400 FT

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

OHIO EDISON/FIRST ENERGY **ELECTRIC:**

2600 ERIE STREET SOUTH MASSILLON, OH 44646 ATTN: KEVIN McCLUSKY

MCCLUSKY@FIRSTENERGYCORP.COM

330.830.7083

DOMINION ENERGY OHIO GAS:

320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OH 44333 ATTN: RICHARD HOUSEHOLDER RELOCATION@DOMINIONENERGY.COM

330.664.2409

MASSILLON CABLE TV (MCTV) CABLE:

> 814 CABLE COURT NW MASSILLON, OH 44647 ATTN: JEFF CAMPBELL JCAMPBELL@MCTVOHIO.COM

330.833.4134 X116

WATER: AQUA OHIO, INC

> 870 THIRD STREET NW MASSILLON, OH 44647 ATTN: JACOB FLANARY JLFLANARY@AQUAAMERICA.COM

330.832.5764 X50650

TELEPHONE: AT&T LEGAL MANDATE

50 WEST BOWERY STREET, FLOOR 6

AKRON, OH 44308 ATTN: STEVE HYLTON SH1513@ATT.COM 330.384.3055

SFWFR.

CITY OF MASSILLON SIGNAL/LIGHTING

401 WALNUT ROAD SE MASSILLON, OH 44647 ATTN: LEE MCBRIDE LMCBRIDE@MASSILONOHIO.GOV

330.833.5746

AT&T REQUESTS THAT IF AN UNDERGROUND CONFLICT IS DISCOVERED DURING CONSTRUCTION THAT THE CONTRACTOR PROVIDE AT&T THREE (3) DAYS' NOTICE AND AN ADDITIONAL SEVEN (7) WORKING DAYS TO RESOLVE THE CONFLICT, WITH ALLOWANCE FOR ADDITIONAL TIME DEPENDING ON THE SEVERITY AND COMPLEXITY INVOLVED.

THE CROSSING OF DOMINION ENERGY OHIO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING DOMINION ENERGY OHIO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (330-266-2121), RICK MCDONALD (330-266-2122), OR AL HUMRICHOUSER (330-478-3757).

THE UNDERGROUND UTILITIES ON THIS PLAN HAVE BEEN LOCATED BY USING A SUBSURFACE UTILITY ENGINEERING COMPANY [SUE]. IF THERE ARE ANY DISCREPANCIES BETWEEN FIELD MARKINGS AND WHAT THE PLAN INDICATES, PLEASE CONTACT MATTHEW STEELE, DISTRICT UTILITY COORDINATOR 330-786-4832, PRIOR TO ANY SUBSURFACE WORK BEING INITIATED.

EXISTING PLANS

EXISTING PLANS ENTITLED STA-241-(8.83-10.42), STA-241-7.94, AND WALES RD. (S.R. 241) AND HILLS AND DALES RELOCATION MAY BE INSPECTED IN THE ODOT DISTRICT 4 OFFICE IN AKRON.

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

CONSTRUCTION COORDINATION WITH UTILITY WORK

NO COMPENSABLE DELAYS WILL BE CONSIDERED DUE TO UTILITY RELOCATION INTERFERENCE. TO AVOID CONSTRUCTION DELAY DUE TO UTILITY CONSTRUCTION/RELOCATION, THE CONTRACTOR SHALL WORK IN AN AREA NOT AFFECTED BY ONGOING UTILITY WORK, AS APPROVED BY THE ENGINEER.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY. THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT. OR EXISTING APPURTENANCE TO BE CONNECTED. DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF SUNSET AND 7:00AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PRIVATE-USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT, AT MAXIMUM OPERATING HEIGHT, SHALL EXCEED A HEIGHT OF 50 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, COORDINATION WITH THE AIRPORT OWNER AND THE ODOT OFFICE OF AVIATION WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. FOR PRIVATE USE AIRPORTS OR HELIPORTS, COORDINATE WITH THE AIRPORT OWNER AND THE ODOT OFFICE OF AVIATION. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL COORDINATION IS MET AND DOCUMENTATION HAS BEEN FURNISHED TO THE PROJECT ENGINEER. IF COORDINATION IS NOT OBTAINED, THEN THE PROJECT ENGINEER WILL HAVE THE AUTHORITY TO PROVIDE RESTRICTIONS AS REQUIRED.

GAINEY HELIPORT ODELL W. GAINEY 1900 ERIE N MASSILLON, OH 44646 (216) 832-8395

AFFINITY MEDICAL CENTER *HELIPORT* 875 8TH STREET NE MASSILLON, OH 44646 (330) 832-8761

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 4 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: RTK ODOT VRS

(PER 2016 ODOT SPEC.)

MONUMENT TYPE: TYPE B

VERTICAL POSITIONING

NA VD88 ORTHOMETRIC HEIGHT DATUM: GEOID 12B GEOID:

HORIZONTAL POSITIONING

NAD83 (2011) REFERENCE FRAME: ELLIPSOID: GRS80

MAP PROJECTION: LAMBERT CONFORMAL CONIC COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE (3401)

COMBINED SCALE FACTOR: 1.00009465

ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

CONSTRUCTION STAGING

CONTRACTOR EQUIPMENT AND MATERIAL STORAGE SHALL BE I IMITED TO:

- 1. THE CITY OF MASSILLON PROPERTY ON THE EAST SIDE OF WALES ROAD NE ADJACENT TO HILLS AND DALES ROAD NE. SEE TEMPORARY CONSTRUCTION FENCE NOTE ON THIS SHEET FOR ADDITIONAL DETAILS.
- 2. AN OFF-SITE STAGING AREA, THE CITY OF MASSILLON PARK MAINTENANCE FACILITY LOT. IS LOCATED AT STATE AVENUE NE AND RESERVOIR DRIVE NE. THIS AREA IS FENCED. THE GATES SHALL BE LOCKED AT THE END OF EACH WORK DAY. THE CITY SHALL PROVIDE THE CONTRACTOR WITH A KEY. ALL WASHOUT WORK SHALL BE RESTRICTED TO THE OFF-SITE STAGING AREA.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

WORK I TMTTS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

TEMPORARY CONSTRUCTION FENCE

THE CONTRACTOR SHALL PLACE A CONSTRUCTION FENCE AROUND THE STAGING AREA ON CITY PROPERTY AT THE HILLS AND DALES ROAD NE INTERSECTION AREA UTILIZING FENCES AND GATES THROUGHOUT THE DURATION OF CONSTRUCTION. THE TEMPORARY CONSTRUCTION FENCE AND GATES SHALL BE SIX FEET (6') HIGH CHAIN LINK, INCLUDING A GATE FOR CONTRACTOR ACCESS. THE GATES SHALL BE LOCKED AT THE END OF EACH WORK DAY, THREE (3) KEYS SHALL BE PROVIDED TO THE CITY.

THE CONTRACT UNIT PRICE FOR FENCE, MISC .: TEMPORARY CONSTRUCTION FENCE WITH GATE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, HARDWARE, WARNING SIGNS, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK. THE FOLLOWING ESTIMATED QUANTITY IS CARRIED TO THE GENERAL SUMMARY AND IS TO BE USED AS DIRECTED BY THE ENGINEER:

607, FENCE, MISC.: TEMPORARY

CONSTRUCTION FENCE WITH GATE

CLEARING AND GRUBBING

MANY TREES AND STUMPS SHOWN ON THESE PLANS HAVE BEEN REMOVED PRIOR TO THE START OF CONSTRUCTION. REMOVE ALL REMAINING TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. REMOVAL ITEMS SHOWN ON THE RIGHT OF WAY PLAN THAT ARE NOT SPECIFICALLY ITEMIZED FOR REMOVAL SHALL BE INCIDENTAL TO ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	1,927 CY
659, REPAIR SEEDING AND MULCHING	868 SY
659, INTER-SEEDING	868 SY
659, COMMERCIAL FERTILIZER	2.34 TON
659, LIME	3.59 ACRES
659. WATER	96 MGAI

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS. FOR SEEDING AND MULCHING QUANTITIES SEE SHEET 80. THE ABOVE QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

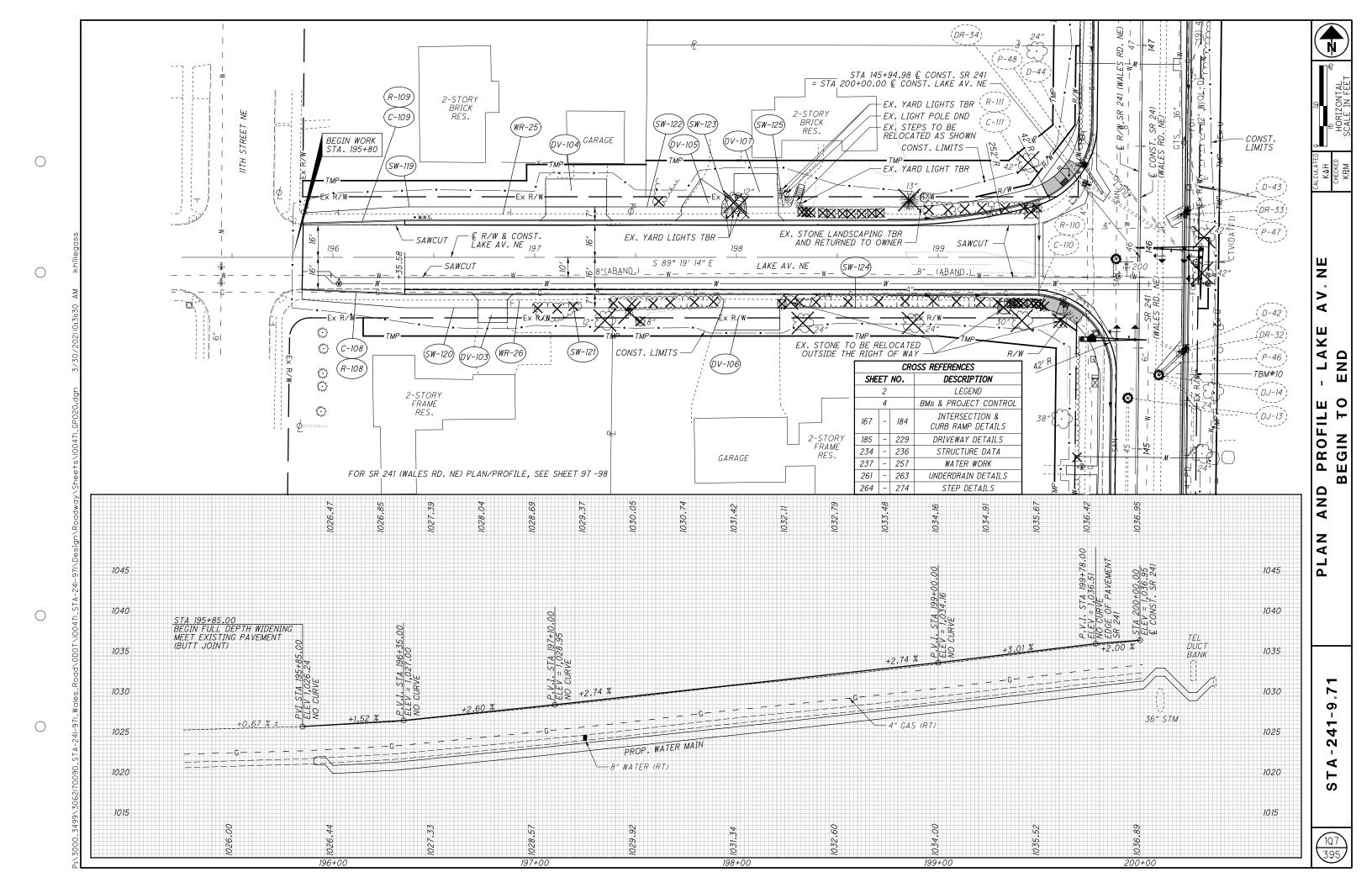
THIS LUMP SUM ITEM INCLUDES ALL WORK, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS TO REMOVE AND DISPOSE OF THE EXISTING LEANING RETAINING WALL BETWEEN STA. 103+72 TO STA. 103+86, LT ON SR 241.

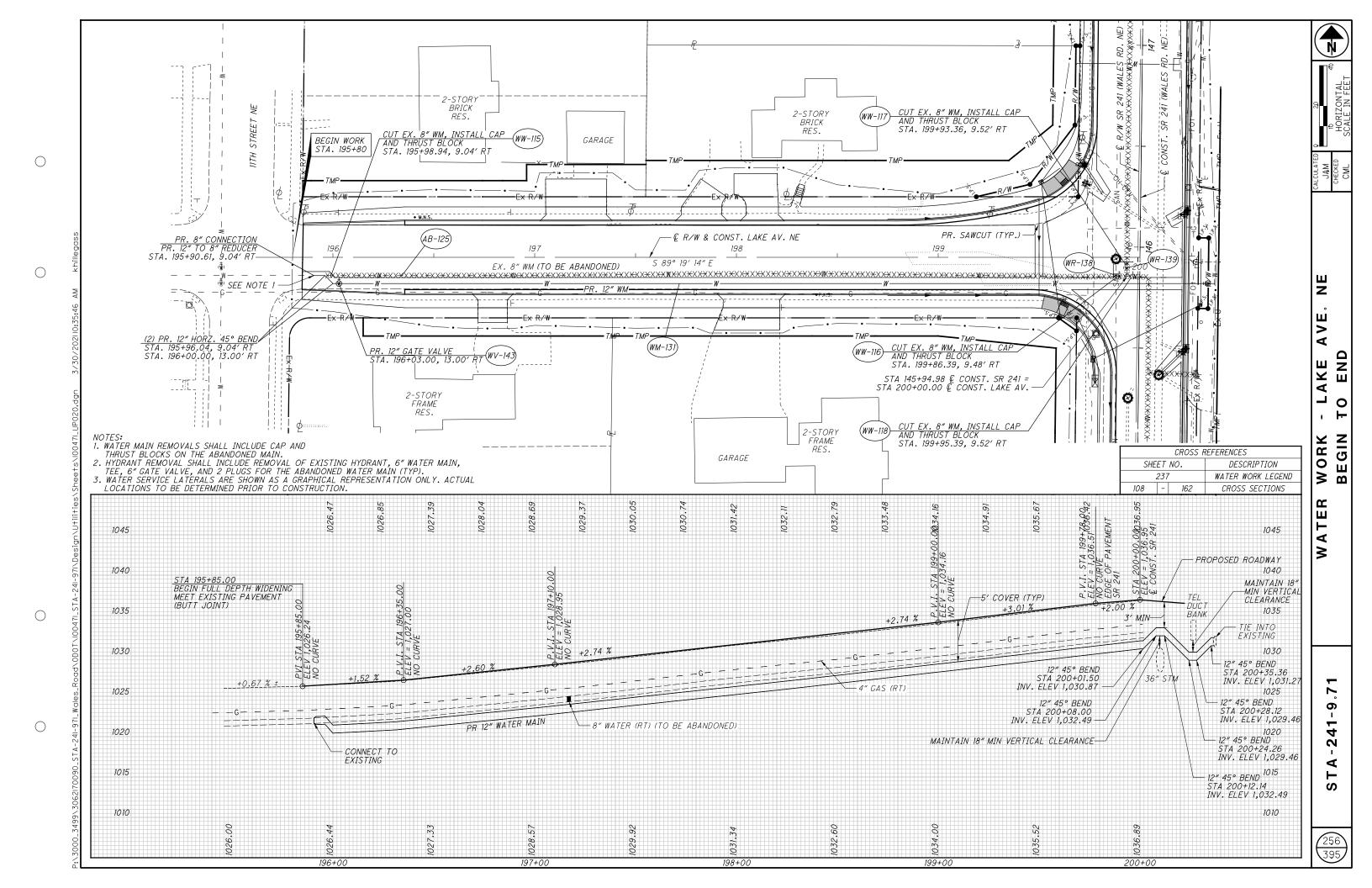
WORK NEAR BUILDING FACES

THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING NEAR BUILDING FACES.



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3. THE CONTRACTOR SHALL COORDINATE THE CROSSING OF RESIDENTIAL DRIVEWAYS TO MAINTAIN ACCESS.

- 4. TRAFFIC CONTROL WILL CONFORM TO STATE AND LOCAL REGULATIONS.
- 5. CONTRACTOR WILL PROVIDE AQUA WITH A SET OF AS BUILT DRAWINGS ONCE ALL WATER WORK RELATED WORK IS COMPLETED. THIS WILL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SPECIAL, AS-BUILT CONSTRUCTION PLANS.

WHEN A LEAD WATER SERVICE IS UNCOVERED (CUSTOMER'S OR AQUA'S), THE CONTRACTOR SHALL NOTIFY THE AQUA CONSTRUCTION INSPECTOR FOR COORDINATION OF WORK.

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PROHIBITION ON USING CUT-OFF SAWS. CONTRACTOR IS PROHIBITED FROM USING CUT-OFF SAWS TO PERFORM SERVICES FOR AQUA WHILE IN THE EXCAVATION TRENCH. A CUT-OFF SAW IS A POWER TOOL WHICH IS TYPICALLY USED TO CUT HARD MATERIALS, SUCH AS METALS. THE CUTTING ACTION IS PERFORMED BY AN ABRASIVE DISC, SIMILAR TO A GRINDING WHEEL OR A DIAMOND TIP STEEL BLADE. THESE TYPES OF SAWS CAN BE GASOLINE, HYDRAULIC OR PNEUMATIC POWERED. THIS TYPE OF SAW IS SOMETIMES REFERRED TO AS A DEMO SAW.

ENVIRONMENTAL WORK INVOLVING PETROLEUM CONTAMINATED SOILS AND GROUNDWATER

ENVIRONMENTAL STUDIES HAVE SHOWN THAT PETROLEUM-CONTAMINATED MATERIALS WILL BE ENCOUNTERED IN EXCAVATIONS ON OR ABUTTING THE PROPERTY AT 145 WALES ROAD (STA. 104+84 TO STA. 104+99), WHICH IS IN THE AREA OF CUT FOR WATER MAIN CONSTRUCTION. THE FOLLOWING QUANTITIES ARE INCLUDED FOR PAYMENT BY AQUA OHIO FOR REMEDIATION OF PETROLEUM CONTAMINATED SOILS AND GROUNDWATER. SEE THE PLAN NOTE ON SHEET 14 FOR A COMPLETE DESCRIPTION AND PAYMENT FOR THE WORK.

SPECIAL, WORK INVOLVING PETROLEUM CONTAMINATED SOILS 4 TON 690. WORK INVOLVING REGULATED WATER 690, WORK INVOLVING WATER 50 GAL ITEM SPECIAL & 638 -PAY ITEMS

ALL ITEM SPECIAL & 638 PAY ITEMS SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 638 IN THE CMS, EXCEPT AS MODIFIED HEREIN.

AQUA OHIO WILL PROVIDE ALL WATER MAIN PIPE, FIRE HYDRANTS AND ASSEMBLY, 6" HYDRANT VALVES, AND WATER MAIN GATE VALVES TO THE CONTRACTOR AT NO ADDITIONAL COST. THIS AFFECTS THE FOLLOWING PAY ITEMS:

SPECIAL, 6" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS SPECIAL. 8" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS SPECIAL, 12" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS 638, WATER WORK, MISC .: 14" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS

SPECIAL, 16" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS SPECIAL, 6" GATE VALVE WITH VALVE BOX

SPECIAL, 8" GATE VALVE WITH VALVE BOX SPECIAL, 12" GATE VALVE WITH VALVE BOX

SPECIAL, 16" GATE VALVE WITH VALVE BOX

SPECIAL, 8"x8" TAPPING SLEEVE, VALVE AND VALVE BOX 638, WATER WORK, MISC .: 14"x12" TAPPING SLEEVE, VALVE AND VALVE BOX SPECIAL, 16"x6" TAPPING SLEEVE, VALVE AND VALVE BOX

SPECIAL, 16"x8" TAPPING SLEEVE, VALVE AND VALVE BOX SPECIAL, 16"x12" TAPPING SLEEVE, VALVE AND VALVE BOX

638, WATER WORK, MISC.: 18"x6" TAPPING SLEEVE, VALVE AND VALVE BOX 638, WATER WORK, MISC.: 18"x8" TAPPING SLEEVE, VALVE AND VALVE BOX 638, WATER WORK, MISC.: 20"x8" TAPPING SLEEVE, VALVE AND VALVE BOX SPECIAL, 6" FIRE HYDRANT

COST FOR ALL WORK, LABOR, EQUIPMENT, AND ANY INCIDENTAL MATERIALS, INCLUDING FITTINGS, BENDS, TEES, CROSSES, MECHANICAL JOINT RESTRAINTS, TAPPING SLEEVES, VALVE BOXES, ETC. SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THESE ITEMS. THE AQUA SUPPLIED MATERIALS WILL BE AVAILABLE FOR CONTRACTOR PICK-UP FROM THE FOLLOWING LOCATION:

D.I. PIPE WILL BE DELIVERED TO JOB SITE YARD. CONTRACTOR TO UNLOAD. VALVES AND HYDRANTS TO BE PICKED UP BY CONTRACTOR AT 870 3RD ST. NW, MASSILLON, OH.

UP TO 1' LESS MIN. COVER HAN THE STANDARD PER IDEM) (PER IDEM) MIN COVER 18' MIN. CONFLICTING OR LESS" OR LESS WITH WATER MAIN USE VERTICAL PIPE JOINT DEFLECTION(S) IOINT DEFLECTION/S (W/O FITTINGS) TO BOTH SIDES" TYP, BOTH ADJUST DEPTH. TYPICAL ADJUST DEPTH. TYPICA EACH SIDE EACH SIDE **CROSSING BELOW** CROSSING ABOVE WITH WATER MAIN MIN. RESTRAINED JOINT LENGTH REQUIRED MIN. RESTRAINED JOINT LENGTH REQUIRED FOR THE GIVEN PIPE SIZE, DEPTH, MATERIX LETC. USE 1.5.1 SAFERY SHALLOW CONDITION PROVIDE ADEQUATE SUPPOR IF THE OBSTACLE IS IN PLACE BEFORE THE WATER MAIN IS CONSTRUCTED MIN. COVER FACTOR & 150 PSI TEST PRESSURE, TYPICAL EACH SIDE. (PER IDEM) EXISTING WATERLINE TO BE RESTRAINED **EXISTING WATER MAIN CROSSINGS** SBSTACLE WITHIN 18' OF FIRST BEND. -GREATER CONFLICTING 1. CONTRACTOR TO NOTIFY AQUA Ohio INC. WITH WATER MAIN WHEN UNDERMINING OF EXISTING MAIN 18" MIN. OCCURS. 2. CONTRACTOR SHALL PROVIDE ADEQUATE DEVIATIONS FROM THESE EXAMPLES BACKING ON EACH SIDE OF THE JOINT. WILL REQUIRE PERMIT APPLICANT TO SUBM**I**T THE COMPLETE "APPLICATION FOR CONSTRUCTION PERMIT FOR PUBLIC WATER SYSTEM - MJ BEND (STATE FORM 35058)" WITH DETAILED MEGA LUGS REQUIRED INFORMATION ABOUT THE AT ALL JOINTS ALTERNATIVE TECHNICAL DUC LUGS W STANDARD. CROSSING BELOW 3/4" ALL THREAD ROD **DEEP CONDITION** REQUIRED BOTH DESIGN CRITERIA FOR

GENERAL WATERLINE INSTALLATION NOTES

- CONTRACTOR TO PROVIDE LINE AND GRADE STAKES AT 100' INTERVALS FOR WATER MAIN AND FOR EACH FITTING AND APPURTENANCE. A COPY OF CUT SHEET SHALL BE PROVIDED TO FIELD INSPECTOR PRIOR TO INSTALLATION. THIS WORK IS TO BE INCIDENTAL TO ALL PERTAINING ITEM 638 PAY ITEMS.
- WATER WORK SHALL NOT BEGIN UNTIL AREAS OF WATERLINE CONSTRUCTION ARE ROUGH GRADED (WITHIN 1 FT. OF FINISHED GRADE AND FILL AREAS ARE COMPLETED AND COMPACTED.)
- 3. NO WATER SERVICE CONNECTIONS TO ANY BUILDINGS SHALL BE PERMITTED PRIOR TO FINAL PUNCH LIST ITEMS. ONCE PUNCH LIST ITEMS ARE COMPLETED, THE BUILDER SHALL BE RESPONSIBLE FOR GRADE ADJUSTMENTS TO WATER FACILITIES AT TIME OF BUILDING CONSTRUCTION AND DURING FINAL SITE GRADING.
- CONDUIT CROSSOVERS AND WATERLINE APPURTENANCES, I.E. HYDRANTS, VALVES, TEES,
- 5. WATER LINE MATERIALS AND INSTALLATION PROCEDURES SHALL MEET OR EXCEED ALL APPLICABLE A.W.W.A. STANDARDS INCLUDING BUT NOT LIMITED TO THE MOST RECENT VERSIONS OF C600 AND C651.
- 6. WATERLINE MATERIAL AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH AQUA OHIO SPECIFICATIONS. CLASS 52 D.I.P. POLYWRAPPED, FITTINGS CLASS 53 CEMENT 17. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO ENSURE SAFETY OF THE LINED POLYWRAPPED AND 1" K COPPER TUBING WITH COMPRESSION FITTINGS FOR DOMESTIC SERVICES OR 2" HDPE SDR 9 POLYETHYLENE 3408 PIPE AROUND CUL-DE-SAC. IF 18. THE LOCATION OF EXISTING UTILITIES AND STRUCTURES, BOTH ABOVE GROUND AND POLYETHYLENE IS USED, A 12 GAUGE WIRE AND METALLIC CAUTION TAPE MUST BE USED.
- ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATER MAIN ARE TO BE WIPED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE
- 8. ALL MECHANICAL JOINTS ARE TO BE RESTRAINED USING MEGALUG OR "FORD" EQUIVALENT. FIRE LINE RISERS TO INCLUDE (2) 5/8" ALL THREAD RODS EXTENDING FROM LOWER BEND TO RISER FLANGE.
- 9. A RESTRAINT GASKET (FIELD-LOK OR APPROVED EQUAL) SHALL BE UTILIZED ON PUSH-ON JOINTS AS REQUIRED BY AQUA OHIO STANDARDS.
- 10. ALL DUCTILE IRON PIPE AND FITTINGS TO BE POLYWRAPPED AND TAPED AS PER DUCTILE IRON PIPE RESEARCH ASSOCIATION RECOMMENDATIONS.

- 11. DUCTILE IRON IN CASING SHALL BE CLASS 52, POLYWRAPPED AND ALL PUSH-ON JOINTS SHALL BE EQUIPPED WITH RESTRAINT GASKETS (FIELD-LOK OR APPROVED EQUAL) AND STAINLESS STEEL CASING SPACERS ARE REQUIRED.
- 12. ALL THRUST BLOCKING WILL BE SOLID CONCRETE BLOCKS WITH OAK WEDGES OR POURED CONCRETE, PER AQUA STANDARDS DRAWING.
- 13. ALL VALVES ARE OPEN RIGHT AND ALL MAIN LINE VALVES ARE TO BE PLACED ON A MINIMUM OF ONE 4" SOLID CONCRETE BLOCK. ALL VALVES TO HAVE #57 LIMESTONE UP TO OPERATING NUT OF VALVE.
- ACCEPTANCE BY AQUA OHIO, INC. WHICH SHALL INCLUDE APPROVED RECTIFICATION OF ALL 14. ALL FIRE HYDRANTS TO HAVE A MINIMUM OF 1/2 CUBIC YARD OF #57 LIMESTONE 6" ABOVE 23. THE CONTRACTOR SHALL VISIT THE SITE TO PERSONALLY ASCERTAIN THE NATURE OF THE DRAIN HOLE OR EQUIVALENT SIZE BANK RUN GRAVEL. PLASTIC SHALL BE PLACED OVER STONE PRIOR TO BACKFILL. ALL HYDRANTS TO BE TURNED WITH 4-1/2" NOZZLE FACING STREET WITH 5" STORZ FITTING AND MEETING FIRE DEPARTMENT SPECIFICATIONS.
- A MINIMUM OF 5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY 15. ALL VALVE BOX COVERS ARE TO BE PAINTED BLUE. CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENTS TO VALVE BOXES, CURB BOXES, AND FIRE HYDRANTS WITH RESPECT TO FINAL GRADING. ALL VALVES BOXES IN NEW OR PROPOSED PAVEMENT SHALL BE SCREW TYPE.
 - 16. WATERLINE WILL NOT BE ACCEPTED OR PLACED IN SERVICE UNTIL CONTRACTOR CONDUCTS AND OBTAINS SATISFACTORY RESULTS OF PRESSURE AND CHLORINE TESTS. BACTERIA TEST WILL THEN BE CONDUCTED BY AQUA OHIO. ALL VALVES, HYDRANTS, AND CURB BOXES ARE TO BE AT PROPER GRADE PRIOR TO ACCEPTANCE.
 - PUBLIC ON AND SURROUNDING THE SITE DURING CONSTRUCTION.
 - UNDERGROUND ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF THE SURVEY AND ARE NOT NECESSARILY COMPLETE AND/OR CORRECT. THE EXACT LOCATION AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES IS THE RESPONSIBILITY OF THE 28. ALL MAIL BOXES, TRAFFIC CONTROL SIGNS AND ADVERTISING SIGNS ENCOUNTERED DURING CONTRACTOR. DURING CONSTRUCTION, THE CONTRACTOR SHALL USE DUE DILIGENCE IN PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND STRUCTURES WHETHER SHOWN ON PLANS OR NOT. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR RESTORATION OF SAME IN ACCORDANCE WITH THE DIRECTIONS OF THE OWNER. THE CONTRACTOR SHALL CONTACT OHIO UTILITIES PROTECTION SERVICE, AT OHTO I AW
 - 19. THE WATERLINE SHALL BE INSTALLED AT 4'-O" OF COVER FROM EXISTING/PROPOSED GRADE TO TOP OF THE WATERLINE. THIS 4' SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.

- 20. A MINIMUM 10'-0" HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN ALL STORM AND SANITARY SEWERS AND WATERLINE, OUT TO OUT.
- 21. A MINIMUM 18" VERTICAL SEPARATION MUST BE MAINTAINED BETWEEN ALL STORM AND SANITARY SEWERS AND WATERLINE, OUT TO OUT.

UTILITY CONFLICTS/CROSSINGS

- 22. DRIVEWAY RESTORATION SHALL BE AS FOLLOWS: CONCRETE DRIVEWAYS WILL BE REPLACED FROM THE NEAREST EXISTING JOINT TO THE STREET, FULL SLAB REPLACEMENT. ASPHALT DRIVEWAYS WILL BE REPLACED FROM THE FARTHEST TRENCH CUT LINE TO THE STREET. REPAIRING ONLY THE TRENCH WIDTH CUT ACROSS A DRIVEWAY ONLY IS NOT ACCEPTABLE.
- WORK INVOLVED AND THOROUGHLY BECOME FAMILIAR WITH THE SITE PRIOR TO THE SUBMISSION OF HIS OR HER BID.
- 24. THE CONTRACTOR SHALL CAREFULLY LAYOUT THE WATERLINE AND ALL RELATED FACILITIES TO ENSURE THAT THEY ARE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY AND/OR ACQUIRED FASEMENTS AS INDICATED.
- 25. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING THE SITE (YARDS, DITCHES, DRIVEWAYS, ETC.) TO ITS ORIGINAL OR BETTER CONDITION UPON COMPLETION OF THE WATERLINE INSTALLATION.
- 26. THE CONTRACTOR MAY DEFLECT THE WATERLINE AS PER MANUFACTURER'S SPECS WITH PERMISSION FROM AQUA AS NEEDED TO MAINTAIN MINIMUM HORIZONTAL AND VERTICAL
- 27. THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, AND ANY BENCHMARK, PROPERTY CORNER, OR SURVEY MARKER DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESET BY AN OHIO REGISTERED PROFESSIONAL SURVEYOR AT THE CONTRACTORS EXPENSE.
- CONSTRUCTION SHALL BE REPLACED IMMEDIATELY AFTER THE WATER MAIN HAS BEEN INSTALLED AND BACKFILLED. TEMPORARY SIGNS TO BE USED AS NEEDED.
- 29. WATER SERVICE LINE CONNECTIONS ARE NOT TO BE INSTALLED UNTIL PRESSURE TEST AND BACTERIA TESTS HAVE BEEN APPROVED.
- 30. THE NORMAL WORKING PRESSURE IN WATER LINES SHALL NOT BE LESS THAN 35 PSI.
- 1-800-362-2764, TWO WORKING DAYS PRIOR TO START OF CONSTRUCTION AS REQUIRED BY 31. COMPACTION TESTING REQUIREMENTS AS PER ITEM 611.06 AND CONSTRUCTION INSPECTION FORMS SUBMITTALS AS PER ITEM 611.04.C APPLY AND INCIDENTAL TO ANY PERTAINING ITEM 638 WATER WORK PAY ITEM.

NOTE: THIS LIST DOES NOT SUPERCEDE CONTRACT SPECIFICATIONS AND IS INTENDED ONLY AS A GUIDELINE TO INSTALLING WATERLINES WITHIN THE AQUA OHIO SERVICE AREA. ANY QUESTIONS SPECIFIC TO YOUR PROJECT, SHOULD BE DISCUSSED WITH THE ONSITE INSPECTOR.



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