

WATER

- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 4'-6".
- ALL WATER SERVICE LATERALS SHALL HAVE A MINIMUM COVER OF 42".
- ALL WATER MAINS SHALL BE DUCTILE IRON CONFORMING WITH AWWA SPEC. C-151 CLASS 52 IN SIZES 4"-16" AND PSI CLASS 350 FOR 20" AND ABOVE.
- COMPACT FITTINGS ARE PERMITTED.
- ALL WATER VALVES MUST OPEN LEFT. ALL VALVE BOX LIDS MUST BE CAST/STAMPED "WCW" IN 1/2" LETTERS AND BE NEENAN NF-19130002 OR EQUAL. ALL VALVE EXTENSIONS TO HAVE SET SCREWS.
- A CONCRETE SLAB MUST BE PROVIDED AT FINAL GRADE AROUND ALL MAIN VALVE BOXES. THE SLABS MUST BE EIGHTEEN INCHES (18") SQUARE /CIRCLE AND NINE INCHES (9") THICK.
- WATER AND SEWER LINES SHALL HAVE A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION AND/OR TWO FEET (2') VERTICAL SEPARATION.
- NO GATE VALVE, METER PIT, BLOW OFF OR CORPORATION STOP SHALL BE LOCATED UNDER OR WITHIN THREE FEET (3') OF DRIVEWAYS, ROADWAYS OR SIDEWALKS.
- NO DRIVEWAY SHALL BE INSTALLED WITHIN FIVE FEET (5') OF A FIRE HYDRANT.
- A MINIMUM OF THREE FEET (3') IS REQUIRED BETWEEN CORPORATION STOPS. NO TAP SHALL BE MADE WITHIN THREE (3') OF A BELL.
- THE LOCATION OF WATER SERVICE LATERALS MUST BE STAMPED IN THE CURB AT THE TIME THE CURB IS PLACED TO PERMANENTLY INDICATE THE LOCATION OF SAID LATERALS.
- THE LOCATION OF ALL WATER SERVICE LATERALS MUST BE PROVIDED ON THE AS-BUILT PLANS.
- CONTRACTOR SHALL SUBMIT AS-BUILT PLANS OF SANITARY AND WATER LATERALS TO THE OWNER.
- ALL WATER MAINS CROSSING UNDER STORM DRAINS SHALL BE BACK-FILLED WITH GRANULAR MATERIAL, O.D.O.T. ITEM 310.02, BETWEEN MAINS AND DRAINS.

APPROVED/REVISED JUNE, 2012	WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER	STANDARD NUMBER WG-1
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WATER

- EACH SERVICE LATERAL MUST BE A CONTINUOUS PIECE OF PIPE FROM THE CORP STOP TO THE METER. COUPLINGS SHALL NOT BE ALLOWED. TYPE K COPPER SHALL BE USED FOR 3/4" AND 1" SERVICES. POLYETHYLENE 200 PSI (COPPER TUBE SIZE) MAY BE USED FOR 1 1/2" AND 2" SERVICES. TRACER WIRE MUST BE USED WITH POLY AND SDR 21.
- SERVICE LINES 1" AND LARGER MUST BE EITHER TYPE K COPPER, POLY 200 PSI (ASTM D-2737) OR SDR 21 (SLIP JOINT) (ASTM-2241). TRACER WIRE MUST BE TAPPED EVENLY EVERY 3' ON POLY AND SDR 21 FROM THE METER PIT INTO THE STRUCTURE BEING SERVED (A 3' LEAD IS REQUIRED INSIDE THE PIT).
- 1 1/2" AND 2" SERVICE LINES FROM THE CORP STOP TO THE METER PIT MUST BE TYPE K COPPER OR POLYETHYLENE 200 PSI. POLY MUST HAVE A TRACER WIRE. SEE W-10A.
- FIRE HYDRANTS MUST BE PROVIDED AT THE ENTRANCE TO ALL SUBDIVISIONS AND AT ALL STREET INTERSECTIONS.
- YARD HYDRANTS, BACKFLOW PREVENTER, 1 1/2" 3/4" WITH BALL CHECK VALVE AND VACUUM BREAKER PERMANENTLY AT THE ENTRANCE TO THE DOUBLE BALL CHECK VALVE ON DEAN.

(NOT USED)

- A BACKFLOW PREVENTION DEVICE MUST BE INSTALLED ON ALL WATER SERVICE LATERALS BY THE PROPERTY OWNER IMMEDIATELY UPON ENTRY TO THE STRUCTURE TO BE SERVED, PRIOR TO ANY POINT OF CONNECTION OR USAGE. THE FOLLOWING DEVICES SHALL BE REQUIRED:
 - FOR RESIDENTIAL DWELLING UNITS (3 FAMILY OR LESS), A DOUBLE CHECK VALVE COMPLYING WITH A.S.S.E. NO. 1024 MUST BE PROVIDED (WATTS REGULATOR COMPANY MODEL NO. 7 OR EQUAL).
 - FOR ALL OTHER USERS, A REDUCED PRESSURE PRINCIPAL PRESSURE REDUCING VALVE (TRIPLE CHECK VALVE) COMPLYING WITH A.S.S.E. NO. 1013 MUST BE PROVIDED (WATTS REGULATOR COMPANY MODEL NO. 909 OR EQUAL).
- SWAB PIPE WITH 50 PPM CHLORINE SOLUTION BEFORE INSTALLATION.
- ALL NEW WATER MAINS SHALL BE PRESSURE TESTED FOR 2 HOURS AT 1.5 TIMES THE OPERATING PRESSURE OR AT 150 PSI, WHICHEVER IS GREATER. ALLOWABLE LEAKAGE SHALL BE PER TABLE 6A OF AWWA C-600.
- DEDUCT METERS SHALL NOT BE ALLOWED.
- NO IRRIGATION CONNECTIONS SHALL BE INSTALLED IN THE METER PIT.
- BACK FLOW PREVENTER TO BE ALLOWED AHEAD OF ANY SPRINKLER BUT NOT IN METER PIT.
- ALL MATERIALS USED SHALL BE DOMESTIC, MADE IN THE UNITED STATES OF AMERICA

APPROVED/REVISED MARCH, 2008	WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER	STANDARD NUMBER WG-1A
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PROCEDURE FOR CONNECTION TO EXISTING WATER SYSTEM

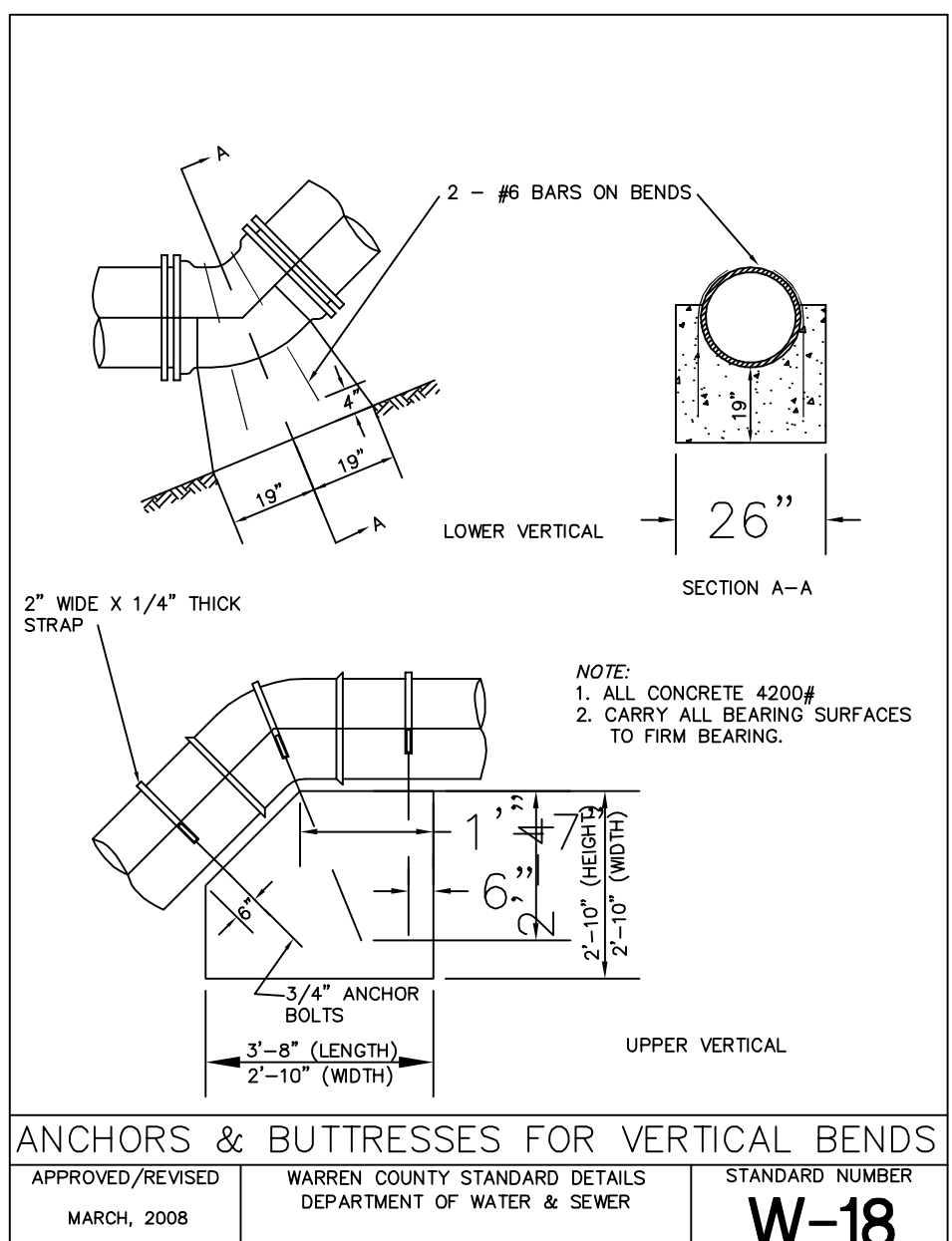
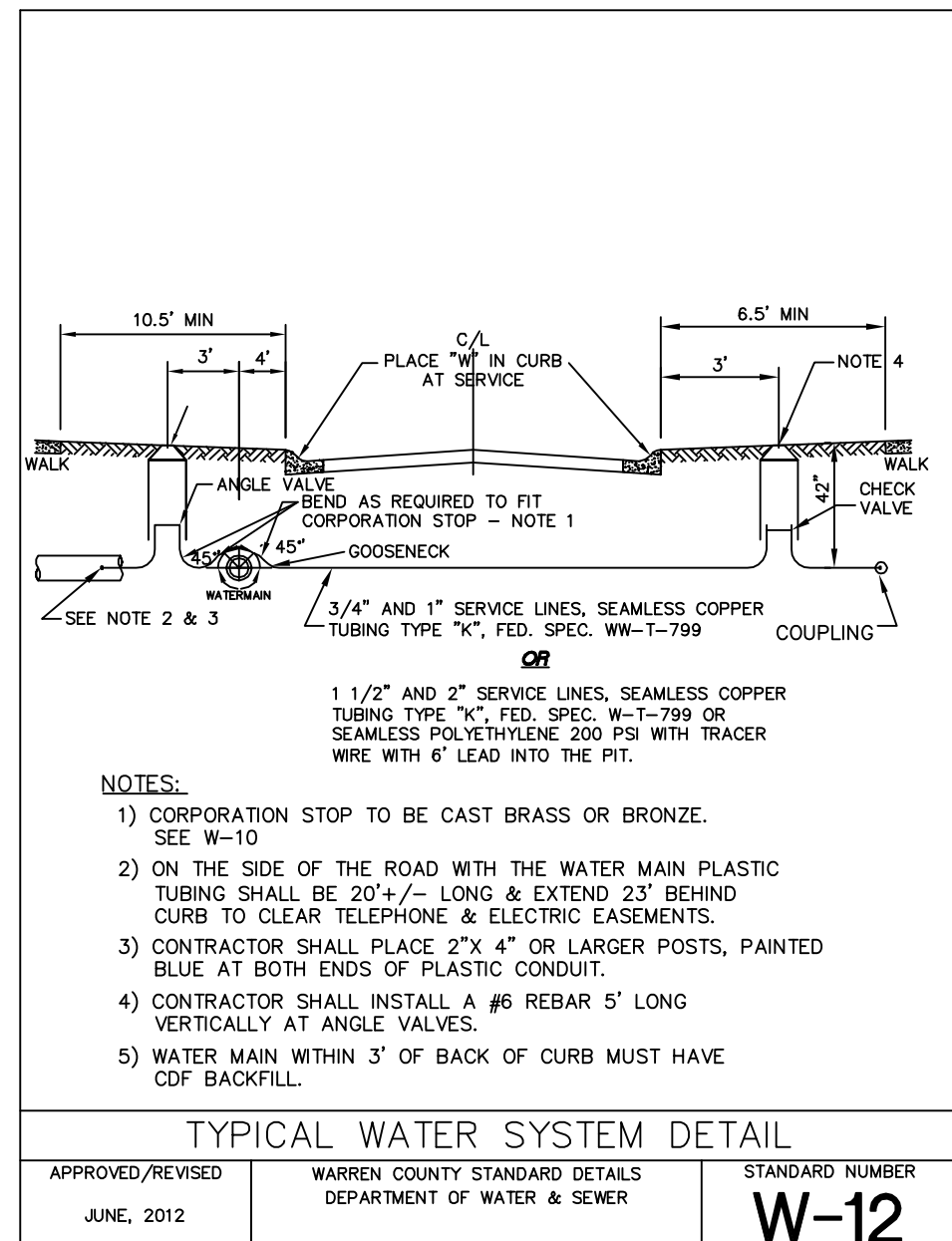
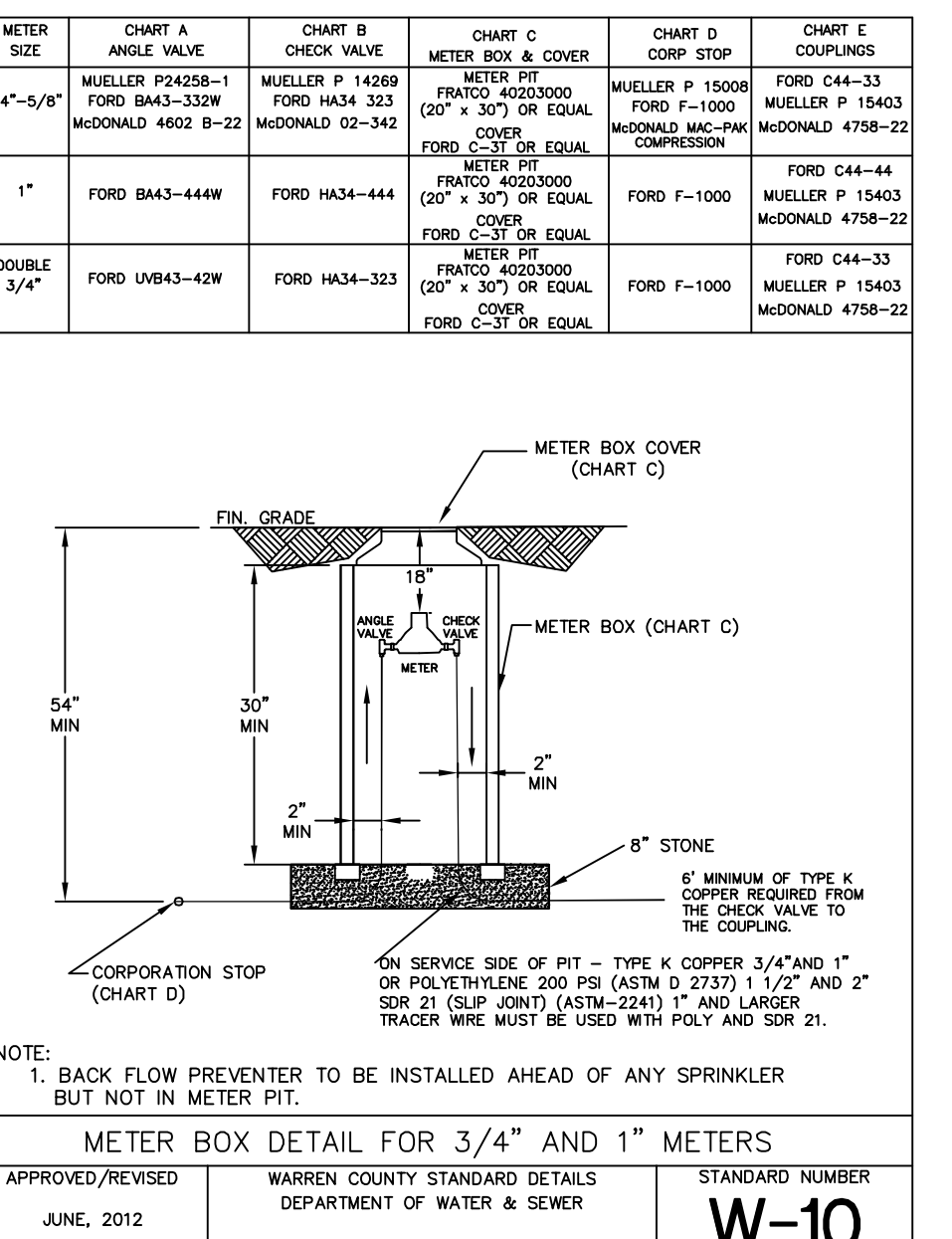
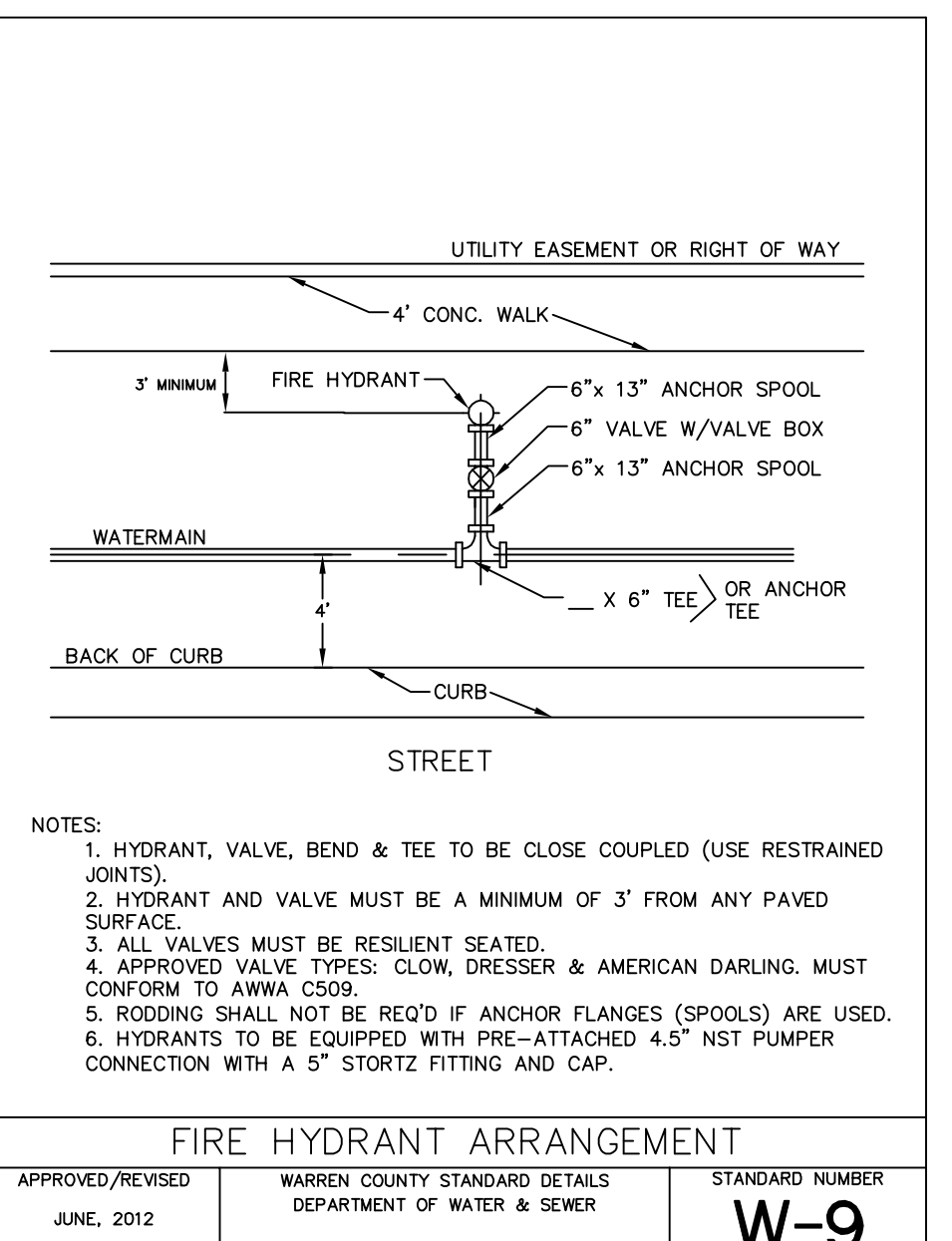
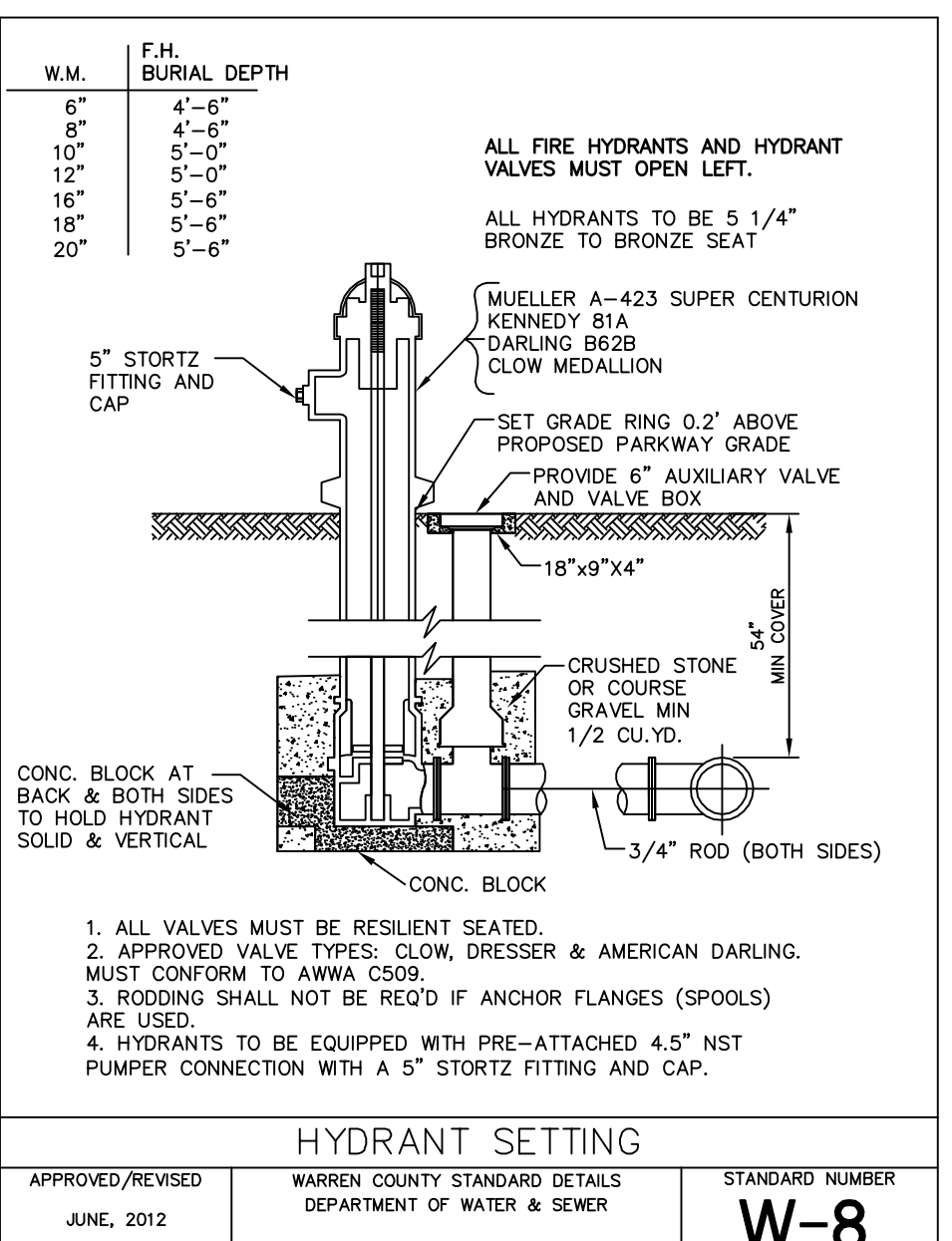
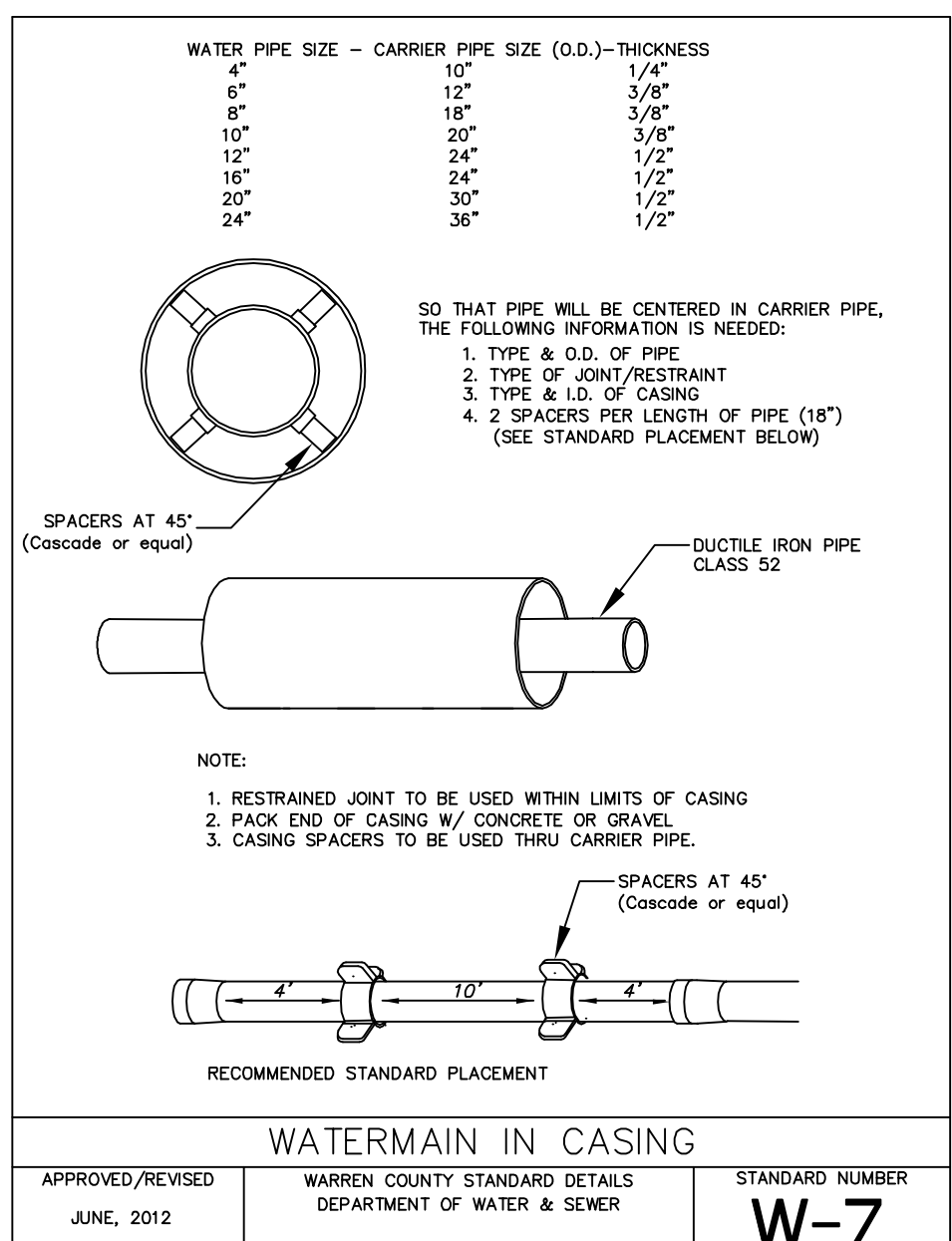
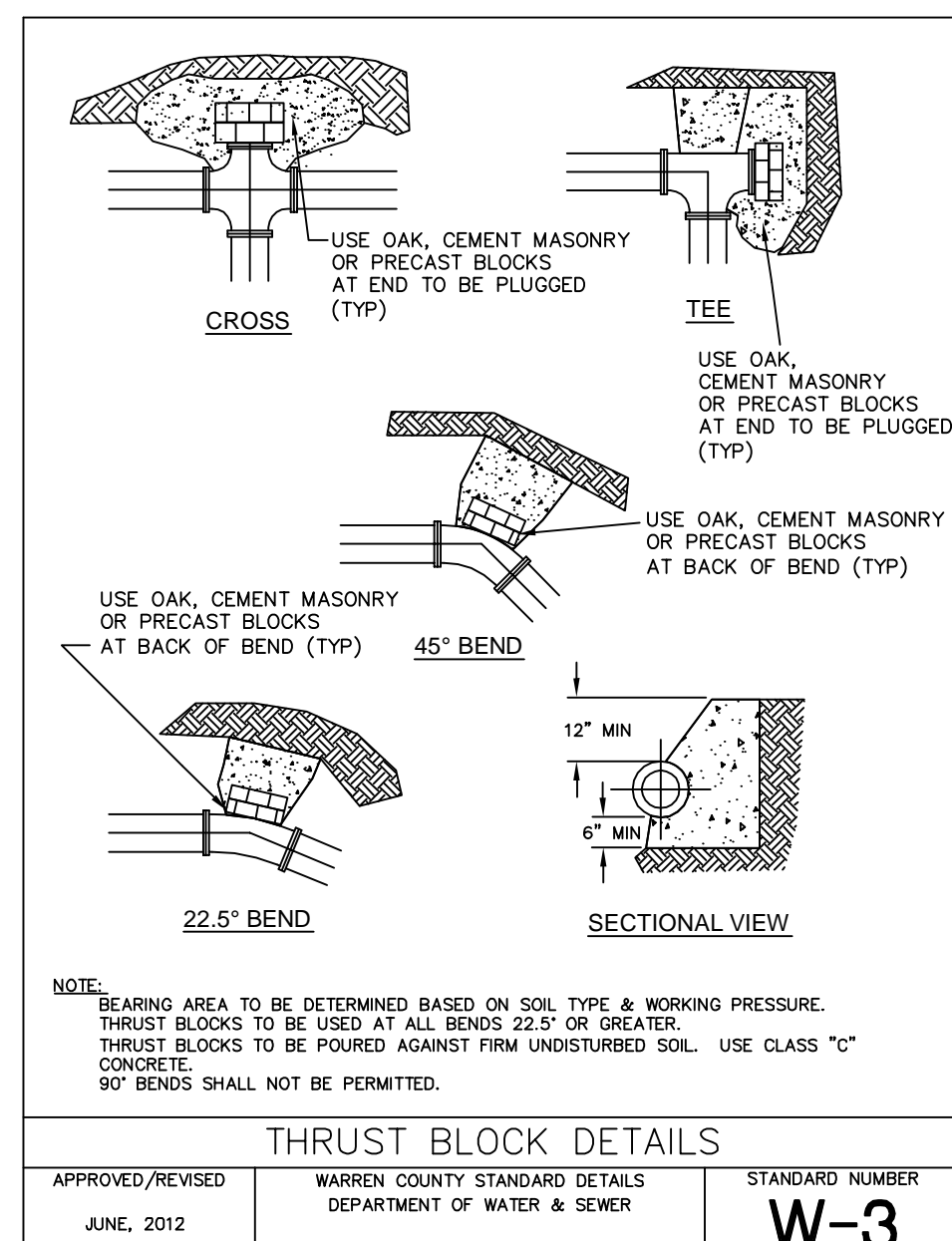
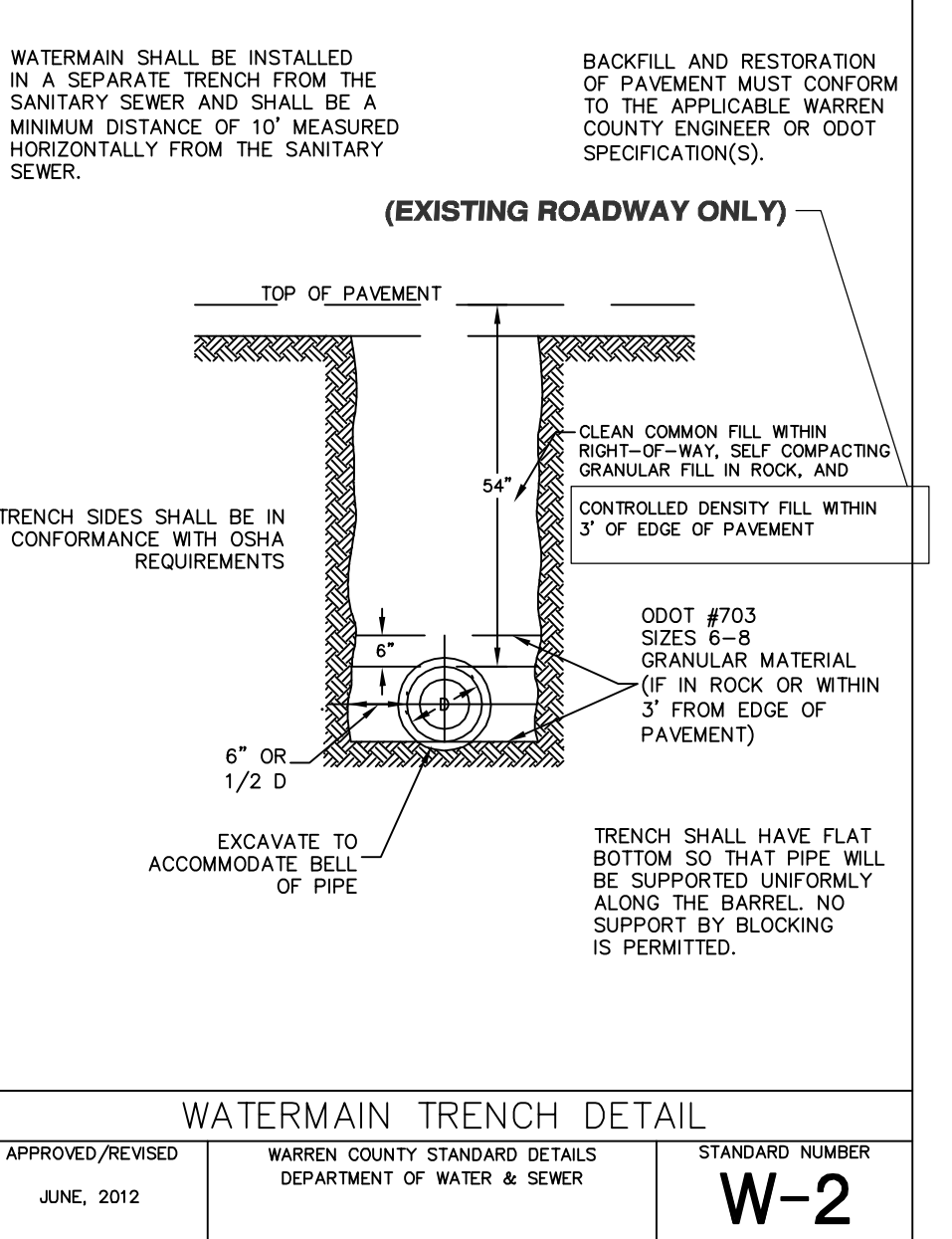
- MUST NOTIFY WARREN COUNTY WATER DEPARTMENT THREE (3) DAYS IN ADVANCE OF ANY SHUT DOWN. WARREN COUNTY WILL ISSUE THE SHUT DOWN NOTIFICATION AND/OR BOIL ADVISORY TO AFFECTED CUSTOMERS PER OHIO EPA REQUIREMENTS IF DETERMINED NECESSARY BY WARREN COUNTY.
- EXPOSE EXISTING MAIN AT PROPOSED CONNECTION POINT. NO MET TAP SHALL BE MADE WITHIN THREE (3) FEET OF A BELL OR PIPE CONNECTION.
- COUNTY PERSONNEL TO OPERATE CLOSING OF APPROPRIATE VALVES TO ISOLATE LINE TO BE TAPPED.
- INSTALL PROPER TAPPING SLEEVE AND TAPPING VALVE. THE TAPPING SLEEVE AND VALVE SHALL BE TESTED AT 200 PSI FOR A PERIOD OF AT LEAST 5 MINUTES. THE PIPE SLAG MUST BE REMOVED AND INSPECTED BY COUNTY PERSONNEL.
- IF THE TAPPING SLEEVE AND VALVE WILL BE UNDER FUTURE PAVEMENT, THE BURIED VALVE MUST BE LEFT OPEN AND A NEW VALVE SET OUT OF PAVEMENT.
- FIELD CUT EXISTING MAIN AS NECESSARY TO ACCOMMODATE TEE AND CLOSE COURSED VALVES AT EACH END OF TEE. CARE IS TO BE TAKEN SO AS NOT TO GET DIRT IN EXISTING MAIN.
- THOROUGHLY CLEAN AND DISINFECT PIPE AND APPURTENANCES TO BE INSTALLED.
- INSTALL TEE AND VALVES - DRESSER COUPLINGS CAN BE USED IF NECESSARY. PROPOSED MAIN VALVE IS TO BE CAPPED AND SHUT OFF. EXISTING MAIN IS THEN TO BE RETURNED TO SERVICE BY COUNTY PERSONNEL.
- CONSTRUCTION OF PROPOSED MAIN IS TO BE COMPLETED WITHIN A JOINT OF CONNECTION TO TEE AND VALVES INSTALLED ABOVE.
- ENTIRE LINE IS TO BE PRESSURE TESTED AND DISINFECTED TO COUNTY STANDARDS.
- ENTIRE LENGTH OF PIPE IS TO BE THOROUGHLY CLEANED AND DISINFECTED PRIOR TO INSTALLATION. FENATEX CHLORINE TABLETS TO BE USED FOR DISINFECTION. DOSAGE SHALL BE PER MANUFACTURER'S SPECIFICATIONS BASED ON PIPE MATERIAL.
- NEW MAIN IS TO BE PUT INTO SERVICE BY COUNTY PERSONNEL.
- TAPPING SLEEVES/SADDLES TO BE TWO-PIECE CAST IRON. SIZE ON SIZE TAPPING SLEEVES ARE NOT PERMITTED.

APPROVED/REVISED JUNE, 2012	WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER	STANDARD NUMBER WG-2
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PROCEDURE FOR RELOCATING OR LOWERING SERVICE LATERAL AND RELOCATING OR BRINGING TO GRADE METER PITS

- ALL AFFECTED USERS MUST BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE AS TO THE TIME AND DURATION OF THE SHUTOFF. ANY DISCONTINUANCE OF SERVICE MUST BE COORDINATED THROUGH WARREN COUNTY PRIOR TO ANY SHUT DOWN.
- ALL WORK MUST BE PERFORMED ACCORDING TO ALL WARREN COUNTY SPECIFICATIONS, PARTICULARLY W-10, W-10A AND W-12.
- EACH SERVICE LATERAL MUST BE A CONTINUOUS PIECE OF PIPE FROM THE CORP STOP TO THE METER. COUPLINGS SHALL NOT BE PERMITTED. TYPE K COPPER SHALL BE USED FOR 3/4" AND 1" SERVICES. POLYETHYLENE 200 PSI MAY BE USED FOR 1 1/2" AND 2" SERVICES.
- METER PITS MUST BE ADJUSTED TO GRADE USING RING RISERS OR PIT RISERS. METERS MUST BE ADJUSTED WITH METER RESETTERS (FORD V42).
- ALL PROCEDURES MUST BE DISCUSSED AT A PRECONSTRUCTION MEETING PRIOR TO THE INITIATION OF CONSTRUCTION.

APPROVED/REVISED MARCH, 2008	WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER	STANDARD NUMBER WG-3
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REQUIRED RESTRAINED JOINTS FOR BENDS

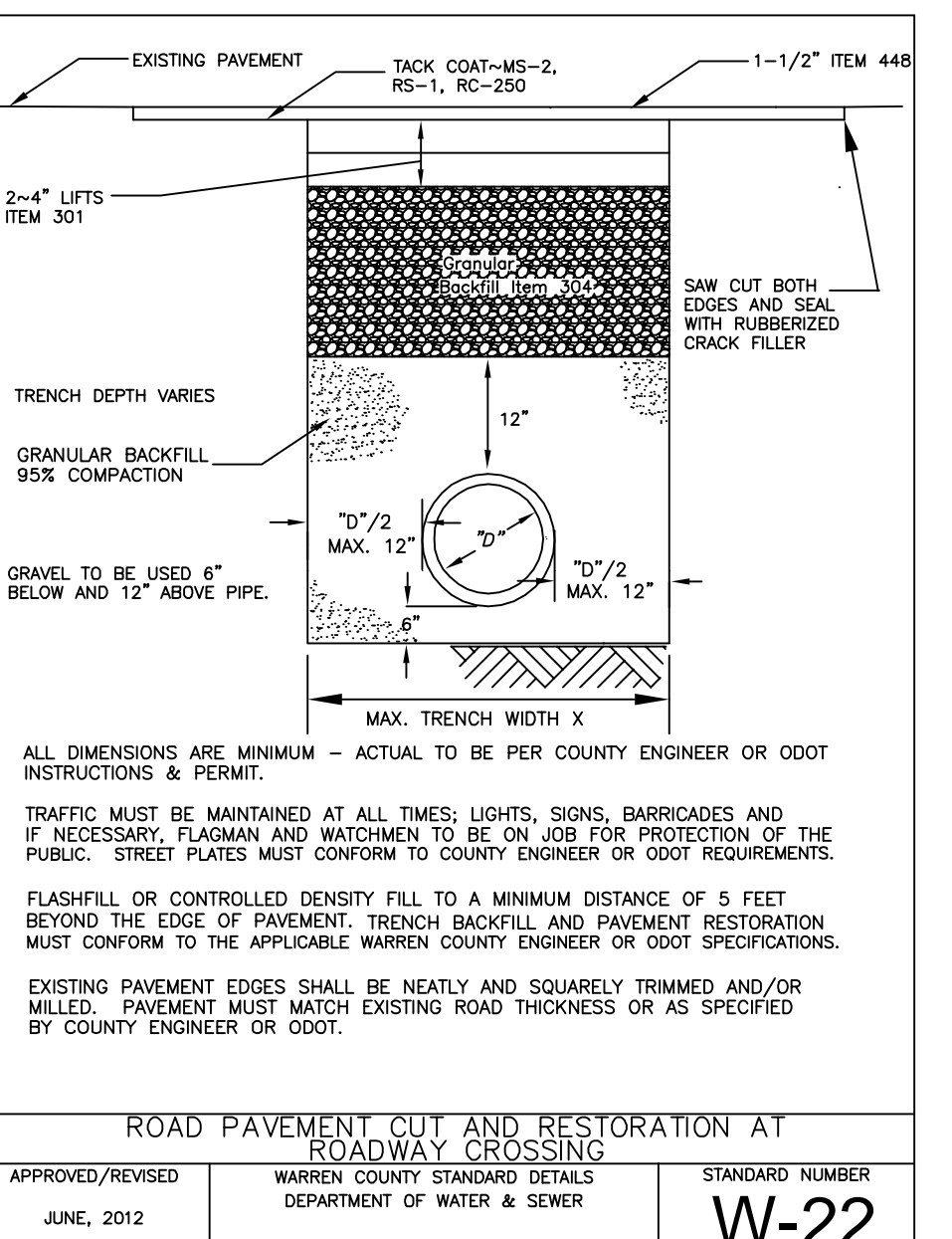
APPROVED/REVISED	WARREN COUNTY STANDARD DETAILS	STANDARD NUMBER
JUNE, 2012	DEPARTMENT OF WATER & SEWER	W-19

REQUIRED LENGTH OF RESTRAINED JOINTS		d-DIAMETER OF PIPE		l-LENGTH OF PIPE	
d	4"	6"	8"	10"	12"
l	54"	54"	54"	66"	90"

REQUIRED RESTRAINED JOINTS - DEAD END VALVES, PLUGS, CAPS & TEES

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JUNE, 2012	DEPARTMENT OF WATER & SEWER	W-20

REQUIRED LENGTH OF RESTRAINED JOINTS		d-DIAMETER OF PIPE		l-LENGTH OF PIPE	
d	4"	6"	8"	10"	12"
l	54"	54"	54"	66"	90"



Plot time: May 09, 2016 - 8:25am
Drawing name: J:\2004\04\027-003\CD Details.dwg - Layout Tab, 8.0 WARREN COUNTY WATER DETAILS

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WYNSTEAD SECTION THREE
MILITARY SURVEY NO. 1546
VILLAGE OF SOUTH LEBANON
WARREN COUNTY, OHIO

WARREN COUNTY WATER DETAILS

Item	Revision Description	Date	Chk.

Drawing: **04M027-003 CD DETAILS**
Checked by: **G.J.K.**
Issue Date: **05-09-16**

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