

Oklahoma Department of Transportation

Materials Division

Policy for Asphalt Mix Designs Approved for Projects

The policies that follow cover the processes and request submittals needed for asphalt mix designs to be approved for an Oklahoma Department of Transportation (ODOT) project. These policies are subject to revision to meet Department needs.

- A. [Process for Approval](#)
- B. [Process to Become an Approved Asphalt Mix Design Lab](#)
- C. [Process to Request Approved Asphalt Mix Designs for Use on ODOT Projects and Contact Information](#)
- D. [Process to Submit New Asphalt Mix Designs for Approval](#)
- E. [Approved Asphalt Mix Designs on the Web](#)
- F. [Request to Correct a Mix Design](#)
- G. [Request for JMF Change](#)
- H. [Request for PG or Asphalt Producer Change](#)
- I. [Request for Transfer](#)
- J. [RAS Mix Designs](#)
- K. [Revision Log](#)

Process for Approval

A general schematic of the process for asphalt mix design approval is titled "Mix Design Model" and can be found on the Materials Division website at the following link:

<https://oklahoma.gov/odot/business-center/materials/acmix-portal.html>

The latest version of the MicroSoft® Excel files approved for new asphalt mix designs may be downloaded at that website. Students attending the asphalt mix design level II certification course are given the password to download the files during an instruction session.

Process to Become an Approved Asphalt Mix Design Lab

A link to the lab qualification policy and list of qualified labs are following:

Lab Qualification Policy:

<https://www.odot.org/materials/pdfs/TESTLAB01.pdf>

List of Current Qualified Labs:

http://crystalweb.odot.ok.gov/report/viewer.aspx?reportpath=public/Materials_Division/11069.rpt&password=APEX

Once the lab has an "AD" listed inside the parentheses at the end of the Lab Name column at the website above, the asphalt mix design level II certified technician should contact the Asphalt Branch Manager for further instructions.

Contact the Materials Division Independent Assurance Supervisor at (405) 522-4985, for details about this process. ODOT Materials Division requires participation in two ASSHTO re:source proficiency sampling programs (PSP) and the lab listing ODOT as a specifying agency.

Process to Request Approved Asphalt Mix Designs for Use on ODOT Projects and Contact Information

A contractor signed form 93-E0.1 or form 93-E0 is required for an approved asphalt mix design to be assigned to a Contract for an ODOT project. The preferred method for submitting the form is by email sent to:

HMAMixSubmit@odot.org

If problems using the group email happen, email: David Vivanco dvivanco@odot.org or Jerry Smith jsmith1@odot.org.

The next method in order of preference is fax. Fax the signed form to the attention of the Asphalt Branch Manager at (405) 522-0552.

The final method is by letter. Mail the form to the attention of the Asphalt Branch Manager at:

Oklahoma Department of Transportation
Attn: Asphalt Branch Manager
5201 NE 122nd Street, Bldg 4011
Edmond, OK 73013

Signature forms 93-E0.1 and 93-E0 are available at the website listed in "Process for Approval". Form 93-E0.2 is similar to 93-E0.1 and 93-E0. It is the second or back sheet that will be attached to an approved asphalt mix design for that project. This form includes similar information as the other two forms and has the Materials Division Engineer's signature and transmittal or effective date. It states that the signed form is located in the project's records. The prime contractor may complete one of the two signature forms and submit it via one of the three methods previously explained.

If only a cover letter is submitted, the Asphalt Branch Manager will email the signature form partially completed for the prime contractor's signature. The contractor will submit the form to the Asphalt Branch Manager for final processing by one of the three methods listed earlier.

The final processing of a signature form that requests that an approved mix design be assigned to a project includes the signature of the Materials Division Engineer. The mix design is then added to SiteManagerTM and tied to the Contract listed on the signature form if applicable.

Courtesy emails of both the approved asphalt mix design and the signature sheet are sent to the parties as listed in the schematic as first explained. No hard copies will be sent.

Listed below are various types of requests for approved asphalt mix designs for ODOT projects:

1. New Mix Design for Various Purchase Order (VPO), Projects
2. New Mix Design with Transfer(s)
3. Corrected Mix Design
4. Job Mix Formula (JMF), Change
5. Asphalt Cement (AC), or Performance Grade (PG), Source Change
6. Transfer(s)

Process to Submit New Asphalt Mix Designs for Approval

The approved asphalt mix design lab will transmit the Excel file for new mix designs to the Materials Division's File Transfer Protocol (FTP), site. The Asphalt Branch Manager gives the FTP site address, user name and password to the approved asphalt mix design labs to do this. Additional steps in the approval process follows.

1. Submit specimens to the Materials Division's Asphalt Design lab for [OHD L-55](#) rut testing.
2. Allow fourteen days to complete rut testing before making inquiries.
3. Once testing is complete, a PDF copy of the new asphalt mix design will be emailed to the approved asphalt mix design lab for review.
4. If a problem is found, notify the Asphalt Branch Manager by email, HMAMixSubmit@odot.org, within twenty-four hours. Otherwise, the asphalt mix design will be assumed to be accurate and final processing will commence.
5. In certain cases, shortcuts for new designs can be made if the new design is based on an approved design.
 - a. In the case of a change in source for an Anti-Strip Additive (ASA), the designer may Email HMAMixSubmit@odot.org to request a copy of the original design data if needed.
 - b. The new data for the new mix design requires new AASHTO T 283 and [OHD L-55](#) rut tests performed by the central ODOT lab from freshly batched material or plant produced material. An approved lab may perform the AASHTO T 283 test.
 - c. In the case of a change in binder grade, the aggregates test data can be used from the approved mix design that it is based upon. All mixtures tests must be performed otherwise.

Approved Asphalt Mix Designs on the Web

The link to all approved asphalt mix designs available for project use (VPOs) was shown in the first link in "Process for Approval". The information in the files provided at this website should be reviewed prior to making requests for information already available in the files provided.

Request to Correct a Mix Design

No signature sheet is needed for corrected asphalt mix design requests. The approved asphalt mix design lab or asphalt producer or other parties involved in the process may request the change if the mix design is in error. If the contract numbers for projects using the design are

known, include this information.

Request for JMF Change

JMF change requests require documentation of test data on a trial or production mixture from an ODOT residency and a [qualified lab](#) to support the change to meet specification requirements for the project (one test result does not support a change). The asphalt producer or prime contractor may make this request. Using the test data supplied, the Materials Division Engineer / Bituminous Branch Manager will make the decision as to whether a JMF revision is warranted. Lab mold densities, Voids in Mineral Aggregate (VMA), gradation, mix durability and project specifications / special provisions will be considerations in the JMF change decision. A request for a change does not mean the request will be granted. Performance tests, AASHTO T 283 and AASHTO T 324 can be requested by the Materials Division for any JMF approval.

1. Only three JMF revisions will be approved by the Materials Division Engineer.
2. A JMF change will only reflect a change within the JMF tolerances from the original design.
3. If a mix design requires a fourth change or a change outside the original JMF tolerances, a new mix design will be required.
4. As with corrections, no signature form needs to be submitted.
5. Include the contract numbers for any projects with this mix design.
6. In the request, state the date that the change is to take effect. If the date is not listed, the date of the change will be the date of receipt. Dates of receipt are listed in the email, the fax or the post marked envelope.
7. The date cannot exceed seven calendar days from the date of receipt.
8. Only the Resident Engineer may approve dates beyond the seven-day limit. Should this be needed, documentation of his request will be required.
9. Every effort is made to process JMF change requests by the end of the next day.
10. The original mix design will be dated for termination in SiteManager™ fourteen days from the date of the new JMF modified mix design's effective date. The design is not approved for use when a new JMF modified design has been approved. The purpose is to allow more time for Residency personnel to enter past test data using the old mix design up to the date of the next JMF modified mix design.

Request for PG or Asphalt Producer Change

Performance Graded (PG) asphalt binder or asphalt producer source change requests are processed within fourteen days of the request. If dates of production are listed in the request showing an immediate need, every attempt will be made to expedite the process.

Source changes for Performance Graded (PG) asphalt binders PG 70-28, PG 76-28 and PG 76E-28 requires AASHTO T 283 and OHD L-55 tests performed by the central ODOT lab from freshly batched material or plant produced material for approval. An approved lab may perform the AASHTO T 283 test. Only the Resident Engineer or Bituminous Branch Manager may approve use of new mix design (AC source change) without the AASHTO T 283 and OHD L-55 tests complete. Should this be needed, documentation of his/her request will be required.

Request for Transfer

Transfer requests are usually processed within three days of the request for an approved asphalt mix design. Transfer requests included with a new asphalt mix design will be processed after the new mix design is approved. Other items related to transfer requests are listed below.

1. If dates of production are listed in the request showing an immediate need, every attempt will be made to expedite the process.
2. No transfer request will be approved if the approved asphalt mix design was not approved or not used on an ODOT project for the previous eighteen months.
 - a. A transfer request may be considered if the design meets the criteria for a JMF change request where a trial mixture shows that the material meets specification requirements.
3. A mix design will be removed from the approved list of designs after five years. It will not be approved for transfer to an ODOT project. The design will also be expired in SiteManager™. (Example, for 2020 projects, designs with original dates before 2016 will not be approved).
4. Request for transfer will not be approved if three consecutive test results for Voids in the Mineral Aggregate (VMA) or any design that fails three AASHTO T 283 tests within a twelve-month period will be terminated and not transferrable.
 - a. A transfer request may be considered if the design meets the criteria for a JMF change request where a trial mixture shows that the material meets specification requirements. Allow fourteen days to complete the two tests below prior to making inquiries.
 - i. The trial mixture shall be submitted to an approved asphalt mix design lab or the Materials Division, for AASHTO T 283 testing.
 - ii. An approved asphalt mix design lab may submit rut test specimens or submit trial mixture to the Materials Division's Asphalt Design lab for [OHD L-55](#) rut testing.
5. No mix design will be accepted for transfer from one asphalt producer to another.
6. Either all Hot-Mix Asphalt (HMA) or all Warm-Mix Asphalt (WMA) mix designs should be transferred to a project.
7. Only one type of HMA or WMA should be transferred to a project pay item. The exception to this rule will be for virgin mixes and mixes containing RAP.
https://www.odot.org/c_manuals/ccdirectives/con_ccd_19920713.pdf

RAS Mix Designs

Reclaimed Asphalt Shingles (RAS) are not allowed in HMA or WMA.

Revision Log

Revision 3/23/2017: Changed all instances of “Bituminous Engineer” to “Asphalt Branch Manager”. In the section named “Process to Request Approved Asphalt Mix Designs for Use on ODOT Projects and Contact Information”: deleted names and email addresses of Edward Schratwieser, Kenneth Hobson, and Rhonda Gittings, and added name and email address of Bobby Williams in the second paragraph and corrected zip code (from 73015-3204 to 73105) in the address block. Inserted words in some sentences which were missing words.

Revision 9/1/2017. In the section named “Process to Request Approved Asphalt Mix Designs for Use on ODOT Projects and Contact Information”: Deleted name and email address of Bobby Williams, and added name and email address of Kevin Sutor in the second paragraph. In the section named “Request for PG or Asphalt Producer Change”: Paragraphs two and three added defining the requirements of AC Source Changes for PG 70-28, PG 76-28 and PG 76-28E. Wording was changed in several sentences to better clarify the meaning or syntax.

Revision 5/4/2018: Updated URL of link to “List of Current Qualified Labs” in section “Process to Become an Approved Asphalt Mix Design Lab” (located on lower part of first page). Also updated “qualified lab” URL in first sentence of “Request for JMF Change” section (located on fourth page).

Revision 12/12/2019: On JMF changes, clarified JMF changes are at the approval of the Materials Engineer and are not guaranteed if requested. All JMF changes are to be within the original JMF tolerances. Mix designs are valid for 5 years only including the current year. If a mix design fails three AASHTO T 283 tests within a twelve-month period, the mix will be terminated. Mix designs are not transferrable from one contractor to another. Either all WMA or HMA designs are to be assigned to a project. Only one mix design will be assigned to a pay item at a time with the exception of virgin versus RAP mixes. Change to RAS section

Revision 7/7/2020: Punctuation and spelling changes.

Revision 1/4/2021: Updated URL for Mix Design Model in section “Process for Approval” (located near the center part of first page). Updated URL for Lab Qualification Policy in “Process to Become an Approved Asphalt Mix Design Lab” section (located near the lower part of first page). Updated all instances of “OHD L-55” URL. Also updated URL included in list bullet number 7 in section “Request for Transfer”.

Revision 7/15/2022: In the second paragraph of section named “Process to Request Approved Asphalt Mix Designs for Use on ODOT Projects and Contact Information”, changed name and email address from “Kevin Sutor ksutor@odot.org” to “David Vivanco dvivanco@odot.org”.