*Designer notes: Use to ensure the quality of the underwater placed backfill or riprap at piers and abutments where the backfill or riprap placement is critical and inspection cannot be performed from above.*

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

**A Description**

This special provision describes providing underwater inspections of the substructure backfill or riprap.

**B (Vacant)**

**C Construction**

After placement of backfill or riprap for the substructure, provide a diver who, under the direction of the engineer, will report the characteristics and quality of the backfill or riprap placed below water level to ensure that the backfill or riprap has been properly placed, consistent with the details shown in the plans.

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 backfill or riprap and repeat the inspections until all deficiencies are corrected.

**D Measurement**

The department will measure Underwater Substructure Backfill or Riprap 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 backfill or riprap 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 Backfill or Riprap Inspection B-XX-XXX | EACH |

Payment for Underwater Substructure Backfill or Riprap 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 backfill or riprap will be included at no extra cost to the project.