Iowa Department of Transportation

MINUTES
OF
IOWA D.O.T. SPECIFICATION COMMITTEE MEETING

January 13, 2011

Members Present:	Jim Berger	Office of Materials
	Donna Buchwald	Office of Local Systems
	Eric Johnsen, Secretary	Specifications Section
	Deanna Maifield	Office of Design
	Doug McDonald	District 1 - Marshalltown RCE
	Gary Novey	Office of Bridges & Structures
	Tom Reis, Chair	Specifications Section
	John Smythe	Office of Construction
Members Not Present:	John Selmer	Statewide Operations Bureau
	Roger Bierbaum	Office of Contracts
	Bruce Kuehl	District 6 - Construction
	Dan Redmond	District 4 - Materials
	Willie Sorensen	Office of Traffic & Safety
Advisory Members Present:	Lisa Rold	FHWA
Others Present:	Ed Kasper	Office of Contracts
	Wayne Sunday	Office of Construction

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the agenda dated January 6, 2011:

1. Article 1102.01, D, 1, b, Competency and Qualification of Bidders.

The Office of Contracts requested changes to raise the prequalification amount for an Individually Prepared Statement.

2. Article 2432.02, B, 1, b, 3, Concrete Panels (Mechanically Stabilized Earth Retaining Wall).

The Office of Materials requested changes to clarify the number of cylinders needed for testing for concrete panels for MSE retaining walls.

3. Article 2432.02, B, 1, k, 2, Concrete Panels (Mechanically Stabilized Earth Retaining Wall).

The Office of Materials requested changes to eliminate unnecessary wording.

4. DS-09XXX, Floating Silt Curtain.

The Specifications Section requested approval of Developmental Specifications for Floating Silt Curtain.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Roger Bierbaum	**Office:** Contracts	**Item 1**
Submittal Date: December 9, 2010	**Proposed Effective Date:** October 2011 GS	
Article No.: 1102.01 **Title:** Competency and Qualification of Bidders	**Other:**	

Specification Committee Action: Approved as requested.

Deferred:	**Not Approved:**	**Approved Date:**	**Effective Date:**

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

1102.01, D, 1, b.

Replace the Article:

When an Individually Prepared Statement is submitted to the Department, ~~an experience factor (F) of 1.0 will be used in the prequalification formula. Regardless of the formula calculations, however,~~ the maximum prequalification amount ~~can not exceed $100,000~~ will be $200,000.

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.)**

1. Individually Prepared Statement.

a. An Individually Prepared Statement is a "Contractor's Financial -Experience - Equipment Statement" that has been completed by the prospective bidder. If the statement has been compiled by a CPA, but does not contain a CPA review or audit of the financial portion of the statement, it is still considered an Individually Prepared Statement.

b. When an Individually Prepared Statement is submitted to the Department~~, an experience factor (F) of 1.0 will be used in the prequalification formula. Regardless of the formula calculations, however,~~ the maximum prequalification amount ~~can not exceed $100,000~~ will be $200,000.

Reason for Revision: $100,000 limit on Individually Prepared Statement hasn't increased since 1979. Based on 3% average inflation for highway construction the amount should be raised to $300,000. However a raise to $200,000 is recommended.

County or City Input Needed (X one)	**Yes**	**No** X
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes** X	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 2**
Submittal Date: November 16, 2010	**Proposed Effective Date:** October 2011	
Article No.: 2432.02, B, 1, b, 3 **Title:** Design And Materials	**Other:**	

Specification Committee Action: Approved as requested.

Deferred:	**Not Approved:**	**Approved Date:**	**Effective Date:**

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: This revision is the result of an FHWA review.

Specification Section Recommended Text:

2432.02, B, 1, b, 3.

Replace the first sentence of the Article:

Cast a minimum of ~~four~~ six test cylinders for each production unit sampled.

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.)**

Cast a minimum of ~~four~~ six test cylinders for each production unit sampled. Cure all the specimens according to this specification.

Reason for Revision: Materials I.M. requires six cylinders for each production for 24 hour, 7day and 28 day testing. For uniformity between the I.M. and the Standard Specification, the number will be revised to six.

County or City Input Needed (X one)	**Yes**	**No** x
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No** X	**Industry Concurrence:**	**Yes**	**No**
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 3**
Submittal Date: November 16, 2010	**Proposed Effective Date:** October 2011	
Article No.: 2432.02, B, 1, k, 2 **Title:** Design And Materials	**Other:**	

Specification Committee Action: Approved as requested.

Deferred:	**Not Approved:**	**Approved Date:**	**Effective Date:**

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: This revision is the result of an FHWA review.

Specification Section Recommended Text:

2432.02, B, 1, k, 2.

Delete the second sentence of the Article:

~~Furnish facilities and collaborate with the Engineer so that all necessary sampling and testing is done in an expeditious and satisfactory manner, as approved by the Engineer.~~

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.)**

k. Testing and Inspection.

1) Acceptability of the precast units will be determined on the basis of compression tests and visual inspection.

2) The precast units will be considered acceptable, regardless of age, when compression test results indicate the concrete will meet the specified 28-day strength. ~~Furnish facilities and collaborate with the Engineer so that all necessary sampling and testing is done in an expeditious and satisfactory manner, as approved by the Engineer~~. Panels will be considered acceptable for placement in the wall when 7-day strengths exceed 80% of 28-day requirements.

Reason for Revision: FHWA thinks the wordings are unnecessary.

County or City Input Needed (X one)	**Yes**	**No** x
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No** X	**Industry Concurrence:**	**Yes**	**No** X
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Tom Reis / Eric Johnsen	**Office:** Specifications	**Item 4**
Submittal Date: 1/3/2011	**Proposed Effective Date:** May 17, 2011	
Article No.: **Title:**	**Other:** Developmental Specifications for Floating Silt Curtain.	

Specification Committee Action: Approved with changes.

Deferred:	**Not Approved:**	**Approved Date:**	**Effective Date:**

Specification Committee Approved Text: See attached Draft DS for Floating Silt Curtain.

Comments: This DS will not have a controller. Designers, including local entities, will be free to use this specification when they feel it is necessary.

The Office of Construction requested additional specification language on installing appropriate on land erosion control measures to contain sediment before it reaches the water. Also, a restriction on pumping water into unrestrained open water was added due to field experience.

The Office of Location and Environment will determine when a Floating Silt Curtain (Containment) is necessary based on specific conditions present at that location. Floating Silt Curtain (Hanging) will be used much more frequently when work is going on in or around an open body of water.

The Design Manual will include some instruction on when and how to use this DS and some direction on estimating quantities.

The committee discussed using hanging silt curtains for RL-16, temporary stream access, installations. Currently, the curtain is required when the material used for constructing the temporary stream access has too much fines in it. The curtain is incidental, as is the temporary stream access. With implementation of the DS, we are going to start paying for the silt curtain in all situations, so as not to cause confusion. So, even though the temporary stream access is incidental, the floating silt curtain will be paid for when required. This will give the Engineer more control over the use of the floating silt curtain, since the contractor will be paid for installing the curtain.

The Offices of Construction, Bridge, Design, and Location and Environment are still discussing implementation of the DS, such as which office will include the bid items on the plan and how to estimate the quantities.

Specification Section Recommended Text: See attached Draft DS for Floating Silt Curtain.

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.)**

Reason for Revision: To create a specification for floating silt curtain which has been used, but not in a consistent manner. Floating silt curtains will be used much more frequently in the future to control sediment in bodies of water.

County or City Input Needed (X one)			**Yes**	**No** X	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

Draft DS-090XX
(New)

Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS
FOR
FLOATING SILT CURTAIN

Effective Date
May 17, 2011

THE STANDARD SPECIFICATIONS, SERIES 2009, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

090XX.01 DESCRIPTION.

Floating Silt Curtains are temporary control measures used for containing suspended sediment in an area of open water. Open water is described as any perennial water course or water body with 6 inch (150 mm) or greater depth. Floating Silt Curtains consist of fabric fastened to a flotation carrier and weighted along the bottom edge. Two types of Floating Silt Curtains may be utilized:

A. Floating Silt Curtain (Containment).
Floating Silt Curtain (Containment) is intended to capture all sediment entering the water during construction activities and the sediment is to be completely removed with the floating silt curtain upon completion of the work.

B. Floating Silt Curtain (Hanging).
Floating Silt Curtain (Hanging) is intended to create a static water area isolated from the water course or water body. Sediment entering the static water area is isolated and settles out of suspension within the area of the floating silt curtain.

090XX.02 MATERIALS.

A. Floating Silt Curtains shall meet the following minimum requirements and manufacturer recommendations:

Table DS-090XX: Floating Silt Curtain Requirements

	TYPE	
	Still Water	**Moving Water**
Curtain Fabric Material Type	Impermeable vinyl-nylon laminate	Impermeable vinyl-coated nylon
Mass Per Square Yard (m^2)	18 oz. (0.6 kg)	22 oz. (0.75 kg)
Grab Tensile Strength ASTM D 4632 *	300 lbs. (1.3 kN)	500 lbs. (2.2 kN)
Flotation	6 inch (150 mm) diameter marine quality expanded polystyrene	8 inch (200 mm) diameter marine quality expanded polystyrene
Net Buoyancy, Per Foot (m)	13 lbs. (200 N)	20 lbs. (300 N)
Top Load Carrying Components	Fabric only	Fabric plus 5/16 inch (8 mm) galvanized steel cable 9800 lbs. (40 kN) minimum break strength
Ballast, Lbs. Per Foot (Kg/m), Minimum	0.7 lbs./foot (1.0 kg/m) enclosed 1/4 inch (6 mm) galvanized chain	1.1 lbs./foot (1.6 kg/m) enclosed 5/16 inch (8 mm) galvanized chain
Connection Between Sections	Laced grommets	Aluminum collar reinforced quick disconnects

* Minimum average roll value.

B. Design connecting devices to prevent silt from permeating through the connection and at specified strength to prevent ripping out.

090XX.03 CONSTRUCTION.

A. General.

1. Construct Floating Silt Curtain as shown in the contract documents and to the expected water depth plus wave height.

2. On U.S. Coast Guard regulated waters or other navigable waterways, furnish buoys to mark the ends and special areas for visibility. Place buoys as required for navigational purposes.

3. Floating Silt Curtain shall be installed adjacent to planned work area prior to soil disturbance. The curtain shall be installed along the complete work area which is planned to be disturbed and to points 20 feet (6 m) beyond the limits of the area of disturbance and tied into the existing soil bank.

4. Floating Silt Curtain (Containment) installations will require both a containment floating silt curtain and a hanging floating silt curtain. Install the two floating silt curtains as shown in the contract documents with the containment silt curtain closest to shore and the hanging silt curtain 10 feet (6 m) outside the containment silt curtain.

5. Do not discharge water pumped from the work site into an area of unrestrained open water.

6. Control surface drainage prior to entry into the water by installation of appropriate erosion control measures on land.

B. Floating Silt Curtain (Containment).

1. Anchors shall include a chain that has a minimum weight of 3.3 pounds (1.5 kg) per yard and anchor weights as needed to hold the curtain down.

2. Inspect the containment floating silt curtain after heavy winds or major rain storms (1 inch (25 mm)) to check for damage and depth of silt on the bottom of the silt curtain. If 2 inches (50 mm) or more of silt is present on top of the silt curtain, remove the silt curtain and silt as described below and reinstall floating silt curtain.

3. Upon completion of the work or when clean-out of containment silt curtain is required, remove containment silt curtain and contained silt by pulling the top of curtain towards land until it reaches the trench line. Remove entrenched fabric and pull both ends up and out of the water. Dispose of collected silt offsite at an upland, non-wetland location or as approved by the Engineer. Following removal of containment curtain, the hanging curtain shall remain in place for a minimum of 48 hours after which it can be removed, provided all work in the area being protected is completed.

C. Floating Silt Curtain (Hanging).

1. Anchors shall be a minimum of 40 pounds (18 kg) and located at a maximum spacing of 100 feet (30 m) along curtain.

2. Hanging silt curtain shall remain in place for a minimum of 48 hours after completion of work activity to allow suspended sediment to settle out after which time the silt curtain can be removed. Remove curtain in a manner that will prevent re-suspension of silt into the water.

090XX.04 METHOD OF MEASUREMENT.

A. Floating Silt Curtain, of the type specified, will be measured by length in feet (meters) furnished and installed.

B. Clean-out of Floating Silt Curtain (Containment) will be measured by length in feet (meters) removed, cleaned, and reinstalled (if necessary) each time cleaning is required.

090XX.05 BASIS OF PAYMENT.

A. Payment for Floating Silt Curtain (Hanging) will be the contract unit price for the length in feet (meters) of hanging silt curtain furnished and installed. Payment is full compensation for labor, equipment, and materials necessary to construct, maintain, and remove hanging silt curtain. Upon satisfactory installation of hanging silt curtain, the Engineer may authorize partial payment not exceeding 80% of the quantity placed. Remaining quantity will be paid after Floating Silt Curtain is removed.

B. Payment for Floating Silt Curtain (Containment) will be the contract unit price for the length in feet (meters) of containment silt curtain furnished and installed. Payment is full compensation for labor, equipment, and materials necessary to construct and maintain containment silt curtain.

C. Payment for Clean-out of Floating Silt Curtain (Containment) will be the contract unit price for the length in feet (meters) of the Containment Silt Curtain removed each time cleaning is required. Payment is full compensation for labor and equipment necessary to remove and clean containment silt curtain, remove and dispose of collected silt, and reinstall containment silt curtain (if necessary). Clean-out of Floating Silt Curtain (Containment) will be paid to remove the containment silt curtain at the completion of the project.