PROJECT DESCRIPTION

The reconstruction of 8th St. SW between Webb Ave. SW and Griffith Ave. SW. The project includes the replacement of the sanitary sewer and water main, sidewalks, curb and gutter, driveway approaches within the right-of-way, new asphalt pavement, pavement markings, storm sewers, and installation of ADA curb ramps at the intersections.

CONVENTIONAL SYMBOLS

County Line
Post (Ex) ○ , Mailbox (Ex) , Mailbox (Pr) Light (Ex) ☆ , Telephone Marker (Ex)+TEL
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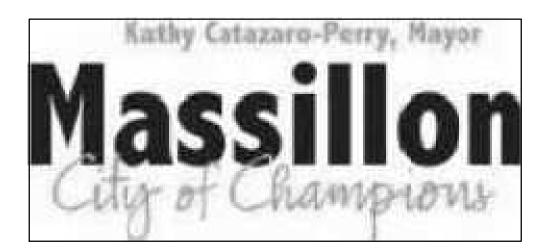
CITY OF MASSILLON CITY ENGINEERING DEPARTMENT STARK COUNTY, OHIO

8TH ST. SW SANITARY SEWER WATERLINE REPLACEMENT PROJECT



LOCATION MAP

PORTION TO BE IMPROVED...



CITY OF MASSILLON

ENGINEER

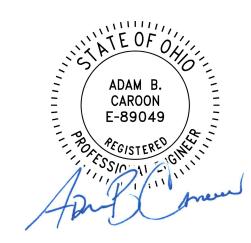
KATHY C JUSTIN RI JAYNE FE LINDA LI

<u>COUNCIL</u>

CLAUDET MARK LO AARON MICHAEL JILL CREA JULIE HAF MICHAEL ED LEWIS TED HUR JAMIE SL

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APPROVALS:

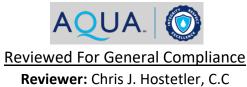
APPROVED BY THE CITY OF MASSILLON ON THIS

DAY OF

DATE

, 2023

DATE



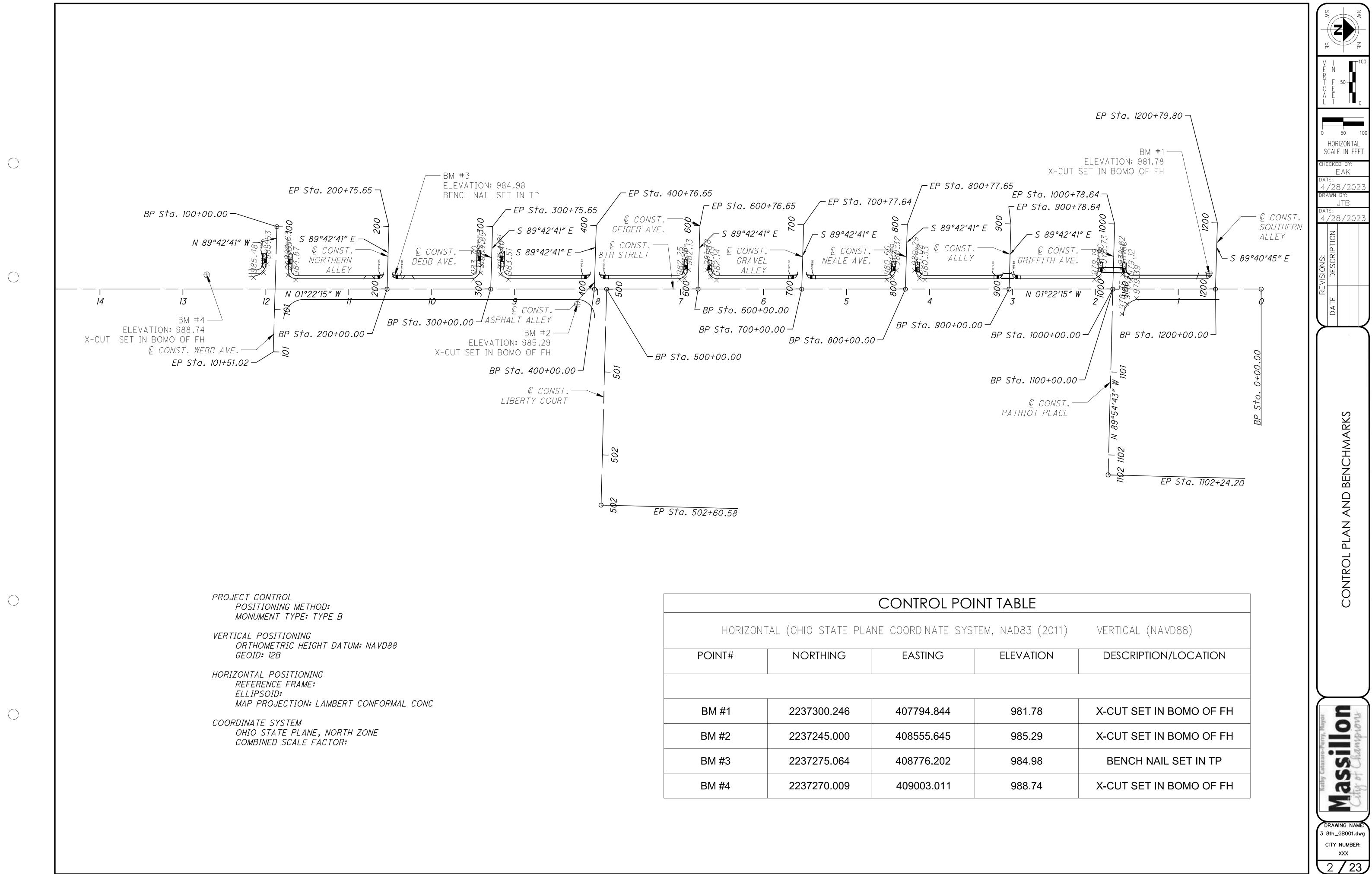
Date: 9/11/2023

CITY OF MASSILLON ELECTED OFFICIALS

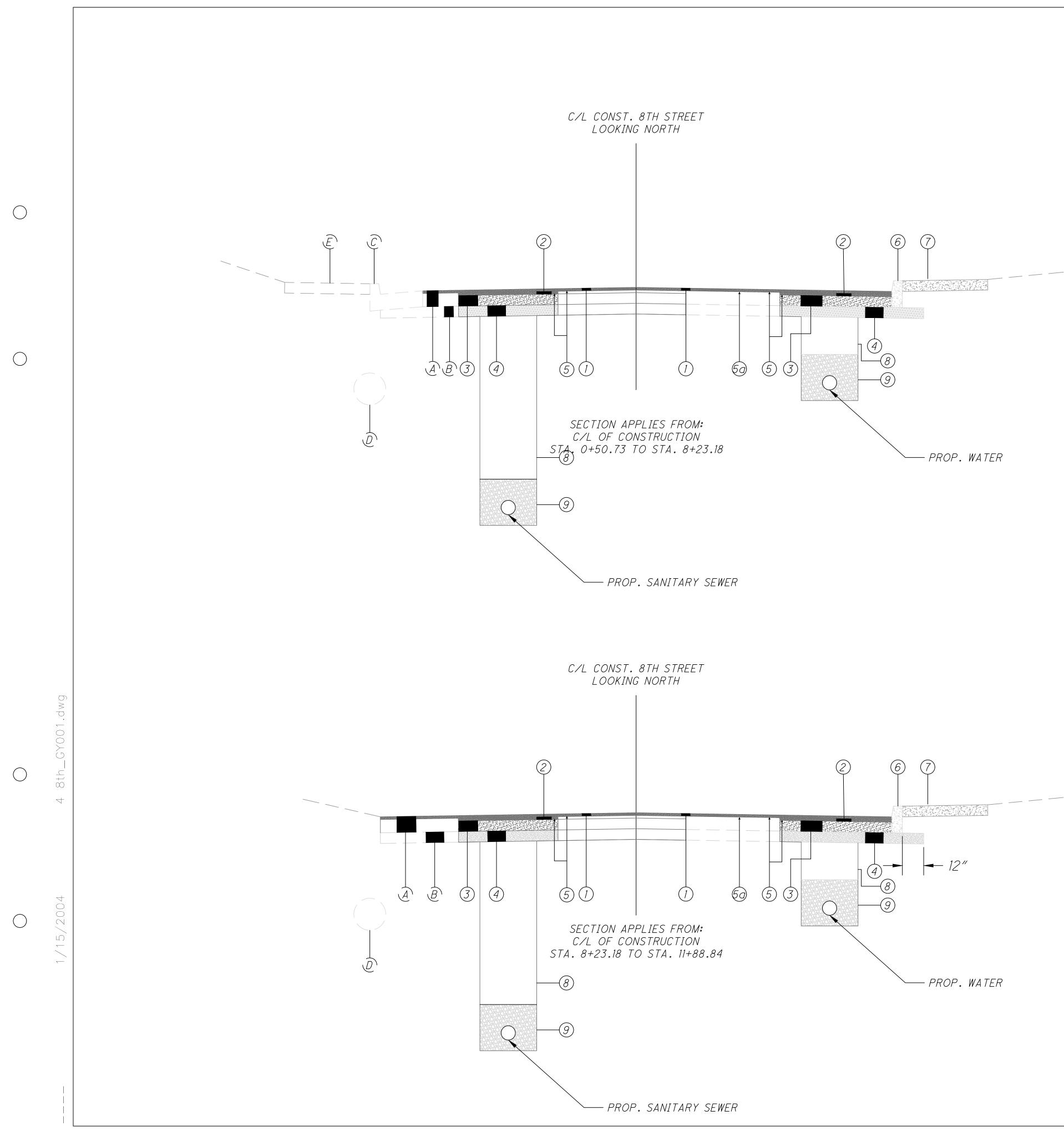
CATAZARO-PERRY	MAYOR
RICHARD	DIRECTOR OF LAW
ERRERO	AUDITOR
ITMAN	TREASURER

=	
TTE O. ISTNICK	PRESIDENT
OMBARDI	1ST WARD
VIOLAND	2ND WARD
L GREGG	3RD WARD
AMER	4TH WARD
ARWIG SMITH	5TH WARD
L SNEE	6TH WARD
S IV	AT LARGE
RNCANE	AT LARGE
LUTZ	AT LARGE

NW SW SE V E N R T F 150 C E A E L T
A E L T Lo 0 150 300 HORIZONTAL SCALE IN FEET CHECKED BY: MW DATE: 4/28/2023 DRAWN BY: ABC DATE: 4/28/2023
DATE DESCR
8th St. SW Sanitary Sewer Waterline Replacement Project Title Sheet City of Massillon Stark County, Ohio
Massillon Brawne Name:
8th_GT001.dwg CITY NUMBER: XXX 1 23



		CONTROL PO	INT TAB
HORIZONTAL (OHIO STATE PLANE COORDINATE SYSTEM, NADE			
POINT#	NORTHING	EASTING	ELEV
BM #1	2237300.246	407794.844	98
BM #2	2237245.000	408555.645	98
BM #3	2237275.064	408776.202	98
BM #4	2237270.009	409003.011	98



<u>LEGEND</u>

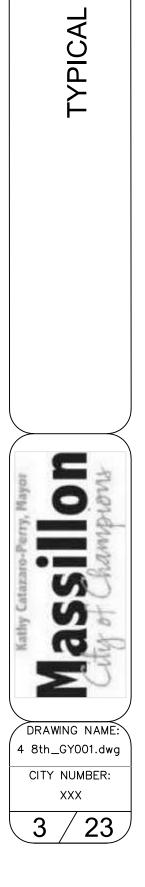
- (1) ITEM 441 1.5" ASPHALT CONCRETE SURFACE
- (2) ITEM 441 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG 64-22
- (3) ITEM 301 6" ASPHALT CONCRETE BASE, (449)
- (4) ITEM 304 6" AGGREGATE BASE
- (5) ITEM 407 NON-TRACKING TACK COAT
- 6 ITEM 609 CURB, TYPE 6
- ITEM 608 4" CONCRETE @ WALKS;
 6" @ RESIDENTIAL DRIVES
- 8 ITEM 304 AGGREGATE BASE
- 9 No. 57 PIPE BEDDING

COURSE, TYPE 1, (448), PG 64-22

60 BITUMEN PAVEMENT REINFORCED PLASTIC GEOGRID MESH TO BE LAID UNDER SURFACE COURSE

<u>EXISTING LEGEND</u>

- A 9"± ASPHALT
- (B) 6"± SUBGRADE
- C CURB & GUTTER
- D EX. STORM SEWER (DND.
- È WALK



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4/28/2023 DRAWN BY:

ABC

4/28/2023

GENERAL

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CITY OF MASSILLON SPECIFICATIONS AND THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. AND ANY SUPPLEMENTS THERETO (HEREAFTER REFERRED TO AS STANDARD SPECIFICATIONS), SHALL GOVERN ALL CONSTRUCTION ITEMS UNLESS OTHERWISE NOTED. IF A CONFLICT BETWEEN SPECIFICATIONS IS FOUND, THE MORE STRICT SPECIFICATION WILL APPLY AS DECIDED BY THE CITY ENGINEER.

THE STANDARD DRAWINGS LISTED BELOW SHALL BE CONSIDERED A PART OF THESE PLANS.

> ODOT STANDARD DRAWINGS DM-1.2 (PIPE UNDERDRAINS) BP-3.1 (ASPHALT PAVING) BP-4.1 (DRIVEWAYS)

BP-5.1 (CONCRETE CURB AND COMBINED CURB AND GUTTERS - EXCEPT AS MODIFIED ON SHEET 3) BP-7.1 (NEW CURB RAMPS)

IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO PROVIDE AND REQUIRE A COMPLETED PROJECT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM THE CONTRACT DOCUMENTS WHICH ARE CLEARLY NECESSARY FOR COMPLETION OF THE WORK AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK, THOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE CONTRACT DOCUMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, SUCH INCIDENTAL ITEMS AS RELOCATION OF MAIL BOXES, SAW CUTTING, REMOVAL AND/OR RELOCATION OF SIGNS, SPRINKLERS, OR OTHER MISCELLANEOUS ITEMS.

THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION THAT ARE NOT SPECIFIED HEREIN. THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR SAFETY ON THE WORK SITE, OR FOR FAILURE BY THE CONTRACTOR TO PERFORM WORK ACCORDING TO THE CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IN WRITING AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE CAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.

ANY MODIFICATIONS TO THE WORK AS SHOWN ON THESE APPROVED PLANS SHALL HAVE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE CITY ENGINEER.

FOLLOWING COMPLETION OF CONSTRUCTION, A PROOF SURVEY SHALL BE PROVIDED BY THE CONTRACTOR THAT DOCUMENTS AS-BUILT INFORMATION ON ALL PUBLIC UTILITIES (SANITARY, WATER) COMPLETED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL PROVIDE THIS INFORMATION TO THE CITY IN A NEAT AND EASILY COMPREHENSIBLE MANNER, TO THE SATISFACTION OF THE CITY. IN INSTANCES WHERE ELEVATIONS OR LOCATIONS CHANGE THE NEW INFORMATION SHALL BE PROVIDED. IN INSTANCES WHERE ELEVATIONS AND LOCATIONS ARE AS SHOWN ON THE PLANS IT SHALL BE NOTED AS SUCH. THIS INFORMATION SHALL BE SUBMITTED TO THE CITY ENGINEER WITHIN 30 DAYS OF PROJECT COMPLETION. COST TO BE INCLUDING IN THE VARIOUS ITEMS OF THE CONTRACT.

THE CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITY TO PUBLIC RIGHT-OF-WAY AND WORK AREAS SHOWN ON THE PLANS OUTSIDE OF THE RIGHT-OF-WAY COVERED BY RIGHT-OF-ENTRY AGREEMENTS.

PROPERTY BOUNDARIES, INCLUDING PROPERTY LINES AND ROAD

RIGHTS-OF-WAY, ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND ARE NOT NECESSARILY COMPLETE OR CORRECT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE FINISHED WORK CONFORM TO THE LINES, GRADES, ELEVATIONS, AND DIMENSIONS CALLED FOR ON THE DRAWINGS AND TYPICAL SECTIONS. CONTRACTOR SHALL PROVIDE CONSTRUCTION LAYOUT SURVEYING/STAKING. COST TO BE INCLUDED IN ITEM 623. CONSTRUCTION LAYOUT STAKING.

THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASES OF DESTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATIONS. RESETTING OF MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER AT THE CONTRACTOR'S EXPENSE.

NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON OR ACROSS PUBLIC STREETS OR HIGHWAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER.

THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATER COURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTIONS.

WHERE THE WORK REQUIRES REMOVAL OF BUSINESS SIGNS AND PRIVATE LANDSCAPING SUCH AS DECORATIVE ROCKS, MOVABLE BORDERS OR CROSSTIES, OR OTHER SALVAGEABLE AND REUSABLE ITEMS, THE CONTRACTOR SHALL COORDINATE SUCH REMOVAL WITH THE PROPERTY OWNERS PRIOR TO THE START OF WORK. IF THESE ITEMS CANNOT BE REPLACED TO THEIR ORIGINAL LOCATION FOLLOWING COMPLETION OF THE WORK, THE CONTRACTOR SHALL BE OBLIGATED TO RELOCATE THESE ITEMS TO A STORAGE FACILITY OF THE OWNER'S CHOICE LOCATED ON THE SAME PROPERTY. IF THE PROPERTY OWNER DOES NOT WISH TO SALVAGE THESE ITEMS, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER REMOVAL AND DISPOSAL. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

TRACKING OR SPILLING MUD, DIRT OR DEBRIS UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS OR BIKE PATHS IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. IF THE CONTRACTOR FAILS TO REMOVED THE MUD, DIRT, DEBRIS, OR SPILLAGE, THE CITY RESERVES THE RIGHT TO REMOVE THESE MATERIALS AND CLEAN AFFECTED AREAS. THE COST OF WHICH SHALL BE WITHHELD FROM MONIES THAT ARE DUE OR MAY BECOME DUE TO THE CONTRACTOR.

ALL SIGNS, LANDSCAPING, STRUCTURES, OR OTHER APPURTENANCES DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE CITY ENGINEER. THE COST OF THIS WORK SHALL BE PAID FOR BY THE CONTRACTOR.

ALL EXISTING SIGNS, MAIL BOXES, FENCES, FLAGPOLES, OR OTHER SIMILAR PRIVATELY OWNED STRUCTURES LOCATED WITHIN THE RIGHT-OF-WAY SHALL BE CAREFULLY RELOCATED TO THE NEAREST REASONABLE POINT OUTSIDE THE RIGHT-OF-WAY BY THE CONTRACTOR. RELOCATIONS MUST BE COORDINATED WITH THE CITY ENGINEER AND PROPERTY OWNER. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

EXCAVATED MATERIAL FROM THIS PROJECT SHALL BE HAULED OFFSITE BY THE CONTRACTOR AND COMPENSATION FOR HAULING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR APPLICABLE 203 & 204 ITEMS. LOCATION SHALL BE APPROVED BY THE ENGINEER.

IN THE EVENT THAT IT BECOMES NECESSARY FOR THE CITY TO PERFORM WORK OF AN IMMEDIATE NATURE (SUCH AS THE PLACEMENT OF BARRICADES OR REPLACEMENT OF SIGNS AND OTHER WARNING OR PROTECTIVE DEVICES) BECAUSE OF FAILURE OR REFUSAL OF THE CONTRACTOR TO PERFORM SUCH WORK AS REQUIRED BY THE CONTRACT. THE CONTRACTOR SHALL REIMBURSE THE CITY AT THE RATE OF 2.5 TIMES THE ACTUAL COST OF LABOR, MATERIALS, AND EQUIPMENT

NECESSARY TO PERFORM SUCH WORK. THE CITY SHALL BE REQUIRED TO NOTIFY OR ATTEMPT TO NOTIFY THE DESIGNATED REPRESENTATIVE OF THE CONTRACTOR OF THE NECESSITY TO PERFORM SUCH WORK. IF THE CONTRACTOR REFUSES OR FAILS WITHIN A REASONABLE TIME TO PERFORM OR CAUSE THE PERFORMANCE OF SUCH WORK, THE CITY SHALL BE REIMBURSED BY THE CONTRACTOR IN THE AMOUNT PROVIDED HEREIN BY WAY OF A DEDUCTION FROM THE CONTRACTOR'S NEXT PAYMENT UNDER THE CONTRACT. REASONABLE TIME FOR ALL STREETS INVOLVED ON THIS CONTRACT IS 2 HOURS FROM THE TIME OF NOTIFICATION BY THE CITY.

ALL NON-PAVEMENT AREAS DISTURBED WITHIN THE RIGHT-OF-WAY AND RIGHT-OF-ENTRY LIMITS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH ITEM 659, SEEDING AND MULCHING. ALL OTHER NON-PAVEMENT AREAS DISTURBED OUTSIDE OF THESE LIMITS SHALL BE GRADED AND SEEDED AT THE CONTRACTOR'S EXPENSE. COST FOR THIS WORK SHALL BE INCLUDED IN ITEM 659. CLASS 1.

A MINIMUM 4 INCHES OF TOPSOIL SHALL BE PLACED IN ALL AREAS TO BE SEEDED. THE CROSS-SECTIONS SHOW THE FINISHED GRADE OF AREAS TO BE SEEDED AFTER TOPSOIL PLACEMENT. PRIOR TO PLACING TOPSOIL IN CUT AREAS, THE EARTH SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO PLACE 4 INCHES OF TOPSOIL. PLACEMENT OF TOPSOIL BEHIND THE WALK SHALL BE MADE TO THE RIGHT-OF-WAY. PAYMENT FOR TOPSOIL IN AREAS OF DRIVE REPLACEMENT SHALL NOT EXCEED 1-FOOT FROM THE EDGE OF PAVEMENT. COST FOR THIS WORK SHALL BE PAID FOR UNDER THE UNIT COST BID FOR ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN.

TOPSOIL SHALL BE REMOVED AND WASTED OR UTILIZED IN NON-LOAD BEARING FILLS IN ACCORDANCE WITH THE SPECIFICATIONS. NO EXTRA COMPENSATION SHALL BE PAID FOR THE REMOVAL OF EXCESS TOPSOIL AS REQUIRED TO OBTAIN A SUITABLE SUBGRADE. PAYMENT FOR TOPSOIL REMOVAL IS INCLUDED IN ITEM 203, EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION.

ALL TOPSOIL MATERIALS AND FINAL AREA OF SUBGRADE PREPARATION SHALL BE FREE FROM ROCK AND OTHER FOREIGN MATERIAL OF $\frac{1}{2}$ " OR GREATER IN ANY DIRECTION.

TOPSOIL REMOVED ON SITE CAN BE REUSED FOR ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN IF FOUND TO BE SUITABLE BY THE ENGINEER.

ALL TREES WITHIN THE CONSTRUCTION AREA NOT DESIGNATED FOR REMOVAL, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE PRESERVED WITHOUT DAMAGE. TREES TO BE PRESERVED SHALL BE PROTECTED WITH HIGH VISIBILITY FENCING. THE FENCING SHALL BE PLACED IN SUCH A WAY AS TO MAXIMIZE PROTECTION OF THE BRANCHES, TRUNK, AND ROOTS. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

• GRAVEL DRIVE: 8-INCHES OF ITEM 304 - AGGREGATE BASE. QUANTITIES FOR THESE ITEMS ARE TO BE INCLUDED IN THE 304 AND 441 ITEMS.

AT A MINIMUM TRENCHES WITHIN 5 FEET OF PROPOSED PAVEMENT, CURB AND GUTTER, BERM, SHOULDERS, SIDEWALK, OR BIKE PATH, OR WHERE SPECIFICALLY CALLED FOR ON THE PLANS, SHALL BE BACKFILLED WITH COMPACTED #304 AGGREGATE BASE ACCORDING TO THE STANDARD SPECIFICATIONS. FOR TRENCHES FURTHER THAN 5-FEET FROM THE ABOVE-REFERENCED STRUCTURES, THEY SHALL BE BACKFILLED IN ACCORDANCE WITH THE DETAIL ON SHEET 46 OF THESE PLANS.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES STORM SEWER, DRAIN, AND DITCH FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PUT INTO SERVICE. THE FLOW OF ALL STORM SEWERS, DRAINS, AND OTHER WATER COURSES ENCOUNTERED AND DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK SHALL BE RESTORED BY THE CONTRACTOR TO A CONDITION SATISFACTORY TO THE CITY ENGINEER. PAYMENT FOR THIS SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

ALL FIELD TILE BROKEN OR ENCOUNTERED DURING EXCAVATION SHALL BE REPLACED OR REPAIRED IN LIKE KIND AND CONNECTED TO THE NEAREST STORM SEWER OR OPEN CHANNEL OUTLET, RESTORING NORMAL FUNCTION TO THE TILE, AS DIRECTED BY THE CITY ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

WHERE THE WORK CALLS FOR RELOCATION OF EXISTING DITCHES OR STORM SEWER, SHALL REESTABLISH THE OUTLETS OF ALL PRIVATE DRAINS ENCOUNTERED; SUCH AS DOWNSPOUTS, FOUNDATION DRAINS, CATCH BASINS, YARD DRAINS, ETC., INTO THE NEAREST NEW DITCH OR STORM SEWER. THE COST FOR REESTABLISHING PRIVATE DRAIN OUTLETS SHALL BE INCLUDED IN THE APPLICABLE STORM SEWER ITEMS.

EXTENSIONS AND/OR REDIRECTION OF EXISTING DRAIN OUTLET PIPES SHALL BE MADE IN LIKE KIND TO THE ORIGINAL USING NEW MATERIALS AND MAINTAINING APPROPRIATE GRADES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM SPECIAL, RECONNECTION TO EXISTING LATERAL. (INCLUDING FLOW INVESTIGATION)

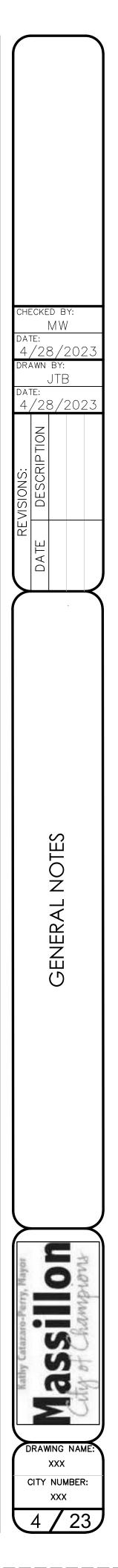
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT U.S. MAIL DELIVERY WITHIN THE PROJECT LIMITS IS NOT DISRUPTED BY CONSTRUCTION OPERATIONS. THIS RESPONSIBILITY IS LIMITED TO RELOCATION OF MAILBOXES TO A TEMPORARY LOCATION THAT WILL ALLOW THE COMPLETION OF THE WORK AND SHALL ALSO INCLUDE THE RESTORATION OF MAILBOXES TO THEIR ORIGINAL LOCATION OR APPROVED NEW LOCATION. ANY RELOCATION OF MAILBOX SERVICES MUST FIRST BE COORDINATED WITH THE U.S. POSTAL SERVICE AND AFFECTED PROPERTY OWNERS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

BEFORE RELOCATING ANY MAILBOXES, THE CONTRACTOR SHALL CONTACT THE U.S. POSTAL SERVICE AND RELOCATE MAILBOXES ACCORDING TO POSTAL SERVICE REQUIREMENT.

COST FOR CLEARING AND GRUBBING AND THE REMOVAL OF TREES UNDER 12-INCHES IN DIAMETER SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

ASPHALT AND GRAVEL DRIVES SHALL BE REPLACED IN LIKE KIND. ASSUMED PAVEMENT BUILD-UPS FOR THE PURPOSES OF CALCULATING QUANTITIES ARE AS FOLLOWS:

• ASPHALT DRIVES: 3-INCHES OF ITEM 441 - ASPHALT CONCRETE SURFACE COURSE OVERTOP OF 5-INCHES OF ITEM 304 - AGGREGATE BASE.



GENERAL CONTINUED

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TRENCH EXCAVATION FOR PAVEMENT WIDENING SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUB-BASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.

ALL TRENCHES WITHIN PAVEMENT, BERM, AND SHOULDER LIMITS SHALL BE BACKFILLED OR SECURELY PLATED DURING NONWORKING HOURS. TRENCHES OUTSIDE THESE AREAS SHALL BE BACKFILLED OR SHALL BE PROTECTED BY APPROVED TEMPORARY FENCING OR BARRICADES DURING NONWORKING HOURS. CLEAN UP SHALL FOLLOW CLOSELY BEHIND THE TRENCHING OPERATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF TRENCHES, INCLUDING SETTLEMENT, FOR A PERIOD OF TWO YEARS FROM FINAL ACCEPTANCE OF THE WORK, AND SHALL MAKE ANY NECESSARY REPAIRS AT NO COST TO THE CITY.

EXISTING PAVEMENTS SHALL BE SAW CUT IN NEAT. STRAIGHT LINES TO THE FULL DEPTH OF THE PAVEMENT, OR AS REQUIRED BY THE CITY ENGINEER.

BUTT JOINTS BETWEEN EXISTING AND NEW PAVEMENT SHALL BE MADE WHERE INDICATED ON THE PLANS IN ACCORDANCE WITH ODOT STD. CONSTRUCTION DWG. BP-3.1.

THE CONTRACTOR SHALL SUBMIT TO THE CITY ENGINEER AT THE PRE-CONSTRUCTION MEETING HIS PROPOSED DESIGN MIX FORMULA FOR ALL BITUMINOUS MIXTURES TO BE PLACED ON THE PROJECT FOR REVIEW AND APPROVAL. A DESIGN MIX FORMULA SHALL BE SUBMITTED FOR EACH MIXTURE AND EACH PRODUCER AND SHALL PROVIDE GRADATION OF ALL COMPONENT AGGREGATES. PERCENTAGE OF BLENDING OF AGGREGATES. PERCENTAGE OF BITUMEN, ANY ADDITIVES AND APPLICATION RATE, NAMES AND ADDRESSES OF AGGREGATE SUPPLIERS, MARSHALL MIX DESIGN DATA, AND THE THEORETICAL LABORATORY DENSITY.

ALL SOIL SUBGRADES SHALL BE PREPARED AND COMPACTED IN ACCORDANCE WITH ITEM 203 TO A DEPTH OF 13-INCHES BELOW THE SUBGRADE SURFACE. SUBGRADE SHALL BE SCARIFIED AND CONTAIN SUFFICIENT MOISTURE TO MEET ITEM 203 COMPACTION REQUIREMENTS.

SUBGRADE COMPACTION SHALL BE REQUIRED UNDER ALL PAVEMENTS (I.E. SIDEWALKS, DRIVES, ROADWAY, CURB & GUTTER, ETC...) AND SHALL FOLLOW THE REQUIREMENTS FOR COMPACTION AS DESCRIBED IN SECTION 204.03. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 204. SUBGRADE COMPACTION.

THE CONTRACTOR SHALL DEFINE THE LIMITS OF ANY WEAK SOILS ENCOUNTERED BY PROOF ROLLING AND NOTIFY THE CITY ENGINEER. WHERE SOFT SUBGRADE IS ENCOUNTERED IN CUTS, DUE TO NO FAULT OF THE CONTRACTOR, AND SATISFACTORY COMPACTION CANNOT BE OBTAINED, THE UNSTABLE MATERIAL SHALL BE REMOVED AND REPLACED PER SECTION 204. QUANTITIES HAVE BEEN INCLUDED AS AN ALLOWANCE FOR BIDDING PURPOSES.

ALL EXISTING PAVEMENTS, SIDEWALKS, AND CURB AND GUTTER SHALL BE REMOVED WHERE PROPOSED PAVEMENTS, SIDEWALK, AND CURB AND GUTTER ARE SHOWN. THERE ARE NO SEPARATE REMOVAL LINE ITEMS AND THE COST TO EXECUTE THIS WORK SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES.

WHEREVER REFERENCE IS MADE TO THE ELEVATION TERM "TC" ON THE PLANS, THIS ABBREVIATION SHALL BE UNDERSTOOD AS MEANING THE FOLLOWING:

STRUCTURE "TC" ELEVATION LOCATION PROPOSED MANHOLES TOP OF CASTING TOP OF CASTING PROPOSED CATCH BASINS PROPOSED CURB INLETS TOP OF CURB THE CONTRACTOR'S CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED SO AS TO ELIMINATE ALL UNNECESSARY NOISE, DUST, AND ODORS. THE USE OF OIL OR OTHER MATERIAL FOR DUST CONTROL, WHICH MAY CAUSE TRACKING, IS NOT PERMITTED.

CONTRACTOR SHALL STAKE R/W A MINIMUM OF EVERY 100 FEFT ALONG THE PROJECT ROUTE. COST TO BE INCLUDED IN ITEM 623, CONSTRUCTION LAYOUT STAKES.

THE COST OF EXCAVATION FOR TRENCHES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE ITEM 611 CONDUIT ITEMS.

THE UNIT COSTS BID FOR ITEMS 452 - NON-REINFORCED CONCRETE PAVEMENT (DRIVEWAY APRON) AND 608 - 4"/6" CONCRETE WALKS SHALL BE FOR THE CONCRETE INSTALLED. AS WELL AS FINISHING. CURING. ETC... ITEMS 204 - SUBGRADE COMPACTION AND 304 - AGGREGATE THAT ARE PART OF THE DRIVE AND WALK SECTIONS SHALL BE COUNTED IN THE 452 AND 608 BID ITEMS.

ALL TRAFFIC AND STREET SIGNS SHALL BE REMOVED, STORED IF NECESSARY AND POSSIBLE, AND REUSED. NO TRAFFIC SIGN SHALL BE TAKEN OUT OF SERVICE WITHOUT APPROVAL BY THE CITY OR THEIR REPRESENTATIVE. COST FOR THIS WORK IS TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

THE UNIT PRICE BID FOR ALL ITEM 611 CONDUIT ITEMS SHALL INCLUDE THE COST FOR ALL WORK NECESSARY TO INSTALL. BED. AND BACKFILL THE PIPE UP TO THE POINT OF SURFACE RESTORATION.

IN ADDITION TO THE TESTING AND INSPECTION REQUIREMENTS SET FORTH IN ITEM 611 THE CONTRACTOR SHALL PERFORM:

- NOT EXCEED A DEFLECTION OF 5%.

THE COST FOR TESTING AND INSPECTION SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS 611 ITEMS.

<u>EXPOSE</u>

THE CONTRACTOR SHALL EXPOSE EXISTING UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THE PLANS, AND MARKED IN THE FIELD, SUFFICIENTLY IN ADVANCE OF LAYING PROPOSED SANITARY OR STORM SEWERS IN ORDER TO VERIFY THE PROPOSED LOCATION, ELEVATION, AND MATERIAL TYPE. COST SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS PIPE ITEMS.

SUBSURFACE INVESTIGATIONS

SUBSURFACE INVESTIGATIONS WERE PERFORMED FOR DESIGN AND ESTIMATING PURPOSES AND ARE PROVIDED IN THE BIDDING DOCUMENTS. LOGS AND ASSOCIATED DATA ARE NOT WARRANTED TO SHOW THE ACTUAL SUBSURFACE CONDITIONS. THE CONTRACTOR SHALL EXAMINE THIS INFORMATION AND OBTAIN ADDITIONAL INFORMATION AT THEIR OWN EXPENSE, IF NECESSARY, IN THEIR JUDGEMENT.

• AN AIR TEST PER THE CITY OF COLUMBUS, OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS (CCMS) SECTION 901.20 ON ALL SANITARY SEWER PIPE. ADDITIONALLY, THE AIR TEST SHALL MEET THE

REQUIREMENTS OF ASTM F1417 FOR PVC PLASTIC PIPE.

 A VACUUM TEST PER ASTM C1244 ON ALL SANITARY MANHOLES. • A MANDREL TEST ON ALL FLEXIBLE CONDUIT PER ODOT ITEM 611 AND SUPPLEMENTAL SPECIFICATION 902 (SECTION 902.03). CONDUIT SHALL SEWER PIPE REMOVED OR ABANDONED

SEWER PIPES IN THE WORK AREA ARE SHOWN "TO BE ABANDONED IN PLACE" OR "TO BE REMOVED" BECAUSE THEY ARE OUTSIDE OF THE EXCAVATION AREA, COINCIDENT WITH PROPOSED SEWER IMPROVEMENTS, OR THOUGHT TO BE SHALLOW ENOUGH THAT THEY WOULD BE ENCOUNTERED DURING THE ROADWAY IMPROVEMENT WORK. ABANDONED PIPES SHALL BE FILLED WITH NON-SHRINK GROUT AND HAVE ALL OPEN ENDS BULKHEADED WITH CONCRETE. COST FOR REMOVAL OR ABANDONMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 611 PIPE ITEMS.

STORM SEWER

ALL STORM SEWERS SHALL BE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE PER 707.33, REINFORCED CONCRETE CIRCULAR PIPE PER 706.02, OR REINFORCED CONCRETE PIPE MEETING THE REQUIREMENTS OF ASTM C76 AND COLUMBUS CMSC 706.02, UNLESS OTHERWISE SHOWN ON THE PLANS.

ALL INLETS SHALL BE CHANNELIZED.

ALL CATCH BASINS AND CURB INLETS MUST BE FURNISHED WITH BIKE SAFE GRATES.

ROADWAY UNDERDRAINS SHALL BE DISCHARGED INTO THE NEAREST STORMWATER STRUCTURE AVAILABLE ALONG THE LINE OF FLOW. CONTRACTOR SHALL PROVIDE UNDERDRAIN BEYOND THE LIMITS CALLED FOR, AS REQUIRED, TO MAKE OUTLET CONNECTIONS.

ALL EXISTING AND PROPOSED CASTINGS SHALL BE ADJUSTED TO MATCH THE SURROUNDING FINISH GRADE BY THE CONTRACTOR. TOP OF CASTING ELEVATIONS PROVIDED ON THE PLANS ARE APPROXIMATE.

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CITY. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY ENGINEER.

ALL NEW CONDUITS, INLETS, CATCH BASINS AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEANED CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY.

WHERE PLANS CALL FOR 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 FOR BOTH LINE AND GRADE PRIOR TO THE START OF PIPE LAYING.

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 CITY 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 A PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY WHEN CONSTRUCTED AS SHOWN ON THE PLAN. THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION ON ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE.

OFFSET DISTANCES FOR ALL NEW CURB INLETS ARE MEASURED PERPENDICULAR TO THE BASELINE TO THE CENTER OF THE STRUCTURE (NOT FACE OF CURB).

THE CONTRACTOR SHALL PERFORM DEFLECTION TESTING (MANDREL TESTING) ON ALL FLEXIBLE STORM PIPE PER ODOT ITEM 611 AND SUPPLEMENTAL SPECIFICATION 902 (SECTION 902.03). IF CONCRETE PIPE IS USED DEFLECTION TESTING IS NOT NECESSARY.

ALL CONCRETE PIPE AND STRUCTURES WILL BE STAMPED OR HAVE SUCH IDENTIFICATION NOTING THAT SAID PIPE, STORM AND SANITARY STRUCTURES HAVE BEEN INSPECTED BY THE DESIGNATED REPRESENTATIVE OF THE CITY OF MASSILLON AND MEETS THEIR SPECIFICATIONS. PIPE AND STRUCTURES WITHOUT PROPER IDENTIFICATION WILL NOT BE PERMITTED FOR INSTALLATION.

ALL NEW STORM SEWERS SHALL BE TELEVISED NO EARLIER THAN 30 DAYS AFTER INSTALLATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.

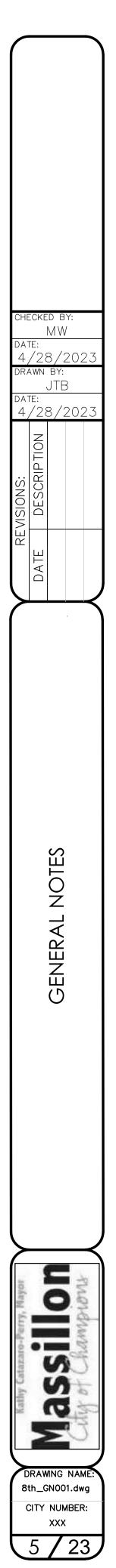
STORM SEWER LATERALS SHALL BE CONSTRUCTED WITH 6" PVC SDR 35 PIPE AND 1% SLOPES FROM PIPE CONNECTION TO R/W (SEE STD. DETAILS), LOCATION TO BE VERIFIED WITH THE CITY AND PROPERTY OWNER. ANY STORM LATERALS CURRENTLY HOOKED UP WILL BE RECONNECTED AFTER THE SOURCE OF FLOW IS VERIFIED.

PRIOR TO THE INSTALLATION OF ANY PROPOSED SEWERS, THE CONTRACTOR SHALL CHECK THE EXISTING INVERT ELEVATIONS OF ALL EXISTING SEWER STRUCTURES (AND PIPES INTO THEM) IN, OR ADJACENT TO THE PROJECT AREA. AND BRING TO ATTENTION TO THE CITY ANY OF THOSE THAT DIFFER MATERIALLY FROM THE PLANS AND THAT COULD AFFECT THE INSTALLATION OF THE PROPOSED SEWERS. ESPECIALLY CRITICAL ARE STRUCTURE AND PIPE ELEVATIONS AT POINTS WHERE EXISTING SEWER AND PROPOSED SEWER MEET. AND WHERE EXISTING PIPES CROSS PROPOSED SEWERS

SANITARY SEWER

ANY MODIFICATION TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER.

WHERE SANITARY SEWERS CROSS WATER MAINS, OTHER SEWERS, OR UTILITIES, TRENCH BACKFILL SHALL BE COMPACTED #57 LIMESTONE PLACED BETWEEN THE DEEPER AND THE SHALLOWER PIPES ACCORDING TO THE STANDARD SPECIFICATION.



SANITARY SEWER CONTINUED

EXISTING SANITARY SERVICE AND WYE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE ACTUAL LOCATION FOR EACH NEW SERVICE MUST BE VERIFIED WITH THE PROPERTY OWNER BY THE CONTRACTOR AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION. SERVICES SHALL BE CONSTRUCTED TO THE RIGHT-OF-WAY LINE, UNLESS OTHERWISE SHOWN ON THE DRAWINGS. ALL EXISTING SANITARY AND STORM SEWER) LATERALS WILL BE RECONNECTED BY THE CONTRACTOR TO

THE CONTRACTOR SHALL FURNISH AND PLACE, AS DIRECTED, APPROVED WYE POLES MADE OF 2 INCH X 2 INCH HARDWOOD LUMBER AT ALL WYE LOCATIONS, ENDS OF EXTENDED SERVICES, OR AT THE END OF EACH RISER WHERE RISERS ARE REQUIRED. WYE POLES SHALL BE VISIBLE BEFORE ACCEPTANCE BY THE CITY.

THE PROPOSED SEWER MAIN. CONTRACTOR TO FIELD VERIFY EACH LATERAL.

EXISTING SANITARY SEWER FLOWS SHALL BE MAINTAINED AT ALL TIMES.

THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS. ALL PLASTIC SEWER PIPE AND ACCESSORIES SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THIS SECTION AND THE STATED REQUIREMENTS PUBLISHED IN THE CURRENT APPLICABLE ASTM STANDARDS AND MANUFACTURER'S SPECIFICATIONS. PLASTIC SEWER PIPE 1 YEAR OR OLDER WILL NOT BE ALLOWED FOR USE ON CITY PROJECTS, UNLESS THE CITY HAS A LETTER ON FILE FROM THE MANUFACTURER AUTHORIZING AN ADDITIONAL 1 YEAR EXPOSURE LIFE.

PIPE MARKINGS - ALL PIPE WILL BE LEGIBLY MARKED WITH THE INFORMATION REQUIRED IN THE ASTM STANDARDS WITH THE EXCEPTION THAT PRODUCTION DATES WILL BE INDICATED BY THE STANDARD CALENDAR DATE (DAY-MONTH-YEAR) OR JULIAN DATE WITH CURRENT NUMERICAL YEAR.

THE CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, AND LABOR TO MAKE CONNECTIONS TO EXISTING MANHOLES. THE SEWER PIPE TO MANHOLE CONNECTIONS FOR ALL SANITARY SEWERS SHALL BE FLEXIBLE AND WATERTIGHT. ALL HOLES SHALL BE NEATLY CORED. THE SEWER PIPE BARREL AT THE SPRINGLINE SHALL NOT EXTEND MORE THAN 1 INCH BEYOND THE INSIDE FACE OF THE MANHOLE. TO MAINTAIN FLEXIBILITY IN THE CONNECTION, A 1-INCH SPACE SHALL BE LEFT BETWEEN THE END OF THE PIPE INSIDE THE MANHOLE AND THE CONCRETE CHANNEL. THIS SPACE SHALL

1. RUBBER SLEEVE WITH STAINLESS STEEL BANDING.

1.1. KOR-N-SEAL AS MANUFACTURED BY NATIONAL POLLUTION CONTROL SYSTEMS, INC.

BE FILLED WITH A WATERPROOF FLEXIBLE JOINT FILLER. ANY METAL THAT IS

USED SHALL BE STAINLESS STEEL. THE CONNECTION MAY BE ANY OF THE

- 1.2. LOCK JOINT FLEXIBLE MANHOLE SLEEVE AS MANUFACTURED BY INTERPACE CORPORATION.
- 1.3. OR EQUAL AS APPROVED BY THE CITY ENGINEER.

2. RUBBER GASKET COMPRESSION.

FOLLOWING TYPES:

- 2.1. PRESS WEDGE II AS MANUFACTURED BY PRESS-SEAL CORPORATION.
- 2.2. DURA SEAL III AS MANUFACTURED BY DURA TECH, INC.
- 2.3. LINK-SEAL AS MANUFACTURED BY THUNDERLINE CORPORATION.
- 2.4. OR EQUAL AS APPROVED BY THE CITY ENGINEER.

THE LOCATIONS OF EXISTING SANITARY AND STORM SEWER SERVICE LATERALS AS SHOWN ARE APPROXIMATE AND WERE TAKEN OFF PLANS. THE CONTRACTOR SHALL CONSTRUCT NEW LATERALS OFF THE NEW SEWER AND RECONNECT TO THE EXISTING LATERALS AT THE R/W OR 1-FOOT INSIDE THE R/W IF THE LATERAL FALLS WITHIN A DRIVE SO THAT EXISTING PAVEMENT BEYOND THE SIDEWALK IS NOT DISTURBED. THE LATERALS SHALL BE INSTALLED PER THE STD. DETAILS. THE OLD LATERALS SHALL BE ABANDONED IN ALL CASES, THE EXISTING SANITARY SEWER LATERAL WILL BE RECONNECTED TO THE PROPOSED SANITARY SEWER MAIN.

HOUSE SANITARY LATERALS SHALL BE DYE-TESTED PRIOR TO LATERAL REPLACEMENT. COST TO BE INCLUDED IN THE RECONNECTION LINE ITEM.

ALL SANITARY AND STORM TAPS SHOULD BE AT THE 10 AND 2 O'CLOCK POSITIONS ON THE PIPE WHENEVER POSSIBLE.

<u>UTILITIES</u>

LISTED BELOW.

THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO UTILITIES PROTECTION SERVICE (TELEPHONE NUMBER 800-362-2764) AND TO OWNERS OF UNDERGROUND UTILITIES THAT ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE. NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS BEFORE START OF CONSTRUCTION.

THE IDENTITY AND LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR DEPTHS OF UNDERGROUND FACILITIES SHOWN ON THE PLANS. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF THE SAME AND FOR ANY RESULTING CONTINGENT DAMAGE.

LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES, SHOWN OR NOT SHOWN ON THE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

WHEN UNKNOWN OR INCORRECTLY LOCATED UNDERGROUND UTILITIES ARE ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER AND THE CITY ENGINEER.

ALL WATER MAIN VALVE BOXES, SERVICE BOXES, HYDRANTS, AND PIPES THAT ARE IN CONFLICT WITH THE IMPROVEMENTS SHOWN HEREIN SHALL BE READJUSTED OR RELOCATED BY THE UTILITY OWNER (AQUA OHIO). THE SAME HOLDS TRUE FOR GAS MAINS/SERVICES (COLUMBIA GAS OF OHIO) AND POWER POLES (FIRST ENERGY). IT IS THE CITY'S INTENTION THAT ALL PRIVATE UTILITIES ARE TO BE RELOCATED PRIOR TO CONSTRUCTION OF THE ROADWAY IMPROVEMENTS. HOWEVER, IN THE EVENT THE PRIVATE UTILITIES CANNOT BE RELOCATED PRIOR TO ROADWAY CONSTRUCTION THE CONTRACTOR SHALL COORDINATE WORK WITH THE PRIVATE UTILITIES.

OUPS - 1-800-362-2764 OGUPUPS - 1-800-925-0988

ADDITIONAL NOTES ON SIDEWALK AND CURB

PLACING: CONCRETE FROM READY MIX TRUCKS SHALL BE DEPOSITED AS UNIFORMLY AS POSSIBLE ON THE PREPARED, THOROUGHLY MOISTENED SUBGRADE. WHILE BEING PLACED, THE CONCRETE SHALL BE SPADED OR VIBRATED AND COMPACTED WITH SUITABLE TOOLS TO PREVENT VOIDS AND HONEYCOMB POCKETS. THE CONCRETE SHALL BE ESPECIALLY WELL SPADED OR VIBRATED AND TAMPED AGAINST THE FORMS AND ALONG ALL JOINTS. PLACING CONCRETE ON FROST OR FROZEN SUBGRADE SHALL NOT BE PERMITTED.

FINISHING: CONCRETE SHALL BE STRUCK OFF AND CONSOLIDATED. FOLLOWING THE SCREEDING OPERATION, A FLOAT SHALL BE USED TO REMOVE SURFACE IRREGULARITIES AND TO WORK UP AN ADEQUATE AMOUNT OF MORTAR FOR PROPER FINISHING. A LIGHT BROOM FINISH SHALL BE GIVEN TO THE SURFACE OF SIDEWALKS, AND A COARSE (TRANSVERSE TO SLOPES) BROOM FINISH SHALL BE GIVEN TO CURB RAMPS, WHEN MOST OF THE WATER SHEEN HAS DISAPPEARED FROM THE SURFACE, AND JUST PRIOR TO THE CONCRETE BECOMING NON-PLASTIC.

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UTILITIES KNOWN TO BE LOCATED WITHIN THE LIMITS OF THIS PROJECT ARE

COLUMBIA GAS AQUA OHIO (FORMERLY OHIO AMERICAN WATER) FIRST ENERGY (FORMERLY OHIO EDISON) CITY OF MASSILLON FRONTIER COMMUNICATIONS

JOINTS: ALL OUTSIDE EDGES AND CONSTRUCTION JOINTS SHALL BE EDGED WITH A 1 INCH RADIUS EDGING TOOL. THE SURFACE OF THE WORK SHALL BE DIVIDED INTO EQUALLY SPACED BLOCKS AT APPROXIMATELY 5 FOOT INTERVALS FOR SIDEWALKS. AND 10 FOOT INTERVALS FOR CURBS. THE EDGES AND JOINTS SHALL BE RETRACED USING A $\frac{1}{4}$ INCH RADIUS EDGING TOOL. INSTALL $\frac{1}{4}$ INCH THICK EXPANSION JOINT FILLER BETWEEN THE CURB RAMP. SIDEWALK, CURB, AND ANY FIXED STRUCTURE OR EXISTING CONCRETE SLAB. THE EXPANSION JOINT MATERIAL SHALL EXTEND THE FULL DEPTH OF THE CURB RAMP, SIDEWALK, OR CURB, OR AS DIRECTED BY THE ENGINEER. EXPANSION JOINT MATERIAL SHALL MEET THE REQUIREMENTS OF THE O.D.O.T. CONSTRUCTION AND MATERIALS SPECIFICATIONS MANUAL, ITEM 705.03.

CHECKED BY: MW DATE: <u>4/28/2023</u> DRAWN BY: JTB DATE: <u>4/28/2023</u> Z
DATE DESCRIPTION
GENERAL NOTES
DRAWING NAME: 8th_GN001.dwg CITY_NUMBER:

THE FOLLOWING NOTES ARE CITY OF MASSILLON STANDARD NOTES AND MAY NOT BE APPLICABLE TO ALL PROJECTS.

DATUM ELEVATION

ALL BENCHMARKS ARE BASED ON REFERENCE BENCHMARKS PROVIDED BY THE CITY OF MASSILLON

STATIONING

ALL STATIONING SHOWN IS REFERENCED TO THE BASELINE AS SHOWN.

NOTIFICATION OF SAFETY FORCES AND BUS GARAGES

THE CONTRACTOR SHALL NOTIFY ALL AGENCY LISTED BELOW AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.

MASSILLON SAFETY SERVICE	MASSILLON FIRE DEPARTMENT	PERRY TOWNSHIP HALL	NORT
330-830-1702	330-833-1053	330-833-2141	330-83
TUSCARAWAS TOWNSHIP HALL	JACKSON FIRE DEPARTMENT	MASSILLON POLICE DEPARTMENT	MASS
330832-4337	330-832-1553	330-830-1735	330-8
JACKSON TOWNSHIP HALL	PERRY FIRE DEPARTMENT	JACKSON POLICE DEPARTMENT	JACK
330-832-7416	330478-5121	330-497-7440	330-8
PERRY POLICE DEPARTMENT	PERRY SCHOOL BUS GARAGE	STARK COUNTY SHERIFF	TUSC
330-833-3865	330-477-1300	330-430-3887	330-83
SARTA			

330-454-5333

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SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING THEIR BID. PROSPECTIVE BIDDERS ARE TO COORDINATE WITH THE OWNER FOR ACCESS TO THE SITE FOR INSPECTIONS AND EXPLORATORY EXCAVATION. THE BIDDER SHALL CONTACT THE OWNER AT LEAST 72 HOURS IN ADVANCE OF THE DESIRED INSPECTION OR EXCAVATION. THE BIDDER SHALL CONTACT OUPS, AND OBTAIN LOCATIONS OF OTHER UTILITIES.

QUANTITIES

QUANTITIES ARE INDICATED FOR COMPARISON OF BIDS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY QUANTITIES BEFORE ORDERING MATERIALS. VARIATIONS FROM THE PLAN QUANTITIES SHALL BE APPROVED BY THE CITY OF MASSILLON ENGINEER BEFORE MATERIAL ORDERS ARE PLACED. MATERIALS REJECTED DUE TO INCOMPATIBILITY BETWEEN ORDERED QUANTITIES AND FIELD CONDITIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE

CONSTRUCTION SPECIFICATIONS & STANDARDS

ALL CONSTRUCTION IS TO BE COMPLETED ACCORDING TO THE CURRENT CITY OF MASSILLON SPECIFICATIONS AND STANDARDS, AND THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. WHEN A CONFLICT ARISES BETWEEN THE CITY OF MASSILLON AND ODOT'S STANDARDS, THE MORE STRINGENT STANDARD WILL BE USED AT THE DISCRETION OF THE CITY OF MASSILLON ENGINEER. THE CONTRACTOR SHALL FOLLOW ALL OSHA AND ADA REGULATIONS AND REQUIREMENTS.

PRESERVATION OF EXISTING UTILITY SERVICES

ANY EXISTING WATER LINE, SANITARY SEWER, STORM SEWER, GAS LINE OR OTHER UTILITY IN OR OUTSIDE OF THE CONSTRUCTION LIMITS, DAMAGED DURING CONSTRUCTION OF THE PROPOSED PROJECT SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

CONTRACTOR AVAILABILITY

THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A 24 HOUR PHONE NUMBER WHERE THE CONTRACTOR SHALL BE AVAILABLE FOR EMERGENCIES.

PRESERVATION OF PRIVATE PROPERTY

THE CONTRACTOR SHALL PERFORM WORK AS TO NOT DISTURB, DAMAGE OR DESTROY ANY TELEPHONE OR POWER POLES, SIGNS, LANDSCAPING ITEMS, ETC., ANY ITEM DAMAGED OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE. PRIOR ENGINEER APPROVAL IS REQUIRED BEFORE ANY OF THE ABOVE ITEMS ARE PERFORMED.

ACCESSIBILITY TO PRIVATE PROPERTY

ACCESS TO ALL DRIVEWAYS AND PARKING AREAS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THE TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORK DAY TO PROVIDE ACCESS. THE CONTRACTOR MUST NOTIFY EACH PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF CUTTING THEIR DRIVEWAY.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE CONTRACTOR SHALL PROVIDE FOR 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.

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RTH LAWRANCE FIRE DEPT 832-6347

SILLON SCHOOL BUS GARAGE 830-1849

KSON SCHOOL BUS GARAGE 830-8042

CARAWAS SCHOOL BUS GARAGE 837-7805

PROFILE AND ALIGNMENT

THE PROPSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF TH BE AS SHOWN ON THE TYPICAL SECTIONS.

GRADING AND FILLING OPERATIONS

THE PLACEMENT OF COMPACTED AGGREGATE SHALL NOT EXTEND PAST THE EXISTING GRADI PERFORMED IN ANY WETLANDS OR STREAMS, UNLESS THE REQUIRED STATE AND/OR FEDERA AND/OR FEDERAL LAWS AND REGULATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACT

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE BID FORM FOR ITEM201SPEC, CLEARING AND GRUBBING. THIS ITEM SHALL INCLUDE ALL P MAY INCLUDE TREES, STUMPS, AND BRUSH AS DETERMINED BY THE CITY ENGINEER.

ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDE

PRESERVATION OF PROPERTY CORNERS AND SURVEY MARKERS

THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMEN IN THE PROXIMITY OF THE WORK REFERENCED. HE SHALL REPLACE DESTROYED OR DAMAGE SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED.

REMOVAL AND RELOCATION OF EXISTING UTILITIES

THE CONTRACTOR IS REQUIRED TO COOPERATE WITH EACH RESPECTIVE UTILITY OWNER FOR CONFLICT WITH CONSTRUCTION OF THE PROJECT.

CROSSING OR CONNECTING TO EXISTING PIPES AND UTILITIES

WHERE THE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS C CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE

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 CITY OF MASSILLON 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.

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

REVIEW OF SANITARY AND DRAINAGE FACILITIES

AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK SHALL BE COMPLETED BEFORE AND AFTER WORK HAS COMMENCED. FINAL ACCEPTANCE BY THE CITY OF MASSILLON WILL NOT OCCUR UNTIL AFTER SAID INSPECTION. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE OBSERVATIONS SHALL BE PROVIDED IN WRITING BY THE CONTRACTOR TO THE CITY OF MASSILLON.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY OF MASSILLON.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE CITY OF MASSILLON.

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

ITEM 407, TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

E EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL	
ED SHOULDERS. NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE AL PERMITS HAVE BEEN OBTAINED IN ACCORDANCE WITH ALL APPLICABLE STATE CTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS OR STREAMS.	
THE LIMITS OF THE PROJECT. A LUMP SUM QUANTITY HAS BEEN INCLUDED IN PROVISIONS AS SET FORTH IN THE 2019 ODOT SPECIFICATIONS. REMOVAL ITEMS	
D IN THE LUMP SUM PRICE BID FOR ITEM 201 SPEC, CLEARING AND GRUBBING. ${f S}$	CHECKED BY: MW DATE: 4/28/202
TS AND ANY TYPE OF LAND MONUMENT. HE SHALL HAVE ALL LAND MONUMENTS D MONUMENTS AND SHALL FURNISH A CERTIFICATION BY AN OHIO REGISTERED	DRAWN BY: ABC DATE: 4/28/202
R THE REMOVAL AND RELOCATION OF ANY AND ALL UTILITIES THAT CREATE A	REVISIONS: DESCRIPTION
OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE EBEFORE STARTING TO LAY THE PROPOSED CONDUIT.	DATE

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	GENERAL NOTES	
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RESTORATION

FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED UP TO MAY 15TH OF ANY CALENDAR YEAR, RESTORATION SHALL BE COMPLETE BY JUNE 30th OF THAT YEAR. FOR INSTALLATION OF SANITARY SEWER TESTED AND ACCEPTED FROM MAY 15th TO SEPTEMBER 30th OF ANY CALANDAR, YEAR RESTORATION SHALL BE COMPLETE BY NOVEMBER 15th OF THAT CALENDAR YEAR. FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED AFTER NOVEMBER 15TH OF ANY CALENDAR YEAR. RESTORATION SHALL BE COMPLETE BY MAY 15th OF THE NEXT CALENDAR YEAR.

ALL SOIL AREAS DISTURBED BY THE CONTRACTOR SHALL BE TOPSOILED, SEEDED AND MULCHED. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM OF AFFECTED WORK. TOPSOIL, SEEDING AND MULCHING SHALL NOT BE A SEPARATE PAY ITEM. THIS INCLUDES BACKFILLING, SEEDING AND MULCHING ALONG THE EDGE OF ALL PAVEMENT RESTORATION.

CONTRACTOR TO REPLACE ALL PAVEMENT MARKINGS. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT.

CONTRACTOR TO USE HOT APPLIED JOINT CRACK SEALER ON ASPHALT PAVEMENT AT ALL ENDS AND INTERSECTIONS.

CONTRACTOR'S EQUIPMENT - OPERATION STORAGE

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W. THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADE AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/SUPERVISOR HAS BEEN GRANTED.

EXISTING DATA

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EACH CONTRACTOR SHALL VISIT THE SITE PERSONALLY TO ASCERTAIN THE NATURE OF THE WORK AND BECOME THOROUGHLY FAMILIARIZED WITH THE SITE PRIOR TO BID SUBMISSION.

EXISTING STRUCTURES, GRADES, PIPING, ETC. ARE INDICATED IN APPROXIMATE LOCATION ON THE PLAN. INFORMATION SHOWN IS NOT GUARANTEED TO BE CORRECT AND COMPLETE. THE DATA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE EXISTENCE OF FACILITIES ABOVE OR BELOW GROUND, WHICH MAY NOT BE SHOWN, WILL NOT BE A BASIS FOR A CLAIM FOR EXTRA WORK.

EXISTING UNDERGROUND UTILITIES SHOWN ARE RECORDS PROVIDED BY UTILITY COMPANIES AND ARE APPROXIMATE ONLY. SERVICE LATERALS ARE NOT SHOWN.

IT IS THE RESPONSIBILITY OF CONTRACTOR TO NOTIFY THE CITY, PRIOR TO BID OPENING OF NON-CONFORMING OR CONFLICTING INFORMATION.

EXCAVATED MATERIAL

ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE PILED AND STORED IN A MANNER THAT WILL NOT ENDANGER THE WORK AND THAT WILL LEAVE DRIVEWAYS OR OTHER CONTROLS UNOBSTRUCTED AND ACCESSIBLE WHILE THE WORK IS TO BE COMPLETED. SATISFACTORY PROVISIONS SHALL BE MADE FOR STREET DRAINAGE, AND NATURAL WATERCOURSES SHALL NOT BE OBSTRUCTED. DURING THE PROGRESS OF THE WORK, ALL MATERIAL PILES SHALL BE KEPT TRIMMED UP AND MAINTAINED IN A NEAT MANNER. ALL EXCAVATED WASTE MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE, AS DIRECTED BY THE ENGINEER. THE WASTE SITE IS TO BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE CITY, UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS ALONG WITH A LETTER FROM THE PROPOSED WASTE SITE OWNER SITE, AS DIRECTED BY THE ENGINEER. THE WASTE SITE IS TO BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE CITY, UNLESS TO BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE AND HOLDING THE CONTRACTOR AT NO COST TO THE AND HOLDING THE CONTRACTOR AT NO COST TO THE AND HOLDING THE CONTRACTOR AT NO COST TO THE AND HOLDING THE CONTRACTOR AT NO COST TO THE AND HOLDING THE CITY HARMLESS.

WORKING AREA

NO EXCAVATION WITH SIDE SLOPES STEEPER THAN 2:1 AND/OR DEEPER THAN 2' WILL BE PERMITTED. OPEN CASTINGS AND PIPES SHALL BE LEFT SECURED WHEN THE SITE IS UNATTENDED BY THE CONTRACTOR. THE CONTRACTOR SHALL SECURE ALL SUCH EXCAVATIONS, OPEN CASTINGS AND PIPES AGAINST UNAUTHORIZED ENTRY COVERING WITH STEEL PLATES, TEMPORARY BACK FILLING, FENCING AND SECURITY SERVICES SHALL BE INCLUDED IN THE PRICE BID FOR THE WORK.

ITEM 832 SPEC EROSION CONTROL

THE CONTRACTOR SHALL PREPARE AND SUBMIT A STORM WATER POLLUTION CONTROL PLAN TO THE CITY OF MASSILLON ENGINEER TO BE FORWARDED TO THE APPROPRIATE PERMITTING AGENCIES. SAID PLAN MUST COMPLY WITH THE MOST CURRENT RULES AND REGULATIONS OF THE CITY OF MASSILLON.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING STORM WATER POLLUTION CONTROL PLAN 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. ALL DEVICES (SILT FENCE, INLET PROTECTION, ROCK CHANNEL, ETC.) SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.

THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 832 SPEC - EROSION CONTROL

CONDITIONS OF WORK

ALL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ACT, STATE, COUNTY, AND CITY OF MASSILLON LAWS AND REGULATIONS. ALL WORK, AT ALL TIMES SHALL BE SUBJECT TO OBSERVATION BY THE OWNER AND/OR ENGINEER. ALL WORK SHALL COMPLY WITH THE CONDITIONS OF THE CONTRACT DOCUMENTS, OHIO EPA, AND STANDARDS OF THE CITY OF MASSILLON. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, AND APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES TO THE PROJECT SITE. ADJACENT ROADS SHALL BE MAINTAINED AND KEPT CLEAN OF MUD AND OTHER DEBRIS THAT MAY BE CAUSED BY TRAFFIC EXITING THE WORK SITE. THE CONTRACTOR SHALL COORDINATE AND PROVIDE FOR ALL NECESSARY TRAFFIC CONTROL. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH CURRENT CITY OF MASSILLON RULES AND REGULATIONS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN FACILITIES FOR A CONSTRUCTION OFFICE, EMPLOYEE PARKING, AND EMPLOYEE SANITARY FACILITIES. ON STREET PARKING WILL NOT BE PERMITTED. THE CONTRACTOR SHALL PROVIDE FOR THE LAWFUL OFF-SITE DISPOSAL OF DEMOLITION DEBRIS AND CONSTRUCTION WASTE.

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS REMOVED DURING CONSTRUCTION SHALL BE UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THIS SHALL INCLUDE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNLESS OTHERWISE STATED BY CITY REPRESENTATIVE.

CONCRETE REMOVAL

ALL EXISTING CONCRETE INCLUDING CURBS, DRIVES, AND BASE ETC. WITHIN WORK LIMITS SHALL BE REMOVED AND PAID FOR UNDER:

ITEM 202 CURB, WALK, AND PAVEMENT REMOVAL.

ITEM 614SPEC MAINTAINING TRAFFIC

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND MAINTAINING SAFE AND EFF PROJECT. ALL TRAFFIC CONTROL DEVICES (PAVEMENT MARKINGS, SIGNS, BARRELS, CONES, CONTRACTOR.

THE CONTRACTOR SHALL DEVISE A MAINTENANCE OF TRAFFIC SCHEME WHICH SHALL BE STA APPROVAL. THE MAINTENANCE OF TRAFFIC SCHEME SHALL PRESENT, IN GENERAL, THE METH

THE PLANS SHALL INCLUDE THE FOLLOWING COMPONENTS:

PLAN VIEW AT AN APPROPRIATE SCALE TO SHOW:

WORK AREA BEGIN/END STATIONING OF TAPERS, TEMPORARY MARKINGS, ETC.

- TEMPORARY PAVEMENT
- LOCATIONS OF SIGNS (EXISTING OVERHEAD SIGNS AND ALL PROPOSED, COVERED, OR I LOCATIONS OF TYPICAL SECTIONS
- REFERENCES TO APPLICABLE STANDARD DRAWINGS

TYPICAL SECTIONS SHOWING: LANE WIDTHS, PAVEMENT MARKINGS, DRUMS, PCB, ETC,

LIMITING STATIONS

WORK AREA AND DROP-OFFS SIGN DETAILS FOR PROPOSED SIGNS AND OVERLAYS/MODIFICATIONS

THE MAINTENANCE OF TRAFFIC SCHEME SHALL BE IN CONFORMANCE WITH THE OHIO MANUAL STANDARD CONSTRUCTION DRAWINGS INCLUDING DESIGNER NOTES, THE CONSTRUCTION AN MANAGEMENT IN WORK ZONES INTERSTATE AND OTHER FREEWAYS, ODOT LOCATION AND DE

THIS SUBMITTAL SHALL CONSIST OF THREE (3) COPIES OF THE PLANS FOR REVIEW AND DISTR TRAFFIC PLANS HAVE BEEN APPROVED BY THE CITY OF MASSILLON ENGINEER.

THE PROGRESS SCHEDULE WILL BE REQUIRED TO APPROVE THE MAINTENANCE OF TRAFFIC F WORK ACTIVITIES AND HIS METHODS OF MAINTAINING TRAFFIC DURING THESE ACTIVITIES. MA CITY OF MASSILLON ENGINEER FOR APPROVAL. THESE PLANS SHALL BE SEALED BY A REGIST REVIEW AND COMMENT ON THESE PLANS. THE CONTRACTOR SHALL NOT BEGIN ANY WORK RE THE CONTRACTOR'S SEQUENCE OF OPERATIONS AND MAINTENANCE OF TRAFFIC PLANS.

THE MAINTENANCE OF TRAFFIC SCHEME SHALL TAKE INTO CONSIDERATION SNOW AND ICE OF RESTRICTIONS, AND CLOSURES MAY NOT BE APPROVED IF THEY ADVERSELY AFFECT SNOW F

THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614 - MAINTAINING TRAFFI

FINAL APPROVAL

A VIDEO IN THE FORM OF FLASH DRIVE WILL BE MADE BY THE CONTRACTOR AND SUBMITTED TAFTER THE FINAL INVOICE IS SUBMITTED THE SITE SHALL BE VIDEOED AGAIN BY THE CONTRA BUILT DRAWINGS SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE CITY OF INVOICE.

COST OF THIS WORK SHALL BE INCLUDED IN ITEM 623 CONSTRUCTION STAKING.

SANITARY SEWER SPECIFICATIONS

SANITARY SEWER CONSTRUCTION PROPOSED FOR THIS PROJECT SHALL CONFORM TO THE L SPECIFICATIONS, TEN STATE STANDARDS, AND THE LATEST EDITION OF THE ODOT CMS, OR M STANDARDS IT SHALL BE AT THE DISCRETION OF THE CITY OF MASSILLON ENGINEER AS TO W GOVERN UNLESS NOTED OTHERWISE.

SANITARY GRAVITY SEWER PIPE AND FITTINGS SHALL BE PVC SDR 35 CONFORMING TO ASTM ASTM D-1784 PVC PIPE AND FITTINGS SHALL HAVE BELL AND SPIGOT TYPE JOINTS CONFORMI

BACKFILL IN SEWER TRENCHES SHALL CONFORM TO ODOT ITEM 611 AND BE PLACED IN LAYER LABORATORY DRY DENSITY PER ASTM D-698 AND THOROUGHLY COMPACTED WITH MACHINE M SHALL BE CONTINUED UNTIL THE TRENCH IS ENTIRELY FILLED AND COMPACTED WITH THE AP DRAWINGS. EXCAVATED MATERIAL CONFORMING TO ODOT ITEM 203 SHALL BE USED FOR BAC CONFORMING TO GRADATION REQUIREMENTS OF ODOT ITEM 304 OR APPROVED EQUAL AS SH TRENCH AREAS SHOWN ON THE PLANS AND AS DIRECTED BY THE CITY OF MASSILLON ENGINE PERMITTED UNLESS APPROVED BY THE CITY OF MASSILLON ENGINEER. COMPACTION TESTING OWNER AT THE EXPENSE OF THE CONTRACTOR.

SANITARY SEWERS SHALL BE AIR TESTED FOR LEAKAGE AND MANDREL TESTED FOR DEFLECT

PRIOR TO FINAL PAYMENT FOR AND ACCEPTANCE OF SANITARY SEWER INSTALLATION THE RE SHALL BE FORWARDED TO THE CITY OF MASSILLON ENGINEER.

DEFLECTION TESTING

MAXIMUM ALLOWABLE PIPE DEFLECTION (REDUCTION IN VERTICAL INSIDE DIAMETER) SHALL E 30 DAYS AFTER THE BACKFILL HAS BEEN PROPERLY PLACED AND BEFORE FINAL ACCEPTANCE BY RE-BEDDING OR REPLACEMENT OF THE PIPE AT THE CONTRACTOR'S EXPENSE. DEVICES F NO-GO) MANDREL OR SEWER BALL.THE DEFLECTION TESTING MUST BE CONDUCTED WITHOUT MEASUREMENTS, THE BASE INSIDE PIPE DIAMETERS WITHOUT DEFLECTION ARE PROVIDED IN BASE INSIDE DIAMETER IN DETERMINING THE MINIMUM PERMISSIBLE DIAMETER. IT MUST BE E THOROUGHLY CLEANED.

TABLE A
INSIDE DIAMETERS FOR DEFLECTI
OF ASTM D 3034 SDR 35 / SDR 2 ²

SIZE	SDR	AVG. O.D.	E
6"	35	6.275	
8"	35	8.400	
10"	35	10.500	
12"	35	12.500	

	FFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS _ BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE	
	PROFESSIONAL ENGINEER, AND PRESENT IT TO THE ENGINEER FOR DNDUCTING THE REQUIRED WORK IN A SAFE AND EFFICIENT MANNER.	
MODIFIED SI	IGNS)	
		CHECKED BY: MW
		date: 4/28/2023
		drawn by: ABC
AL OF UNIFO	RM TRAFFIC CONTROL DEVICES, LATEST REVISION, THE REFERENCED	DATE: 4/28/2023
ND MATERIA	AL SPECIFICATIONS (CMS), POLICY NO. 516-003(P) TRAFFIC JAL, VOLUME 1, AND ALL REQUIREMENTS DETAILED IN THESE PLANS.	NO
	O WORK SHALL BEGIN AT THE LOCATION UNTIL THE MAINTENANCE OF	
	O WORK SHALL BEGIN AT THE LOCATION ON THE THE MAINTENANCE OF	S S
	S SCHEDULE OF OPERATIONS SHALL DETAIL THE CONTRACTOR'S	DES
	E OF TRAFFIC PLANS SHALL BE PREPARED AND SUBMITTED TO THE ESSIONAL ENGINEER. THE CITY SHALL HAVE 14 CALENDAR DAYS TO	
	RAFFIC CONTROL UNTIL THE ENGINEER HAS GIVEN APPROVAL OF	DATE
	FROM DECEMBER 1 THROUGH MARCH 31, LANE SHIFTS.	
REMOVAL OF		
FIC, AS PER F	PLAN.	
	Y OF MASSILLON ENGINEER PRIOR TO THE PROJECT COMMENCING.	
ACTOR. ANY	DISCREPANCIES WILL BE RESOLVED PRIOR TO FINAL PAYMENT. AS	
MASSILLON	I ENGINEER IN A CLEAR AND LEGIBLE MANNER PRIOR TO FINAL	
	OF MASSILLON STANDARDS AND CONSTRUCTION AND MATERIALS	IES
WHICH STAN	IDARD SHALL GOVERN. THE PROJECT CONTRACT DRAWINGS SHALL	NOTES
I D-3034 UNLI	ESS OTHERWISE NOTED. PVC COMPOUNDS SHALL CONFORM TO	AL N
	M D-3212 AND GASKETS CONFORMING TO ASTM F-477	IR ∧
	ENT TO MEET THE COMPACTION REQUIREMENT OF 100% OF MAXIMUM COMPACTION EQUIPMENT. THE PLACING OF BACKFILL MATERIAL	ENER
PPROVED GI	RANULAR MATERIAL TO THE GRADE CALLED FOR ON THE CONTRACT	U Ü
HOWN IN OD	XISTING STRUCTURES (AFTER REMOVAL) ONLY. CRUSHED GRAVEL OOT TABLE 703-1 SHALL BE USED FOR BACKFILLING ALL SEWER	
	DING, JETTING, OR PUDDLING OF BACKFILL MATERIAL WILL NOT BE ACKFILL BY A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE	
TION. THE M	IAXIMUM ALLOWABLE PIPE DEFLECTION SHALL BE 5%.	
ESULTS OF	THE AIR PRESSURE TESTS, TELEVISION TESTS AND MADREL TESTS	
	LECTION TESTS OF PIPE SHALL BE PERFORMED NOT SOONER THAN NS WITH EXCESS DEFLECTION SHALL BE EXCAVATED AND REPAIRED	
	G INCLUDE A DEFLECTOMETER METER, OR PROPERLY SIZED (60, CAL PULLING DEVICES. FOR THE PURPOSE OF DEFLECTION	
N TABLE A. T	HE MAXIMUM ALLOWABLE DEFLECTION SHALL BE APPLIED TO THE	
ινις μασιζευ) THAT TO INSURE ACCURATE TESTING, THE LINES MUST BE	Anyor O
		, kua
TION MEASU 21 PVC SEWE		Pida .
BASE I.D.	DEFLECTION MANDREL	Cata
5.742	5.54	Mathy D
7.665	7.28	S U
9.563 11.361	9.08 10.79	
		DRAWING NAME: 8th_GN001.dwg
		CITY NUMBER:
		XXX

(8/23)

TELEVISION TESTING

ALL SANITARY SEWERS, 8-INCH DIAMETER AND LARGER, MUST PASS AN INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE A COMPLETE INTERNAL INSPECTION DVD TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT. THE RECORDING PROCEDURE SHALL BE IN ACCORDANCE WITH CITY OF MASSILLON ENGINEERING DEPARTMENT STANDARDS.

COST OF THIS WORK SHALL BE INCLUDED IN ITEM 611 - 8" CONDUIT TYPE B SDR 35 PVC.

LEAKAGE TESTS

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LEAKAGE TESTS SHALL BE PERFORMED WHICH MAY INCLUDE APPROPRIATE WATER OR LOW PRESSURE AIR TESTING. THE TESTING METHODS SELECTED SHOULD TAKE INTO CONSIDERATION THE RANGE IN GROUNDWATER ELEVATIONS DURING THE TEST AND ANTICIPATED DURING THE DESIGN LIFE OF THE SEWER COMPLETED AND ACCEPTED.

AIR TESTING AS PER ASTM F1417

AIR TESTING WILL BE CONDUCTED AS THE PROJECT IS BEING CONSTRUCTED. AT NO TIME WILL MORE THAN 900 FEET OF PIPE BE INSTALLED BEFORE AIR TESTING IS PERFORMED. SEWAGE WILL NOT BE DIVERTED TO ANY SECTION OF PIPE. REGARDLESS OF LENGTH. UNTIL ALL TESTING IS COMPLETED AND ACCEPTED

AFTER BACKFILLING A MANHOLE TO MANHOLE REACH OF SANITARY SEWER LINE, THE CONTRACTOR SHALL, AT HIS EXPENSE, CONDUCT THE LINE ACCEPTANCE TESTS. THE TESTS SHALL BE PERFORMED ACCORDING TO THE STATED PROCEDURES AND UNDER THE SUPERVISION OF THE CITY OF MASSILLON ENGINEER OR HIS REPRESENTATIVE.

EQUIPMENT USED SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS AND BE APPROVED BY THE CITY OF MASSILLON ENGINEER:

1: PNEUMATIC PLUGS SHALL HAVE A SEALING LENGTH EQUAL TO OR A GREATER THAN THE DIAMETER OF THE PIPE BEING INSPECTED. 2: PNEUMATIC PLUGS SHALL RESIST INTERNAL TEST PRESSURES WITHOUT REQUIRED EXTERNAL BRACING OR BLOCKING. 3: ALL AIR USED SHALL PASS THROUGH A SINGLE CONTROL PANEL.

4. THREE INDIVIDUAL HOSES SHALL BE USED FOR THE FOLLOWING CONNECTIONS:

a. FROM CONTROL PANEL TO PNEUMATIC PLUGS FOR INFLATION.

b. FROM CONTROL PANEL TO SEALED LINE FOR INTRODUCING THE LOW PRESSURE AIR.

c. FROM SEALED LINE TO CONTROL PANEL FOR CONTINUALLY MONITORING AIR PRESSURE RISE IN THE SEALED LINE.

ALL PNEUMATIC PLUGS SHALL BE SEAL TESTED BEFORE BEING USED IN THE ACTUAL TEST INSTALLATION. ONE LENGTH OF PIPE SHALL BE LAID ON THE GROUND AN SEALED AT BOTH ENDS WITH THE PNEUMATIC PLUGS TO BE CHECKED. THE SEALED PIPE SHALL BE PRESSURED TO 5 PSIG. THE PLUGS MUST HOLD AGAINST THIS PRESSURE WITHOUT HAVING TO BE BRACED.

AFTER A MANHOLE TO MANHOLE REACH OF PIPE HAS BEEN BACKFILLED AND CLEANED, AND THE PNEUMATIC PLUGS ARE CHECKED BY THE ABOVE PROCEDURE, THE PLUGS SHALL BE PLACED IN THE LINE AT EACH MANHOLE. LOW PRESSURE AIR SHALL BE SLOWLY INTRODUCED INTO THIS SEALED LINE UNTIL THE INTERNAL AIR PRESSURE **REACHES APPROXIMATELY 4 PSIG.**

AT LEAST TWO MINUTES SHALL BE ALLOWED FOR THE AIR PRESSURE TO STABILIZE. WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE 3.5 PSIG, THE AIR HOSE FROM THE CONTROL PANEL TO THE AIR SUPPLY SHALL BE DISCONNECTED. THE PORTION OF THE LINE BEING TESTED SHALL BE TERMED "ACCEPTABLE" IF THE TIME REQUIRED IN MINUTES FOR THE PRESSURE TO DECREASE FROM 3.5 TO 2.5 PSIG (GREATER THEN THE AVERAGE BACK PRESSURE OF ANY GROUNDWATER THAT MAY BE OVER THE PIPE) SHALL NOT BE LESS THAN THE TIME SHOWN FOR THE GIVEN DIAMETERS IN THE FOLLOWING TABLE:

PIPE		LENGTH FOR	TIME FOR LONGER			SPECIFICA	TION TIME LEN	E LENGTH (L) SHOWN, MINUTES			
DIAMETER IN.	TIME MINUTES	MINUTES TIME, FT.	LENGTH, S	100 FT.	150 FT.	200 FT.	250 FT.	300 FT.	350 FT.	400 FT.	450 FT.
4	3:46	597	0.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	0.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:36	7:36	8:52	10:08	11:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	198	3.416 L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	6.342 L	14:10	14:10	17:46	22:15	26:42	31:09	35:36	40:04
18	17:0	133	7.692 L	17:00	19:13	25:38	32:09	38:27	44:52	51:16	57:41
21	19:50	114	10.470 L	19:50	26:10	36:54	43:37	52:21	XX:XX	69.48	78:31
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	76:46	91:10	102:33
27	25:30	88	17.306 L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852 L	49:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	170.29	205:07	230:46

IN AREAS WHERE GROUND WATER IS KNOWN TO EXIST. THE CONTRACTOR SHALL INSTALL A 1/2 INCH DIAMETER CAPPED PIPE NIPPLE APPROXIMATELY 10 INCHES LONG. THROUGH THE MANHOLE WALL ON TOP OF ONE OF THE SANITARY SEWER LINES ENTERING THE MANHOLE. THIS SHALL BE DONE AT THE TIME THE SANITARY SEWER LINE IS INSTALLED, IMMEDIATELY PRIOR TO THE PERFORMANCE OF THE LINE ACCEPTABILITY TEST, THE GROUND WATER SHALL BE DETERMINED BY REMOVING THE PIPE CAP, BLOWING AIR THROUGH THE PIPE NIPPLE IN THE GROUND SO AS TO CLEAR IT, AND THEN CONNECTING A CLEAR PLASTIC TUBE TO THE NIPPLE. THE PLASTIC TUBE SHALL BE VERTICAL AND A MEASUREMENT OF THE HEIGHT, IN FEET OF WATER OVER THE INVERT OF THE PIPE, SHALL BE TAKEN AFTER THE WATER HAS STOPPED RISING IN THIS PLASTIC TUBE. THE HEIGHT, IN FEET OF WATER OVER THE INVERT OF THE PIPE, SHALL BE TAKEN AFTER THE WATER HAS STOPPED RISING IN THIS PLASTIC TUBE. AIR TEST PRESSURE IS TO BE INCREASED BY 0.433 PSI FOR EACH FOOT THE GROUND WATER IS ABOVE THE INVERT OF THE SEWER LINE BEING TESTED. THE ALLOWABLE DROP OF ONE POUND AND THE TIMING OF THE TEST REMAIN THE SAME.

IF A LINE ACCEPTABILITY TEST IS BEING CONDUCTED ON MORE THAN ONE MANHOLE REACH OF PIPE, THE ENTIRE SECTION BEING TESTED SHALL MEET THE LINE ACCEPTABILITY REQUIREMENTS AS IF ONLY ONE (1) OF THE MANHOLE REACHES IN THE SECTION WERE BEING TESTED.

COST OF THIS WORK SHALL BE INCLUDED IN ITEM 611 - 8" CONDUIT TYPE B SDR 35 PVC.

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NEGATIVE AIR PRESSURE (VACUUM) TESTING OF MANHOLES AS PER ASTM C-1244

COST OF THIS WORK SHALL BE INCLUDED IN ITEM 611 - MANHOLE TYPE NO. 3 PREPARATION OF THE MANHOLE:

- ALL LIFT HOLES SHALL BE PLUGGED Α.
- ALL PIPES ENTERINGTHE MANHOLE SHALL BE TEMPORARILY PLUGGED, TAKING CARE TO SECURELY BRACE THE PIPE AND PLUGS TO PREVENT THEM FROM BEING DRAWN INTO THE MANHOLE

PROCEDURE:

- A. THE TEST HEAD SHALL BE PLACED AT THE TOP OF THE MANHOLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. A VACUUM OF 10 IN. OF MERCURY SHALL BE DRAWN ON THE MANHOLE, THE VALVE ON THE VACUUM LINE OF THE TEST HEAD CLOSED, AND THE VACUUM PUMP SHUT OFF. THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 IN OF MERCURY.
- C. THE MANHOLE SHALL PASS IF THE TIME FOR THE VACUUM READING TO DROP FROM 10 IN. OF MERCURY TO 9 IN. OF MERCURY MEETS OR EXCEEDS THE VALUES INDICATED IN TABLE BELOW.

MINIMUM TEST TIMES FOR MANHOLES

				DIAM	ETER, IN.				
DEPTH (FT)	30	33	36	42	48	54	60	66	72
				TIME, IN	N SECONDS	6			
8	11	12	14	17	20	23	26	29	33
10	14	15	18	21	25	29	33	36	41
12	17	18	21	25	30	35	39	43	49
14	20	21	25	30	35	41	46	51	57
16	22	24	39	34	40	46	52	58	67
18	25	27	32	38	45	52	59	65	73
20	28	30	35	42	50	53	65	72	81

CLEAN WATER STATEMENT

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

COMMENCING. AFTER THE FINAL INVOICE IS SUBMITTED THE SITE SHALL BE VIDEOED AGAIN BY THE CONTRACTOR. ANY DISCREPANCIES WILL BE RESOLVED PRIOR TO FINAL PAYMENT. AS BUILT DRAWINGS SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE CITY OF MASSILLON ENGINEER IN A CLEAR AND LEGENDABLE MANNER PRIOR TO FINAL INVOICE.

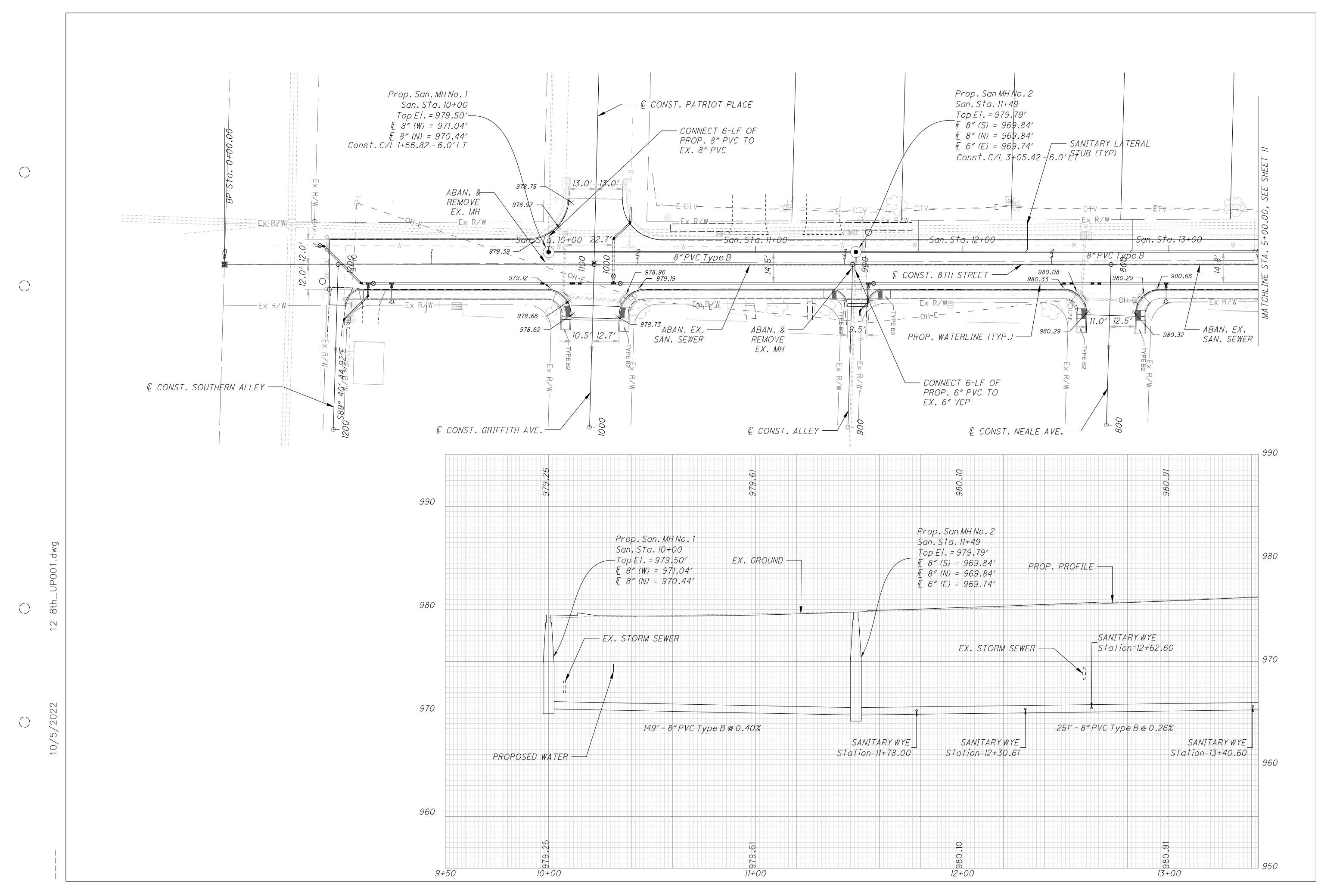
COST OF THIS WORK SHALL BE INCLUDED IN ITEM 623 CONSTRUCTION STAKING

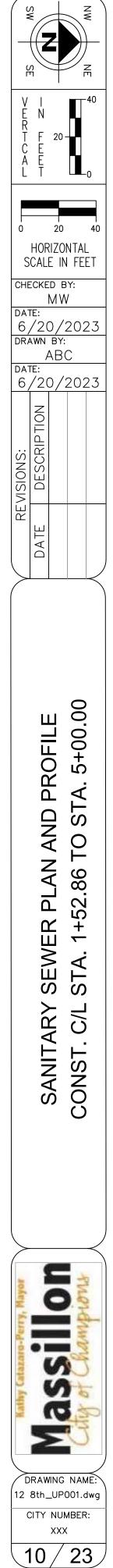
RELATION TO WATER MAINS

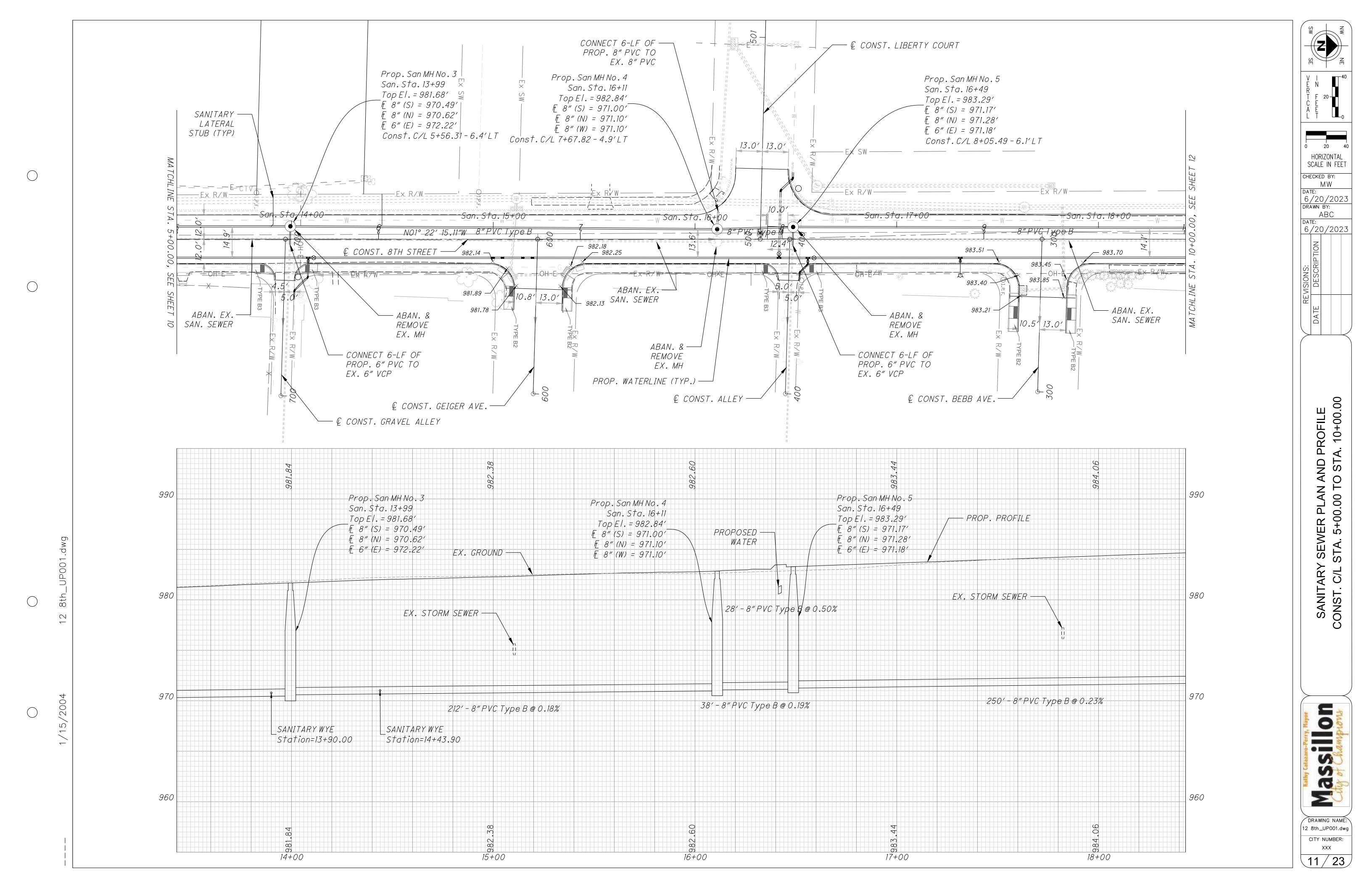
SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.

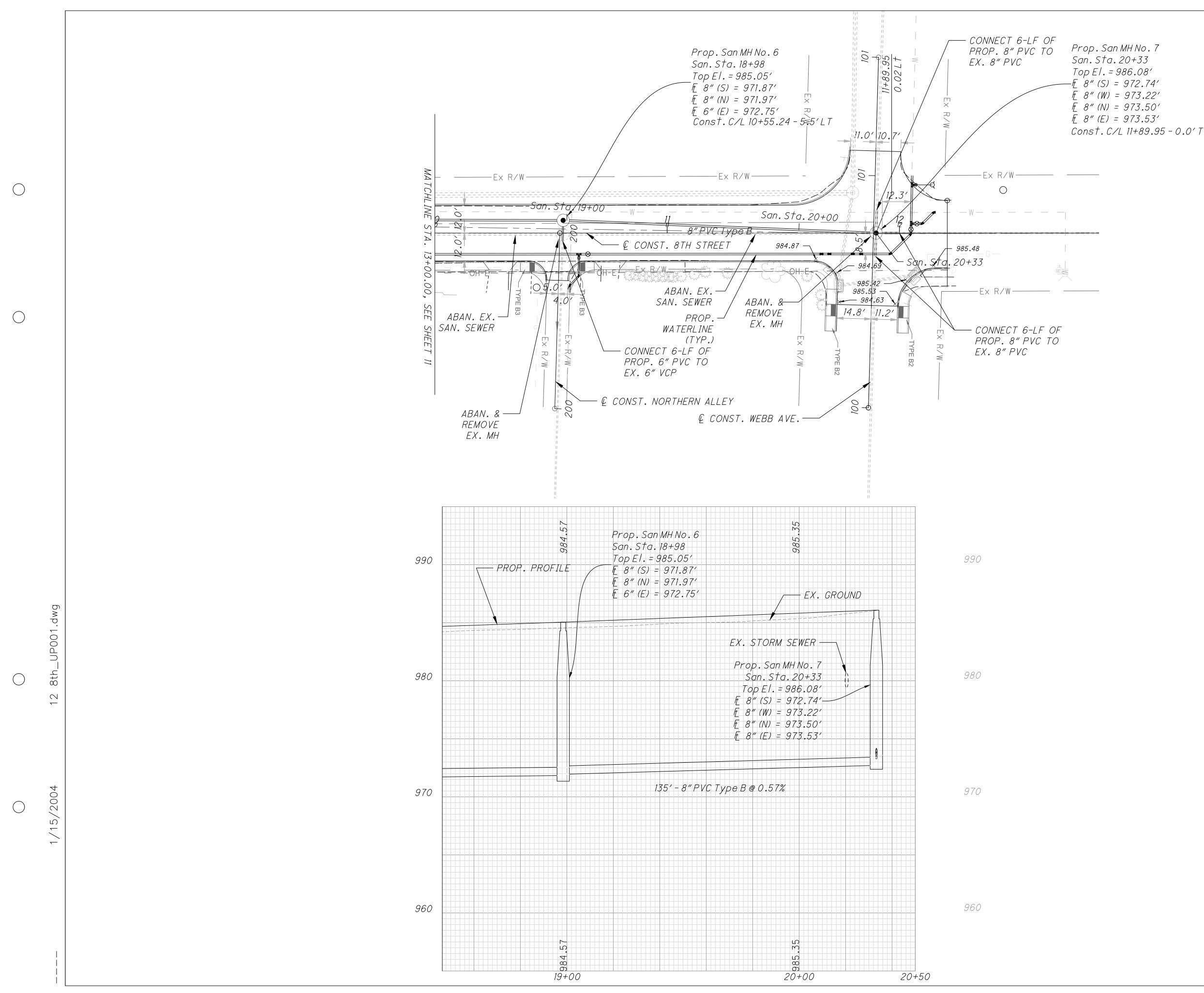
SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER.

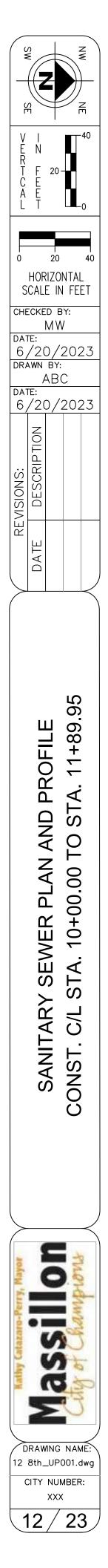
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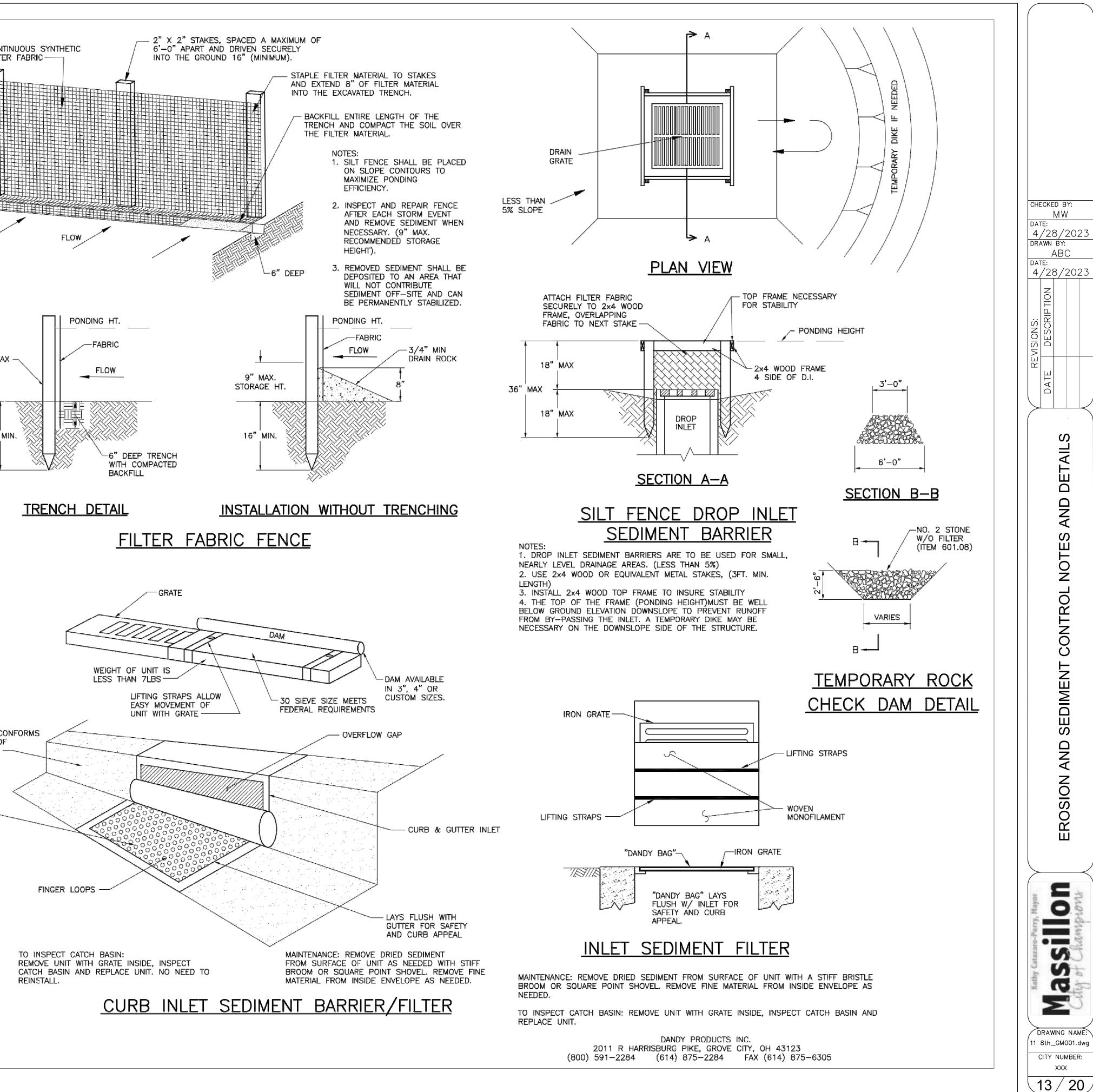
	FILTER FABRIC FENCE SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH HETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY	CON
	THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (HIGHER	
	FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).	
2.	THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND SECURELY SEALED.	36" MAXIMUM
3.	POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.	Y III
4.	A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.	
5.	WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.	
6.	THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.	STEEL OR WOOD POST 36" HIGH M/
7.	WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. 6 APPLYING.	16"
8.	THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.	*
9.	SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.	
	MAINTENANCE	
RAINE	FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER ALL AND AT LEAST DAILY DURING PROLONGED RAINFALL, ANY REQUIRED RSEACH SHALL BE MADE IMMEDIATELY.	
BECO	LD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR ME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE ER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.	
BE RI	ENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST EMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE—HALF THE HEIGHT OF BARRIER.	
BARRI	SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER ER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE NG GRADE, PREPARED, AND SEEDED.	
	TEMPORARY ROCK CHECK DAM DRARY ROCK CHECK DAMS SHALL CONSIST OF NO. 2 STONE WITHOUT FILTER, TEM 601.08, AND PLACED TO THE DIMENSIONS SHOWN ON THE DETAIL.	SPECIAL DESIGN C TO ALL SHAPES O CONCRETE CURBS
	MAINTENANCE	
SEDIM DIMEN DESIG	DAM SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. ENT SHALL BE REMOVED AND THE DAM RESTORED TO ITS ORIGINAL ISIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE—HALF THE DAM N HEIGHT. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA SUBJECT TO EROSION.	WOVEN MONOFILAMENT
	SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING AGE AREA HAS BEEN PROPERLY STABILIZED.	
	ENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM SPECIAL—TEMPORARY CHECK DAM; INCLUDING MATERIAL, PLACEMENT, MAINTENANCE, AND REMOVAL.	
	INLET SEDIMENT FILTER	
	LLATION AND MAINTENANCE OF INLET SEDIMENT FILTERS SHALL BE IN RDANCE WITH THE DETAILS AND THE MANUFACTURER'S RECOMMENDATIONS.	
	PAYMENT	
	COST FOR MEETING THE EROSION AND SEDIMENT CONTROL REQUIREMENTS	

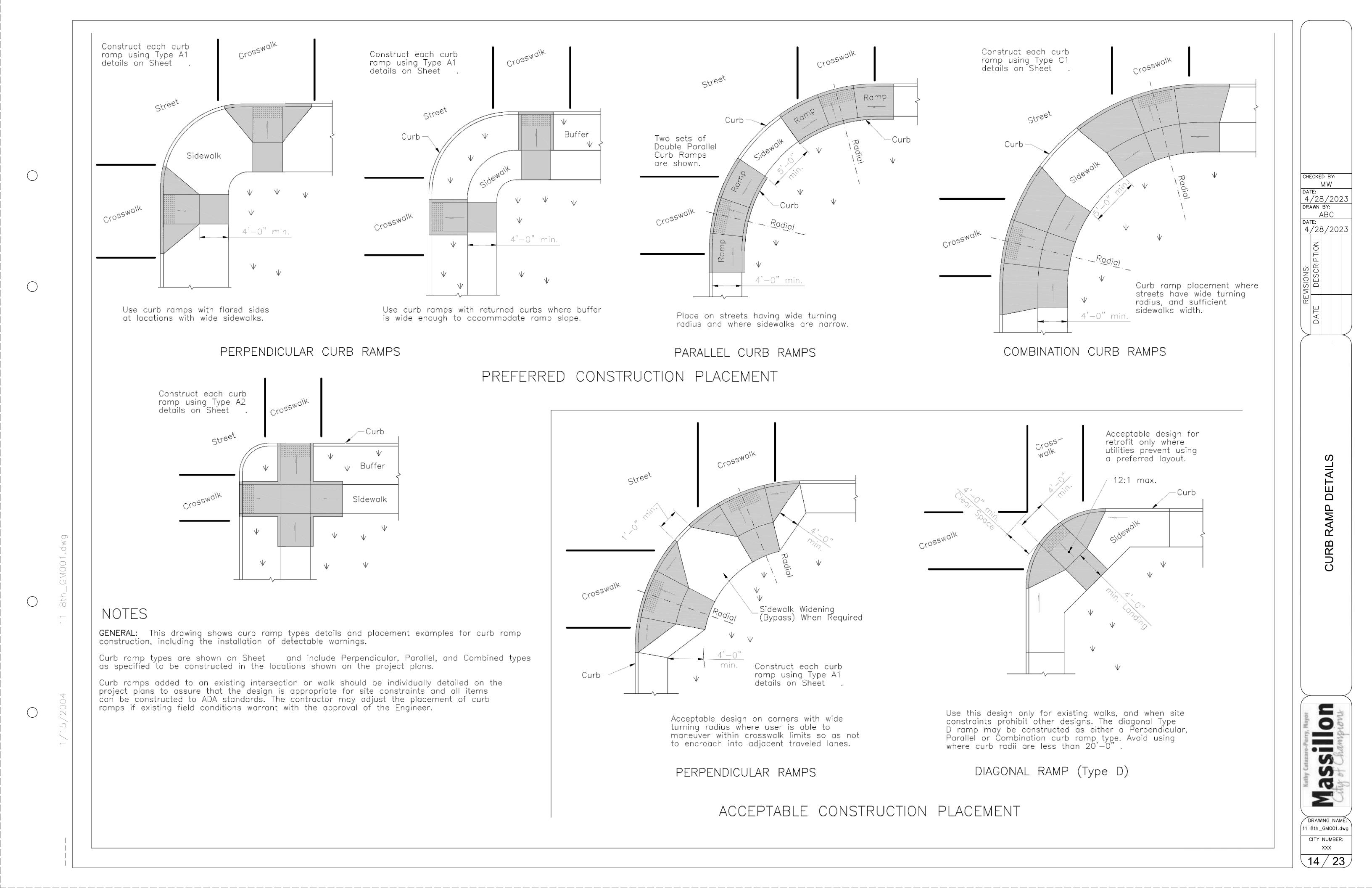
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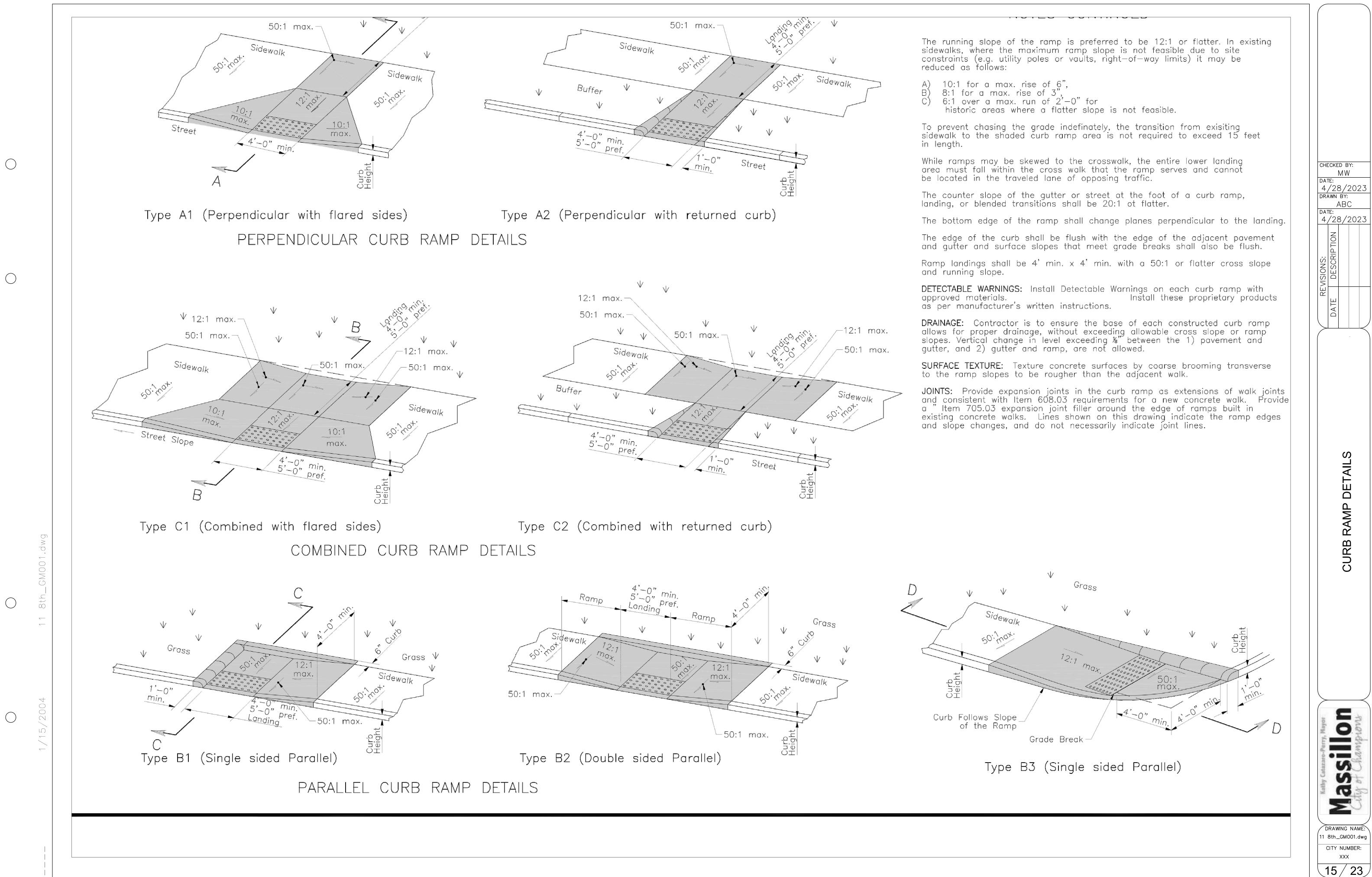
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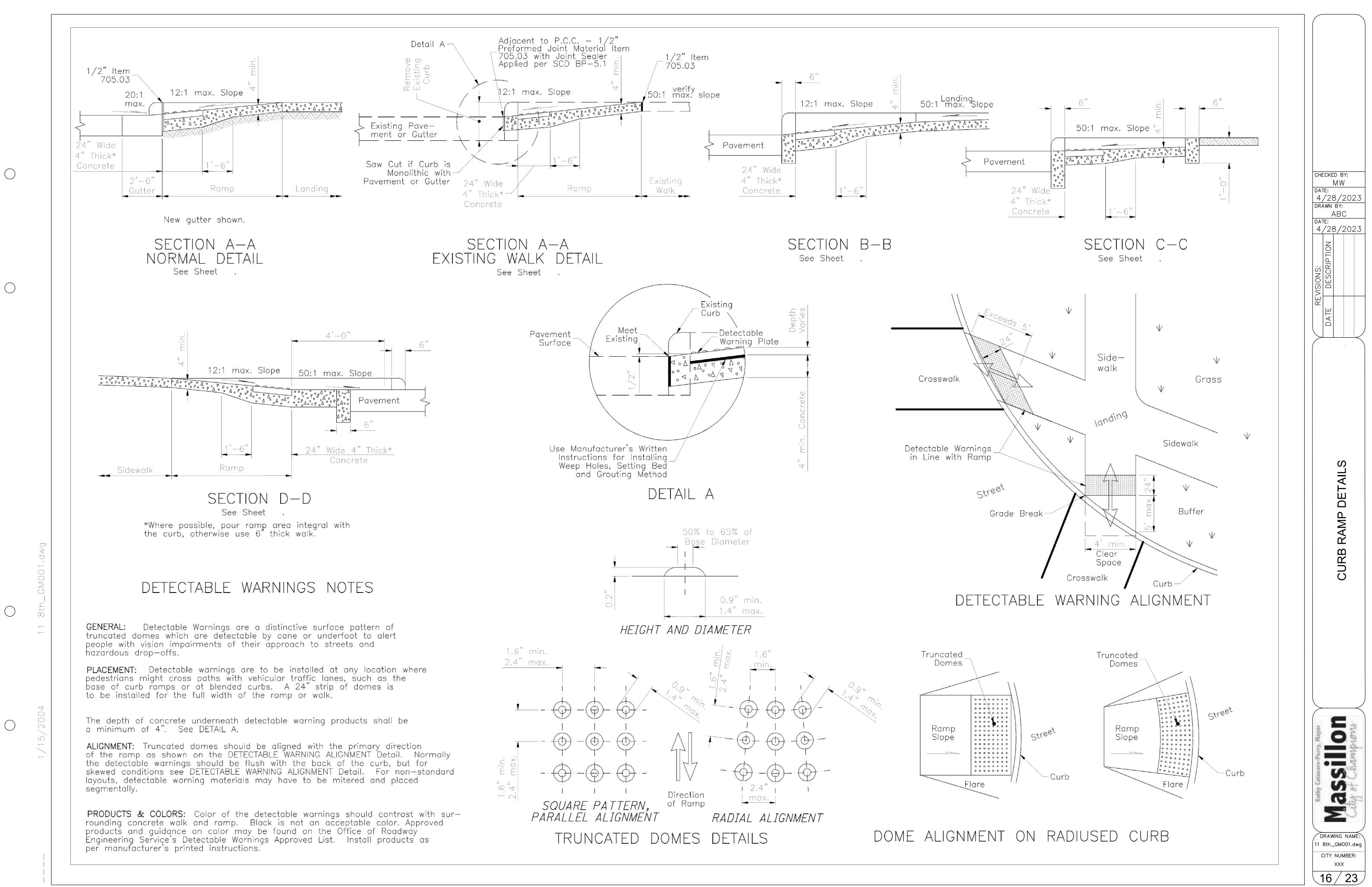
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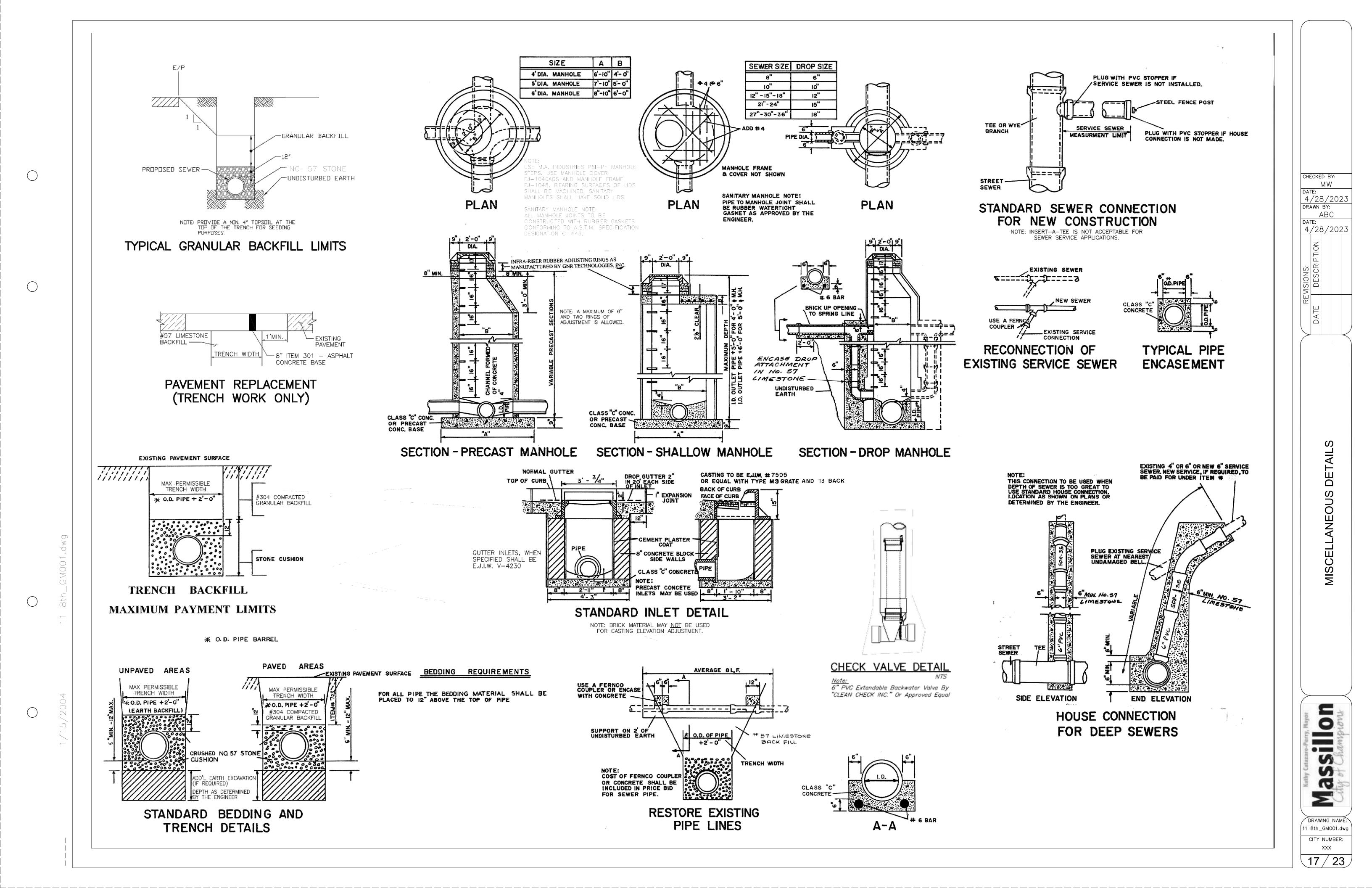
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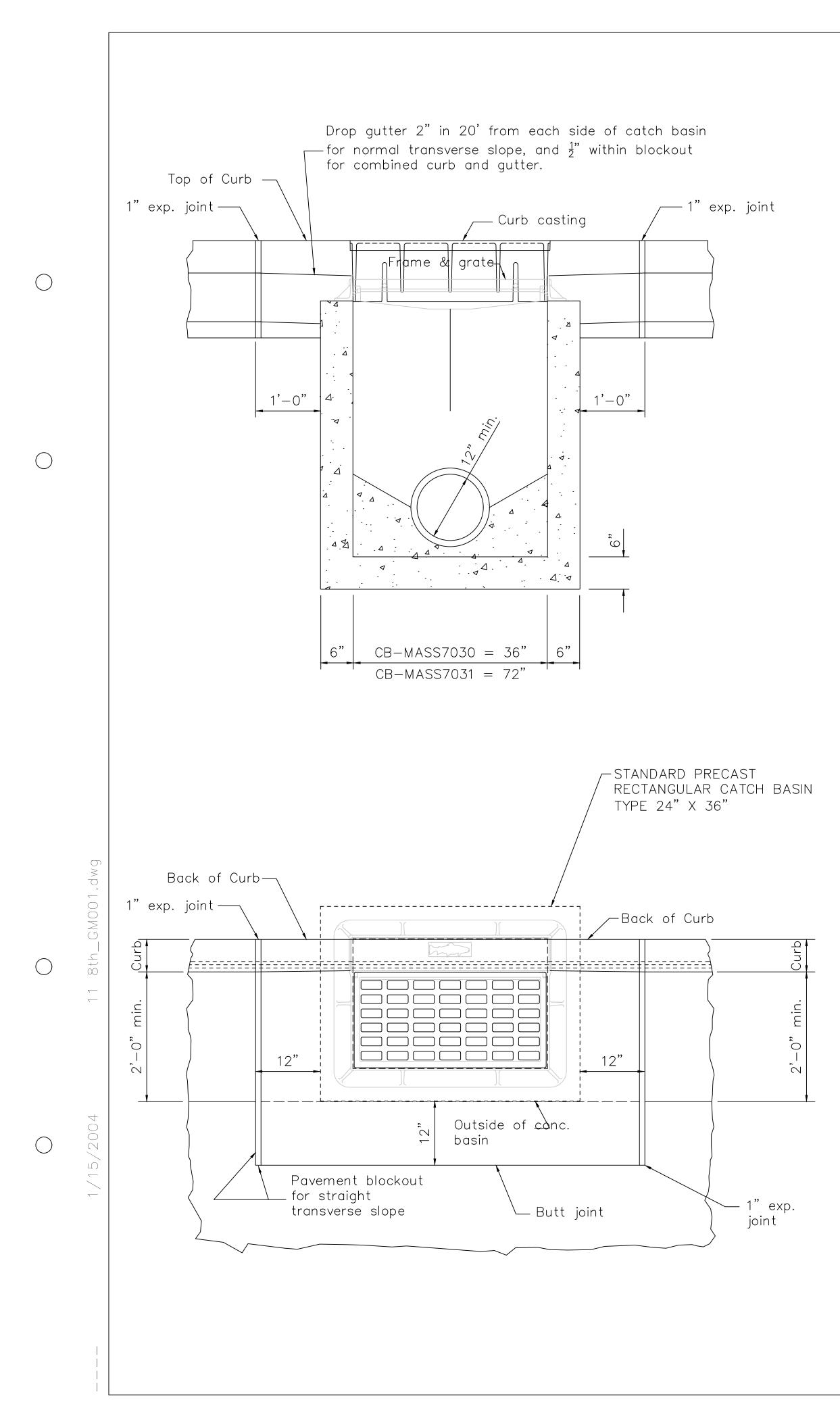










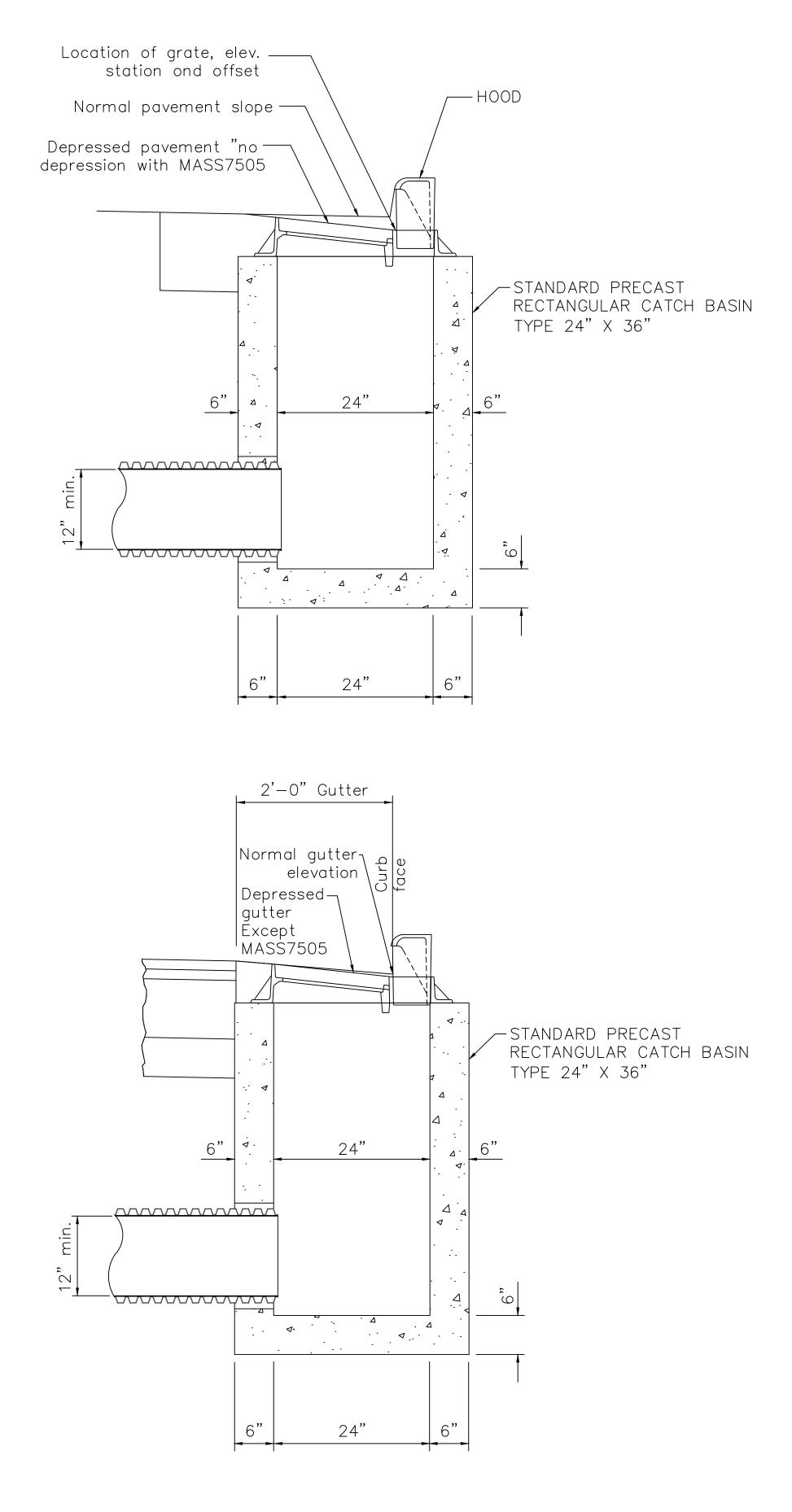


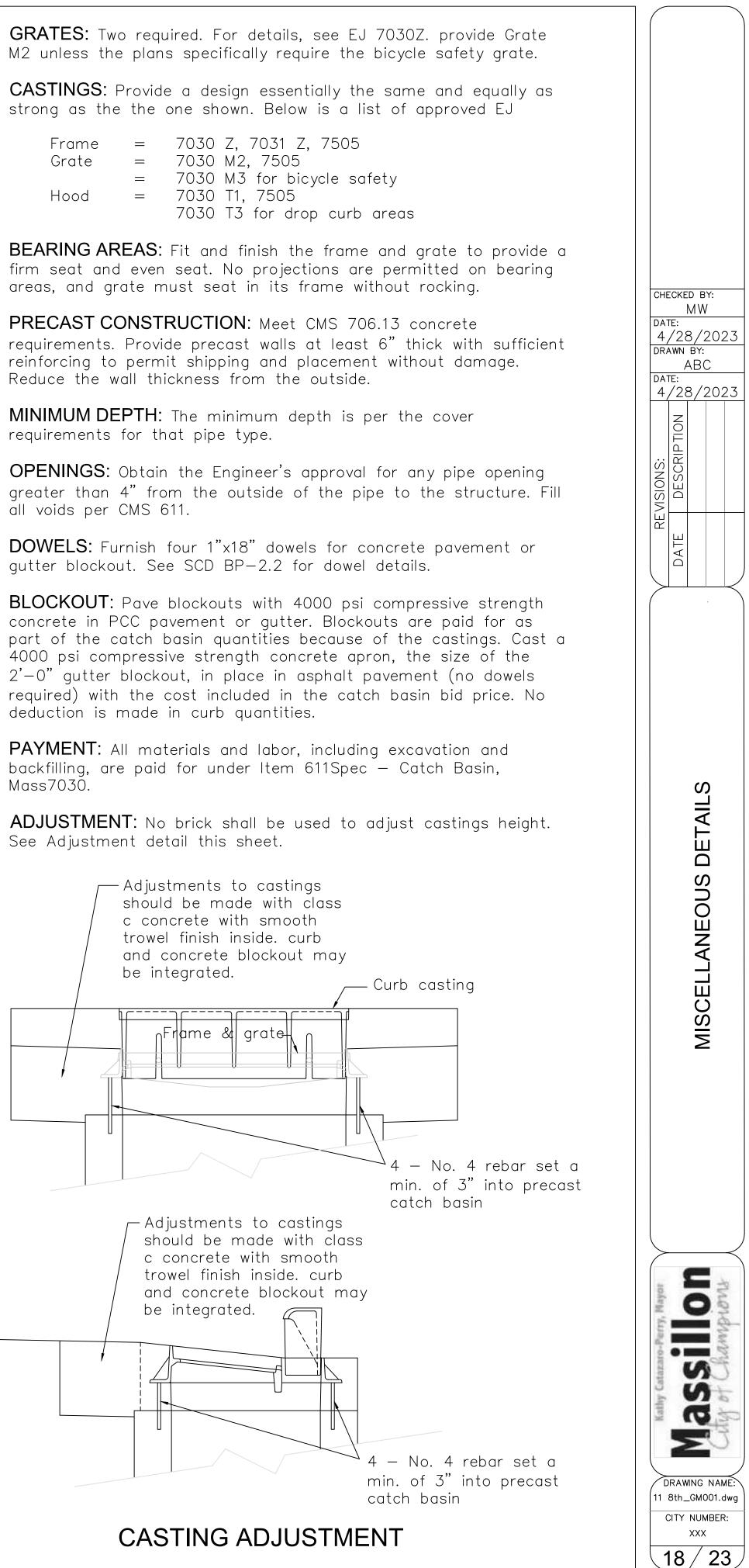
Frame Grate

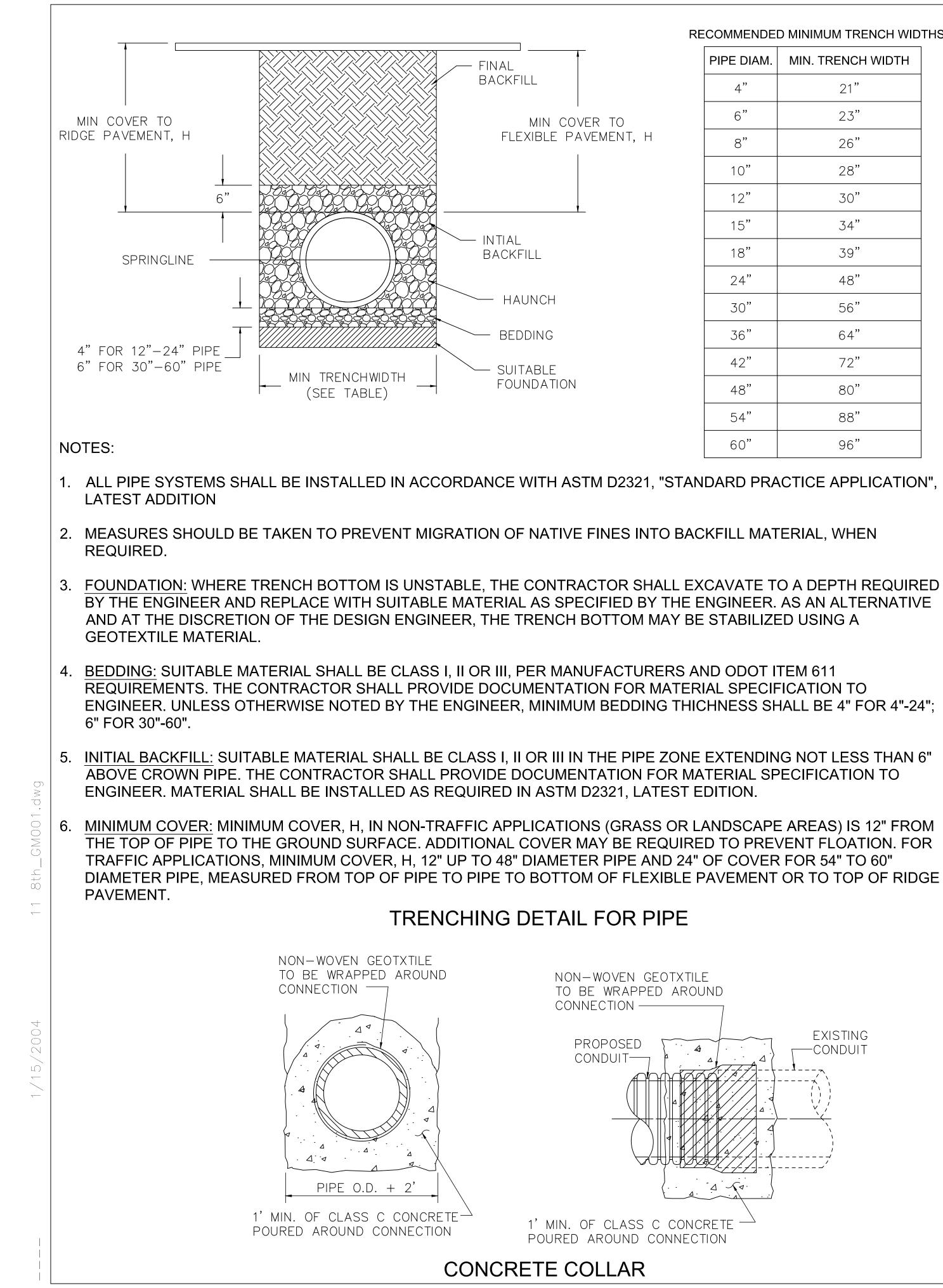
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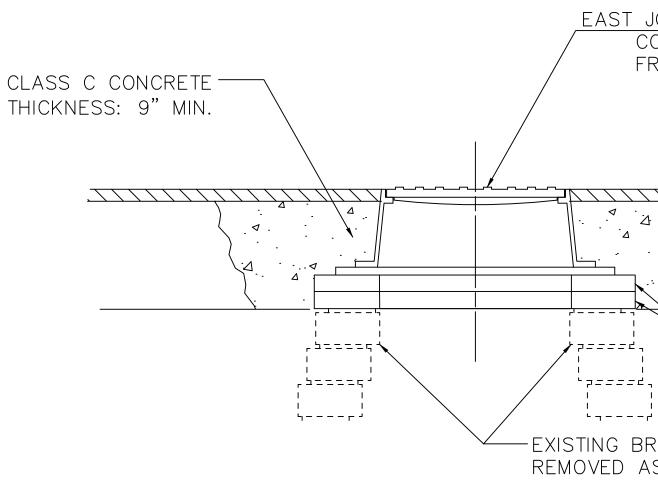
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RECOMMENDED MINIMUM TRENCH WIDTHS

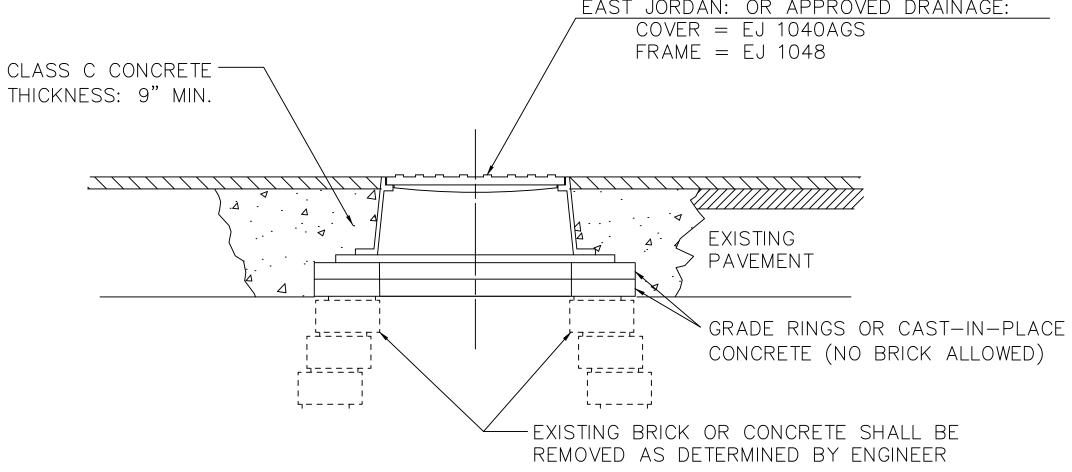
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"



NOTES:

- 1. ALL CASTINGS, LIDS AND GRATES ARE TO BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR FOR SALVAGE BY THE CITY OF MASSILLON.
- 2. WORK SHALL INCLUDED ALL REMOVAL AND DISPOSAL OF EXISTING.

DRAINAGE MANHOLE MASS1048-R



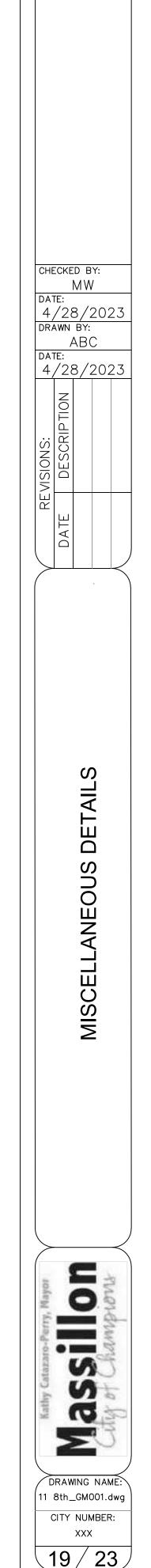
NOTES:

- 1. ALL CASTINGS, LIDS AND GRATES ARE TO BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR FOR SALVAGE BY THE CITY OF MASSILLON.
- 2. WORK SHALL INCLUDED ALL REMOVAL AND DISPOSAL OF EXISTING.

SANITARY MANHOLE MASS1048-R

EAST JORDAN: OR APPROVED DRAINAGE: COVER = EJ 1040AGSFRAMF = FJ 1048

EXISTING PAVEMENT

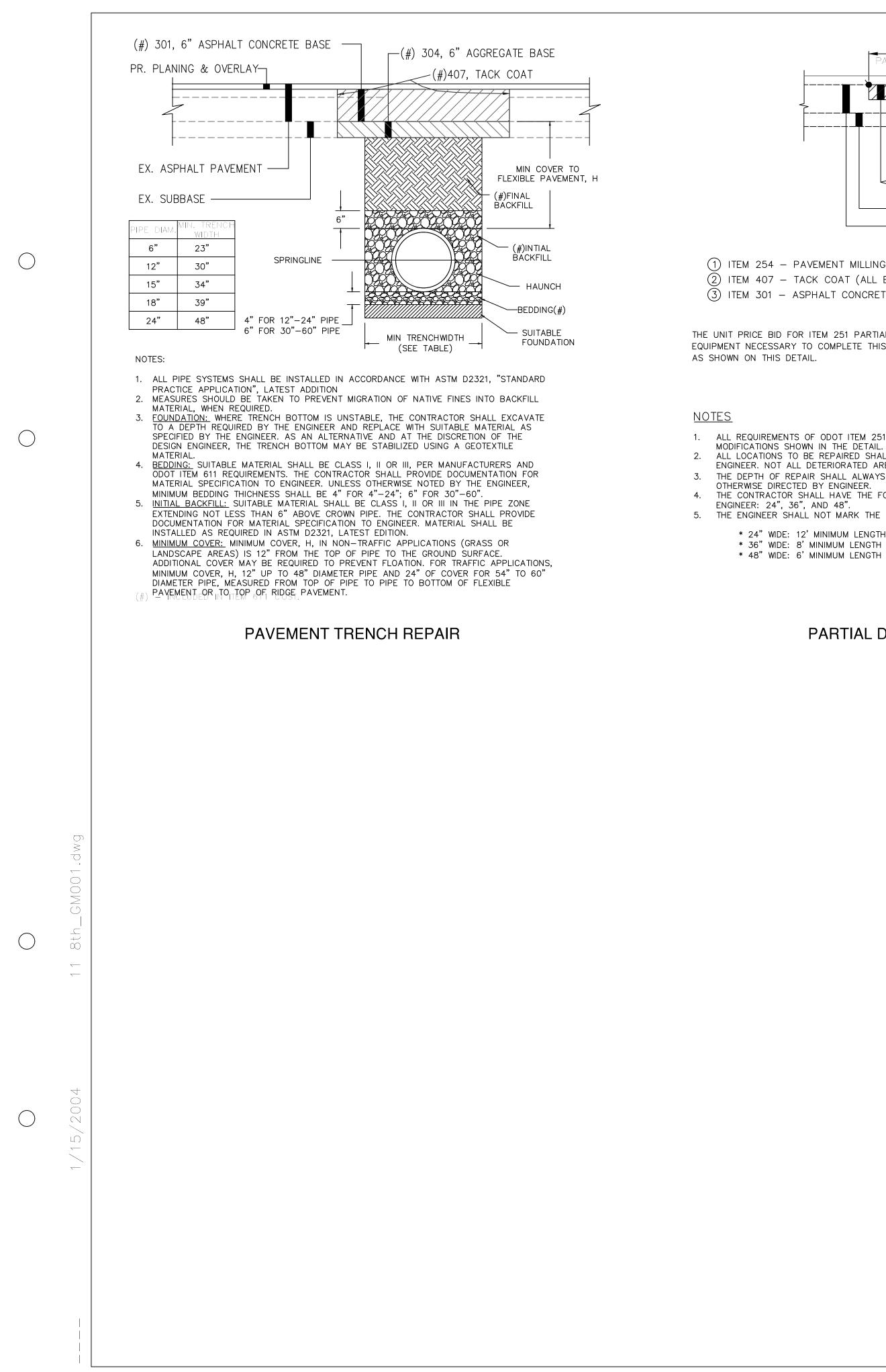


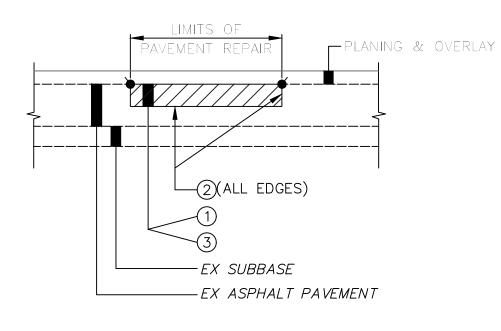
CONCRETE (NO BRICK ALLOWED)

GRADE RINGS OR CAST-IN-PLACE

-EXISTING BRICK OR CONCRETE SHALL BE REMOVED AS DETERMINED BY ENGINEER

EAST JORDAN:	OR APPROVED DRAINA	GE:
COVER =	EJ 1040AGS	
FRAME =	EJ 1048	



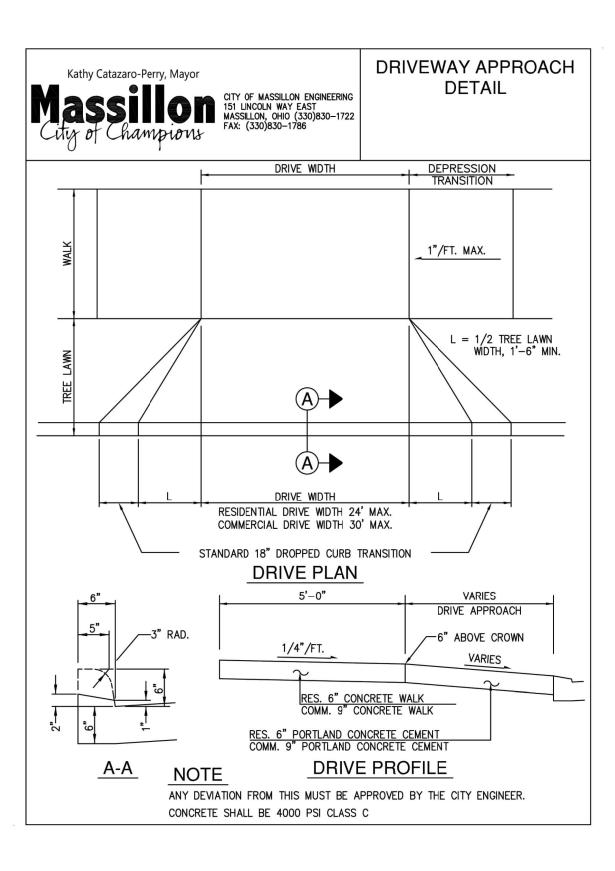


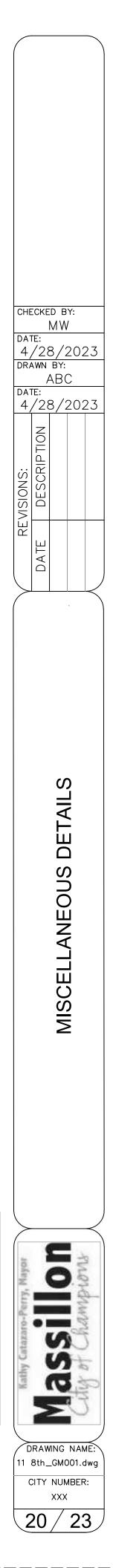
- (1) ITEM 254 PAVEMENT MILLING
- (2) ITEM 407 TACK COAT (ALL EXPOSED SURFACES)
- (3) ITEM 301 ASPHALT CONCRETE BASE, PG64–22

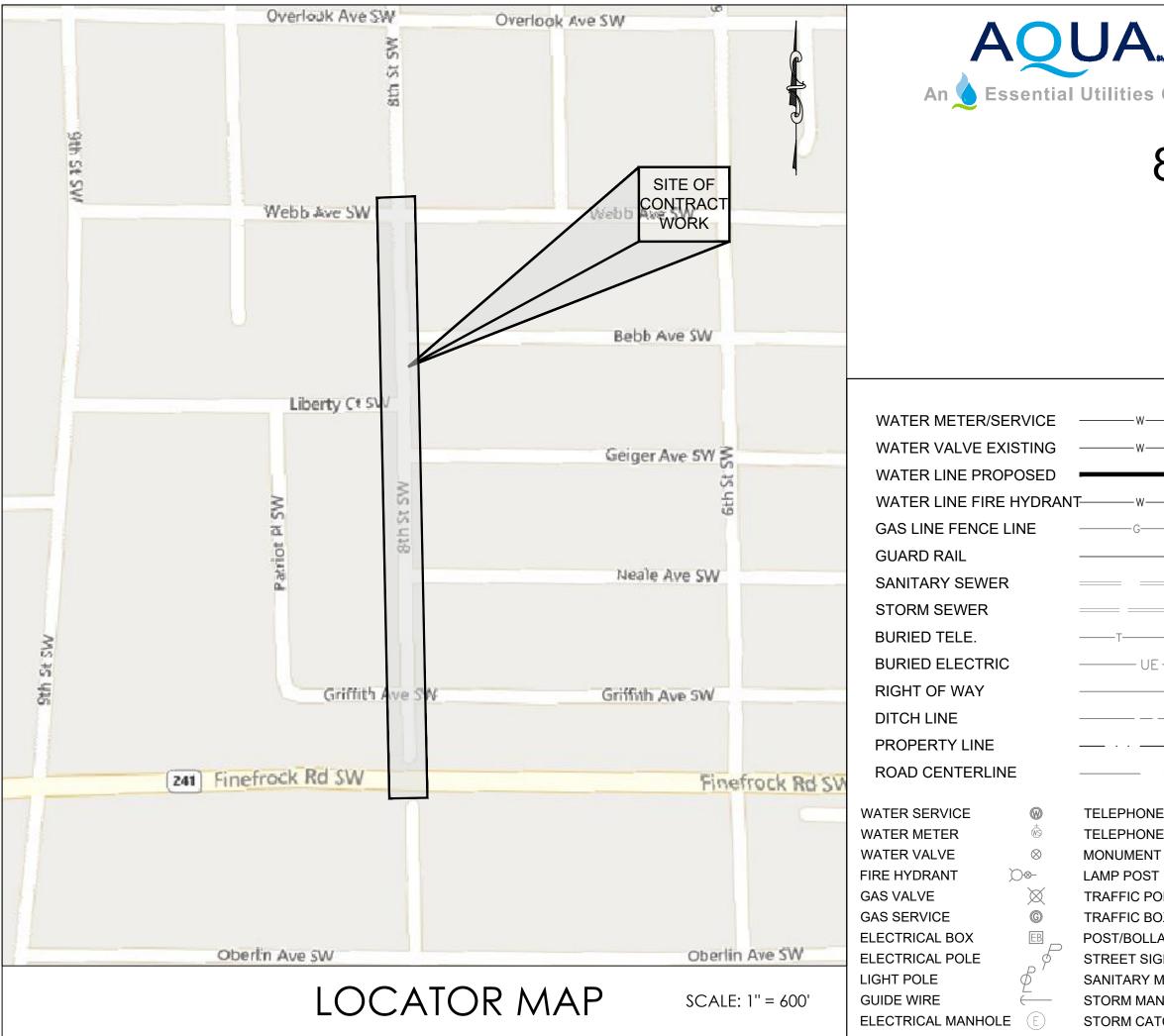
THE UNIT PRICE BID FOR ITEM 251 PARTIAL DEPTH REPAIR INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THIS ITEM PER THE SPECIFICATION, ITEMS (1)THRU (3) . AND

- 1. ALL REQUIREMENTS OF ODOT ITEM 251 SHALL APPLY TO THIS WORK, INCLUDING
- ALL LOCATIONS TO BE REPAIRED SHALL BE DESIGNATED AT THE DIRECTION OF THE ENGINEER. NOT ALL DETERIORATED AREAS WILL BE MARKED FOR REPAIR.
- THE DEPTH OF REPAIR SHALL ALWAYS BE $4\frac{1}{2}$ " BELOW BOTTOM OF FINISH GRADE UNLESS
- THE CONTRACTOR SHALL HAVE THE FOLLOWING MILLING WIDTH AVAILABLE TO THE
- THE ENGINEER SHALL NOT MARK THE AREAS SMALLER THAN SHOWN BELOW FOR REPAIR:
 - * 24" WIDE: 12' MINIMUM LENGTH
 - * 48" WIDE: 6' MINIMUM LENGTH

PARTIAL DEPTH PAVEMENT REPAIR







8TH STREET SW							
WATER SERVICE RECONNECTIONS (<u>3</u> TO BE INSTALLED UNDER THIS CONTRACT)							
SHORT SIDE - 0							
CURB STO	OPS - 0 METER PI	Г-					
LONG SIDE - 3							
CURB STO	OPS - 3 METER PI	Γ-					
8" DIP WATER M	AIN - APPROXIMA ⁻	TELY 1,260 LF.					
6" DIP WATER M	AIN - APPROXIMA	TELY 80 LF.					
HYDRAN	T AND VALVE QU	ANTITIES					
TYPE	SIZE	QUANTITY					
GATE VALVE	6"	5					
GATE VALVE	8"	11					
HYD. GATE VALVE	6"	3					
FIRE HYDRANT	-	3					
HYD. TO BE REMOVED	_	3					

GENERAL (

- 1. PRE-CONSTRUC CONSTRUCTION
- 2. PRE-CONSTRUCTION VIDEOTAPE WILL BE MADE TO DOCUMENT EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- 4. TRAFFIC CONTROL WILL CONFORM TO STATE AND LOCAL REGULATIONS.

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.

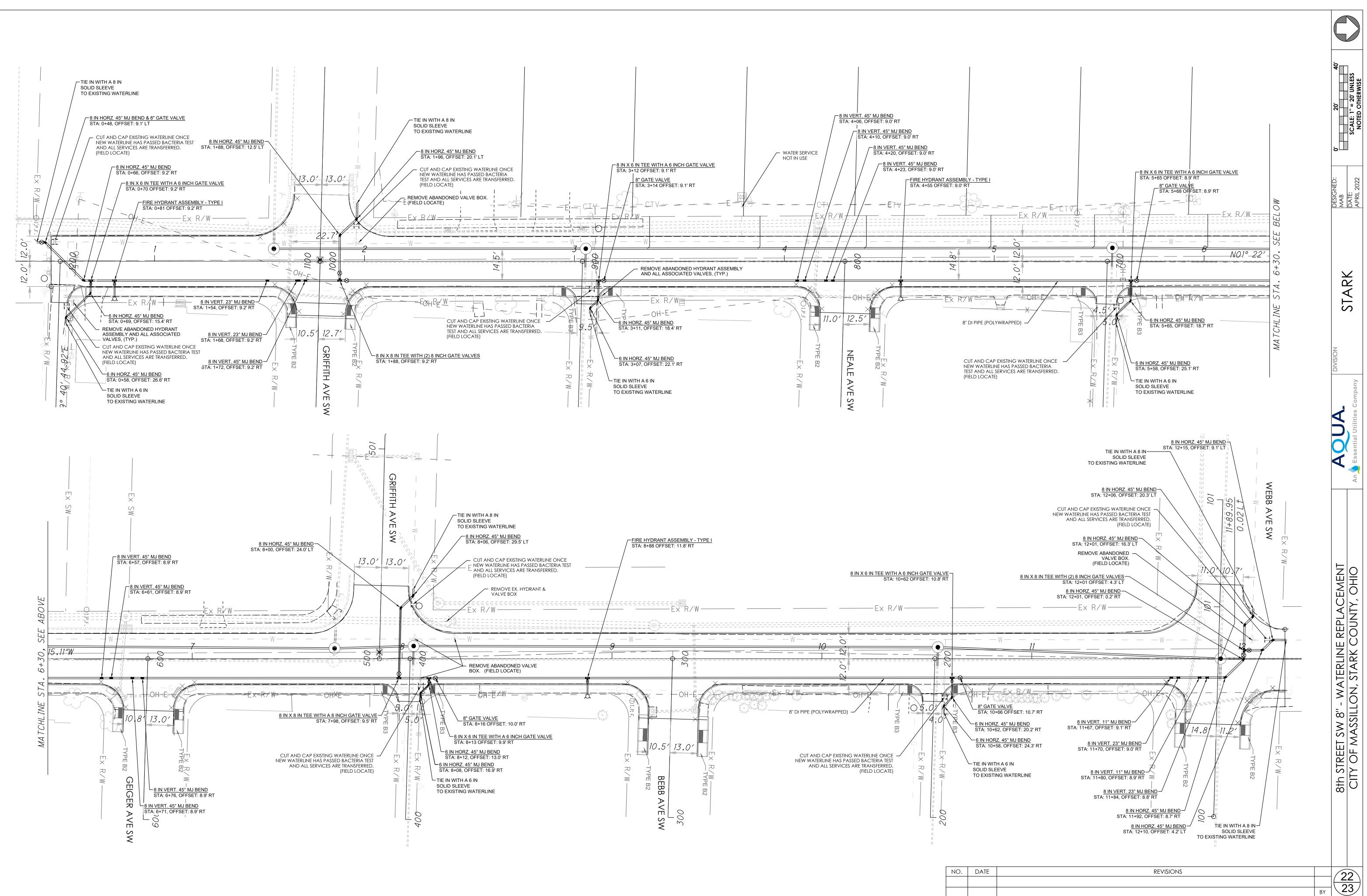
	ST - EET SW - FY OF MASSII -	A OHIO, I ARK DIVISION 8" WATER ON, STARK CO ACTIVITY NO. PREPARED BY CENTER ENGINEER	MAIN PROJECT DUNTY, OHIO
ww ww	-w	DRAWING NO.	TABLE OF CONTENTS DESCRIPTION
TELEPHONE BOXTBSTORMONUMENTMSTORLAMP POSTMYARDTRAFFIC POLEMAILETRAFFIC BOXMPOST/BOLLARDTREESTREET SIGNBUSHSANITARY MANHOLESA	TREE	28TH	E, APPROVALS AND WATER LINE NOTES STREET SW CONSTRUCTION PLAN UA OHIO TYPICAL WATER LINE DETAILS
OHIO Utilities Protection		FITTING AND APF INSTALLATION.	GENERAL WATERLINE INSTALLATION NOTES O PROVIDE LINE AND GRADE STAKES AT 100' INTERVALS FOR WATER MAIN AND FOR EACH PURTENANCE. A COPY OF CUT SHEET SHALL BE PROVIDED TO FIELD INSPECTOR PRIOR TO
2 WORKING DAYS BEFORE YOU D 1-800-362-2764	IG	OF FINISHED GRA 3. NO WATER SERVI AQUA OHIO, INC LIST ITEMS ARE CO	ALL NOT BEGIN UNTIL AREAS OF WATERLINE CONSTRUCTION ARE ROUGH GRADED (WITHIN 1FT. DE" AND FILL AREAS ARE COMPLETED AND COMPACTED.) CE CONNECTIONS TO ANY BUILDINGS SHALL BE PERMITTED PRIOR TO FINAL ACCEPTANCE BY . WHICH SHALL INCLUDE APPROVED RECTIFICATION OF ALL PUNCH LIST ITEMS. ONCE PUNCH DMPLETED, THE BUILDER SHALL BE RESPONSIBLE FOR GRADE ADJUSTMENTS TO WATER FACILITIES NG CONSTRUCTION AND DURING FINAL SITE GRADING.
			5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY CONDUIT D WATERLINE APPURTENANCES, I.E. HYDRANTS, VALVES, TEES, ETC.
			ERIALS AND INSTALLATION PROCEDURES SHALL MEET OR EXCEED ALL APPLICABLE A.W.W.A. UDING BUT NOT LIMITED TO THE MOST RECENT VERSIONS OF C600 AND C651.
ERAL CONSTRUCTION E-CONSTRUCTION MEETING WILL BE SCHED DNSTRUCTION WITH ALL APPROVING AGEN	ULED PRIOR TO	SPECIFICATIONS. HDPE TUBING WI	ERIAL AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH AQUA OHIO CLASS 52 D.I.P. POLYWRAPPED, FITTINGS CLASS 53 CEMENT LINED POLYWRAPPED AND 1" IPS - TH COMPRESSION FITTINGS FOR DOMESTIC SERVICES OR 2" HDPE SDR 9 POLYETHYLENE 3408 L-DE-SAC. IF POLYETHYLENE IS USED, A 12 GAUGE WIRE AND METALLIC CAUTION TAPE MUST BE

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

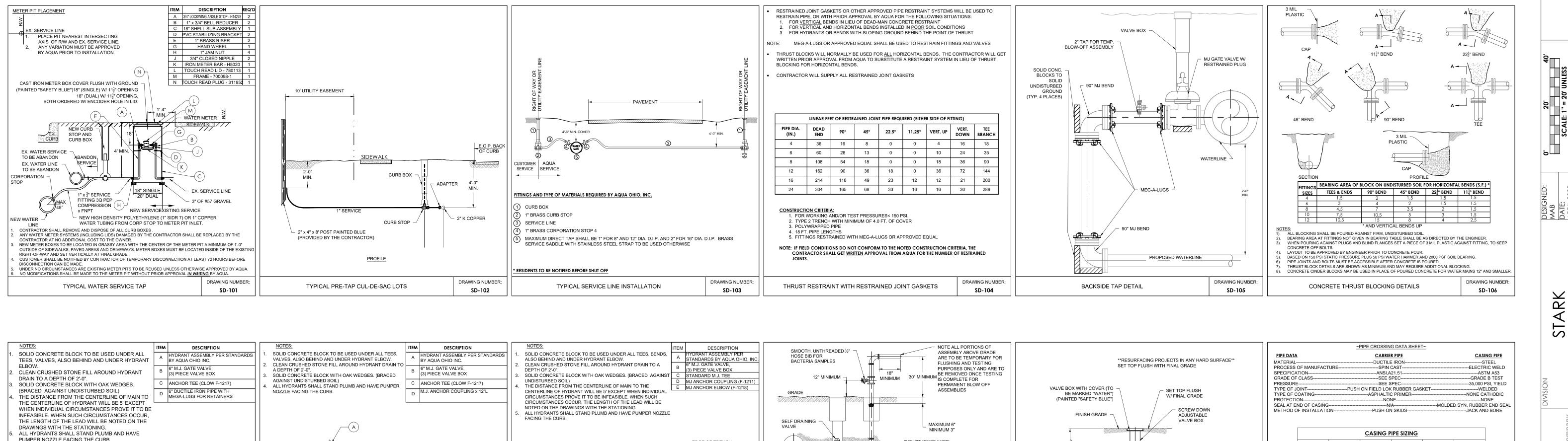
WHEN A LEAD WATER SERVICE IS UNCOVERED (CUSTOMER'S OR AQUA'S), THE CONTRACTOR SHALL NOTIFY THE AQUA CONSTRUCTION INSPECTOR FOR COORDINATION OF WORK.

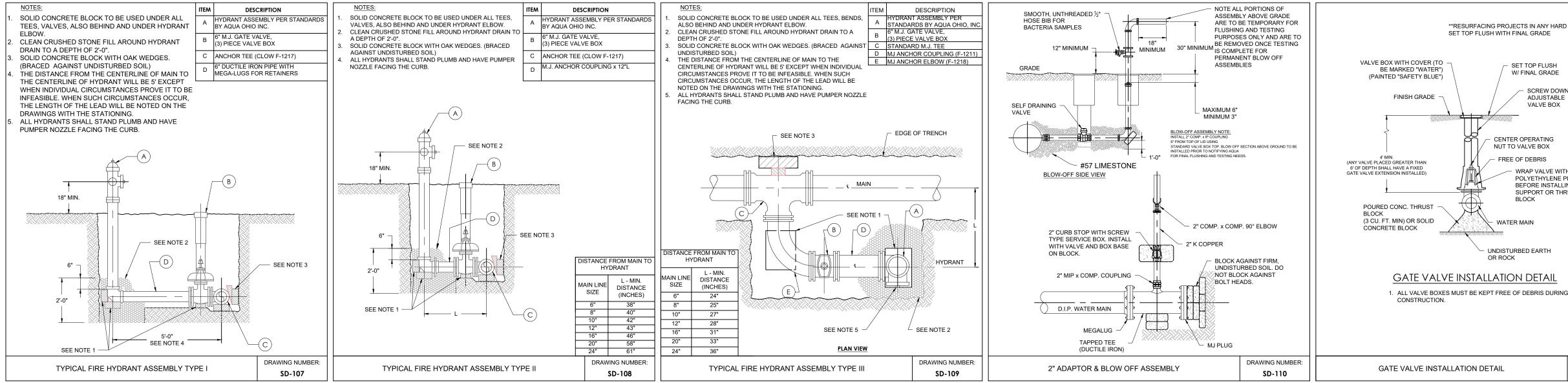
- 7. ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATER MAIN ARE TO BE WIPED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE SOLUTION.
- 8. ALL MECHANICAL JOINTS ARE TO BE RESTRAINED USING MEGALUG OR "FORD" EQUIVALENT. FIRE LINE RISERS TO INCLUDE (2) 5/8" ALL THREAD RODS EXTENDING FROM LOWER BEND TO RISER FLANGE. ALL FASTENERS TO BE 304 STAINLESS STEEL.
- 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.
- 14. ALL FIRE HYDRANTS TO HAVE A MINIMUM OF ½ CUBIC YARD OF #57 LIMESTONE 6" ABOVE 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 AND MEETING FIRE DEPARTMENT SPECIFICATIONS.
- 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.

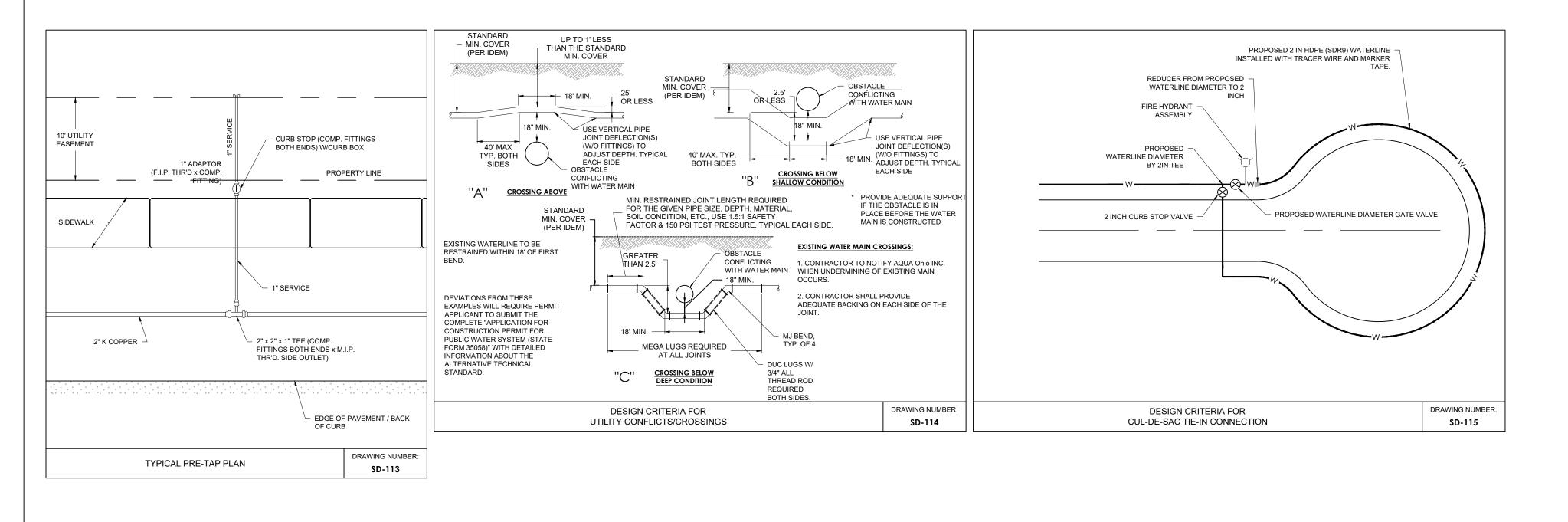
	AQUA OHIO AREA MANAGER DATE	Q
	AQUA OHIO PROJECT MANAGER DATE	20' 20' 20' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2'
	AQUA OHIO FIELD SUPERVISOR DATE	20' 20' SCALE: 1" = 3 NOTED OTI
	AQUA OHIO CONSTRUCTION COORDINATOR DATE	o o
	REGISTERED PROFESSIONAL ENGINEER DATE CONSTRUCTION INSPECTOR CONSTRUCTION INSPECTOR COMPANY CONSTRUCTION INSPECTOR COMPANY CONSTRUCTION INSPECTOR COMPANY START DATE SUBSTANTIAL COMPLETION DATE	DIVISION DESIGNED: MAB MAB DATE: DAT
	FINAL COMPLETION DATE APPROVALS	AOUA. An Sesential Utilities Com
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.	
7.	THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO ENSURE SAFETY OF THE PUBLIC ON AND SURROUNDING THE SITE DURING CONSTRUCTION.	
18.	THE LOCATION OF EXISTING UTILITIES AND STRUCTURES, BOTH ABOVE GROUND AND 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 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 1-800-362-2764, TWO WORKING DAYS PRIOR TO START OF CONSTRUCTION AS REQUIRED BY OHIO LAW.	
19.	THE WATERLINE SHALL BE INSTALLED AT 4'-0" 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.	
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.	WATERLINE DN, STARK C
23.	THE CONTRACTOR SHALL VISIT THE SITE TO PERSONALLY ASCERTAIN THE NATURE OF THE WORK INVOLVED AND THOROUGHLY BECOME FAMILIAR WITH THE SITE PRIOR TO THE SUBMISSION OF HIS OR HER BID.	$ \cdot 0 \rangle$
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 EASEMENTS AS INDICATED.	SILL
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.	NA A
26.	THE CONTRACTOR MAY DEFLECT THE WATERLINE AS PER MANUFACTURER'S SPECS WITH PERMISSION FROM AQUA AS NEEDED TO MAINTAIN MINIMUM HORIZONTAL AND VERTICAL SEPARATION DISTANCES.	STREET (Y OF M
27.	THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, AND STAKES. 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.	th STR CITY O
28.	ALL MAIL BOXES, TRAFFIC CONTROL SIGNS AND ADVERTISING SIGNS ENCOUNTERED DURING 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.	
	REVISIONS	
	BY	$\frac{21}{23}$



NO.	DATE	







NO. DATE

R OPERATING VALVE BOX	
OF DEBRIS	

- WRAP VALVE WITH (5) MIL POLYETHYLENE PLASTIC BEFORE INSTALLING SUPPORT OR THRUST BLOCK

	WATER MAIN SIZE	NOMINAL SIZE OF CASING PIPE	OUTSIDE DIAMETER	INSIDE DIAMETER	WALL THICKNESS (MIN.)	WEIGHT PER FOOT	
	6"	16"	16.000	15.250	0.375	62.64	
	8"	18"	18.000	17.250	0.375	70.65	
	12"	24"	24.000	23.000	0.500	125.61	
	16"	30''	30.000	29.000	0.500	157.68	
	20''	36"	36.000	35.000	0.500	189.75	
	24''	42''	42.000	41.000	0.500	221.82	
	30''	48''	48.000	47.000	0.500	253.89	
	36"	54"	54.000	53.000	0.500	285.96	
	42''	60''	60.000	59.000	0.500	318.03	
SMITH-BLAIR CASING SPACERS @ 1/3 POINTS EACH PIPE LENGTH (2 PER LENGTH) (NOTE: AS AN ALTERNATIVE, P.S.I. OR CASCADE CASING SPACERS MAY BE USED) ILL CASING PIPE WITH SAND AFTER CARRIER PIPE IS IN PLACE. ENDS TO BE CLOSED OFF SUFFICIENTLY TO RETAIN THE SAND, FIELD-LOK GASKETS TO BE USED AT ALL PIPE JOINTS WITHIN CASING PIPE.							
DRAV							G NUMBER:

CASING PIPE DETAIL

DRAWING NUMBER SD-111

EMENT OHIO - WATERLINE REPLAC LON, STARK COUNTY, 8th Street SW 8". City of Massill

SD-112

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REVISIONS

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