PART 1  GENERAL

1.1 SECTION INCLUDES
   A. Measurement and payment criteria applicable to portions of the Work performed where unit price adjustments are provided.
   B. Defect assessment and non-payment for rejected work.

1.2 AUTHORITY
   A. The Engineer will take all measurements and compute quantities accordingly.
   B. Contractor shall assist Engineer by providing necessary equipment, workers, and survey personnel as required.
   C. Owner or City refers to the City of Alamosa Public Works Department.

1.3 ADJUSTMENT UNIT QUANTITIES SPECIFIED
   A. All estimated quantities stipulated in the Bid Form or other contract Documents are approximate and are to be used only as a basis for estimating the probable cost of the Work and for the purpose of comparing the bids submitted for the Work. The actual amounts of the work done, and materials furnished under unit price items may differ from the estimated quantities.
   B. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees to make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts thereof.
   C. Quantities and measurements supplied or placed in the Work and verified by the Engineer shall determine final payment. The Contractor must seek written permission from the City before commencing any work which will bring the actual amount of work done over the estimated amount for each bid item.
   D. If the actual Work requires more or fewer quantities than those quantities indicated in the estimated amounts, Contractor will provide the required quantities at the unit prices contracted.
E. Final payment on the contract will not be authorized until all required submittals are made and approved.

1.4 MEASUREMENT OF QUANTITIES
A. Measurement Devices:
   1. Weigh Scales: Inspected, tested and certified by the State of Colorado Department of Agriculture within the past year.
   2. Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
   3. Metering Devices: Inspected, tested and certified by the applicable State Department within the past year.
B. Measurement by Weight: Measured by actual scale ticket weight for specific items identified.
C. Measurement by Volume: Measured by actual area and depth of in place material.
D. Measurement by Area: measured by square dimension using mean length and width or radius.
E. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
F. Stipulated Sum/Price Measurement: Items measured by weight, volume, area or linear means or combination, as appropriate, as a completed item or unit of the Work.

1.5 PAYMENT
A. The Total Contract Cost shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit prices bid.
B. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid.
C. Payment Includes: Full compensation for all required labor, products, tools, equipment, transportation, services and incidentals; erection, application or
installation of an item of Work; acceptance testing; clean-up and restoration; overhead and profit.

D. Final payment for Work governed by unit prices will be made based on the actual measurements and quantities accepted by the City multiplied by the unit sum/price for Work which is incorporated in or made necessary by the Work.

1.6 DEFECT ASSESSMENT
   A. Contractor shall replace the Work, or portions of the Work, not conforming to specified requirements.
   B. If, in the opinion of the City, it is not practical to remove and replace the defective Work, the City will direct one of the following remedies:
      1. The defective Work may remain, but the unit sum/price will be adjusted to a new sum/price at the discretion of the City.
      2. The defective Work will be partially repaired to the instructions of the City, and the unit sum/price will be adjusted to a new sum/price at the discretion of the City.
   C. The individual specification sections may modify these options or may identify a specific formula or percentage sum/price reduction.
   D. The authority of the City to assess the defect and identify payment adjustment is final.

1.7 NON-PAYMENT FOR REJECTED PRODUCTS
   A. Payment will not be made for any of the following:
      1. Products wasted or disposed of in a manner that is not acceptable.
      2. Products determined as unacceptable before or after placement.
      3. Products not completely unloaded from the transporting vehicle.
      4. Products placed beyond the lines and levels of the Work.
      5. Products remaining on hand after completion of the Work.

1.8 SCHEDULE UNIT PRICES
   The unit prices shall encompass all work required to complete the Work in accordance with the drawings and specifications and the limits on quantities of certain items of work, as follows:
BID ITEM DESCRIPTION

1. MOBILIZATION AND BONDING: This bid item shall include all costs for bonds including performance bond and payment bond; insurance, establishing temporary facilities, as required, moving construction equipment and materials to and from the site, and all appurtenances related to the work not otherwise specifically called out. The pay item is one (1) lump sum, with 50% to be withheld until completion and acceptance of the work.

2. WET WELL: This bid item shall include all costs associated with the supply and installation of the concrete wet well. This work includes excavation, backfill, compaction, Tensar TX160 geogrid, crushed aggregate, concrete base, precast concrete wet well sections, grout, 48”x 66” aluminum hatch, top slab, (4) pipe bollards, approximately 25’’ of 12” pvc sewer pipe and connection to existing stub out, manhole steps, ductile iron piping within the wet well to and including the coupling between the wet well and valve vault. This item includes all incidental items required to provide a complete wet well installation as shown on the plans. The pay item is lump sum.

3. VALVE VAULT: This bid item shall include all costs associated with the supply and installation of the concrete valve vault. This work includes excavation, backfill, compaction, Tensar TX160 geogrid, crushed aggregate, concrete base, precast concrete sections, top slab, manhole lid, steps, all piping, fittings, valves through the vault from the coupling on each side of the vault, and all incidental items required to provide a complete valve vault installation as shown on the plans. The pay item is lump sum.

4. ODOR CONTROL SYSTEM: This bid item shall include all costs associated with the installation of the Precision Systems Passive Odor Control System Equipment provided by the City of Alamosa. This includes 24” sq. x 6” thick concrete pad, vent pipe and all incidental items required to provide a complete odor control system installation as shown on the plans. The pay item is lump sum.

5. PUMPS AND CONTROLS: This bid item shall include all costs associated with the installation of the lift station pumps and controls in the wet well. This work includes the pumps, guide rail, check valve, fogrod, control panel, pump base, lifting chain and
all incidental items required to provide a complete pump installation as shown on the plans. The pay item is lump sum.

6. **10’x 10’x 6” CONCRETE PAD:** This bid item shall include all costs associated with installing a concrete pad for the generator and electrical control panels. This work includes grading, forming, concrete placement, reinforcement, pipe posts, and all incidental items required to provide a complete installation as shown on the plans. The pay item is lump sum.

7. **NATURAL GAS GENERATOR SET:** This bid item shall include all costs associated with the purchase and installation of a natural gas generator set. This bid item includes the automatic transfer switch and all electrical equipment and connections from the generator to the electric control panel. This bid item includes all incidental items required to provide a complete operating electrical backup system to operate the lift station equipment during an electrical power outage from the Excel Energy service. The contractor shall provide shop drawings and manufacture’s information to the City for approval prior to ordering the generator set. The pay item is lump sum.

8. **ELECTRICAL INSTALLATION:** This bid item shall include all costs to furnish and install the required electrical equipment to operate the lift station. This item includes electrical wiring, control panels, furnishing and installing all electrical equipment not specifically supplied by Falcon Environmental and Supply, and all incidental electrical equipment required to operate the lift station as intended. This includes coordination with Xcel Energy as required. The pay item is lump sum.

9. **8 FEET TALL SOLID WOOD FENCE:** This bid item shall include all costs to furnish and install an 8 feet tall solid wood fence around the generator and control panels. This item includes materials, gates, hardware, posts, paint, or wood finish as approved by the City of Alamosa, and all incidental items required to provide a complete installation as shown on the plans. The pay item is lineal feet of fence installed and accepted.

10. **8 INCH C900 PVC FORCEMAIN PIPE:** This bid item shall include all costs to furnish and install 8 inch C900 PVC forcemain pipe from the valve vault to the connection with the existing forcemain in the alley or to the connection with the manhole in Second Street as determined by the City of Alamosa. This includes pipe, trenching, backfill, compaction, fittings, pressure testing, tracer wire and all City of Alamosa ALAMOSA LIFT STATION PROJECT Price and Payment Procedures 01-20-00 - 5
incidental items to provide a complete forcemain installation as shown on the plans. The pay item is lineal feet of pipe installed and accepted.

11. CONNECT FORCEMAIN TO EXISTING MH#1 IN SECOND STREET: This bid item shall include all materials and work required to connect the forcemain pipe to the existing manhole in Second Street. This includes asphalt patch, pipe fittings and all incidental items to provide a complete installation as shown on the plans. The pay item is lump sum.
   (This item may be deleted from the project if the city decides not to connect to the manhole in Second Street.)

12. REMOVE EXISTING LIFT STATION AND WET WELL: This bid item shall include all equipment and costs required to remove the existing wet well and lift station. This includes excavation, backfill, compaction, disposal of all existing equipment, final grading and all incidental items required to remove the exiting lift station and equipment. The pay item is lump sum.

13. LIFT STATION START-UP: The lump sum bid to complete the lift station startup includes but is not limited to installing all electrical connections, providing water to fill lift station wet well for test operation and ensure all pumps are operating according to supplier’s instructions.