

ITEM SPECIAL – HYDRANT ADJUSTED TO GRADE

THE CONTRACTOR SHALL RAISE THE EXISTING FIRE HYDRANT TO FIT THE NEW GRADE, BY USING APPROPRIATE EXTENSION SECTIONS IF NEEDED. THE ENGINEER SHALL FIRST CONFIRM THE NECESSITY FOR RAISING EACH HYDRANT. ANY HYDRANT CONSIDERED SATISFACTORY AS EXISTING SHALL BE NON-PERFORMED FROM THIS ITEM.

THE CONTRACTOR SHALL PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER ADJUSTMENT OF THE HYDRANT, INCLUDING INSPECTION AND CLEANING.

MEASUREMENT

THE "HYDRANT ADJUSTED TO GRADE" TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF EACH LISTED AND ESTIMATED SEPARATELY COMPLETED AND ACCEPTED.

SETTING

(A) GENERAL LOCATION: THE HYDRANT SHALL BE LOCATED IN A MANNER TO PROVIDE COMPLETE ACCESSIBILITY, AND IN SUCH A MANNER THAT THE POSSIBILITY OF DAMAGE FROM VEHICLES OR INJURY TO PEDESTRIANS WILL BE MINIMIZED.

(B) LOCATION REGARDING CURB LINES: WHEN PLACED BEHIND CURB THE HYDRANT SHALL BE SET SO THAT THERE IS A MINIMUM OF 0.61 METER OF CLEARANCE FROM THE FACE OF THE CURB TO THE CLOSEST PORTION OF THE HYDRANT.

(C) LOCATION REGARDING SIDEWALK: WHEN SET IN THE TREE LAWN SPACE BETWEEN THE CURB AND THE SIDEWALK OR BETWEEN THE SIDEWALK AND THE PROPERTY LINE, NO PORTION OF THE HYDRANT OR NOZZLE CAP SHALL BE WITHIN 0.15 METER OF THE SIDEWALK.

(D) WHERE THE EXISTING HYDRANT IS TO BE EXTENDED OR RELOCATED AND THE EXTENSION OR RELOCATION CAN BE ACHIEVED BY CUTTING THE EXISTING PIPE BETWEEN THE EXISTING HYDRANT SHOE AND BRANCH VALVE, THE ADDITIONAL PIPING AND/OR HORIZONTAL OFFSET SHALL BE SLEEVED-IN THE EXISTING BRANCH USING RETAINED MECHANICAL JOINT SOLID SLEEVES OR APPROVED COMPRESSION COUPLINGS.

(E) THE EXISTING BRANCH PIPE SHALL BE CUT NO LESS THAN 0.45 METER FROM THE FACE OF THE EXISTING HYDRANT SHOE. THE EXISTING HYDRANT, WITH THE 0.45 METER PIPE INTACT SHALL BE RELOCATED AND RESET AT ITS PLACE OF RELOCATION AND RECONNECTED TO THE NEW HYDRANT BRANCH PIPING WITH RETAINED MECHANICAL JOINT SOLID SLEEVES OR APPROVED COMPRESSION COUPLINGS AND REQUIRED RETAINED MECHANICAL JOINT FITTINGS OR OFFSETS TO SET RELOCATED HYDRANT TO PROPER LINE AND GRADE.

(F) THE EXISTING BRANCH VALVE CASTING MAY BE REUSED IF IN GOOD CONDITION. VALVE BOX CASTINGS FOUND TO BE DAMAGED OR UNSUITABLE FOR REUSE SHALL BE REPLACED WITH NEW AND UNUSED MATERIAL.

(G) WHERE VERTICAL DEFLECTION BY USE OF VERTICAL BENDS OR OFFSETS CANNOT BE ACHIEVED DUE TO OBSTRUCTIONS, THE NEW HYDRANT BRANCH TEE MAY BE RELOCATED DOWNWARD TO ALLOW PROPER DEFLECTION AND CLEARANCE OF OBSTRUCTION. RETAINED MECHANICAL JOINT FITTINGS SHALL BE USED TO BRING RELOCATED HYDRANT TO PROPER GRADE AFTER CROSSING OBSTRUCTION.

(H) POSITION OF NOZZLE: THE HYDRANT SHALL STAND PLUMB WITH THE NOZZLES POINTING TOWARD THE ROAD AT AN ANGLE OF 90 DEGREES THEREFROM. WHERE THE HYDRANT BRANCHING IS PARALLEL WITH OR NOT AT RIGHT ANGLES TO THE CURB, THE CONTRACTOR SHALL RELEASE SWIVEL HEAD BOLTS AND ADJUST THE HYDRANT NOZZLES TO FACE THE ROAD AT THE PROPER ANGLE. A HYDRANT WITHOUT SWIVEL HEADS WILL BE ADJUSTED BY LAKE COUNTY DEPARTMENT OF UTILITIES WHERE NECESSARY TO CORRECT THE ANGLE OF THE NOZZLES. THE ELEVATION SHALL CONFORM TO THE ESTABLISHED GRADE WITH TOPS OF FROST CASING AT LEAST FOUR INCHES ABOVE GRADE.

(I) DRAINAGE AT HYDRANT: DRAINAGE SHALL BE PROVIDED AT THE BASE OF THE HYDRANT BY FILLING AROUND THE ELBOW WITH COURSE GRAVEL OR CRUSHED STONE TO AT LEAST 0.15 METER ABOVE THE WASTE OPENING. WHEREVER A HYDRANT IS SET IN ROCK, CLAY OR OTHER IMPERVIOUS SOIL, THE TRENCH SHALL BE WIDENED AND DEEPENED ON EACH SIDE OF THE HYDRANT BASE AND THE SPACE SHALL BE FILLED COMPACTLY WITH COURSE GRAVEL OR BROKEN STONE MIXED WITH COURSE SAND OF SUFFICIENT QUANTITY TO ABSORB ALL WATER TO BE DRAINED FROM THE HYDRANT WHEN THE VALVE IS CLOSED.

(J) ANCHORAGE FOR HYDRANT: THE HYDRANT SHALL BE SET ON A STONE SLAB OR SIMILAR FOUNDATION AND THE BASE OF THE HYDRANT AND THE HYDRANT TEE SHALL BE WELL BRACED AGAINST UNEXCAVATED EARTH AT THE END OF THE TRENCH WITH CONCRETE BACKING AND IT SHALL BE TIED TO THE PIPE WITH SUITABLE RODS OR CLAMPS AS DIRECTED BY THE ENGINEER.

(K) CLEANING: THE HYDRANT SHALL BE THOROUGHLY CLEANED OF DIRT AND FOREIGN MATERIAL BEFORE SETTING.

BASIS OF PAYMENT

THE UNIT PRICE STIPULATED FOR EACH "ITEM SPECIAL – HYDRANT ADJUSTED TO GRADE" SHALL INCLUDE THE EXCAVATION, BACKFILLING, INSPECTING AND CLEANING, SEEDING AND SODDING AND THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS AND APPLIANCES NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

ITEM SPECIAL – HYDRANT EXTENDED AND ADJUSTED TO GRADE

THE CONTRACTOR SHALL EXTEND THE LENGTH OF THE EXISTING OFFSET AND RAISE OR LOWER THE ELEVATION TO FIT THE NEW GRADE. THE ENGINEER SHALL FIRST CONFIRM THE NECESSITY FOR EXTENDING EACH HYDRANT. ANY HYDRANT CONSIDERED SATISFACTORY AS EXISTING SHALL BE NON-PERFORMED.

MEASUREMENT

THE "HYDRANT EXTENDED AND ADJUSTED TO GRADE" TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF EACH LISTED AND ESTIMATED SEPARATELY, COMPLETED AND ACCEPTED.

BASIS OF PAYMENT

THE UNIT PRICE STIPULATED FOR EACH "ITEM SPECIAL – EXTEND AND ADJUST HYDRANT TO GRADE" SHALL INCLUDE ALL EXCAVATION, SHEETING, REMOVING AND RESETTING THE EXISTING HYDRANT, EXTENDING BRANCH, TESTING, PAINTING, BACKFILLING AND FURNISHING ALL LABOR, TOOLS MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN PLACE.