

QUALITY ASSURANCE MONTHLY SITE ASSESSMENT REPORT

Site or Project Name:

Airfield Modernization Program Runway 5L-23R Reconstruction Project 2 / Project 3

Site Assessment Dates:

07/16/20 07/30/20

Applicable Permit #:

NPDES TN0081868 (Individual) NPDES TNR134734 (General)

Site Assessment Reviewer:

Jason R. Hunt, P.E. / Larry Davis

Jason R. Hunt, P.E. / Larry Davis

Contractor:

Eutaw Construction Co. (Project 2) The Harper Co. (Project 3)

Company:

Cannon & Cannon, Inc.
Cannon & Cannon, Inc.

Site Assessment Certification:

"I certify under penalty of law that these inspection records and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated information presented. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that inspections of stormwater discharge points (outfalls) and of erosion and sediment controls have been performed as recorded in these records. I certify that erosion prevention and sediment controls in the drainage area of the identified outfall were installed as planned and designed and in working order as recorded in these records. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Primary Permittee:

Eric Williamson
Project Manager

Metropolitan Knoxville Airport Authority

Site Assessment Reviewer:

Cannon & Cannon, Inc.

(See attached documents for areas noted as requiring additional erosion control measures or maintenance of installed devices)



Cannon & Cannon, Inc.

Site Assessment Date:

07/30/2020

Start and End Time

10:30 am - 3:30 pm

Site or Project Name:

Airfield Modernization Program Runway 5L-23R Reconstruction Project 2 / Project 3 / PSXE820001-Repair Taxiway Lighting Site Assessment Reviewer:

Jason R. Hunt, P.E.

Site Conditions:

Rain, 86

Applicable Permit #:

NPDES TN0081868 (Individual) NPDES TNR134734 (General) Contractor:

Company:

Eutaw Construction Co. (Project 2)
The Harper Co. (Project 3)
The Harper Co. (TWY Lighting)

Coordination:

Jim McNamara (CHA Companies) Clark Chitwood (CCI)

Chitwood (CCI) Larry Davis (CCI)

Distribution:

Valerie McFall (TDEC Knoxville) Todd Henry (CHA) Jim McNamara (CHA) Eric Williamson (MKAA) Bryan White (MKAA) Scott Crimmins (CHA)

Samantha Kleem (Harper) Dennis Rauch (Harper)

Site Assessment Comments:

Site assessment was performed with the EPSC Inspector (Larry Davis-CCI). Rainfall started to occur at the start of the site assessment. Site conditions were wet from the current day's rainfall.

Current disturbed area remains at approximately 43.1 acres (based on areas that have not received application of stabilization measure - not based on actual grass establishment).

See attached Photo Log for areas requiring additional measures or modification. Reference the EPSC inspection reports for additional site requirements and coordination. The site assessment may not include all measures that are required.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.

AIRFIELD MODERNIZATION PROGRAM RUNWAY 5L-23R RECONSTRUCTION

PROJECT 2 – VOLUMES 1 AND 2 (CONTRACTOR – EUTAW CONSTRUCTION CO.)

PROJECT 3 – RUNWAY AND ASSOCIATED TAXIWAY PAVING (CONTRACTOR – THE HARPER COMPANY)

PROJECT 4 – TAXIWAYS B4/B5/B/Y/G4/G (CONTRACTOR – THE HARPER COMPANY)

TNANG – REPAIR TAXIWAY LIGHTING SYSTEM (CONTRACTOR – THE HARPER COMPANY)



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 1 Sta. 111+56 RT (Line LB) NLET 01 Project 2

North Lateral End Treatment 01 (Outfall A). Clear flow observed.



Photo 2 Sta. 111+56 RT (Line LB) NLET 01 Project 2

North Lateral End Treatment 01 (Outfall A). Clear flow observed.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 3 Sta. 111+82 LT (Line LB) NLET 02 Project 2

Main outfall to Lackey Creek. This section of the site was inaccessible at time of inspection.





Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 5 Sta. 115+28 to Sta. 121+45 (Line LB) Project 2

Grass established at ditch line along Liberty Street.



Photo 6 Sta. 117+00 (Line LB) Project 2

Guard Lateral Ditch (Outfall B). Clear flow observed.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 7 Sta. 117+00 (Line LB) Project 2

Above the Guard Lateral Ditch (Outfall B). Construction fall out present. Recommend coordinating remediation with CHA.



Photo 8 Sta. 117+00 (Line LB) Project 2

Guard Lateral Ditch (Outfall B). Clear flow observed.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 9 Sta. 117+00 (RT) Project 2

78" culvert in the Guard Lateral Ditch. Clear flow observed.



Photo 10 Sta. 287+21 LT (RW 5L-23R) Structure 124 Project 3

Structure 124.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 11 Sta. 289+13 LT (RW 5L-23R) Structure 122 Project 3

Structure 122. Recommend stabilizing remaining bare areas.



Photo 12 Sta. 291+51 LT (RW 5L-23R) Structure 120 Project 3

Structure 120.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 13 Sta. 294+31 LT (RW 5L-23R) Structure 118 Project 3

Structure 118.



Photo 14 Sta. 298+71 LT (RW 5L-23R) Structure 116 Project 3

Structure 116.

Recommend stabilizing bare areas and repairing rills (see photos #15 and #16 below).



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 15 Sta. 298+71 LT (RW 5L-23R) Structure 116 Project 3

Structure 116. Recommend stabilizing bare areas.



Photo 16 Sta. 298+71 LT (RW 5L-23R) Structure 116 Project 3

Above Structure 116 on Taxiway G2. Recommend repairing rills and stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 17 Sta. 302+54 LT (RW 5L-23R) Structure 114 Project 3

Structure 114.

Bare areas have been sprayed with hydroseeding and mulch; however, many areas remain bare and grass has not established. Coordinate with CHA on final stabilization options.



Photo 18 Sta. 303+36 LT (RW 5L-23R) Structure 12 Project 3

Structure 12.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 19 Sta. 310+04 LT (RW 5L-23R) Structure 10 Project 3

Structure 10.
Bare areas recently stabilized.



Photo 20 Sta. 310+00 LT (RW 5L-23R) Project 3

Structure 112 and Concrete Washout Area.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 21 Sta. 314+48 LT (RW 5L-23R) ES Endwall 108 Project 3

Enhanced Swale Endwall 108. Recommend stabilizing remaining bare areas.



Photo 22 Sta. 314+48 LT (RW 5L-23R) ES Endwall 108 Project 3

Enhanced Swale Endwall 108. Recommend stabilizing remaining bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 23 Sta. 324+86 LT (RW 5L-23R) ES Endwall 106 Project 3

Enhanced Swale Endwall 106.



Photo 24 Sta. 324+86 to Sta. 335+73 LT (RW 5L-23R) ES Endwall 106 Project 3

Enhanced Swale Endwall 106.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 25 Sta. 335+73 LT (RW 5L-23R) ES Endwall 104 Project 3

Enhanced Swale Endwall 104.



Photo 26 Sta. 335+73 LT (RW 5L-23R) ES Endwall 104 Project 3

Enhanced Swale Endwall 104.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 27 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

First potential construction fallout on Storm Line 1 between ES Endwall 104 and 102.



Photo 28 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Second construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 29 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Third construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



Photo 30 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Fourth construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



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Photo 31 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Fifth construction fallout on Storm Line 1 between ES Endwall 104 and 102. Coordinate remediation with CHA.



Photo 32 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Sixth construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 33 Sta. 347+31 LT (RW 5L-23R) ES Endwall 102 Project 3

Enhanced Swale Endwall 102. Recommend stabilizing remaining bare areas.



Photo 34 Sta. 347+31 LT (RW 5L-23R) ES Endwall 102 Project 3

Enhanced Swale Endwall 102. Recommend stabilizing remaining bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 35 Sta. 341+50 LT (RW 5L-23R) ES Endwall 102 Project 3

Seventh construction fallout on Storm Line 1 between ES Endwall 102 and 100.

Coordinate remediation with CHA.



Photo 36 Sta. 354+75 LT (RW 5L-23R) ES Endwall 100 Project 2

Enhanced Swale Endwall 100.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 37 Sta. 354+75 LT (RW 5L-23R) ES Endwall 100 Project 3

Enhanced Swale Endwall 100.



Photo 38 Sta. 361+39 LT (RW 5L-23R) Structure 100 Project 3

Structure 100.
Recommend stabilizing remaining bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 39 Sta. 363+35 LT (RW 5L-23R) Existing Structure Project 2

Existing Structure.



Photo 40 Sta. 366+25 LT (RW 5L-23R) Existing Structure Project 2

Existing Structure.
Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 41 Sta. 369+11 LT (RW 5L-23R) Existing Structure Project 2

Existing Structure.
Recommend stabilizing bare areas.



Photo 42 Sta. 677+00 RT (RW 5L-23R) Existing Structure Project 4

Structure south of Taxiway "G".

Slopes started to rill after previous storm events. Sediment has migrated to structure.

Recommend repairing rills, removing accumulated sediment, and replacing sediment tubes.

Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 43 Sta. 677+00 RT (RW 5L-23R) Project 4

Structure between Taxiway G and UPS Facility.



Photo 44 Sta. 676+00 RT (RW 5L-23R) Project 4

Storm structure adjacent to UPS.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 45 New structure Project 4

New storm structure installed north of Taxiway G.



Photo 46 New structure Project 4

Above new structure north of Taxiway G.
Erosion of shoulder has occurred and continues to erode.
Area to be regraded and stabilized per discussion at Progress Meeting on 07/30/2020.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 47 Sta. 366+89 RT (RW 5L-23R) Existing Structure Project 4

Existing Structure adjacent to Outfall C.



Photo 48 Sta. 366+89 RT (RW 5L-23R) Outfall C Project 4

Recommend removing filter fabric from this structure to allow sampling for DMR. (Outfall C).



(RW 5L-23R)

Structure 300 Project 4

QUALITY ASSURANCE SITE ASSESSMENT

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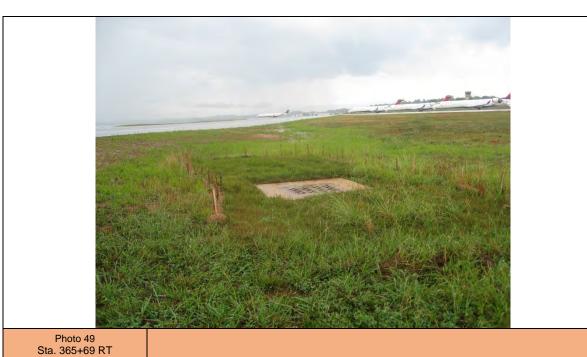


Photo 50
(RW 5L-23R)
TVYY Y Tie-in
Project 4

Existing structure north of Taxiway Y.

Structure 300



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 51 (RW 5L-23R) TWY Y Tie-in Project 4

Existing structure south of Taxiway Y. Recommend removing inlet protection.



Photo 52 Sta. 362+02 LT (RW 5L-23R) Structure 400 Project 4

Structure 400.
Bare areas recently stabilized.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 53 Sta. 353+56 RT (RW 5L-23R) Structure 20 Project 4

Structure 20.



Photo 54 Sta. 347+26 RT (RW 5L-23R) Structure 22 Project 4

Structure 22. Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 55 Sta. 353+56 RT (RW 5L-23R) Structure 200 Project 4

Structure 200.



Photo 56 Sta. 347+26 RT (RW 5L-23R) Structure 202 Project 4

Structure 202.
Rills and sediment migration occurred after recent storm events.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 57 Sta. 341+86 RT (RW 5L-23R) Structure 204 Project 4

Structure 204.



Photo 58 Sta. 341+86 RT (RW 5L-23R) Project 4

Construction fallout on Storm Line 2 between structures 204 and 206. Recommend coordinating remediation with CHA.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 59 Sta. 338+02 RT (RW 5L-23R) Structure 206 Project 4

Structure 206.



(RW 5L-23R) Project 4

Recommend coordinating remediation with CHA.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 61 Sta. 338+02 RT (RW 5L-23R) Structure 208 Project 4

Structure 208.



Photo 62 Sta. 329+86 RT (RW 5L-23R) Structure 210 Project 3

Structure 210.
Bare areas recently stabilized.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 63 Sta. 321+73 RT (RW 5L-23R) Structure 212 Project 3

Structure 212.

Recommend removing accumulated sediment and replacing damaged sediment tubes.

Recommend stabilizing remaining bare areas.



Photo 64 Sta. 314+32 RT (RW 5L-23R) Structure 214 Project 3

Structure 214.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 65 Sta. 307+99 RT (RW 5L-23R) Structure 216 Project 3

Structure 216.



Photo 66 Sta. 301+87 RT (RW 5L-23R) Structure 218 Project 3

Structure 218.

Recommend stabilizing bare areas and repairing rill above structure (see photo below).



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 67 Sta. 301+87 RT (RW 5L-23R) Structure 218 Project 3

Structure 218.
Recommend stabilizing bare areas and repairing rill above structure.



Photo 68 Sta. 296+83 RT (RW 5L-23R) Structure 220 Project 2

Structure 220. Recommend stabilizing remaining bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 69 Sta. 288+26 (RW 5L-23R) Structure 224 Project 2

Structure 224.



Photo 70 Sta. 288+26 (RW 5L-23R) Structure 224 Project 2

Below structure 224.

Side slope has eroded causing damage to the articulated concrete block.

CHA, Harper and KMAA were already aware of the issue as discussed in a progress meeting dated 07/16/2020.



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Photo 71 Sta. 290+26 RT (RW 5L-23R) Structure 600 Ditch Project 2

Structure 600 Ditch. Recommend stabilizing remaining bare areas.



Photo 72 Sta. 290+26 RT (RW 5L-23R) Structure 222 Project 2

Structure 222.
Recommend removing inlet protection.
Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 73 Sta. 290+26 RT (RW 5L-23R) Structure 600 Ditch Project 2

Structure 600 ditch.
Bare areas recently stabilized.



Photo 74 Sta. 284+59 (RW 5L-23R) Structure 600 Project 3

Structure 600.
Sediment recently removed and sediment tubes repaired.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 75 (RW 5L-23R) Project 3

Area above Haul Road Culvert Inlet (stone stockpile area). Sediment tubes recently installed to divert runoff into existing storm structure.



Photo 76 (RW 5L-23R) Project 3 Area above Haul Road Culvert Inlet (stone stockpile area).

A gap exists between existing sediment tubes and newly installed sediment tubes (see previous photo) which will allow water to bypass structure. Recommend additional sediment tubes be installed to ensure runoff is treated or diverted to storm structure.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 77 (RW 5L-23R) Project 3

Existing structure at stone stockpile area.



Photo 78 (RW 5L-23R) Project 3 Existing structure.

Grading operations appear to be complete.

Recommend stabilizing bare areas of entire pad.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 79 (RW 5L-23R) Project 3

Silt fence above North Lateral Ditch at stone stockpile area.



Photo 80 Sta. 39+00 CL Proposed Haul Route Project 3

Inlet side of 54" haul route crossing culvert.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 81 Sta. 39+00 CL Proposed Haul Route Project 3

Outlet side of 54" haul route crossing culvert.



Photo 82 Sta. 37+25 RT Proposed Haul Route Project 3

Inlet structure along haul road.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 83 Sta. 37+25 RT Proposed Haul Route Project 3

New storm structure installed along haul road. Recommend installing grate and filter fabric or extend sediment tube around structure.



Photo 84 Sta. 32+50 RT Proposed Haul Route Project 3

Inlet structure along haul road.
Underdrain/French drain recently installed and slope regraded. Recommend tracking slope perpendicular to prevent creation of rills.

Recommend stabilizing slope as soon as practical.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 85 Sta. 32+50 RT Proposed Haul Route Project 3

Haul Route.
Underdrain/French drain recently installed and slope regraded. Recommend tracking slope perpendicular to prevent creation of rills.

Recommend stabilizing slope as soon as practical.



Photo 86 Sta. 302+54 (RW 5L-23R) Project 2

North Lateral Fill Area
Rills have formed and sediment has migrated to silt fence.
Recommend removing accumulated sediment.
Recommend coordinating with CHA on remediating rills.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 87 Sta. 302+54 (RW 5L-23R) Project 2 Above North Lateral Endwall 100.
Sediment has accumulated in front of sediment tubes.
Recommend removing sediment. Recommend replacing sediment tubes.
Recommend stabilizing bare areas.



Photo 88 Sta. 302+54 (RW 5L-23R) Project 2

Above North Lateral Endwall 100. Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 89 Sta. 302+54 (RW 5L-23R) Project 2

Soil stockpile area next to haul road at Taxiway B.

Berm has started to erode and sediment has accumulated in front of tubes. Recommend removing accumulated sediment. Recommend adding sediment tubes adjacent to berm.

Recommend stabilizing all bare areas.



Photo 90 Sta. 302+54 to Sta. 313+50 (RW 5L-23R) Project 2

North Lateral Endwall 100. Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 91 Sta. 300+60 (RW 5L-23R) Project 2

North Lateral Endwall 102.



Photo 92 Sta. 29+00 RT Proposed Haul Route Project 3

Inlet structure along haul road.
Underdrain/French drain recently installed and slope regraded. Recommend tracking slope perpendicular to prevent creation of rills.

Recommend stabilizing slope as soon as practical.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 93 Sta. 25+50 RT Proposed Haul Route Project 3 Inlet structure along haul road.
Underdrain/French drain recently installed and slope regraded. Recommend tracking slope perpendicular to prevent creation of rills.

Recommend stabilizing slope as soon as practical.



Photo 94 Sta. 297+01 (RW 5L-23R) Project 2

North Lateral Endwall 104.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 95 Sta. 295+10 (RW 5L-23R) Project 2

North Lateral Endwall 106.



Photo 96 Sta. 22+00 RT Proposed Haul Route Project 3

Inlet structure along haul road.
Underdrain/French drain recently installed and slope regraded. Recommend tracking slope perpendicular to prevent creation of rills.

Recommend stabilizing slope as soon as practical.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.

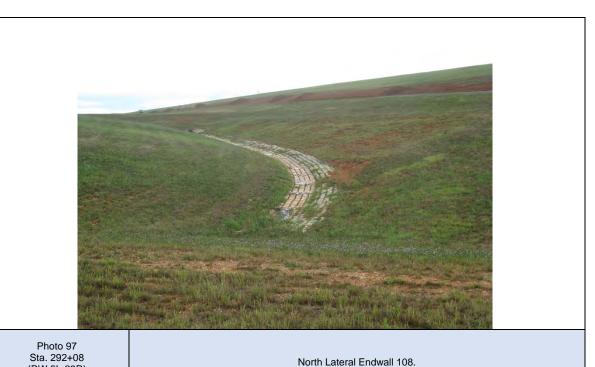


Photo 98 Sta. 290+50 LT (RW 5L-23R) Project 2

(RW 5L-23R) Project 2

North Lateral Endwall 110.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 99 Sta. 15+50 RT Proposed Haul Route Project 3 Inlet structure along haul road.
Underdrain/French drain recently installed and slope regraded. Recommend tracking slope perpendicular to prevent creation of rills.

Recommend stabilizing slope as soon as practical.



Photo 100 Sta. 284+00 LT (RW 5L-23R) Project 2

Existing vault at old Liberty street.

Construction fallout present. Recommend coordinating with CHA on remediation.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 101 Sta. 284+00 LT (RW 5L-23R) Project 2

Previous soil stockpile at old Liberty Street. Construction fallout filled with concrete. Recommend stabilizing remaining bare areas.



Photo 102 (Repair TWY Lighting) Fill area adjacent to Liberty Street from Taxiway shoulder removal.

Sediment has migrated to silt fence. Recommend removing accumulated sediment.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 103 (Repair TWY Lighting) Existing Structure

Existing structure south of Taxiway G Recommend stabilizing bare areas once final grading is complete.



Photo 104 (Repair TWY Lighting) Existing Structure Existing structure south of Taxiway G.
Area recently graded and appears to be at finished grade.
Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 105 (Repair TWY Lighting) Existing Structure Existing structure north of Taxiway G.

Area recently graded and appears to be at finished grade.

Recommend stabilizing bare areas.



Photo 106 (Repair TWY Lighting) Existing structure at Upper Apron. Shoulder graded. Pavement markings being installed.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 107 (Repair TWY Lighting)

Sod being installed along Taxiway G at time of inspection.



Photo 108 (Repair TWY Lighting)

Existing structure adjacent to demolished Taxiway G4.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 109 (Repair TWY Lighting) Demolished old Taxiway G4 and shoulder recently graded. Recommend stabilizing bare areas.



Photo 110 (Repair TWY Lighting) Existing structure at Upper Apron. Shoulders recently graded. Recommend stabilizing bare areas.



Review Date: 07/30/2020 Reviewer: Jason R. Hunt, P.E.



Photo 111 (Repair TWY Lighting)

Existing structure at Middle Apron. Shoulders recently graded. Recommend stabilizing bare areas.



Photo 112 (Repair TWY Lighting)

Existing structure at Middle Apron.



Cannon & Cannon, Inc.

Site Assessment Date:

07/16/2020

Start and End Time

10:00 am - 3:00 pm

Site or Project Name:

Airfield Modernization Program Runway 5L-23R Reconstruction Project 2 / Project 3 / PSXE820001-Repair Taxiway Lighting Site Assessment Reviewer:

Jason R. Hunt, P.E.

Site Conditions:

Sunny, 94

Applicable Permit #:

NPDES TN0081868 (Individual) NPDES TNR134734 (General) Contractor:

Company:

Eutaw Construction Co. (Project 2)
The Harper Co. (Project 3)
The Harper Co. (TWY Lighting)

Coordination:

Jim McNamara (CHA Companies) Clark Chitwood (CCI) Larry Davis (CCI)

Distribution:

Valerie McFall (TDEC Knoxville) Todd Henry (CHA) Jim McNamara (CHA) Eric Williamson (MKAA) Bryan White (MKAA) Scott Crimmins (CHA) Samantha Kleem (Harper) Dennis Rauch (Harper)

Site Assessment Comments:

Site assessment was performed with the EPSC Inspector (Larry Davis-CCI). Site conditions were mostly dry.

Current disturbed area remains at approximately 43.1 acres (based on areas that have not received application of stabilization measure - not based on actual grass establishment).

See attached Photo Log for areas requiring additional measures or modification. Reference the EPSC inspection reports for additional site requirements and coordination. The site assessment may not include all measures that are required.



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AIRFIELD MODERNIZATION PROGRAM RUNWAY 5L-23R RECONSTRUCTION

PROJECT 2 – VOLUMES 1 AND 2 (CONTRACTOR – EUTAW CONSTRUCTION CO.)

PROJECT 3 – RUNWAY AND ASSOCIATED TAXIWAY PAVING (CONTRACTOR – THE HARPER COMPANY)

PROJECT 4 – TAXIWAYS B4/B5/B/Y/G4/G (CONTRACTOR – THE HARPER COMPANY)

TNANG – REPAIR TAXIWAY LIGHTING SYSTEM (CONTRACTOR – THE HARPER COMPANY)



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 1 Sta. 111+56 RT (Line LB) NLET 01 Project 2

North Lateral End Treatment 01 (Outfall A).



Photo 2 Sta. 111+56 RT (Line LB) NLET 01 Project 2

North Lateral End Treatment 01 (Outfall A).



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 3 Sta. 111+82 LT (Line LB) NLET 02 Project 2

Main outfall to Lackey Creek. This section of the site was inaccessible at time of inspection.



Photo 4 Sta. 115+28 to Sta. 121+45 (Line LB) Project 2

Grass established at ditch line along Liberty Street.



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 5 Sta. 117+00 (Line LB) Project 2

Guard Lateral Ditch (Outfall B).



Photo 6 Sta. 117+00 (Line LB) Project 2

Above the Guard Lateral Ditch (Outfall B). Construction fall out present. Recommend coordinating remediation with CHA.



Sta. 117+00

QUALITY ASSURANCE SITE ASSESSMENT

Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Guard Lateral Ditch (Outfall B).





Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 9 Sta. 287+21 LT (RW 5L-23R) Structure 124 Project 3

Structure 124.



Photo 10 Sta. 289+13 LT (RW 5L-23R) Structure 122 Project 3

Structure 122.
Recommend stabilizing remaining bare areas.



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 11 Sta. 291+51 LT (RW 5L-23R) Structure 120 Project 3

Structure 120.



Photo 12 Sta. 294+31 LT (RW 5L-23R) Structure 118 Project 3

Structure 118.



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Photo 13 Sta. 298+71 LT (RW 5L-23R) Structure 116 Project 3

Structure 116. Recommend stabilizing bare areas.



Photo 14 Sta. 302+54 LT (RW 5L-23R) Structure 114 Project 3

Structure 114.



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Photo 15 Sta. 303+36 LT (RW 5L-23R) Structure 12 Project 3

Structure 12.
Bare areas recently stabilized.



Photo 16 Sta. 310+04 LT (RW 5L-23R) Structure 10 Project 3

Structure 10.
Bare areas recently stabilized.



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 17 Sta. 310+00 LT (RW 5L-23R) Project 3

Structure 112



Photo 18 Sta. 314+48 LT (RW 5L-23R) ES Endwall 108 Project 3

Enhanced Swale Endwall 108. Recommend stabilizing remaining bare areas.



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 19 Sta. 314+48 LT (RW 5L-23R) ES Endwall 108 Project 3

Enhanced Swale Endwall 108. Recommend stabilizing remaining bare areas.



ES Endwall 106 Project 3



Review Date: 07/16/2020 Reviewer: Jason R. Hunt, P.E.



Photo 21 Sta. 324+86 to Sta. 335+73 LT (RW 5L-23R) ES Endwall 106 Project 3

Enhanced Swale Endwall 106.



Photo 22 Sta. 335+73 LT (RW 5L-23R) ES Endwall 104 Project 3

Enhanced Swale Endwall 104.



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Photo 23 Sta. 335+73 LT (RW 5L-23R) ES Endwall 104 Project 3

Enhanced Swale Endwall 104.



Photo 24 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Potential construction fallout on Storm Line 1 between ES Endwall 104 and 102.



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Photo 25 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

First construction fallout on Storm Line 1 between ES Endwall 104 and 102. Coordinate remediation with CHA.



Photo 26 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Second construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



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Photo 27 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Third construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



Photo 28 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Fourth construction fallout on Storm Line 1 between ES Endwall 104 and 102. Coordinate remediation with CHA.



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Photo 29 Sta. 341+50 LT (RW 5L-23R) Between ES Endwall 104 and 102 Project 3

Fifth construction fallout on Storm Line 1 between ES Endwall 104 and 102.

Coordinate remediation with CHA.



Photo 30 Sta. 347+31 LT (RW 5L-23R) ES Endwall 102 Project 3

Enhanced Swale Endwall 102. Recommend stabilizing remaining bare areas.



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Photo 31 Sta. 347+31 LT (RW 5L-23R) ES Endwall 102 Project 3

Enhanced Swale Endwall 102. Recommend stabilizing remaining bare areas.



Photo 32 Sta. 341+50 LT (RW 5L-23R) ES Endwall 102 Project 3

Construction fallout on Storm Line 1 between ES Endwall 102 and 100. Coordinate remediation with CHA.



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Photo 33 Sta. 354+75 LT (RW 5L-23R) ES Endwall 100 Project 2

Enhanced Swale Endwall 100.



Photo 34 Sta. 354+75 LT (RW 5L-23R) ES Endwall 100 Project 3

Enhanced Swale Endwall 100.



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Photo 35 Sta. 361+39 LT (RW 5L-23R) Structure 100 Project 3

Structure 100. Recommend stabilizing remaining bare areas.



Photo 36 Sta. 363+35 LT (RW 5L-23R) Existing Structure Project 2

Existing Structure.



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Photo 37 Sta. 366+25 LT (RW 5L-23R) Existing Structure Project 2

Existing Structure. Recommend stabilizing bare areas.



Photo 38 Sta. 369+11 LT (RW 5L-23R) Existing Structure Project 2

Existing Structure.
Recommend stabilizing bare areas.



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Photo 39 Sta. 677+00 RT (RW 5L-23R) Existing Structure Project 4

Structure south of Taxiway "G".

Slopes started to rill after recent storm event. Sediment has migrated to structure.

Recommend repairing rills and removing accumulated sediment.

Recommend stabilizing bare areas.



Photo 40 Sta. 677+00 RT (RW 5L-23R) Project 4

Structure between Taxiway G and UPS Facility.



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Photo 41 Sta. 676+00 RT (RW 5L-23R) Project 4

New structure recently placed. Area recently backfilled, inlet protection installed, and erosion control blanket installed.



Photo 42 New structure Project 4 Above new structure north of Taxiway Golf.
Erosion of shoulder has occurred.
CHA, Harper and KMAA were made aware of the issue during a progress meeting dated 07/16/2020.



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Photo 43 (RW 5L-23R) Existing Structure Project 4

Existing structure south of Taxiway G Sediment tubes recently replaced. Recommend stabilizing bare areas.



Photo 44 (RW 5L-23R) Existing Structure Project 4

Existing structure south of Taxiway G.



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Photo 45 (RW 5L-23R) Existing Structure Project 4

Existing structure north of Taxiway G.



Photo 46 Sta. 366+89 RT (RW 5L-23R) Existing Structure Project 4

Existing Structure adjacent to Outfall C.



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Photo 47 Sta. 366+89 RT (RW 5L-23R) Outfall C Project 4

Recommend removing filter fabric from this structure to allow sampling for DMR. (Outfall C).



Photo 48 Sta. 365+69 RT (RW 5L-23R) Structure 300 Project 4

Structure 300



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Photo 49 (RW 5L-23R) TWY Y Tie-in Project 4

Existing structure north of Taxiway Y.



Photo 50 (RW 5L-23R) TWY Y Tie-in Project 4

Existing structure south of Taxiway Y. Bare areas recently stabilized.



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Photo 51 Sta. 362+02 LT (RW 5L-23R) Structure 400 Project 4

Structure 400.
Bare areas recently stabilized.



Photo 52 Sta. 353+56 RT (RW 5L-23R) Structure 20 Project 4

Structure 20.



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Photo 53 Sta. 347+26 RT (RW 5L-23R) Structure 22 Project 4

Structure 22. Sediment tubes recently relocated to edge of sod. Recommend stabilizing bare areas.



Photo 54 Sta. 353+56 RT (RW 5L-23R) Structure 200 Project 4

Structure 200.



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Photo 55 Sta. 347+26 RT (RW 5L-23R) Structure 202 Project 4

Structure 202. Rills and sediment migration occurred after recent storm events.



Photo 56 Sta. 341+86 RT (RW 5L-23R) Structure 204 Project 4

Structure 204.



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Photo 57 Sta. 341+86 RT (RW 5L-23R) Project 4

Construction fallout on Storm Line 2 between structures 204 and 206. Recommend coordinating remediation with CHA.



Photo 58 Sta. 338+02 RT (RW 5L-23R) Structure 206 Project 4

Structure 206.



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Photo 59 (RW 5L-23R) Project 4

Construction fallout on Storm Line 2 between structures 206 and 208. Recommend coordinating remediation with CHA.



Photo 60 Sta. 338+02 RT (RW 5L-23R) Structure 208 Project 4

Structure 208.



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Photo 61 Sta. 329+86 RT (RW 5L-23R) Structure 210 Project 3

Structure 210.
Bare areas recently stabilized.



Photo 62 Sta. 321+73 RT (RW 5L-23R) Structure 212 Project 3

Structure 212.

Recommend removing accumulated sediment and replacing damaged sediment tubes.



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Photo 63 Sta. 314+32 RT (RW 5L-23R) Structure 214 Project 3

Structure 214.



Photo 64 Sta. 307+99 RT (RW 5L-23R) Structure 216 Project 3

Structure 216.



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Photo 65 Sta. 301+87 RT (RW 5L-23R) Structure 218 Project 3

Structure 218. Recommend stabilizing bare areas.



Photo 66 Sta. 296+83 RT (RW 5L-23R) Structure 220 Project 2

Structure 220.
Recommend stabilizing remaining bare areas.



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Photo 67 Sta. 288+26 (RW 5L-23R) Structure 224 Project 2

Structure 224.



Photo 68 Sta. 288+26 (RW 5L-23R) Structure 224 Project 2

Below structure 224.
Side slope has severely eroded.
CHA, Harper and KMAA were already aware of the issue as discussed in a progress meeting dated 07/16/2020.



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Photo 69 Sta. 290+26 RT (RW 5L-23R) Structure 600 Ditch Project 2

Structure 600 Ditch.
Ditch recently regraded and sod applied.
Recommend stabilizing remaining bare areas.



Photo 70 Sta. 290+26 RT (RW 5L-23R) Structure 222 Project 2

Structure 222.
Recommend removing inlet protection.
Recommend stabilizing bare areas.



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Photo 71 Sta. 290+26 RT (RW 5L-23R) Structure 600 Ditch Project 2

Structure 600 ditch.
Bare areas recently stabilized.



Photo 72 Sta. 284+59 (RW 5L-23R) Structure 600 Project 3

Structure 600.
Bare areas recently stabilized.



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Photo 73 (RW 5L-23R) Project 3

Existing structure at stone stockpile area.



Photo 74 (RW 5L-23R) Project 3 Recently installed silt fence has been undermined from recent storm events.

Recommend removing silt fence in this area and installing sediment tubes per the attached exhibit.



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Photo 75 (RW 5L-23R) Project 3

Existing structure.



Photo 76 (RW 5L-23R) Project 3

Silt fence recently installed.



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Photo 77 Sta. 39+00 CL Proposed Haul Route Project 3

Inlet side of 54" haul route crossing culvert.



Photo 78 Sta. 37+25 RT Proposed Haul Route Project 3

Inlet structure along haul road.



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Photo 79 Sta. 32+50 RT Proposed Haul Route Project 3

Inlet structure along haul road. Asphalt recently installed.



Photo 80 Sta. 302+54 (RW 5L-23R) Project 2

Above North Lateral Endwall 100. Recommend stabilizing bare areas.



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Photo 81 Sta. 302+54 (RW 5L-23R) Project 2

Above North Lateral Endwall 100. Slope recently regraded. Recommend stabilizing bare areas.



Photo 82 Sta. 302+54 (RW 5L-23R) Project 2

Soil stockpile area next to haul road at Taxiway B.

Recommend removing accumulated sediment and installing additional sediment tubes in ditch line.

Recommend stabilizing bare areas.



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Photo 83 Sta. 302+54 to Sta. 313+50 (RW 5L-23R) Project 2

North Lateral Endwall 100. Recommend stabilizing bare areas.



Photo 84 Sta. 300+60 (RW 5L-23R) Project 2

North Lateral Endwall 102.



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Photo 85 Sta. 29+00 RT Proposed Haul Route Project 3

Inlet structure along haul road.



Photo 86 Sta. 25+50 RT Proposed Haul Route Project 3

Inlet structure along haul road.



Sta. 297+01

QUALITY ASSURANCE SITE ASSESSMENT

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North Lateral Endwall 104.



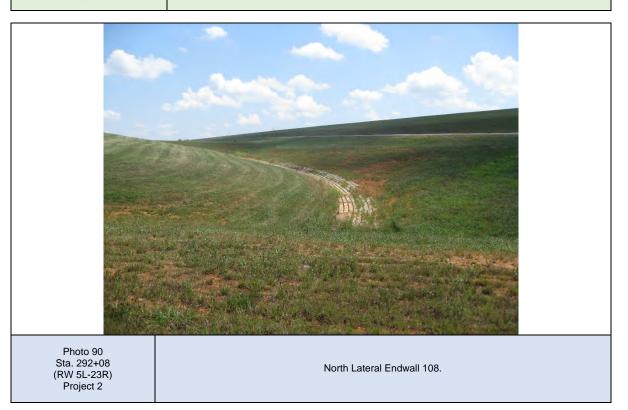


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Photo 89 Sta. 22+00 RT Proposed Haul Route Project 3

Inlet structure along haul road.





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Photo 91 Sta. 290+50 LT (RW 5L-23R) Project 2

North Lateral Endwall 110.



Photo 92 Sta. 15+50 RT Proposed Haul Route Project 3

Inlet structure along haul road.



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Photo 93 Sta. 282+45 to 288+26 LT (RW 5L-23R) Project 2

North Lateral Ditch.



Photo 94 Sta. 284+00 LT (RW 5L-23R) Project 2

Existing vault at old Liberty street.

Construction fallout present. Recommend coordinating with CHA on remediation.



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Photo 95 Sta. 284+00 LT (RW 5L-23R) Project 2

Previous soil stockpile at old Liberty Street.

Construction fallout appears to have been filled with concete.



Photo 96 (Repair TWY Lighting)

Fill area adjacent to Liberty Street from Taxiway shoulder removal.



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Photo 97 (Repair TWY Lighting) Sheet EC2.1.7

Existing structure at Upper Apron.
Asphalt recently installed.



Photo 98 (Repair TWY Lighting) Sheet EC2.1.6

Existing remaining Taxiway G4 and shoulder being graded at time of inspection.



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Photo 99 (Repair TWY Lighting) Sheet EC2.1.6

Existing structure adjacent to demolished Taxiway G4.



Photo 100 (Repair TWY Lighting) Sheet EC2.1.5

Existing structure at Upper Apron.
Asphalt recently installed.



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Photo 101 (Repair TWY Lighting) Sheet EC2.1.5

Existing structure at Upper Apron.