

FY21 SPECIFICATION PROJECT ORDER

2022 Annual Tri-Service and Industry
Review Meeting - Airfield Asphalt User
Producer Group

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SUBMITTALS

Added *Pavement Lots* in submittal register to provide appropriate location for Contractor to submit Lot Reports

SD-02 Shop Drawings

Placement Plan; G[, [____]]

SD-03 Product Data

Diamond Grinding Plan; G[, [____]]

Mix Design; G[, [____]]

Contractor Quality Control; G[, [____]]

SD-04 Samples

Aggregates

Asphalt Binder

Warm-mix Additive

SD-06 Test Reports

Aggregates; G[, [____]]

QC Monitoring

Pavement Lots; G[, [____]]

SD-07 Certificates

Asphalt Binder; G[, [____]]

Testing Laboratory

Warm-mix Additive

Airfield Asphalt Pavement QC Manager

Airfield Asphalt Pavement Inspector

Airfield Asphalt Pavement Laboratory Technician

QUALITY CONTROL REFERENCE SECTIONS

Added Navy and NASA references to appropriate Quality Control UFGS sections.
Addresses CCR # 105661

Reference Section [01 45 00.00 10][01 45 00.00 20][01 45 00.00 40] QUALITY CONTROL for Contractor personnel qualification requirements along with the information included below. [The Airfield Asphalt Pavement QC Manager is a separate person and is in addition to the [CQC System Manager identified in Section [01 45 00.00 10][01 45 00.00 20][01 45 00.00 40]][QC Manager identified in Section 01 45 00.00 20][Quality Program Manager identified in section 01 45 00.00 40] QUALITY CONTROL. The Airfield Asphalt Pavement QC Manager will report to and assist the project CQC System Manager.] Submit certifications for Contractor Quality Control Staff in the following areas:

STRAIGHTEDGE TESTING FREQUENCY



Added straightedge frequency for Quality Control. Not Acceptance.

Addresses CCR # 8107

1.6.9.1 Straightedge Testing

NOTE: Select bracketed text when paving lots are anticipated to be less than 1/10 mile longitudinally.

Provide finished surfaces of the pavements within the tolerances specified in Table 5 when checked with an approved 4 m 12 foot straightedge. Start longitudinal and transverse straightedge testing with one-half the length of the straightedge at the edge of pavement section being tested and then moved ahead one-half the length of the straightedge for each successive measurements. Perform continuous tests across all joints. Determine the amount of surface irregularity by placing the freestanding (unleveled) straightedge on the pavement surface and allowing it to rest upon the two highest spots covered by its length, and measuring the maximum gap between the straightedge and the pavement surface in the area between these two high points. Use the straightedge to also measure abrupt changes in surface smoothness. Abrupt changes may be anywhere visual inspection justifies performing straightedge measurements and will be in addition to the testing frequency specified. Do not perform straightedge measurements across grade changes or cross slope transitions.

Perform transverse measurements perpendicular to centerline every 15 m 50 feet or more often as determined by the Government. [For longitudinal measurements, test parallel to the centerline of paving; at the center of paving lanes when widths of paving lanes are less than 6 m 20 feet; and at the third points of paving lanes when widths of paving lanes are 6 m 20 feet or greater.] After two full lots have been placed with an average of less than five percent of measurements out, a request can be made to reduce the testing frequency at a rate approved by the Government. Report all individual straightedge measurements coinciding with project stationing in each paving lot report.

FINAL PROFILOGRAPH TESTING

[1.6.9.3 Final Profilograph Testing

NOTE: Select this paragraph if project includes long linear pavements such as a runway or taxiway where evaluation of between lot transitions are desired. Appropriate projects would include new construction, complete mill/overlay or reconstruction of a runway/taxiway or other similar airfield feature. Edit bracketed text for the airfield feature(s) to be evaluated.

After all paving on the [runway][taxiway] is complete, perform final profilograph testing in the longitudinal direction per paragraph PROFILOGRAPH TESTING with the following changes. Operate the profilograph the full length of the asphalt pavement on the [runway][taxiway] to facilitate testing of the smoothness between lots and to evaluate the transition of any transverse joints. Provide pavements having an average total profile index less than 10 inches per mile per 1/10 mile. Operate the profilograph one foot left and right of centerline and 15 feet right and left of project centerline (four total traces). Correct any "must grind" areas by diamond grinding or by removing and replacing full depth of the surface course. Reevaluate the pavement with a second profilograph run after corrections to ensure an average profile index of 10 inches per mile per 1/10 mile or less is achieved. Final profilograph testing is to be done in addition to the profilograph traces being performed on a lot basis. Provide a digital copy of the test results to the Government prior to full acceptance of the pavement.]



Photo Courtesy of FAA

- Added Final Profilograph Testing for Runways/Taxiways that have been constructed/reconstructed.
- Evaluate between lot transitions and transverse joints

PLAN GRADE DELIVERABLE

1.6.10 Plan Grade

Text Not Ready

for correcting high areas is not permitted. Submit finished surface grades in record drawing format showing design and constructed elevations which are stamped and signed by a licensed surveyor. Provide a comparison of the as-built grades to the design grades and determine a percentage of individual measurements exceeding the tolerances specified and determine pay factor per paragraph PAY FACTOR BASED ON PLAN GRADE. Submit the survey CAD files to the Government for record purposes. Submit all files including the calculation for percent measurements in each paving lot report.

MATERIAL TRANSFER VEHICLE

Added minimum onboard storage

Provide Material Transfer Vehicles for placement of the asphalt mixture. To transfer the material from the hauling equipment to the paver, use a self-propelled, material transfer vehicle with a swing conveyor that delivers material to the paver from outside the paving lane and without making contact with the paver. Provide MTV capable to move back and forth between the hauling equipment and the paver providing material transfer to the paver, while allowing the paver to operate at a constant speed. Provide Material Transfer Vehicle with remixing and a minimum onboard storage capability of 15 metric tons tons.

Still considering other values



RECYCLED ASPHALT SHINGLES (RAS)

2.7 RECYCLED ASPHALT SHINGLES

NOTE: Recycled asphalt shingles (RAS) usually is available as pre-consumer (manufacturer waste) or post consumer (tear-off) products. Due to the extreme stiffness of the binder in these products, do not allow on airfield pavements. Contact the cognizant representatives of the Corps of Engineers Transportation Systems Center (TSMCX), the Air Force Civil Engineer Center (AFCEC) pavement subject matter expert (SME), or the Naval Facilities Engineering Command (NAVFAC) engineer for further guidance if RAS is being further considered.

Recycled asphalt shingles (RAS) is not allowed for the project.

Specification now addresses
(prohibits) RAS

ECHELON PAVING

3.9.3 Echelon Paving

If echelon paving is accomplished to minimize longitudinal cold joints, visually inspect the interface between the two paving lanes to ensure that the interface is not segregated or appears to be visually different from other sections of the course. If visual inspection identifies quality concerns, extract 1 randomly selected cores per subplot centered over the interface between the two paving lanes being placed. The requirements for density at the interface between the two echelon paved lanes are the same as that for the joint density specified in paragraph MAT AND JOINT DENSITIES.

- Add subparagraph under “Joints” to address the interface between the two paving lanes when echelon paving is performed.
- Current draft states only if visual inspection justifies (subjective).
- Uses joint density determination to encourage echelon paving.



QUESTIONS?



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