*Designer notes: Use to ensure the quality of concrete pier or abutment components placed under water: concrete seal (under a spread footing), concrete spread footing, or shaft of pile encased pier.*

Underwater Substructure Inspection B-XX-XXX, Item SPV.0060.xx.

**A Description**

This special provision describes providing underwater inspections of the substructure seal(s), footing(s) or shaft(s).

**B (Vacant)**

**C Construction**

After placement of Concrete Masonry Bridges or Concrete Masonry Seal for the substructure and as soon as practicable after removal of the forms, provide a diver who, under the direction of the engineer, will report the characteristics and quality of the concrete placed below water level to ensure that the concrete masonry has been properly formed and placed.

Provide a video monitor and video camera, along with two-way audio communications with the diver during the inspection and record the video and audio.

Correct all deficiencies in the concrete and repeat the inspections until all deficiencies are corrected.

**D Measurement**

The department will measure Underwater Substructure Inspection B-XX-XXX once for each individual unit acceptably completed. The entire pier or abutment substructure location is considered a unit. Multiple underwater inspections at the same substructure location to correct concrete deficiencies will not be measured.

**E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

|  |  |  |
| --- | --- | --- |
| ITEM NUMBER | DESCRIPTION | UNIT |
| SPV.0060 | Underwater Substructure Inspection B-XX-XXX | EACH |

Payment for Underwater Substructure Inspection B-XX-XXX is full compensation for all diving inspections and reporting; and for supplying video and two-way audio communications equipment and recorded electronic video and audio files. Payment for correcting deficiencies in the placed concrete will be included at no extra cost to the project.