

**GRAY SUMMIT, MISSOURI**  
**HIGHWAY ATTACHMENT 10 FHWA WORK ZONE INSPECTION**  
**REPORT**  
**5 PAGES**



## INSPECTION REPORT

 US Department of Transportation  
 Federal Highway Administration

CONTRACT ID:	090626-604
PROJECT NO.:	I-44-3(101)
JOB NO.:	J6I2011
ROADWAY:	I-44

INSPECTION TYPE (Check appropriate box)

<input checked="" type="checkbox"/> INITIAL INSPECTION	<input type="checkbox"/> INTERMEDIATE INSPECTION	<input type="checkbox"/> FINAL INSPECTION	<input type="checkbox"/> INSPECTION-IN-DEPTH
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DATE PREPARED	REPORT NO.	COUNTY	DIVISION		
7/12/10	One	Franklin	Missouri		
INSPECTION MADE BY: Greg Budd, Urban Transportation Engineer					
IN COMPANY WITH: Tim Hellebusch, Resident Engineer					
DATE OF INSPECTION	QUALITY OF WORK	PROGRESS OF WORK	TIME ELAPSED	WORK COMPLETED	
06/16/2010	Satisfactory	Unsatisfactory	71%	34%	
DBE GOAL	TRAINEE HOURS	AWARD DATE	NOTICE TO PROCEED	CONTRACT TIME	CONTRACT AMOUNT
14%	3000 hrs	07/08/09	08/10/2009	432 days	\$17,377,494.68
PROJECT LOCATION I-44 from Route 100 west exit to west of Viaduct Street (Pacific)			CONTRACTOR NAME Fred Weber, Inc.		
PROJECT SCOPE OF WORK Grading, paving, and drainage on I-44 from Route 100 to west of Viaduct Street in Pacific.					

### Scope of Inspection:

The purpose of this inspection was to meet the project staff, review project files, and inspect ongoing and completed work for conformance with contract requirements. This is the initial on-site inspection performed for this project.

### Major Work Complete:

At the time of this inspection the following work has been completed on the project:

- Installation of concrete pipe and drainage inlets for the median storm drainage system is complete; work completed to date was reviewed and found to generally conform to the contract requirements, no problems or deficiencies were noted;
- Construction of the 14' inside travel lane, in both the WB and EB directions of travel, has been completed. The pavement consists of 10" of PCC pavement. The completed work was reviewed and found to generally conform to contract requirements unless stated otherwise in the 'Finding' section of this report; the following was noted:
  - Curing compound on the finished concrete driving surface was considered adequate; it was noted that the sides of the slab did not have adequate coverage at some locations;
  - Surface texturing appeared adequate;
  - No cracks or other surface irregularities were noted; the only observed cracking appeared at the saw joint locations;
  - The edge of slab exhibited no sloughing;
  - Overall quality of the work appeared good.
- Construction of the inside A2 shoulder had begun the previous night; all concrete work on the project is being completed during night operations. Approximately 1000' of shoulder had been installed. The completed work was reviewed and found to be acceptable.

### Current Work Activities:

At the time of this inspection, the contractor was performing the following:

- Completing sawcutting operations from the previous nights concrete pour; a review of this work revealed no problems or deficiencies;

- Fine grading in the center median for the continued construction of A2 shoulders. A visual inspection of the base revealed no apparent problems or deficiencies. Compaction of the base materials appeared adequate, with no soft spots or other deficiencies noted.
- The contractor was set to continue construction of the A2 shoulder that same night.

Ongoing work activities were considered satisfactory, with no apparent problems or deficiencies noted.

#### Work Progress:

The contractor has completed approximately 34% of the work with approximately 71% of time elapsed. Concerns regarding the contractor's apparent slow progress were discussed with the RE. The RE indicated that much of the prep work had been done and the contractor began paving operations on 5/24/10; additionally, the contractor is currently working 20 hour days. It was felt that these should help bring the construction progress more in line with the contract elapsed time. The contractor's current schedule shows work being completed on time. This situation will continue to be monitored during future inspections.

Due to the above, current progress is considered unsatisfactory, but will be reevaluated on the next inspection.

#### Project and Test Records Reviewed:

It was reported that a maturity meter was being used to assess concrete strength, to determine when the newly placed concrete could be open to construction traffic; results to date have been good with no problems encountered.

PCC paving began on 5/24/10, therefore no 28-day strength breaks were available for review at the time of this inspection; results for concrete strength will be checked and reviewed during the next inspection of this project.

The QC test results for aggregate base were reviewed and found to generally be acceptable. It was noted that the standard form used to record the test results included a column to show specification limits for the different gradation ranges, but that this column had been left blank.

The monthly ARRA reporting documentation was checked and was generally considered satisfactory. Project staff indicated that the required reports are always delivered on time, with none being turned in late, to date. It was noted, however, that the most recent submittal had not been signed by the contractor; a spot check of prior month submittals revealed that other monthly submittals had also not been signed.

#### Project Staffing:

Project staffing consists of the following:

- Tim Hellebusch, Resident Engineer;
- Brian Fleer, Project Manager/Senior Inspector;
- Bruce Wright, Intermediate Inspector;
- Jeff Lappe, Intermediate Inspector (shared with adjacent project J6I0735D)

As the majority of ongoing work is localized concrete paving, the staffing was considered adequate.

#### Erosion and Siltation:

The erosion control file was reviewed, no problems were noted. Inspections of erosion control devices are conducted weekly and after storm events, inspection reports were reviewed with no deficiencies found. The erosion control file was considered well documented.

#### Work Zone Traffic Control:

Traffic control devices in place at the time of this inspection were reviewed and found to be acceptable, no problems or deficiencies were noted. The speed limit through the project is set at 50 MPH due to narrowed lanes to accommodate the on-going paving operations; this speed appeared adequate for the conditions.

Project staff has weekly meetings with District traffic personnel regarding the adequacy of the project work zone; the District assesses the adequacy of work zones on all projects throughout the District on a regular basis and reports problems to project staff.

Work Orders, Changes and Possible Claims:

Two change orders are being processed, and should be submitted to FHWA in the near future. The first is to adjust the final quantity of drainage inlets. The second is for a VECP to modify the PCC barrier type to a 'California Type' barrier; this VECP results in a savings of approximately \$50k, after the cost share with the contractor.

Based on discussion with project staff, no problems with the upcoming change orders are anticipated.

Disadvantaged Business Enterprises:

The project has a 14% DBE goal; the contractor has submitted a DBE certification committing to meeting the project goal. Three DBE subcontractors have been identified for work consisting of guardrail installation, temporary concrete barrier, dowel baskets, PCC bond breaker, and saw cutting.

VECP #1 has been approved, modifying the construction staging on the project and resulting in a reduction in the quantity of temporary concrete barrier; as it was planned to use a DBE firm to supply and install the temporary barrier, this change has resulted in a reduction in the planned DBE work on the project, causing the contractor to fall below the 14% project DBE goal. The VECP was approved contingent upon the contractor making up the lost DBE work; a copy of the approval letter with this contingency was reviewed. The contractor made up the deficiency through an increased use of DBE trucking and hauling services.

Labor Compliance, OJT, and EEO:

The contractor employee interview file was reviewed, the documentation included in the file was found to be acceptable and included interviews with both the prime contractor and subcontractors. No problems or deficiencies were noted.

The prime and subcontractor payroll submittals were spot checked for conformance to minimum wage rate requirements; wage rates were checked for the following individuals:

Bruce Macleary, Laborer, Tramer Contracting, minimum wage required \$26.02, actual wage \$27.72  
CONFORMS

Orian Wymer, Operator, Fred Weber, Inc., minimum wage required \$28.17, actual wage \$30.67  
CONFORMS

There is a 3000 hour OJT goal for this project. Project staff provided documentation showing 3 trainees have been used on the project for a combined total of 915.5 hours. Staff indicated that the OJT goal will be met on this project.

Bulletin Board:

Project staff conducts formal bulletin board inspections every other month on the project, with the last inspection conducted on 6/15/10 showing no deficiencies. The bulletin board was checked in the field, no problems or deficiencies were noted.

Findings/Comments/Conclusions/Recommendations:

Results of this inspection conclude that this project is being administered and constructed in general conformance with the contract requirements. The quality of work completed to date was considered satisfactory. The progress to date is considered unsatisfactory, but it is assumed that the initiation of the paving operations over the past month will improve the progress. The following items were noted on this inspection:

- As noted in the 'Major Work Complete' section, the sides of the completed pavement slab had not received a coating of curing compound as required. All exposed surfaces of PCC pavement must be cured in accordance with the specification requirements;
- As noted in the 'Project and Test Records' section, multiple monthly ARRA reporting submittals had not been properly signed by the contractor. The project staff was informed that these documents are required to have the formal signature of the contractor upon submittal.
- As noted in the 'Project and Test Records' section, the specification limits were left blank on the contractor's QC reporting forms. It is recommended that the spec limits be added in the spaces provided, this will more clearly show passing and failing results.