Standard Gas Bid Item Descriptions

THESE BID ITEM DESCRIPTIONS SHALL SUPERCEDE ANY BID ITEM DESCRIPTIONS CONTAINED IN UTILITY OWNER SUPPLIED SPECIFICATIONS PROVIDED ELSEWHERE IN THIS PROPOSAL.

BOLLARDS This item is for payment for furnishing and installing protective guard posts at above ground utility installations. A bollard may consist of, but not limited to, a steel post set in concrete or any other substantial post material. This item shall include all labor, equipment, and materials needed for complete installation of the bollard, as specified by the utility owner specifications and plans. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Note: A bid code for this item has been established in standard roadway bid items and shall be used for payment of this item. The bid code is 21341ND.

G CAP EXISTING MAIN This item shall include the specified cap, labor, equipment, excavation, backfill, and restoration required to install a steel or polyethylene/plastic cap on an existing main, when the main is to be left in service at the location shown on the plans or as directed, in accordance with the specifications. This item is not to be paid to cap new main installations or mains that are to be abandoned. Caps on new mains are to be considered incidental to the new main, as are other fittings on new mains, and are not to be paid under this item. All caps on existing mains shall be paid under this one bid item included in the contract, regardless of size or material. No separate bid items will be established for size or material variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Plugging of existing abandoned mains shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications for Road and Bridge Construction, using Bid code 01314, Plug Pipe.

G DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized to minimize the impact of open-cut for the installation of gas main under streets, creeks, etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore, whether used as a carrier pipe or an encasement of a separate carrier pipe. Carrier pipe and peripherals required to be installed within a bore pipe shall be paid separately under pipe items. The bore pipe sizes shall be as shown on the plans and/or in the specifications. This bid item shall also include the cost of pre and/or post directional bore video inspection of adjacent sanitary and storm sewer mains, manholes, and laterals, when the utility specifications associated with the contract require such video inspection. The size shall be the measured internal diameter of the bore pipe. The sizes of bore to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All sizes greater than 2 inches to and including 6 inches
Range 2 = All sizes greater than 6 inches to and including 10 inches
Range 3 = All sizes greater than 10 inches to and including 14 inches
Range 4 = All sizes greater than 14 inches to and including 18 inches
Range 5 = All sizes greater than 18 inches to and including 24 inches
Range 6 = All sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately but shall be considered incidental to the carrier pipe.) Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid in LINEAR FEET (LF).

G ELECTRONIC ID MARKER This bid item is to pay for labor, equipment, computer programing, and installation of an electronic ID marker at the locations shown on the plans, or as directed by the engineer. The marker may be in the form of a ball, disk, cylinder, post, or other shape as required by specification and may be buried, at-grade, or above-grade, as specified. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Paid EACH (EA) when complete.

NOTE: This bid item is not for payment of standard non-electronic markers or monuments. A separate "Line Marker" bid item is established for this purpose.

G ENCASEMENT STEEL BORED This item shall include the steel encasement pipe size as specified on the plans and in the specifications, excavation, bore pit shoring in compliance with all federal, state, local, and utility owner requirements, casing spacers, end seals, vents, backfill, labor, and equipment to bore and install the encasement complete and ready-for-use in accordance with the plans and specifications. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
Range 6 = All encasement sizes greater than 24 inches

Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

Note: Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.

G ENCASEMENT STEEL OPEN CUT This item shall include the steel encasement pipe size as specified on the plans and in the specifications, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, casing spacers, end seals, vents, backfill, labor, and equipment to open cut and install the encasement complete and ready-for-use in accordance with the plans and specifications. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
Range 6 = All encasement sizes greater than 24 inches

Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

Note: Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.

G FARM TAP AND REGULATOR This item is for the installation of gas service tap and regulator assembly on a gas transmission main. This item shall include excavation, labor, equipment, all tapping, piping, fittings, and regulator materials to install the farm tap and regulator assembly, complete and ready-for-use, in accordance with the plans, specifications, and standard drawings. Only one pay item has been established for Farm Tap and Regulator installations. Payment shall be made under this item regardless of farm tap service and regulator size. No separate pay items will be established for size variation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G LINE MARKER This item is for payment for furnishing and installing a gas utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

NOTE: This bid item is not for payment of "Electronic ID Markers". Electronic ID Markers are paid under a separate bid item.

G MAIN ABANDON This bid item is for payment of abandonment of gas mains that are to be left in place, as shown on plans and only when nitrogen purge is to be employed. If the main is to be left in place without nitrogen purge, no payment shall be made under this item. All work shall be done in accordance with the plans, specifications, and all pipeline safety regulations. This bid item is for all work to abandon and nitrogen purge gas main, regardless of size or length. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LUMP SUM (LS) for the entire project when complete.

Plugging of existing abandoned mains shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications for Road and Bridge Construction, using Bid code 01314, Plug Pipe.

Any pipe requiring removal that does not require disposal as hazardous waste will be considered incidental to roadway excavation.

G MAIN POINT RELOCATE This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the locations shown on the plans. Payment under this item is to be made only when the pipe must be cut to accomplish the relocation. This bid item is to be used to relocate an existing gas main at point locations, such as to clear a conflict at a proposed drainage structure, pipe, or any other similar short relocation situation. All new materials are to be used. The materials provided shall be of the same type and specifications as those that exist or as specified in plans and specifications. This item includes replacement of tracing wire, pipe, fittings, labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, bedding, backfill, restoration, etc., required to complete the relocation of main at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings, complete and ready-for-use. For steel pipe, this bid item shall include corrosion coating of the pipe as needed, replacement or relocation of all cathodic protection anodes, lead wire, test boxes or stations, and any accessories. Substitution of alternative materials shall be approved by the engineer in advance on a case-by-case basis. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically, regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Main Point Relocate shall not be paid on a linear feet basis; but shall be paid EACH (EA) at each location when complete and placed in service.

G MAIN RELOCATE/LOWER IN-PLACE This item is intended for payment for horizontal and/or vertical relocation of an existing steel or polyethylene/plastic main at the locations shown on the plans, where the main has sufficient slack that it can be relocated without cutting the pipe. This bid item is to be used to relocate an existing gas main to clear a conflict at a proposed drainage structure, pipe, road subgrade, or any other similar relocation situation. This item includes replacement of tracing wire, labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, bedding, backfill, restoration, etc., required to complete the relocation of the main at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings, complete and ready- for-use. For steel pipe, this bid item shall include corrosion recoating of the pipe as needed, replacement or relocation of all cathodic protection anodes, lead wire, test boxes or stations, and any accessories. This bid item shall include material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. Measurement of quantities under this item shall be from end to end of exposed pipe. Payment shall be made under this item regardless of pipe size to be relocated. No separate bid items are provided for varying pipe sizes. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

G METER AND REGULATOR This bid item description shall be used for all meter and regulator bid items of every size, except those defined as "Special". These pay items are for all labor, equipment, and materials needed for the installation of a service meter and regulator assembly at the locations shown on the plans, or as directed by the engineer in accordance with specifications and standard drawings, complete and ready-for-use. Materials to be provided under this bid item shall include, but are not limited to: meter, regulator, piping, fittings, building anchoring brackets, and hardware needed to create and install the assembly. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G PIPE This description shall apply to all polyethylene/plastic and steel pipe bid items of every size and type to be used as gas main, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to: bends, tees, reducers, plugs, and caps), tracing wire with test boxes (if required by specifications), corrosion protective coatings of steel pipe and fittings, labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, bedding, restoration, pressure testing, backfill, etc., required to install the specified new pipe and new fittings at the locations shown on the plans, including stub outs, or as directed, in accordance with the specifications and standard drawings, complete and ready-for-use. For steel pipe, this bid item shall include all cathodic protection anodes, lead wire, test boxes or stations, and any accessories. No additional payment will be made for rock excavation. This bid item shall include material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. This bid item shall also include the cost of pre and/or post directional bore gas installation video inspection of adjacent sanitary and storm sewer mains, manholes, and laterals, when the utility specifications associated with the contract require such video inspection. Measurement of quantities under this item shall be through valves (including horizontal measurements through above grade valves), fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). Measurements shall be further defined to be to the center of tees at branch mains, at tie-ins at the point where new pipe or fittings contacts existing pipe, to the outside face of vault or structure walls, to the point of main termination at dead ends, or stub outs. No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

G PIPE HAZARDOUS WASTE DISPOSAL This bid item is to be paid only when there is abandoned gas pipe that must be removed and disposed of as hazardous waste due to either internal contamination and/or hazardous external coatings. This item shall include all labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, materials needed for removal and disposal of the pipe, and backfill. All work shall be performed by trained and certified personnel, in accordance with all environmental and pipeline laws and regulations. Any and all pipe removed shall be paid under one bid item included in the contract, regardless of size. No separate bid items will be established for size variations. Method of measurement shall be from end to end of each pipe section removed from the site. Any pipe removed that does not require disposal as hazardous waste shall not be paid under this item but shall be considered incidental to roadway construction. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

G REGULATOR STATION Includes all labor, equipment, materials, and restoration to install a new gas regulator station, as indicated on plans and on standard drawings, complete and ready-fo r- use. Only one pay item has been established for regulator station installations. Payment shall be made under this item regardless of regulator station size. No separate pay items will be established for size variation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: This item is to be used to pay for regulator stations to reduce the pressure of gas from a higher pressure main to feed a lower pressure main. This item is not to be used to pay for regulators used on individual customer service lines.

G SERVICE LONG SIDE This bid item description shall apply to all service line installations of every size bid, up to and including 2-inch inside diameter, except those service bid items defined as "Special". This item includes the specified piping material, main tap, coupling for connecting the new piping to the surviving existing piping, encasement of 2 inches or less internal diameter (if required by plan or specifications), labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, backfill, testing, and restoration at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready-for- use. This bid item is to pay for service installations where the ends of the service connection are on opposite sides of the public roadway, and the service line crosses the centerline of the public roadway as shown on the plans. The length of the service line is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. This pay item does not include installation or relocation of meters. Meters will be paid separately. New service line installations shall be installed to the length required to accommodate the road work; but shall not extend beyond the road right- of-way, temporary roadway easement, or permanent gas easement line, whichever is greatest. Any service replacement found to be needed beyond project limits will need to be accomplished by the utility owner, in consultation with the property owner. Service line replacement beyond project limits is not to be performed as part of road contract work. This bid item shall also include the cost of pre and/or post directional bore gas installation video inspection of adjacent sanitary and storm sewer mains, manholes, and laterals, when the utility specifications associated with the contract require such video inspection. No additional payment will be made for rock excavation or for special bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G SERVICE SHORT SIDE This bid item description shall apply to all service line installations of every size up to and including 2-inch internal diameter, except those service bid items defined as "Special". This item includes installation of the specified piping material of the size specified on plans, encasement of 2 inches or less internal diameter (if required by plan or specifications), main tap, coupling for connecting the new piping to the surviving existing piping, labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, backfill, testing, and restoration at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready- for-use. This bid item is to pay for service installations where both ends of the service connection are on the same side of the public roadway, or when an existing service crossing a public roadway will remain and is being extended, reconnected, or relocated, with all work on one side of the public roadway centerline, as shown on the plans. The length of the service line is not to be specified and shall not be restricted to any minimum or maximum length. Payment shall be made under this item even if the service crosses a private residential or commercial entrance, but not a public roadway. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. This pay item does not include installation or relocation of meters. Meters will be paid separately. New service line installations shall be installed to the length required to accommodate the road work; but not extend beyond the road right-of-way, temporary roadway easement, or permanent gas easement line, whichever is greatest. Any service replacement found to be needed beyond project limits will need to be accomplished by the utility owner, in consultation with the property owner. Service line replacement beyond project limits is not to be performed as part of road contract work. This bid item shall also include the cost of pre and/or post directional bore gas installation video inspection of adjacent sanitary and storm sewer mains, manholes, and laterals, when the utility specifications associated with the contract require such video inspection. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G SERVICE RELOCATE This item is for the relocation of an existing gas service line where a meter is not involved, and where an existing service line has sufficient slack, such that it can easily be adjusted by excavating alongside and moving the line horizontally and/or vertically a short distance, without cutting the service line, to avoid conflicts with road construction. This item shall include excavation, shoring in compliance with all federal, state, local, and utility owner requirements, labor, equipment, bedding, and backfill to relocate the line in accordance with the plans and specifications, complete and ready- for-use. Payment under this item shall be for each location requiring relocation. Payment shall be made under this item regardless of service size or relocation length. No separate pay items will be established for size or length variation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G SERVICE TEST AND RELIGHT This work includes all labor, equipment, and materials for turning off and on a gas service line, testing the service for leaks, relighting pilots on customer appliances. This item also includes separating existing service facilities for testing, air testing, and re-connecting the meter set. All work is to be performed according to utility owner approved specifications and procedures. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G TIE-IN This bid description shall be used for all polyethylene/plastic or steel gas main tie-in bid items of every size, except those that include a temporary bypass or are defined as "Special". This item includes all labor, equipment, excavation, shoring in compliance with all federal, state, local, and utility owner requirements, fittings, sleeves, reducers, couplings, restoration, testing, and backfill required to make the gas main tie-in as shown on the plans, and in accordance with the specifications, complete and ready-for-use. Pipe for tie-ins shall be paid under separate bid items. No additional payment will be made for rock excavation. This bid item shall also include material and placement of flowable fill backfill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

When this bid item is used, no separate payment is to be made under GAS TIE-IN EXCAVATION AND BACKFILL, GAS TIE-IN PIPE PREPARATION, and GAS TIE-IN SHORING bid items since these efforts are incidental to the above G TIE-IN bid description.

G TIE-IN EXCAVATION AND BACKFILL This bid item is for payment for only the excavation and backfill services of utility owner performed tie-ins. This bid item is employed due to utility owner request for excavation, shoring, and backfill assistance. Shoring for tie-in excavation shall be considered incidental to this bid item. Shoring shall be provided to whatever extent required to be in compliance with all federal, state, local, and utility owner requirements to protect all workers including utility owner workers. The shoring shall be left in place until the tie-in is made by the utility owner regardless of how much time that may be. The contractor shall draw his own conclusions on how long the shoring may need to be left in place at each locaiton. No separate payment will be made for rock excavation. The excavation shall be made to the dimensions required by the utility owner regardless of the materials encountered. This bid item shall also include disposal of excavated material deemed to be unsuitable for backfill, procurement of suitable backfill material as required by specification or on plans, compaction and restoration. Backfill materials to be provided by the contractor may consist of, but is not limited to, sand or flowable fill as may be required. Payment under this item shall be by volume of actual excavation measured in the field. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be measured and paid by CUBIC YARD (CY) when complete.

Payment shall not be made under this item if the entirety of the tie-in is being performed by the contractor and is being paid under a G TIE-IN bid item contained in the contract. Excavation, and backfill for pipe tie-ins being made entirely by the contractor is considered incidental to G TIE- IN bid items contained in the contract.

G TIE-IN PIPE PREPARATION This bid item is for the gas contractor to make ready all polyethylene/plastic and/or steel tie-in fittings and piping short of cutting of the existing main. Separate bid items are provided for polyethylene/plastic mains and steel mains. No separate bid items are provided for size variations or on an individual location basis. Only separate bid items for two material type are provided. Payment is to be made under these items when the gas utility owner is to make the final cut-in of the existing main and tying of the new main to the existing main. One lump sum item is provided for the combined entirety of all polyethylene/plastic tie-in preparations on a project and one lump sum item is provided for the combined entirety of all steel tie-in preparations on a project. This item shall include fusing or welding of all pipe and fittings needed to make the tie-in location ready for completion by the utility owner. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's specifications shall be referenced. This item shall be paid LUMP SUM (LS) for the entirety of the project for each material type when complete.

Payment shall not be made under this item if the entirety of the tie-in is being performed by the contractor and is being paid under a G TIE-IN bid item contained in the contract. Tie-in pipe preparation for tie-ins being made entirely by the contractor is considered incidental to G TIE-IN

bid items contained in the contract.

G TIE-IN W/BYPASS This bid description shall be used for all polyethylene/plastic or steel gas main tie-in bid items that include temporary bypass of every size, except those defined as "Special". This item includes all labor, equipment (including tapping, stopple, and/or squeeze equipment), excavation, shoring in compliance with all federal, state, local, and utility owner requirements, permanent and temporary fittings (including, but not limited to: tees, split tees, bends, reducers, plugs, caps, and couplings), temporary bypass piping, restoration, testing, and backfill required to make the gas main tie-in with temporary bypass as shown on the plans, and in accordance with the specifications, complete and ready- for-use. Mainline pipe for tie-ins shall be paid under separate bid items. This bid item shall also include material and placement of flowable fill backfill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

The tie-in size reflected in the bid item reflects the nominal internal diameter size of the existing main gas line being tied-in, not the bypass pipe size.

G VALVE This description shall apply to all buried valves of every size and type required in the plans and specifications, except those bid items defined as "Special". Payment under this description is to be for gas valves being installed with new main. This item includes: the valve as specified in the plans and specifications, protective coating and corrosion protection, labor, equipment, excavation, valve box and valve stem extensions, backfill, restoration, testing, etc., required to install the specified valve at the location shown on the plans, in accordance with the specifications and standard drawings, complete and ready-for-use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G VALVE ABOVE GRADE This description shall apply to all above grade valve assemblies of every size and type required in the plans and specifications, except those bid items defined as "Special". Payment under this description is to be for above grade gas valves being installed with new main. This item includes the above grade valve, pipe, and fittings as specified in the plans, specifications, and standard drawings. This bid items shall also include protective coating and corrosion protection, labor, equipment, excavation, backfill, restoration, testing, etc., required to install the specified above grade valve at the location shown on the plans, in accordance with the specifications and standard drawings, complete and ready-for-use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G VALVE BOX ADJUST This item includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, etc. to adjust the top of the box to finished grade, complete and ready-for- use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G VALVE BOX REMOVE This item includes all labor, equipment, restoration materials, disposal and any other effort for removal of a valve box, leaving the valve in place. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

G VALVE REMOVE This item includes all labor, equipment, and restoration materials for cutting of existing pipe and any other effort necessary for total removal of an existing valve and valve box. This bid item shall include disposal of the valve and box, unless plans or specifications state the valve and box are to be salvaged and delivered to the utility owner for reuse. No separate pay items are to be established for size variations. All valve removals, regardless of size, shall be paid under this one pay item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

If plugging of existing abandoned mains is needed after valve removal, the work shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications for Road and Bridge Construction, using Bid code 01314, Plug Pipe.

G WELD X-RAY INSPECTION This description shall apply to all radiographic x-ray inspections of steel pipe joints of every size, within the pipe size ranges given in the bid item text. This bid includes all labor, equipment, and materials to assess the acceptability of the weld in order to comply with specifications, industry and regulatory standards. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) for each pipe joint inspected.