

RUNWAY AND TAXIWAY LIGHTING CIRCUITS

1. AT THE START OF THIS PHASE THE CONTRACTOR WILL SHUT OFF THE LIGHTING CIRCUIT TO RUNWAY 11-29. THIS CIRCUIT WILL REMAIN DE-ACTIVATED UNTIL THE RUNWAY IS READY TO BE RE-OPENED.
2. THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER AT LEAST FOUR WEEKS PRIOR TO CLOSING RUNWAY 11-29 SO THE AIRPORT MANAGER CAN CONTACT THE FEDERAL AVIATION ADMINISTRATION (FAA) ABOUT SHUTTING DOWN THE ASSOCIATED NAVAIDS ON RUNWAY 11-29. THESE NAVAIDS WILL REMAIN DE-ACTIVATED UNTIL THE RUNWAY IS READY TO BE RE-OPENED.
3. RUNWAY 6-24 WILL REMAIN OPEN THROUGH OUT PHASE 1 ACTIVITIES AND THE LIGHTING CIRCUIT AND NAVAIDS FOR RUNWAY 6-24 WILL REMAIN OPERATIONAL AS WELL.
4. CURRENTLY THERE ARE SEVEN DIFFERENT TAXIWAY LIGHTING CIRCUITS. THIS PROJECT, AT ONE TIME OR ANOTHER, WILL IMPACT ALL OF THESE TAXIWAY LIGHTING CIRCUITS.
5. TAXIWAY CIRCUIT NO. 7 WILL BE SHUT OFF AT THE START OF THIS PHASE AND WILL REMAIN OFF UNTIL RUNWAY 11-29 IS READY TO BE RE-OPENED.
6. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO "COVER" THE TAXIWAY LIGHTS THAT ARE LOCATED WITHIN TAXIWAY AREAS THAT HAVE BEEN CLOSED TO AIRCRAFT MOVEMENT. THERE ARE APPROXIMATELY 100 TAXIWAY LIGHTS THAT WILL REQUIRE "COVERING".
7. THE PROPOSED "COVER" WILL NOT ALLOW THE EMITTANCE OF ANY LIGHT FROM THE TAXIWAY LIGHT FIXTURE. THE CONTRACTOR WILL BE ALLOWED TO USE ANY MATERIAL AT HIS DISPOSAL TO "COVER" THE LIGHTS. DIFFERENT TYPES OF "COVERINGS" USED IN THE PAST HAVE BEEN BLACK PLASTIC BAGS, CANS, AND SECTIONS OF PLASTIC PIPE. ANY DAMAGE TO THE EXISTING LIGHT FROM THE "COVERING" WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
8. THE "COVERING" OF THE TAXIWAY LIGHTS AS WELL AS THE DE-ACTIVATION/RE-ACTIVATION OF THE RUNWAY 11-29 LIGHTING CIRCUIT AND TAXIWAY LIGHTING CIRCUIT NO. 7 WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
9. THE CONTRACTOR (AT HIS DISCRETION) WILL REMOVE THE THRESHOLD LIGHT FIXTURES OFF THE WEST END OF RUNWAY 11-29. THE LIGHT FIXTURES WILL BE STORED AND PROTECTED FROM DAMAGE. ANY DAMAGE TO THESE FIXTURES WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S OWN EXPENSE. THE CONCRETE LIGHT BASES WILL BE LEFT IN PLACE AND PROTECTED FROM TRUCKS/EQUIPMENT TRAVELING OVER THEM. ANY DAMAGE TO THE CONCRETE LIGHT BASES WILL BE REPAIRED/REPLACED AT THE

CONTRACTOR'S OWN EXPENSE. THE THRESHOLD LIGHT FIXTURES WILL BE REPLACED WHEN RUNWAY 11-29 IS READY TO BE RE-OPENED. ALL WORK ASSOCIATED WITH THE REMOVAL, STORAGE, AND REPLACEMENT OF THESE LIGHTS WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PROPOSED BARRICADES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED BARRICADES THROUGHOUT THIS PROJECT.
2. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 93 FEET FROM THE CENTERLINE OF THE TAXIWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
3. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 250 FEET FROM THE CENTERLINE OF THE RUNWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.

PROPOSED HAUL ROUTE & STAGING AREAS

DURING THE PHASE 1 CONSTRUCTION THE CONTRACTOR WILL BE USING THE FOLLOWING ACCESSES:

1. THE PROPOSED HAUL ROUTE OFF OF ROUTE 16 WILL BE THE PRIMARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES ON THE WESTERLY PORTION OF RUNWAY 11-29 AND THE CONNECTING TAXIWAYS.
2. THE PROPOSED HAUL ROUTE OFF OF OLD STATE ROAD WILL BE THE SECONDARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES ON THE EASTERLY PORTION OF RUNWAY 11-29 AND THE CONNECTING TAXIWAYS ON THE EASTERLY PORTION.
3. THE CONTRACTOR(S) AND HIS PERSONNEL WILL USE THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREAS AS SHOWN ON THIS PHASING PLAN.

PROPOSED PHASE 1 CONSTRUCTION

THE NOTICE TO PROCEED ON THIS PROJECT IS ANTICIPATED TO BE ISSUED IN THE LATE SPRING OF 2015.

THE PHASE 1 CONSTRUCTION SHALL CONSIST OF THE FOLLOWING ITEMS:

1. CONSTRUCT HAUL ROUTES AND STAGING AREAS.
2. RUBBLIZE THE WESTERLY 2,600' X 150' OF RUNWAY 11-29.
3. MILLING OF THE CONCRETE/BITUMINOUS BUTT JOINTS ON THE CONNECTING TAXIWAYS TO RUNWAY 11-29.
4. ADJUSTMENT OF THE EXISTING RUNWAY LIGHT BASES THAT ARE LOCATED ON THE CONNECTING TAXIWAYS TO RUNWAY 11-29.
5. THE CONTRACTOR WILL BE ALLOWED TO PLACE THE PROPOSED BITUMINOUS BASE COURSE IN ONE LIFT (6" MAXIMUM DEPTH) ON THE WESTERLY 2,600' SECTION OF RUNWAY 11-29.
6. INSTALLATION OF THE PROPOSED UNDERDRAIN SYSTEM ALONG THE EASTERLY 3,000' OF RUNWAY 11-29.

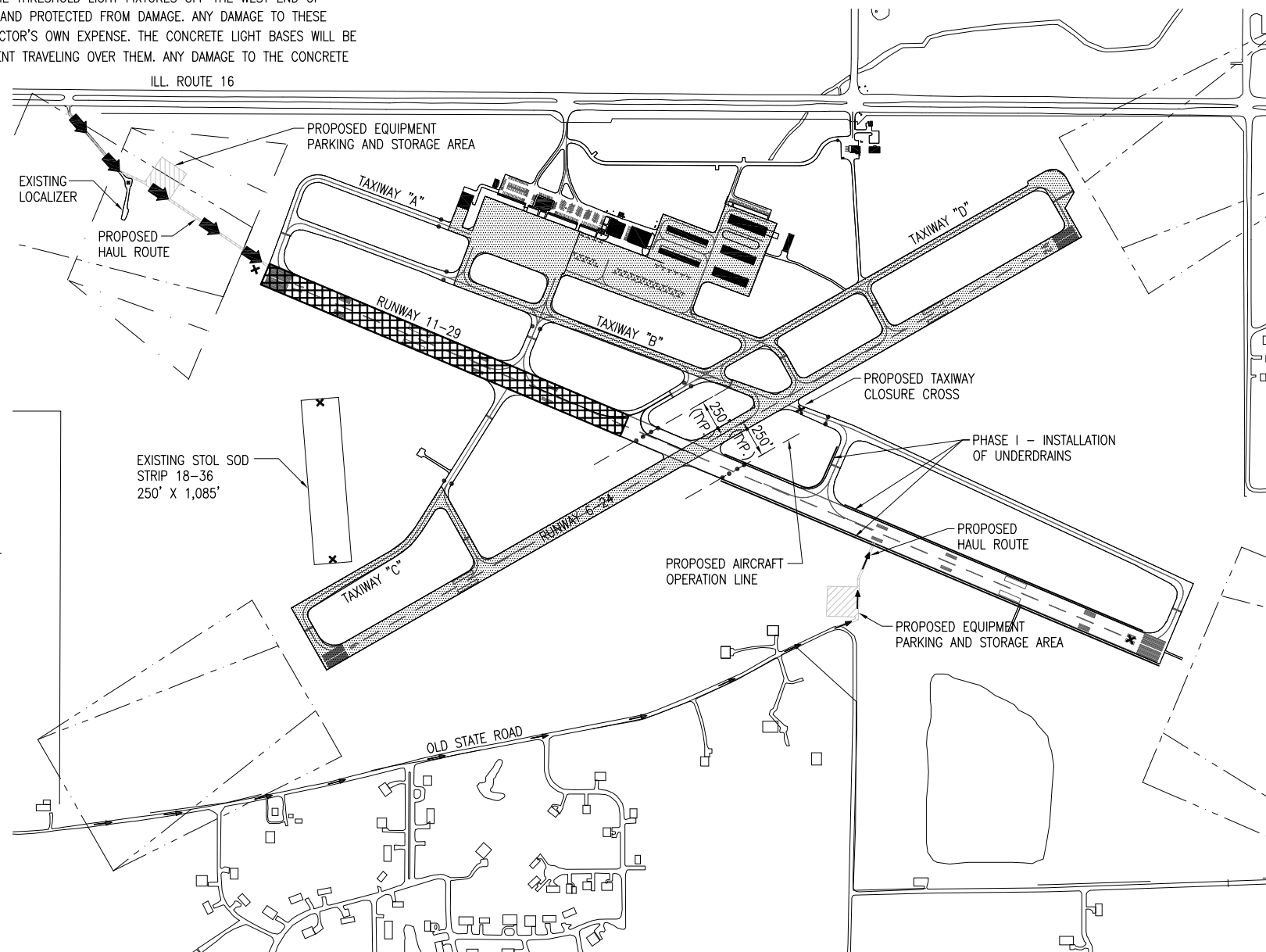
PROPOSED CLOSURE CROSSES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED CLOSURE CROSSES THROUGHOUT THIS PROJECT.
2. AT THE START OF THIS PHASE THE CONTRACTOR WILL CLOSE RUNWAY 11-29 AND STOL SOD STRIP 18-36. THEY WILL REMAIN CLOSED UNTIL THE END OF PHASE 4.
3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE AS SHOWN ON SHEET NO. 3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NOS. 3 AND 4.
4. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE AS SHOWN ON SHEET NO. 4. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
5. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE IN PLACE AT THE START OF PHASE I AND WILL REMAIN IN PLACE THROUGH PHASE II. WHEN RUNWAY 6-24 IS CLOSED, THE TAXIWAY CLOSURE CROSS CAN BE REMOVED.
6. THE PLACEMENT, MAINTENANCE AND REMOVAL OF THE RUNWAY AND TAXIWAY CLOSURE CROSSES WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

CROSSING RUNWAY 6-24 WHILE ACTIVE

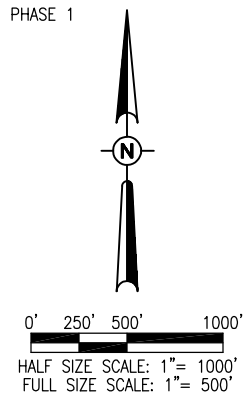
THE CONTRACTOR, HIS PERSONNEL OR HIS EQUIPMENT WILL NOT BE ALLOWED TO CROSS RUNWAY 6-24 WHILE IT IS ACTIVE EXCEPT UNDER THE FOLLOWING CONDITIONS:

1. THE CONTRACTOR HAS COMPLETED A PHASE OF CONSTRUCTION AND NEEDS TO TAKE HIS EQUIPMENT ACROSS RUNWAY 6-24 TO START THE NEXT PHASE.
2. THE CONTRACTOR HAS NOTIFIED THE AIRPORT MANAGER AND THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE THAT HE DESIRES TO MOVE TO THE NEXT PHASE OF WORK AND WILL HAVE TO CROSS THE ACTIVE RUNWAY 6-24.
3. THE DATE AND TIME OF THE MOVE ACROSS RUNWAY 6-24 HAS BEEN APPROVED BY THE AIRPORT MANAGER.
4. THE CONTRACTOR WILL PROVIDE A FLAGMAN TO CONTROL THE MOVEMENT OF HIS EQUIPMENT AND PERSONNEL ACROSS RUNWAY 6-24. THE FLAGMAN WILL BE TRAINED IN VEHICULAR OPERATIONAL PROCEDURES ON THE AIRPORT.
5. ALL THE EQUIPMENT BEING MOVED ACROSS RUNWAY 6-24 IS MOBILIZED AT A DISTANCE OF 250' FROM THE CENTERLINE OF RUNWAY 6-24.
6. JUST BEFORE THE CONTRACTOR BEGINS THE MOVE ACROSS RUNWAY 6-24 HE REQUESTS PERMISSION FROM THE AIRPORT MANAGER TO CROSS RUNWAY 6-24.
7. WITH PERMISSION FROM THE AIRPORT MANAGER THE CONTRACTOR WILL HAVE A 20 MINUTE WINDOW TO MOVE ALL OF HIS EQUIPMENT ACROSS RUNWAY 6-24 AND TO A DISTANCE OF AT LEAST 250' FROM THE CENTERLINE OF RUNWAY 6-24.
8. THE CONTRACTOR, RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE AND A REPRESENTATIVE OF THE AIRPORT WILL INSPECT THE AREA WHERE THE EQUIPMENT CROSSED TO INSURE NO "FOREIGN MATERIAL" WAS LEFT ON THE PAVEMENT. ANY UN-DESIREABLE MATERIAL WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PRIOR TO THE AREA BEING ACCEPTED FOR OPENING TO AIRCRAFT ACTIVITY.
9. AFTER APPROVAL OF THE CROSSING AREA AND ALL THE EQUIPMENT ARE AT LEAST 250' FROM THE CENTERLINE OF RUNWAY 6-24, THEN THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER ALL HIS EQUIPMENT HAVE CLEARED RUNWAY 6-24 AND RUNWAY 6-24 IS READY FOR AIRCRAFT OPERATIONS.
10. DAILY CROSSING OF RUNWAY 6-24 WHILE IT IS ACTIVE WILL NOT BE ALLOWED.



LEGEND

- EXISTING IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
- ACTIVE AIRFIELD PAVEMENTS
- PROPOSED PHASE 1 CONSTRUCTION AREA
- PROPOSED AIRCRAFT OPERATION LINE
- PROPOSED UNDERDRAINS - PHASE 1
- PROPOSED BARRICADES - PHASE 1
- PRIMARY HAUL ROUTE - PHASE 1
- SECONDARY HAUL ROUTE - PHASE 1
- CLOSURE CROSS



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REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV
1	5/21/14	AS PER IDA	CAH	JSL

ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: G-004STG.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
REVIEWED BY: CAH 05/02/14
SHEET TITLE

CONSTRUCTION
SAFETY & PHASING
PLAN - PHASE 1

RUNWAY AND TAXIWAY LIGHTING CIRCUITS

1. AT THE START OF PHASE 1 THE CONTRACTOR WILL SHUT OFF THE LIGHTING CIRCUIT TO RUNWAY 11-29. THIS CIRCUIT WILL REMAIN DE-ACTIVATED UNTIL THE RUNWAY IS READY TO BE RE-OPENED.
2. RUNWAY 6-24 WILL REMAIN OPEN THROUGH OUT PHASE 2 ACTIVITIES AND THE LIGHTING CIRCUIT AND NAVAIDS FOR RUNWAY 6-24 WILL REMAIN OPERATIONAL AS WELL.
3. CURRENTLY THERE ARE SEVEN DIFFERENT TAXIWAY LIGHTING CIRCUITS. THIS PROJECT, AT ONE TIME OR ANOTHER, WILL IMPACT ALL OF THESE TAXIWAY LIGHTING CIRCUITS.
4. TAXIWAY CIRCUIT NO. 7 WILL BE SHUT OFF AT THE START OF PHASE 1 AND WILL REMAIN OFF UNTIL RUNWAY 11-29 IS READY TO BE RE-OPENED.
5. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO "COVER" THE TAXIWAY LIGHTS THAT ARE LOCATED WITHIN TAXIWAY AREAS THAT HAVE BEEN CLOSED TO AIRCRAFT MOVEMENT. THERE ARE APPROXIMATELY 100 TAXIWAY LIGHTS THAT WILL REQUIRE "COVERING".
6. THE PROPOSED "COVER" WILL NOT ALLOW THE EMITTANCE OF ANY LIGHT FROM THE TAXIWAY LIGHT FIXTURE. THE CONTRACTOR WILL BE ALLOWED TO USE ANY MATERIAL AT HIS DISPOSAL TO "COVER" THE LIGHTS. DIFFERENT TYPES OF "COVERINGS" USED IN THE PAST HAVE BEEN BLACK PLASTIC BAGS, CANS, AND SECTIONS OF PLASTIC PIPE. ANY DAMAGE TO THE EXISTING LIGHT FROM THE "COVERING" WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
7. THE "COVERING" OF THE TAXIWAY LIGHTS AS WELL AS THE DE-ACTIVATION/RE-ACTIVATION OF THE RUNWAY 11-29 LIGHTING CIRCUIT AND TAXIWAY LIGHTING CIRCUIT NO. 7 WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
8. THE THE CONTRACTOR (AT HIS DISCRETION) WILL REMOVE THE THRESHOLD LIGHT FIXTURES OFF THE EAST END OF RUNWAY 11-29. THE LIGHT FIXTURES WILL BE STORED AND PROTECTED FROM DAMAGE. ANY DAMAGE TO THESE FIXTURES WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S OWN EXPENSE. THE CONCRETE LIGHT BASES WILL BE LEFT IN PLACE AND PROTECTED FROM TRUCKS/EQUIPMENT TRAVELING OVER THEM. ANY DAMAGE TO THE CONCRETE LIGHT BASES WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S OWN EXPENSE. THE THRESHOLD LIGHT FIXTURES WILL BE RESTORED TO THE CONCRETE LIGHT BASES WHEN RUNWAY 11-29 IS READY TO BE RE-OPENED. ALL WORK ASSOCIATED WITH THE REMOVAL, STORAGE, AND REPLACEMENT OF THESE LIGHTS WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PROPOSED PHASE 2 CONSTRUCTION

THE PHASE 2 CONSTRUCTION SHALL CONSIST OF THE FOLLOWING ITEMS:

1. RUBBLIZE THE EASTERLY 3,000' X 150' OF RUNWAY 11-29. (THE EDGE DRAIN SYSTEM THAT WAS INSTALLED UNDER PHASE 1 MUST HAVE BEEN IN OPERATION AT LEAST ONE WEEK PRIOR TO STARTING THE RUBBLIZATION OF THIS PHASE.)
2. MILLING OF THE CONCRETE/BITUMINOUS BUTT JOINTS ON THE CONNECTING TAXIWAYS TO RUNWAY 11-29.
3. ADJUSTMENT OF THE EXISTING RUNWAY LIGHT BASES THAT ARE LOCATED ON THE CONNECTING TAXIWAYS TO RUNWAY 11-29.
4. THE CONTRACTOR WILL BE ALLOWED TO PLACE THE PROPOSED BITUMINOUS BASE COURSE IN ONE LIFT (6" MAXIMUM DEPTH) ON THE EASTERLY 3,000' SECTION OF RUNWAY 11-29.
5. INSTALLATION OF THE PROPOSED UNDERDRAIN SYSTEM ALONG THE WESTERLY 2,600' OF RUNWAY 11-29.
6. RUBBLIZATION OF THE CONCRETE PAVEMENT LEADING TO THE GLIDE SLOPE FACILITY.

PROPOSED CLOSURE CROSSES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED CLOSURE CROSSES THROUGHOUT THIS PROJECT.
2. AT THE START OF PHASE 1 THE CONTRACTOR CLOSED RUNWAY 11-29 AND STOL SOD STRIP 18-36 AND THEY WILL REMAIN CLOSED UNTIL THE END OF PHASE 4.
3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE AS SHOWN ON SHEET NO. 3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NOS. 3 AND 4.
4. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE AS SHOWN ON SHEET NO. 4. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
5. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE IN PLACE AT THE START OF PHASE I AND WILL REMAIN IN PLACE THROUGH PHASE II. WHEN RUNWAY 6-24 IS CLOSED, THE TAXIWAY CLOSURE CROSS CAN BE REMOVED.
6. THE PLACEMENT, MAINTENANCE AND REMOVAL OF THE RUNWAY AND TAXIWAY CLOSURE CROSSES WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

CROSSING RUNWAY 6-24 WHILE ACTIVE

THE CONTRACTOR, HIS PERSONNEL OR HIS EQUIPMENT WILL NOT BE ALLOWED TO CROSS RUNWAY 6-24 WHILE IT IS ACTIVE EXCEPT UNDER THE FOLLOWING CONDITIONS:

1. THE CONTRACTOR HAS COMPLETED A PHASE OF CONSTRUCTION AND NEEDS TO TAKE HIS EQUIPMENT ACROSS RUNWAY 6-24 TO START THE NEXT PHASE.
2. THE CONTRACTOR HAS NOTIFIED THE AIRPORT MANAGER AND THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE THAT HE DESIRES TO MOVE TO THE NEXT PHASE OF WORK AND WILL HAVE TO CROSS THE ACTIVE RUNWAY 6-24.
3. THE DATE AND TIME OF THE MOVE ACROSS RUNWAY 6-24 HAS BEEN APPROVED BY THE AIRPORT MANAGER.
4. THE CONTRACTOR WILL PROVIDE A FLAGMAN TO CONTROL THE MOVEMENT OF HIS EQUIPMENT AND PERSONNEL ACROSS RUNWAY 6-24. THE FLAGMAN WILL BE TRAINED IN VEHICULAR OPERATIONAL PROCEDURES ON THE AIRPORT.
5. ALL THE EQUIPMENT BEING MOVED ACROSS RUNWAY 6-24 IS MOBILIZED AT A DISTANCE OF 250' FROM THE CENTERLINE OF RUNWAY 6-24.
6. JUST BEFORE THE CONTRACTOR BEGINS THE MOVE ACROSS RUNWAY 6-24 HE REQUESTS PERMISSION FROM THE AIRPORT MANAGER TO CROSS RUNWAY 6-24.
7. WITH PERMISSION FROM THE AIRPORT MANAGER THE CONTRACTOR WILL HAVE A 20 MINUTE WINDOW TO MOVE ALL OF HIS EQUIPMENT ACROSS RUNWAY 6-24 AND TO A DISTANCE OF AT LEAST 250' FROM THE CENTERLINE OF RUNWAY 6-24.
8. THE CONTRACTOR, RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE AND A REPRESENTATIVE OF THE AIRPORT WILL INSPECT THE AREA WHERE THE EQUIPMENT CROSSED TO INSURE NO "FOREIGN MATERIAL" WAS LEFT ON THE PAVEMENT. ANY UN-DESIREABLE MATERIAL WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PRIOR TO THE AREA BEING ACCEPTED FOR OPENING TO AIRCRAFT ACTIVITY.
9. AFTER APPROVAL OF THE CROSSING AREA AND ALL THE EQUIPMENT ARE AT LEAST 250' FROM THE CENTERLINE OF RUNWAY 6-24, THEN THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER ALL HIS EQUIPMENT HAVE CLEARED RUNWAY 6-24 AND RUNWAY 6-24 IS READY FOR AIRCRAFT OPERATIONS.
10. DAILY CROSSING OF RUNWAY 6-24 WHILE IT IS ACTIVE WILL NOT BE ALLOWED.

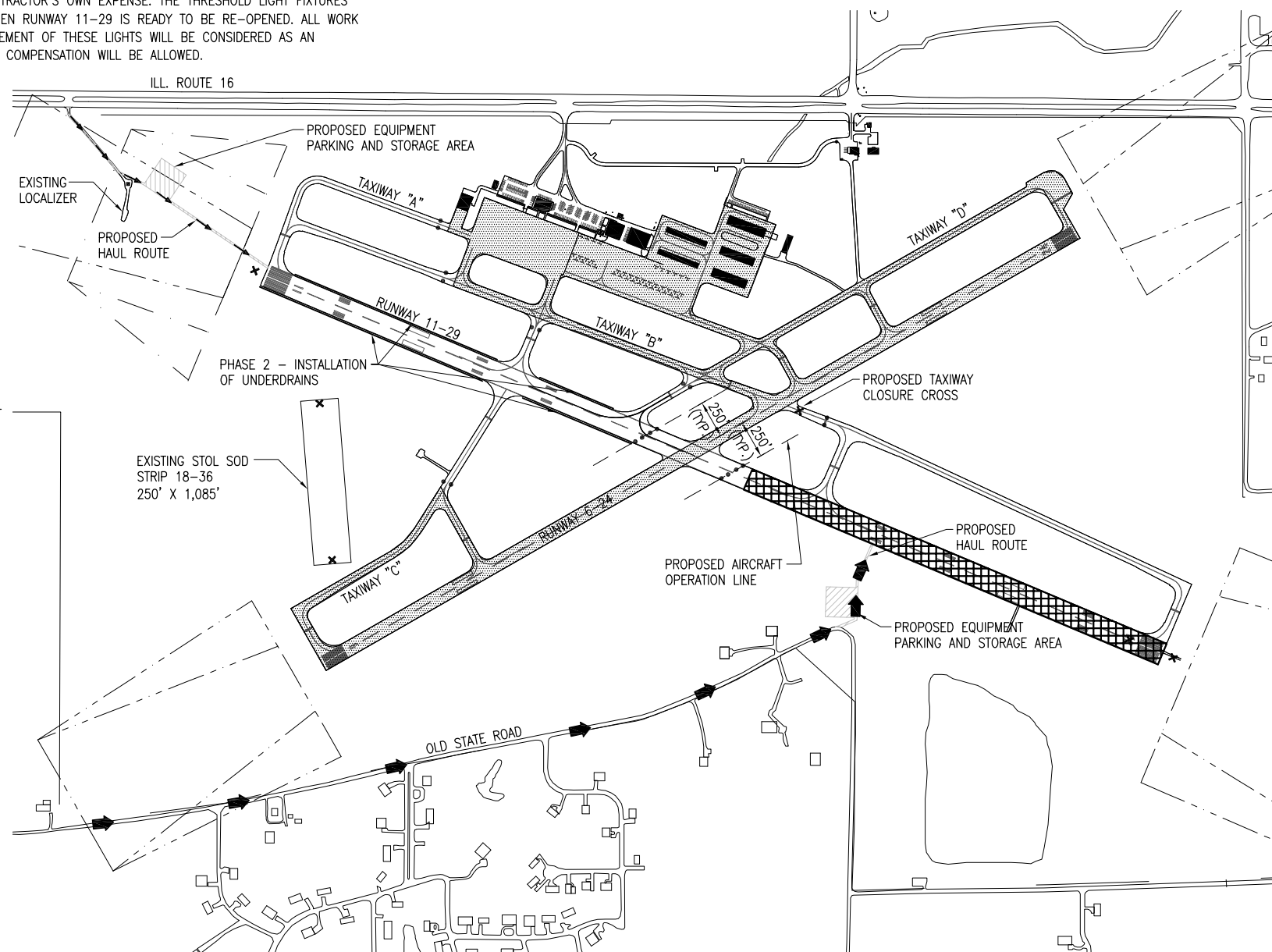
PROPOSED BARRICADES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED BARRICADES THROUGHOUT THIS PROJECT.
2. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 93 FEET FROM THE CENTERLINE OF THE TAXIWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
3. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 250 FEET FROM THE CENTERLINE OF THE RUNWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.

PROPOSED HAUL ROUTE & STAGING AREAS

DURING THE PHASE 2 CONSTRUCTION THE CONTRACTOR WILL BE USING THE FOLLOWING ACCESSES:

1. THE PROPOSED HAUL ROUTE OFF OF ROUTE 16 WILL BE THE SECONDARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES ON THE WESTERLY PORTION OF RUNWAY 11-29 AND THE CONNECTING TAXIWAYS.
2. THE PROPOSED HAUL ROUTE OFF OF OLD STATE ROAD WILL BE THE PRIMARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES ON THE EASTERLY PORTION OF RUNWAY 11-29 AND THE CONNECTING TAXIWAYS ON THE EASTERLY PORTION.
3. THE CONTRACTOR(S) AND HIS PERSONNEL WILL USE THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREAS AS SHOWN ON THIS PHASING PLAN.



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION
		LAY DWN REV
1	5/21/14	AS PER IDA CAH CAH JSL

ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: G-004STG.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
REVIEWED BY: CAH 05/02/14
SHEET TITLE

CONSTRUCTION SAFETY & PHASING PLAN - PHASE 2

RUNWAY AND TAXIWAY LIGHTING CIRCUITS

1. AT THE START OF PHASE 1 THE CONTRACTOR WILL SHUT OFF THE LIGHTING CIRCUIT TO RUNWAY 11-29. THIS CIRCUIT WILL REMAIN DE-ACTIVATED UNTIL THE RUNWAY IS READY TO BE RE-OPENED.
2. THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER AS SOON AS POSSIBLE BUT AT LEAST ONE WEEK PRIOR TO CLOSING RUNWAY 6-24 SO THE AIRPORT MANAGER CAN CONTACT THE FEDERAL AVIATION ADMINISTRATION (FAA) ABOUT SHUTTING DOWN THE ASSOCIATED NAVAIDS ON RUNWAY 6-24. THESE NAVAIDS WILL REMAIN DE-ACTIVATED UNTIL THE RUNWAY IS READY TO BE RE-OPENED. THE AIRPORT MANAGER WILL ALSO NOTIFY THE AIRPORT USERS THAT THE AIRPORT WILL BE CLOSED IN ONE WEEK AND WILL REMAIN CLOSED UNTIL THE COMPLETION OF PHASE 4.
3. AT THE START OF THIS PHASE THE CONTRACTOR WILL SHUT OFF THE LIGHTING CIRCUIT TO RUNWAY 6-24. THIS CIRCUIT WILL REMAIN DE-ACTIVATED UNTIL THE RUNWAY IS READY TO BE RE-OPENED.
4. ALL SEVEN OF THE TAXIWAY LIGHTING CIRCUITS WILL BE SHUT OFF FOR THE DURATION OF THIS PHASE AND PHASE 4.
5. SINCE ALL THE TAXIWAY LIGHTING CIRCUITS ARE DEACTIVATED THERE IS NO NEED FOR THE TAXIWAY LIGHTS TO BE "COVERED". THE CONTRACTOR MAY LEAVE THE TAXIWAY LIGHTS "COVER" THROUGH OUT THIS PHASE AND PHASE 4. HOWEVER, AT THE END OF PHASE 4 THE TAXIWAY LIGHTS WILL HAVE TO BE UN-COVERED IN PREPARATION TO RE-OPENING THE RUNWAYS AND TAXIWAYS.

PROPOSED CLOSURE CROSSES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED CLOSURE CROSSES THROUGHOUT THIS PROJECT.
2. AT THE START OF PHASE 1 THE CONTRACTOR CLOSED RUNWAY 11-29 AND STOL SOD STRIP 18-36 AND THEY WILL REMAIN CLOSED UNTIL THE END OF PHASE 4.
3. AT THE START OF THIS PHASE THE CONTRACTOR WILL CLOSE RUNWAY 6-24 AND IT WILL REMAIN CLOSED UNTIL THE END OF PHASE 4.
4. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE AS SHOWN ON SHEET NO. 3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NOS. 3 AND 4.
5. THE PROPOSED TAXIWAY CLOSURE CROSS WILL NOT BE NEEDED AS PART OF THIS PHASE AND (AT THE DISCRETION OF THE CONTRACTOR) SHALL BE REMOVED.
6. THE PLACEMENT, MAINTENANCE AND REMOVAL OF THE RUNWAY AND TAXIWAY CLOSURE CROSSES WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PROPOSED PHASE 3 CONSTRUCTION

THE PHASE 3 CONSTRUCTION SHALL CONSIST OF THE FOLLOWING ITEMS:

1. INSTALLATION OF THE UNDERDRAIN SYSTEM LOCATED WITHIN THE INTERSECTION AREA.
2. MILLING OF THE CONCRETE/BITUMINOUS BUTT JOINTS ON RUNWAY 6-24.
3. ADJUSTMENT OF THE EXISTING RUNWAY LIGHT BASES THAT ARE LOCATED ON THE RUNWAY 6-24.
4. RUBBLIZE THE REMAINING SECTION OF RUNWAY 11-29 AND THE NORTHERN SECTION OF RUNWAY 6-24.
5. THE CONTRACTOR WILL BE ALLOWED TO PLACE THE PROPOSED BITUMINOUS BASE COURSE IN ONE LIFT (6" MAXIMUM DEPTH) ON THE PHASE 3 AREA. IF HE CAN NOT OBTAIN THE REQUIRE PAVEMENT DENSITIES AND GRADES THEN HE WILL BE REQUIRED TO DO THE FOLLOWING:
 - 5.1. PLACEMENT OF "BITUMINOUS LEVELING COURSE" WHERE NEEDED.
 - 5.2. PLACEMENT OF FIRST LIFT OF BITUMINOUS BASE COURSE (3" MAXIMUM DEPTH) ON THE PHASE 3 AREA.

PROPOSED BARRICADES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED BARRICADES THROUGHOUT THIS PROJECT.
2. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 93 FEET FROM THE CENTERLINE OF THE TAXIWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
3. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 250 FEET FROM THE CENTERLINE OF THE RUNWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.

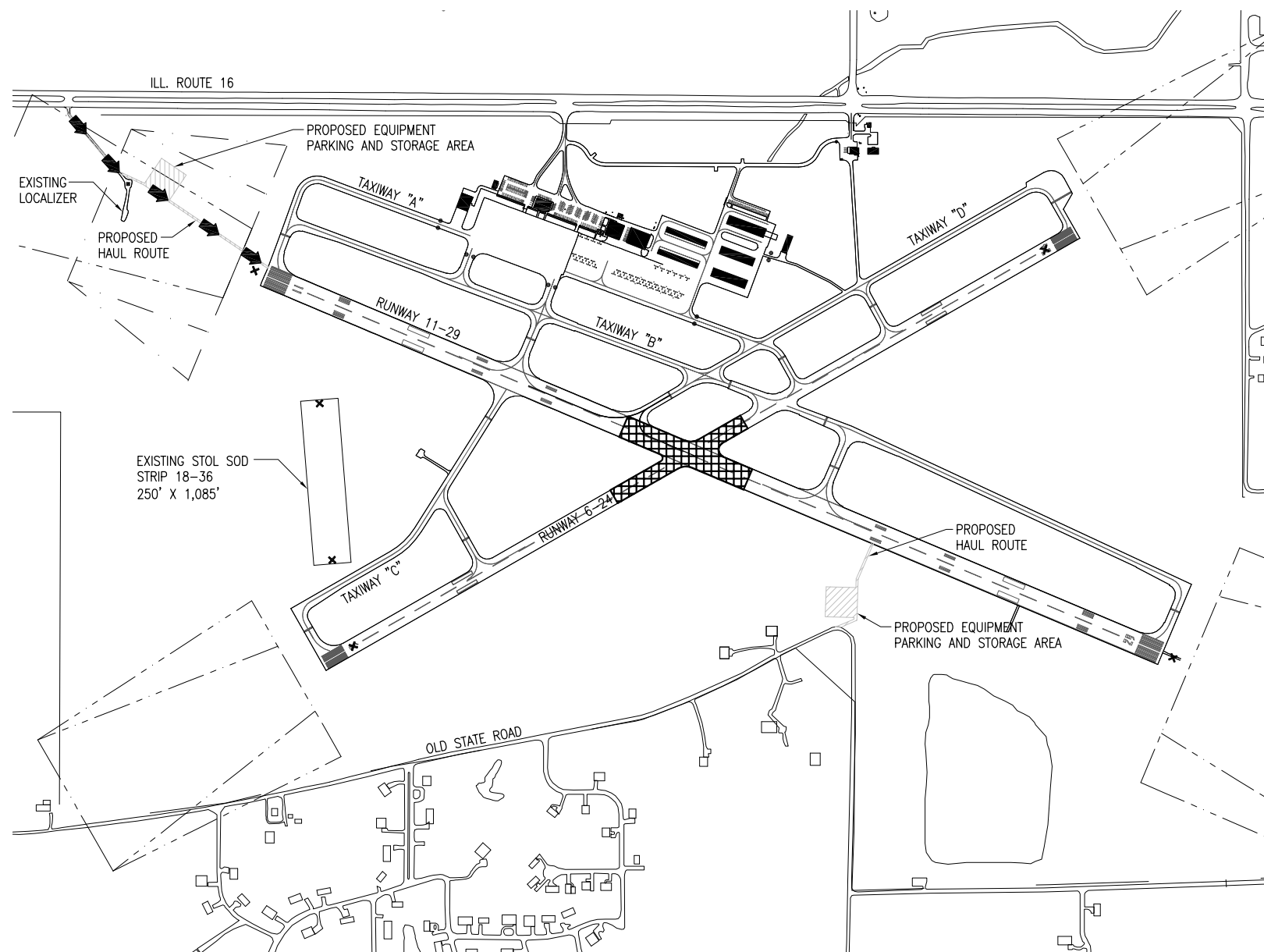
PROPOSED HAUL ROUTE & STAGING AREAS

DURING THE PHASE 3 CONSTRUCTION THE CONTRACTOR WILL BE USING THE FOLLOWING ACCESSSES:

1. THE PROPOSED HAUL ROUTE OFF OF ROUTE 16 WILL BE THE PRIMARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES WITHIN THE INTERSECTION OF THE TWO RUNWAYS.
2. THE CONTRACTOR(S) AND HIS PERSONNEL WILL USE THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREAS AS SHOWN ON THIS PHASING PLAN.

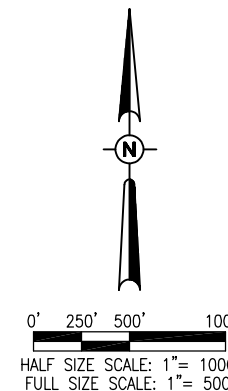
NOTE TO THE CONTRACTOR

1. THIS PHASE WILL CLOSE THE AIRPORT TO ALL AIRCRAFT OPERATIONS. ALL WORK THROUGH OUT THIS PHASE AND PHASE 4 WILL BE EXPEDITED TO LIMIT THE AMOUNT OF TIME THE AIRPORT IS CLOSED.
2. THE CONTRACTOR WILL HAVE 30 CALENDAR DAYS TO COMPLETE PHASE 3 AND 4 AND RE-OPEN THE AIRPORT.



LEGEND

- EXISTING IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
- ACTIVE AIRFIELD PAVEMENTS
- PROPOSED PHASE 3 CONSTRUCTION AREA
- PROPOSED BARRICADES - PHASE 3
- PRIMARY HAUL ROUTE - PHASE 3
- CLOSURE CROSS



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV
1	5/21/14	AS PER IDA		
		CAH	CAH	JSL

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SHEET TITLE

CONSTRUCTION SAFETY & PHASING PLAN - PHASE 3

RUNWAY AND TAXIWAY LIGHTING CIRCUITS

1. AT THE START OF PHASE 3 THE CONTRACTOR SHUT OFF RUNWAY 6-24 AND ALL REMAINING ACTIVE TAXIWAY LIGHTING CIRCUITS, THUS DEACTIVATING ALL LIGHTING CIRCUITS ON THE AIRPORT AND CLOSING THE AIRPORT. THESE CIRCUITS WILL REMAIN DE-ACTIVATED UNTIL BOTH RUNWAYS AND THE TAXIWAYS ARE READY TO BE RE-OPENED AT THE END OF THIS PHASE.
2. WHEN PHASE 4 HAS BEEN COMPLETED THE CONTRACTOR WILL REPLACE THE THRESHOLD LIGHT FIXTURES ON BOTH ENDS OF RUNWAY 11-29, HE WILL RE-ACTIVATE THE LIGHTING CIRCUITS FOR BOTH RUNWAY 11-29 AND 6-24.
3. AT THE CONCLUSION OF PHASE 4 THE CONTRACTOR WILL REMOVE ALL THE "COVERS" FROM THE TAXIWAY LIGHTS (IF HE HASN'T ALREADY REMOVED THEM UNDER PHASE 3). THE CONTRACTOR WILL RETAIN THESE "COVERS" SINCE THEY WILL BE NEEDED AGAIN AS PART OF PHASE 5.
4. THE CONTRACTOR WILL PROVIDE THE AIRPORT MANAGER WITH AS MUCH ADVANCE NOTICE AS POSSIBLE BUT AT LEAST 5 DAYS NOTICE TO RE-OPENING THE RUNWAYS AND TAXIWAYS TO ALLOW THE AIRPORT MANAGER TO CONTACT FAA SO THEY CAN SCHEDULE THE RE-ACTIVATION OF THE NAVAIDS FOR RUNWAYS 6-24 AND 11-29.

PROPOSED CLOSURE CROSSES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED CLOSURE CROSSES THROUGHOUT THIS PROJECT.
2. AT THE START OF PHASE 1 THE CONTRACTOR CLOSED RUNWAY 11-29 AND STOL SOD STRIP 18-36 AND THEY WILL REMAIN CLOSED UNTIL THE END OF PHASE 4.
3. AT THE START OF PHASE 3 THE CONTRACTOR CLOSED RUNWAY 6-24 AND IT WILL REMAIN CLOSED UNTIL THE END OF PHASE 4.
4. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE AS SHOWN ON SHEET NO. 3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NOS. 3 AND 4.
5. AT THE END OF PHASE 4 THE CONTRACTOR WILL RE-OPEN RUNWAYS 6-24, 11-29 AND 18-36.
6. THESE RUNWAYS WILL BE OPEN TO AIRCRAFT OPERATIONS UNTIL THE BITUMINOUS SURFACE COURSE HAS AMPLE TIME TO CURE (MINIMUM OF 30 DAYS) AND THE GROOVING OPERATION CAN BEGIN.
7. THE PLACEMENT, MAINTENANCE AND REMOVAL OF THE RUNWAY AND TAXIWAY CLOSURE CROSSES WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PROPOSED PHASE 4 CONSTRUCTION

- THE PHASE 4 CONSTRUCTION SHALL CONSIST OF THE FOLLOWING ITEMS:
1. APPLICATION OF THE BITUMINOUS TACK COAT TO RUNWAY 11-29 AND ALL CONNECTING TAXIWAYS.
 2. PLACEMENT OF THE BITUMINOUS SURFACE COURSE (2" DEPTH) ON RUNWAY 11-29, ALL CONNECTING TAXIWAYS AND THE GLIDE SLOPE ACCESS ROAD.
 3. APPLICATION OF THE BITUMINOUS TACK COAT TO RUNWAY 6-24.
 4. PLACEMENT OF THE BITUMINOUS SURFACE COURSE (2" DEPTH) ON RUNWAY 6-24.
 5. CONSTRUCTION OF THE PROPOSED MALSR ACCESS ROAD.
 6. PLACEMENT, COMPACTION AND GRADING OF THE SHOULDER ADJUSTMENT ON RUNWAY 6-24, RUNWAY 11-29 AND ALL CONNECTING TAXIWAYS.
 7. PLACEMENT OF ONE APPLICATION OF PAVEMENT MARKING ON RUNWAY 6-24, RUNWAY 11-29 AND ALL CONNECTING TAXIWAYS. GLASS BEADS WILL BE APPLIED WITH THIS APPLICATION.

PROPOSED BARRICADES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED BARRICADES THROUGHOUT THIS PROJECT.
2. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 93 FEET FROM THE CENTERLINE OF THE TAXIWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
3. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 250 FEET FROM THE CENTERLINE OF THE RUNWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.

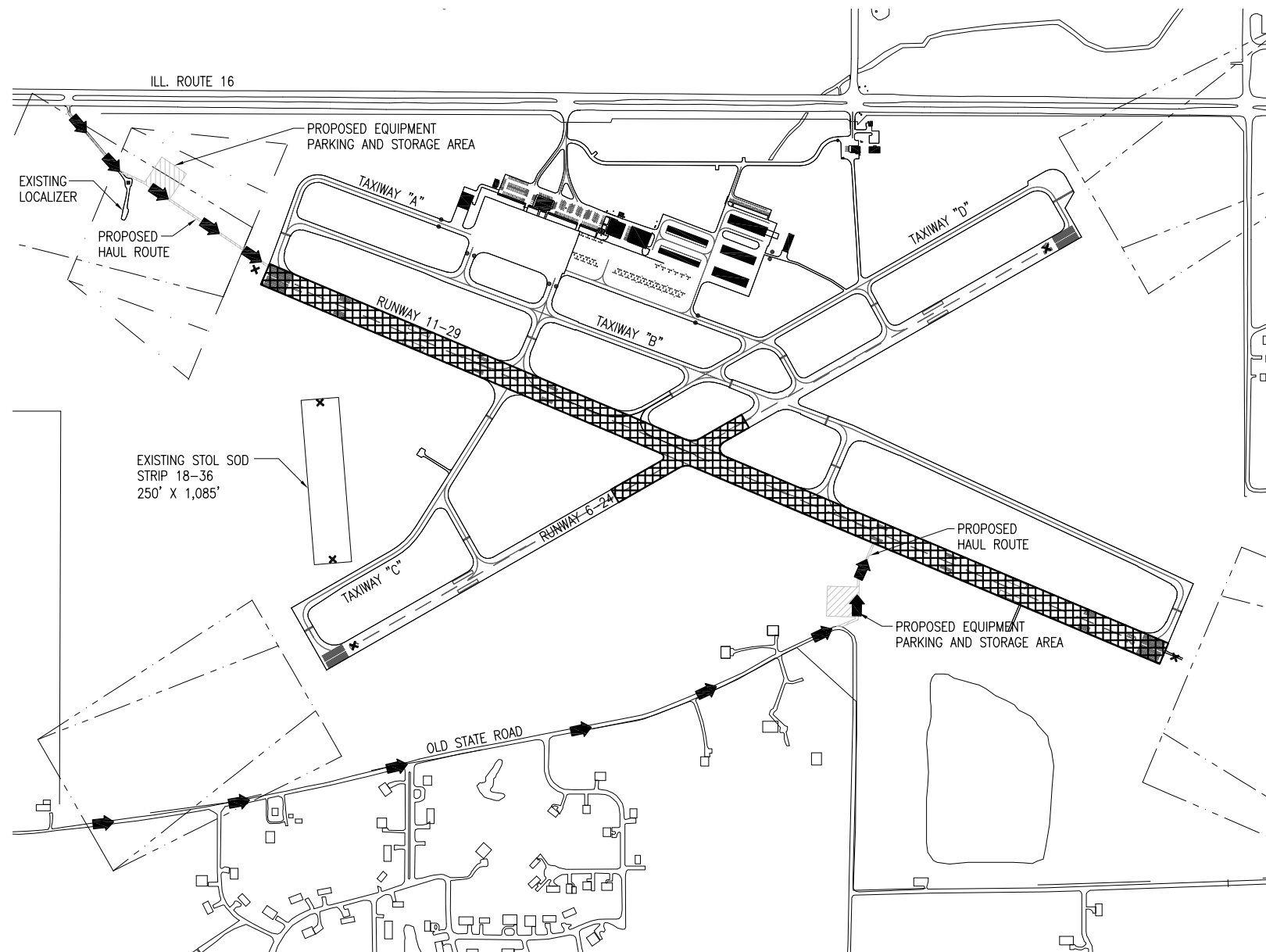
PROPOSED HAUL ROUTE & STAGING AREAS

DURING THE PHASE 4 CONSTRUCTION THE CONTRACTOR WILL BE USING THE FOLLOWING ACCESSSES:

1. THE PROPOSED HAUL ROUTES OFF OF ROUTE 16 AND OLD STATE ROAD (AT THE DISCRETION OF THE CONTRACTOR) WILL BE THE PRIMARY HAUL ROUTES FOR ALL CONSTRUCTION ACTIVITIES WITHIN THIS PHASE.
2. THE CONTRACTOR(S) AND HIS PERSONNEL WILL USE THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREAS AS SHOWN ON THIS PHASING PLAN.

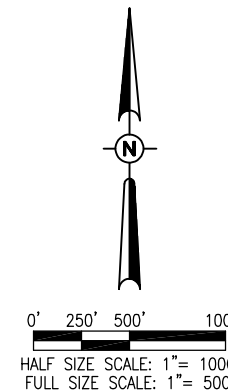
NOTE TO THE CONTRACTOR

1. THIS PHASE WILL CLOSE THE AIRPORT TO ALL AIRCRAFT OPERATIONS. ALL WORK THROUGH OUT THIS PHASE AND PHASE 4 WILL BE EXPEDITED TO LIMIT THE AMOUNT OF TIME THE AIRPORT IS CLOSED.
2. THE CONTRACTOR WILL HAVE 30 CALENDAR DAYS TO COMPLETE PHASE 3 AND 4 AND RE-OPEN THE AIRPORT.



LEGEND

- EXISTING IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
- ACTIVE AIRFIELD PAVEMENTS
- PROPOSED PHASE 4 CONSTRUCTION AREA
- PROPOSED BARRICADES - PHASE 4
- PRIMARY HAUL ROUTE - PHASE 4
- CLOSURE CROSS



**REHABILITATE
RUNWAY 11/29**

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**CONSTRUCTION
SAFETY & PHASING
PLAN - PHASE 4**

RUNWAY AND TAXIWAY LIGHTING CIRCUITS

1. AT THE START OF PHASE 5, AREA 1 CONSTRUCTION THE CONTRACTOR WILL SHUT OFF THE LIGHTING CIRCUIT TO RUNWAY 11-29. THIS CIRCUIT WILL REMAIN DE-ACTIVATED UNTIL THE PROJECT IS COMPLETED AND THE RUNWAY IS READY TO BE RE-OPENED.
2. AT THE START OF PHASE 5, AREA 2 CONSTRUCTION THE CONTRACTOR WILL SHUT OF THE LIGHTING CIRCUIT TO RUNWAY 6-24. THIS CIRCUIT WILL REMAIN DE-ACTIVATED UNTIL THE PROJECT IS COMPLETED AND THE RUNWAY IS READY TO BE RE-OPENED.
3. THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER AS SOON AS POSSIBLE BUT AT LEAST TWO WEEKS PRIOR TO CLOSING RUNWAY 11-29 AND ONE WEEK PRIOR TO CLOSING RUNWAY 6-24 SO THE AIRPORT MANAGER CAN CONTACT THE FEDERAL AVIATION ADMINISTRATION (FAA) ABOUT SHUTTING DOWN THE ASSOCIATED NAVAIDS ON RUNWAY 11-29 OR RUNWAY 6-24. THESE NAVAIDS WILL REMAIN IN-ACTIVE UNTIL THE ASSOCIATED RUNWAY IS READY TO BE RE-OPENED.
4. RUNWAY 6-24 WILL REMAIN OPEN THROUGH OUT PHASE 5, AREA 1 ACTIVITIES AND THE LIGHTING CIRCUIT AND NAVAIDS FOR RUNWAY 6-24 WILL REMAIN OPERATIONAL AS WELL.
5. TAXIWAY CIRCUIT NO. 7 WILL BE SHUT OFF AT THE START OF PHASE 5, AREA 1 AND WILL REMAIN OFF UNTIL RUNWAY 11-29 IS READY TO BE RE-OPENED.
6. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ONCE AGAIN "COVER" THE TAXIWAY LIGHTS THAT ARE LOCATED WITHIN TAXIWAY AREAS THAT HAVE BEEN CLOSED TO AIRCRAFT MOVEMENT. THERE ARE APPROXIMATELY 100 TAXIWAY LIGHTS THAT WILL REQUIRE "COVERING".
7. THE PROPOSED "COVER" WILL NOT ALLOW THE EMITTANCE OF ANY LIGHT FROM THE TAXIWAY LIGHT FIXTURE. THE CONTRACTOR WILL BE ALLOWED TO USE ANY MATERIAL AT HIS DISPOSAL TO "COVER" THE LIGHTS. DIFFERENT TYPES OF "COVERINGS" USED IN THE PAST HAVE BEEN BLACK PLASTIC BAGS, CANS, AND SECTIONS OF PLASTIC PIPE. ANY DAMAGE TO THE EXISTING LIGHT FROM THE "COVERING" WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
8. THE "COVERING" OF THE TAXIWAY LIGHTS AS WELL AS THE DE-ACTIVATION/RE-ACTIVATION OF RUNWAY 6-24 AND RUNWAY 11-29 LIGHTING CIRCUITS AND THE TAXIWAY LIGHTING CIRCUITS WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PROPOSED HAUL ROUTE & STAGING AREAS

DURING THE PHASE 5 CONSTRUCTION THE CONTRACTOR WILL BE USING THE FOLLOWING ACCESSES:

1. THE PROPOSED HAUL ROUTE OFF OF ROUTE 16 WILL BE THE PRIMARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES ON THE WESTERLY PORTION OF RUNWAY 11-29 AND THE CONNECTING TAXIWAYS. THIS HAUL ROUTE WILL BE USED FOR ALL INTERSECTION WORK AS WELL.
2. THE PROPOSED HAUL ROUTE OFF OF OLD STATE ROAD WILL BE THE PRIMARY HAUL ROUTE FOR ALL CONSTRUCTION ACTIVITIES ON THE EASTERLY PORTION OF RUNWAY 11-29 AND THE CONNECTING TAXIWAYS ON THE EASTERLY PORTION.
3. THE CONTRACTOR(S) AND HIS PERSONNEL WILL USE THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREAS AS SHOWN ON THIS PHASING PLAN.

PROPOSED BARRICADES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED BARRICADES THROUGHOUT THIS PROJECT.
2. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 93 FEET FROM THE CENTERLINE OF THE TAXIWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
3. THE CONTRACTOR WILL PLACE THE PROPOSED BARRICADES AT A DISTANCE OF 250 FEET FROM THE CENTERLINE OF THE RUNWAY BEING LEFT OPEN TO AIRCRAFT MOVEMENT. THE PROPOSED BARRICADES WILL BE AS SHOWN ON SHEET NO. 4 AND WILL BE PLACED ACROSS THE TAXIWAY BEING CLOSED. SPACING OF THE BARRICADES WILL BE IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.

PROPOSED PHASE 5 CONSTRUCTION

THE PHASE 5, AREA 1 CONSTRUCTION SHALL CONSIST OF THE FOLLOWING ITEMS:

1. GROOVING RUNWAY 11-29 OUTSIDE THE AIRCRAFT OPERATION LINE FOR RUNWAY 6-24.

THE PHASE 5, AREA 2 CONSTRUCTION SHALL CONSIST OF THE FOLLOWING ITEMS:

1. COMPLETE THE GROOVING OF RUNWAY 11-29.
2. GROOVE RUNWAY 6-24.
3. MARK RUNWAY 6-24, RUNWAY 11-29 AND ALL CONNECTING TAXIWAYS.
 - 3.1. THE PROPOSED MARKING ON RUNWAY 6-24 AND RUNWAY 11-29 WHERE THE PAVEMENT WAS GROOVED WILL RECEIVE TWO APPLICATIONS OF PAINT. THE SECOND APPLICATION WILL BE APPLIED IN THE OPPOSITE DIRECTION AS THE FIRST APPLICATION. THE SECOND APPLICATION OF WHITE PAINT WILL BE APPLIED WITH GLASS BEADS.
 - 3.2. THE PROPOSED MARKING ON RUNWAY 6-24 AND RUNWAY 11-29 WHERE THE PAVEMENT WAS NOT GROOVED WILL RECEIVE ONLY ONE APPLICATION OF PAINT. THE APPLICATION OF WHITE PAINT WILL BE APPLIED WITH GLASS BEADS.
 - 3.3. ALL PROPOSED TAXIWAY MARKINGS THAT WILL BE PLACED ON GROOVED PAVEMENT WILL RECEIVE TWO APPLICATIONS OF PAINT. THE SECOND APPLICATION WILL BE APPLIED IN THE OPPOSITE DIRECTION AS THE FIRST APPLICATION. THE SECOND APPLICATION OF YELLOW PAINT WILL BE APPLIED WITH GLASS BEADS.
 - 3.4. ALL PROPOSED TAXIWAY MARKINGS THAT ARE NOT LOCATED ON GROOVED PAVEMENT WILL BE RE-MARKED WITH ONE APPLICATION OF PAINT. THE APPLICATION OF YELLOW PAINT WILL BE APPLIED WITH GLASS BEADS.
4. COMPLETE THE SEEDING AND MULCHING OF THE SHOULDER ADJUSTMENT AREAS.
5. REMOVAL OF THE HAUL ROUTES AND EQUIPMENT PARKING AND MATERIAL STORAGE AREAS.

PROPOSED CLOSURE CROSSES

1. THE CONTRACTOR WILL FURNISH, MAINTAIN AND REMOVE THE PROPOSED CLOSURE CROSSES THROUGHOUT THIS PROJECT.
2. AFTER THE BITUMINOUS PAVEMENT PLACED UNDER PHASE 4 HAS PROPERLY CURED (MINIMUM OF 30 DAYS) THE CONTRACTOR WILL CLOSE RUNWAY 11-29 AND IT WILL REMAIN CLOSED UNTIL THE END OF THIS PROJECT.
3. AFTER THE CONTRACTOR HAS COMPLETED ALL THE GROOVING OF RUNWAY 11-29 OUTSIDE OF THE AIRCRAFT OPERATION LINE, THEN HE WILL CLOSE RUNWAY 6-24 AND COMPLETE THE GROOVING ON RUNWAY 11-29 AND 6-24.
4. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE AS SHOWN ON SHEET NO. 3. THE PROPOSED RUNWAY CLOSURE CROSSES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NOS. 3 AND 4.
5. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE AS SHOWN ON SHEET NO. 4. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES ON SHEET NO. 4.
6. THE PROPOSED TAXIWAY CLOSURE CROSS WILL BE IN PLACE AT THE START OF PHASE 5 AND WILL REMAIN UNTIL RUNWAY 6-24 IS CLOSED, THEN THE TAXIWAY CLOSURE CROSS CAN BE REMOVED.
7. THE PLACEMENT, MAINTENANCE AND REMOVAL OF THE RUNWAY AND TAXIWAY CLOSURE CROSSES WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

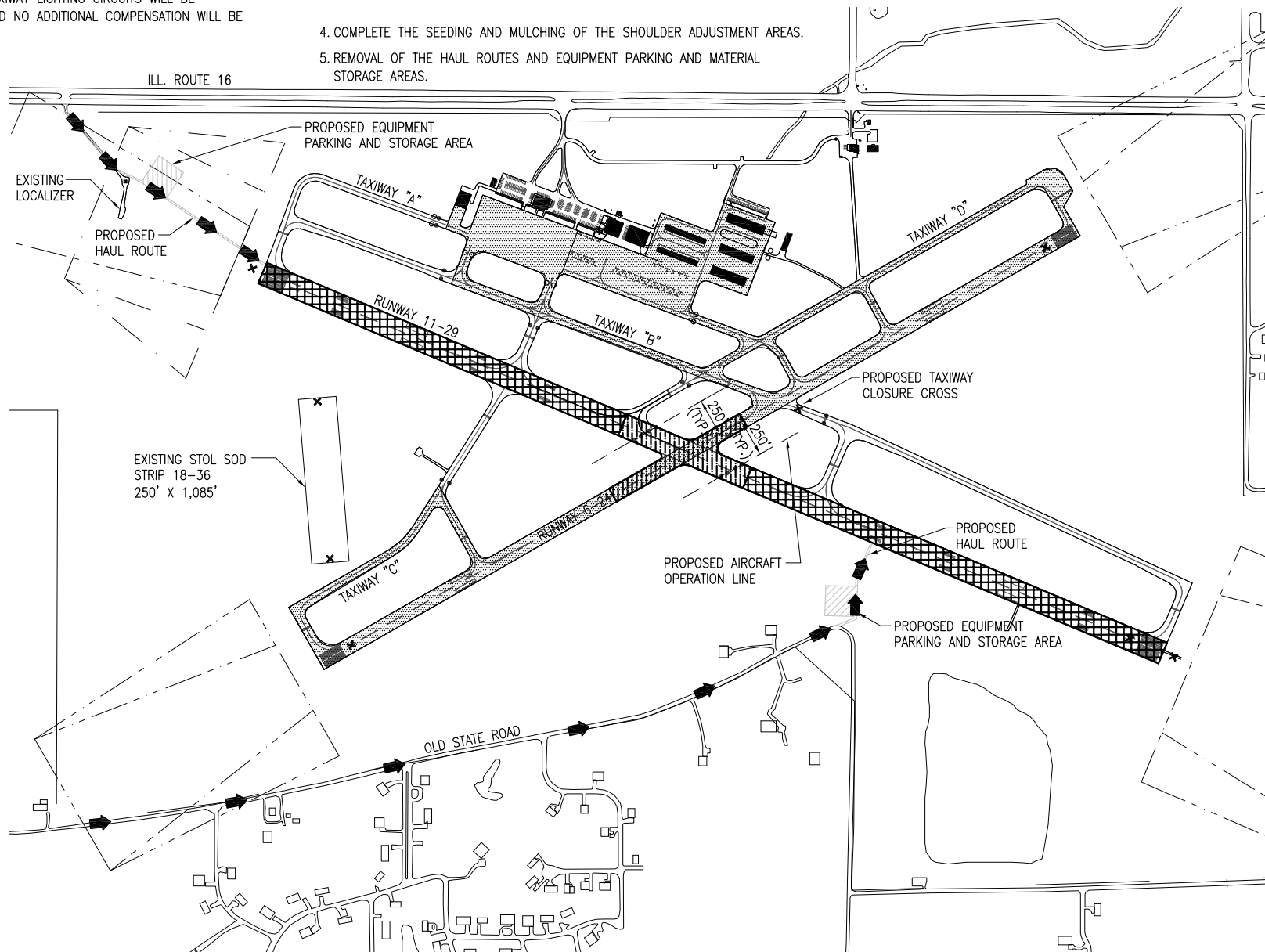
NOTE TO THE CONTRACTOR

1. PHASE 5, AREA 2 WILL CLOSE THE AIRPORT TO ALL AIRCRAFT OPERATIONS. ALL WORK THROUGH OUT PHASE 5, AREA 2 WILL BE EXPEDITED TO LIMIT THE AMOUNT OF TIME THE AIRPORT IS CLOSED.
2. THE CONTRACTOR WILL HAVE 6 CALENDAR DAYS TO COMPLETE PHASE 5, AREA 2 AND RE-OPEN THE AIRPORT.

CROSSING RUNWAY 6-24 WHILE ACTIVE

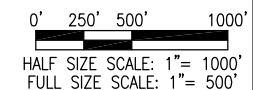
THE CONTRACTOR, HIS PERSONNEL OR HIS EQUIPMENT WILL NOT BE ALLOWED TO CROSS RUNWAY 6-24 WHILE IT IS ACTIVE EXCEPT UNDER THE FOLLOWING CONDITIONS:

1. THE CONTRACTOR HAS COMPLETED A PHASE OF CONSTRUCTION AND NEEDS TO TAKE HIS EQUIPMENT ACROSS RUNWAY 6-24 TO START THE NEXT PHASE.
2. THE CONTRACTOR HAS NOTIFIED THE AIRPORT MANAGER AND THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE THAT HE DESIRES TO MOVE TO THE NEXT PHASE OF WORK AND WILL HAVE TO CROSS THE ACTIVE RUNWAY 6-24.
3. THE DATE AND TIME OF THE MOVE ACROSS RUNWAY 6-24 HAS BEEN APPROVED BY THE AIRPORT MANAGER.
4. THE CONTRACTOR WILL PROVIDE A FLAGMAN TO CONTROL THE MOVEMENT OF HIS EQUIPMENT AND PERSONNEL ACROSS RUNWAY 6-24. THE FLAGMAN WILL BE TRAINED IN VEHICULAR OPERATIONAL PROCEDURES ON THE AIRPORT.
5. ALL THE EQUIPMENT BEING MOVED ACROSS RUNWAY 6-24 IS MOBILIZED AT A DISTANCE OF 250' FROM THE CENTERLINE OF RUNWAY 6-24.
6. JUST BEFORE THE CONTRACTOR BEGINS THE MOVE ACROSS RUNWAY 6-24 HE REQUESTS PERMISSION FROM THE AIRPORT MANAGER TO CROSS RUNWAY 6-24.
7. WITH PERMISSION FROM THE AIRPORT MANAGER THE CONTRACTOR WILL HAVE A 20 MINUTE WINDOW TO MOVE ALL OF HIS EQUIPMENT ACROSS RUNWAY 6-24 AND TO A DISTANCE OF AT LEAST 250' FROM THE CENTERLINE OF RUNWAY 6-24.
8. THE CONTRACTOR, RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE AND A REPRESENTATIVE OF THE AIRPORT WILL INSPECT THE AREA WHERE THE EQUIPMENT CROSSED TO INSURE NO "FOREIGN MATERIAL" WAS LEFT ON THE PAVEMENT. ANY UN-DESIREABLE MATERIAL WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PRIOR TO THE AREA BEING ACCEPTED FOR OPENING TO AIRCRAFT ACTIVITY.
9. AFTER APPROVAL OF THE CROSSING AREA AND ALL THE EQUIPMENT ARE AT LEAST 250' FROM THE CENTERLINE OF RUNWAY 6-24, THEN THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER ALL HIS EQUIPMENT HAVE CLEARED RUNWAY 6-24 AND RUNWAY 6-24 IS READY FOR AIRCRAFT OPERATIONS.
10. DAILY CROSSING OF RUNWAY 6-24 WHILE IT IS ACTIVE WILL NOT BE ALLOWED.



LEGEND

- EXISTING IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
- ACTIVE AIRFIELD PAVEMENTS- PHASE 5, AREA 1 CONSTRUCTION
- PROPOSED PHASE 5, AREA 1 CONSTRUCTION AREA
- PROPOSED PHASE 5, AREA 2 CONSTRUCTION AREA
- PROPOSED BARRICADES - PHASE 5, AREA 1
- PROPOSED BARRICADES - PHASE 5, AREA 2
- PRIMARY HAUL ROUTE - PHASE 5
- CLOSURE CROSS



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REHABILITATE RUNWAY 11/29

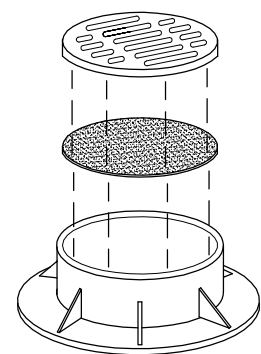
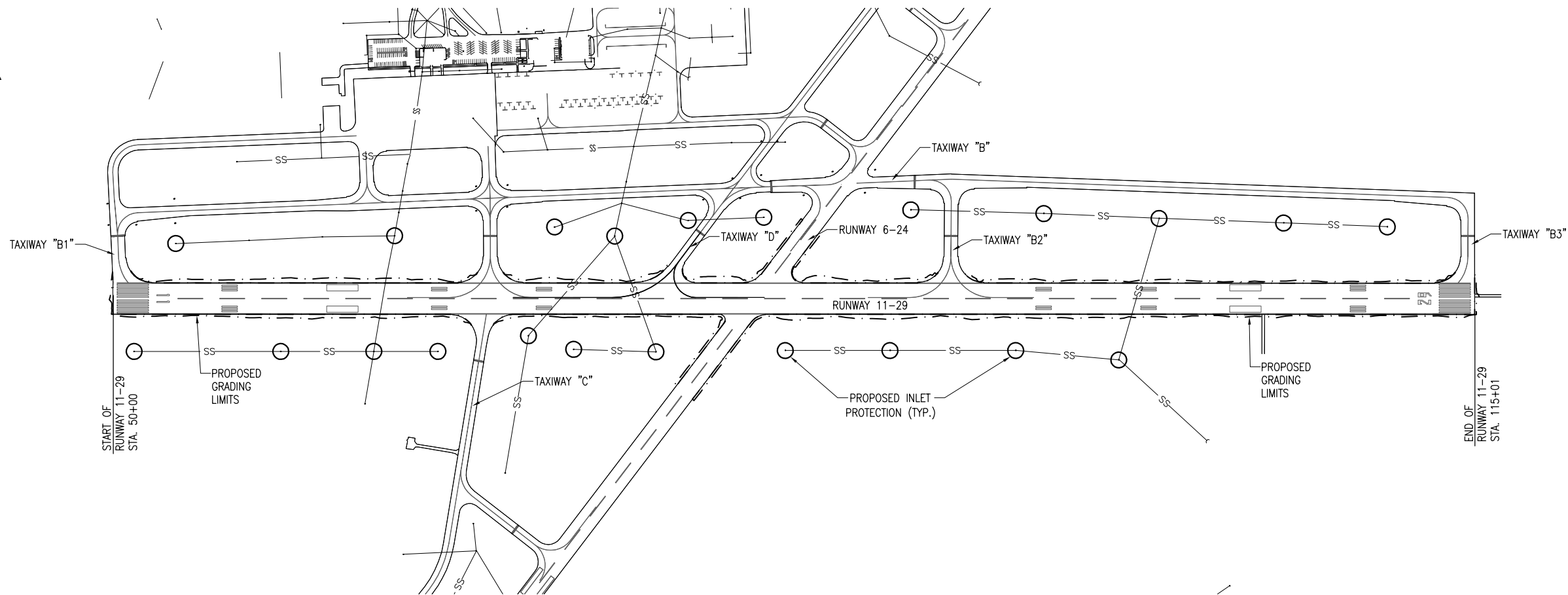
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CONSTRUCTION SAFETY & PHASING PLAN - PHASE 5



INLET PROTECTION DETAIL
NOT TO SCALE

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES ARE GOVERNED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S STANDARDS AND SPECIFICATIONS FOR SOIL EROSIONS AND SPECIFICATION FOR SOIL EROSIONS AND SEDIMENT CONTROL.
2. FILTER WRAP TO BE PLACED IN ALL PROPOSED AND EXISTING INLETS LOCATED IN PAVED AREAS.
3. FABRIC SHALL BE IN CONFORMANCE WITH MATERIALS SPECIFIED FOR EROSION CONTROL FENCING.
4. FABRIC SHALL OVERLAY FRAME BY 2" MIN.
5. THE CONTRACTOR SHALL CLEAR DEBRIS AND SILT AS REQUIRED FROM FABRIC TO MAINTAIN DRAINAGE THROUGH THE STRUCTURE.
6. FABRIC SHALL REMAIN IN PLACE UNTIL TURFED AREAS HAVE DEVELOPED A MIN. OF 80% COVERAGE.
7. COST OF FILTER WRAP, INSTALLATION, MAINTENANCE AND REMOVAL SHALL BE PAID FOR UNDER ITEM NO. AR156520.

LEGEND

- EXISTING PAVEMENT
- SS— EXISTING STORM SEWER
- ⊙ EXISTING INLET (TO BE PROTECTED)
- - - - PROPOSED GRADING LIMITS

REHABILITATE
RUNWAY 11/29

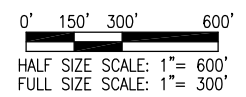
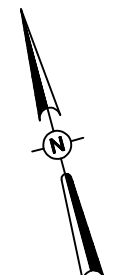
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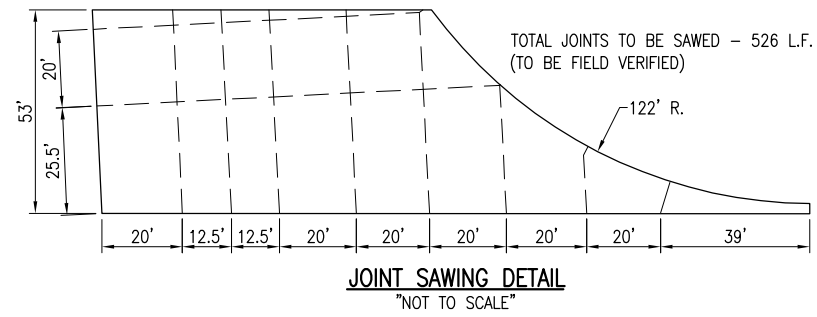
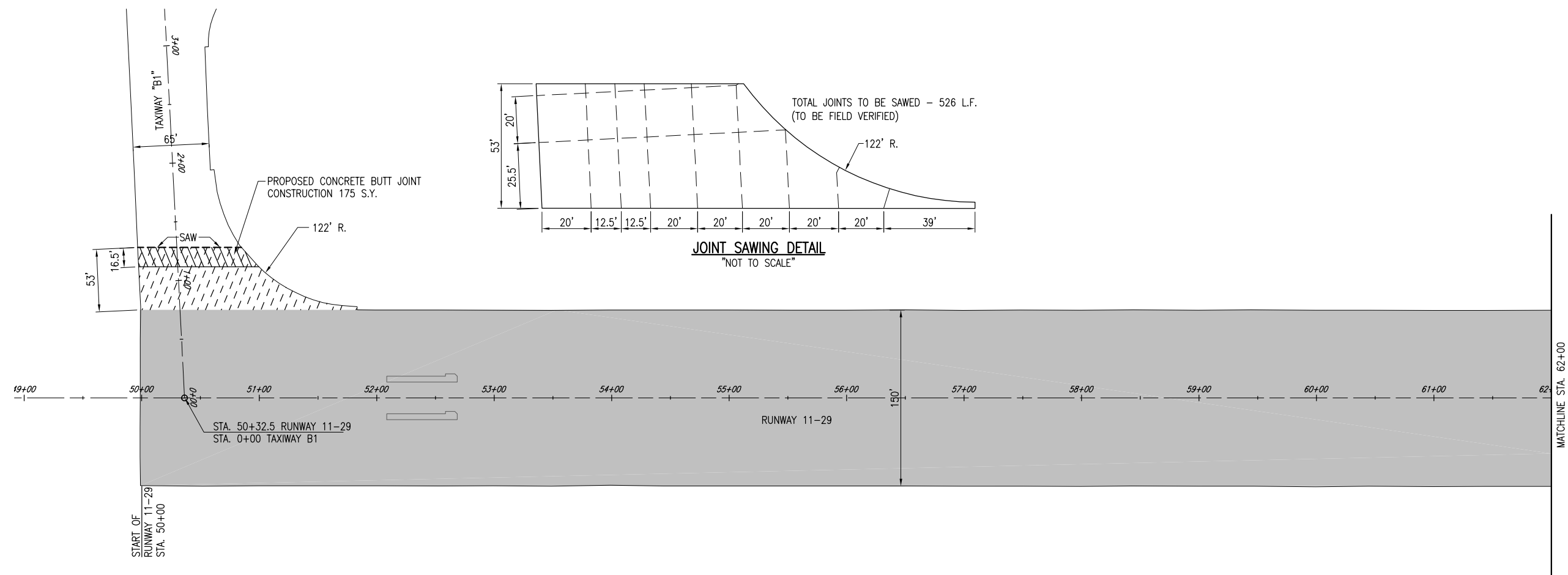
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PROPOSED
STORMWATER
POLLUTION
PREVENTION PLAN



CONCRETE BUTT JOINT CONSTRUCTION NOTES

- EXISTING TAXIWAY "B1" IS CONSTRUCTED OF 14" P.C. CONCRETE PAVEMENT ON 7" BITUMINOUS BASE COURSE.
- THE PROPOSED BUTT JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM AR501551 "PCC BUTT JOINT" AS STATED IN THE SPECIAL PROVISIONS.
- THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING CONCRETE PAVEMENT SURFACE BY MILLING IN ORDER TO CONSTRUCT A BUTT JOINT FOR THE TRANSITION OF THE PROPOSED BITUMINOUS OVERLAY AT THE LOCATION SHOWN ON THIS SHEET.
- THE PAVEMENT SURFACE WILL BE MILLED TO A DEPTH OF 0.17 FEET AT THE BUTT END AND WILL TAPER TO 0 INCHES AT THE OPPOSITE END. THE PLANNER MUST BE CAPABLE OF MILLING THE SURFACE TO THE DESIRED ELEVATIONS AND GRADES.
- ANY ADJACENT PAVEMENT DAMAGED BY THE MILLING OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
- ALL CONCRETE PAVEMENT MILLING AREAS WILL BE LOCATED AND MARKED BY THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
- THE CONCRETE PAVEMENT MILLING WILL BE PAID FOR UNDER ITEM:
AR501551 "PCC BUTT JOINT" _ _ PER S.Y.

BITUMINOUS SAWING AND SEALING NOTES

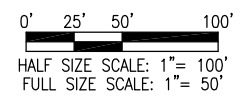
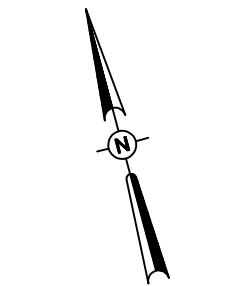
- AFTER THE CONCRETE PAVEMENT HAS BEEN OVERLAID, THE CONTRACTOR WILL DUPLICATED THE JOINTING PATTERN BY SAWING THE BITUMINOUS PAVEMENT IN ACCORDANCE WITH THE DETAIL ON THIS SHEET AND ITEM AR401660 "SAW & SEAL BIT. JOINTS".
- THERE MAY BE SOME VARIATION FROM THE JOINTING PATTERN SHOWN. THE CONTRACTOR WILL BE REQUIRED TO FIELD VERIFY THE JOINT LAYOUT. THE QUANTITY OF PROPOSED SAWING AND SEALING HAS BEEN INCREASED BY 5% TO COVER ANY VARIATION.
- THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ASTM D 5329 AND ASTM D 6690.
- THE BITUMINOUS SAWING AND SEALING WILL BE PAID FOR UNDER ITEM AR401660 "SAW & SEAL BIT. JOINTS" _ _ PER L.F.
- QUANTITY OF SAWING ON THIS SHEET 526 + 26 = 552 L.F.

PAVEMENT SAWING NOTES

- WHERE THE PROPOSED BITUMINOUS SURFACE COURSE ABUTS THE EXISTING PAVEMENT, THE EXISTING PAVEMENT WILL BE SAWED TO FURNISH A STRAIGHT EDGE TO ABUT AGAINST.
- THE RESIDENT ENGINEER WILL MARK THE PROPOSED SAW LINE IN THE FIELD.
- ANY PAVEMENT CUT FROM THE SAWING OPERATIONS WILL BE COLLECTED AND DISPOSED OF OFF THE AIRPORT SITE.
- THE SAWING AND DISPOSAL OF ANY WASTE MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE BUTT JOINT CONSTRUCTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- PROPOSED CONCRETE BUTT JOINT CONSTRUCTION
- PROPOSED BITUMINOUS OVERLAY ON EXISTING CONCRETE PAVEMENT
- PROPOSED BITUMINOUS OVERLAY ON RUBBLIZED CONCRETE PAVEMENT
- PROPOSED SAWING (AT MATCH-IN TO EXISTING PAVEMENT)



**REHABILITATE
RUNWAY 11/29**

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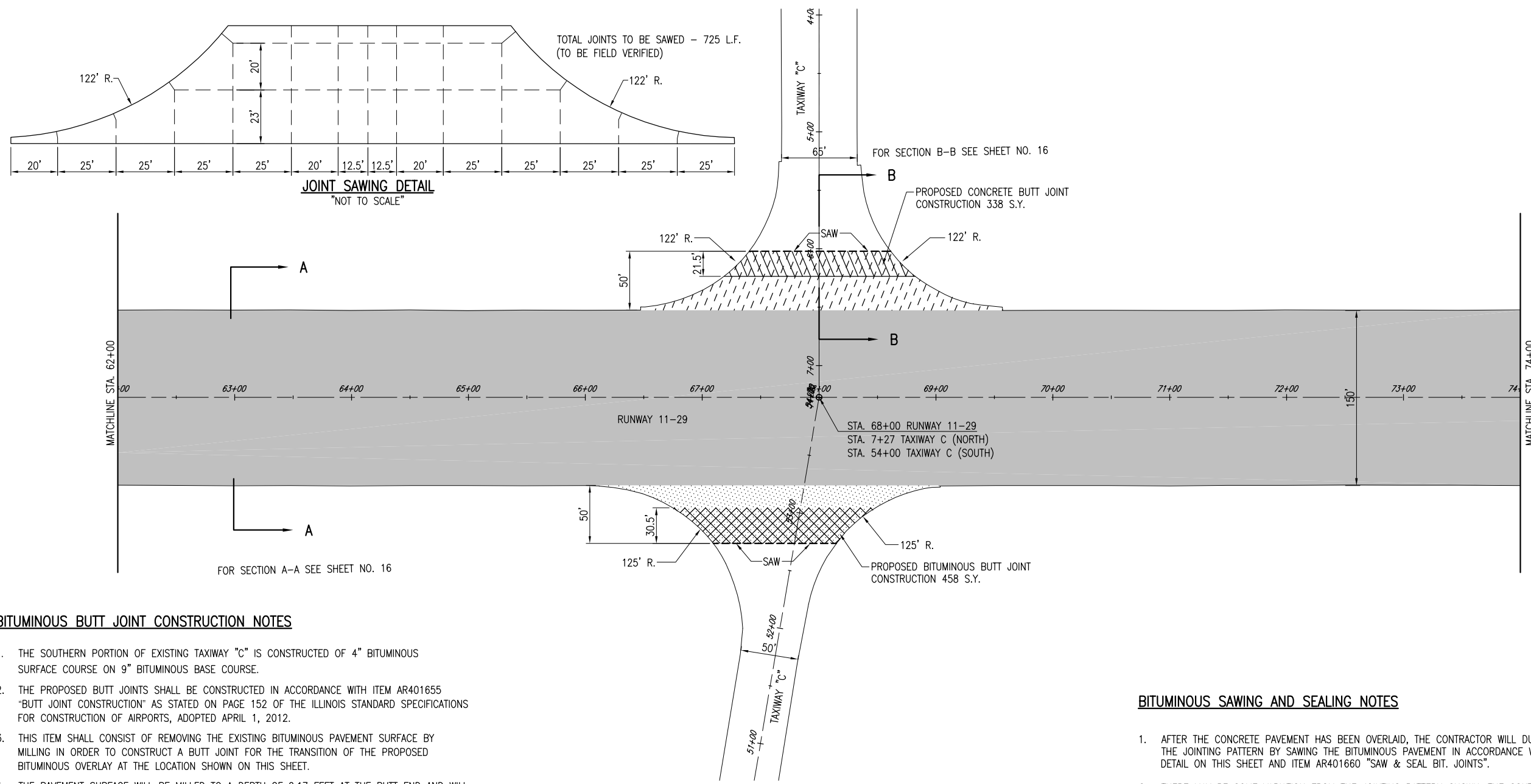
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**PROPOSED
CONSTRUCTION PLAN
STA. 50+00 TO 62+00**

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BITUMINOUS BUTT JOINT CONSTRUCTION NOTES

1. THE SOUTHERN PORTION OF EXISTING TAXIWAY "C" IS CONSTRUCTED OF 4" BITUMINOUS SURFACE COURSE ON 9" BITUMINOUS BASE COURSE.
2. THE PROPOSED BUTT JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM AR401655 "BUTT JOINT CONSTRUCTION" AS STATED ON PAGE 152 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
3. THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING BITUMINOUS PAVEMENT SURFACE BY MILLING IN ORDER TO CONSTRUCT A BUTT JOINT FOR THE TRANSITION OF THE PROPOSED BITUMINOUS OVERLAY AT THE LOCATION SHOWN ON THIS SHEET.
4. THE PAVEMENT SURFACE WILL BE MILLED TO A DEPTH OF 0.17 FEET AT THE BUTT END AND WILL TAPER TO 0 INCHES AT THE OPPOSITE END. THE PLANNER MUST BE CAPABLE OF MILLING THE SURFACE TO THE DESIRED ELEVATIONS AND GRADES.
5. ANY ADJACENT PAVEMENT DAMAGED BY THE MILLING OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
6. ALL BITUMINOUS PAVEMENT MILLING AREAS WILL BE LOCATED AND MARKED BY THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
7. THE BITUMINOUS PAVEMENT MILLING WILL BE PAID FOR UNDER ITEM: AR401655 "BUTT JOINT CONSTRUCTION" _ _ PER S.Y.

PAVEMENT SAWING NOTES

1. WHERE THE PROPOSED BITUMINOUS SURFACE COURSE ABUTS THE EXISTING PAVEMENT, THE EXISTING PAVEMENT WILL BE SAWED TO FURNISH A STRAIGHT EDGE TO ABUT AGAINST.
2. THE RESIDENT ENGINEER WILL MARK THE PROPOSED SAW LINE IN THE FIELD.
3. ANY PAVEMENT CUT FROM THE SAWING OPERATIONS WILL BE COLLECTED AND DISPOSED OF OFF THE AIRPORT SITE.
4. THE SAWING AND DISPOSAL OF ANY WASTE MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE BUTT JOINT CONSTRUCTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

CONCRETE BUTT JOINT CONSTRUCTION NOTES

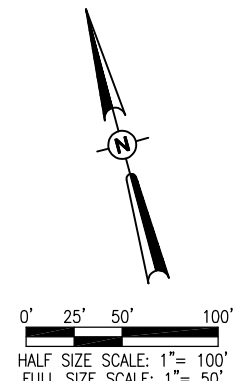
1. THE NORTHERN SECTION OF THE EXISTING TAXIWAY "C" IS CONSTRUCTED OF 14" P.C. CONCRETE PAVEMENT ON 7" BITUMINOUS BASE COURSE.
2. THE PROPOSED BUTT JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM AR501551 "PCC BUTT JOINT" AS STATED IN THE SPECIAL PROVISIONS.
3. THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING CONCRETE PAVEMENT SURFACE BY MILLING IN ORDER TO CONSTRUCT A BUTT JOINT FOR THE TRANSITION OF THE PROPOSED BITUMINOUS OVERLAY AT THE LOCATION SHOWN ON THIS SHEET.
4. THE PAVEMENT SURFACE WILL BE MILLED TO A DEPTH OF 0.17 FEET AT THE BUTT END AND WILL TAPER TO 0 INCHES AT THE OPPOSITE END. THE PLANNER MUST BE CAPABLE OF MILLING THE SURFACE TO THE DESIRED ELEVATIONS AND GRADES.
5. ANY ADJACENT PAVEMENT DAMAGED BY THE MILLING OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
6. ALL CONCRETE PAVEMENT MILLING AREAS WILL BE LOCATED AND MARKED BY THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
7. THE CONCRETE PAVEMENT MILLING WILL BE PAID FOR UNDER ITEM: AR501551 "PCC BUTT JOINT" _ _ PER S.Y.

BITUMINOUS SAWING AND SEALING NOTES

1. AFTER THE CONCRETE PAVEMENT HAS BEEN OVERLAID, THE CONTRACTOR WILL DUPLICATED THE JOINTING PATTERN BY SAWING THE BITUMINOUS PAVEMENT IN ACCORDANCE WITH THE DETAIL ON THIS SHEET AND ITEM AR401660 "SAW & SEAL BIT. JOINTS".
2. THERE MAY BE SOME VARIATION FROM THE JOINTING PATTERN SHOWN. THE CONTRACTOR WILL BE REQUIRED TO FIELD VERIFY THE JOINT LAYOUT. THE QUANTITY OF PROPOSED SAWING AND SEALING HAS BEEN INCREASED BY 5% TO COVER ANY VARIATION.
3. THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ASTM D 5329 AND ASTM D 6690.
4. THE BITUMINOUS SAWING AND SEALING WILL BE PAID FOR UNDER ITEM AR401660 "SAW & SEAL BIT. JOINTS" _ _ PER L.F.
5. QUANTITY OF SAWING ON THIS SHEET 725 + 36 = 761 L.F.

LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- PROPOSED CONCRETE BUTT JOINT CONSTRUCTION
- PROPOSED BITUMINOUS OVERLAY ON EXISTING CONCRETE PAVEMENT
- PROPOSED BITUMINOUS BUTT JOINT CONSTRUCTION
- PROPOSED BITUMINOUS OVERLAY ON EXISTING BITUMINOUS PAVEMENT
- PROPOSED BITUMINOUS OVERLAY ON RUBBLIZED CONCRETE PAVEMENT
- PROPOSED SAWING (AT MATCH-IN TO EXISTING PAVEMENT)



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REHABILITATE
RUNWAY 11/29

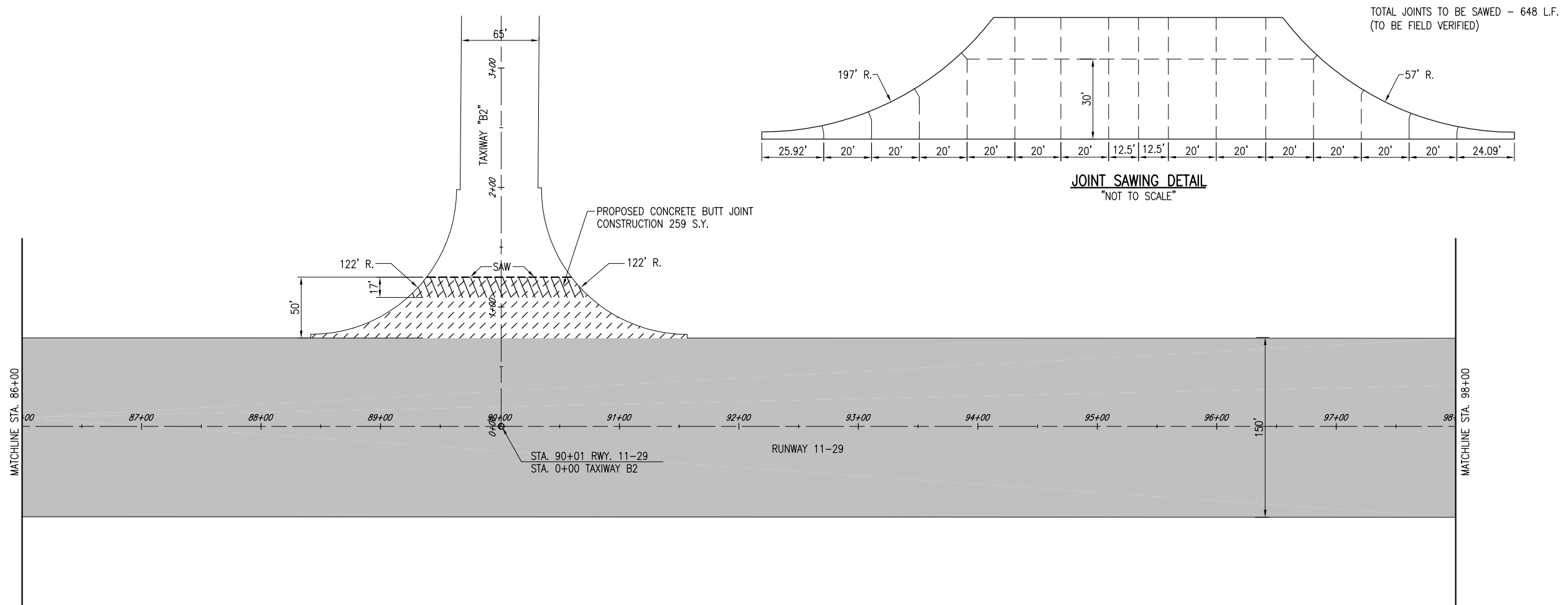
IDA No: MTO-4320

Contract No. CO061

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		LAY	DWN	REV

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CAD FILE: C-121CON.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
REVIEWED BY: CAH 05/02/14
SHEET TITLE

PROPOSED
CONSTRUCTION PLAN
STA. 62+00 TO 74+00



TOTAL JOINTS TO BE SAWED - 648 L.F.
(TO BE FIELD VERIFIED)

JOINT SAWING DETAIL
"NOT TO SCALE"

CONCRETE BUTT JOINT CONSTRUCTION NOTES

- EXISTING TAXIWAY "B2" IS CONSTRUCTED OF 14" P.C. CONCRETE PAVEMENT ON 7" BITUMINOUS BASE COURSE.
- THE PROPOSED BUTT JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM AR501551 "PCC BUTT JOINT" AS STATED IN THE SPECIAL PROVISIONS.
- THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING CONCRETE PAVEMENT SURFACE BY MILLING IN ORDER TO CONSTRUCT A BUTT JOINT FOR THE TRANSITION OF THE PROPOSED BITUMINOUS OVERLAY AT THE LOCATION SHOWN ON THIS SHEET.
- THE PAVEMENT SURFACE WILL BE MILLED TO A DEPTH OF 0.17 FEET AT THE BUTT END AND WILL TAPER TO 0 INCHES AT THE OPPOSITE END. THE PLANER MUST BE CAPABLE OF MILLING THE SURFACE TO THE DESIRED ELEVATIONS AND GRADES.
- ANY ADJACENT PAVEMENT DAMAGED BY THE MILLING OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
- ALL CONCRETE PAVEMENT MILLING AREAS WILL BE LOCATED AND MARKED BY THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
- THE CONCRETE PAVEMENT MILLING WILL BE PAID FOR UNDER ITEM: AR501551 "PCC BUTT JOINT" _ _ PER S.Y.

PAVEMENT SAWING NOTES

- WHERE THE PROPOSED BITUMINOUS SURFACE COURSE ABUTS THE EXISTING PAVEMENT, THE EXISTING PAVEMENT WILL BE SAWED TO FURNISH A STRAIGHT EDGE TO ABUT AGAINST.
- THE RESIDENT ENGINEER WILL MARK THE PROPOSED SAW LINE IN THE FIELD.
- ANY PAVEMENT CUT FROM THE SAWING OPERATIONS WILL BE COLLECTED AND DISPOSED OF OFF THE AIRPORT SITE.
- THE SAWING AND DISPOSAL OF ANY WASTE MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE BUTT JOINT CONSTRUCTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

BITUMINOUS SAWING AND SEALING NOTES

- AFTER THE CONCRETE PAVEMENT HAS BEEN OVERLAID, THE CONTRACTOR WILL DUPLICATED THE JOINTING PATTERN BY SAWING THE BITUMINOUS PAVEMENT IN ACCORDANCE WITH THE DETAIL ON THIS SHEET AND ITEM AR401660 "SAW & SEAL BIT. JOINTS".
- THERE MAY BE SOME VARIATION FROM THE JOINTING PATTERN SHOWN. THE CONTRACTOR WILL BE REQUIRED TO FIELD VERIFY THE JOINT LAYOUT. THE QUANTITY OF PROPOSED SAWING AND SEALING HAS BEEN INCREASED BY 5% TO COVER ANY VARIATION.
- THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ASTM D 5329 AND ASTM D 6690.
- THE BITUMINOUS SAWING AND SEALING WILL BE PAID FOR UNDER ITEM AR401660 "SAW & SEAL BIT. JOINTS" _ _ PER L.F.
- QUANTITY OF SAWING ON THIS SHEET 648 + 32 = 680 L.F.

LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- PROPOSED CONCRETE BUTT JOINT CONSTRUCTION
- PROPOSED BITUMINOUS OVERLAY ON EXISTING CONCRETE PAVEMENT
- PROPOSED BITUMINOUS OVERLAY ON RUBBLIZED CONCRETE PAVEMENT
- PROPOSED SAWING (AT MATCH-IN TO EXISTING PAVEMENT)

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

**REHABILITATE
RUNWAY 11/29**

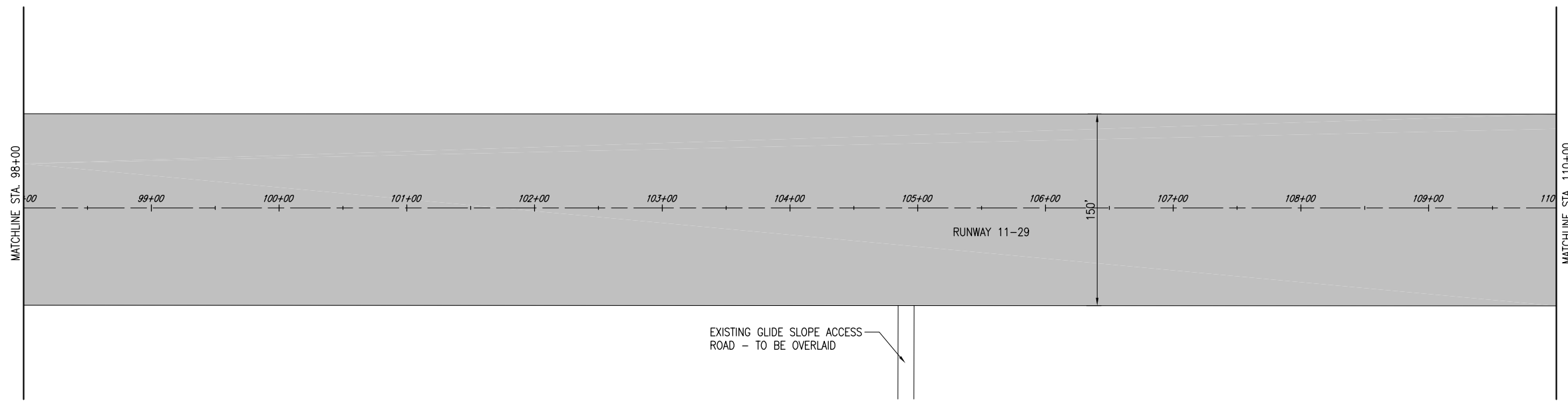
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Contract No. CO061

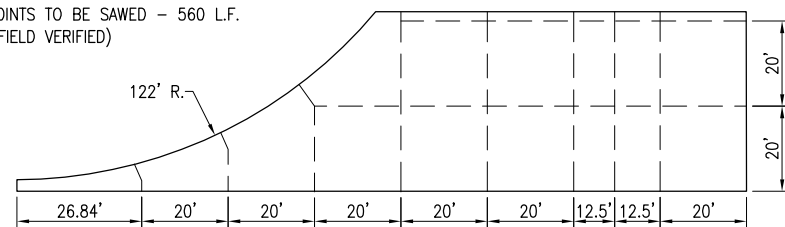
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PROJECT NO: 14A0005D
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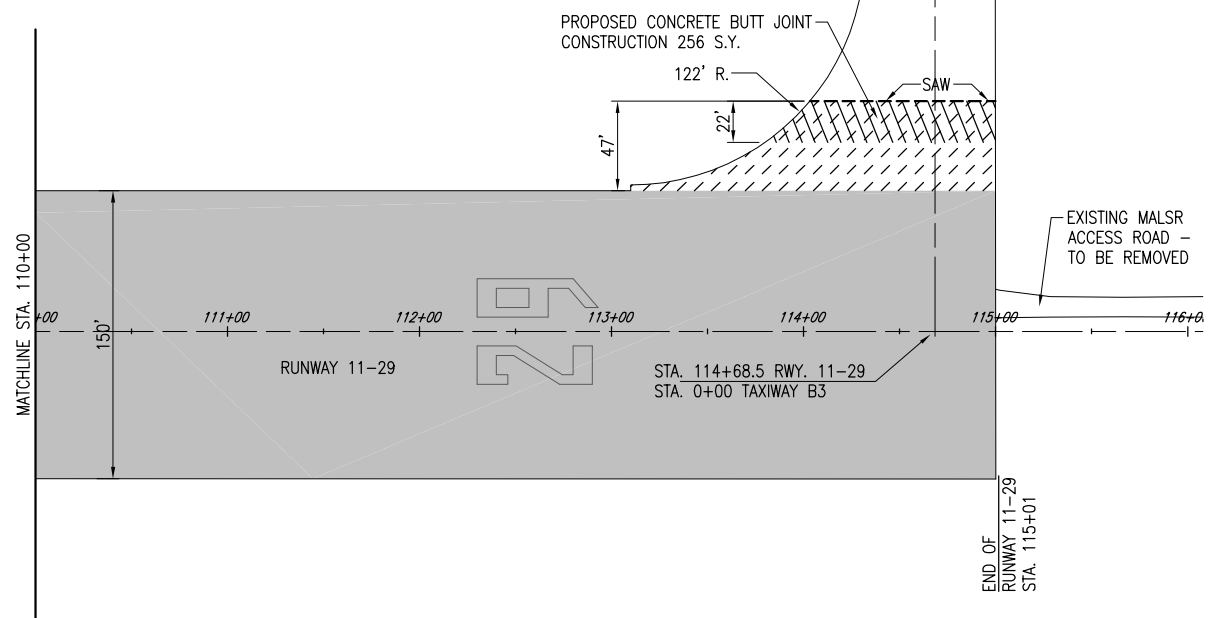
**PROPOSED
CONSTRUCTION PLAN
STA. 86+00 TO 98+00**



TOTAL JOINTS TO BE SAWED - 560 L.F.
(TO BE FIELD VERIFIED)



JOINT SAWING DETAIL
"NOT TO SCALE"



CONCRETE BUTT JOINT CONSTRUCTION NOTES

- EXISTING TAXIWAY "B3" IS CONSTRUCTED OF 14" P.C. CONCRETE PAVEMENT ON 7" BITUMINOUS BASE COURSE.
- THE PROPOSED BUTT JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM AR501551 "PCC BUTT JOINT" AS STATED IN THE SPECIAL PROVISIONS.
- THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING CONCRETE PAVEMENT SURFACE BY MILLING IN ORDER TO CONSTRUCT A BUTT JOINT FOR THE TRANSITION OF THE PROPOSED BITUMINOUS OVERLAY AT THE LOCATION SHOWN ON THIS SHEET.
- THE PAVEMENT SURFACE WILL BE MILLED TO A DEPTH OF 0.17 FEET AT THE BUTT END AND WILL TAPER TO 0 INCHES AT THE OPPOSITE END. THE PLANER MUST BE CAPABLE OF MILLING THE SURFACE TO THE DESIRED ELEVATIONS AND GRADES.
- ANY ADJACENT PAVEMENT DAMAGED BY THE MILLING OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
- ALL CONCRETE PAVEMENT MILLING AREAS WILL BE LOCATED AND MARKED BY THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
- THE CONCRETE PAVEMENT MILLING WILL BE PAID FOR UNDER ITEM: AR501551 "PCC BUTT JOINT" _ _ PER S.Y.

BITUMINOUS SAWING AND SEALING NOTES

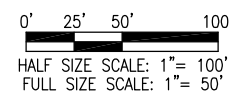
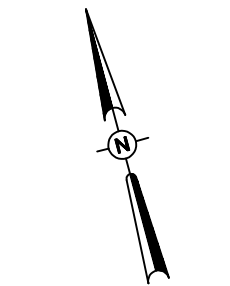
- AFTER THE CONCRETE PAVEMENT HAS BEEN OVERLAID, THE CONTRACTOR WILL DUPLICATED THE JOINTING PATTERN BY SAWING THE BITUMINOUS PAVEMENT IN ACCORDANCE WITH THE DETAIL ON THIS SHEET AND ITEM AR401660 "SAW & SEAL BIT. JOINTS".
- THERE MAY BE SOME VARIATION FROM THE JOINTING PATTERN SHOWN. THE CONTRACTOR WILL BE REQUIRED TO FIELD VERIFY THE JOINT LAYOUT. THE QUANTITY OF PROPOSED SAWING AND SEALING HAS BEEN INCREASED BY 5% TO COVER ANY VARIATION.
- THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ASTM D 5329 AND ASTM D 6690.
- THE BITUMINOUS SAWING AND SEALING WILL BE PAID FOR UNDER ITEM AR401660 "SAW & SEAL BIT. JOINTS" _ _ PER L.F.
- QUANTITY OF SAWING ON THIS SHEET 560 + 28 = 588 L.F.

PAVEMENT SAWING NOTES

- WHERE THE PROPOSED BITUMINOUS SURFACE COURSE ABUTS THE EXISTING PAVEMENT, THE EXISTING PAVEMENT WILL BE SAWED TO FURNISH A STRAIGHT EDGE TO ABUT AGAINST.
- THE RESIDENT ENGINEER WILL MARK THE PROPOSED SAW LINE IN THE FIELD.
- ANY PAVEMENT CUT FROM THE SAWING OPERATIONS WILL BE COLLECTED AND DISPOSED OF OFF THE AIRPORT SITE.
- THE SAWING AND DISPOSAL OF ANY WASTE MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE BUTT JOINT CONSTRUCTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- PROPOSED CONCRETE BUTT JOINT CONSTRUCTION
- PROPOSED BITUMINOUS OVERLAY ON EXISTING CONCRETE PAVEMENT
- PROPOSED BITUMINOUS OVERLAY ON RUBBLIZED CONCRETE PAVEMENT
- PROPOSED SAWING (AT MATCH-IN TO EXISTING PAVEMENT)



**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

Contract No. CO061

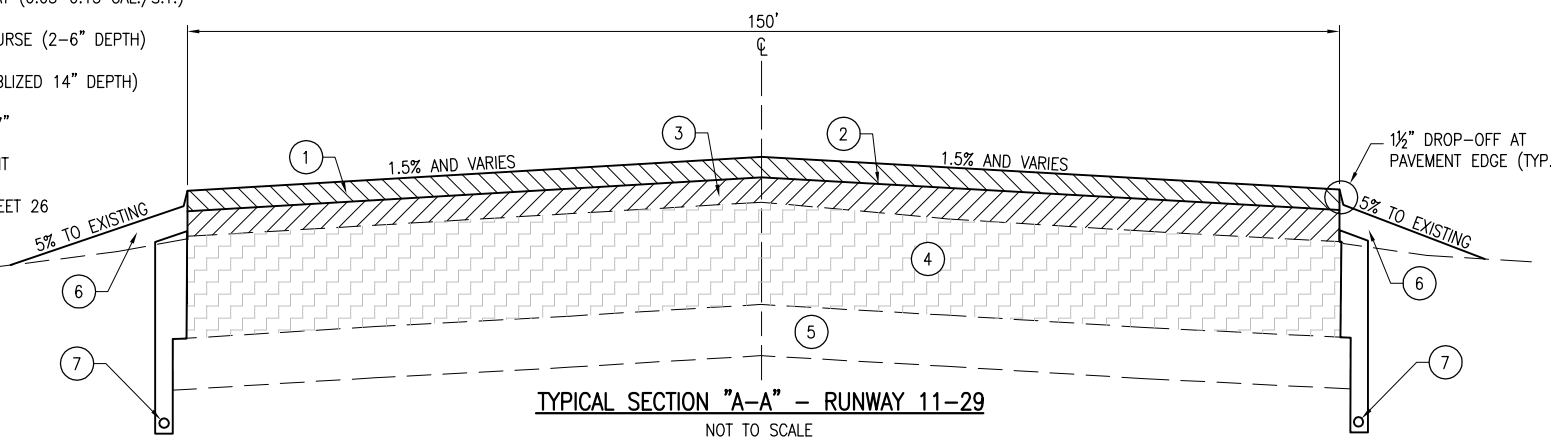
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SHEET TITLE

**PROPOSED
CONSTRUCTION PLAN
STA. 98+00 TO 115+01**

LEGEND FOR TYPICAL SECTION "A-A"

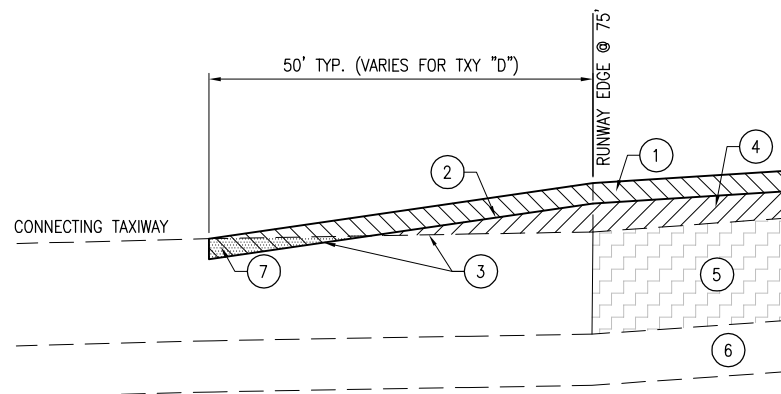
- 1 PROPOSED BITUMINOUS SURFACE COURSE (2" DEPTH)
- 2 PROPOSED BITUMINOUS TACK COAT (0.05-0.15 GAL./S.Y.)
- 3 PROPOSED BITUMINOUS BASE COURSE (2-6" DEPTH)
- 4 EXISTING CONCRETE (TO BE RUBBLIZED 14" DEPTH)
- 5 EXISTING BITUMINOUS SUBBASE, 7"
- 6 PROPOSED SHOULDER ADJUSTMENT
- 7 PROPOSED UNDERDRAIN (SEE SHEET 26 FOR FULL DETAIL)



TYPICAL SECTION "A-A" - RUNWAY 11-29
NOT TO SCALE

LEGEND FOR TYPICAL SECTION "B-B"

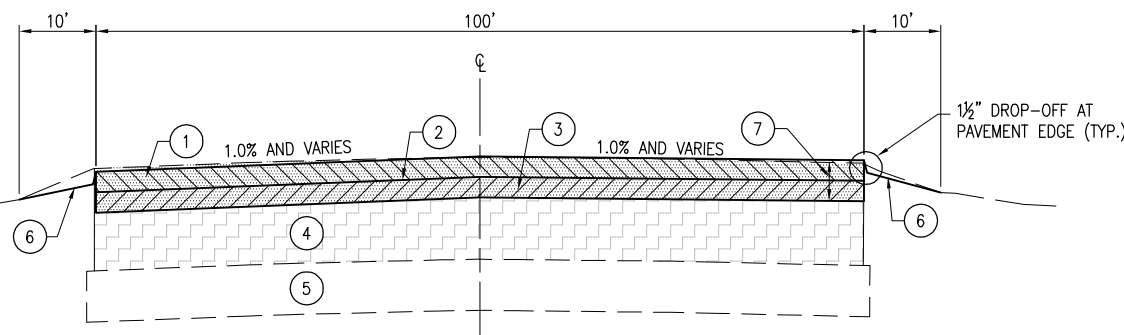
- 1 PROPOSED BITUMINOUS SURFACE COURSE (2" DEPTH)
- 2 PROPOSED BITUMINOUS TACK COAT (0.05-0.15 GAL./S.Y.)
- 3 PROPOSED BITUMINOUS TACK COAT (0.05-0.20 GAL./S.Y.)
- 4 PROPOSED BITUMINOUS BASE COURSE (2-6" DEPTH)
- 5 EXISTING CONCRETE (TO BE RUBBLIZED 14" DEPTH)
- 6 EXISTING BITUMINOUS SUBBASE, 7"
- 7 PROPOSED CONCRETE BUTT JOINT



TYPICAL SECTION "B-B" - BUTT JOINT DETAIL
NOT TO SCALE

LEGEND FOR TYPICAL SECTION "C-C"

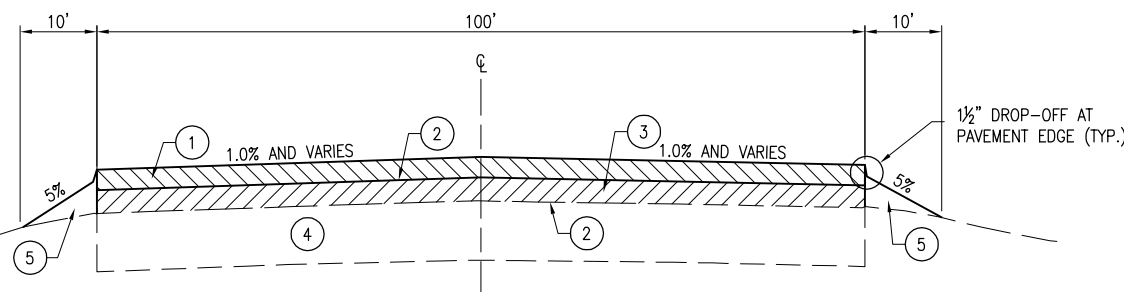
- 1 PROPOSED BITUMINOUS SURFACE COURSE (2" DEPTH)
- 2 PROPOSED BITUMINOUS TACK COAT (0.05-0.15 GAL./S.Y.)
- 3 PROPOSED BITUMINOUS BASE COURSE (2" DEPTH)
- 4 EXISTING CONCRETE (TO BE RUBBLIZED 10"-14" DEPTH)
- 5 EXISTING BITUMINOUS SUBBASE, 7"
- 6 PROPOSED SHOULDER ADJUSTMENT
- 7 PROPOSED CONCRETE BUTT JOINT CONSTRUCTION (4" DEPTH)



TYPICAL SECTION "C-C" - RUNWAY 6-24 NORTH OF RUNWAY 11-29
NOT TO SCALE

LEGEND FOR TYPICAL SECTION "D-D"

- 1 PROPOSED BITUMINOUS SURFACE COURSE (2" DEPTH)
- 2 PROPOSED BITUMINOUS TACK COAT (0.05-0.15 GAL./S.Y.)
- 3 PROPOSED BITUMINOUS BASE COURSE (VARIABLE DEPTH)
- 4 EXISTING BITUMINOUS PAVEMENT
- 5 PROPOSED SHOULDER ADJUSTMENT



TYPICAL SECTION "D-D" - RUNWAY 6-24 SOUTH OF RUNWAY 11-29
NOT TO SCALE

AR401614 BITUMINOUS SURFACE COURSE-METHOD II, SUPERPAVE

- THE BITUMINOUS SURFACE COURSE (401) SHALL BE PLACED IN ACCORDANCE WITH ITEM AR401003 "BITUMINOUS SURFACE COURSE-METHOD II, SUPERPAVE" AS STATED ON PAGE 105 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
- THIS ITEM OF WORK SHALL CONSIST OF CONSTRUCTING: 1 LIFT OF BITUMINOUS SURFACE COURSE-METHOD II, SUPERPAVE (2 INCH DEPTH) ON THE PROPOSED BITUMINOUS BASE COURSE (403).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUALITY CONTROL IN THE PRODUCTION AND CONSTRUCTION OF THE BITUMINOUS SURFACE COURSE METHOD II, SUPERPAVE.
- PRIOR TO STARTING THE BITUMINOUS SURFACE COURSE-METHOD II, SUPERPAVE OPERATION, THE CONTRACTOR SHALL SUBMIT TO THE RESIDENT ENGINEER A DETAILED OUTLINE SHOWING AREAS AND ORDER OF PAVING WIDTHS OF PAVING LANES, AND REQUIRED OFFSETS FOR ELECTRONIC GRADE.
- THE PROPOSED BITUMINOUS SURFACE COURSE METHOD II, SUPERPAVE WILL BE DESIGNED TO A SUPERPAVE DESIGN OF MORE THAN 60,000 POUNDS.
- 401-4.9 ADD THE FOLLOWING TO THIS SECTION:

WHEN HAND SPREADING IS PERMITTED, THE MIXTURE WILL BE DISTRIBUTED AND SPREAD USING HAND TOOLS. WHEN THE WORK IS COMPLETED, THE LAYER WILL HAVE THE REQUIRED THICKNESS AND CONFORM TO THE GRADE AND SURFACE CONTOUR SHOWN ON THE PLANS.
- 401-4.12 ADD THE FOLLOWING TO THIS PARAGRAPH:

ALL PAVEMENT EDGES (LONGITUDINAL, RADIUS, AND PAVEMENT ENDS) MUST BE LEFT IN PROPER ALIGNMENT AS SHOWN ON THE PLANS. THIS MAY BE ACCOMPLISHED BY THE TRIMMING METHOD OUTLINED ABOVE OR AT THE CONTRACTOR'S OPTION BY SAWING AFTER THE PAVING HAS BEEN COMPLETED. NO ADDITIONAL COMPENSATION WILL BE MADE IF THE SAWING METHOD IS USED.
- 401-6.1 ADD THE FOLLOWING TO THIS SECTION
AR401614 BIT. SURF. CSE-METHOD II, SUPERPAVE _____ PER TON

AR403614-BITUMINOUS BASE COURSE-METHOD II, SUPERPAVE NOTES

- THE BITUMINOUS BASE COURSE (403) SHALL BE PLACED IN ACCORDANCE WITH ITEM AR403613 "BITUMINOUS BASE COURSE-METHOD II, SUPERPAVE" AS STATED ON PAGE 187 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
- THIS ITEM OF WORK SHALL CONSIST OF CONSTRUCTING ONE OR MULTIPLE LIFTS OF BITUMINOUS BASE COURSE ON THE PROPOSED RUBBLIZED CONCRETE PAVEMENT.
- THE THICKNESS OF THE PROPOSED BITUMINOUS BASE COURSE VARIES FROM 2 TO 6 INCHES. AREAS EXCEEDING 3 INCHES IN THICKNESS MAY BE PAVED IN ONE LIFT, PROVIDED THE CONTRACTOR DEMONSTRATES THE ABILITY TO CONSISTENTLY MEET TO THE COMPACTION AND GRADE REQUIREMENTS. IF MULTIPLE BASE COURSE LIFTS ARE PLACED IN AREAS OVER 3 INCHES THICK, THE "LEVELING" LIFT WILL BE ACCEPTANCE TESTED PER METHOD I REQUIREMENTS. SEE SHEET NO. 33 FOR A PLAN VIEW DETAIL OF THE BITUMINOUS BASE COURSE THICKNESSES.
- THE PROPOSED BITUMINOUS BASE COURSE WILL BE DESIGNED TO A SUPERPAVE DESIGN FOR AIRCRAFT WEIGHING MORE THAN 60,000 POUNDS.
- 403-6.1 PAYMENT WILL BE MADE UNDER:

AR403614 BIT. BASE CSE.-METHOD II, SUPERPAVE -- PER TON.

AR603510-BITUMINOUS TACK COAT NOTES:

- THE BITUMINOUS TACK COAT (603) SHALL BE PLACED IN ACCORDANCE WITH ITEM AR603 "BITUMINOUS TACK COAT" AS STATED ON PAGE 250 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
- QUANTITY OF BITUMINOUS TACK COAT WAS CALCULATED AT 0.15 GALLONS PER SQUARE YARD FOR PLACEMENT ON BITUMINOUS PAVEMENT AND 0.20 GAL./S.Y. FOR PLACEMENT ON NON-RUBBLIZED CONCRETE. THE ACTUAL APPLICATION RATE WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
- THE PROPOSED BITUMINOUS TACK COAT WILL BE PAID FOR UNDER ITEM:
AR603510 BITUMINOUS TACK COAT _____ PER GAL.

REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

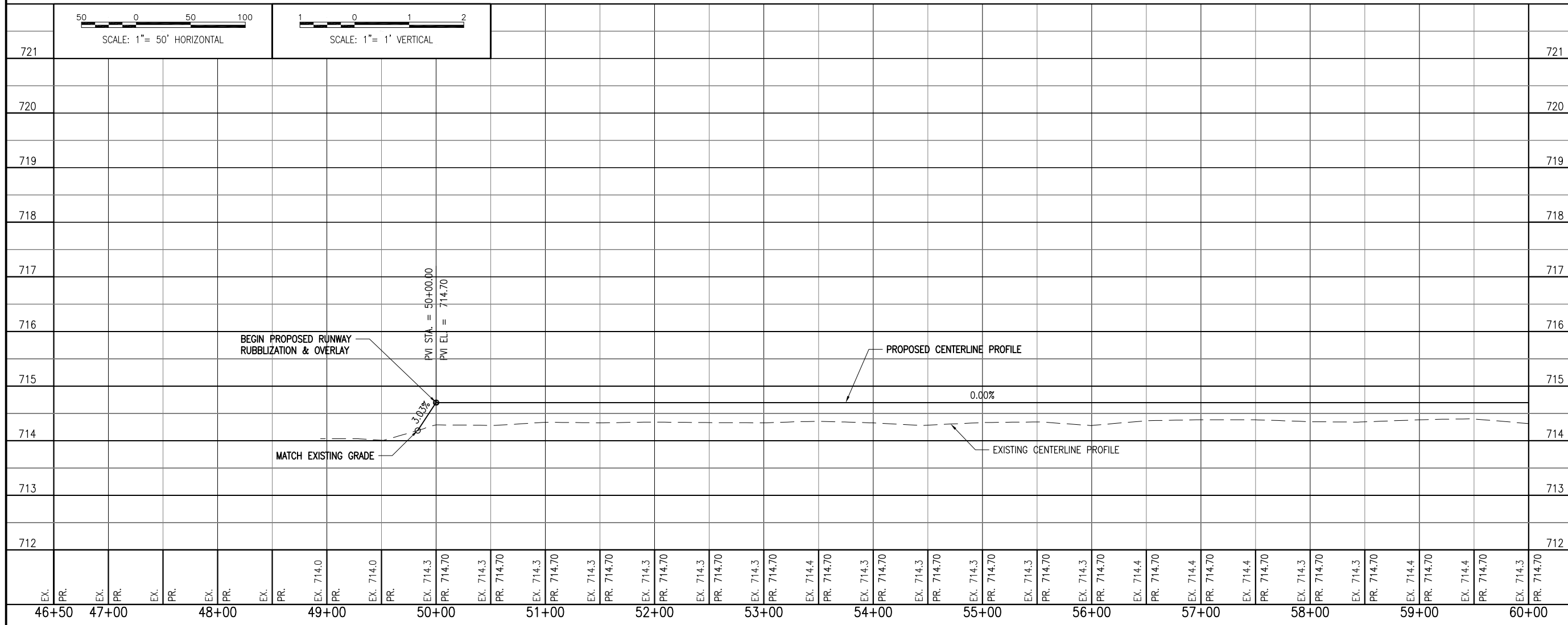
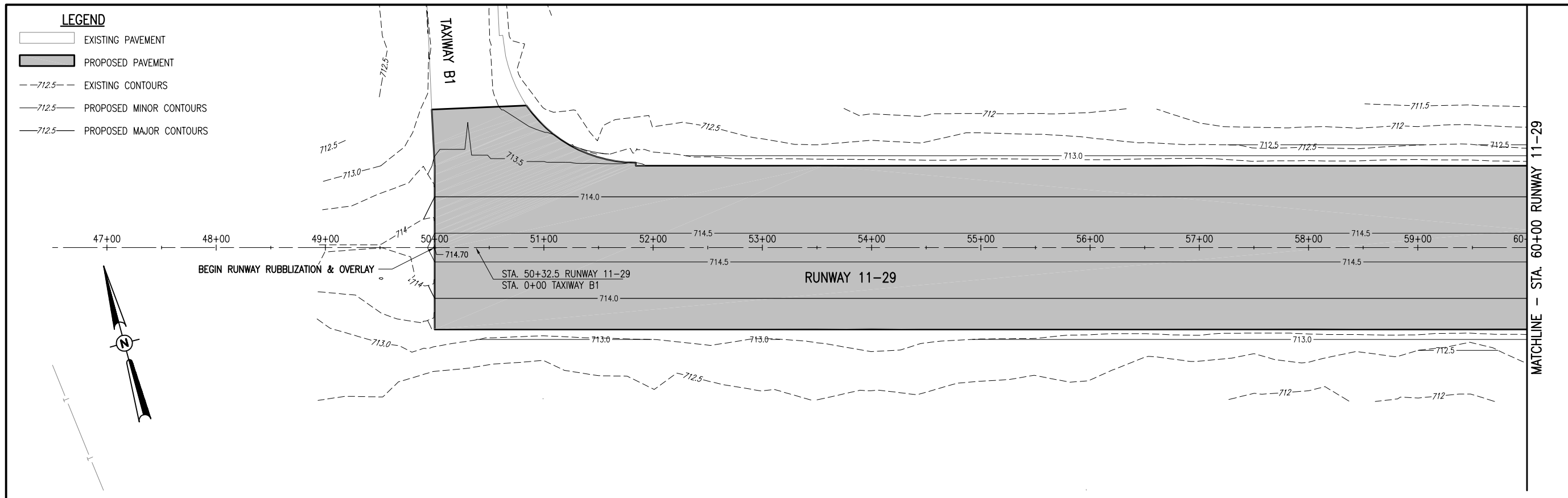
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PROPOSED TYPICAL
SECTIONS AND
NOTES



**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

Contract No. CO061

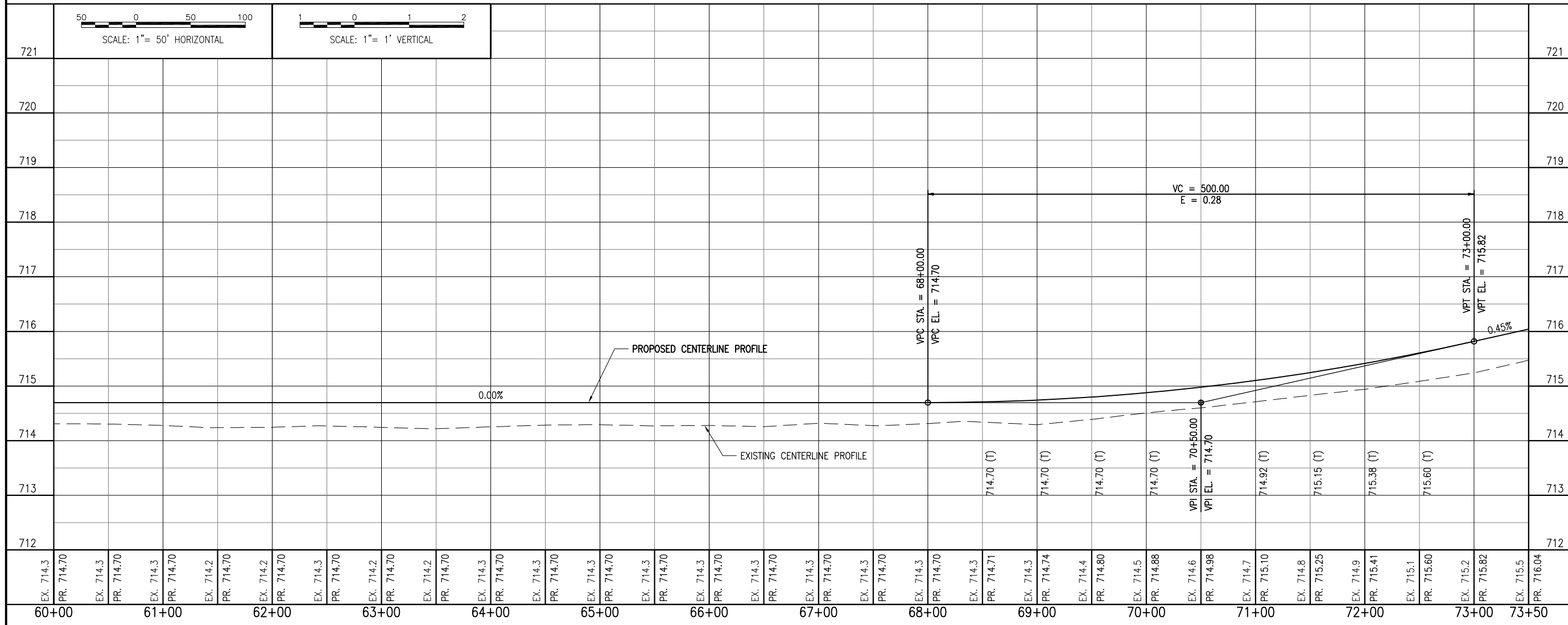
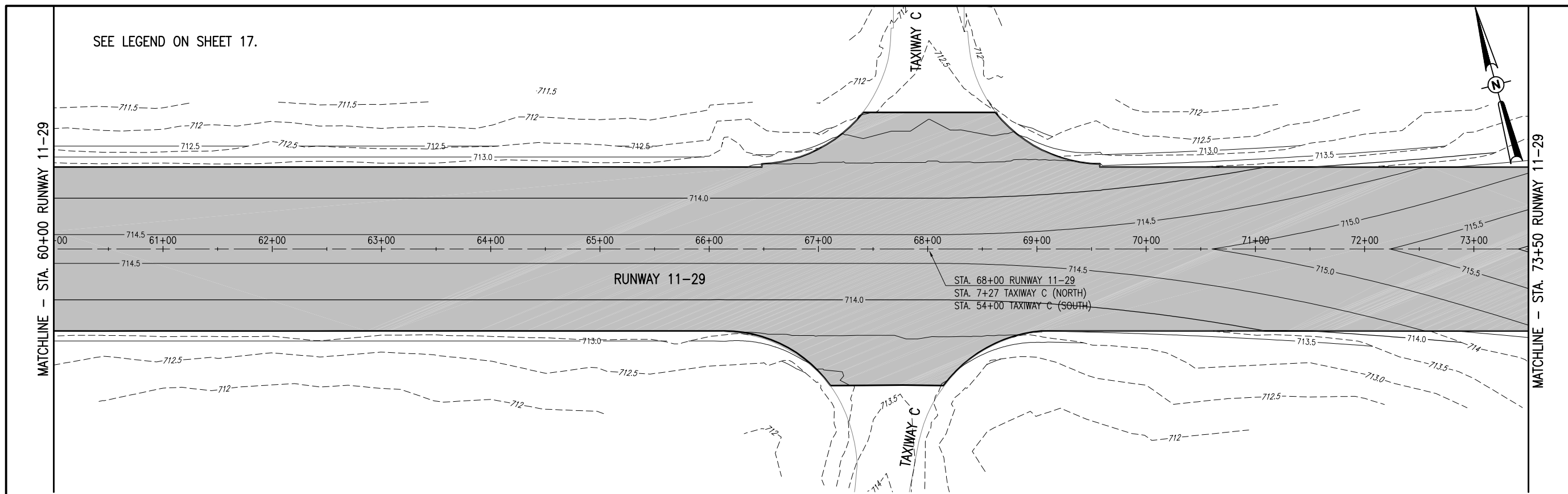
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**PLAN AND PROFILE
RUNWAY 11-29 STA.
49+50 TO 60+00**

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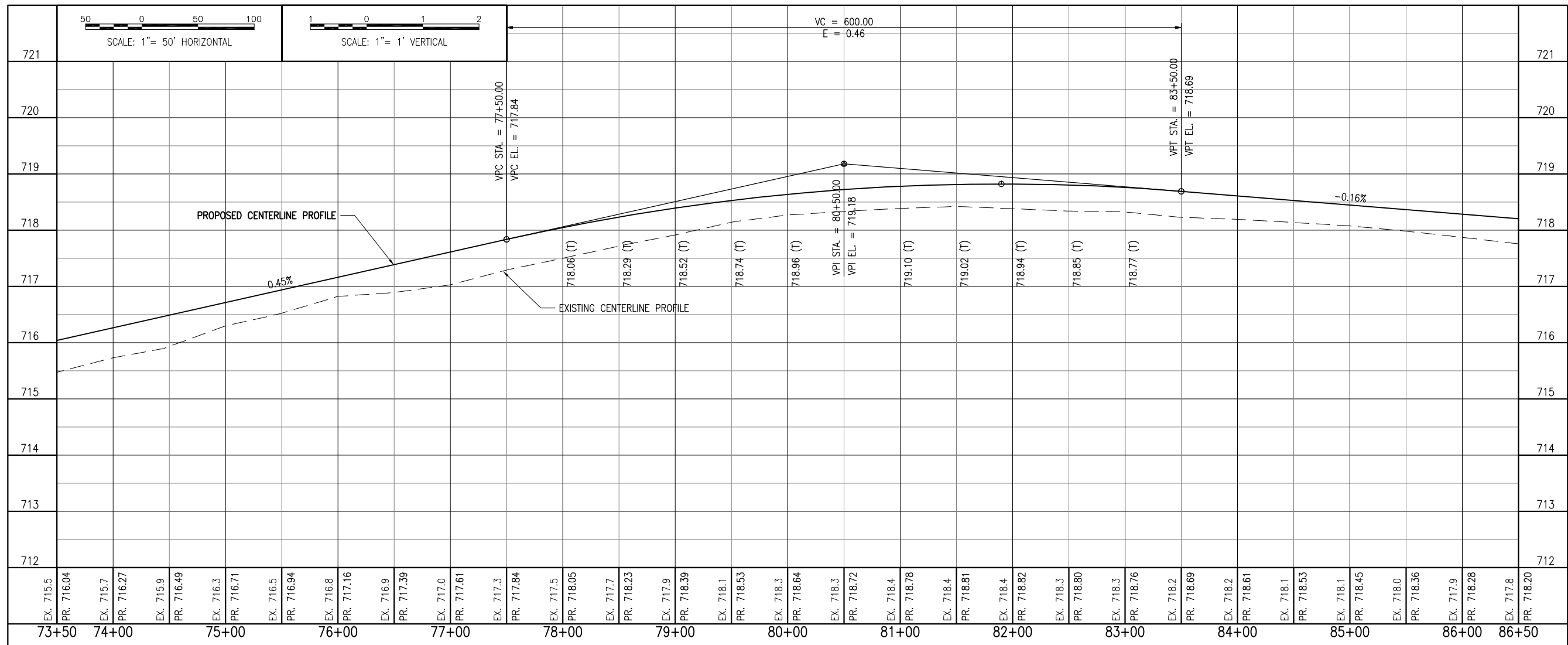
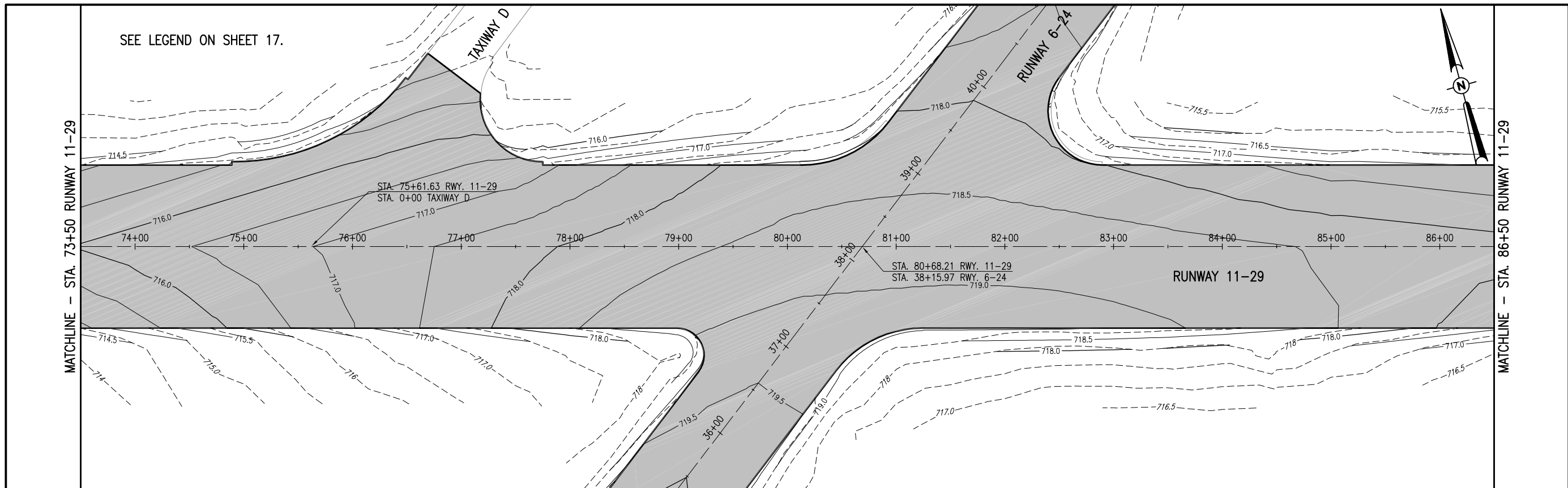
REHABILITATE RUNWAY 11/29
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PLAN AND PROFILE RUNWAY 11-29 STA. 60+00 TO 73+50

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**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

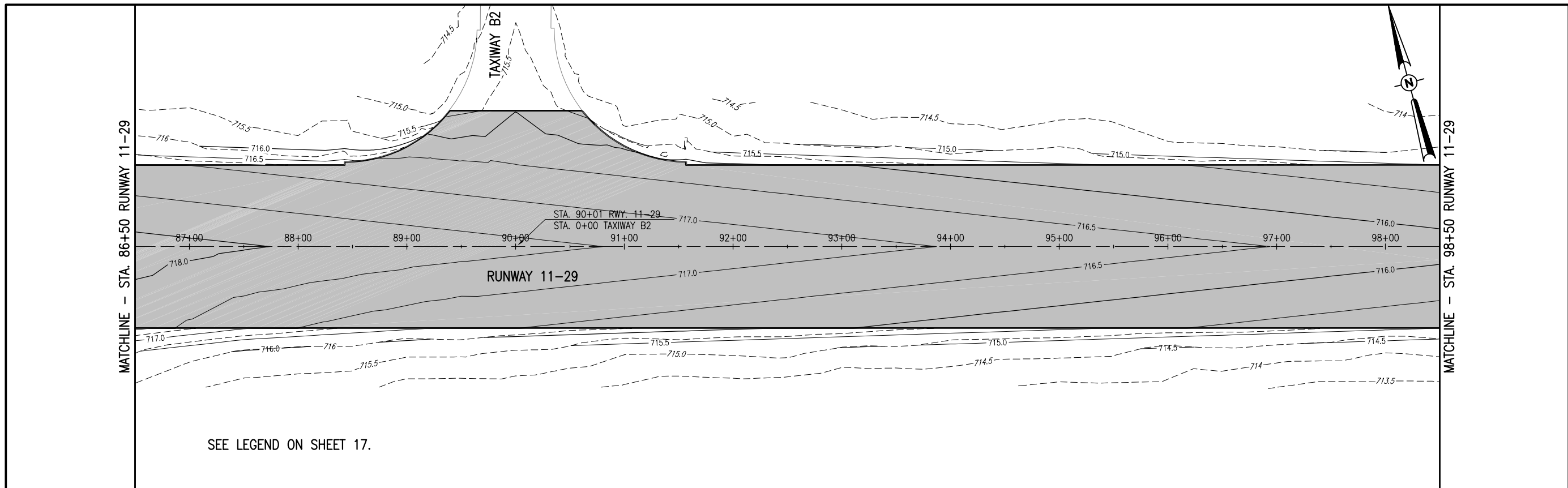
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

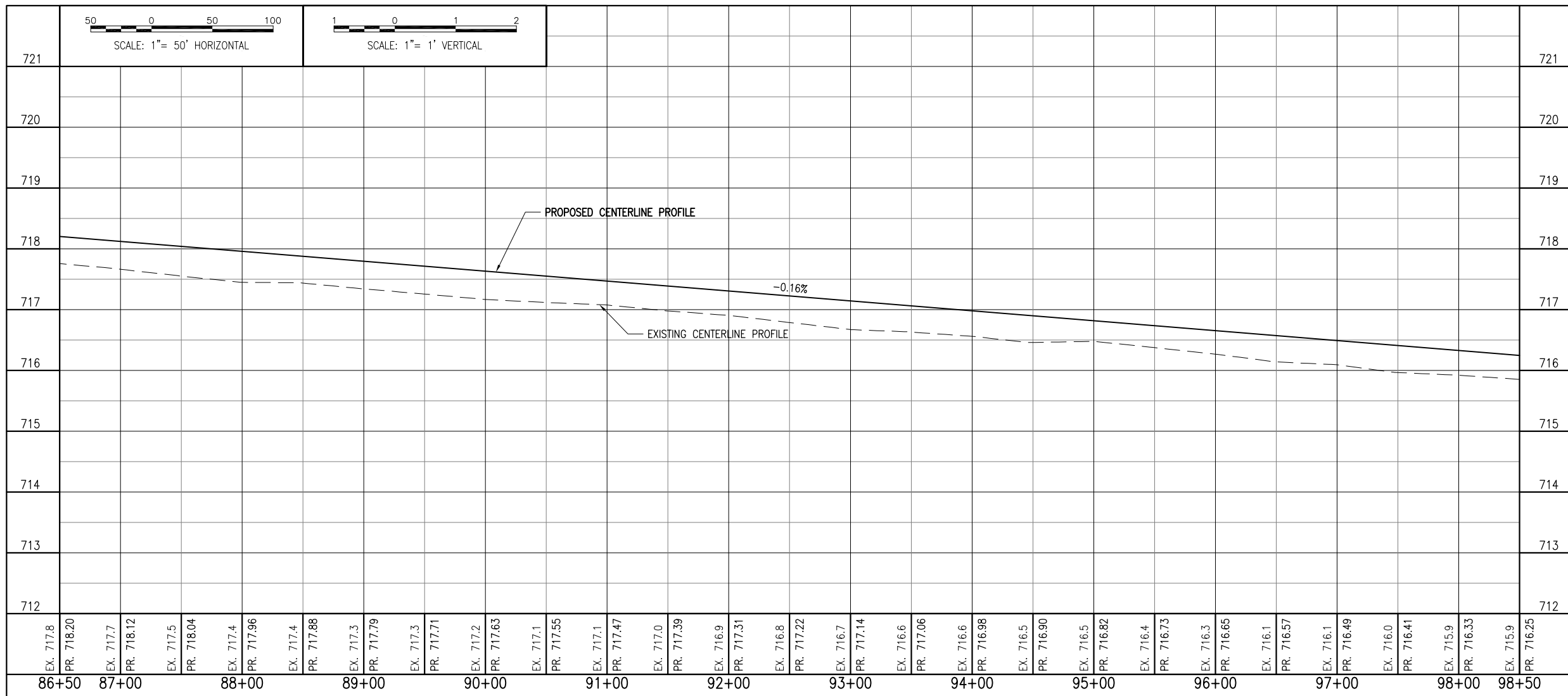
ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-701-PNP.DWG
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**PLAN AND PROFILE
RUNWAY 11-29 STA.
73+50 TO 86+50**



SEE LEGEND ON SHEET 17.



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

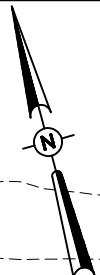
Contract No. CO061

NO.	DATE	DESCRIPTION		
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ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
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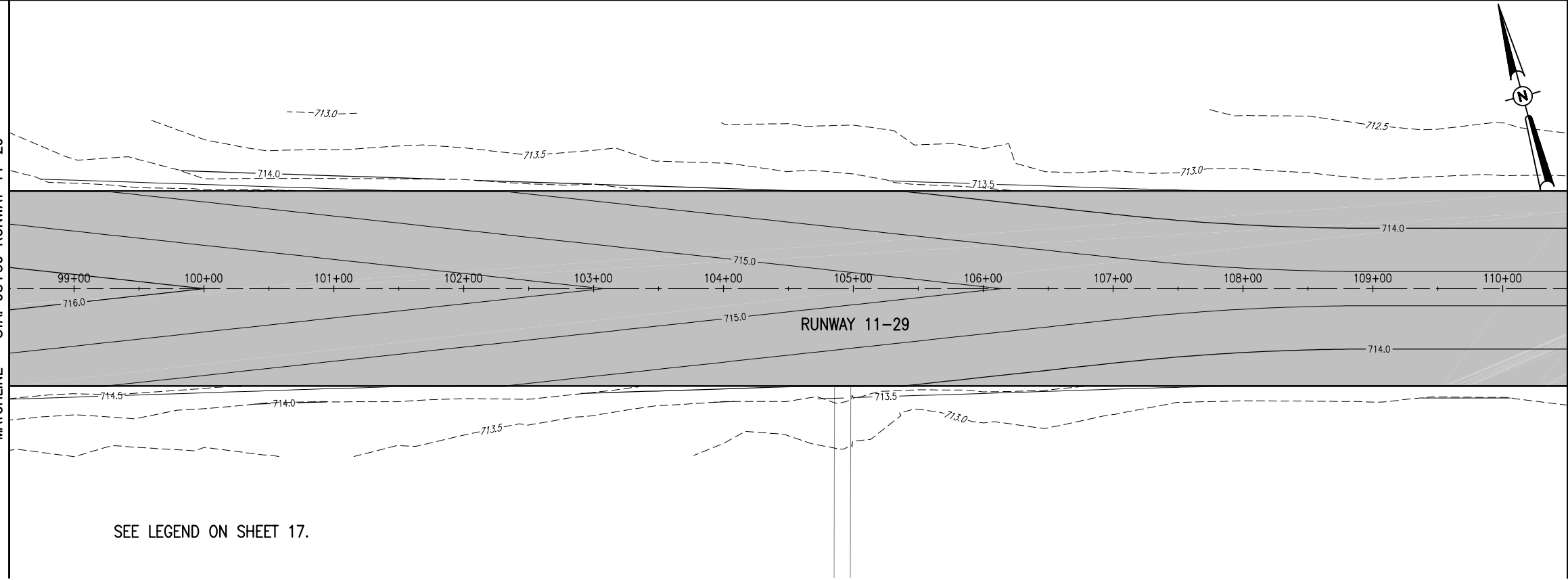
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PLAN AND PROFILE RUNWAY 11-29 STA. 86+50 TO 98+50

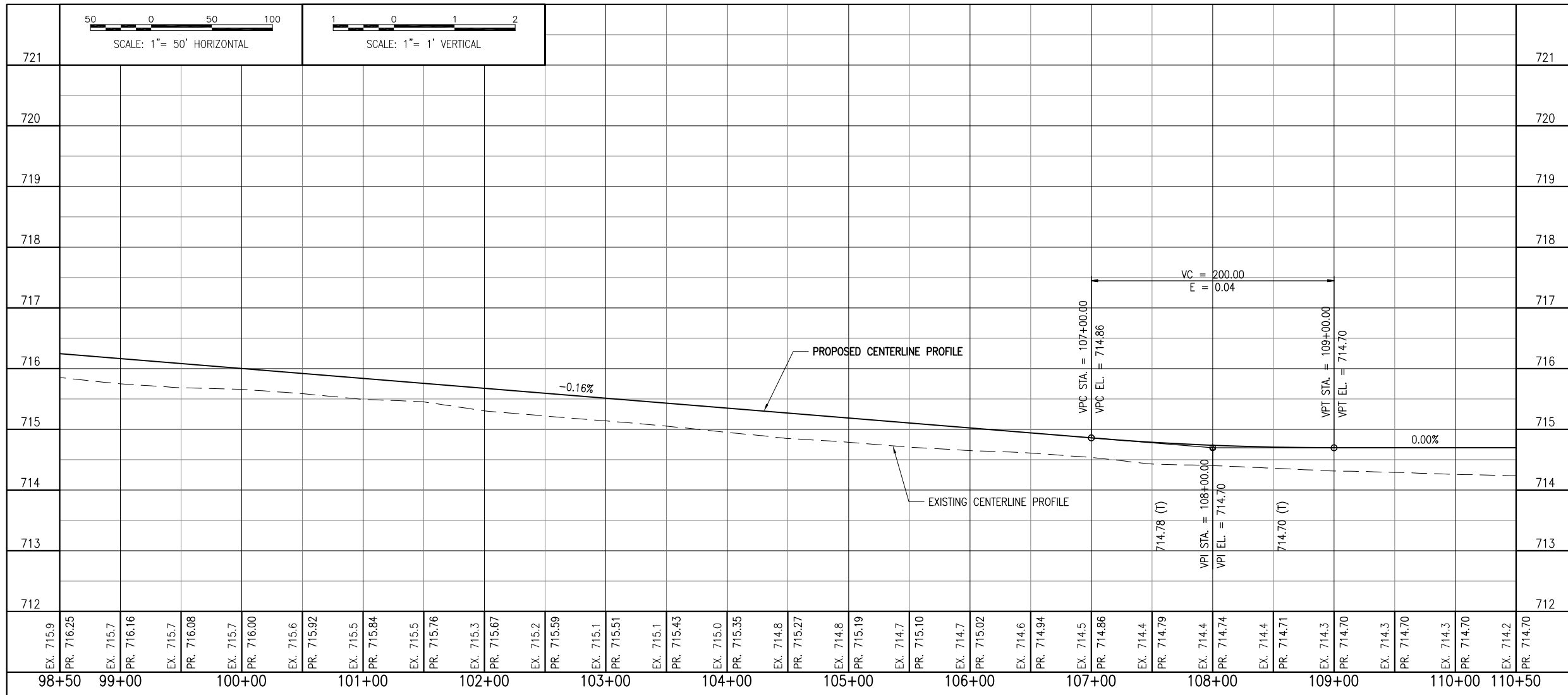
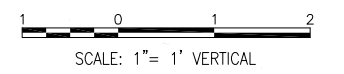
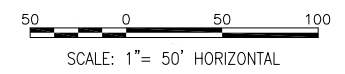


MATCHLINE - STA. 98+50 RUNWAY 11-29

MATCHLINE - STA. 110+50 RUNWAY 11-29



SEE LEGEND ON SHEET 17.



EX. 715.9	PR. 716.25	EX. 715.7	PR. 716.16	EX. 715.7	PR. 716.08	EX. 715.7	PR. 716.00	EX. 715.6	PR. 715.92	EX. 715.5	PR. 715.84	EX. 715.5	PR. 715.76	EX. 715.3	PR. 715.67	EX. 715.2	PR. 715.59	EX. 715.1	PR. 715.51	EX. 715.1	PR. 715.43	EX. 715.0	PR. 715.35	EX. 714.8	PR. 715.27	EX. 714.8	PR. 715.19	EX. 714.7	PR. 715.10	EX. 714.7	PR. 715.02	EX. 714.6	PR. 714.94	EX. 714.5	PR. 714.86	EX. 714.4	PR. 714.79	EX. 714.4	PR. 714.74	EX. 714.4	PR. 714.71	EX. 714.3	PR. 714.70	EX. 714.3	PR. 714.70	EX. 714.3	PR. 714.70	EX. 714.2	PR. 714.70
98+50	99+00	100+00	101+00	102+00	103+00	104+00	105+00	106+00	107+00	108+00	109+00	110+00	110+50																																				

REHABILITATE RUNWAY 11/29

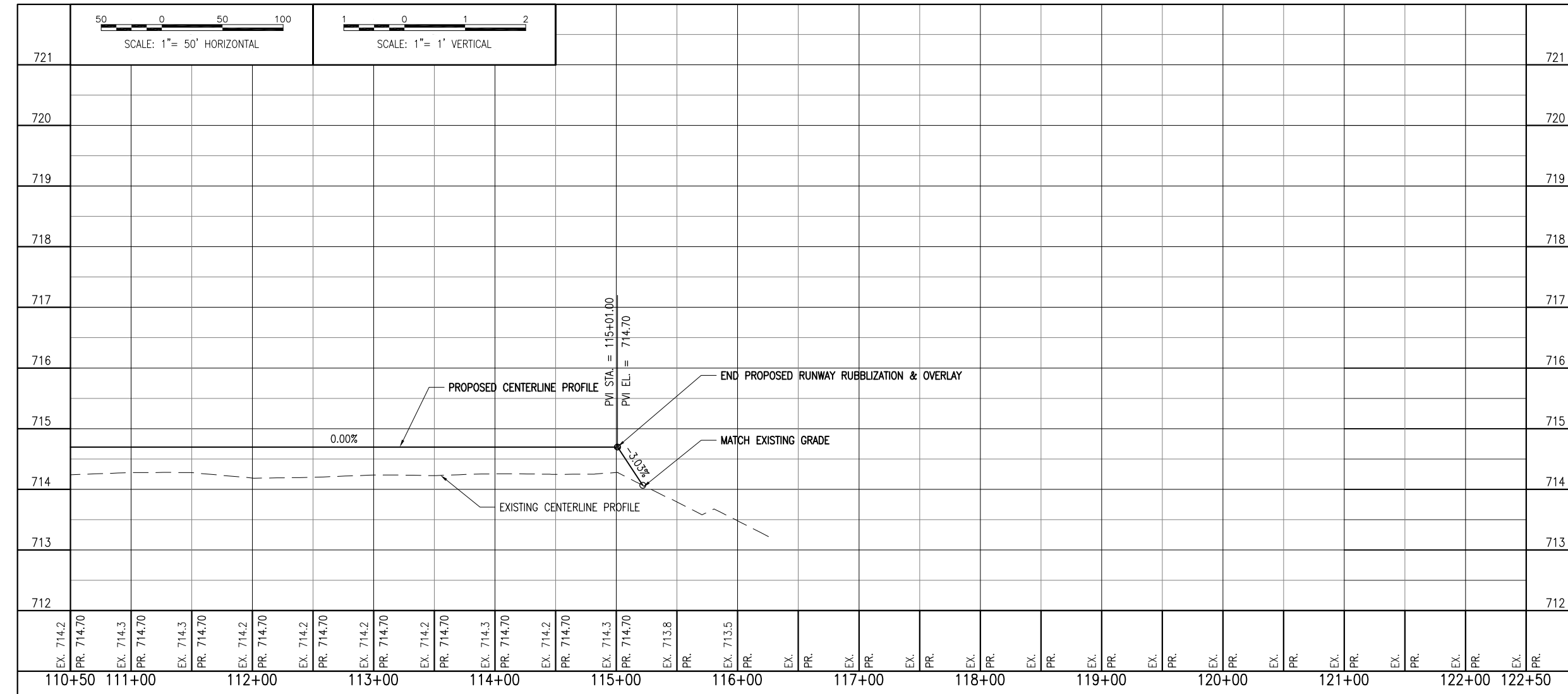
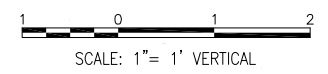
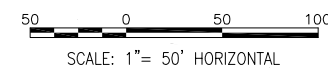
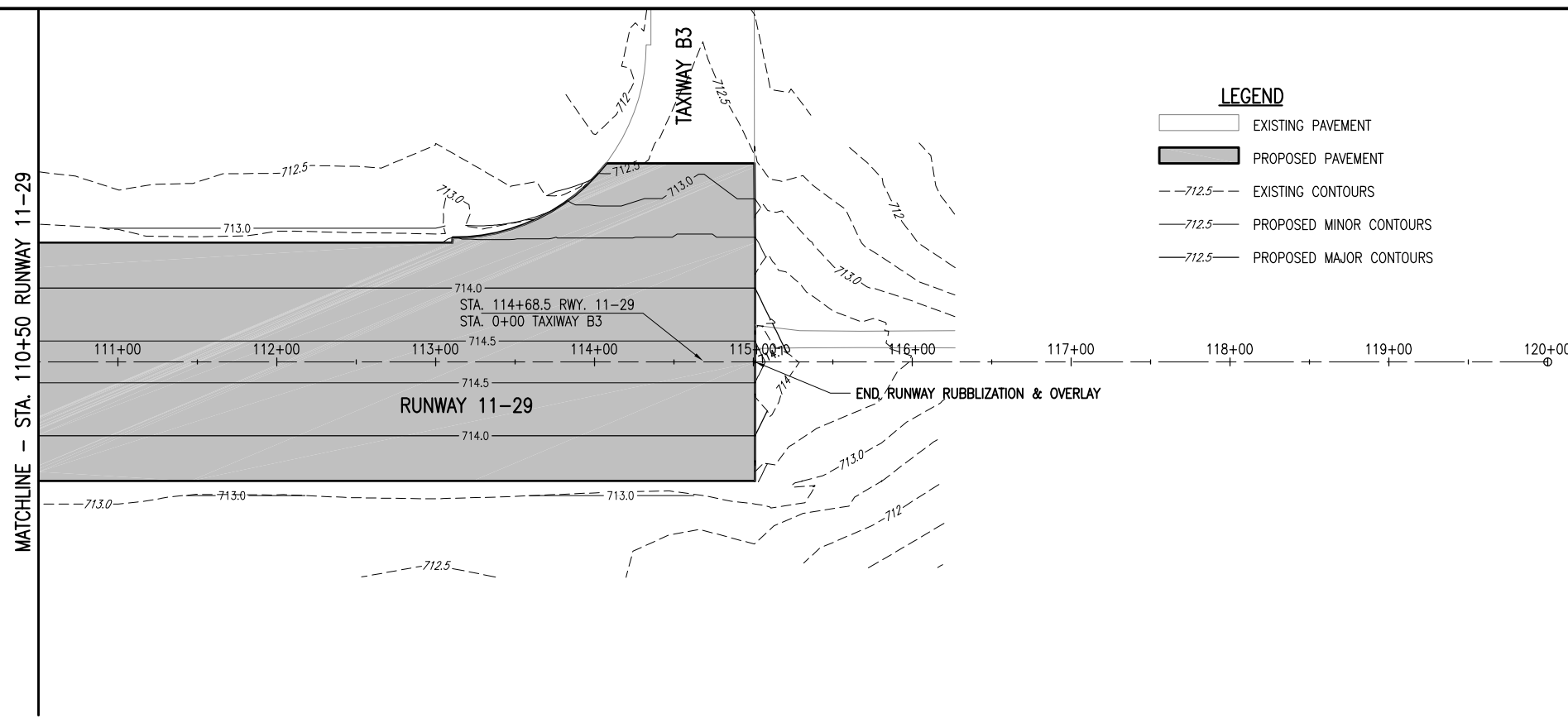
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PLAN AND PROFILE RUNWAY 11-29 STA. 98+50 TO 110+50



**REHABILITATE
RUNWAY 11/29**

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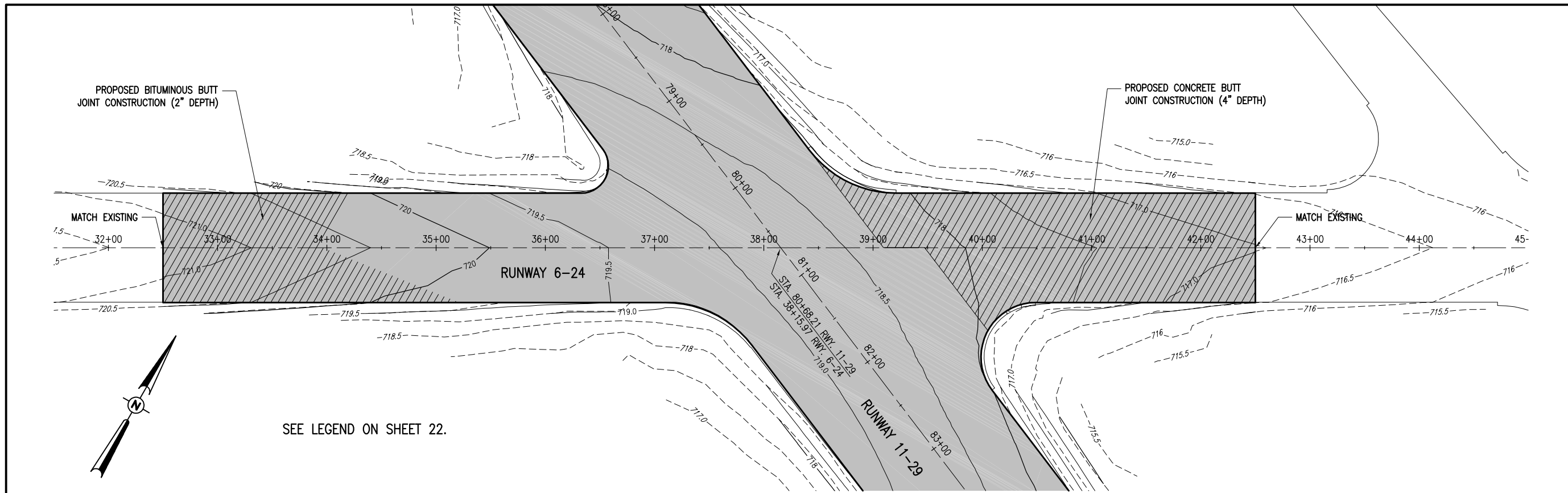
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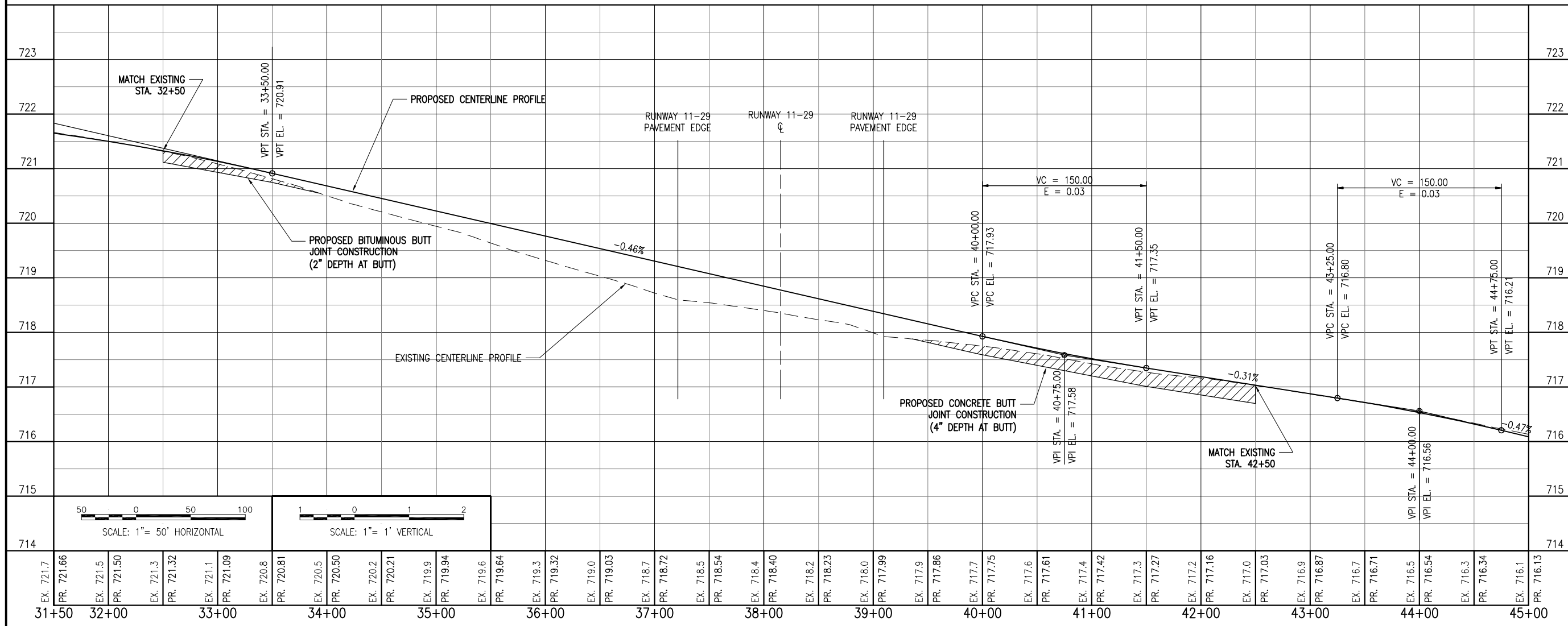
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**PLAN AND PROFILE
RUNWAY 11-29 STA.
110+50 TO 115+50**



SEE LEGEND ON SHEET 22.



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

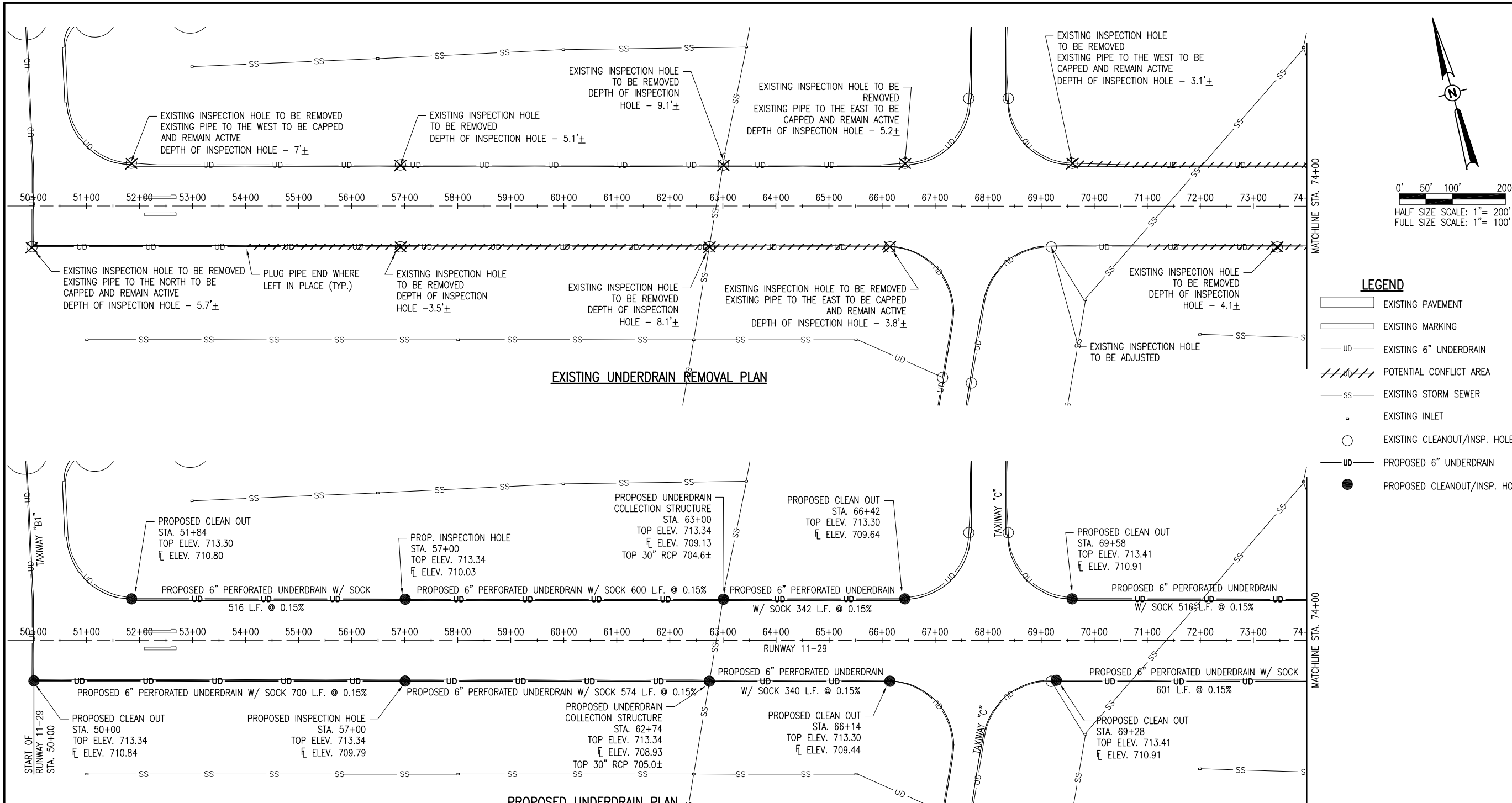
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ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-702-PNP.DWG
LAYOUT BY: KBS 03/27/14
DRAWN BY: RAD 03/27/14
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PLAN AND PROFILE RUNWAY 6-24 STA. 31+50 TO 45+00

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LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- EXISTING 6" UNDERDRAIN
- POTENTIAL CONFLICT AREA
- EXISTING STORM SEWER
- EXISTING INLET
- EXISTING CLEANOUT/INSP. HOLE
- PROPOSED 6" UNDERDRAIN
- PROPOSED CLEANOUT/INSP. HOLE

UNDERDRAIN REMOVAL NOTES

1. THE EXISTING RUNWAY 11-29 UNDERDRAIN, LOCATED ON THE PORTION WEST OF RUNWAY 6-24, SHALL REMAIN FUNCTIONAL UNTIL THE COMPLETION OF THE RUBBLIZATION IN THAT AREA. IT SHALL THEN BE PLUGGED AND ABANDONED IN PLACE OR REMOVED WHEN FOUND TO BE IN CONFLICT WITH THE PROPOSED REPLACEMENT UNDERDRAIN INSTALLATION.
2. WHEREVER THE EXISTING UNDERDRAIN PIPE INTERFERES WITH THE INSTALLATION OF THE PROPOSED UNDERDRAIN PIPE, THE CONTRACTOR WILL REMOVE THE EXISTING UNDERDRAIN PIPE AND DISPOSE OF IT OFF THE AIRPORT SITE IN A LEGAL MANNER. WHEN AN EXISTING UNDERDRAIN PIPE NO LONGER INTERFERES WITH THE PROPOSED INSTALLATION, THE CONTRACTOR WILL SEAL/CAP THE EXPOSED END OF THE UNDERDRAIN PIPE AT THAT LOCATION AND LEAVE THE REMAINING UNDERDRAIN PIPE IN PLACE.
3. APPROXIMATE AREAS OF ANTICIPATED CONFLICT WITH THE EXISTING UNDERDRAIN PIPE HAVE BEEN NOTED ON THESE SHEETS. THESE AREAS ARE BASED ON RECORD DRAWING INFORMATION AND THEREFORE MAY VARY IN THE FIELD. ALL REMOVAL OF EXISTING UNDERDRAIN PIPE, REGARDLESS OF WHETHER IT IS SHOWN TO BE IN CONFLICT ON THE PLANS, IS INCIDENTAL TO THE REPLACEMENT UNDERDRAIN INSTALLATION.

4. ALL EXISTING INSPECTION HOLES DESIGNATED FOR REMOVAL WILL BE REMOVED AND DISPOSED OF OFF THE AIRPORT SITE IN A LEGAL MANNER. THE HOLES SHALL BE BACKFILLED WITH A DIRT PLUG AND COMPACTED TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL PIPES CONNECTED TO THE REMOVED INSPECTION HOLES SHALL BE PLUGGED OR CAPPED.
5. THE EXISTING INSPECTION HOLES ARE CONSTRUCTED OF CONCRETE ENCASED CORRUGATED METAL PIPE WITH A NEENAH CASTING ON TOP OF THE STRUCTURE.
6. THE EXISTING UNDERDRAIN PIPE IS BELIEVED TO BE A 6" PERFORATED CORRUGATED METAL PIPE.
7. THE METHOD OF SEALING/CAPPING THE UNDERDRAIN PIPE WILL BE APPROVED BY THE RESIDENT ENGINEER.
8. THE REMOVAL OF THE EXISTING INSPECTION HOLES WILL BE PAID FOR UNDER:
AR705903 "REMOVE UNDERDRAIN INSPECTION HOLE" _ _ PER EACH.

INSPECTION HOLE ADJUSTMENT NOTES

1. ALL INSPECTION HOLES DESIGNATED FOR ADJUSTMENT WILL BE ADJUSTED IN ACCORDANCE WITH THE DETAIL SHOWN ON SHEET 26.
2. THE CONTRACTOR WILL REMOVE THE TOP OF THE EXISTING STRUCTURE DOWN TO SOUND CONCRETE. TWO NO. 5 RE-BAR WILL BE DRILLED AND GROUTED INTO THE TOP OF THE LOWERED STRUCTURE. THE CONTRACTOR WILL FORM THE STRUCTURE TO THE PROPOSED GRADE.
3. THE CONTRACTOR WILL FURNISH A NEW FRAME AND LID AS SHOWN ON SHEET 26.
4. THE ADJUSTED INSPECTION HOLE WILL BE PAID FOR UNDER:
AR705943 "ADJUST UNDERDRAIN INSP. HOLE" _ _ PER EACH.

UNDERDRAIN NOTES

1. THE CONTRACTOR SHALL INSTALL THE PROPOSED 6" P.E. TUBING UNDERDRAINS TO THE DEPTH AND GRADES SHOWN ON THE PROPOSED DRAINAGE PLAN SHEETS. THE UNDERDRAINS ON THE EAST SIDE OF RUNWAY 6-24 SHALL BE INSTALLED AND FUNCTIONAL FOR A PERIOD OF 7 DAYS PRIOR TO THE START OF THE RUBBLIZATION IN THAT AREA.
2. THE 6" P.E. TUBING SHALL BE CAPPED AT THE ENDS WHICH DO NOT CONNECT INTO EXISTING STRUCTURES.
3. THE TRENCH SHALL BE BACKFILLED AND COMPACTED WITH POROUS BACKFILL MATERIAL. THE TRENCH LOCATED IN TURF AREAS SHALL BE BACKFILLED UP TO WITHIN 6 INCHES OF THE EXISTING GROUND ELEVATION. THE REMAINING 6 INCHES OF TRENCH WILL BE BACKFILLED AND COMPACTED WITH EARTH MATERIAL.
4. POROUS BACKFILL MATERIAL SHALL CONFORM TO IDOT CA-16 REQUIREMENTS AND BE FREE OF CLAY OR OTHER FOREIGN MATERIALS. THE POROUS BACKFILL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE INSTALLATION OF THE PROPOSED 6" PERFORATED UNDERDRAIN PIPE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
5. THE PROPOSED UNDERDRAINS AND BACKFILLED MATERIAL WILL BE PAID FOR UNDER THE FOLLOWING ITEMS:
AR705506 "6" PERFORATED UNDERDRAIN" _ _ PER L.F.

REHABILITATE RUNWAY 11/29

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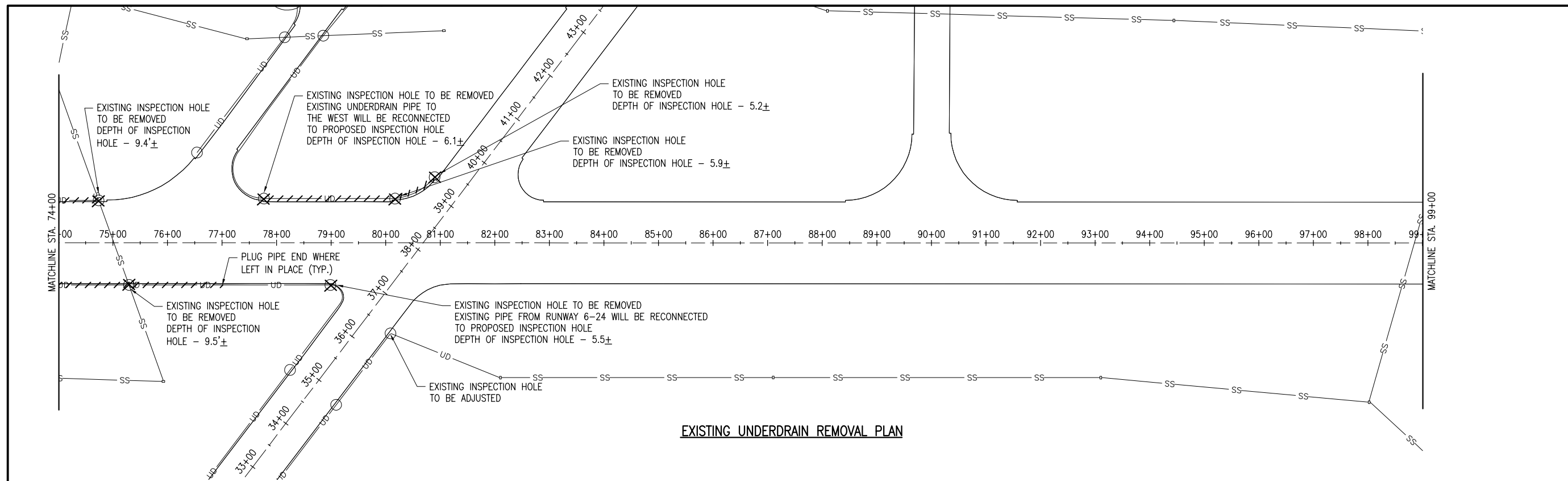
Contract No. CO061

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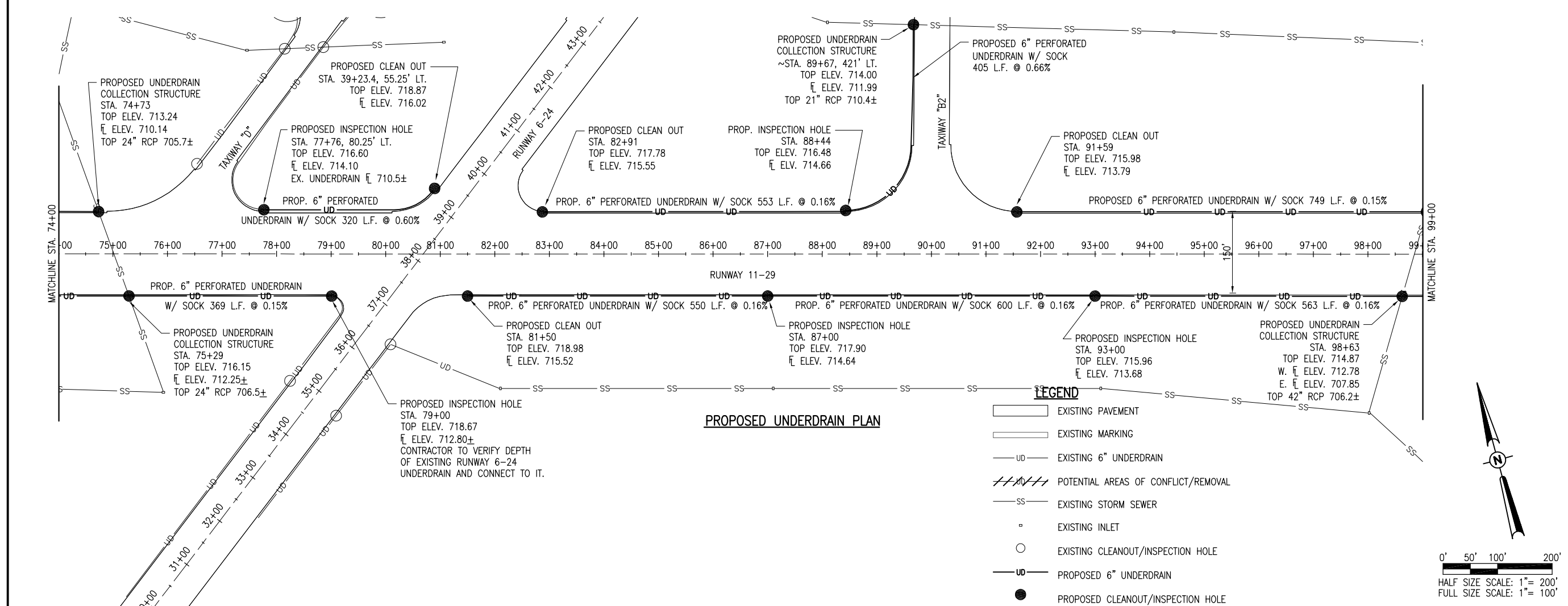
ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-131DRN.DWG
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PROPOSED DRAINAGE PLAN STA. 50+00 TO 74+00

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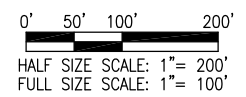


EXISTING UNDERDRAIN REMOVAL PLAN



PROPOSED UNDERDRAIN PLAN

- LEGEND**
- EXISTING PAVEMENT
 - EXISTING MARKING
 - EXISTING 6" UNDERDRAIN
 - POTENTIAL AREAS OF CONFLICT/REMOVAL
 - EXISTING STORM SEWER
 - EXISTING INLET
 - EXISTING CLEANOUT/INSPECTION HOLE
 - PROPOSED 6" UNDERDRAIN
 - PROPOSED CLEANOUT/INSPECTION HOLE



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

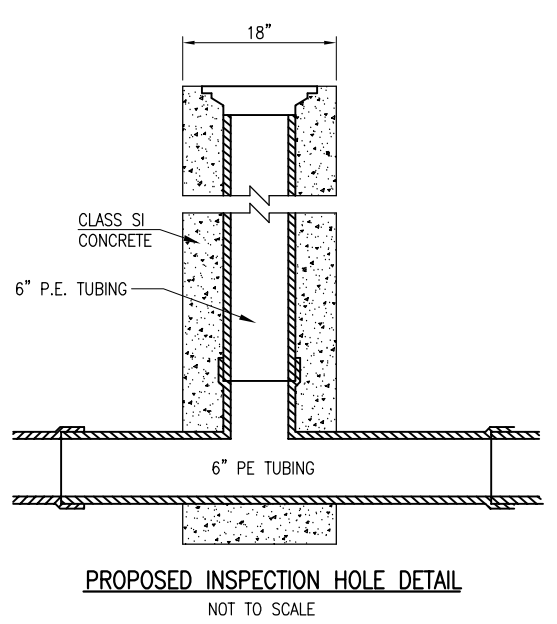
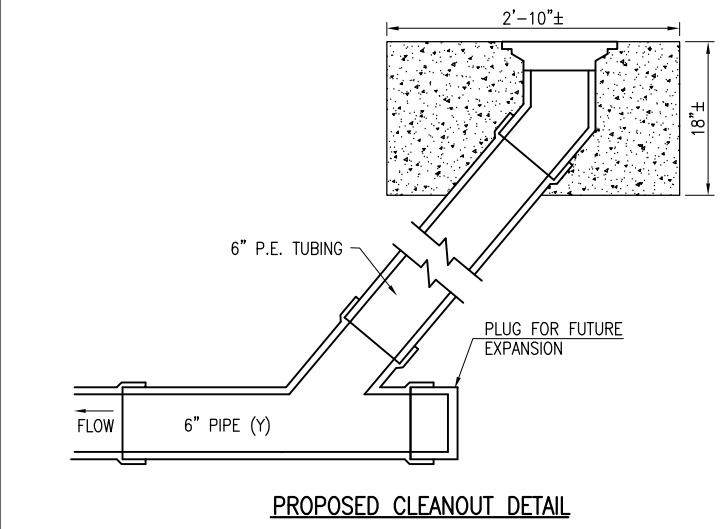
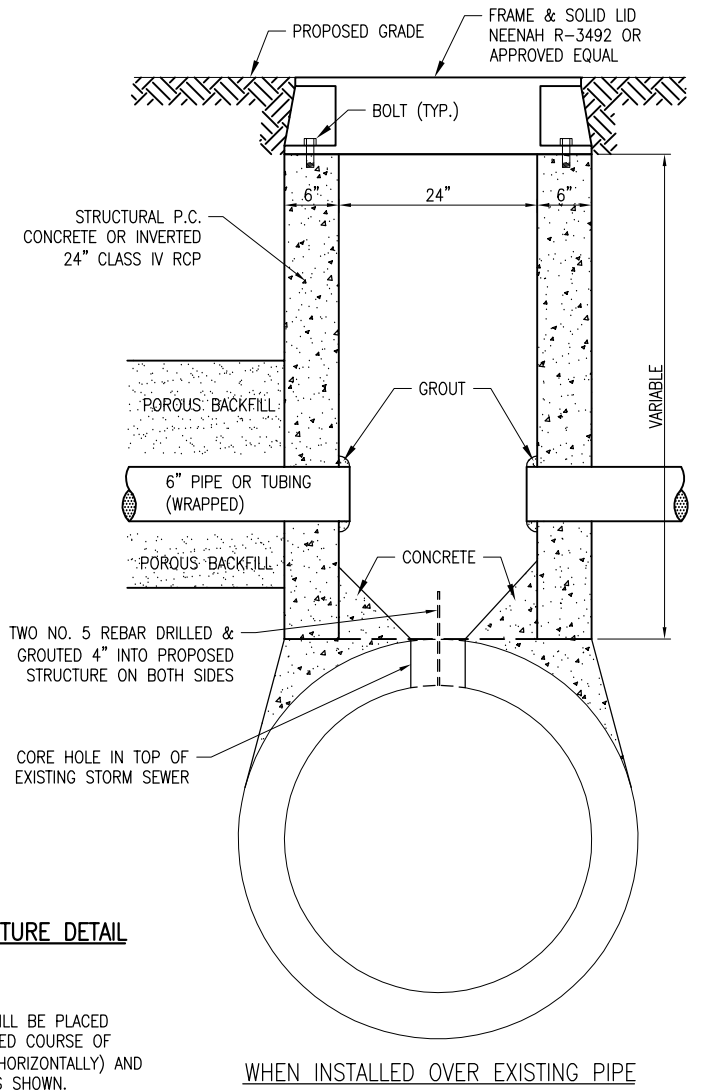
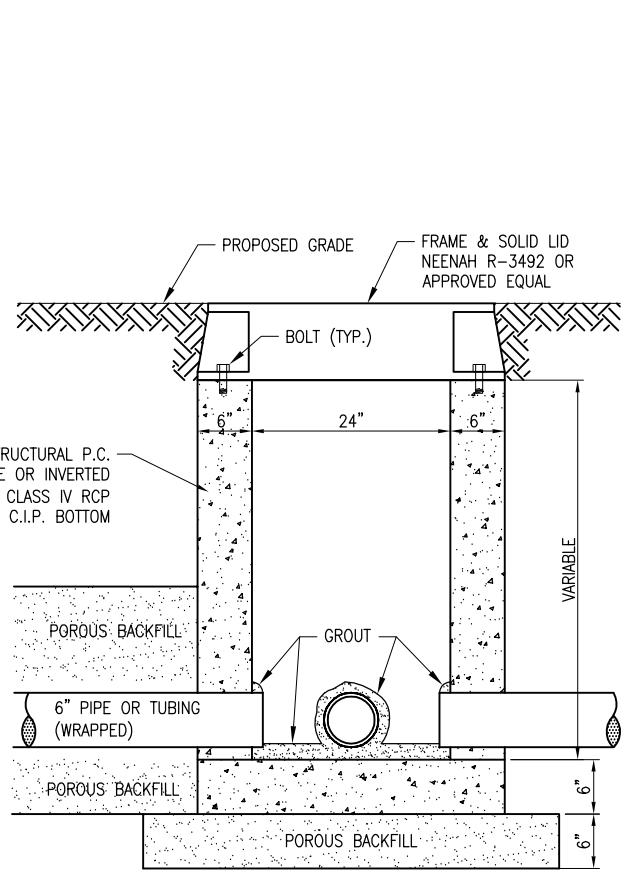
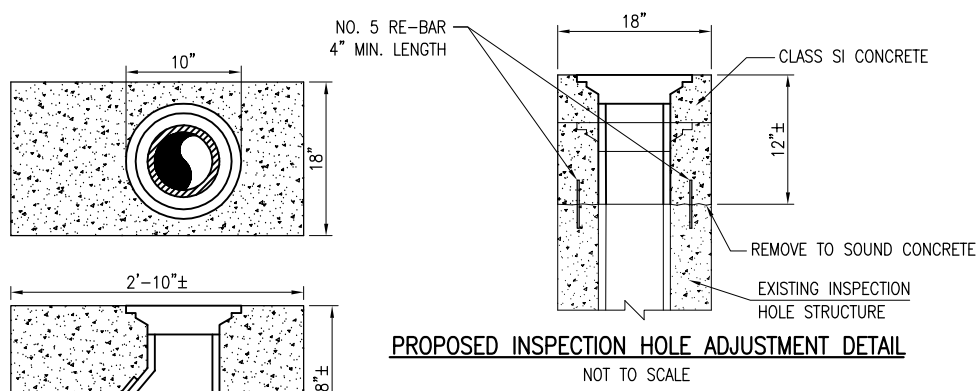
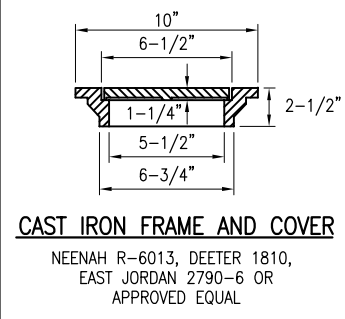
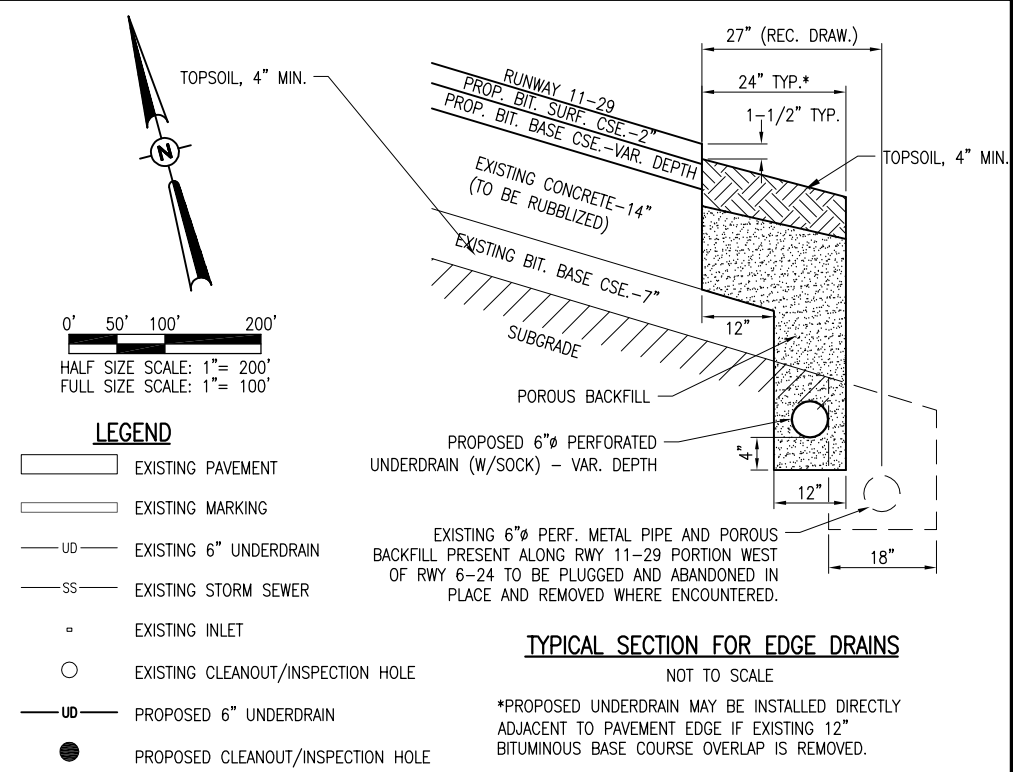
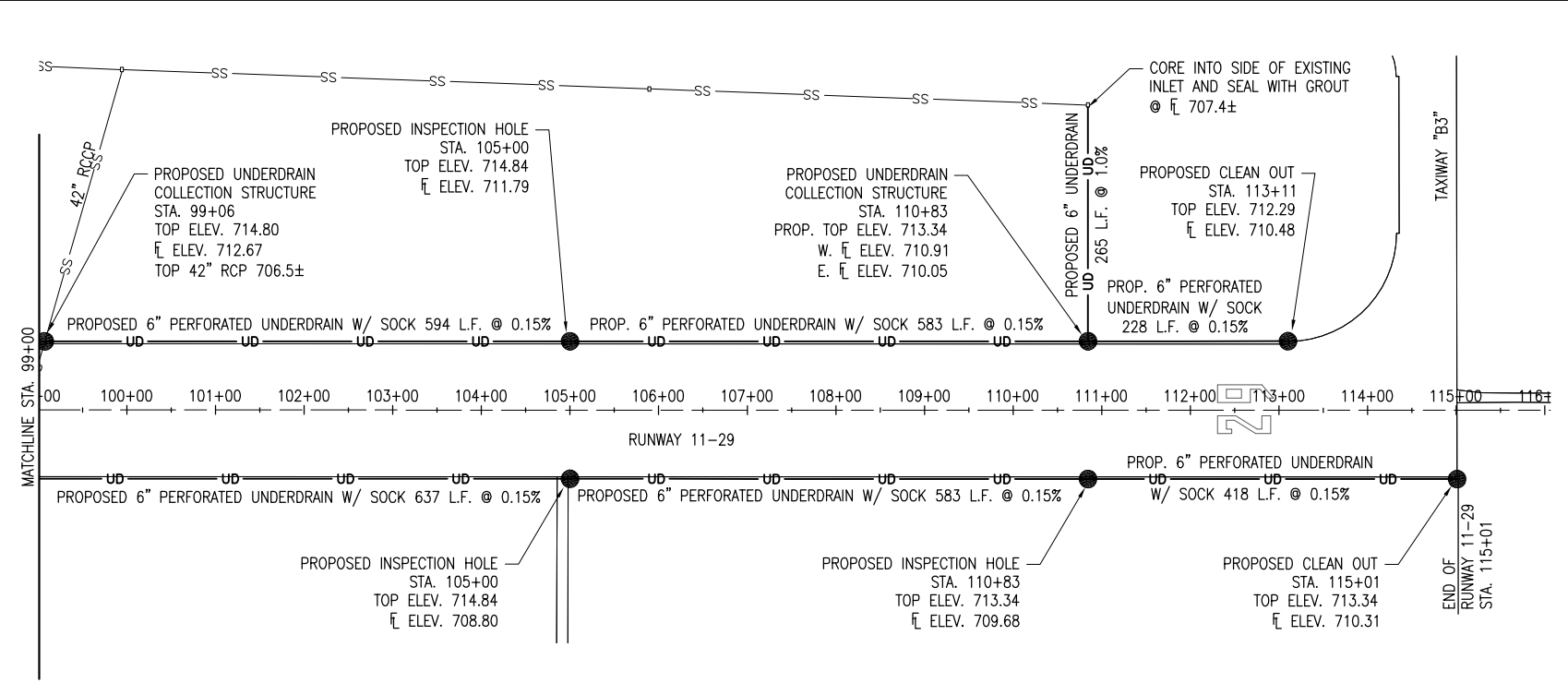
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PROPOSED DRAINAGE PLAN STA. 74+00 TO 99+00

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- INSPECTION HOLE & CLEAN OUT NOTES**
- DIAMETER OF PIPE AS SPECIFIED.
 - TOP OF INSPECTION HOLES & CLEAN OUTS SHALL BE FLUSH WITH GROUND LINE AT LOCATION SHOWN ON PLANS.
 - 1/2" CHAMFER TO BE USED ON ALL EXPOSED EDGES.
 - THE CONCRETE SHALL BE STRUCTURAL PORTLAND CEMENT CONCRETE (NON-REINFORCED)

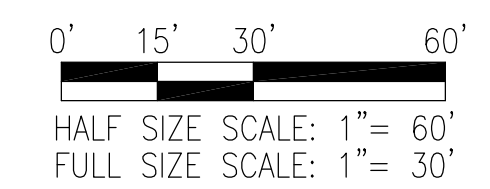
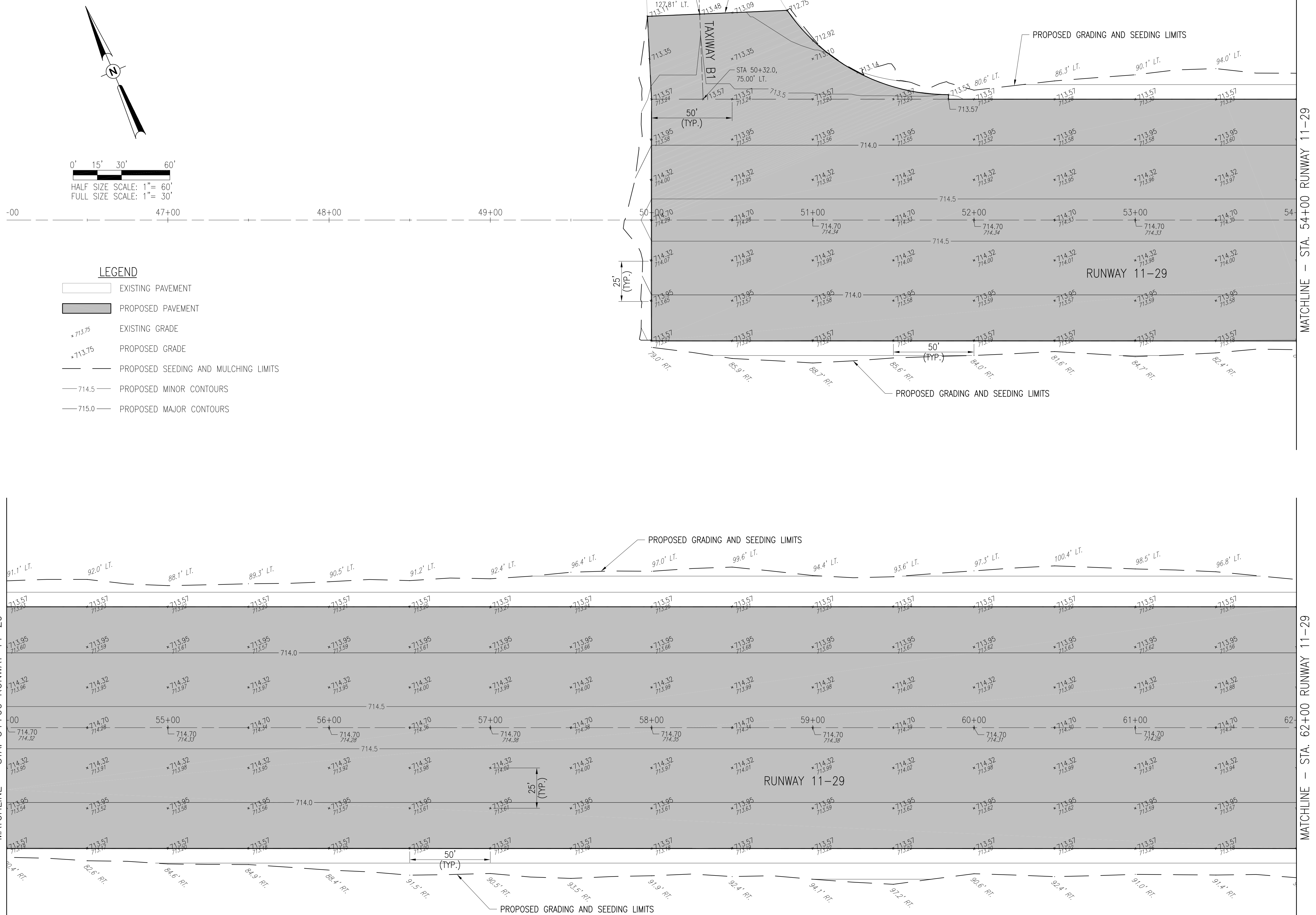
NOTE: UNDERDRAIN COLLECTION STRUCTURE WILL BE PLACED IMMEDIATELY ADJACENT TO THE PROPOSED COURSE OF RUBBLIZED 501 CONCRETE PAVEMENT (HORIZONTALLY) AND THE TUBING DIRECTED TO INTERSECT AS SHOWN.

REHABILITATE RUNWAY 11/29
IDA No: MTO-4320
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

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PROPOSED DRAINAGE PLAN
STA. 99+00 TO 115+01



LEGEND

- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED SEEDING AND MULCHING LIMITS
- PROPOSED MINOR CONTOURS
- PROPOSED MAJOR CONTOURS

**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

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**PROPOSED STAKING
PLAN RUNWAY 11-29
STA. 49+00 TO 62+00**

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**REHABILITATE
RUNWAY 11/29**

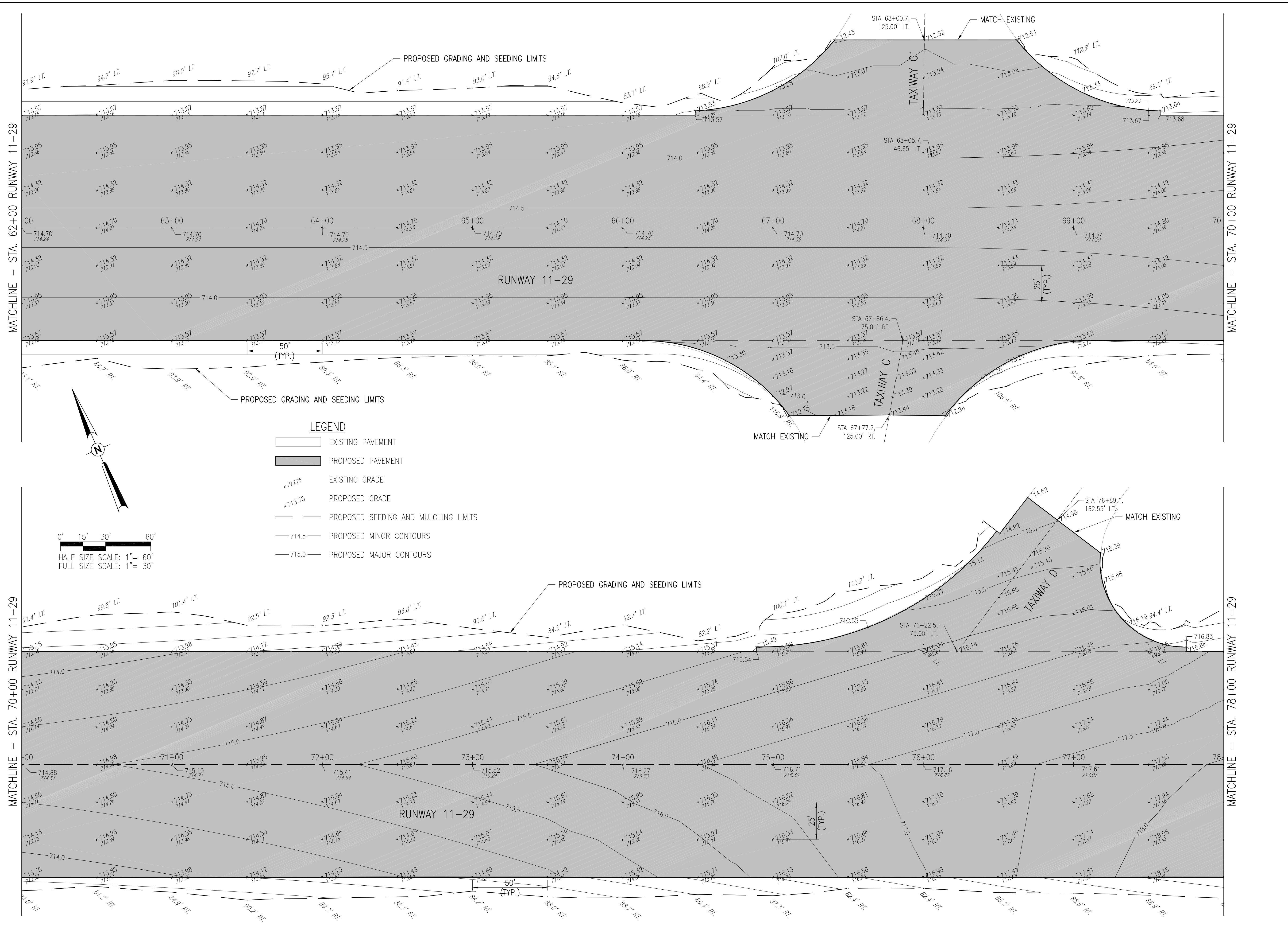
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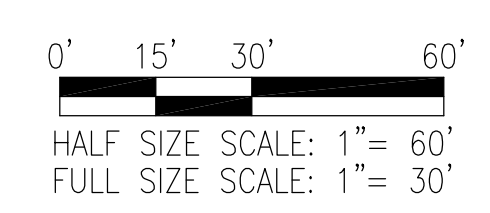
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**PROPOSED STAKING
PLAN RUNWAY 11-29
STA. 62+00 TO 78+00**

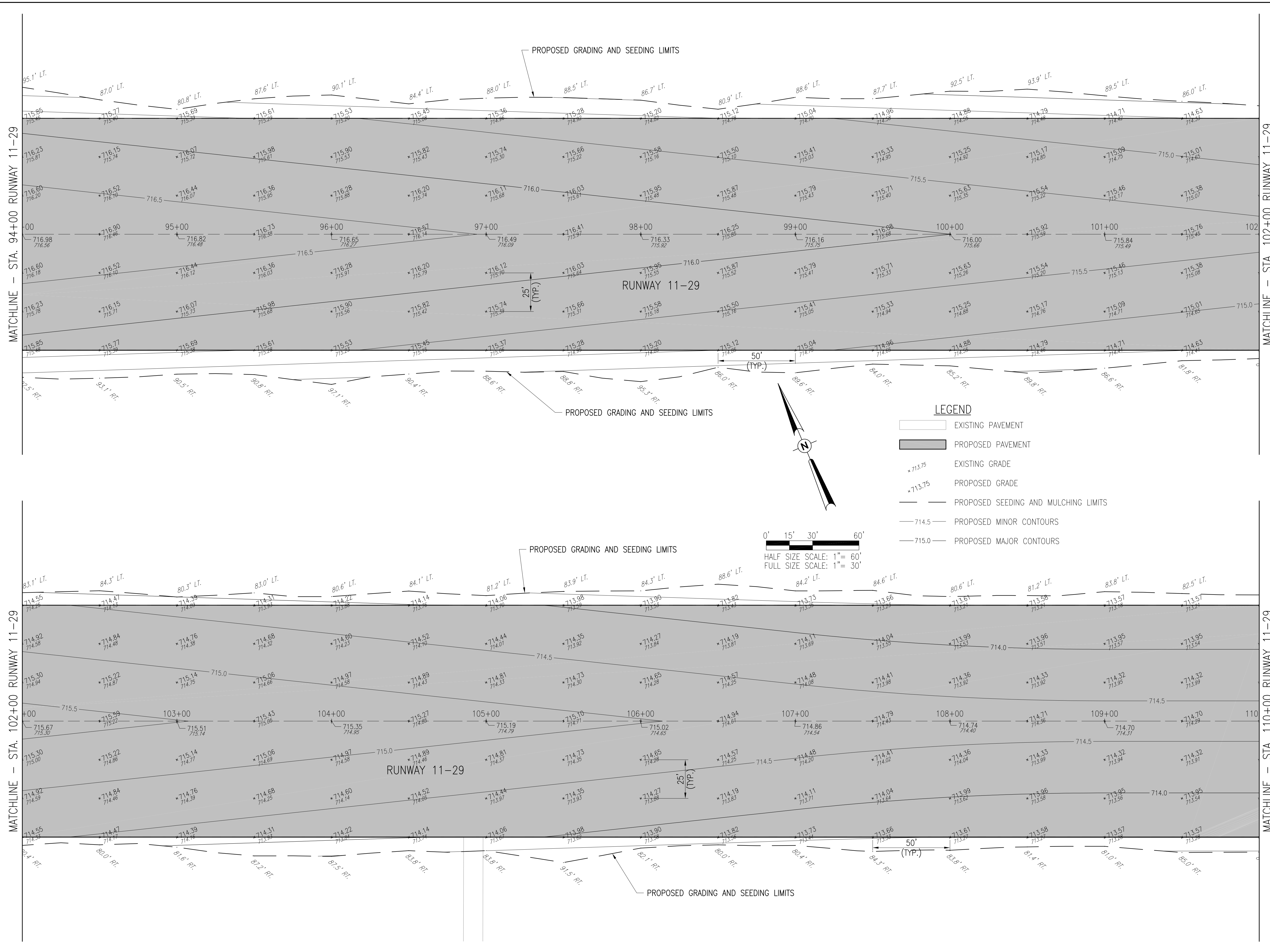


LEGEND

- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED SEEDING AND MULCHING LIMITS
- PROPOSED MINOR CONTOURS
- PROPOSED MAJOR CONTOURS



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**REHABILITATE
RUNWAY 11/29**

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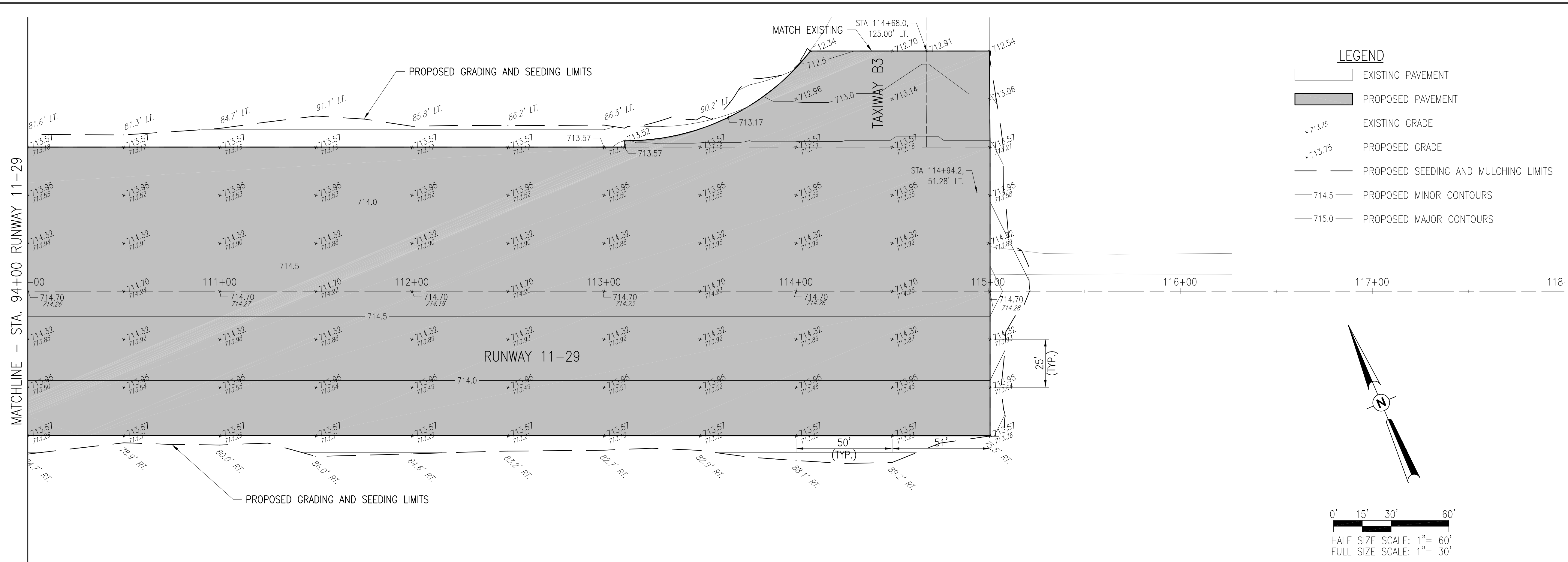
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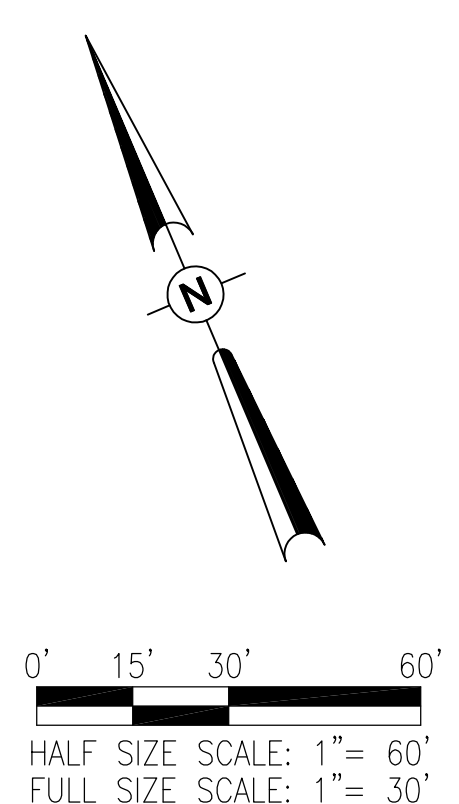
**PROPOSED STAKING
PLAN RUNWAY 11-29
STA. 94+00 TO 110+00**

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LEGEND

[White Box]	EXISTING PAVEMENT
[Grey Box]	PROPOSED PAVEMENT
- - - 713.75	EXISTING GRADE
- - - 713.75	PROPOSED GRADE
— — —	PROPOSED SEEDING AND MULCHING LIMITS
- - - 714.5	PROPOSED MINOR CONTOURS
— — — 715.0	PROPOSED MAJOR CONTOURS



908 MULCHING NOTES

1. THE PROPOSED MULCHING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ITEM 908 "MULCHING" AS STATED ON PAGE 330 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
2. THIS ITEM SHALL CONSIST OF THE FURNISHING, TRANSPORTING, AND PLACING MULCH OVER THE SEEDED AREA. DISTURBED AREAS OUTSIDE THE GRADING LIMITS SHALL ALSO BE MULCHED AND PARTICIPATION WILL BE THE SAME AS FOR SEEDED AREAS.
3. 908-2.1 MULCH MATERIAL: THE CONTRACTOR MAY EITHER FURNISH STRAW OR HYDROMULCH AS THE TYPE OF MULCH MATERIAL TO BE USED ON THIS PROJECT.
4. 908-3.1 MULCHING: THE HYDRAULIC MULCH SHALL BE APPLIED AS A SLURRY OF 2,500 POUNDS OF MULCH AND NOT LESS THAN 2,500 GALLONS OF WATER PER ACRE.
5. 908-3.4 STRUCTURE CLEANING: AFTER THE PROPOSED MULCH HAS BEEN APPLIED, THE CONTRACTOR WILL CLEAN THE MULCH OFF ALL STRUCTURES (DRAINAGE, ELECTRICAL, LIGHTS, SIGNS, ETC.).
6. DATE MULCHING COMPLETED _____.
7. THE PROPOSED MULCHING WILL BE PAID FOR UNDER ITEM: AR908510 "MULCHING" _____ PER ACRE

901 SEEDING NOTES

1. THE PROPOSED SEEDING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ITEM 901 "SEEDING" AS STATED ON PAGE 319 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
2. ALL DISTURBED AREAS LOCATED WITHIN THE PROPOSED GRADING AND SEEDING LIMITS WILL BE SEEDED IN ACCORDANCE WITH THE ABOVE NOTED SPECIFICATION. ALL AREAS OUTSIDE THE DESIGNATED GRADING AND SEEDING LIMITS WILL ALSO BE SEEDED BUT AT THE CONTRACTOR'S OWN EXPENSE.
3. ALL MATERIALS AND/OR DEBRIS RESULTING FROM THE SEEDING OPERATIONS WILL BE REMOVED FROM THE PAVEMENTS AND MISCELLANEOUS STRUCTURES PRIOR TO OPENING THE RUNWAY.
4. 901-3.4 MAINTENANCE OF SEEDED AREAS. DELETE THE SECOND PARAGRAPH OF THIS SECTION AND ADD THE FOLLOWING:
5. "THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE RESIDENT ENGINEER. IF AT THE TIME WHEN THE CONTRACT HAS BEEN OTHERWISE COMPLETED, IT IS NOT POSSIBLE TO MAKE AN ADEQUATE DETERMINATION OF COLOR, DENSITY, AND UNIFORMITY OF SUCH STAND OF GRASS, THE ITEM OF WORK WILL BE REVIEWED AT A LATER DATE DETERMINED BY THE ILLINOIS DIVISION OF AERONAUTICS."
6. DATE SEEDING COMPLETED _____.
7. THE PROPOSED SEEDING WILL BE PAID FOR UNDER ITEM: AR901510 "SEEDING" _____ PER ACRE

EARTH SHOULDER ADJUSTMENT

1. THE EXISTING EARTH SHOULDERS ADJACENT TO ALL PROPOSED PAVING AREAS WILL BE ADJUSTED AS SHOWN ON THESE SHEETS AND ON THE CROSS-SECTIONS. THE EXISTING SOD WILL BE TILLED/DISKED THOROUGHLY TO REMOVE ANY CLUMPS OR CLODS AND TO INCORPORATE ANY TOPSOIL MATERIAL BROUGHT IN TO BRING THE SHOULDERS TO GRADE. THE DROP-OFF FROM PAVEMENT TO SHOULDER WILL NOT EXCEED ONE AND A HALF INCHES (1-1/2"). THE SHOULDER MATERIAL WILL NOT REQUIRE COMPACTING, OTHER THAN LIGHT ROLLING AND SHAPING.
2. THE EARTH SHOULDERS SHALL BE CONSTRUCTED WITH A QUALITY TOPSOIL MATERIAL OBTAINED FROM OFF-SITE AND FREE OF LARGE CLUMPS, ROCKS, AND OTHER FOREIGN MATERIAL. NO COMPACTION, GRADATION, ORGANIC CONTENT OR PH TESTING WILL BE REQUIRED, PROVIDED THE TOPSOIL MEETS THE APPROVAL OF THE RESIDENT ENGINEER AND FACILITATES THE GROWTH OF THE SEEDING.
3. APPROXIMATELY 985 CUBIC YARDS OF OFF-SITE TOPSOIL MATERIAL WILL BE NEEDED FOR THE SHOULDER ADJUSTMENT. THE QUANTITY IS GIVEN FOR ESTIMATING PURPOSES ONLY AND WILL NOT BE MEASURED FOR ANY KIND OF PAYMENT OR UNIT PRICE ADJUSTMENT TO THE PAY ITEM.
4. THE PROPOSED EARTH SHOULDER ADJUSTMENT WILL BE PAID FOR UNDER: ITEM AR152480 "SHOULDER ADJUSTMENT" _____ PER S.Y.

EXISTING RUNWAY/TAXIWAY LIGHT NOTES

1. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE EXISTING RUNWAY AND TAXIWAY LIGHTS AND BASES/STAKES THAT ARE LOCATED WITHIN THE PROPOSED CONSTRUCTION LIMITS.
2. ANY DAMAGE TO ANY RUNWAY OR TAXIWAY LIGHT AND OR ITS' BASE/STAKE WILL BE REPAIRED/REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

**REHABILITATE
RUNWAY 11/29**

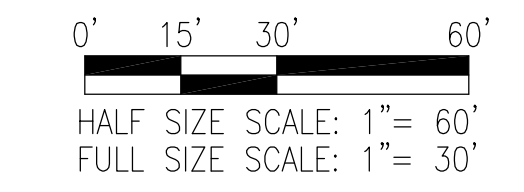
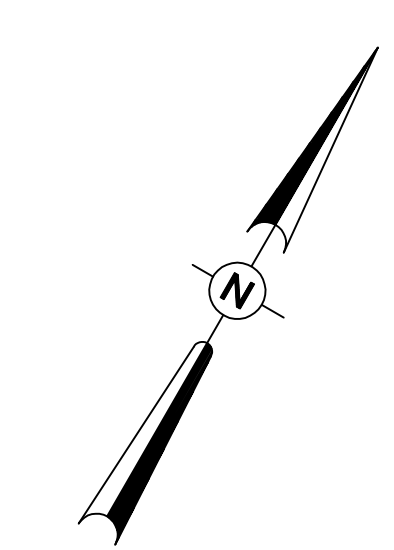
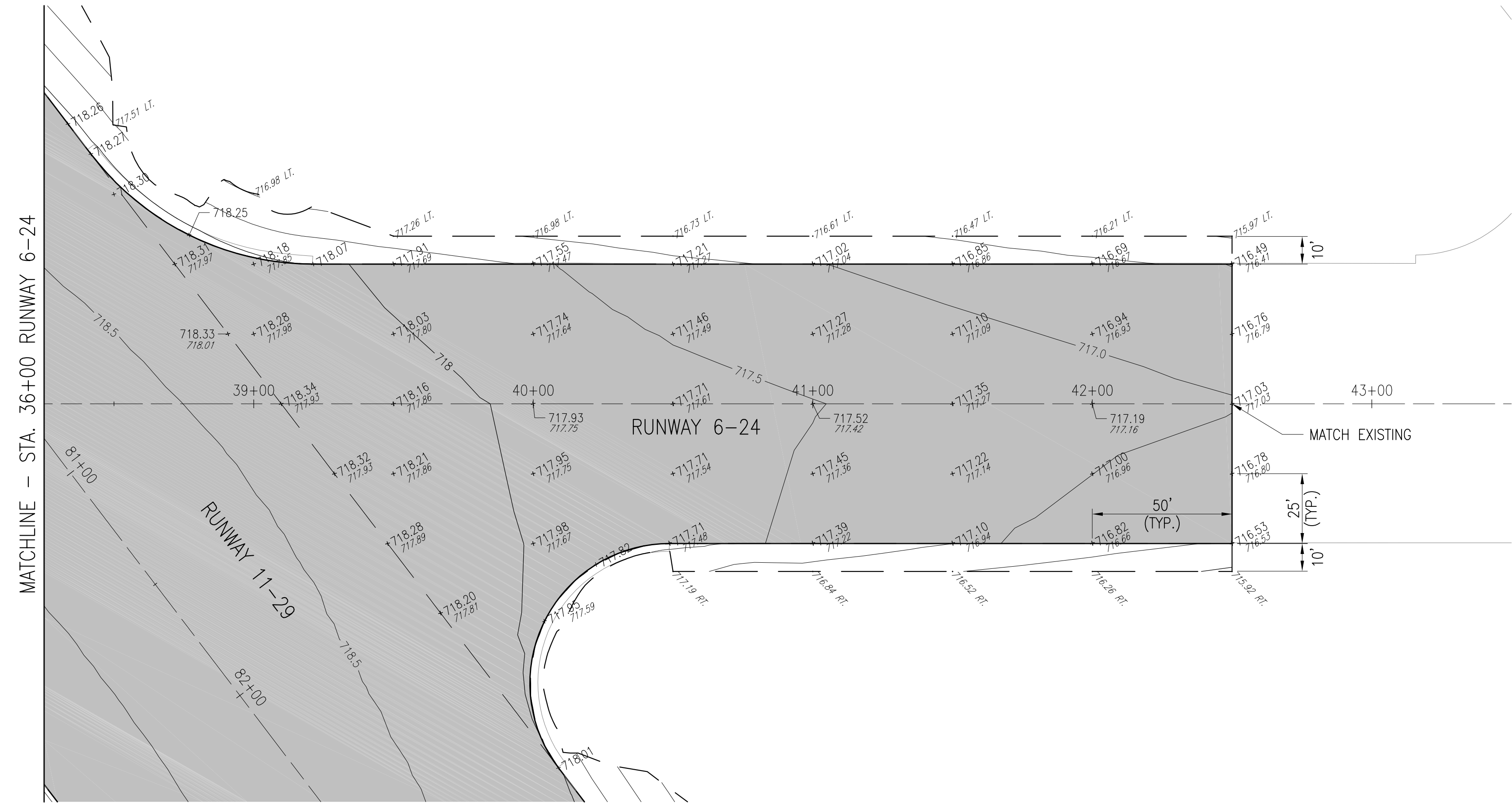
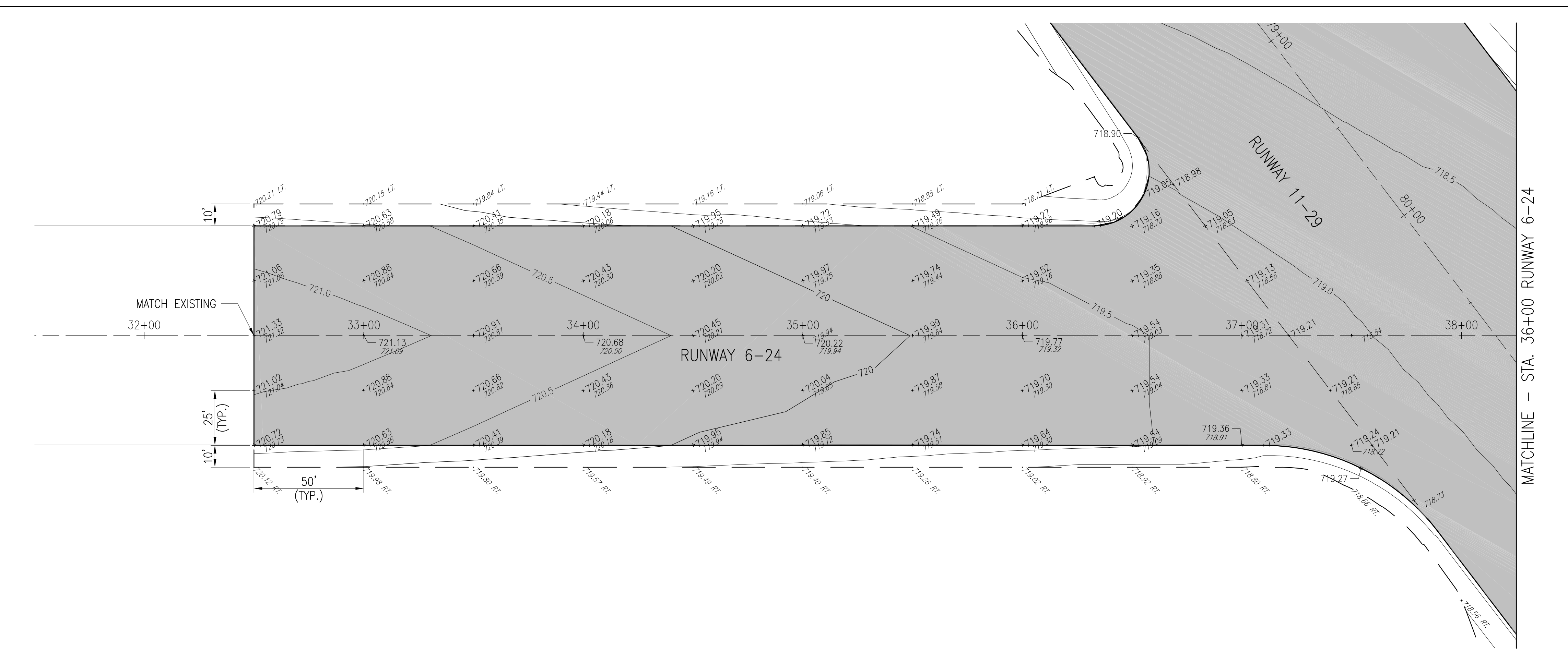
IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

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PROJECT NO: 14A0005D
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**PROPOSED STAKING
PLAN RUNWAY 11-29
STA. 110+00 TO 116+00**



- LEGEND**
- EXISTING PAVEMENT
 - PROPOSED PAVEMENT
 - + 713.75 EXISTING GRADE
 - + 713.75 PROPOSED GRADE
 - PROPOSED SEEDING AND MULCHING LIMITS
 - 714.5 — PROPOSED MINOR CONTOURS
 - 715.0 — PROPOSED MAJOR CONTOURS

**REHABILITATE
RUNWAY 11/29**

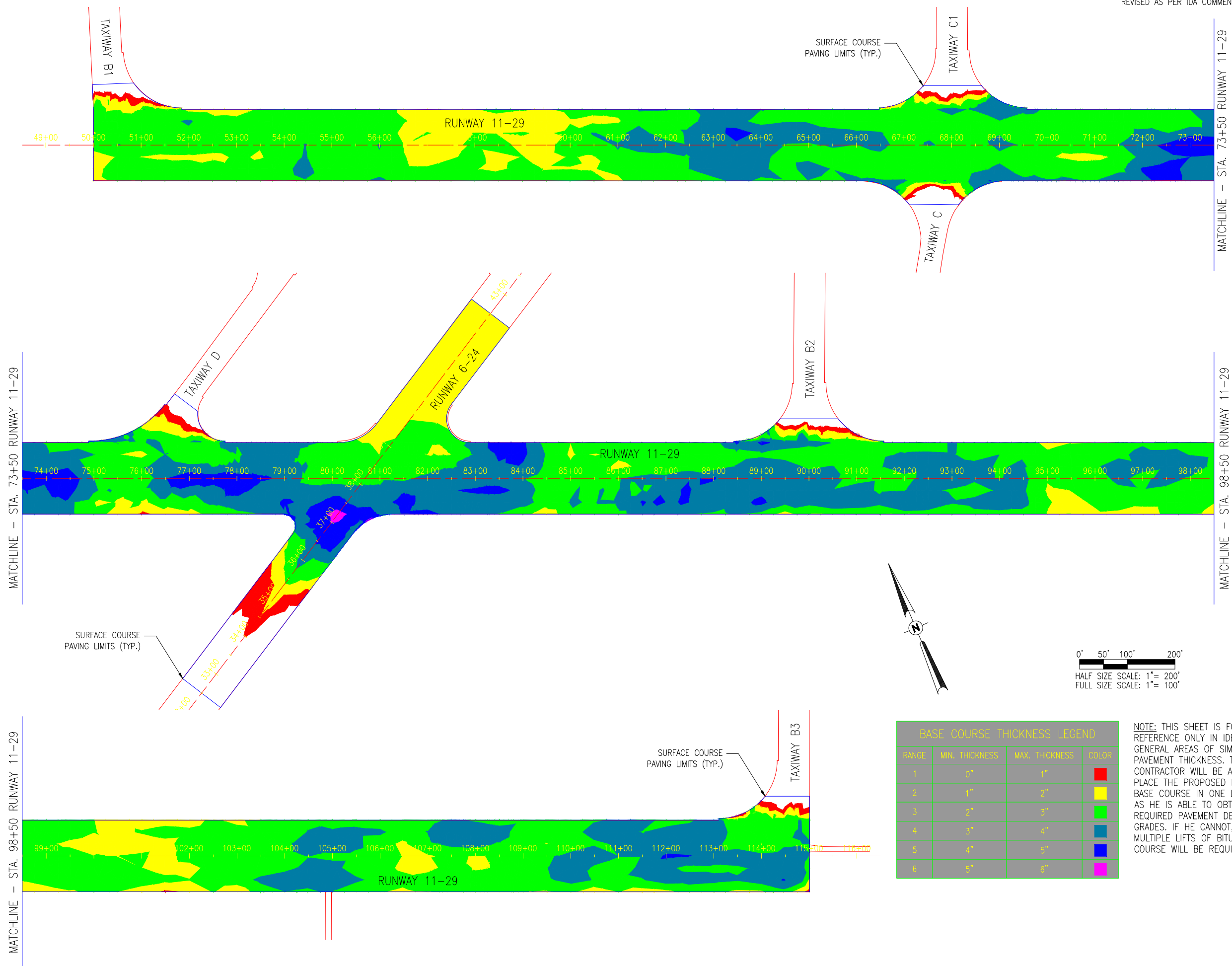
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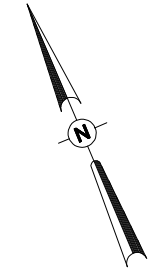
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**PROPOSED STAKING
PLAN RUNWAY 6-24
STA. 32+50 TO 42+50**



SURFACE COURSE PAVING LIMITS (TYP.)

SURFACE COURSE PAVING LIMITS (TYP.)



0' 50' 100' 200'
HALF SIZE SCALE: 1" = 200'
FULL SIZE SCALE: 1" = 100'

BASE COURSE THICKNESS LEGEND			
RANGE	MIN. THICKNESS	MAX. THICKNESS	COLOR
1	0"	1"	Red
2	1"	2"	Yellow
3	2"	3"	Green
4	3"	4"	Blue
5	4"	5"	Dark Blue
6	5"	6"	Pink

NOTE: THIS SHEET IS FOR USE AS A REFERENCE ONLY IN IDENTIFYING GENERAL AREAS OF SIMILAR PAVEMENT THICKNESS. THE CONTRACTOR WILL BE ALLOWED TO PLACE THE PROPOSED BITUMINOUS BASE COURSE IN ONE LIFT AS LONG AS HE IS ABLE TO OBTAIN THE REQUIRED PAVEMENT DENSITIES AND GRADES. IF HE CANNOT, THEN MULTIPLE LIFTS OF BITUMINOUS BASE COURSE WILL BE REQUIRED.

MATCHLINE - STA. 73+50 RUNWAY 11-29

MATCHLINE - STA. 98+50 RUNWAY 11-29

MATCHLINE - STA. 98+50 RUNWAY 11-29

MATCHLINE - STA. 73+50 RUNWAY 11-29

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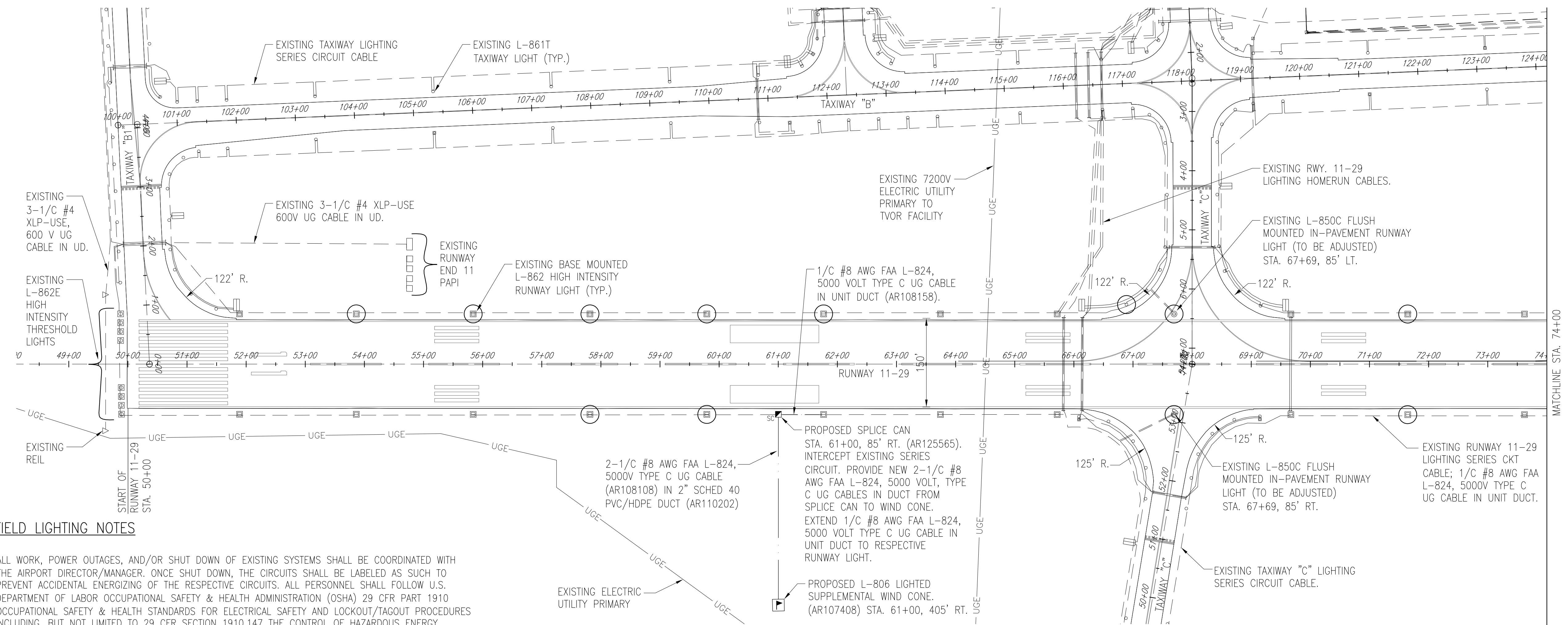
REHABILITATE RUNWAY 11/29

IDA No: MTO-4320
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PROPOSED BASE COURSE THICKNESS PLAN



AIRFIELD LIGHTING NOTES

- ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT DIRECTOR/MANAGER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS. CONTRACTOR SHALL FIELD VERIFY RESPECTIVE CIRCUITS AND POWER SOURCES PRIOR TO REMOVING OR DISCONNECTING THE RESPECTIVE AIRFIELD LIGHTING, NAVAID, OR OTHER DEVICE.
- PROPOSED WIND CONES, OTHER AIRFIELD LIGHTING, SPLICE CANS, ELECTRICAL DUCTS, AND CABLE SHALL BE INSTALLED AT THE LOCATIONS SHOWN AND IN COMPLIANCE WITH THE SPECIFICATIONS, SPECIAL PROVISIONS, RESPECTIVE DETAILS, AND MANUFACTURER'S RECOMMENDATIONS.
- PROPOSED CABLE FOR AIRFIELD LIGHTING SHALL BE INSTALLED APPROXIMATELY 12' FROM THE PAVEMENT EDGE OR PERPENDICULAR TO THE RESPECTIVE PAVEMENT EDGE WHERE RUNNING TO A WIND CONE. CABLES AND DUCTS SHALL BE PLACED A MINIMUM OF 18" BELOW FINISHED GRADE.
- THE PROPOSED RUNWAY AND TAXIWAY LIGHTING CABLE SHALL BE 1/C, #8 AWG, FAA L-824, 5000 VOLT, TYPE C UNDERGROUND CABLE IN DUCT OR UNIT DUCT.
- IN AREAS WHERE THERE IS A CONGESTION OF CABLES OR WHERE THE PROPOSED CABLE CROSSES AN EXISTING CABLE, THE CONTRACTOR IS REQUIRED TO HAND DIG THE TRENCH NECESSARY FOR THE PROPOSED CABLE. AT OTHER LOCATIONS, THE PROPOSED CABLE MAY BE TRENCHED OR PLOWED INTO PLACE. HAND DIGGING, TRENCHING AND/OR PLOWING WILL BE CONSIDERED INCIDENTAL TO THE PROPOSED CABLES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL SECURE, IDENTIFY AND PLACE ALL TEMPORARY EXPOSED WIRING IN CONDUIT, DUCT OR UNIT DUCT TO PREVENT ELECTROCUTION AND FIRE IGNITION SOURCES AS PER THE REQUIREMENTS OF FAA AC 150/5370-2F, PART 218, PARAGRAPH C. ALL LABOR, MATERIALS, AND TIME NECESSARY TO COMPLY WITH THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- EXISTING AIRFIELD LIGHTING CABLES (SCHEDULED FOR REPLACEMENT) IN AREAS OF NEW WORK SHALL BE DISCONNECTED & REMOVED WHERE IN CONFLICT WITH NEW CONSTRUCTION. IN OTHER AREAS CABLES MAY BE ABANDONED IN PLACE.
- THE CONTRACTOR IS REQUIRED TO FILL IN ALL HOLES AND DEPRESSIONS RESULTING FROM THE NEW WORK, WITH EARTH MATERIAL. THE AREAS SHALL BE COMPACTED TO PREVENT FUTURE SETTLEMENT AND FERTILIZED, SEEDED, AND MULCHED IN ACCORDANCE WITH ITEMS 901 AND 908 RESPECTIVELY.
- SEE "L-806 WIND CONE DETAILS" SHEET AND ITEM 107 SPECIAL PROVISIONS SPECS FOR REQUIREMENTS ON INSTALLATION OF L-806 SUPPLEMENTAL LIGHTED WIND CONES.
- IN THE EVENT THAT OTHER CONSTRUCTION PROJECTS ARE IN PROGRESS AT THE AIRPORT AT THE SAME TIME AS THIS PROJECT, THE CONTRACTOR WILL BE REQUIRED TO COOPERATE WITH ALL OTHER CONTRACTORS AND THE AIRPORT MANAGER IN THE COORDINATION OF THE WORK.
- NO CONNECTION TO AN ACTIVE LIGHTING CIRCUIT WILL BE BROKEN UNTIL THE CIRCUIT HAS BEEN TURNED OFF IN ACCORDANCE WITH NOTE 1.

PROPOSED RUNWAY 11 SUPPLEMENTAL LIGHTED WIND CONE LOCATION NOTE:

- FOR RUNWAY 11-29 THE RSA (RUNWAY SAFETY AREA) IS 500' WIDE X 1000' (OR 250' FROM RUNWAY 11-29 CENTERLINE). FOR RUNWAY 11-29 THE OFA (OBJECT FREE AREA) IS 800' WIDE X 1000' (OR 400' FROM RUNWAY 11-29 CENTERLINE). THE PROPOSED SUPPLEMENTAL LIGHTED WIND CONE IS LOCATED OUTSIDE THE RSA AND OFA TO COMPLY WITH THE REQUIREMENTS OF THE FAA AC 150/5340-30G. THE PROPOSED SUPPLEMENTAL LIGHTED WIND CONE IS LOCATED ON THE RIGHT SIDE OF THE RUNWAY 11 TO ACCOMMODATE TAXIWAY "B".

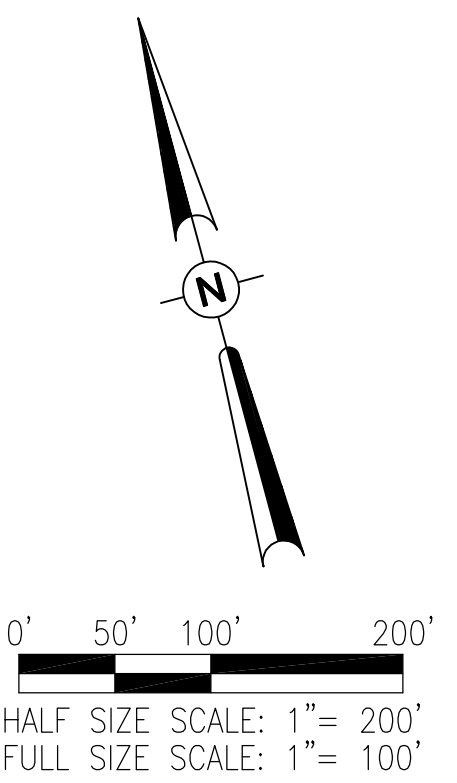
THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY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

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

PROPOSED SPLICE CAN STA. 61+00, 85' RT. (AR125565). INTERCEPT EXISTING SERIES CIRCUIT. PROVIDE NEW 2-1/C #8 AWG FAA L-824, 5000 VOLT, TYPE C UG CABLES IN DUCT FROM SPLICE CAN TO WIND CONE. EXTEND 1/C #8 AWG FAA L-824, 5000 VOLT TYPE C UG CABLE IN UNIT DUCT TO RESPECTIVE RUNWAY LIGHT.

PROPOSED L-806 LIGHTED SUPPLEMENTAL WIND CONE. (AR107408) STA. 61+00, 405' RT.

- LEGEND**
- [Symbol] EXISTING PAVEMENT
 - [Symbol] EXISTING MARKING
 - [Symbol] EXISTING ELECTRICAL DUCT
 - [Symbol] EXISTING ELECTRICAL CABLE
 - [Symbol] UGE EXISTING ELECTRIC UTILITY UNDERGROUND PRIMARY
 - [Symbol] PROPOSED 2-1/C #8 AWG FAA L-824, 5000 VOLT TYPE C UG CABLES IN 2" PVC/HDPE DUCT
 - [Symbol] PROPOSED 1/C #8 AWG FAA L-824, 5000 VOLT TYPE C UG CABLE IN UNIT DUCT
 - [Symbol] PROPOSED L-806 LIGHTED SUPPLEMENTAL WIND CONE
 - [Symbol] PROPOSED SPLICE CAN
 - [Symbol] EXISTING PAPI
 - [Symbol] EXISTING REILS
 - [Symbol] EXISTING BASE MOUNTED THRESHOLD LIGHT
 - [Symbol] EXISTING BASE MOUNTED RUNWAY LIGHT
 - [Symbol] EXISTING STAKE MOUNTED RUNWAY LIGHT
 - [Symbol] EXISTING BASE MOUNTED RUNWAY LIGHT (TO BE ADJUSTED)
 - [Symbol] EXISTING FLUSH MOUNTED IN-PAVEMENT RUNWAY LIGHT (TO BE ADJUSTED)
 - [Symbol] EXISTING STAKE MOUNTED TAXIWAY LIGHT (TO BE ADJUSTED)
 - [Symbol] EXISTING STAKE MOUNTED TAXIWAY LIGHT
 - [Symbol] EXISTING GUIDANCE SIGN
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 - [Symbol] EXISTING BASE MOUNTED TAXIWAY LIGHT



**REHABILITATE
RUNWAY 11/29**

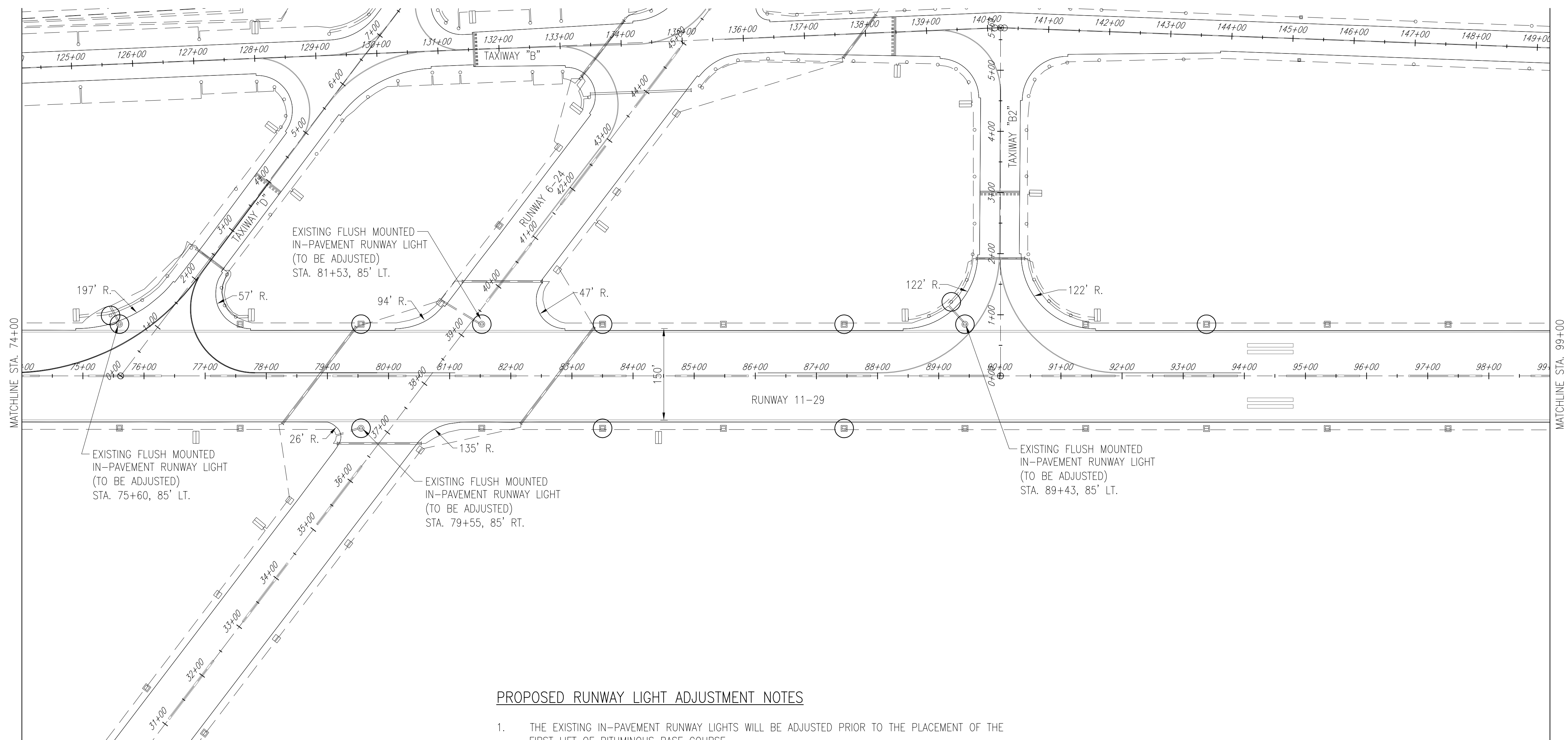
IDA No: MTO-4320

Contract No. CO061

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**PROPOSED
ELECTRICAL PLAN
STA. 50+00 TO 74+00**



PROPOSED RUNWAY LIGHT ADJUSTMENT NOTES

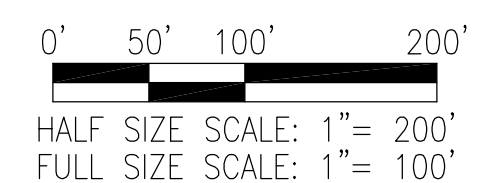
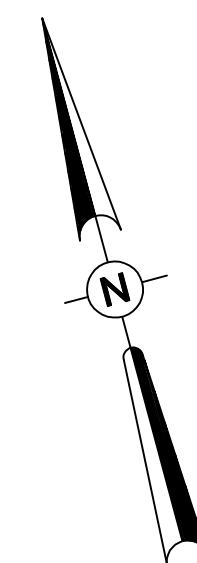
1. THE EXISTING IN-PAVEMENT RUNWAY LIGHTS WILL BE ADJUSTED PRIOR TO THE PLACEMENT OF THE FIRST LIFT OF BITUMINOUS BASE COURSE.
2. THE CONTRACTOR SHALL REMOVE THE EXISTING LIGHT FIXTURE, BASE PLATE AND ISOLATION TRANSFORMER FROM THE LIGHT BASE TO INSURE NO DAMAGE OCCURS TO THEM DURING THE PROPOSED CONSTRUCTION OPERATIONS. ONCE THE LIGHT BASE HAS BEEN ADJUSTED AND THE ADJACENT PAVING HAS BEEN COMPLETED THE CONTRACTOR WILL RETURN THE LIGHT FIXTURE, BASE PLATE AND ISOLATION TRANSFORMER TO THE ADJUSTED LIGHT BASE. ANY DAMAGE TO THE LIGHT FIXTURE AND/OR ISOLATION TRANSFORMER WILL BE REPAIRED/REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
3. THE CONTRACTOR WILL BOLT A COVER OVER THE BASE CAN TO PREVENT ANY FOREIGN MATERIAL FALLING INTO THE BASE CAN DURING CONSTRUCTION ACTIVITIES THAT OCCUR AFTER HE HAS REMOVED THE LIGHT FIXTURE.
4. THE CONTRACTOR WILL ADJUST EACH IN-PAVEMENT RUNWAY LIGHT TO A SUFFICIENT HEIGHT TO MATCH THE PROPOSED PAVEMENT AROUND IT. THE PROPOSED ADJUSTMENT WILL BE COMPLETED IN ACCORDANCE WITH THE DETAIL SHOWN ON SHEET NO. 38 OF THESE CONSTRUCTION PLANS.
5. THE EXISTING BASE MOUNTED RUNWAY LIGHTS AND THE EXISTING STAKE MOUNTED TAXIWAY LIGHTS ARE LOCATED 10' FROM THE PAVEMENT EDGE. THESE LIGHTS WILL BE ADJUSTED AT THE DISCRETION OF THE CONTRACTOR. ONCE ADJUSTED THESE LIGHTS WILL MATCH THE PROPOSED EARTH GRADE AROUND THEM.
6. THE EXISTING BASE MOUNTED RUNWAY LIGHTS WILL BE ADJUSTED IN ACCORDANCE WITH THE DETAIL SHOWN ON SHEET NO. 38 OF THESE CONSTRUCTION PLANS.
7. THE EXISTING STAKE MOUNTED TAXIWAY LIGHTS WILL BE ADJUSTED BY THE CONTRACTOR DIGGING UP THE LIGHT STAKE, ISOLATION TRANSFORMER AND CABLE LEADS AND THEN ADJUSTING THEM UPWARD TO THE PROPOSED EARTH GRADE AROUND THEM. THE ISOLATION TRANSFORMER AND CABLE LEADS WILL HAVE SAND PLACED AROUND AND OVER THEM PRIOR TO BACKFILLING WITH EARTH MATERIAL. THE EARTH MATERIAL WILL BE COMPACTED TO PREVENT ANY FUTURE SETTLEMENT.
8. THE PROPOSED LIGHT ADJUSTMENTS WILL BE PAID FOR UNDER ITEMS:
AR125941 ADJUST STAKE MOUNTED LIGHT -- PER EACH.
AR125942 ADJUST BASE MOUNTED LIGHT -- PER EACH.
AR125943 ADJUST INPAVEMENT LIGHT -- PER EACH.

LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- EXISTING ELECTRICAL DUCT
- EXISTING ELECTRICAL CABLE
- EXISTING PAPI
- EXISTING REILS
- EXISTING BASE MOUNTED THRESHOLD LIGHT
- EXISTING BASE MOUNTED RUNWAY LIGHT
- EXISTING STAKE MOUNTED RUNWAY LIGHT
- EXISTING BASE MOUNTED RUNWAY LIGHT (TO BE ADJUSTED)
- EXISTING FLUSH MOUNTED IN-PAVEMENT RUNWAY LIGHT (TO BE ADJUSTED)
- EXISTING STAKE MOUNTED TAXIWAY LIGHT (TO BE ADJUSTED)
- EXISTING GUIDANCE SIGN
- EXISTING STAKE MOUNTED TAXIWAY LIGHT
- EXISTING BASE MOUNTED TAXIWAY LIGHT

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

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**REHABILITATE
RUNWAY 11/29**

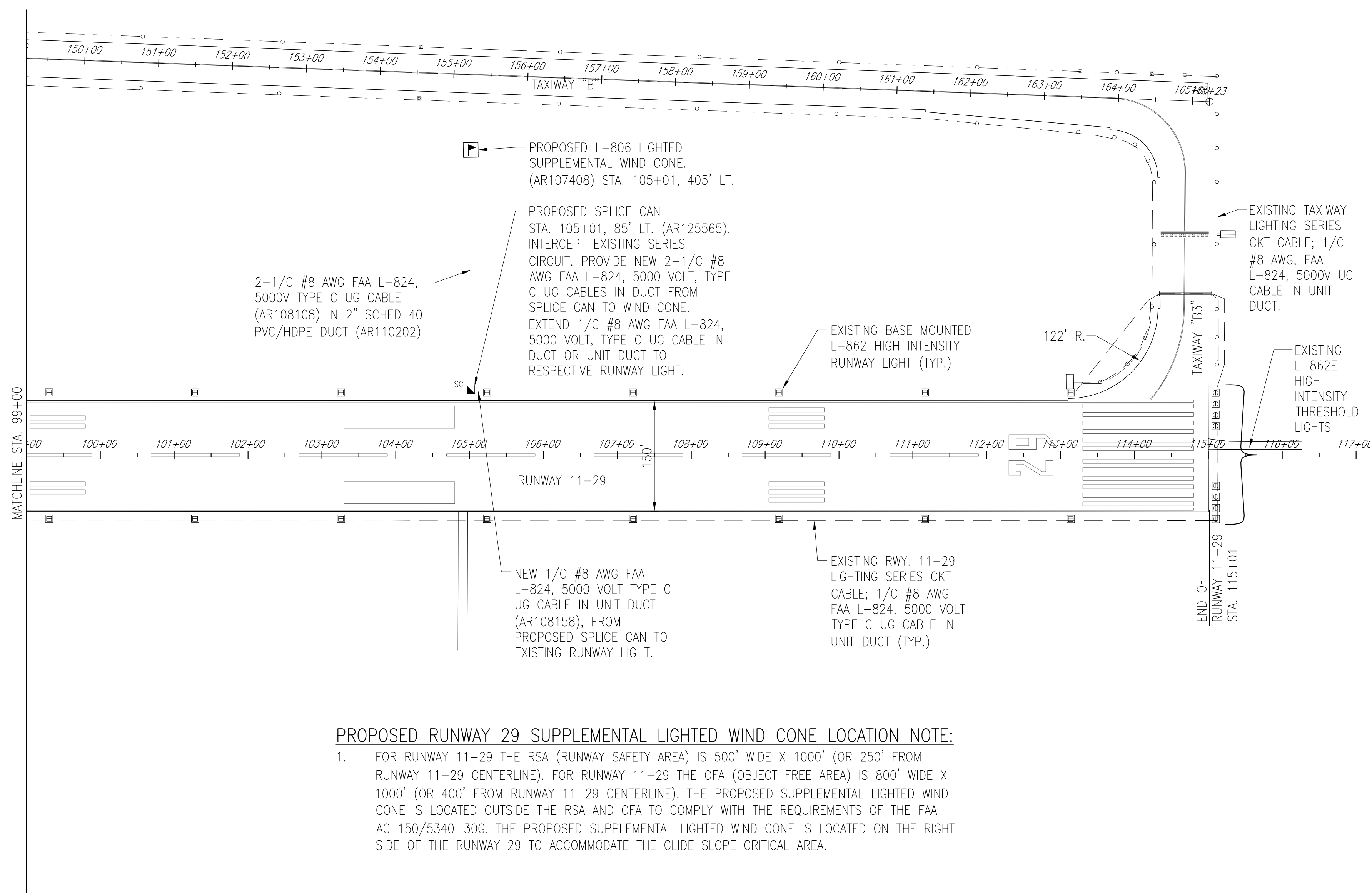
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**PROPOSED
ELECTRICAL PLAN
STA. 74+00 TO 99+00**

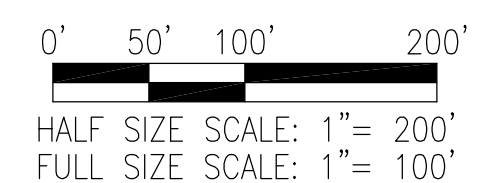
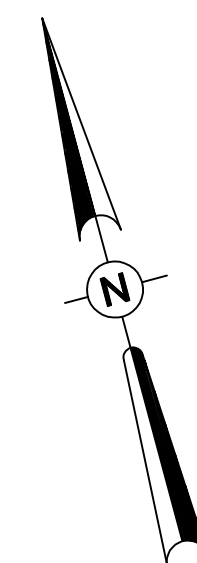


PROPOSED RUNWAY 29 SUPPLEMENTAL LIGHTED WIND CONE LOCATION NOTE:

- FOR RUNWAY 11-29 THE RSA (RUNWAY SAFETY AREA) IS 500' WIDE X 1000' (OR 250' FROM RUNWAY 11-29 CENTERLINE). FOR RUNWAY 11-29 THE OFA (OBJECT FREE AREA) IS 800' WIDE X 1000' (OR 400' FROM RUNWAY 11-29 CENTERLINE). THE PROPOSED SUPPLEMENTAL LIGHTED WIND CONE IS LOCATED OUTSIDE THE RSA AND OFA TO COMPLY WITH THE REQUIREMENTS OF THE FAA AC 150/5340-30G. THE PROPOSED SUPPLEMENTAL LIGHTED WIND CONE IS LOCATED ON THE RIGHT SIDE OF THE RUNWAY 29 TO ACCOMMODATE THE GLIDE SLOPE CRITICAL AREA.

LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- EXISTING ELECTRICAL DUCT
- EXISTING ELECTRICAL CABLE
- PROPOSED 2-1/C #8 AWG FAA L-824, 5000 VOLT TYPE C UG CABLES IN 2" PVC/HDPE DUCT
- PROPOSED 1/C #8 AWG FAA L-824, 5000 VOLT TYPE C UG CABLE IN UNIT DUCT
- PROPOSED L-806 LIGHTED SUPPLEMENTAL WIND CONE
- PROPOSED SPLICE CAN
- EXISTING PAPI
- EXISTING REILS
- EXISTING BASE MOUNTED THRESHOLD LIGHT
- EXISTING BASE MOUNTED RUNWAY LIGHT
- EXISTING STAKE MOUNTED RUNWAY LIGHT
- EXISTING FLUSH MOUNTED IN-PAVEMENT RUNWAY LIGHT (TO BE ADJUSTED)
- EXISTING GUIDANCE SIGN
- EXISTING STAKE MOUNTED TAXIWAY LIGHT
- EXISTING BASE MOUNTED TAXIWAY LIGHT



**REHABILITATE
RUNWAY 11/29**

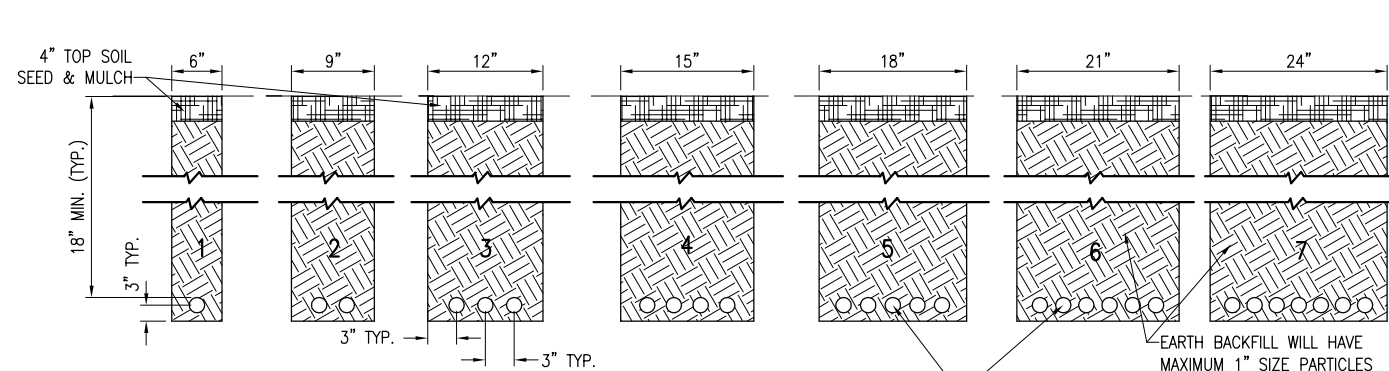
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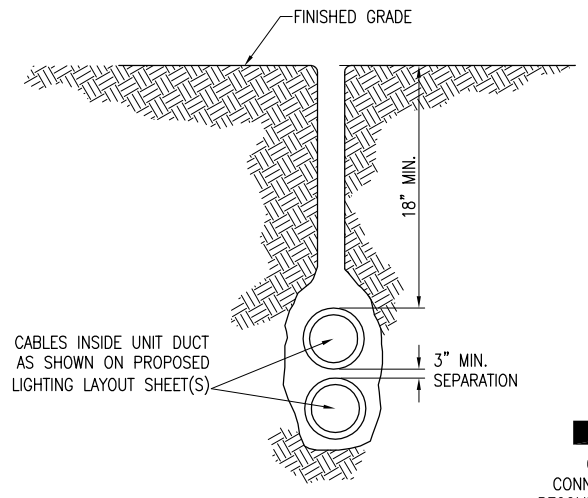
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CAD FILE: C-141ELE.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
REVIEWED BY: KNL 04/07/14
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SHEET TITLE

**PROPOSED
ELECTRICAL PLAN
STA. 99+00 TO 115+01**

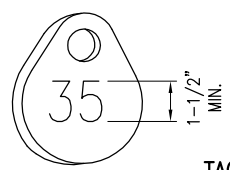


- NOTES:**
1. DETAIL NUMBERS INDICATE NO. OF CABLES.
 2. TRENCHES WITH MORE THAN SEVEN CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE; IF SPECIFIED ON PLANS TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
 3. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS. MINIMUM COVER REQUIREMENTS FOR CABLES AND DUCTS AT AIRPORT RUNWAYS OR ADJACENT AREAS WHERE TRESPASSING IS PROHIBITED IS 18 INCHES PER NEC 300.5 AND 300.50. COVER IS DEFINED AS THE SHORTEST DISTANCE IN INCHES MEASURED BETWEEN A POINT ON THE TOP SURFACE OF THE DIRECT-BURIED CONDUCTOR, CABLE, CONDUIT, OR OTHER RACEWAY AND THE TOP SURFACE OF FINISHED GRADE, CONCRETE, OR SIMILAR COVER.
 4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH.

CABLE TRENCHES
(NOT TO SCALE)

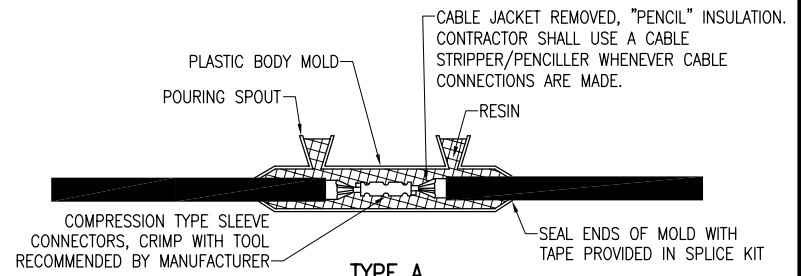


PLOWED CABLE
(NOT TO SCALE)



TAG DETAIL
(NOT TO SCALE)

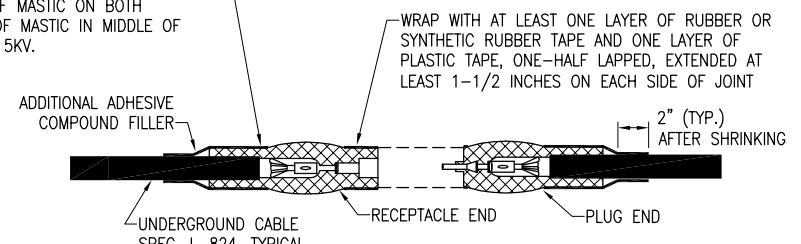
NOTE:
AFFIX NON-CORROSIVE TAG TO FIXTURE FACING RUNWAY WITH SET SCREW, WIRE TIE, OR METAL BAND. NUMERALS SHALL BE ENGRAVED FOR PERMANENT READABILITY.



TYPE A

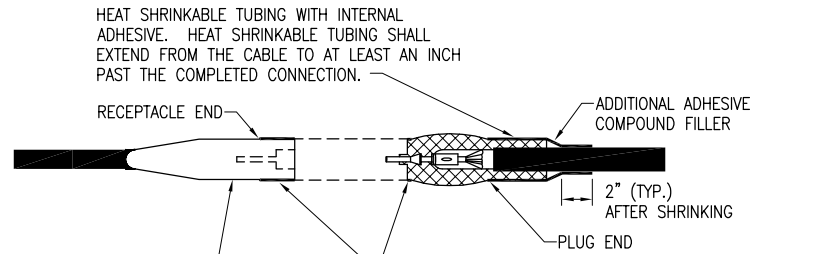
FOR SPLICES IN LOW VOLTAGE CABLE (600V) HOMERUNS FOR EXTENSIONS TO EXISTING LOW VOLTAGE CABLES ONLY. TYPE A SPLICES SHALL BE MADE IN SPLICE CANS, HANDHOLES, MANHOLES, OR JUNCTIONS BOXES

CONTINUOUS HEAT SHRINK TUBING PLACED OVER THE ENTIRE L-823 CONNECTOR(S) BOTH MALE AND FEMALE AT ALL 5KV JUNCTIONS. THE HEAT SHRINK TUBING SHALL BE APPROXIMATELY 18" IN LENGTH WITH 6 INCHES OF MASTIC ON BOTH ENDS AND VOID OF MASTIC IN MIDDLE OF TUBE RATED FOR 5KV.



TYPE B

FOR SPLICES AT JUNCTION OF HOMERUN WITH LOOP CIRCUIT AND FOR SPLICES IN HOMERUNS TO EXISTING CABLES



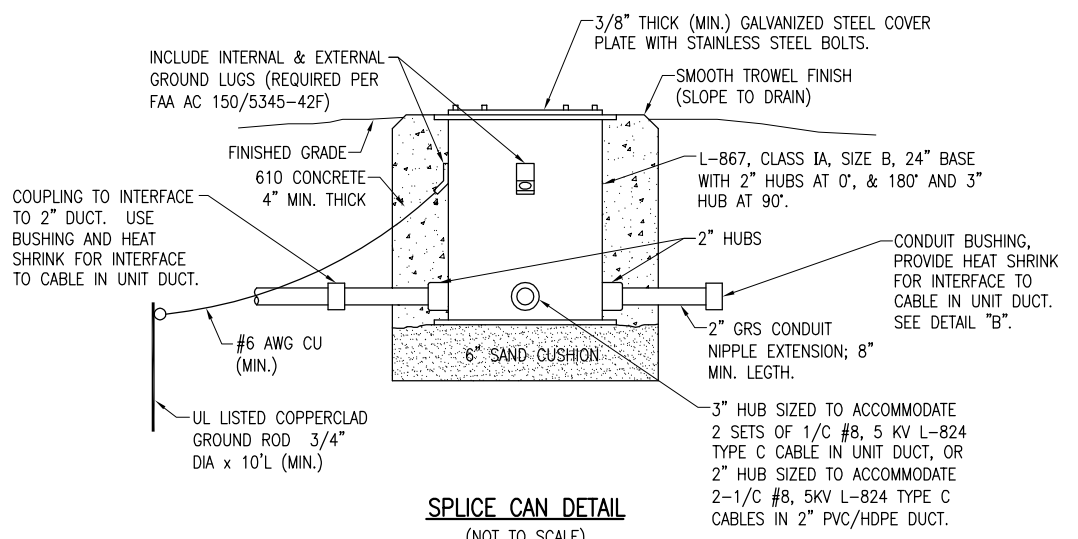
TYPE C

FOR SPLICES AT RUNWAY AND TAXIWAY LIGHTS

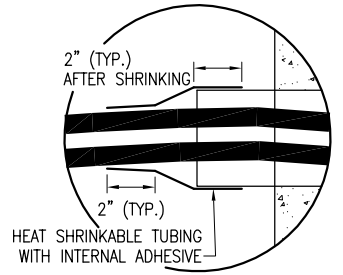
NOTES:
SEE PROPOSED LIGHTING LAYOUT SHEET(S) FOR SPLICE TYPE.
INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.

CABLE SPLICES
(NOT TO SCALE)

NOTE:
FOR THE PURPOSE OF ENHANCING SAFETY, EACH BASE MUST HAVE INSTALLED, BY THE MANUFACTURER, AN INTERNAL AND EXTERNAL GROUND STRAP THAT IS AVAILABLE FOR THE PURPOSE OF ATTACHING A GROUND LUG THAT IS CONNECTED TO AN EARTH GROUND OR A SAFETY GROUND CONDUCTOR INSTALLED WITH THE RESPECTIVE CIRCUIT. FOR AIRPORT PROJECTS RECEIVING FEDERAL FUNDS THIS REQUIREMENT IS MANDATORY PER FAA AC 150/5345-42F.



SPLICE CAN DETAIL
(NOT TO SCALE)



DETAIL "B"
(NOT TO SCALE)

REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

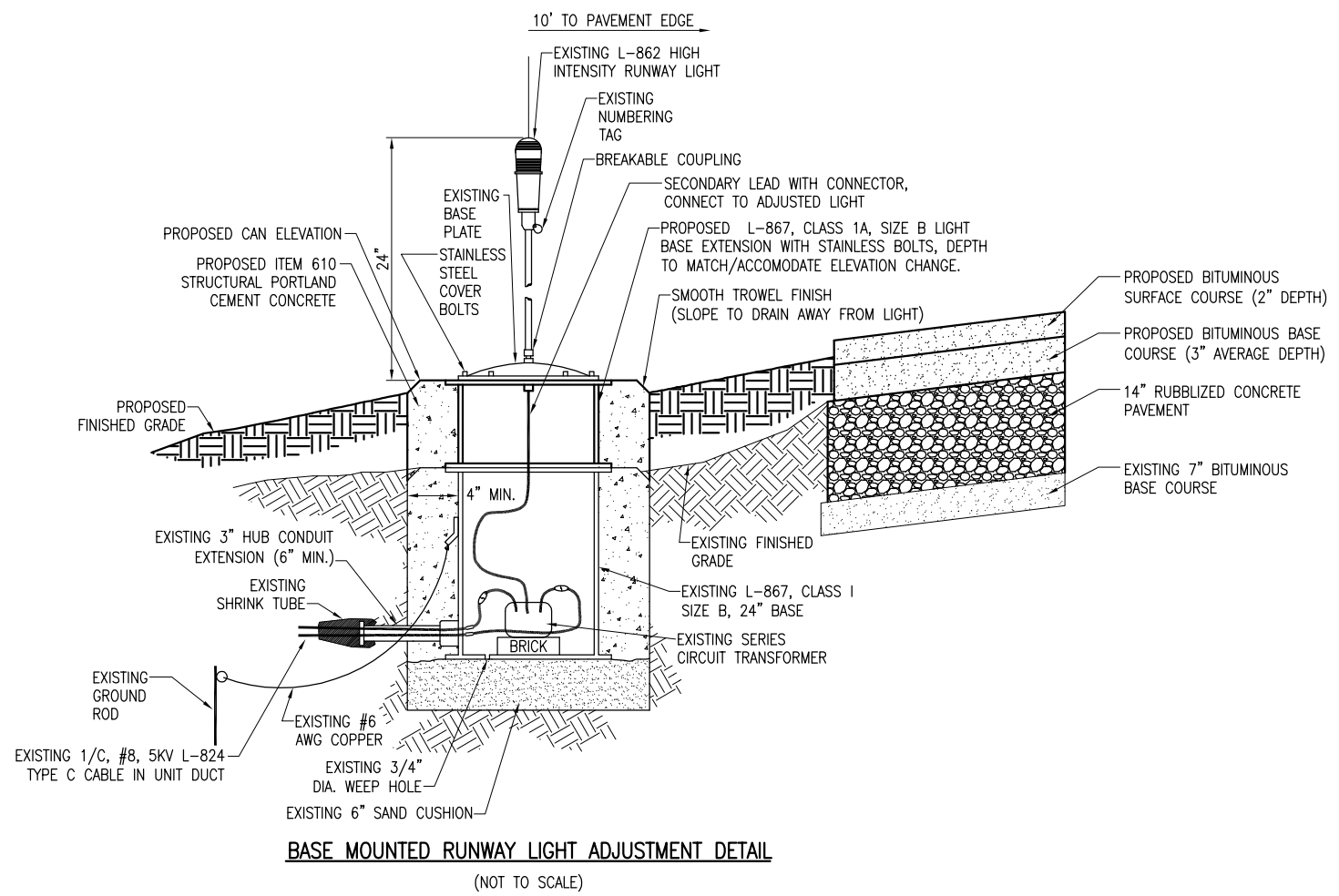
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ELECTRICAL DETAILS SHEET 1

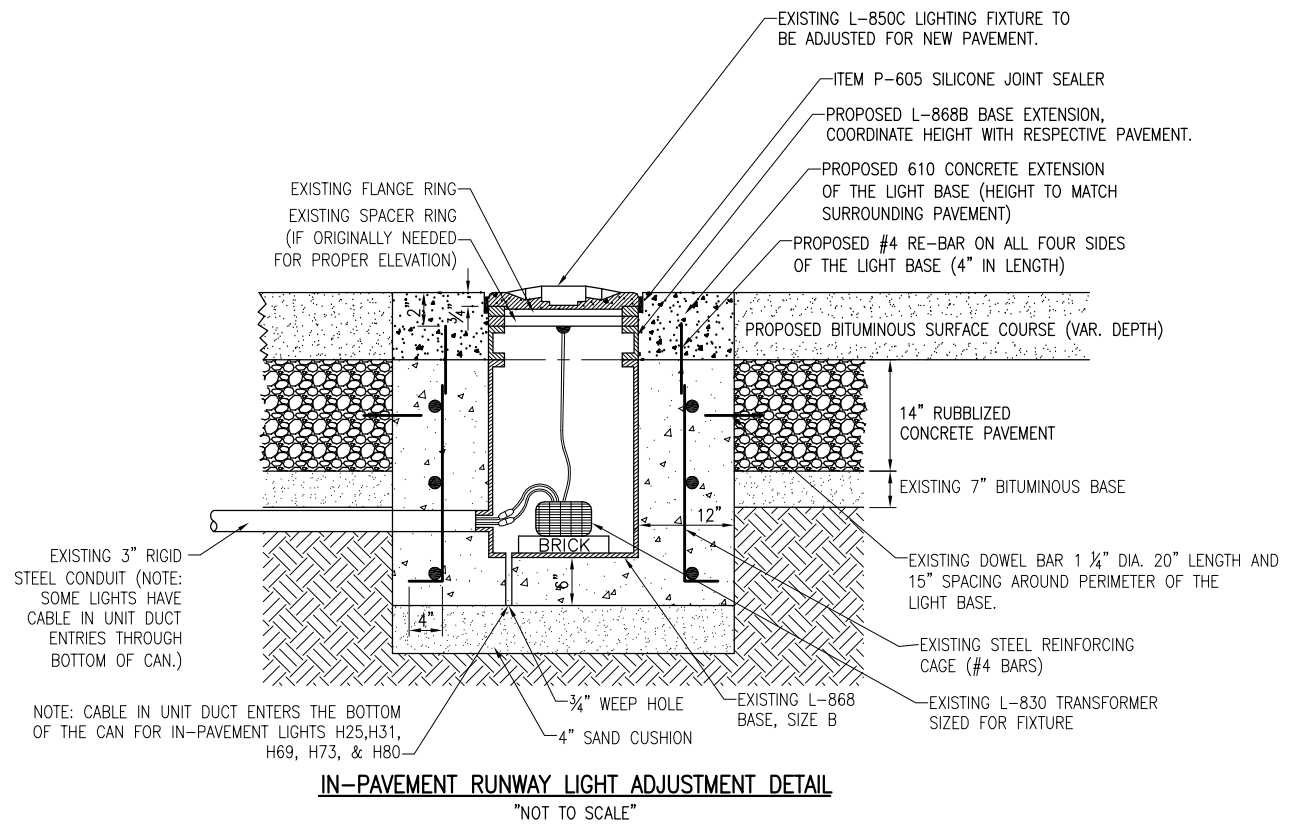
RUNWAY LIGHT ADJUSTMENT NOTES

1. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
2. CONTRACTOR SHALL EXAMINE THE SITE TO DETERMINE THE EXTENT OF THE WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS. THE EXISTING RUNWAY 11-29 LIGHTS AT THE COLES COUNTY AIRPORT ARE UNDERSTOOD TO BE POWERED BY THE RUNWAY 11-29 LIGHTING CONSTANT CURRENT REGULATORS LOCATED IN THE AIRPORT ELECTRICAL VAULT. CONTRACTOR SHALL FIELD VERIFY RESPECTIVE CIRCUITS AND POWER SOURCES PRIOR TO REMOVING OR DISCONNECTING THE RESPECTIVE AIRFIELD LIGHTING, NAVAID, OR OTHER DEVICE.
3. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF FAA AC NO. 150/5370-2F (OR MOST CURRENT ISSUE) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
4. CONTRACTOR SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE.
5. SOME OF THE EXISTING RUNWAY LIGHTS LOCATED ON RUNWAY 11-29 WILL REQUIRE ADJUSTMENT TO ACCOMMODATE SITE GRADING AND PAVEMENT WORK. EXISTING AIRFIELD LIGHTS THAT ARE DESIGNATED FOR ADJUSTMENT SHALL BE DISCONNECTED AND CAREFULLY REMOVED BY THE CONTRACTOR AS NOT TO DAMAGE THE LIGHT. THE LIGHT SHALL BE RE-INSTALLED WITH THE ADJUSTMENT.
6. ALL ELECTRICAL EQUIPMENT (INCLUDING AIRFIELD LIGHTING AND NAVAIDS) SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRIC CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS, AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, INTERTEK TESTING SERVICES VERIFICATION/LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
7. ANY AND ALL TRENCHES AND DISTURBED AREAS WILL BE BACKFILLED AND RESTORED TO A SMOOTH GRADE AND SEEDED TO THE SATISFACTION OF THE ENGINEER. ALL TRENCH SETTLEMENT SHALL BE CORRECTED FOR A PERIOD OF ONE YEAR. RESTORATION, GRADING, SEEDING, AND MULCHING OF AREAS DISTURBED DURING THE AIRFIELD LIGHT FIXTURE ADJUSTMENT WILL BE INCIDENTAL TO THE ADJUSTMENT OF THE RESPECTIVE AIRFIELD LIGHT FIXTURE.
8. NO CONNECTION TO AN ACTIVE LIGHTING CIRCUIT, NAVAID, OR OTHER CIRCUIT SHALL BE BROKEN UNTIL THE CIRCUIT HAS BEEN TURNED OFF IN ACCORDANCE WITH THE ABOVE NOTE 1.



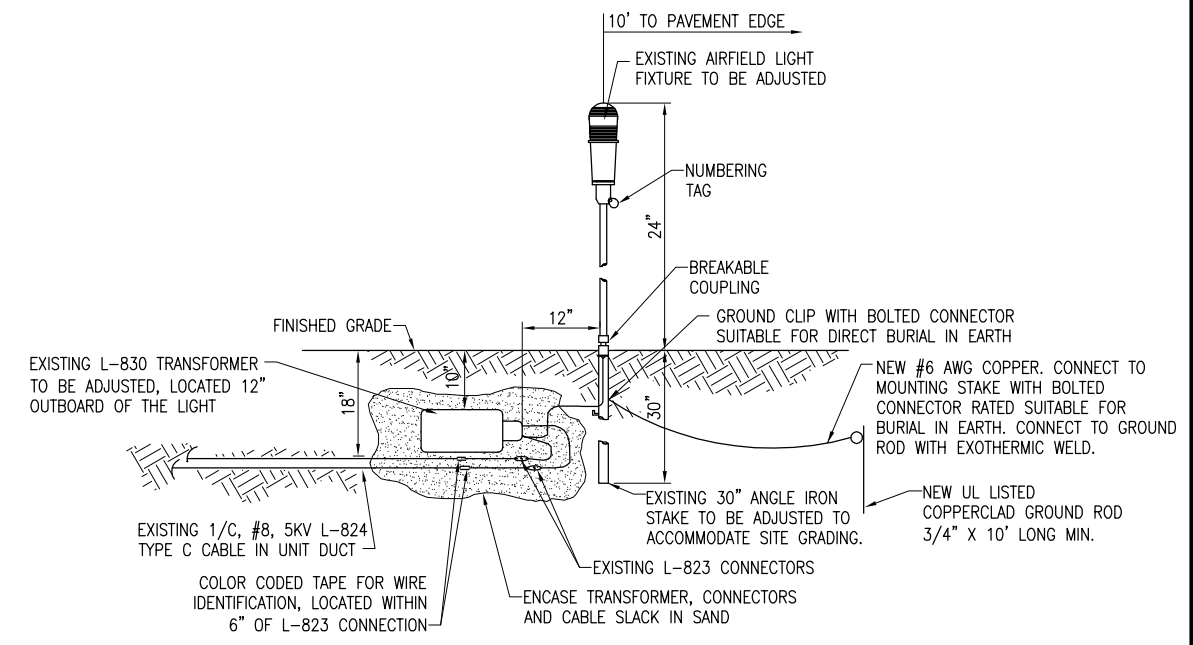
BASE MOUNTED RUNWAY LIGHT ADJUSTMENT DETAIL

(NOT TO SCALE)



IN-PAVEMENT RUNWAY LIGHT ADJUSTMENT DETAIL

"NOT TO SCALE"



STAKE MOUNTED LIGHT ADJUSTMENT DETAIL

(NOT TO SCALE)

REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

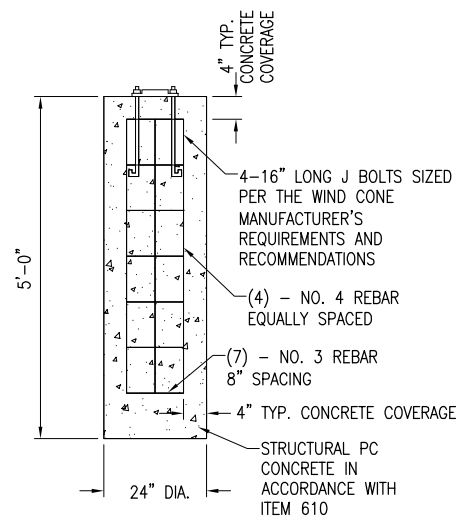
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

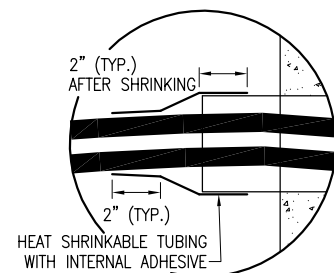
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SHEET TITLE

ELECTRICAL DETAILS SHEET 2

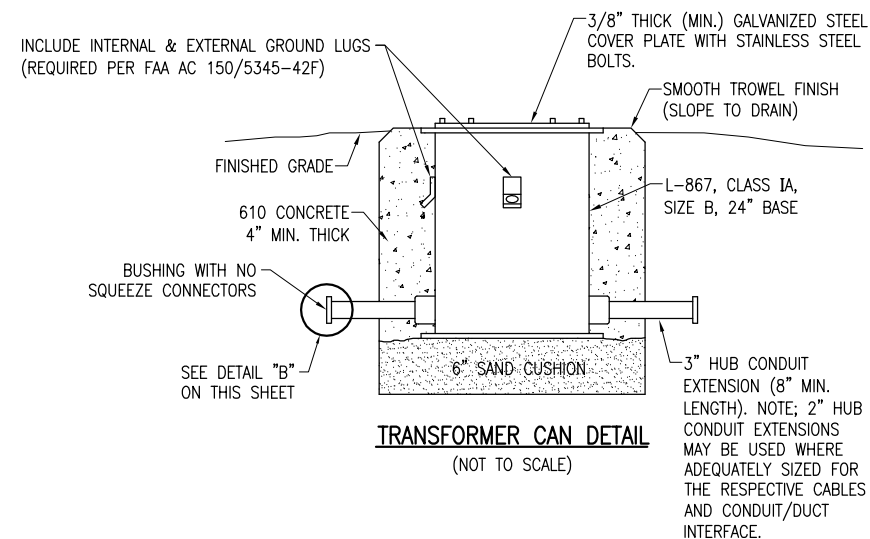
MAY 21, 2014 2:00 PM KINCA00394 pvc:\sp\svr\036.hanson.dom\chanson\Projects\Documents\14\jobs\14A0005D\CAD\Airport\SheetE-503DTLS



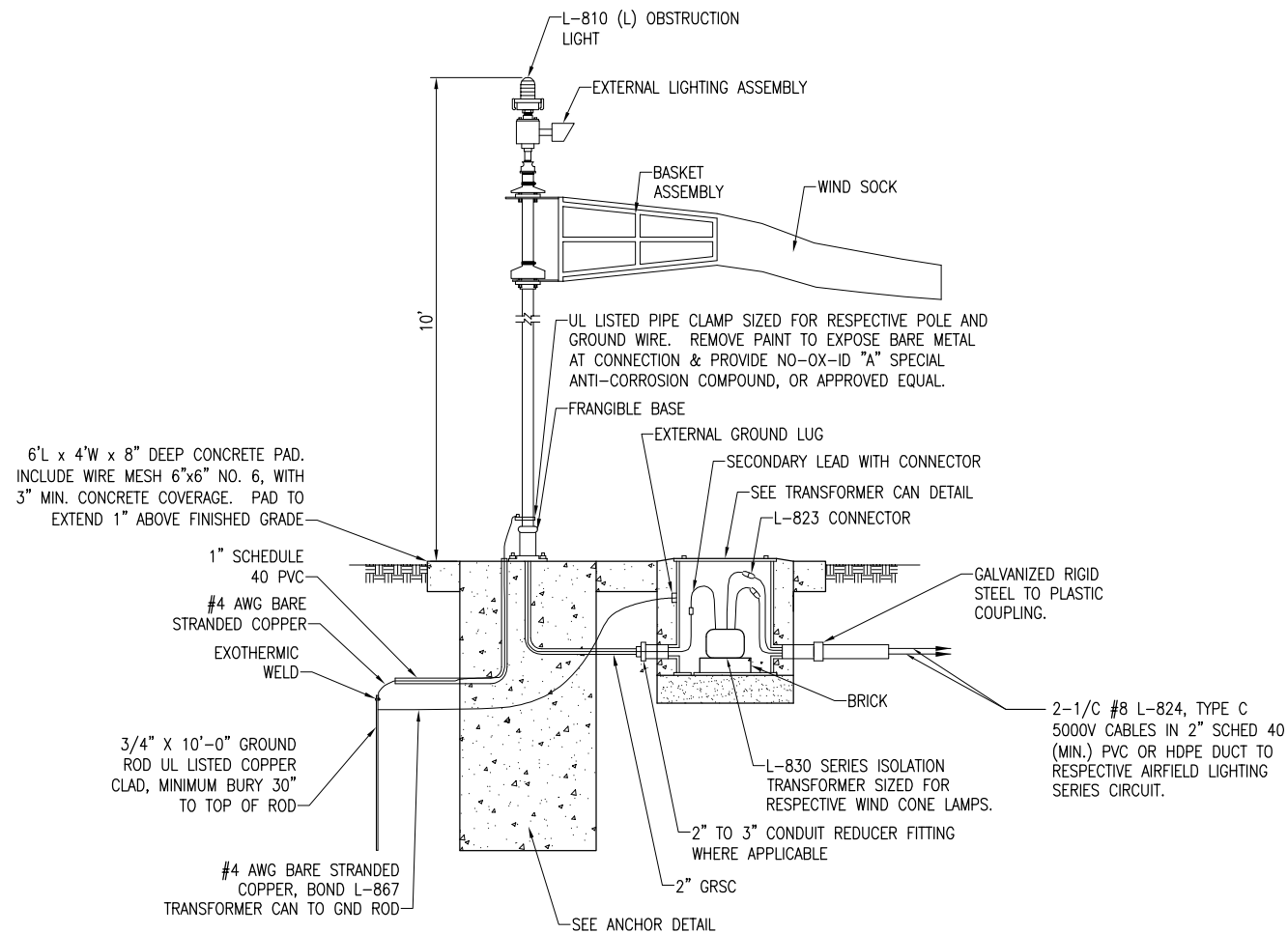
ANCHORING DETAIL
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DETAIL "B"
(NOT TO SCALE)

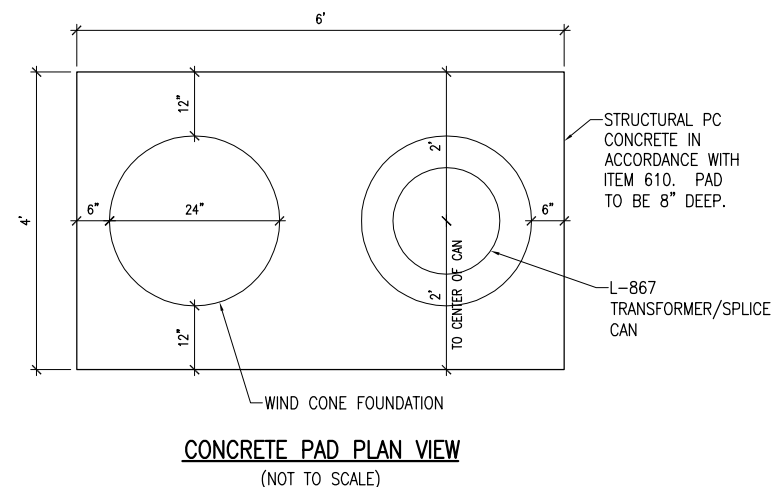


TRANSFORMER CAN DETAIL
(NOT TO SCALE)



NOTES

- SUPPLEMENTAL WIND CONES SHALL BE FAA APPROVED TYPE L-806(L) WITH LIGHT EMITTING DIODE ILLUMINATION, SIZE 1 (18-INCH DIAMETER BY 8 FEET LONG), AND SUITABLE FOR 6.6 AMP SERIES CIRCUIT POWER. WIND CONES SHALL INCLUDE CONSTANT-BRIGHTNESS SERIES CIRCUIT POWER ADAPTER. SEE SPECIAL PROVISION SPECS.
- THE RUNWAY 11-29 LIGHTING CIRCUIT IS POWERED BY AN L-828, CLASS 1 - 6.6 AMP OUTPUT CURRENT, STYLE 2-5 BRIGHTNESS STEPS CONSTANT CURRENT REGULATOR. COORDINATE WITH THE RESPECTIVE WIND CONE MANUFACTURER TO PROVIDE A COMPATIBLE AND PROPERLY SIZED SERIES ISOLATION TRANSFORMER FOR EACH WIND CONE.
- THE CONSTANT CURRENT REGULATOR POWERING THE SERIES CIRCUIT FOR THE WIND CONES HAS BEEN SIZED FOR THE RESPECTIVE RUNWAY LIGHTING LOADS AND WIND CONES THAT HAVE A LOAD OF LESS THAN 150VA AND DO NOT REQUIRE A SERIES ISOLATION TRANSFORMER LARGER THAN A 300 WATT RATING. IN THE EVENT THAT A WIND CONE IS PROPOSED THAT EXCEEDS THIS RATING, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT THE RESPECTIVE CONSTANT CURRENT REGULATOR IS PROPERLY SIZED FOR THE TOTAL SERIES CIRCUIT LOAD. WHERE A WIND CONE IS PROPOSED THAT REQUIRES LOADS THAT EXCEED THE RATING OF THE EXISTING CONSTANT CURRENT REGULATOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADJUSTMENTS INCLUDING PROVIDING A LARGER CONSTANT CURRENT REGULATOR AND ALL ASSOCIATED CIRCUIT BREAKERS, CONDUITS, WIRING AND VAULT WORK AS APPLICABLE TO ACCOMMODATE THE RESPECTIVE SERIES CIRCUIT LOAD WITH THE WIND CONE(S).
- SUPPLEMENTAL L-806 WIND CONES WILL BE PAID FOR UNDER ITEM AR107408 L-806 WIND CONE - 8' LIGHTED PER EACH. SPLICE CANS FOR WIND CONE SERIES CIRCUIT TRANSFORMERS WILL BE INCIDENTAL TO THE RESPECTIVE WIND CONE PAY ITEM.
- REBAR SHALL BE CONFORM TO THE REQUIREMENTS OF ASTM A706, GRADE 60 AND SHALL BE MANUFACTURED FROM 100% DOMESTIC STEEL.
- FOR EACH GROUNDING ELECTRODE SYSTEM (GROUND ROD) THE CONTRACTOR SHALL TEST THE MADE ELECTRODE GROUNDING SYSTEM WITH A INSTRUMENT THAT IS SPECIFICALLY DESIGNED FOR TESTING GROUNDING SYSTEMS. TEST RESULTS SHALL BE RECORDED FOR EACH GROUNDING ELECTRODE SYSTEM. IF GROUND RESISTANCE EXCEEDS 25 OHMS, CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTION. COPIES OF THE GROUND SYSTEM TEST RESULTS SHALL BE FURNISHED TO THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.



CONCRETE PAD PLAN VIEW
(NOT TO SCALE)

EXTERNALLY LIGHTED L806 WIND CONE (SERIES CIRCUIT TYPE)
"NOT TO SCALE"

REHABILITATE
RUNWAY 11/29

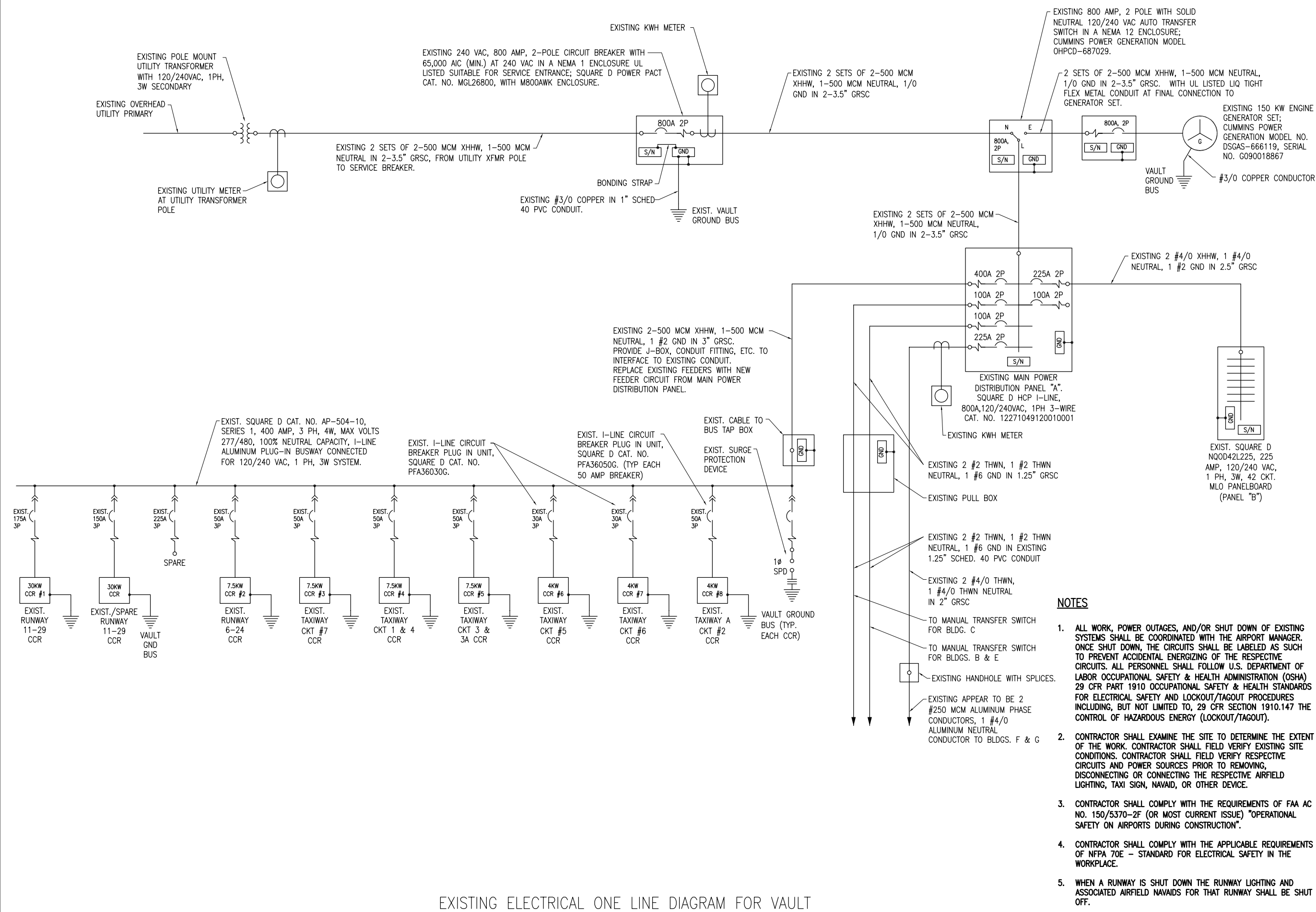
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SHEET TITLE

L-806 WIND CONE
DETAILS



EXISTING ELECTRICAL ONE LINE DIAGRAM FOR VAULT

NOTES

- ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- CONTRACTOR SHALL EXAMINE THE SITE TO DETERMINE THE EXTENT OF THE WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS. CONTRACTOR SHALL FIELD VERIFY RESPECTIVE CIRCUITS AND POWER SOURCES PRIOR TO REMOVING, DISCONNECTING OR CONNECTING THE RESPECTIVE AIRFIELD LIGHTING, TAXI SIGN, NAVAID, OR OTHER DEVICE.
- CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF FAA AC NO. 150/5370-2F (OR MOST CURRENT ISSUE) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- CONTRACTOR SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE.
- WHEN A RUNWAY IS SHUT DOWN THE RUNWAY LIGHTING AND ASSOCIATED AIRFIELD NAVAIDS FOR THAT RUNWAY SHALL BE SHUT OFF.

REHABILITATE RUNWAY 11/29

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Contract No. CO061

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SHEET TITLE

EXISTING ELECTRICAL ONE LINE DIAGRAM FOR VAULT

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**REHABILITATE
RUNWAY 11/29**

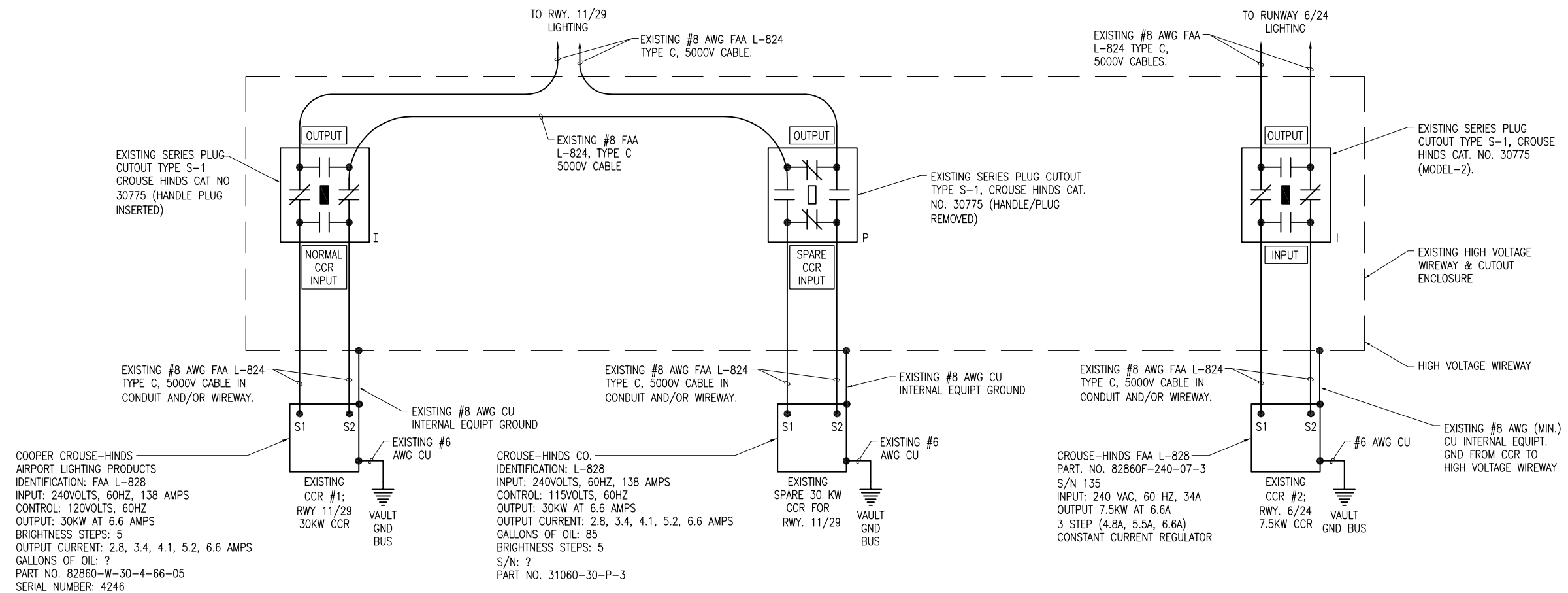
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**HIGH VOLTAGE WIRING
SCHEMATIC FOR
RUNWAYS**



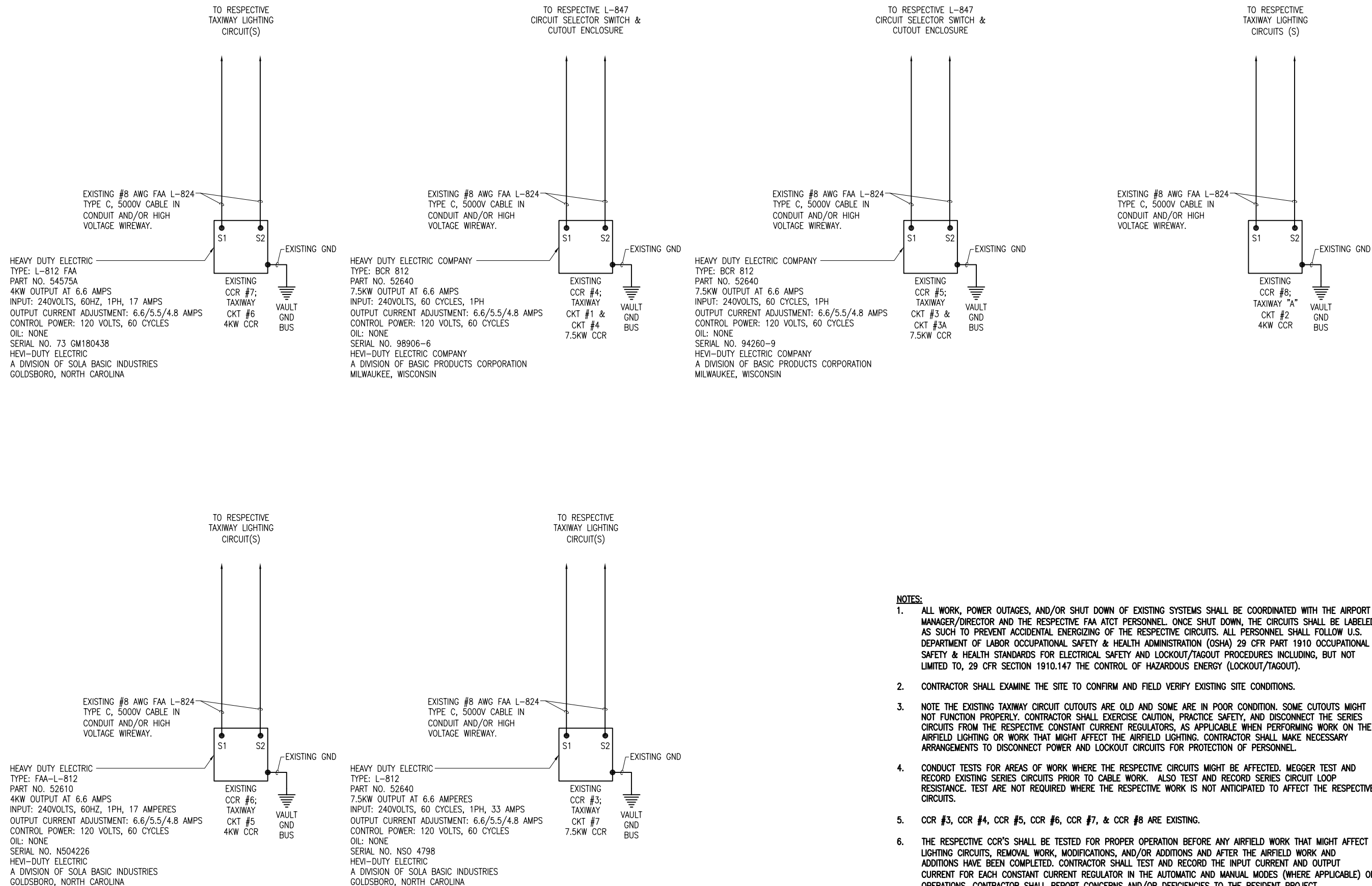
EXISTING HIGH VOLTAGE WIRING SCHEMATIC FOR RUNWAYS

NOTES:

- ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGER/DIRECTOR AND THE RESPECTIVE FAA ATCT PERSONNEL. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- CONTRACTOR SHALL EXAMINE THE SITE TO CONFIRM AND FIELD VERIFY EXISTING SITE CONDITIONS.
- MEGGER TEST AND RECORD EXISTING SERIES CIRCUITS PRIOR TO CABLE WORK. ALSO TEST AND RECORD SERIES CIRCUIT LOOP RESISTANCE.
- RUNWAY 11/29 CCR, BACKUP CCR FOR RUNWAY 11/29, RUNWAY 6/24 CCR, AND THE ASSOCIATED CUTOUTS ARE EXISTING.
- TWO L-806 SUPPLEMENTAL LIGHTED WIND CONES ARE PROPOSED TO BE ADDED TO THE RUNWAY 11-29 LIGHTING SERIES CIRCUIT.
- THE RESPECTIVE CCR'S SHALL BE TESTED FOR PROPER OPERATION BEFORE REMOVAL WORK, MODIFICATIONS, AND/OR ADDITIONS AND AFTER THE NEW CABLES AND LIGHTING SYSTEM MODIFICATIONS AND ADDITIONS HAVE BEEN COMPLETED. CONTRACTOR SHALL TEST AND RECORD THE INPUT CURRENT AND OUTPUT CURRENT FOR EACH CONSTANT CURRENT REGULATOR IN THE AUTOMATIC AND MANUAL MODES OF OPERATIONS. CONTRACTOR SHALL REPORT CONCERNS AND/OR DEFICIENCIES TO THE RESIDENT PROJECT REPRESENTATIVE/RESIDENT ENGINEER.

LEGEND
"I" DENOTES PLUG CUTOUT WITH PLUG INSERTED
"P" DENOTES PLUG CUTOUT WITH PLUG PULLED
"CCR" DENOTES CONSTANT CURRENT REGULATOR

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- NOTES:**
- ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGER/DIRECTOR AND THE RESPECTIVE FAA ATCT PERSONNEL. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
 - CONTRACTOR SHALL EXAMINE THE SITE TO CONFIRM AND FIELD VERIFY EXISTING SITE CONDITIONS.
 - NOTE THE EXISTING TAXIWAY CIRCUIT CUTOUTS ARE OLD AND SOME ARE IN POOR CONDITION. SOME CUTOUTS MIGHT NOT FUNCTION PROPERLY. CONTRACTOR SHALL EXERCISE CAUTION, PRACTICE SAFETY, AND DISCONNECT THE SERIES CIRCUITS FROM THE RESPECTIVE CONSTANT CURRENT REGULATORS, AS APPLICABLE WHEN PERFORMING WORK ON THE AIRFIELD LIGHTING OR WORK THAT MIGHT AFFECT THE AIRFIELD LIGHTING. CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS TO DISCONNECT POWER AND LOCKOUT CIRCUITS FOR PROTECTION OF PERSONNEL.
 - CONDUCT TESTS FOR AREAS OF WORK WHERE THE RESPECTIVE CIRCUITS MIGHT BE AFFECTED. MEGGER TEST AND RECORD EXISTING SERIES CIRCUITS PRIOR TO CABLE WORK. ALSO TEST AND RECORD SERIES CIRCUIT LOOP RESISTANCE. TEST ARE NOT REQUIRED WHERE THE RESPECTIVE WORK IS NOT ANTICIPATED TO AFFECT THE RESPECTIVE CIRCUITS.
 - CCR #3, CCR #4, CCR #5, CCR #6, CCR #7, & CCR #8 ARE EXISTING.
 - THE RESPECTIVE CCR'S SHALL BE TESTED FOR PROPER OPERATION BEFORE ANY AIRFIELD WORK THAT MIGHT AFFECT LIGHTING CIRCUITS, REMOVAL WORK, MODIFICATIONS, AND/OR ADDITIONS AND AFTER THE AIRFIELD WORK AND ADDITIONS HAVE BEEN COMPLETED. CONTRACTOR SHALL TEST AND RECORD THE INPUT CURRENT AND OUTPUT CURRENT FOR EACH CONSTANT CURRENT REGULATOR IN THE AUTOMATIC AND MANUAL MODES (WHERE APPLICABLE) OF OPERATIONS. CONTRACTOR SHALL REPORT CONCERNS AND/OR DEFICIENCIES TO THE RESIDENT PROJECT REPRESENTATIVE/RESIDENT ENGINEER.

REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

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EXISTING HIGH VOLTAGE WIRING SCHEMATIC FOR TAXIWAYS

LEGEND
"CCR" DENOTES CONSTANT CURRENT REGULATOR

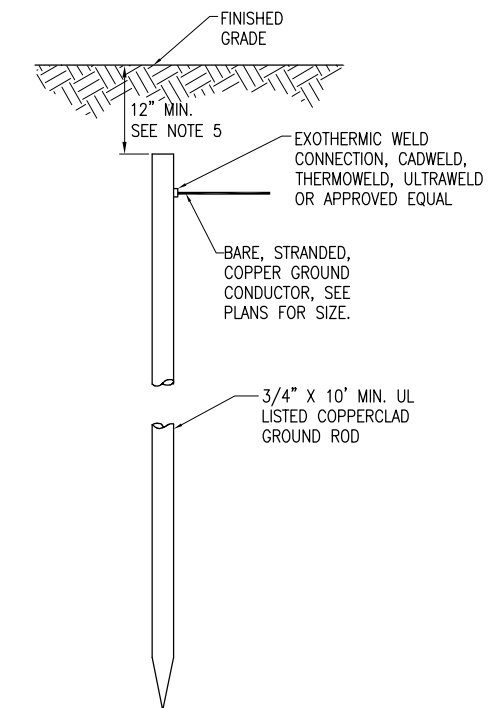
HIGH VOLTAGE WIRING
SCHEMATIC FOR
TAXIWAYS

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GROUNDING NOTES

- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL GROUNDING AS MAY BE NECESSARY OR REQUIRED TO MAKE A COMPLETE GROUNDING SYSTEM AS REQUIRED BY THE LATEST NATIONAL ELECTRICAL CODE (NFPA 70) IN FORCE AND FAA-STD-019e (LIGHTNING AND SURGE PROTECTION, GROUNDING, BONDING, AND SHIELDING REQUIREMENTS FOR FACILITIES AND ELECTRONIC EQUIPMENT). THE RELIABILITY OF THE GROUNDING SYSTEM IS DEPENDENT ON CAREFUL, PROPER INSTALLATION AND CHOICE OF MATERIALS. IMPROPER PREPARATION OF SURFACES TO BE JOINED TO MAKE AN ELECTRICAL PATH, LOOSE JOINTS OR CORROSION CAN INTRODUCE IMPEDANCE THAT WILL SERIOUSLY IMPAIR THE ABILITY OF THE GROUND PATH TO PROTECT PERSONNEL AND EQUIPMENT AND TO ABSORB TRANSIENTS THAT CAN CAUSE NOISE IN COMMUNICATIONS CIRCUITS. THE FOLLOWING FUNCTIONS ARE PARTICULARLY IMPORTANT TO ENSURE A RELIABLE GROUND SYSTEM:
- FURNISH AND INSTALL GROUND RODS AS DETAILED HEREIN. GROUND RODS FOR AIRFIELD LIGHTING (RUNWAY LIGHTING, TAXIWAY LIGHTING, TAXI GUIDANCE SIGNS, & WIND CONES SHALL BE MINIMUM 3/4-IN. DIAMETER BY 10-FT LONG, UL-LISTED COPPER CLAD WITH 10-MIL MINIMUM COPPER COATING. GROUND RODS FOR OTHER APPLICATIONS SHALL BE MINIMUM 3/4-IN. DIAMETER BY 10-FT LONG, UL-LISTED, COPPER CLAD WITH 10-MIL MINIMUM COPPER COATING. GROUND RODS SHALL BE SPACED OR AS DETAILED ON THE RESPECTIVE PLANS, AND IN NO CASE SPACED LESS THAN ONE ROD LENGTH APART. ALL CONNECTIONS TO GROUND RODS AND THE GROUND RING SHALL BE MADE WITH EXOTHERMIC WELD TYPE CONNECTORS, CADWELD BY ERICO PRODUCTS, INC., SOLON, OHIO, (PHONE 1-800-248-9353), THERMOWELD BY CONTINENTAL INDUSTRIES, INC., TULSA, OKLAHOMA (PHONE 918-663-1440) OR ULTRAWELD BY HARGER, GRAYSLAKE, ILLINOIS (PHONE 1-800-842-7437) OR APPROVED EQUAL. EXOTHERMIC WELD CONNECTIONS SHALL BE INSTALLED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S DIRECTIONS USING MOLDS AS REQUIRED FOR EACH RESPECTIVE APPLICATION. BOLTED CONNECTIONS WILL NOT BE PERMITTED AT GROUND RODS OR AT BURIED GROUNDING ELECTRODE CONDUCTORS.
- CONTRACTOR SHALL TEST EACH MADE ELECTRODE GROUND ROD/GROUND FIELD/GROUND RING WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND FIELD SYSTEMS. IF GROUND RESISTANCE EXCEEDS 25 OHMS, CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTION. COPIES OF GROUND ROD TEST RESULTS SHALL BE FURNISHED TO THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE.
- ALL PRODUCTS ASSOCIATED WITH THE GROUNDING SYSTEM SHALL BE UL-LISTED AND LABELED.
- ALL BOLTED OR MECHANICAL CONNECTIONS SHALL BE COATED WITH A CORROSION PREVENTATIVE COMPOUND BEFORE JOINING, SANICHEM INC. 'NO-OX-ID 'A-SPECIAL' COMPOUND, BURNDY PENETROX E, OR EQUAL.
- METALLIC SURFACES TO BE JOINED SHALL BE PREPARED BY THE REMOVAL OF ALL NON-CONDUCTIVE MATERIAL, PER 2011 NATIONAL ELECTRICAL CODE ARTICLE 250-12. ALL COPPER BUS BARS MUST BE CLEANED PRIOR TO MAKING CONNECTIONS TO REMOVE SURFACE OXIDATION.
- METALLIC RACEWAY FITTINGS SHALL BE MADE UP TIGHT TO PROVIDE A PERMANENT LOW IMPEDANCE PATH FOR ALL CIRCUITS. METAL CONDUIT TERMINATIONS IN ENCLOSURES SHALL BE BONDED TO THE ENCLOSURE WITH UL-LISTED FITTINGS SUITABLE FOR GROUNDING. PROVIDE GROUNDING BUSHINGS WITH BONDING JUMPER FOR ALL METAL CONDUITS ENTERING SERVICE EQUIPMENT (METER BASE, CT CABINET, MAIN SERVICE BREAKER ENCLOSURE, ETC.). PROVIDE GROUNDING BUSHINGS WITH BONDING JUMPER FOR ALL METAL CONDUITS ENTERING AN ENCLOSURE THROUGH CONCENTRIC OR ECCENTRIC KNOCKOUTS THAT ARE PUNCHED OR OTHERWISE FORMED SO AS TO IMPAIR THE ELECTRICAL CONNECTION TO GROUND. STANDARD LOCKNUTS OR BUSHINGS SHALL NOT BE THE SOLE MEANS FOR BONDING WHERE A CONDUIT ENTERS AN ENCLOSURE THROUGH A CONCENTRIC OR ECCENTRIC KNOCKOUT
- ALL CONNECTIONS, LOCATED ABOVE GRADE, BETWEEN THE DIFFERENT TYPES OF GROUNDING CONDUCTORS SHALL BE MADE USING UL-LISTED DOUBLE COMPRESSION CRIMP TYPE CONNECTORS OR UL-LISTED BOLTED GROUND CONNECTORS. FOR GROUND CONNECTIONS TO ENCLOSURES, CASES AND FRAMES OF ELECTRICAL EQUIPMENT NOT SUPPLIED WITH GROUND LUGS THE CONTRACTOR SHALL DRILL REQUIRED HOLES FOR MOUNTING A BOLTED GROUND CONNECTOR. ALL BOLTED GROUND CONNECTORS SHALL BE BURNDY, THOMAS AND BETTS, OR EQUAL. TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUES IN UL STANDARD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
- ALL METAL EQUIPMENT ENCLOSURES, CONDUITS, CABINETS, BOXES, RECEPTACLES, MOTORS, ETC. SHALL BE BONDED TO THE RESPECTIVE GROUNDING SYSTEM.
- PROVIDE ALL BOXES FOR PROPOSED OUTLETS, SWITCHES, CIRCUIT BREAKERS, ETC. WITH GROUNDING SCREWS. PROVIDE ALL PANELBOARD, SWITCHGEAR, ETC., ENCLOSURES WITH GROUNDING BARS WITH INDIVIDUAL SCREWS, LUGS, CLAMPS, ETC., FOR EACH OF THE GROUNDING CONDUCTORS THAT ENTER THEIR RESPECTIVE ENCLOSURES.
- EACH NEW FEEDER CIRCUIT AND/OR BRANCH CIRCUIT SHALL INCLUDE AN EQUIPMENT GROUND WIRE. METAL RACEWAY OR CONDUIT SHALL NOT MEET THIS REQUIREMENT. THE EQUIPMENT GROUND WIRE FROM EQUIPMENT SHALL NOT BE SMALLER THAN ALLOWED BY 2011 NEC TABLE 250-122 'MINIMUM SIZE CONDUCTORS OR GROUNDING RACEWAY AND EQUIPMENT.' WHEN CONDUCTORS ARE ADJUSTED IN SIZE TO COMPENSATE FOR VOLTAGE DROP, EQUIPMENT-GROUNDING CONDUCTORS SHALL BE ADJUSTED PROPORTIONATELY ACCORDING TO CIRCULAR MIL AREA. ALL EQUIPMENT GROUND WIRES SHALL BE COPPER, EITHER BARE OR INSULATED GREEN IN COLOR. WHERE THE EQUIPMENT GROUNDING CONDUCTORS ARE INSULATED, THEY SHALL BE IDENTIFIED BY THE COLOR GREEN, AND SHALL BE THE SAME INSULATION TYPE AS THE PHASE CONDUCTORS.

- ALL EXTERIOR METAL CONDUIT, WHERE NOT ELECTRICALLY CONTINUOUS BECAUSE OF MANHOLES, HANDHOLES, NON-METALLIC JUNCTION BOXES, ETC., SHALL BE BONDED TO ALL OTHER METAL CONDUIT IN THE RESPECTIVE DUCT RUN, AND AT EACH END, WITH A COPPER-BONDING JUMPER SIZED IN CONFORMANCE WITH 2011 NEC 250-102. WHERE METAL CONDUITS TERMINATE IN AN ENCLOSURE (SUCH AS A MOTOR CONTROL CENTER, SWITCHBOARD, ETC) WHERE THERE IS NOT ELECTRICAL CONTINUITY WITH THE CONDUIT AND THE RESPECTIVE ENCLOSURE, PROVIDE A BONDING JUMPER FROM THE RESPECTIVE ENCLOSURE GROUND BUS TO THE CONDUIT SIZED PER 2011 NEC 250-102.
- IT IS THE INTENT OF THIS SPECIFICATION THAT ALL MOTOR FRAMES, PUMP BASES ELECTRICAL EQUIPMENT ENCLOSURES, PANEL HOUSINGS, CONDUITS, BOXES, ETC. HAVE A CONTINUOUS COPPER WIRE GROUND CONNECTION AND SHALL BE POSITIVELY BONDED TO THE RESPECTIVE GROUNDING SYSTEM. CONDUIT CONNECTORS WILL NOT BE CONSIDERED AS ADEQUATE GROUNDING.
- PROVIDE A POSITIVE GROUND BOND FOR ALL OUTLET BOXES, ELECTRICAL EQUIPMENT ENCLOSURES, GROUNDING RECEPTACLES, TOGGLE SWITCHES, ETC. INSTALL A GROUNDING CONDUCTOR IN ALL WIRE AND CABLE RACEWAYS. GROUND CONDUCTOR TO HAVE 600-VOLT INSULATION AND BE IDENTIFIED BY A CONTINUOUS GREEN COLOR COATING. THEY SHALL BE USED SOLELY FOR GROUNDING PURPOSES AND BE ENTIRELY SEPARATE FROM WHITE GROUNDING NEUTRAL CONDUCTOR, EXCEPT AT SUPPLY SIDE OF SERVICE DISCONNECTING MEANS, WHERE GROUNDING AND NEUTRAL SYSTEMS ARE TO BE CONNECTED TO SERVICE GROUND.
- EACH AND ALL GROUNDED CASED AND METAL PARTS ASSOCIATED WITH ELECTRICAL EQUIPMENT SHALL BE TESTED FOR CONTINUITY OF CONNECTION WITH GROUND BUS SYSTEM BY CONTRACTOR IN PRESENCE OF OWNER'S REPRESENTATIVE.
- ALL CONNECTIONS BETWEEN THE DIFFERENT TYPES OF GROUNDING CONDUCTORS ABOVE GRADE SHALL BE MADE USING BOLTED GROUND CONNECTORS. GROUND LUGS SHALL BE PROVIDED IN ALL ENCLOSURES AND WIRING TERMINATION JUNCTION BOXES. EQUIPMENT GROUNDS AND GROUNDING CONDUCTOR SHALL BE CONNECTED TO THESE GROUND LUGS. FOR GROUND CONNECTIONS TO ENCLOSURES, CASES AND FRAMES OF ELECTRICAL EQUIPMENT NOT SUPPLIED WITH GROUND LUGS THE CONTRACTOR SHALL DRILL REQUIRED HOLES FOR MOUNTING A BOLTED GROUND CONNECTOR. ALL BOLTED GROUND CONNECTORS SHALL BE BURNDY, OR APPROVED EQUAL.
- BOND ALL NONCURRENT-CARRYING PARTS OF METAL EQUIPMENT TO GROUND SYSTEM.
- BUILDING STRUCTURAL STEEL SYSTEM SHALL BE BONDED TO ELECTRICAL GROUND SYSTEM.
- INSTALL GROUNDING ELECTRODE CONDUCTORS, LIGHTNING PROTECTION DOWN CONDUCTORS AND SEPARATE GROUND CONDUCTORS IN SCHEDULE 40 OR SCHEDULE 80 PVC CONDUIT OR EXPOSED WHERE ACCEPTABLE TO LOCAL CODES. WHERE GROUNDING ELECTRODE CONDUCTORS, LIGHTNING PROTECTION DOWN CONDUCTORS OR INDIVIDUAL GROUND CONDUCTORS ARE RUN IN PVC CONDUIT, DO NOT COMPLETELY ENIRCLE CONDUIT WITH FERROUS AND/OR MAGNETIC MATERIALS. USE NON-METALLIC REINFORCED FIBERGLASS STRUT SUPPORT. WHERE METAL CONDUIT CLAMPS ARE INSTALLED, USE NYLON BOLTS, NUTS, WASHERS AND SPACERS TO INTERRUPT A COMPLETE METALLIC PATH FROM ENCIRCLING THE CONDUIT. THIS IS REQUIRED TO AVOID GIRDLING OF GROUND CONDUCTORS. GIRDLING OF A GROUND CONDUCTOR IS THE RESULT OF PLACING THE CONDUCTOR IN A RING OF MAGNETIC MATERIAL. THIS RING COULD BE A METALLIC CONDUIT, U-BOLT OR STRUT SUPPORT PIPE CLAMP, OR OTHER SUPPORT HARDWARE. THE RESULT OF GIRDLING GROUND CONDUCTORS SIGNIFICANTLY INCREASES THE INDUCTIVE IMPEDANCE OF THE GROUND CONDUCTOR. INDUCTIVE AND CAPACITIVE IMPEDANCE IS A TYPE OF RESISTANCE THAT OPPOSES THE FLOW OF ALTERNATING CURRENT. ANY INCREASE IN THE IMPEDANCE OF A GROUND CONDUCTOR REDUCES ITS ABILITY TO EFFECTIVELY MITIGATE RADIO FREQUENCY NOISE IN THE GROUND SYSTEM. THE CONDITION WHERE A GROUND CONDUCTOR IS GIRDLED DURING A LIGHTNING STRIKE RESULTS IN PHENOMENA KNOWN AS SURGE IMPEDANCE LOADING. SURGE IMPEDANCE LOADING IS A RESULT OF VOLTAGE AND CURRENT REACHING 500,000 VOLTS AND 10,000 AMPS FOR A SHORT DURATION. GIRDLING FURTHER INCREASES THE IMPEDANCE AT LIGHTNING FREQUENCIES OF 100 KILOHERTZ TO 100 MEGAHERTZ. AT THESE POWER AND FREQUENCY LEVELS ANY INCREASE IN THE IMPEDANCE OF THE GROUND CONDUCTOR MUST BE CONTROLLED. DURING LIGHTNING DISCHARGE CONDITIONS A LOW INDUCTIVE IMPEDANCE PATH IS MORE IMPORTANT THAN A LOW DC RESISTANCE PATH.
- IF LOCAL CODES DICTATE THAT INDIVIDUAL GROUNDING CONDUCTORS MUST BE RUN IN METAL CONDUIT OR RACEWAY, THEN THE CONDUIT OR RACEWAY MUST BE BONDED AT EACH END OF THE RUN WITH A BONDING JUMPER SIZED EQUAL TO THE INDIVIDUAL GROUNDING CONDUCTOR OR AS REQUIRED BY 2011 NEC 250-102. NOTE THIS DOES NOT APPLY TO AC EQUIPMENT GROUNDING CONDUCTORS RUN WITH AC CIRCUITS.
- WHERE A CONFLICT IS DETERMINED WITH RESPECT TO GROUNDING REQUIREMENTS PER MANUFACTURER INSTALLATION INSTRUCTIONS, NEC, AND/OR THE CONTRACT DOCUMENTS, CONTACT THE RESIDENT ENGINEER OR PROJECT ENGINEER FOR FURTHER DIRECTIONS.
- GROUND RODS SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA TO COMPLY WITH THE AIRPORT IMPROVEMENT PROGRAM BUY AMERICAN REQUIREMENTS. STEEL USED TO MANUFACTURER GROUND RODS SHALL BE 100 PERCENT DOMESTIC STEEL.



10 FT. GROUND ROD

NOTES

- TYPE AND MINIMUM NUMBER OF GROUND RODS SHALL BE AS SPECIFIED ON THE PLAN.
- THE RESISTANCE TO GROUND OF THE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS.
- COST OF GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.
- GROUND RODS SHALL BE SPACED AS DETAILED ON THE PLANS AND SHALL NOT BE SPACED LESS THAN ONE ROD LENGTH APART.
- TOP OF GROUND RODS SHALL BE 12" MINIMUM BELOW GRADE UNLESS DETAILED OTHERWISE HEREIN.
- GROUND RODS FOR SPLICE CANS AND WIND CONES SHALL BE A MINIMUM 3/4-INCH DIAMETER BY 10-FT LONG UL LISTED COPPER CLAD.

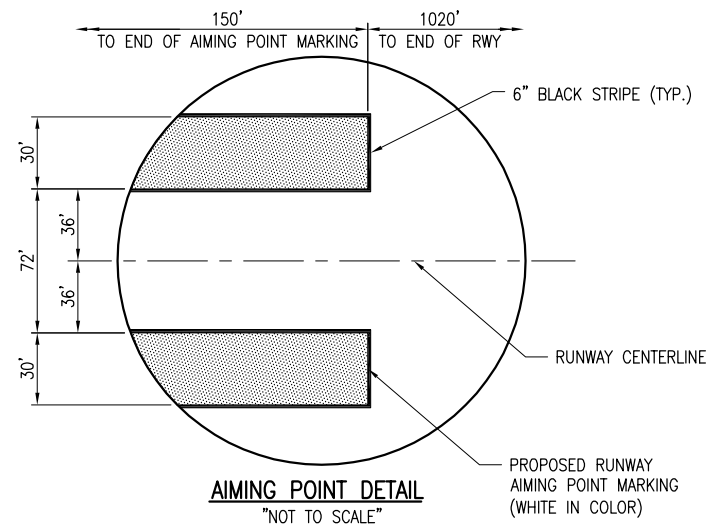
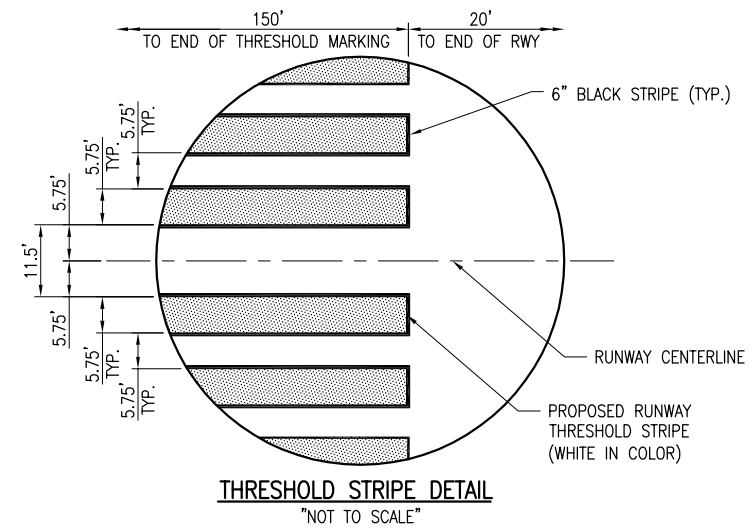
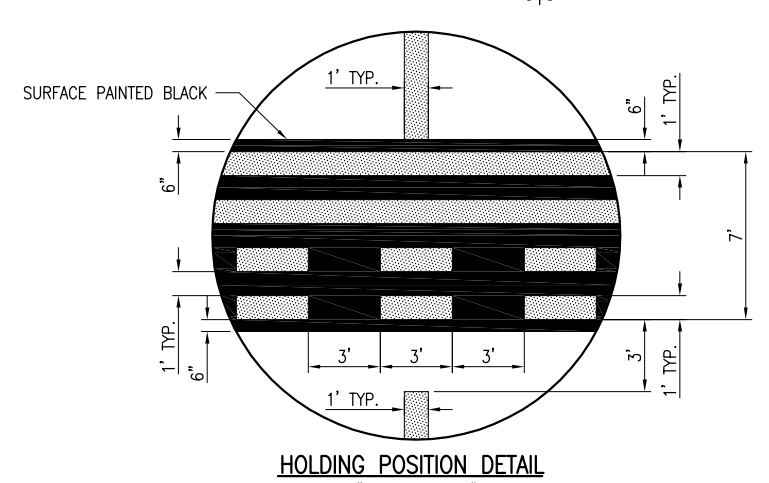
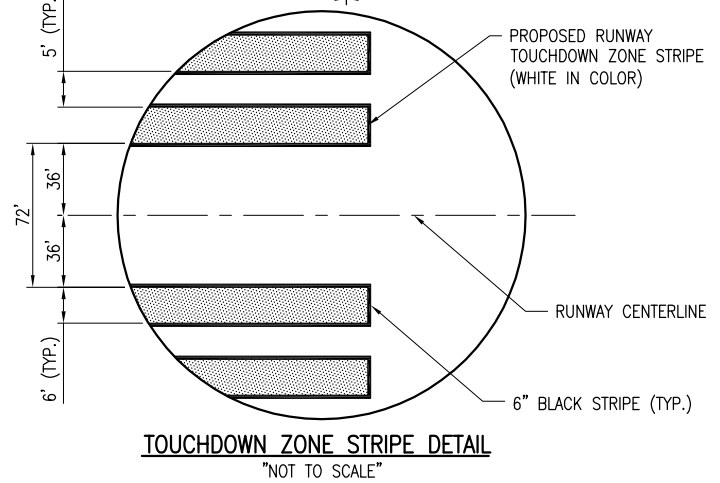
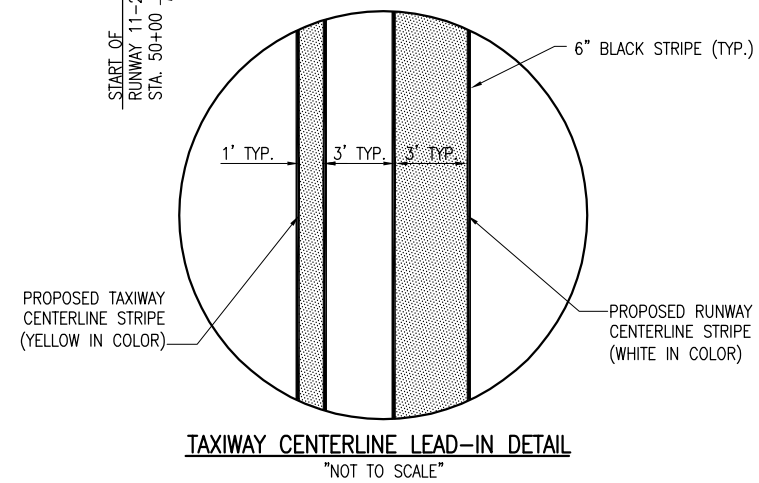
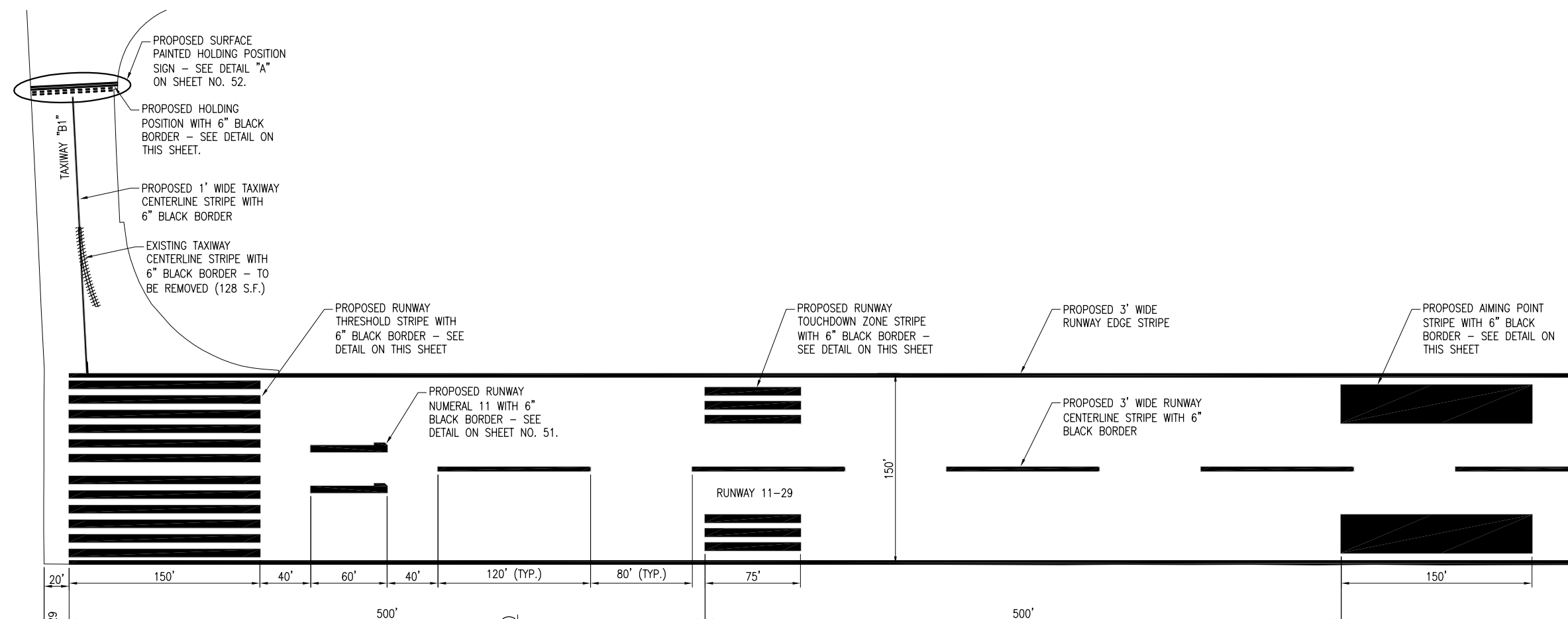
GROUND RODS
(NOT TO SCALE)

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

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PROJECT NO: 14A0005D
CAD FILE: E-004.DWG
LAYOUT BY: KNL 04/05/14
DRAWN BY: BAK 04/07/14
REVIEWED BY: CAH 03/28/14
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GROUNDING NOTES

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LEGEND

- EXISTING PAVEMENT
- EXISTING MARKING
- PROPOSED MARKING

0' 25' 50' 100'
HALF SIZE SCALE: 1" = 100'
FULL SIZE SCALE: 1" = 50'

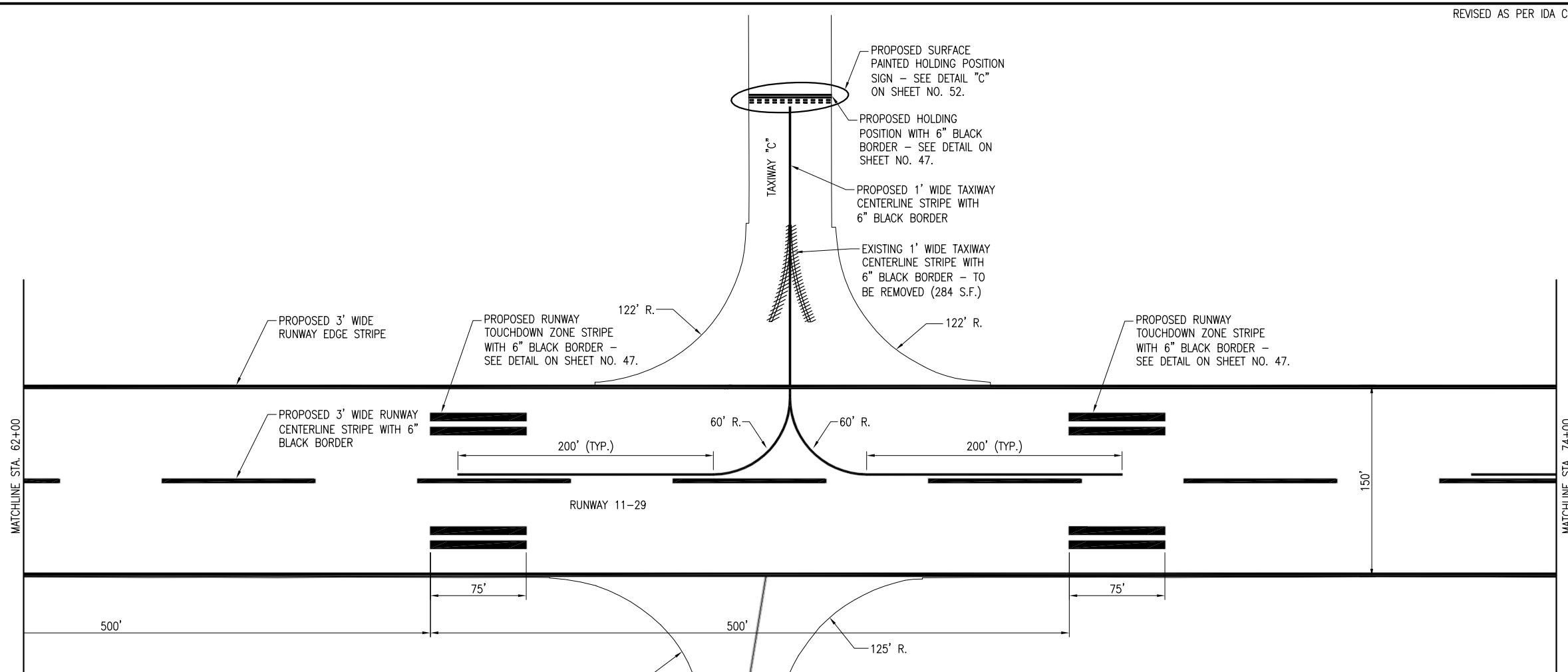
REHABILITATE RUNWAY 11/29
IDA No: MTO-4320
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-151MRK.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
REVIEWED BY: CAH 05/02/14
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PROPOSED MARKING PLAN STA. 50+00 TO 62+00

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620-PAVEMENT MARKING-WATERBORNE NOTES

1. THE PAVEMENT MARKING-WATERBORNE (620) SHALL BE PLACED IN ACCORDANCE WITH ITEM 620 "PAVEMENT MARKING" AS STATED ON PAGE 272 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
2. THIS ITEM SHALL CONSIST OF RUNWAY MARKING, TAXIWAY CENTERLINE, TAXIWAY HOLDING POSITION MARKING AND SURFACE PAINTED HOLD POSITION SIGN MARKING IN ACCORDANCE WITH THESE SPECIFICATIONS AND AT THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. ALL MARKING WILL BE WHITE, YELLOW AND RED IN COLOR WITH A 6-IN BLACK BORDER. THE PROPOSED PAVEMENT MARKING WILL BE APPLIED IN TWO APPLICATIONS.
3. ANY MATERIAL DELIVERED THAT FAILS TO MEET THE SPECIFICATIONS SHALL BE DISPOSED OF BY THE VENDOR AND IMMEDIATELY REPLACED WITH ACCEPTABLE MATERIAL ENTIRELY AT THE VENDOR'S EXPENSE, INCLUDING HANDLING AND TRANSPORTATION CHARGES.
4. ALL CURING COMPOUND WILL BE CLEANED FROM CONCRETE PAVEMENT PRIOR TO APPLYING PAINT. NO EXCEPTIONS.
5. ALL PROPOSED MARKING WILL BE COMPLETED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION PLANS.
6. IF THE CONTRACTOR ELECTS TO "BLOCK PAINT" THE BLACK PAINT AND THEN PAINT EITHER YELLOW, WHITE OR RED PAINT OVER THE BLACK PAINT; ONLY THE VISIBLE BLACK PAINT WILL BE ELIGIBLE FOR PAYMENT.
7. GLASS BEADS SHALL BE REQUIRED IN BOTH APPLICATIONS OF WHITE, YELLOW AND RED MARKING.
8. CUT-OFF SHEETS WILL BE REQUIRED TO INSURE STRAIGHT EDGES.
9. THE PROPOSED MARKING WILL BE PAID FOR UNDER ITEM:
AR620520 PAVEMENT MARKING-WATERBORNE ___ PER S.F.
AR620525 PAVEMENT MARKING-BLACK BORDER ___ PER S.F.

620900-PAVEMENT MARKING REMOVAL NOTES

1. THE EXISTING PAVEMENT MARKING SHALL BE REMOVED IN ACCORDANCE WITH ITEM 620 "PAVEMENT MARKING" AS STATED ON PAGE 272 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS, ADOPTED APRIL 1, 2012.
2. THE AREAS THAT ARE DESIGNATED FOR REMOVAL ARE SHOWN ON THESE PROPOSED MARKING PLANS.
3. ALL AREAS TO BE REMOVED ARE CALCULATED AREAS. ANY ADDITIONAL AREAS, DUE TO OVER SPRAY, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. THE PROPOSED REMOVAL WILL BE ACCOMPLISHED BY THE USE OF A PAVEMENT GRINDER.
5. THE QUANTITY OF PROPOSED MARKING REMOVAL -- 898 S.F.
6. THE PROPOSED MARKING REMOVAL WILL BE PAID FOR UNDER ITEM:
AR620900 PAVEMENT MARKING REMOVAL ___ PER S.F.

SURFACE PAINTED HOLDING POSITION SIGN NOTES:

1. SURFACE PAINTED HOLDING POSITION SIGNS SHALL BE PAINTED AT THE LOCATIONS SHOWN ON THE PAVEMENT MARKING PLAN SHEETS AND AS DETAILED ON THE PROPOSED SURFACE PAINTED HOLDING POSITION SIGN DETAIL SHEET.
2. THE AIRPORT PERSONNEL HAVE THE STENCILS FOR THE SURFACE PAINTED HOLDING POSITION SIGNS AND WILL MAKE THEM AVAILABLE FOR THE CONTRACTOR TO USE. THE CONTRACTOR SHALL MAINTAIN THE STENCILS IN GOOD CONDITION AND AT THE CONCLUSION OF THE PROJECT RETURN THE STENCILS TO THE AIRPORT.
3. ONE APPLICATION OF PAINT FOR THE SURFACE PAINTED HOLDING POSITION SIGNS SHALL BE APPLIED PRIOR TO THE PROPOSED PAVEMENT GROOVING AND THE OTHER APPLICATION WILL BE APPLIED AFTER THE PROPOSED PAVEMENT GROOVING HAS BEEN COMPLETED. BOTH APPLICATIONS WILL RECEIVE BEADS.

LEGEND

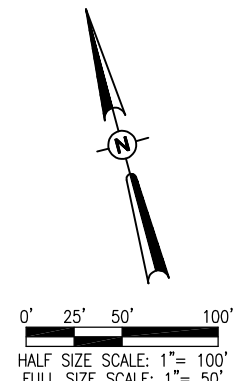
	EXISTING PAVEMENT
	EXISTING MARKING
	PROPOSED MARKING

REHABILITATE RUNWAY 11/29

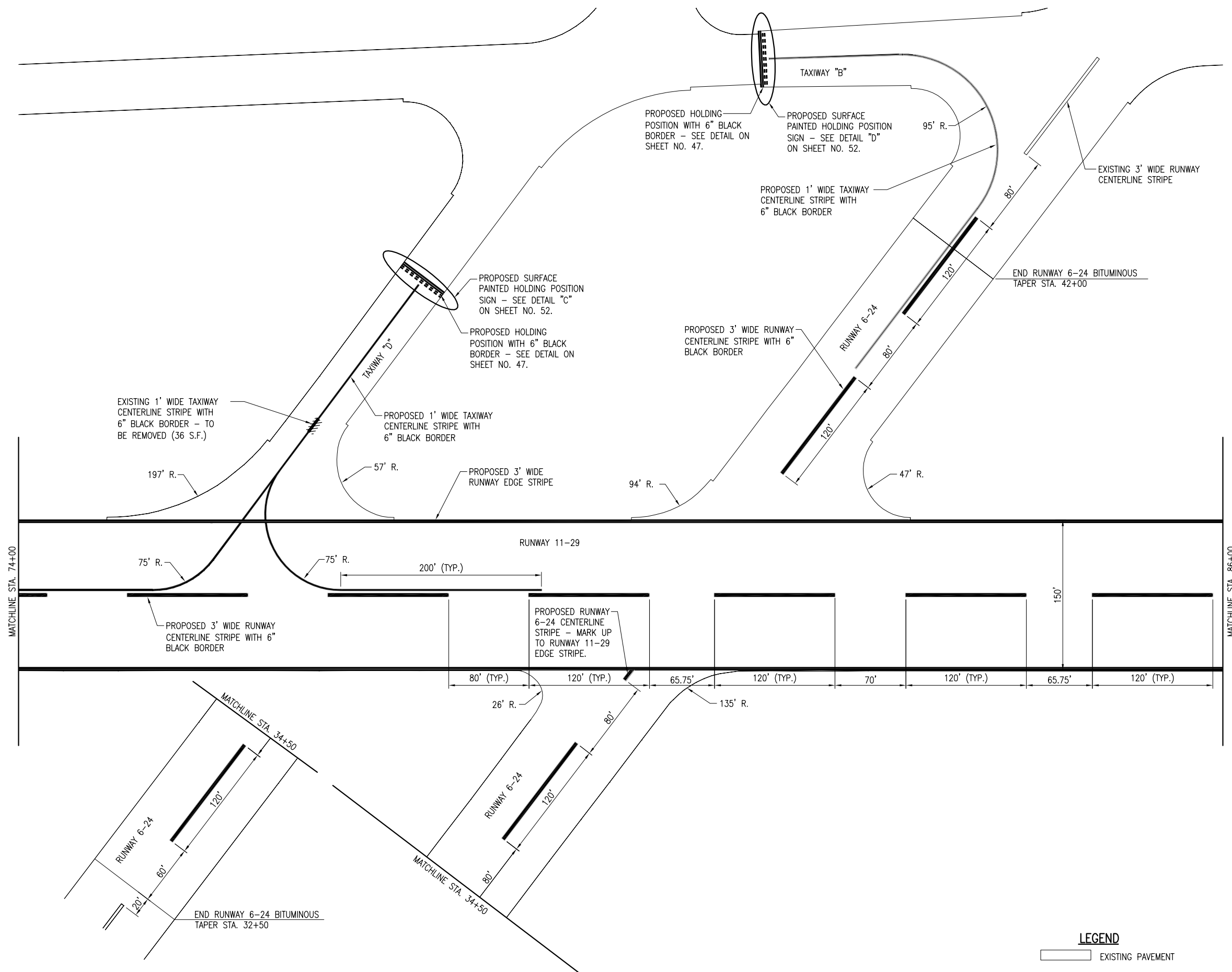
IDA No: MTO-4320
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

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PROJECT NO: 14A0005D
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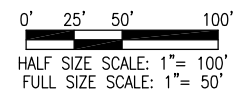


MATCHLINE STA. 74+00

MATCHLINE STA. 86+00

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- LEGEND**
- EXISTING PAVEMENT
 - EXISTING MARKING
 - PROPOSED MARKING



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

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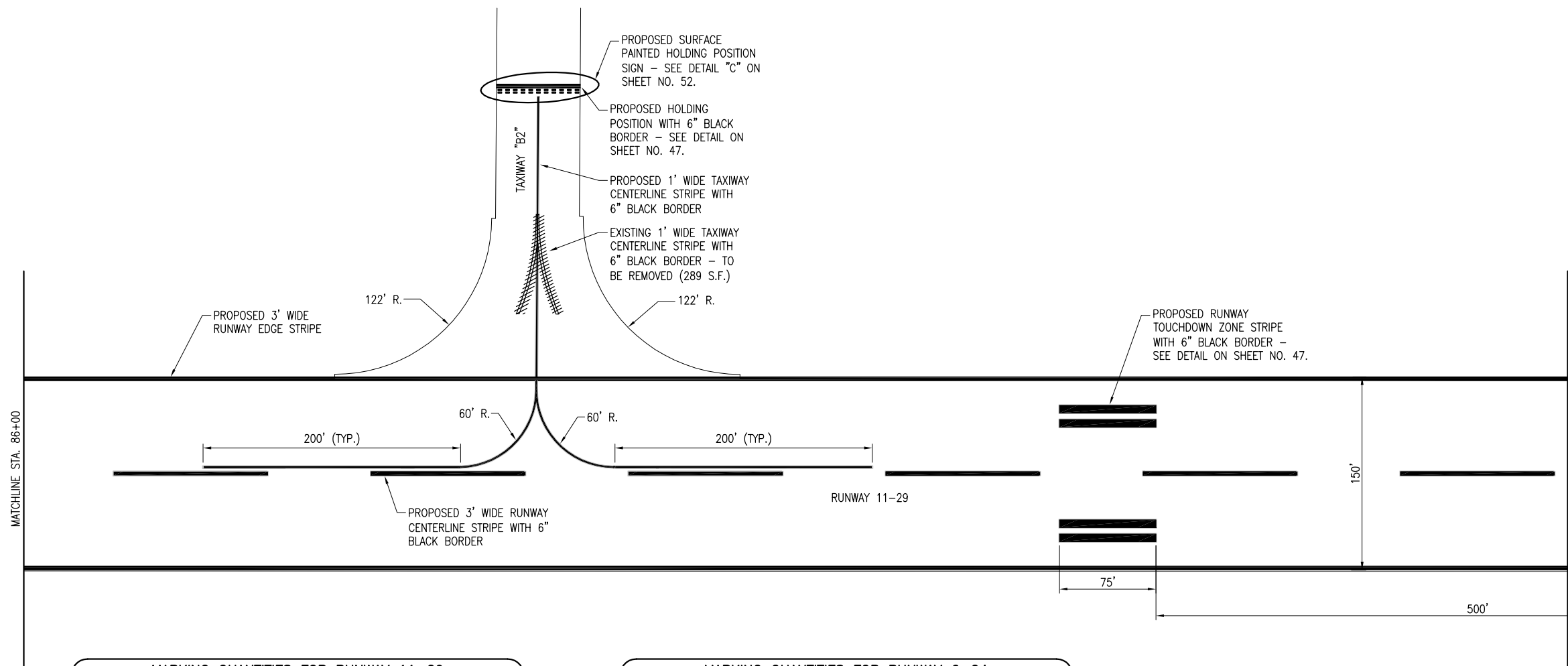
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PROPOSED MARKING PLAN STA. 74+00 TO 86+00

MATCHLINE STA. 86+00

MATCHLINE STA. 98+00



MARKING QUANTITIES FOR RUNWAY 11-29	
YELLOW MARKING: AR620520	TOTAL AREA (S.F.)
TAXIWAY CENTERLINES & LEAD-IN STRIPES (RWY. 11-29)	3,222
HOLDING POSITION	1,087
TOTAL YELLOW:	4,309
BLACK MARKING: AR620525	TOTAL AREA (S.F.)
TAXIWAY CENTERLINES & LEAD-IN STRIPES (RWY. 11-29)	3,234
HOLDING POSITION	1,802
TOTAL BLACK FOR YELLOW:	5,036
WHITE MARKING: AR620520	TOTAL AREA (S.F.)
RUNWAY THRESHOLD STRIPE - 5.75'x150' (x24)	20,700
RUNWAY EDGE STRIPE - 3'x6,461' (x2)	38,766
RUNWAY CENTERLINE STRIPE - 3'x120' (x30) (RWY. 11-29)	10,800
RUNWAY TOUCHDOWN ZONE STRIPE - 6'x75' (x28)	12,600
RUNWAY AIMING POINT STRIPE - 30'x150' (x4)	18,000
RUNWAY NUMERAL 1 (x2)	636
RUNWAY NUMERAL 2	652
RUNWAY NUMERAL 9	712
TOTAL WHITE:	102,866
BLACK MARKING: AR620525	TOTAL AREA (S.F.)
RUNWAY THRESHOLD STRIPE - (x24)	3,762
RUNWAY CENTERLINE STRIPE - (x30) (RWY. 11-29)	3,720
RUNWAY TOUCHDOWN ZONE STRIPE - (x28)	2,296
RUNWAY AIMING POINT STRIPE - (x4)	724
RUNWAY NUMERAL 1 (x2)	135
RUNWAY NUMERAL 2	106
RUNWAY NUMERAL 9	114
TOTAL BLACK FOR WHITE:	10,857
TOTAL MARKING (YELLOW & WHITE):	107,175
TOTAL BLACK (YELLOW & WHITE):	15,893

MARKING REMOVAL QUANTITIES	
EXISTING TAXIWAY CENTERLINE MARKING: AR620900	TOTAL AREA (S.F.)
BLACK MARKING	449
WHITE MARKING	449
TOTAL REMOVAL:	898

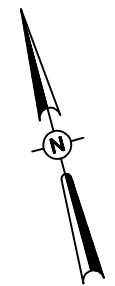
MARKING QUANTITIES FOR RUNWAY 6-24	
YELLOW MARKING: AR620520	TOTAL AREA (S.F.)
TAXIWAY CENTERLINES & LEAD-IN STRIPES (RWY. 6-24)	544
HOLDING LINE	168
TOTAL YELLOW:	712
BLACK MARKING: AR620525	TOTAL AREA (S.F.)
TAXIWAY CENTERLINES & LEAD-IN STRIPES (RWY. 6-24)	546
HOLDING LINE	282
TOTAL BLACK FOR YELLOW:	828
WHITE MARKING: AR620520	TOTAL AREA (S.F.)
RUNWAY CENTERLINE STRIPE - 3'x120' (x4) (RWY. 6-24)	1,440
RUNWAY CENTERLINE STRIPE - 3'x14' (x1) (RWY. 6-24)	42
TOTAL WHITE:	1,482
BLACK MARKING: AR620525	TOTAL AREA (S.F.)
RUNWAY CENTERLINE STRIPE - (x5) (RWY. 6-24)	496
RUNWAY CENTERLINE STRIPE - (x1) (RWY. 6-24)	16
TOTAL BLACK FOR WHITE:	512
TOTAL MARKING (YELLOW & WHITE):	2,194
TOTAL BLACK (YELLOW & WHITE):	1,340

LEGEND

EXISTING PAVEMENT

EXISTING MARKING

PROPOSED MARKING



0' 25' 50' 100'
HALF SIZE SCALE: 1" = 100'
FULL SIZE SCALE: 1" = 50'

REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

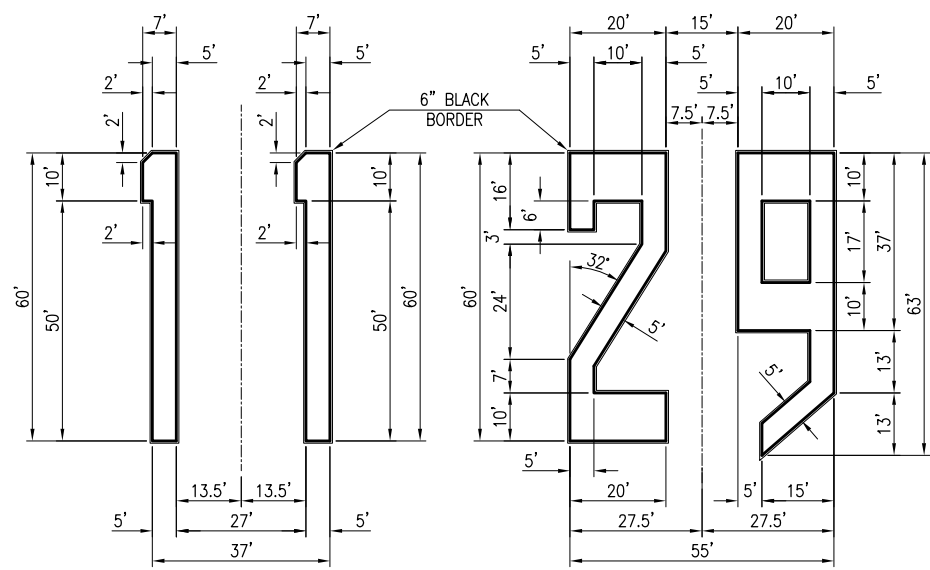
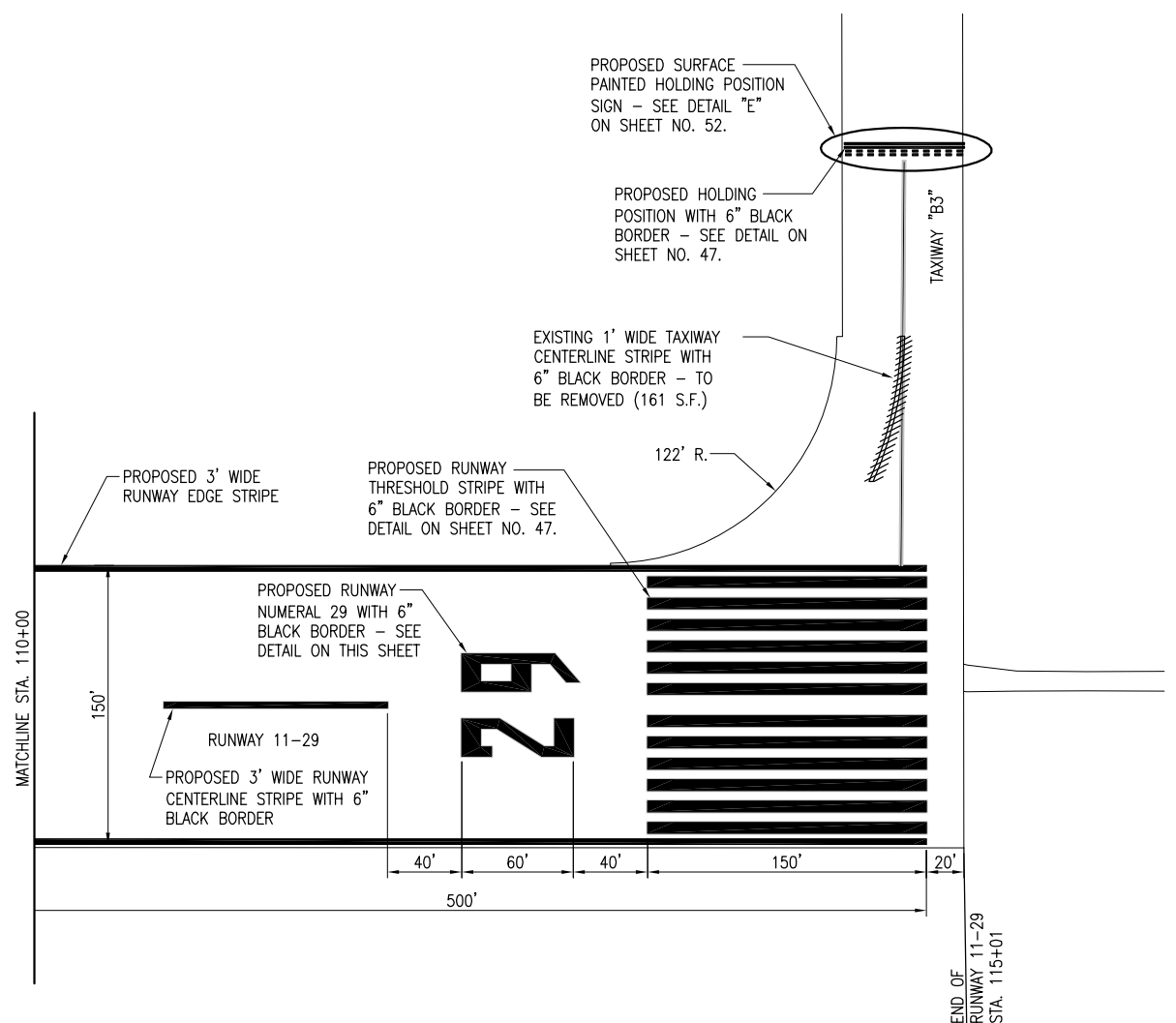
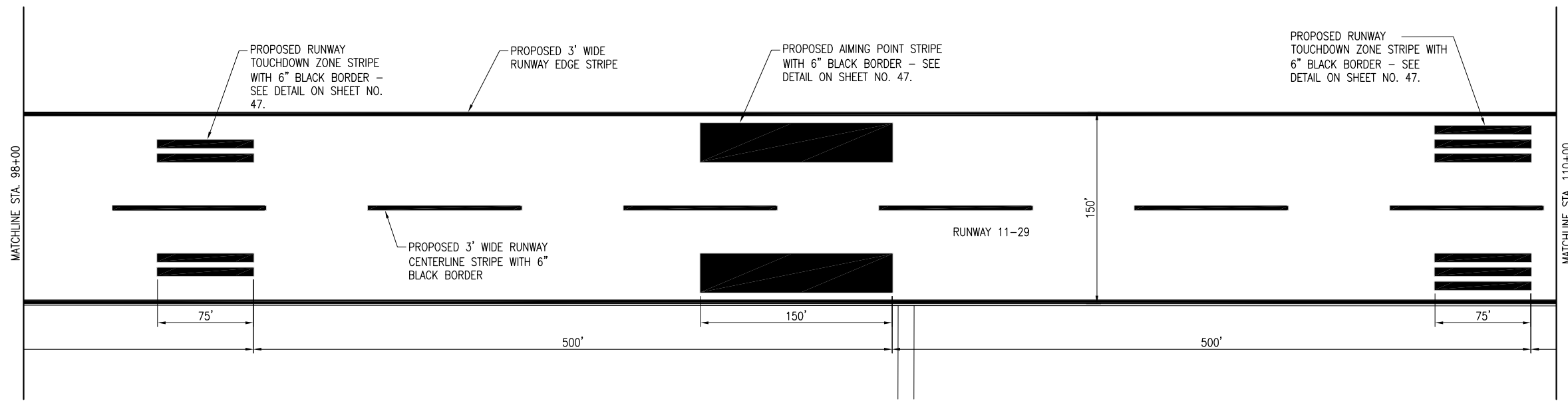
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PROPOSED
MARKING PLAN STA.
86+00 TO 98+00

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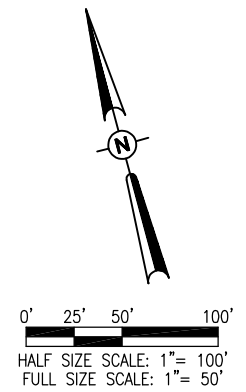
NUMERAL 11
"NOT TO SCALE"

NUMERAL 29
"NOT TO SCALE"

LEGEND

	EXISTING PAVEMENT
	EXISTING MARKING
	PROPOSED MARKING

- RUNWAY NUMERAL DIMENSIONING NOTES:**
- ALL NUMERAL MARKING WILL BE WHITE IN COLOR AND WILL BE APPLIED WITH REFLECTIVE MEDIA IN THE SECOND APPLICATION IN ACCORDANCE WITH THE SPECIFICATIONS.
 - NUMERALS EXCEPT FOR THE NUMERAL ELEVEN (AS SHOWN) ARE HORIZONTALLY SPACED 15 FEET APART.
 - ALL DIMENSIONS ARE EXPRESSED IN INCREMENTS OF FEET.
 - DOUBLE DIGIT NUMERAL DESIGNATIONS ARE CENTERED ON THE RUNWAY PAVEMENT CENTERLINE BASED ON THE CENTER OF THE OUTER EDGES OF THE TWO NUMERALS.
 - CUT-OFF SHEETS WILL BE REQUIRED TO INSURE STRAIGHT EDGES.
 - ALL PROPOSED MARKING ITEMS WILL BE PAID FOR AS FOLLOWS:
AR620520 "PAVEMENT MARKING-WATERBORNE" _____ PER SQ. FT.



**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

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LAYOUT BY: CAH 02/14/14

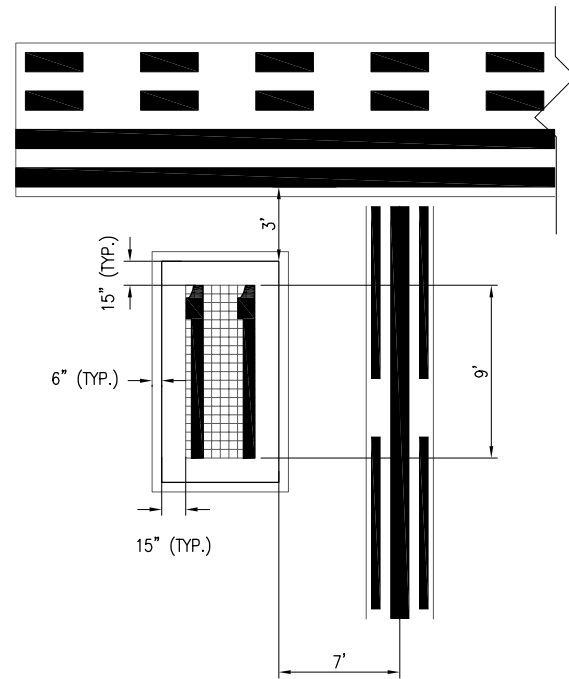
DRAWN BY: BAK 02/14/14

REVIEWED BY: CAH 05/02/14

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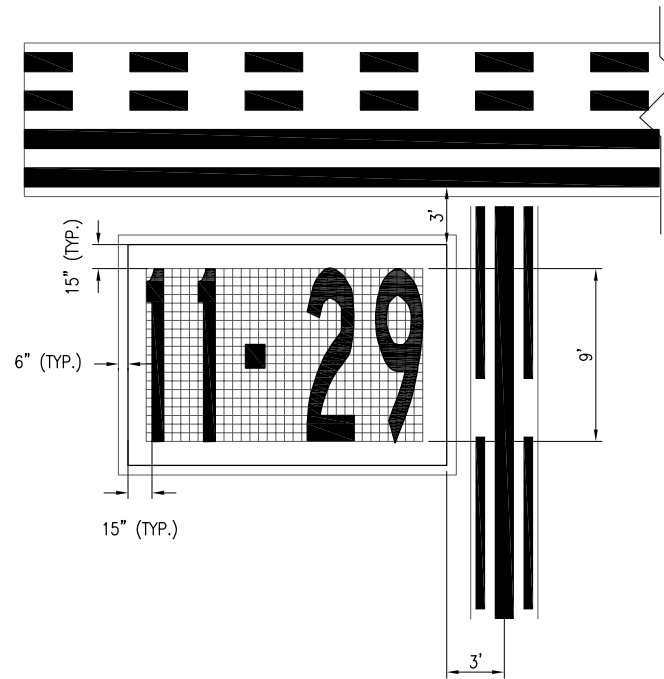
SHEET TITLE

**PROPOSED
MARKING PLAN STA.
98+00 TO 115+01**



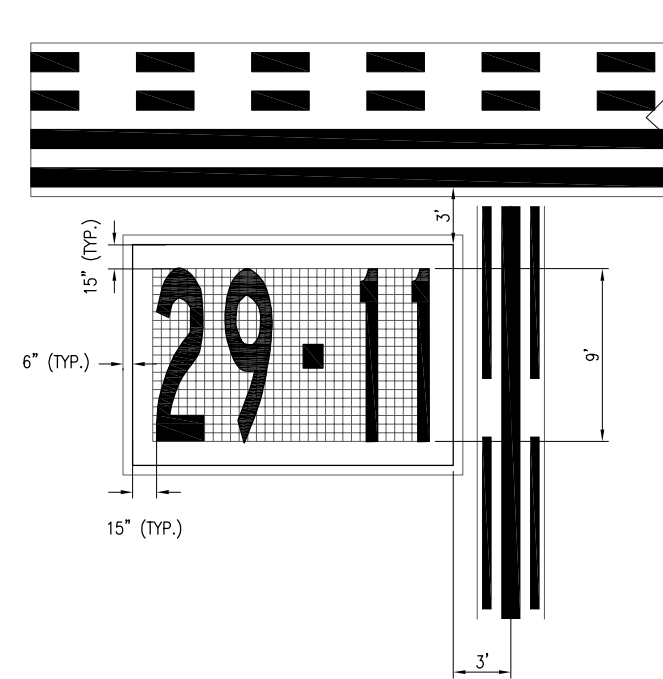
SURFACE PAINTED HOLDING POSITION SIGN DETAIL "A"
NOT TO SCALE

NOTE: GRID SHOWN FOR PROPER SIZING OF INSCRIPTIONS
- NOT TO BE PAINTED. GRID SPACING IS 0.45 FEET.
THIS SIGN WILL BE PAINTED USING WATERBORNE PAINT



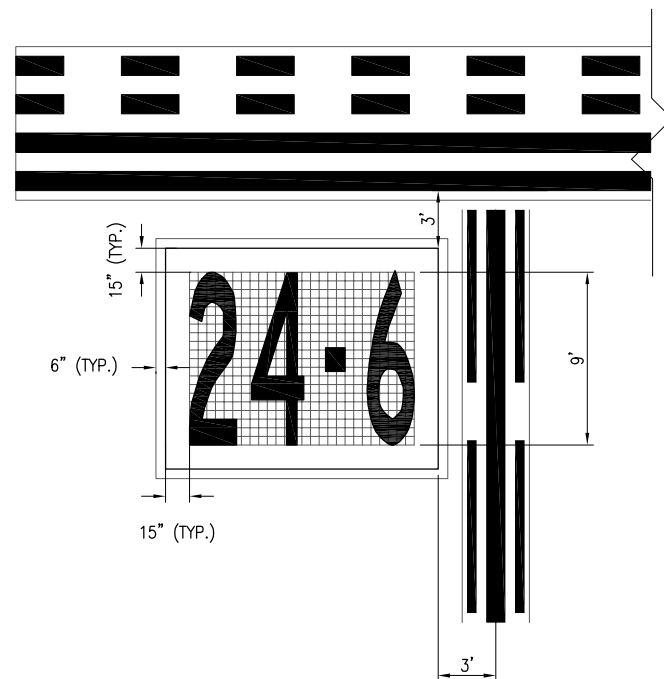
SURFACE PAINTED HOLDING POSITION SIGN DETAIL "B"
NOT TO SCALE

NOTE: GRID SHOWN FOR PROPER SIZING OF INSCRIPTIONS
- NOT TO BE PAINTED. GRID SPACING IS 0.45 FEET.
THIS SIGN WILL BE PAINTED USING WATERBORNE PAINT



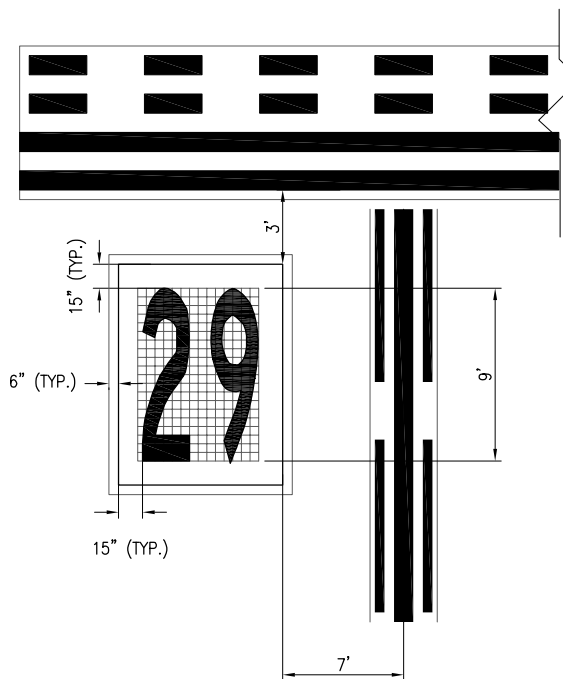
SURFACE PAINTED HOLDING POSITION SIGN DETAIL "C"
NOT TO SCALE

NOTE: GRID SHOWN FOR PROPER SIZING OF INSCRIPTIONS
- NOT TO BE PAINTED. GRID SPACING IS 0.45 FEET.
THIS SIGN WILL BE PAINTED USING WATERBORNE PAINT



SURFACE PAINTED HOLDING POSITION SIGN DETAIL "D"
NOT TO SCALE

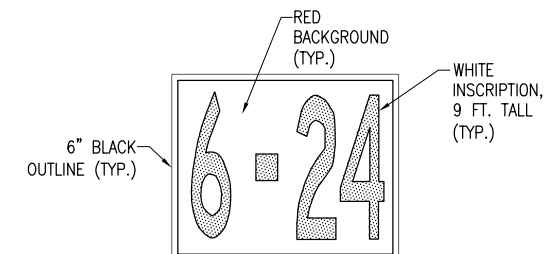
NOTE: GRID SHOWN FOR PROPER SIZING OF INSCRIPTIONS
- NOT TO BE PAINTED. GRID SPACING IS 0.45 FEET.
THIS SIGN WILL BE PAINTED USING WATERBORNE PAINT



SURFACE PAINTED HOLDING POSITION SIGN DETAIL "E"
NOT TO SCALE

NOTE: GRID SHOWN FOR PROPER SIZING OF INSCRIPTIONS
- NOT TO BE PAINTED. GRID SPACING IS 0.45 FEET.
THIS SIGN WILL BE PAINTED USING WATERBORNE PAINT

SURFACE PAINTED HOLDING POSITION SIGN MARKING QUANTITIES	
MARKING: AR620520	TOTAL AREA (S.F.)
SPHP SIGNS	1,296
TOTAL MARKING 1,296	



SURFACE PAINTED HOLDING POSITION SIGN DETAIL
TYPICAL COLOR SCHEME
NOT TO SCALE

REHABILITATE
RUNWAY 11/29

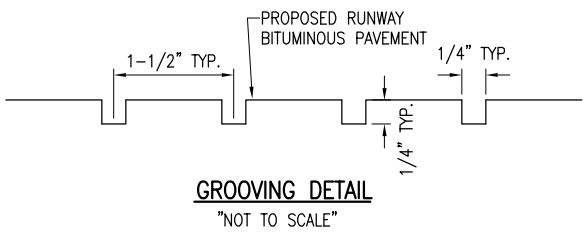
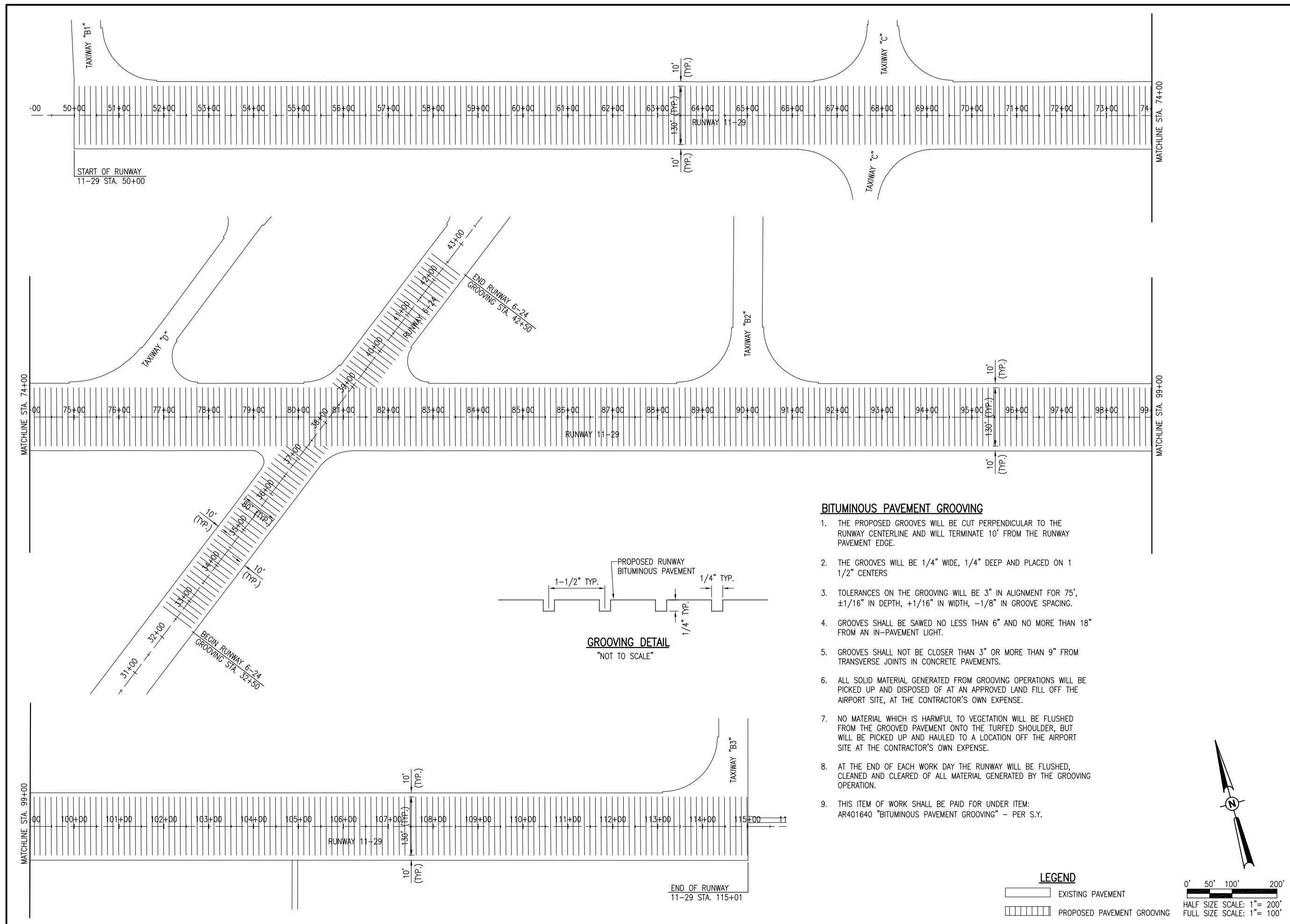
IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
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ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-151MRK.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
REVIEWED BY: CAH 05/02/14
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SHEET TITLE

PROPOSED SURFACE
PAINTED HOLDING
POSITION SIGN
DETAILS

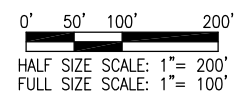


BITUMINOUS PAVEMENT GROOVING

1. THE PROPOSED GROOVES WILL BE CUT PERPENDICULAR TO THE RUNWAY CENTERLINE AND WILL TERMINATE 10' FROM THE RUNWAY PAVEMENT EDGE.
2. THE GROOVES WILL BE 1/4" WIDE, 1/4" DEEP AND PLACED ON 1 1/2" CENTERS
3. TOLERANCES ON THE GROOVING WILL BE 3" IN ALIGNMENT FOR 75', ±1/16" IN DEPTH, +1/16" IN WIDTH, -1/8" IN GROOVE SPACING.
4. GROOVES SHALL BE SAWED NO LESS THAN 6" AND NO MORE THAN 18" FROM AN IN-PAVEMENT LIGHT.
5. GROOVES SHALL NOT BE CLOSER THAN 3" OR MORE THAN 9" FROM TRANSVERSE JOINTS IN CONCRETE PAVEMENTS.
6. ALL SOLID MATERIAL GENERATED FROM GROOVING OPERATIONS WILL BE PICKED UP AND DISPOSED OF AT AN APPROVED LAND FILL OFF THE AIRPORT SITE, AT THE CONTRACTOR'S OWN EXPENSE.
7. NO MATERIAL WHICH IS HARMFUL TO VEGETATION WILL BE FLUSHED FROM THE GROOVED PAVEMENT ONTO THE TURFED SHOULDER, BUT WILL BE PICKED UP AND HAULED TO A LOCATION OFF THE AIRPORT SITE AT THE CONTRACTOR'S OWN EXPENSE.
8. AT THE END OF EACH WORK DAY THE RUNWAY WILL BE FLUSHED, CLEANED AND CLEARED OF ALL MATERIAL GENERATED BY THE GROOVING OPERATION.
9. THIS ITEM OF WORK SHALL BE PAID FOR UNDER ITEM: AR401640 "BITUMINOUS PAVEMENT GROOVING" - PER S.Y.

LEGEND

	EXISTING PAVEMENT
	PROPOSED PAVEMENT GROOVING



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

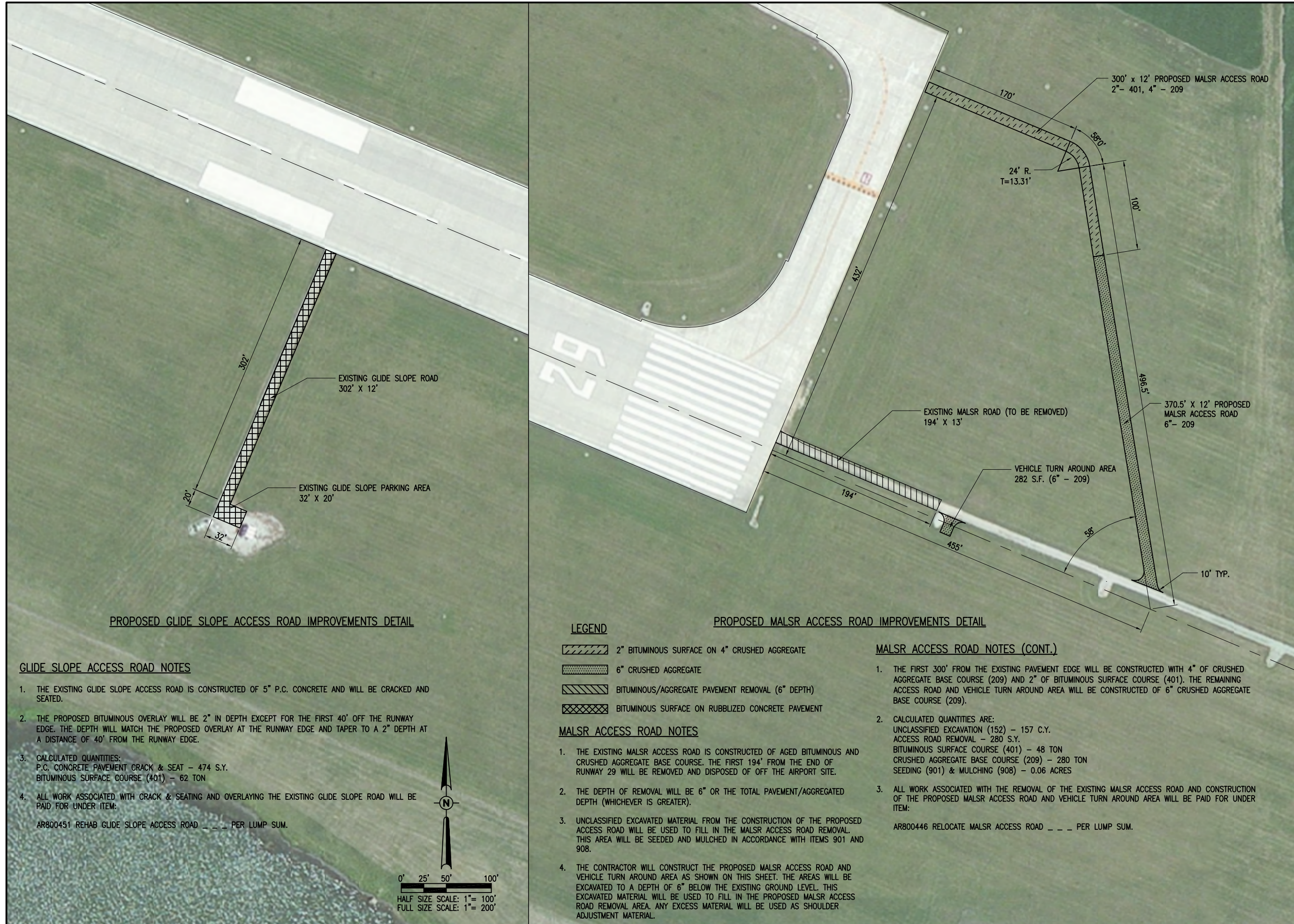
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-122CON.DWG
LAYOUT BY: CAH 02/14/14
DRAWN BY: BAK 02/14/14
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SHEET TITLE

PROPOSED GROOVING PLAN

MAY 21, 2014 2:41 PM KINCA00394 p:\c\sp\sv\036.hanson.com\hanson\Projects\Documents\14\jobs\14A0005D\CAD\Airport\SheetC-122CON



PROPOSED GLIDE SLOPE ACCESS ROAD IMPROVEMENTS DETAIL

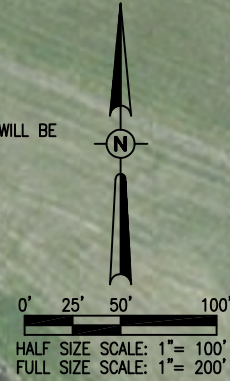
PROPOSED MALS ACCESS ROAD IMPROVEMENTS DETAIL

- LEGEND**
- 2" BITUMINOUS SURFACE ON 4" CRUSHED AGGREGATE
 - 6" CRUSHED AGGREGATE
 - BITUMINOUS/AGGREGATE PAVEMENT REMOVAL (6" DEPTH)
 - BITUMINOUS SURFACE ON RUBBLIZED CONCRETE PAVEMENT

- MALS ACCESS ROAD NOTES**
- THE EXISTING MALS ACCESS ROAD IS CONSTRUCTED OF AGED BITUMINOUS AND CRUSHED AGGREGATE BASE COURSE. THE FIRST 194' FROM THE END OF RUNWAY 29 WILL BE REMOVED AND DISPOSED OF OFF THE AIRPORT SITE.
 - THE DEPTH OF REMOVAL WILL BE 6" OR THE TOTAL PAVEMENT/AGGREGATED DEPTH (WHICHEVER IS GREATER).
 - UNCLASSIFIED EXCAVATED MATERIAL FROM THE CONSTRUCTION OF THE PROPOSED ACCESS ROAD WILL BE USED TO FILL IN THE MALS ACCESS ROAD REMOVAL. THIS AREA WILL BE SEEDED AND MULCHED IN ACCORDANCE WITH ITEMS 901 AND 908.
 - THE CONTRACTOR WILL CONSTRUCT THE PROPOSED MALS ACCESS ROAD AND VEHICLE TURN AROUND AREA AS SHOWN ON THIS SHEET. THE AREAS WILL BE EXCAVATED TO A DEPTH OF 6" BELOW THE EXISTING GROUND LEVEL. THIS EXCAVATED MATERIAL WILL BE USED TO FILL IN THE PROPOSED MALS ACCESS ROAD REMOVAL AREA. ANY EXCESS MATERIAL WILL BE USED AS SHOULDER ADJUSTMENT MATERIAL.

- MALS ACCESS ROAD NOTES (CONT.)**
- THE FIRST 300' FROM THE EXISTING PAVEMENT EDGE WILL BE CONSTRUCTED WITH 4" OF CRUSHED AGGREGATE BASE COURSE (209) AND 2" OF BITUMINOUS SURFACE COURSE (401). THE REMAINING ACCESS ROAD AND VEHICLE TURN AROUND AREA WILL BE CONSTRUCTED OF 6" CRUSHED AGGREGATE BASE COURSE (209).
 - CALCULATED QUANTITIES ARE:
UNCLASSIFIED EXCAVATION (152) - 157 C.Y.
ACCESS ROAD REMOVAL - 280 S.Y.
BITUMINOUS SURFACE COURSE (401) - 48 TON
CRUSHED AGGREGATE BASE COURSE (209) - 280 TON
SEEDING (901) & MULCHING (908) - 0.06 ACRES
 - ALL WORK ASSOCIATED WITH THE REMOVAL OF THE EXISTING MALS ACCESS ROAD AND CONSTRUCTION OF THE PROPOSED MALS ACCESS ROAD AND VEHICLE TURN AROUND AREA WILL BE PAID FOR UNDER ITEM:
AR800446 RELOCATE MALS ACCESS ROAD _ _ _ PER LUMP SUM.

- GLIDE SLOPE ACCESS ROAD NOTES**
- THE EXISTING GLIDE SLOPE ACCESS ROAD IS CONSTRUCTED OF 5" P.C. CONCRETE AND WILL BE CRACKED AND SEATED.
 - THE PROPOSED BITUMINOUS OVERLAY WILL BE 2" IN DEPTH EXCEPT FOR THE FIRST 40' OFF THE RUNWAY EDGE. THE DEPTH WILL MATCH THE PROPOSED OVERLAY AT THE RUNWAY EDGE AND TAPER TO A 2" DEPTH AT A DISTANCE OF 40' FROM THE RUNWAY EDGE.
 - CALCULATED QUANTITIES:
P.C. CONCRETE PAVEMENT CRACK & SEAT - 474 S.Y.
BITUMINOUS SURFACE COURSE (401) - 62 TON
 - ALL WORK ASSOCIATED WITH CRACK & SEATING AND OVERLAYING THE EXISTING GLIDE SLOPE ROAD WILL BE PAID FOR UNDER ITEM:
AR800451 REHAB GLIDE SLOPE ACCESS ROAD _ _ _ PER LUMP SUM.



REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

ISSUE: MAY 2, 2014

PROJECT NO: 14A0005D
CAD FILE: C-521CON.DWG
LAYOUT BY: CAH 03/31/14
DRAWN BY: CAH 03/31/14
REVIEWED BY: CAH 05/02/14

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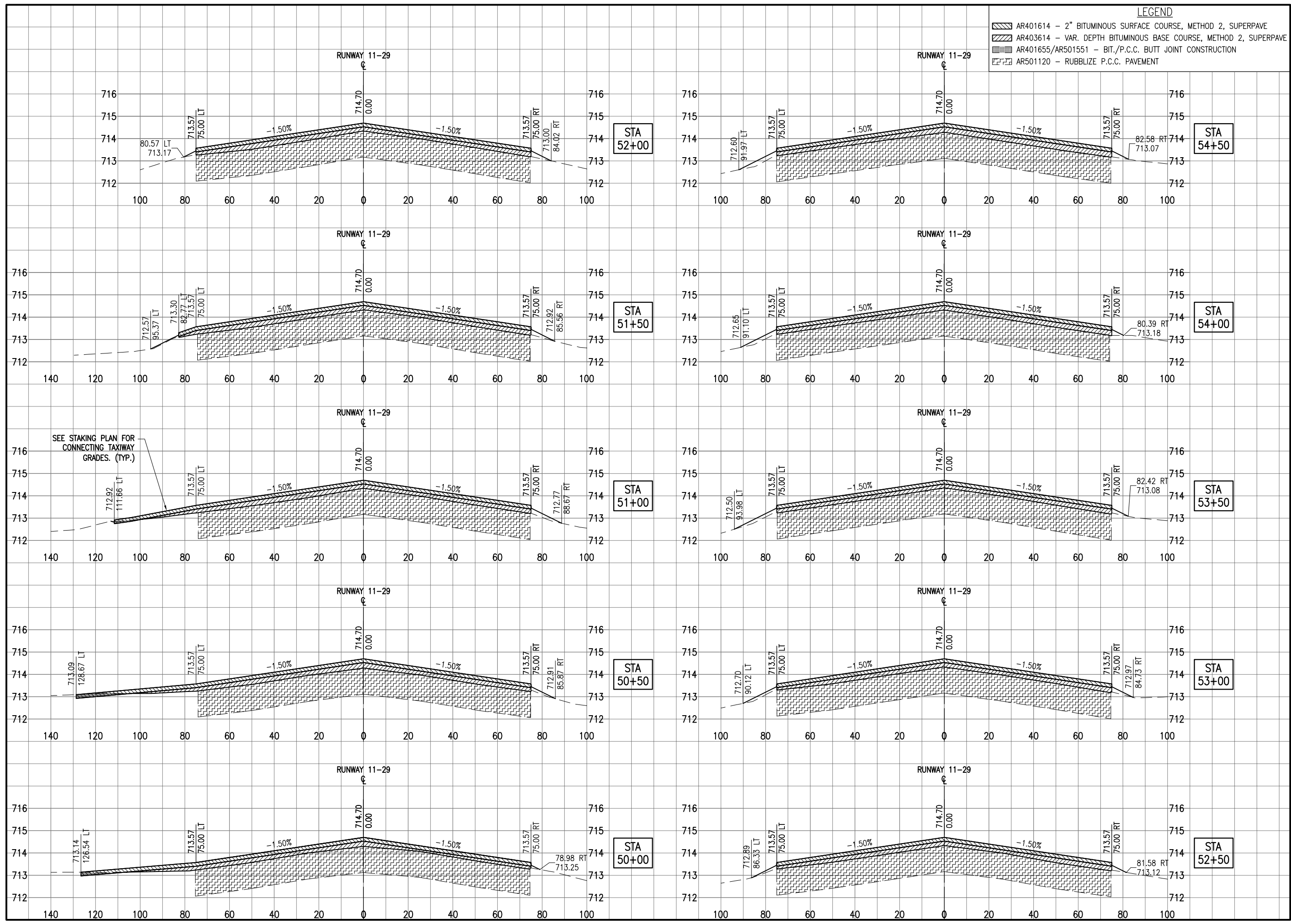
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**PROPOSED
ACCESS ROADS
IMPROVEMENTS**

MAY 21, 2014 2:43 PM KINGCA00394
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LEGEND

	AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV





ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-301-XS.DWG
LAYOUT BY: KBS 04/08/14
DRAWN BY: KBS 04/08/14
REVIEWED BY: CAH 05/02/14

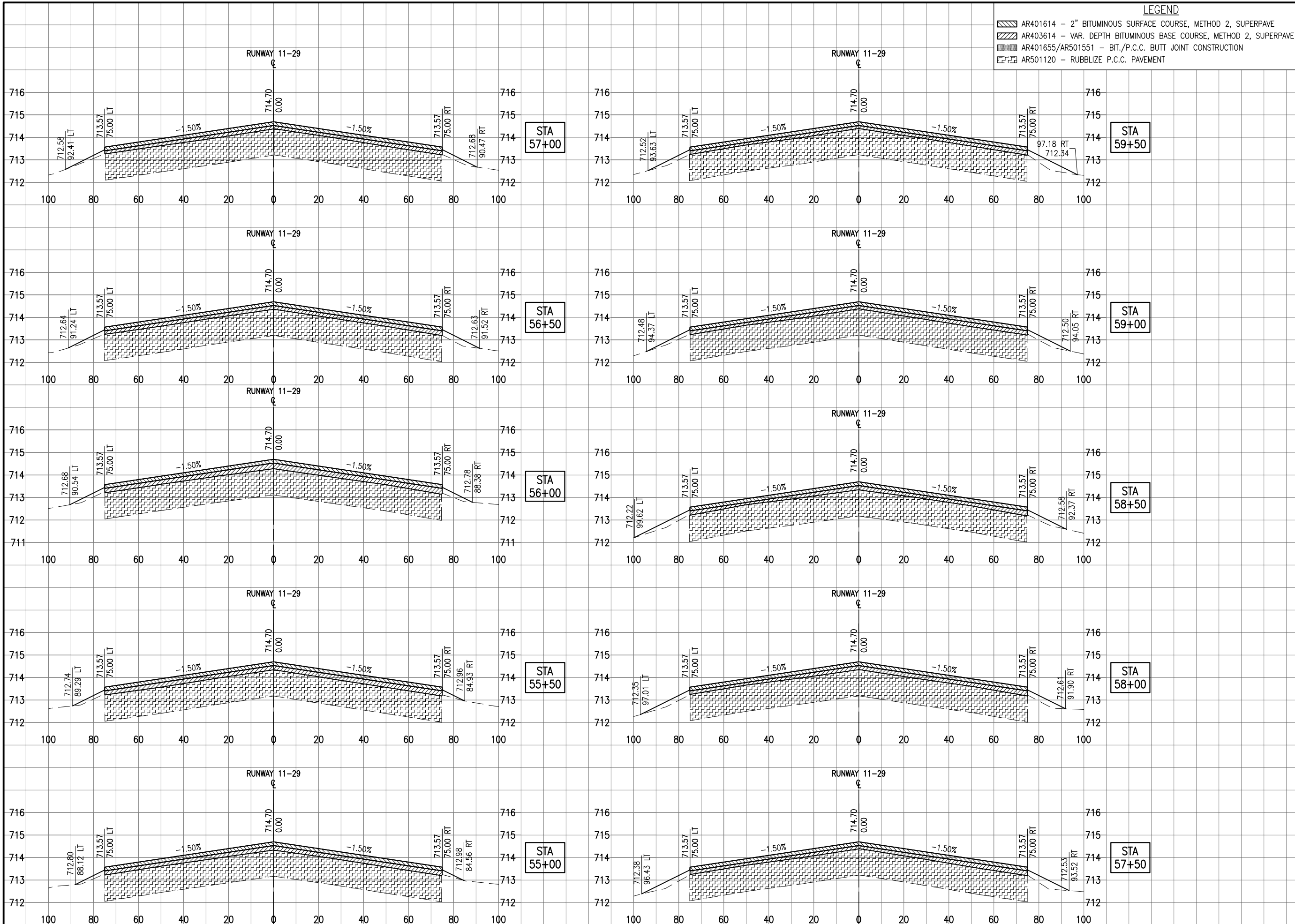
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RUNWAY 11-29 CROSS SECTIONS - STA. 50+00 TO 54+50

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LEGEND

-  AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
-  AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
-  AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
-  AR501120 - RUBBLIZE P.C.C. PAVEMENT



**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-301-XS.DWG
LAYOUT BY: KBS 04/08/14
DRAWN BY: KBS 04/08/14
REVIEWED BY: CAH 05/02/14

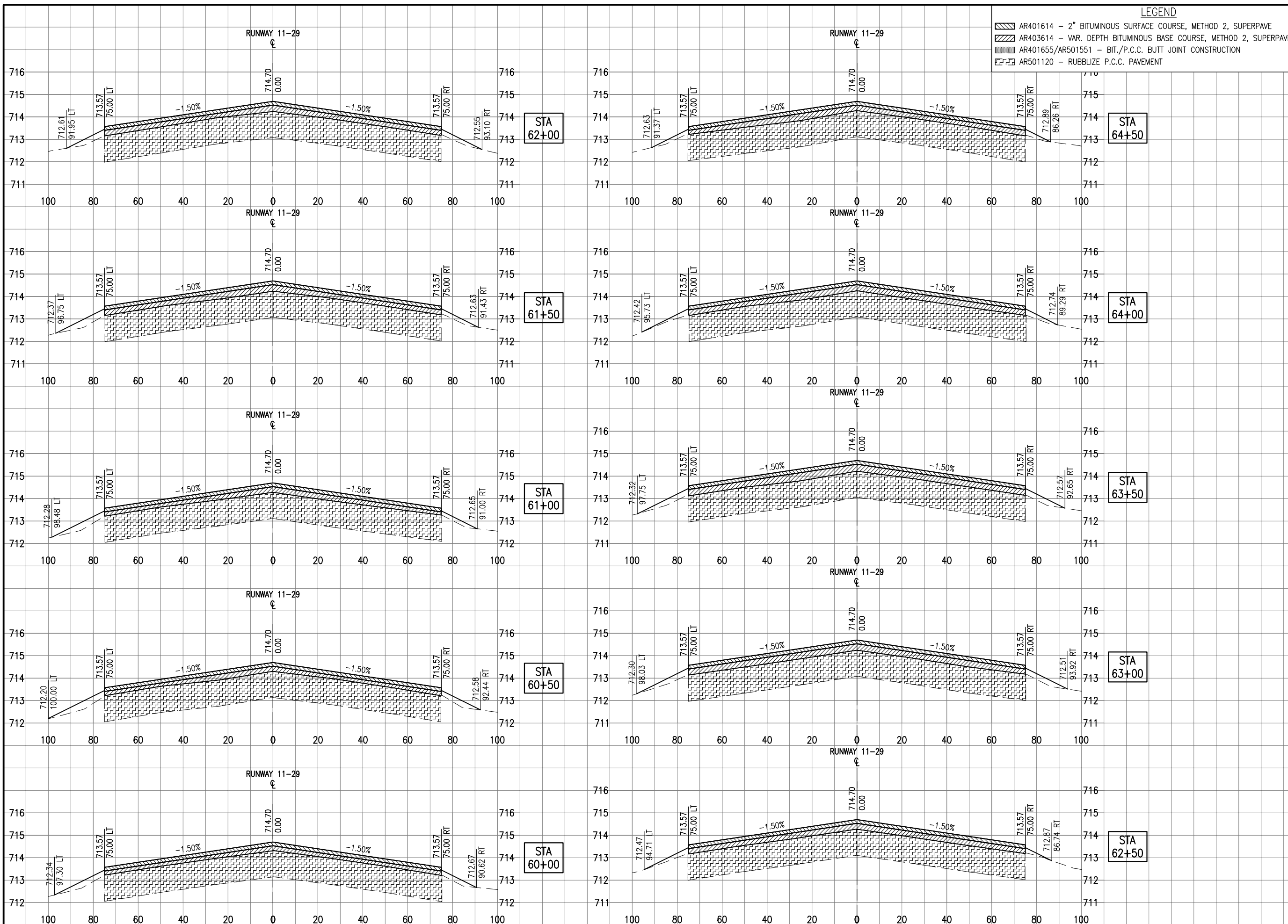
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**RUNWAY 11-29
CROSS SECTIONS -
STA. 55+00 TO 59+50**

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LEGEND

	AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
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ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-301-XS.DWG
LAYOUT BY: KBS 04/08/14
DRAWN BY: KBS 04/08/14
REVIEWED BY: CAH 05/02/14

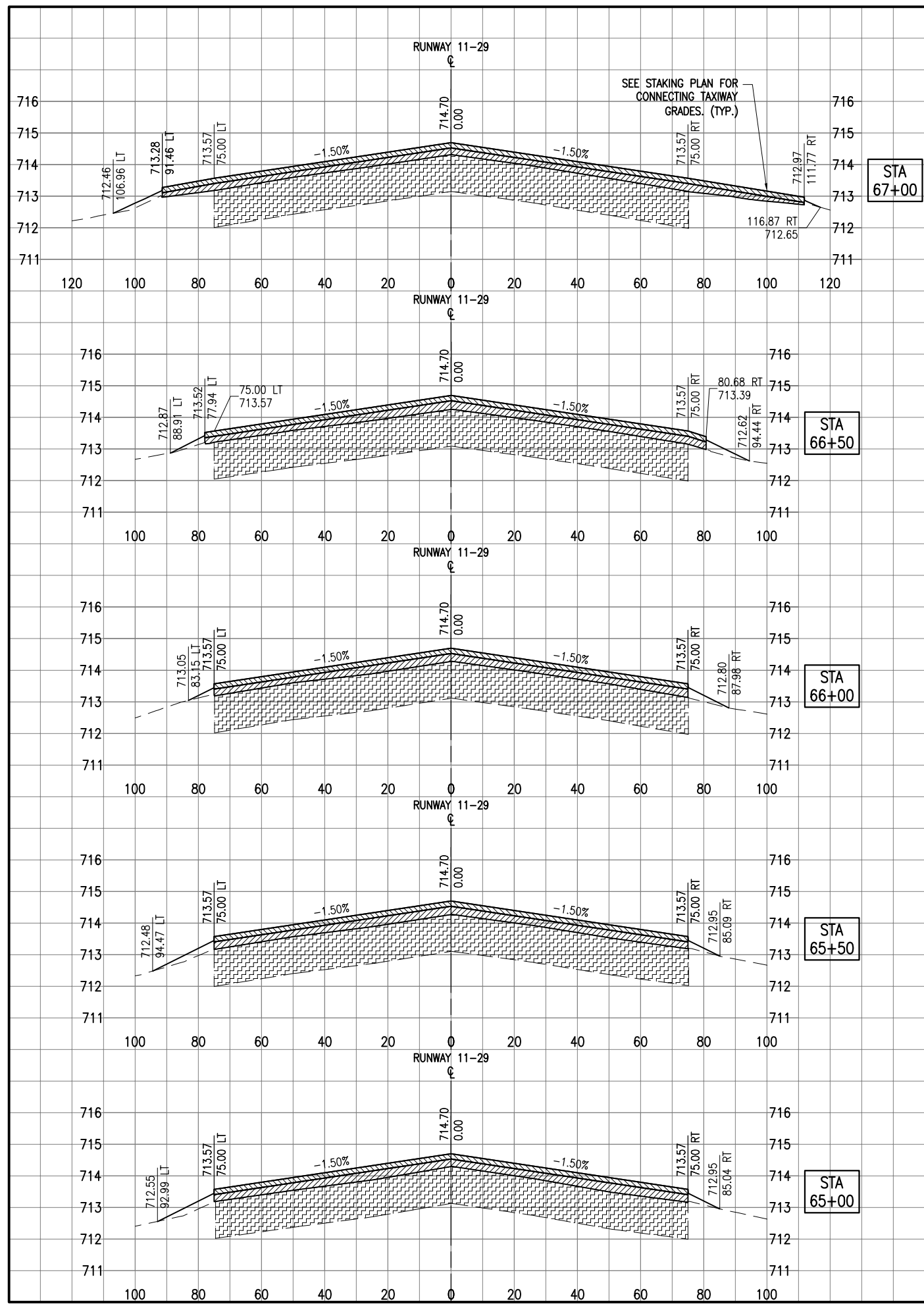
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RUNWAY 11-29
CROSS SECTIONS -
STA. 60+00 TO 64+50

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LEGEND

- AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
- AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
- AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
- AR501120 - RUBBLIZE P.C.C. PAVEMENT



**REHABILITATE
RUNWAY 11/29**

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

ISSUE: MAY 2, 2014

PROJECT NO: 14A0005D

CAD FILE: C-301-XS.DWG

LAYOUT BY: KBS 04/08/14

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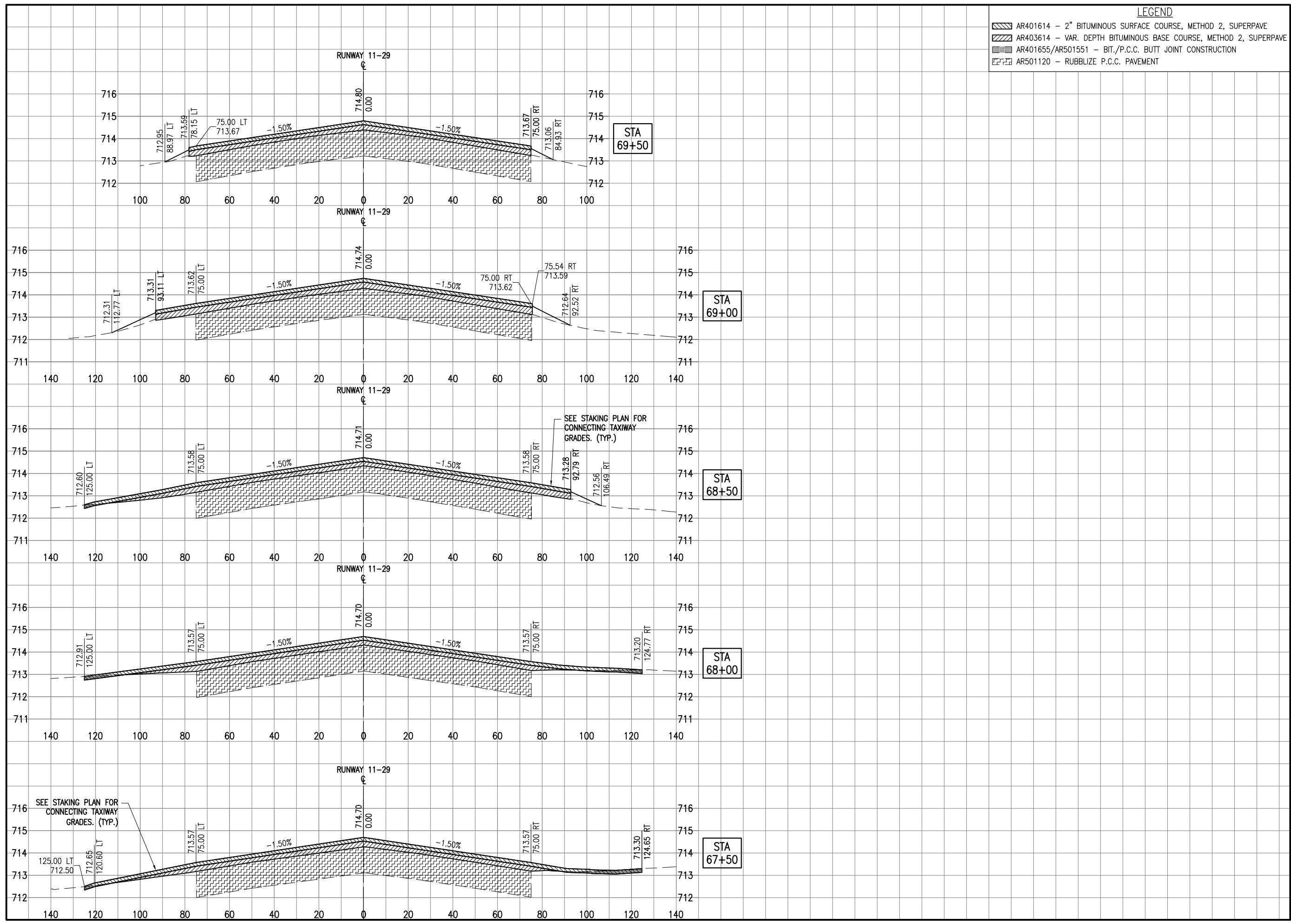
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**RUNWAY 11-29
CROSS SECTIONS -
STA. 65+00 TO 67+00**

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LEGEND

- AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
- AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
- AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
- AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE
RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

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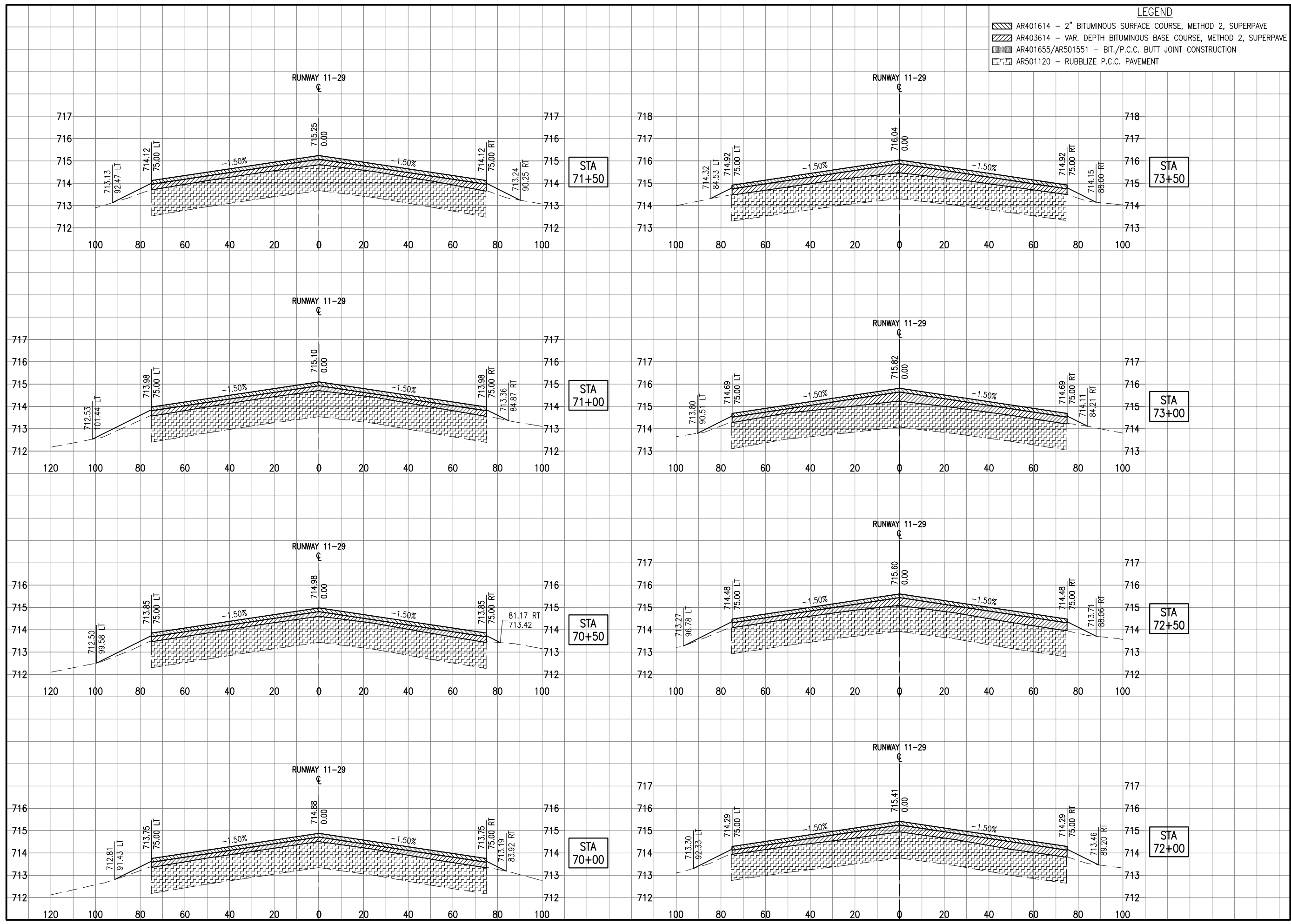
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RUNWAY 11-29
CROSS SECTIONS -
STA. 67+50 TO 69+50

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LEGEND

- AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
- AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
- AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
- AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE
RUNWAY 11/29
IDA No: MTO-4320
Contract No. CO061

NO.	DATE	DESCRIPTION		
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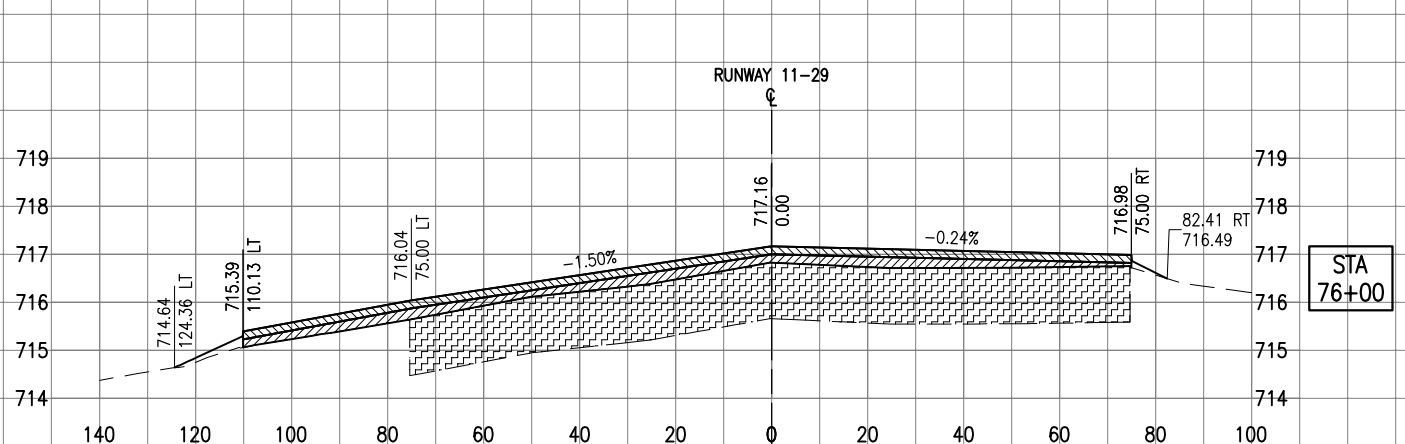
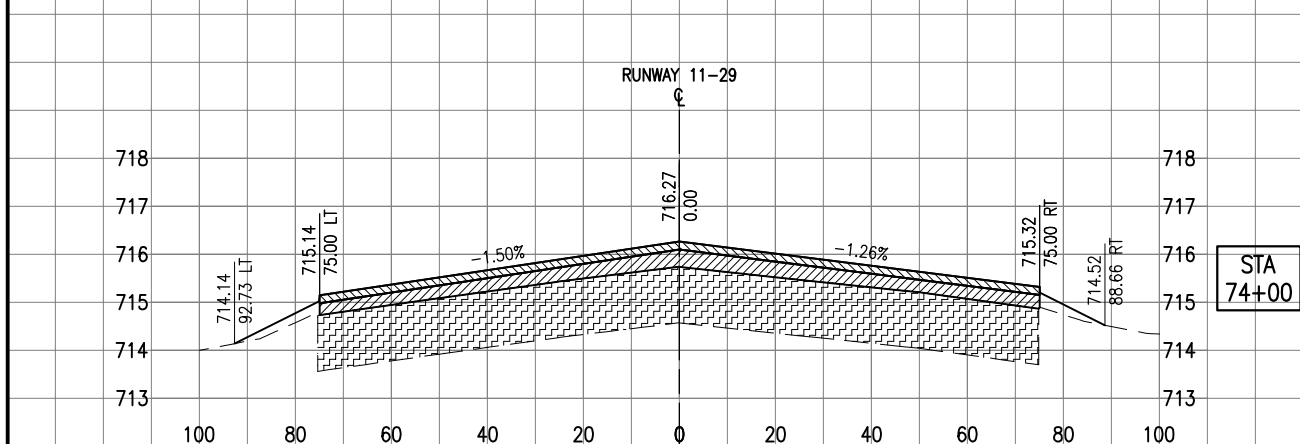
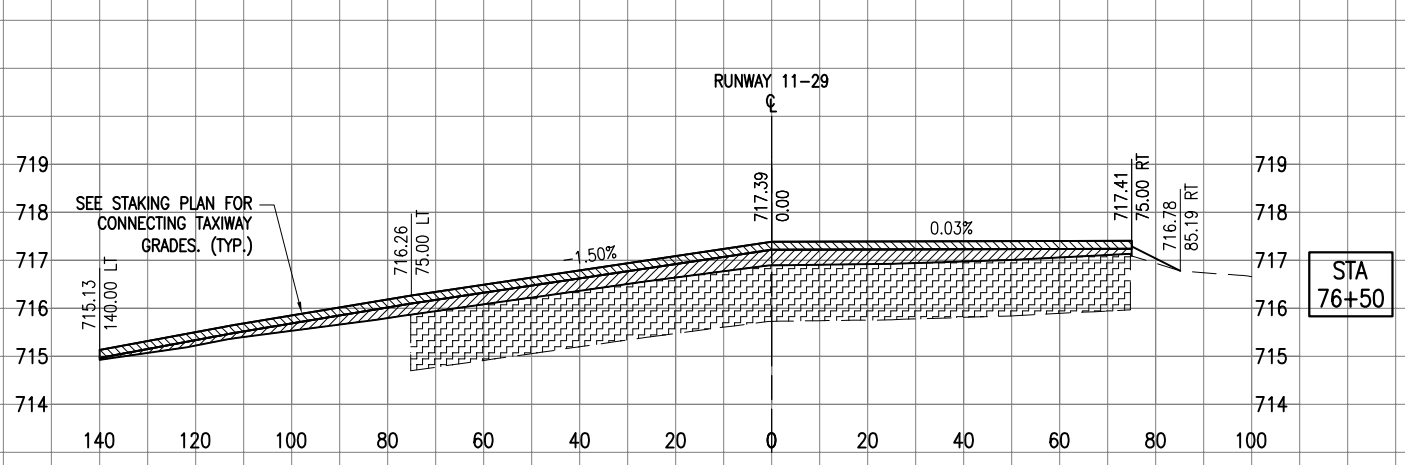
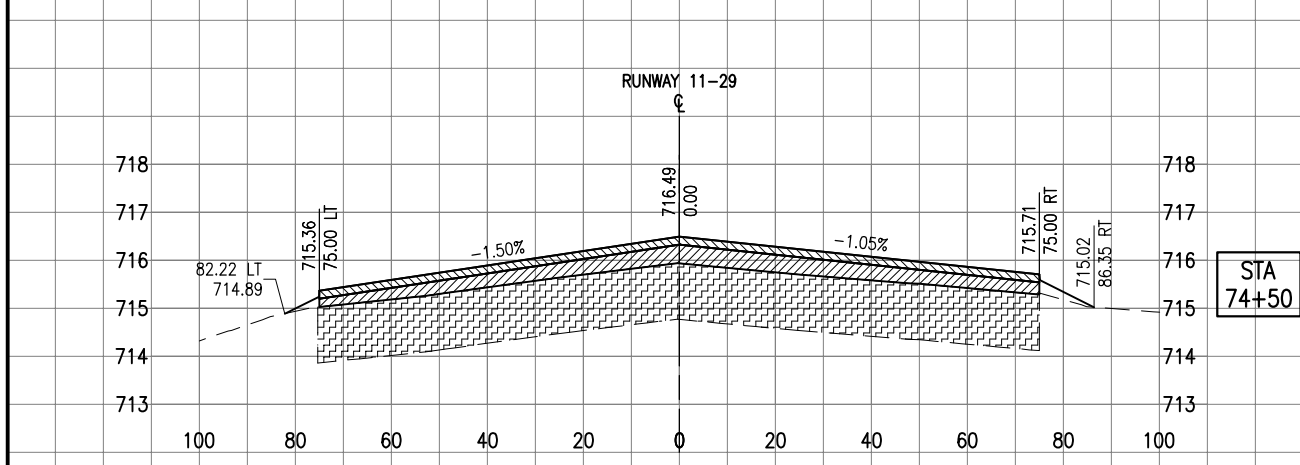
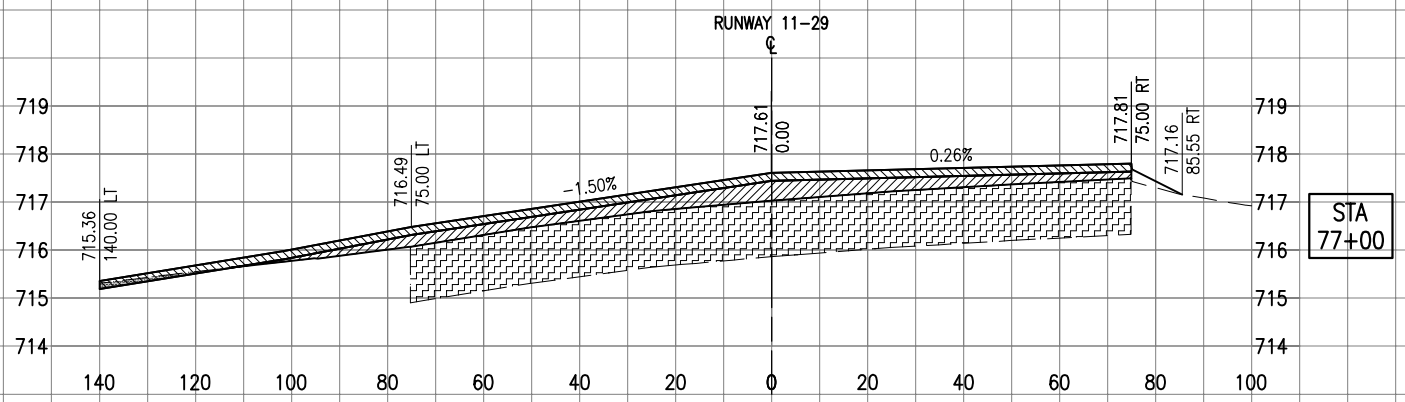
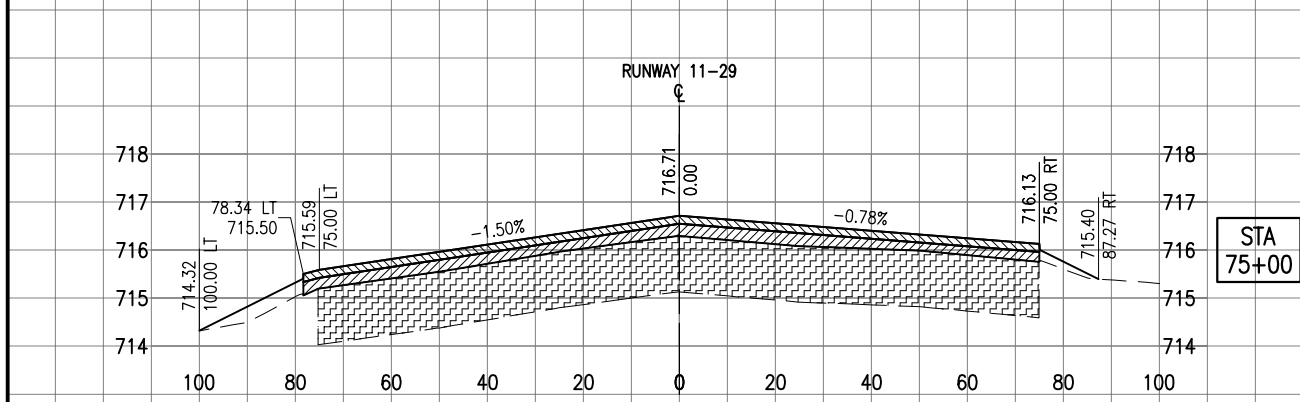
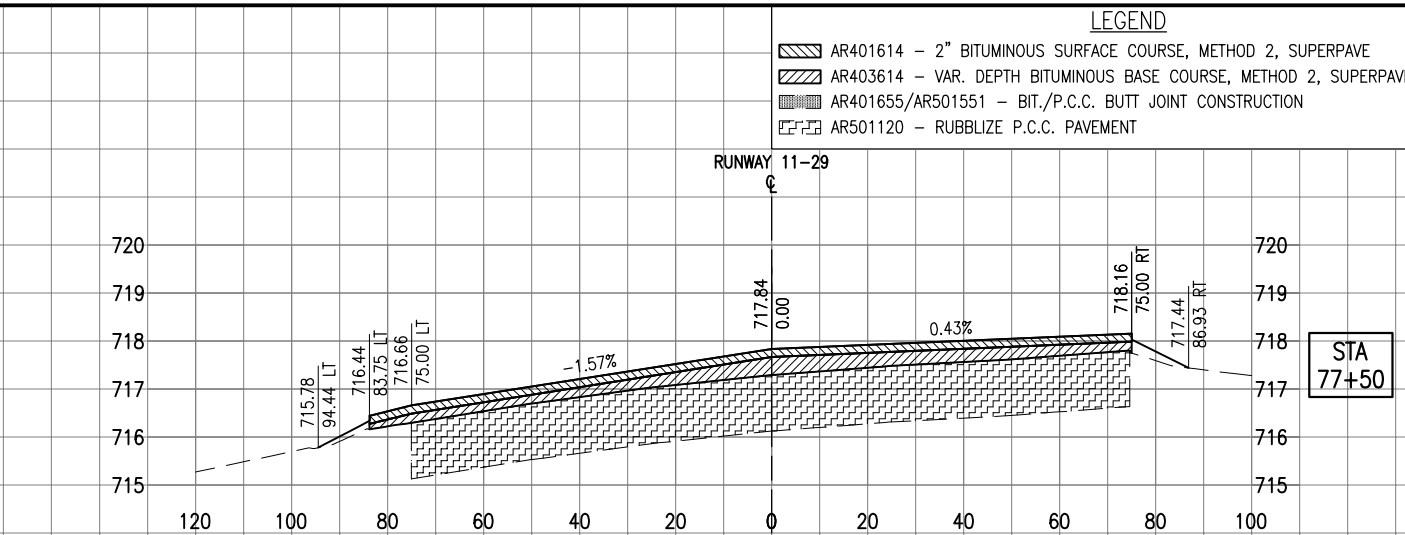
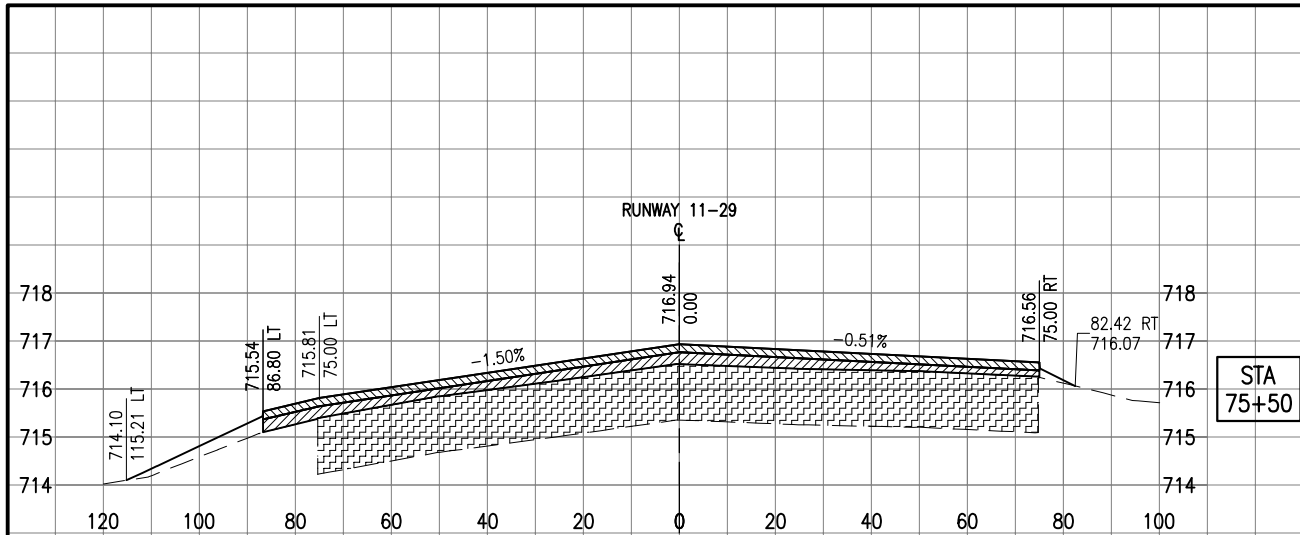
ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
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SHEET TITLE

RUNWAY 11-29
CROSS SECTIONS -
STA. 70+00 TO 73+50

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LEGEND

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
CAD FILE: C-301-XS.DWG
LAYOUT BY: KBS 04/08/14
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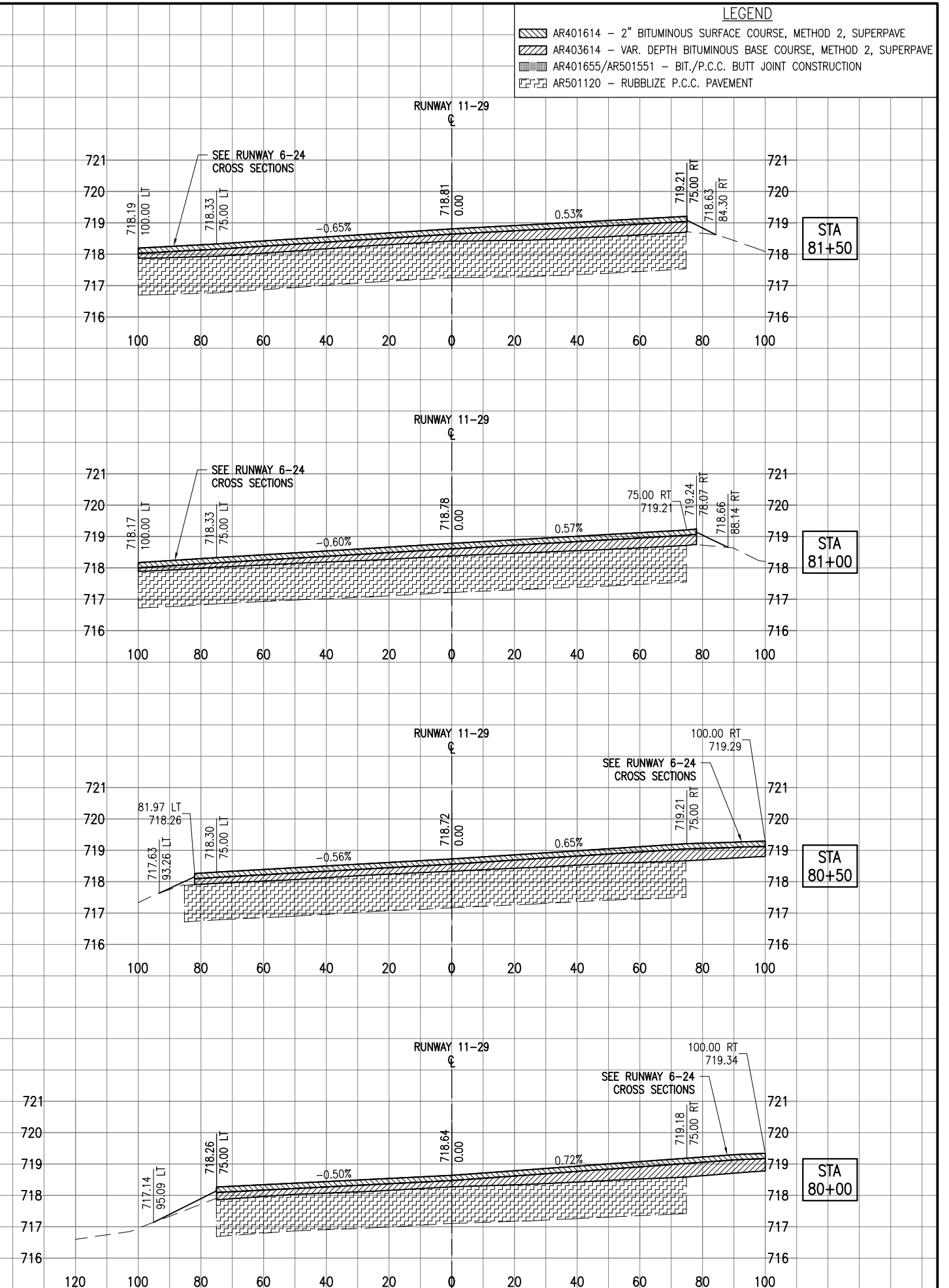
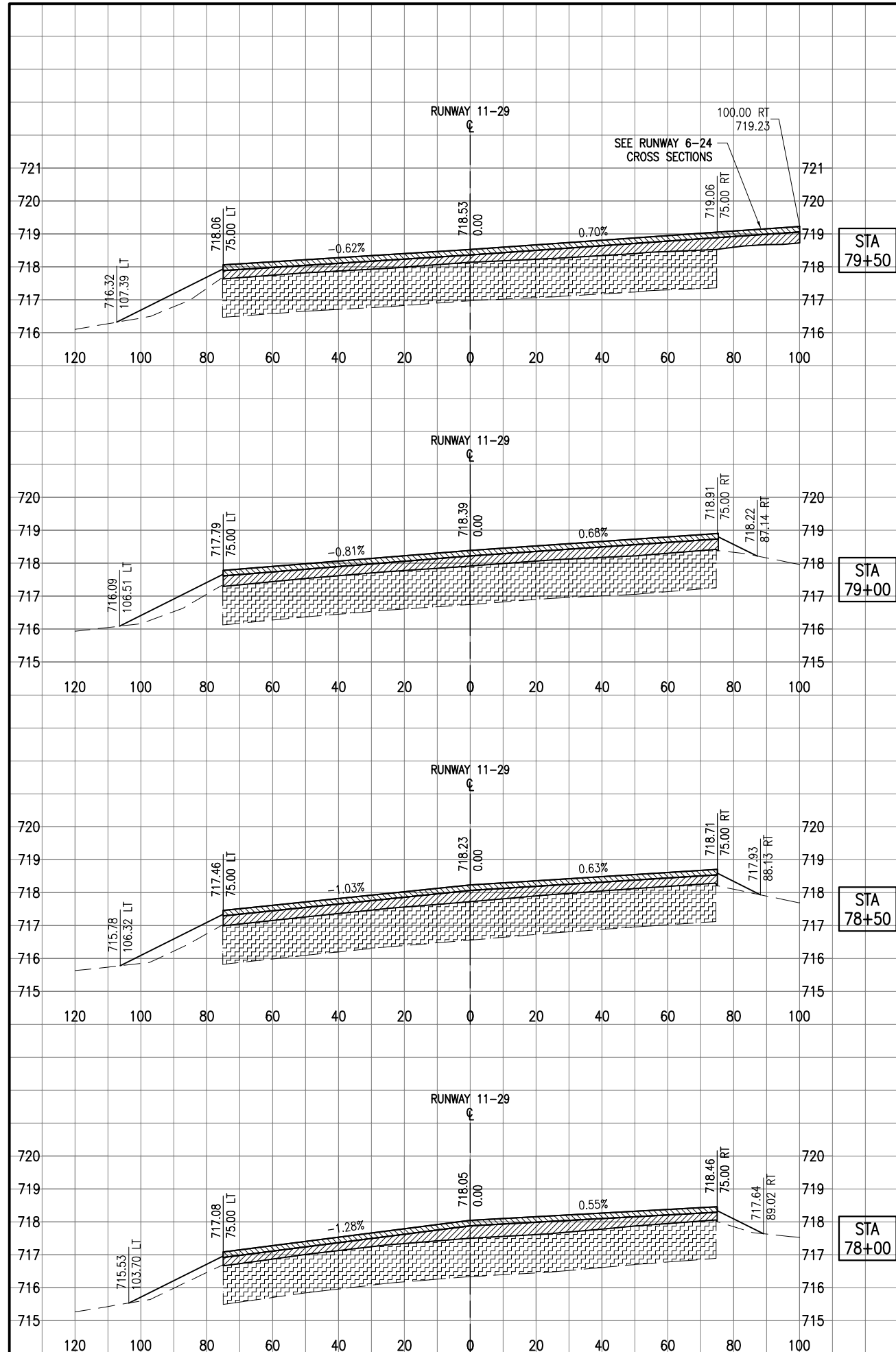
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RUNWAY 11-29 CROSS SECTIONS - STA. 74+00 TO 77+50

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LEGEND

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE RUNWAY 11/29

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Contract No. CO061

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PROJECT NO: 14A0005D
CAD FILE: C-301-XS.DWG
LAYOUT BY: KBS 04/08/14
DRAWN BY: KBS 04/08/14
REVIEWED BY: CAH 05/02/14

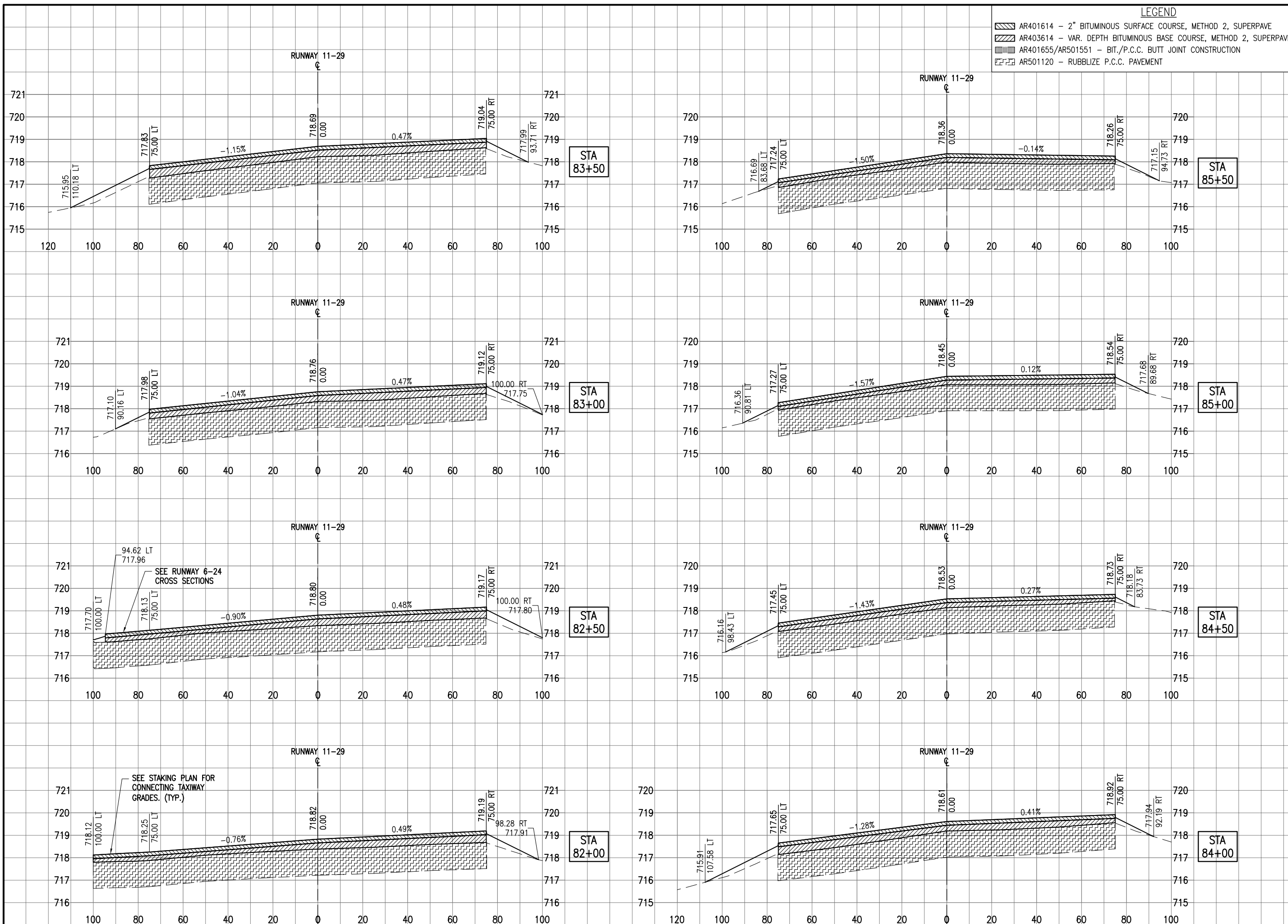
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RUNWAY 11-29 CROSS SECTIONS - STA. 78+00 TO 81+50

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LEGEND

	AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE RUNWAY 11/29

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LAYOUT BY: KBS 04/08/14
DRAWN BY: KBS 04/08/14
REVIEWED BY: CAH 05/02/14

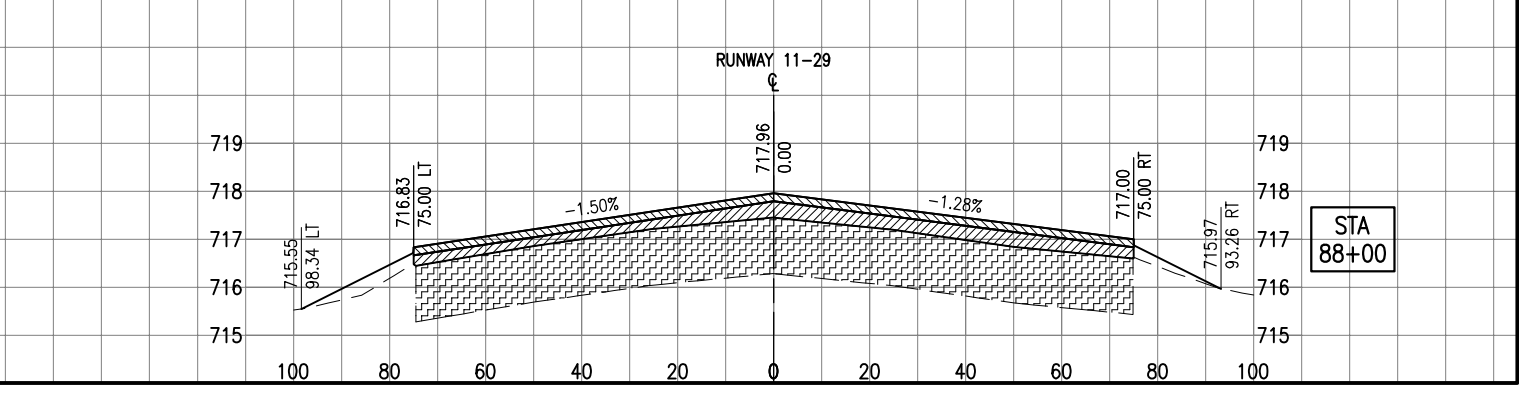
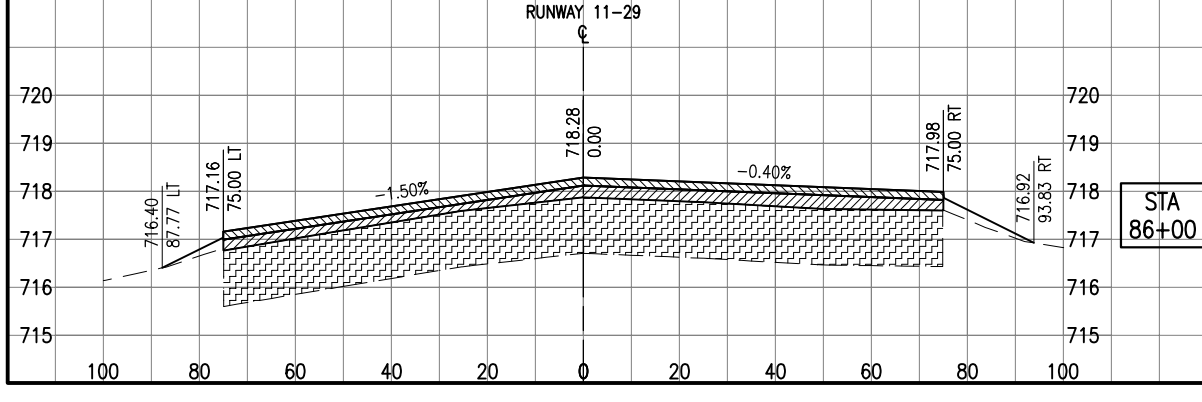
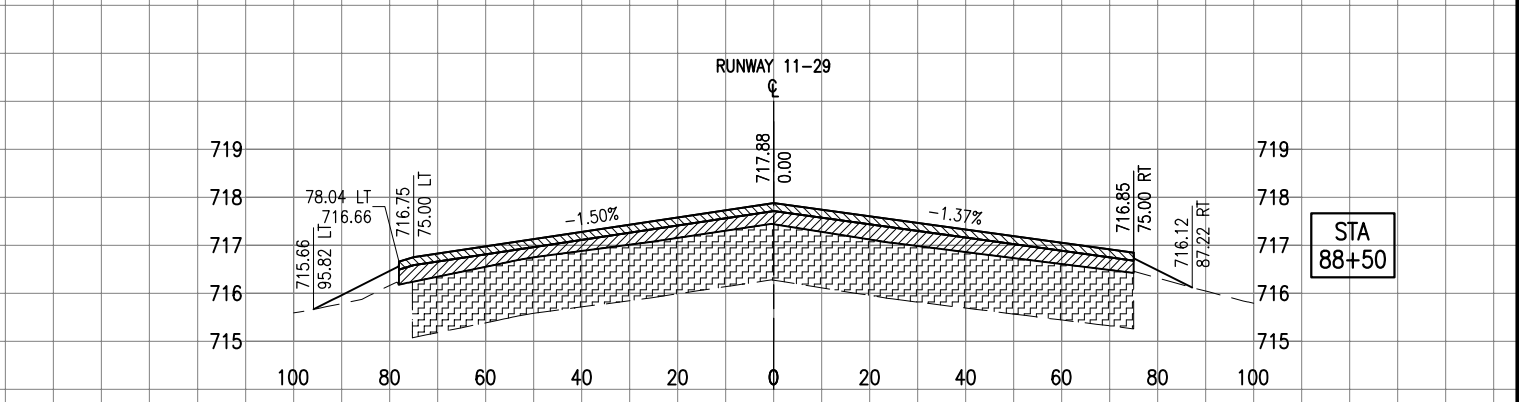
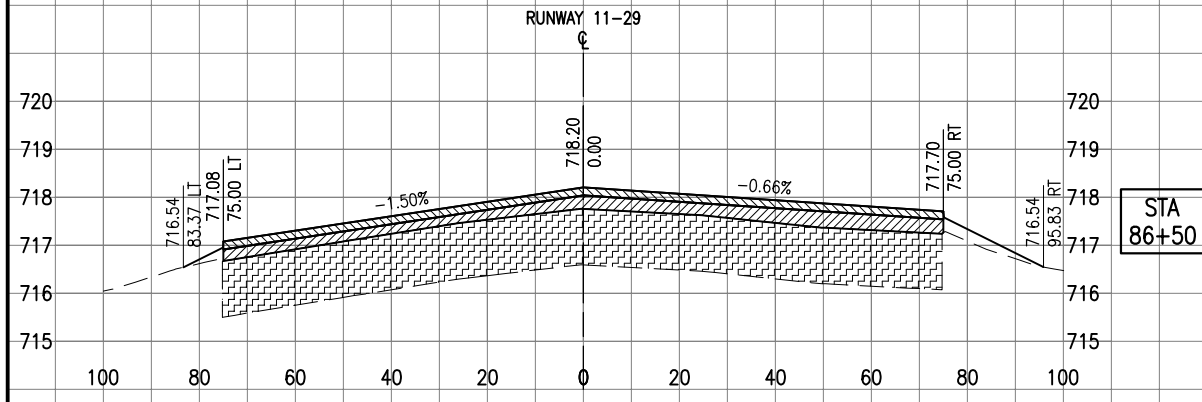
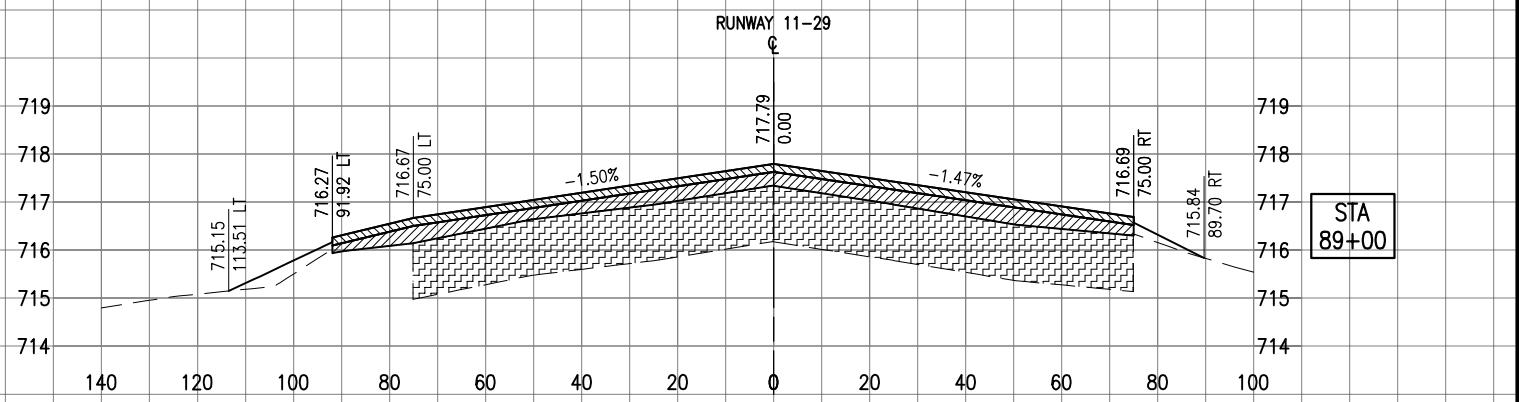
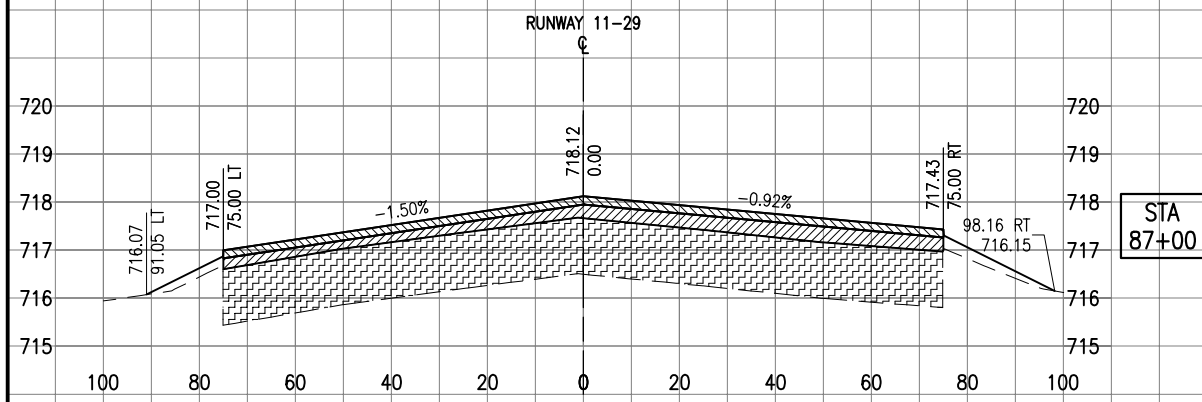
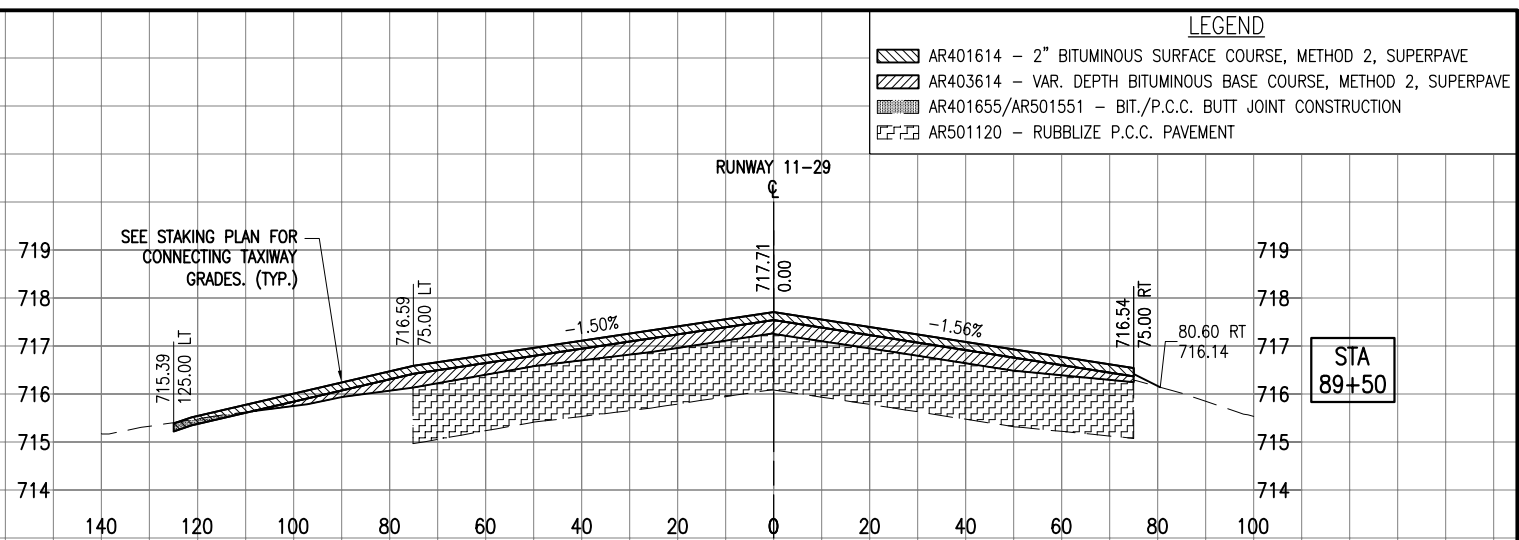
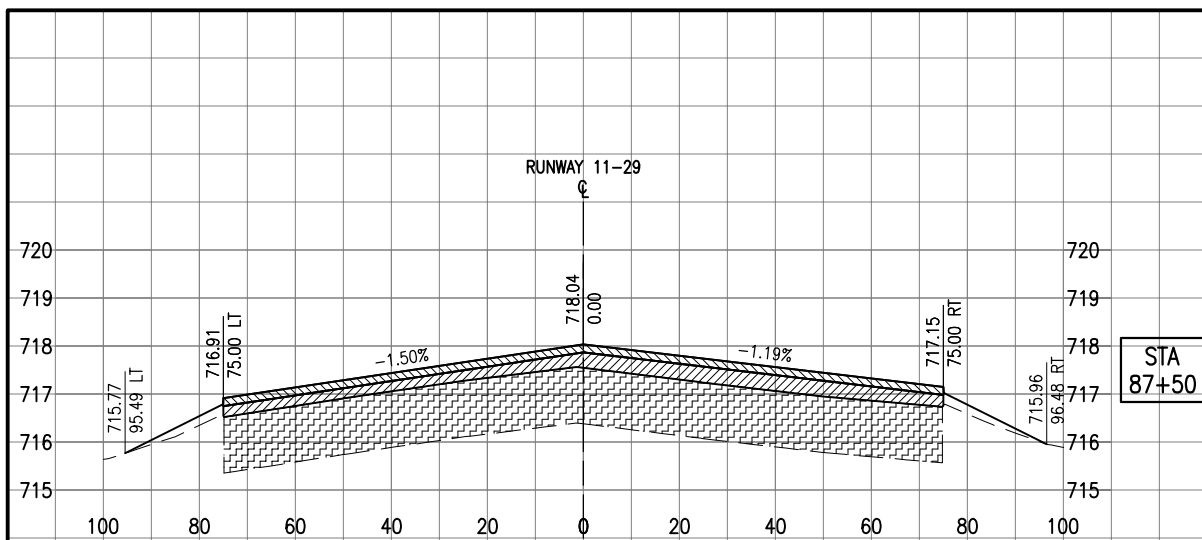
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RUNWAY 11-29 CROSS SECTIONS - STA. 82+00 TO 85+50

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LEGEND

	AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE RUNWAY 11/29

IDA No: MTO-4320

Contract No. CO061

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		LAY	DWN	REV

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PROJECT NO: 14A0005D
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LAYOUT BY: KBS 04/08/14
DRAWN BY: KBS 04/08/14
REVIEWED BY: CAH 05/02/14

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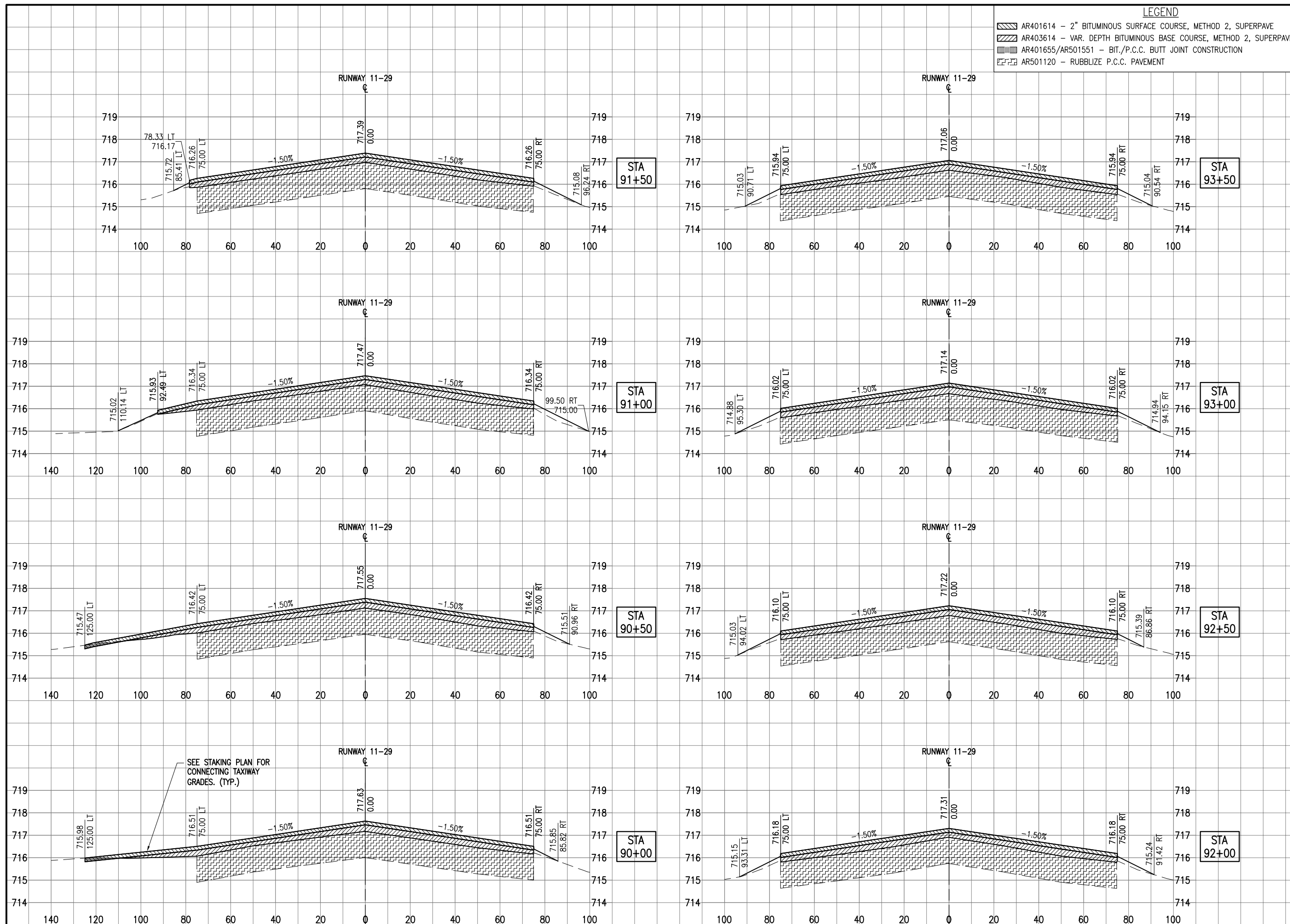
**RUNWAY 11-29
CROSS SECTIONS -
STA. 86+00 TO 89+50**

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE
RUNWAY 11/29
IDA No: MTO-4320
Contract No. CO061

NO.	DATE	DESCRIPTION		
		LAY	DWN	REV

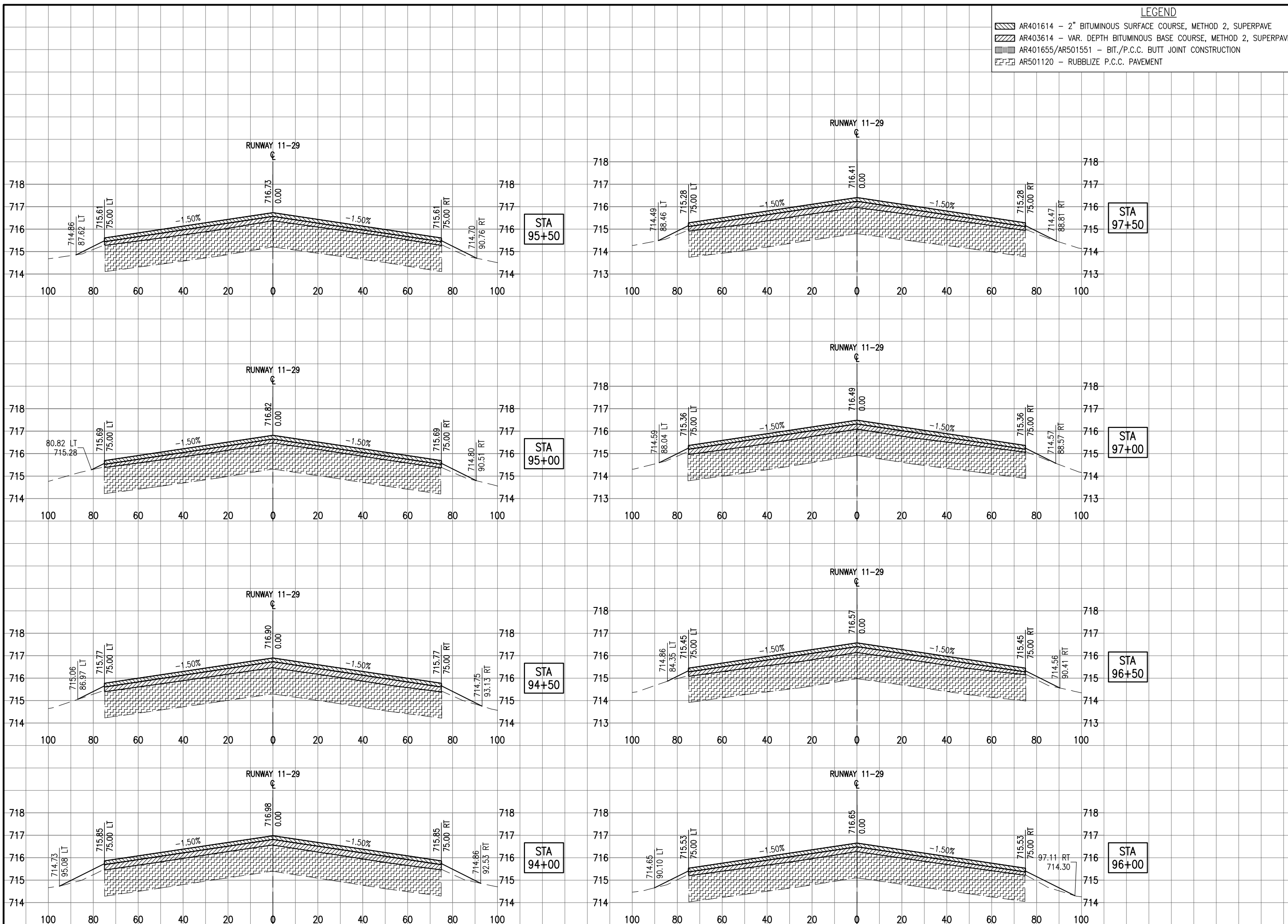
ISSUE: MAY 2, 2014
PROJECT NO: 14A0005D
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RUNWAY 11-29
CROSS SECTIONS -
STA. 90+00 TO 93+50

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LEGEND

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



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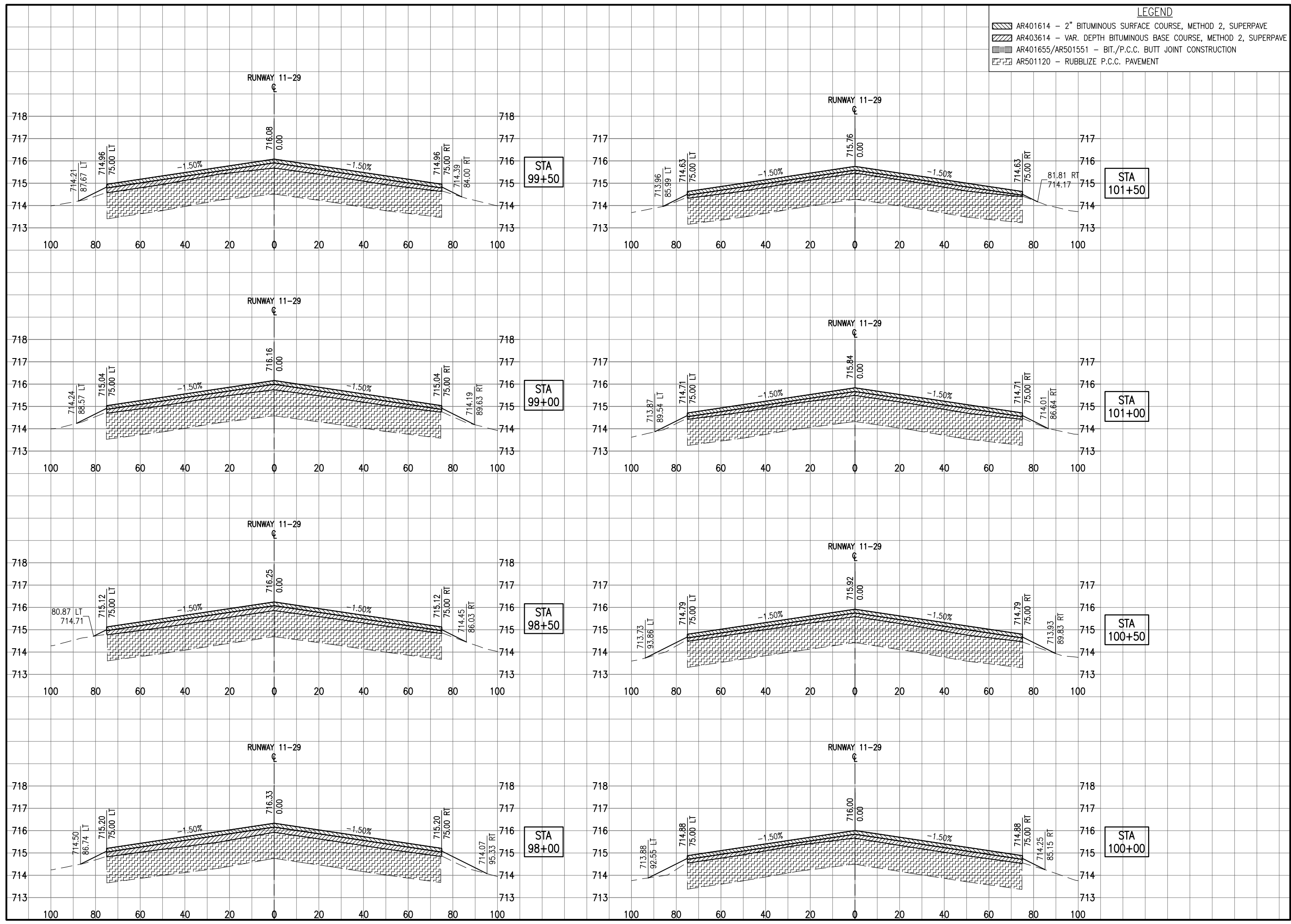
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REHABILITATE RUNWAY 11/29

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Contract No. CO061

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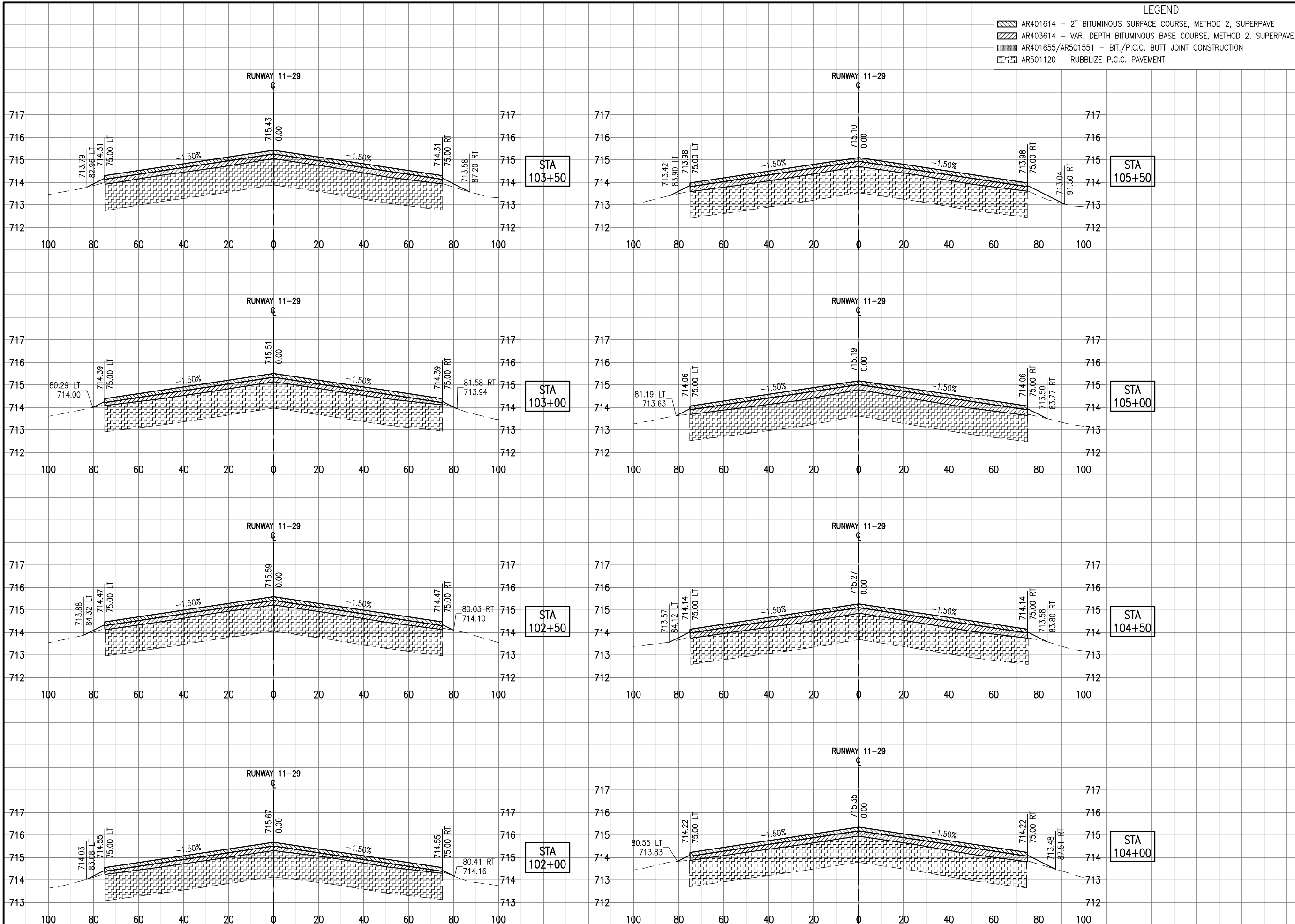
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STA. 98+00 TO 101+50**

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
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**REHABILITATE
RUNWAY 11/29**

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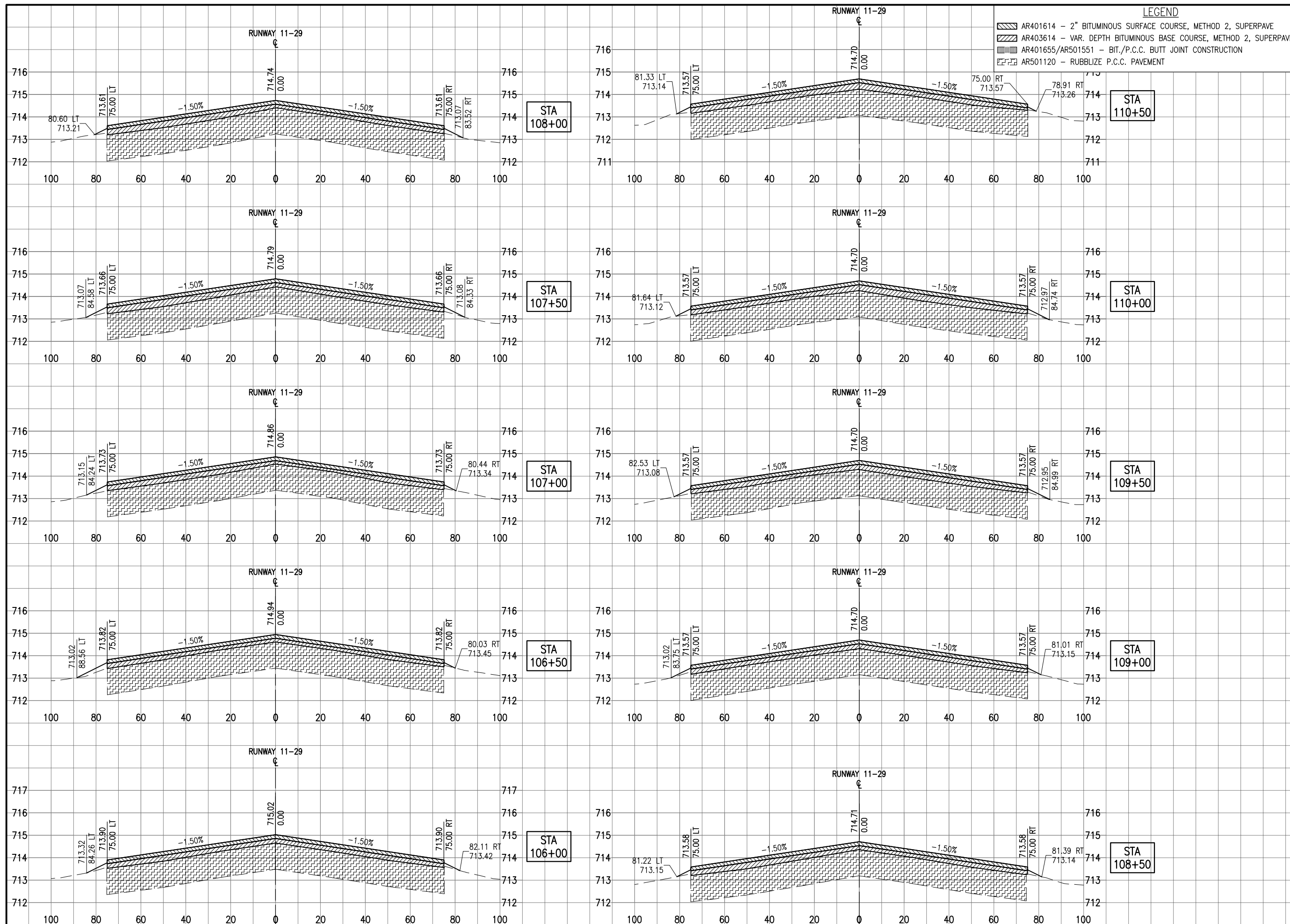
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SECTIONS - STA.
102+00 TO 105+50**

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LEGEND

- AR401614 - 2" BITUMINOUS SURFACE COURSE, METHOD 2, SUPERPAVE
- AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
- AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
- AR501120 - RUBBLIZE P.C.C. PAVEMENT

REHABILITATE
RUNWAY 11/29
IDA No: MTO-4320
Contract No. CO061

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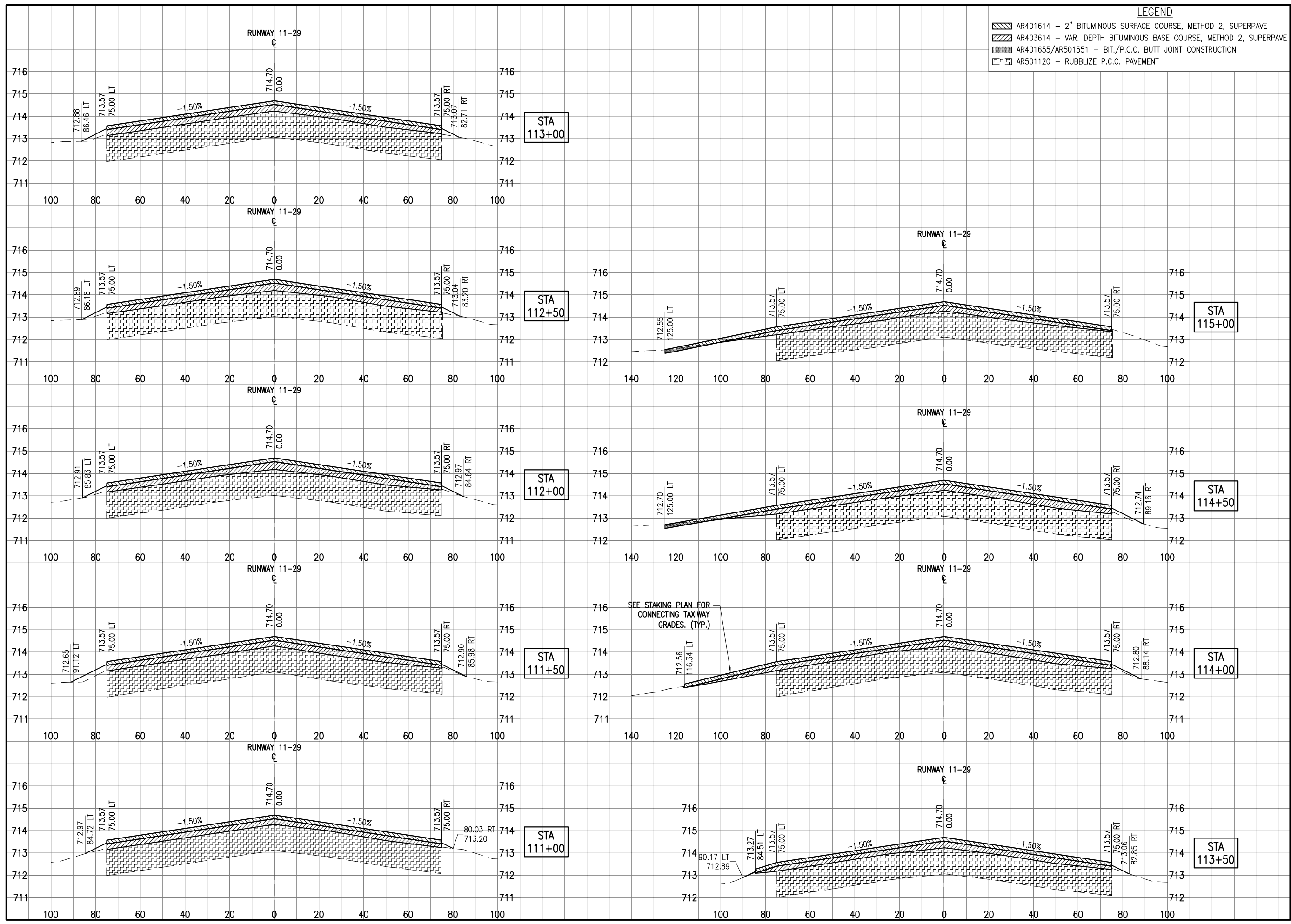
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RUNWAY 11-29 CROSS
SECTIONS - STA.
106+00 TO 110+50

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
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RUNWAY 11/29
IDA No: MTO-4320
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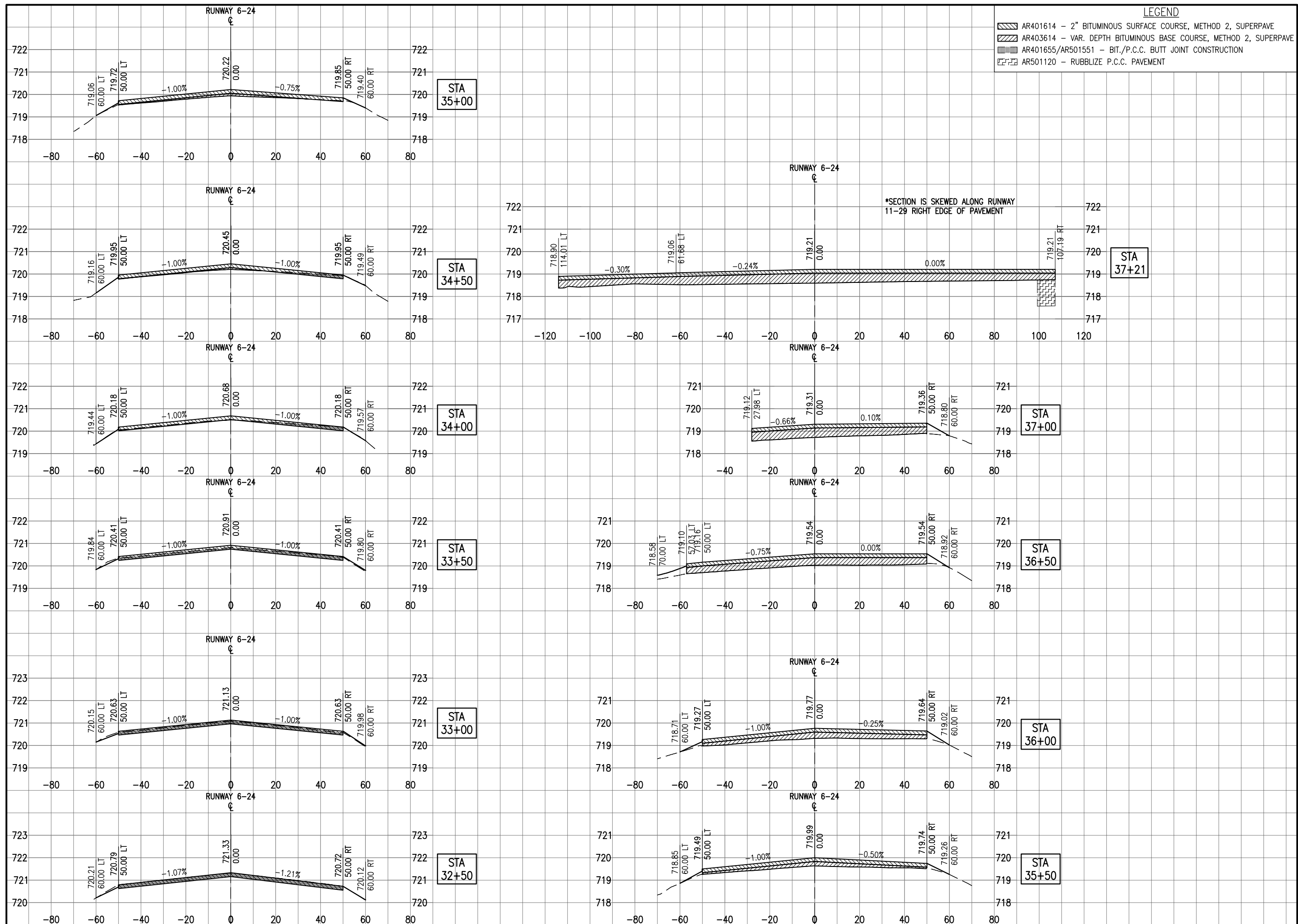
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RUNWAY 11-29
CROSS SECTIONS -
STA. 111+00 TO 115+00

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LEGEND

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	AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
	AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
	AR501120 - RUBBLIZE P.C.C. PAVEMENT



REHABILITATE
RUNWAY 11/29
IDA No: MTO-4320
Contract No. CO061

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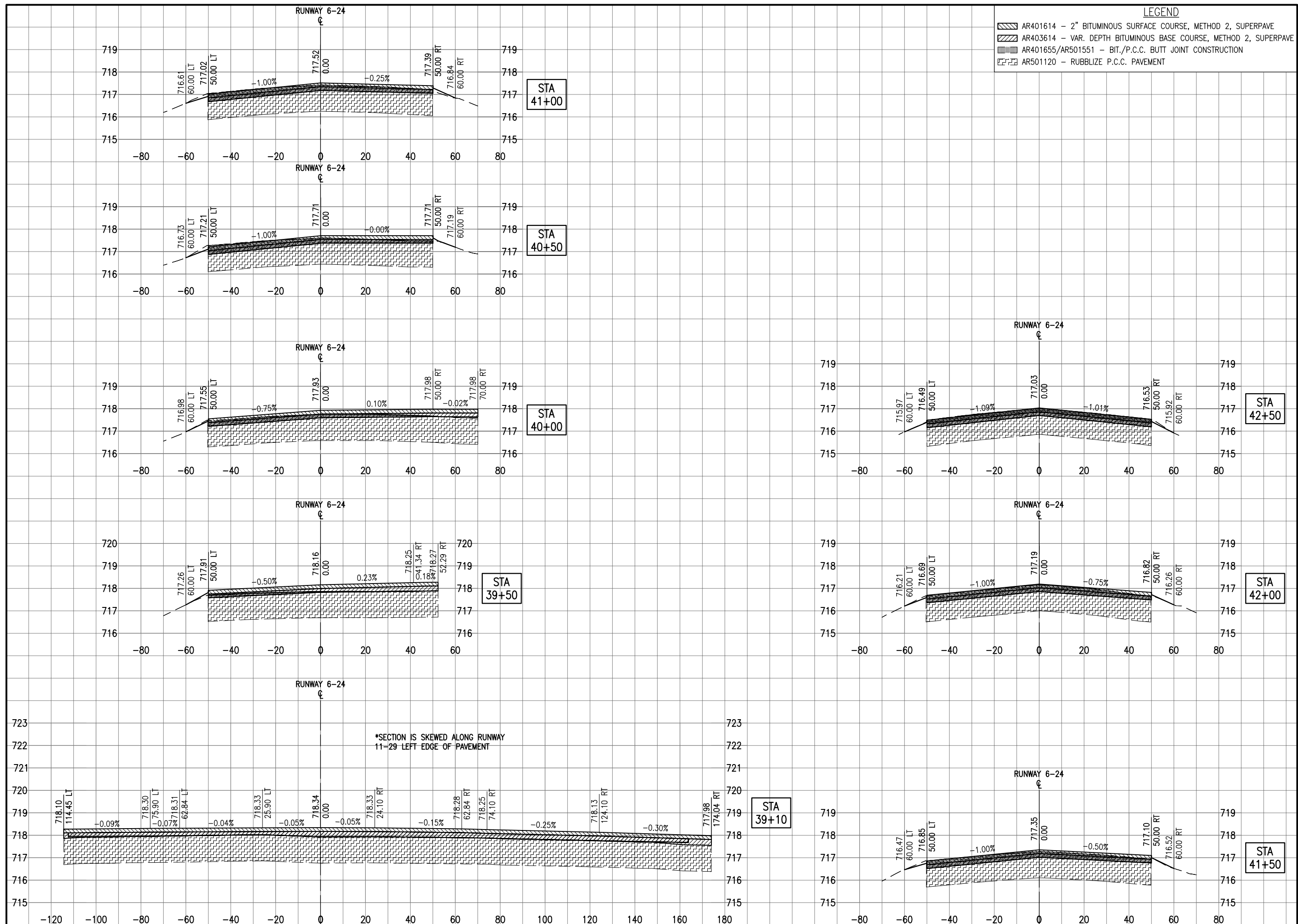
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RUNWAY 6-24
CROSS SECTIONS -
STA. 32+50 TO 39+10

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- AR403614 - VAR. DEPTH BITUMINOUS BASE COURSE, METHOD 2, SUPERPAVE
- AR401655/AR501551 - BIT./P.C.C. BUTT JOINT CONSTRUCTION
- AR501120 - RUBBLIZE P.C.C. PAVEMENT



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RUNWAY 6-24
CROSS SECTIONS -
STA. 39+50 TO 42+50

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