



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

February 25, 2005

SUBJECT: FAI Route 80 & FAU Route 6108 (I-80 & IL 351)
Project ACIM-ACF-000S(455)
Section (50-2)HBR & (71X)N & TS-1
LaSalle County
Contract No. 86603
Item No. 93, March 11, 2005 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS: :

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised pages i - iv of the Table of Contents to the Special Provisions.
2. Revised pages 3, 47, 48, 124 & 125 of the Special Provisions.
3. Added pages 150 – 152 to the Special Provisions.
4. Added sheet 174A to the Plans.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Michael L. Hine
Engineer of Design
and Environment

A handwritten signature in cursive script, reading "Ted B. Walschleger" followed by "P.E." in a smaller font.

By: Ted B. Walschleger, P. E.
Engineer of Project Management

cc: Gregg Mounts; N. R. Stoner; Roger Driskell; R. E. Anderson; Jim White; Design & Environment File

TBW:MS:jc

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Revised 02-25-2005

COMPLETION DATE

Effective February 16, 2001

All work associated with this project shall be completed on or before August 1, 2006.

In addition, the following requirements shall apply:

- All pavement in the Civic Road intersection shall be complete and open to traffic on or before August 15, 2005.
- Structure Number 050-0230 and Ramps E & F shall be complete and open to traffic on or before December 15, 2005.
- Between the dates of December 15, 2005 and March 1, 2006 Interstate 80 traffic shall be returned to its original alignment and no temporary concrete barrier wall shall be in place.

GRANULAR SUBGRADE REPLACEMENT

(Effective July 1, 1994; Revised January 1, 2002)

The Standard Specifications for Section 210, Fabric for Ground Stabilization, shall be revised as follows:

The second sentence in the first paragraph of Article 210.04, Placement of Granular Blanket, shall be revised to read:

Subbase Granular Material, Type A and Subbase Granular Material, Type C shall be used in conjunction with the Geotechnical Fabric under this provision. The requirements of Section 311 of the Standard Specifications shall apply to these items.

In the Standard Specifications, Article 1004.04(c), paragraph 4 shall be revised to permit optional use of the following gradation in addition to the gradations listed for Subbase Granular Material, Type C.

<u>Sieve Size</u>	<u>Percent Passing</u>
63 mm (2 1/2")	100
50 mm (2")	93 + 7
12.5 mm (1/2)	30 + 30
4.75 mm (No. 4)	6 + 6
1.18 mm (No. 16)	4 + 4

The third paragraph in Article 210.04, Placement of Granular Blanket, shall be deleted. Placement and compaction of granular material shall be as specified in Section 311 of the Standard Specifications.

Delete the second sentence in Article 210.05 and the second paragraph in Article 210.06. Method of Measurement and payment shall be as follows:

Material removed (undercut areas) shall be used in roadway embankment outside the limits of the shoulders and will be paid for at the contract unit price per cubic meter (cubic yard) for EARTH EXCAVATION.

Revised 02-25-2005

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

1021.04 Set Accelerating Admixtures. The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)"

80094

Revised 02-25-2005.

CORRUGATED METAL PIPE CULVERTS (BDE)

Effective: August 1, 2003

Revised: July 1, 2004

Revise the fourth paragraph of Article 542.04(d) of the Standard Specifications to read:

“When corrugated steel or aluminum alloy culvert pipe (including bituminous coated steel or aluminum and pre-coated steel) is used, the pipe shall be placed such that the longitudinal lap is placed at the sides and separate sections of pipe shall be joined with a hugger-type band. When the pipes are fabricated with a smooth sleeve-type coupler, the gasket shall meet the requirements of Article 1006.01.”

Add the following paragraph after the first paragraph of Article 1006.01 of the Standard Specifications:

“Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of 45 ± 5 (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe.”

Delete the last sentence of the first paragraph of Article 1006.01(a) of the Standard Specifications.

Add the following paragraph after the first paragraph of Article 1006.03 of the Standard Specifications:

“Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of 45 ± 5 (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe.”

80102

CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)

Effective: January 1, 2004

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

“Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete.”

Revised 02-25-2005

The Contractor shall provide a manufacturer's self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device."

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

"Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes."

Add the following to Article 702.03 of the Standard Specifications:

"(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic."

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

"When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. "ROAD CONSTRUCTION AHEAD" signs will also be required on side roads located within the limits of the mainline "ROAD CONSTRUCTION AHEAD" signs."

Delete all references to "Type 1A barricades" and "wing barricades" throughout Section 702 of the Standard Specifications.

80097

Revised 02-25-2005

FLOATING BEARINGS

Effective: October 13, 1988

Revised: June 21,2004

Description. This work shall consist of furnishing and installing floating (pot type) bearing assemblies as shown on the plans.

Floating bearings shall be the following types:

- | | |
|-----------------------|---|
| Fixed: | Allows rotation in any direction and fixed against translation. |
| Guided Expansion: | Allows rotation in any direction and translation in limited directions. |
| Non-Guided Expansion: | Allows rotation in any direction and translation in any direction. |

The floating bearings shall be of the type specified and designed for the loads shown on the plans. The design of the top and bottom bearing plates are based on detail assumptions which are not applicable to all suppliers and may require modifications depending on the supplier chosen by the Contractor. The overall depth dimension for the floating bearings shall be as specified on the plans. The horizontal dimensions shall be limited to the available bearing seat area. Any modifications required to accommodate the bearings chosen shall be submitted to the Engineer for approval prior to ordering materials. Modifications required shall be made at no additional cost to the State. Inverted pot bearing configurations will not be permitted.

The Contractor shall comply with all manufacturer's material, fabrication and installation requirements specified.

Submittals. Shop drawings shall be submitted to the Engineer for approval according to Article 105.04 of the Standard Specifications. In addition the Contractor shall furnish certified copies of the bearing manufacturer's test reports on the physical properties of the component materials for the bearings to be furnished and a certification by the bearing manufacturer stating the bearing assemblies furnished conform to all the requirements shown on the plans and as herein specified. Submittals with insufficient test data and supporting certifications will be rejected.

Materials. The materials for the floating bearing assemblies shall be according to the following:

Revised 02-25-2005

SLIPFORM PARAPET
Effective February 25, 2005

The following shall replace Article 503.17(e)(1) of the Standard Specifications.

- (1) Slipforming. At the option of the Contractor, concrete parapets may be constructed by slipforming in lieu of the conventional forming methods. The slipform machine shall have automatic horizontal and vertical grade control and be approved by the Engineer.

The concrete mix design may combine two or more coarse aggregate sizes, consisting of CA-7, CA-11, CA-13, CA-14, and CA-16, provided a CA-7 or CA-11 is included in the blend in a proportion approved by the Engineer.

The slipform machine speed shall not exceed 1.2 m (4 feet) per minute. Any section of parapet placed with the slipform machine moving in excess of the maximum allowed speed will be rejected. The contractor shall schedule concrete delivery to maintain a uniform delivery rate of concrete into the slipform machine. If delivery of concrete into the slipforming machine is interrupted by more than 10 minutes, the portion of the wall within the limits of the slipform machine will be rejected.

If the Contractor elects to slipform, the parapet cross-sectional area and reinforcement bar clearances may be revised according to the detail for Concrete Parapet Slipforming Option.

For parapets adjacent to the watertable, the Contractor shall use the alternate reinforcement as shown in the detail for Concrete Parapet Slipforming Option at no additional cost to the Department. For parapets at other locations or for median barriers on bridge decks, the Contractor may propose alternate reinforcement and stiffening details subject to the approval of the Engineer.

The use of cast-in-place anchorage devices for attaching appurtenances and/or railings to the parapets will not be allowed in conjunction with slipforming of parapets. Alternates means for making these attachments shall be as detailed on the plans or as approved by the Engineer.

All reinforcement bar intersections within the parapet cross section shall be 100 percent tied to maintain rigidity during concrete placement. At pre-planned sawcut joints in the parapet, Glass Fiber Reinforced Polymer (GFRP) reinforcement shall be used to maintain the rigidity of the reinforcement cage across the proposed joints (See Detail for Concrete Parapet Slipforming Option).

Glass Fiber Reinforced Polymer (GFRP) reinforcement shall be subject to approval by the Engineer. Other non-ferrous reinforcement may be proposed for use but shall be subject to approval by the Engineer.

For projects with plan details specifying parapet joints spaced greater than 6 meters (20 feet) apart, additional sawcut joints, spaced between 3 meters (10 feet) and 6 meters (20 feet), shall be placed as directed by the Engineer. The horizontal reinforcement extending through the proposed joints shall be precut to provide a minimum of 100 mm (4 inch) gap, centered over the joint, between rebar ends. The ends of the reinforcement shall be repaired according to Article 508.05.

Added 02-25-2005

After the slipform machine has been set to proper grade and prior to concrete placement, the clearance between the slipform machine inside faces and reinforcement bars shall be checked during a dry run by the Contractor in the presence of the Engineer. The dry run shall not begin until the entire reinforcing cage has been tied and the Engineer has verified and approved the placement and tying of the reinforcing bars. Any reinforcement bars found to be out of place by more than 13 mm (1/2 in.), or any dimensions between bars differing from the plans by more than 13 mm (1/2 in.) shall be re-tied to the plan dimensions.

During the dry run and in the presence of the Engineer, the Contractor shall check the clearance of the reinforcement bars from the inside faces of the slipform mold. In all locations, the Contractor shall ensure the reinforcement bars have the minimum cover distance shown on the plans. This dry run check shall be made for the full distance that is anticipated to be placed in the subsequent pour. Reinforcement bars found to have less than the minimum clearance shall be adjusted and the dry run will be performed again, at least in any locations that have been readjusted.

The aluminum cracker plates as detailed in the plans shall be securely tied in place and shall be coated or otherwise treated to minimize their potential reaction with wet concrete. In lieu of chamfer strips at horizontal and vertical edges, radii may be used. Prior to slipforming, the Contractor shall verify proper operation of the vibrators using a mechanical measuring device subject to approval by the Engineer.

The top portion of the joint shall be sawcut as shown in Detail for Concrete Parapet Slipforming Option. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive raveling. All joints shall be sawed to the full thickness before uncontrolled shrinkage cracking takes place but no later than 8 hours after concrete placement. The sawcut shall be approximately 10 mm (3/8 in.) wide and shall be performed with a power circular concrete saw. The joints shall be sealed with an approved polysulfide sealant, conforming to Article 1050.03, to a minimum depth of 12 mm (1/2 in.), with surface preparation and installation according to the manufacturer's written instructions. Cork, hemp or other compressible material may be used as a backer. The sawcut will not require chamfered edges.

~~Ends of the parapet shall be formed and the forms securely braced. Parapets at light standards, shall be formed for a minimum distance of 1.2 m (4 ft) on each side of the exception.~~

For acceptance and rejection purposes a parapet section shall be defined as the length of parapet between adjacent vertical parapet joints.

The maximum variance of actual to proposed longitudinal alignment shall not exceed ± 20 mm (3/4 in.) with no more than 6 mm in 3 m (1/4 in. in 10 ft). Notwithstanding this tolerance, abrupt variance in actual alignment of 13 mm in 3 m (1/2 in. in 10 ft) will be cause for rejection of the parapet section.

In addition, all surfaces shall be checked with a 3 m (10 ft) straight edge furnished and used by the Contractor as the concrete is extruded from the slipform mold. Continued variations in the barrier surface exceeding 6 mm in 3 m (1/4 in. in 10 ft) will not be permitted and remedial action shall immediately be taken to correct the problem.

Added 02-25-2005

The use of equipment or methods which result in dimensions outside the tolerance limits shall be discontinued. Parapet sections having dimensions outside the tolerance limits will be rejected.

Any visible indication that less than specified cover of concrete over the reinforcing bars has been obtained, or any cracking or tearing of the plastic concrete, or any location showing diagonal or horizontal cracking will be cause for rejection of the parapet section in which they are found.

The vertical surfaces at the base of the barrier within 75 mm (3 inches) of the deck surface shall be trowelled true after passage of the slipform machine. Any deformations or bulges remaining after the initial set shall be removed by grinding after the concrete has hardened. Hand finishing of minor sporadic surface defects may be allowed at the discretion of the Engineer. Otherwise the parapets shall receive a normal finish as specified in Article 503.16(a) as directed by the Engineer.

Slipformed parapets shall be cured according to either Article 1020.13(a)(3) or Article 1020.13(a)(5). For either method, a soaker hose shall be placed on the top surface of the parapet, and the curing material kept wet with a continuous supply of water for the entire curing period. The cotton mats or burlap covering shall be held in place with brackets or other method approved by the Engineer.

A maximum of three random 100 mm (4 in.) diameter cores per 30 m (100 feet) of parapet shall be taken as directed by the Engineer, but no less than three random cores shall be taken for each parapet pour. Separate parapets poured on the same date shall be considered separate pours. Random cores will not be measured for payment.

The Engineer will mark additional locations for cores where, in the sole opinion of the Engineer, the quality of the slipformed parapet is suspect.

Any cores showing voids of any size adjacent to the reinforcement bars, or showing voids not adjacent to reinforcement bars of 160 square millimeters (1/4 square inch) in area or more, or showing signs of segregation, or showing signs of cracking shall be considered failures and the parapet section from which it was taken will be rejected.

Rejected parapet sections shall be removed and replaced for the full depth cross-section of the parapet. The minimum length of parapet removed and replaced shall be 1 m (3 feet). Additional cores may be required to determine the longitudinal extent of removal and replacement if it can not be determined and agreed upon by other means (i.e. visual, sounding, non-destructive testing, etc.).

Any parapet section with more than one half of its length rejected or with remaining segments less than 3m (10 feet) in length shall be removed and replaced in its entirety.

If reinforcement bars are damaged during the removal and replacement, additional removal and replacement shall be done, as necessary, to ensure minimum splice length of replacement bars. Any damage to epoxy coating of bars shall be repaired according to Article 508.05.

All core holes will be filled with a non-shrink grout meeting the requirements of Section 1024.

Added 02-25-2005