

TRANSMITTAL COVER LETTER

To: Nick Fallara, EIT
CNFallara@columbus.gov
614-645-1580 (Direct) or 614-645-7677 (Distribution Engineering Office)
City of Columbus Division of Water
Water Distribution Engineering
910 Dublin Road, Columbus, OH 43215, 2nd Floor

Date: X-XX-XX

Re: Chlorination Request – Main Street Water Line Improvements

From: Name

Inspection Agency or Contract Community (if in-house inspection): XXXXXXXXXXXXX

Address: XXXXXXXX

Phone Number: XXX-XXX-XXXX

It is preferred that all items in the chlorination request submittal, with the exception of the 3 hard copy sets of redlined as-built plans, be submitted electronically via email

***Items Included in Submittal:**

- Chlorination Request Summary Sheet
- Chlorination Submittal Checklist with items checked off
- 3 Hard Copies of Full Size, Signed, REDLINED as-built plans (markups in red) that include Signed Title Sheet. *Make sure plans are stapled.*
- Pressure Testing Reports
- Water Service Reports
- As-Built Survey Coordinates (Microsoft Excel format)
- *PDF of recorded easement/plat (if applicable)*
- *Inspection Report noting pigging operations (date and station limits) for **12" or larger mains** (if applicable)*
- *Continuity Testing report for **20" or larger mains** (if applicable)*

CHLORINATION REQUEST SUMMARY SHEET

Project Name: Main Street Water Line Improvements

Contact Information

Contact Information	Name	Address	Phone	E-mail
Inspector				
Contractor				

Water Mains requested for Chlorination

Segment	Primary Street	Pipe Diameter (inches)	Length (ft)	Start Station*	Nearest Intersection	Distance from	End station*	Nearest Intersection	Distance from
1	Main Street	8"	720'	10+00	Long Street	N/A	17+20	High Street	25' E
2	Water Ave	8"	15'	13+62	Main Street	N/A	N/A	Main Street	N/A
3	High Street	8"	56'	16+80	Main Street	N/A	16+80, 56' LT	Main Street	20' N
4									
5									
6									
7									
8									
9									
10									
11									

*Please make sure to use water main stationing for all data (in lieu of roadway stationing). If no water main stationing is available, roadway stationing is permitted.

CHLORINATION REQUEST SUBMITTAL CHECKLIST

- TRANSMITTAL COVER LETTER & CHLORINATION REQUEST SUMMARY SHEET (INCLUDING ALL ITEMS LISTED BELOW)**
 - Project Name and Name, Address, Email Address, and Phone Number of Contractor & Inspector.
 - Size and length of each water main to chlorinated
 - Beginning and ending station of each water main to be chlorinated
 - Distance of beginning and end of water main from nearest intersection or other reference point

- PRESSURE TEST REPORTS**
 - Initial and Final Pressure (including in-line valves)
 - Length and size of pipe section tested (including in-line valves). Each valved section must be tested.
 - Leakage (in gallons) for each tested section
 - Duration of test (minimum of 2 hours as per spec)

- RECORDED PLATS/EASEMENTS, IF APPLICABLE**

- AS-BUILT PLANS**
 - Three (3) full size copies of current **red-lined (in color)** as-built plans (must be able to read clearly after it's scanned and copied). Submittal must include **SIGNED title sheet** and any sheets that have as-built information. No shading or highlighting on red-lined submittals. PLEASE STAPLE PLANS TOGETHER.
 - Update all descriptions, stations, and centerline elevations of fittings in plan and profile. Must match as-built survey coordinate table.
 - Re-draw linework that has changed by more than 18-inches horizontally (plan) or 12-inches vertically (profile)
 - Show temporary caps, blowoffs, and chlorination ports in plan view. Include sizes and station in labels.
 - Indicate sections and their lengths that are to be hand swabbed (cannot exceed 20 feet in length)
 - Indicate any work that was non-performed by labeling as such

- AS-BUILT SURVEY COORDINATES**
 - One (1) electronic (Microsoft Excel format) copy of table of Survey Coordinates with stations, sizes and centerline elevations with descriptions for all appurtenances including horizontal deflections and every 200' where no fitting or other water main structure is being installed within that length of improvement. **(The Inspector is responsible to verify that all coordinates are included per the "Survey Coordinates" note.)** Coordinates must be sent via e-mail.

- WATER SERVICE REPORTS, REPORT FOR PIGGING OPERATIONS (IF APPLICABLE), CONTINUITY TESTING FOR LARGE DIAM.**
 - One Scanned Copy of Water Service Reports
 - Inspection Report for Pigging Operations on water main 12" and larger (if applicable)
 - Continuity Testing Report for Large Diameter Mains, if applicable

Make sure descriptions, stations, and elevations match between Plan View, Profile View, and Coordinate Table

Note to inspector: Update Centerline elevations for chlorination submittal.

Re-draw linework in profile that has changed by more than 12" vertically

Cross out work that was non-performed

Note: Elevations are not filled in on this sample sheet, but should be updated on as-builts

Re-draw linework in plan view that has changed by more than 18" horizontally (Services are an exception, re-draw if more than 5')

8" Temporary Cap with blocking, 3/4" Blowoff in cap, Sta 17+20

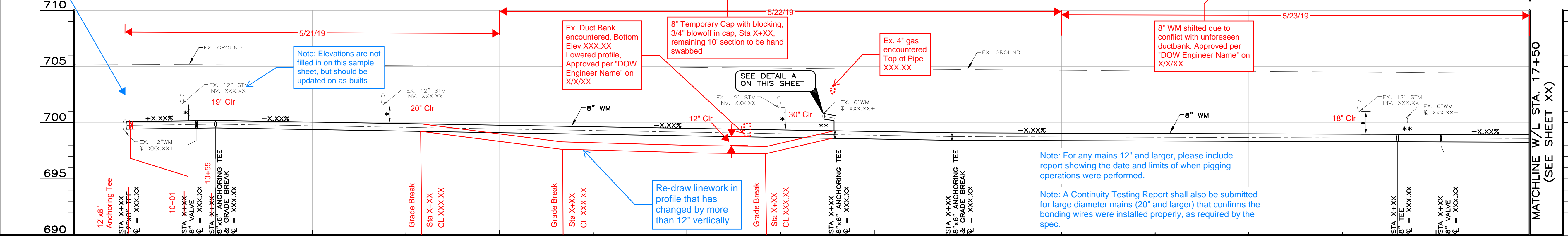
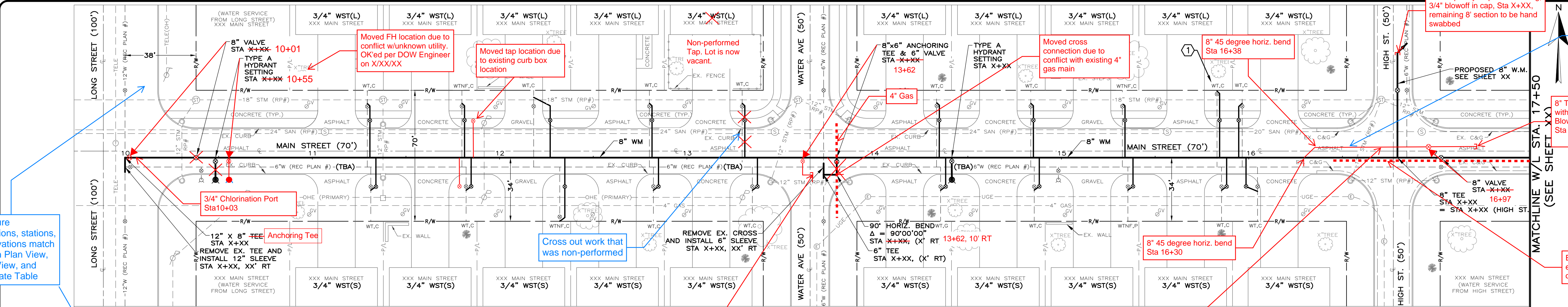
8" Temporary Cap with blocking, 3/4" blowoff in cap, Sta X+XX, remaining 8' section to be hand swabbed

Existing duct bank encountered, not shown on plans

NOTES:
 * = MAINTAIN A MINIMUM OF 18 INCHES OF CLEARANCE BETWEEN OUTSIDE OF SEWER PIPE TO OUTSIDE OF WATER MAIN PIPE
 ** = MAINTAIN A MINIMUM OF 12 INCHES OF CLEARANCE BETWEEN EXISTING AND PROPOSED WATER MAINS.
 REFER TO SHEET XX FOR RESTORATION PLAN.

SPACE RESERVED FOR ENLARGED DETAIL

DETAIL A
 XXXXXXXXXXXXXXXXXXXX
 STA XX+XX
 (HORIZ. SCALE 1"=10')
 (VERT. SCALE 1"=5')



WM STATION	10	11	12	13	14	15	16	17	WM STATION
GROUND	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
C/L OF PIPE	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
CUT	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX

CITY OF COLUMBUS
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER

PLAN & PROFILE
 XXXXXXXX STREET

DIVISION OF WATER CONTRACT NO. XXXX
 CAPITAL IMPROVEMENT PROJECT NO. XXXXXX-XXXXXX
 PROJECT NAME

SCALE
 HORIZ. 1"=30'
 VERT. 1"=5'

XX-XXX

X
 XX

City of Columbus - Division of Water

Water Main Pressure Test Report

Job Name: Main Street Water Line Improvements

Date: X-XX-XX

Project No: XX-XXX

Contractor: XXXXXXXXXXXX

Contract No. XXXX

Section Tested: Section A, Section B, Section C

Section Description:

Main Street from anchor tee and valve to end cap, including all hydrant foot valves (Section A). Water Ave (Section B) and High St (Section C) side street connections included to end caps.

Allowable Leakage Calculations

Note: Stationing shown shall be as-built water main stationing

	Section A	Section B	Section C	Section D
Location	10+01 to 17+20	13+62	16+80	xxxx
Length of Pipe (Feet)	719	15	56	xxxx
Nominal Pipe Diameter (Inches)	8	8	8	xxxx
Test Pressure (150 PSI)	150	150	150	150
Allowable Leakage (2 hour test)	0.95	0.02	0.08	#VALUE!

Per 801.10, each section of water main must be tested independently from valve to valve.

If pressure varies by more than 5 psi during test, must pump back up to original starting pressure. If pressure drops but does not vary by more than 5 psi during test, only have to pump back up to original starting pressure at end of test to measure the leakage.

L= allowable leakage (gal/hr)
 S= length of pipe tested in feet
 D= nominal pipe diameter in inches
 P= test pressure (150 psi)

Formula:

$$L = \frac{SDVP}{148,000} \times 2 \text{ (for 2 hr test)}$$

Diameter of Barrel (inches): 14

Gallons per Inch: 0.6664

.0034 (Diameter of Barrel in inches)²

Time Started: 9:00

Time Stopped: 11:00

Time	Gauge Reading (PSI)	Distance from Top of Barrel to top of Water (inches)	Number of Inches Used	Remarks
9:00	150	30	0	Initial Reading
9:30	149	30	0	Intermediate Reading
10:00	149	30	0	Intermediate Reading
10:30	149	30	0	Intermediate Reading
11:00	150	31	1	Final Reading
		Total Inches Used	1	

Total Leakage (gallons):

0.6664

Allowable Leakage (gallons):

1.06

1.590636255 inches allowed
 25 16ths of an inch allowed

Test Results:

Pass

(Pass or Fail)

Inspector's Signature:

Inspector's Name & Cell Phone Number:

City of Columbus - Division of Water

Water Main Pressure Test Report

Job Name: Main Street Water Line Improvements

Date: X-XX-XX

Project No: XX-XXX

Contractor: XXXXXXXXXXX

Contract No.: XXXX

Section Tested: Section D, Section E

Section Description:

Main Street from anchor tee and valve to main line valve at Sta 16+97 and valve on tee at cross connection at Water Ave (Sta 13+62)(Section D), valve on High St side street connection (Sta 16+80, 36' LT),

Allowable Leakage Calculations

Note: Stationing shown shall be as-built water main stationing

	Section D	Section E	Section F	Section G
Location	10+01 to 16+97	16+80, 36' LT	XXXX	XXXX
Length of Pipe (Feet)	696	36	XXXX	XXXX
Nominal Pipe Diameter (Inches)	8	8	XXXX	XXXX
Test Pressure (150 PSI)	150	150	150	150
Allowable Leakage (2 hour test)	0.92	0.05	#VALUE!	#VALUE!

Per 801.10, each section of water main must be tested independently from valve to valve.

If pressure varies by more than 5 psi during test, must pump back up to original starting pressure. If pressure drops but does not vary by more than 5 psi during test, only have to pump back up to original starting pressure at end of test to measure the leakage.

L= allowable leakage (gal/hr)
 S= length of pipe tested in feet
 D= nominal pipe diameter in inches
 P= test pressure (150 psi)

Formula:

$$L = \frac{SDvP}{148,000} \times 2 \text{ (for 2 hr test)}$$

Diameter of Barrel (inches): 14

Gallons per Inch: 0.6664

.0034 (Diameter of Barrel in inches)²

Time Started: 8:00

Time Stopped: 10:00

Time	Gauge Reading (PSI)	Distance from Top of Barrel to top of Water (inches)	Number of Inches Used	Remarks
9:00	150	30	0	Initial Reading
9:30	150	30	0	Intermediate Reading
10:00	150	30	0	Intermediate Reading
10:30	150	30	0	Intermediate Reading
11:00	150	30	0	Final Reading
		Total Inches Used	0	

Total Leakage (gallons):

0

Allowable Leakage (gallons):

0.97

1.455582233 inches allowed
 23 16ths of an inch allowed

Test Results:

Pass

(Pass or Fail)

Inspector's Signature:

Inspector's Name & Cell Phone Number:

Project/Permit Number: XXXXX Water Main Improvements	Approval (circle one): <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Partial
Property Address: 1234 Main Street	Contractor: XYZ Construction
Premise Number: 070-004332	Inspector: ABC Consulting Services, Inc.
Lot Number/Subdivision:	Supervisor: John Doe

Must be within 42" to 60" regardless of size

WORK PERFORMED: Circle One: New Transfer (Replace) Repair Put-In-Shape (PIS) Corporation Stop Repair/Replacement

TAP/SERVICE INFORMATION

Curb Box Location: 25 Feet E of Centerline of Long Street
15 Feet S of Centerline of Main Street

Depth of Tap (at curb box): 46" (must be within 42" to 60") Depth of Tap (at main): 51"

Water Main Size: 8" Tap Size (at main): 3/4"

New Water Service Length (W.M. to curb box): 23' New Water Service Manufacturer: XXXXXXXXXX

New Water Service Material (W.M. to curb box): Copper Owner's Side Water Service Material (Curb box to meter): Plastic

Northing: XXXXXXXXXXXX Easting: XXXXXXXXXXXX

ABANDONED TAP/SERVICE INFORMATION

Premise Number: 070-004332 Previous Tap Size: 3/4"

Previous Water Service Material (W.M. to curb box): Galvanized

Remarks: _____

Tap Drawing



Basis for measurement must be centerline of street or right-of-way line