ADDENDUM NO. 2
Bid Reference No. MCN.0025
GPR Event ID PE-61100-NONST-2025-000000066

Macon-Bibb County

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
at
Middle Georgia Regional Airport (MCN)

Bid Advertisement Date: April 21, 2025
Addendum No. 2 Issue Date: May 09, 2025

PREPARED BY:
PASSERO ASSOCIATES, LLC

PASSERO
engineering architecture

3855 Shallowford Road, Suite 310
Marietta, GA 30062

Passero Project No. 20202946.0025

ADDENDUM NO. 2
Paving, Lighting and Markings for Runway 5 Extension
Macon-Bibb County
Bid Reference No. MCN.0025
GPR Event ID PE-61100-NONST-2025-000000066
Addendum No. 2 Issued: May 09, 2025

The following items are clarifications, corrections, or additions to the contract documents. **THIS ADDENDUM TAKES PRECEDENCE OVER THE ORIGINAL PARTS OF THE CONTRACT DOCUMENTS.**

All the parts of the contract documents, not specifically modified by this or other addenda, remain in full force and effect.

Bidders shall thoroughly familiarize themselves with the contents of this Addendum before submitting bid proposals. **IT SHALL BE THE BIDDER'S RESPONSIBILITY TO INFORM THE SUBCONTRACTORS, SUPPLIERS, MANUFACTURERS, AND OTHER PARTIES PARTICIPATING IN THE WORK OF APPLICABLE REQUIREMENTS IN THIS ADDENDUM.**

Bidders shall acknowledge receipt of this addendum, identified by number and date, on the Addenda Receipt form included in the Proposal Section of the Contract Documents and submitted as part of their Proposal. Failure to acknowledge receipt of Addendum may be grounds for rejection of the bid proposal.

MODIFICATIONS TO CONTRACT DOCUMENTS:

1. The last day for questions has been extended to Monday, May 12 2025 at 5:00 P.M. local time.
2. **Plan Sheet C112.** The "Proposed Runway/Taxiway Asphalt Pavement Section with Select Fill" detail was added.
3. **Plan Sheet C114.** The stockpile limits of disturbance was updated to account for additional excavation where offsite borrow material will be installed. The total limits of disturbance notes were updated.
4. **Plan Sheets C115, C116, C117 and C118**. The total limits of disturbance notes were updated to reflect the changes to Plan Sheet C114 - "INITIAL PHASE BASE BID DISTURBED AREA = 5.14 AC" and "INITIAL PHASE ALTERNATE 1 DISTURBED AREA = 7.73 AC".
5. **Plan Sheet C120.** The stockpile limits of disturbance and grades were updated to account for additional excavation where offsite borrow material will be installed. The total limits of disturbance notes were updated.
6. **Plan Sheet C122.** An area of 18" offsite borrow installation under proposed pavement was shown on the plan, with updated limits of disturbance, survey notes and a geometric layout.
7. **Plan Sheets C121, C123 and C124**. The total limits of disturbance notes were updated to reflect the changes to Plan Sheets C120 and C122 - "CONSTRUCTION PHASE BASE BID DISTURBED AREA = 15.06 AC" and "CONSTRUCTION PHASE ALTERNATE 1 DISTURBED AREA = 17.65 AC".
8. **Plan Sheets C126, C127, C128, C129 and C130**. The total limits of disturbance notes were updated - "STABILIZING PHASE BASE BID DISTURBED AREA = 15.06 AC" and "STABILIZING PHASE ALTERNATE 1 DISTURBED AREA = 17.65 AC".
9. **Plan Sheets C144, C145, C147 and C149.** The proposed runway designation was changed from "6-24" to "5-23". Runway designation markings and surface painted holding position signs were updated.
10. **Plan Sheet C150.** The "Runway Designation Markings" and the "Surface Painted Holding Position Sign Layout" details were updated to reflect the correct runway designation numerals.
11. **Plan Sheet C151.** The "Displaced Threshold Marking" detail was updated to reflect the correct

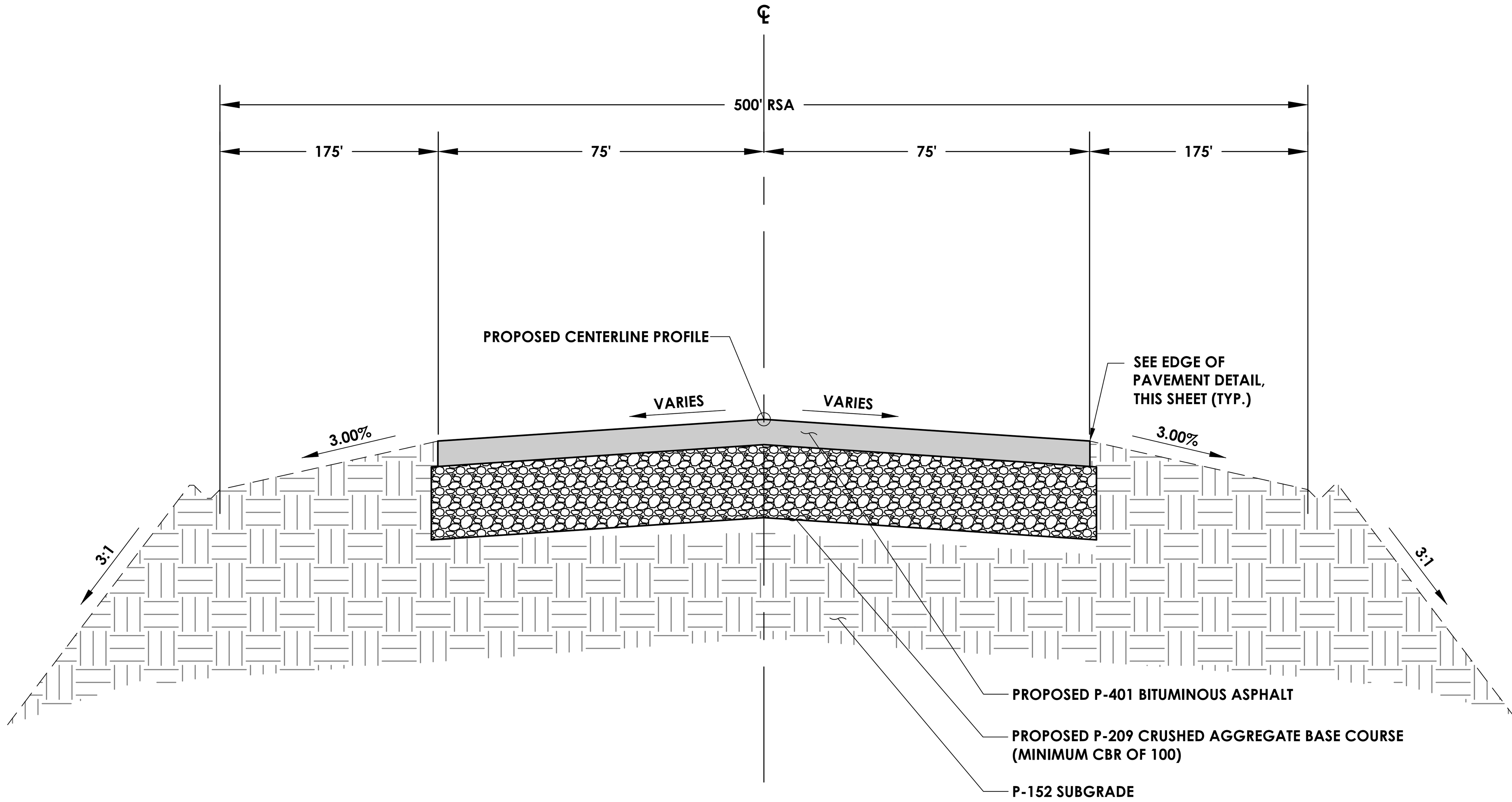
runway designation numeral.

12. **Plan Sheet C205.** The "Proposed Runway/Taxiway Concrete Pavement Section with Select Fill" detail was added.
13. **Plan Sheet EA-001.** Entire sheet added to Bid Plans.
14. **Plan Sheets EA-502, EA-504 and EA-805.** The hold signs were updated for the updated "5-23" runway designation.
15. **Technical Specifications (P-152).** Section 152-1.2b "Borrow excavation" was added, Section 152-2.3 was revised to include information for offsite borrow sources, Sections 152-3.3 and 152-4.2 were added and "Offsite Borrow" was added to Merthod of Measurement and Basis of Payment.
16. **Bid Form.** The full pay item description for C-100-14.1 in the Base Bid and C-100-14.1, P-209-5.1, and P-209-5.3 in Alternate 1 were cut off in the original bid form. See the attached revised bid form for the complete pay item description.
17. **Bid Form.** The pay item C-109-3.1 "Engineer's Field Office – Fixed" was updated to include the fixed unit cost and total cost.
18. **Bid Form.** The pay item "Offsite Borrow" was added to the Base Bid as item P-152-4.2.
19. **Bid Form.** The quantities of pay items C-102-5.5 "Temporary Seeding (Mulched)", T-901-5.1 "Permanent Seeding", T-908-5.1 "Mulching", L-115-1"FAA Handhole – Aircraft Rated", L-115-3 "L-867D Junction Can with 3/8" Thick Blank Steel Cover Plate Installed in Turf" and P-152-4.1 "Unclassified Excavation" in Base Bid were revised.
20. An additional Geotechnical Report showing pavement cores in the project area has been attached.

ATTACHMENTS

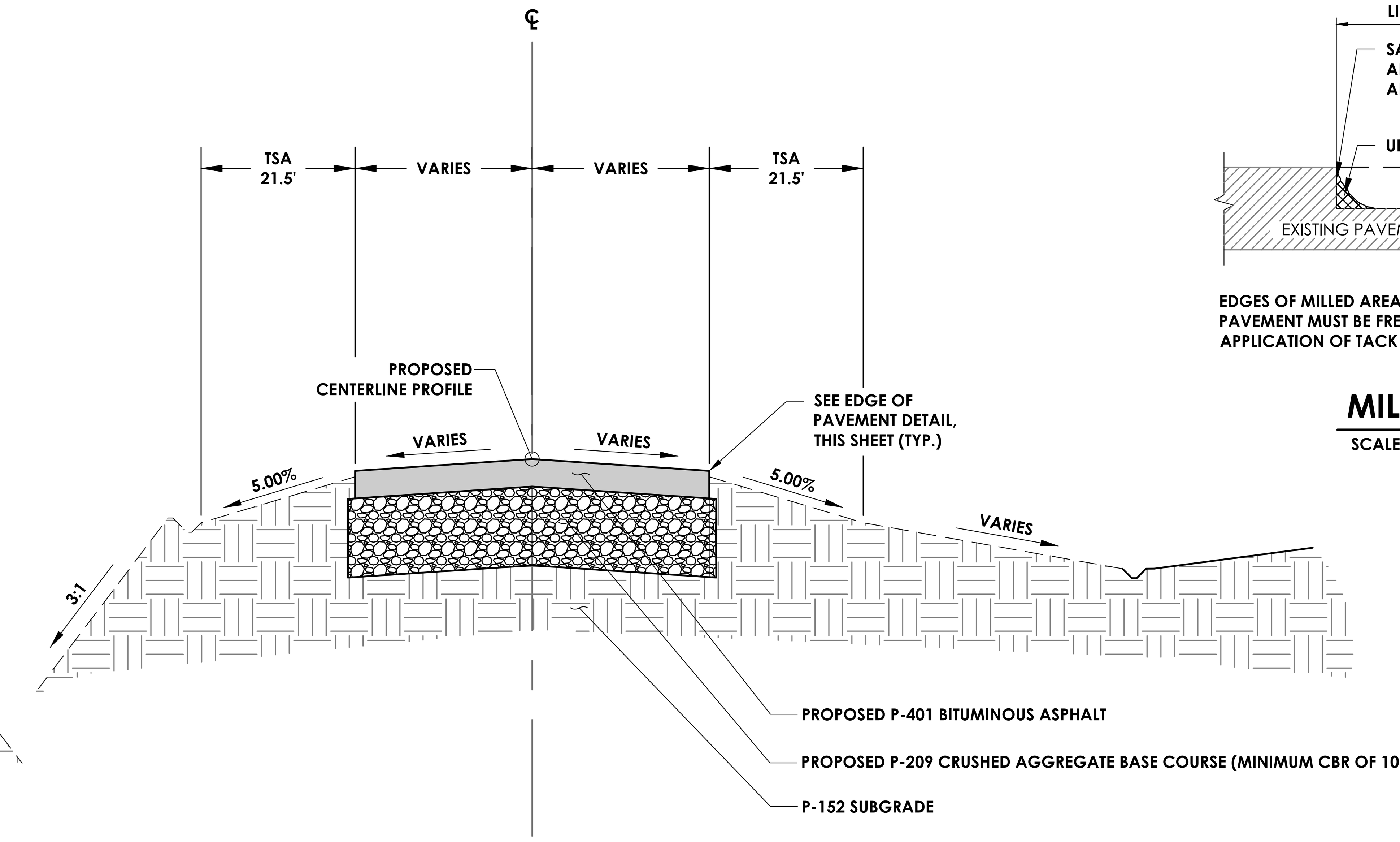
Revised Bid Plans – C112, C114, C120, C122, C144, C145, C147, C149, C150, C151, C205, EA-001, EA-502, EA-504 and EA-805
Technical Specification P-152
Bid Form
Geotechnical Report

End of Addendum No. 2



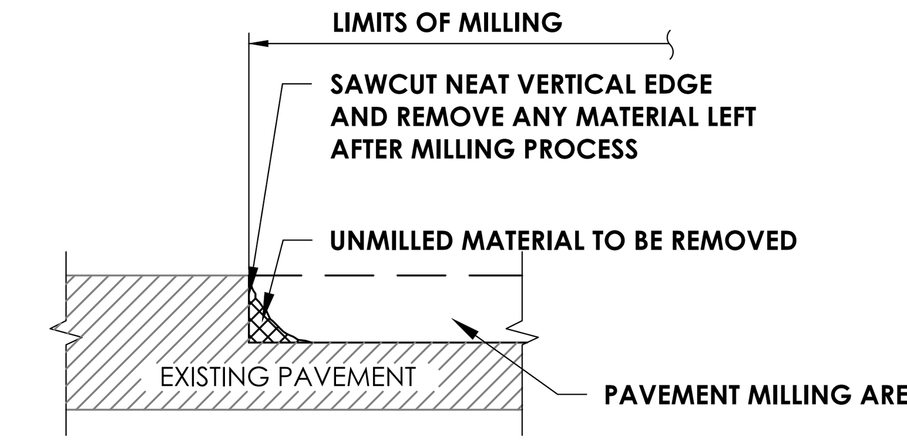
PROPOSED ASPHALT RUNWAY 5/23 TYPICAL SECTION

SCALE: NTS



PROPOSED ASPHALT TAXIWAY TYPICAL SECTION

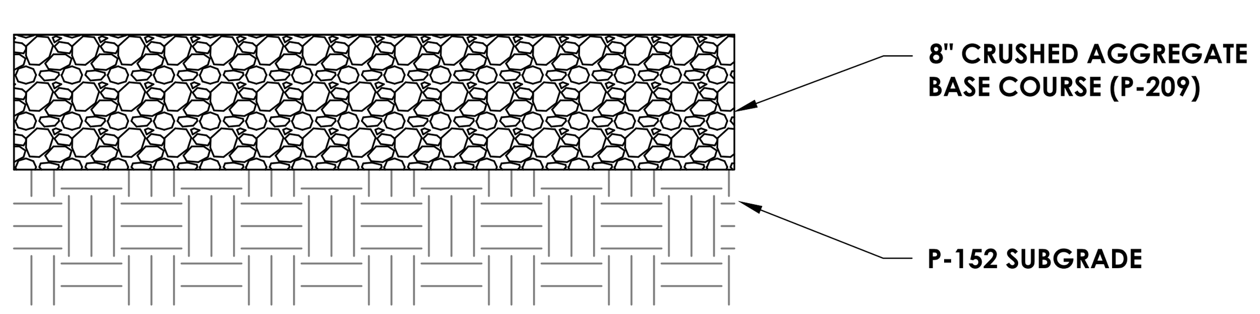
SCALE: NTS



EDGES OF MILLED AREAS TO RECEIVE NEW BITUMINOUS PAVEMENT MUST BE FREE FROM LOOSE MATERIAL PRIOR TO APPLICATION OF TACK COAT.

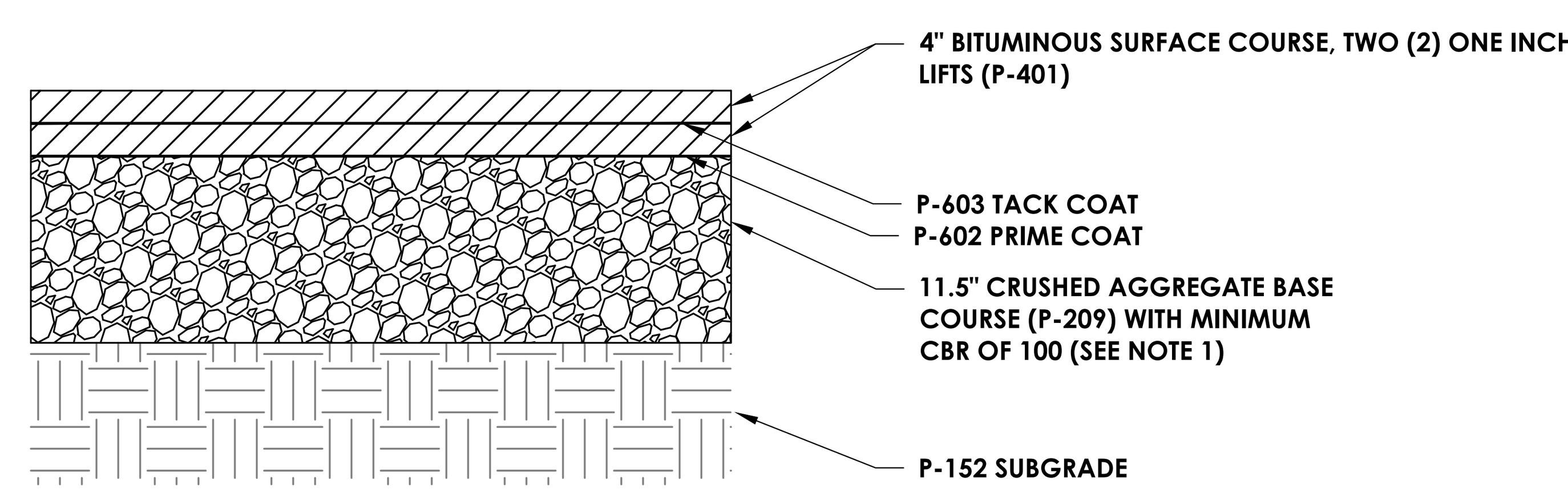
MILLED EDGE

SCALE: NTS



PROPOSED GRAVEL ROAD PAVEMENT SECTION

SCALE: NTS



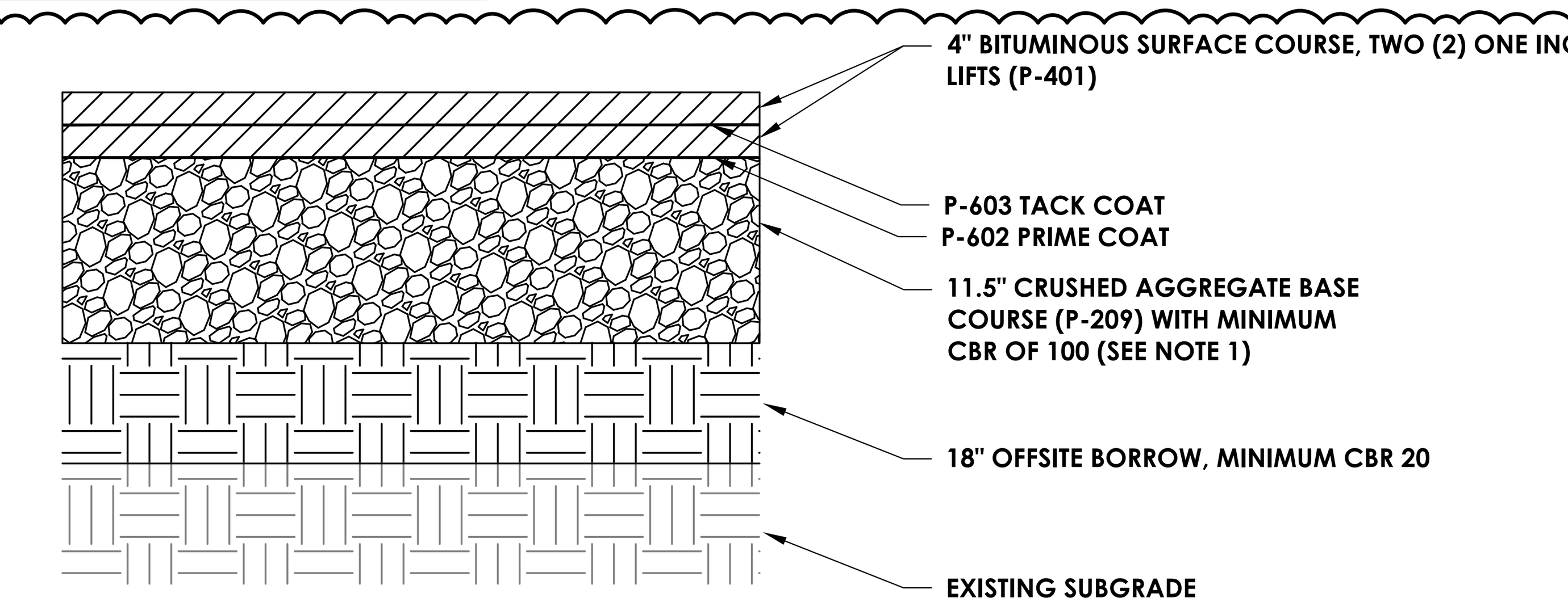
NOTES:

1. CRUSHED AGGREGATE BASE COURSE SHALL HAVE A MINIMUM CALIFORNIA BEARING RATIO (CBR) OF 100, DETERMINED BY LABORATORY TESTING USING SOAKED AND REMOLDED SAMPLES COMPACTED TO AT LEAST 100% OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY. ALL COSTS ASSOCIATED WITH LABORATORY TESTING SHALL BE INCIDENTAL TO THE "CRUSHED AGGREGATE BASE COURSE (11.5-INCH DEPTH) (MINIMUM CBR OF 100)" PAY ITEM.

PROPOSED RUNWAY/TAXIWAY ASPHALT PAVEMENT SECTION

SCALE: NTS

1

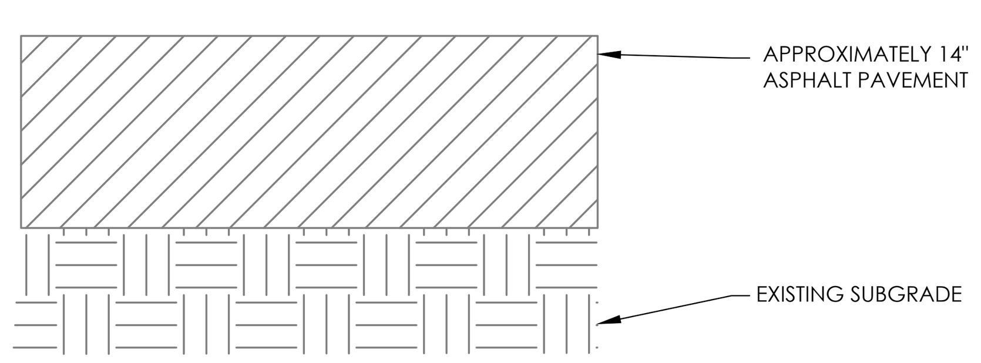


NOTES:

1. CRUSHED AGGREGATE BASE COURSE SHALL HAVE A MINIMUM CALIFORNIA BEARING RATIO (CBR) OF 100, DETERMINED BY LABORATORY TESTING USING SOAKED AND REMOLDED SAMPLES COMPACTED TO AT LEAST 100% OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY. ALL COSTS ASSOCIATED WITH LABORATORY TESTING SHALL BE INCIDENTAL TO THE "CRUSHED AGGREGATE BASE COURSE (11.5-INCH DEPTH) (MINIMUM CBR OF 100)" PAY ITEM.
2. CONTRACTOR SHALL PROVIDE A PAVEMENT BOX EXCAVATION SURVEY FOR ENGINEER APPROVAL BEFORE INSTALLATION OF OFFSITE BORROW, ALL COSTS SHALL BE INCIDENTAL TO THE "PROJECT SURVEY, STAKEOUT AND RECORD DRAWINGS" ITEM OF WORK.
3. FOR LIMITS OF CONSTRUCTION OF OFFSITE BORROW, SEE SHEET C122.
4. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS ASSOCIATED WITH THE OFFSITE BORROW. ALL NECESSARY PERMIT COSTS SHALL BE INCIDENTAL TO THE "OFFSITE BORROW" ITEM OF WORK.
5. THE CONTRACTOR SHALL PROVIDE LABORATORY TESTING RESULTS VERIFYING THAT ANY OFFSITE BORROW MATERIAL USED TO MEET SUBGRADE REQUIREMENTS ACHIEVES A MINIMUM CALIFORNIA BEARING RATIO (CBR) OF 20, DETERMINED IN ACCORDANCE WITH ASTM D1883, USING SOAKED CONDITIONS AND COMPACTED TO MODIFIED PROCTOR DENSITY PER ASTM D1557. ALL TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT. ALL COSTS SHALL BE INCIDENTAL TO THE "OFFSITE BORROW" ITEM OF WORK.

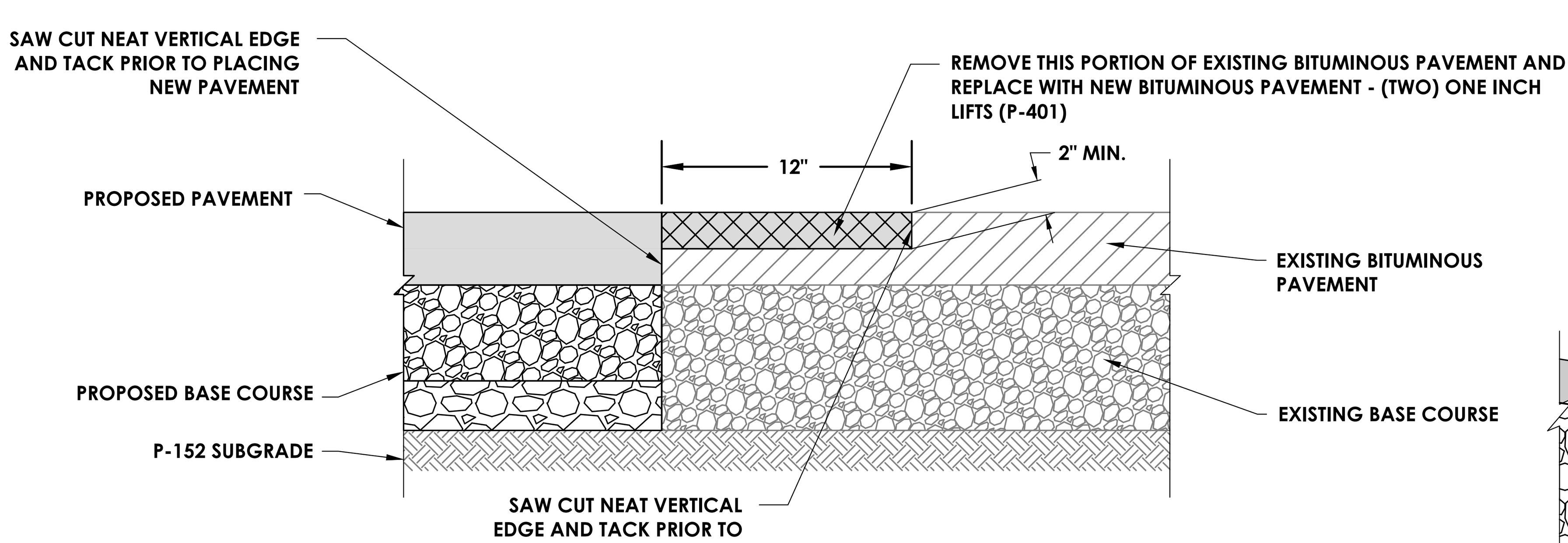
PROPOSED RUNWAY/TAXIWAY ASPHALT PAVEMENT SECTION WITH SELECT FILL

SCALE: NTS



EXISTING RUNWAY/TAXIWAY PAVEMENT SECTION

SCALE: NTS

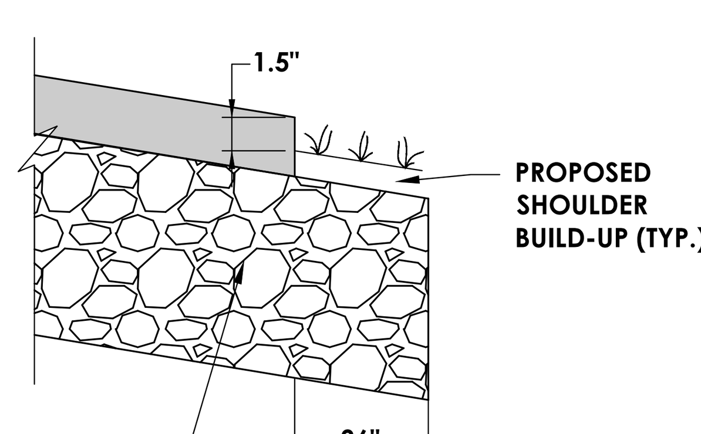


NOTE:

1. CONTRACTOR SHALL PROTECT EXISTING EDGES OF PAVEMENT UNTIL FINAL LIFT OF ASPHALT IS INSTALLED.
2. ALL COSTS ASSOCIATED WITH BITUMINOUS PAVEMENT TIE-IN SHALL BE INCIDENTAL TO THE "BITUMINOUS SURFACE COURSE (4-INCH)" ITEM OF WORK.

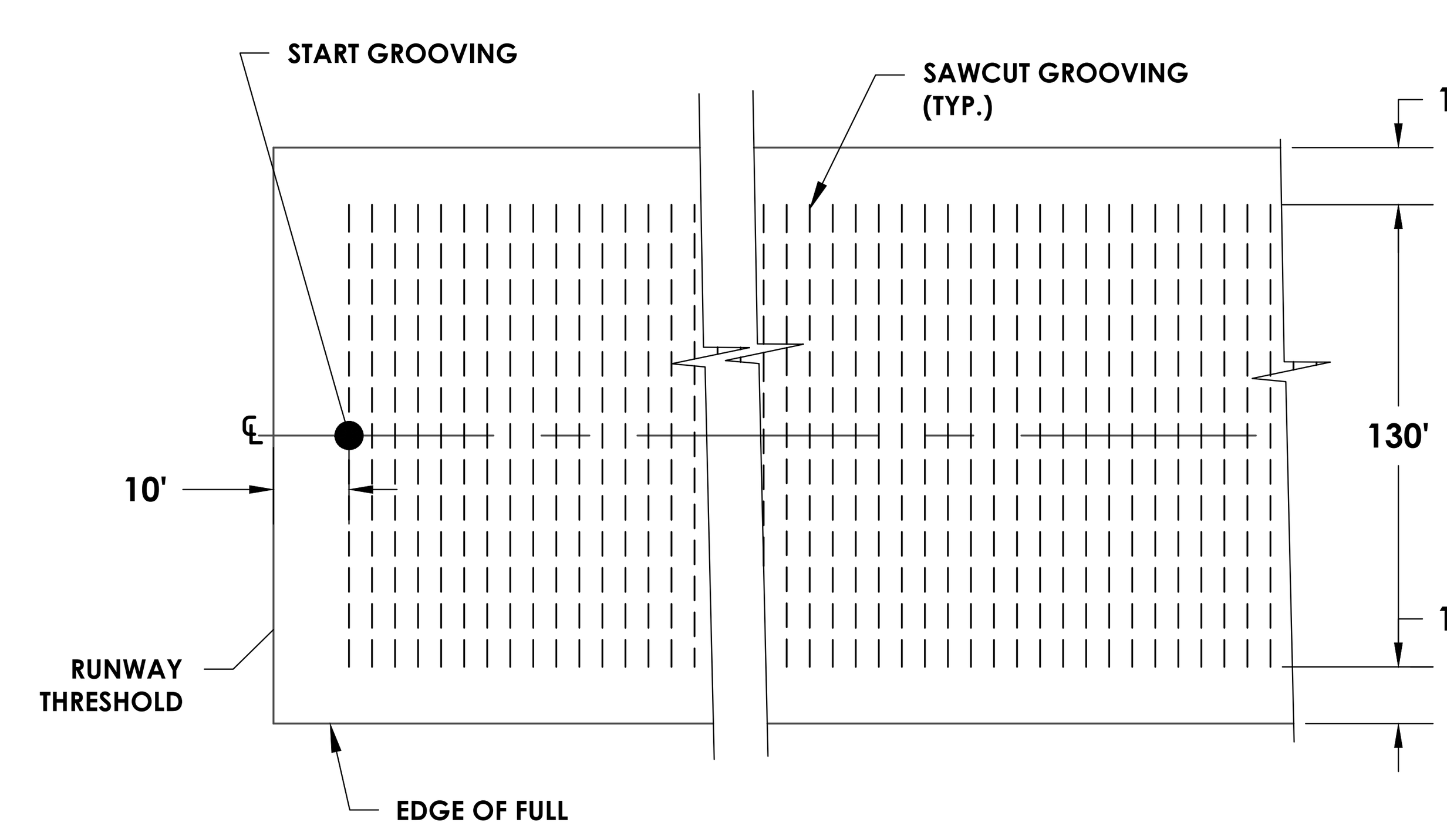
BITUMINOUS PAVEMENT TIE-IN

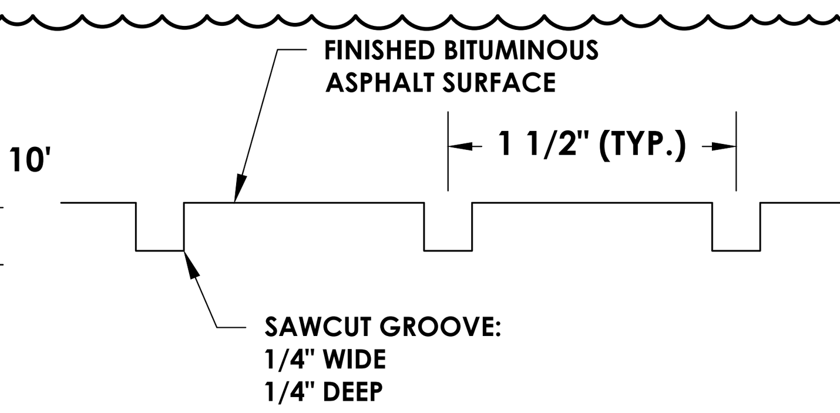
SCALE: NTS



SCALE: NTS

ASPHALT EDGE OF PAVEMENT DETAIL





NOTES:

1. ALL PROPOSED RUNWAY PAVEMENT SHALL HAVE SAWCUT GROOVING.
2. SEE SPECIFICATION FOR ITEM P-621 FOR DETAILED GROOVING TOLERANCE INFORMATION.
3. GROOVES SHALL BE SAWED NO LESS THAN 6 INCHES AND NO MORE THAN 18 INCHES FROM IN-PAVEMENT LIGHT FIXTURES.
4. WASTE MATERIAL COLLECTED DURING THE GROOVING OPERATION MUST BE DISPOSED OF BY SWEEPING OR VACUUMING. ALL COSTS ASSOCIATED WITH WASTE DISPOSAL SHALL BE INCIDENTAL TO THE "ASPHALT SAWCUT PAVEMENT GROOVING" ITEM OF WORK.
5. ASPHALT PAVEMENT MUST CURE FOR 30 DAYS PRIOR TO SAWCUT GROOVING.

SAWCUT GROOVING

SCALE: NTS

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PRINCIPAL IN CHARGE BRAD WENTE, P.E.
PROJECT MANAGER MICHAEL JOSEPH, P.E.
DESIGNED BY TJ COLLINS, P.E.

GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

ASPHALT TYPICAL SECTIONS AND PAVEMENT DETAILS

SHEET: C112

PROJECT NO.: 20202946.0025

DATE: MAY 2025

INITIAL PHASE SEDIMENT / EROSION CONTROL NOTES:

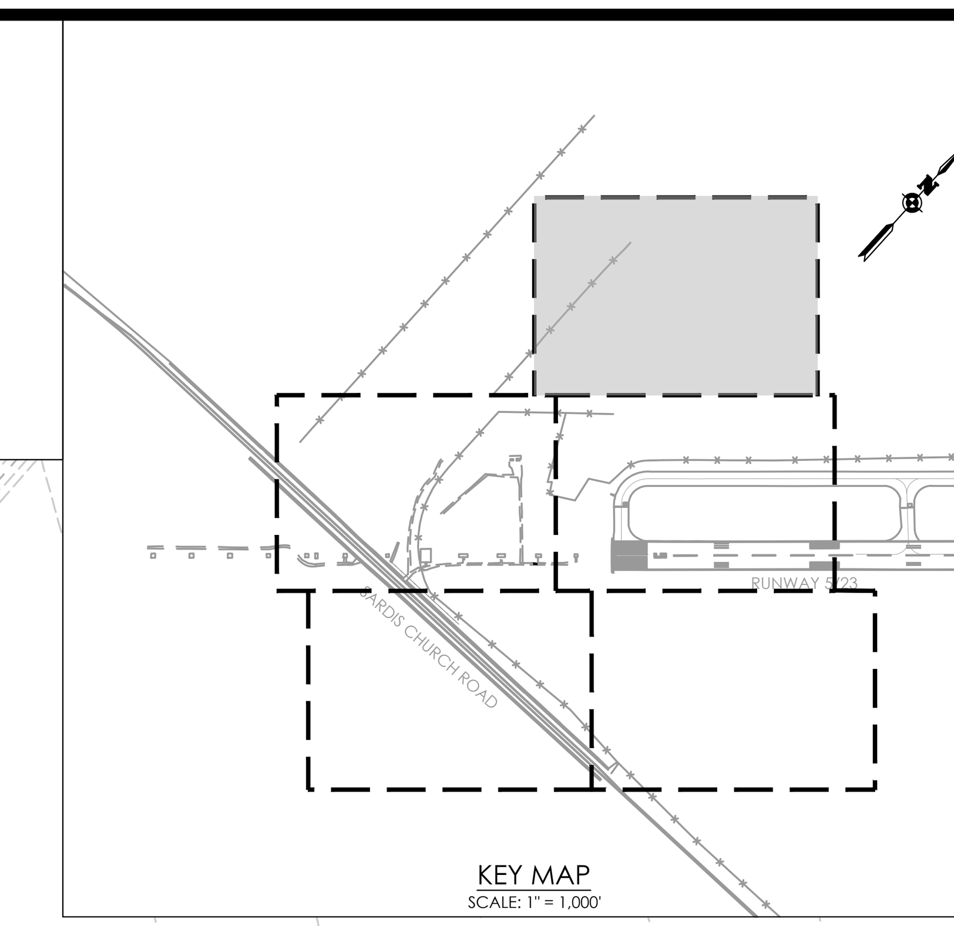
1. INITIAL PHASE BASE BID DISTURBED AREA = 5.14 AC
   INITIAL PHASE ALTERNATE 1 DISTURBED AREA = 7.73 AC (1)
2. EROSION CONTROL PRACTICES MUST COMPLY WITH THE STANDARDS AND SPECIFICATIONS IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST VERSION.
3. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED PRIOR TO ANY LAND DISTURBANCE OR GRADING ON SITE.
4. REFER TO THE GEOTECHNICAL ENGINEERING REPORT FOR INFORMATION REGARDING EXISTING SUBSURFACE CONDITIONS.
5. IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5 TO 1 AND WITH HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFER, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL BLANKET.
5. SEED AND MULCH WORK AREA AREAS AS SOON AS SITE IS BROUGHT TO FINAL GRADE. SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BY HYDRO-SEEDING. LAYING OF STRAW OR HAY WILL NOT BE AN ACCEPTABLE FORM OF MULCHING DUE TO POTENTIAL JET BLASTS.
6. PROPER INSTALLATION OF ALL DRAINAGE STRUCTURES AND SEDIMENT CONTROL DEVICES IS THE RESPONSIBILITY OF THE GENERAL AND/OR GRADING CONTRACTOR. THESE STRUCTURES SHOULD BE CONSTRUCTED OF SUITABLE MATERIALS AND IN ACCORDANCE WITH PROFESSIONAL STANDARDS AND PRACTICES FOR STRUCTURES OF THIS TYPE. THE MEASURES SHOWN ARE RECOMMENDATIONS BASED ON THE INFORMATION PROVIDED. IF AT ANY TIME THESE MEASURES ARE JUDGED TO BE INADEQUATE TO CONTROL SILTATION OR RUNOFF, ADDITIONAL MEASURES SHOULD BE PROVIDED TO INSURE PROPER CONTROL. THE GRADING AND/OR GENERAL CONTRACTOR IS URGED TO CONTACT THE GOVERNING MUNICIPALITY FOR ASSISTANCE IF EITHER THE INSTALLATION OR FUNCTION OF THESE MEASURES IS UNCERTAIN. UNDER NO CIRCUMSTANCE WILL SEDIMENT OR SILT-LADEN RUNOFF BE ALLOWED ONTO ADJACENT PROPERTIES.
7. SEE SHEETS C131 TO C137 FOR EROSION CONTROL DETAILS AND SEDIMENT STORAGE CALCULATIONS.
8. SEE SHEET C137 FOR EROSION CONTROL BMP LEGEND. AND G101 FOR GENERAL EROSION CONTROL LEGEND.
9. ALL COMPOST FILTER SOCKS SHALL MEET CFR-503 REGULATIONS.

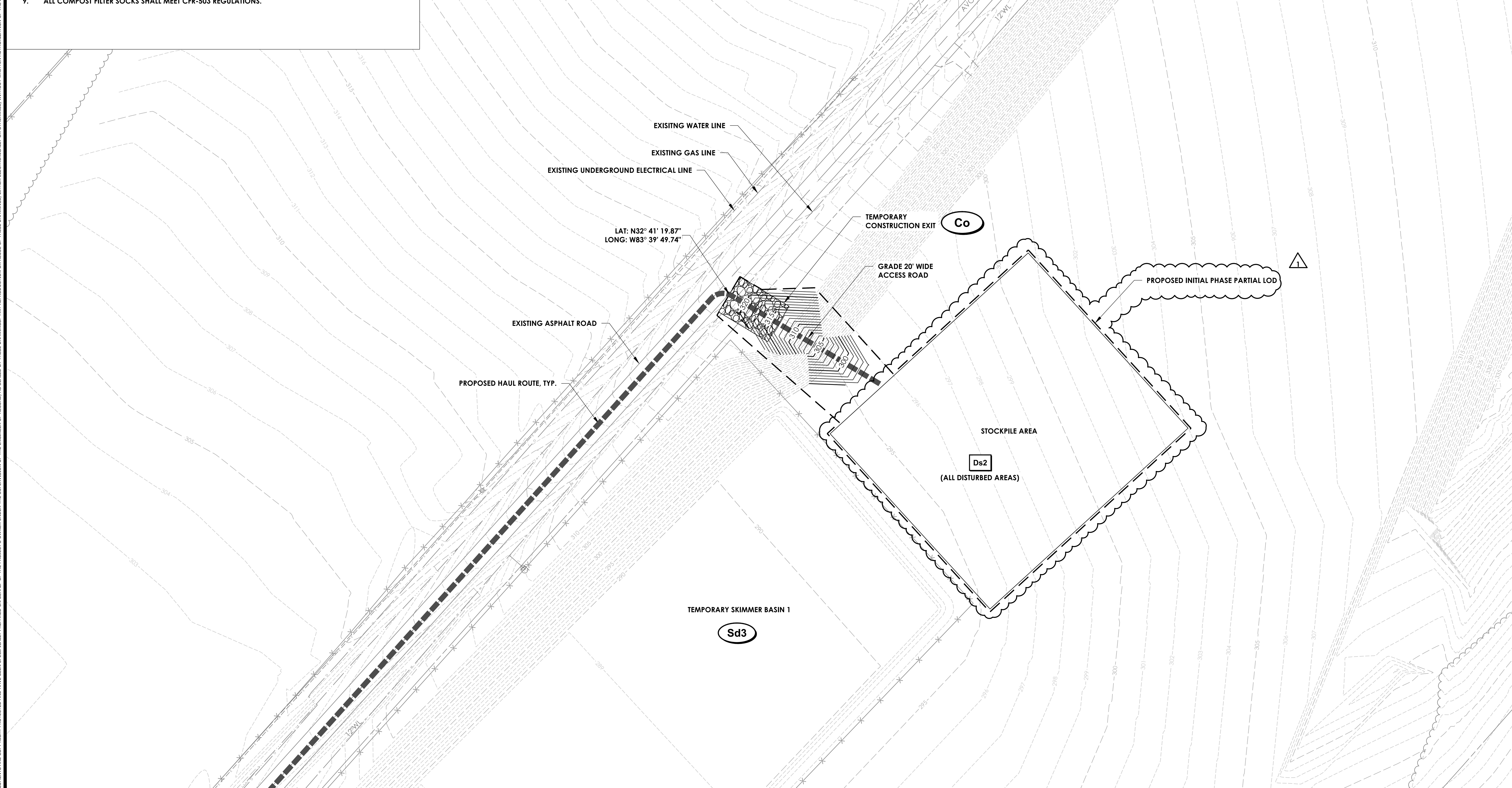
INITIAL PHASE SEQUENCE OF CONSTRUCTION ACTIVITY:

1. OBTAIN APPROVAL FROM MACON WATER AUTHORITY FOR THIS PHASE AND NOTIFY MACON WATER AUTHORITY 48 HOURS PRIOR TO BEGINNING THE LAND DISTURBANCE ACTIVITY.
2. DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE.
4. INSTALL TEMPORARY CONSTRUCTION EXITS AS SHOWN IN THIS PHASE.
5. INSTALL COMPOST FILTER SOCK, CHECK DAMS, AND TEMPORARY INLET PROTECTION.
6. CONVERT THE EXISTING DRY PONDS TO TEMPORARY SKIMMERS BY PLUGGING THE EXISTING LOW FLOW ORIFICES AND WEIRS WITH HYDRAULIC CEMENT, GALVANIZED STEEL PLATES AND POLYURETHANE JOINT SEALANT TO CREATE A WATERTIGHT SEAL. INSTALL PROPOSED SKIMMERS.
7. INSTALL ACCESS ROUTE TO STOCKPILE AREA AFTER TEMPORARY SKIMMER BASIN 1 HAS BEEN INSTALLED.
8. ALTERNATE 1 ONLY: INSTALL CONCRETE BATCH PLANT ONCE PERIMETER EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ACCEPTED.

GRADING NOTES:

1. TOPSOIL WITHIN THE GRADING AREA SHALL BE STRIPPED 4" AND PLACED AT THE STOCKPILE SHOWN. THERE WILL BE NO SEPARATE PAYMENT FOR RE-HANDLING TOPSOIL. ALL WORK ASSOCIATED WITH TOPSOIL STRIPPING, STOCKPILING AND FINAL PLACEMENT SHALL BE PAID FOR UNDER THE "TOPSOIL STRIPPING (ON-SITE STRIPPING AND FINAL PLACEMENT)" ITEM OF WORK.
2. ANY DAMAGE TO EXISTING UTILITIES SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
3. GRADING WITH THE AIRFIELD AREA SHALL BE AS PER UFC-3-260-01 AND FAA AC 150/5300-13B





MATCHLINE - SEE SHEET C115

MATCHLINE - SEE SHEET C116

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PROJECT MANAGER: MICHAEL JOSEPH, P.E.
DESIGNED BY: TJ COLLINS, P.E.

GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

50 0 50

GRAPHIC SCALE IN LINEAR FEET

PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

INITIAL PHASE GRADING, DRAINAGE & EROSION CONTROL - SHEET 1

SHEET:

C114

PROJECT NO.:

20202946.0025

DATE:

MAY 2025

CONSTRUCTION PHASE SEDIMENT / EROSION CONTROL NOTES:

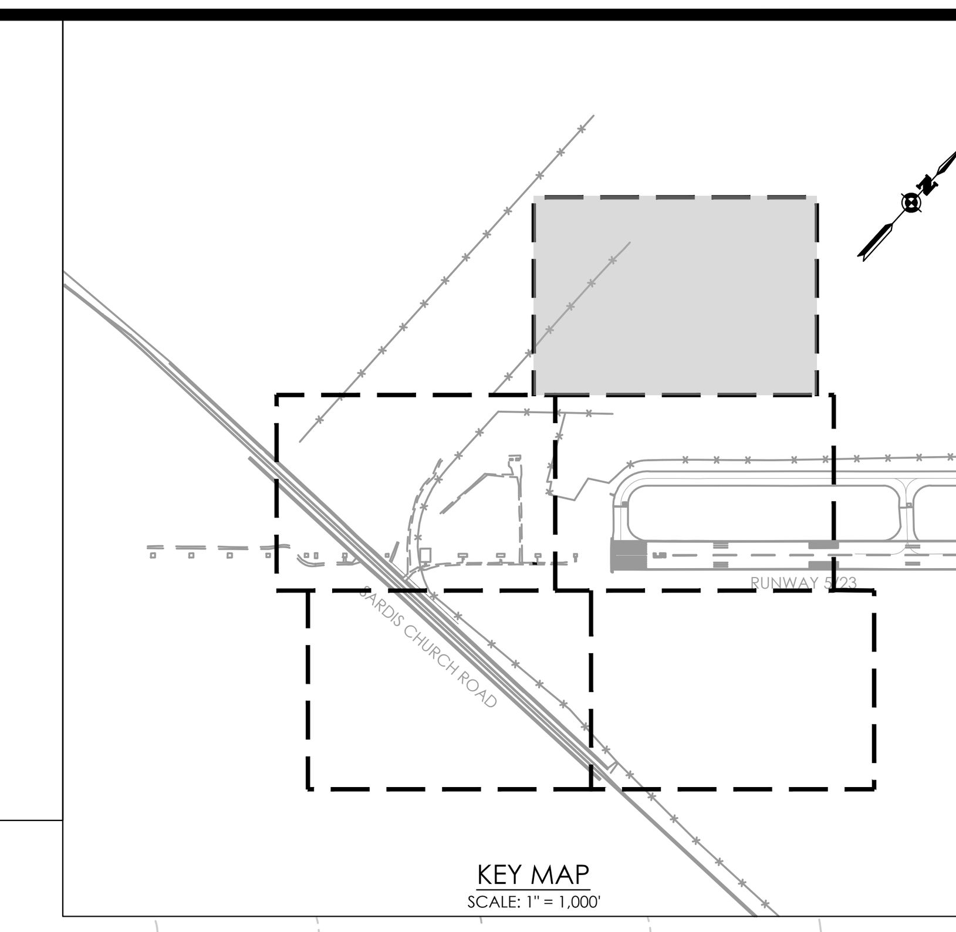
1. CONSTRUCTION PHASE BASE BID DISTURBED AREA = 15.11 AC
   CONSTRUCTION PHASE ALTERNATE 1 DISTURBED AREA = 17.70 AC (1)
2. EROSION CONTROL PRACTICES MUST COMPLY WITH THE STANDARDS AND SPECIFICATIONS IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST VERSION.
3. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED PRIOR TO ANY LAND DISTURBANCE OR GRADING ON SITE.
4. REFER TO "REPORT OF GEOTECHNICAL ENGINEERING REPORT" PREPARED BY GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS, COMPLETED ON FEBRUARY 10, 2022 FOR INFORMATION REGARDING EXISTING SUBSURFACE CONDITIONS.
5. IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5 TO 1 AND WITH HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFER, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL BLANKET.
5. SEED AND MULCH WORK AREA AREAS AS SOON AS SITE IS BROUGHT TO FINAL GRADE. SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BY HYDRO-SEEDING. LAYING OF STRAW OR HAY WILL NOT BE AN ACCEPTABLE FORM OF MULCHING DUE TO POTENTIAL JET BLASTS.
6. PROPER INSTALLATION OF ALL DRAINAGE STRUCTURES AND SEDIMENT CONTROL DEVICES IS THE RESPONSIBILITY OF THE GENERAL AND/OR GRADING CONTRACTOR. THESE STRUCTURES SHOULD BE CONSTRUCTED OF SUITABLE MATERIALS AND IN ACCORDANCE WITH PROFESSIONAL STANDARDS AND PRACTICES FOR STRUCTURES OF THIS TYPE. THE MEASURES SHOWN ARE RECOMMENDATIONS BASED ON THE INFORMATION PROVIDED. IF AT ANY TIME THESE MEASURES ARE JUDGED TO BE INADEQUATE TO CONTROL SILTATION OR RUNOFF, ADDITIONAL MEASURES SHOULD BE PROVIDED TO INSURE PROPER CONTROL. THE GRADING AND/OR GENERAL CONTRACTOR IS URGED TO CONTACT THE GOVERNING MUNICIPALITY FOR ASSISTANCE IF EITHER THE INSTALLATION OR FUNCTION OF THESE MEASURES IS UNCERTAIN. UNDER NO CIRCUMSTANCE WILL SEDIMENT OR SILT-LADEN RUNOFF BE ALLOWED ONTO ADJACENT PROPERTIES.
7. SEE SHEETS C131 TO C137 FOR EROSION CONTROL DETAILS AND SEDIMENT STORAGE CALCULATIONS.
8. SEE SHEET C137 FOR EROSION CONTROL BMP LEGEND AND G101 FOR GENERAL EROSION CONTROL LEGEND.
9. ALL COMPOST FILTER SOCKS SHALL MEET CFR-503 REGULATIONS.

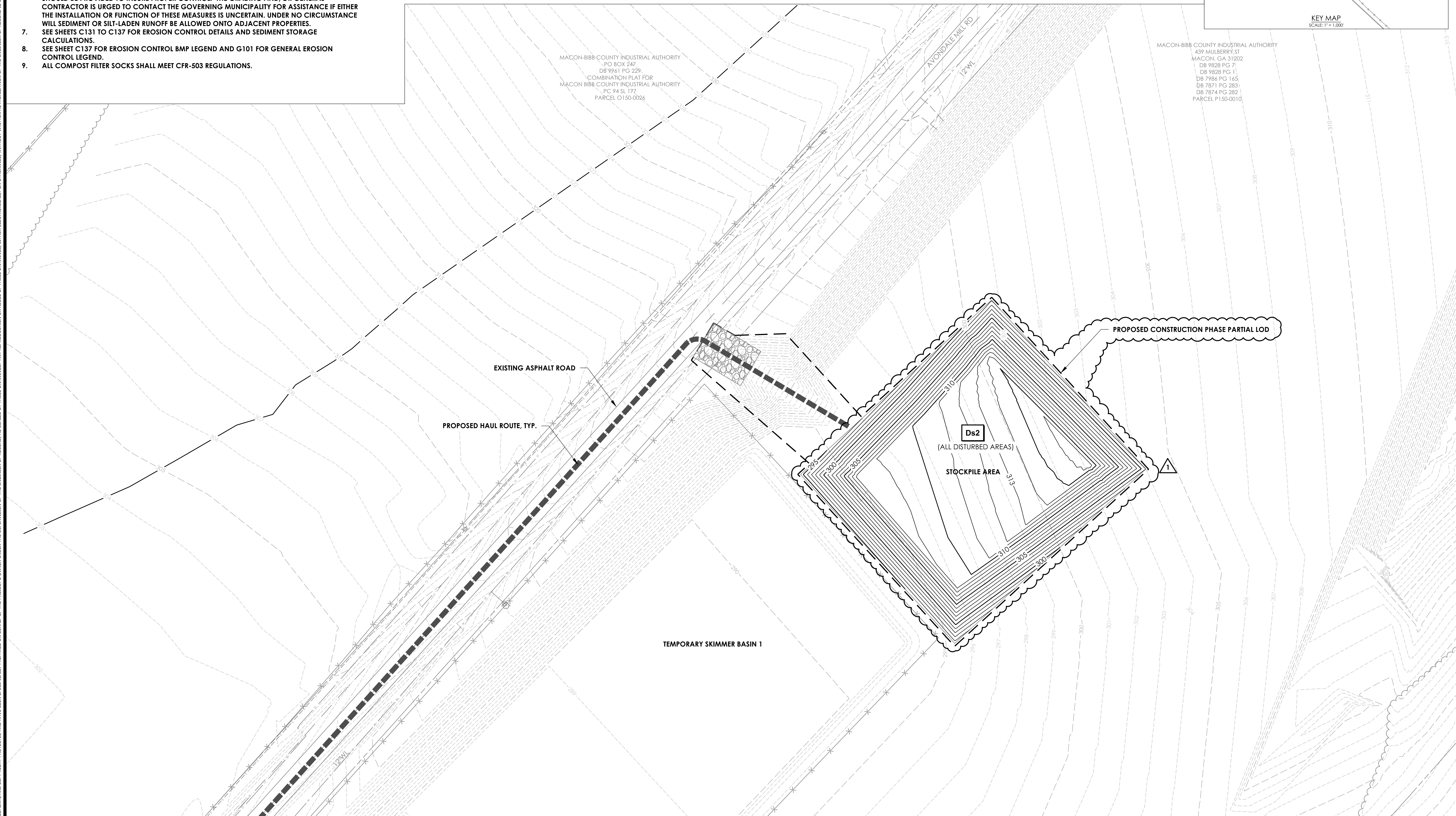
CONSTRUCTION PHASE SEQUENCE OF CONSTRUCTION ACTIVITY:

1. OBTAIN APPROVAL FROM MACON WATER AUTHORITY FOR THIS PHASE AND NOTIFY MACON WATER AUTHORITY 48 HOURS PRIOR TO BEGINNING THE LAND DISTURBANCE ACTIVITY.
2. DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE.
3. BEGIN DEMOLITION, EXCAVATE PAVEMENT BOXES, INSTALL PAVEMENT AND LIGHTING, FINE GRADING, AND INSTALL CHECK DAMS ONCE DITCH GRADING IS COMPLETE.

GRADING NOTES:

1. TOPSOIL WITHIN THE GRADING AREA SHALL BE STRIPPED 4" AND PLACED AT THE STOCKPILE SHOWN. THERE WILL BE NO SEPARATE PAYMENT FOR RE-HANDLING TOPSOIL. ALL WORK ASSOCIATED WITH TOPSOIL STRIPPING, STOCKPILING AND FINAL PLACEMENT SHALL BE PAID FOR UNDER THE "TOPSOIL STRIPPING (ON-SITE STRIPPING AND FINAL PLACEMENT)" ITEM OF WORK.
2. ANY DAMAGE TO EXISTING UTILITIES SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
3. GRADING WITH THE AIRFIELD AREA SHALL BE AS PER UFC-3-260-01 AND FAA AC 150/5300-13B.





MATCHLINE - SEE SHEET C121

MATCHLINE - SEE SHEET C122

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GA COA NO.: PEF003273 — EXP.: 06/30/26

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NORTH ARROW AND SCALE:

50 0 50

GRAPHIC SCALE IN LINEAR FEET

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REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

CONSTRUCTION PHASE GRADING, DRAINAGE & EROSION CONTROL - SHEET 1

SHEET:

C120

PROJECT NO.:

20202946.0025

DATE:

MAY 2025

MATCHLINE - SEE SHEET C120

MATCHLINE - SEE SHEET C121

MATCHLINE - SEE SHEET C123

MATCHLINE - SEE SHEET C124

TEMPORARY SKIMMER BASIN 1

EXISTING ASPHALT ROAD

PROPOSED HAUL ROUTE, TYP.

MACON-BIBB COUNTY INDUSTRIAL AUTHORITY
439 MULBERRY ST
MACON, GA 31202
DB 9828 PG 7
DB 9828 PG 1
DB 7984 PG 165
DB 7871 PG 283
DB 7874 PG 282
PARCEL P150-0010

EX. MH
SANITA
RIM: 2
INV: 27

EX. 24" RCP STM. SWR.

EX RISER 1
RIM = 291.00
E INV = 284.25

EX PR MH 104
RIM = 297.54
NE INV = 278.44
SW INV = 278.44

EX. 36" PVC SAN. SWR.

EX FES-1B
RIM = 286.28
W INV = 283.97

EX. 36" RCP STM. SWR.

EX FES-2
RIM = 300.55
E INV = 297.13

EX DI-8
RIM = 307.21
E INV = 300.00
SW INV = 300.00

EX. 24" RCP STM. SWR.

EX DI-4
RIM = 302.24
SE INV = 297.41
NE INV = 298.42
W INV = 297.41

EX DI-5
RIM = 311.99
SE INV = 307.16
NW INV = 297.96

EX. 30" RCP STM. SWR.

EX DI-9
RIM = 311.67
W INV = 301.07

EX HW-1
RIM = 292.96
E INV = 289.13

EX MH-1
RIM = 301.83
E INV = 297.00
W INV = 289.52

EX MH-2
RIM = 306.83
E INV = 302.00
W INV = 297.32

EX MH 28
RIM = 286.47
W INV = 279.88

ECHECONNEE CREEK
TRIBUTARY 1

EXISTING FES
INV: 285.93

EXISTING 25' STREAM
BUFFER

EX. 18" CMP

COMPOST FILTER
SOCK CHECK DAM
(TYP.)

Cd-Fs

PROPOSED
CONCRETE FLUME,
246 SY

MATCH EXISTING
GRADE

EXISTING FES
INV: 320.62

(PT)
N:977778.23
E:2452057.38

N:978061.75
E:2452368.78

EXISTING TAXIWAY 'B'

MATCH EXISTING
GRADE

N:977976.37
E:2452446.26

EXISTING DI
RIM: 327.03
INV: 320.73

R200'

(PC)
N:977557.45
E:2452049.62

N:977531.20
E:2452020.78

EX DI-6
RIM = 313.83
NE INV = 309.00
NW INV = 309.00

EX DI-6A
RIM = 313.98
NE INV = 310.00
SW INV = 310.00

EX DI-7
RIM = 314.75
SW INV = 311.00

EX. 24" RCP STM. SWR.

N:977770.52
E:2452234.54

ASSUMED 24" RCP

N:977664.99
E:2452164.83

Ds2

(ALL DISTURBED AREAS)

N:977575.00
E:2452212.89

N:977475.91
E:2452104.28

PROPOSED TAXIWAY 'B'

PROPOSED OFFSITE
BORROW, MINIMUM
CBR 20 (SEE SHEET
C112 FOR DETAILS)

PROPOSED CONSTRUCTION
PHASE PARTIAL LOD

PROPOSED BITUMINOUS
ASPHALT

(3) 10' CMP

N:977518.48
E:2452298.18

N:977359.49
E:2452166.18

N:977525.42
E:2452348.43

EXISTING ASPHALT RUNWAY 05/23
(6,500' X 150')

PROPOSED RUNWAY 5 EXTENSION

MATCH EXISTING
GRADE

RUNWAY 5/23

KEY MAP
SCALE: 1" = 1,000'

CONSTRUCTION PHASE SEDIMENT / EROSION CONTROL NOTES:

1. CONSTRUCTION PHASE BASE BID DISTURBED AREA = 15.11 AC
   CONSTRUCTION PHASE ALTERNATE 1 DISTURBED AREA = 17.70 AC
2. EROSION CONTROL PRACTICES MUST COMPLY WITH THE STANDARDS AND SPECIFICATIONS IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST VERSION.
3. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED PRIOR TO ANY LAND DISTURBANCE OR GRADING ON SITE.
4. REFER TO "REPORT OF GEOTECHNICAL ENGINEERING REPORT" PREPARED BY GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS, COMPLETED ON FEBRUARY 10, 2022 FOR INFORMATION REGARDING EXISTING SUBSURFACE CONDITIONS.
5. IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5 TO 1 AND WITH HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFER, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL BLANKET.
5. SEED AND MULCH WORK AREA AREAS AS SOON AS SITE IS BROUGHT TO FINAL GRADE. SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BY HYDRO-SEEDING. LAYING OF STRAW OR HAY WILL NOT BE AN ACCEPTABLE FORM OF MULCHING DUE TO POTENTIAL JET BLASTS.
6. PROPER INSTALLATION OF ALL DRAINAGE STRUCTURES AND SEDIMENT CONTROL DEVICES IS THE RESPONSIBILITY OF THE GENERAL AND/OR GRADING CONTRACTOR. THESE STRUCTURES SHOULD BE CONSTRUCTED OF SUITABLE MATERIALS AND IN ACCORDANCE WITH PROFESSIONAL STANDARDS AND PRACTICES FOR STRUCTURES OF THIS TYPE. THE MEASURES SHOWN ARE RECOMMENDATIONS BASED ON THE INFORMATION PROVIDED. IF AT ANY TIME THESE MEASURES ARE JUDGED TO BE INADEQUATE TO CONTROL SILTATION OR RUNOFF, ADDITIONAL MEASURES SHOULD BE PROVIDED TO INSURE PROPER CONTROL. THE GRADING AND/OR GENERAL CONTRACTOR IS URGED TO CONTACT THE GOVERNING MUNICIPALITY FOR ASSISTANCE IF EITHER THE INSTALLATION OR FUNCTION OF THESE MEASURES IS UNCERTAIN. UNDER NO CIRCUMSTANCE WILL SEDIMENT OR SILT-LADEN RUNOFF BE ALLOWED ONTO ADJACENT PROPERTIES.
7. SEE SHEETS C131 TO C137 FOR EROSION CONTROL DETAILS AND SEDIMENT STORAGE CALCULATIONS.
8. SEE SHEET C137 FOR EROSION CONTROL BMP LEGEND AND G101 FOR GENERAL EROSION CONTROL LEGEND.
9. ALL COMPOST FILTER SOCKS SHALL MEET CFR-503 REGULATIONS.

CONSTRUCTION PHASE SEQUENCE OF CONSTRUCTION ACTIVITY:

1. OBTAIN APPROVAL FROM MACON WATER AUTHORITY FOR THIS PHASE AND NOTIFY MACON WATER AUTHORITY 48 HOURS PRIOR TO BEGINNING THE LAND DISTURBANCE ACTIVITY.
2. DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE.
3. BEGIN DEMOLITION, EXCAVATE PAVEMENT BOXES, INSTALL PAVEMENT AND LIGHTING, FINE GRADING, AND INSTALL CHECK DAMS ONCE DITCH GRADING IS COMPLETE.

GRADING NOTES:

1. TOPSOIL WITHIN THE GRADING AREA SHALL BE STRIPPED 4" AND PLACED AT THE STOCKPILE SHOWN. THERE WILL BE NO SEPARATE PAYMENT FOR RE-HANDLING TOPSOIL. ALL WORK ASSOCIATED WITH TOPSOIL STRIPPING, STOCKPILING AND FINAL PLACEMENT SHALL BE PAID FOR UNDER THE "TOPSOIL STRIPPING (ON-SITE STRIPPING AND FINAL PLACEMENT)" ITEM OF WORK.
2. ANY DAMAGE TO EXISTING UTILITIES SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
3. GRADING WITH THE AIRFIELD AREA SHALL BE AS PER UFC-3-260-01 AND FAA AC 150/5300-13B.

OFFSITE BORROW SURVEY NOTE:

1. AFTER PAVEMENT BOX EXCAVATION IS COMPLETE AND BEFORE THE INSTALLATION OF OFFSITE BORROW MATERIAL, THE CONTRACTOR SHALL SURVEY THE LIMITS OF THE PROPOSED OFFSITE BORROW FOR ENGINEER APPROVAL. THE SURVEY SHALL MEET THE DELIVERY REQUIREMENTS OF SPECIFICATION C-103 AND SHALL BE INCIDENTAL TO THE "PROJECT SURVEY, STAKEOUT, AND RECORD DRAWINGS" PAY ITEM.

NORTH ARROW AND SCALE:

50 0 50

GRAPHIC SCALE IN LINEAR FEET

PASSERO engineering architecture

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Fax: (585) 325-1691

PRINCIPAL IN CHARGE — BRAD WENTE, P.E.
PROJECT MANAGER — MICHAEL JOSEPH, P.E.
DESIGNED BY — TJ COLLINS, P.E.

GA COA NO.: PEF003273 — EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

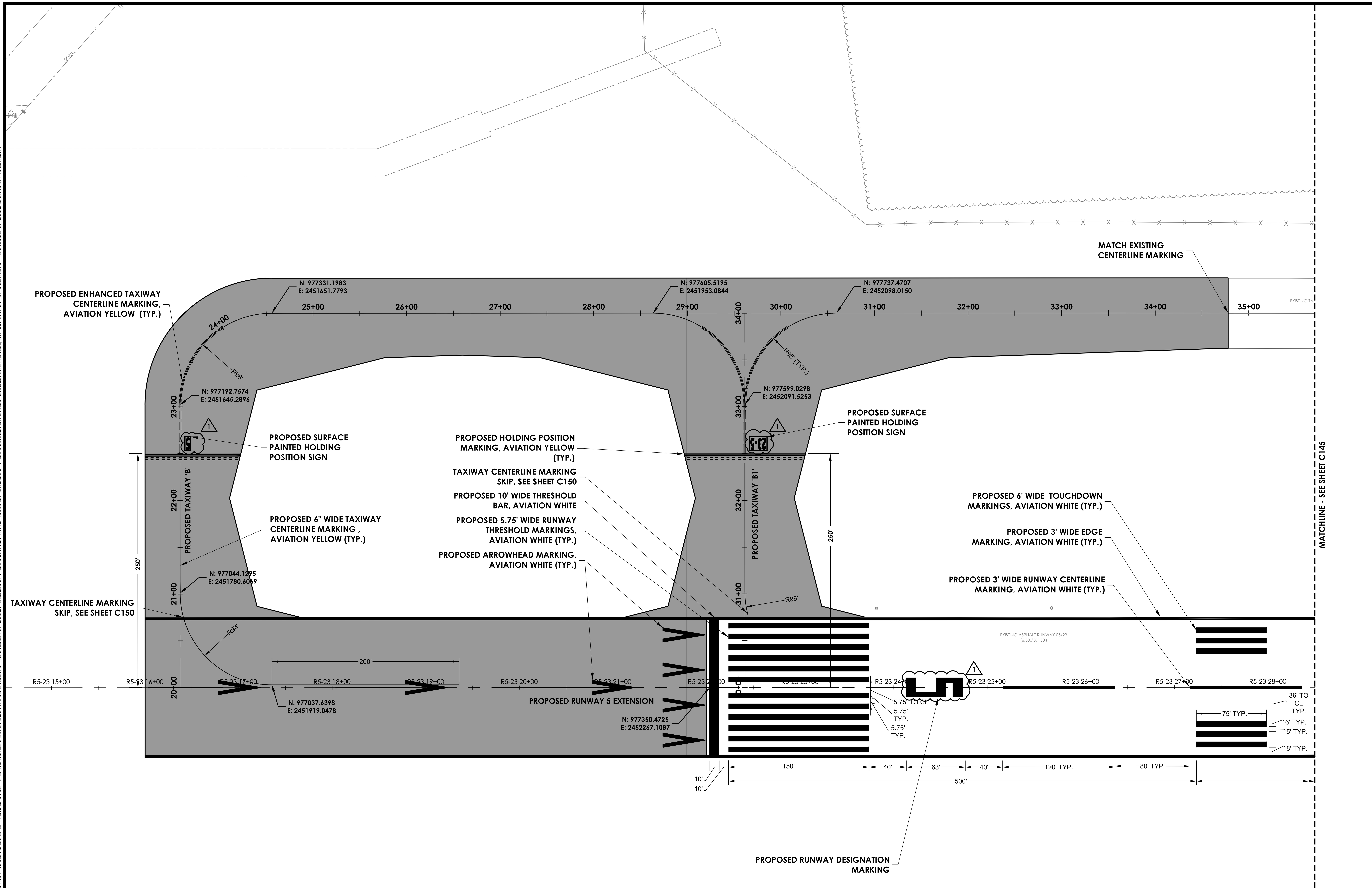
SHEET TITLE:

CONSTRUCTION PHASE GRADING, DRAINAGE & EROSION CONTROL - SHEET 3

SHEET: **C122**

PROJECT NO.: 20202946.0025

DATE: MAY 2025



NOTES:

1. ALL RUNWAY CENTERLINE MARKINGS ARE 120' LONG WITH 80' SPACES UNLESS OTHERWISE INDICATED.
2. ALL BLACK PAVEMENT MARKINGS ARE INCIDENTAL TO THE CONTRACT.

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GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

50 0 50

GRAPHIC SCALE IN LINEAR FEET

PROJECT:

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MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

MARKING PLAN - SHEET 1

SHEET:

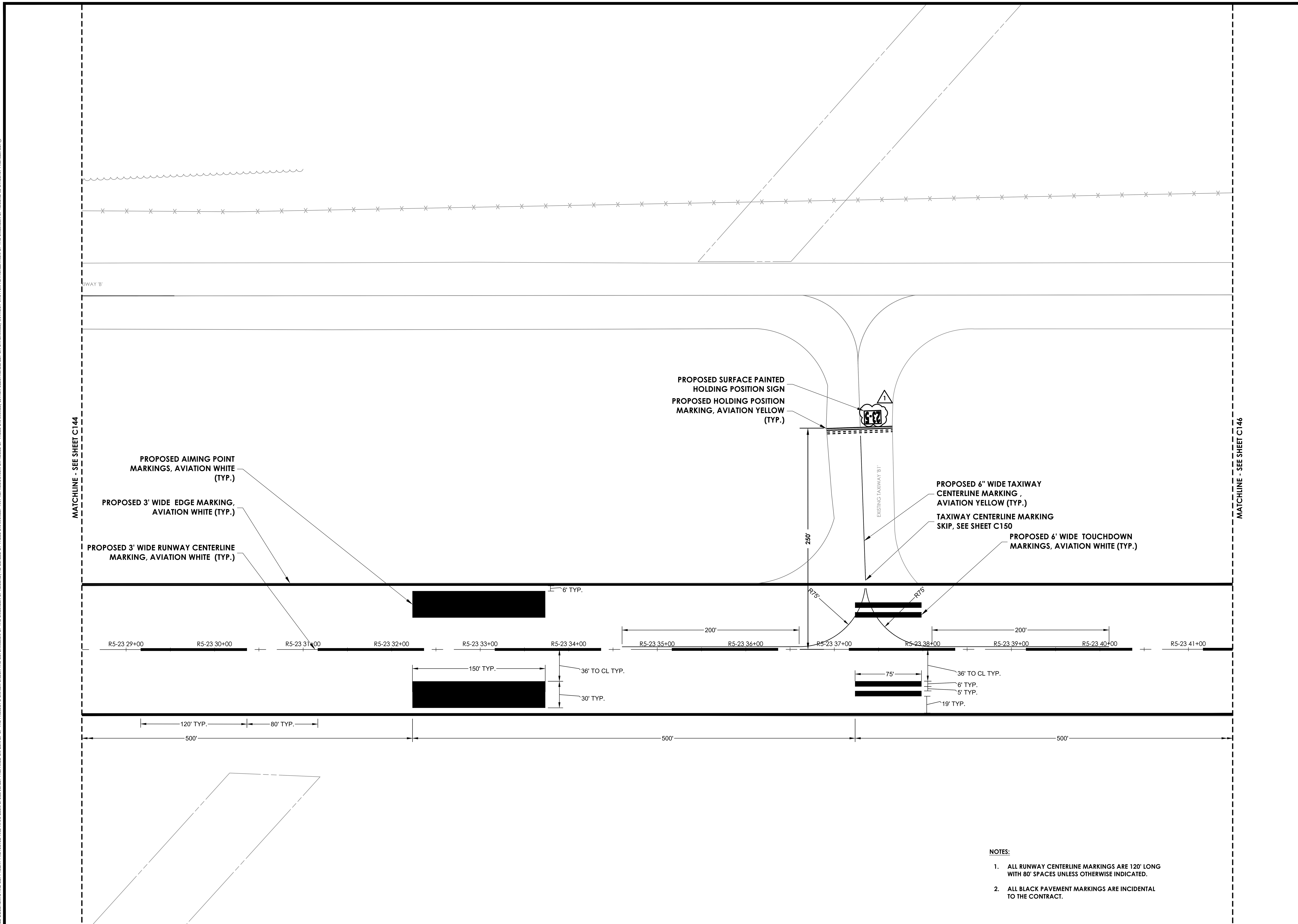
C144

PROJECT NO.:

20202946.0025

DATE:

MAY 2025



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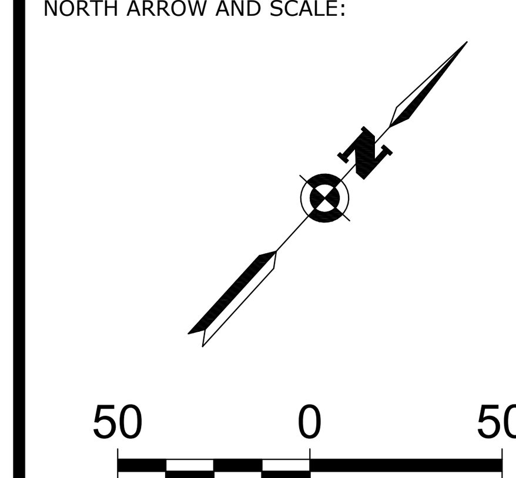
NORTH ARROW AND SCALE:



GRAPHIC SCALE IN LINEAR FEET

PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

MARKING PLAN - SHEET 2

SHEET:

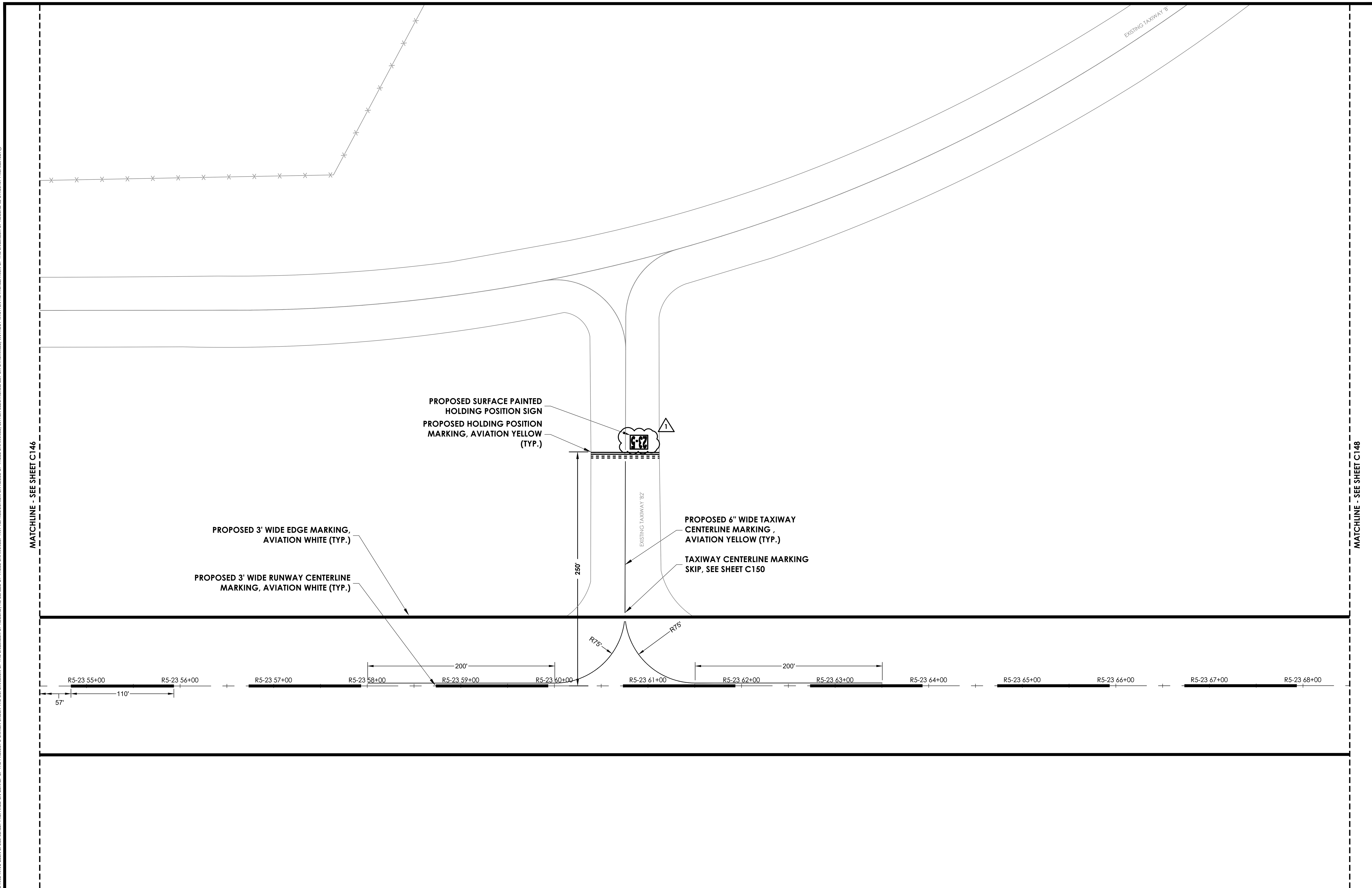
C145

PROJECT NO.:

20202946.0025

DATE:

MAY 2025



NOTES:

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2. ALL BLACK PAVEMENT MARKINGS ARE INCIDENTAL TO THE CONTRACT.

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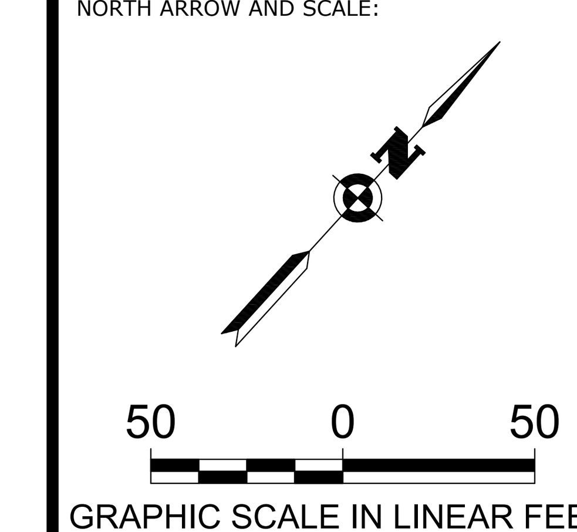
GA COA NO.: PEF003273 — EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:



PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

MARKING PLAN - SHEET 4

SHEET:

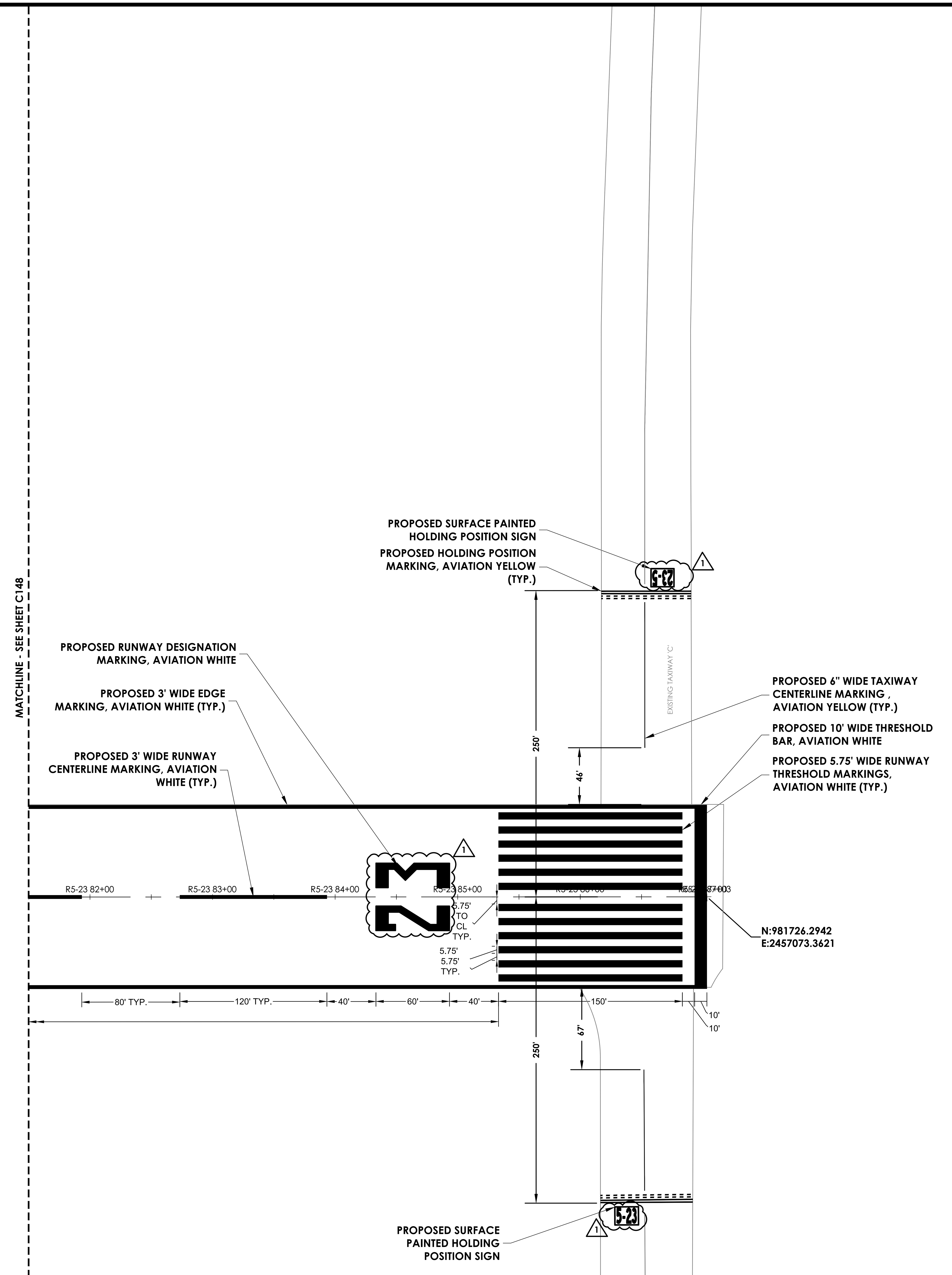
C147

PROJECT NO.:

20202946.0025

DATE:

MAY 2025



NOTES:

1. ALL RUNWAY CENTERLINE MARKINGS ARE 120' LONG WITH 80' SPACES UNLESS OTHERWISE INDICATED.
2. ALL BLACK PAVEMENT MARKINGS ARE INCIDENTAL TO THE CONTRACT.

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DESIGNED BY TJ COLLINS, P.E.

GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

50 0 50

GRAPHIC SCALE IN LINEAR FEET

PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MACON-BIBB COUNTY · FORT HAWKINS · EST. 1806 · FORWARD TOGETHER · 1823 · 2014 · 1822

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

MARKING PLAN - SHEET 6

SHEET:

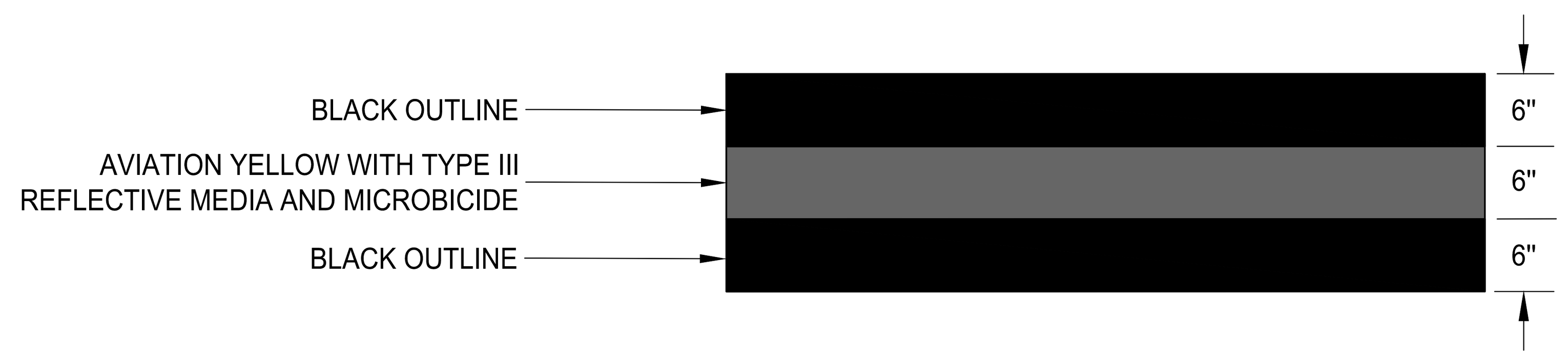
C149

PROJECT NO.:

20202946.0025

DATE:

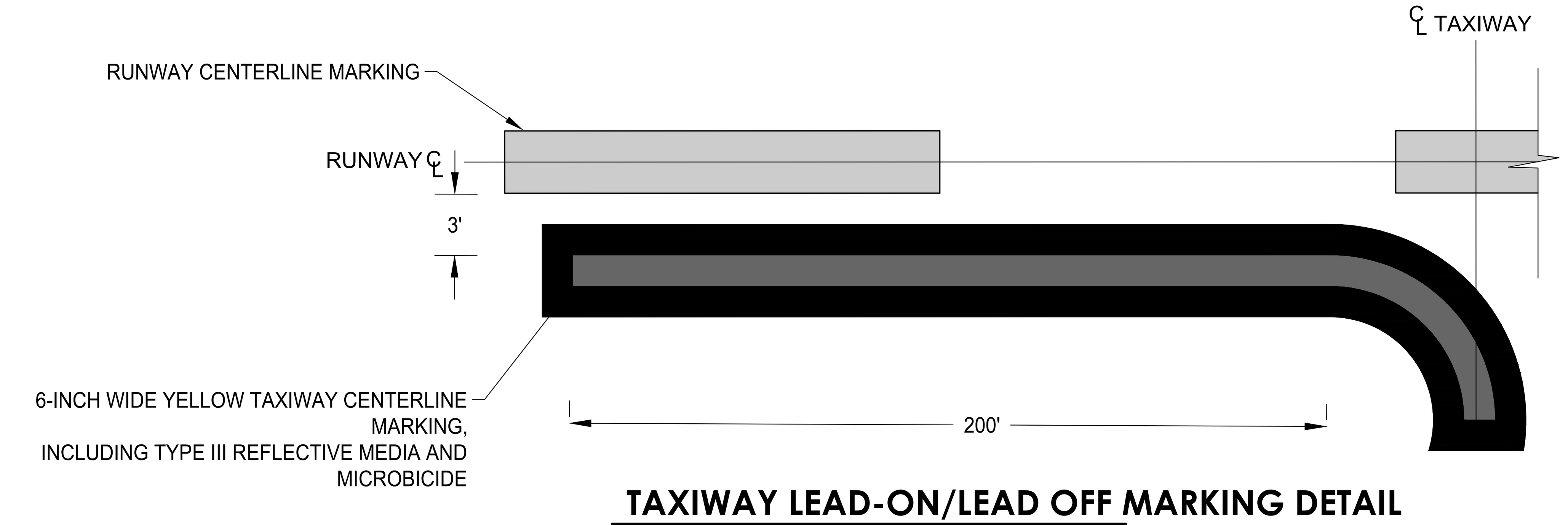
MAY 2025



NOTE:
1. 6-INCHES OF BLACK PAVEMENT MARKING SHALL OUTLINE ALL INSTALLED YELLOW MARKINGS REGARDLESS OF CONTRAST WITH NEW PAVEMENT.

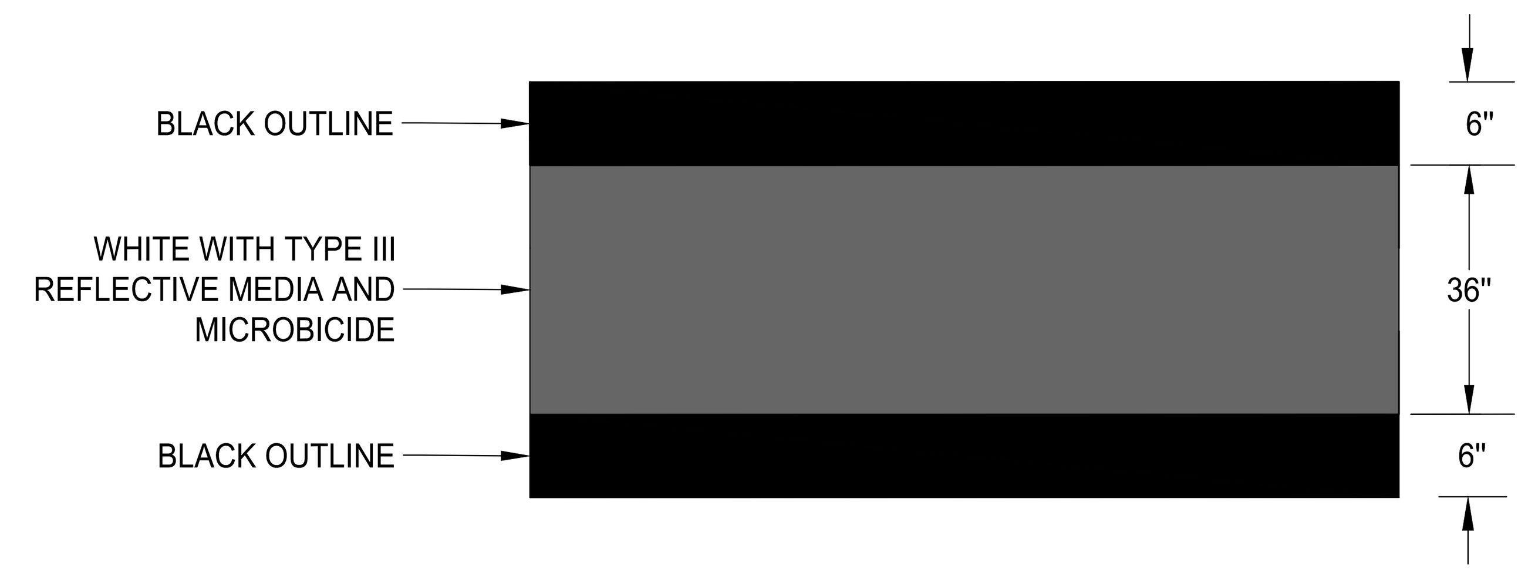
TAXIWAY CENTERLINE MARKING DETAIL

SCALE: NTS



TAXIWAY LEAD-ON/LEAD OFF MARKING DETAIL

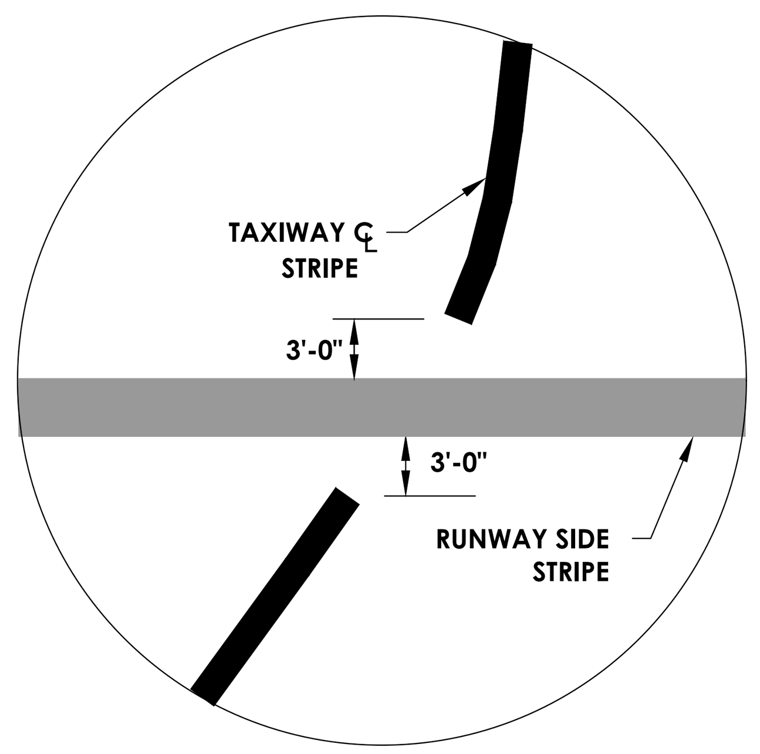
SCALE: NTS



CENTERLINE MARKING

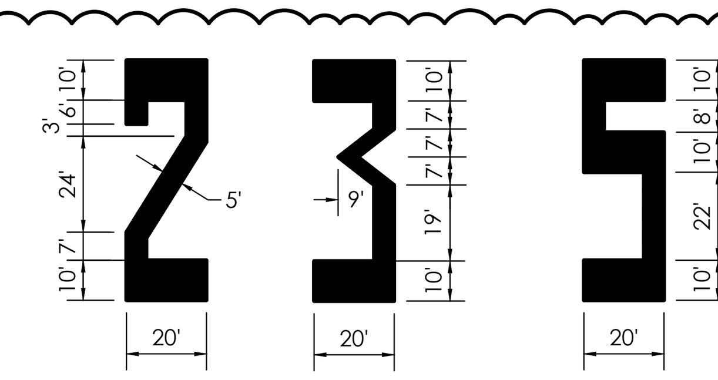
SCALE: NTS

NOTE:
1. 6-INCHES OF BLACK PAVEMENT MARKING SHALL OUTLINE ALL INSTALLED WHITE MARKINGS REGARDLESS OF CONTRAST WITH NEW PAVEMENT.
2. SEE PLAN VIEW FOR CENTERLINE MARKING LAYOUT



TAXIWAY CENTERLINE SKIP DETAIL

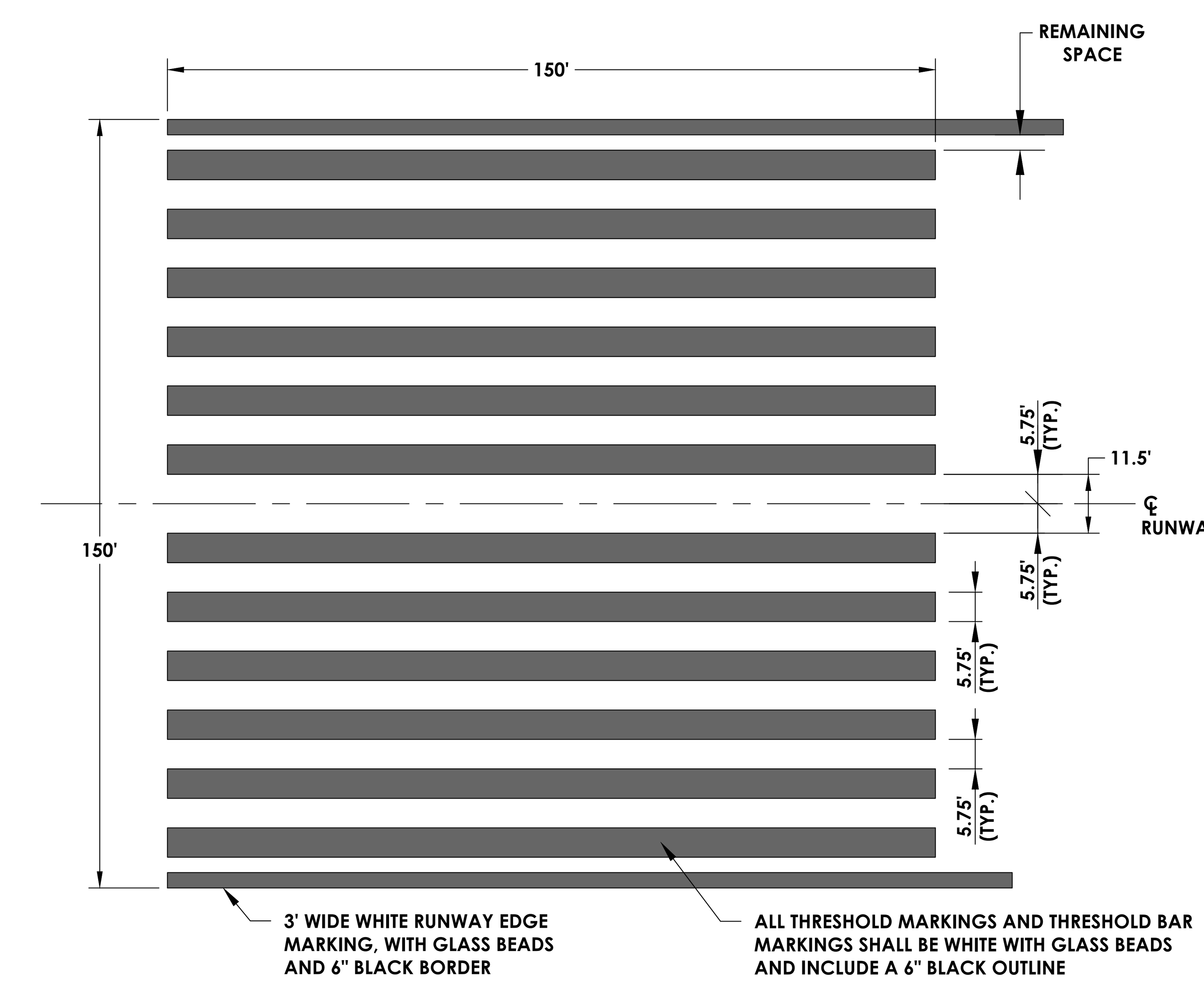
SCALE: NTS



RUNWAY DESIGNATION MARKINGS

SCALE: NTS

NOTE:
1. ALL LETTERS AND NUMERALS EXCEPT THE NUMBER ELEVEN ARE HORIZONTALLLY SPACED 15 FEET APART.
2. FIGURES ARE NOT TO SCALE.
3. THE RUNWAY NUMERALS AND LETTERS SHALL BE AVIATION WHITE.



THRESHOLD MARKING DETAIL

SCALE: NTS

AIMING POINT MARKING

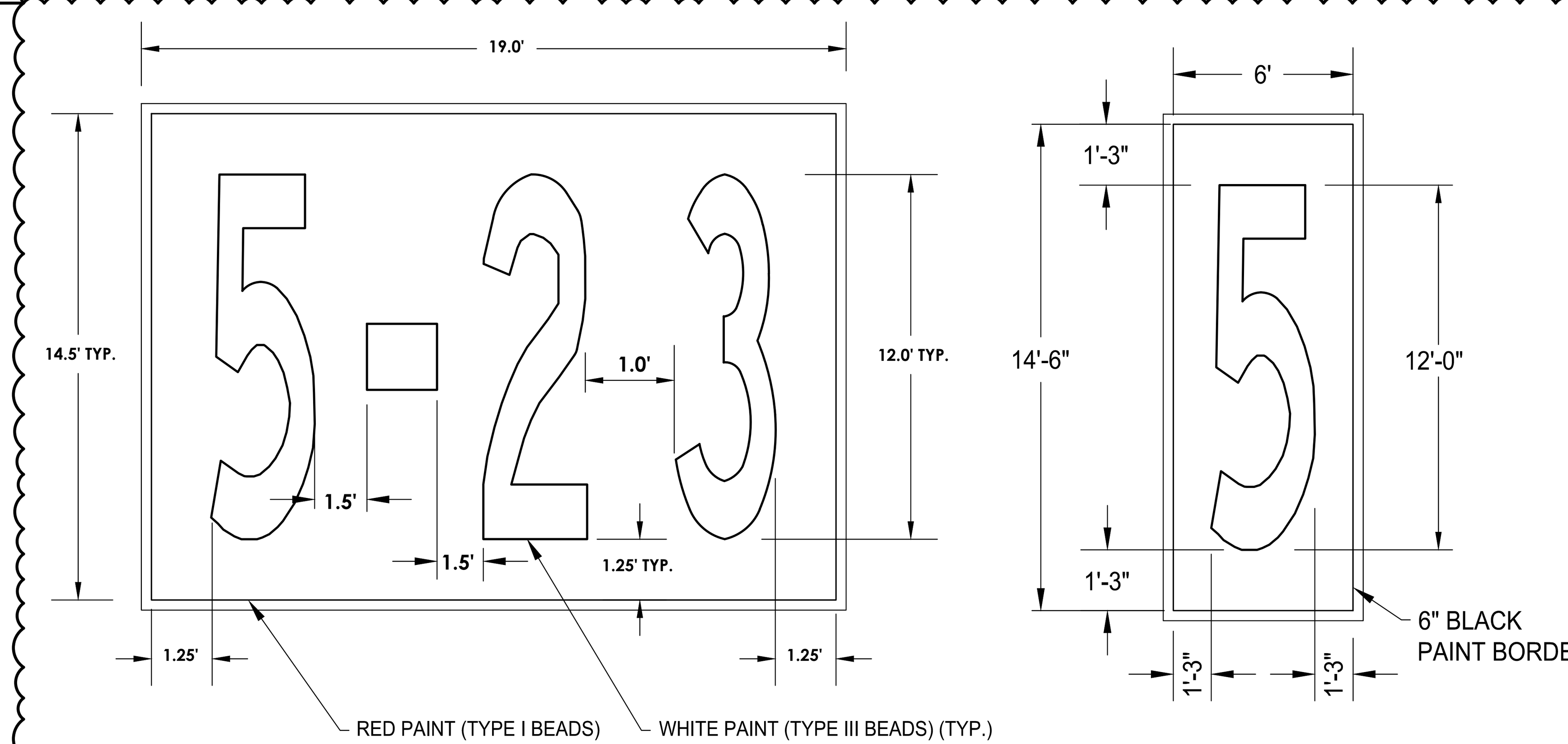
SCALE: NTS

NOTE:
1. 6-INCHES OF BLACK PAVEMENT MARKING SHALL OUTLINE ALL INSTALLED WHITE MARKINGS REGARDLESS OF CONTRAST WITH NEW PAVEMENT.
2. SEE PLAN VIEW FOR AIMING POINT MARKING LAYOUT

EDGE MARKING

SCALE: NTS

NOTE:
1. 6-INCHES OF BLACK PAVEMENT MARKING SHALL OUTLINE ALL INSTALLED WHITE MARKINGS REGARDLESS OF CONTRAST WITH NEW PAVEMENT.
2. SEE PLAN VIEW FOR CENTERLINE MARKING LAYOUT



SURFACE PAINTED HOLDING POSITION SIGN LAYOUT

SCALE: NTS

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PRINCIPAL IN CHARGE BRAD WENTE, P.E.
PROJECT MANAGER MICHAEL JOSEPH, P.E.
DESIGNED BY TJ COLLINS, P.E.
GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:
BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

PROJECT:
BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:
MACON-BIBB COUNTY

MACON-BIBB COUNTY · FORT HAWKINS · EST. 1806 · FORWARD TOGETHER · 1823 · 2014 · 1822

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

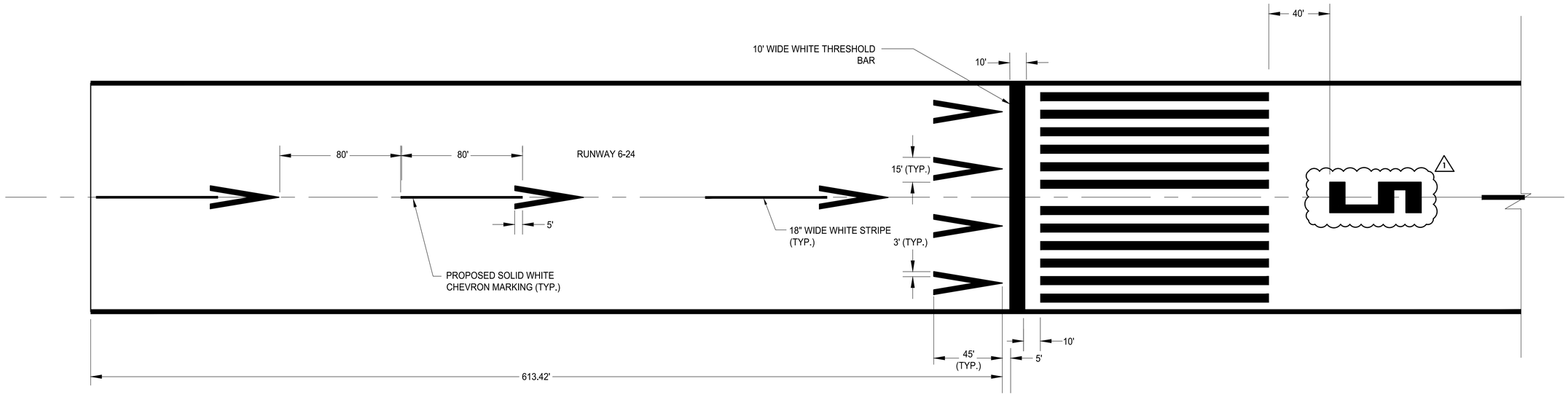
No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:
MARKING DETAILS - SHEET 1

SHEET:
C150

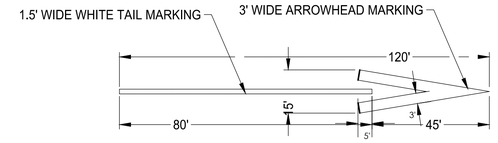
PROJECT NO.:
20202946.0025

DATE:
MAY 2025



DISPLACED THRESHOLD MARKING DETAIL

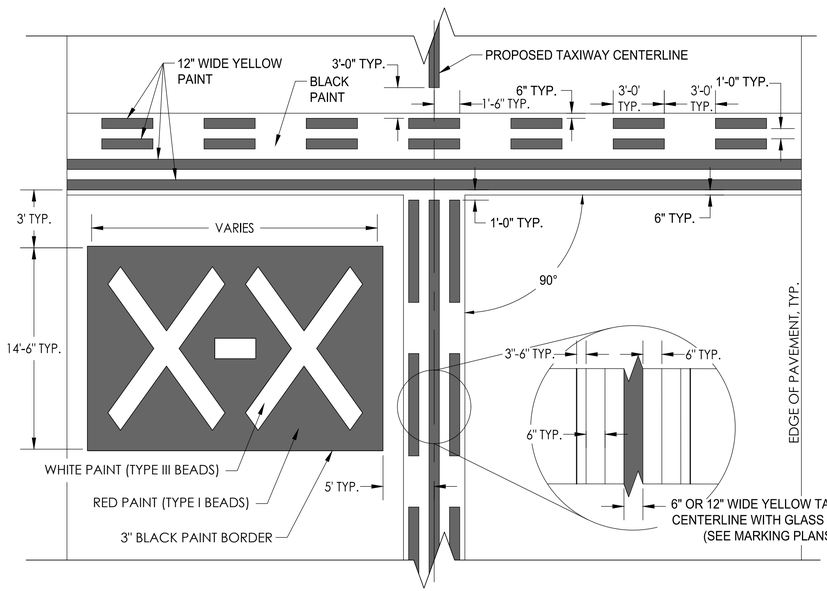
SCALE: NTS



ARROWHEAD POINT MARKING

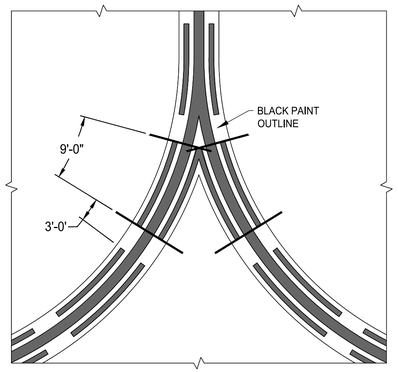
SCALE: NTS

NOTE:
1. 6-INCHES OF BLACK PAVEMENT MARKING SHALL OUTLINE ALL INSTALLED WHITE MARKINGS REGARDLESS OF CONTRAST WITH NEW PAVEMENT.
2. SEE PLAN VIEW FOR ARROWHEAD MARKING LAYOUT



SURFACE PAINTED HOLDLINE AND PATTERN A HOLDING POSITION SIGN DETAIL

SCALE: NTS



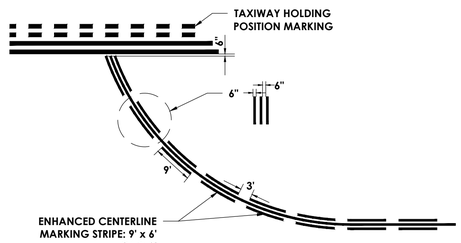
INTERSECTION NOTES:

1. AS SHOWN IN THIS CASE THE V-SHAPED INNER DASHES START AND STOP WITH THE OUTSIDE 9-FOOT DASHES. HOWEVER, THIS MAY NOT ALWAYS BE THE CASE FOR THE INNER DASHES. IF THE V-SHAPED ARE LESS THAN 5 FEET THEY MAY BE OMITTED.

2. MEASUREMENTS ARE TAKEN ALONG THE CENTER OF THE CENTERLINE STRIPE.

ENHANCED TAXIWAY CENTERLINE MARKING INTERSECTION DETAIL

NOT TO SCALE



GENERAL NOTES:
1. TAXIWAY CENTERLINES ARE ENHANCED FOR 150' PRIOR TO RUNWAY HOLDING POSITION MARKING.
2. DASHED LINES DIMENSIONS ARE TAKEN ALONG THE CENTER OF THE TAXIWAY CENTERLINE.
3. ENHANCEMENT TERMINATES 5' FROM TAXIWAY/TAXIWAY INTERSECTION.
4. ENHANCEMENT LESS THAN 150' MERGE (TANGENT) TO CURVE. END ENHANCEMENT WITH THE LAST SET OF FULL DASHES.
5. BLACK BORDERS FOR ENHANCED TAXIWAY CENTERLINE MARKINGS MAY INITIALLY BE DEFERRED FOR THE CASE OF NEW, DARK-COLORED ASPHALT CONCRETE FOR UP TO 2 YEARS AS PER TABLE 1-1 IN FAA AC 150/5340-1.

ENHANCED TAXIWAY CENTERLINE MARKING DETAIL

SCALE: NTS

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DESIGNED BY: TJ COLLINS, P.E.
GA COA NO.: PEF003273
EXP.: 06/30/26

SUBMITTAL:
BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

PROJECT:
BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:
MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

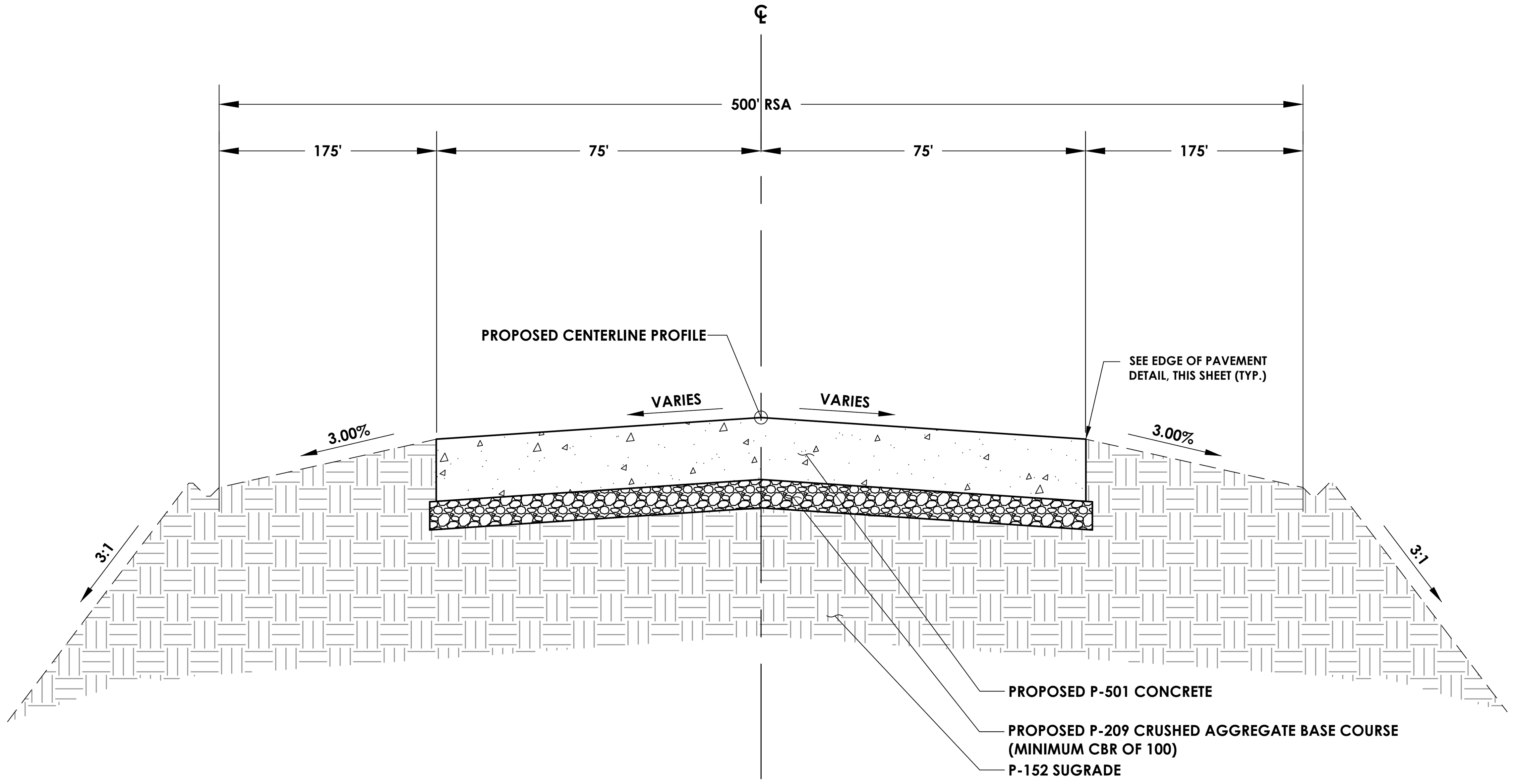
No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:
MARKING DETAILS - SHEET 2

SHEET:
C151

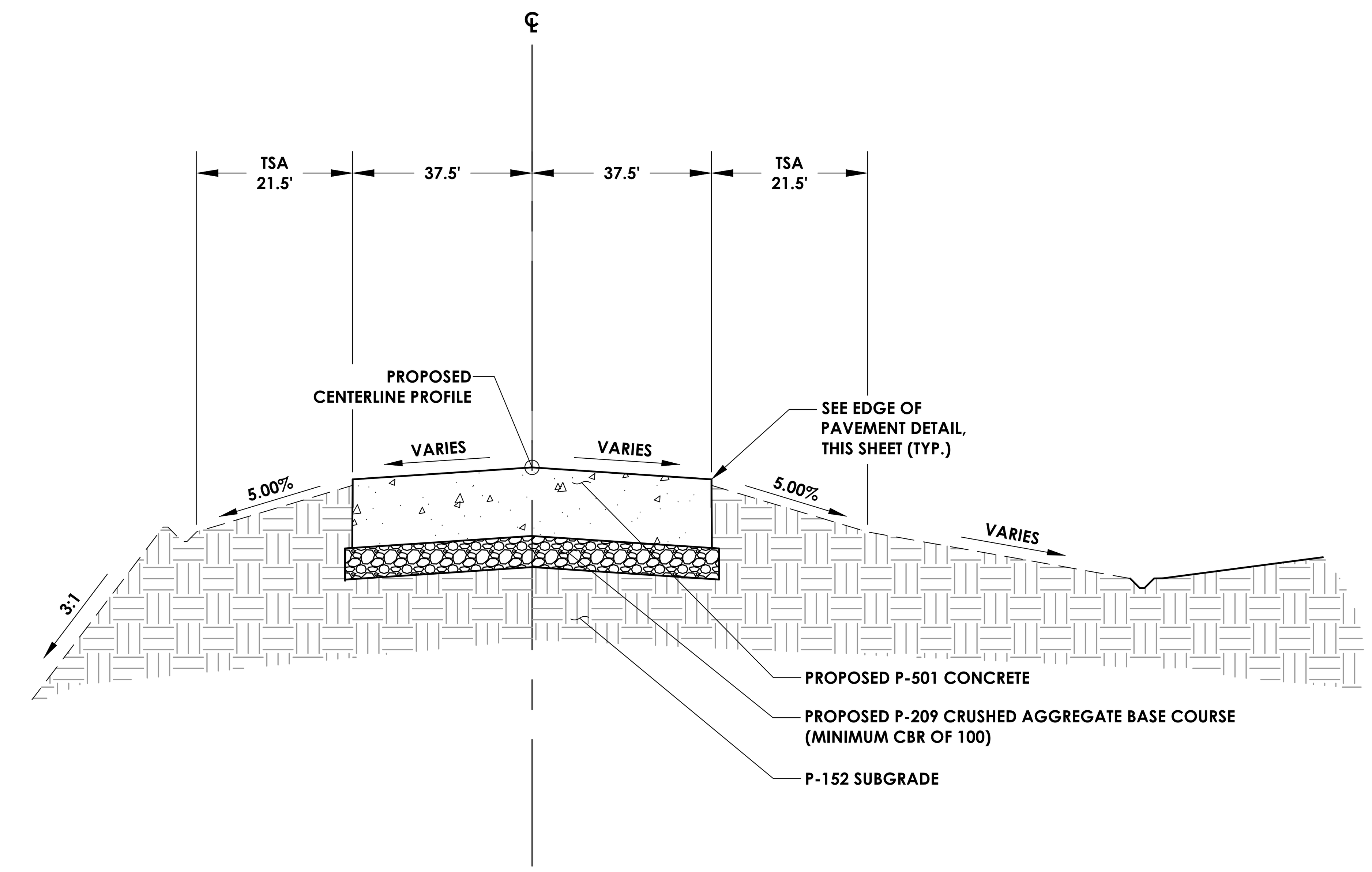
PROJECT NO.:
20202946.0025

DATE:
MAY 2025



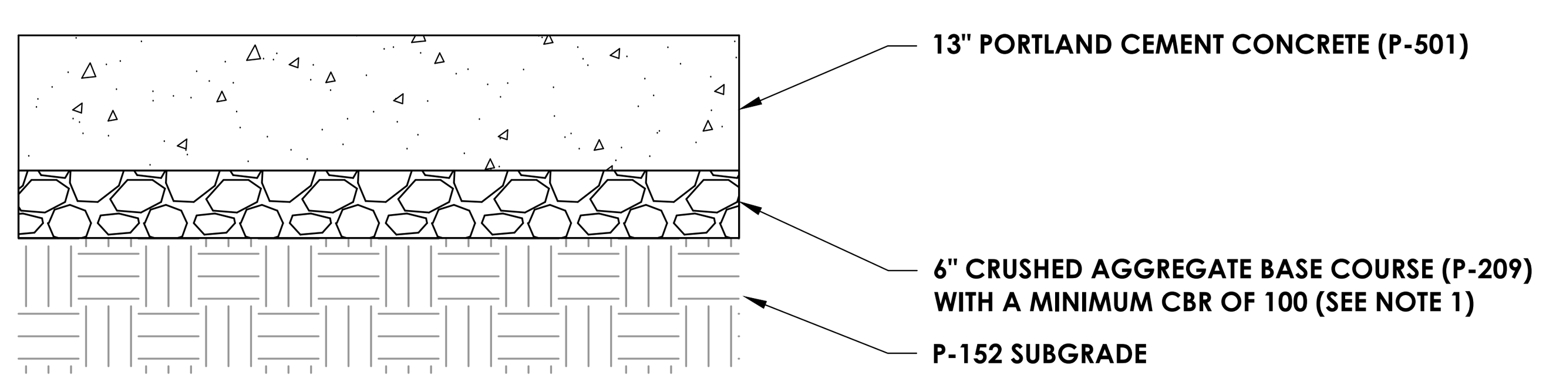
PROPOSED RUNWAY 5-23 CONCRETE TYPICAL SECTION

SCALE: NTS



PROPOSED TAXIWAY CONCRETE TYPICAL SECTION

SCALE: NTS

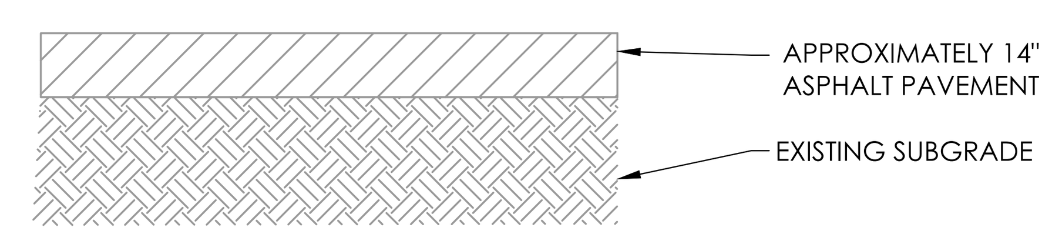


NOTES:

1. AGGREGATE BASE COURSE (P-209) SHALL HAVE A MINIMUM CALIFORNIA BEARING RATIO (CBR) OR 100, DETERMINED BY LABORATORY TESTING USING SOAKED AND REMOLDED SAMPLES COMPACTED TO AT LEAST 100% OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY. ALL COSTS ASSOCIATED WITH LABORATORY TESTING SHALL BE INCIDENTAL TO THE "CRUSHED AGGREGATE BASE COURSE (6-INCH DEPTH) (MINIMUM CBR OF 100)" PAY ITEM.

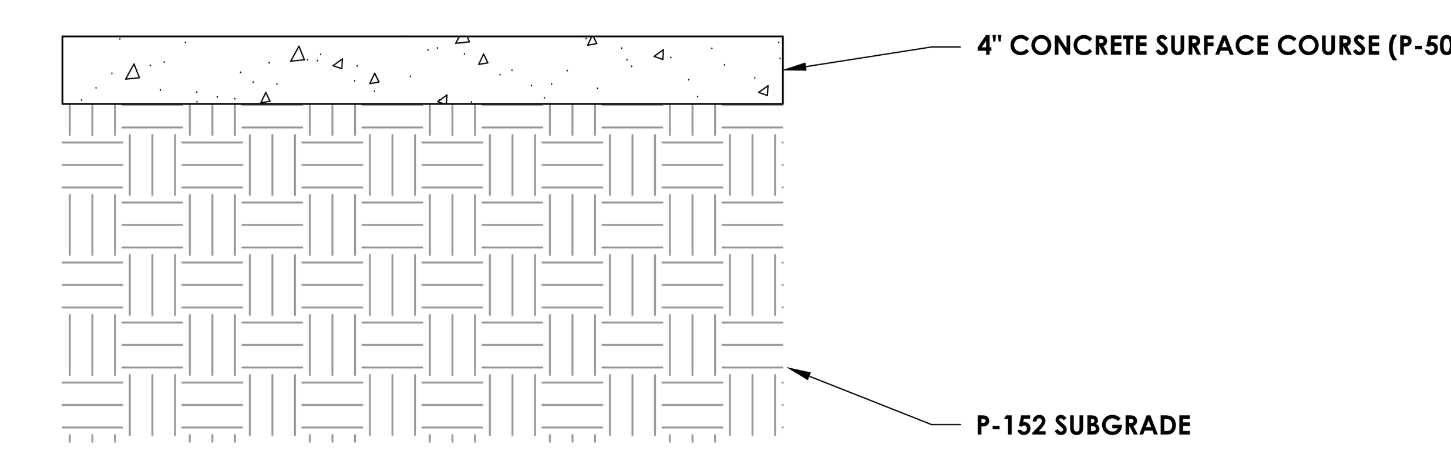
PROPOSED RUNWAY/TAXIWAY CONCRETE PAVEMENT SECTION

SCALE: NTS



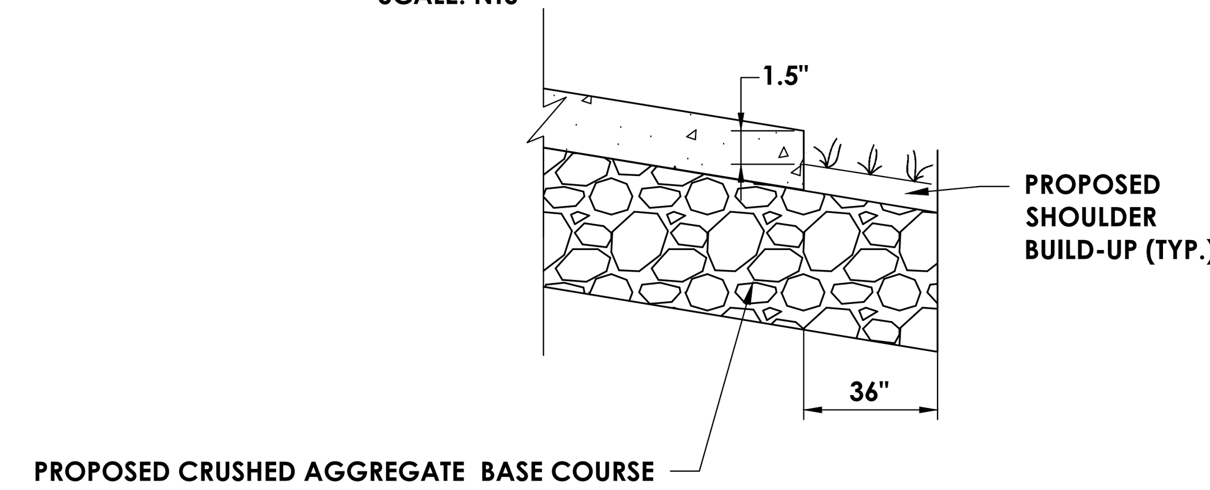
EXISTING RUNWAY/TAXIWAY PAVEMENT SECTION

SCALE: NTS



PROPOSED AUXILIARY LIGHT FOUNDATION PAVEMENT SECTION

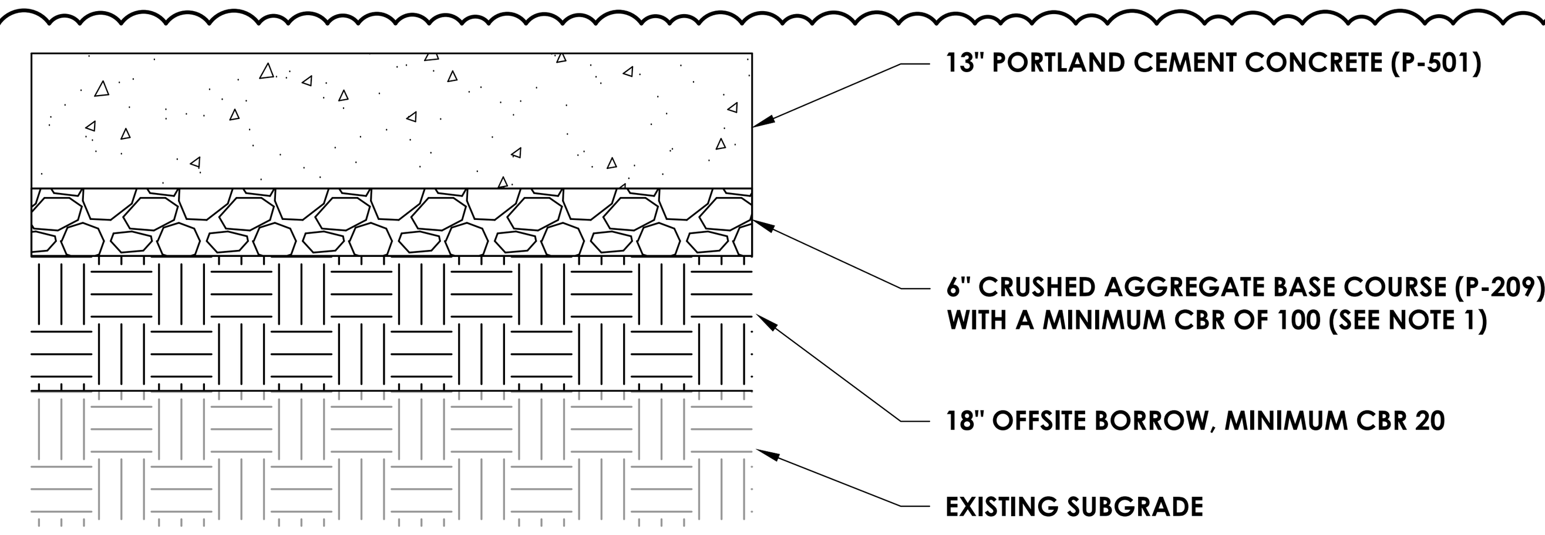
SCALE: NTS



CONCRETE EDGE OF PAVEMENT DETAIL

SCALE: NTS

1

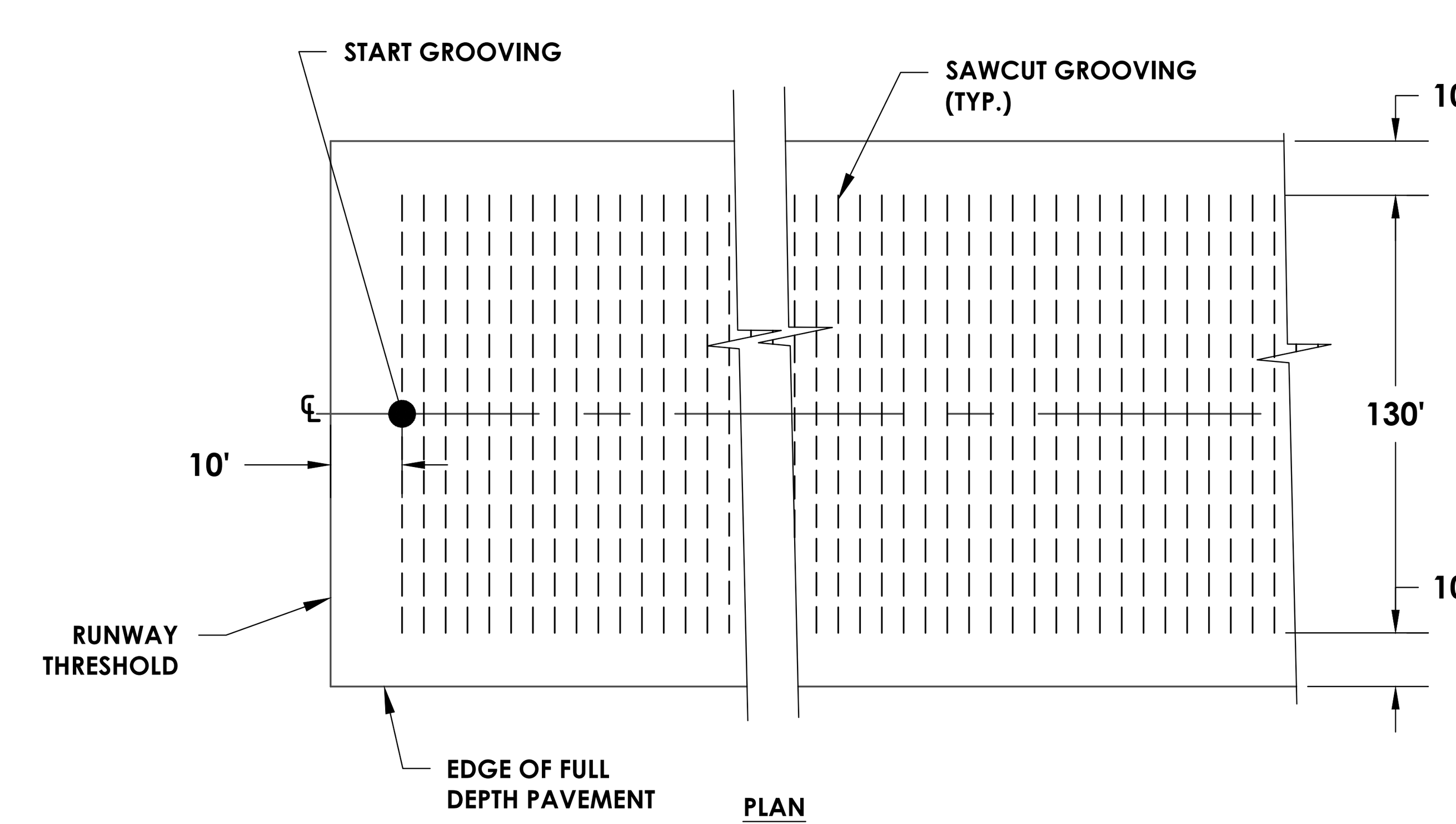


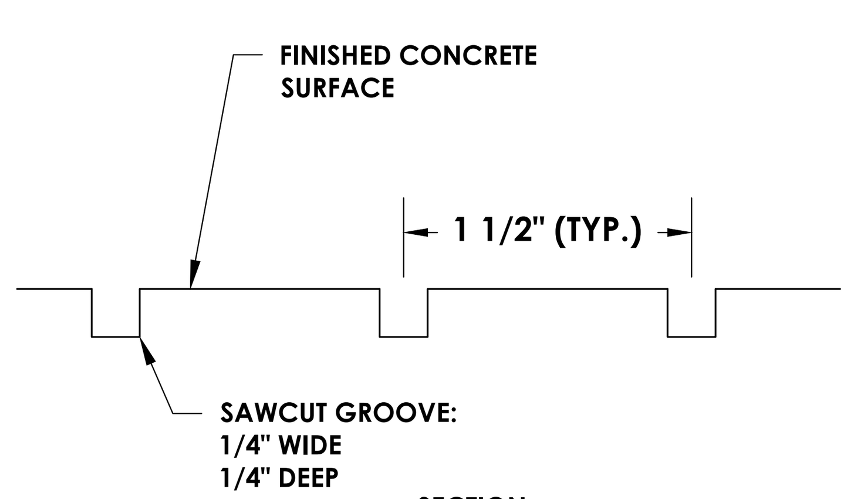
NOTES:

1. CRUSHED AGGREGATE BASE COURSE SHALL HAVE A MINIMUM CALIFORNIA BEARING RATIO (CBR) OF 100, DETERMINED BY LABORATORY TESTING USING SOAKED AND REMOLDED SAMPLES COMPACTED TO AT LEAST 100% OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY. ALL COSTS ASSOCIATED WITH LABORATORY TESTING SHALL BE INCIDENTAL TO THE "CRUSHED AGGREGATE BASE COURSE (11.5-INCH DEPTH) (MINIMUM CBR OF 100)" PAY ITEM.
2. CONTRACTOR SHALL PROVIDE A PAVEMENT BOX EXCAVATION SURVEY FOR ENGINEER APPROVAL BEFORE INSTALLATION OF OFFSITE BORROW, ALL COSTS SHALL BE INCIDENTAL TO THE "PROJECT SURVEY, STAKEOUT AND RECORD DRAWINGS" ITEM OF WORK.
3. FOR LIMITS OF CONSTRUCTION OF OFFSITE BORROW, SEE SHEET C122.
4. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS ASSOCIATED WITH THE OFFSITE BORROW. ALL NECESSARY PERMIT COSTS SHALL BE INCIDENTAL TO THE "OFFSITE BORROW" ITEM OF WORK.
5. THE CONTRACTOR SHALL PROVIDE LABORATORY TESTING RESULTS VERIFYING THAT ANY OFFSITE BORROW MATERIAL USED TO MEET SUBGRADE REQUIREMENTS ACHIEVES A MINIMUM CALIFORNIA BEARING RATIO (CBR) OF 20, DETERMINED IN ACCORDANCE WITH ASTM D1883, USING SOAKED CONDITIONS AND COMPACTED TO MODIFIED PROCTOR DENSITY PER ASTM D1557. ALL TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT. ALL COSTS SHALL BE INCIDENTAL TO THE "OFFSITE BORROW" ITEM OF WORK.

PROPOSED RUNWAY/TAXIWAY CONCRETE PAVEMENT SECTION WITH SELECT FILL

SCALE: NTS





NOTES:

1. ALL PROPOSED RUNWAY PAVEMENT SHALL HAVE SAWCUT GROOVING.
2. SEE SPECIFICATION FOR ITEM P-621 FOR DETAILED GROOVING TOLERANCE INFORMATION.
3. GROOVES SHALL BE SAWED NO LESS THAN 6 INCHES AND NO MORE THAN 18 INCHES FROM IN-PAVEMENT LIGHT FIXTURES.
4. WASTE MATERIAL COLLECTED DURING THE GROOVING OPERATION MUST BE DISPOSED OF BY SWEEPING OR VACUUMING. ALL COSTS ASSOCIATED WITH WASTE DISPOSAL SHALL BE INCIDENTAL TO THE "CONCRETE SAWCUT PAVEMENT GROOVING" ITEM OF WORK.
5. AUXILIARY LIGHT FOUNDATION PAVEMENT SECTIONS SHALL NOT BE SAWCUT GROOVED.
6. CONCRETE SHALL NOT BE SAWCUT GROOVED UNTIL CONCRETE HAS REACHED FULL DESIGN STRENGTH OF P-501.

SAWCUT GROOVING

SCALE: NTS

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DESIGNED BY TJ COLLINS, P.E.

GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

PROJECT:

ALTERNATE 1: CONCRETE PAVING FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT
MACON, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

CONCRETE TYPICAL SECTIONS AND PAVEMENT DETAILS

SHEET:

C205

PROJECT NO.:

20202946.0025

DATE:

MAY 2025

EXISTING MALSR ELECTRICAL ITEMS

Symbol	Description
	EXISTING MALSR STEADY BURNER LIGHT BAR
	EXISTING MALSR FLASHER
	EXISTING MALSR JUNCTION BOX AND DISTRIBUTION PANEL
	EXISTING MALSR THRESHOLD LIGHT

EXISTING AIRFIELD ELECTRICAL ITEMS

Symbol	Description
	EXISTING RUNWAY THRESHOLD LIGHT
	EXISTING RUNWAY EDGE LIGHT
	EXISTING STAKE MOUNTED TAXIWAY EDGE LIGHT
	EXISTING BASE MOUNTED TAXIWAY EDGE LIGHT
	EXISTING AIRFIELD GUIDANCE SIGN
	EXISTING MAN HOLE
	EXISTING JUNCTION CAN
X-Y"	EXISTING ELECTRICAL DUCT. X = NUMBER OF CONDUITS IN DUCT, Y = DIAMETER OF CONDUIT IN INCHES
CKT	EXISTING ELECTRICAL CONDUIT/TRENCH. NUMBER OF TIC MARKS INDICATES NUMBER OF EXISTING CABLE(S) IN CONDUIT. CKT = CIRCUIT DESIGNATOR

ELECTRICAL DEMOLITION ITEMS

Symbol	Description
X	DEMOLISH. COMPLETELY REMOVE UNLESS OTHERWISE NOTED. ITEMS TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO: LIGHT FIXTURE OR SIGN, CONCRETE, REBAR, CONDUIT, DUCT BANK, CABLE, COUNTERPOISE, JUNCTION STRUCTURES (ANY DEPTH), AGGREGATE, GROUND RODS, BASE CANS, CONDUIT SPACERS, CONDUIT HOLD DOWN BARS, WARNING TAPE, DRAINAGE CONCECTIONS, GROUND RINGS, AND ALL OTHER INCIDENTALS, AS SHOWN ON PLANS. DEMOLISHED CABLE MUST BE REMOVED BACK TO THE NEXT ADJACENT JUNCTION STRUCTURE TO REMAIN UNLESS OTHERWISE NOTED. (NOTE 14)
	CONDUIT CAP. CAP EXISTING CONDUITS AT DEMOLITION LIMITS WITH APPROPRIATELY SIZED PVC FRICTION FIT CAPS TO PREVENT DIRT AND DEBRIS FROM ENTERING THE CONDUIT. REMOVE CABLE BACK TO ADJACENT JUNCTION STRUCTURES/LIGHT BASES.

ABBREVIATIONS

AWG	-	AMERICAN WIRE GAUGE
BSD	-	BARE SOFT DRAWN
CC	-	CENTER TO CENTER
CE	-	CONCRETE ENCASED
CKT	-	CIRCUIT
CL	-	CENTERLINE
CU	-	COPPER
DEB	-	DIRECT EARTH BURIED
DIA	-	DIAMETER
EOP	-	EDGE OF PAVEMENT
FO	-	FIBER OPTIC
JCP	-	JUNCTION CAN PLAZA
KV	-	KILOVOLT
MAX	-	MAXIMUM
MIN	-	MINIMUM
PC	-	POINT OF CURVATURE
PI	-	POINT OF INFLECTION
PS	-	PAVEMENT SENSOR
PT	-	POINT OF TANGENCY
PVC	-	POLYVINYL CHLORIDE
RGS	-	RIGID GALVANIZED STEEL
RPR	-	RESIDENT PROJECT REPRESENATIVE
SCH	-	SCHEDULE
T/W	-	TAXIWAY
TDZ	-	TOUCH DOWN ZONE
TYP	-	TYPICAL
UNO	-	UNLESS NOTED OTHERWISE
WWF	-	WELDED WIRE FABRIC

NEW MALSR ELECTRICAL ITEMS - FURNISH AND INSTALL

Symbol	Description
	MALSR LIGHT BAR. SEE MALSR LIGHT PLANE FOR INSTALLATION TYPE OF MALSR LIGHT BAR.
	IN-PAVEMENT MALSR THRESHOLD LIGHT
B	INSTALL L-867B BASE CAN, CLASS 1A, WITH 3/8" STEEL COVER
P C	AIRCRAFT RATED MANHOLE COMPLETE AND INSTALLED WITH ALL APPURTENANCES. P = POWER MANHOLE. \PC = COMMUNICATIONS MANHOLE.

NEW AIRFIELD LIGHTING ELECTRICAL ITEMS - FURNISH AND INSTALL

Symbol	Description
	INTERCEPT EXISTING CONDUIT AND CONNECT TO NEW CONDUIT WITH APPROPRIATELY SIZED PVC COUPLING. INSTALL NEW CABLE(S) BACK TO ADJACENT JUNCTION STRUCTURES/LIGHT BASES AS SHOWN ON CIRCUITING PLANS.
	L-861T(L), LED, OMNI-DIRECTIONAL, TAXIWAY EDGE LIGHT. INSTALL STEM ON AN L-867B BASE CAN WITH A BASE PLATE, PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS.
R Y / G C	L-862 BIDIRECTIONAL ELEVATED RUNWAY EDGE LIGHT COLUMN MOUNTED ON AN L-867B BASE CAN WITH A BASE PLATE AND PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. R = RED LENS, Y = YELLOW LENS, G = GREEN LENS, C = CLEAR LENS (WHITE)
G	L-850D UNIDIRECTIONAL IN-PAVEMENT RUNWAY DISPLACED THRESHOLD LIGHT INSTALLED ON AN L-868B BASE CAN WITH A FLANGE RING, SPACERS, PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. G = GREEN LENS
R Y	L-850C BIDIRECTIONAL IN-PAVEMENT RUNWAY EDGE LIGHT INSTALLED ON AN L-868B BASE CAN WITH A FLANGE RING, SPACERS, PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. R = RED LENS, Y = YELLOW LENS
R R	L-862E BIDIRECTIONAL ELEVATED RUNWAY END LIGHT COLUMN MOUNTED ON AN L-867B BASE CAN WITH A BASE PLATE AND PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. R = RED LENS
G	L-862E UNIDIRECTIONAL ELEVATED RUNWAY DISPLACED THRESHOLD LIGHT COLUMN MOUNTED ON AN L-867B BASE CAN WITH A BASE PLATE AND PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. G = GREEN LENS
	L-858(L) AIRFIELD SIGN, LED, INSTALLED ON A CONCRETE FOUNDATION WITH L-867B CLASS 1, 24" DEEP BASE CAN, PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. SEE SIGN SCHEDULE FOR MORE INFORMATION.
JCP-X(#)	JUNCTION CAN PLAZA IN CONCRETE BASE. JCP-X = JUNCTION CAN PLAZA IDENTIFICATION NUMBER. # = NUMBER OF CLASS 1A L-867D BASE CANS IN PLAZA.
CKT	2" SCH. 40 PVC CONDUIT, DIRECT EARTH BURIED IN UNPAVED AREAS, CONCRETE ENCASED UNDER FULL STRENGTH PAVEMENT. NUMBER OF TICK MARKS INDICATE THE NUMBER OF NEW L-824, TYPE C, 5 KV, #8 AWG, CABLES INSTALLED IN DUCT. CKT = CIRCUIT DESIGNATOR. NO TICK MARKS AND CIRCUIT DESIGNATOR INDICATES A SPARE CONDUIT.
X-Y"	PROPOSED ELECTRICAL DUCT BANK, SCHEDULE 40 PVC CONCRETE ENCASED. X = NUMBER OF CONDUITS IN DUCT, Y = DIAMETER OF CONDUIT IN INCHES. AND END OF DUCT MARKER SHALL BE INSTALLED ABOVE EACH END OF THE DUCT.
X-Y"	PROPOSED ELECTRICAL DUCT BANK, SCHEDULE 80 PVC DIRECT EARTH BURIED. X = NUMBER OF CONDUITS IN DUCT, Y = DIAMETER OF CONDUIT IN INCHES. AND END OF DUCT MARKER SHALL BE INSTALLED ABOVE EACH END OF THE DUCT.

NOTES:

1. PROJECT PAY ITEMS: THE PROJECT PAY ITEMS ARE PROVIDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THE CONTRACT DOCUMENTS. ALL WORK NOT IDENTIFIED WITH A SPECIFIC PAY ITEM IS TO BE CONSIDERED REQUIRED WORK TO COMPLETE THE PROJECT, AND IS TO BE ANCILLARY TO THE COST OF PROJECT PAY ITEMS PROVIDED.
2. WHENEVER, IN THE CONTRACT DOCUMENTS, THE WORDS "PROVIDE", "FURNISH", "INSTALL", "FURNISH AND INSTALL", OR OTHER WORDS OF LIKE IMPORTANCE ARE USED, IT SHALL BE UNDERSTOOD THAT THE INTENT OF THE CONTRACT DOCUMENTS IS TO PROVIDE FOR THE CONSTRUCTION AND COMPLETION IN EVERY DETAIL OF THE WORK DESCRIBED. IT IS FURTHER INTENDED THAT THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, SUPPLIES, TESTING AND INCIDENTALS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS (PLANS), SPECIFICATIONS AND TERMS OF THE CONTRACT.
3. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, ETC., PRIOR TO COMMENCEMENT OF WORK. THE COST OF PERMITS, LICENSES, ETC., SHALL BE INCIDENTAL TO AND INCLUDED IN THE BID PRICE FOR THE RESPECTIVE PAY ITEMS.
4. ITEMS SHOWN IN SCREEN (GHOST/GREYSCALE) ARE EXISTING OR CIVIL ITEMS. ITEMS SHOWN IN SOLID (BOLD) ARE NEW TO BE INSTALLED UNDER THIS CONTRACT, UNLESS OTHERWISE NOTED
5. ALL EXCAVATION WITHIN 5 FEET OF AN UNDERGROUND UTILITY SHALL BE PERFORMED BY HYDRO EXCAVATION METHODS. EXISTING DIRECT BURIED CABLES TO REMAIN SHALL BE ENCLOSED IN SPLIT SCH. 40 DUCT AND ENCASED IN A 3" ENVELOPE OF CONCRETE (P-610) UNDER THE FOLLOWING CONDITIONS:
   - A. WHEN WITHIN 20 FEET OF EXCAVATION, TRENCHING, ETC.
   - B. WHEN PAVEMENT WIDENING OR EXTENSIONS WILL BE ROUTED OVER THE EXISTING CABLE. THE SPLIT DUCT WILL EXTEND 20 FEET BEYOND THE NEW EDGE OF PAVEMENT.
   - C. WHEN ENCOUNTERED DURING CONSTRUCTION.
   - D. WHEN SUBJECT TO DAMAGE, IN THE OPINION OF THE OWNER/ENGINEER, FROM CONSTRUCTION ACTIVITIES.
6. AN END OF DUCT MARKER SHALL BE INSTALLED ABOVE EACH END OF THE DUCT.
7. ALL DAMAGE TO UTILITIES OR EXISTING STRUCTURES SHALL BE IMMEDIATELY REPORTED TO THE OWNER. THE OWNER SHALL DETERMINE WHETHER REPAIR OR REPLACEMENT IS NECESSARY. ALL REPAIR METHODS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVED BY THE OWNER PRIOR TO INITIATING THE WORK.
8. IN NEW OR EXISTING PAVEMENT, OR TURF, PRIOR TO PLACEMENT OF THE FINAL LIFT OF PAVEMENT OR TURF, ALL CONDUITS, DUCT BANKS, BASE CANS, COUNTERPOISE, GROUND GRID CONDUCTORS, ETC., SHALL BE INSTALLED AND CONNECTION VERIFIED AND DOCUMENTED.
9. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK. EXISTING CONDITIONS SHALL BE RECORDED AND SENT TO ENGINEER/RPR FOR VERIFICATION, ANY EXISTING ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT NO ADDITIONAL COST TO OWNER.
10. EXISTING CONDUIT, DUCT BANK, CIRCUITING AND UTILITY INFORMATION IS BASED ON "AS-BUILT" AND "RECORD" DRAWINGS, AND SITE VISITS BY THE ENGINEER. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY/AGENCY, PRIOR TO STARTING WORK, AND STAKE/MARK THE LOCATION OF ALL EXISTING UTILITIES. ANY PLANNED INTERRUPTION OF AN EXISTING SYSTEM OR UTILITY SERVICE SHALL BE COORDINATED AND APPROVED BY THE AUTHORITY, AGENCY OR UTILITY HAVING JURISDICTION, PRIOR TO STARTING WORK.
11. ALL EXISTING SYSTEMS/UTILITIES TO REMAIN SHALL BE PROTECTED FROM DAMAGE, GROUND PENETRATING RADAR (GPR) IS TO BE USED TO LOCATE UNDERGROUND UTILITIES. REPLACEMENT OF ANY DAMAGED EXISTING SYSTEMS/ UTILITIES TO REMAIN SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. FAA CABLES, FIBER OPTIC CABLES, OR OTHER CABLES DEEMED NOT SPLICABLE, SHALL BE COMPLETELY REPLACED. DAMAGE TO FAA CABLES WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR COMPLETE REPLACEMENT OF THE FAA CABLE.
12. ELECTRICAL DEMOLITION WORK SHALL BE LIMITED TO THE AREAS AND SCHEDULES IDENTIFIED IN THE APPROVED PHASING PLAN.
13. ALL WORK SHOWN ON THE DEMOLITION DRAWINGS IS BASED ON FIELD OBSERVATION OF THE ACTUAL EXISTING CONDITIONS AND ON EXISTING "AS-BUILT" DRAWINGS OF THE AREAS AFFECTED. THEY ARE THEREFORE CONSIDERED TO BE SCHEMATIC. IT IS THE INTENT OF THE DEMOLITION DRAWINGS THAT ALL EQUIPMENT, DEVICES, FIXTURES, WIRING MATERIALS, SYSTEMS AND APPURTENANCES, ETC., WHICH ARE NO LONGER REQUIRED AS A RESULT OF THE PROJECT BE REMOVED.
14. ALL REMOVED ITEMS TO BE COMPLETELY DEMOLISHED INCLUDING, BUT NOT LIMITED TO, CABLES, DUCT, BASE CANS, CONCRETE PADS, MANHOLES, ETC., SHALL BE PROPERLY AND LEGALLY DISPOSED OF OFF THE SITE BY THE CONTRACTOR. ALL ITEMS TO BE RELOCATED SHALL BE REMOVED FIRST AND PROPERLY STORED FOR FUTURE INSTALLATION.
15. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO DETERMINE THAT ALL AIRFIELD LIGHTING CIRCUITS, EXCEPT THOSE THAT ARE SERVING CLOSED TAXIWAYS OR RUNWAYS, ARE COMPLETELY OPERATIONAL, USING THE NORMAL CONTROL SYSTEM, AT THE END OF EACH WORK SHIFT AND SHALL SO CERTIFY TO THE OWNER/RPR BEFORE THE END OF EACH SHIFT. THE CONTRACTOR SHALL NOT LEAVE THE WORK SITE UNTIL CIRCUIT OPERATION HAS BEEN CONFIRMED BY THE OWNER/RPR.
16. LOCATE AND UTILIZE EXISTING DUCTS WHERE POSSIBLE. MANDREL EXISTING DUCTS TO DETERMINE ACCEPTABILITY FOR USE. THE COST OF MANDRELLING THE EXISTING DUCTS SHALL BE INCIDENTAL. IF EXISTING DUCTS SHOWN ARE DAMAGED, NON-EXISTENT, OR ROUTED DIFFERENTLY, WITH THE PERMISSION OF THE OWNER/ENGINEER, OPEN CUT PAVEMENT AND INSTALL NEW DUCT AS DETAILED IN THE PLANS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STORAGE OF ALL ITEMS REQUIRING STORAGE PRIOR TO REINSTALLATION. ALL SIGNS UNITS, LIGHT FIXTURES, ETC. SHALL BE REINSTALLED OR RETURNED TO THE OWNER UNDAMAGED, IN PROPER WORKING CONDITION, CLEANED AND RE-LAMPED. ITEMS WHICH ARE DAMAGED PRIOR TO CONTRACTOR POSSESSION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE CONTRACTOR PRIOR TO DEMOLITION AND SHALL BE PHOTO DOCUMENTED. ANY ITEMS DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES OR STORAGE SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. NO ADDITIONAL TIME WILL BE GRANTED FOR DELAYS IN OBTAINING REPLACEMENT EQUIPMENT.
18. ANY REGRADING OR SODDING ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE INCIDENTAL TO THE ELECTRICAL PAY ITEMS.
19. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ITEMS SHOWN FOR DEMOLITION AND REMOVAL, INCLUDING LIGHT CANS, CONDUIT, WIRE, CONCRETE BASE, AND OTHER, AND ALL RELATED APPURTENANCES, IN A SAFE AND LEGAL MANNER OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
20. ALL ITEMS REQUIRING RPR/ENGINEER APPROVAL OR NOTICE MUST ALSO INCLUDE FAA RESIDENT ENGINEER FOR ANY FAA SYSTEM.
21. FOR ALL FAA ITEMS, INCLUDING THE MALSR, THE "OWNER" MEANS THE FAA.
22. PRIOR TO THE START OF WORK, THE CONTRACTOR MUST RECORD EXISTING CONDITIONS OF THE AIRFIELD LIGHTING SYSTEM WITHIN, AND ADJACENT TO, THE PROJECT CONSTRUCTION LIMITS AND SEND PROOF OF CONDITION TO THE RPR AND OWNER AS A SUBMITTAL TO BE VERIFIED AND APPROVED. CONTRACTOR MUST ENSURE ALL EXISTING AND RECENTLY INSTALLED LIGHTS AND SIGNS ARE PROTECTED FROM DAMAGE. ANY ITEMS DAMAGED AFTER APPROVED EXISTING CONDITIONS SUBMITTAL MUST BE FULLY REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR MUST TAKE CARE NOT TO RUN OVER AIRFIELD LIGHTS WITH VACUUM OR SWEEPER TRUCKS.
23. THE CONTRACTOR SHALL COMPLETELY SURVEY AND STAKE OUT EACH AREAS' LIGHTING LAYOUT PRIOR TO STARTING ANY INSTALLATION. SHOULD ANY IRREGULARITIES OCCUR IN THE LIGHTING LAYOUT, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. THE BID ITEM PRICE SHALL INCLUDE THE NECESSARY LAYOUT FOR EACH FIXTURE AND THE COST FOR ANY ADDITIONAL ADJUSTMENT OF THE LOCATION OF THE FIXTURES DUE TO THE EXISTING GEOMETRIC CONDITIONS. THE NEW LIGHTING INSTALLATION SHALL BE COORDINATED WITH AND BLEND INTO THE EXISTING INSTALLATION.
24. IF A LIGHT CAN IS INSTALLED INCORRECTLY, THE DUCT/CONDUIT IS PLUGGED/BROKEN, OR THE LIGHT CAN IS SAWED BY THE CONCRETE SAW, THE CONCRETE SLABS OR ASPHALT PAVEMENT AROUND THE LIGHT CAN AND THE LIGHT SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
25. THE DISTANCE SHOWN BETWEEN LIGHTS ON A RADIUS IS CHORD LENGTH, NOT ARC LENGTH.
26. AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS) - THE UPDATING OF THE ALCMS SHALL BE COMPLETED BY ADB SAFEGATE, INC. THE CONTRACTOR SHALL COORDINATE THE UPDATING OF THE SYSTEM WITH THE AIRPORT AND ADB SAFEGATE, INC. ALL COORDINATION WITH ADB SAFEGATE, INC. IS INCIDENTAL TO THE LUMP SUM PAY ITEM: "L-125-21 COORDINATE UPDATE OF EXISTING ALCMS".

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DESIGNED BY TJ COLLINS, P.E.

GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:

BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

PROJECT:

BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:

MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT (MCN) MACON-BIBB COUNTY, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:

ELECTRICAL LEGEND AND GENERAL NOTES

SHEET:

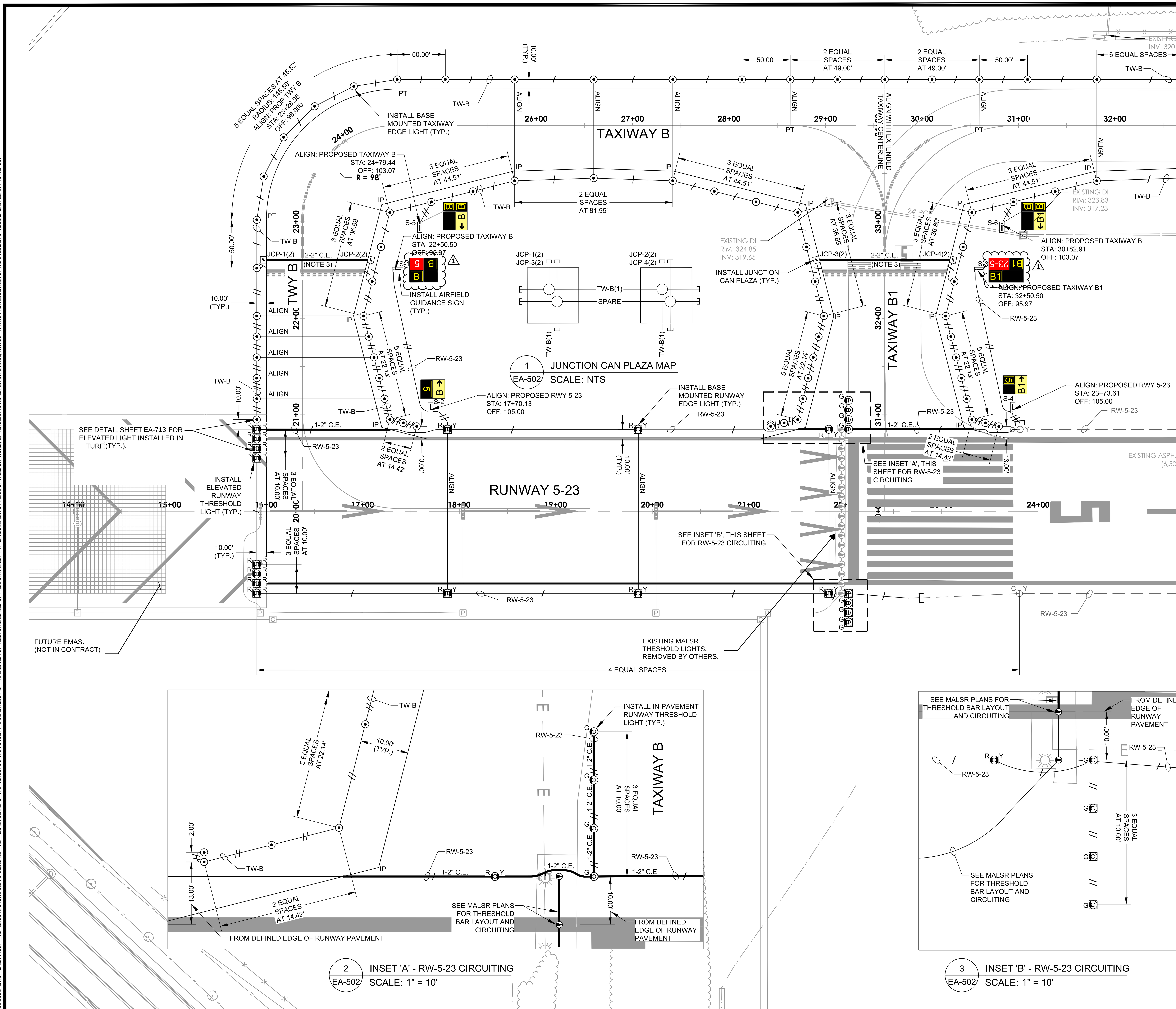
EA-001

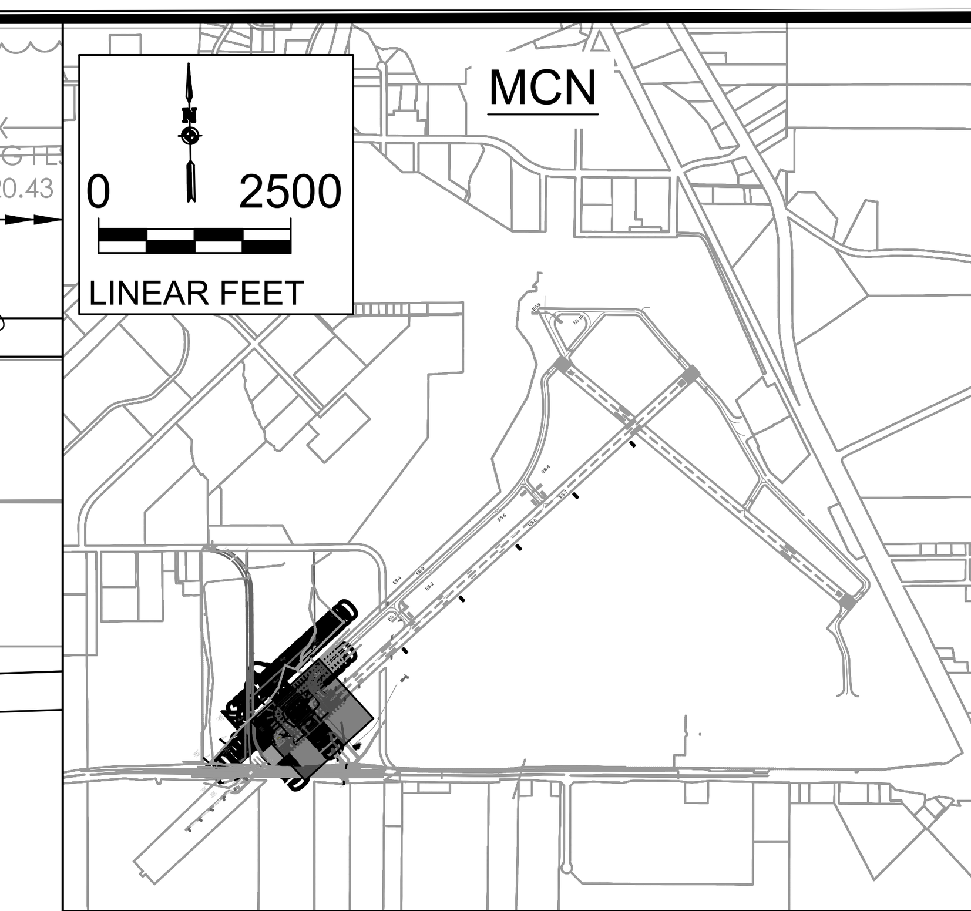
PROJECT NO.:

20202946.0025

DATE:

APRIL 2025





KEY MAP

NOTES:

1. CONTRACTOR SHALL STAKE OUT LIGHT FIXTURE AND SIGN, LOCATIONS PRIOR TO INSTALLATION. IN LOCATIONS WHERE FIELD CONDITIONS DIFFER FROM LAYOUT INFORMATION PROVIDED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE RPR FOR DIRECTION AND ENSURE APPROVAL PRIOR TO PROCEEDING.
2. SEE SHEETS EA-601 - EA-604 FOR MALSR LAYOUT AND CIRCUITING PLANS.
3. SEE DETAIL 1, SHEET EA-502 FOR JUNCTION CAN PLAZA MAP DETAIL.

KEY NOTES:

1. CONNECT NEW CABLE TO EXISTING LIGHT FIXTURE.
2. INSTALL TAXIWAY EDGE LIGHT 10.00' MAX. FROM THE EXISTING EDGE OF PAVEMENT AND INSTALLED SUCH THAT THEY ARE IN-LINE WITH THE EXISTING EDGE LIGHTS TO REMAIN AND THE NEW EDGE LIGHTS INSTALLED OFF OF NEW PAVEMENT.

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GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:
BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:
50 0 50
GRAPHIC SCALE IN LINEAR FEET

PROJECT:
BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:
MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT (MCN) MACON-BIBB COUNTY, GEORGIA

REVISIONS

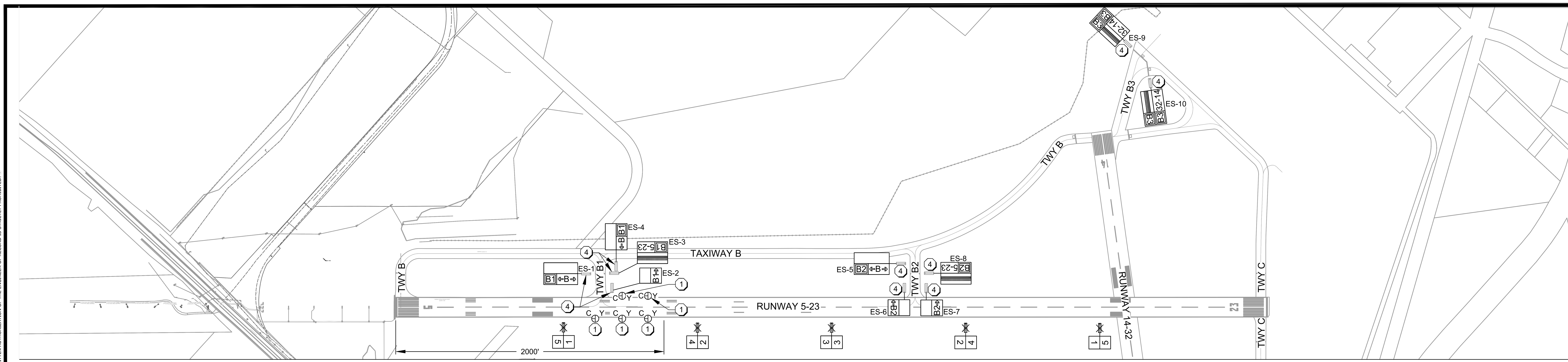
No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:
AIRFIELD ELECTRICAL LAYOUT PLANS - SHEET 1

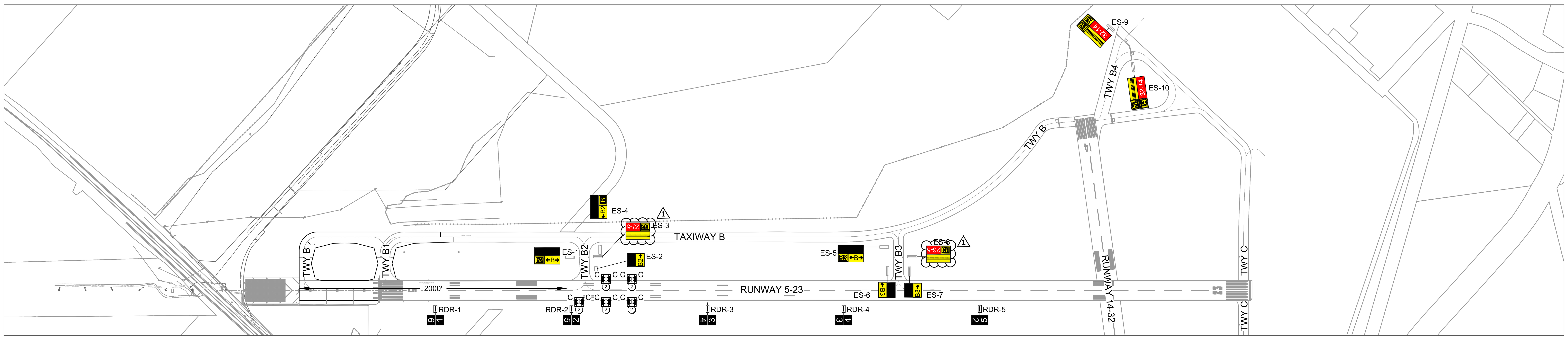
SHEET:
EA-502

PROJECT NO.:
20202946.0025

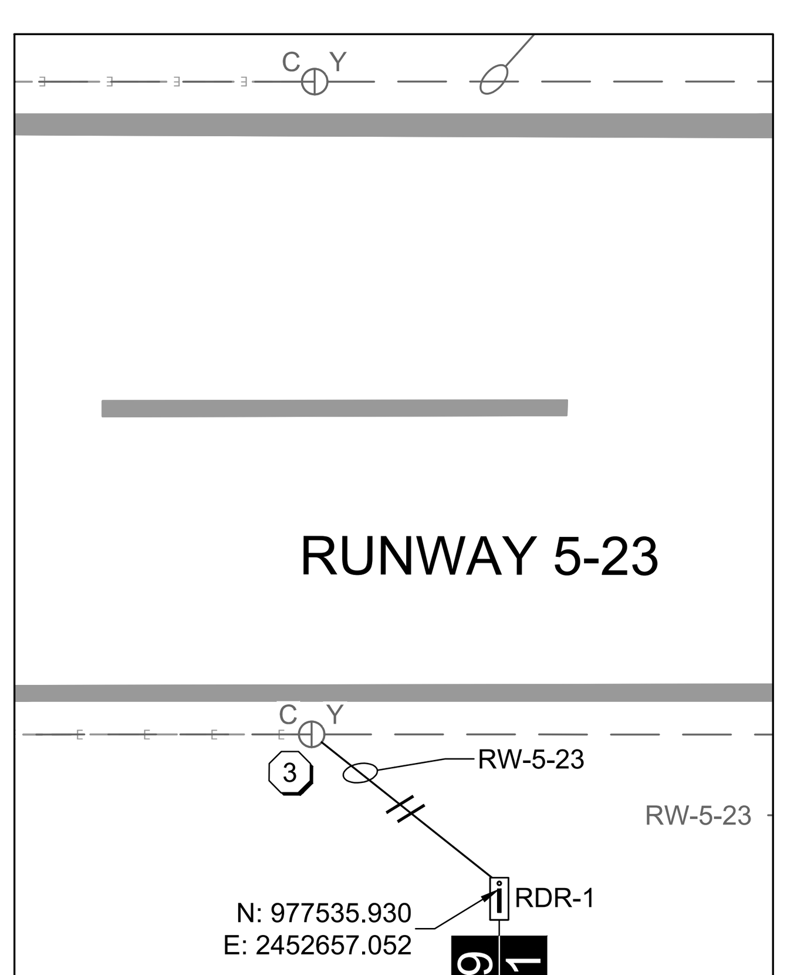
DATE:
APRIL 2025



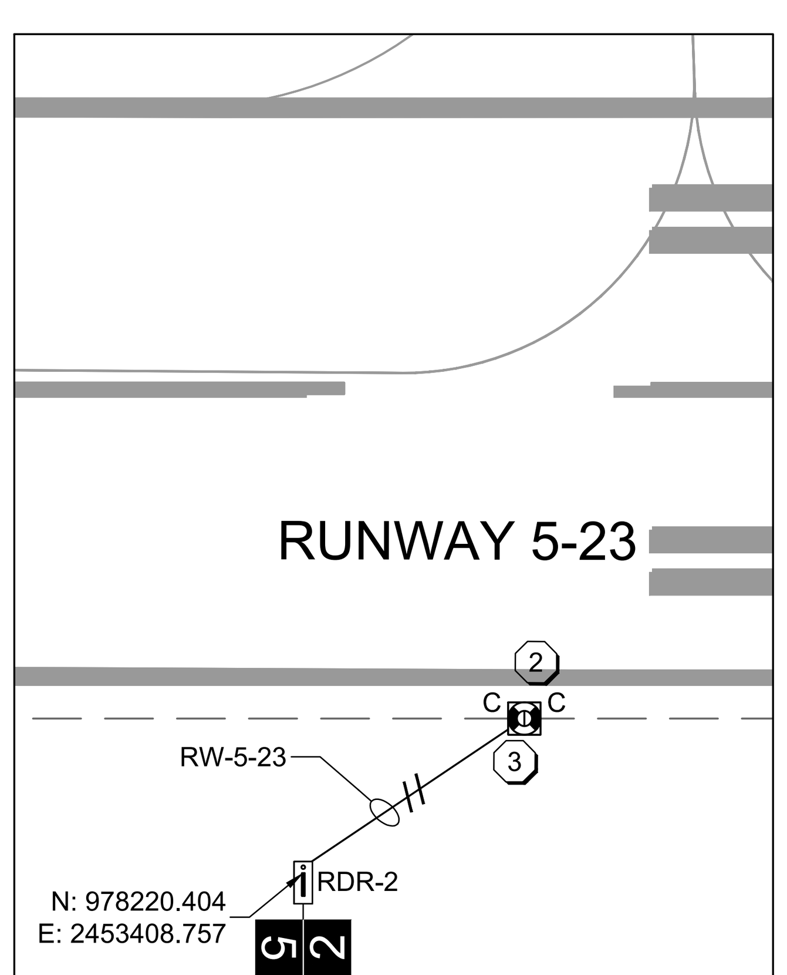
1 RUNWAY DISTANCE REMAINING SIGN DEMOLITION PLAN
EA-504 SCALE: 1' = 400"



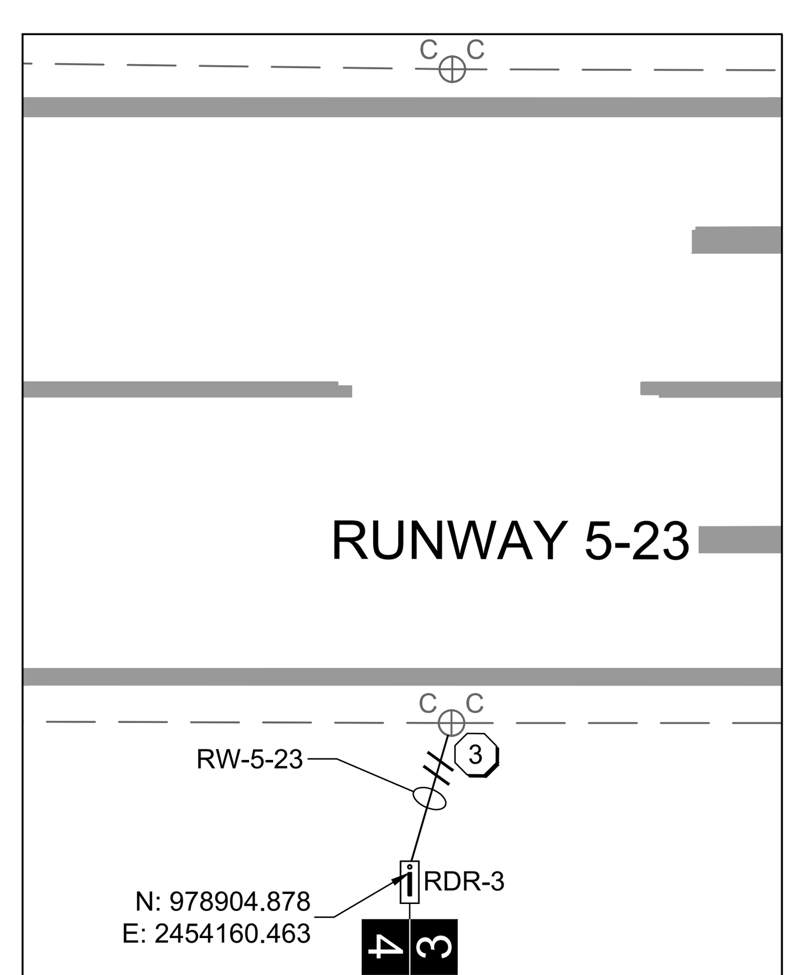
2 RUNWAY DISTANCE REMAINING SIGN LAYOUT PLAN
EA-504 SCALE: 1' = 400"



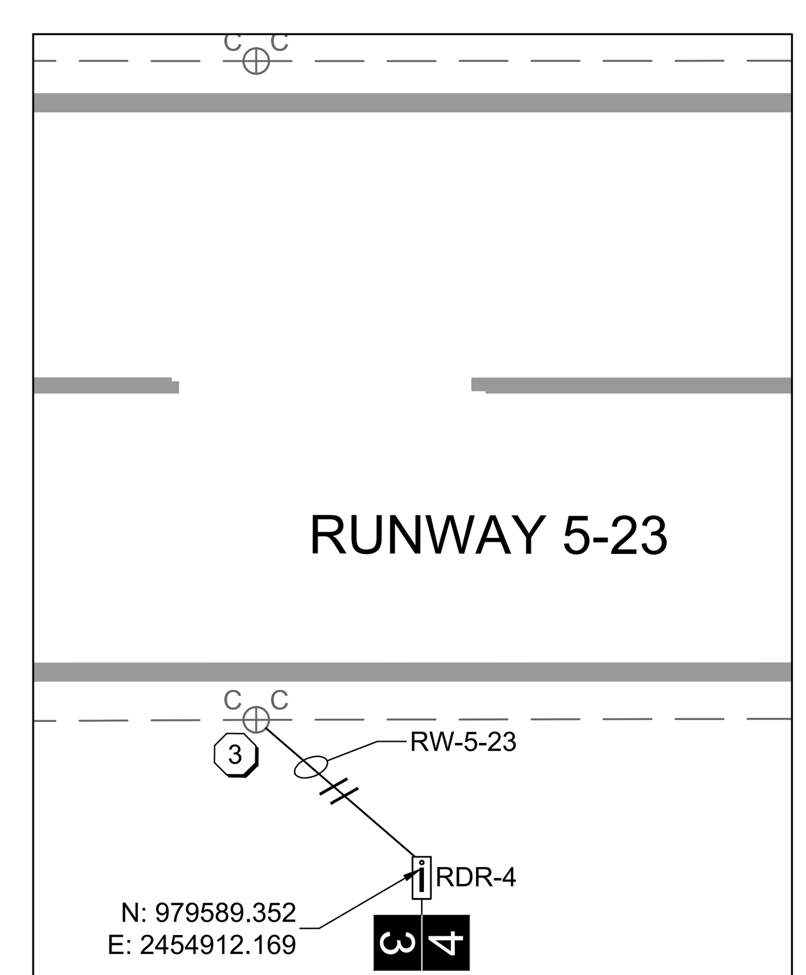
3 RDR-1 CIRCUITING PLAN
EA-504 SCALE: 1" = 50'



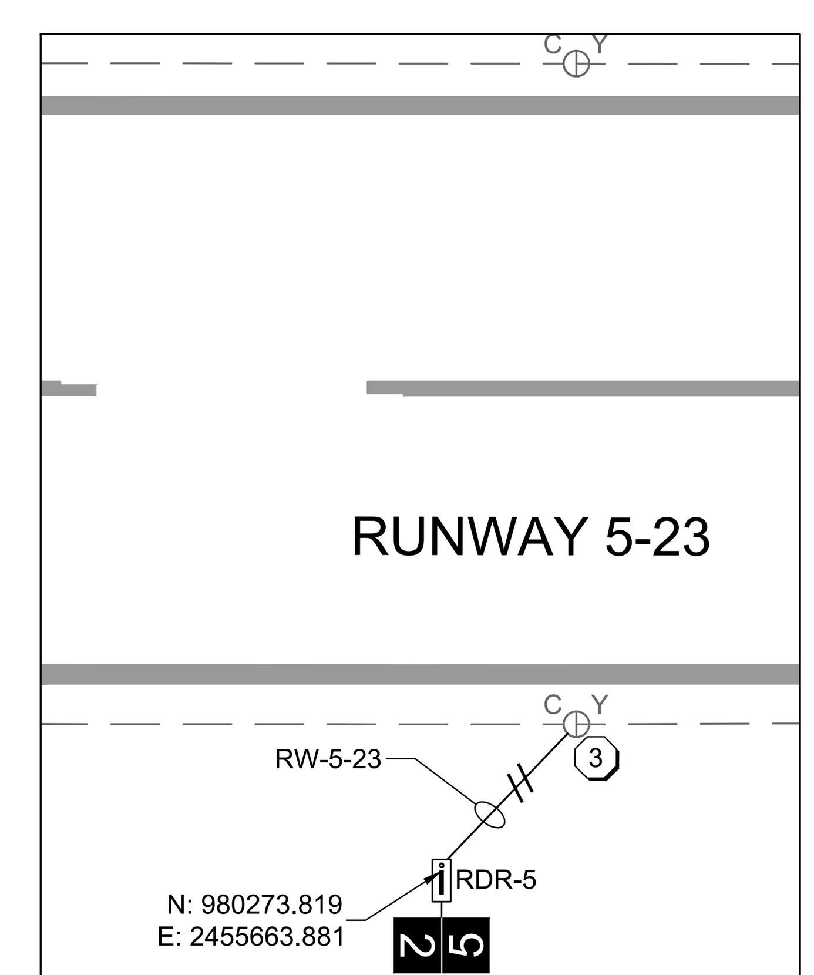
4 RDR-2 CIRCUITING PLAN
EA-504 SCALE: 1" = 50'



5 RDR-3 CIRCUITING PLAN
EA-504 SCALE: 1" = 50'



6 RDR-4 CIRCUITING PLAN
EA-504 SCALE: 1" = 50'



7 RDR-5 CIRCUITING PLAN
EA-504 SCALE: 1" = 50'

NOTES:

1. CONTRACTOR SHALL STAKE OUT LIGHT FIXTURE AND SIGN LOCATIONS PRIOR TO INSTALLATION. IN LOCATIONS WHERE FIELD CONDITIONS DIFFER FROM LAYOUT INFORMATION PROVIDED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE RPR FOR DIRECTION AND ENSURE APPROVAL PRIOR TO PROCEEDING.
2. SEE DETAILS 3, 4, 5, 6, AND 7 FOR CIRCUITING OF NEW RUNWAY DISTANCE REMAINING SIGNS.

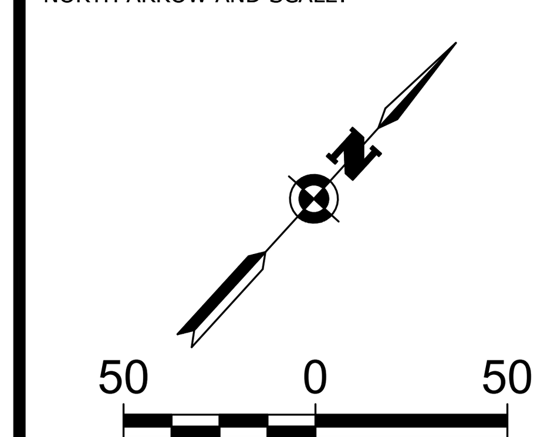
KEY NOTES:

1. REMOVE EXISTING LIGHT FIXTURE, ISOLATION TRANSFORMER, AND CONNECTORS, FROM EXISTING BASE CAN TO REMAIN.
2. INSTALL L-862 RUNWAY EDGE LIGHT (CLEAR/CLEAR) AND PROPERLY SIZED L-830 ISOLATION TRANSFORMER ON EXISTING BASE CAN.
3. CONNECT NEW CABLE/CONDUIT TO EXISTING LIGHT BASE CAN.
4. REMOVE EXISTING SIGN PANELS FROM EXISTING SIGN TO REMAIN.
5. INSTALL NEW SIGN PANELS ON EXISTING SIGN

PASSERO engineering architecture
3855 Shallowford Rd, Suite 310
Marietta, GA 30062
(470) 577-9989
Fax: (585) 325-1691
PRINCIPAL IN CHARGE BRAD WENTE, P.E.
PROJECT MANAGER MICHAEL JOSEPH, P.E.
DESIGNED BY TJ COLLINS, P.E.
GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:
BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:



GRAPHIC SCALE IN LINEAR FEET

PROJECT:
BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:
MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT (MCN)
MACON-BIBB COUNTY, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:
AIRFIELD ELECTRICAL LAYOUT PLANS - SHEET 3

SHEET:
EA-504

PROJECT NO.:
20202946.0025

DATE:
APRIL 2025

SIGN ID	LEGEND - SIDE A 1A	2A	3A	4A	LEGEND - SIDE B 1B	2B	3B	4B	SIZE	STYLE	MODE	CLASS	NOTES
S-1	B (L)	5 (R) ⚠1			B (L)	BLANK			2	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
S-2	5 (L)				B ➔ (Y)				2	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
S-3	B1 (L)	23 (R) ⚠1	-5 (R) ⚠1		B1 (L)	BLANK	BLANK		2	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
S-4	5 (L)	BLANK			B1 (Y)	➔ (Y)			2	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
S-5	← B (Y)	B (L)			B (L)	BLANK			2	2	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
S-6	← (Y)	B1 (Y)	B (L)		B (L)	BLANK	BLANK		2	2	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
RDR-1	1 (B)				6 (B)				4	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
RDR-2	2 (B)				5 (B)				4	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
RDR-3	3 (B)				4 (B)				4	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
RDR-4	4 (B)				3 (B)				4	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
RDR-5	5 (B)				2 (B)				4	3	3	2	INSTALL NEW SIGN ON NEW FOUNDATION
ES-1	B2 (L)	← B (Y)	➔ (Y)		BLANK	BLANK	BLANK		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-2	BLANK	BLANK			B2 (Y)	➔ (Y)			EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-3	B2 (L)	23 (R) ⚠1	-5 (R) ⚠1		Y	Y	Y		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-4	← (Y)	B2 (Y)	B (L)		BLANK	BLANK	BLANK		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-5	B3 (L)	← B (Y)	➔ (Y)		BLANK	BLANK	BLANK		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-6	← (Y)	B3 (Y)			BLANK	BLANK			EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-7	BLANK	BLANK			B3 (Y)	➔ (Y)			EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-8	B3 (L)	23 (R) ⚠1	-5 (R) ⚠1		Y	Y	Y		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-9	B4 (L)	Y	Y		32 (R)	-14 (R)	B4 (L)		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN
ES-10	B4 (L)	32 (R)	-14 (R)		Y	Y	B4 (L)		EXST	EXST	EXST	EXST	INSTALL NEW SIGN PANELS ON EXISTING SIGN

LEGEND:

SIDE B

END TOWARD T/W OR R/W

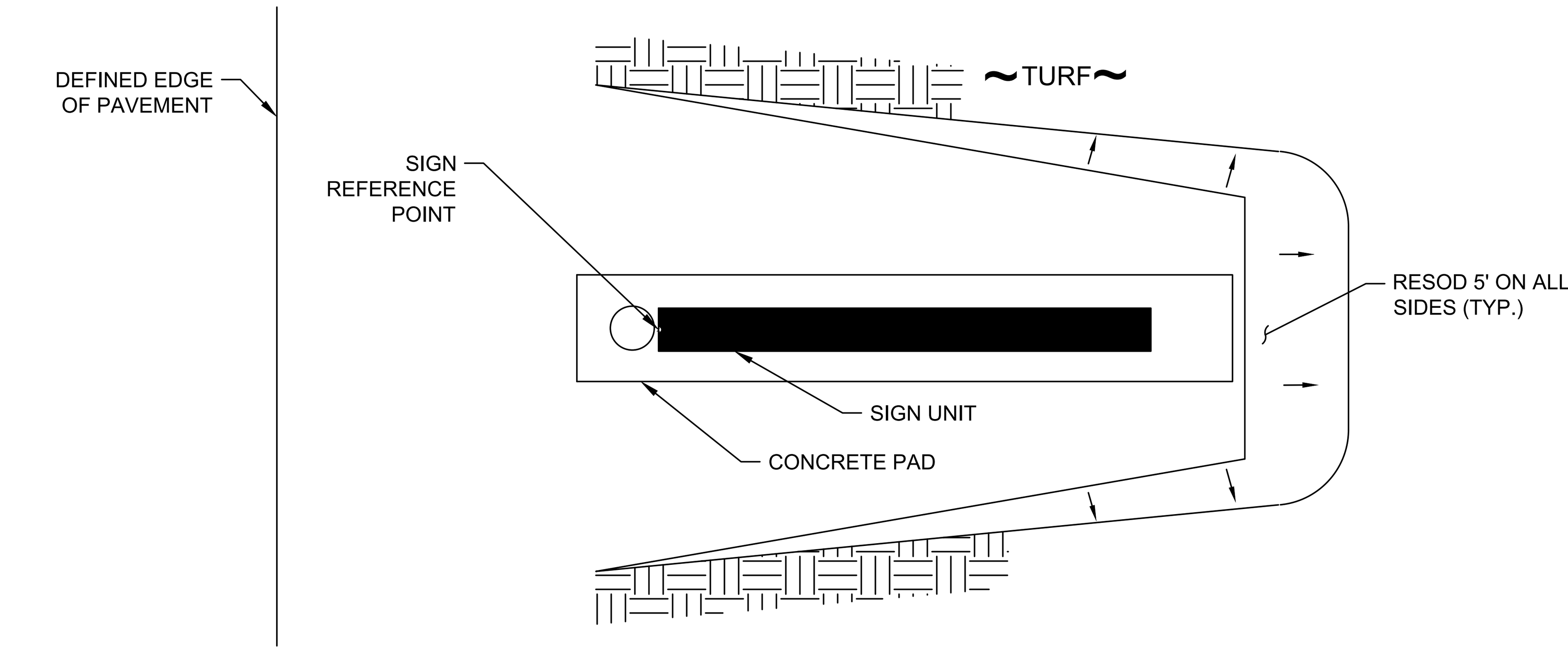
SIDE A

NOTES:

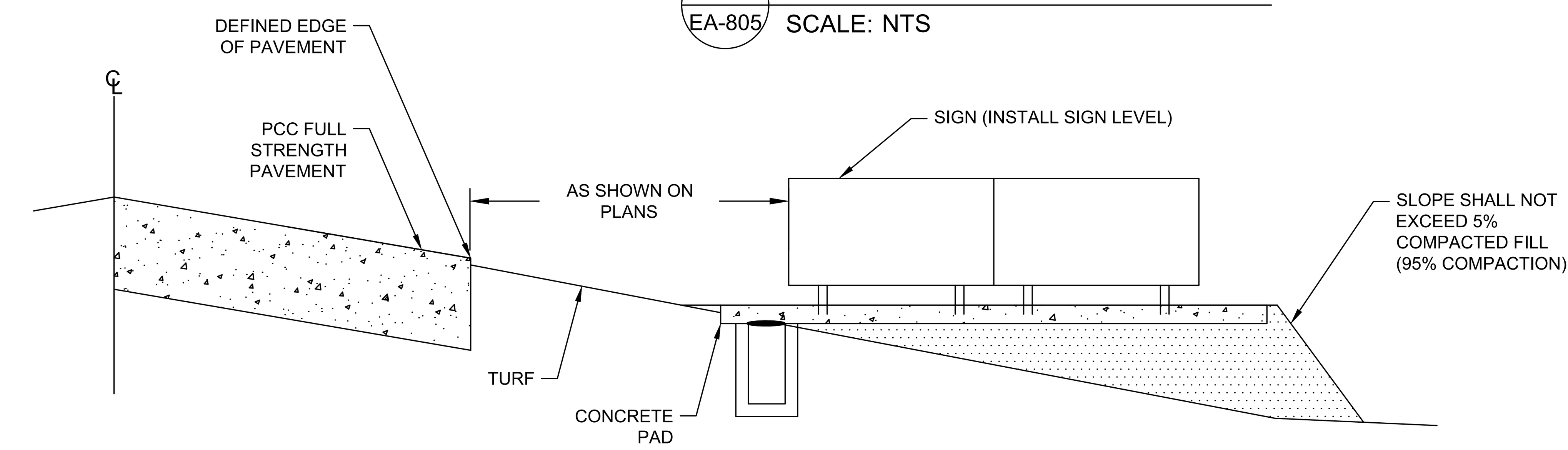
1. SEE LAYOUT SERIES FOR LOCATION DIMENSIONS OF SIGNS.
2. CONTRACTOR TO FIELD VERIFY EXISTING SIGNS SIZE, MODULES, AND MANUFACTURER, PRIOR TO PANEL REPLACEMENT.

1 / EA-805 — SIGN SCHEDULE
SCALE: NTS

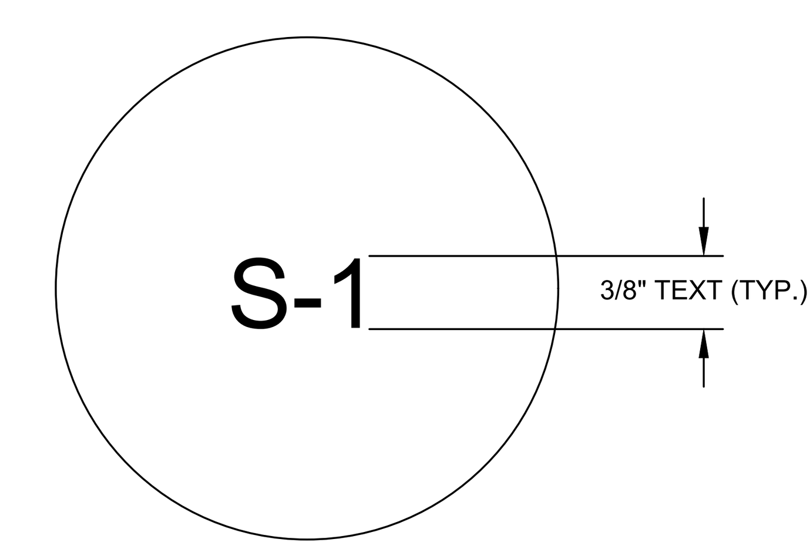
TYPE DESIGNATIONS
L = L-858(L)L LOCATION SIGN
Y = L-858(L)Y DIRECTION OR BOUNDARY SIGN
R= L-858(L) R MANDATORY SIGN
B= L-858B(L) RUNWAY DISTANCE REMAINING SIGN
BLANK = BLACK SIGN PANEL WITHOUT INSCRIPTION; BLANK PANEL



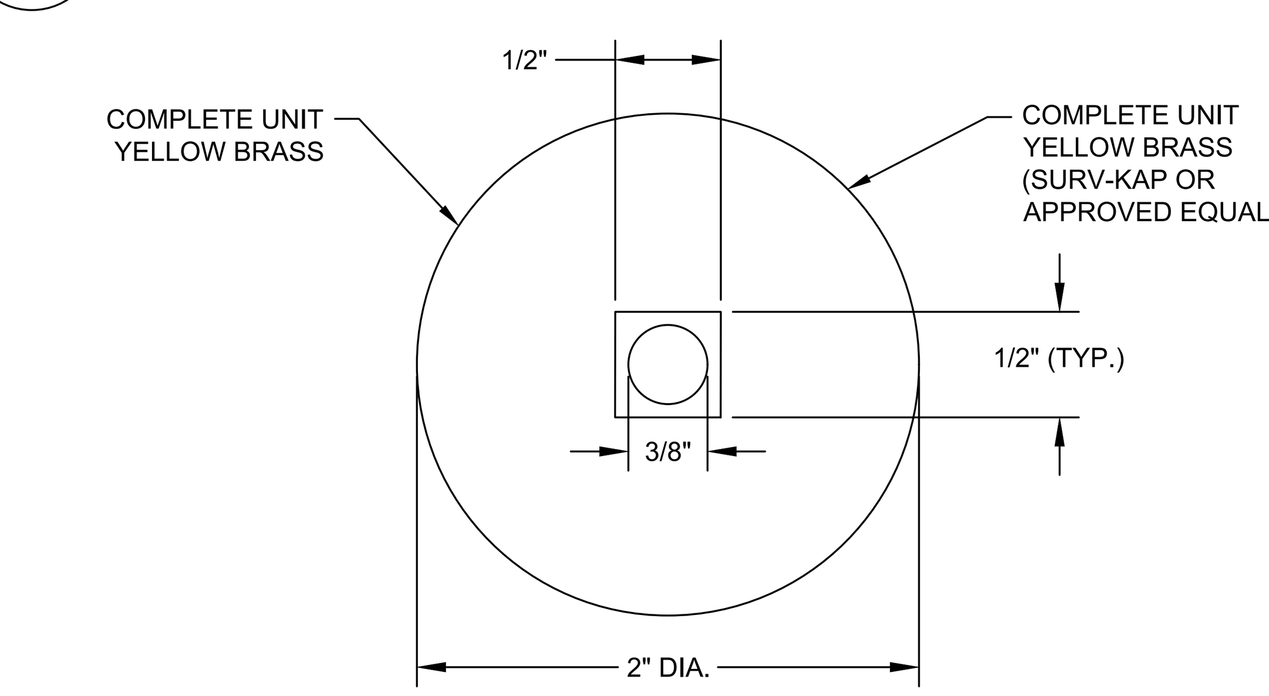
2 / EA-805 — GRADING AND FILL DETAIL - PLAN VIEW
SCALE: NTS



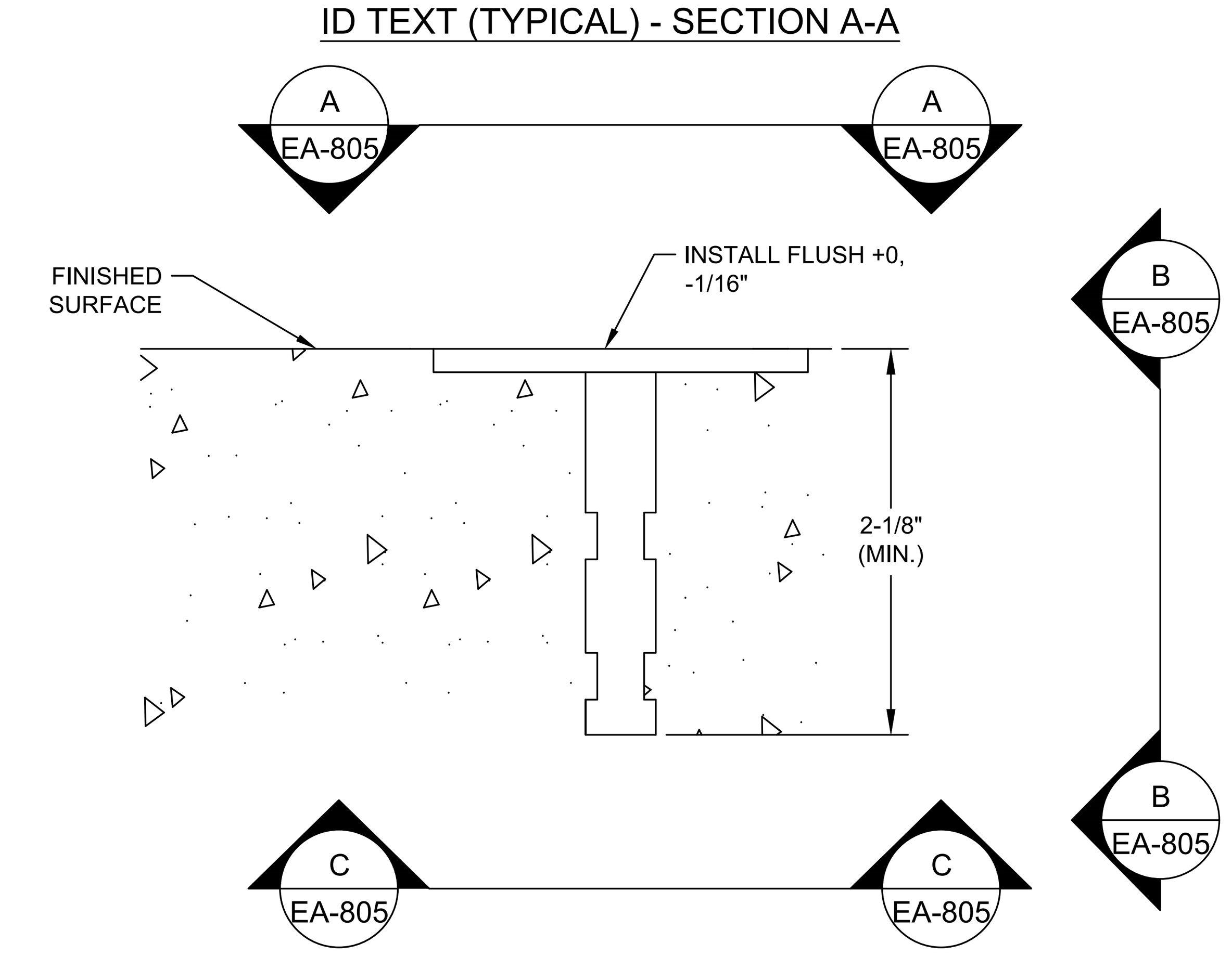
3 / EA-805 — GRADING AND FILL DETAIL
SCALE: NTS

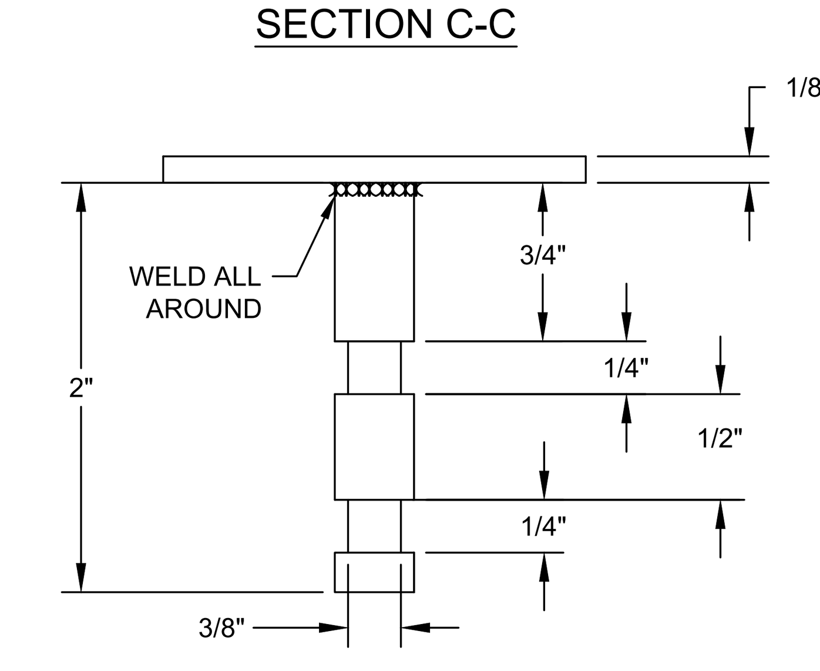


ID TEXT (TYPICAL) - SECTION A-A



SECTION C-C





SECTION B-B

GENERAL NOTES:

1. IDENTIFICATION MARKER SHALL BE INSTALLED DURING THE CONCRETE INSTALLATION.
2. CONTRACTOR SHALL COORDINATE SIGN NAMING CONVENTION OF BRASS ID MARKERS WITH OWNER PRIOR TO ORDERING/INSTALLATION.

4 / EA-805 — SIGN IDENTIFICATION MARKER
SCALE: NTS

PASSERO
engineering architecture
3855 Shallowford Rd, Suite 310
Marietta, GA 30062
(470) 577-9989
Fax: (585) 325-1691
PRINCIPAL IN CHARGE BRAD WENTE, P.E.
PROJECT MANAGER MICHAEL JOSEPH, P.E.
DESIGNED BY TJ COLLINS, P.E.
GA COA NO.: PEF003273 EXP.: 06/30/26

SUBMITTAL:
BID DOCUMENTS - DO NOT USE FOR CONSTRUCTION

NORTH ARROW AND SCALE:

PROJECT:
BASE BID: PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION

CLIENT:
MACON-BIBB COUNTY

MIDDLE GEORGIA REGIONAL AIRPORT (MCN)
MACON-BIBB COUNTY, GEORGIA

REVISIONS

No.	Date	By	Description
1	5/9/25	MRJ	ADDENDUM NO. 2

SHEET TITLE:
AIRFIELD GUIDANCE SIGN DETAILS - 2 OF 2

SHEET: EA-805

PROJECT NO.: 20202946.0025

DATE: APRIL 2025

Item P-152 Excavation, Subgrade, and Embankment

DESCRIPTION

152-1.1 This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

152-1.2 Classification. All material excavated shall be classified as defined below:

a. **Unclassified excavation.** Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature.

b. **Borrow excavation.** Borrow excavation shall consist of approved material required for the construction of embankments or for other portions of the work in excess of the quantity of usable material from areas designated by the Resident Project Representative (RPR) within the limits of the airport property but outside the normal limits of necessary grading, or from areas outside the airport boundaries.

152-1.3 Unsuitable excavation. Unsuitable material shall be disposed in designated waste areas as shown on the plans. Materials containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material suitable for topsoil may be used on the embankment slope when approved by the RPR.

CONSTRUCTION METHODS

152-2.1 General. Before beginning excavation, grading, and embankment operations in any area, the area shall be cleared or cleared and grubbed in accordance with Item P-151.

The suitability of material to be placed in embankments shall be subject to approval by the RPR. All unsuitable material shall be disposed of in waste areas as shown on the plans. All waste areas shall be graded to allow positive drainage of the area and adjacent areas. The surface elevation of waste areas shall be specified on the plans or approved by the RPR.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued and the RPR notified per Section 70, paragraph 70-20. At the direction of the RPR, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Areas outside the limits of the pavement areas where the top layer of soil has become compacted by hauling or other Contractor activities shall be scarified and disked to a depth of 4 inches (100 mm), to loosen and pulverize the soil. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not be permitted in the top 6 inches (150 mm) of the subgrade.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures, the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the Contractor shall notify the RPR, who shall arrange for their removal if necessary. The Contractor, at their

own expense, shall satisfactorily repair or pay the cost of all damage to such facilities or structures that may result from any of the Contractor's operations during the period of the contract.

a. Blasting. Blasting shall not be allowed.

152-2.2 Excavation. No excavation shall be started until the work has been staked out by the Contractor and the RPR has obtained from the Contractor, the survey notes of the elevations and measurements of the ground surface. The Contractor and RPR shall agree that the original ground lines shown on the original topographic mapping are accurate, or agree to any adjustments made to the original ground lines.

Digital terrain model (DTM) files of the existing surfaces, finished surfaces and other various surfaces were used to develop the design plans.

Volumetric quantities were calculated by comparing DTM files of the applicable design surfaces and generating Triangle Volume Reports. Electronic copies of DTM files and a paper copy of the original topographic map will be issued to the successful bidder.

All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future use in areas designated on the plans or by the RPR. All suitable excavated material shall be used in the formation of embankment, subgrade, or other purposes **as** shown on the plans. All unsuitable material shall be disposed of as shown on the plans.

The grade shall be maintained so that the surface is well drained at all times.

When the volume of the excavation exceeds that required to construct the embankments to the grades as indicated on the plans, the excess shall be used to grade the areas of ultimate development or disposed as directed by the RPR. When the volume of excavation is not sufficient for constructing the embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

a. Selective grading. When selective grading is indicated on the plans, the more suitable material designated by the RPR shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas until it can be placed. The more suitable material shall then be placed and compacted as specified. Selective grading shall be considered incidental to the work involved. The cost of stockpiling and placing the material shall be included in the various pay items of work involved.

b. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for safety areas, subgrades, roads, shoulders, or any areas intended for turf shall be excavated to a minimum depth of 12 inches (300 mm) below the subgrade or to the depth specified by the RPR. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be disposed off the airport. The cost is incidental to this item. This excavated material shall be paid for at the contract unit price per cubic yard (per cubic meter) for unsuitable excavation. The excavated area shall be backfilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary backfill will constitute a part of the embankment. Where rock cuts are made, backfill with select material. Any pockets created in the rock surface shall be drained in accordance with the details shown on the plans. Undercutting will be paid as unclassified excavation.

c. Over-break. Over-break, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the RPR. All over-break shall be graded or removed by the Contractor and disposed of as directed by the RPR. The RPR shall determine if the displacement of such material was unavoidable and their own decision shall be final. Payment will not be made for the removal and disposal of over-break that the RPR determines as avoidable. Unavoidable over-break will be classified as "Unclassified Excavation."

d. Removal of utilities. The removal of existing structures and utilities required to permit the orderly progress of work will be accomplished by the Contractor as indicated on the plans. All existing foundations shall be excavated at least 2 feet (60 cm) below the top of subgrade or as indicated on the plans, and the material disposed of as directed by the RPR. All foundations thus excavated shall be backfilled with suitable material and compacted as specified for embankment or as shown on the plans.

152-2.3 Borrow excavation. There are no borrow sources within the boundaries of the airport property. The Contractor shall located and obtain borrow sources, subject to the approval of the RPR. The Contractor shall notify the RPR a least 15 days prior to beginning the excavation so necessary measurements and tests can be made by the RPR. All borrow pits shall be opened to expose the various strata of acceptable material to allow obtaining a uniform product. Borrow areas shall be drained and left in a neat, presentable condition with all slopes dressed uniformly. Borrow areas shall not create a hazardous wildlife attractant.

152-2.4 Drainage excavation. Drainage excavation shall consist of excavating drainage ditches including intercepting, inlet, or outlet ditches; or other types as shown on the plans. The work shall be performed in sequence with the other construction. Ditches shall be constructed prior to starting adjacent excavation operations. All satisfactory material shall be placed in embankment fills; unsuitable material shall be placed in designated waste areas or as directed by the RPR. All necessary work shall be performed true to final line, elevation, and cross-section. The Contractor shall maintain ditches constructed on the project to the required cross-section and shall keep them free of debris or obstructions until the project is accepted.

152-2.5 Preparation of cut areas or areas where existing pavement has been removed. In those areas on which a subbase or base course is to be placed, the top 12 inches (300 mm)of subgrade shall be compacted to not less than 100 % of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM D1557. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

152-2.6 Preparation of embankment area. All sod and vegetative matter shall be removed from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by plowing or scarifying to a minimum depth of 6 inches (150 mm) and shall then be compacted per paragraph 152-2.10.

Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches (300 mm) and compacted as specified for the adjacent fill.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

152-2.7 Control Strip. The first half-day of construction of subgrade and/or embankment shall be considered as a control strip for the Contractor to demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of this specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The RPR must witness this demonstration and approve the lift thickness prior to full production.

Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. The Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

152-2.8 Formation of embankments. The material shall be constructed in lifts as established in the control strip, but not less than 6 inches (150 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

The lifts shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the RPR. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained due to rain, freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to provide surface drainage at all times.

The material in each lift shall be within ±2% of optimum moisture content before rolling to obtain the prescribed compaction. The material shall be moistened or aerated as necessary to achieve a uniform moisture content throughout the lift. Natural drying may be accelerated by blending in dry material or manipulation alone to increase the rate of evaporation.

The Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content to achieve the specified embankment density.

The contractor will take samples of excavated materials which will be used in embankment for testing and develop a Moisture-Density Relations of Soils Report (Proctor) in accordance with ASTM D1557. A new Proctor shall be developed for each soil type based on visual classification.

Density tests will be taken by the contractor for every 3,000 square yards of compacted embankment for each lift which is required to be compacted, or other appropriate frequencies as determined by the RPR.

If the material has greater than 30% retained on the 3/4-inch (19.0 mm) sieve, follow AASHTO T-180 Annex Correction of maximum dry density and optimum moisture for oversized particles.

Rolling operations shall be continued until the embankment is compacted to not less than 100% of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM D1557. Under all areas to be paved, the embankments shall be compacted to a depth of 12 inches and to a density of not less than 100 percent of the maximum density as determined by ASTM D1557. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches (100 mm) which shall be prepared for a seedbed in accordance with Item T-901.

The in-place field density shall be determined in accordance with ASTM D1556. Contractor’s laboratory shall perform all density tests in the RPR’s presence and provide the test results upon completion to the RPR for acceptance. If the specified density is not attained, the area represented by the test or as designated by the RPR shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

Compaction areas shall be kept separate, and no lift shall be covered by another lift until the proper density is obtained.

During construction of the embankment, the Contractor shall route all construction equipment evenly over the entire width of the embankment as each lift is placed. Lift placement shall begin in the deepest portion of the embankment fill. As placement progresses, the lifts shall be constructed approximately parallel to the finished pavement grade line.

When rock, concrete pavement, asphalt pavement, and other embankment material are excavated at approximately the same time as the subgrade, the material shall be incorporated into the outer portion of the embankment and the subgrade material shall be incorporated under the future paved areas. Stones, fragmentary rock, and recycled pavement larger than 4 inches (100 mm) in their greatest dimensions will not be allowed in the top 12 inches (300 mm) of the subgrade. Rockfill shall be brought up in lifts as specified or as directed by the RPR and the finer material shall be used to fill the voids forming a dense, compact mass. Rock, cement concrete pavement, asphalt pavement, and other embankment material shall not be disposed of except at places and in the manner designated on the plans or by the RPR.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in lifts of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in lifts not exceeding 2 feet (60 cm) in thickness. Each lift shall be leveled and smoothed with suitable equipment by distribution of spalls and finer fragments of rock. The lift shall not be constructed above an elevation 4 feet (1.2 m) below the finished subgrade.

Payment for compacted embankment will be made under embankment in-place and no payment will be made for excavation, borrow, or other items.

152-2.9 Proof rolling. The purpose of proof rolling the subgrade is to identify any weak areas in the subgrade and not for compaction of the subgrade. Before start of embankment, and after compaction is completed, the subgrade area shall be proof rolled with a 20 ton (18.1 metric ton) Tandem axle Dual Wheel Dump Truck loaded to the legal limit with tires inflated to 100 psi or with a 25 ton Proof Roller with tires spaced not more than 32 inches (0.8 m) on-center with tires inflated to 125 psi in the presence of the RPR. Apply a minimum of two coverages, or as specified by the RPR, under pavement areas. A coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that deflect more than 1 inch (25 mm) or show permanent deformation greater than 1 inch (25 mm) shall be removed and replaced with suitable material or reworked to conform to the moisture content and compaction requirements in accordance with these specifications. Removal and replacement of soft areas is incidental to this item.

152-2.10 Compaction requirements. The subgrade under areas to be paved shall be compacted to a depth of 12 inches (300 mm) and to a density of not less than 100 percent of the maximum dry density as determined by ASTM D1557. The subgrade in areas outside the limits of the pavement areas shall be compacted to a depth of 12 inches (300 mm) and to a density of not less than 95 percent of the maximum density as determined by ASTM D1557.

The material to be compacted shall be within ±2% of optimum moisture content before being rolled to obtain the prescribed compaction (except for expansive soils). When the material has greater than 30 percent retained on the ¾ inch (19.0 mm) sieve, follow the methods in ASTM D1557. Tests for moisture content and compaction will be taken at a minimum of 500 S.Y. of subgrade. All quality assurance testing shall be done by the Contractor's laboratory in the presence of the RPR, and density test results shall be furnished upon completion to the RPR for acceptance determination.

The in-place field density shall be determined in accordance with ASTM D1556 or ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938 within 12 months prior to its use on this contract. The gage shall be field standardized daily.

Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

If the specified density is not attained, the entire lot shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the plans or as directed by the RPR and the finished subgrade shall be maintained.

152-2.11 Finishing and protection of subgrade. Finishing and protection of the subgrade is incidental to this item. Grading and compacting of the subgrade shall be performed so that it will drain readily. All low areas, holes or depressions in the subgrade shall be brought to grade. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans. All ruts or rough places that develop in the completed subgrade shall be graded, re-compacted, and retested. The Contractor shall protect the subgrade from damage and limit hauling over the finished subgrade to only traffic essential for construction purposes.

The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been accepted by the RPR.

152-2.12 Haul. All hauling will be considered a necessary and incidental part of the work. The Contractor shall include the cost in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

The Contractor's equipment shall not cause damage to any excavated surface, compacted lift or to the subgrade as a result of hauling operations. Any damage caused as a result of the Contractor's hauling operations shall be repaired at the Contractor's expense.

The Contractor shall be responsible for providing, maintaining and removing any haul roads or routes within or outside of the work area, and shall return the affected areas to their former condition, unless otherwise authorized in writing by the Owner. No separate payment will be made for any work or materials associated with providing, maintaining and removing haul roads or routes.

152-2.13 Surface Tolerances. In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. The Contractor shall perform all final smoothness and grade checks in the presence of the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

a. **Smoothness.** The finished surface shall not vary more than +/- ½ inch (12 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. **Grade.** The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +/- 0.05 feet (15 mm) of the specified grade.

On safety areas, turfed areas and other designated areas within the grading limits where no subbase or base is to placed, grade shall not vary more than 0.10 feet (30 mm) from specified grade. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

152-2.14 Topsoil. When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of

finished construction, the material shall be stockpiled at approved locations. Stockpiles shall be located as shown on the plans and the approved CSPP, and shall not be placed on areas that subsequently will require any excavation or embankment fill. If, in the judgment of the RPR, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further re-handling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as shown on the plans and as required in Item T-905. Topsoil shall be paid for as provided in Item T-905. No direct payment will be made for topsoil under Item P-152.

METHOD OF MEASUREMENT

152-3.1 Measurement for payment specified by the cubic yard shall be computed by comparing the survey for the existing ground surface, prior to the beginning of construction, with a survey of the final, constructed surface. The difference in the two surfaces will be compared utilizing CAD software by the Engineer to determine the final embankment quantity.

152-3.2 The quantity of unclassified excavation to be paid for shall be the number of cubic yards (cubic meters) measured in its original position. Measurement shall not include the quantity of materials excavated without authorization beyond normal slope lines, or the quantity of material used for purposes other than those directed.

152-3.3 The quantity of offsite borrow to be paid for shall be the number of cubic yards measured in its final position. Offsite borrow material shall exhibit a California Bearing Ratio (CBR) of at least 20 when tested in accordance with ASTM D1883, using soaked conditions and compacted to Modified Proctor density per ASTM D1557.

BASIS OF PAYMENT

152-4.1 Unclassified excavation payment shall be made at the contract unit price per cubic yard (cubic meter). This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

152-4.2 Offsite borrow payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, testing, and incidentals necessary to complete the item.

Payment will be made under:

Item P-152-4.1	Unclassified Excavation – per cubic yard
Item P-152-4.2	Offsite Borrow – per cubic yard

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO T-180	Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

ASTM International (ASTM)

ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2700 kN-m/m^3))
ASTM D6938	Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

Advisory Circulars (AC)

AC 150/5370-2	Operational Safety on Airports During Construction Software

Software

FAARFIELD – FAA Rigid and Flexible Iterative Elastic Layered Design

U.S. Department of Transportation

FAA RD-76-66	Design and Construction of Airport Pavements on Expansive Soils

END OF ITEM P-152

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
1	C-100-14.1	Asphalt Contractor Quality Control Program (CQCP) (unit price in words)	1	LS		$ -
2	C-102-5.1	Temporary Construction Exit (unit price in words)	4	EA		$ -
3	C-102-5.2	Compost Filter Sock (unit price in words)	4,345	LF		$ -
4	C-102-5.3	Compost Filter Sock Check Dam (unit price in words)	17	EA		$ -
5	C-102-5.4	Temporary Inlet Protection (unit price in words)	14	EA		$ -
6	C-102-5.5	Temporary Seeding (Mulched) (unit price in words)	7.7	AC		$ -
7	C-102-5.6	Erosion Control Blanket (unit price in words)	170	SY		$ -
8	C-102-5.7	Proposed Concrete Flume (unit price in words)	246	SY		$ -
9	C-102-5.8	Temporary Skimmer Basin 1, Complete (unit price in words)	1	LS		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
10	C-102-5.9	Temporary Skimmer Basin 2, Complete (unit price in words)	1	LS		$ -
11	C-102-5.10	Erosion Control Permit (unit price in words)	1	ALW	$ 2,250.00	$ 2,250.00
12	C-103-8.1	Project Survey, Stakeout and Record Drawings (unit price in words)	1	LS		$ -
13	C-105-6.1	Base Bid Mobilization (10% Maximum) (unit price in words)	1	LS		$ -
14	C-109-3.1	Engineer's Field Office - Fixed (unit price in words)	3	MTH	$ 900.00	$ 2,700.00
15	L-104-1	Temporary Airfield Lighting Jumpers – Complete (unit price in words)	1	LS		$ -
16	L-105-1	Demolish Existing Fixture/Base Can (unit price in words)	34	EA		$ -
17	L-105-6	Miscellaneous Electrical Demolition (unit price in words)	1	LS		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
18	L-105-7	Remove Existing Sign and Foundation (unit price in words)	7	EA		$ -
19	L-105-8	Remove Existing Sign Panels from Existing Sign to Remain (unit price in words)	10	EA		$ -
20	L-108-1	1/12C No. 19 AWG, Shielded - CASSPIC-FSF (unit price in words)	2,600	LF		$ -
21	L-108-2	No. 1/0 AWG, BSDC Guard Wire, Installed in Trench or with Duct Bank or Conduit, Including Ground Rods and Ground Connectors (unit price in words)	15,700	LF		$ -
22	L-108-3	No. 12 AWG, XHHW (unit price in words)	1,600	LF		$ -
23	L-108-4	No. 2 AWG, XHHW (unit price in words)	10,200	LF		$ -
24	L-108-5	No. 4 AWG, XHHW (unit price in words)	14,400	LF		$ -
25	L-108-6	No. 4/0 AWG, BSDC, Installed in Trench or with Duct Bank or Conduit, Including Ground Rods and Ground Connectors (unit price in words)	1,500	LF		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
26	L-108-7	No. 4/0 AWG, XHHW (unit price in words)	5,900	LF		$ -
27	L-108-8	No. 6 AWG, XHHW (unit price in words)	4,200	LF		$ -
28	L-108-9	No. 8 AWG, XHHW (unit price in words)	3,750	LF		$ -
29	L-108-10	No. 6 AWG, Solid, Bare Counterpoise Wire, Installed in Trench, Above the Duct Bank, Conduit, or Cable, Including Ground Rods and Ground Connectors (unit price in words)	20,600	LF		$ -
30	L-108-11	No. 8 AWG, 5 kV, L-824, Type C Cable (unit price in words)	11,000	LF		$ -
31	L-110-1	1W-2" Concrete Encased (unit price in words)	9,300	LF		$ -
32	L-110-2	1W-2" RGSC Duct Concrete Encased (unit price in words)	300	LF		$ -
33	L-110-3	1W-4" PVC Duct Concrete Encased (unit price in words)	150	LF		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
34	L-110-5	2W-2" PVC Concrete Encased (unit price in words)	300	LF		$ -
35	L-110-6	2W-4" PVC Duct Concrete Encased (unit price in words)	3,000	LF		$ -
36	L-110-7	3/4 IN. X 10 FT Copper Clad Ground Rods - Supplemental (unit price in words)	500	EA		$ -
37	L-110-8	3W-4" PVC Duct Concrete Encased (unit price in words)	200	LF		$ -
38	L-110-9	4W-4" PVC Duct Concrete Encased (unit price in words)	600	LF		$ -
39	L-110-10	6W-4" PVC Duct Concrete Encased (unit price in words)	600	LF		$ -
40	L-110-11	8W-4" PVC Duct Concrete Encased (unit price in words)	500	LF		$ -
41	L-115-1	FAA Handhole - Aircraft Rated (unit price in words)	15	EA		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
42	L-115-2	Junction Can Plaza - 2 L-867D Base Cans (unit price in words)	4	EA		$ -
43	L-115-3	L-867D Junction Can with 3/8" Thick Blank Steel Cover Plate Installed in Turf (unit price in words)	5	EA		$ -
44	L-125-1	Concrete Bollard (unit price in words)	15	EA		$ -
45	L-125-2	L-850C In-Pavement Runway Edge Light (unit price in words)	1	EA		$ -
46	L-125-3	L-850D In-Pavement Runway Threshold Light (unit price in words)	4	EA		$ -
47	L-125-5	L-858 LED RDR Sign, 1-Module on a New Concrete Sign Base (unit price in words)	5	EA		$ -
48	L-125-6	L-858 LED Sign, 1-Module on a New Concrete Sign Base (unit price in words)	1	EA		$ -
49	L-125-7	L-858 LED Sign, 2-Module on a New Concrete Sign Base (unit price in words)	3	EA		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
50	L-125-8	L-861T(L) Elevated Taxiway Edge Light (unit price in words)	81	EA		$ -
51	L-125-10	L-862 Elevated Runway Edge Light (unit price in words)	5	EA		$ -
52	L-125-11	L-862E Elevated Runway Threshold Light (unit price in words)	12	EA		$ -
53	L-125-13	MALS EMT Light Bar - Installed in Turf (unit price in words)	1	EA		$ -
54	L-125-16	MALS MG20 Light Bar - Installed in Turf (unit price in words)	5	EA		$ -
55	L-125-17	MALS Semi Flush Light Bar - Full Strength Pavement (unit price in words)	2	EA		$ -
56	L-125-18	MALSR - Distribution Panel / Junction Box (unit price in words)	1	EA		$ -
57	L-125-19	MALSR Equipment Rack (unit price in words)	1	LS		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
58	L-125-20	MALSR Shelter (unit price in words)	1	LS		$ -
59	L-125-21	MALSR Shelter EES Grounding and Lightning Protection (unit price in words)	1	LS		$ -
60	L-125-22	Relocated Storage Shelter (unit price in words)	1	LS		$ -
61	L-125-23	Threshold Light Bar - Full Strength Pavement (unit price in words)	1	EA		$ -
62	L-125-25	L-858 LED Sign, 3-Module on a New Concrete Sign Base (unit price in words)	2	EA		$ -
63	L-125-26	Install New Sign Panels on Existing Signs (unit price in words)	10	EA		$ -
64	P-101-5.1	Remove Existing Pavement (unit price in words)	6,735	SY		$ -
65	P-152-4.1	Unclassified Excavation (unit price in words)	21,100	CY		$ -
66	P-152-4.2	Offsite Borrow (unit price in words)	6,500	CY		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
67	P-209-5.1	Crushed Aggregate Base Course (11.5-Inch Depth) (Minimum CBR of 100) (unit price in words)	9,670	CY		$ -
68	P-209-5.2	Gravel Road (unit price in words)	2,509	SY		$ -
69	P-401-8.1	Bituminous Surface Course (4-Inch) (unit price in words)	7,780	TONS		$ -
70	P-602-5.1	Bituminous Prime Coat (unit price in words)	9,073	GAL		$ -
71	P-603-5.1	Bituminous Tack Coat (unit price in words)	2,881	GAL		$ -
72	P-620.5.1	Pavement Marking Removal by Waterblasting (unit price in words)	112,700	SF		$ -
73	P-620-5.2	Pavement Marking, Permanent, White, Reflective, Including Microbicide (unit price in words)	107,200	SF		$ -
74	P-620-5.3	Pavement Marking, Permanent, Yellow, Reflective, Including Microbicide (unit price in words)	3,900	SF		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
75	P-620-5.4	Pavement Marking, Permanent, Red, Reflective, Including Microbicide (unit price in words)	1,600	SF		$ -
76	P-620-5.5	Pavement Marking, Temporary, White, Non-reflective, Including Microbicide (unit price in words)	107,200	SF		$ -
77	P-620-5.6	Pavement Marking, Temporary, Yellow, Non-reflective, Including Microbicide (unit price in words)	3,900	SF		$ -
78	P-620-5.7	Pavement Marking, Temporary, Red, Non-reflective, Including Microbicide (unit price in words)	1,600	SF		$ -
79	P-621-5.1	Asphalt Sawcut Pavement Grooving (unit price in words)	8,856	SY		$ -
80	T-901-5.1	Permanent Seeding (unit price in words)	7.7	AC		$ -
81	T-905-5.1	Topsoil (On-Site Stripping and Final Placement) (unit price in words)	3,200	CY		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Base Bid

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
82	T-908-5.1	Mulching (unit price in words)	7.7	AC		$ -

Base Bid SubTotal _____

(unit price in words)

Note: Should a discrepancy be found between the unit price provided in words and the unit price provided in numerical form, the price in words shall govern.

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Alternate 1 - Concrete Pavement

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
1	C-100-14.1	Asphalt Contractor Quality Control Program (CQCP) (unit price in words)	DEDUCT	LS		
2	C-100-14.2	Concrete Contractor Quality Control Program (CQCP) (unit price in words)	1	LS		$ -
3	C-102-5.2	Compost Filter Sock (unit price in words)	1,365	LF		$ -
4	C-102-5.5	Temporary Seeding (Mulched) (unit price in words)	2.6	AC		$ -
5	C-105-6.1	Base Bid Mobilization (10% Maximum) (unit price in words)	DEDUCT	LS		
6	C-105-6.1	Alternate 1 Mobilization (10% Maximum) (unit price in words)	1	LS		$ -
7	P-152-4.1	Unclassified Excavation (unit price in words)	2,500	CY		$ -
8	P-209-5.1	Crushed Aggregate Base Course (11.5-Inch Depth) (Minimum CBR of 100) (unit price in words)	DEDUCT	CY		
9	P-209-5.3	Crushed Aggregate Base Course (6-Inch Depth) (Minimum CBR of 100) (unit price in words)	5,117	CY		$ -

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Alternate 1 - Concrete Pavement

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
10	P-401-8.1	Bituminous Surface Course (4-Inch) (unit price in words)	DEDUCT	TONS		
11	P-501-8.1	Portland Cement Concrete (13-Inch) (unit price in words)	27,238	SY		$ -
12	P-501-8.2	Reinforced Portland Cement Concrete (13-Inch) (unit price in words)	1,633	SY		$ -
13	P-501-8.3	Auxiliary Light Foundation Pavement (unit price in words)	400	SY		$ -
14	P-501-8.4	Concrete to Asphalt Transition (unit price in words)	273	SY		$ -
15	P-501-8.5	Concrete Batch Plant (unit price in words)	1	LS		$ -
16	P-602-5.1	Bituminous Prime Coat (unit price in words)	DEDUCT	GAL		
17	P-603-5.1	Bituminous Tack Coat (unit price in words)	DEDUCT	GAL		

BID FORM

PAVING, LIGHTING AND MARKINGS FOR RUNWAY 5 EXTENSION
MIDDLE GEORGIA REGIONAL AIRPORT (MCN)

Alternate 1 - Concrete Pavement

No.	Pay Item Code	Pay Item Description and Unit Price in Words	Quantity	Unit	Unit Cost	Total Cost
18	P-621-5.1	Asphalt Sawcut Pavement Grooving (unit price in words)	DEDUCT	SY		
19	T-901-5.1	Permanent Seeding (unit price in words)	2.6	AC		$ -
20	T-905-5.1	Topsoil (On-Site Stripping and Final Placement) (unit price in words)	200	CY		$ -
21	T-908-5.1	Mulching (unit price in words)	2.6	AC		$ -
22	P-621-5.1	Concrete Sawcut Pavement Grooving (unit price in words)	8,856	SY		$ -

Alternate 1 SubTotal **$ -**

(cost in words)

Total Bid (Base Bid + Alternate 1) **$ -**

(total cost in words)

Note: Should a discrepancy be found between the unit price provided in words and the unit price provided in numerical form, the price in words shall govern.

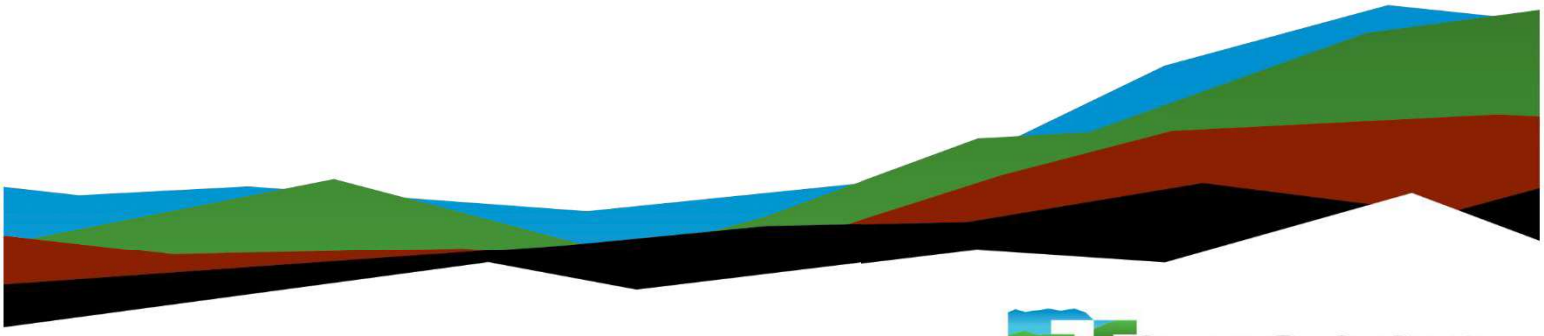
MCN Airport Runway 5 Extension

Geotechnical Engineering Data Report

April 24, 2025 | Terracon Project No. HN255060

Prepared for:

Passero Associates
335 S. Legacy Trail, Suite B-102
Augustine, FL 32092



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April 24, 2025

Passero Associates
335 S. Legacy Trail, Suite B-102
Augustine, FL 32092

Attn: Brad Wente, P.E.
P: (904) 307-7024
E: bwente@passero.com

Re: Geotechnical Engineering Data Report
MCN Airport Runway 5 Extension
1000 Terminal Drive
Macon, Georgia
Terracon Project No. HN255060

Dear Mr. Wente:

We have completed the scope of our Geotechnical Engineering Data services for the referenced project in general accordance with Terracon's proposal PHN255060 dated April 1, 2025. This report presents the field results from pavement coring conducted at the specified locations on the existing runway surface.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

John P. Mastrion, E.I.T.
Geotechnical Staff Engineer

Richard L. Curtis, P.E., BC.GE, F.ASCE
Senior Engineering Consultant

Table of Contents

Project Description **1**
Results and Recommendations **2**
Testing Procedure 2
Geotechnical Overview 2
General Comments **3**

Attachments

Photography Log
Site Location and Exploration Plans

Note: This report was originally delivered in a web-based format. **Blue Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the Terracon logo will bring you back to this page. For more interactive features, please view your project online at **client.terracon.com**.

Refer to each individual Attachment for a listing of contents.

Project Description

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project condisions is as follows:

- On Monday, April 14th, Terracon coordinated a field visit with MCN Operations and the client to perform field activities. While en route to the site, Terracon field personnel were notified by MCN Operations that the day's field activities had been cancelled.

- Terracon remobilized on Tuesday, April 22nd to perform the field activities. Upon arrival, field personnel were informed of a 1.5-hour delay due to a delayed flight. Following the delay, the field work was completed.

Item	Description
Information Provided	On March 26, 2025, an email was received from Ms. Julia Norris, E.I.T. requesting a proposal for geotechnical services. The request included a site plan identifying four specific coring locations: two situated on Runway 5 at Middle Georgia Regional Airport, and two positioned along a taxiway leading to the south side of Runway 5.
Project Description	It is our understanding that the pavement cores are being performed to verify pavement thicknesses. This data is understood to be used for the Runway 5 extension project.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	The project is located on 1000 Terminal Drive in Macon, Georgia. Latitude/Longitude (approximate): 32.68696° N 83.66054° W (See Exhibit D)
Existing Improvements	Runway 5 is paved with asphalt with pavement markings. During the proposal phase, it was anticipated that the cores would encounter approximately 12 inches of asphalt underlain by approximately 5 inches of concrete.
Current Ground Cover	The runway is paved and the borrow source appears to be in an agricultural field.
Existing Topography	The existing site is at an approximate elevation of 350 feet and is relatively flat.

Results and Recommendations

Photo documentation of representative asphalt core samples are shown in the **Photography Log**.

Testing Procedure

Terracon conducted pavement coring operations on April 22, 2025, at four designated locations to evaluate pavement thickness and material composition. Prior to coring, Ground Penetrating Radar (GPR) was employed to assess each location for potential near-surface obstructions and utilities. Coring locations were selected based on client requests and positioned to avoid interference with existing pavement markings.

A Hilti DD 250-CA core drill equipped with a 4-inch diameter core bit was used to perform the pavement coring. Upon extraction, asphalt cores were carefully wrapped and labelled for identification. After coring was completed, each core hole was cleared of debris and filled with non-shrink grout, suitable for depths of 1.5 feet or more. The surrounding pavement area was cleaned and rinsed with water to remove residual material and maintain site conditions.

All core samples were transported to the office for further examination. During extraction, cores C-2 and C-3 experienced separation at depths of 5.1 inches and 7.0 inches, respectively. The remaining core segments were retrieved using a hammer drill, and the total asphalt thicknesses were verified accordingly.

Geotechnical Overview

The slab thicknesses of the four cores are presented in the table below. Each core was underlain by soil. During the proposal phase, it was anticipated that the asphalt would be underlain by concrete; however, no concrete or aggregate base was encountered at any of the cored locations. Refer to the **Photography Log** for representative asphalt core samples.

Location	Total Length (in.)
C-1	14.0
C-2[1]	14.0
C-3[2]	13.5
C-4	13.25

1. Core separated at a depth of 5.1 inches.
2. Core separated at a depth of 7 inches.

The recommendations contained in this report are based upon the results of field testing and our current understanding of the proposed project. The **General Comments** section provides an understanding of the report limitations.

General Comments

The analysis and recommendations presented in this report are based upon the data obtained from the visual survey, intrusive testing, and coring performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between core locations and/or across the site.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made.

Attachments

Contents:

Photography Log (3 pages)

Photography Log

Coring Photographs

Cores C-1 to C-4 (from left to right, in ascending order)

Cores C-1 to C-4 (top view – from left to right, in ascending order)

Core C-1

Core C-2

Core C-3

Core C-4

Site Location and Exploration Plans

Contents:

Site Location
Exploration Plan
Exploration Plan – Site Plan Overlay

Note: All attachments are one page unless noted above.

Site Location

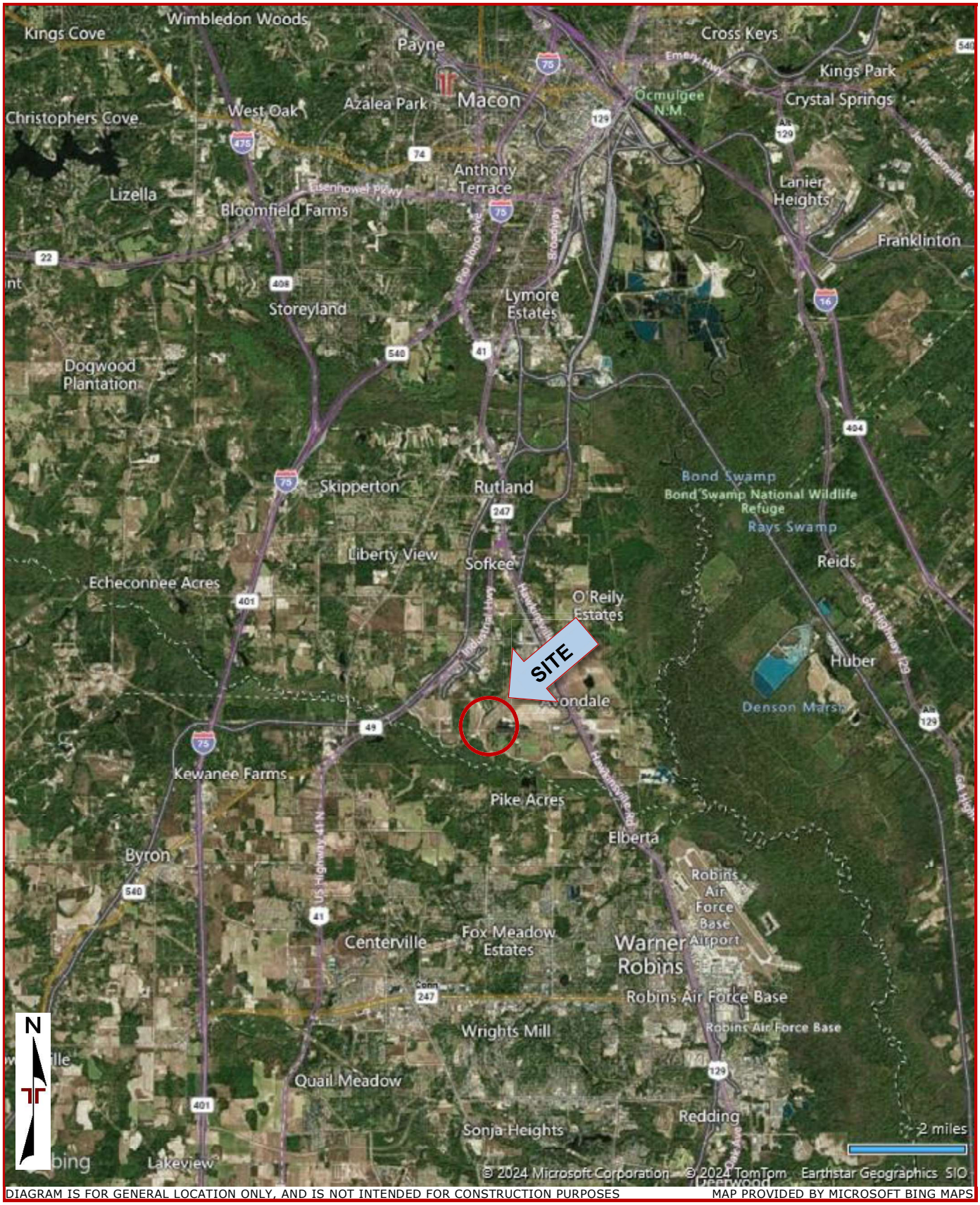


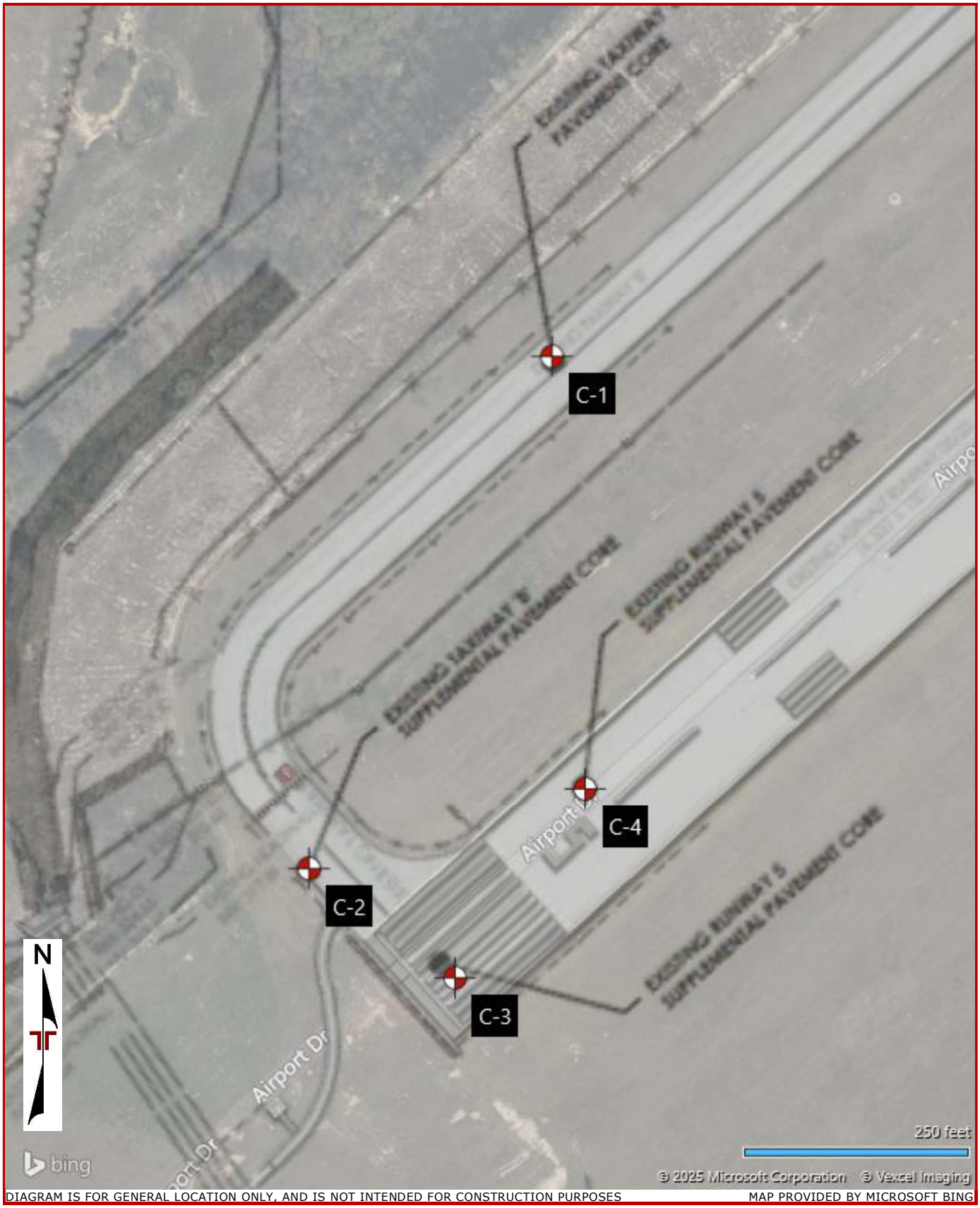
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

Exploration Plan

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES MAP PROVIDED BY MICROSOFT BING MAPS

Exploration Plan – Site Plan Overlay



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