



# CITY OF ANN ARBOR PROJECT MANAGEMENT

## LAWRENCE ST. WATER MAIN REPLACEMENT

### NOTES

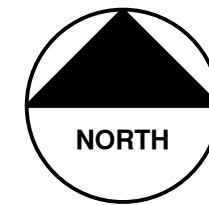
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, ITS DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.

BID No. BID NO, FILE No. 2014032

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	NOTES AND CONTACTS
3	LEGENDS, BENCHMARKS AND CASTING SCHEDULES
4	TRAFFIC CONTROL
5	ROAD SECTION, TRENCH DETAIL, INLET DETAIL
6	REMOVALS
7-8	WATER MAIN PLAN AND PROFILE
9	ROAD PLAN & PROFILE



VICINITY MAP

PROJECT MANAGEMENT SERVICE UNIT	
<p>NICHOLAS HUTCHINSON, P.E. - MI LICENSE No. 46789 CITY ENGINEER</p> <p>_____/_____/2014 DATE</p>	ENGINEER'S SEAL
<p>PREPARED UNDER THE SUPERVISION OF</p> <p>IGOR V. KOTLYAR, P.E. - MI LICENSE No. 43287 PROJECT ENGINEER</p> <p>_____/_____/2014 DATE</p>	ENGINEER'S SEAL

Know what's below.  
Call before you dig.

REV.	DATE	DATE	BY	CHECKED
00	ADD DESCRIPTION	AN MAKE LAYER PLOT	DATE	DATE
	DESCRIPTION		DRAWN	DRAWN

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-8647  
734-754-4410  
www.aagov.org

PROJECT DESCRIPTION AND LIMITS

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE

DRAWING No. 2014032-1

SHEET No. 1 OF 9



BM #	ELEV	DESCRIPTION
1	860.703	RR spike in W side of LP @ SE corner of State and Lawrence.
2	854.268	RR spike in N side of LP on S side of Lawrence in front of hse #514
3	849.435	RR spike in S side of LP on N side of Lawrence in front of hse #503
4	842.277	RR spike in S side of LP @ NE corner of Division & Lawrence

SANITARY SEWER STRUCTURE TABLE							
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS	NOTES
s1	-0+22.25	848.83	10.55	48	4' MH	8" N 838.28	ex 4' mh
s2	-0+21.87	840.83	9.00	48	4' MH	8" S 831.93 8" E 832.38 8" N 831.83	ex 4' mh
s3	-0+21.80	835.17	10.95	48	4' MH	8" S 824.22	ex 4' mh
s4	1+62.93	846.45	8.75	48	4' MH	8" E 837.70 8" W 837.70	ex 4' mh
s5	2+99.98	851.26	9.35	48	4' MH	8" E 841.91 8" W 841.91	ex 4' mh
s6	4+44.54	854.43	9.90	48	4' MH	8" E 844.53 8" W 844.53	ex 4' mh
s7	6+13.27	856.52	8.60	48	4' MH	8" W 847.92	ex. 4' mh
s8	7+13.34	862.22	10.55	48	4' MH	10" N 851.67	ex 4' mh
s9	7+08.81	857.83	10.20	48	4' MH	10" S 847.63 8" E 848.18 10" N 847.63	ex 4' mh
s10	7+10.04	842.00	9.05	48	4' MH	10" S 832.95	ex 4' mh
s11		860.64	9.80	48	4' MH	8" W 850.84	ex 4' mh

STORM SEWER STRUCTURE TABLE						
STRUCTURE	UTILITY STATION	INVERT ELEVATION, SIZE & DIRECTION	TOP OF CASTING ELEVATION	DEPTH (Feet)	SIZE	APPLICATION/CONSTRUCTION
r1	7+14	24" N 858.09	865.59	9.50	48" Dia.	ex. 4' mh
r2	6+98	12" N 856.15	859.35	5.20	24" Dia.	ex. 2' inlet
r3	7+20	24" S 850.67 24" N 850.67 12" S 852.77 12" SE 852.77 12" E 852.77 12" NE 852.77 12" E 852.77	858.62	9.95	48" Dia.	ex. 4' mh
r4	7+31	12" NW 855.51	859.11	5.60	24" Dia.	ex. 2' inlet
r5		12" W 855.93	859.03	5.10	24" Dia.	ex. drop
r6		12" SW 855.45	858.35	4.90	24" Dia.	ex. 2' inlet
r7	7+23	24" S 837.12	845.42	10.30	48" Dia.	ex. 4' mh
r8	-0+13	15" N 842.98	848.78	7.80	48" Dia.	ex. 4' mh
r9	-0+13	15" S 835.68 15" N 835.68 12" SW 836.28 12" S 836.28 12" SE 836.28 12" SE 836.28 12" E 836.28	841.08	7.40	48" Dia.	ex. 4' mh
r10	-0+34	12" NE 842.34	844.09	3.75	24" Dia.	ex. 2' inlet
r11	-0+01	12" N 838.85	841.45	2.60	24" Dia.	ex. drop
r12	0+03	12" NW 839.05	841.14	2.09	24" Dia.	ex. drop
r13	0+19	12" NW 838.75	841.52	2.77	24" Dia.	ex. drop
r14	0+20	12" W 839.25	841.12	1.87	24" Dia.	Cylindrical Structure Slab Top Circular Frame
r15	-0+12	15" S 829.35	835.15	7.80	48" Dia.	ex. 4' mh

WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	RIM	DEPTH
01-00513	gviw	-0+07	835.57	5.50
01-00511	gviw	-0+09	848.35	5.50
01-01098	gviw		858.74	5.50
02-00076	hydrant	0+04	842.29	5.44
01-01099	gviw (REMOVE)	6+78	858.35	5.50
01-01161	gviw	7+25	839.55	5.50
01-01913	gvib	7+26	860.11	7.59
01-01912	gviw	7+27	857.09	5.50
02-00097	hydrant	7+39	859.99	5.40

**EXISTING LEGEND**

- FIRE HYDRANT
- GATE VALVE IN BOX
- GATE VALVE IN WELL
- STOP BOX
- WATER VAULT
- WELL
- CATCH BASIN (SQ)
- CATCH BASIN (RD)
- STORM MANHOLE
- NON-CURB CATCH BASIN (SQ)
- SANITARY MANHOLE
- CLEAN-OUT
- POST
- PEDESTRIAN SIGNAL
- SIGN
- HAND HOLE
- ORNAMENTAL LIGHT
- FLOOD LIGHT
- UNKNOWN MANHOLE
- TELEPHONE MANHOLE
- TELEPHONE RISER
- GAS VALVE
- GAS VENT
- GAS BOX
- ELECTRICAL RISER
- TRANSFORMER
- UTILITY POLE
- LAMP POLE
- GUY ANCHOR
- GUY POLE
- MONITORING WELL
- MAILBOX
- SOIL BORING
- TRAVERSE POINT
- BENCH MARK
- IRON PIPE
- MON BOX
- WATER MAIN
- STORM SEWER
- SANITARY SEWER
- GAS MAIN
- ELECTRICAL OVER HEAD
- ELECTRICAL UNDER GROUND
- BOUNDARY
- BUILDING
- CENTERLINE OF DITCH
- CENTERLINE/CROWN OF ROAD
- EDGE OF WATER
- FENCE
- GRAVEL
- STONE WALL
- R.O.W.
- TREELINE
- WETLAND
- TREE (DECIDUOUS)
- TREE (CONIFEROUS)
- STUMP
- SHRUB (DECIDUOUS)

**PROPOSED LEGEND**

- HYDRANT (PLAN)
- WATER GATE WELL
- REDUCER
- WATER GATE VALVE
- WATER STOP BOX
- WATER VAULT
- INLET
- DOUBLE INLET
- INLET JUNCTION CHAMBER
- ROUND CATCH BASIN
- STORM MANHOLE
- DRAIN ARROW
- FLARED END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- BARREL
- SIGN
- PUSH BUTTON
- WATER MAIN
- STORM SEWER
- SANITARY SEWER
- CENTERLINE OF DITCH
- CENTERLINE OF ROAD
- FENCE
- SILT FENCE
- LOT/UNIT
- CURB
- TEMPORARY GRADING PERMIT
- WATER EASEMENT
- STORM EASEMENT
- SANITARY EASEMENT
- R.O.W.
- LIMITS OF CONSTRUCTION
- STONE WALL
- DETECTABLE WARNING
- ASPHALT
- CONCRETE
- SIDEWALK
- TREE (DECIDUOUS)
- TREE (CONIFEROUS)

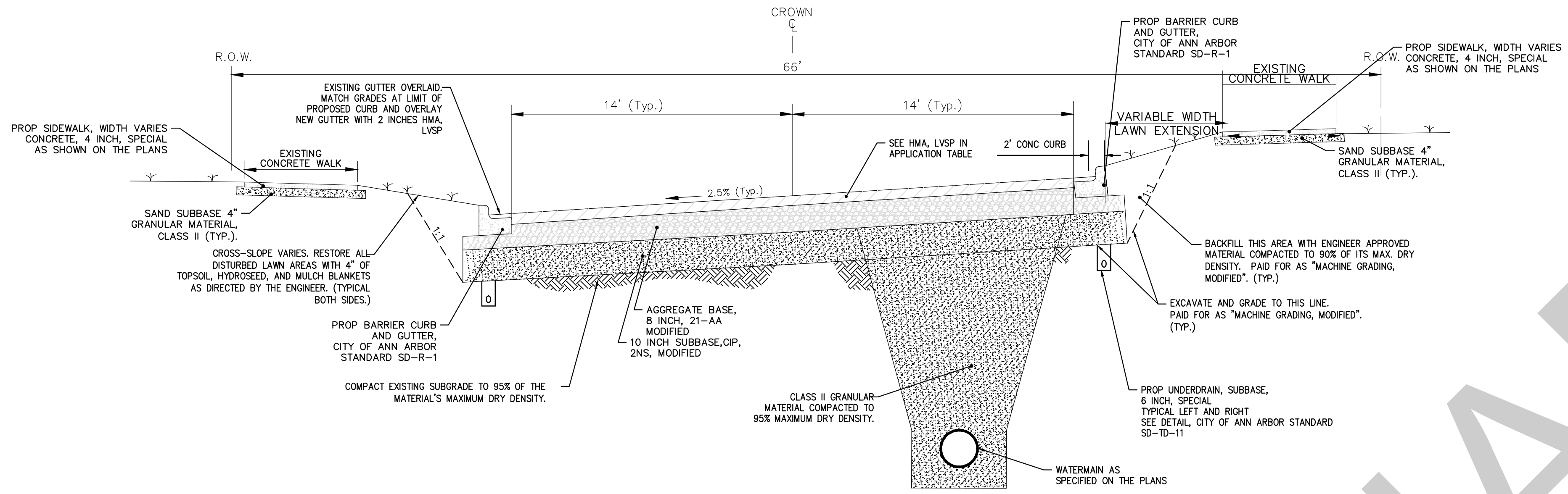


NO	ADD DESCRIPTION	AN	MAKE LAYER PLOT	DATE	DATE	BY	CHECKED

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
PO BOX 8667  
ANN ARBOR MI 48106-8667  
www.a3gov.org

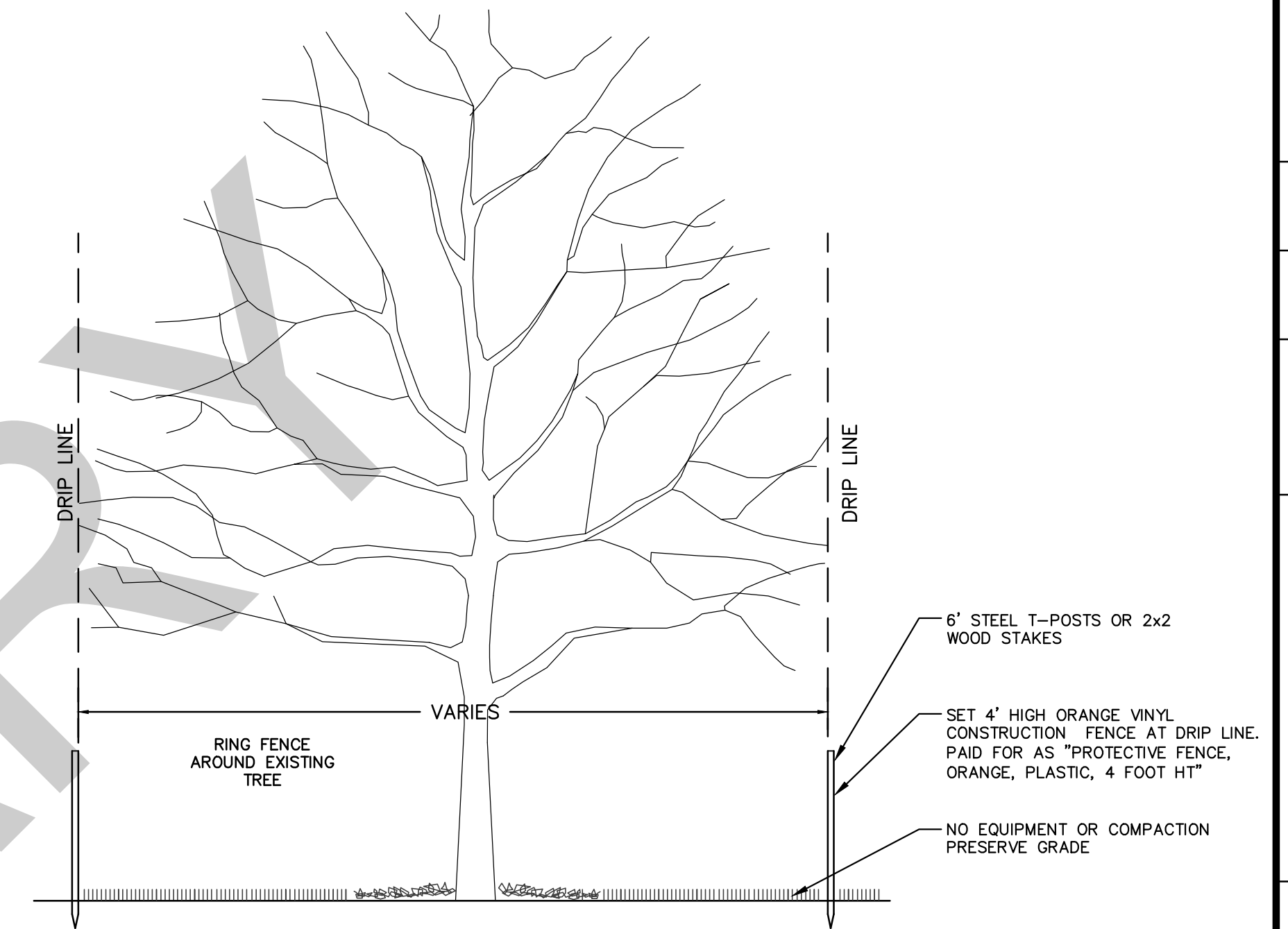


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
LAWRENCE ST. WATER MAIN REPLACEMENT  
LEGENDS, BENCHMARKS & CASTING SCHEDULES  
SCALE: N/A  
DRAWING No. 2014032-3

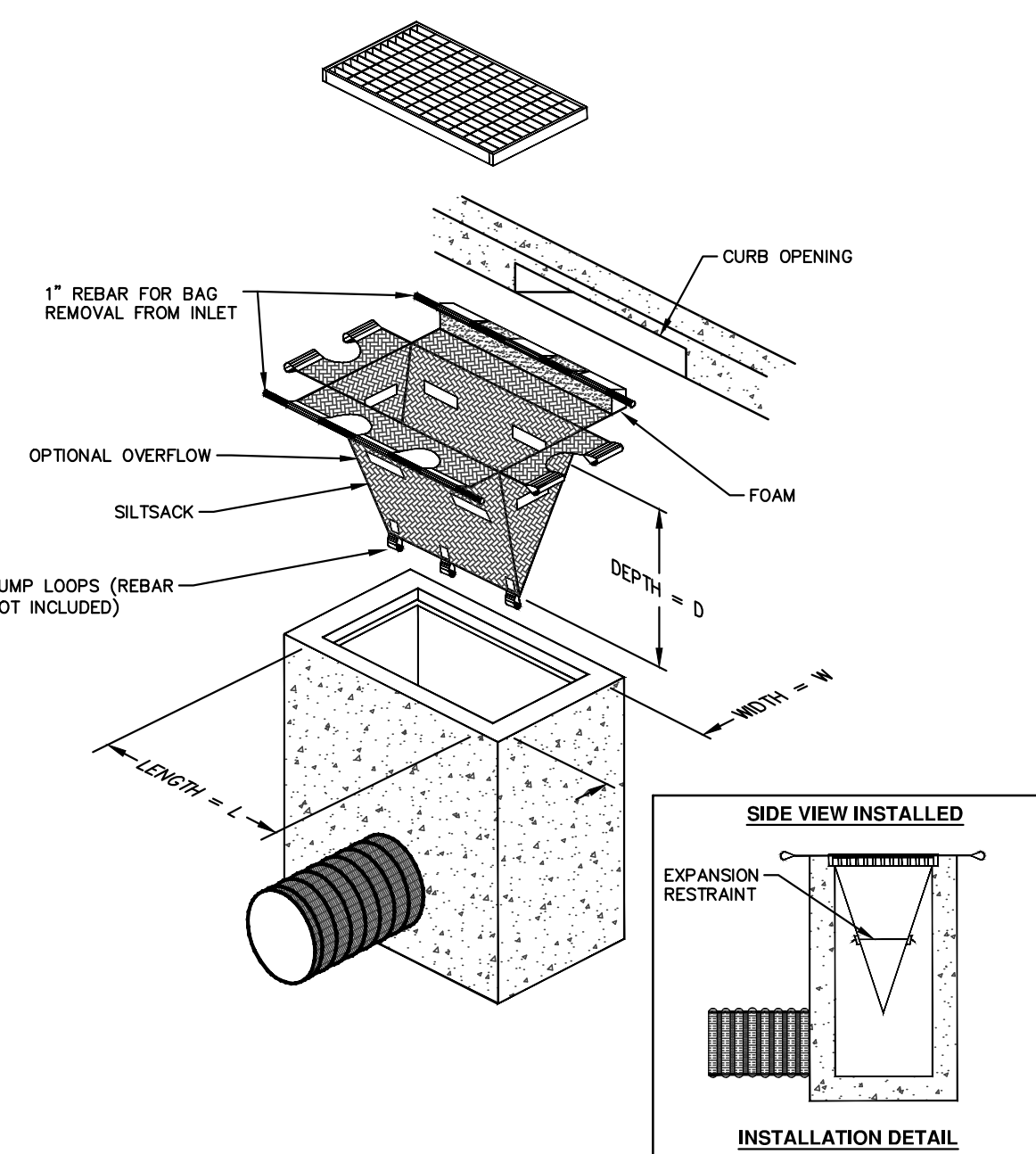


LAWRENCE STREET  
PROPOSED TYPICAL CROSS SECTION  
N.T.S.

HMA APPLICATION ESTIMATE					
HMA MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI (MIN.)	BINDER	LOCATION/NOTES
LVSP	220 LB/SYD	2.0	260 (TOP)	PG 58-28	TOP COURSE
LVSP	220 LB/SYD	2.0	260 (TOP)	PG 58-28	LEVELING COURSE
Bond Coat SS-1h	0.05 GAL/SYD	-	-	-	INCLUDE IN COST OF HMA ITEM



TREE PROTECTION DETAIL



SILTSACK DETAIL

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

**REGULAR FLOW SILTSACK**

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	REQUIRED VALUE	TEST METHOD
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

**HI-FLOW SILTSACK**

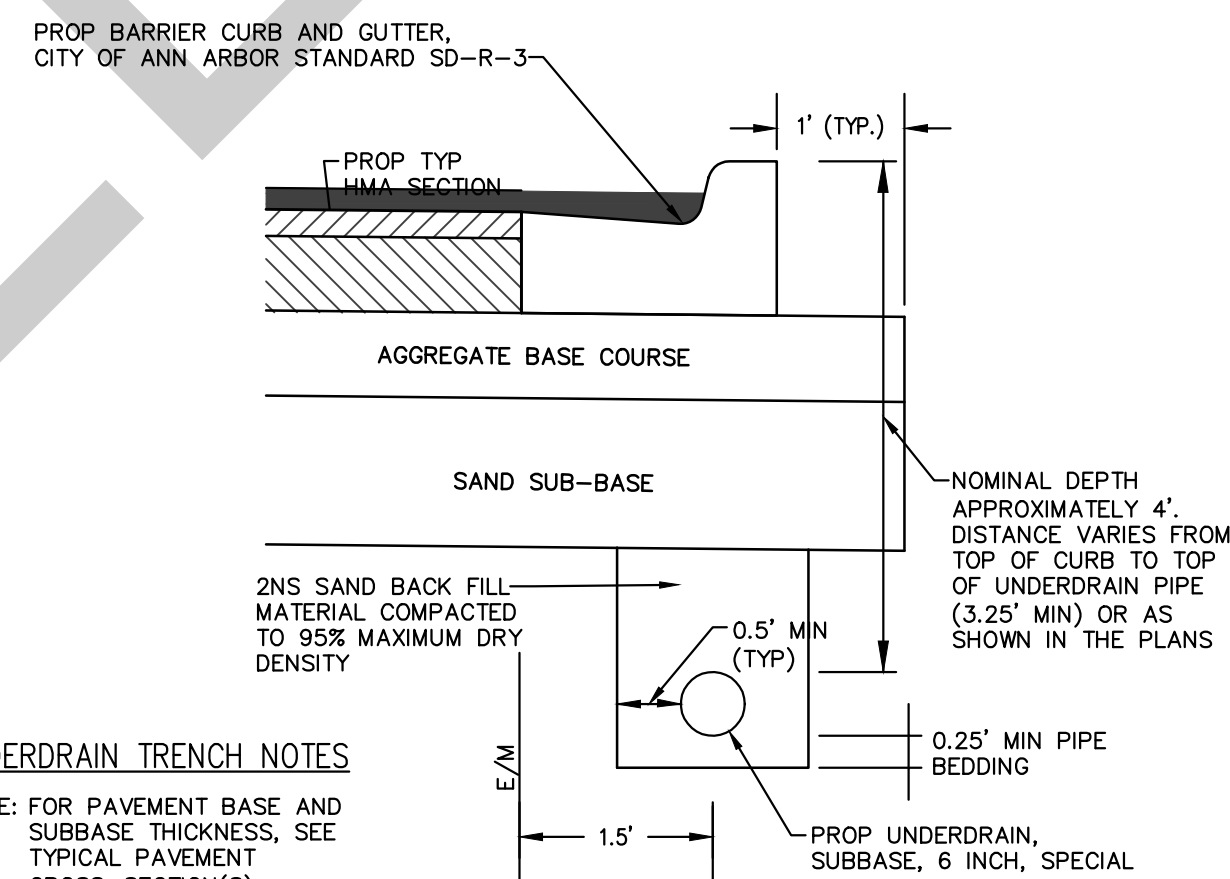
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	REQUIRED VALUE	TEST METHOD
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC-1

**OIL-ABSORBANT SILTSACK**

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS THAT THE CONTRACTOR INSTALL THE REBAR AS SHOWN IN THIS DETAIL TO PROVIDE A FULLY FUNCTIONING UNIT. ALL COSTS ASSOCIATED WITH FURNISHING, CLEANING AS MANY TIMES AS REQUIRED, DISPOSAL OF SEDIMENT, AND REMOVING THE INLET FILTER WHEN NO LONGER NEEDED IS INCLUDED IN THE ITEM OF WORK AND WILL NOT BE PAID FOR SEPARATELY.



**UNDERDRAIN TRENCH NOTES**

- NOTE: FOR PAVEMENT BASE AND SUBBASE THICKNESS, SEE TYPICAL PAVEMENT CROSS-SECTION(S)
- NOTE: TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY
- NOTE: ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS
- NOTE: TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY
- NOTE: ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS

TRENCH DETAIL FOR UNDERDRAIN  
(UNDER HMA PAVEMENT)

**811**  
Know what's below. Call before you dig.

REV.	DATE	DATE	BY	CHECKED
00				

DESCRIPTION: AN MAKE LAYER PLOT

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-8647  
www.a3gov.org

CITY OF ANN ARBOR  
PUBLIC SERVICES - CITY OF ANN ARBOR  
LAWRENCE ST. WATER MAIN REPLACEMENT

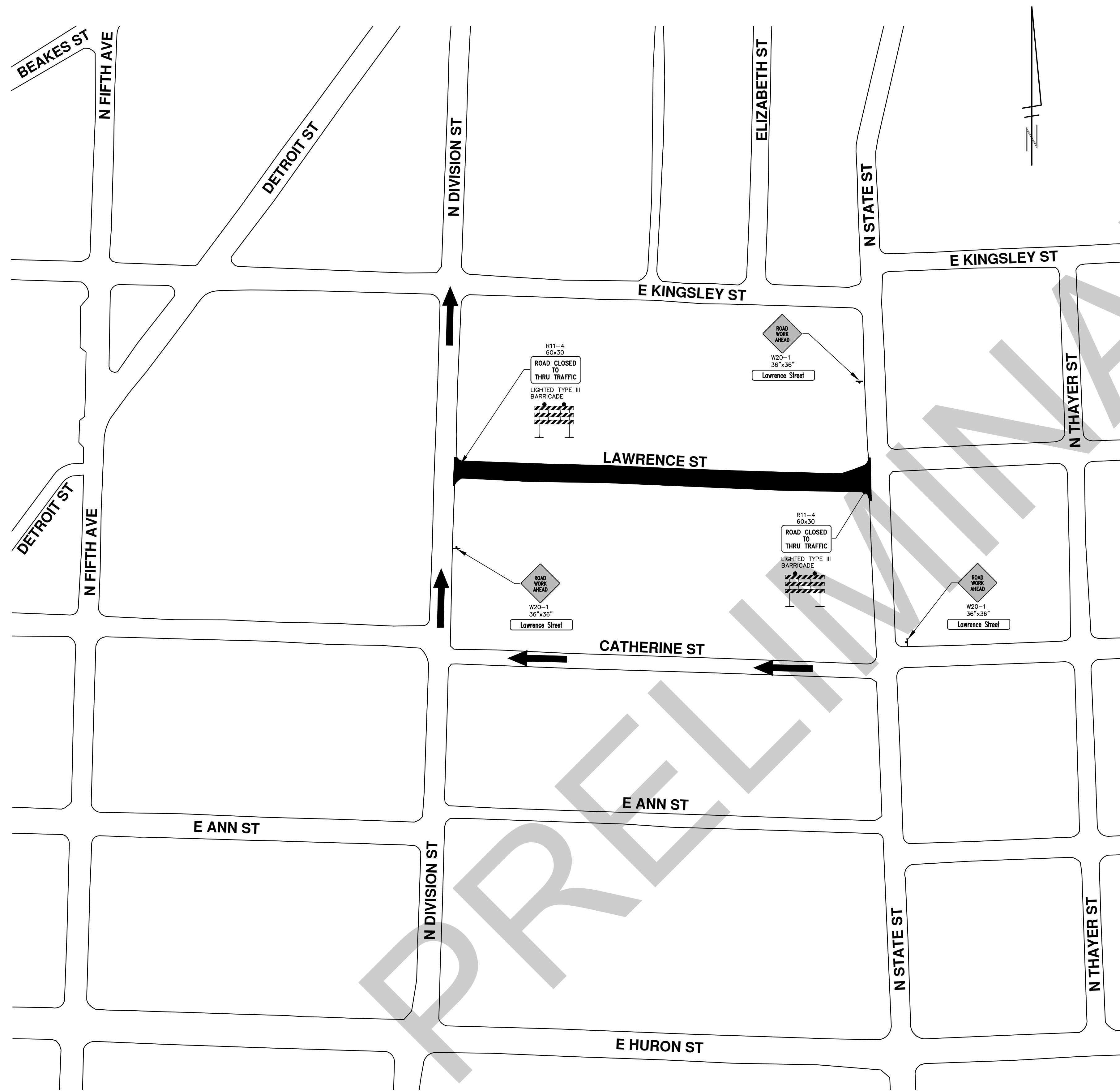
ROAD SECTION, TRENCH DETAIL, INLET DETAIL

SCALE: NTS

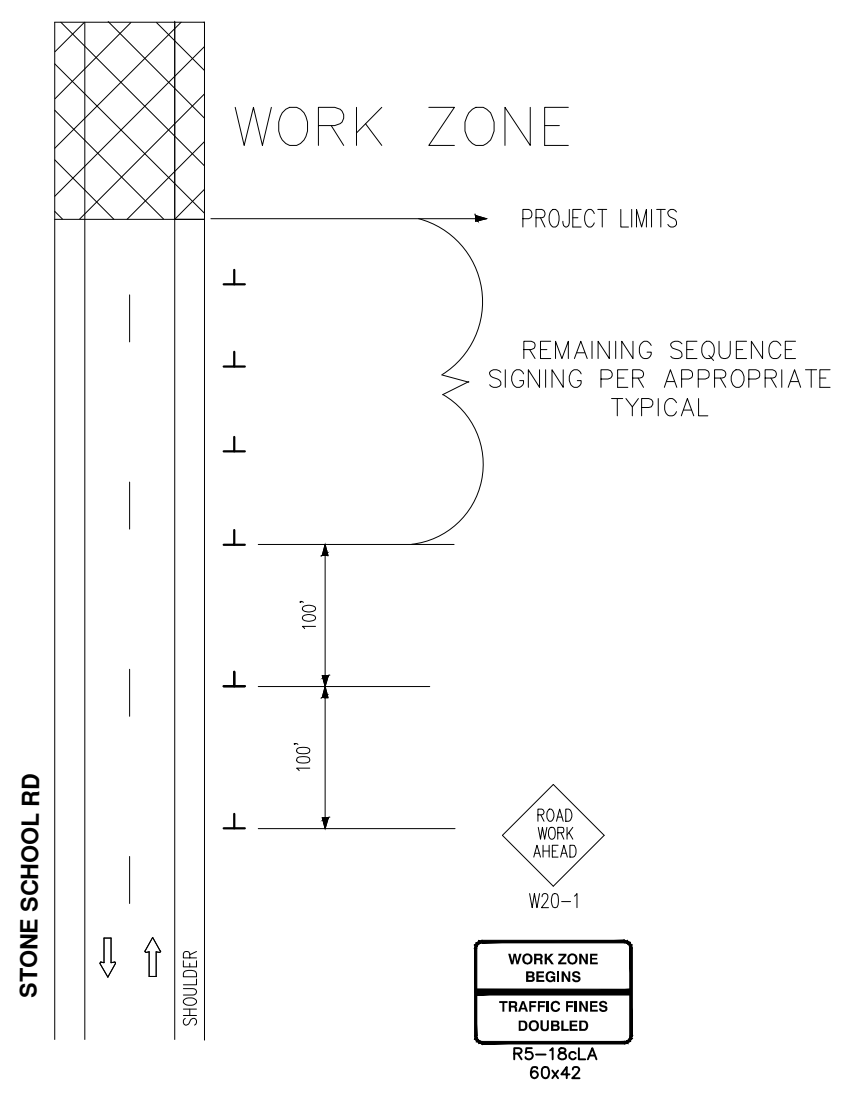
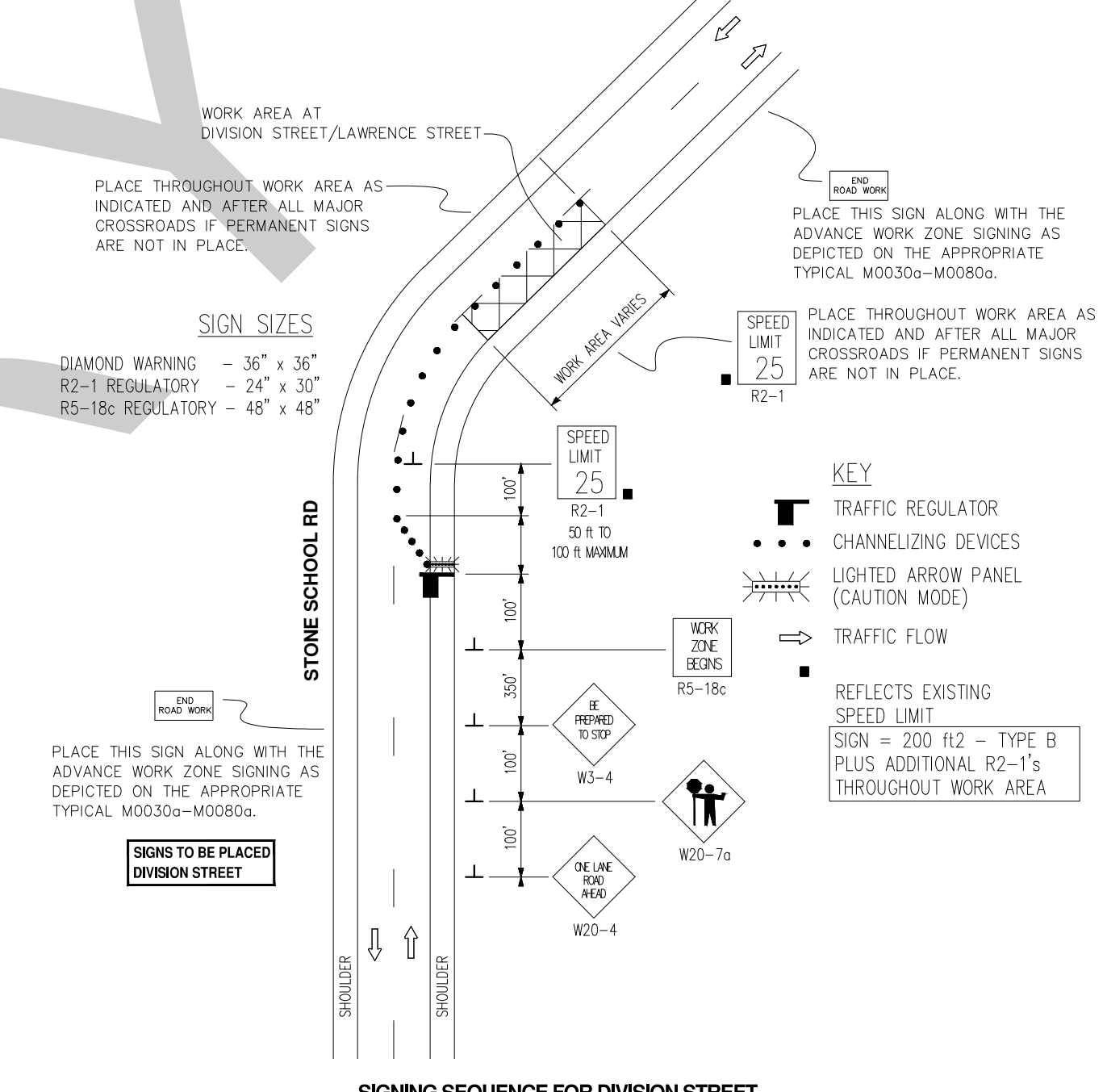
DRAWING No. 2014032-4

SHEET No. 4 OF 9

S:\Project Management\Design\2014032 Lawrence WM\Plan Production\Primary\2014032MTRF.dwg Dwg Created: 17-Sep-14 - \_a2 standard bw.stb - Plot Date: 2-Dec-14



**TRAFFIC CONTROL TO BE FOLLOWED DURING WATER MAIN WORK IN DIVISION STREET / LAWRENCE STREET INTERSECTION**



**LEGEND:**  
 ONE WAY STREET. ←

**MAINTAINING TRAFFIC AND TRAFFIC CONTROL**

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.

**811** Know what's below. Call before you dig.

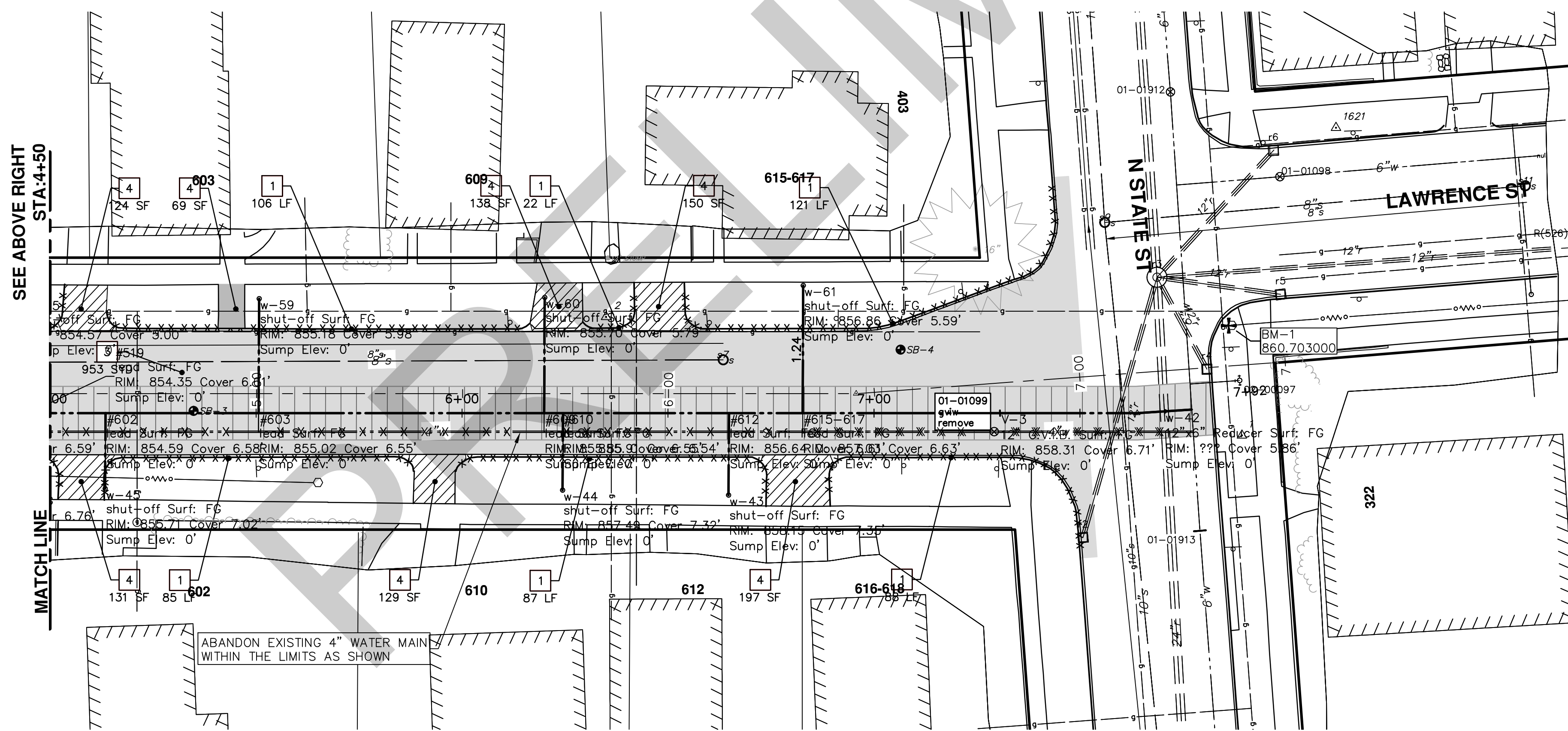
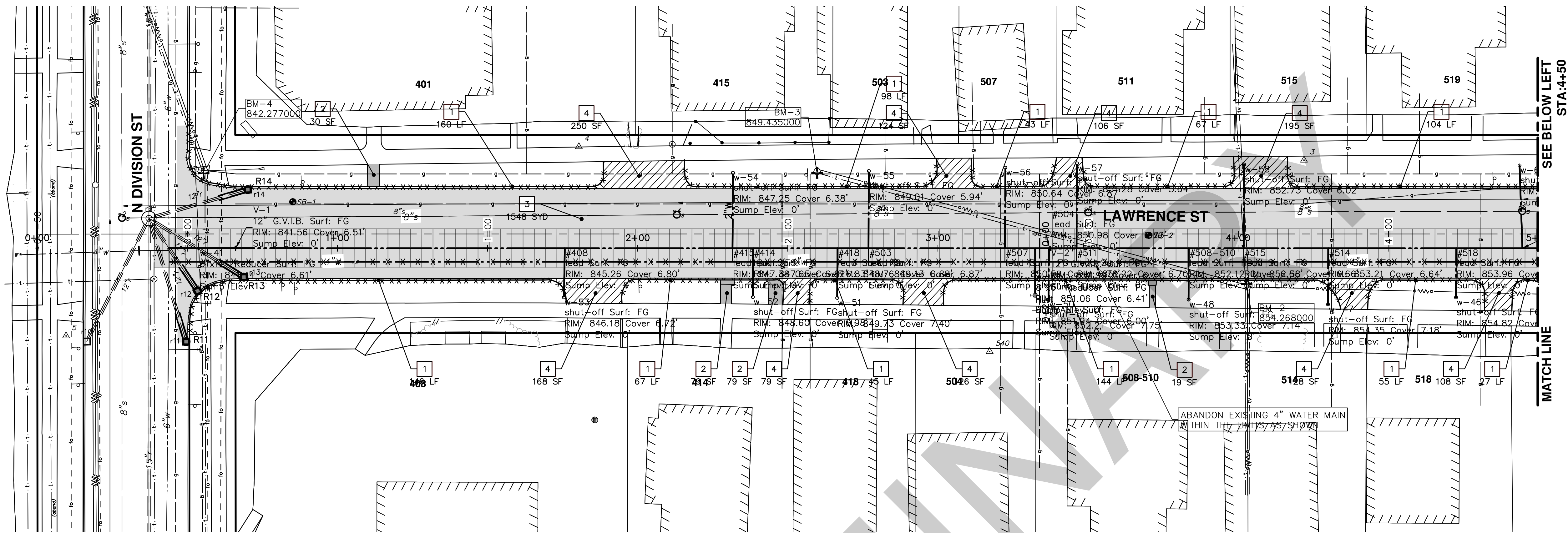
NO.	ADD DESCRIPTION, AN MAKE LAYER PLOT	DATE	BY	CHECKED

CITY OF ANN ARBOR  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1000  
 734.794.4410  
 www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**LAWRENCE ST. WATER MAIN REPLACEMENT**  
 TRAFFIC CONTROL

SCALE PLAN: 1" = 100'  
 DRAWING No. 2014032-5

SHEET No. 5 OF 9



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE EXISTING CURB AND GUTTER - ANY TYPE
2	REMOVE EXISTING SIDEWALK OR RAMP - ANY TYPE OR THICKNESS
3	REMOVE EXISTING PAVEMENT - ANY THICKNESS, SAWCUT FULL DEPTH AT REMOVAL LIMITS
4	REMOVE EXISTING 6-INCH DRIVEWAY
5	ABANDON WATERMAIN AND APPURTENANCES-SEE NOTES
6	REMOVE DROP INLET & INSTALL SINGLE INLET STRUCTURE
7	REMOVE TREE
8	PROTECTIVE FENCING

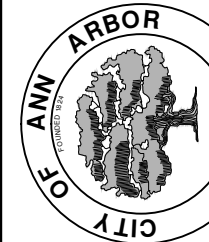
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**LAWRENCE ST. WATER MAIN REPLACEMENT**

SCALE PLAN: 1" = 20'

DRAWING No. 2014032-6

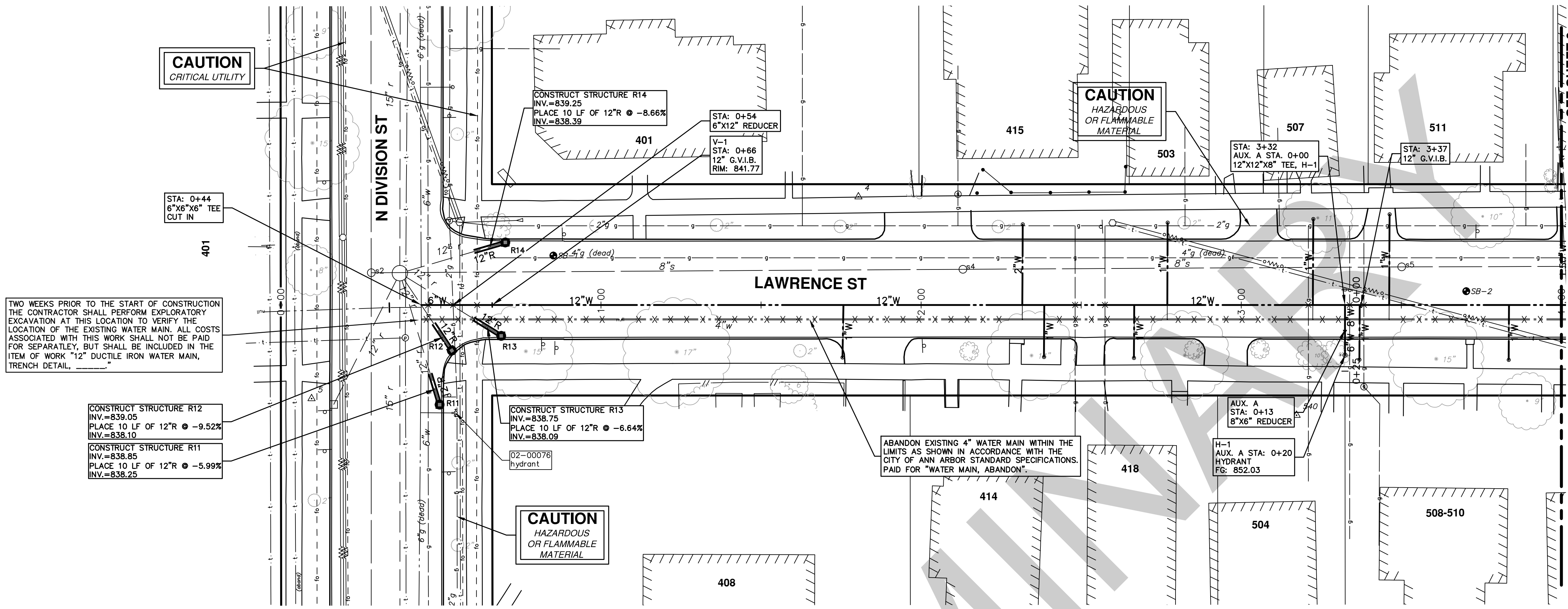
SHEET No.

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0647  
 www.a2gov.org



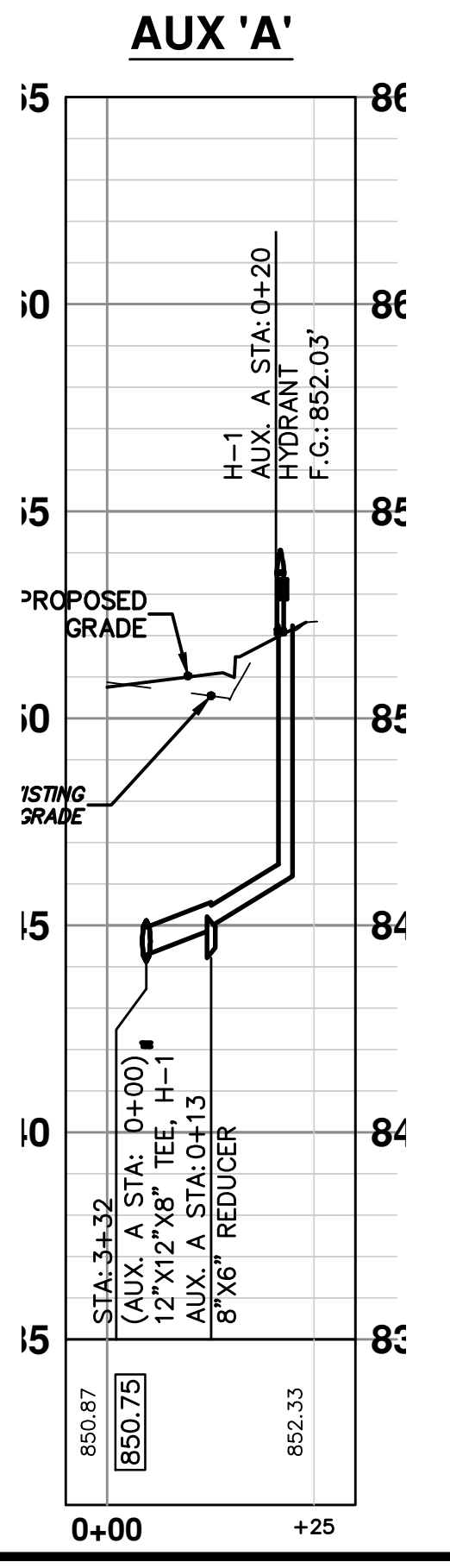
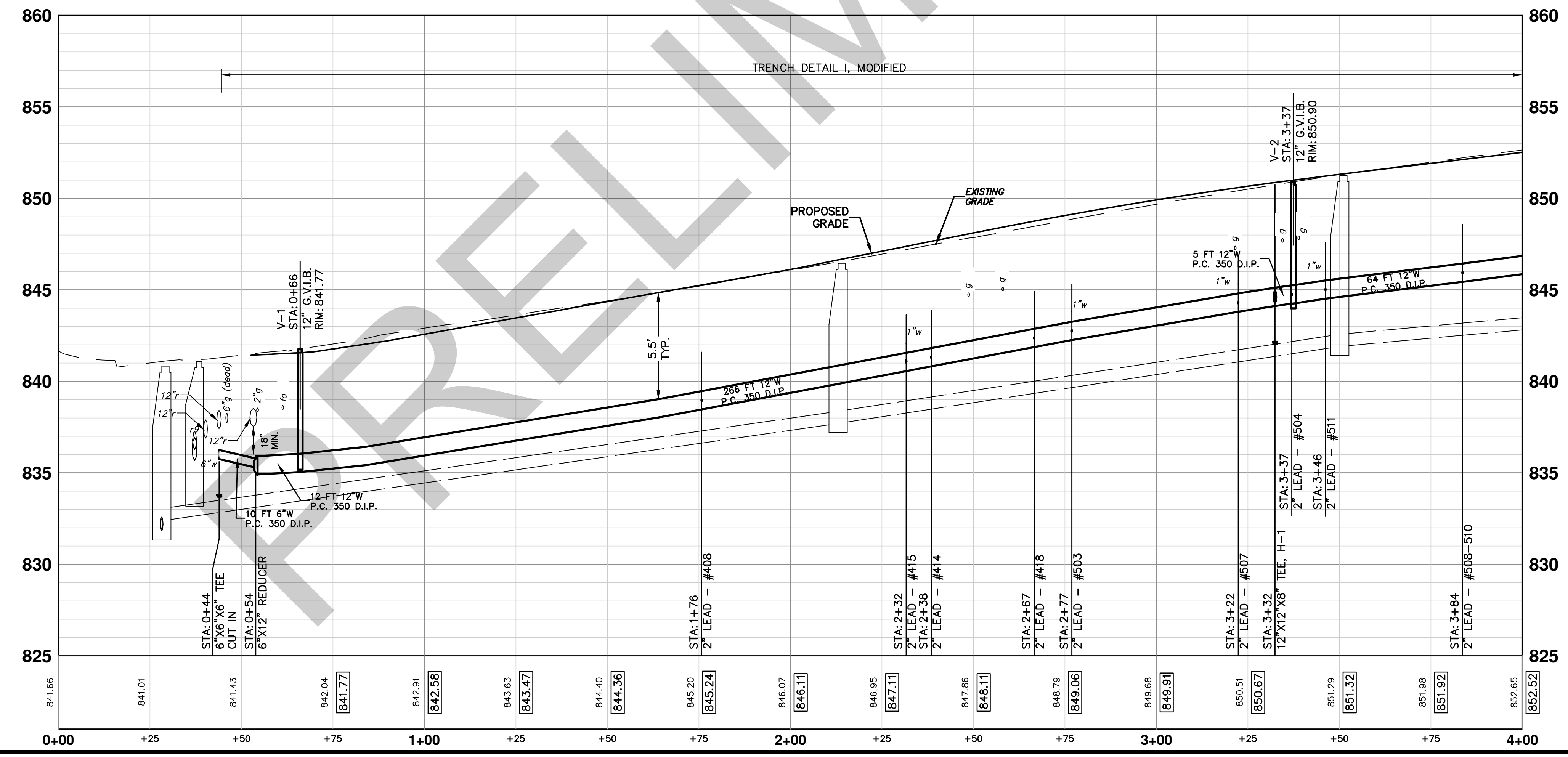
NO	ADD DESCRIPTION	AN MAKE LAYER	PLOT	DATE	DATE	BY	CHECKED

Know what's below. Call Before you dig.



**WATER MAIN STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
V-1	12" G.V.I.B.	0+66	841.77	6.51
H-1	HYDRANT	3+32	852.03	6.00
V-2	12" G.V.I.B.	3+37	850.90	6.74
V-3	12" G.V.I.B.	7+31	858.45	6.71



**811**  
Know what's below. Call before you dig.

**CITY OF ANN ARBOR**  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0667  
www.a3gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
LAWRENCE ST. WATER MAIN REPLACEMENT  
WATER MAIN PLAN & PROFILE  
WATER MAIN 0+00 TO 4+00

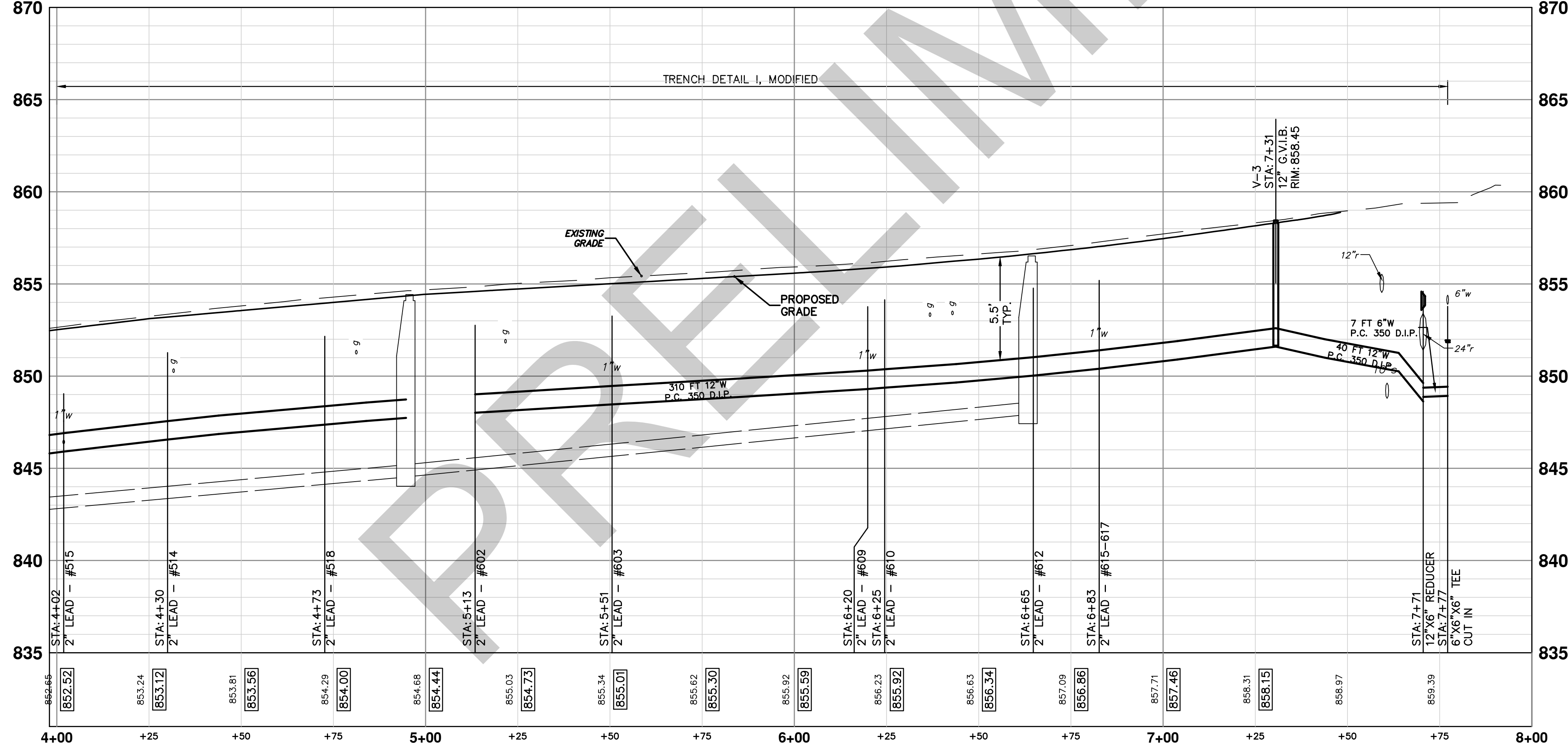
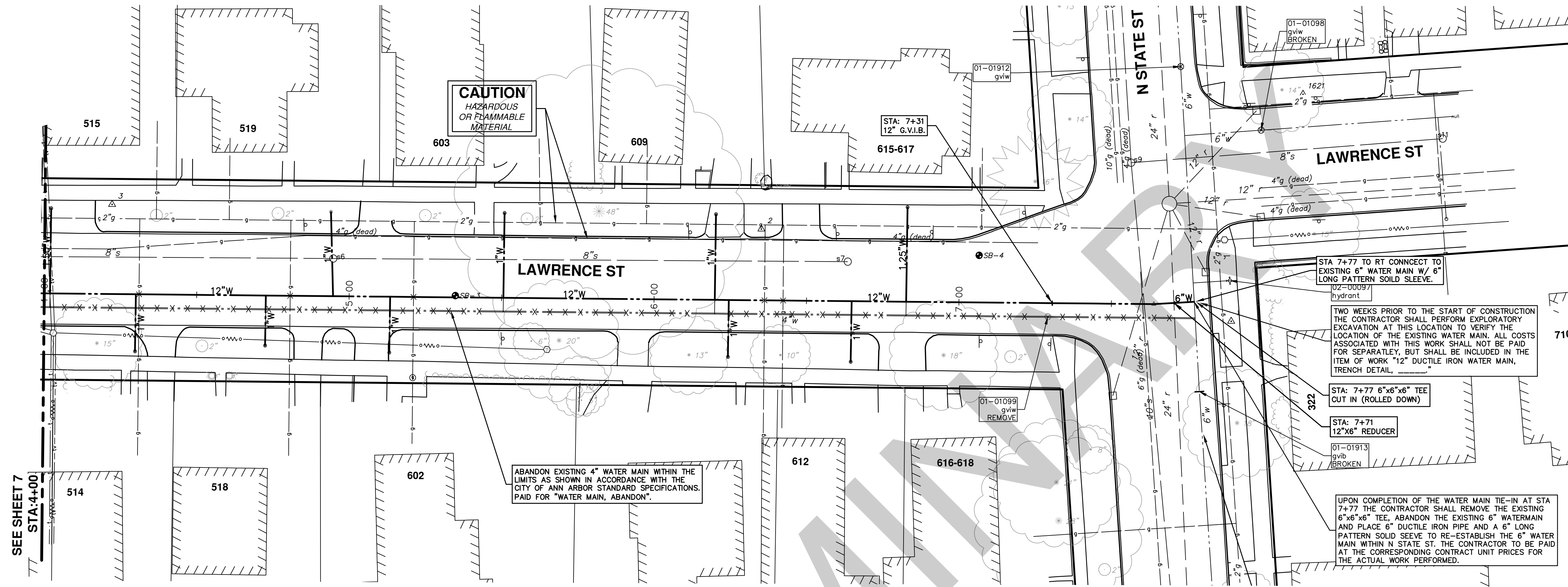
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 4'

DRAWING NO. 2014032-7

SHEET NO. 7 OF 9

REV.	DESCRIPTION	DATE	BY	CHECKED
00	ADD DESCRIPTION AN MAKE LAYER PLOT			

S:\Project Management\Design\2014032 Lawrence WM\Plan Production\Primary\2014032WATR.dwg Dwg Created: 23-Sep-14 - a2 standard bw.stb - Plot Date: 2-Dec-14



**811**  
Know what's below. Call before you dig.

NO	ADD DESCRIPTION	AN MAKE LAYER PLOT	DATE	DATE	BY	CHECKED
00	REV.					

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-1667  
ANN ARBOR 734-754-4410  
www.a2gov.org

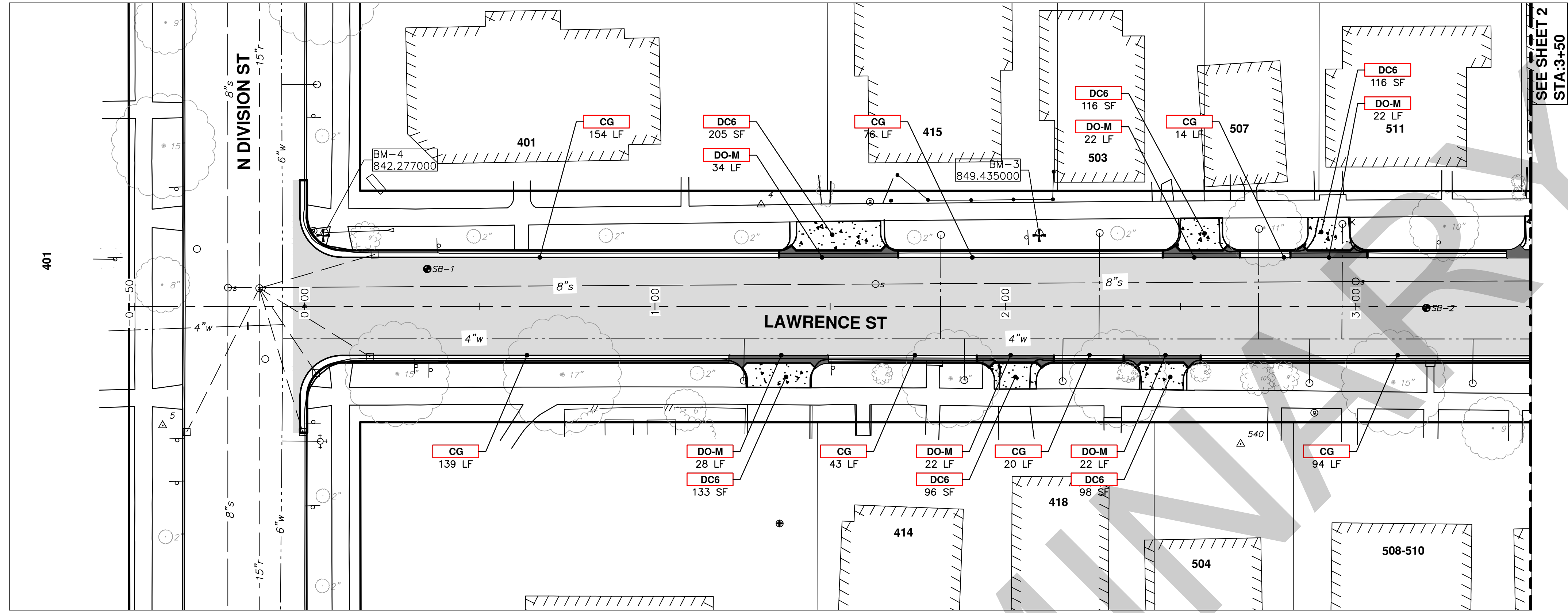
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
LAWRENCE ST. WATER MAIN REPLACEMENT  
WATER MAIN PLAN & PROFILE  
WATER MAIN 4+00 TO POE

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 4'

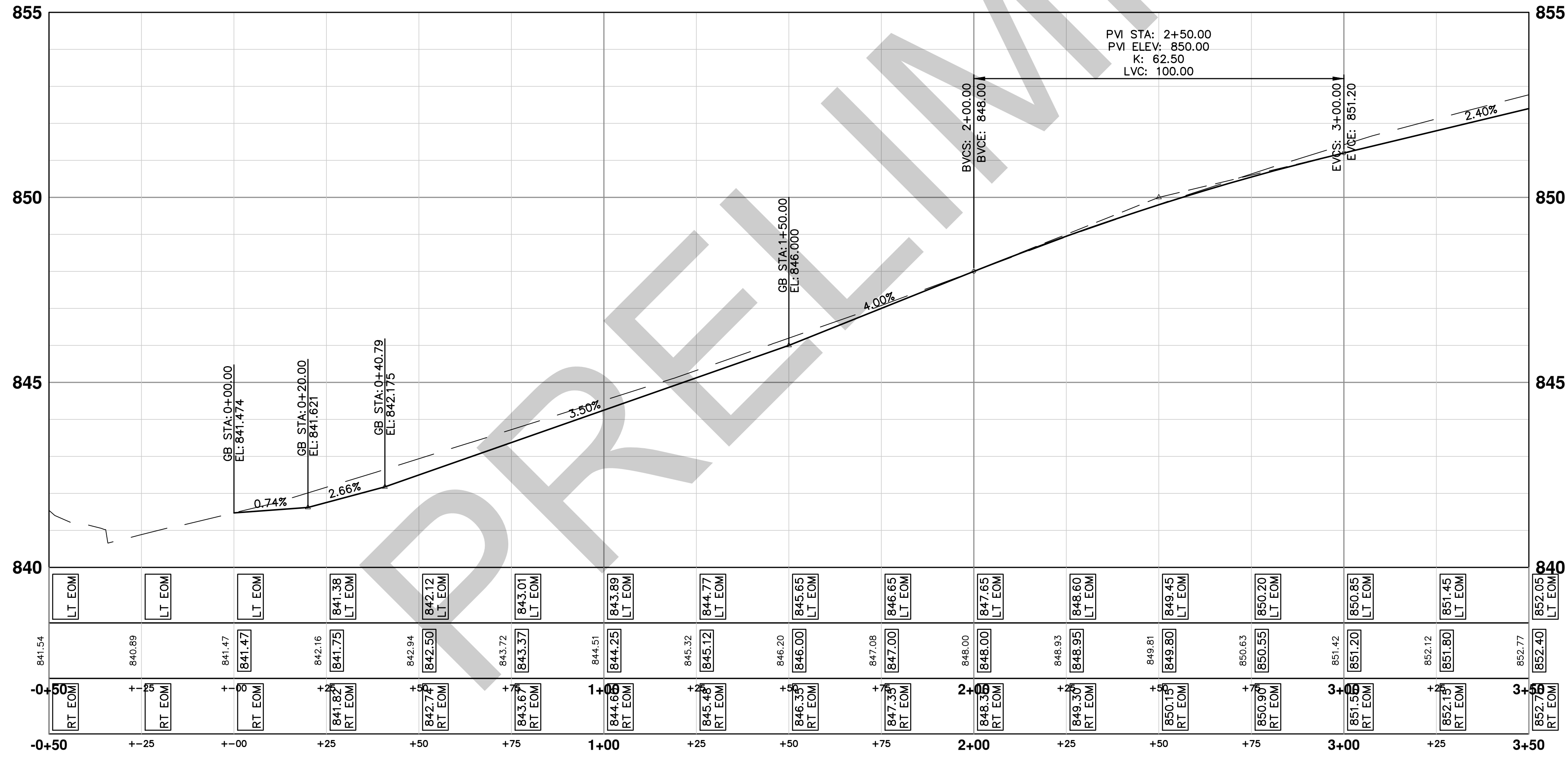
DRAWING No. 2014032-8

SHEET No. 8 OF 9





SEE SHEET 2  
STA:3+50



CONSTRUCTION KEY	
KEY	DESCRIPTION
CG	PLACE CURB AND GUTTER, CONC, F4, SPECIAL
DO-M	PLACE DRIVEWAY OPENING, CONC, DETAIL M, P-NC
DC6	PLACE CONC, DRIVE APPROACH, NON-REINFORCED, P-NC, 6 INCH
SW4	PLACE 4" CONC, SIDEWALK
SW6	PLACE 6" CONC, ADA RAMP WITH DETECTABLE WARNING STRIP
1	ADJUST GATE VALVE BOX, MONUMENT BOX, OR GAS BOX.
2	ADJUST INLET STRUCTURE COVER
3	ADJUST MANHOLE COVER

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**LAWRENCE ST. WATER MAIN REPLACEMENT**  
 ROAD & STORM SEWER

SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING No. **2014032-1**

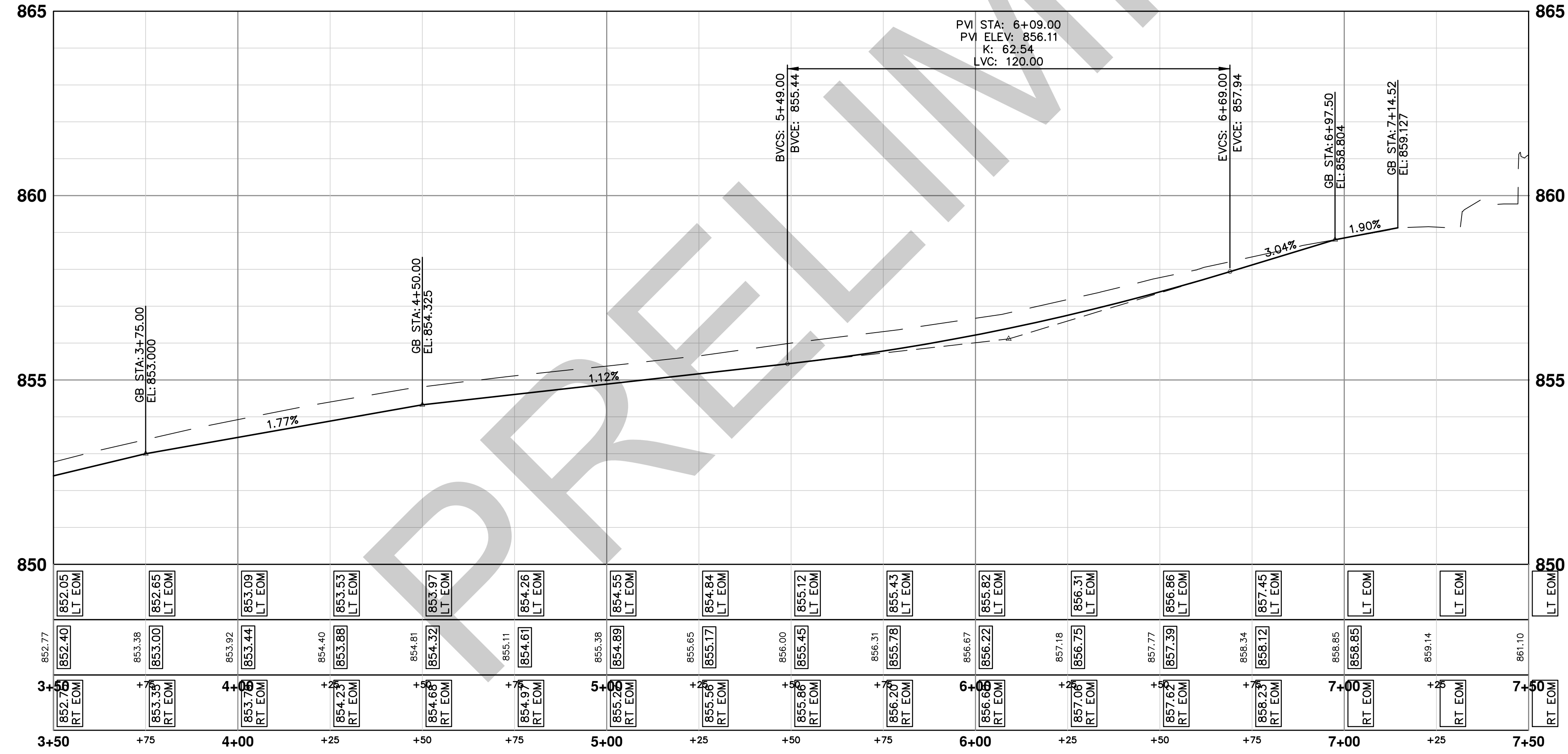
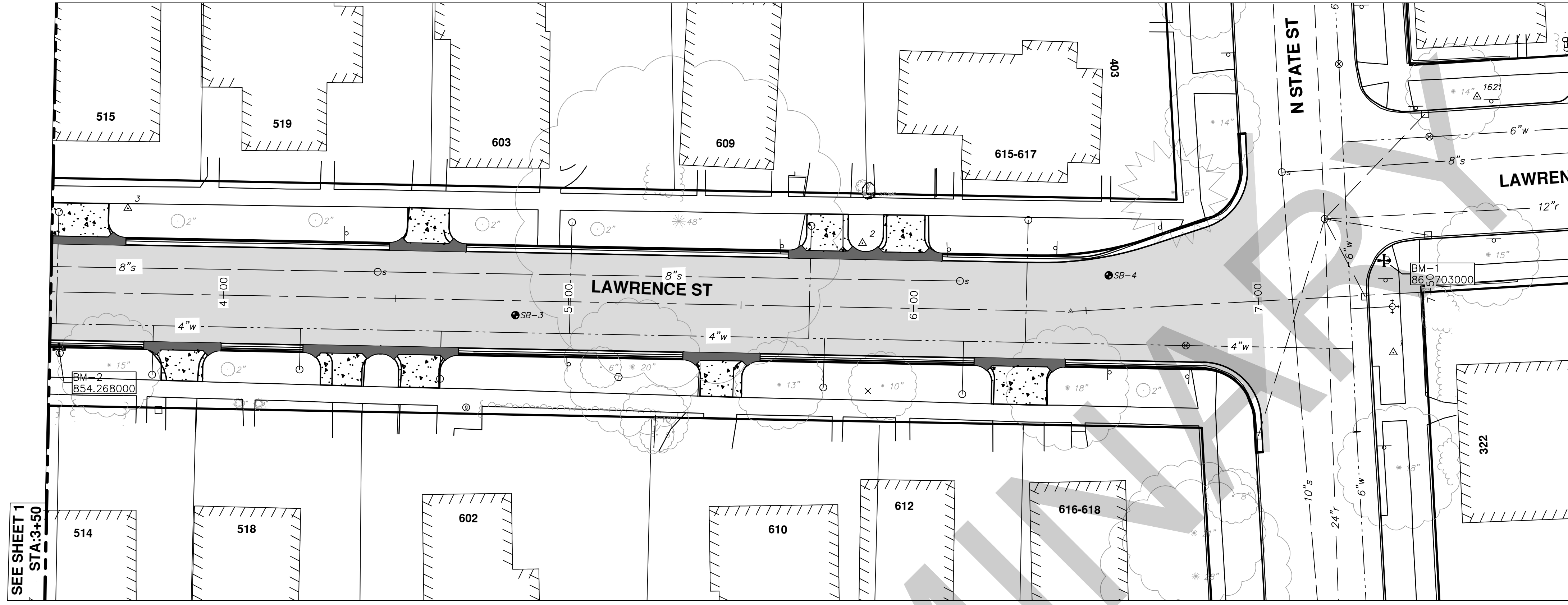
SHEET No. **1 OF 9**

RD- (1)

**CITY OF ANN ARBOR**  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-8647  
 ANN ARBOR: 734.754.4410  
 www.a2gov.org

**811**  
 Know what's below.  
 Call Before you dig.

NO	ADD DESCRIPTION	DATE	BY	CHECKED



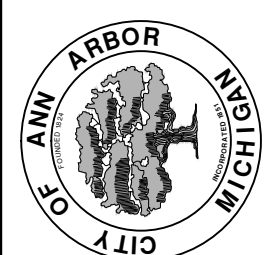
CONSTRUCTION KEY	
KEY	DESCRIPTION
CG	PLACE CURB AND GUTTER, CONC, F4, SPECIAL
DO-M	PLACE DRIVEWAY OPENING, CONC, DETAIL M, P-NC
DC6	PLACE CONC, DRIVE APPROACH, NON-REINFORCED, P-NC, 6 INCH
SW4	PLACE 4" CONC, SIDEWALK
SW6	PLACE 6" CONC, ADA RAMP WITH DETECTABLE WARNING STRIP
1	ADJUST GATE VALVE BOX, MONUMENT BOX, OR GAS BOX.
2	ADJUST INLET STRUCTURE COVER
3	ADJUST MANHOLE COVER

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**LAWRENCE ST. WATER MAIN REPLACEMENT**  
 ROAD & STORM SEWER  
 RD- (2)

SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'


DRAWING No. **2014032-2**

SHEET No. **2 OF 9**



CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-6647  
 ANN ARBOR: 734-794-4410  
 WWW.A2GOV.ORG

REV.	DESCRIPTION	DATE	BY	CHECKED
00	ADD DESCRIPTION AN MAKE LAYER PLOT			



Know what's below.  
Call Before you dig.