

0002AB West Trench 200 CY

1.1 SUMMARY

This section describes how Line Items will be measured and paid for when making progress payments. Work to be measured is described in specification sections listed for each Line Item. Measurement procedures for payment, required quantity survey or procurement documentation and payment restrictions are described in applicable specification sections. Allocate costs for work not specifically mentioned to the Line Item most closely associated with work involved. Unless there is a specific Line Item for administrative costs, such as Quality Control and Safety, allocate such costs proportionally across all Line Items.

1.2 QUALITY CONTROL SYSTEM (QCS)

1.2.1 Definition

The terms "Contract Line Item Number (CLIN)" and "Line Item" are interchangeable herein (e.g.: CLIN 0001 is Line Item 0001). The term "CLIN" is a contracting term used in the Quality Control System (QCS) payment data base.

1.2.2 Instructions

See Section [01 45 04 CONTRACTOR QUALITY CONTROL] [01 45 05 DREDGING/BEACH FILL PLACEMENT - CONTRACTOR QUALITY CONTROL] for instructions on linking a CLIN to a schedule of values of pay activities and construction schedule, and in-depth payment procedure.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Transmit submittal items in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Schedule of Values; G|RO

Provide a breakdown of lump sum items into proposed pay activities. Schedule of Values will become basis for CLIN and Pay Activity data in the QCS payment data base.

SD-07 Certificates

NOTE: To be used in conjunction with paragraph and line item "Utility Connection and Relocation" below. This submittal provides for direct reimbursement to the Contractor for charges incurred for services rendered by utility companies. Delete if not used.

Utility Invoices

Submit invoices from the utility company indicating payment for services covered in Line Item [] "Utility Connection and Relocation". Payment under this line item will not be made prior to submission of valid invoices to the Government. The Contractor will be reimbursed for costs indicated on these invoices only.

1.4 LUMP SUM PAYMENT ITEMS

NOTE: The number and identification of lump sum payment items is primarily a Construction-Operations Division concern. Generally, it is better to keep the number of lump sum payment items to a minimum. The description of the work included in a payment item is unique for each job and must be developed for each construction contract.

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the LINE ITEMS AND PRICING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

Progress payments for lump sum CLINs will be made in accordance with the Payments Under Fixed-Price Construction Contracts clause of Section 00700 CONTRACT CLAUSES in Volume 1. Provide a list of pay activities, (Schedule of Values) to breakdown bid for each lump sum CLIN. Within 20 calendar days after receiving Notice to Proceed, submit Schedule of Values for Government approval. An unbalanced Schedule of Values and Pay Activity Schedule will be returned for revision. If this contract contains either the Continuing Contracts clause or the Continuing Contracts (Alternate) clause, the Contractor should take into account the amount reserved for contract payments when preparing the construction schedule.

1.4.1 Mobilization and Demobilization (Line Item [])

NOTE: If mobilization and demobilization costs are expected to be a minor cost under the contract, this clause and payment item should be deleted.

NOTE TO SPEC WRITER: EACH PARAGRAPH SHOULD BE EDITED ACCORDINGLY; SELECT/DELETE BRACKETED INFORMATION AND FILL IN ALL BLANKS.

a. Payment will be made for costs associated with or incidental to mobilization and demobilization and establishment of initial project management and coordination. See Clause PAYMENT FOR MOBILIZATION AND DEMOBILIZATION of Section 00700 CONTRACT CLAUSES in Volume 1.

b. Payment will be made for costs associated with or incidental to mobilization and demobilization for sea turtle trawling and relocation (For Hopper Dredges Only). See Section 01 57 20 ENVIRONMENTAL PROTECTION.

1.4.2 Endangered Species Observers [(For Hopper Dredges Only)] (Line Item [])

Payment will be made for costs associated with or incidental to endangered species observers. See Section 01 57 20 ENVIRONMENTAL PROTECTION.

1.4.3 Turbidity Monitoring (Line Item [])

Payment will be made for costs associated with or incidental to obtaining, analyzing, and reporting the results of monitoring for turbidity. See Section 01 57 25 TURBIDITY AND DISPOSAL MONITORING.

1.4.4 Lighted Aids to Navigation (Line Item [])

Payment will be made for costs associated with or incidental to the installation, operation, maintenance, and removal of lighted aids to navigation. Other markers as required by different sections of this contract shall be included and addressed by that Section. See Section 35 20 25 BEACH FILL.

1.4.5 Construction/Vibration Control and Monitoring (Line Item [])

Payment will be made for costs associated with or incidental to the protection of existing structures from construction activities and monitoring. See Section 02 22 13 VIBRATION MONITORING REQUIREMENTS FOR EXISTING STRUCTURES.

1.4.6 Structure [] (Line Item [])

NOTE: Consult the concrete materials design memorandum to choose the appropriate cementitious materials and admixtures for measurement and payment.

Repeat this lump sum line item for each structure to be paid for by lump sum, renumbering the line items appropriately.

Payment will be made for costs associated with operations necessary for construction of the structure at Station []. See Section 03 31 01 CAST-IN-PLACE STRUCTURAL CONCRETE.

1.4.7 Utility Connection and Relocation (Line Item [])

NOTE: Use this paragraph for utility connections and/or relocations arranged and paid for by the Contractor. EN-DM must obtain an estimate from the utilities which will be shown as the total price for this line item in Section 00010A LINE ITEMS AND PRICING SCHEDULE. Delete of not used.

Payment will include full compensation for the charges paid to utility companies by the Contractor for furnishing all materials, equipment, and labor required to remove, relocate, and install [utility services][] in accordance with paragraph [TITLE] of Section [] [TITLE] and detailed work as shown in the drawings. Payment will be made for actual cost incurred for utility relocation and installation. Actual cost incurred will be based on utility invoices indicated in paragraph SUBMITTALS above.

1.4.8 [] (Line Item [])

Payment will be made for costs associated with or incidental to the []. See Section [] [].

1.5 UNIT PRICE PAYMENT ITEMS

NOTE: THE UNIT PRICE PAYMENT ITEMS SHOWN BELOW ARE FOR ILLUSTRATION PURPOSES ONLY. UNIT PRICE PAYMENT ITEM LANGUAGE MUST BE WRITTEN SPECIFICALLY FOR EACH JOB. UNIT PRICE PAYMENT ITEM LANGUAGE APPROPRIATE FOR INCLUSION BELOW IS CONTAINED IN GUIDE SPECIFICATION SECTIONS AND MUST BE MOVED TO THIS SECTION TO DEVELOP THE PAY ITEMS FOR THE PROJECT.

NOTE TO SPEC WRITER: EACH PARAGRAPH SHOULD BE EDITED ACCORDINGLY; SELECT/DELETE BRACKETED INFORMATION AND FILL IN ALL BLANKS.

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the LINE ITEMS AND PRICING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

Each Unit Price CLIN may be a single pay activity item or may be broken down into pay activities with smaller quantities equal to CLIN total. Contract unit price multiplied by agreed quantity is full compensation.

1.5.1 Excavation, Unclassified (Line Item [])

NOTE: For dredging projects.

1.5.1.1 Payment

a. Payment will be made for costs associated with or incidental to excavation, transportation, and disposal of materials; providing and maintaining access to the work site(s) and disposal area(s); noise control; debris removal; [installation, operation or maintenance of the electronic tracking system for surveillance of all dredging and disposal activities]; [nearshore disposal area marking]; and, monitoring sea turtles. See Sections 35 20 23 DREDGING and 01 57 20 ENVIRONMENTAL PROTECTION.

b. Insofar as consistent with the paragraph CONTINUITY OF WORK of Section 35 20 23 DREDGING, monthly partial payments will be based on approximate quantities determined by soundings or sweepings performed by the Contractor behind the dredge. The term "area designated by the Contracting Officer" as used in the CONTINUITY OF WORK paragraph, is defined as "acceptance section".

c. Hydrographic surveys (soundings) for final payment purposes will be made by the Government. The Contracting Officer will select the type of survey to be performed (single-beam vs. multi-beam) and the transducer frequency to be used. Once the survey method (type and transducer frequency) is selected, the government will strive to use the selected method throughout the contract period. However, the Contracting Officer reserves the right to change the survey method at any time according to his sole discretion.

1.5.1.2 Measurement

a. The maps and/or drawings already prepared (clause CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS of Section 00700 CONTRACT CLAUSES in Volume 1) are believed to represent accurately average existing conditions, but the depths shown thereon may be verified and corrected by soundings taken before dredging. Determination of quantities removed and the deductions made therefrom to determine quantities by in place measurement to be paid for in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

b. The total amount of material removed, and to be paid for under the contract, will be measured by the cubic yard in place [and quantities determined by the average end area method]. The volume computed shall be between the bottom surface shown by soundings taken within 3 weeks before dredging and the bottom surface shown by the soundings taken within 3 weeks after the work specified in each acceptance section indicated on the drawings has been completed. The Contractor shall give [3 weeks] [10 days] advance notice, in writing, to the Contracting Officer's Representative of the need for a pre-dredging survey or after-dredging survey for final acceptance for each acceptance section. The quantity shall include the volume within the limits of the side slopes described in subparagraph "Side Slopes" of paragraph REQUIRED DEPTH, ALLOWABLE OVERDEPTH, AND SIDE SLOPES of Section 35 20 23 DREDGING, less any deductions that may be required for misplaced material described in subparagraph "Misplaced Materials" of paragraph DISPOSAL OF EXCAVATED MATERIAL of Section 35 20 23 DREDGING.

1.5.1.3 Unit of Measure

Cubic yard.

1.5.2 Beach Fill (Line Item [])

NOTE: For beach fill projects.

1.5.2.1 Payment

a. Payment will be made for costs associated with or incidental to barricades and signs, debris removal, [rock removal/disposal,] pipeline

crossing, excavation and transportation of beach fill, constructing the beach profile and final dressing; noise control; [dive reports]; [installation, operation, or maintenance of the electronic positional monitoring equipment]; [condition surveys and monitoring of hardbottom/reef communities and operational box for protection of hardbottom/reef communities]; monitoring sea turtles; and, monitoring and reporting turbidity. See Sections 01 57 20 ENVIRONMENTAL PROTECTION, 01 57 25 TURBIDITY AND DISPOSAL MONITORING, and 35 20 25 BEACH FILL.

b. In addition to the above, payment will be made for in-place beach fill to plus 0.5 foot tolerance line on both berm and slope. Payment quantities [will] [shall] be determined by the [Contracting Officer's Representative] [Contractor] using average end area method of calculation. When beach fill is placed up-slope above slough zone to compensate for wave action, payment of end area will be based on a cut and fill calculation. No payment will be made for material placed on the up-slope above the tolerance A(u) that exceeds A(s) (Refer to Beach Fill Tolerance figure indicated in the paragraph CONSTRUCTION FORMS AND DETAILS of Section 35 20 25 BEACH FILL).

1.5.2.2 Measurement

NOTE: Reference to paragraph QUANTITY SURVEYS - ALTERNATE I below will be used when determination is made that Contractor will perform ALL surveys. If Government will perform pre- and post-surveys then use QUANTITY SURVEYS reference.

a. The maps and/or drawings already prepared (clause CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS of Section 00700 CONTRACT CLAUSES in Volume 1) are believed to represent accurately the existing conditions at the time the surveys were performed, but the depths and elevations shown thereon may be verified and corrected by elevations and soundings taken before commencing the work. Determination of quantities placed and the deductions made therefrom to determine quantities by in place measurement to be paid for within a specified reach or section, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

b. Beach fill satisfactorily placed will be measured for payment by use of the average end area method. The quantities will be computed by the Government in accordance with clause [QUANTITY SURVEYS] [QUANTITY SURVEYS - ALTERNATE I] of Section 00700 CONTRACT CLAUSES in Volume 1. Measurement of quantity placed for pay purposes will be based on original and final cross sections made on the section or reach indicated on the drawings. The Contractor shall give 3 calendar days advance notice, in writing, to the Contracting Officer's Representative of the need to perform the original and final surveys. Quality Control Surveys shall be the responsibility of the Contractor. Monthly partial payments will be based on approximate quantities determined by measurement of the in-place beach fill and in accordance with clause [QUANTITY SURVEYS] [QUANTITY SURVEYS - ALTERNATE I] of Section 00700 CONTRACT CLAUSES in Volume 1.

c. In accordance with clause [QUANTITY SURVEYS] [QUANTITY SURVEYS - ALTERNATE I] of Section 00700 CONTRACT CLAUSES in Volume 1,

[Contracting Officer's Representative will] [Contractor shall] perform pre- and post-construction topographic survey at 100-foot stations with elevations taken at 10-foot range intervals from the baseline to the toe slope elevation. In order to achieve final grade in slough zone, Contractor shall place material to final grade within tolerance for entire slope or may stockpile beach fill up-slope of slough zone. After stockpiled beach fill is measured for payment, Contractor shall shape slope to within 0.5 foot of final grade from top of slope to waterline producing a smooth uniform slope. Once post-construction survey is performed, no measurements will be revised except on suspicion of fraud or obvious error.

1.5.2.3 Unit of Measure

Cubic yard.

1.5.3 Excavation (Line Item [])

NOTE: For excavation other than dredging.

1.5.3.1 Payment

Payment will be made for costs associated with or incidental to [blasting,] excavation, transportation, and disposal of materials; excavation, hauling and stockpiling of topsoil; providing and maintaining access to the work site(s) and disposal area(s); noise control; and, debris removal.

1.5.3.2 Measurement

The total amount of material removed, and to be paid for under this contract, will be measured by the volume in-place prior to excavation with quantities determined by digital terrain model (DTM) surface to surface computations. The Government will perform initial and final surveys in accordance with the clause QUANTITY SURVEYS of Section 00700 CONTRACT CLAUSES in Volume 1. The two DTM surfaces used for calculation of final quantities will be determined from the original survey performed by the Government after clearing and before excavation, and the finished grades as shown on the drawings. The final survey performed by the Government will be used to verify that excavation is complete to the required finished grades, and that tolerances have not been exceeded. Excavation below required finished grades will not be included in quantities calculated for final payment. The estimated quantity for this line item does not include tolerances. The Contractor is responsible for considering the cost of required tolerances, and including this cost in the unit price for this line item (See Section 00010A LINE ITEMS AND PRICING SCHEDULE in Volume 1). DTM surfaces used for calculation of quantities for progress payments will be determined from the original survey performed by the Government, and elevations above finished grade obtained from progress surveys performed by the Contractor in accordance with the clause QUANTITY SURVEYS of Section 00700 CONTRACT CLAUSES in Volume 1.

1.5.3.3 Unit of Measure

Cubic yard.

1.5.4 Fill (Line Item [])

NOTE: For upland fill (not beach fill).

1.5.4.1 Payment

Payment will be made for costs associated with or incidental to borrow, processing (removal of unsuitable fill), transportation, and placement of suitable materials; providing and maintaining access to the work site(s) and borrow area(s); and noise control.

1.5.4.2 Measurement

The total amount of material placed, and to be paid for under this contract, will be measured by the volume in-place with quantities determined by digital terrain model (DTM) surface to surface computations. The Government will perform initial and final surveys in accordance with the clause QUANTITY SURVEYS of Section 00700 CONTRACT CLAUSES in Volume 1. The two DTM surfaces used for calculation of final quantities will be determined from the original survey performed by the Government after clearing and before fill placement, and the finished grades as shown on the drawings. The final survey performed by the Government will be used to verify that fill placement is complete to the required finished grades, and that tolerances have not been exceeded. Fill above required finished grades will not be included in quantities calculated for final payment. The estimated quantity for this line item does not include tolerances. The Contractor is responsible for considering the cost of required tolerances, and including this cost in the unit price for this line item (See Section 00010A LINE ITEMS AND PRICING SCHEDULE in Volume 1). DTM surfaces used for calculation of quantities for progress payments will be determined from the original survey performed by the Government, and elevations below finished grade obtained from progress surveys performed by the Contractor in accordance with the clause QUANTITY SURVEYS of Section 00700 CONTRACT CLAUSES in Volume 1.

1.5.4.3 Unit of Measure

Cubic yard.

1.5.5 Post-Fill Restoration (Line Item [])

1.5.5.1 Payment

Payment will be made for costs associated with or incidental to restoration of the beach in the vicinity of the breakwaters after the initial construction. See Section 35 20 25 BEACH FILL.

1.5.5.2 Unit of Measure

Cubic yard.

1.5.6 Deformed Steel Bars for Concrete Reinforcement (Line Item [])

NOTE: This example was taken from UFGS Section
03201 STEEL BARS AND WELDED WIRE FABRIC FOR CONCRETE
REINFORCEMENT FOR CIVIL WORKS.

1.5.6.1 Payment

Payment will be made for costs associated with furnishing and placing deformed steel bars for concrete reinforcement. No payment will be made for the additional steel in laps wherein the additional steel lap was made for the convenience of the Contractor.

1.5.6.2 Measurement

The measured lengths will be converted to weights for the size of bars listed by the use of the nominal weights per linear foot.

1.5.6.3 Unit of Measure

Unit of measure: per pound.

1.5.7 Bituminous Base Course (Line Item [])

NOTE: Paragraph UNIT PRICES of UFGS Section 02713A BITUMINOUS BASE COURSE was edited to develop this example.

1.5.7.1 Payment

The quantities of bituminous base course shall be paid for at the respective contract unit price in the LINE ITEMS AND PRICING SCHEDULE. Payment shall constitute full compensation for preparing and reconditioning the underlying layer; for furnishing all material, equipment, plant, and tools; and other incidentals necessary to complete the work required by Section 32 11 26 BITUMINOUS BASE COURSE. No payment will be made for defective areas until corrected.

1.5.7.2 Measurement

The amount paid for will be the number of 2,000-pound tons of bituminous mixture used in the accepted work. Bituminous mixture shall be weighed after mixing, and no deductions will be made for the weight of bituminous material incorporated in the mix. No payment will be made for defective areas until corrected.

1.5.7.3 Unit of Measure

Unit of measure: 2,000-pound ton.

1.5.8 Bituminous Materials (Line Item [])

NOTE: Paragraph UNIT PRICES of UFGS 02713A BITUMINOUS BASE COURSE was edited to develop this example.

1.5.8.1 Payment

The quantities of bituminous materials shall be paid for at the respective

contract unit price in the LINE ITEMS AND PRICING SCHEDULE. Payment shall constitute full compensation for preparing and reconditioning the underlying layer; for furnishing all material, equipment, plant, and tools; and other incidentals necessary to complete the work required by Section 32 11 26 BITUMINOUS BASE COURSE. No payment will be made for defective areas until corrected.

1.5.8.2 Measurement

Bituminous material to be paid for shall be measured in the number of [gallons of the material used in the accepted work, corrected to gallons at 60 degrees F.] [2,000-pound tons of the material used in the accepted work.]

1.5.8.3 Unit of Measure

Unit of measure: [gallons] [2,000-pound tons].

1.5.9 Concrete for [] (Line Item [])

NOTE: Consult the concrete materials design memorandum to choose the appropriate cementitious materials and admixtures for measurement and payment.

Repeat this unit price line item and its respective subparagraphs for each line item of concrete, renumbering the line items appropriately.

1.5.9.1 Payment

Payment will be made for costs associated with completing the concrete work for concrete placed in the []. However, these costs will not include the cost of embedded parts that are specified to be paid for separately. No payment will be made for concrete, as such, that is placed in structures of which payment is made as a lump sum. See Section 03 31 01 CAST-IN-PLACE STRUCTURAL CONCRETE.

1.5.9.2 Measurement

Concrete will be measured for payment based upon the actual volume of concrete within the pay lines of the structures as indicated on the drawings. Measurement of concrete placed against the sides of any excavation without the use of intervening forms shall be made only within the pay lines of the structure. No deductions shall be made for rounded or beveled edges, space occupied by metal work, electrical conduits or reinforcing steel, or for voids or embedded items that are either less than 0.14 cubic meters5 cubic feet in volume or 0.09 square meter1 square foot in cross section.

1.5.9.3 Unit of Measure

Unit of measure: cubic metersyards.

1.5.10 CO Field Office (Line Item [])

NOTE: Use only when authorized by project manager.

1.5.10.1 Payment

Payment will be made for costs associated with or incidental to providing, maintaining, and final disposition of the Contracting Officer's field office including all costs for rent and provision of all services indicated in Section 01 52 10 CONTRACTING OFFICER'S FIELD OFFICE. Costs for such provision and maintenance of the Contractor's own field office and other facilities will not be paid for under this line item.

1.5.10.2 Measurement

The basis for payment will be the amount of time that the Contracting Officer's field office is available to the Government within the duration of the contract.

1.5.10.3 Unit of Measure

Month.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 PAYMENT PROCEDURES

Upon receiving initial Resident Management System import file, go to "Pay Activities" and establish a link between bid breakdown schedule of values of "Pay Activities" to contract CLINs using "Schedule Activities" data entry page.

3.1.1 Requesting Progress Payment

For progress payments, ensure "Activity Schedule", "Feature Schedule", submittal register, and punchlists are all up to date. Use "Progress Payments" to "request Activity Earnings" for both "Activity Earnings" data entry page and "Other Earning". Provide hard copies of supporting invoices and quantity measurements to support all requested earnings. Ensure that sum of payment activities do not exceed contract award CLIN funding amounts, or "unbalanced" CLINs error will prevent processing the payment.

3.1.2 Options and Modification CLINS

When additional work is added by modification, existing CLINs funding amounts must be updated, or new CLINs for modification will be created. If contract has option CLINs not yet awarded, option CLINs will appear as zero dollar CLINs until option is awarded by modification. No payment may be requested for Options or Modification CLINs until contract modification has been funded and signed.

-- End of Section --