

**COFFERDAM INSTALLATION, PILING PLACEMENT,  
AND TREMIE POUR INSPECTOR'S CHECKLIST**

CONTROL SECTION	JOB NUMBER	DATE
STRUCTURE NUMBER	PROJECT NAME	
CONTRACTOR	CONSTRUCTION ENGINEER	
INSPECTOR	PROJECT ENGINEER	

**INITIALS**

**A. Sheeting Installation**

1. Ensure contractor's cofferdam design is approved before installation of the cofferdam is to begin, per Subsection 704.03.A. \_\_\_\_\_
2. Ensure contractor uses the correct equipment to install the steel sheet piling. Please refer to the contract plans and special provisions for details on allowable equipment (e.g., **The use of vibratory hammers may not be permitted.**) \_\_\_\_\_
3. Ensure the first sheet and subsequent sheets driven for the cofferdam are plumb. \_\_\_\_\_
4. Ensure materials used to construct cofferdams meet or exceed the materials specified in approved design (e.g., **sheeting section modulus, grade of steel, size of walers and struts**). \_\_\_\_\_
5. Ensure the contractor has provided new or used continuous interlock-type steel sheet piling including connection and corner pieces. Used steel sheet piling must be in good condition. \_\_\_\_\_
6. Ensure cofferdams are constructed in accordance with the approved design dimensions and staged construction requirements. \_\_\_\_\_
7. Ensure temporary left in place and/or permanent steel sheet piling meets Buy America requirements. \_\_\_\_\_
8. Ensure contractor maintains an approved cofferdam design on-site as required by MIOSHA Construction Safety Standards. (**Note: Any deviation from the approved cofferdam design must be documented by the designer, reapproved by the Engineer, and kept in the on-site documentation.**) \_\_\_\_\_

**B. Prior to Placing Foundation Piling**

1. Check to make sure the bottom of tremie is excavated to the plan elevation using probes in a grid pattern. \_\_\_\_\_
2. Ensure the contractor has checked the sheet pile corrugations to make sure they are cleaned to the full depth of the tremie excavation. (**Note: This will help ensure a watertight seal.**) \_\_\_\_\_

**C. During Installation of Foundation Piling**

1. Ensure the contractor is placing the piling in the right location. **Note: If piling is battered and contractor is not able to drive the pile at the bottom of footing elevation (e.g., cofferdam in a stream), check to make sure contractor has placed their template in the correct location, if they use a template.** \_\_\_\_\_
  
2. Ensure the position of each pile at the cutoff elevation is within 6 inches of the position shown on the plans. **Note: If the pile needs to be moved due to an obstruction, or some other interference, contact the Bridge Design Engineer to see if or how the pile can be repositioned.** \_\_\_\_\_

**D. Immediately Prior to Pour**

1. Recheck bottom of tremie elevation. \_\_\_\_\_
  
2. Ensure the contractor has some type of measuring device to measure grade of the tremie. The measuring device should also be capable of checking for a reasonably level surface. \_\_\_\_\_
  
3. Ensure water level inside the cofferdam is equal to, or greater than, water outside the cofferdam. \_\_\_\_\_

**E. During the Pour**

1. When testing concrete, take concrete samples from the concrete truck. Do not remove tremie tube from the fresh concrete to obtain the concrete sample. \_\_\_\_\_
  
2. Ensure the contractor is checking the grade of the tremie. Place concrete to at least the elevation of the top of tremie seal, but no more than +6 inches above the tremie seal, per Subsection 706.03.H.3. \_\_\_\_\_
  
3. Ensure contractor always keeps the tremie tube in the freshly deposited concrete; only withdraw the tremie upon completion of each pour, or as required to get by piling or cofferdam bracing, per Subsection 706.03.H.3. \_\_\_\_\_
  
4. Ensure contractor pours tremie per Subsection 706.03.H.3. \_\_\_\_\_
  
5. Ensure contractor pumps off any displaced water during the tremie pour into a filter bag, per Subsection 704.03.C. Do not pump water below the water level at the start of the pour. **Note: Contractor is not allowed to have any displaced water overtop the cofferdam sheeting.** \_\_\_\_\_

**F. After the Pour**

1. Ensure the concrete has attained at least 50 percent of the 28-day compressive strength or after test beams break with a modulus of rupture of at least 325 psi, per Subsection 706.03.H.3. 

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2. Ensure contractor removes all concrete in excess of +6 inches above the tremie seals, per Subsection 706.03.H.3. 

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3. Ensure contractor is pumping water from the cofferdam into a filter bag if the water is not silt and sediment free, per Subsection 704.03.C. 

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4. Ensure contractor cuts off piles normal to the longitudinal axis of the pile and within 1 inch of the elevation required, per Subsection 705.03.I. 

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**G. During Forming of Footing**

1. Ensure a distance of at least 9 inches between the edges of piles and the outline of the superimposed concrete, per Subsection 705.03.C.2.e. 

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**Note: Cut off the “Cofferdams, Left in Place” at elevation shown on the plans. Do not pull up or re-drive cofferdam sheeting to match the cut off elevation, unless otherwise shown on the plans or approved by the Engineer.**