**IDOT LETTING: APRIL 22, 2016** 

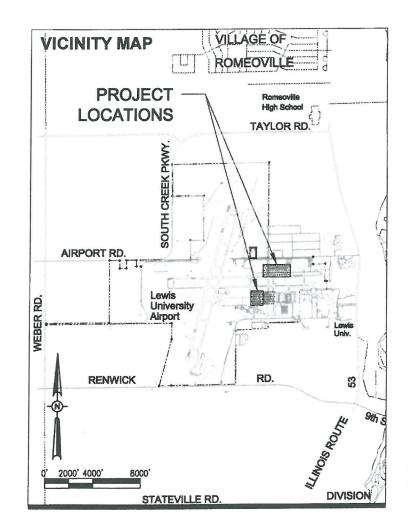
LE049 TOTAL SHEETS = 50

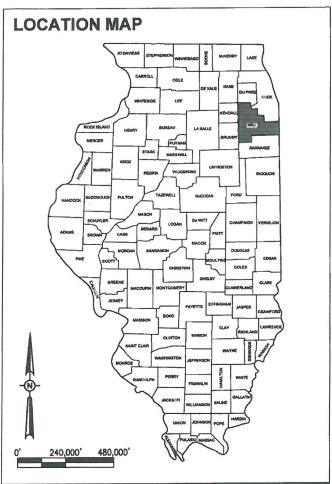
# **CONSTRUCTION PLANS**

# REHABILITATE TAXIWAYS N1, N2 & R1 AND PORTIONS OF TAXIWAY R

JOLIET REGIONAL PORT DISTRICT LEWIS UNIVERSITY AIRPORT (LOT) ROMEOVILLE, WILL COUNTY, ILLINOIS

SBG PROJECT NO. 3-17-SBGP-XX IDA PROJECT NO. LOT-4425

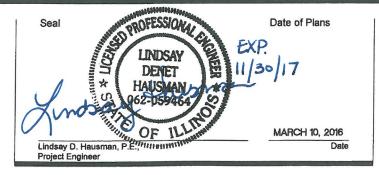


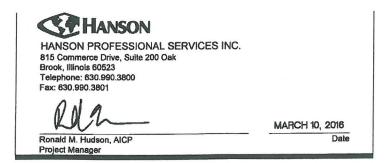


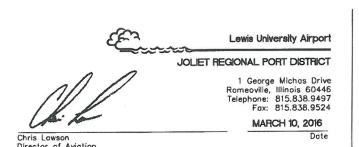
# NOTICE TO CONTRACTORS AND BIDDERS

THESE CONSTRUCTION PLANS RELY UPON THE SPECIAL PROVISIONS AND THE SPECIFICATIONS TO PROVIDE FOR A COMPLETE DESCRIPTION OF THE WORK AND CONSTRUCTION REQUIREMENTS. THE PLANS SHALL ONLY BE USED IN COMBINATION WITH ALL CONTRACT DOCUMENTS.

No.	Issue/Description	Sheets Changed	Date	Ву
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	SUMMARY OF			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RECORD PAIL
AR110551	EXTEND DUCT	LINEAR FOOT	61.0	
AR150510	ENGINEER'S FIELD OFFICE	LUMP SUM	1.0	
AR150520	MOBILIZATION	LUMP SUM	1.0	
AR150540	HAUL ROUTE	LUMP SUM	1.0	
AR152410	UNCLASSIFIED EXCAVATION	CUBIC YARD	7,893.0	
AR156510	SILT FENCE	LINEAR FOOT	318.0	
AR156513	SEPARATION FABRIC	SQUARE YARD	8,401.0	
AR156520	INLET PROTECTION	EACH	21.0	
AR162900	REMOVE CLASS E FENCE	LINEAR FOOT	124.0	
AR162905	REMOVE GATE	EACH	1.0	
AR209608	CRUSHED AGG. BASE COURSE - 8"	SQUARE YARD	3,300.0	
AR209612	CRUSHED AGG. BASE COURSE - 12"	SQUARE YARD	5,101.0	
AR401613	BIT. SURF. CSE METHOD I, SUPERPAVE	TON	940.0	
AR401650	BITUMINOUS PAVEMENT MILLING	SQUARE YARD	349.0	
AR401660	SAW & SEAL BIT. JOINTS	LINEAR FOOT	1,587.0	
AR401665	BITUMINOUS PAVEMENT SAWING	LINEAR FOOT	1,669.0	
AR401900	REMOVE BITUMINOUS PAVEMENT	SQUARE YARD	7,875.0	
AR403613	BIT BASE CSE METHOD I SUPERPAVE	TON	1,716.0	
AR501665	PCC PAVEMENT SAWING	LINEAR FOOT	59.0	
AR501900	REMOVE PCC PAVEMENT	SQUARE YARD	181.0	
AR602510	BITUMINOUS PRIME COAT	GALLONS	2,448.0	
AR603510	BITUMINOUS TACK COAT	GALLONS	2,032.0	
AR620520	PAVEMENT MARKING - WATERBORNE	SQUARE FOOT	3,678.0	
AR620525	PAVEMENT MARKING - BLACK BORDER	SQUARE FOOT	335.0	
AR620900	PAVEMENT MARKING REMOVAL	SQUARE FOOT	294.0	
AR701512	12" RCP, CLASS IV	LINEAR FOOT	172.0	
AR701518	18" RCP, CLASS IV	LINEAR FOOT	117.0	
AR701524	24" RCP, CLASS IV	LINEAR FOOT	471.0	
AR701900	REMOVE PIPE	LINEAR FOOT	104.0	
AR705506	6" PERFORATED UNDERDRAIN	LINEAR FOOT	2,640.0	
AR705630	UNDERDRAIN INSPECTION HOLE	EACH	3.0	
AR705640	UNDERDRAIN CLEANOUT	EACH	9.0	
AR705900	REMOVE UNDERDRAIN	LINEAR FOOT	1,653.0	
AR705903	REMOVE UNDERDRAIN INSP. HOLE	EACH	2.0	
AR705904	REMOVE UNDERDRAIN CLEANOUT	EACH	3.0	
AR751410	INLET	EACH	2.0	
AR751540	MANHOLE 4'	EACH	2.0	
AR751550	MANHOLE 5'	EACH	2.0	
AR751568	MANHOLE 8'	EACH	1.0	
AR751903	REMOVE MANHOLE	EACH	1.0	
AR800921	PCC PATCH	SQUARE YARD	284.0	
AR800921	CA-6 AGGREGATE BACKFILL	CUBIC YARD	3,050.0	
AR800927	GRANULAR DRAINAGE SUBBBASE 6"	SQUARE YARD	5,101.0	
AR800928	GRANULAR DRAINAGE SUBBBASE 4"	SQUARE YARD	3,300.0	
AR800928 AR800950		EACH	4.0	
AR901510	ADJUST MANHOLE & REPLACE CASTING SEEDING	ACRE	2.8	
			940.0	
AR905510 AR908510	TOPSOILING (FROM ON SITE)  MULCHING	CUBIC YARD	940.0	

PAYMENT WILL BE MADE UNDER THE ITEM NUMBERS, DESCRIPTIONS AND UNITS NOTED IN THE ABOVE TABLE IN ACCORDANCE WITH THE BASIS OF PAYMENT FOR EACH RESPECTIVE WORK ITEM NOTED IN THE SPECIAL PROVISIONS, COMPLETED AND ACCEPTED BY THE ENGINEER.



Offices Nationwide www.hanson-inc.com

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Illinois Licensed Professional Service Corporation #184-001084

Lewis University Airport

JOLIET REGIONAL PORT DISTRICT 1 George Michas Drive Romeoville, Illinois 60446 Telephone: 815.838.9497 Fax: 815.838.9524

REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

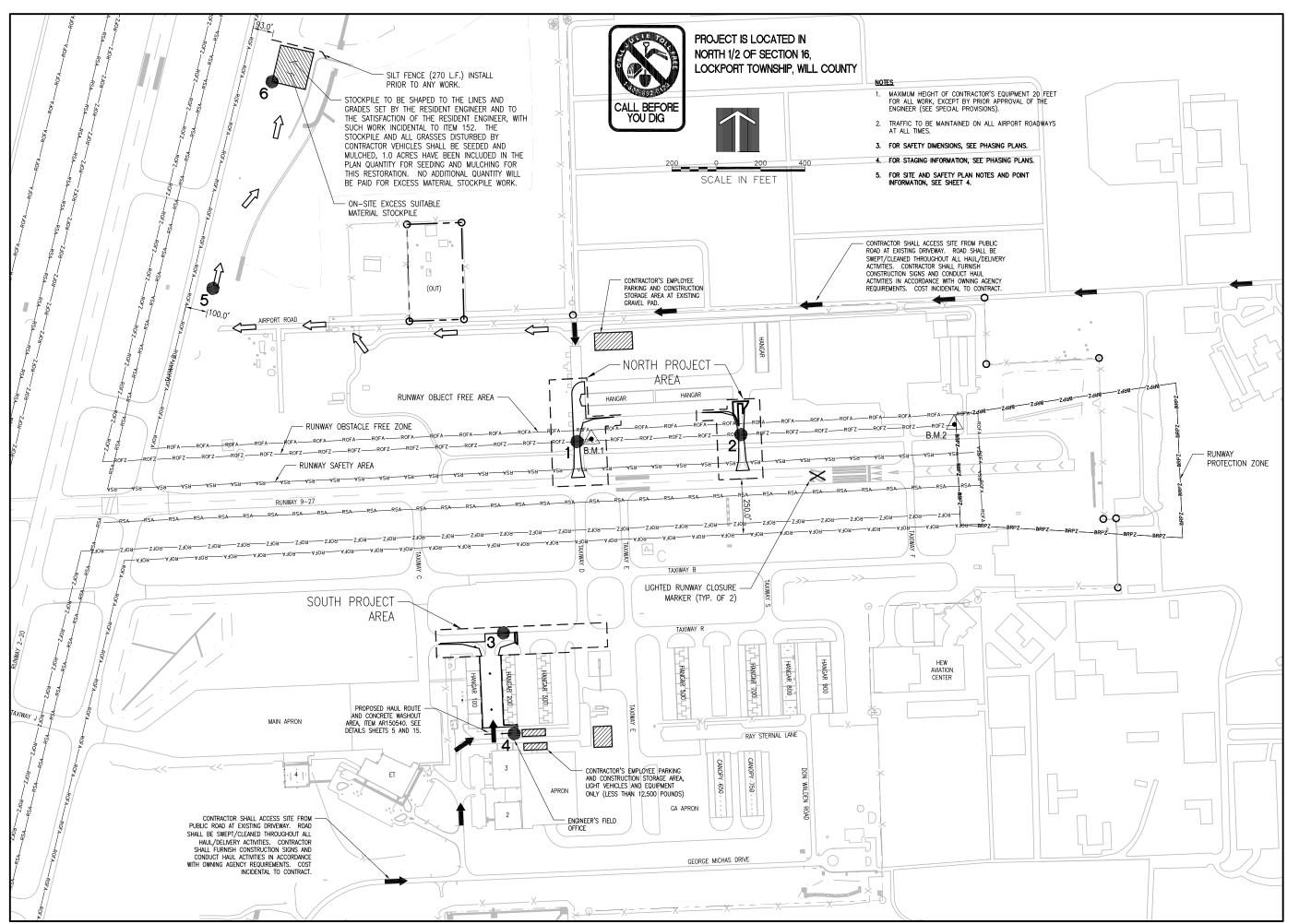
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SHEET TITLE

SHEET INDEX AND SUMMARY OF QUANTITIES





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Illinois Licensed Professional Service Corporation #184-001084

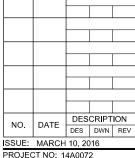
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



CAD FILE: 03-SITE & SAFETY.DWG
DESIGN BY: LDH 11/21/14
DRAWN BY: LDH 11/21/14

REVIEWED BY: RMH 3/8/16
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SHEET TITLE

SITE AND SAFETY PLAN

## PROJECT DESCRIPTION

THIS PROJECT IS TO REHABILITATE TAXIWAYS N1, N2 AND RI AND PORTIONS OF TAXIWAY R AT LEWIS UNIVERSITY AIRPORT INCLUDING, AMONG OTHER INCIDENTAL WORK, THE FOLLOWING ITEMS:

- PLACEMENT OF TEMPORARY SOIL EROSION CONTROL MEASURES.
- PROVISION OF UNCLASSIFIED EXCAVATION.
- INSTALLATION OF DRAINAGE LAYER, AGGREGATES AND HMA TAXIWAY PAVEMENTS.
- INSTALLATION OF UNDERDRAINS AND REQUIRED STORM SEWER PIPE AND STRUCTURES.
- PLACEMENT OF PAVEMENT MARKINGS.
- TOPSOILING, SEEDING AND MULCHING ALONG NEW PAVEMENT EDGES.

### PROTECTION OF EXISTING AIRPORT FACILITIES

THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND LIGHTING EQUIPMENT, DRIVEWAY AND ROAD PAVEMENT AND SHOULDERS; RUNWAY, TAXIWAY AND APRON PAVEMENTS AND SHOULDERS; RUNWAY, TAXIWAY AND AIRPORT LIGHTING EQUIPMENT; AND SEEDED AND TURFED AREAS THAT ARE UTILIZED IN OR AFFECTED BY THE CONTRACTOR'S ACTIVITIES. ITEMS DAMAGED BY THE CONTRACTOR ARE TO BE REPAIRED AT CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF AIRPORT OWNER AND THE RESIDENT

IN ADDITION, WHEN CONDITIONS DICTATE OR AS DETERMINED BY THE AIRPORT OWNER AND THE RESIDENT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO USE A PICK-UP TYPE SWEEPER IN ALL ACTIVE CONSTRUCTION AIRFIELD PAVEMENT AREAS. THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. THE COST OF SWEEPING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

### CONTRACTOR'S ACCESS AND TEMPORARY FACILITIES

CONTRACTOR'S ACCESS TO THE PROJECT WHEN ON AIRPORT PROPERTY IS SHOWN ON SHEET 3. CONTRACTOR'S ACCESS TO THE AIRPORT ITSELF IS TO BE PROVIDED BY PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR IS TO SECURE ALL NECESSARY PERMITS FOR THE USE OF ANY PUBLIC RIGHTS-OF-WAY AND IS TO MAINTAIN TRAFFIC ON THESE PUBLIC ROADS AT ALL TIMES, WITH THE COSTS OF PERMITTING, CLEANING AND REPAIRING OF PAVEMENT DAMAGED BY CONTRACTOR'S ACTIVITIES INCIDENTAL TO THE CONTRACT. USE OF AND REPAIRS TO ANY PUBLIC FACILITIES ARE TO BE COMPLETED TO THE SATISFACTION OF THE FACILITY'S OWNER.

THE CONTRACTOR IS TO PROVIDE TEMPORARY CONSTRUCTION ROADS WITHIN THE CONSTRUCTION LIMIT LINES AS MAY BE REQUIRED BY HIS ACTIVITIES. HEAVY VEHICLES SHALL NOT CROSS EXISTING PAVEMENT SURFACES EXCEPT AS APPROVED BY THE AIRPORT OWNER AND THE RESIDENT ENGINEER. ANY DAMAGE TO PAVEMENTS THAT MAY OCCUR BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE AIRPORT OWNER AND THE RESIDENT ENGINEER. FOR HAUL ROUTES MADE BY CONTRACTOR THROUGH GRASSED AREAS, CONTRACTOR SHALL GRADE, LEVEL, TOPSOIL, SEED AND MULCH AT THE END OF THE PROJECT, COST INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR IS TO PROVIDE AN EQUIPMENT STORAGE AND PARKING AREA AT THE LOCATIONS SHOWN ON SHEET 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE ACCESS ROADS AND THE STORAGE AREA DURING CONSTRUCTION AND TO RESTORE THE AREAS AT PROJECT COMPLETION TO CONDITIONS SUITABLE TO THE AIRPORT OWNER AND THE RESIDENT ENGINEER. AT THE AIRPORT OWNER'S DISCRETION, THE TEMPORARY FACILITIES MAY REMAIN, BUT THEY MUST BE LEFT IN CONDITIONS SUITABLE TO THE AIRPORT OWNER. THE COST OF PROVIDING, MAINTAINING AND RESTORING THE TEMPORARY FACILITIES IS INCIDENTAL TO THE CONTRACT.

# RESPONSIBILITY FOR EXISTING UTILITIES

THE LOCATION, SIZE AND/OR TYPE OF MATERIAL OF EXISTING UNDERGROUND OR OVERHEAD UTILITIES AS MAY BE INDICATED ON THESE CONSTRUCTION PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE PROJECT ENGINEER HAVE INDEPENDENTLY VERIFIED THIS INFORMATION AND NEITHER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE INFORMATION AND GIVE NO EXPRESSED OR IMPLIED GUARANTEE THAT ANY CONDITIONS INDICATED ARE REPRESENTATIVE OF ACTUAL CONDITIONS TO BE ENCOUNTERED.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND ACENCIES OF HIS CONSTRUCTION PLANS AND SHALL OBTAIN FROM EACH PARTY DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF ALL UTILITIES AND THE WORKING SCHEDULE OF ANY REMOVALS OR ADJUSTMENTS REQUIRED OF THE UTILITY. THE CONTRACTOR SHALL CONTRACT JULLIE. (PHONE 800—892—0123) TO ASSIST IN THE ABOVE.

THE CONTRACTOR SHALL PROTECT ANY FACILITIES TO THE SATISFACTION OF THE UTILITY OR OWNING-AGENCY WITH THE COST OF ANY REQUIRED PROTECTION TO BE INCIDENTAL TO THE CONTRACT. IN THE EVENT A UTILITY LINE OR SERVICE IS UNEXPECTEDLY ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESIDENT ENGINEER AND THE UTILITY COMPANY OR AGENCY OF JURISDICTION. ANY SUCH UTILITIES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO SERVICE AT ONCE.

# EXISTING BENCHMARKS

PROJECT BENCHMARKS ARE AS FOLLOWS:

B.M.1 N 1,800,236.82 E 1,051,080.54 ELEV 666.67

**△**B.M.2

M 1,800,302.96 E 1,052,719.90 ELEV 664.18

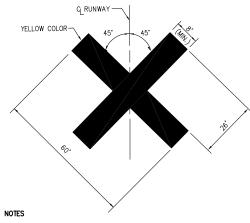
THIS DATA IS NOT ILLINOIS STATE PLANE COORDINATES



### NOTES

- 1. LIGHTED MARKER SHALL BE FURNISHED BY THE OWNER.
- THE LIGHTED MARKERS SHALL BE PLACED OVER THE RUNWAY NUMERALS AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.
- 3. LIGHTED MARKERS SHALL BE SECURED FROM WIND EFFECTS BY THE CONTRACTOR AS RECOMMENDED BY THE MANUFACTURER
- THE LIGHTED MARKERS SHALL BE IN PLACE AND OPERATING WHENEVER THE RUNWAY IS CLOSED AND REMOVED WHEN THE RUNWAY IS RE-OPENED.
- 5. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY REMOVE THE LIGHTED MARKERS FROM SERVICE, SUCH INTERRUPTION SHALL BE DURING DAYLIGHT CONDITIONS ONLY. THE LIGHTED MARKER SHALL BE REPLACED WITH OWNER-SUPPLIED VINYM MARKERS, WHICH SHALL BE PLACED, SECURED AND REMOVED BY THE CONTRACTOR AS SHOWN IN THE DETAIL, THIS SHEET. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

# LIGHTED RUNWAY CLOSURE MARKER



- VINYL MARKERS SHALL BE FURNISHED BY THE OWNER. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS FOR INSTALLING, RELOCATING AND MAINTAINING THE MARKERS, WHOSE COST SHALL BE INCIDENTAL TO THE CONTRACT.
- CONTRACTOR SHALL LOCATE THE MARKERS ON TOP OF THE RUNWAY
   NUMERALS DURING CLOSURE OF THE RUNWAY.
- MARKERS TO BE SECURED BY CONTRACTOR AS RECOMMENDED BY THE MANUFACTURER.

VINYL RUNWAY CLOSURE MARKER
(DAYLIGHT USE ONLY)

<u>DETAIL C</u> RUNWAY CLOSURE MARKERS

	OBJECT INFORMATION												
ITEM NO.	DESCRIPTION	PHASE	MOBILITY	GROUND ELEVATION	OBJECT ELEVATION	LATITUDE	LONGITUDE	RUNWAY 9-27 STATION	RUNWAY 9-27 OFFSET	RUNWAY 9-27 EXIST EL.	RUNWAY 2-20 STATION	RUNWAY 2-20 OFFSET	RUNWAY 2-20 EXIST EL.
1	CONSTRUCTION EQUIPMENT	N1	MOVING	667.1	687.1	41° 36' 32.5787" N	88° 05' 21.0920" N	65+66.96	200.0	668.7			
2	CONSTRUCTION EQUIPMENT	N4	MOVING	668.0	688.0	41° 36' 32.8675" N	88° 05' 11.3442" N	73+08.03	200.0	668.6			
3	CONSTRUCTION EQUIPMENT	S1	MOVING	667.5	687.5	41° 36' 24.0436" N	88° 05' 25.4993" N	61+98.31	650.0	668.7			
4	ENGINEER'S FIELD OFFICE	ALL	STATIONARY	665.3	680.3	41° 36' 19.5469" N	88° 05' 24.8732" N	62+27.87	1106.7	668.7			
5	HAUL ROUTE	ALL	MOVING	660.0	675.0	41° 36' 39.4579" N	88° 05' 42.7120" N				145+17.71	500.0	665.4
6	MATERIAL STOCKPILE	ALL	STATIONARY	654.3	654.3	41° 36' 48.6811" N	88° 05' 39.1606" N				154+88.62	540.4	663.0

# **RUNWAY END COORDINATES**

DESCRIPTION	LATITUDE	LONGITUDE	RUNWAY STATION
RUNWAY 27 END RUNWAY 2 END	41°35'57.2760" N	88'06'15.9913" W 88'05'01.0708" W 88'06'03.2207" W 88'05'42.9106" W	100+00.40

# <u>NOTES</u>

- 1. COORDINATES ARE IN NAD 83 FOR HORIZONTAL AND NAVD 88 FOR VERTICAL.
- 2. STATIONS, OFFSETS AND ELEVATIONS SHOWN ARE IN FEET.
- 3. THE APPROACH END OF RUNWAY 9 IS STATION 23+85. THE APPROACH END OF RUNWAY 2 IS STATION 100+00.
- THE AIRPORT REFERENCE CODE FOR RUNWAY 9-27 IS B-II WITH NONPRECISION APPROACHES WITH VISIBILITY 1 MILE OR GREATER ON BOTH RUNWAY 9 AND BINNWAY 27
- THE AIRPORT REFERENCE CODE FOR RUNWAY 2-20 IS D-III WITH NONPRECISION APPROACHES WITH VISIBILITY AS LOW AS 3/4 MILE ON RUNWAY 2 AND AS LOW AS 1 MILE ON RUNWAY 20.

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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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DRAWN BY: LDH 11/21/14

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SHEET TITLE

REVIEWED BY: RMH 3/8/16

SITE AND SAFETY NOTES AND POINT TABLE

### SAFETY IS REQUIRED

CONSTRUCTION OF THE PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE GUIDELINES SPECIFIED IN FAA ADVISORY CIRCULAR 150/5370-2 (CURRENT ISSUE) AND THE AIRPORT RULES AND REGULATIONS (AS PUBLISHED ON LEWIS UNIVERSITY AIRORT'S WEBSITE AT WWW.FLVLOT.COM, UNDER JRPD ORDINANCES AND MINUTES (EXCEPT FEES FOR VEHICLE DRIVING PERMITS SHALL NOT BE PAID). ANY ACTIVITIES REQUIRED FOR PROJECT SAFETY SHALL BE INCIDENTAL TO THE CONTRACT.

### SEQUENCE OF CONSTRUCTION

TO MINIMIZE DISRUPTIONS TO AIRPORT OPERATIONS, CONSTRUCTION OPERATIONS MUST BE CONTROLLED THROUGHOUT THE PROJECT'S DURATION, AND WORK MUST BE COMPLETED EXPEDITIOUSLY. A CONSTRUCTION PHASINIG PLAN DETAILING THE SEQUENCING OF THE CONTRACTOR'S WORK THROUGHOUT THE PROJECT IS INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PROVIDE HIS WRITTEN ACCEPTANCE OF THE PROJECT CONSTRUCTION PHASING PLAN AT THE PRE-CONSTRUCTION CONFERENCE. ANY AND ALL CHANGES TO THE CONSTRUCTION PHASING PLAN THAT MAY BE REQUESTED BY THE CONTRACTOR MUST BE APPROVED BY THE PROJECT ENGINEER AND THE AIRPORT OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SUFFICIENT ADVANCE NOTICE OF ANY PROPOSED PHASING CHANGE TO PERMIT CONSIDERATION AND APPROVAL BY THE PROJECT ENGINEER AND THE AIRPORT OWNER. THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY EXTRA COMPENSATION NOR EXTENSION TO THE CONTRACT TIME BECAUSE OF A PHASING CHANGE REQUEST NOR FOR ANY TIME NECESSARY IN RECEIVING THE REQUIRED APPROVALS. THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY EXTRA COMPENSATION NOR EXTENSION TO THE CONTRACT TIME BECAUSE OF A PHASING CHANGE REQUEST NOR FOR ANY TIME NECESSARY IN RECEIVING THE REQUIRED APPROVALS. THE CONTRACTOR SHALL EXPEDITE WORK AT THOSE STAGES WHERE ACTIVE TAXIMAYS, HANGAR ACCESS, APRONS, ROADWAYS OR PARKING LOTS MUST BE CLOSED, TO MINIMIZE THE LENGTH OF TIME THAT AIRPORT OFERATIONS ARE RESTRICTED.

AT THE PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL PROVIDE A CONTRACTOR COORDINATION PLAN THAT COORDINATES HIS WORK WITH THE WORK OF HIS SUBCONTRACTORS AND THE WORK OF OTHER CONTRACTORS OF OTHER ON-GOING AIRPORT PROJECTS.

### CONSTRUCTION LIMITS

THE CONTRACTOR SHALL REMAIN WITHIN THE CONSTRUCTION LIMITS SHOWN ON THE PLANS. THE CONTRACTOR SHALL FURNISH MEASURES TO PREVENT EQUIPMENT AND PERSONNEL FROM OPERATING OUTSIDE THESE LIMITS. SEE DETAIL A, THIS SHEET.

### VEHICULAR TRAFFIC CONTROL

THE CONTRACTOR SHALL ERECT AND MAINTAIN, AT NO COST TO THE CONTRACT, DIFECTIONAL AND INFORMATIONAL SIGNS FOR THE CONTRACTOR'S ACCESS ROUTES AT THE EXISTING CONSTRUCTION ENTRANCE AND FOR THE CONTRACTOR'S ROUTE WITHIN THE AIRPORT OPERATIONS AREA, AS NOTED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. WHERE CONTRACTOR EQUIPMENT IS OPERATING WITHIN ACTIVE AIRCRAFT OPERATIONS AREAS, RADIO—EQUIPED FLAGGERS SHALL BE FURNISHED BY THE CONTRACTOR. CONTINUING PAVEMENT SWEEPING SHALL BE FURNISHED TO REMOVE DEBRIS FROM ACTIVE AIRCRAFT MOVEMENT PATHS. THE COST OF TRAFFIC CONTROL/FLAGGERS AND PAVEMENT SWEEPING SHALL BE INCIDENTAL TO THE CONTRACT.

### AIRFIELD OPERATIONAL SAFETY DURING CONSTRUCTION

THE CONTRACTOR SHALL NOT HAVE ACCESS TO ANY PART OF THE ACTIVE AIRFIELD (RUNWAYS, TAXIWAYS OR APRONS) FOR ANY EQUIPMENT OR PERSONNEL WITHOUT THE APPROVAL OF THE RESIDENT ENGINEER AND THE AIRPORT OWNER. ACTIVITIES WITHIN THE AIRPORT OPERATIONS AREA (AOA) ARE SUBJECT TO FEDERAL ACCESS CONTROL. BECAUSE OF THE HIGH REQUIREMENTS FOR AIRPORT SECURITY AND SAFETY, THE FOLLOWING REQUIREMENTS MUST BE ADHERED TO:

- ALL EMPLOYEES OF THE CONTRACTOR SHALL PARK THEIR PERSONAL VEHICLES IN THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREA. EACH PERSON OR VEHICLE ENTERING
  THE CONTRACTOR AREA SHALL DO SO IN ACCORDANCE WITH THE POLICIES AND PROCEDURES OF THE AIRPORT OWNER. THE CONTRACTOR WILL TRANSPORT THE WORKERS FROM THE
  PARKING AREAS TO THE WORK AREA. ONLY CONTRACTOR VEHICLES WILL BE ALLOWED OUTSIDE OF THE PROPOSED EQUIPMENT STORAGE AND PARKING AREAS.
- SHOULD ANY CONTRACTOR PERSONNEL BE IDENTIFIED AS NONCOMPLIANT WITH ANY VEHICLE DRIVING SAFETY REQUIREMENTS IN THIS SAFETY PLAN OR IN THE AIRPORT VEHICLE OPERATIONS REGULATIONS, SUCH DRIVERS SHALL BE PENALIZED BY RESCISSION OF THEIR ON—AIRPORT DRIVING PRIVILEGES, AND THEIR ACCESS TO THE CONSTRUCTION LIMIT AREA WHEN OPERATING VEHICLES SHALL BE REVOKED.
- THE CONTRACTOR WILL BE REQUIRED TO BE IN CONTACT WITH AIRPORT OPERATIONS. THIS WILL KEEP THE CONTRACTOR IN CONTACT WITH AIRPORT PERSONNEL AND ENABLE THE
  AIRPORT PERSONNEL TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTICAL EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS
  PERSONNEL.

THE PROJECT WILL REQUIRE THE CLOSING OF RUNWAY 9-27 DURING A PORTION OF THE WORK. THE CONTRACTOR SHALL PLACE AND OPERATE AND MAINTAIN THE LIGHTED RUNWAY CLOSURE MARKERS FURNISHED BY THE AIRPORT OWNER, AS DETAILED IN THE PLANS. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT. TO MINIMIZE DISRUPTION TO AIRCRAFT OPERATIONS ASSOCIATED WITH THE RUNWAY CLOSINGE, CONSTRUCTION WORK MUST BE COMPLETED EXPEDITIOUSLY. RUNWAY CLOSINGS SHALL ONLY BE PERMITTED BY PRIOR AUTHORIZATION OF THE RESIDENT ENGINEER AND THE AIRPORT OWNER, AND IN ACCORDANCE WITH THE PHASING PLAN. WHEN THE RUNWAY IS TO BE CLOSED, THE AIRPORT OWNER WILL DE-ENERGIZE AIRPORT/RUNWAY NAVAIDS, AND AIRFIELD LIGHTING POWER AND CONTROL CIRCUITS WEIN REQUIRED BY THE CONTRACTOR'S ACTIVITIES. THE CONTRACTOR SHALL NOT PROCEED WITH FURTHER WORK UNTIL AFTER THE REQUIRED CHANGES TO THE AIRPORT OWNER MADE BY THE AIRPORT OWNER.

THE CONTRACTOR SHALL FURNISH, PLACE, MAINTAIN, RELOCATE, AND REMOVE TEMPORARY BARRICADES ON AIRFIELD TAXIWAYS AND OTHER PAVEMENT SURFACES AS SHOWN AND DETAILED IN THE CONSTRUCTION PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR SHALL REMAIN WITHIN THE CONSTRUCTION LIMITS LINE SHOWN IN THE PLANS. WHEN OUTSIDE THESE LIMITS, ALL CONTRACTOR ACTIVITIES SHALL REMAIN MORE THAN 250 FEET FROM THE CENTERLINE AND 3,000 FEET FROM THE END OF ACTIVE RUNWAY 9-27, AND 250 FEET FROM THE CENTERLINE AND 1,000 FEET FROM THE END OF ACTIVE RUNWAY 9-27, AND 250 FEET FROM THE CENTERLINE AND 1,000 FEET FROM THE END OF ACTIVE CATEGORY I TAXIWAY CENTERLINES, 65.5 FEET FROM ACTIVE CATEGORY II TAXIWAY CENTERLINES, 65.5 FEET FROM ACTIVE CATEGORY II TAXIWAY CENTERLINES, ASD 35 FEET FROM ACTIVE CATEGORY II TAXIWAY CENTERLINES, ASD 35 FEET FROM ACTIVE CATEGORY II TAXIWAY CENTERLINES, ASD 35 FEET FROM ACTIVE CATEGORY II TAXIWAY CENTERLINES, ASD 35 FEET FROM ACTIVE THANGAR TAXILANES AND TEN (10) FEET FROM ACTIVE APRONS. (ALL TAXIWAYS IN THE PROJECT WORK AREA ARE EITHER CATEGORY II (44.5 FEET), OR CATEGORY III (65.5 FEET), OR CATEGORY III (93 FEET), AS SHOWN IN THE PHASING PLAN.) WHEN CONSTRUCTION OPERATIONS MUST BE CONDUCTED WITHIN THESE SEPARATIONS, THE PAVEMENT MUST BE CLOSED TO AIRCRAFT ACTIVITY BY THE CONTRACTOR BY PROVIDING TEMPORARY BARRICADES AS SHOWN IN THE PLANS, AND IN THE CASE OF RUNWAY PAVEMENTS, CLOSED RUNWAY MARKERS. NO CLOSURE OF ANY RUNWAY WILL BE PERMITTED FOR THIS PROJECT, EXCEPT AS SHOWN IN THE PHASING PLAN.

THE CONTRACTOR SHALL KEEP ALL OF HIS EQUIPMENT AND PERSONNEL AT LEAST 15 FEET FROM THE EDGE OF ANY ACTIVE ROADWAY OR AUTO PARKING PAVEMENT. WHEN HIS ACTIVITIES REQUIRE WORKING WITHIN 15 FEET OF THE ROAD/PAVEMENT EDGE, THE CONTRACTOR SHALL PROVIDE FOR TRAFFIC CONTROL IN ACCORDANCE WITH IDOT SPECIFICATIONS (HIGHWAY STANDARDS).

OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL AT THE CONSTRUCTION SITE SHALL BE DELINEATED WITH THE USE OF BARRICADES DURING HOURS OF RESTRICTED VISIBILITY AND/OR DARKNESS. NO OPEN TRENCHES SHALL BE ALLOWED WITHIN THE RUNWAY SAFETY AREA (RSA) OR THE TAXIWAY SAFETY AREA (TSA) WHEN THE RUNWAY OR TAXIWAY IS OPEN TO AIR TRENFIC (INCLUDING OVERNICHT). THE RSA IS DEFINED AS 75 FEET FROM THE CENTERLINE AND 300 FEET FROM THE END OF RUNWAY 92-20. THE TSA IS MEASURED AT 24.5 FEET FROM THE CATECORY I TAXIWAY CENTERLINE, 39.5 FEET FROM THE CATECORY II TAXIWAY CENTERLINE, AND 5.9 FEET FROM THE CATECORY II TAXIWAY CENTERLINE, AND 5.9 FEET FROM THE CATECORY II TAXIWAY CENTERLINE, AND 5.9 FEET FROM THE CATECORY II TAXIWAY CENTERLINE, AND 5.9 FEET FROM THE CATECORY II TAXIWAY CENTERLINE, AND 5.0 FEET FROM

WHEN NOT IN USE AND DURING NONWORKING HOURS, CONTRACTOR'S EQUIPMENT SHALL BE PARKED WITHIN THE CONTRACTOR'S EQUIPMENT STORAGE AND PARKING AREAS ARE TO BE LOCATED AS SHOWN ON THE PHASING PLAN. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION ENTRANCES AND CONTRACTOR REAS IN GOOD CONDITION. THE COST OF MAINTAINING THE CONSTRUCTION ENTRANCE AND CONTRACTOR AREAS IS TO BE INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL PROTECT ALL EXISTING PAVEMENT EDGES FROM DAMAGE FROM CONSTRUCTION EQUIPMENT AND HAUL VEHICLES.

AT NO TIME SHALL THE CONTRACTOR OPERATE OR PARK EQUIPMENT SO AS TO OBSTRUCT AN ACTIVE PART 77 AIRPORT IMAGINARY SURFACES. CONTRACTOR'S EQUIPMENT SHALL EXTEND NO HIGHER THAN 20 FEET. CRANES SHALL NOT BE USED DURING INSTRUMENT WEATHER CONDITIONS OR AT NIGHT. CRANES SHALL BE LOWERED WHEN NOT IN USE.

BEFORE REOPENING TEMPORARILY CLOSED PAVEMENTS, THE CONTRACTOR SHALL INSPECT AND CLEAN, AS NECESSARY, THE PAVEMENT TO ASSURE THAT NO MATERIALS OR OBJECTS THAT MAY DAMAGE AIRCRAFT OR VEHICLES REMAIN. ANY REQUIRED CLEANING SHALL BE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT OWNER AND IS INCIDENTAL TO THE

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROVED PROJECT SAFETY PLAN, ISSUED BY THE ILLINOIS DIVISION OF AERONAUTICS. FAILURE TO USE THESE PRESCRIBED PROCEDURES OR ADHERE TO THE SAFETY REQUIREMENTS WILL RESULT IN THE SUSPENSION OF WORK.

# NOTIFICATIONS BY CONTRACTOR

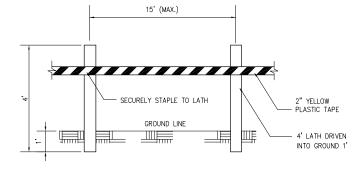
THE CONTRACTOR MUST NOTIFY THE RESIDENT ENGINEER AND THE AIRPORT OWNER 3 (3) DAYS IN ADVANCE OF ANY REQUIRED PARTIAL OR COMPLETE CLOSING OF ANY TAXIWAY OR APRON. THE DATE, TIME AND SCHEDULED DURATION OF THE CLOSING MUST BE APPROVED BY THE RESIDENT ENGINEER AND THE AIRPORT OWNER. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT OWNER 72 HOURS IN ADVANCE OF THE CONTRACTOR'S CLOSING OF OTHER ACTIVE ROADWAYS, AIRFIELD OR ROADWAY LIGHTING CIRCUITS, OR OTHER AIRPORT FACILITIES.

# CONTRACTOR'S USE OF SI

THE CONTRACTOR SHALL NOT OPERATE WITHIN, ENCROACH UPON OR OBSTRUCT AIRPORT OPERATIONAL AREAS, INCLUDING ACTIVE RUNWAY, TAXIWAYS AND APRON SAFETY AREAS, OBJECT AND OBSTACLE FREE ZONES, RUNWAY PROTECTION ZONES AND AIRPORT IMAGINARY SURFACES AS DEFINED IN FEDERAL AVIATION REGULATIONS (FAR) PART 77, "OBJECTS AFFECTING NAVIGABLE AIRSPACE".

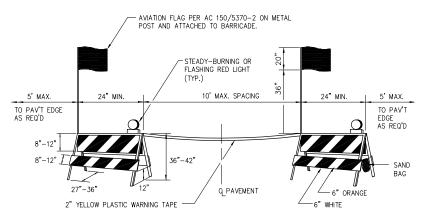
# UTILITY OUTAGES AND SHUTDOWN

THE CONTRACTOR SHALL PROVIDE 72 HOURS PRIOR NOTICE OF ANY OUTAGES OR SHUTDOWNS TO THE OWNER AND THE AGENCY OWNING THE AFFECTED UTILITY. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY CONNECTIONS OR OTHER MEASURES AS MAY BE REQUIRED TO MAINTAIN SERVICE AS MAY BE REQUIRED BY THE OWNING AGENCY AT NO COST TO THE OWNER.



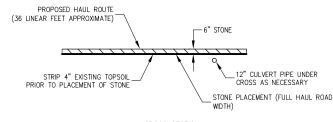
MATERIALS ARE TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION. COST OF MATERIALS, INSTALLATION, RELOCATION AND MAINTENANCE OF LATHING AND WARNING TAPE IS TO BE INCIDENTAL TO THE CONTRACT.

# <u>DETAIL A</u> LATHING AND WARNING TAPE

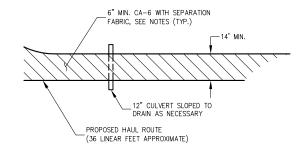


BARRICADES ARE TO BE OF IDOT TYPE I. A STEADY-BURNING OR FLASHING RED LIGHT FACING PASSING TRAFFIC IS TO BE MOUNTED ABOVE THE TOP OF EACH BARRICADE FRAME. THE BARRICADE IS TO BE STABILIZED FROM WIND BY SANDBAGS PLACED ON THE FRAME OR OTHER METHODS APPROVED BY THE RESIDENT ENGINEER. NO PART OF THE REFLECTORIZED PORTION OF THE BARRICADE IS TO BE OBSTRUCTED IN ANY MANNER. COST OF FURNISHING, INSTALLING, RELOCATING, MAINTAINING AND REMOVING BARRICADES IS TO BE PAID UNDER ITEM ART50530.

# <u>DETAIL B</u> PAVEMENT BARRICADES



# CROSS SECTION



### NOTES:

# <u>PLAN</u>

- 1. STRIP 4" OF EXISTING TOPSOIL PRIOR TO PLACEMENT OF STONE.
- STONE SHALL BE 2-INCH SIZE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT, OR RECYCLED ASPHALT.
- 3. HAUL ROUTE THICKNESS SHALL NOT BE LESS THAN SIX INCHES
- 4. HAUL ROUTE WIDTH SHALL BE 14 FEET MINIMUM.
- 5. SURFACE WATER FLOWING OR DIVERTED SHALL BE CARRIED IN CULVERT (CMP, STEEL OR HDPE).
- PLACE SEPARATION FABRIC PRIOR TO STONE PLACEMENT FOR FULL WIDTH OF HAUL ROUTE. FABRIC TO BE MIRAFI 160N OR APPROVED EQUAL, COST INCIDENTAL TO ITEM ART50540.
- A CONCRETE WASHOUT PIT TO PROHIBIT STORM WATER DISCHARGE SHALL ALSO BE FURNISHED, AND SHALL BE BUILT MEETING THE REQUIREMENTS OF THE ILLINOIS URBAN MANUAL AND AS SEEN IN THE DETAILS.
- 8. THE HAUL ROUTE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO AIRPORT PAVEMENTS OR PUBLIC RICHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL AGGREGATE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO AIRPORT PAVEMENTS OR PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
- PERIODIC INSPECTION SHALL BE PERFORMED AND REQUIRED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.
- 10. HAUL ROUTE AND WASHOUT PIT TO BE REMOVED AT PROJECT END. AREA TO BE RESTORED AND RESEEDED AND LEFT IN A CONDITION SATISFACTORY TO THE RESIDENT ENCINETE.
- 11. COST OF INSTALLING, MAINTAINING, REMOVING AND RESTORING HAUL ROUTE SHALL BE PAID UNDER ITEM AR150540.

# <u>DETAIL D</u> <u>HAUL ROUTE</u>



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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

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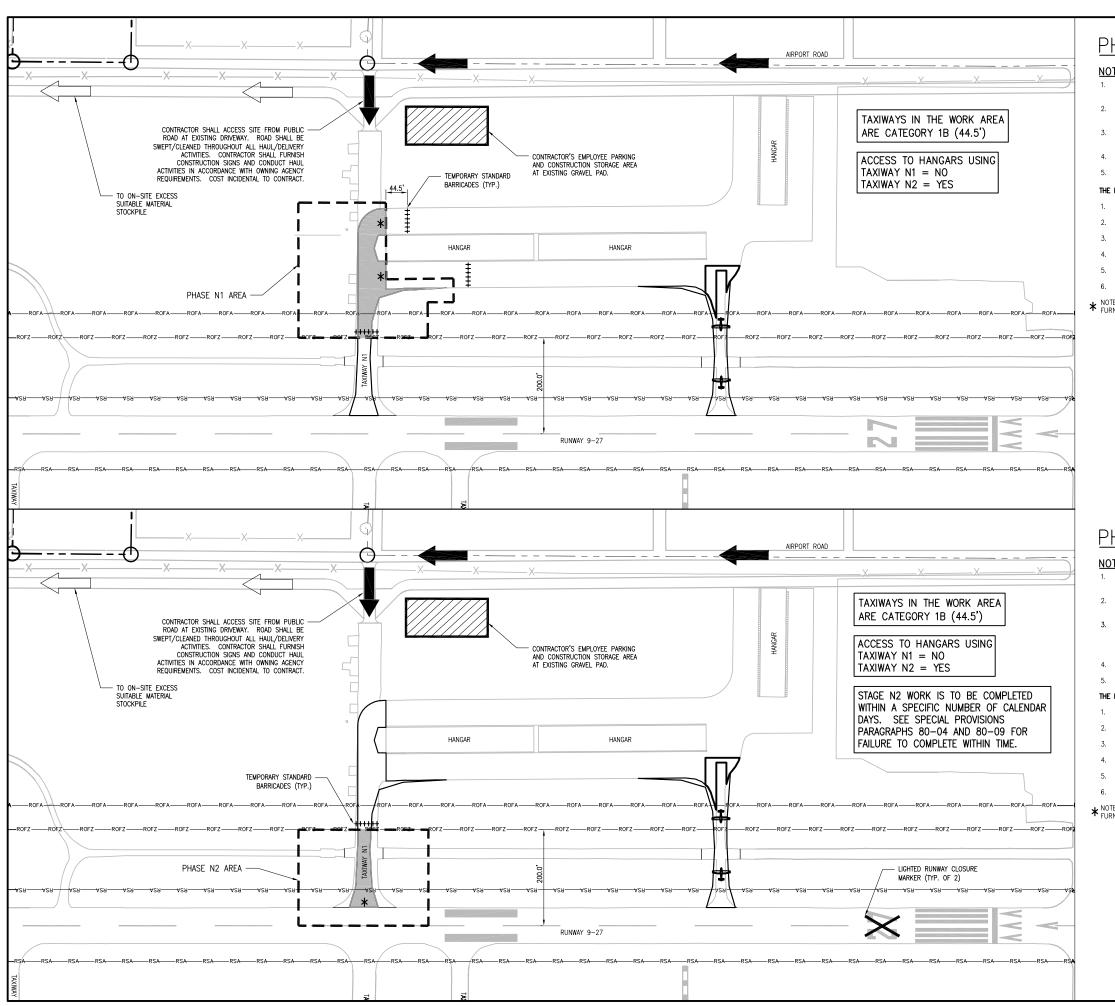
DESIGN BY: LDH 11/21/14
DRAWN BY: LDH 11/21/14

REVIEWED BY: RMH 3/8/16

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TEET TITLE

CONSTRUCTION SAFETY NOTES AND DETAILS



# PHASE N1

- 1. ALL CONTRACTOR ACTIVITIES SHALL TAKE PLACE WITHIN CONSTRUCTION LIMIT LINES AS SHOWN.
- 2. ALL CONSTRUCTION EQUIPMENT WILL BE LIMITED TO A HEIGHT OF 20 FEET UNLESS PRIOR APPROVAL GIVEN BY THE ENGINEER (SEE SPECIAL PROVISIONS)
- 3. CONTRACTOR'S EQUIPMENT MAY NOT DISRUPT FLIGHT OPERATIONS ON RUNWAY 2-20 OR 9-27 AT ANY TIME DURING PHASE N1
- 4. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 5. SEE CONSTRUCTION SITE PLAN ON SHEET 3 AND SAFETY NOTES ON SHEET 5.

### THE FOLLOWING ITEMS ARE TO BE COMPLETED IN PHASE N1:

- PAVEMENT REMOVAL WITHIN PHASE N1 LIMITS
- 2 EXCAVATION WITHIN PHASE NI LIMITS
- 3. INSTALL DRAINAGE LAYER AND AGGREGATE WITHIN PHASE N1 LIMITS.
- 4. INSTALL UNDERDRAIN AND STORM SEWER WITHIN PHASE N1 LIMITS.
- 5. INSTALL BITUMINOUS BASE COURSE WITHIN PHASE N1 LIMITS.
- 6. GRADE AND LANDSCAPE WITHIN PHASE N1 LIMITS.
- \* NOTE: TEMPORARY TAPERS FROM EXISTING PAVEMENT TO REMAIN SHALL BE FURNISHED AS SHOWN ON SHEET 16, PAID FOR UNDER AR403613.

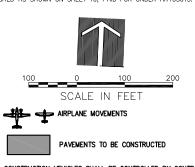
AT CONTRACTOR'S OPTION, WORK MAY BE COMPLETED IN BOTH NORTH AND SOUTH AREA, SO LONG AS ALL CLOSURE DURATION AND WORK PROGRESS REQUIREMENTS ARE MET.

# PHASE N2

- ALL CONTRACTOR ACTIVITIES SHALL TAKE PLACE WITHIN CONSTRUCTION LIMIT LINES AS SHOWN.
- ALL CONSTRUCTION EQUIPMENT WILL BE LIMITED TO A HEIGHT OF 20 FEET UNLESS PRIOR APPROVAL GIVEN BY THE ENGINEER (SEE SPECIAL PROVISIONS).
- WORK IN PHASE N2 SHALL BE LIMITED TO 5 CALENDAR DAYS IN ORDER TO MINIMIZE THE TIME RUNWAY 9-27 IS CLOSED. IF PHASE N2 AND N3 ARE COMBINED, THE WORK MUST BE COMPETED IN 7 DAYS. RUNWAY 9-27 SHALL BE CLOSED WHEN WORKING WITHIN 200 FEET OF THE CENTERLINE
- TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 5. SEE CONSTRUCTION SITE PLAN ON SHEET 3 AND SAFETY NOTES ON SHEET 5.

# THE FOLLOWING ITEMS ARE TO BE COMPLETED IN PHASE N2:

- 1. PAVEMENT REMOVAL WITHIN PHASE N2 LIMITS.
- 2. EXCAVATION WITHIN PHASE N2 LIMITS.
- 3. INSTALL DRAINAGE LAYER AND AGGREGATE WITHIN PHASE N2 LIMITS.
- 4. INSTALL UNDERDRAIN AND STORM SEWER WITHIN PHASE N2 LIMITS.
- 5. INSTALL BITUMINOUS BASE COURSE WITHIN PHASE N2 LIMITS.
- 6. GRADE AND LANDSCAPE WITHIN PHASE N2 LIMITS.
- \* NOTE: TEMPORARY TAPERS FROM EXISTING PAVEMENT TO REMAIN SHALL BE FURNISHED AS SHOWN ON SHEET 16, PAID FOR UNDER AR403613.



CONSTRUCTION VEHICLES SHALL BE CONTROLLED BY CONTRACTOR AND SHALL ALWAYS YIELD TO AIRCRAFT. SEE SPECIAL PROVISIONS.



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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

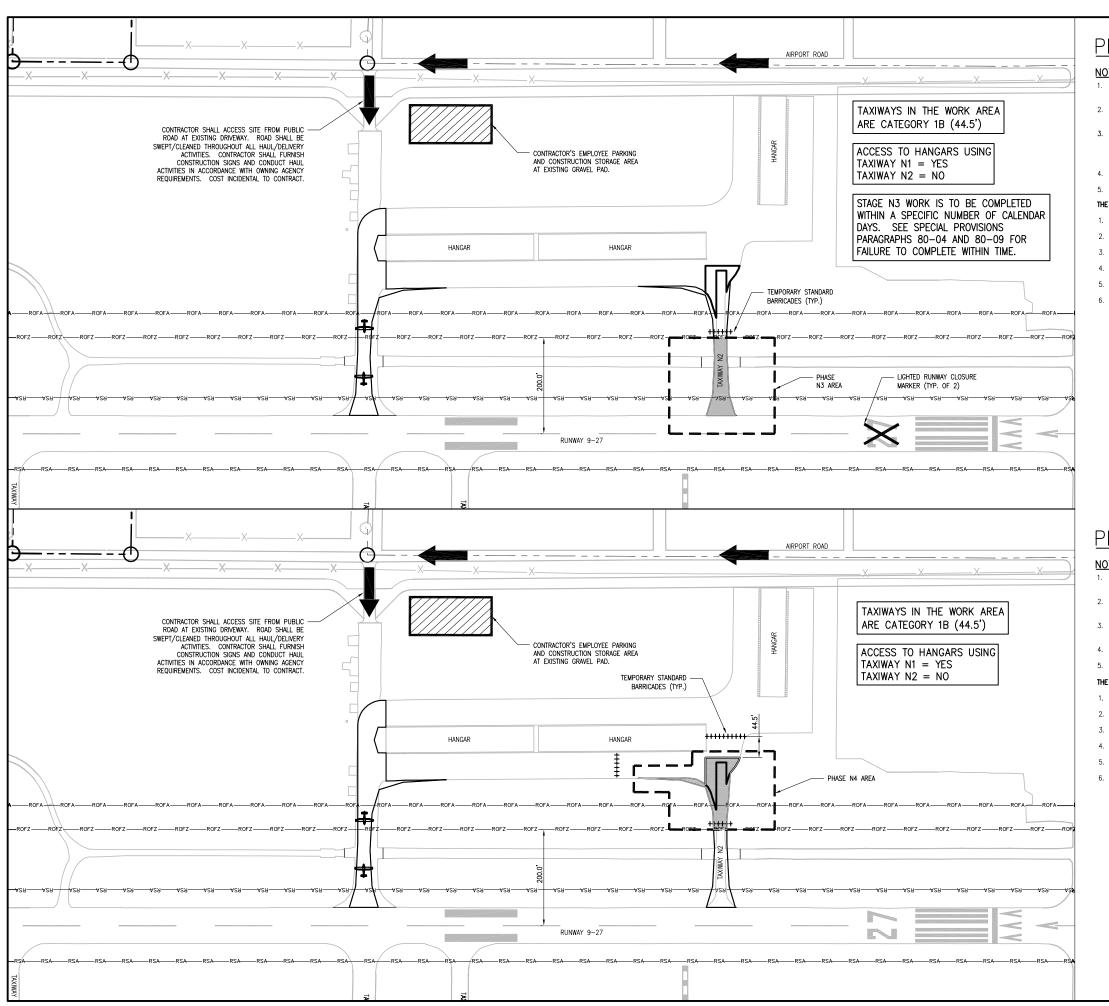
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PHASING PLAN TAXIWAY N1 AND N2 PHASE N1 AND N2

DRAWN BY: LDH 1/12/15 REVIEWED BY: RMH 3/8/16

SHEET TITLE



# PHASE N3

- ALL CONTRACTOR ACTIVITIES SHALL TAKE PLACE WITHIN CONSTRUCTION LIMIT LINES AS SHOWN.
- ALL CONSTRUCTION EQUIPMENT WILL BE LIMITED TO A HEIGHT OF 20 FEET UNLESS PRIOR APPROVAL GIVEN BY THE ENGINEER (SEE SPECIAL PROVISIONS).
- 3. WORK IN PHASE N3 SHALL BE LIMITED TO 5 CALENDAR DAYS IN ORDER TO MINIMIZE THE TIME RUNWAY 9-27 IS CLOSED. IF PHASE N2 AND N3 ARE COMBINED, THE WORK MUST BE COMPLETED IN 7 DAYS. RUNWAY 9-27 SHALL BE CLOSED WHEN WORKING WITHIN 200 FEET OF THE CENTERLINE.
- 4. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 5. SEE CONSTRUCTION SITE PLAN ON SHEET 3 AND SAFETY NOTES ON SHEET 5.

### THE FOLLOWING ITEMS ARE TO BE COMPLETED IN PHASE N3:

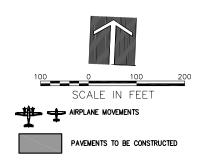
- PAVEMENT REMOVAL WITHIN PHASE N3 LIMITS.
- 2. EXCAVATION WITHIN PHASE N3 LIMITS.
- 3. INSTALL DRAINAGE LAYER AND AGGREGATE WITHIN PHASE N3 LIMITS.
- 4. INSTALL UNDERDRAIN AND STORM SEWER WITHIN PHASE N3 LIMITS.
- 5. INSTALL BITUMINOUS BASE COURSE WITHIN PHASE N3 LIMITS.
- 6. GRADE AND LANDSCAPE WITHIN PHASE N3 LIMITS

# PHASE N4

- 1. ALL CONTRACTOR ACTIVITIES SHALL TAKE PLACE WITHIN CONSTRUCTION LIMIT LINES AS SHOWN.
- 2. ALL CONSTRUCTION EQUIPMENT WILL BE LIMITED TO A HEIGHT OF 20 FEET UNLESS PRIOR APPROVAL GIVEN BY THE ENGINEER (SEE SPECIAL PROVISIONS).
- 3. CONTRACTOR'S EQUIPMENT MAY NOT DISRUPT FLIGHT OPERATIONS ON RUNWAY  $2-20\,$  OR  $9-27\,$  AT ANY TIME DURING PHASE N4.
- 4. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 5. SEE CONSTRUCTION SITE PLAN ON SHEET 3 AND SAFETY NOTES ON SHEET 5.

# THE FOLLOWING ITEMS ARE TO BE COMPLETED IN PHASE N4:

- 1. PAVEMENT REMOVAL WITHIN PHASE N4 LIMITS.
- 2. EXCAVATION WITHIN PHASE N4 LIMITS.
- 3. INSTALL DRAINAGE LAYER AND AGGREGATE WITHIN PHASE N4 LIMITS.
- 4. INSTALL UNDERDRAIN AND STORM SEWER WITHIN PHASE N4 LIMITS.
- 5. INSTALL BITUMINOUS BASE COURSE WITHIN PHASE N4 LIMITS.
- 6. GRADE AND LANDSCAPE WITHIN PHASE N4 LIMITS.



CONSTRUCTION VEHICLES SHALL BE CONTROLLED BY CONTRACTOR AND SHALL ALWAYS YIELD TO AIRCRAFT. SEE SPECIAL PROVISIONS.



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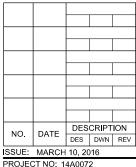
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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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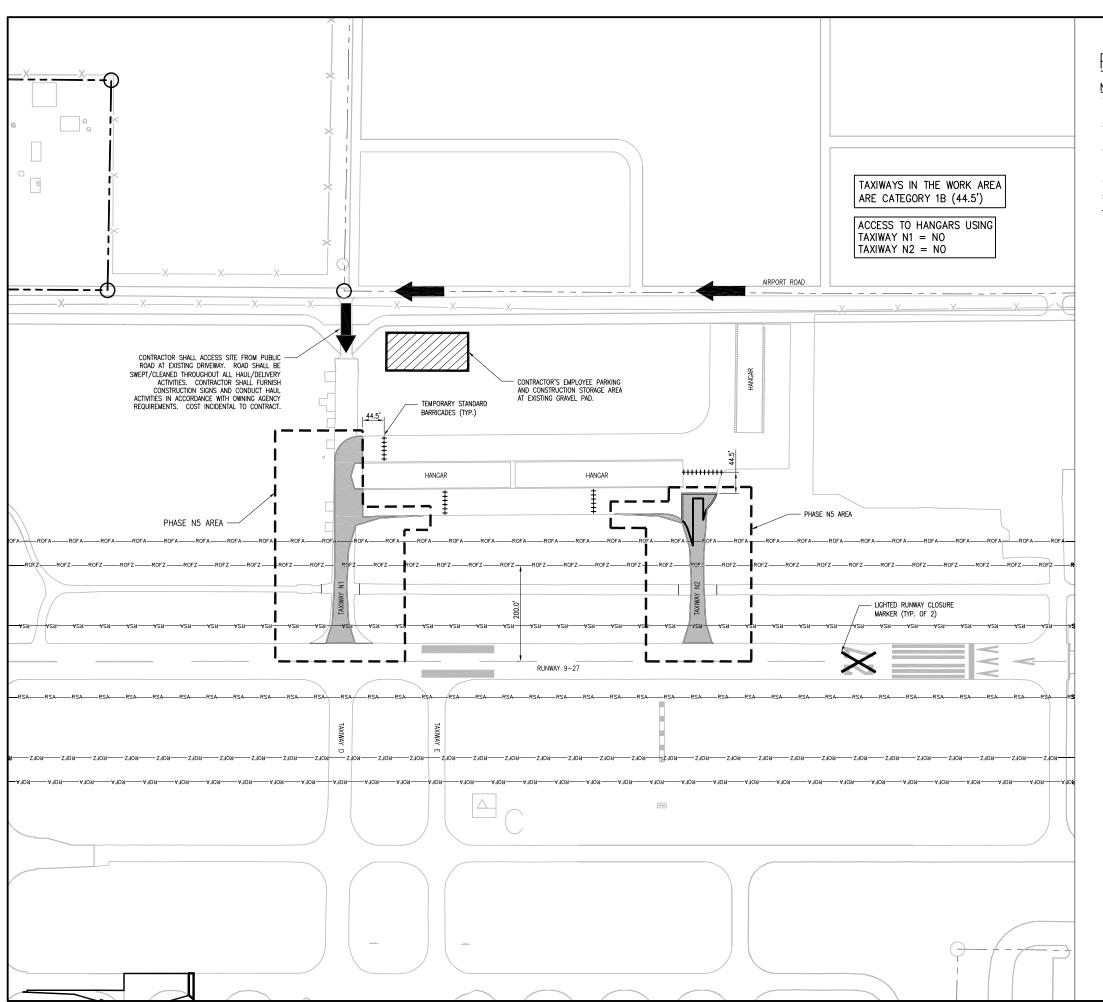
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DRAWN BY: LDH 1/12/15 REVIEWED BY: RMH 3/8/16

SHEET TITLE

PHASING PLAN

TAXIWAY N1 AND N2 PHASE N3 AND N4



# PHASE N5

- ALL CONTRACTOR ACTIVITIES SHALL TAKE PLACE WITHIN CONSTRUCTION LIMIT LINES AS SHOWN.
- ALL CONSTRUCTION EQUIPMENT WILL BE LIMITED TO A HEIGHT OF 20 FEET UNLESS PRIOR APPROVAL GIVEN BY THE ENGINEER (SEE SPECIAL PROVISIONS).
- 3. WORK IN PHASE N5 SHALL BE LIMITED TO 2 CALENDAR DAYS IN ORDER TO MINIMIZE THE TIME RUNWAY 9-27 IS CLOSED. RUNWAY 9-27 SHALL BE CLOSED WHEN WORKING WITHIN 200 FEET OF THE CENTERLINE.
- 4. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 5. SEE CONSTRUCTION SITE PLAN ON SHEET 3 AND SAFETY NOTES ON SHEET 5.

## THE FOLLOWING ITEMS ARE TO BE COMPLETED IN PHASE N5:

1. INSTALL BITUMINOUS SURFACE COURSE WITHIN PHASE N5 LIMITS.

SCALE IN FEET

PAVEMENTS TO BE CONSTRUCTED

CONSTRUCTION VEHICLES SHALL BE CONTROLLED BY CONTRACTOR AND SHALL ALWAYS YIELD TO AIRCRAFT. SEE SPECIAL PROVISIONS.

AIRPLANE MOVEMENTS

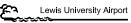
2. INSTALL PAVEMENT MARKINGS WITHIN PHASE N5 LIMITS.



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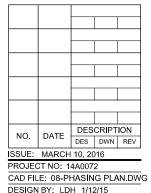


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REVIEWED BY: RMH 3/8/16 SHEET TITLE

DRAWN BY: LDH 1/12/15

PHASING PLAN

TAXIWAY N1 AND N2 PHASE N5



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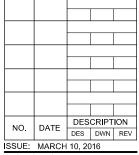
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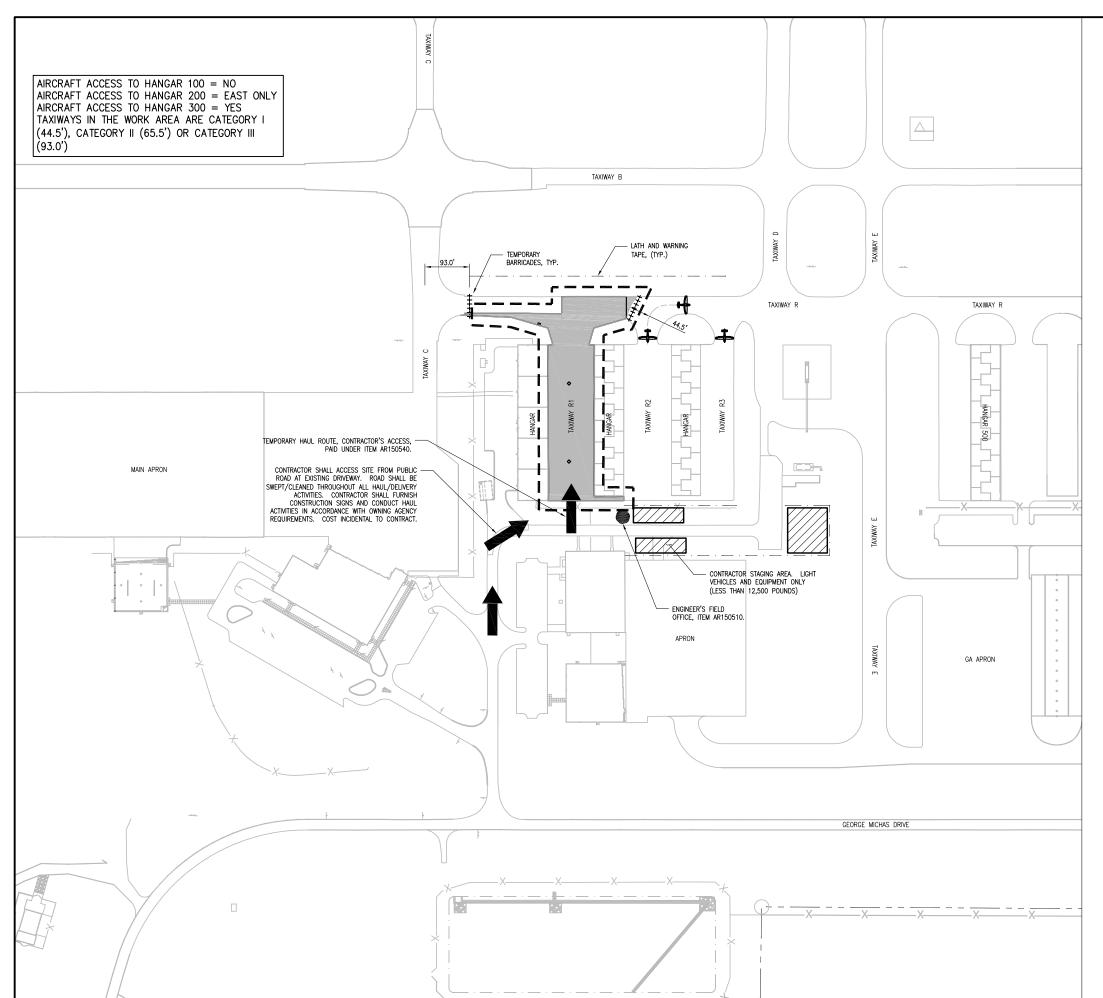
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REVIEWED BY: RMH 3/8/16

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SHEET TITLE

PHASING PLAN CLOSED RUNWAY BARRICADE PLAN



# PHASE S1

- AL CONTRACTOR ACTIVITIES SHALL TAKE PLACE WITHIN CONSTRUCTION LIMIT LINES AS SHOWN.
- ALL CONSTRUCTION EQUIPMENT WILL BE LIMITED TO A HEIGHT OF 20 FEET UNLESS PRIOR APPROVAL GIVEN BY THE ENGINEER (SEE SPECIAL PROVISIONS).
- 3. CONTRACTOR'S EQUIPMENT MAY NOT DISRUPT FLIGHT OPERATIONS ON RUNWAY  $2-20\ \text{OR}\ 9-27$  AT ANY TIME DURING STAGE S1.
- 4. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 5. SEE CONSTRUCTION SITE PLAN ON SHEET 3 AND SAFETY NOTES ON SHEET 5.

# THE FOLLOWING ITEMS ARE TO BE COMPLETED IN PHASE S1:

- 1. PAVEMENT REMOVAL WITHIN PHASE S1 LIMITS.
- 2. EXCAVATION WITHIN PHASE S1 LIMITS.
- 3. INSTALL DRAINAGE LAYER AND AGGREGATE WITHIN PHASE S1 LIMITS.
- 4. INSTALL UNDERDRAIN AND STORM SEWER WITHIN PHASE S1 LIMITS.
- 5. INSTALL BITUMINOUS BASE COURSE WITHIN PHASE S1 LIMITS.
- 6. GRADE AND LANDSCAPE WITHIN PHASE S1 LIMITS.
- 7. INSTALL BITUMINOUS SURFACE COURSE WITHIN PHASE S1 LIMITS.
- 8. INSTALL PAVEMENT MARKINGS WITHIN PHASE S1 LIMITS.

AT CONTRACTOR'S OPTION, WORK MAY BE COMPLETED IN BOTH NORTH AND SOUTH AREA, SO LONG AS ALL CLOSURE DURATION AND WORK PROGRESS REQUIREMENTS ARE MET.



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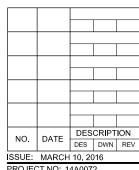


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DESIGN BY: LDH 1/15/15

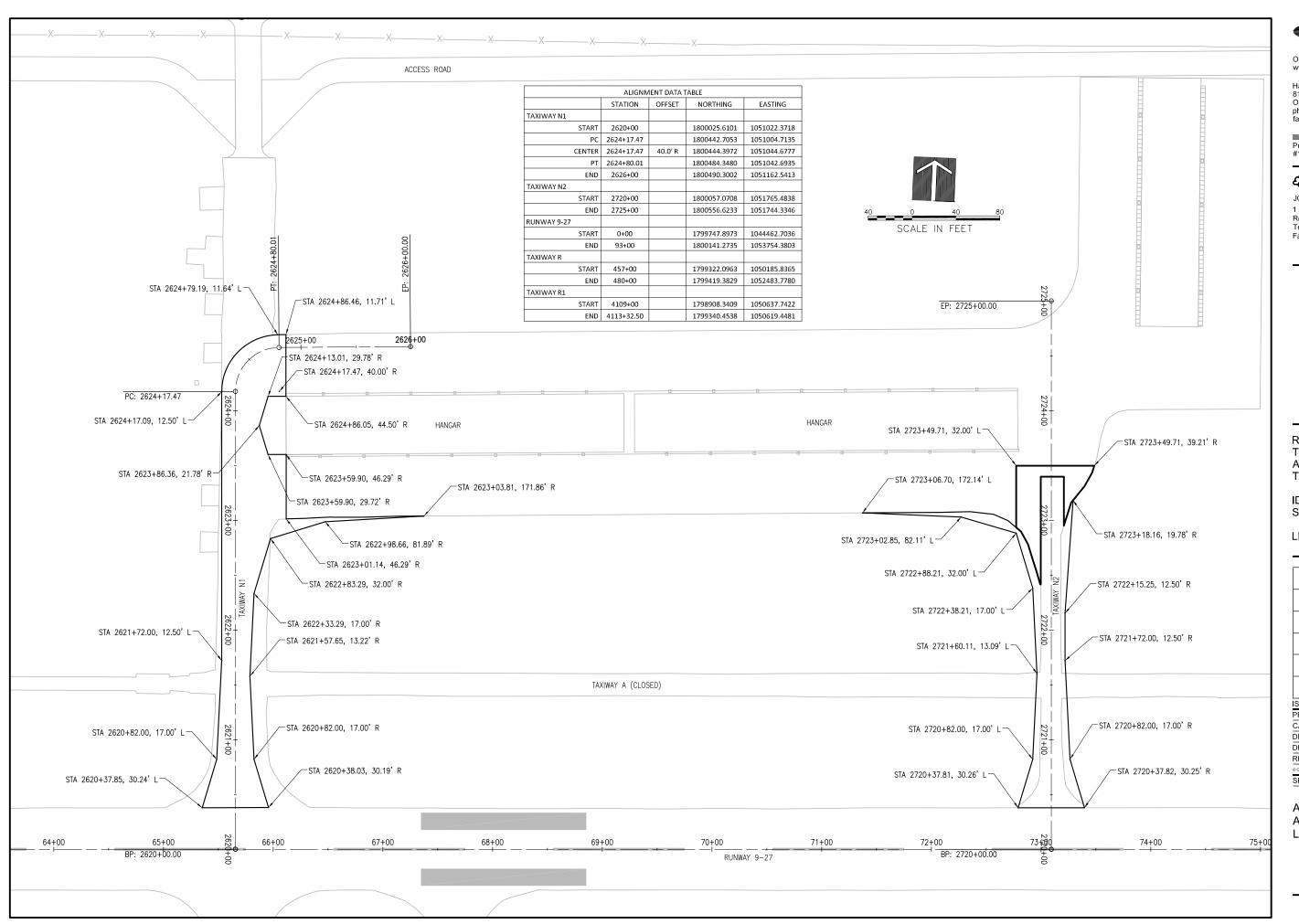
DRAWN BY: LDH 1/15/15 REVIEWED BY: RMH 3/8/16

SHEET TITLE

PHASING PLAN TAXIWAY R AND R1 PHASE S1

SCALE IN FEET AIRPLANE MOVEMENTS PAVEMENTS TO BE CONSTRUCTED

CONSTRUCTION VEHICLES SHALL BE CONTROLLED BY CONTRACTOR AND SHALL ALWAYS YIELD TO AIRCRAFT. SEE SPECIAL PROVISIONS.





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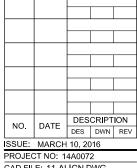
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

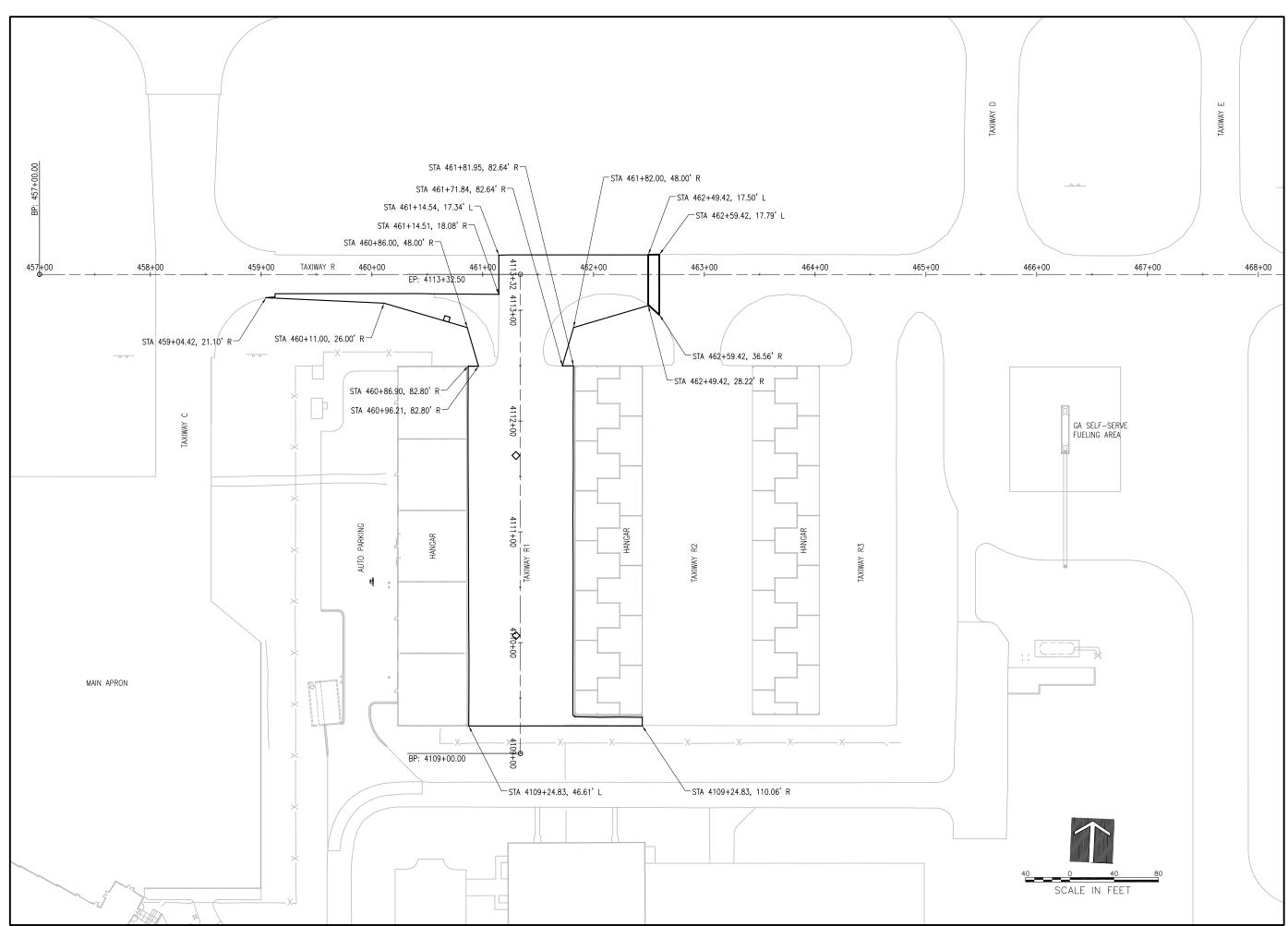
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SHEET TITLE

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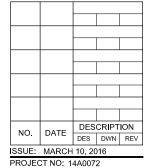
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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PROJECT NO: 14A0072

CAD FILE: 12-ALIGN.DWG

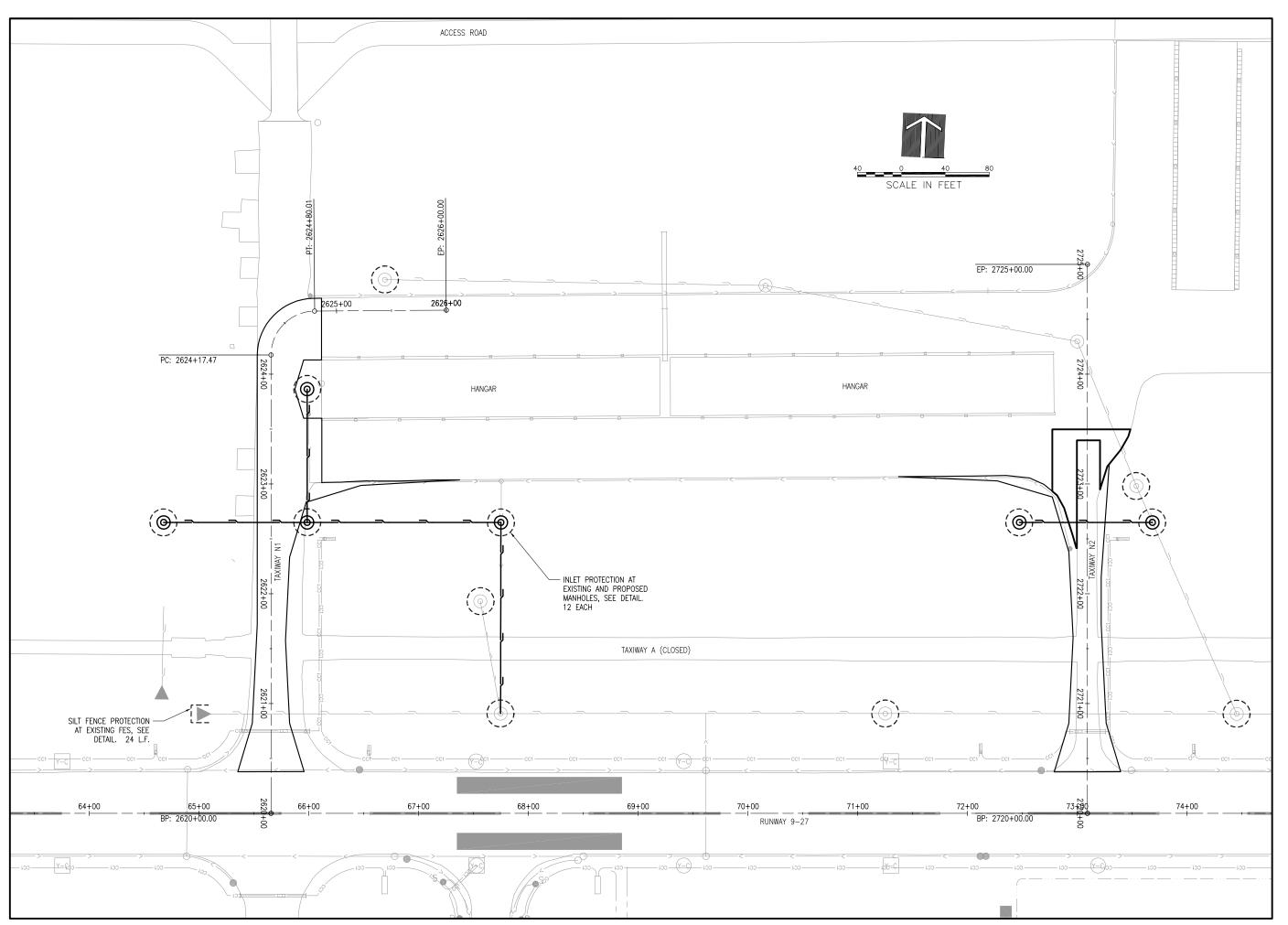
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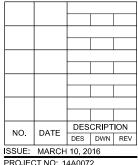
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

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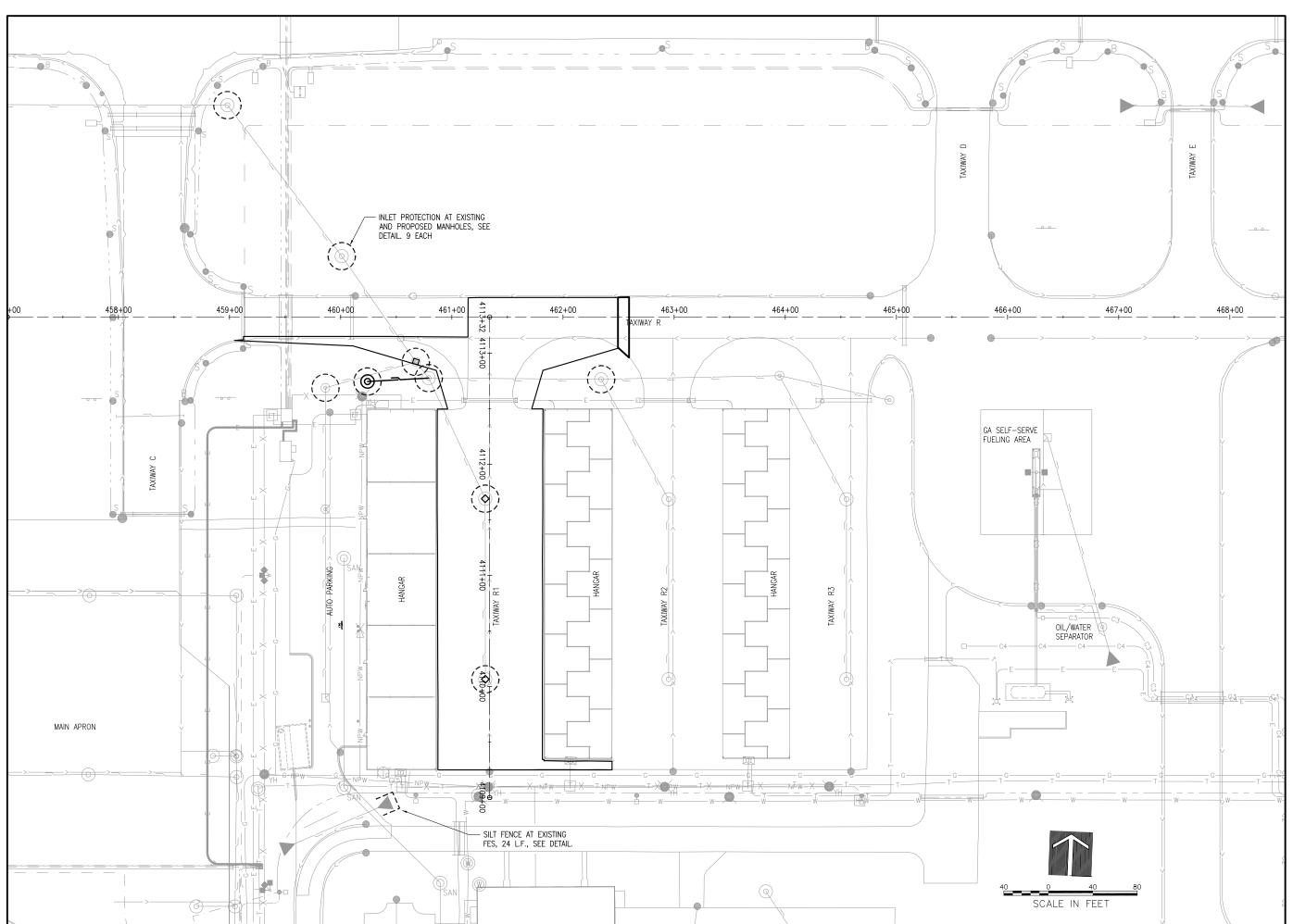
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SHEET TITLE

STORM WATER
POLLUTION
PREVENTION PLAN





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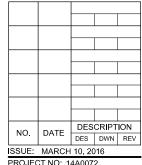
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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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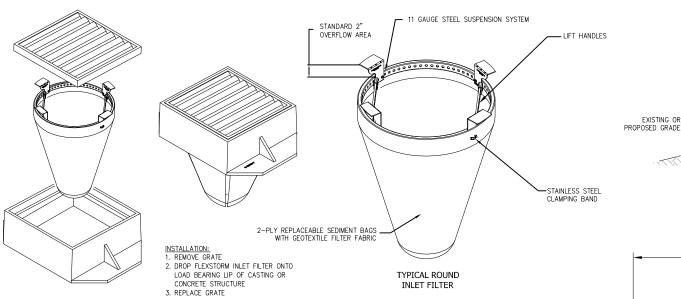
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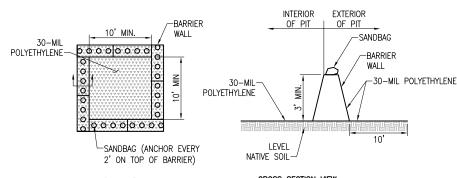
SHEET TITLE

STORM WATER
POLLUTION
PREVENTION PLAN



- 1. FILTER FABRIC INLET PROTECETION SHALL CONSIST OF INLET BASKET AND FABRIC INSERT, IPP FLEXSTORM BY EROTEX OR APPROVED EQUAL.
- 2. DEVICE SHALL BE EQUIPPED WITH AN OVERFLOW FEATURE SO DRAINAGE TO INLET IS NOT COMPLETELY BLOCKED IF DEVICE IS FULL OF SILT.
- 3. INLET BASKET IS AVAILABLE TO FIT ROUND, RECTANGULAR, BEEHIVE OR CURB INLET CASTINGS.
- 4. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE (AOS) OF AT LEAST 70 SIEVE FOR NONWOVEN.
- 5. FILTER FABRIC SHALL HAVE A GRAB TENSILE STRENGTH OF A LEAST 100 LBS FOR NON WOVEN.
- 6. POLYESTER OUTER REINFORCEMENT BAG SHALL HAVE FABRIC WITH A WEIGHT OF 4.55 OZ/SQYD +/- 15 PERCENT
- FRAME CONSTRUCTION SHALL HAVE A TENSILE STRENGTH OF AT LEAST 58,000 PSI AND A YIELD STRENGTH OF AT LEAST 36,000 PSI.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED. REMOVE SILT FROM FABRIC INSERT WHEN 50% OF CAPACITY IS REACHED. REMOVE SILT FROM INTERIOR AND EXTERIOR OF INLET DAM WHEN 50% OF DAM HEIGHT IS REACHED.
- 9. PAYMENT FOR INLET PROTECTION MAINTENANCE SHALL BE INCIDENTAL TO INLET PROTECTION.

# INLET PROTECTION



# PLAN VIEW

# CROSS SECTION VIEW

- IMPERMEABLE SHEETING MUST EXTEND OVER ENTIRE BASIN AND BERM TO PREVENT ESCAPE OF DISCHARGE.
- PROTECT AREA AROUND UNIT FOR 10 FEET WITH PLASTIC UNDER AND AROUND UNIT TO CONTAIN SPILLS OR OVERFLOW.
- FACILITY LINED WITH 30-MIL POLYETHYLENE LINER AND SECURED USING SAND BAGS, OR OTHER ANCHORS, AND SHALL BE FREE OF HOLES OR TEARS.
- 4. FACILITY IS TO BE LOCATED ON LEVEL GROUND.
- WASHOUT NEEDS TO BE COVERED OR LIQUIDS TO BE REMOVED PRIOR TO IMPENDING STORMS TO PREVENT OVERFLOW.
- IF EFFLUENT CANNOT BE REMOVED PRIOR TO ANTICIPATED RAINFALL EVENT, PLACE AND SECURE A NON-COLLAPSING, NON WATER COLLECTING COVER OVER THE WASHOUT FACILITY TO PREVENT ACCUMULATION AND PRECIPITATION OVERFLOW.
- REMOVE WASHOUT WATER FROM HIGH VOLUME FACILITIES WITH A VACUUM TRUCK AND DISPOSE OF PROPERLY. DO NOT DISCHARGE WASTEWATER INTO THE ENVIRONMENT. (NOTE: ACIDITY, NOT PARTICULATES, IS ENVIRONMENTALLY
- 8. DO NOT DISCHARGE WASHOUT WATER INTO THE ENVIRONMENT; FACILITATE EVAPORATION OF LOW VOLUME WASHOUT WATER.

- 9. INSPECT LINE FOR TEARS, AN INTACT LINER WILL ENSURE THAT CONCRETE WASTEWATER WILL NOT ESCAPE THE WASHOUT FACILITY.
- 10. REPLACE DAMAGED LINER IMMEDIATELY
- CHECK AREA SURROUNDING FACILITY FOR SIGNS OF EFFLUENT ESCAPING CONTAINMENT.
- 12. INSPECT WASHOUT AREA FOLLOWING POUR TO EVALUATE EFFECTIVENESS.
- 13. CHECK DEPTH OF SOLIDS TO ENSURE VOLUME IS SUFFICIENT FOR NEXT
- 14. INSPECT WASHOUTS PRIOR TO POUR TO ENSURE SUFFICIENT VOLUME IS AVAILABLE TO CONTAIN WASHOUT. REMOVE TEMPORARY CONCRETE WASHOUT FACILITIES WHEN NO LONGER NEEDED AND RESTORE DISTURBED AREAS TO ORIGINAL CONDITION.
- 16. DISPOSE OF SOLIDIFIED CONCRETE WASTE, CONSIDERED CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) AS PER THE IEPA ACT

PROPOSED GRADE

1. FENCE POST SHALL BE EITHER STEEL "T" LINE POST OR HARDWOOD POST WITH A MINIMUM SECTIONAL AREA OF 2.0 SQUARE INCHES. A CARPENTER'S (NOMINAL) 2"x2" POST WILL MEET

FABRIC ANCHOR DETAIL

10' MAX (5' WITHOUT WIRE FABRIC)

WIRE FABRIC

FILTER FABRIC, WOVEN

**ELEVATION** 

6" SQUARE MAX (OPTIONAL)

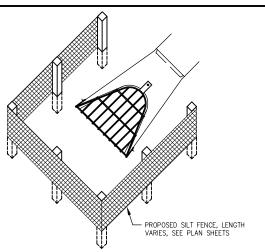
-FILTER FABRIC

NO. 9 (MIN.) WIRE FASTENER, 4 PER-

POST (TYP.)

- TOP AND BOTTOM WIRE OF WIRE FABRIC SHALL BE MINIMUM GAGE NO. 9. INTERMEDIATE WIRES OF THE WIRE FABRIC SHALL BE MINIMUM GAGE NO. 11.
- WIRE FABRIC SHALL BE SECURELY FASTENED TO FENCE POSTS WITH NO. 9 GAGE WIRE MINIMUM. FOUR (4) FASTENERS PER POST REQUIRED.
- FILTER FABRIC SHALL BE SECURELY FASTENED TO WIRE FABRIC AND POSTS WITH TIES OR STAPLES SPACED AT 12" APART AT THE TOP, MIDDLE AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER FABRIC MEET, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED AND ATTACHED TO THE WIRE FABRIC AT A POST.
- 6. FILTER FABRIC SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS WITH APPARENT OPENING SIZE (AOS) OF AT LEAST 40 FOR NONWOVEN AND WOVEN (OR MAXIMUM OF 0.60mm).
- 7. WIRE FABRIC MAY BE OMITTED IF A MAXIMUM OF 5 FEET IS USED FOR POST-TO-POST
- 8. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- 9. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE
- 10. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. PERIODIC INSPECTION SHALL BE PERFORMED AND REQUIRED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.
- 11. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN BULGES DEVELOP IN THE SILT FENCE.
- 12. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).
- 13. FENCE POSTS SHALL BE REMOVED WHEN DIRECTED AT PROJECT END.
- 14. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.





# SILT FENCE PLACEMENT AT FLARED END SECTIONS (FES)

# SEDIMENTATION AND EROSION CONTROL NOTES:

- A. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- B. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- C. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 14 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.
- D. AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 8H:1V SHALL BE STABILIZED WITH SOD, MAT OR BLANKET IN COMBINATION WITH SEEDING.
- EROSION CONTROL BLANKET SHALL BE REQUIRED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN NORMAL WATER LEVEL AND HIGH WATER LEVEL.
- ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- G. ALL TEMPORARY FROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER
- H. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND
- A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A
- J. SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A DESIGNATED BUFFER. NO STOCKPILES SHALL BE LOCATED WITHIN AN ACTIVE RUNWAY SAFETY AREA, RUNWAY OBJECT FREE AREA, RUNWAY OBSTACLE FREE ZONE, OR ACTIVE TAXIWAY OBJECT FREE AREA.
- K. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (e.g. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE.
- L. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS.
  ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

# STORM WATER POLLUTION PREVENTION NOTES

# GENERAL

STEEL POST OR

(SEE NOTE 1)

THE CONTRACTOR SHALL IMPLEMENT ALL PROVISIONS OF THE CONTRACT DOCUMENTS TO ASSURE THAT STORM WATER POLLUTION PREVENTION ITEMS ARE CONSTRUCTED AND MAINTAINED IN A TIMELY MANNER. SEDIMENTATION MUST NOT BE TRANSPORTED OFF THE CONSTRUCTION SITE. PERMANENT DRAINAGE FEATURES AND VEGETATIVE MEASURES SHALL BE PROVIDED AS SOON AS POSSIBLE.

THE MAINTENANCE OF ALL STORM WATER POLLUTION PREVENTION MEASURES IS INCIDENTAL TO THE ASSOCIATED ITEM.

# POLLUTION PREVENTION MEASURES

THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT AND MAINTAIN STORM WATER POLLUTION PREVENTION PRACTICES AND MEASURES PRIOR TO THE STRIPPING OF EXISTING VEGETATION WHEREVER POSSIBLE AND AS SOON AS CONSTRUCTION PERMITS IN OTHER AREAS. POLLUTION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, INCLUDING THESE CONSTRUCTION PLANS, AND WITH STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, CURRENT ISSUE. THE CONTRACTOR SHALL ADJUST HIS OPERATIONS AND IMPLEMENT POLLUTION CONTROL MEASURES SO THAT NO RUNOFF FROM STRIPPED AREAS WILL LEAVE THE CONSTRUCTION SITE OTHER THAN THROUGH SEDIMENT TRAPS OR OTHER SUITABLE

POLLUTION CONTROL ITEMS SHALL BE PROVIDED AS NOTED ON THE STORM WATER POLLUTION PREVENTION PLAN AND IN THE STORM WATER POLLUTION PREVENTION DETAILS AND AS DIRECTED BY THE ENGINEER. THE LIMITS OF SUCH MEASURES SHALL BE STAKED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SUCH LIMITS MAY BE ADJUSTED BY THE ENGINEER TO ACCOUNT FOR ACTUAL SITE CONDITIONS EXPERIENCED DURING CONSTRUCTION. ADDITIONAL COMPENSATION FOR MEASURES EXCEEDING THE PLAN QUANTITIES WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH ITEM.

THE CONTRACTOR IS TO MAINTAIN AND ADJUST, REPAIR OR REPLACE ALL POLLUTION PREVENTION MEASURES AS REQUIRED OR AS DIRECTED BY THE ENGINEER UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. MAINTENANCE OF POLLUTION CONTROL MEASURES IS TO BE PROVIDED AT NO ADDITIONAL COST TO THE CONTRACT.

ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES ARE EXISTING ON SITE LOCATED AT DRAINAGE FACILITIES AND ALONG THE PROPERTY LINE.



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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF **TAXIWAY R** 

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049

DESCRIPTION NO. DATE DES DWN REV ISSUE: MARCH 10, 2016

PROJECT NO: 14A0072

CAD FILE: 15- SWPPP DET.DWG DESIGN BY: LDH 12/22/14 DRAWN BY: LDH 12/22/14

REVIEWED BY: RMH 3/8/16

SHEET TITLE

SWPPP DETAILS

# TYPICAL SECTION - TAXIWAY N1 AND N2

(SECTION SHOWN LOOKING NORTH)

- ① PROPOSED 1.5 INCH BITUMINOUS SURFACE COURSE, ITEM AR401613
- PROPOSED BITUMINOUS TACK COAT, ITEM AR603510
- 3 PROPOSED 2.5 INCH BITUMINOUS BASE COURSE, ITEM AR403613
- 4 PROPOSED BITUMINOUS PRIME COAT, ITEM AR602510
- ⑤ PROPOSED 8 INCH CRUSHED AGGREGATE BASE COURSE, ITEM AR209608
- 6 PROPOSED 4 INCH GRANULAR DRAINAGE SUBBASE, ITEM AR800928
- 7 PROPOSED 4 INCH TOPSOIL, ITEM AR905510
- 8 PROPOSED SEPARATION FABRIC, ITEM AR156513
- PROPOSED UNDERCUT (ITEM AR152410) AND BACKFILL (ITEM AR208515). SEE SUBGRADE REMOVAL PLAN AND CROSS SECTIONS FOR LOCATION AND DEPTH.

BITUMINOUS SURFACE COURSE - NO EXCEPTIONS.

# 1.5" OR 2.0" DEEP SAWCUT PRIOR TO MILLING, ITEM AR401665 AND SAW AND VARIES (SEE PLAN) 1.5" OR 2.0" BITUMINOUS SURFACE COURSE BITUMINOUS BASE COURSE, PLACED IN LIFTS AS NECESSARY, SEE SPECIAL PROVISIONS SEAL AFTER PAVING, ITEM AR401660, SEE PROPOSED TAXIWAY BITUMINOUS /BITUMINOUS SEAL DETAIL BITUMINOUS TACK COAT EXISTING BITUMINOUS PAVEMENT SECTION INCLUDING ALL VERTICAL FACES WIDTH VARIES TO ALLOW FOR A 1.5" OR 2.0" MINIMUM OVERLAY THICKNESS

**BITUMINOUS TAPER DETAIL** 

BITUMINOUS TACK COAT SHALL BE APPLIED BETWEEN EACH LIFT OF BITUMINOUS BASE COURSE AND BETWEEN THE BITUMINOUS BASE COURSE TOP LIFT AND THE

BITUMINOUS PRIME AND BITUMINOUS TACK COAT SHALL BE REQUIRED AS SPECIFIED. SEE SPECIAL PROVISIONS AND STANDARD PROVISIONS.

# TYPICAL SECTION - TAXIWAY R AND RI

(SECTION SHOWN LOOKING NORTH)

CENTERLINE

17.5' (VARIES)

FREE PAVEMENT EDGES)

CL UNDERDRAIN

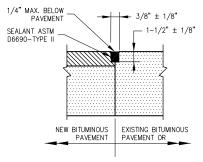
1.5" DROP (TYPICAL TO ALL

17.5' (VARIES)

VARIES

CL UNDERDRAIN

- ① PROPOSED 2 INCH BITUMINOUS SURFACE COURSE, ITEM AR401613
- PROPOSED BITUMINOUS TACK COAT, ITEM AR603510
- PROPOSED 4 INCH BITUMINOUS BASE COURSE, ITEM AR403613
- 4 PROPOSED BITUMINOUS PRIME COAT, ITEM AR602510
- ⑤ PROPOSED 12 INCH CRUSHED AGGREGATE BASE COURSE, ITEM AR209612
- 6 PROPOSED 6 INCH GRANULAR DRAINAGE SUBBASE, ITEM AR800927
- 7 PROPOSED 4 INCH TOPSOIL, ITEM AR905510
- (8) PROPOSED SEPARATION FABRIC, ITEM AR156513



ALL BITUMINOUS/BITUMINOUS JOINT SEALING TO BE PAID UNDER SAW AND SEAL BITUMINOUS JOINTS, ITEM AR401660.

BITUMINOUS/BITUMINOUS SEAL

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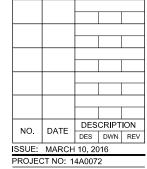
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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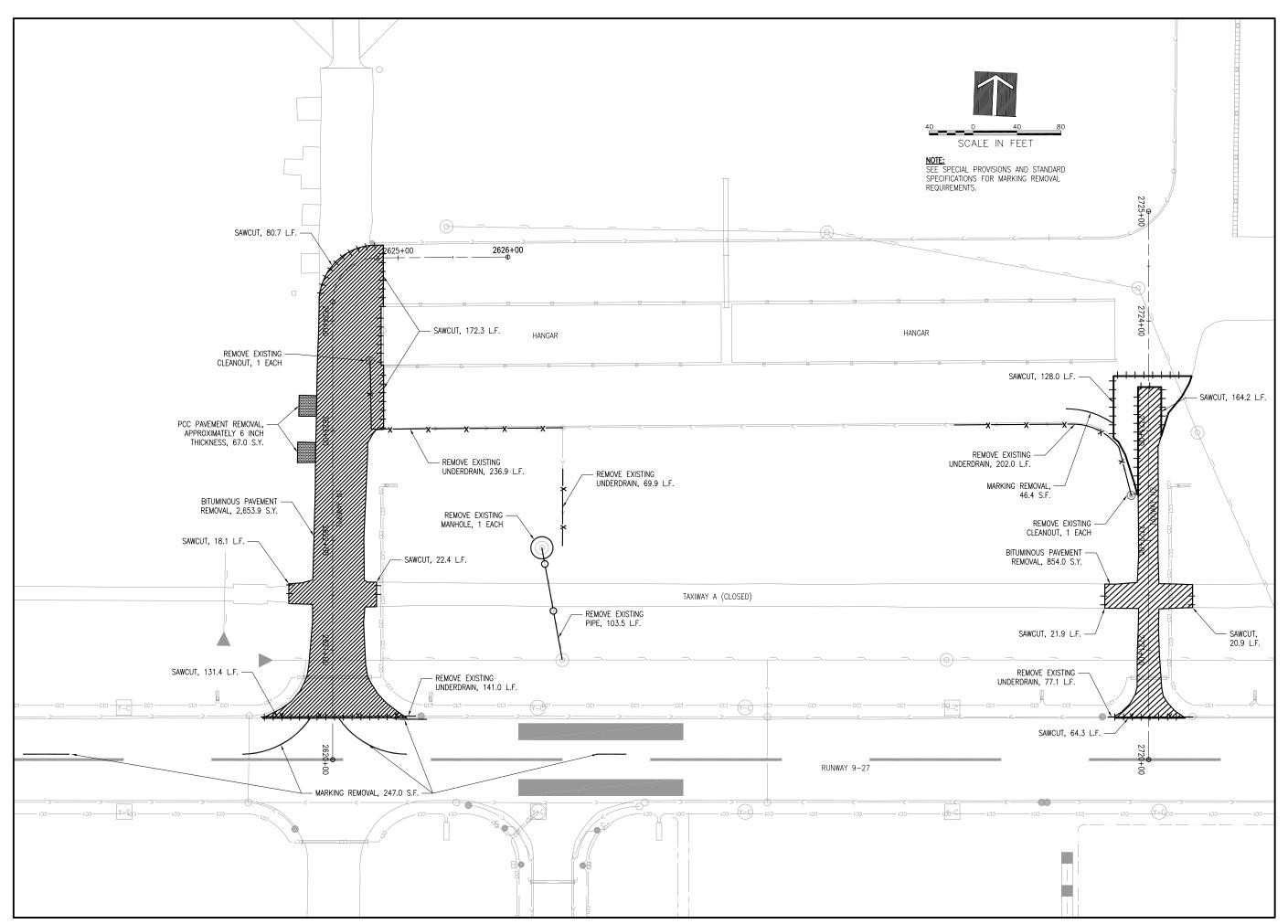


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SHEET TITLE

TYPICAL SECTIONS AND PAVEMENT DETAILS





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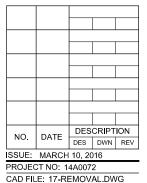
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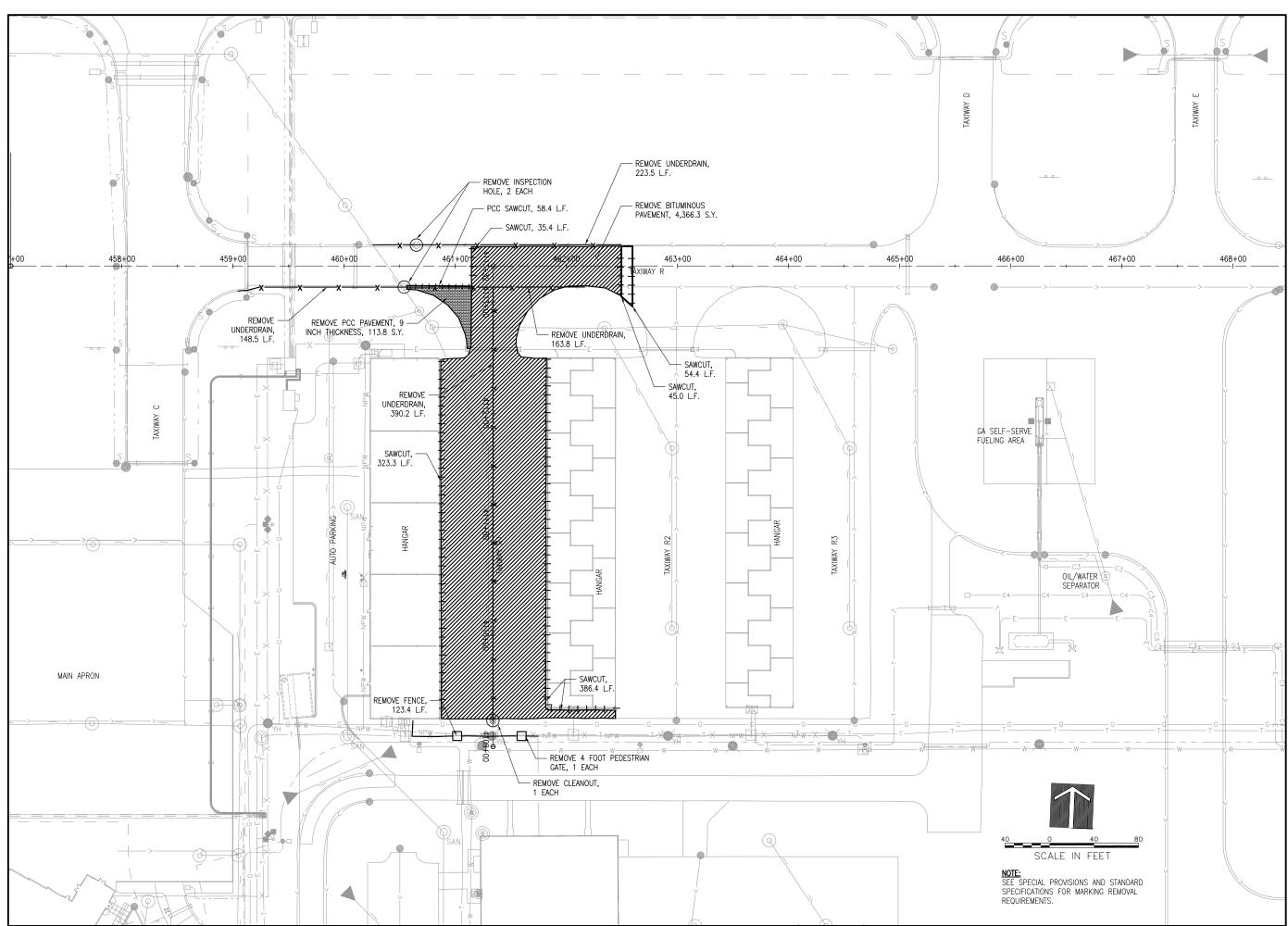
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REMOVAL PLAN





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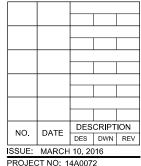
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



PROJECT NO: 14A0072

CAD FILE: 18-REMOVAL.DWG

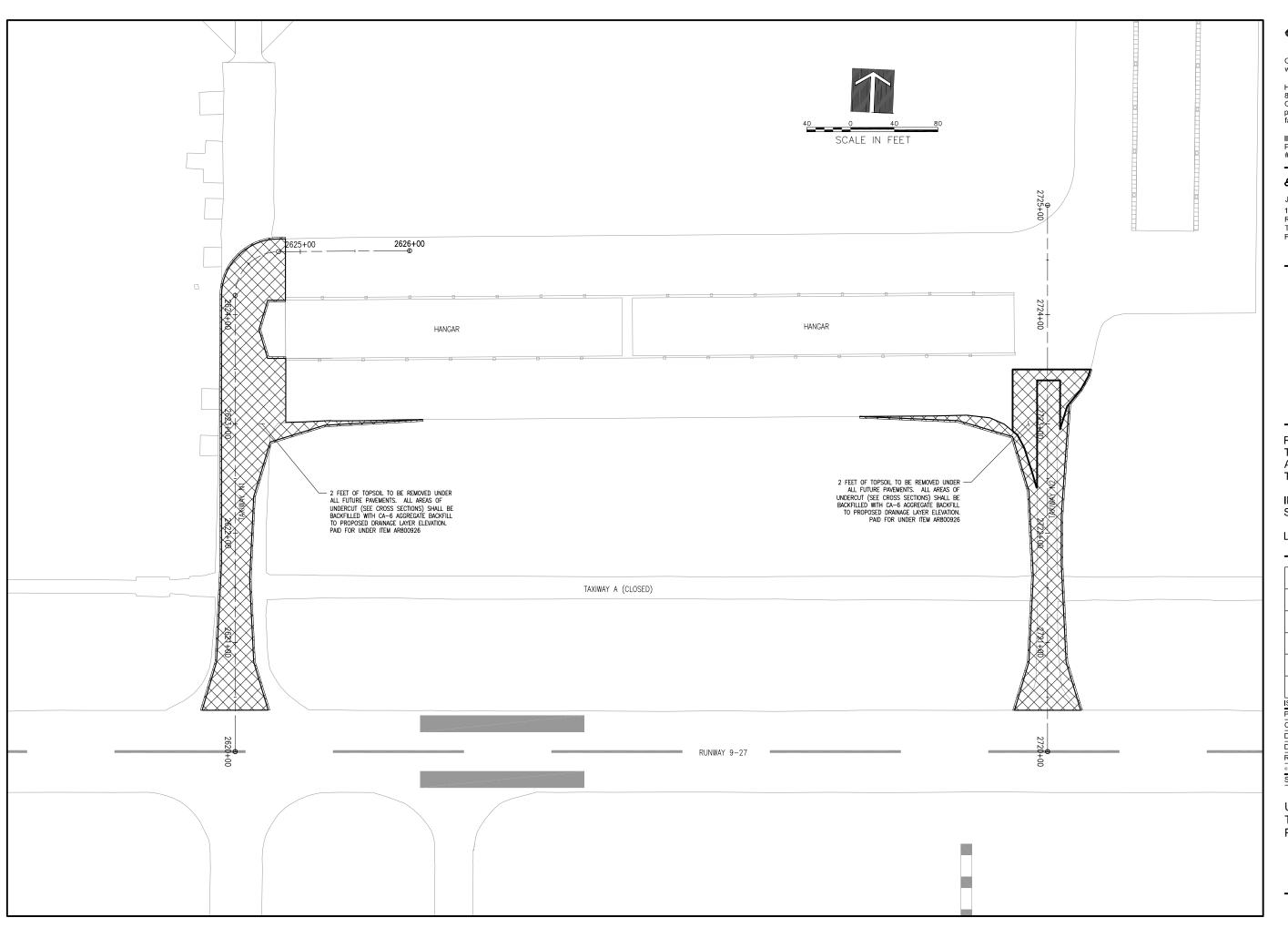
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REMOVAL PLAN





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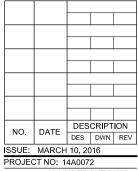
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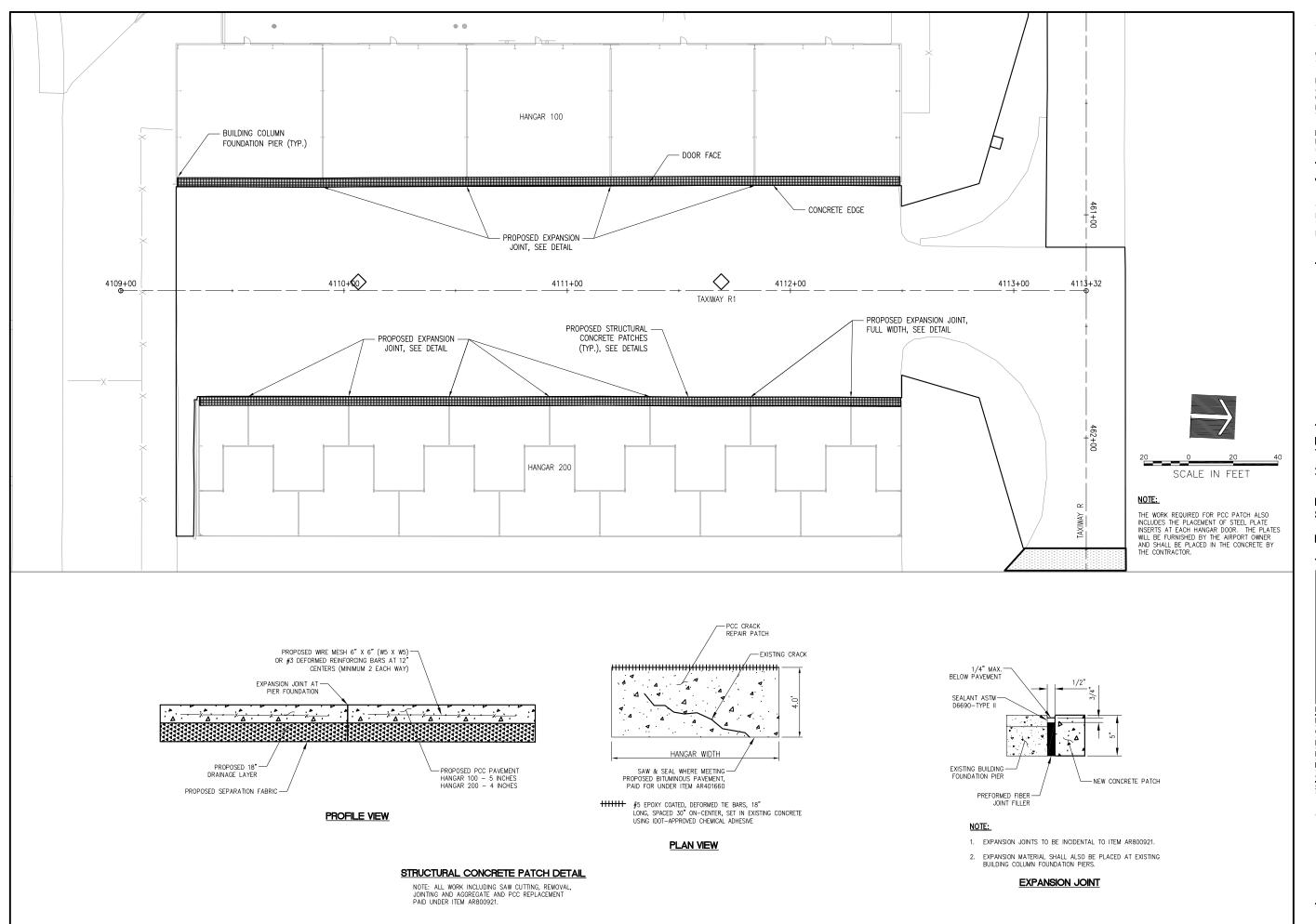
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SHEET TITLE

UNDERCUT AND TOPSOIL REMIOVAL PLAN



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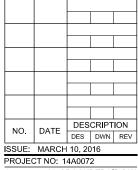
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



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SHEET TITLE

CRACK REPAIR AND PATCH PLAN AND DETAILS



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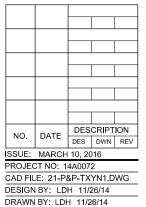
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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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PLAN AND PROFILE TAXIWAY N1

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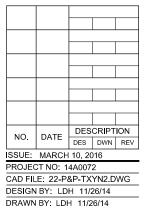
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



PLAN AND PROFILE TAXIWAY N2

REVIEWED BY: RMH 3/8/16

SHEET TITLE



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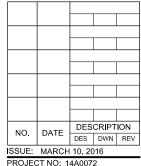
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



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CAD FILE: 23-P&P-TXYR.DWG

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SHEET TITLE

TAXIWAY R

PLAN AND PROFILE



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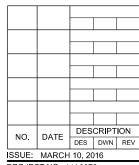
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

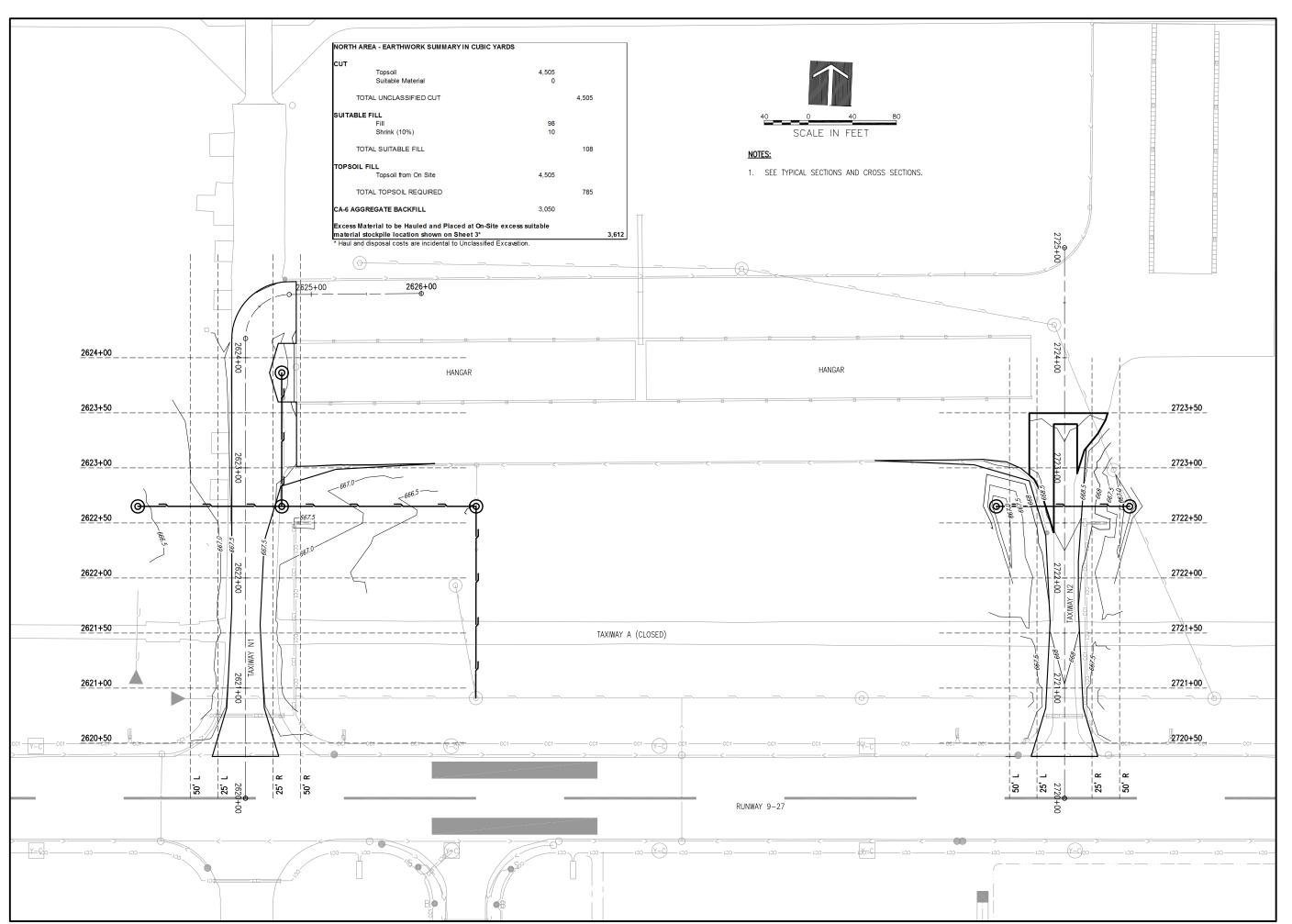
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CAD FILE: 24-P&P-TXYR1.DWG
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SHEET TITLE

PLAN AND PROFILE TAXIWAY R1





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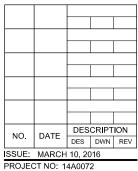
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

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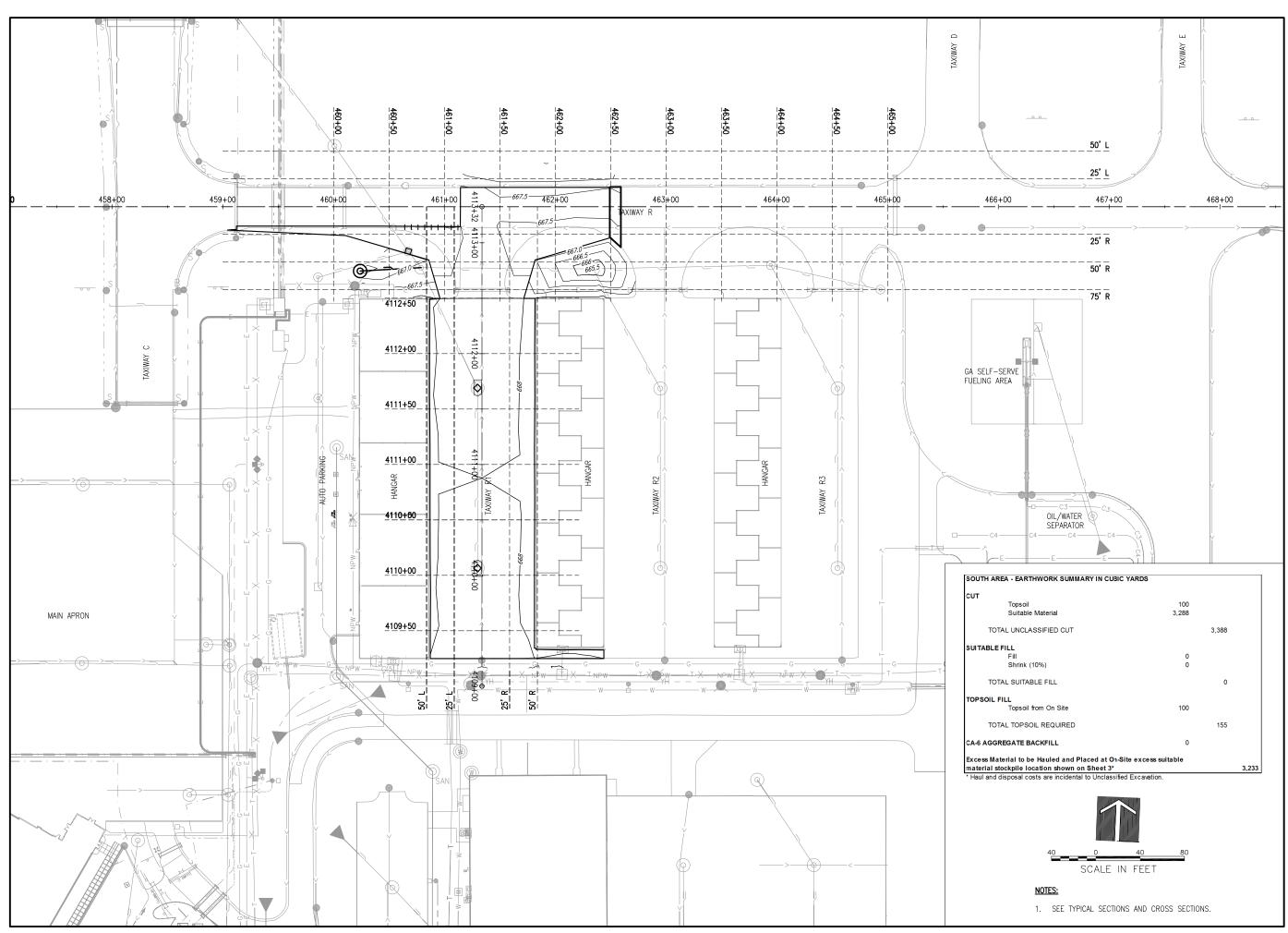
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SHEET TITLE

GRADING PLAN -NORTH AREA





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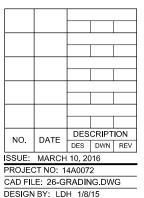
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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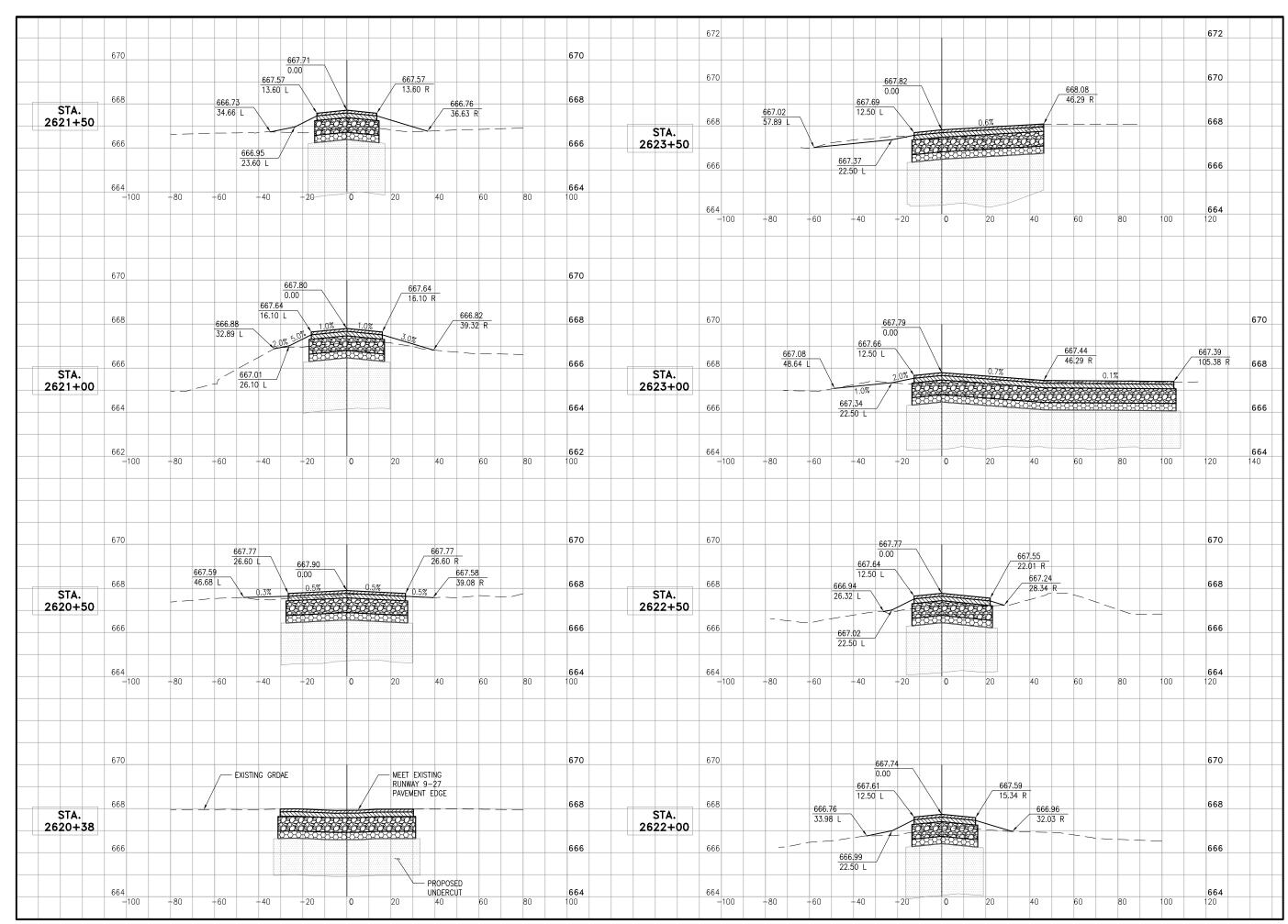
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GRADING PLAN -SOUTH AREA





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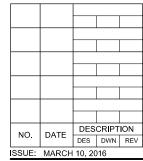
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

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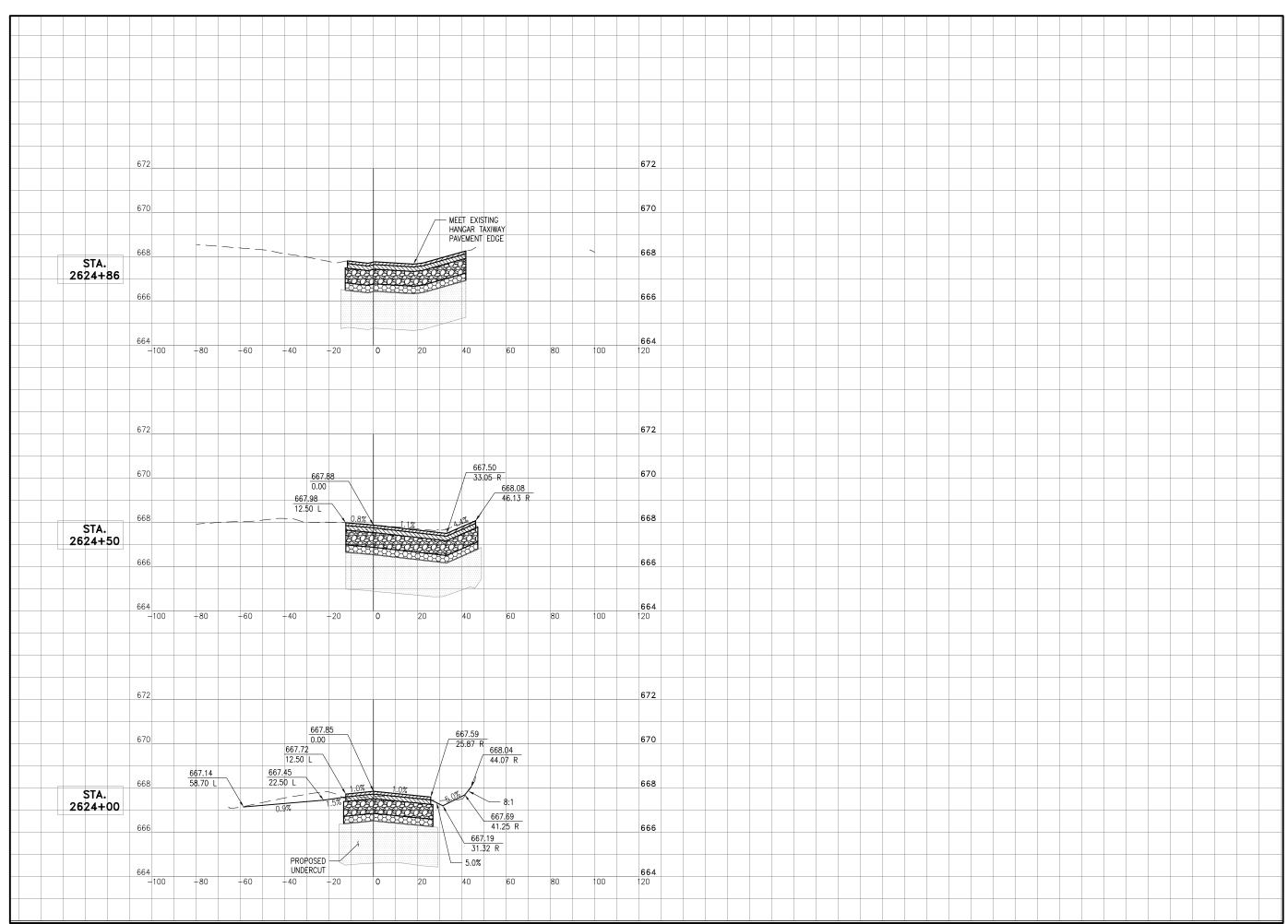
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SHEET TITLE

CROSS SECTIONS TAXIWAY N1





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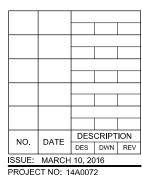
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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PROJECT NO: 14A0072

CAD FILE: 28-XSECT-N1.DWG

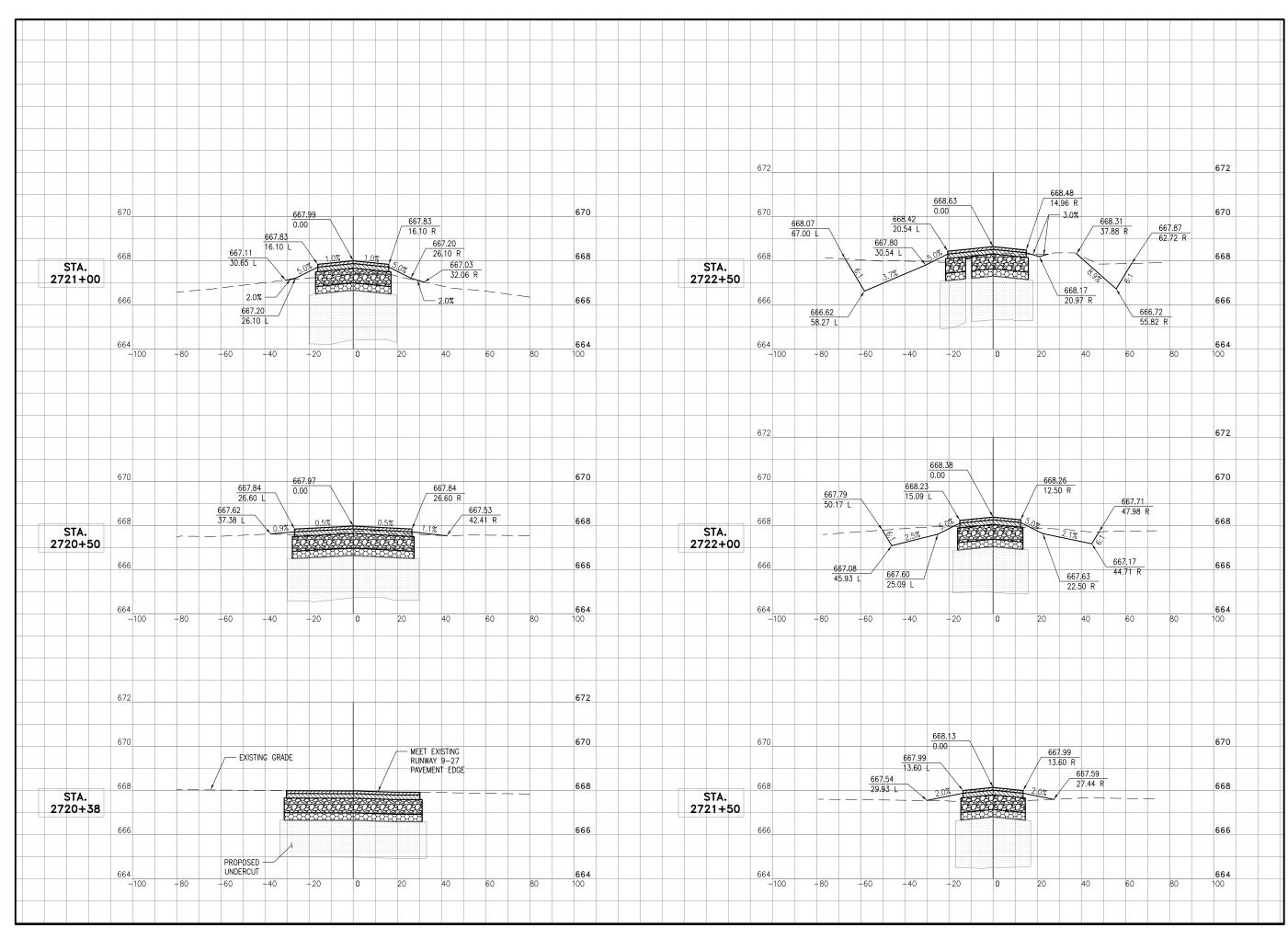
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SHEET TITLE

CROSS SECTIONS TAXIWAY N1





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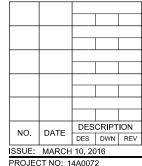
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

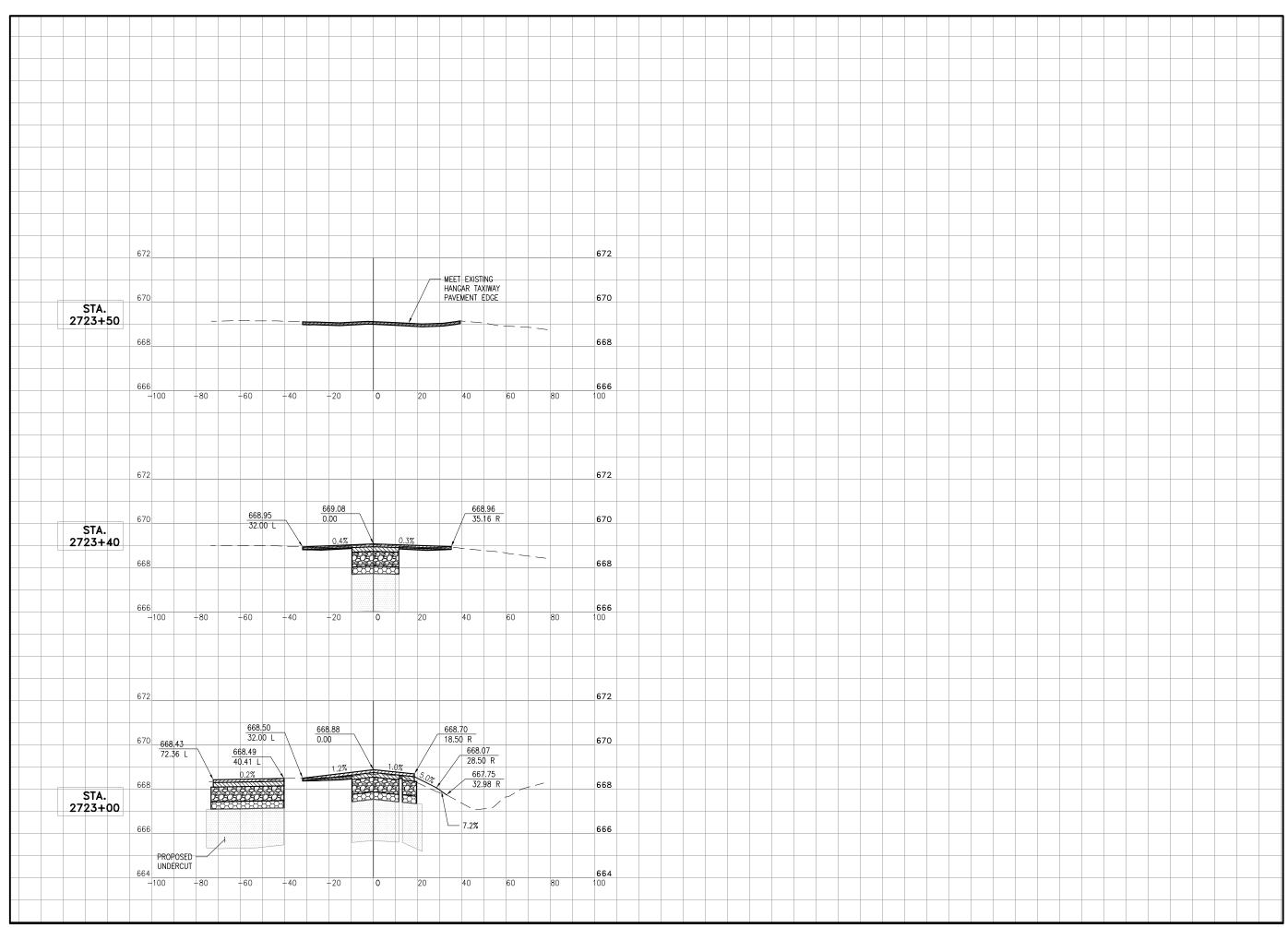
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CROSS SECTIONS TAXIWAY N2





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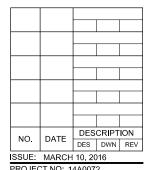
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



PROJECT NO: 14A0072

CAD FILE: 30-XSECT-N2.DWG

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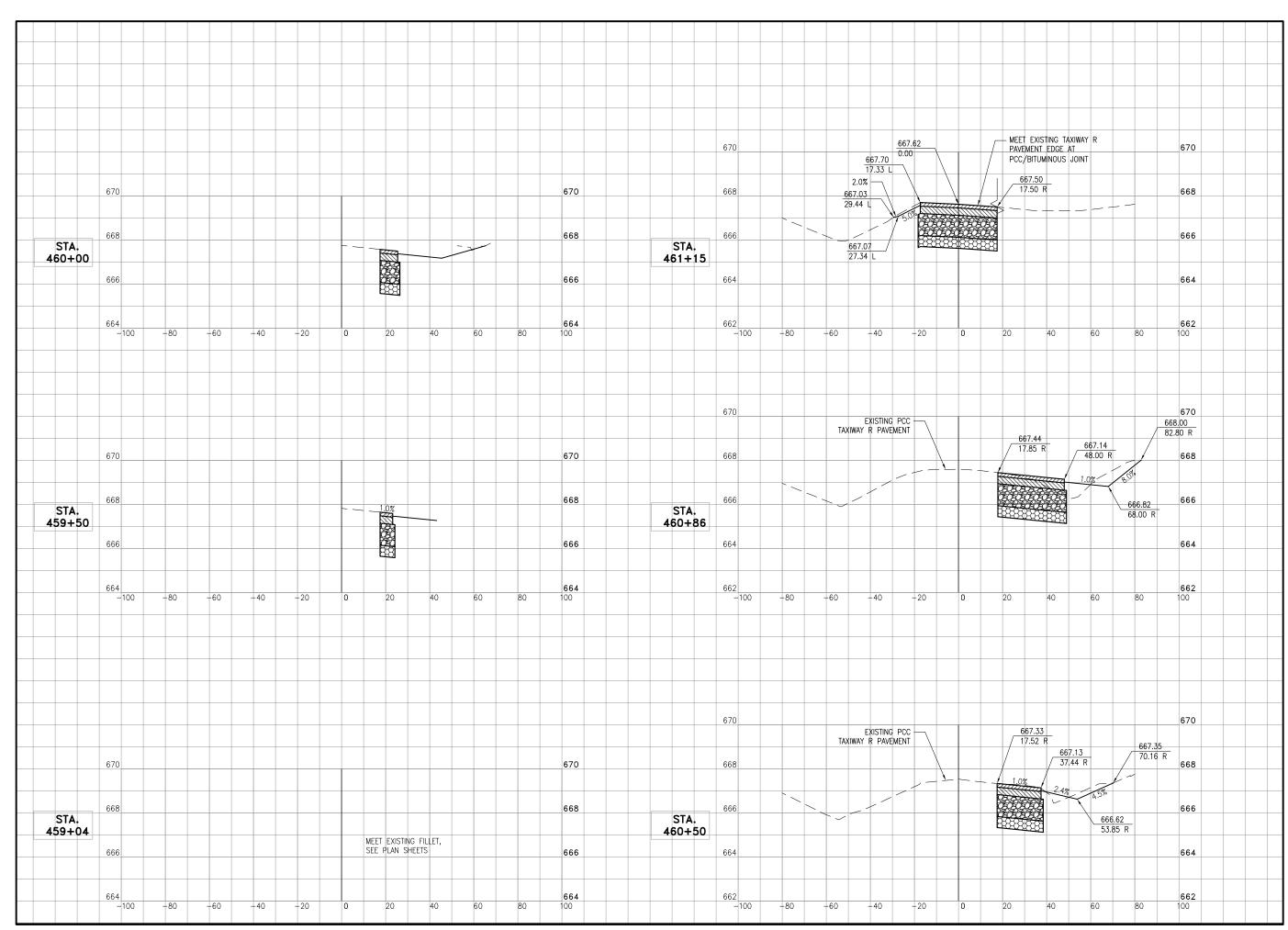
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SHEET TITLE

CROSS SECTIONS TAXIWAY N2





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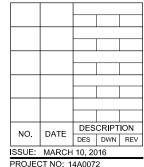
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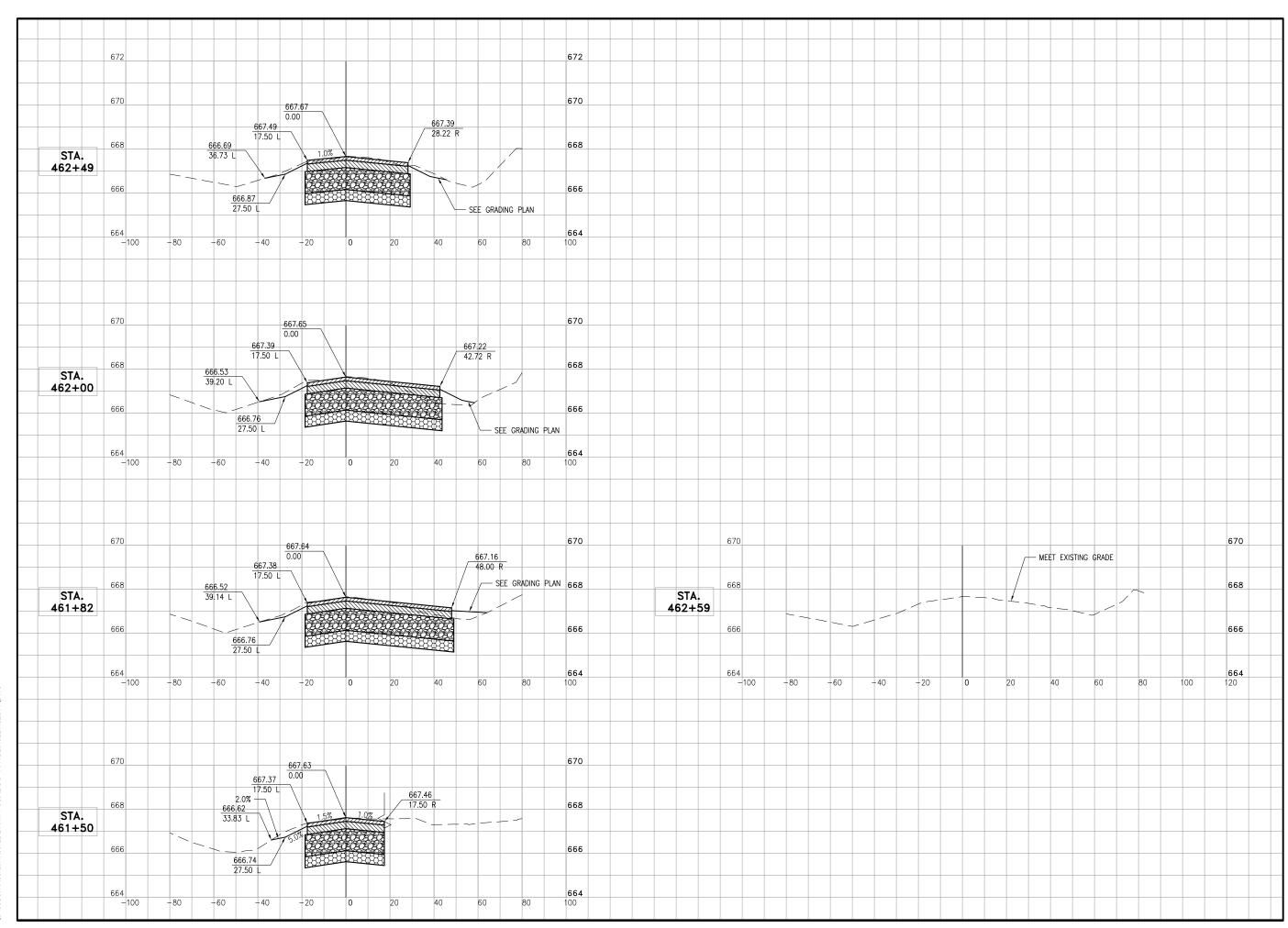
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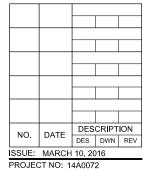
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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



PROJECT NO: 14A0072

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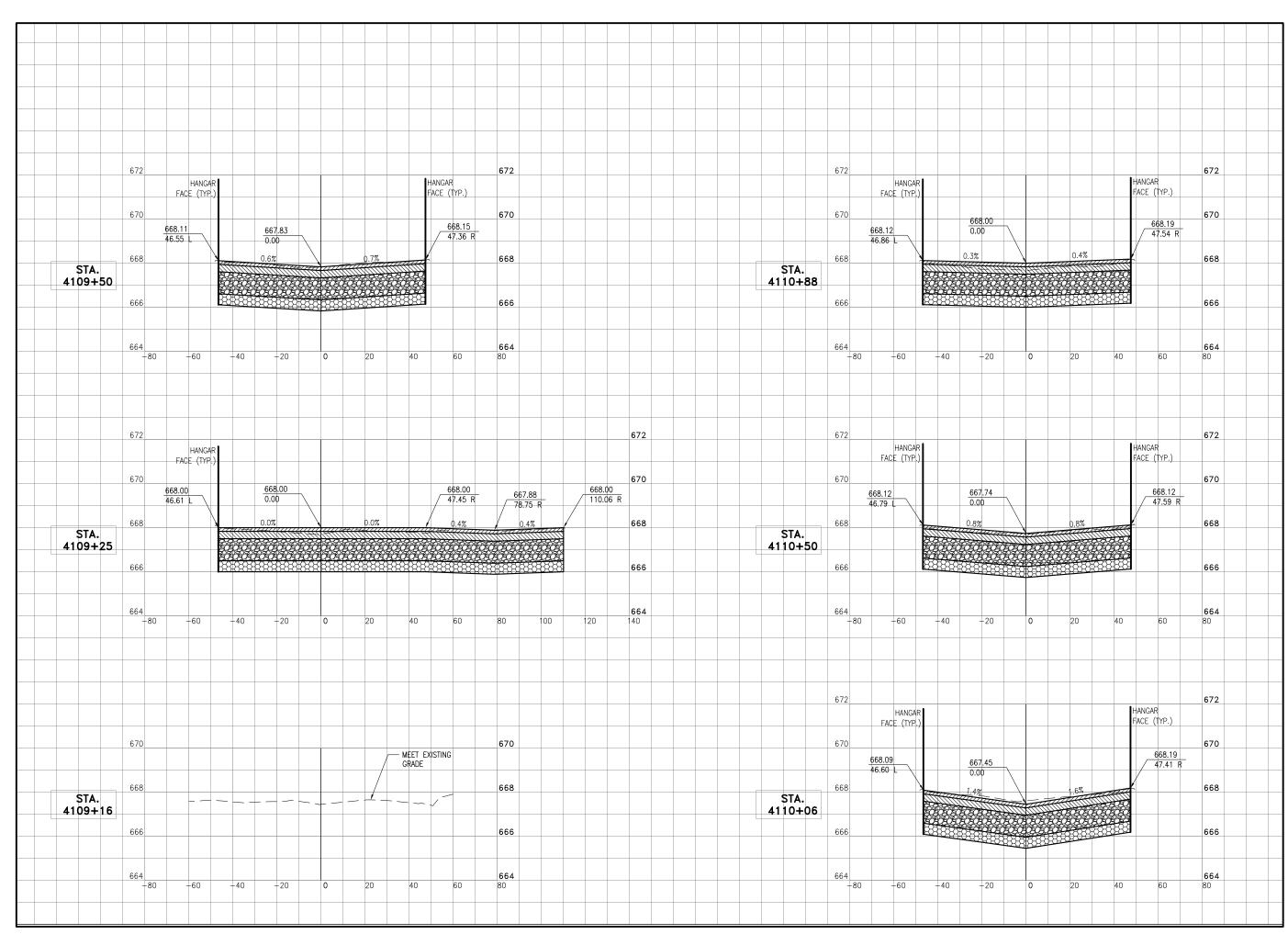
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SHEET TITLE

CROSS SECTIONS TAXIWAY R





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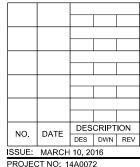
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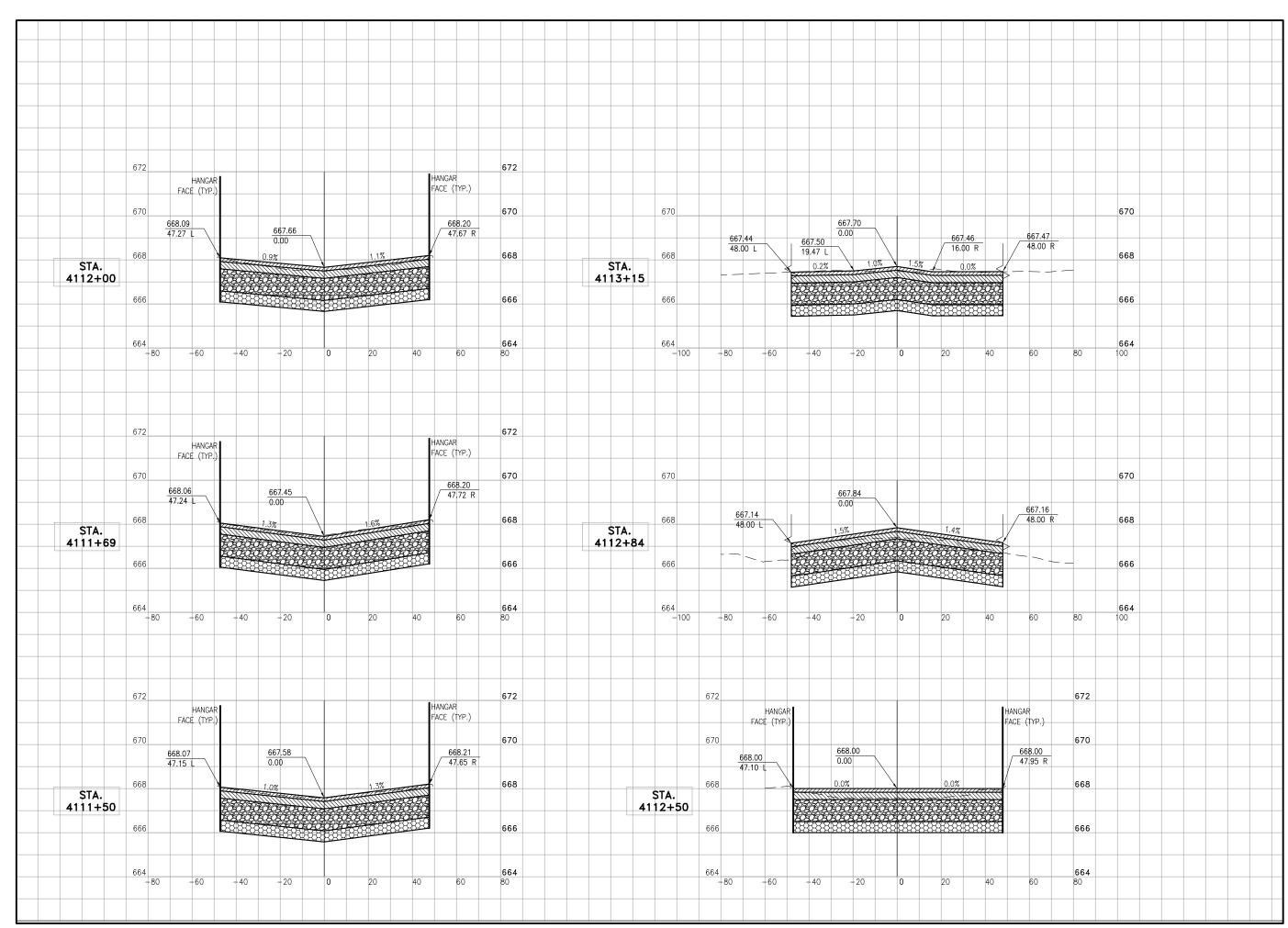
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CAD FILE: 33-XSECT-R1.DWG
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CROSS SECTIONS TAXIWAY R1





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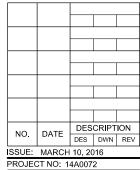
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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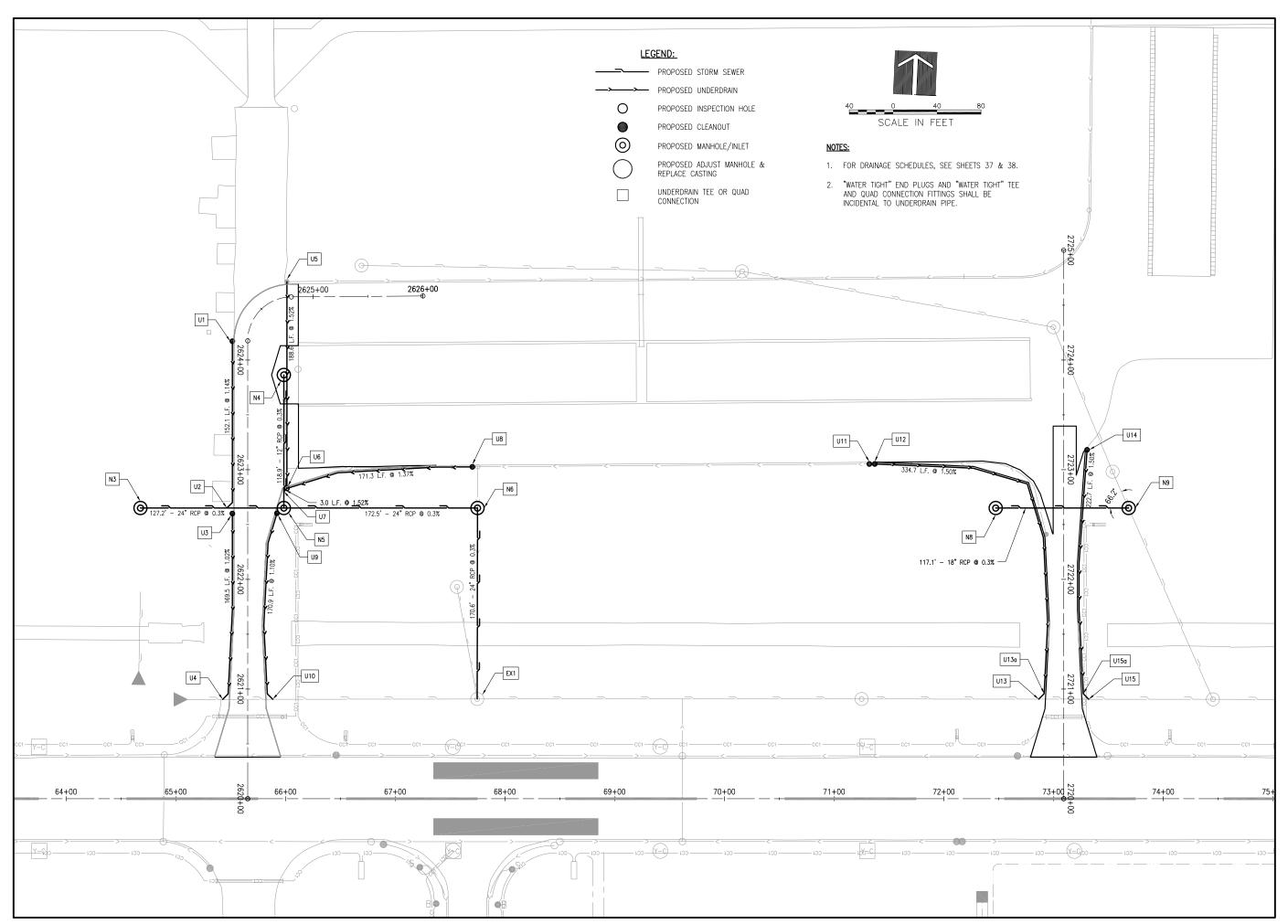
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SHEET TITLE

CROSS SECTIONS TAXIWAY R1





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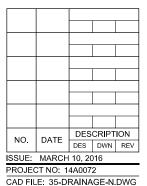
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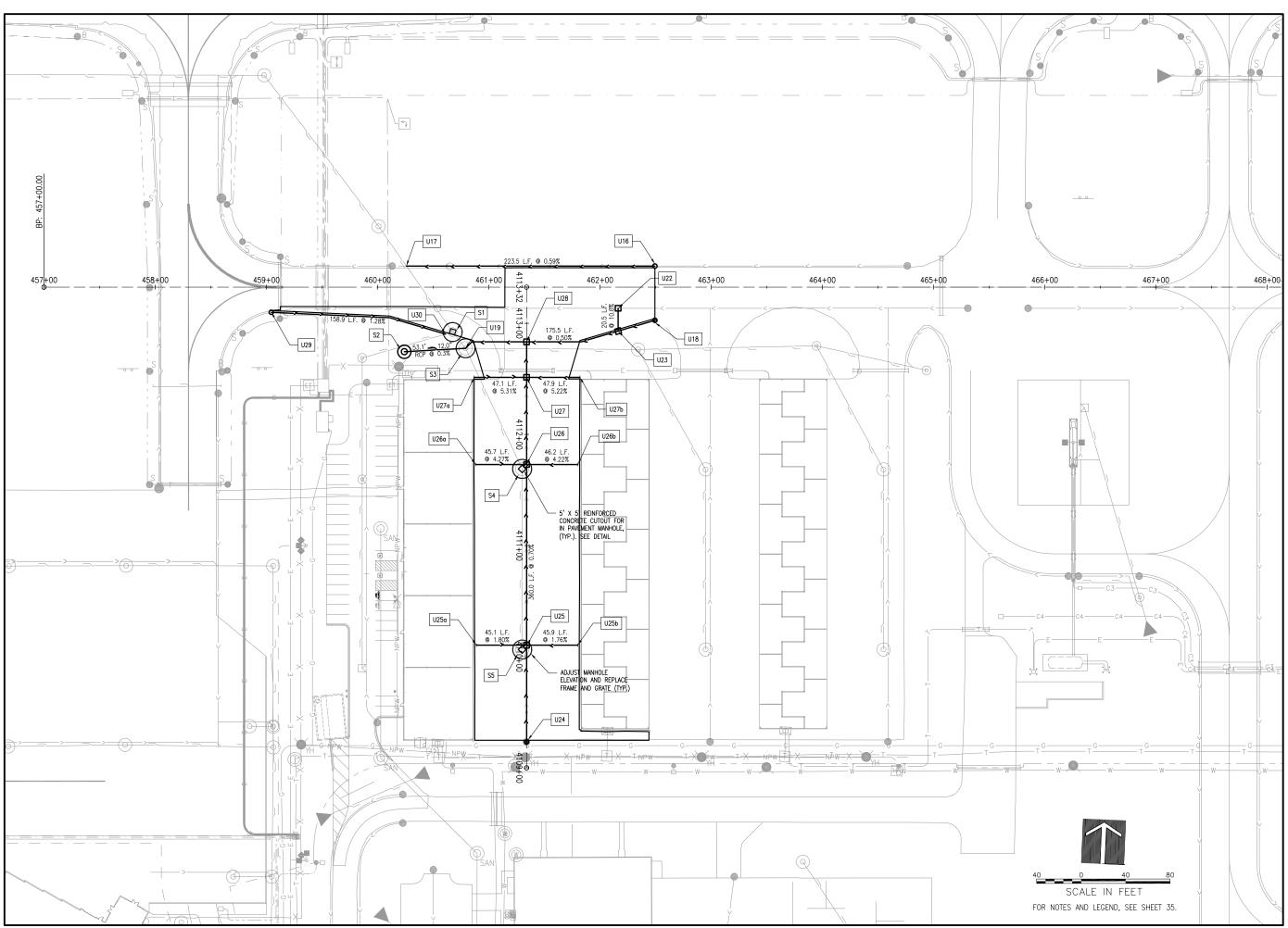
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SHEET TITLE

DRAINAGE PLAN -NORTH AREA





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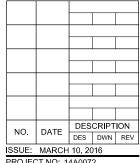
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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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PROJECT NO: 14A0072 CAD FILE: 36-DRAINAGE-S.DWG DESIGN BY: LDH 12/23/14 DRAWN BY: LDH 12/23/14

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SHEET TITLE

DRAINAGE PLAN -SOUTH AREA

# STORM SEWER SCHEDULE

Structure	Station	Offset	t	Туре	Rim El.	Inv	ert El.		Pipe Pay Length	Size	Туре	Slope %
S2	4112+74.44	109.9	LT	Inlet Type A (2" Dia)	666.33	Е	661.57					
									53.1	12.0	RCP	0.30
S3	4112+77.51	54.9	LT	Existing MH	667.15	W	661.40					
						w	662.60	*	Future	18.0	RCP	
						N	662.60	*	Future	18.0	RCP	
N3	2622+65.00	97.8	LT	MH (4' Dia)	666.40	Е	662.60					
									127.2	24.0	RCP	0.30
						W	662.21					
N5	2622+65.00	32.9	RT	MH (5' Dia)	667.30	N	662.21					
				<u> </u>		E	662.21					
									172.5	24.0	RCP	0.30
						W	661.68					
N6	2622+65.00	209.5	RT	MH (5' Dia)	665.95	E	661.68	*	Future	18.0	RCP	
				· · · · · · · · · · · · · · · · · · ·		S	661.68					
									170.6	24.0	RCP	0.30
EX1	2620+90.90	209.1	RT	Existing MH	665.94	N	661.16					
N4	2623+86.36	32.9	RT	Inlet Type A (2' Dia)	667.09	S	662.57					
									118.9	12.0	RCP	0.30
N5	2622+65.00	32.9	RT	MH (5' Dia)	667.30	N	662.21					
						W	662.21					
						E	662.21					
N8	2722+65.00	62.0	LT	MH (4' Dia)	666.48	E	658.80	+ +				
•		-2.0		, · - · - · · · ·	223.10		110.00		116.6	18.0	RCP	0.30
N9	2722+65.00	59.2	RT	MH (8' Dia)	666.58	W	658.44		110.0	10.0	1.0.	0.00
	2.22 30.00	55.2		ν	333.00	NW	658.44	**	Existing	42.0	RCP	
						SE	658.44	**	Existing	42.0	RCP	
						E	658.44	*	Future	18.0	RCP	
							00017	+ +	- uturo	1010	1.0.	

<sup>\*</sup> MANHOLES SHALL BE PRECAST WITH CONCRETE "KNOCK-OUTS"TO ACCOMMODATE FUTURE PIPES AS SHOWN IN THE SCHEDULE.
\*\* THE CENTERLINE OF THE EXISTING PIPE IS 66.2 DEGREES FROM THE CENTERLINE OF THE PROPOSED PIPE, SEE PLAN.

# NEW STRUCTURE FRAME AND GRADE SCHEDULE

Structure	Structure	Diameter	Frame Height	Grate Diameter	Frame Type	Cover/Grate
Number	Туре	"D" (in.)	(in.)	(in.)	(Neenah)	(Neenah)
S2	Inlet Type A	24	7	25-3/4	R-2390	Type C
N3	Manhole	48	8-5/8	36	R-2251	Type G
N4	Inlet Type A	24	7	25-3/4	R-2390	Type C
N5	Manhole	60	9	27	R-3492	Solid
N6	Manhole	60	8-5/8	36	R-2251	Type G
N8	Manhole	48	8-5/8	36	R-2251	Type G
N9	Manhole	96	8-5/8	36	R-2251	Type G

# EXISTING MANHOLE FRAME AND GRATE ELEVATION ADJUSTMENT AND REPLACEMENT SCHEDULE

Existing Structure	New Grate Type	Station	Offset		Rim Elevation
S1	Neenah R-3492	4112+92.10	66.5	LT	667.15
S3	Neenah R-3492	4112+77.51	54.9	LT	667.15
S4	Neenah R-3492-1	4111+68.99	4.0	LT	667.45
S5	Neenah R-3492-1	4110+06.42	4.0	LT	667.45

MODIFICATIONS TO EXISTING MANHOLE WALLS AND CONCRETE ADJUSTING RINGS REQUIRED SHALL BE INCIDENTAL TO ADJUST MANHOLE AND REPLACE CASTING.



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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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	NO.	DATE	DES	CRIPT	ION
	NO.	DATE	DES	DWN	REV
- 1	SSUE:	MARCH	10, 20	)16	
	PROJE(	CT NO: 1	4A007	2	

CAD FILE: 37-DRN SCH.DWG DESIGN BY: LDH 1/26/15 DRAWN BY: LDH 1/26/15 REVIEWED BY: RMH 3/8/16

SHEET TITLE

STORM SEWER SCHEDULES

# UNDERDRAIN SCHEDULE

Structure	Station	Offse	et	Туре	Rim El.	Invert El.	Pay Length	Slope %
U1	2624+17.09	14.00	LT	Cleanout	667.61	665.61		
							152.1	1.14
U2	2622+65.00	14.00	LT	RCP Connection		663.85		
U3	2622+60.00	14.00	LT	Cleanout	667.49	665.49		
							169.5	1.02
U4	2620+90.60	18.07	LT	RCP Connection		663.74		
U5	2624+77.18	14.14	LT	Existing Cleanout	667.91	665.91		
							188.6	1.52
U6	2622+82.89	35.78	RT	Inspection Hole	667.31	663.04		
							3.0	1.52
U7	2622+82.01	32.93	RT	RCP Connection		663.00		
U8	2623+02.54	204.78	RT	Cleanout	667.40	665.40		
							171.3	1.37
U6	2622+82.89	35.78	RT	Inspection Hole	667.31	663.04		
U9	2622+60.21	26.64	RT	Cleanout	667.38	665.38		
							170.9	1.10
U10	2620+90.64	18.07	RT	RCP Connection		663.47		
U11	2723+05.16	177.14	LT	Cleanout (Connect to Existing UD)	668.33	665.50		-
			l					
U12	2723+05.20	172.20	LT	Cleanout	668.33	666.33		
			l	Slave Channe			334.7	1.50
U13a	2720+95.77	17.81	LT	Slope Change		661.28		
1140	0700	40		DOD 0		085 :-	5.0	
U13	2720+90.76	18.06	LT	RCP Connection		658.43		
1114	2722 : 40 00	24.20	D7	Clos	660.00	666.60		
U14	2723+18.06	21.28	RT	Cleanout	668.60	666.60	222.7	1.50
11150	2720+05 72	17 92	DT	Slope Change		663.33	222.1	1.50
U15a	2720+95.73	17.82	RT	Stope Onlings	<del></del>	663.23	5.0	
U15	2720 : 00 72	10.07	D7	DCD Commodian		650.00	5.0	
U15	2720+90.73	18.07	RT	RCP Connection		658.26		

<sup>\* &</sup>quot;WATER TIGHT" END PLUGS AND "WATER TIGHT" TEE AND QUAD CONNECTION FITTINGS SHALL BE INCIDENTAL TO UNDERDRAIN PIPE.

Structure	Station	Offset		Туре	Rim El.	Invert El.	Pay Length	Slope %
U16	462+49.42	19.00	LT	Inspection Hole (Connect Existing UD)	667.29	664.05		
							223.5	0.59
U17	460+25.90	19.00	LT	RCP Connection		662.73		
U18	462+49.41	29.79	RT	Cleanout	667.17	663.37		
							175.5	0.50
U19	460+79.12	54.99	RT	Manhole Connection		662.49		
U22	462+16.31	18.99	RT	Tee Connection (Connect Existing UD)		665.25		
	402 - 10.01	10.00		,		000.20	20.5	10.00
U23	462+16.31	39.50	RT	Tee Connection		663.20		
U24	4109+23.33	0.00		Cleanout	667.80	665.30		
							360.0	0.70
U28	4112+83.29	0.00		Tee Connection		662.78		
U25a	4110+10.42	45.13	LT	Plug End		665.50		
							45.1	1.80
U25	4110+10.42	0.00		Quad Connection		664.69		
				Plug End			45.9	1.76
U25b	4110+10.42	45.91	RT	Flug Ellu		665.50		
U26a	4111+72.99	45.74	LT	Plug End		665.50		
				<u> </u>			45.7	4.27
U26	4111+72.99	0.00		Quad Connection		663.55		
							46.2	4.22
U26b	4111+72.99	46.22	RT	Plug End		665.50		
U27a	4112+51.36	47.10	LT	Plug End		665.50		
			_				47.1	5.31
U27	4112+51.36	0.00		Quad Connection		663.00		
	4440	47		Diversed		005	47.9	5.22
U27b	4112+51.36	47.95	RT	Plug End		665.50		
			-					
U29	459+04.42	22.60	RT	Inspection Hole (Connect Existing UD)	667.48	664.65		
020	430.04.42	22.00		(22,000)	007.40	004.00	158.9	1.28
U30	460+61.05	42.25	RT	RCP Connection		662.61		
			<u> </u>					
	-							

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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049

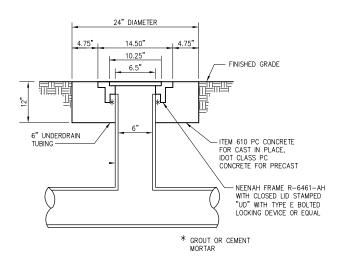
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INO.	DATE	DES	DWN	REV
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PROJECT NO: 14A0072 CAD FILE: 38-UD SCH.DWG DESIGN BY: LDH 1/26/15 DRAWN BY: LDH 1/26/15 REVIEWED BY: RMH 3/8/16

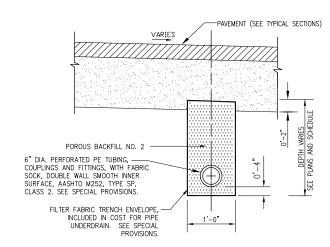
SHEET TITLE

UNDERDRAIN SCHEDULES

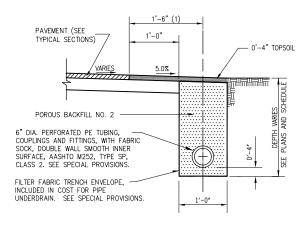
# UNDERDRAIN CLEANOUT



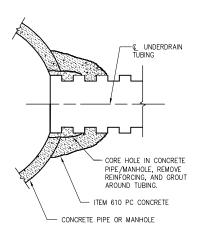
# UNDERDRAIN INSPECTION HOLE



UNDERDRAIN UNDER PAVEMENT



UNDERDRAIN ALONG PAVEMENT EDGE



STORM SEWER CONCRETE COLLAR AND GROUT CONNECTION

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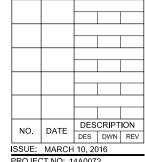
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



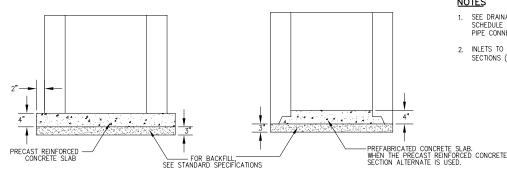
PROJECT NO: 14A0072

CAD FILE: 39-UD DETAILS.DWG DESIGN BY: LDH 1/8/15

DRAWN BY: LDH 1/8/15 REVIEWED BY: RMH 3/8/16

SHEET TITLE

UNDERDRAIN **DETAILS** 

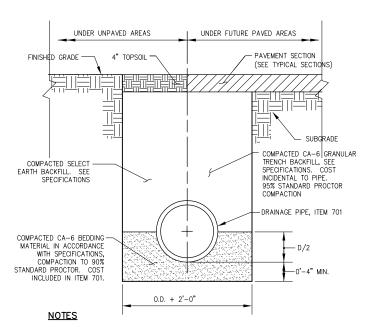


## <u>NOTES</u>

- SEE DRAINAGE PLANS AND INFILTRATION TRENCH SCHEDULE FOR LOCATION, SIZE AND NUMBER OF PIPE CONNECTIONS.
- 2. INLETS TO BE PRECAST REINFORCED CONCRETE SECTIONS (T = 3").

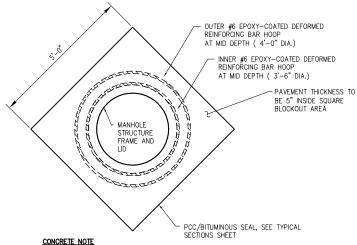
ALTERNATE METHODS

INLET TYPE A (IDOT STANDARD 602301)



- 1. UNSUITABLE MATERIAL ENCOUNTERED DURING PLACEMENT OF BEDDING SHALL BE
- 2. WITHIN 3 FEET OF FUTURE PAVED AREA, GRANULAR BACKFILL IS TO BE USED INSTEAD OF EARTH BACKFILL.
- 3. AT CONTRACTOR'S OPTION IDOT CONTROLLED LOW STRENGTH MATERIAL WITH A HIGH EARLY STRENGTH, "FLASH FILL", MAY BE USED INSTEAD OF GRANULAR TRENCH BACKFILL UNDER PAVEMENTS.

PIPE TRENCH



1. CONCRETE SHALL BE IDOT CLASS BS (4,000 PSI AT 14 DAYS) AIR ENTRAINED, SLUMP LIMITED TO 3 INCHES, COARSE AGGREGATE GRADATION CA-11.

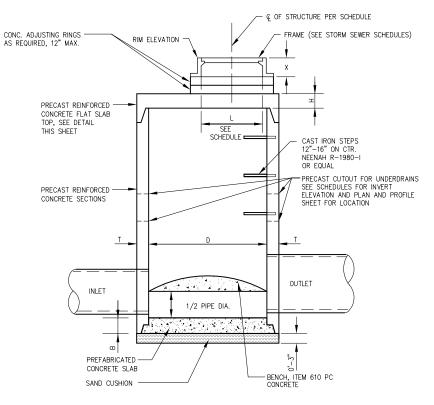
### FRAMING NOTE

1. HOOP REINFORCEMENT REQUIRED AND SHALL BE ONE PIECE CONSTRUCTION HAVING A MINIMUM LAP LENGTH OF 2'-0".

#### GENERAL NOTE

1. ALL MATERIALS AND WORK TO BE PAID UNDER ITEM AR800950.

# JOINTING AND REINFORCING AT MANHOLES S1, S4 AND S5

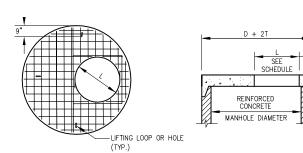


### MANHOLE DATA

- 1. FOR "L" DIMENSION AND FRAME AND LID INFORMATION SEE STORM SEWER SCHEDULES.
- 2. CENTER OF FRAME TO BE USED FOR LOCATING STRUCTURE. FOR STRUCTURE LOCATIONS AND ADDITIONAL INFORMATION SEE
- 3. ALL STRUCTURES TO BE PRECAST REINFORCED CONCRETE SECTIONS; BENCHES MAY BE CAST IN PLACE.
- 4. BLOCKOUTS FOR UNDERDRAIN CONNECTIONS AND FUTURE PIPES SHALL BE PRECAST INTO THE STRUCTURE

INSIDE DIA. "D" (IN.)	WALL THICKNESS "T" (IN.)	TOP THICKNESS "H" (IN.)	BOTTOM THICKNESS "B" (IN.)
48	5	6	6
60	5	8	8
72	7	8	8
108	9	9	8

# MANHOLE WITH FLAT SLAB TOP (IDOT STANDARD 602401-MODIFIED)



- 1. ADDITIONAL TOP AND BOTTOM BARS PLACED ADJACENT TO ACCESS HOLE.
- 2. MINIMUM 1" COVER ON STEEL BARS.
- 3. THREE LIFTING LOOPS OR HOLES.
- MINIMUM STEEL REINFORCEMENT IN EACH DIRECTION TO BE WWF 1.06 SQ. IN./FT. IN ACCORDANCE WITH AASHTO M199 AND IDOT STANDARDS.
- 5. FOR "L" DIMENSION SEE STORM SEWER SCHEDULES.

# PRECAST REINFORCED CONCRETE FLAT SLAB TOP

(IDOT STANDARD 602601)

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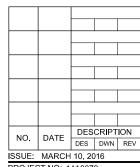
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



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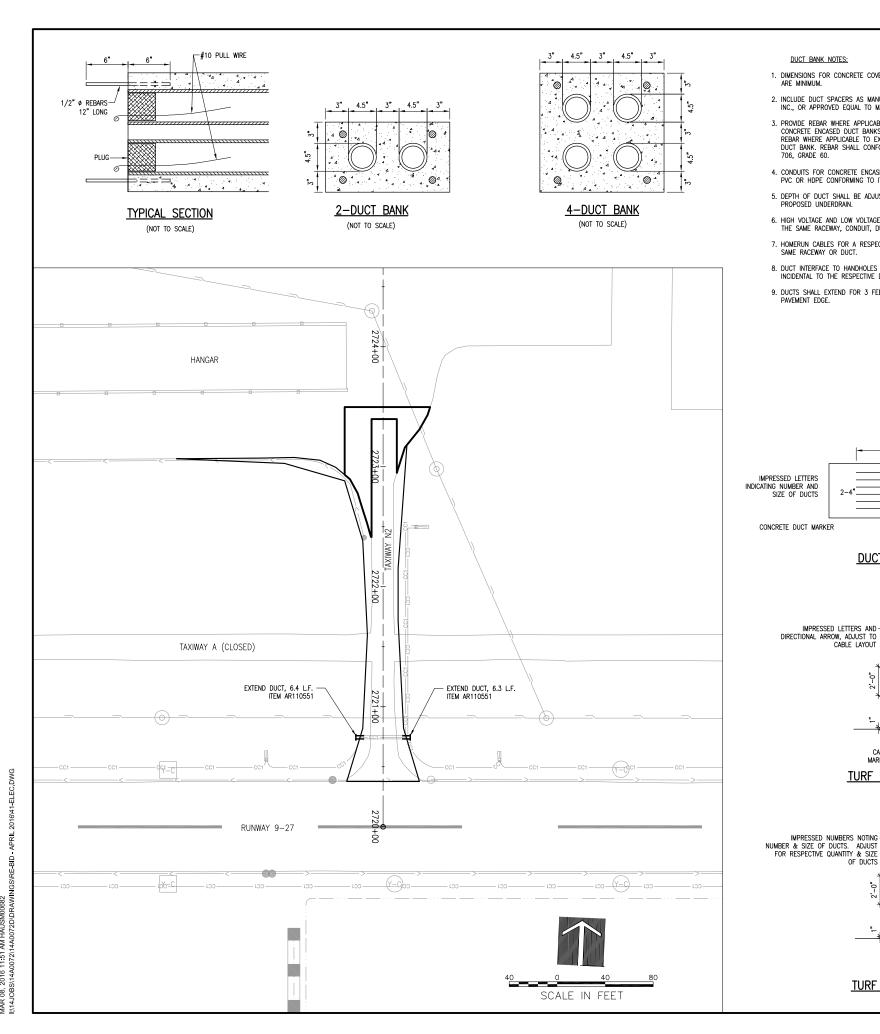
DRAWN BY: LDH 1/8/15

REVIEWED BY: RMH 3/8/16

40

SHEET TITLE

DRAINAGE DETAILS



#### DUCT BANK NOTES:

- 1. DIMENSIONS FOR CONCRETE COVERAGE AND SEPARATION BETWEEN DUCTS
- 2. INCLUDE DUCT SPACERS AS MANUFACTURED BY UNDERGROUND DEVICES INC., OR APPROVED EQUAL TO MAINTAIN PROPER SEPARATION OF CONDUITS.
- 3. PROVIDE REBAR WHERE APPLICABLE TO ACCOMMODATE INTERFACE OF CONCRETE ENCASED DUCT BANKS TERMINATING IN HANDHOLE. PROVIDE REBAR WHERE APPLICABLE TO EXTEND AN EXISTING CONCRETE ENCASED DUCT BANK. REBAR SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706, GRADE 60.
- 4. CONDUITS FOR CONCRETE ENCASED DUCT SHALL BE SCHEDULE 40 (MIN.) PVC OR HDPE CONFORMING TO ITEM 110.
- 5. DEPTH OF DUCT SHALL BE ADJUSTED TO PASS BELOW EXISTING OR PROPOSED UNDERDRAIN.
- 6. HIGH VOLTAGE AND LOW VOLTAGE CIRCUITS SHALL NOT BE INSTALLED IN THE SAME RACEWAY, CONDUIT, DUCT, HANDHOLE, OR MANHOLE.
- 7. HOMERUN CABLES FOR A RESPECTIVE CIRCUIT SHALL BE INSTALLED IN THE
- 8. DUCT INTERFACE TO HANDHOLES OR MANHOLES WILL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE DUCT PAY ITEM.
- DUCTS SHALL EXTEND FOR 3 FEET BEYOND ANY EXISTING OR PROPOSED PAVEMENT EDGE.

2-WAY OR 4-WAY DUCT

CONCRETE PAVEMENT

MARKER SEE NOTE 2

PROPOSED PAVEMENT

OR "LOCALIZER"

CONCRETE CABLE

FINISHED GRADE

CONCRETE DUCT

FINISHED GRADE

**DUCT MARKER DETAIL** 

"NOT TO SCALE"

CABLE

2'-0"

TURF CABLE MARKERS

"NOT TO SCALE"

2'-0"

DUCT

TURF DUCT MARKERS

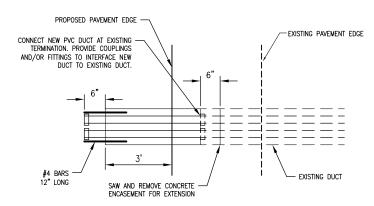
"NOT TO SCALE"

CABLE

IMPRESSED LETTERS AND -

DIRECTIONAL ARROW, ADJUST TO CABLE LAYOUT

FOR RESPECTIVE QUANTITY & SIZE



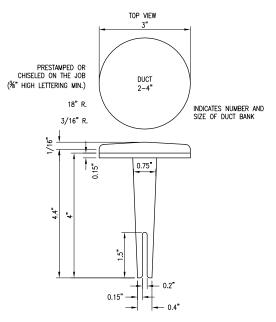
# **DUCT EXTENSION**

#### CABLE & DUCT MARKER NOTES:

- 1. THE COST OF ALL TURF AND PAVEMENT DUCT MARKERS SHALL BE INCIDENTAL TO THE DUCT. THE COST OF ALL CABLE MARKERS SHALL BE INCIDENTAL TO THE CABLE.
- 2. BITUMINOUS PAVEMENT DUCT MARKER AND CONCRETE DUCT MARKER TO BE PROVIDED AT EACH END OF EACH DUCT AS SHOWN ON THE LOCATION PLAN. FOR CONCRETE PAVEMENT, THE LETTER "D" SHALL BE IMPRESSED IN THE PAVEMENT INSTEAD OF THE MARKER. THE LETTER SHALL BE FORMED AS DESCRIBED IN NOTE 4.
- 3. CABLE MARKERS SHALL BE PLACED AT CHANGES OF DIRECTION AND APPROXIMATELY EVERY 200' ALONG CABLE RUNS.
- 4. CONCRETE CABLE MARKERS AND DUCT MARKERS SHALL HAVE LETTERS 4" HIGH,
- 5. EMPLOY THE FOLLOWING METHODS WERE ADDITIONAL SPACE TO FIT LEGEND IS
- REQUIRED:

  A. REDUCE LETTER SIZE TO 3" HIGH, 2" WIDE.

  B. INCREASE THE MARKER SIZE TO 30" X 30".
- C. PROVIDE ADDITIONAL MARKERS PLACED SIDE BY SIDE.



# BITUMINOUS PAVEMENT DUCT MARKERS

"NOT TO SCALE"

- NOTES:

  1. TOP OF MARKER SHALL BE FLUSH WITH FINISHED PAVEMENT SURFACE. MARKER MAY BE INSTALLED IN A DRILLED HOLE AND SECURED WITH EPOXY GLUE.
- 2. BRASS DUCT MARKERS ARE AVAILABLE FROM G&S FOUNDRY & MANUFACTURING CO., INC., 210 KASKASKIA DRIVE, RED BUD, IL 62278, PHONE: (618)-282-4114



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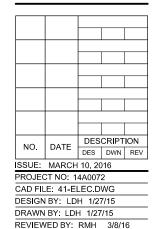
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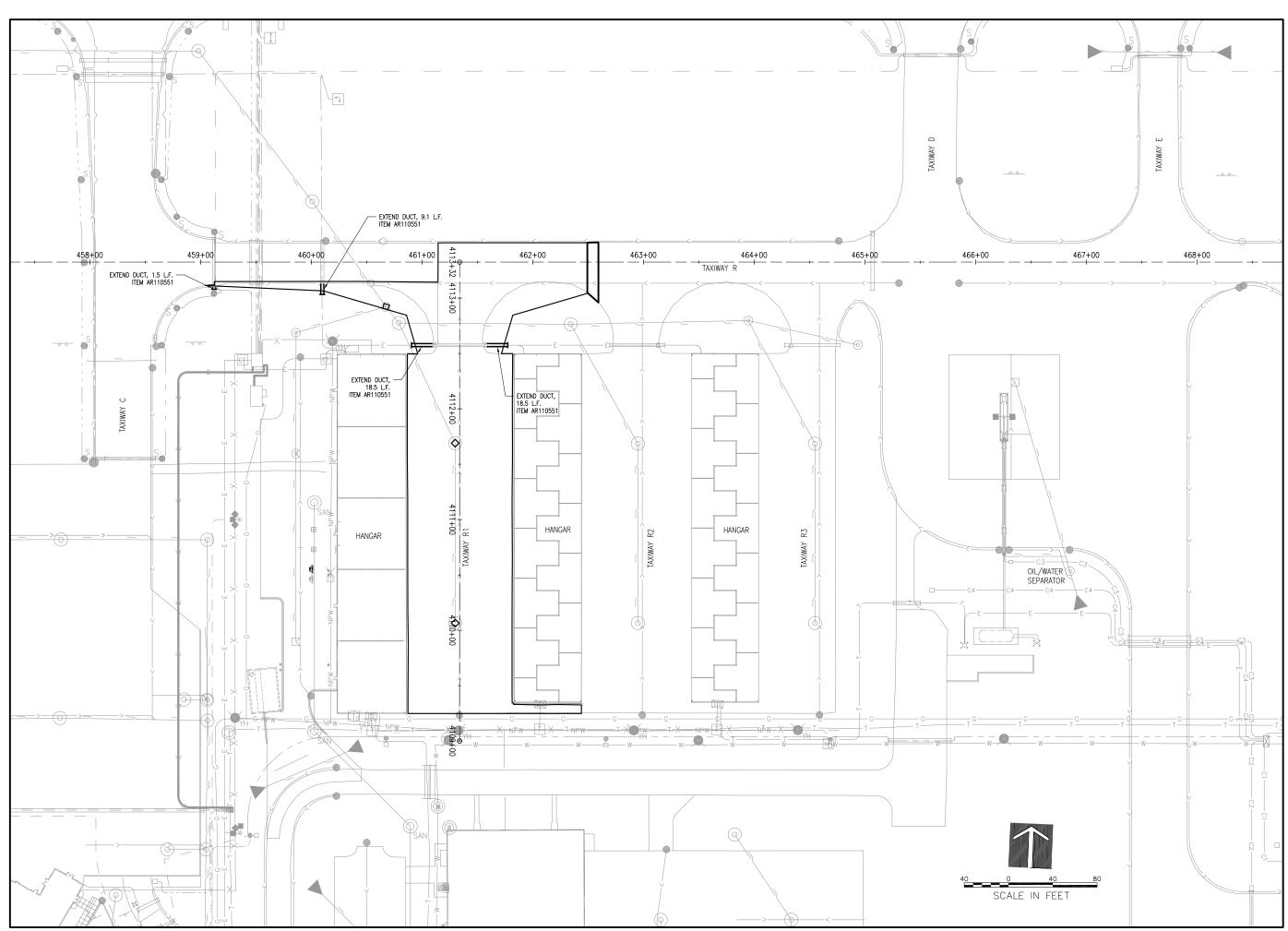
IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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**NORTH AREA ELECTRICAL DUCT** PLAN AND DETAILS

SHEET TITLE





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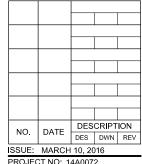
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IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



PROJECT NO: 14A0072

CAD FILE: 42-ELEC.DWG

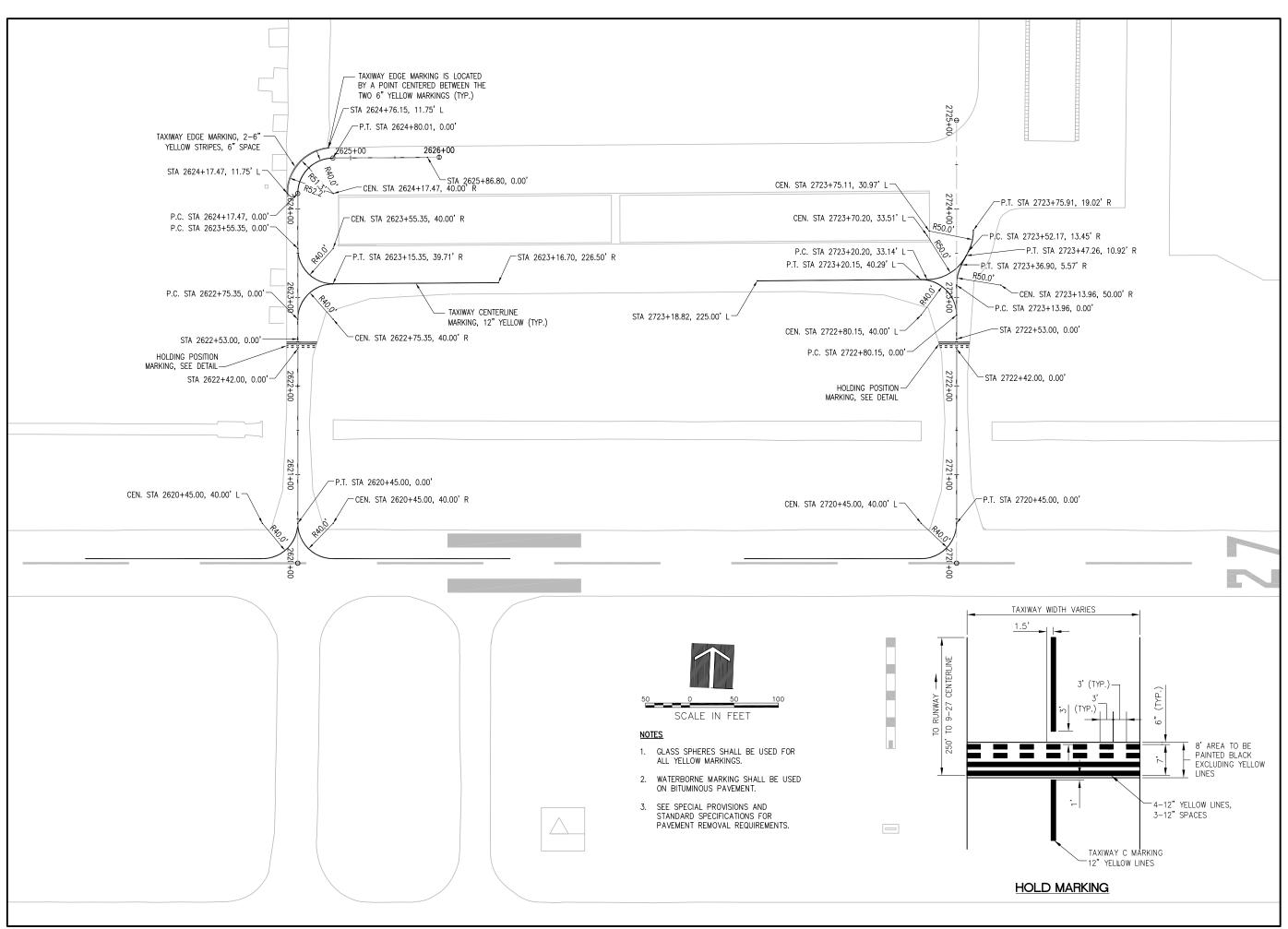
DESIGN BY: LDH 1/27/15

DRAWN BY: LDH 1/27/15

REVIEWED BY: RMH 3/8/16
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SHEET TITLE

SOUTH AREA ELECTRICAL DUCT PLAN



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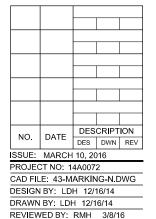
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

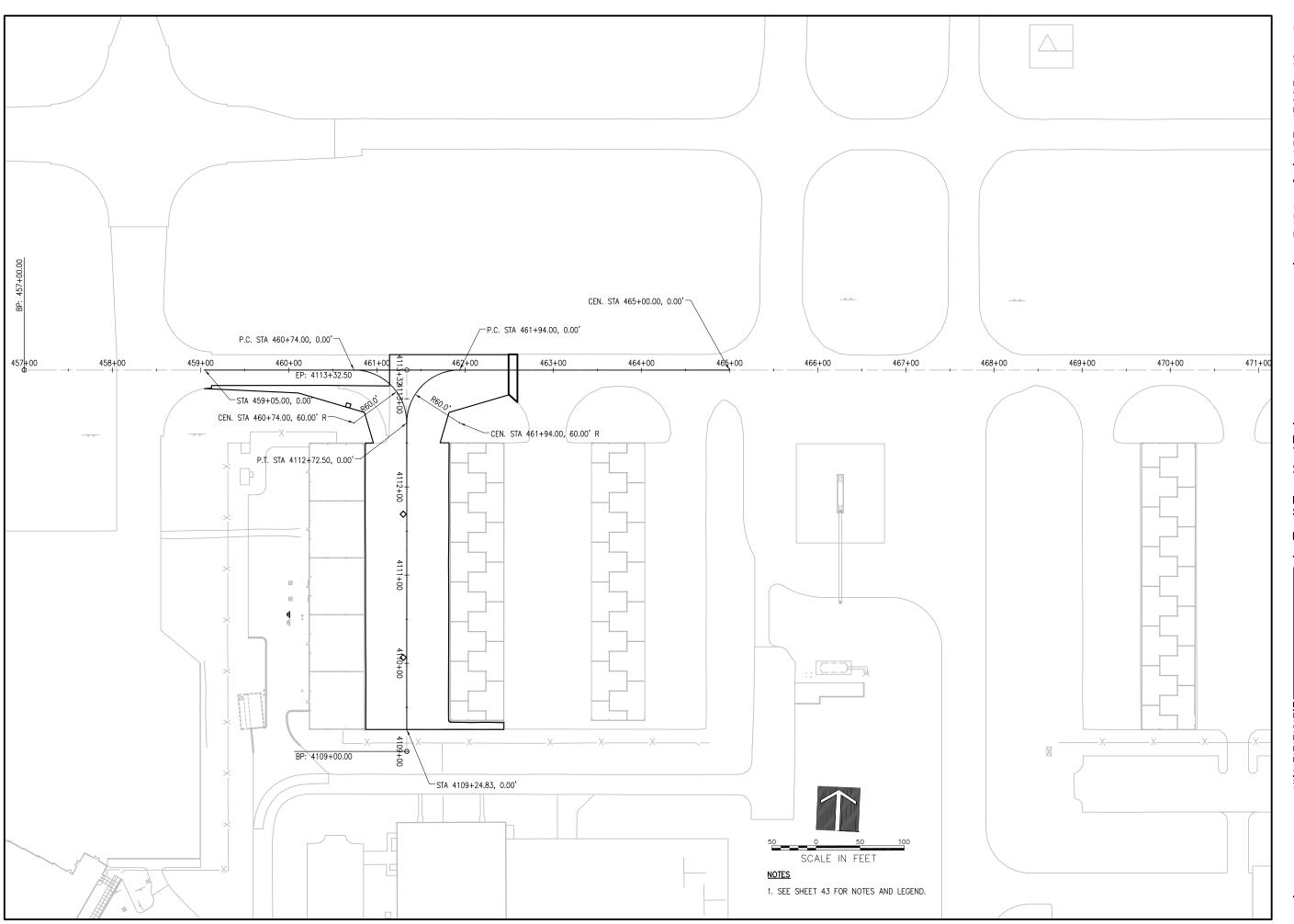
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MARKING PLAN -NORTH AREA

SHEET TITLE



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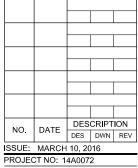
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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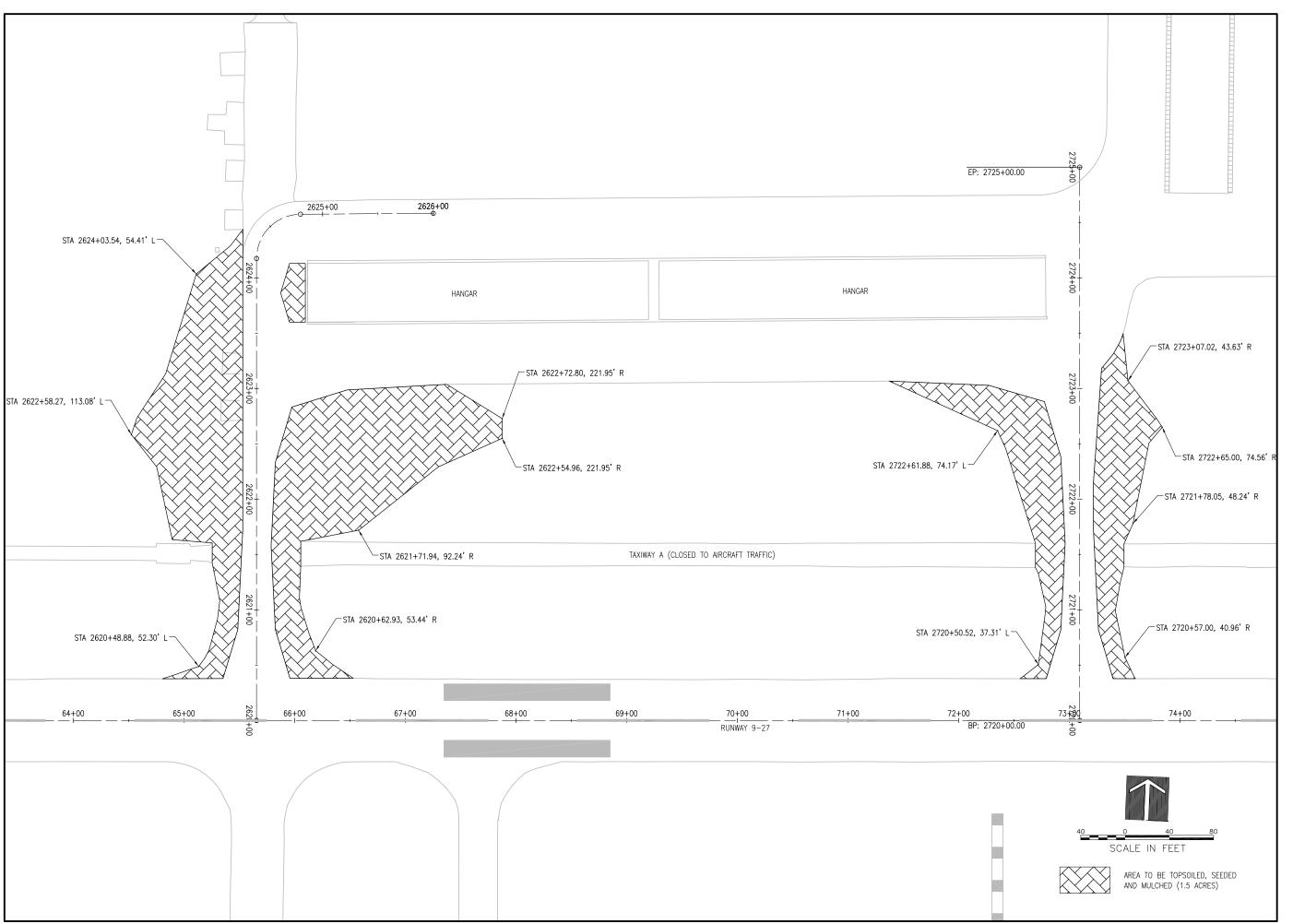


PROJECT NO: 14A0072
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DRAWN BY: LDH 7/15/14

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MARKING PLAN -SOUTH AREA





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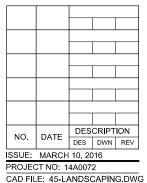
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049



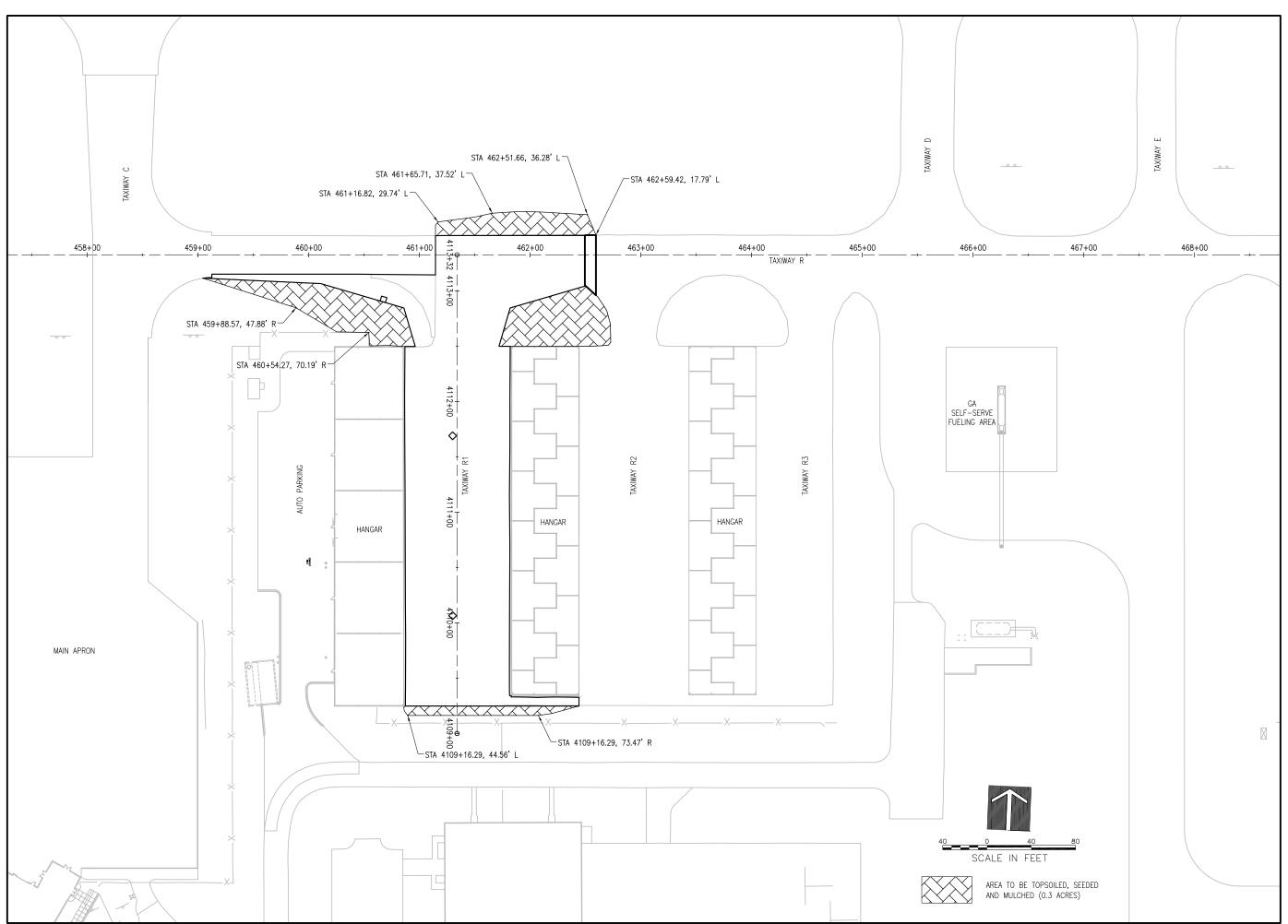
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LANDSCAPING PLAN -NORTH AREA





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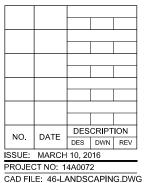
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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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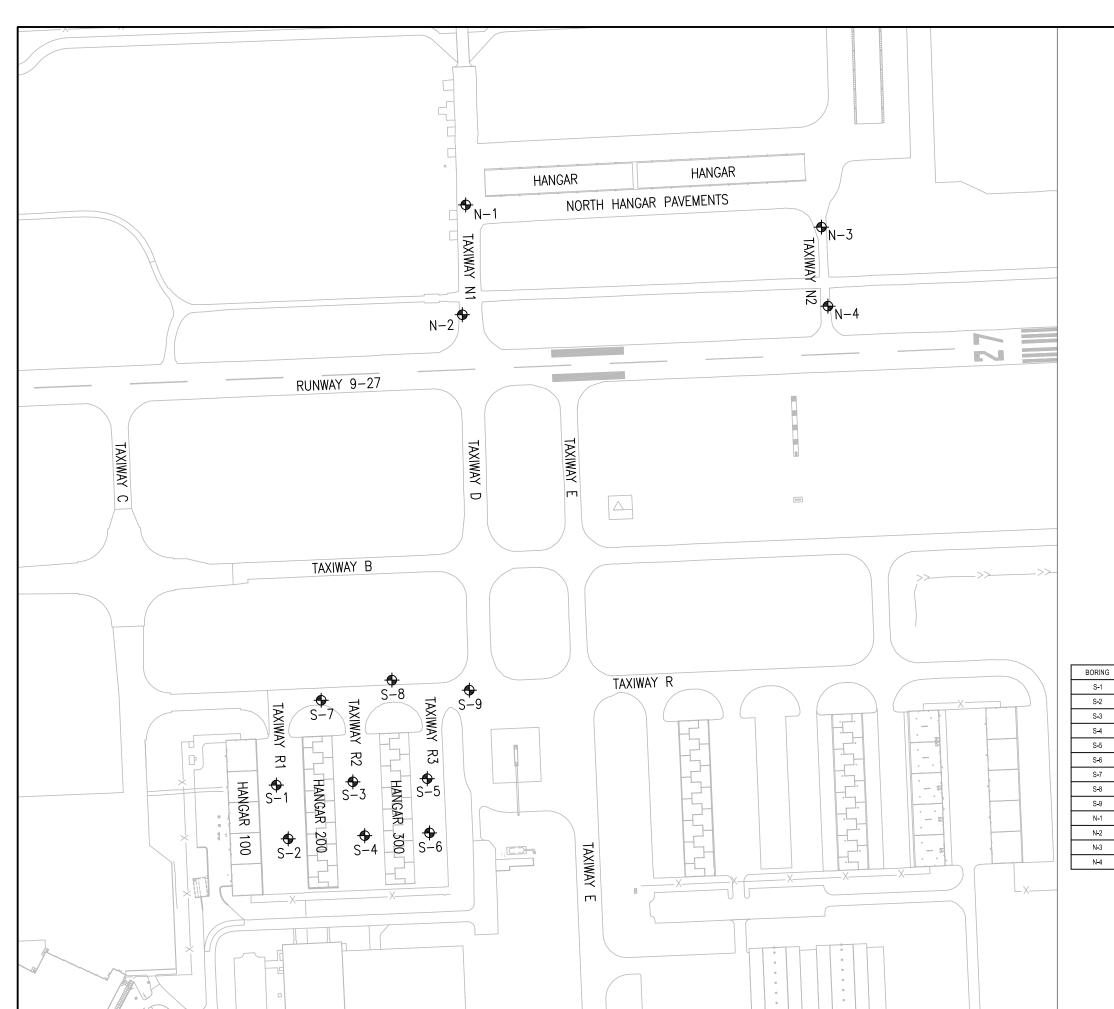
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LANDSCAPING PLAN -SOUTH AREA





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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049

EASTING

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1050642.1036

1050776.6995

1050801.4609

1050931.5814

1050936.3606

1050710.7050

1050858.0414

1051019.2608

1051011.8624

1051004.7847

1051752.6794

1051766.1694

SCALE IN FEET

NORTHING

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1799047.6476

1799166.4354

1799054.3942

1799172.9926

1799060.1054

1799336.3102

1799378.2844

1799357.3805

1800368.2325

1800139.3878

1800321.9406

1800157.2985

ELEVATION

667.61

667.75

668.18

668.14

668.29

667.66

667.00

667.30

667.43

666.97

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667.42

LENGTH

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10'

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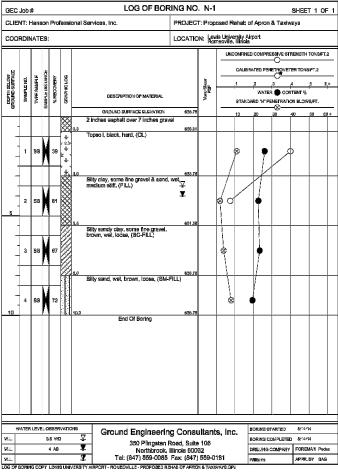
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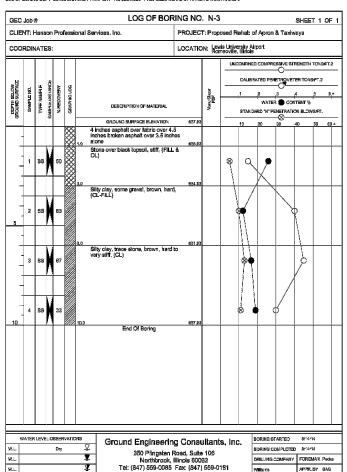
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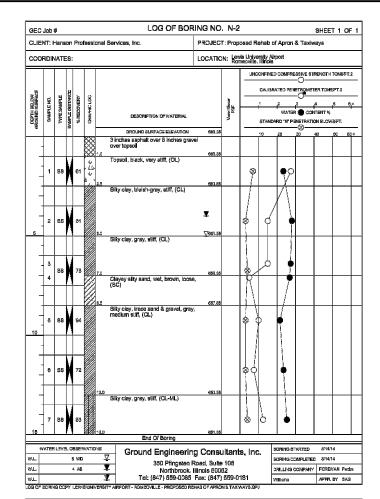
BORING LOCATION MAP

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SHEET TITLE







GEC	Job	#				LOG OF BO	RING NO	. N-4					SHEET	1 OF	1	
CLIE	NT: I	lans	on	Pro	isaei	onal Services, Inc.	PROJEC	r: Prop	osed Re	hab of	Apron	& Taxiw	ays			
coo	RDIN	IATE	s:				LOCATIO	N: Lew	via Univer neoville, I	sity Ainp Ilinois	ort					
									UNCO	NFINED	FINED COMPRESSIVE STRENGTH TONS#T.2					
щ			и							CALIBRA	JBRATED PENETROMETER TONSFT.3					
DEPTH BELOW POLIND SURFACE	3	TYPE SAMPLE	SAMPLE DISTANCE	JE V	X			Ġ.			2	-O'		t 6,-	-	
E.S.	SAMPLE NO.	8	ED!	% RECOVERY	CHANNICLOC	DESCRIPTION OF MATERIAL		Vane Shear PSF			WATER	CON	renr%	•		
	a	٤	SAME	38	ð			-		STANDA	RD 'N' PS	METRATIC	N BLCW	SNFT.	_	
	┝	L		_	XX	arcund surface elevation 4.75 inches asphalt over 5.25 in:			- 1	9	20		<b>3</b> 0	BQ 63	*	
-	1				燹	sand & gravel	685.91									
-	T	Н	ī	_	×	Sifty olay & topsoll, dark gray & t vary stiff, (FILL)	HOWTH,								_	
_	1	88	Ĭ	44	₩	very sur, (mill)			8		• 9	ÞΙ				
_			Ц		$\bigotimes$						W					
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44	VATER	LEVE	LO	eaea	WATIO	NS Ground Engineer	ina Corce	المرجوان	n Inc	30	DRING 81	WRITED	a/15/1-		=	
97.L.	Ground Engineer					— Ground Endineer	_		s, Inc.			OMPLETED			_	
W.L.						■ Northbroo	k, Illinois 600	32		23	allina (	COMPANY	FOREWAN Pecks			
W.L.						▼ Tel: (847) 559-008  VERSITY AIRPORT - ROMEOVILLE - PROPOSED  Tel: (847) 559-008  Tel: (847) 559-008				W	llians		APPB.	BY SAG		



Hanson Professional Services Inc. 815 Commerce Drive, Suite 200 Oak Brook, IL 60523 phone: 630-990-3800 fax: 630-990-3801

Illinois Licensed Professional Service Corporation #184-001084

Lewis University Airport

JOLIET REGIONAL PORT DISTRICT 1 George Michas Drive Romeoville, Illinois 60446 Telephone: 815.838.9497 Fax: 815.838.9524

REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

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	NO.	DATE	DES	CRIPT	ION
	NO.	DAIL	DES	DWN	REV
ı	SSUE:	MARCH	10, 20	)16	
	PROJEC	CT NO: 1	4A007	2	

PROJECT NO: 14A0072

CAD FILE: 48-BORINGS.DWG

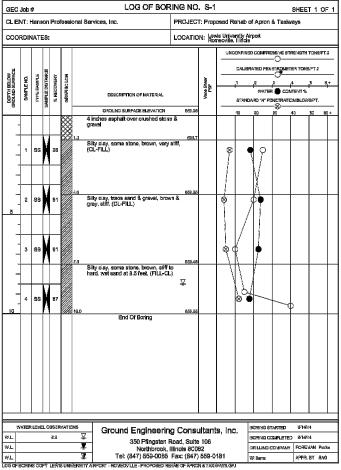
DESIGN BY: LDH 1/9/15

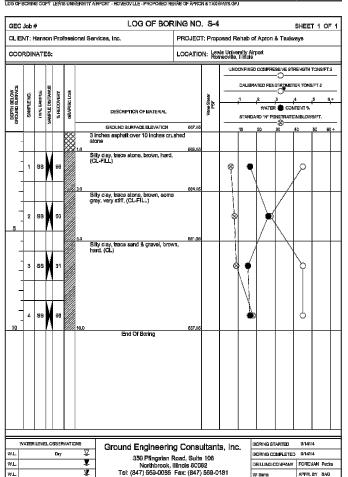
DRAWN BY: LDH 1/9/15

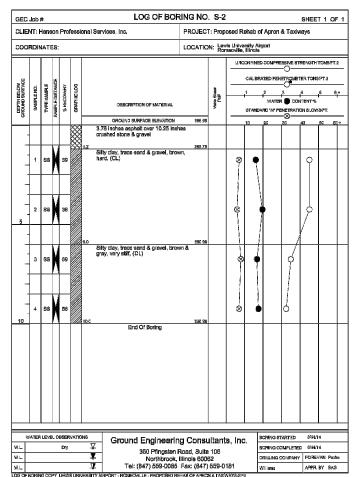
REVIEWED BY: RMH 3/8/16

SHEET TITLE

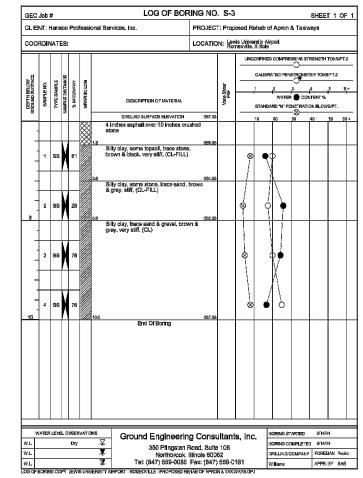
BORING LOGS N-1 THRU N-4

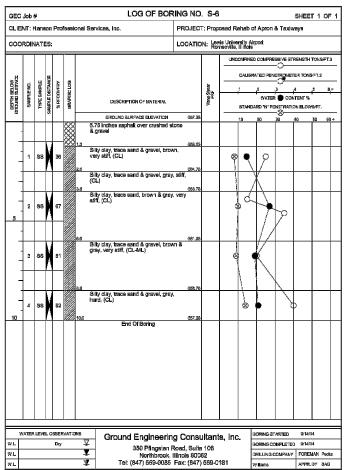






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GEC	Jab i	*	_				LOG OF BOF	RING NO	. S-5					SHEE	T 1 0	F 1
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000	RENIN	IATE	ES:					LOCATION: Lewis University Airport Romacville, Illinois								
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и			8							CALIBRATED FENETROMETER TONSATT.2						
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DEPTH BELOW STOUND BURFACE	SMITTE NO.	TYPE SAMPLE	SAMPLE DISTANCE	% RECOVERY	BRAPHIC LOG		DESCRIPTION OF MATERIAL		Verse Shear	WATER DONTENT'S STANDARD IN PENETRATION BLOWSFT.						,
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WATER LEVEL CESSERVATIONS  W. □ 3.5 WD   Ground Engineerin				-		s, inc	ì.  -	CPING C								
W.L.	350 Pfingsten Rr 88 AB Y Northbrook, III							-	FILLING (			REVAN Peda				
W⊥						085 Fax: (847) 559-0181 VIII ama APPR. BY 8AG										







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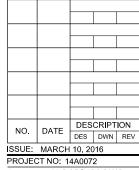
Lewis University Airport

JOLIET REGIONAL PORT DISTRICT 1 George Michas Drive Romeoville, Illinois 60446 Telephone: 815.838,9497 Fax: 815.838,9524

REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

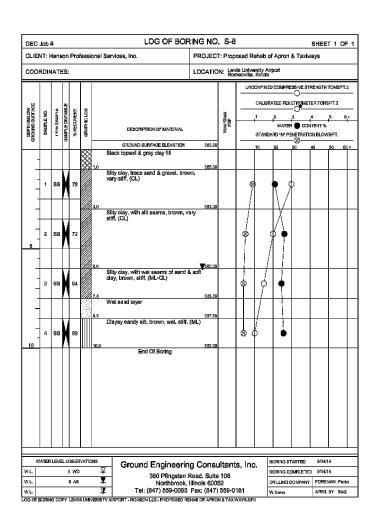
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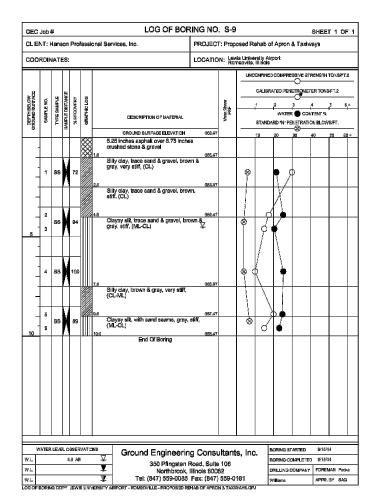


ISSUE: MARCH 10, 2016
PROJECT NO: 14A0072
CAD FILE: 49-BORINGS.DWG
DESIGN BY: LDH 1/9/15
DRAWN BY: LDH 1/9/15
REVIEWED BY: RMH 3/8/16

SHEET TITLE

BORING LOGS S-1 THRU S-6







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REHABILITATE TAXIWAY N1, N2, & R1 AND PORTIONS OF TAXIWAY R

IDA No: LOT-4425 SBG No: 3-17-SBGP-XX

LE049

NO. DATE DESCRIPTION
DES DWN REV

ISSUE: MARCH 10, 2016

PROJECT NO: 14A0072
CAD FILE: 50-BORINGS.DWG
DESIGN BY: LDH 1/9/15
DRAWN BY: LDH 1/9/15
REVIEWED BY: RMH 3/8/16

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SHEET TITLE

BORING LOGS S-7 THRU S-9