

Materials & Tests Unit

Local Administered Project

Pre-Construction Checklist



The following document is to be utilized as a general foundation for acceptance, basic requirements, and utilization of materials potentially incorporated on a LAP. All materials received on the project should be thoroughly reviewed prior to arrival on-site for; acceptance documentation, certification Type, sampling/testing frequencies and requirements, and recognition identification. Additional assistance is located within the Minimum Sampling Guide (MSG), NCDOT Specification book, M&T Webpage, HiCAMS, and Vendor.

- ☐ Obtain a “List of Materials” to be utilized for the project, if possible, prior to the pre-con meeting. Review the list and only reference the bullets that apply. If a List of Materials is not available, have the list emailed to the M&T LAP representative.
- ☐ Inform attendees, a “Local Administered Project Materials Acceptance Guide” is available at the following link: <https://inside.ncdot.gov/stage/connect/resources/Materials/LAP/Pages/default.aspx>
- ☐ Note to all attendees: ***All materials are not represented in this guide. If a material or material operation is not listed in this guide, please contact your local materials LAP representative or M&T’s “Material Certification Program Engineer” for assistance.***
- ☐ Inform the CEI contact who the M&T LAP representative is and his/her contact information (this is not the AME, SMS, or SMT).
- ☐ Note to the CEI firm and Town/City representative:

A “Material Certification” is conducted at the end of the construction phase, prior to final payment. During this process ALL line items/pay items are reviewed and verified. EACH line item shall have the required documentation, legible, and kept on file for verification during the “Material Certification” process. If the documentation does not meet the specifications and/or requirements, a non-participating amount will be assigned, and funds withheld.
- ☐ Use only approved producers and manufacturers on the NCDOT Approved List. Recommend printing off approval facilities from the website before accepting materials. All invoices, 3rd party receipts, and certification documents must contain the original origin for the individual material credentials.
- ☐ If the project is utilizing precast units and/or materials, all items must come from an approved source, utilize the RFID Tracking, be pre-inspected and approved to be fully acceptable. There will be no M&T on-site inspection/approval for items not meeting these requirements.
- ☐ If the project is utilizing prestress units and/or materials, all items must come from an approved source, utilize the RFID Tracking, be pre-inspected and approved to be fully acceptable. There will be no M&T on-site inspection/approval for items not meeting these requirements.
- ☐ If the project is utilizing fabricators and/or a pedestrian bridge: see section 6 “NCDOT Resources and Links” in the LAP guide for specifics. Note to prime contractor, there are specific requirements and specifications that shall be obeyed, or non-participating amounts will be applied. There will be no M&T on-site inspection/approval for items not meeting these requirements.
- ☐ If the project is incorporating any steel and/or iron products, A “Buy America” guarantee must be submitted prior to acceptance of material and notarized. Additional details can be found in section 106 of the “NCDOT Standard Specifications For Roads And Structures”.
- ☐ Materials are received by MRR format or shipping ticket.

- Materials received by the MRR format:
 - Certifications, invoices, and receipts shall have the associated “Line Item” indicated on the documentation.
 - If a material requires a “Certification Type” documentation, it shall be attached to its respective MRR.
 - Reference section 7 “Certification Types and Examples” in the LAP guide.
- Materials received by utilizing a shipping ticket:
 - Must come from an approved producer/supplier.
 - Shall require a “Weighmaster” verification.
 - The weighmaster verification shall be SIGNED and/or INITIALED.
 - The signature and/or initials shall be a hard signature/initials, or electronic signature/initials.
 - If the Weighmaster’s signature and/or initials is not present and legible, the material should not be accepted, and payment withheld.
 - If a weighmaster stamp appears on the ticket, it must display a current, active certification date and shall be signed/initialed (hard or electronic).
 - Every ticket is required to meet the above documentation.
 - Additional required documentation can be found in the NCDOT Specification Book, Section 106-7, page 1-51, or section 9, “LAP Material Acceptance Guide – General Requirements” in the LAP guide.
- All on-site acceptance testing shall be conducted by active, fully certified technicians. Copies of all technicians’ certifications shall be placed in the project files and verified during the material certification phase. Acceptance testing conducted by technicians not meeting these requirements will result in non-participating amounts. Reference section 9.5 “Concrete – On-Site Concrete Testing” in the LAP guide.
- Concrete test specimens are accepted based on 28-day strengths ONLY. All other strengths are considered information only and will not be submitted as acceptance results.
- Laboratory Acceptance Testing: laboratory acceptance testing is accepted by either utilizing the central or regional NCDOT M&T laboratory or utilizing a 3rd party – non NCDOT laboratory.
 - Reference section 13.1 “NCDOT Central and Regional Laboratories” and 13.2 “Non-NCDOT or 3rd Party Laboratories” in the LAP guide.
 - Laboratories with WACEL and/or NICET certifications are not acceptable laboratories for testing materials on LAP’s.
- Laboratory Testing Technicians: Reference section 13.3 “Non-NCDOT or 3rd Party Laboratory Testing Technician” in the LAP guide.

The following are general bullets to review, if they apply to the pre-con meeting:

- Seed: NCDOT approved seed utilizing the orange tags, is being phased out, but still acceptable. If the seed does not have an orange tag, it must be verified by using the web link. Reference section 9 in the LAP guide.
- Qualified Products List (QPL) - is a list of pre-qualified products accepted by NCDOT to be used on LAP’s. All QPL products shall be verified, documented, and received on the MRR. Although products are listed on the QPL, they must submit the correct material certifications as required and listed in the Standard Specifications.
- “Data Sheets” and copies of “Catalog Cuts” are not accepted as “Material Certification Types”. These documents are for information only and will not be accepted in the material certification process.
- Specialized materials/items (ie. decorative or unique city/town elements) are required to have a “Letter of Acceptability” signed by Division for acceptance. This letter must remain in the project files and verified during the material certification process.
- CEI firms responsible for sampling and testing shall place in the project file a list of all Technicians and their active/current certifications including certification numbers.

- ☐ Lump Sum: line items which are labeled “Lump Sum” shall supply a detailed, all-encompassing, list of materials within the line item.
- ☐ “Traffic Control” items shall be accounted for and documented on a MRR and certification documentation attached.
- ☐ Plantings, trees, shrubs, and nursery stock items are required to submit a “NC Department of Agriculture” certificate. This certificate must be active the year material is received.
- ☐ Geotextiles – reference section 9.7 “Geotextiles” in the LAP guide.
- ☐ ADA compliant material/items certification is required when received on-site.
- ☐ Timber materials must meet the requirements as stated in the NCDOT Specification Book, Section 1082, page 10-177. Documentation must be present in the project files. There is an exception regarding split rail/wooden fencing – these items are acceptable through local agencies.
- ☐ Handrails: Contact the M&T Coatings and Corrosion Engineer. All handrail must have NCDOT approved drawings and require an inspection at completion of installation. If handrails do not receive a final M&T inspection and approval, this line item may receive non-participating funds.
- ☐ Concrete placed on the project shall have the following:
 - Approved Mix Designs (send to concretedesigns@ncdot.gov)
 - Approved Ready Mix Facility
 - On-Site sampling Technician must be active ACI and NCDOT certified
 - Documentation: document on MRR & Line Item, completed 903, completed 250, all documents must be legible.
 - Strength test result reports for 28 day strengths. Early breaks are **NOT** acceptable.
 - AASHTO Certified Laboratory to break cylinders
- ☐ Asphalt placed on the project shall have the following:
 - Approved JMF
 - Approved asphalt facility
 - NCDOT certified Technician for sampling and testing
 - Documentation: document Line Item # on ticket, type, and completed 605
 - Asphalt tickets are signed/initialed and stamped by NC Weigh Master
 - On-site inspector should note station number of placement
 - Density and/or core test reports
 - See NCDOT Specification Book, Section 106-7.
- ☐ Pipe (Concrete, Metal, HDPE)
 - All categories of pipe shall come from an approved producer/supplier.
 - All pipe received on the project must utilize the RFID Tracking system.
 - The RFID number shall be verified as “Available” status.
 - All pipe shall arrive with a Bill of Lading and include the RFID tracking number.
- ☐ Precast, Prestress members shall have the following:
 - NCDOT Approved facility
 - Approved drawings
 - Pre-Inspected by NCDOT Materials & Tests, or representative – prior to arrival on-site
 - FRID identification tag
 - Document/received on MRR, type, and Line Item
 - Verified pieces/item has been documented in HiCAMS
(<https://apps.ncdot.gov/vendor/approvedproducts/PrecastLookup.aspx>)
 - Bill of Lading (BOL) assigned to pieces/item – arrive on site **WITH** materials
- ☐ Steel/Pre-fabricated Structural Members shall have the following:

- NCDOT approved manufacturer
 - Approved drawings
 - Documentation/certification stating original origin of steel
 - Pre-Inspected by NCDOT Materials & Tests, or representative – prior to arrival on-site
 - Document/received on MRR, type, and Line Item
 - **Contact M&T Steel Section ASAP if a prefab metal bridge/pedestrian bridge is utilized on project.**
- ☐ Aggregate materials must have the following:
- NCDOT approved facility
 - FA# and/or CA# shall be documented on ticket
 - Aggregate weight tickets are signed and stamped by NC Weigh Master
 - Aggregate tickets shall document; on-site inspectors signature/initials, station numbers, location, line item #, and date.
- ☐ Cast Iron Material (grates, frames, hoods, manhole rings and covers, etc.):
- Currently only two companies supply these materials:
 - U.S. Foundry (CI2) stamp- USF NC DOT
 - East Jordan Ironworks (CI3, CI5 & CI10) stamp- NCDOT EJIW QC
 - The date, along with the foundry ID number is the alternate ID
 - A BOL from the foundry manufacture will accompany the material
 - A material certification which will include a reference to the foundry, alternate ID, and/or lot number.
 - These items are pre-inspected at the facility by Materials and Tests.
- ☐ Cast Iron Products:
- Producers that have been supplying NCDOT with cast iron products for five or more years and are in good standing will no longer be required to submit a Form CI-01 with their shipments. These Producers will now supply a Type 3 - Manufacturer's Certification with their shipments and will stamp items with the foundry's white QC stamp.
 - The HiCAMS Minimum Sampling Guide (MSG) has also been updated. The MSG will no longer require a matching ALT ID for receiving cast iron items. Inspectors should verify that cast iron products such as frames, grates, and lids have a Producer's white QC stamp and are accompanied by a completed Type 3 - Manufacturer's Certification.
 - Cast iron products that arrive on a project already incorporated into a precast item (frame is cast into a lid for example) will be accepted as part of the precast concrete item. Verification of the cast iron's QC check and Type 3 Certification will be conducted by the Materials and Tests Unit Precast Inspector during inspection at the precast facility. This check will be noted on the item's Field Inspection Report (FIR) in HiCAMS. Cast iron products that are added to the precast structure on a project site should continue to be received separately from the precast items.