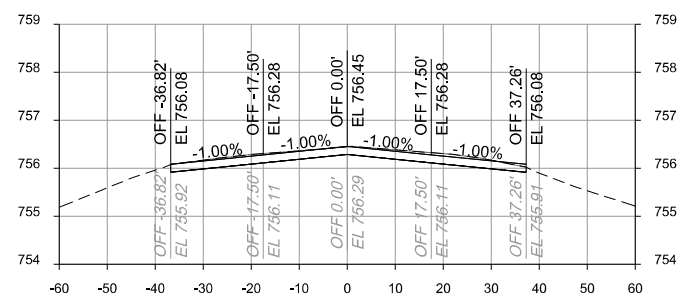
AS SHOWN
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE 2012/02/03
PROJ 424278
DWG X-516
SHEET 49 of 57

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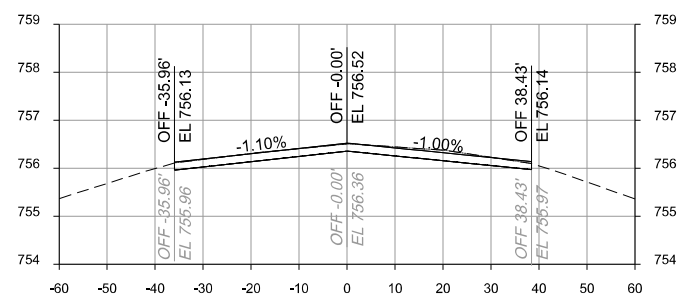
A



AREA MILLING: 13.7 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

207+00.00

VOL MILLING: 10.3 CYD
VOL P-401: 9.1 CYD
VOL P-403: 0.0 CYD

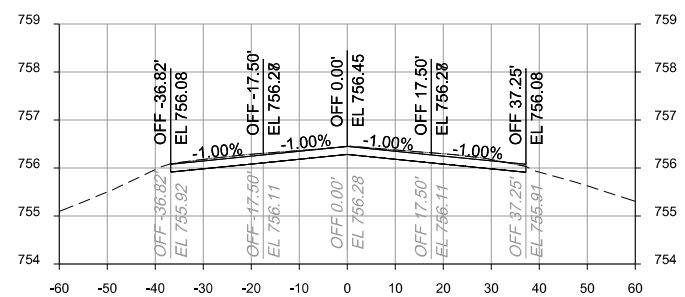


AREA MILLING: 12.8 SQFT
AREA P-401: 12.4 SQFT
AREA P-403: 0.0 SQFT

208+00.00

VOL MILLING: 12.0 CYD
VOL P-401: 11.4 CYD
VOL P-403: 0.0 CYD

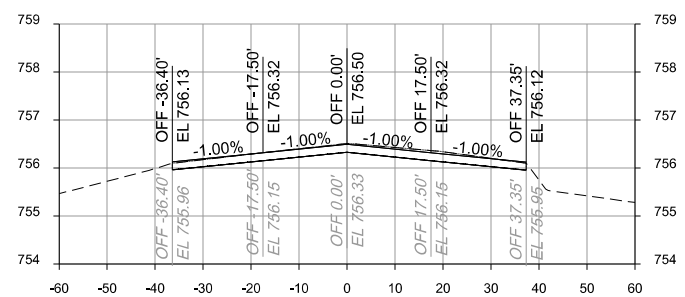
B



AREA MILLING: 14.1 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

206+80.00

VOL MILLING: 2.6 CYD
VOL P-401: 2.3 CYD
VOL P-403: 0.0 CYD

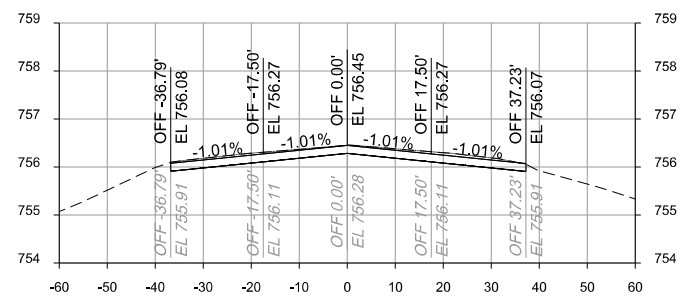


AREA MILLING: 13.1 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

207+75.00

VOL MILLING: 12.0 CYD
VOL P-401: 11.4 CYD
VOL P-403: 0.0 CYD

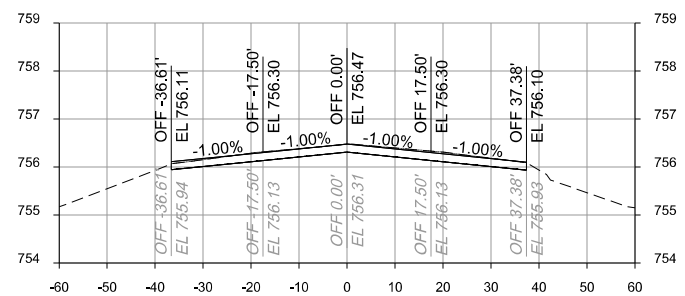
C



AREA MILLING: 14.5 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

206+75.00

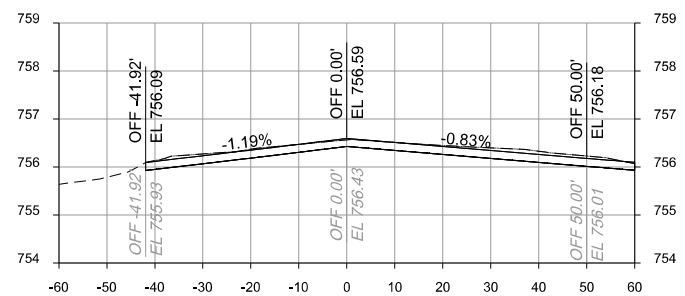
VOL MILLING: 13.8 CYD
VOL P-401: 11.4 CYD
VOL P-403: 0.0 CYD



AREA MILLING: 12.8 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

207+50.00

VOL MILLING: 12.1 CYD
VOL P-401: 11.4 CYD
VOL P-403: 0.0 CYD

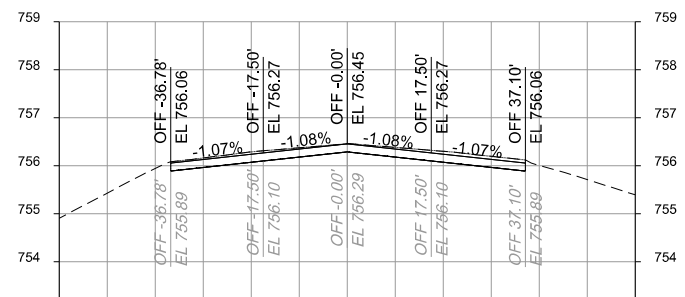


AREA MILLING: 19.4 SQFT
AREA P-401: 17.0 SQFT
AREA P-403: 0.0 SQFT

208+50.00

VOL MILLING: 15.5 CYD
VOL P-401: 14.4 CYD
VOL P-403: 0.0 CYD

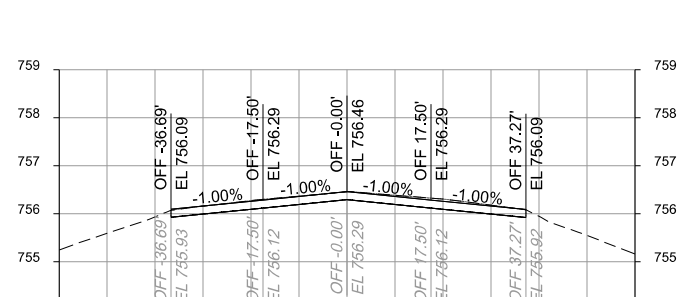
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AREA MILLING: 15.3 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

206+50.00

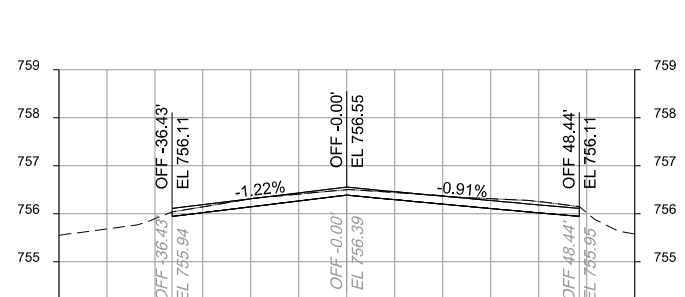
VOL MILLING: 14.6 CYD
VOL P-401: 11.4 CYD
VOL P-403: 0.0 CYD



AREA MILLING: 13.4 SQFT
AREA P-401: 12.3 SQFT
AREA P-403: 0.0 SQFT

207+25.00

VOL MILLING: 12.6 CYD
VOL P-401: 11.4 CYD
VOL P-403: 0.0 CYD



AREA MILLING: 14.0 SQFT
AREA P-401: 14.1 SQFT
AREA P-403: 0.0 SQFT

208+25.00

VOL MILLING: 12.4 CYD
VOL P-401: 12.3 CYD
VOL P-403: 0.0 CYD

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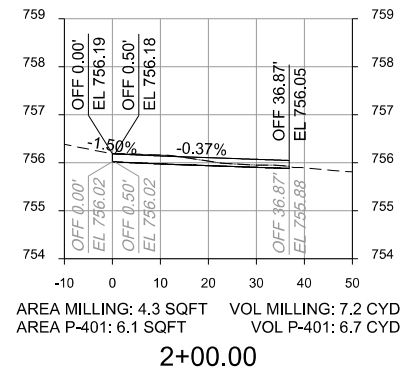
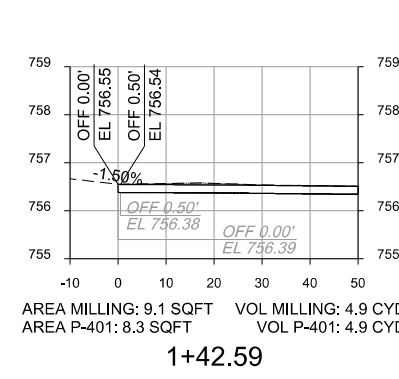
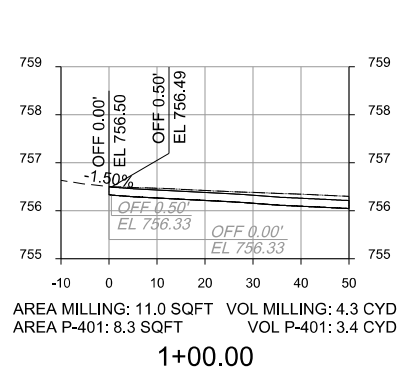
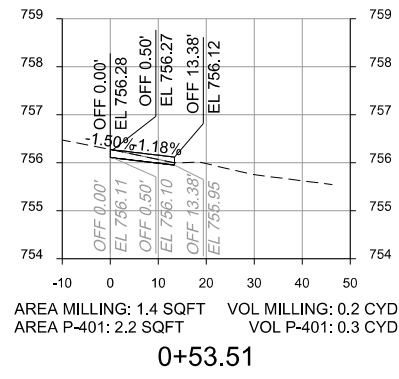
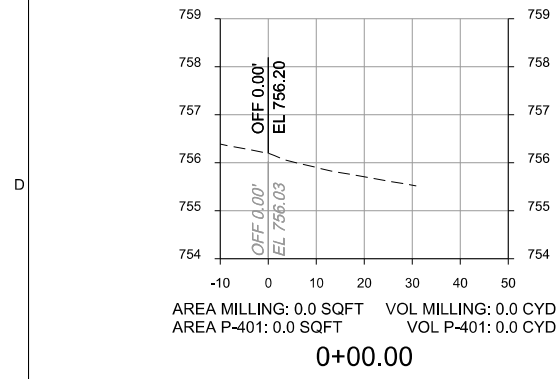
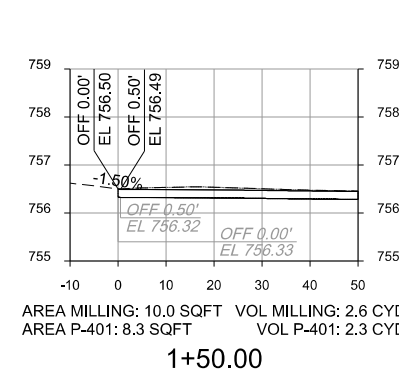
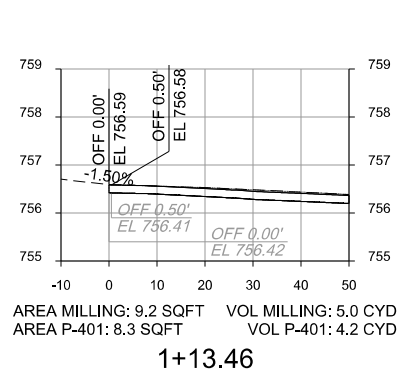
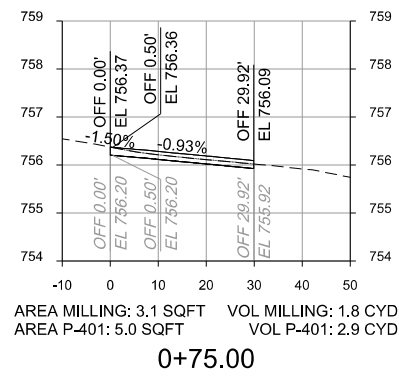
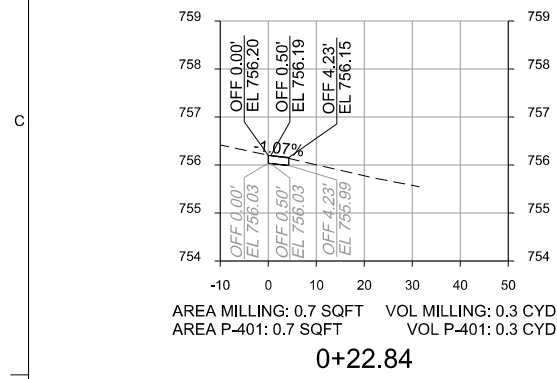
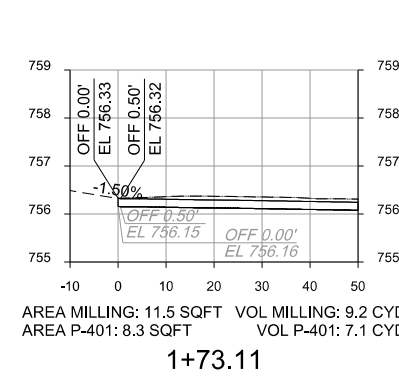
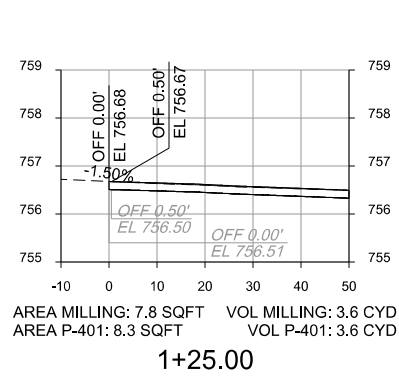
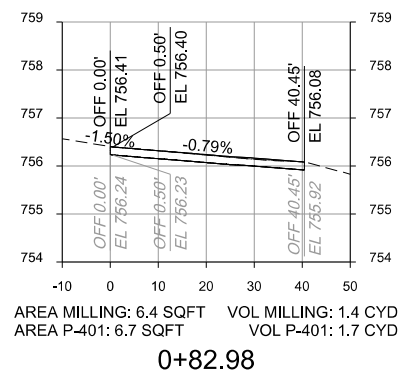
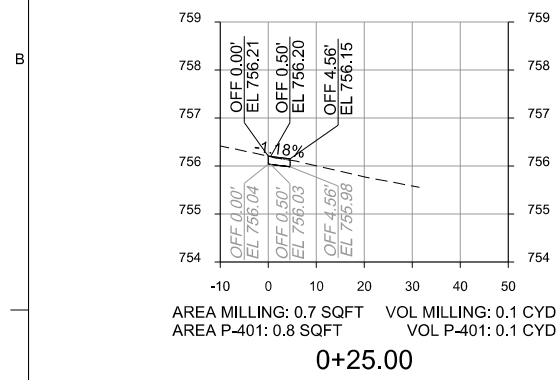
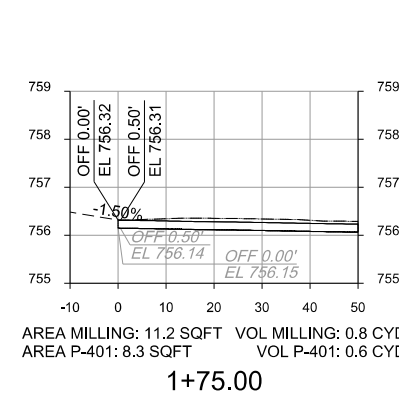
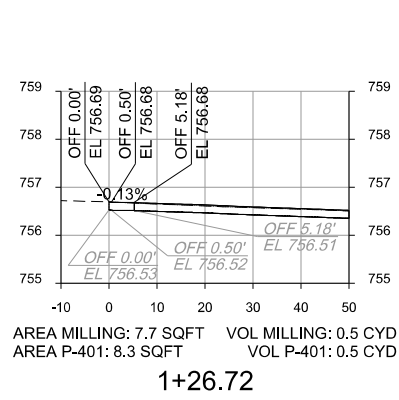
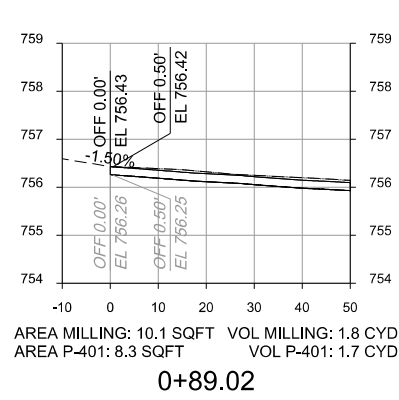
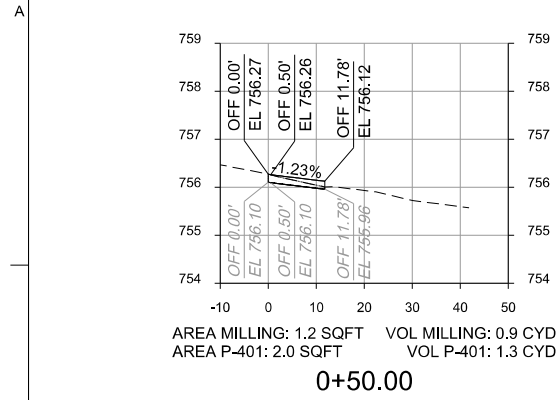
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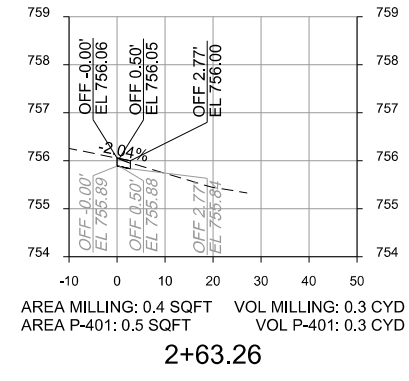
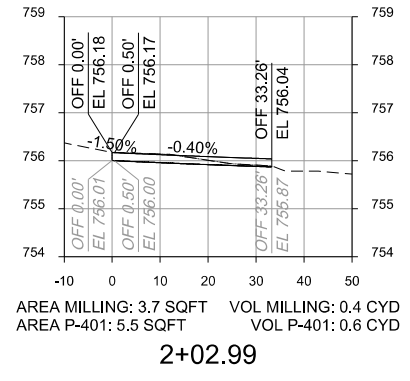
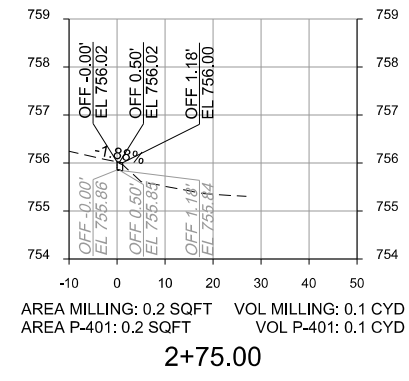
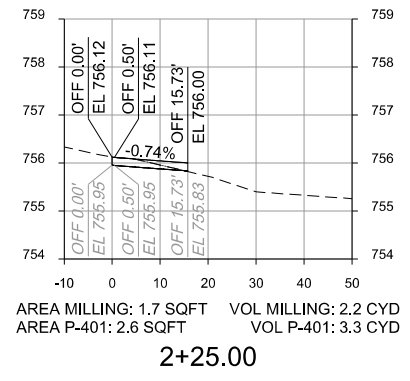
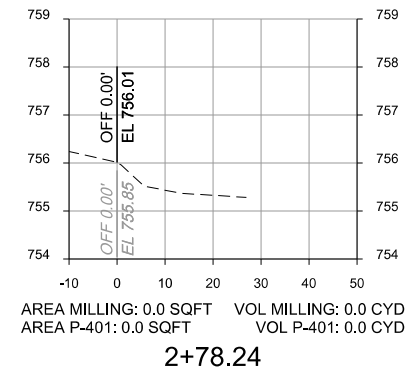
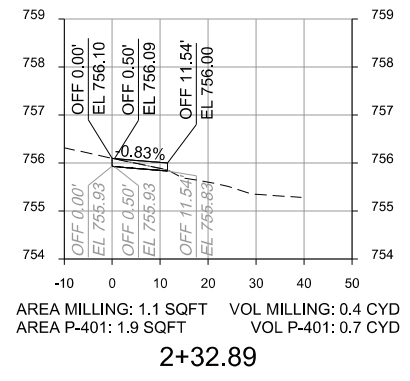
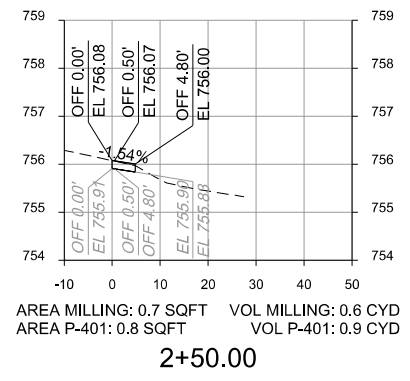
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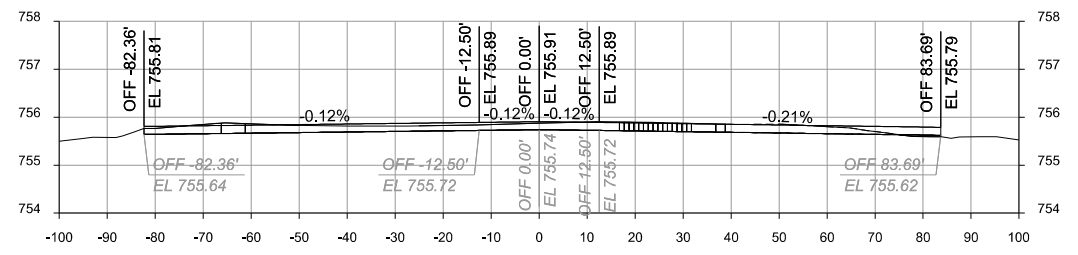
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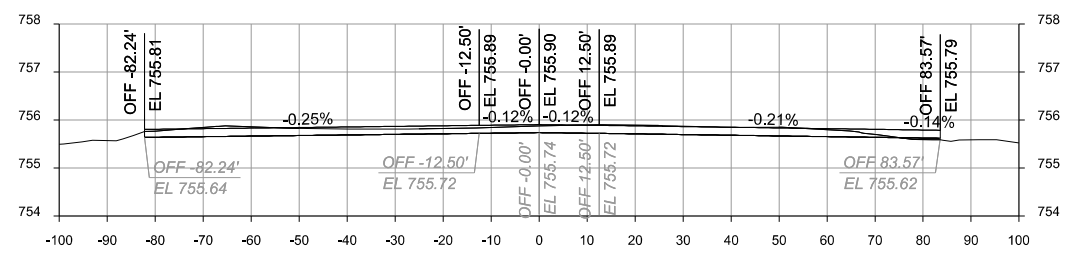
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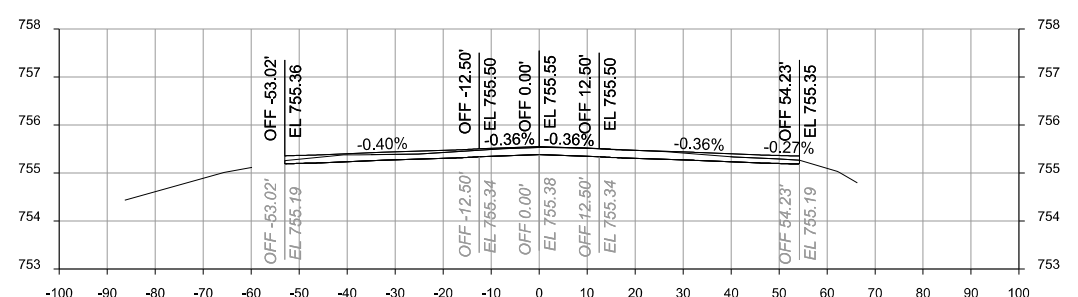
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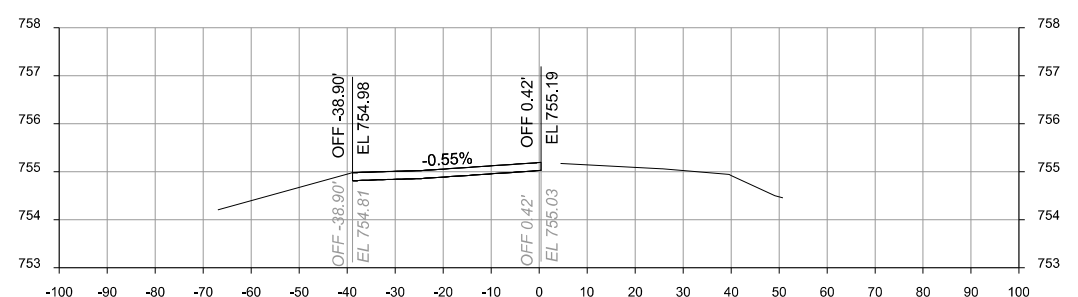
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 AREA P-401: 27.7 SQFT
1+64.50
 VOL MILLING: 0.1 CYD
 VOL P-401: 0.1 CYD



AREA MILLING: 23.2 SQFT
 AREA P-401: 27.6 SQFT
1+64.43
 VOL MILLING: 17.4 CYD
 VOL P-401: 21.1 CYD



AREA MILLING: 14.4 SQFT
 AREA P-401: 17.9 SQFT
1+39.43
 VOL MILLING: 9.7 CYD
 VOL P-401: 11.3 CYD



AREA MILLING: 6.5 SQFT
 AREA P-401: 6.6 SQFT
1+14.43
 VOL MILLING: 0.0 CYD
 VOL P-401: 0.0 CYD

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SHEET 53 of 57

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APVD	JJ
BY	APVR
REVISION	
ISSUE FOR BID	
APVD	N
BY	APVR
APVD	MV

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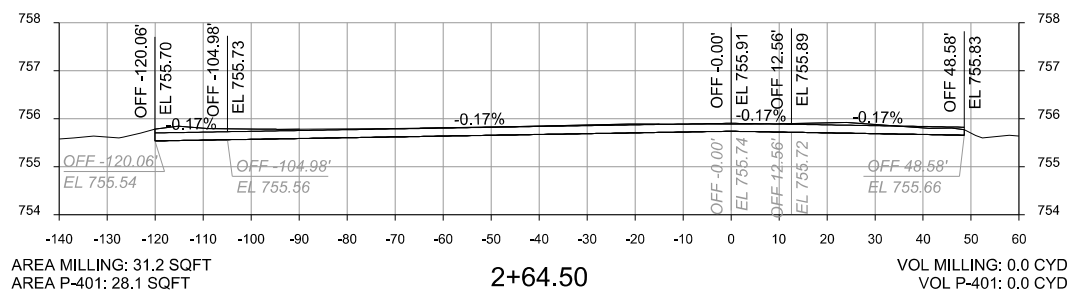
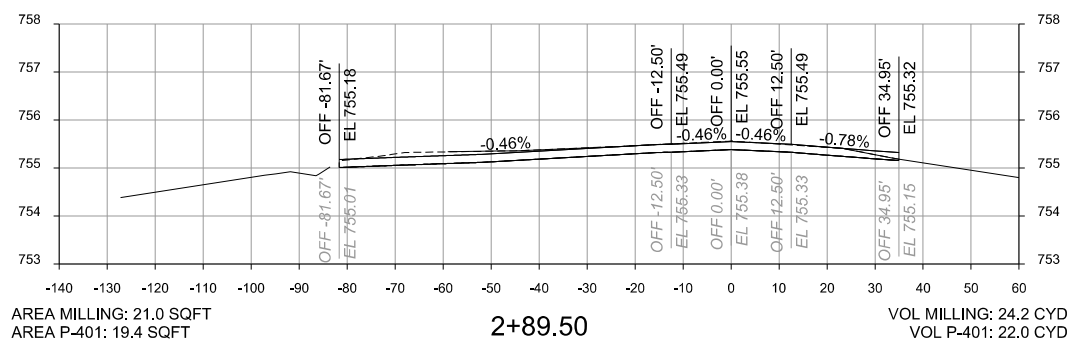
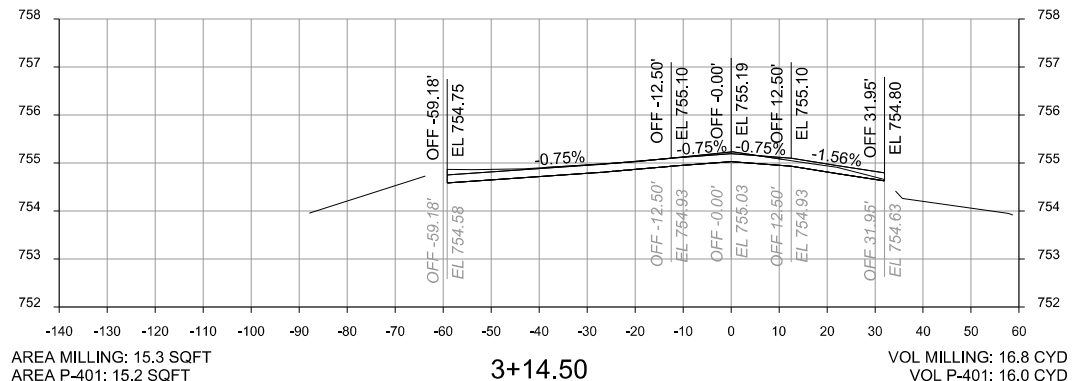
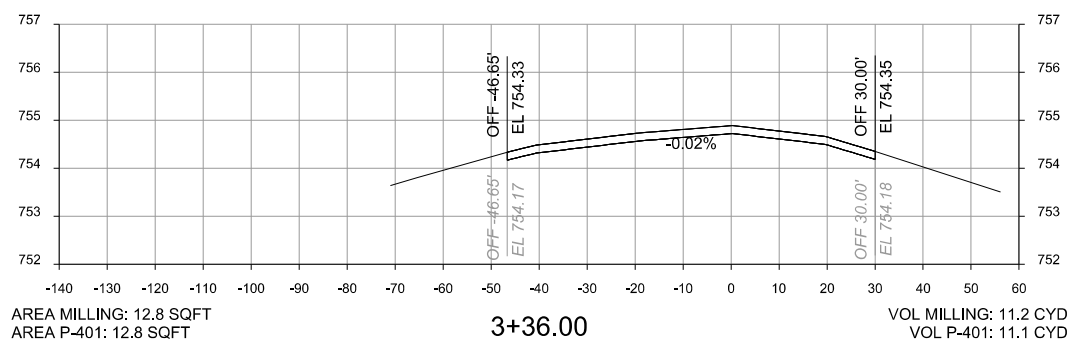
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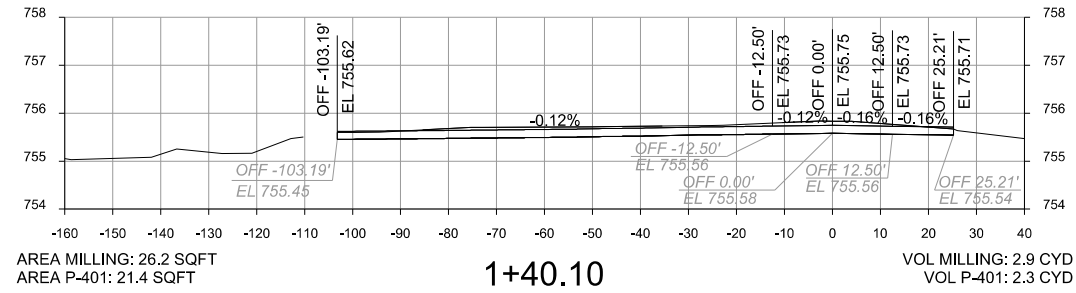
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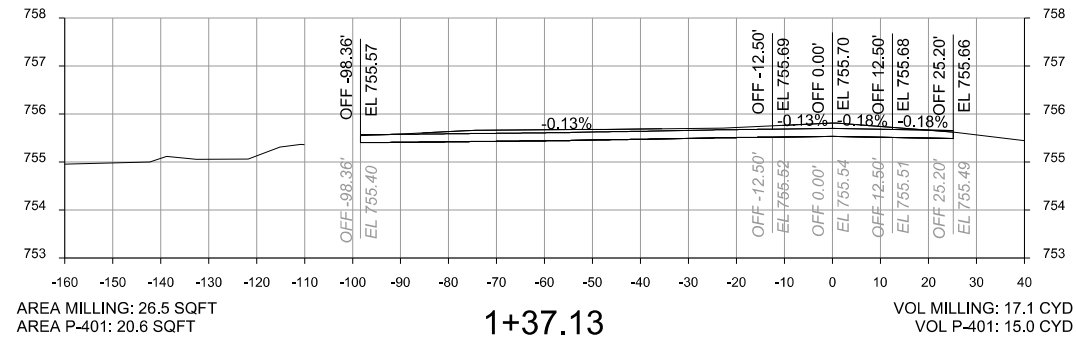
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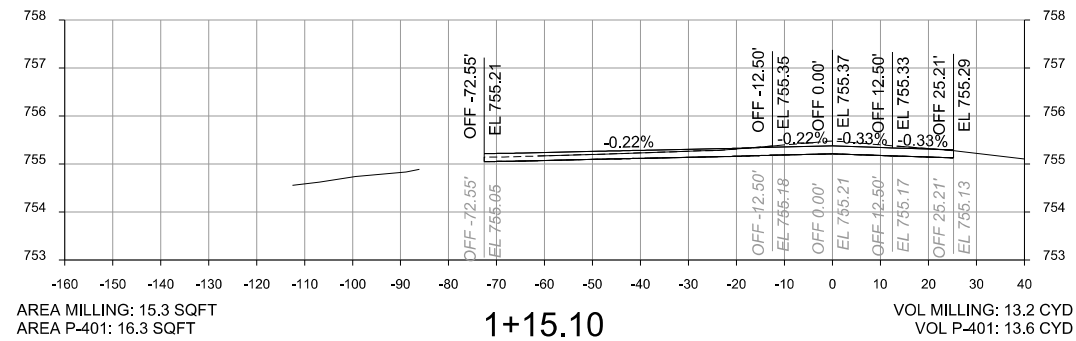
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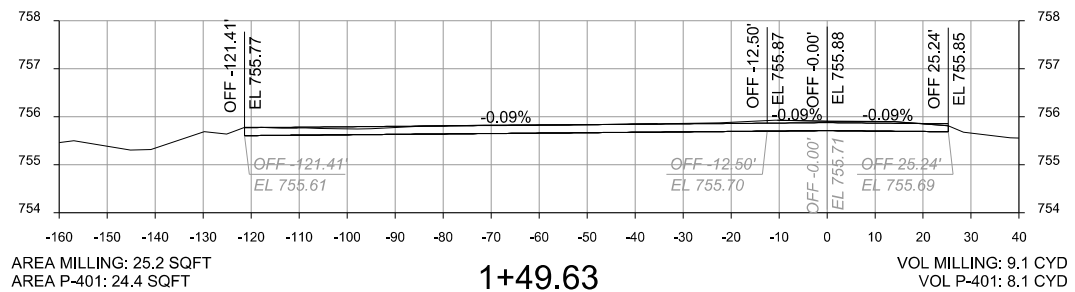
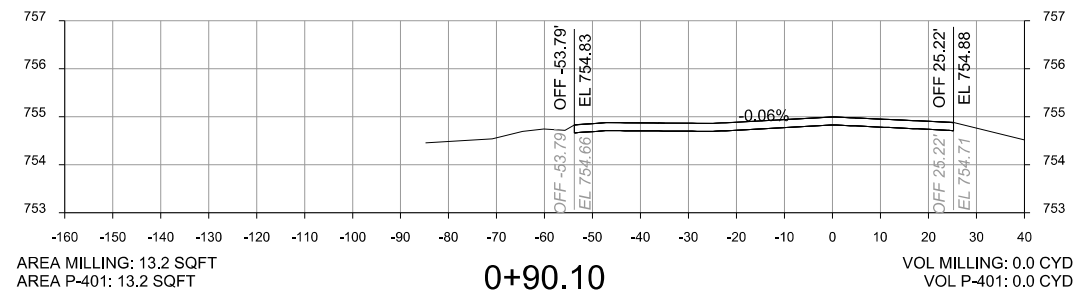
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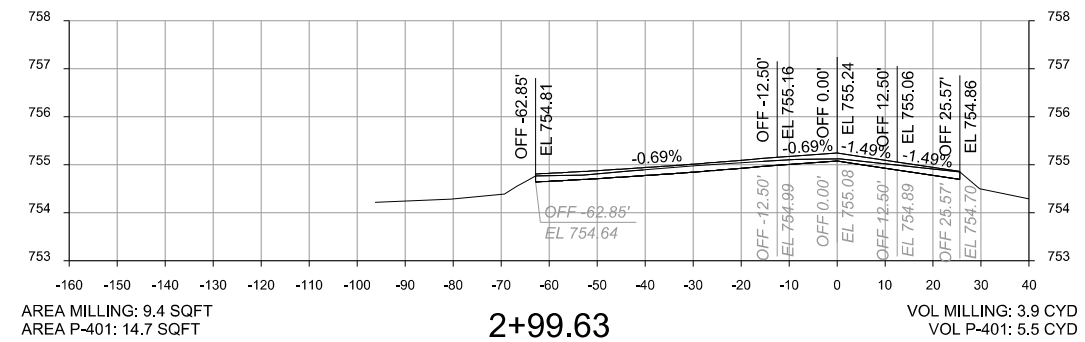
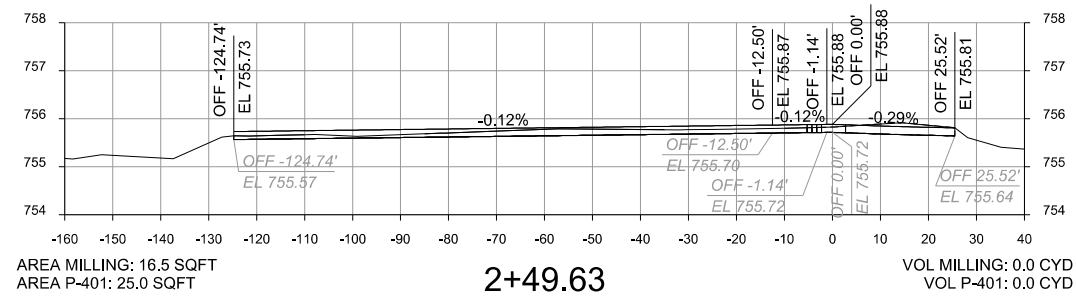
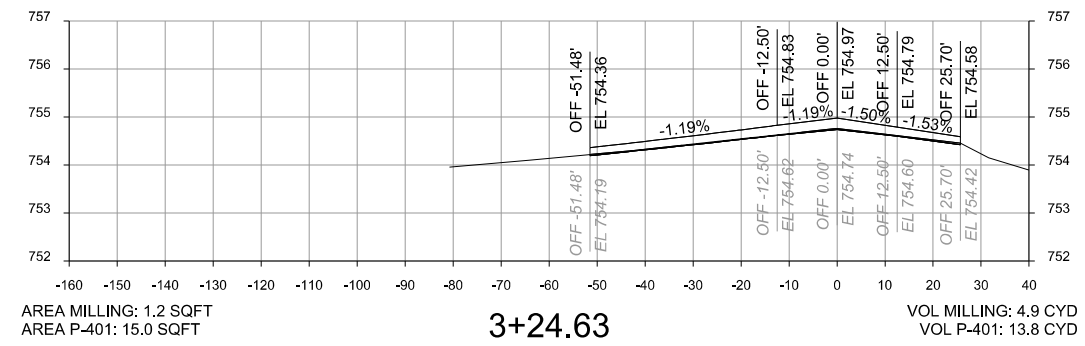
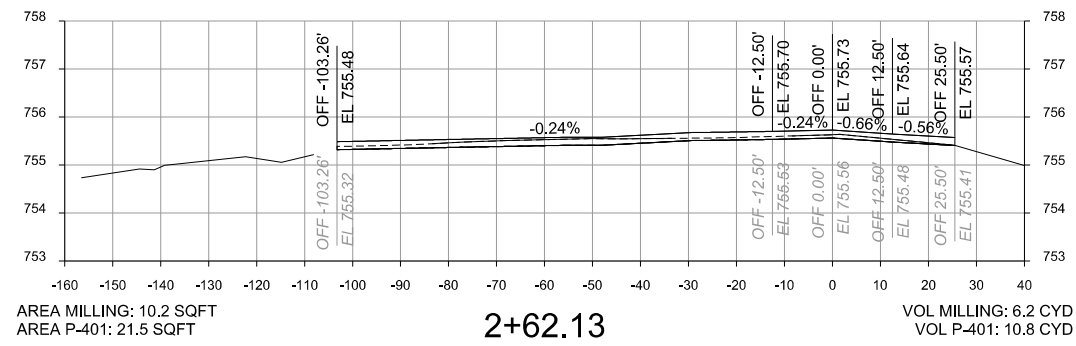
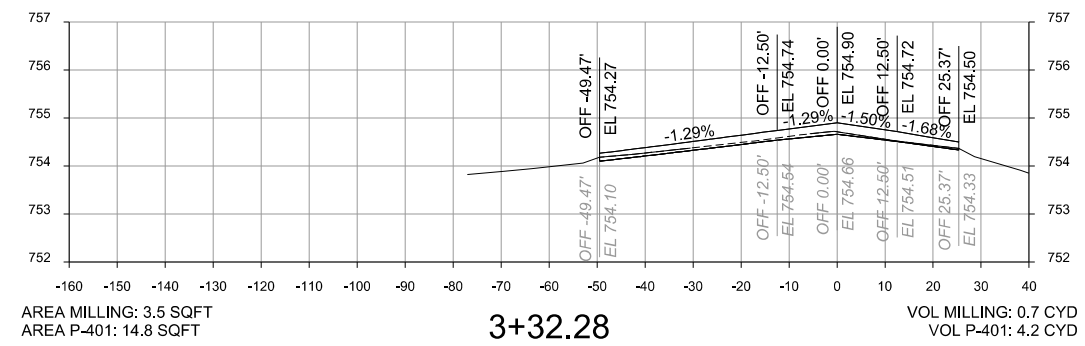
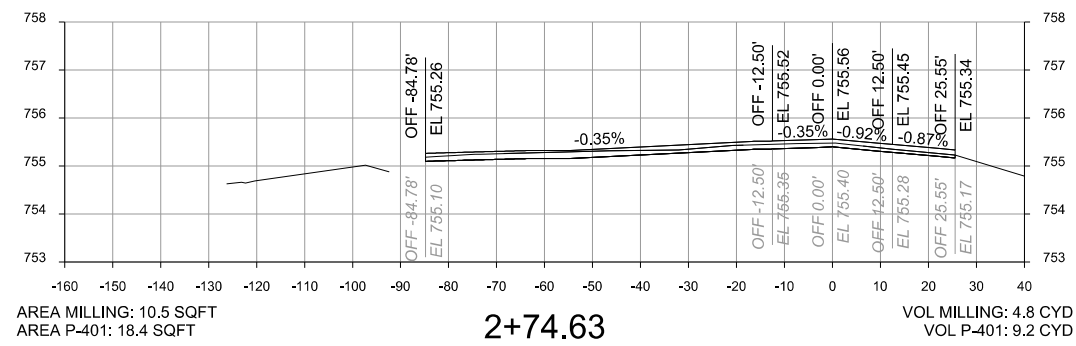
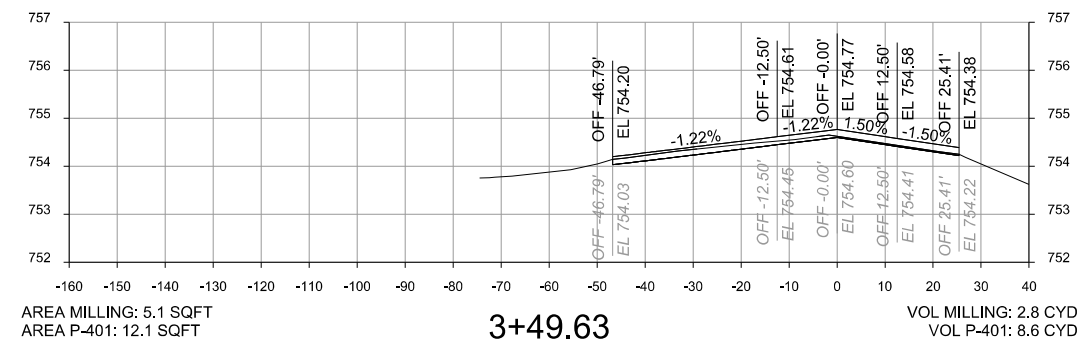
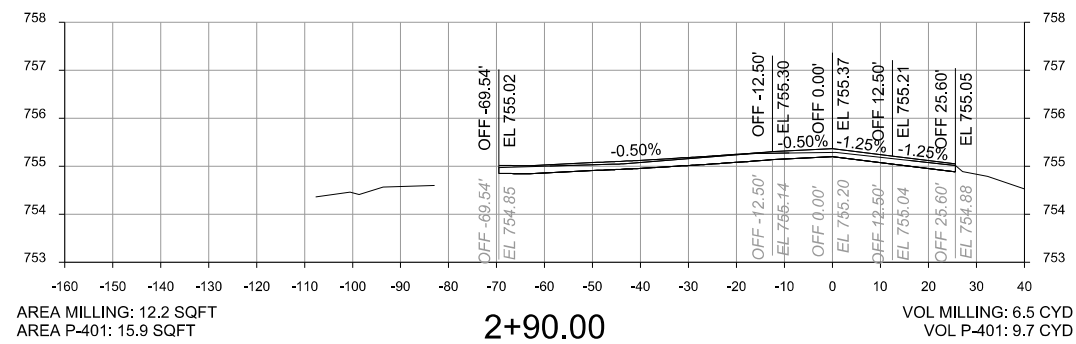
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APVR	N	BY	APVD
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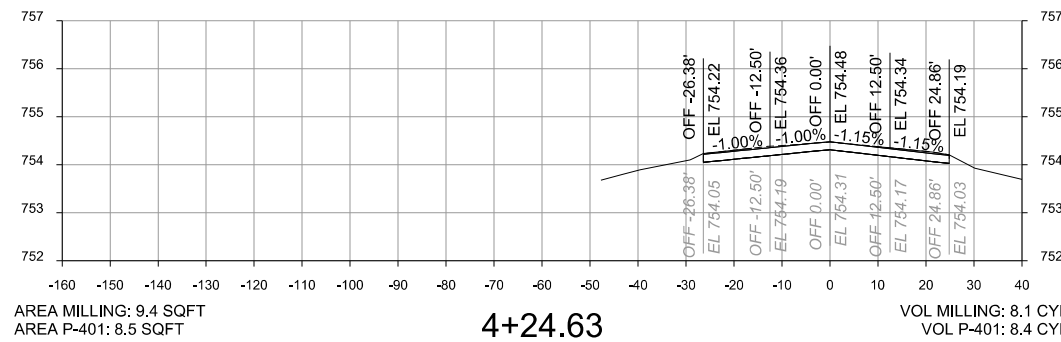
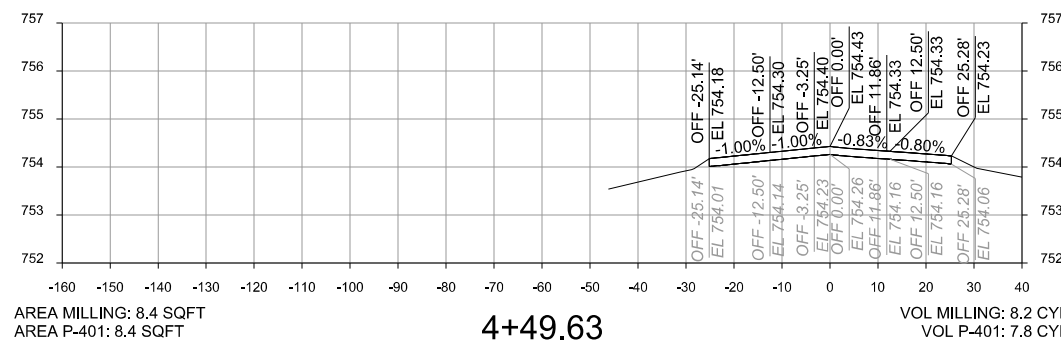
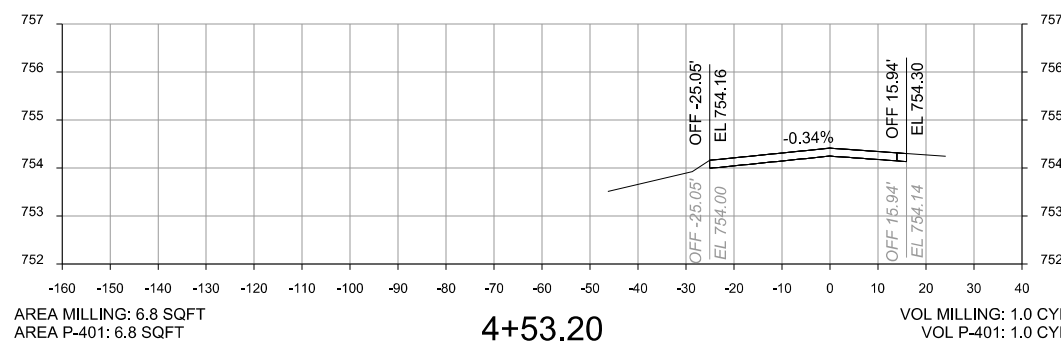
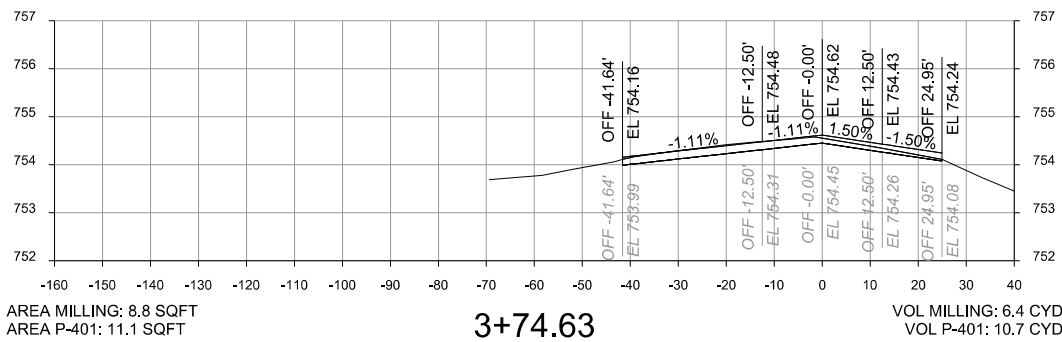
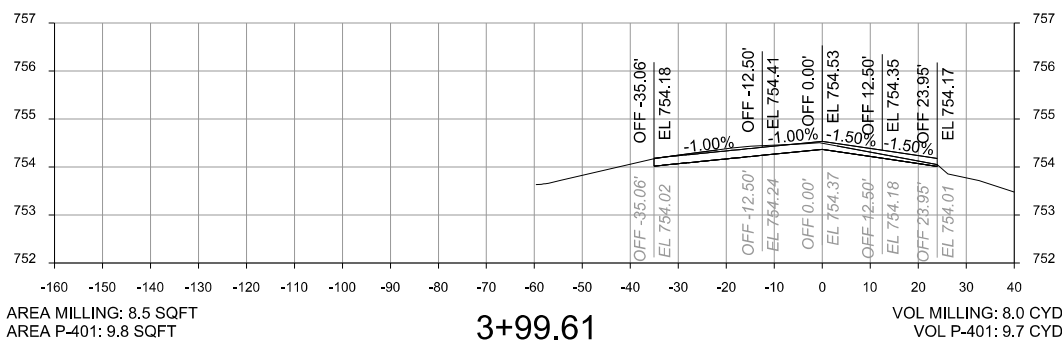
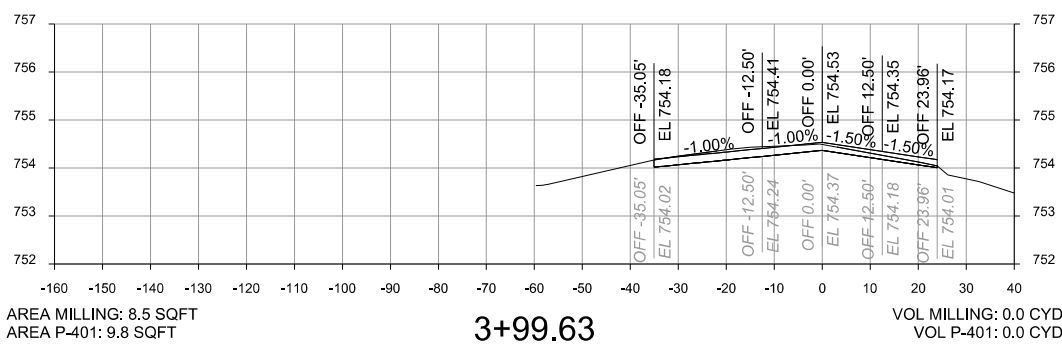
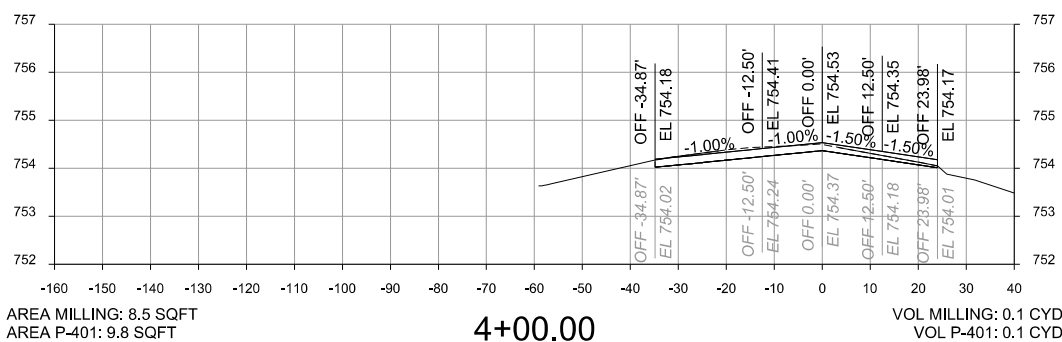
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