

Lean Concrete Base Course

Project No: _____

Date: _____

Reviewer: _____

Time Elapsed: _____%

Work Completed _____%

In Company With: _____

Specification Requirements

Slump _____ inch to _____ inches

Air Content _____% to _____% (4.5" \pm 1.5)

Cement Content _____ sack/CY

Thickness _____ inches

Mix Design Strength - Type I Cement _____ (at 7 days)

Type II Cement _____ (at 7 days)

References

Lean Concrete Base Course - - LCB (Sheets 1 through 6)

Portland Cement Concrete Pavement - - PCCP (Sheets 1 through 23)

Plant Site

1. Has the contractor's mix design been reviewed and approved? Was Type I or II cement used in the mix design? (LCB sheets 1 & 3).
2. Have the stockpiles of aggregate been tested and accepted (not more than 7 days before intended use)? (LCB sheet 2).
3. Is the material passing the No. 40 sieve non plastic? Have the gradation limits been achieved (check on variation from trial batch gradation-percent)? (LCB sheets 1 & 2).
4. Have any admixtures other than air-entraining agents been approved for use? (LCB sheet 2)
5. Are there two separate water lines for insertion of water into the mixing drum? If used, are water reducing admixtures injected into one line and air-entraining agent into the other? (LCB sheet 3, PCCP sheet 12).
6. Is the batch plant equipped with a numerical printout device that will make a continuous, permanent, and accurate record of the weights of cement, gravel, and sand as well as the

amount of water and additives used in each batch of concrete with the time of day for each batch shown in hours, minutes, and seconds? (LCB sheet 3, PCCP sheet 9).

7. Have the batch plant scales and water meter(s) been certified and sealed by the State Department of Agriculture? If so, what date? (LCB sheet 3, PCCP sheet 12).
8. Is the mixing time 80 seconds or greater after all materials are in the drum? Has the engineer approved a shorter mixing time (minimum of 60 seconds) based on an efficiency test using design mix materials? (LCB sheet 3, PCCP sheet 12).
9. Is the concrete being sampled from the haul trucks with a square mouth shovel at the batch plant platform? (LCB sheet 3, PCCP sheet 7).
10. Have slump and air tests been taken on the first three truck loads of concrete produced each morning and the first three truck loads produced after shutdown of more than one hour, and any out of specification tests will require three consecutive loads to be tested and accepted before full operation resumes? (LCB sheet 3, PCCP sheet 8).
11. Are additional slump and air tests made on a random basis throughout the day by means of random number tables? At what frequency are tests made? (LCB sheet 3, PCCP sheet 8).
12. Has the batching operation been slowed down to allow completion of each slump and air test before the next batch is made so test results can be communicated to the batch plant operator and necessary corrections can be made (first three loads)? (LCB sheet 3, PCCP sheet 8).

13. Are the trucks used to haul concrete from the batch plant to the paver flat bottom end dump with essentially water tight end gates and bottoms with rounded inside corners? (LCB sheet 3, PCCP sheet 9).

Project Site

1. Is the lay-down equipment equipped with a control system which will automatically control the laying of the materials to the specified longitudinal grades? (LCB sheet 3, PCCP sheet 9).
2. Is the slip-form paver equipped with vibrators meeting the following requirements? (LCB sheet 3, PCCP sheet 10).
 - a. Eccentric diameter - - 1 7/8 inch?
 - b. Frequency - - 9,500 vibrations per/minute minimum in concrete or equivalent in air?
 - c. Spacing - - 18" maximum mounted longitudinally?
 - d. Are they operated horizontally at the midpoint of the concrete slab and mounted parallel to the direction of paving?
 - e. Is each vibrator equipped with a gauge or other device that will indicate whether or not the vibrator is operating? Is the gauge or other devices mounted on the paving machine so they can be easily seen by the operator and the inspector?
3. The subbase shall be in a moist condition at the time LCB is placed. Has the subbase been thoroughly watered not less than 6 hours prior to placing concrete? Has at least 500 feet

- of subbase been prepared ahead of the paver? (LCB sheet 3).
4. Has the mixed LCB been discharged from non-agitating hauling equipment and processed by the initial power lay-down machine within 35 minutes after introduction of the mixing water to the cement and aggregates? (LCB sheet 4, PCCP sheet 12).
 5. Has the LCB been deposited in such a manner as to require as little rehandling as possible? (LCB sheet 4, PCCP sheet 13).
 6. Has any water been added to the pavement surface behind the final screed on the paver? (LCB sheet 4, PCCP sheet 13).
 7. Is the LCB surface being checked with a straight edge, chalk-line or profilograph to see if the 3/8 inch in 10 feet deviation is being met? Are the areas that are high in excess of 1/4 inch being recorded or marked for grinding? (LCB sheet 4).
 8. Is the entire exposed area, including sides and edges, of the LCB being cured by uniformly spraying with two applications of curing compound at a rate of not less than one gallon per 160 SF of surface per application? Does the curing compound conform to AASHTO Designation M-148, Type II, white pigmented, with wax base? (LCB sheets 2 & 4). How is the application rate being monitored?
 9. Is the first application of curing compound being placed as soon as the finishing operations have been completed? (LCB sheet 4)
 10. Has curing compound been applied with mechanical sprayers of the fully atomizing type and are they provided

with a hood to protect the spray from the wind? (LCB sheet 4).

11. Has traffic or the contractor's equipment been permitted on the LCB before a period of at least 72 hours has elapsed after placing? (LCB sheet 4).
12. Have the core thickness values been plotted on graph paper showing thickness values per 12,000 SF areas? Have there been any deficient areas of LCB? If so, have the appropriate price adjustments been assessed? (LCB sheet 5 & 6).

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