

GENERAL NOTES

WATERWORK NOTES

HANDLING PIPE AND ACCESSORIES

- (A) UNLOADING: PIPE, FITTINGS, VALVES, HYDRANTS, AND OTHER ACCESSORIES SHALL, UNLESS OTHERWISE DIRECTED, BE UNLOADED AT THE POINT OF DELIVERY, HAULED TO AND DISTRIBUTED AT THE SITE OF THE PROJECT BY THE CONTRACTOR. THEY SHALL AT ALL TIMES BE HANDLED WITH CARE TO AVOID DAMAGE. IN LOADING AND UNLOADING, THEY SHALL BE LIFTED BY HOISTS OR SLID, OR ROLLED ON SKIDWAYS IN SUCH A MANNER AS TO AVOID SHOCK. UNDER NO CIRCUMSTANCES SHALL THEY BE DROPPED. PIPE HANDLED ON SKIDWAYS MUST NOT BE SKIDDED OR ROLLED AGAINST PIPE ALREADY ON THE GROUND.
- (B) AT SITE OF WORK: IN DISTRIBUTING THE MATERIAL AT THE SITE OF THE WORK, EACH PIECE SHALL BE UNLOADED OPPOSITE OR NEAR THE PLACE WHERE IT IS TO BE LAID IN THE TRENCH.
- (C) PROTECTION OF PIPE COATING: PIPE SHALL BE HANDLED IN SUCH MANNER THAT A MINIMUM AMOUNT OF DAMAGE TO THE COATING WILL RESULT. ANY DUCTILE IRON PIPE OR FITTING, THE COAT OF WHICH HAS BEEN DAMAGED IN SHIPPING OR HANDLING, SHALL HAVE THE DAMAGED PORTION WELL CLEANED AND COVERED WITH AN ASPHALT PAINT, APPROVED BY THE ENGINEER AND COUNTY, BEFORE BEING PLACED IN THE WORK. THE CONTRACTOR SHALL THOROUGHLY COAT ALL EXPOSED PARTS OF BOLT AND NUTS WITH AN APPROVED ASPHALT PAINT, AND PROTECTED BY ZINC "PROTECTO-CAPS", AFTER ALL PIPE HAS BEEN LAID AND BEFORE BACKFILLING HAS BEEN PLACED. ALL FIELD COATING SHALL BE FURNISHED BY THE CONTRACTOR.
- (D) PIPE KEPT CLEAN: THE INTERIOR OF THE PIPE, FITTINGS, AND OTHER ACCESSORIES SHALL BE KEPT FREE FROM DIRT AND FOREIGN MATTER AT ALL TIMES.
- (E) FROST PROTECTION: VALVES AND HYDRANTS BEFORE INSTALLATION SHALL BE DRAIN-ED AND STORED IN A MANNER THAT WILL PROTECT THEM FROM DAMAGE BY FREEZING.

CHANGES IN WATERLINES

WHEREVER IT BECOMES NECESSARY, IN THE OPINION OF THE ENGINEER AND COUNTY, TO CHANGE THE LOCATION OR ELEVATION OF WATER MAINS AND HYDRANTS, AND WHERE CONNECTIONS ARE TO BE MADE BETWEEN EXISTING DISTRIBUTION MAINS AND WATER MAINS UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING WATERLINE MATERIALS REQUIRED TO MAKE WAY FOR THE CONNECTION, AND SHALL FURNISH ALL THE CAST IRON OR DUCTILE IRON PIPE, FITTINGS AND VALVES RE-QUIRED AND SHALL ALSO FURNISH ALL NECESSARY LABOR, MATERIALS, TOOLS AND EQUIP-MENT AND MAKE THE EXCAVATION, BACKFILL AND TEMPORARY PAVING FOR SUCH CONNECT-IONS. PAYMENT FOR THIS WILL BE INCLUDED IN PRICE BID UNDER APPROPRIATE ITEM FOR SIZE OF WATER MAIN OR CONNECTION TO BE INSTALLED. ALL PIPE, VALVES, VALVE BOXES, AND HYDRANTS TO BE REMOVED SHALL BE STORED ON THE PROJECT SITE FOR PICKUP BY CITY FORCES.

CLOSING VALVES

THE CLOSING OF ALL GATE VALVES ON WATER MAINS FOR MAKING CONNECTIONS, TESTS, OR FOR ANY OTHER CAUSE, SHALL BE DONE BY THE LAKE COUNTY UTILITIES DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE LAKE COUNTY UTILITIES DEPARTMENT ONE WEEK IN ADVANCE OF THE SHUTDOWN AND THEY WILL SPECIFY THE TIME, HOURS AND/OR SPECIAL CONDITIONS, ETC.

ITEM SPECIALS--WATERWORK

ALL WATERWORK LISTED AS "ITEM SPECIALS" IN GENERAL SUMMARY SHALL BE CONSTRUCT-ED IN ACCORDANCE WITH THE LAKE COUNTY REGIONAL SEWER AND WATER DISTRICT'S "RULES AND REGULATIONS GOVERNING WATER SUPPLY IN LAKE COUNTY".

A COPY OF SAID SPECIFICATIONS IS ON FILE WITH ODOT'S BUREAU OF CONTRACT SALES IN COLUMBUS AND AT THE DISTRICT 12 OFFICE OR CAN BE OBTAINED FROM THE LAKE COUNTY SANITARY ENGINEER'S OFFICE.

ITEM SPECIAL--HYDRANT REMOVED FOR STORAGE

THIS WORK SHALL CONSIST OF THE REMOVAL OF EXISTING HYDRANT ASSEMBLIES. (SEE DETAIL, SHEET NO. 36)

HYDRANTS DESIGNATED FOR REMOVAL SHALL BE REMOVED UNDER LAKE COUNTY UTILITIES DEPARTMENT SUPERVISION. SPECIAL CARE IN REMOVAL AND HANDLING OF EXISTING HYDRANTS SHALL BE MAINTAINED AT ALL TIMES AND REMOVAL OF EXISTING HYDRANTS TO BE DONE BY EXCAVATION OF HYDRANT ASSEMBLY ONLY, UNLESS OTHERWISE DIRECTED BY LAKE COUNTY UTILITIES.

REMOVE HYDRANT AT THE HYDRANT BASE CONNECTION TO THE 6" HYDRANT LEAD PIPING AND CAP WITH A MECHANICAL JOINT PLUG.

ALL REMOVED HYDRANTS SHALL BECOME THE PROPERTY OF THE CITY OF WILLOUGHBY. THE CONTRACTOR SHALL STORE THEM IN THE RIGHT-OF-WAY TO BE SALVAGED BY THE CITY OF WILLOUGHBY FORCES.

THE UNIT PRICE BID FOR ITEM SPECIAL--HYDRANT REMOVED SHALL INCLUDE THE NECESSARY EXCAVATION AND BACKFILL INCLUDING GRANULAR BACKFILL WHEN REQUIRED, DISPOSAL OF WASTE MATERIALS, PROTECTION OF STRUCTURES AND UTILITIES TOGETHER WITH ALL LABOR, EQUIPMENT, TOOLS AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SHOWN, SPECIFIED OR DIRECTED BY THE ENGINEER.

ITEM SPECIAL--HYDRANT ASSEMBLY, TYPE A

THIS WORK SHALL CONSIST OF THE INSTALLATION OF HYDRANT ASSEMBLIES AS DETAILED IN THESE PLANS. (SEE SHEET NO. 36)

ALL HYDRANTS SHALL BE POSITIONED SO THAT THE STEAMER NOZZLES POINT IN THE DIRECTION SHOWN ON THE PLANS.

THE UNIT PRICE BID FOR ITEM SPECIAL--HYDRANT ASSEMBLY SHALL INCLUDE THE NECESSARY EXCAVATION AND BACKFILL INCLUDING GRANULAR BACKFILL WHEN REQUIRED. IT SHALL ALSO INCLUDE THE NECESSARY FITTINGS, VALVES, EXTENSIONS, SHEETING OR SHORING, PIPE BEDDING, AND PIPE BACKFILL, DISPOSAL OF WASTE MATERIALS, PROTECTION OF STRUCTURES, UTILITIES SERVICE CONNECTIONS OR OTHER FACILITIES TOGETHER WITH ALL LABOR, EQUIPMENT, TOOLS AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SHOWN, SPECIFIED OR DIRECTED BY THE ENGINEER.

ITEM SPECIAL--MISCELLANEOUS METAL WORK

THE CONTRACTOR SHALL FURNISH AND INSTALL NEW MISCELLANEOUS METALS SUCH AS MANHOLE FRAMES AND COVERS, WATER METER BOXES AND COVERS, VALVE BOXES AND LIDS, VALVE BOX EXTENSIONS, HYDRANT EXTENSIONS, BRONZE BOLTS, AND OTHER SIMILAR ITEMS REQUIRED FOR THE PROPER COMPLETION OF THE WORK AND NOT SPECIFIC-ALLY CALLED FOR UNDER ANOTHER PAY ITEM. FURNISHINGS AND INSTALLATIONS SHALL BE AS DIRECTED BY THE ENGINEER, AND LAKE COUNTY UTILITIES DEPARTMENT UPON DETERMINATION IN THE FIELD THAT SUCH CASTINGS OR PARTS ARE BROKEN, DAMAGED OR OTHERWISE UNUSABLE.

ALL NEW CASTINGS OR PARTS SHALL CONFORM TO THE APPROPRIATE WATERWORKS SPECIFICATIONS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS, SPECIFIC-ATIONS OR AS DIRECTED BY THE ENGINEER, AND LAKE COUNTY UTILITIES DEPARTMENT. ALL CASTINGS OR PARTS DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE SHALL BE REPLACED AT NO COST TO THE STATE OR COUNTY.

THE UNIT PRICE BID PER POUND FOR ITEM SPECIAL, MISCELLANEOUS METALS SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PROPERLY COMPLETE THE WORK AS PLANNED, SPECIFIED OR DIRECTED BY THE ENGINEER, AND LAKE COUNTY UTILITIES.

AN ESTIMATED QUANTITY FOR ITEM SPECIAL, MISCELLANEOUS METAL WORK HAS BEEN PROVIDED IN THE PLANS AS FOLLOWS:

ITEM SPECIAL, MISCELLANEOUS METAL WORK 500 LBS.

ITEM SPECIAL--HYDRANT EXTENDED AND ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF THE HYDRANT EXTENDED AS DETAILED IN THESE PLANS, SEE SHEET NO. 36.

THE EXISTING HYDRANT SHALL BE REMOVED (FOR STORAGE TO BE PICKED UP BY THE CITY OF WILLOUGHBY,) THE HYDRANT LEAD SHALL BE EXTENDED, AND NEW HYDRANT INSTALLED AS SHOWN ON THE PLAN AND IN THE DETAIL. (SHEET 35A)

THE UNIT PRICE BID FOR ITEM SPECIAL--HYDRANT EXTENDED AND ADJUSTED TO GRADE SHALL INCLUDE THE NECESSARY EXCAVATION AND BACKFILL INCLUDING GRANULAR BACKFILL WHEN REQUIRED. IT SHALL ALSO INCLUDE THE NECESSARY FITTINGS, EXTENSIONS, SHEETING AND SHORING, PIPE BEDDING, AND PIPE BACKFILL, DISPOSAL OF WASTE MATERIALS, PROTECTION OF STRUCTURES, UTILITIES SERVICE CONNECTIONS OR OTHER FACILITIES TOGETHER WITH ALL LABOR, EQUIPMENT, TOOLS AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SHOWN, SPECIFIED OR DIRECTED BY THE ENGINEER.

ITEM 202 -- ABANDONED MISC. METER VAULT ABANDONED

THIS WORK SHALL CONSIST OF REMOVING THE MANHOLE CASTING AND THE PRECAST CONCRETE TOP FROM THE TOP OF THE ABANDONED WATER VAULT AND BACKFILLING THE VAULT TO REQUIRED SUBGRADE ELEVATION WITH ODOT ITEM 310 COMPACTED IN ACCORDANCE W/ODOT ITEM 203. (SEE DETAIL, SHEET NO. 36) THE CASTING AND CONCRETE TOP TO BE PICKED UP BY CITY OF WILLOUGHBY

THE UNIT BID PRICE FOR ITEM 202- METER VAULT ABANDONED SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SHOWN, SPECIFIED OR DIRECTED BY THE ENGINEER.

ITEM SPECIAL--VALVE BOX ADJUSTED TO GRADE

THIS WORK SHALL CONSIST OF ADJUSTING EXISTING VALVE BOXES TO GRADE IN REASONABLY CLOSE CONFORMITY TO THE GRADES SHOWN ON THE PLANS OR ESTABLISHED BY THE ENGINEER.

THE UNIT PRICE BID FOR ITEM SPECIAL--VALVE BOX ADJUSTED TO GRADE SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO RAISE OR LOWER AND PLUMB THE EXISTING CASTING, AS DIRECTED BY THE ENGINEER.