CITY OF MADISON.

MADISON WATER UTILITY DEPARTMENT OF PUBLIC WORKS PLAN OF PROPOSED IMPROVEMENT

INDEX OF SHEETS

SHEET NO.

SHEET NO.

SHEET NO.

SHEET NO.	1	TITLE SHEET
SHEET NO.	EC-1 TO EC-7	EROSION CONTROL PLAN
SHEET NO.	W-1 TO W-7	WATER PLAN & PROFILE
SHEET NO.	W-8 TO W-9	WATER PLAN OVERVIEW
SHEET NO.	W-10 TO W-15	WATER IMPACT PLAN
SHEET NO.	W-16	PRESSURE ZONE BOUNDARIES
SHEET NO.	W–17	WATER ESTIMATE OF MATERIAL
SHEET NO.	RW-1 TO RW-2	RELOCATED WALL PLAN
SHEET NO.	D-1 TO D-3	DETAILS

CU-1 TO CU-4 CONTRACTOR USE PLAN

RESTORATION PLAN

UTILITY PLAN & PROFILE & SCHEDULE

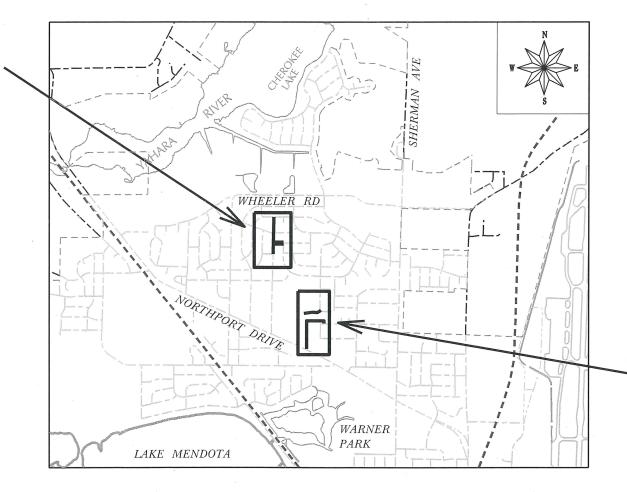
LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2

> CITY PROJECT NO. 53W1903 MUNIS NO. 10439 CONTRACT NO. 7452

CONSTRUCTION PROJECT LOCATION 2 (MELBY & MANDRAKE)

U-1 TO U-2

RS-1 TO RS-4



DATE: 3/20/2017

PUBLIC IMPROVEMENT PROJECT APPROVED

NOVEMBER 1, 2016

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

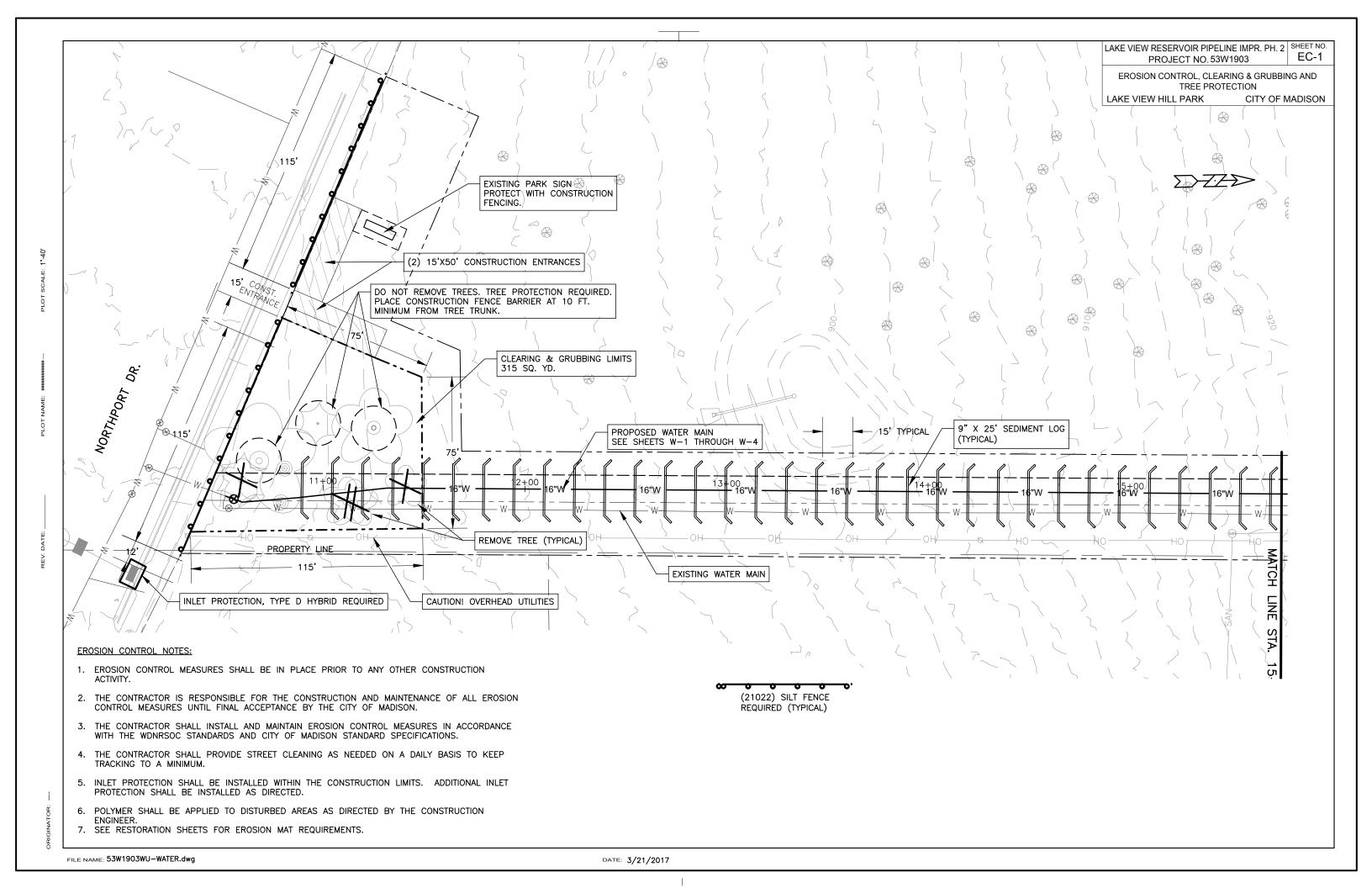
Principal Engineer Madison Water Utility

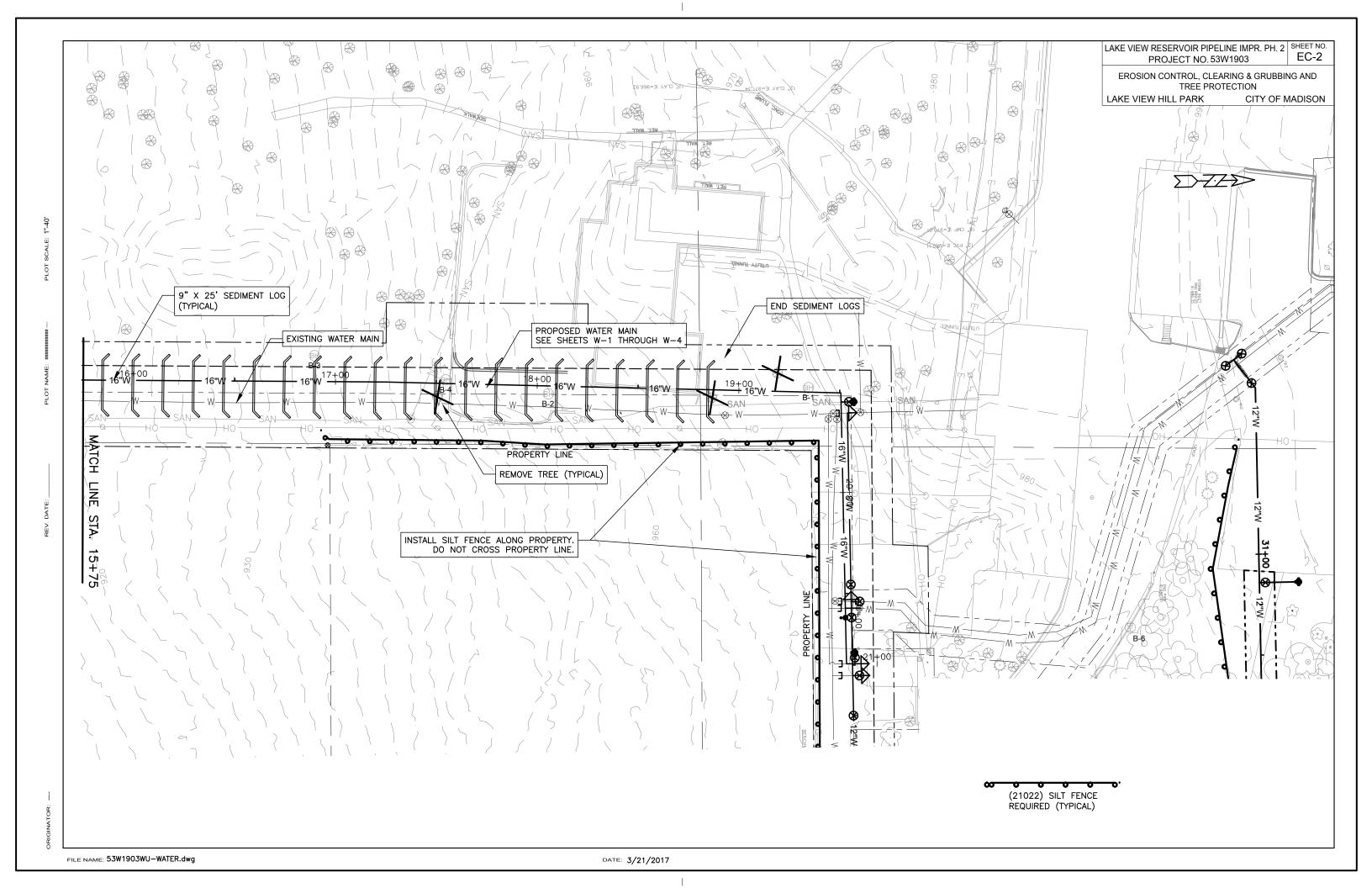


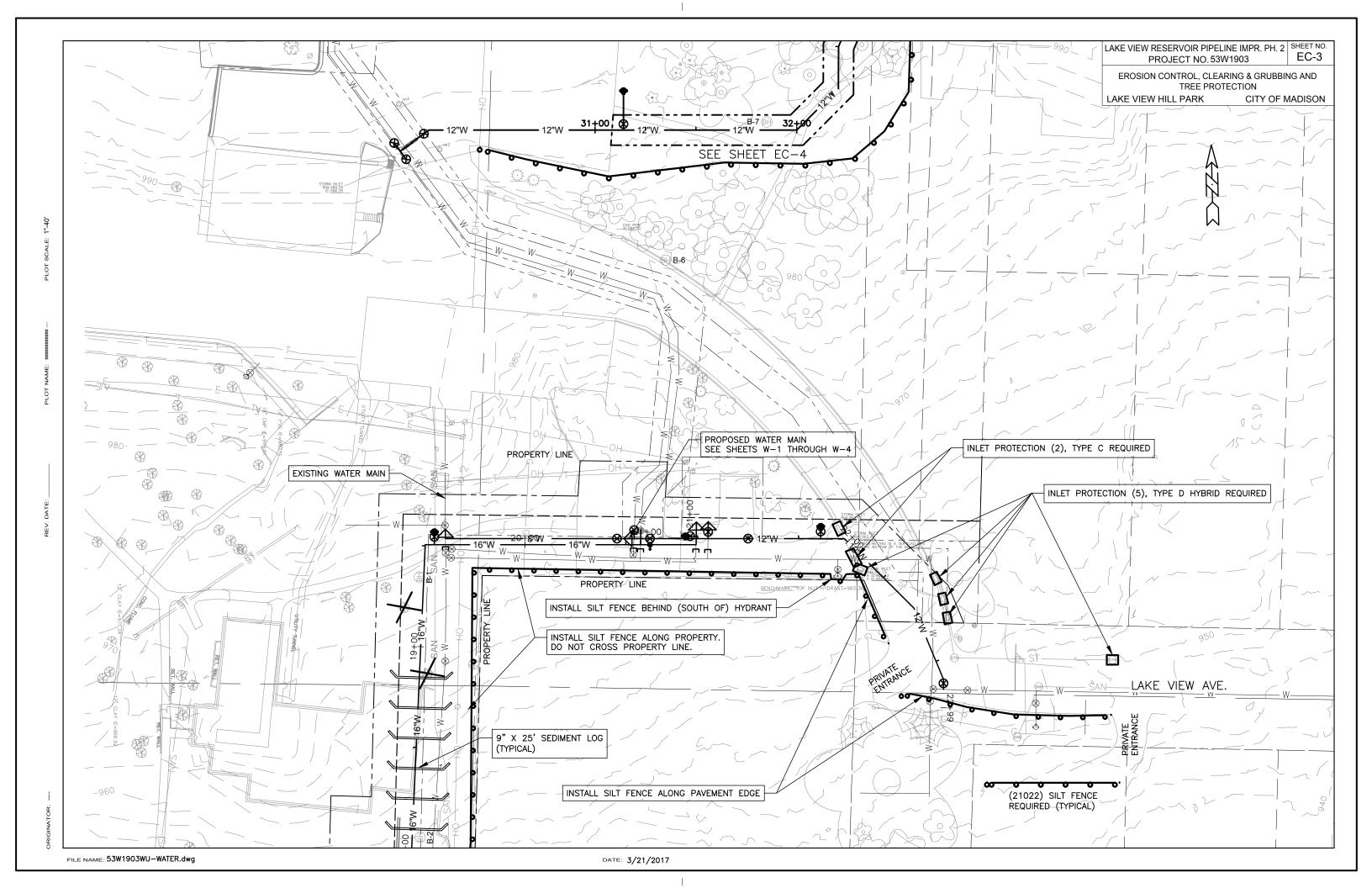


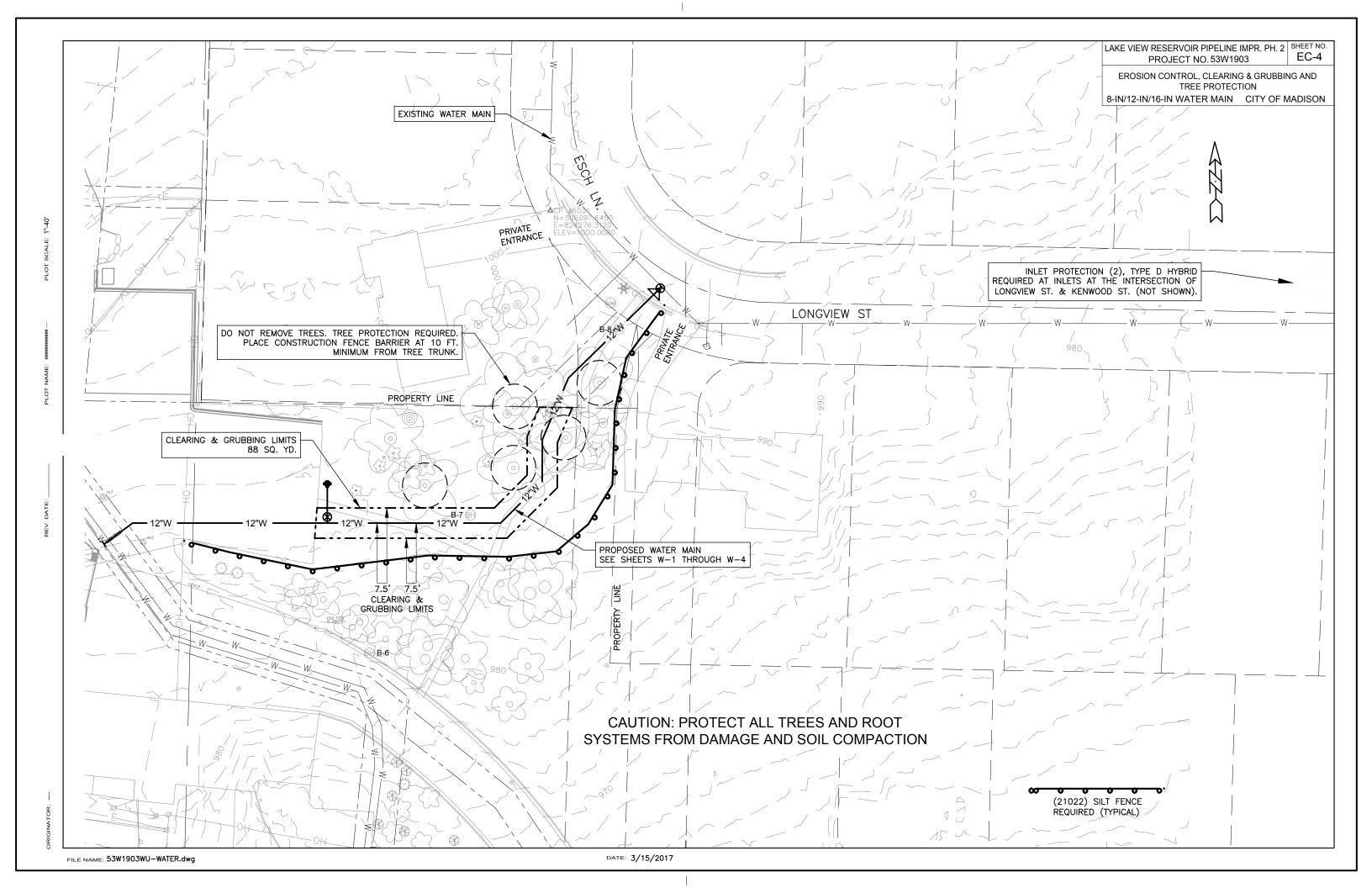
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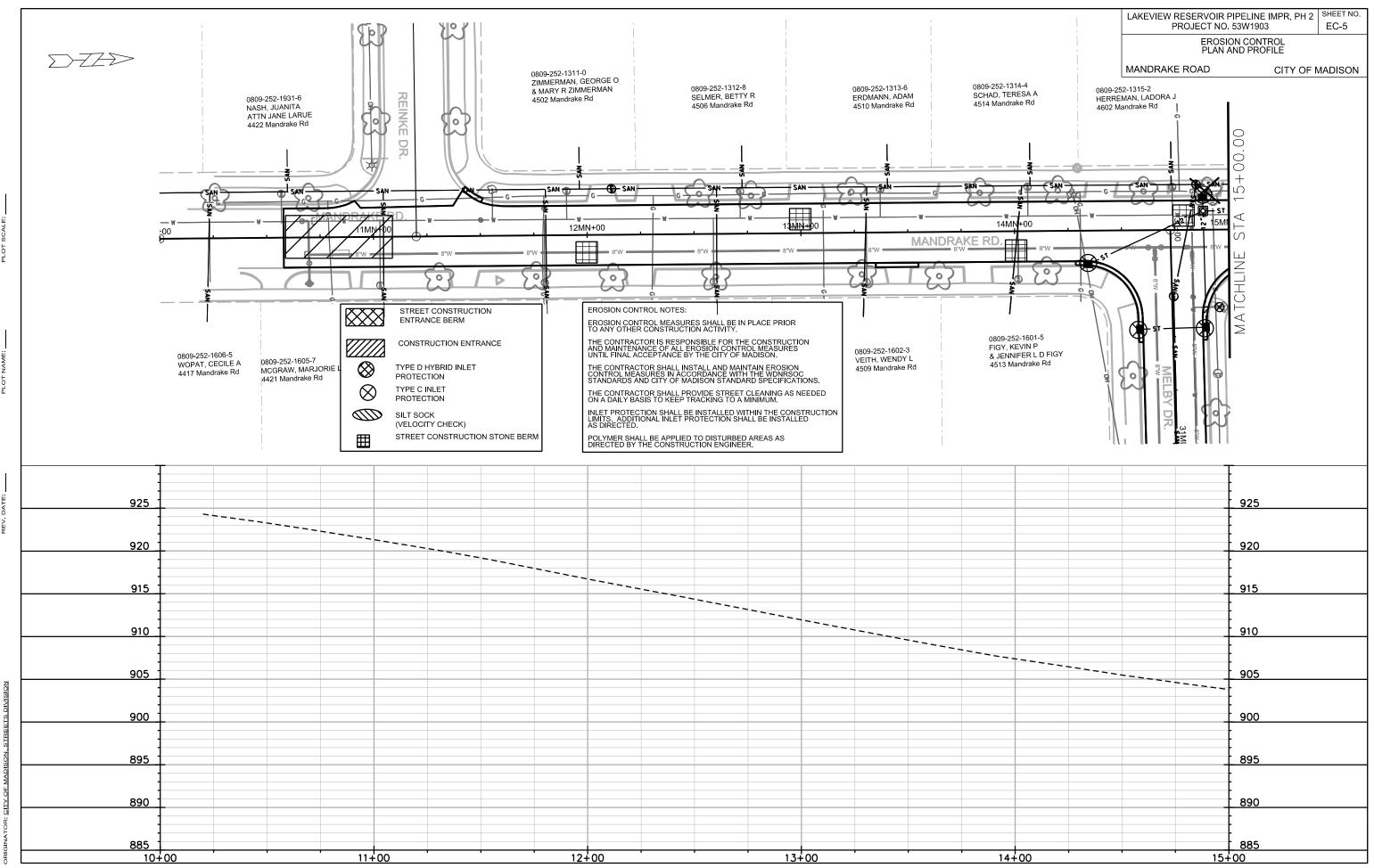
ORIGINATOR: CITY OF MADISON, STREETS

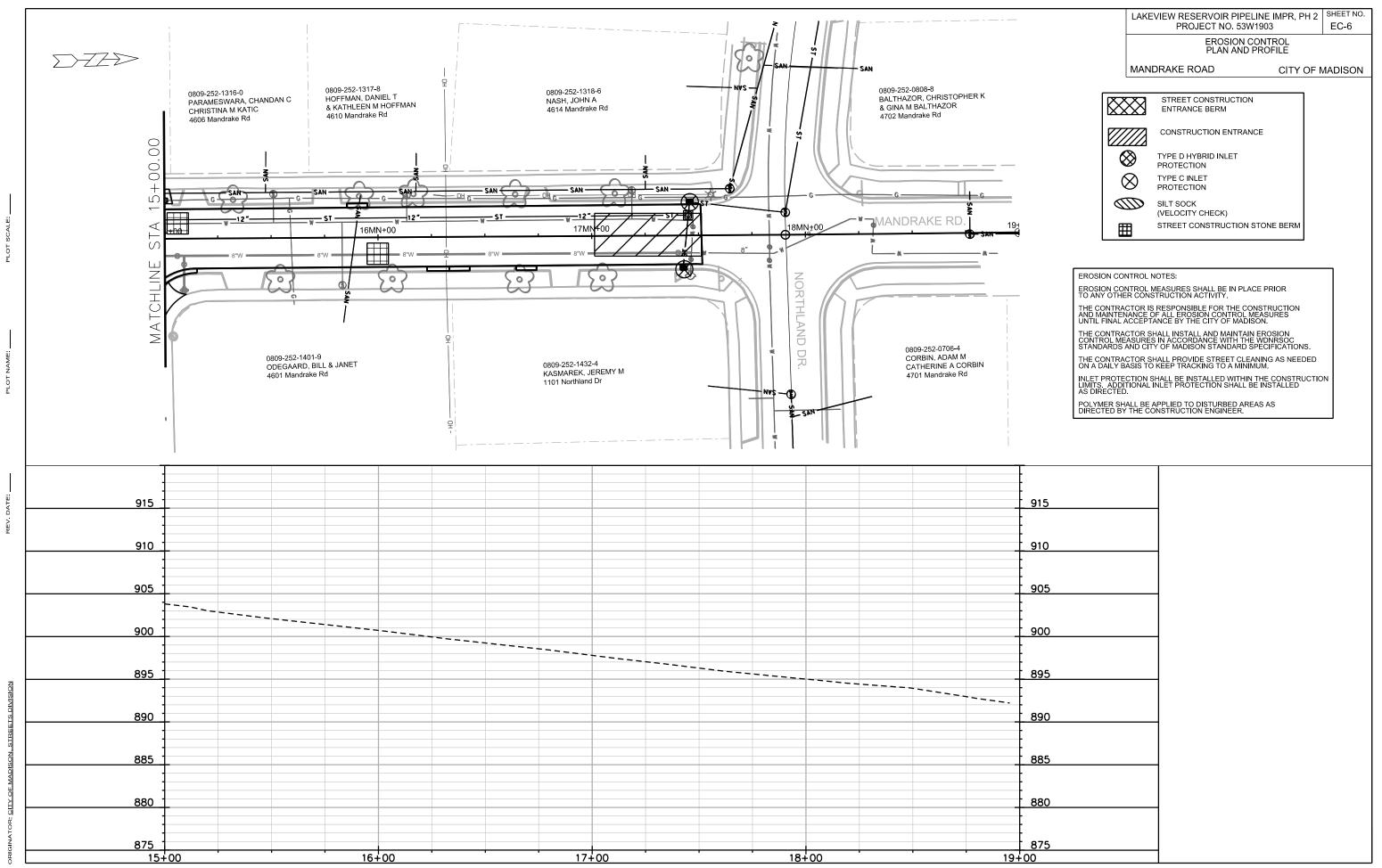


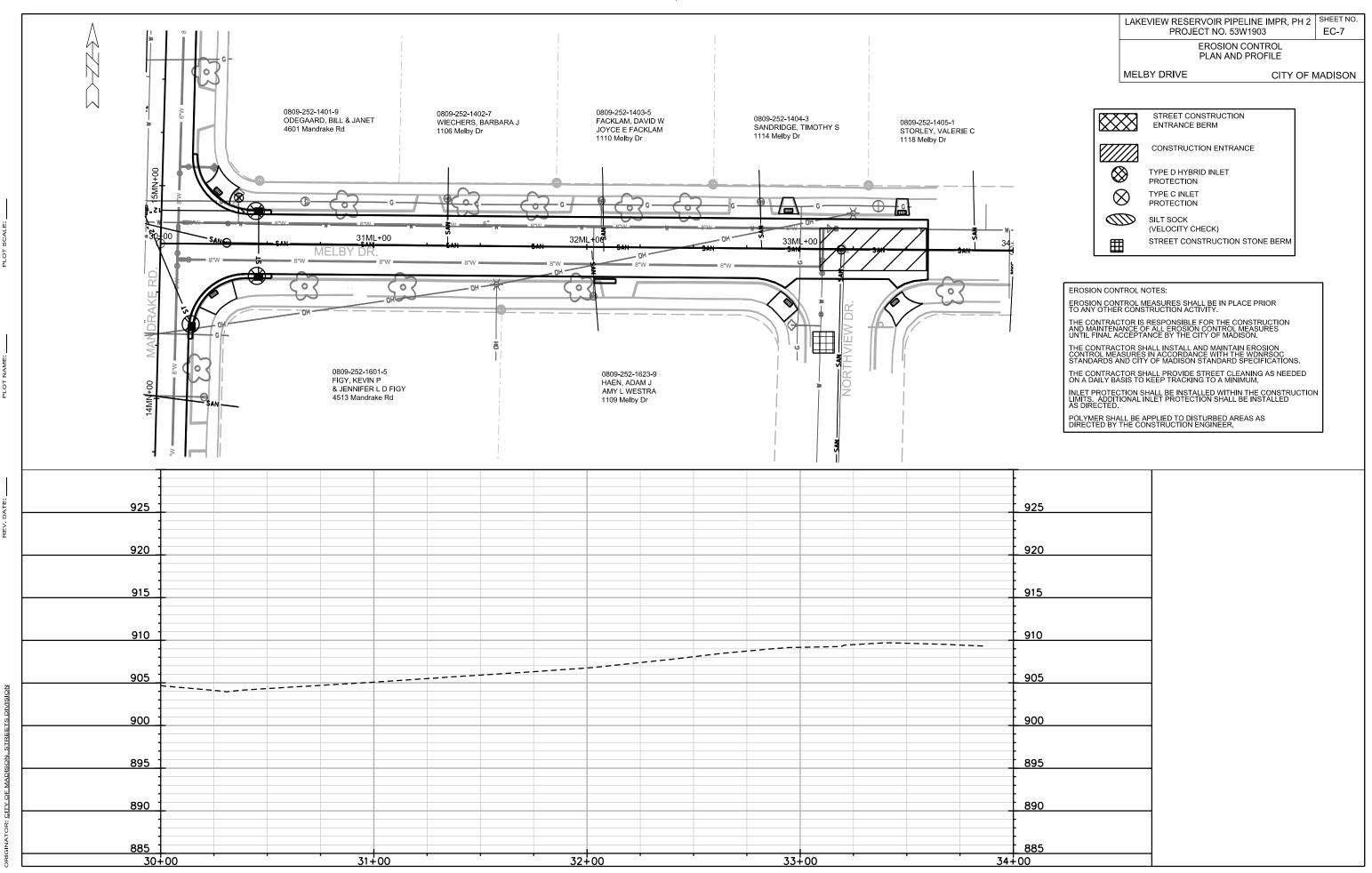


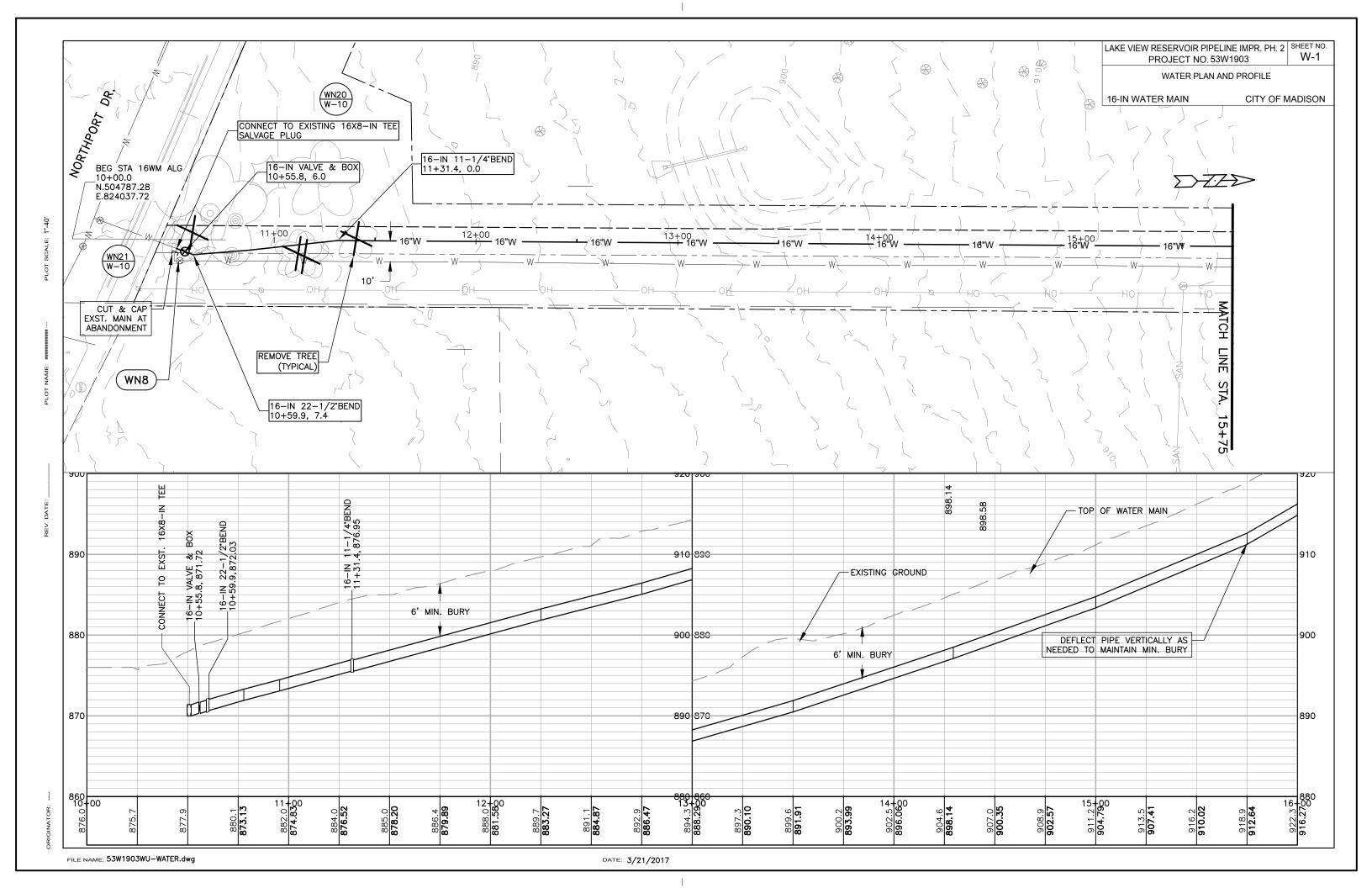


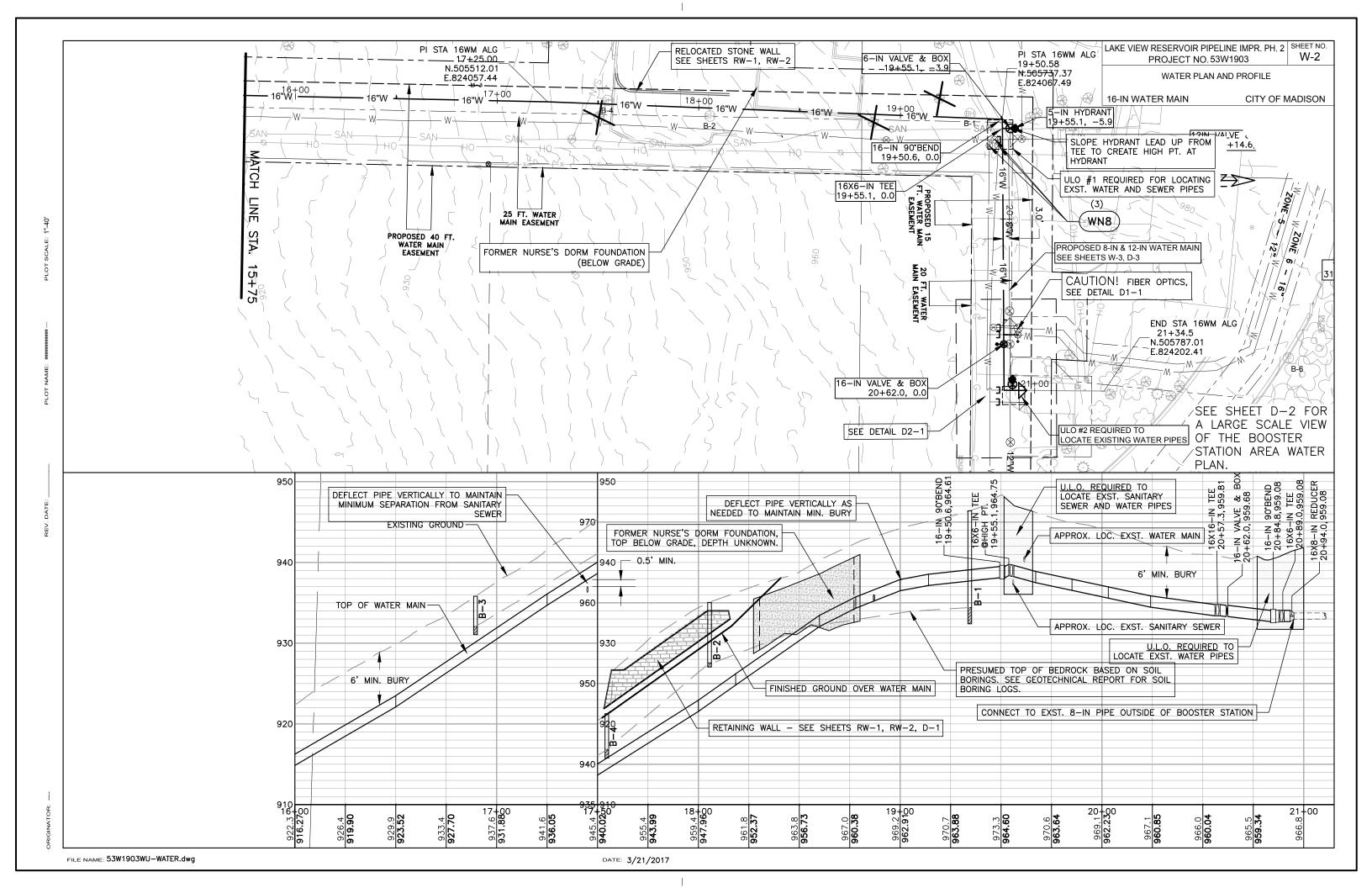


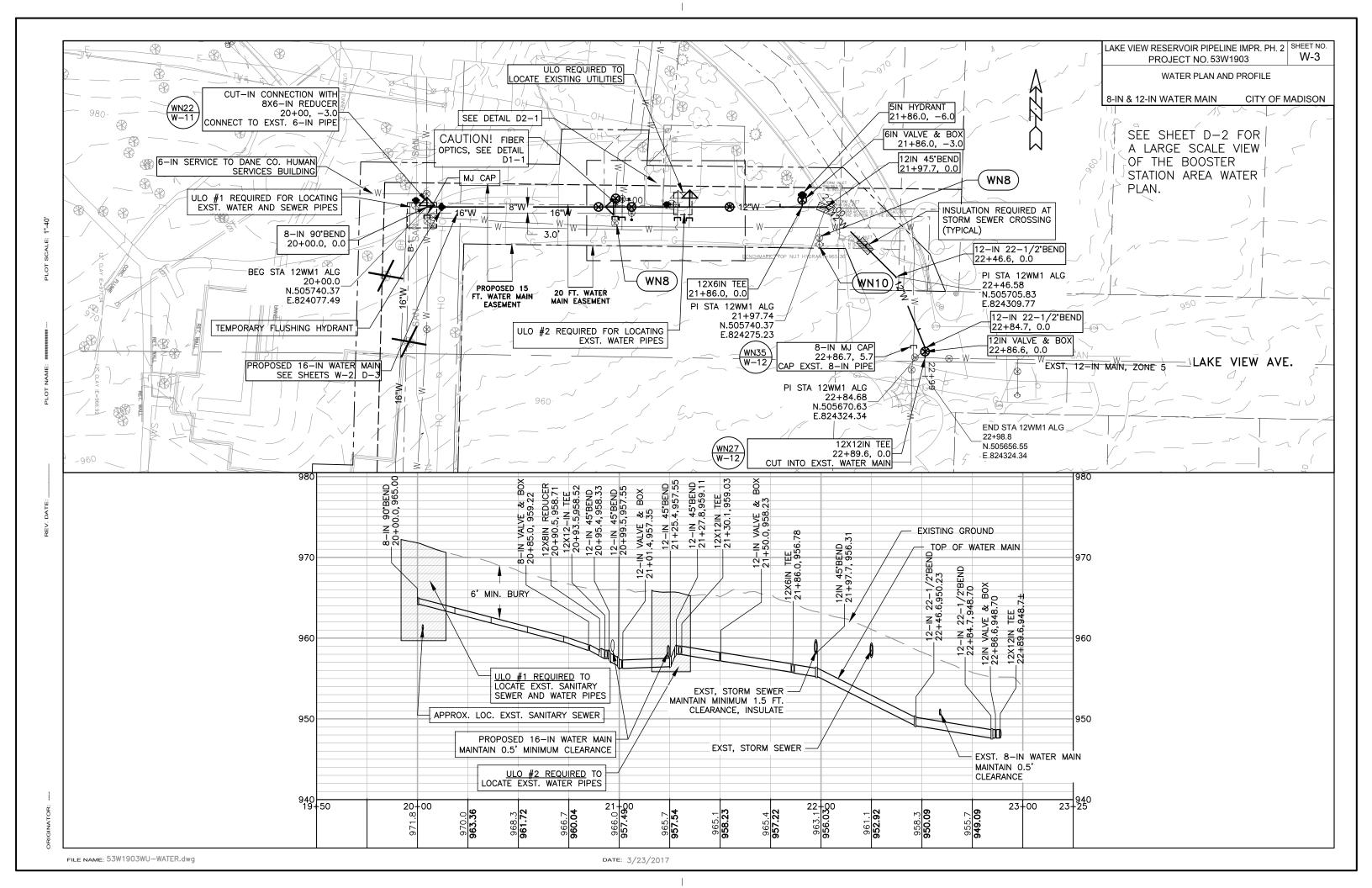


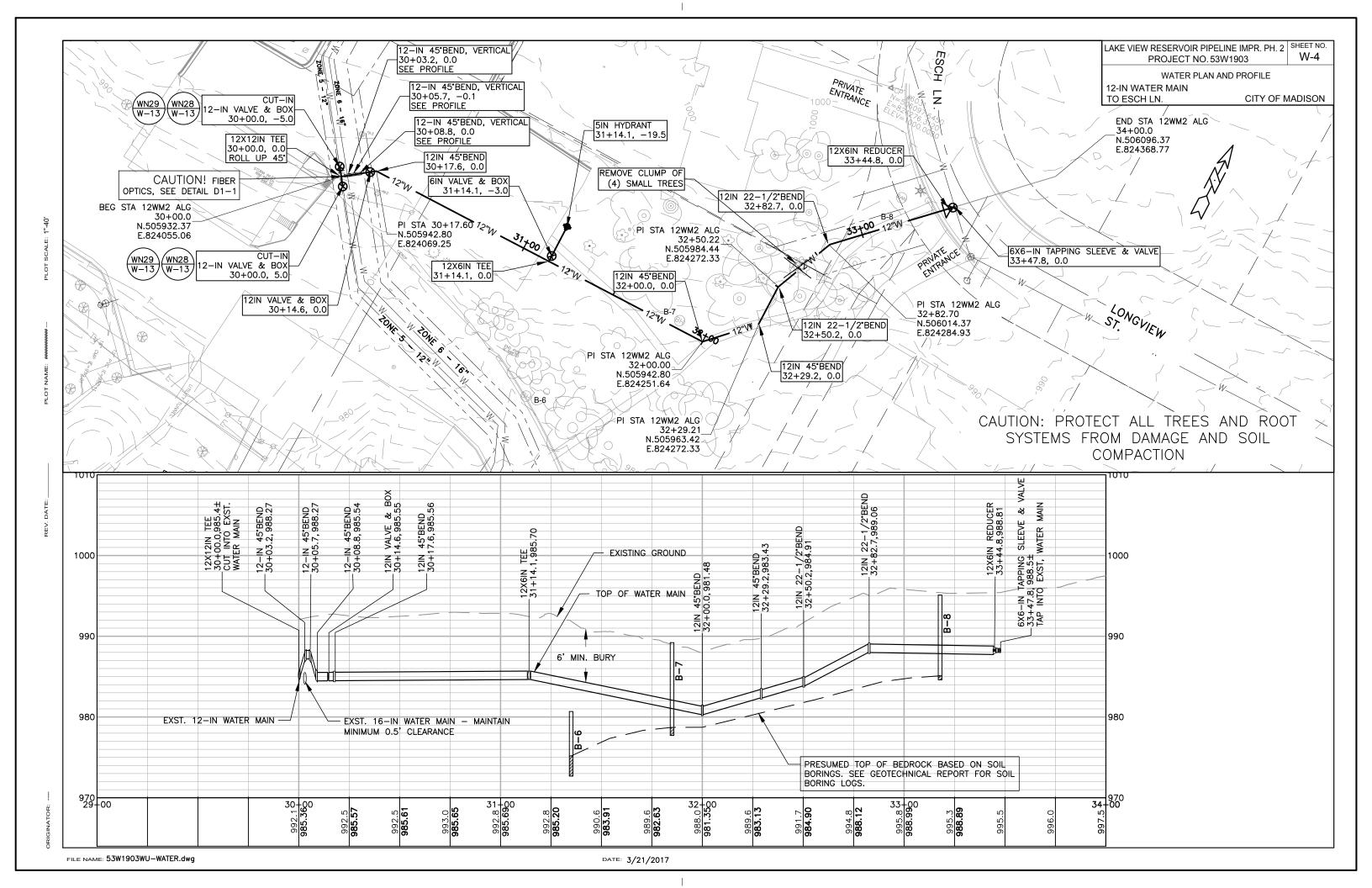


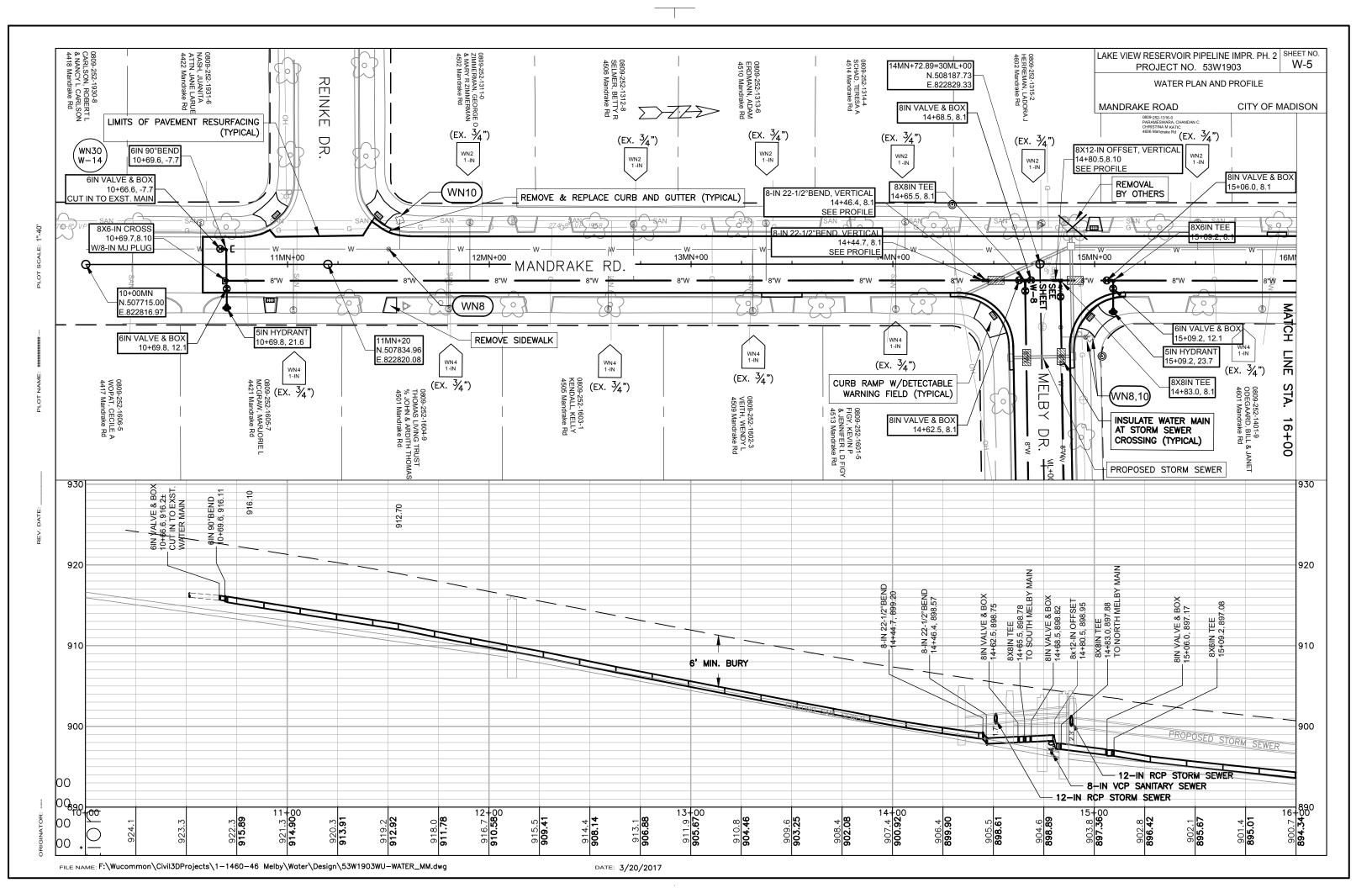


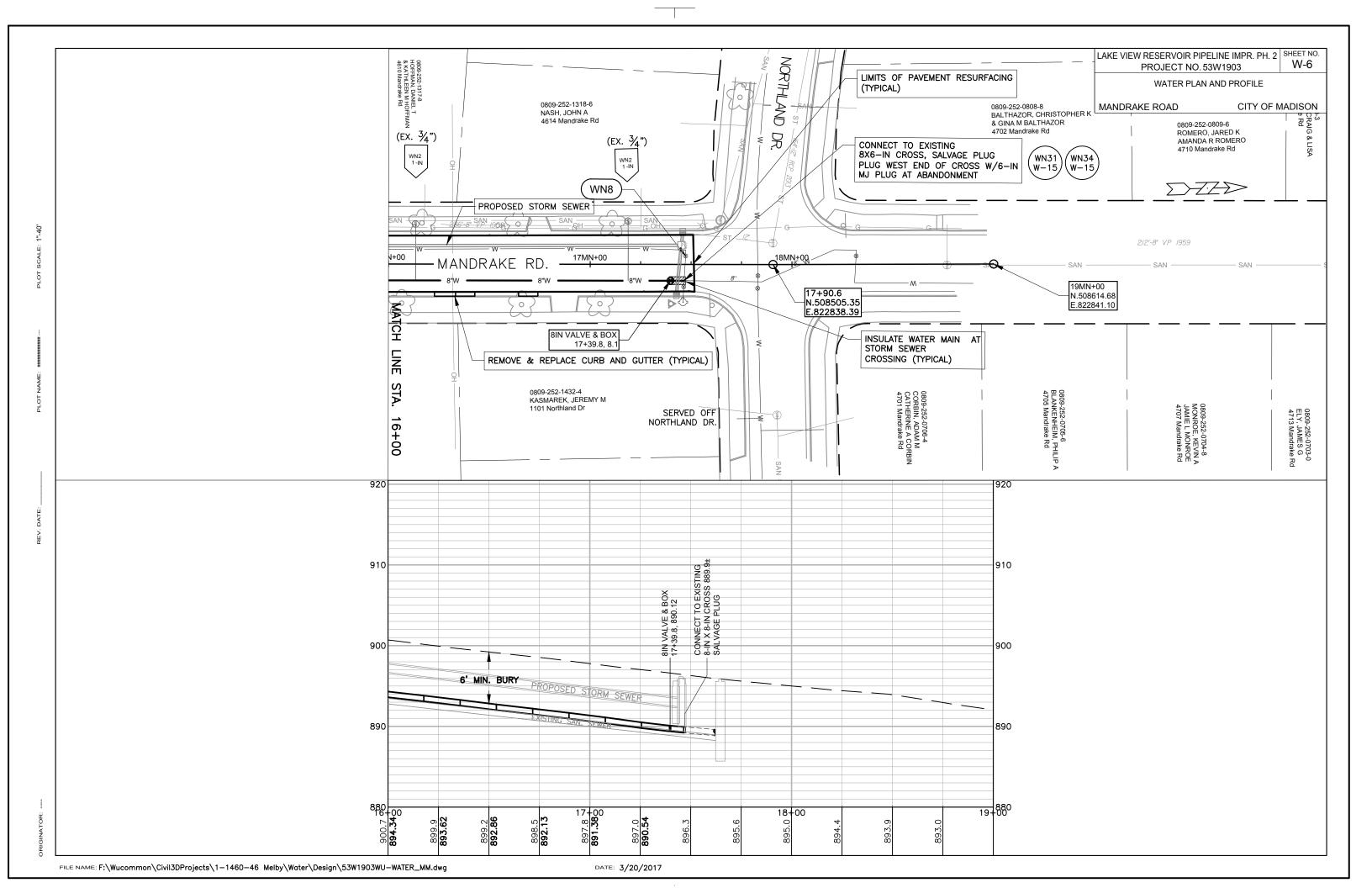


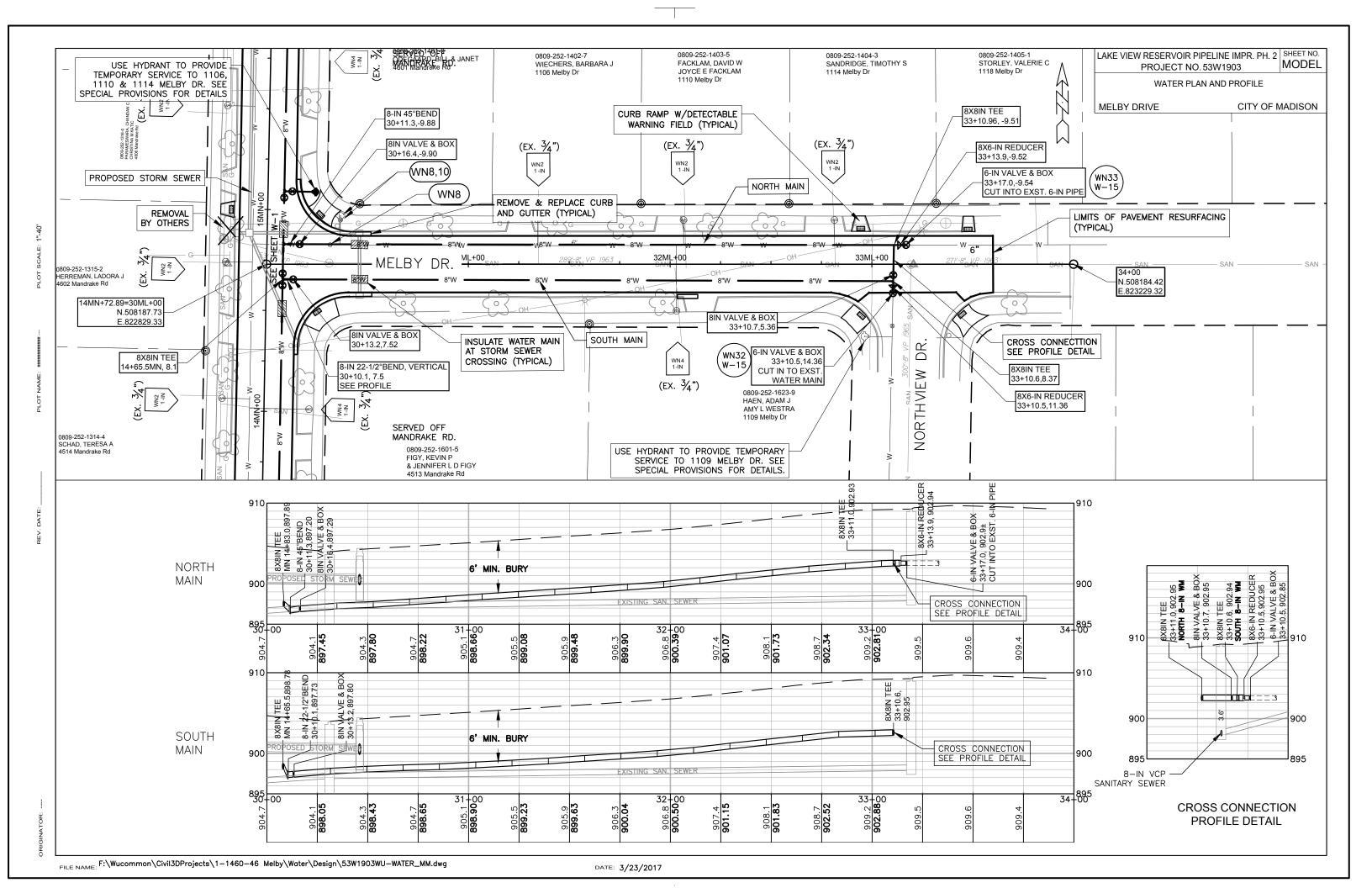


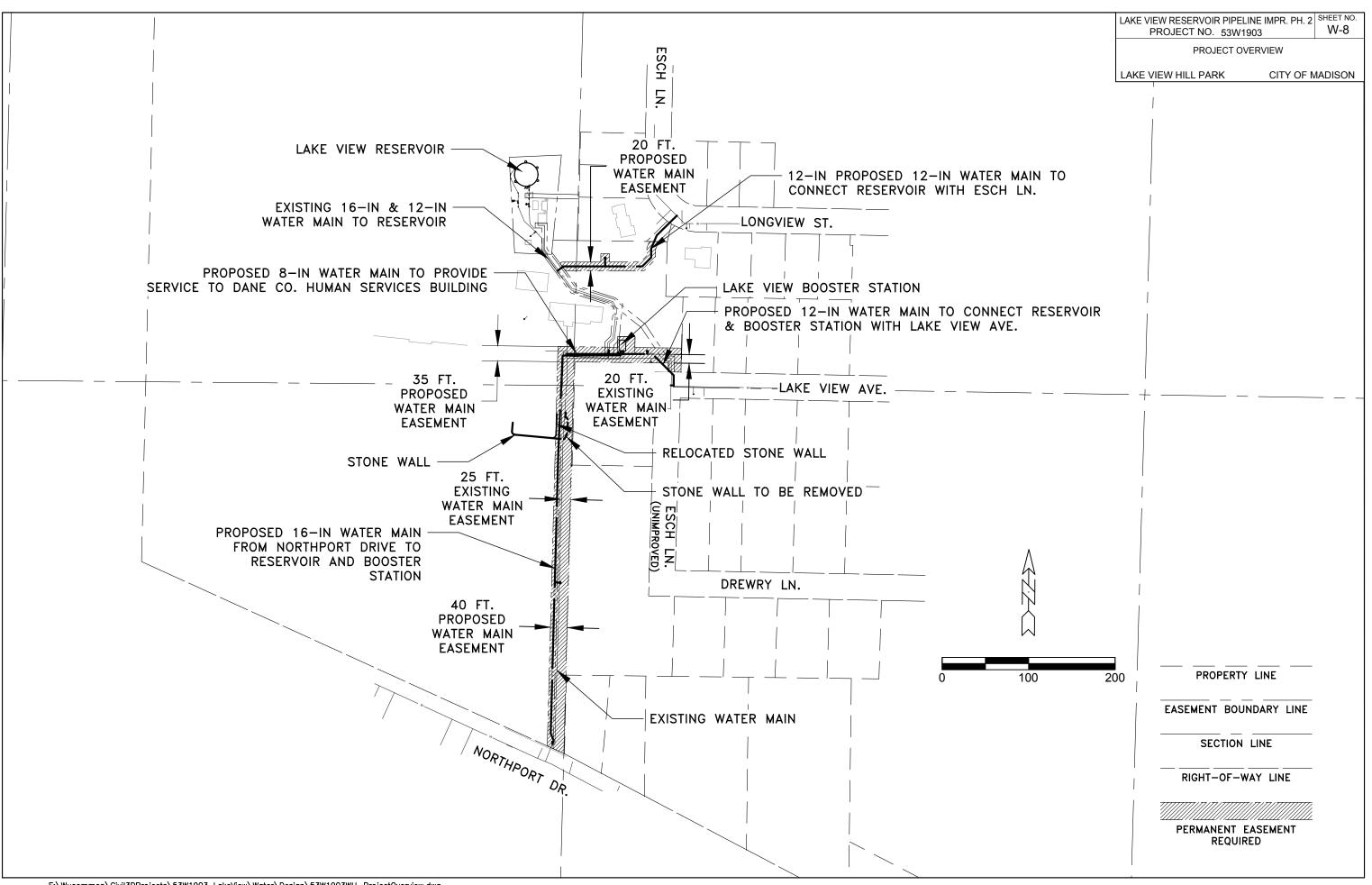


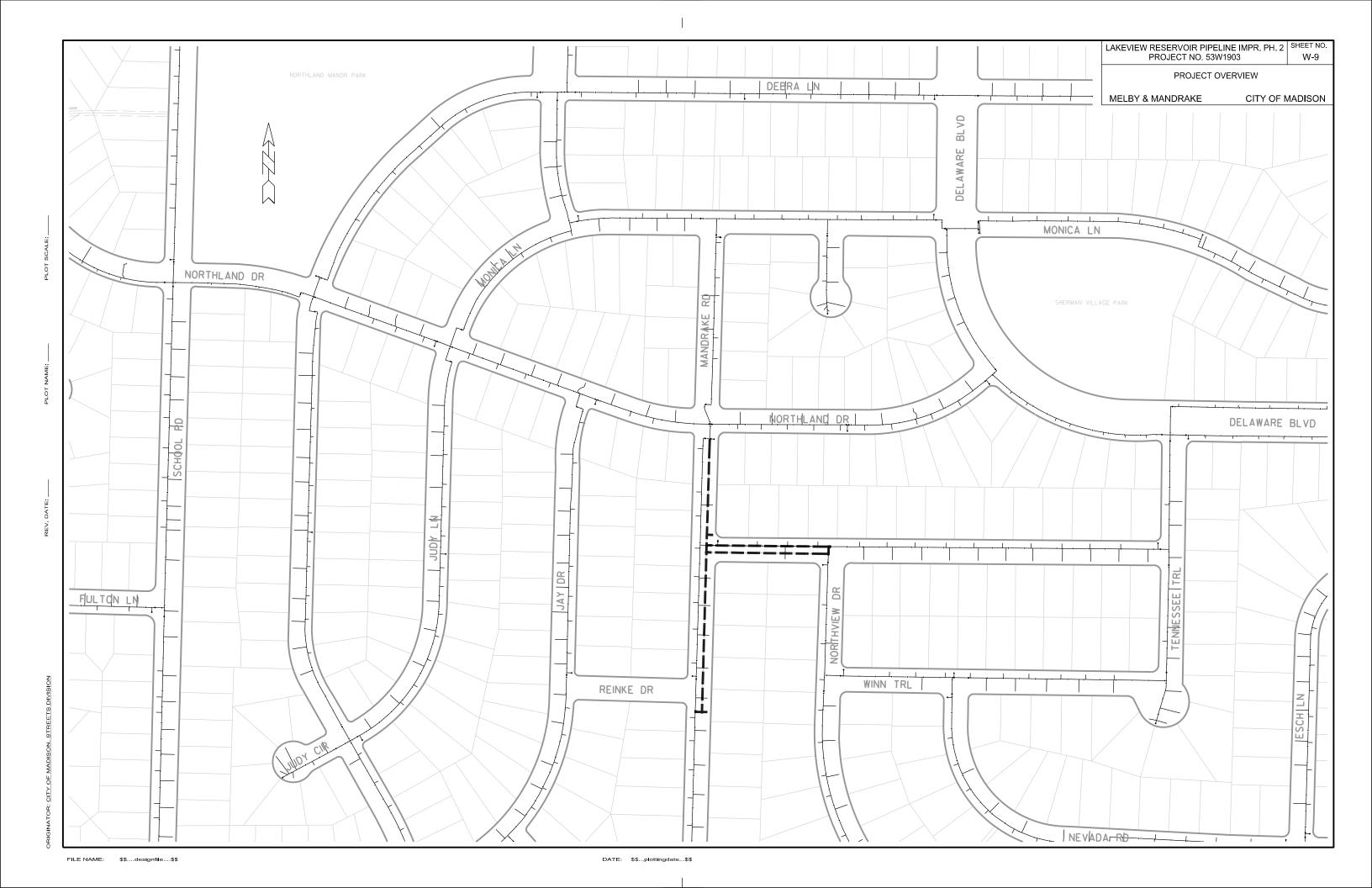


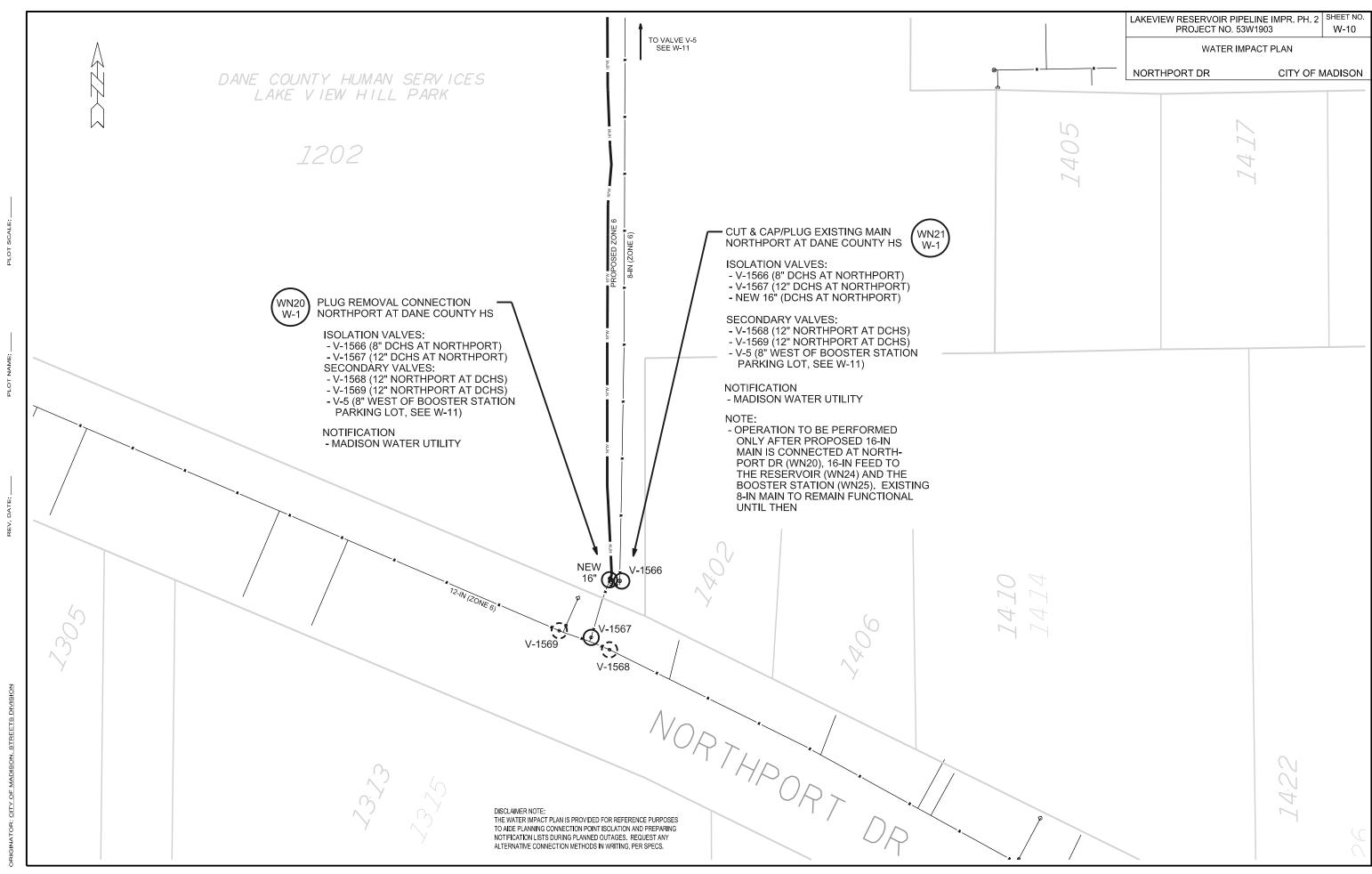


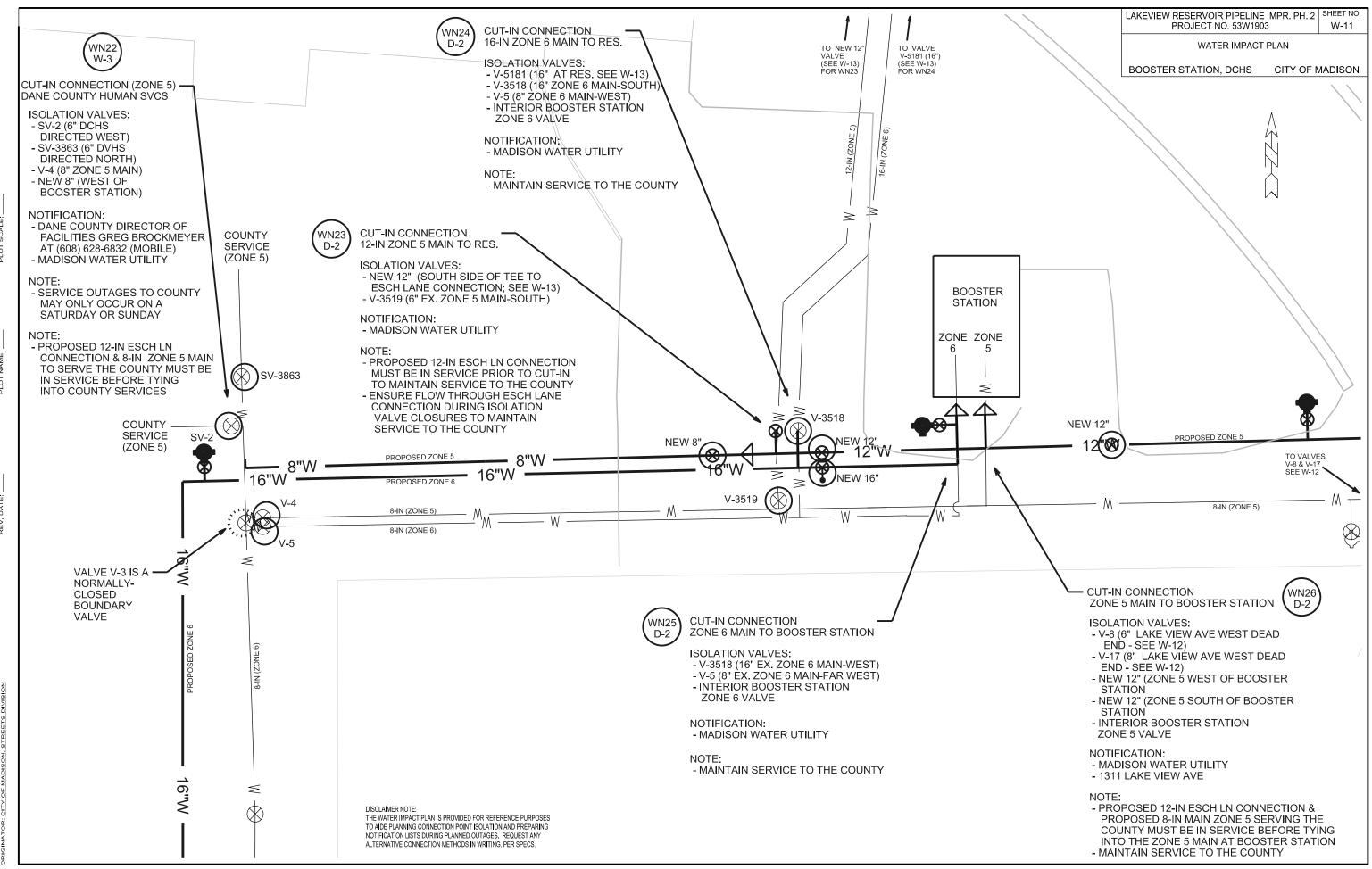


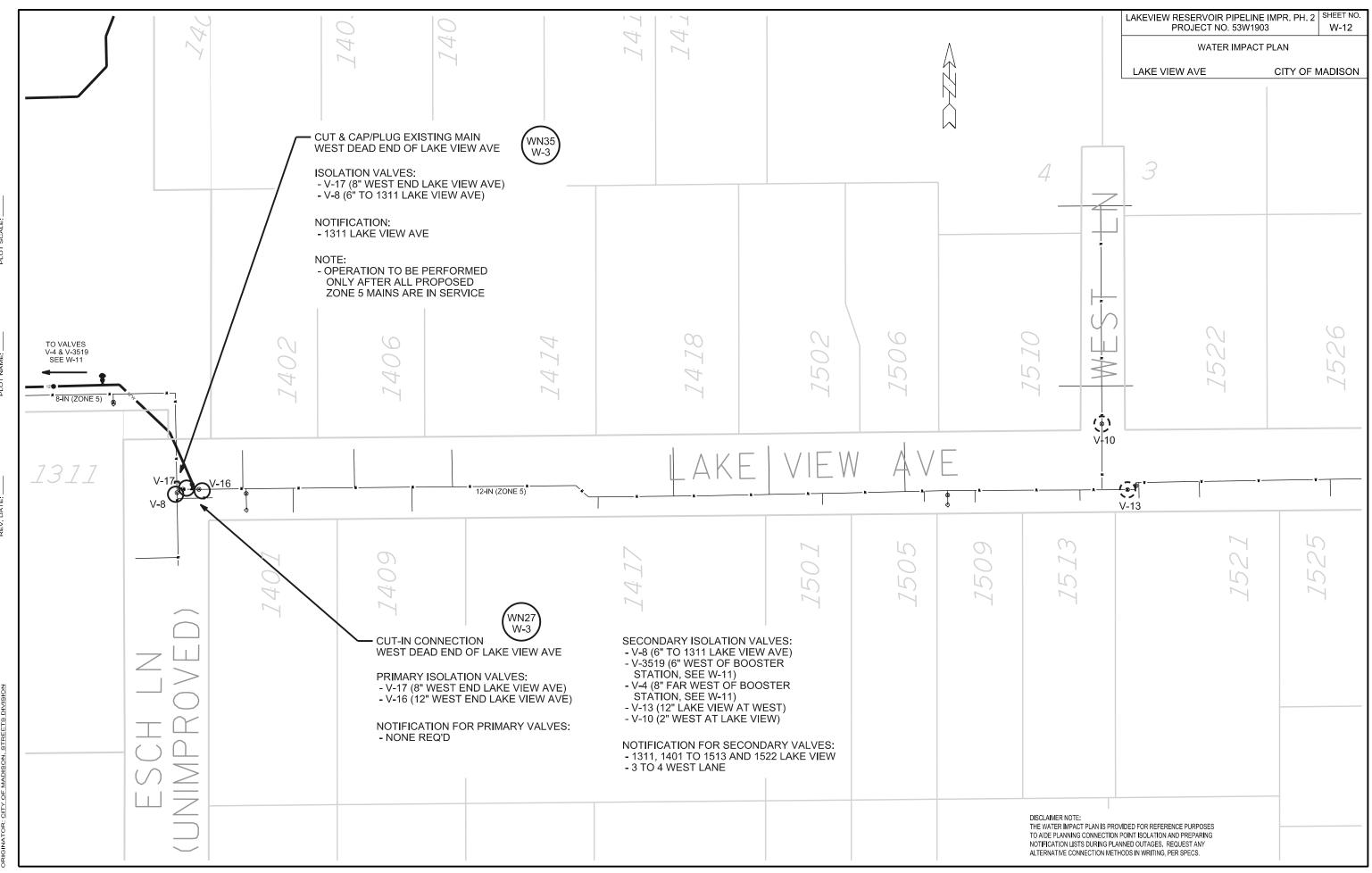






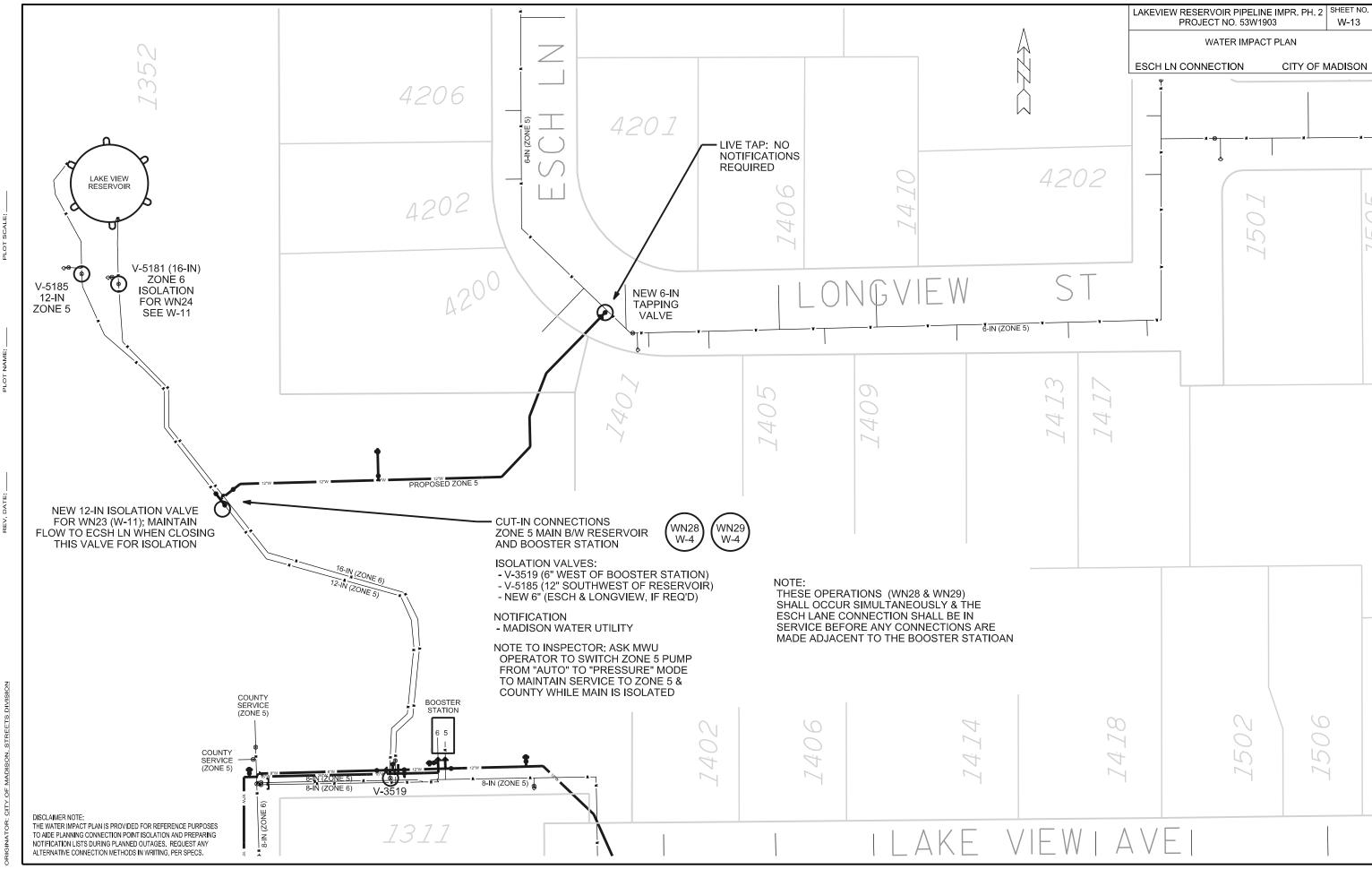






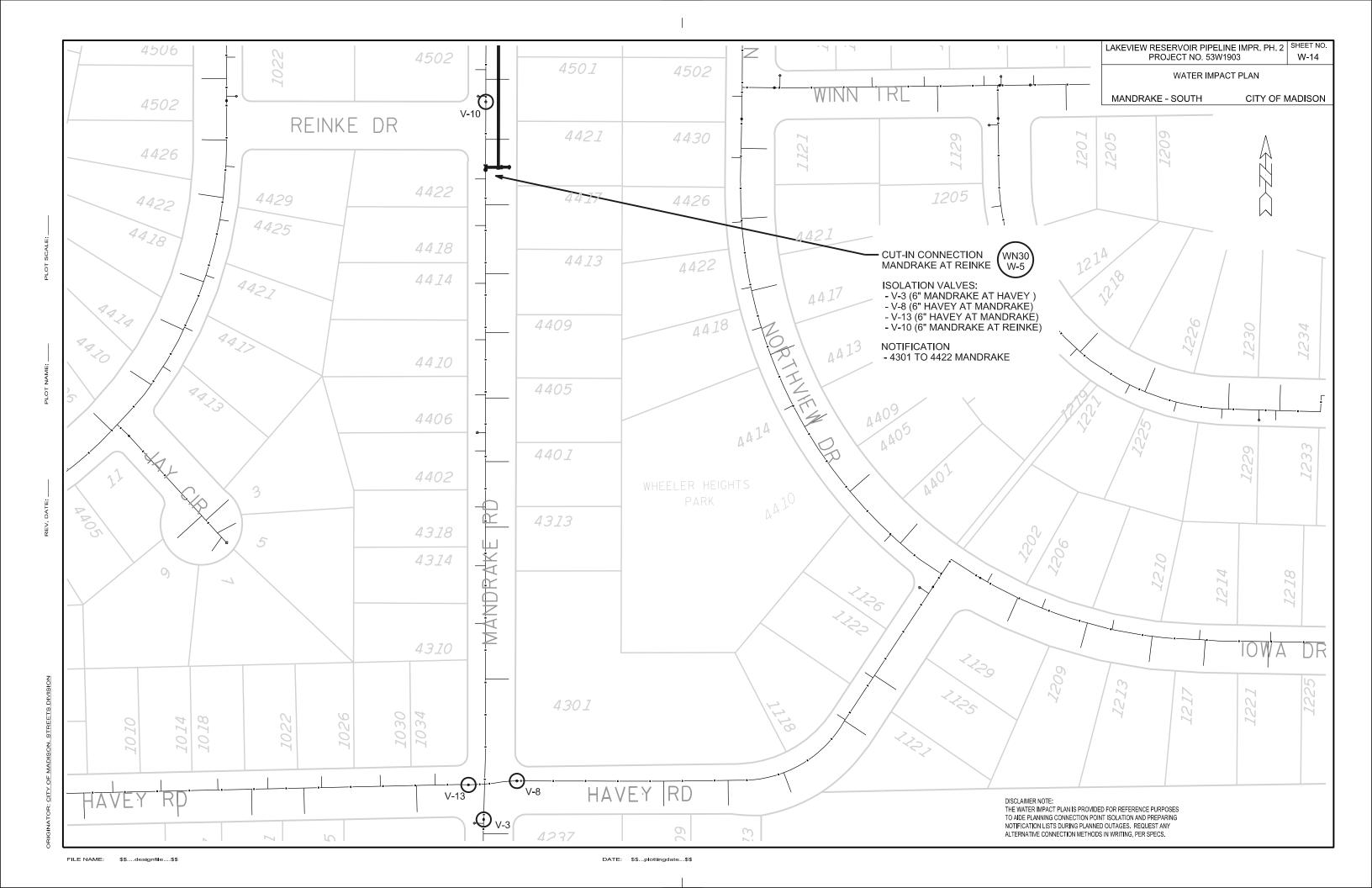
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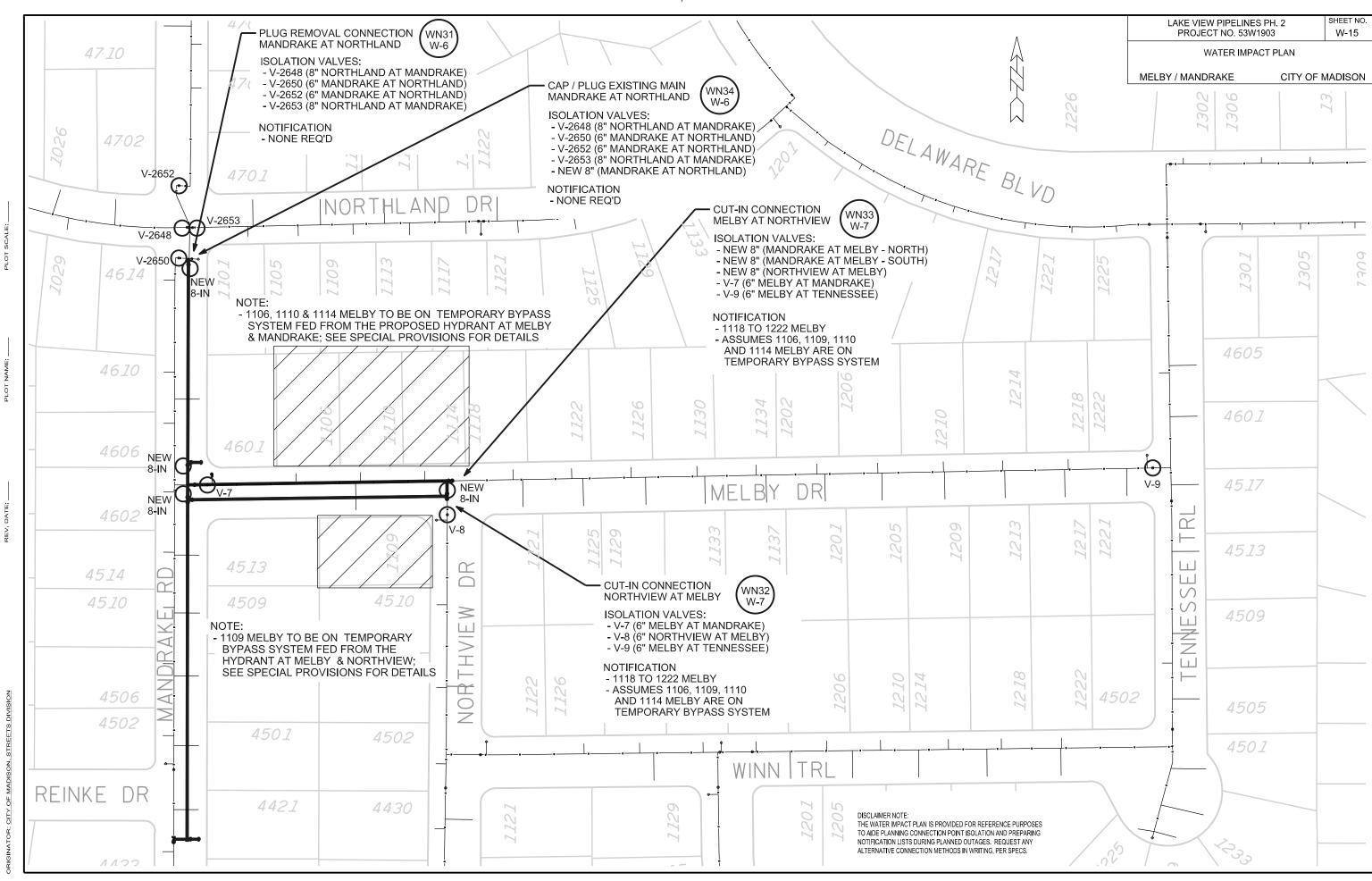
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CONSTRUCTION NOTES:

- 1. CONSTRUCT NEW WATER MAIN 6.0' BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. INSULATE MAIN WITH POLYSTYRENE BOARD AT UTILITY CROSSINGS OR OTHER AREAS IDENTIFIED BY ENGINEER AS HAVING INADEQUATE
- 2. VERIFY SIZE OF EXISTING WATER SERVICES AND RECONNECT SERVICES
- 3. MINIMIZE DISRUPTION OF SERVICE TO EXISTING CUSTOMERS. NOTIFY PER CONTRACT REQUIREMENTS OF ANY PLANNED WATER OUTAGE.
- 4. THE EXISTING UTILITIES SHOWN ON THIS PLAN REPRESENT THE BEST INFORMATION AVAILABLE TO THE WATER UTILITY AT THE TIME OF PLAN PREPARATION. CONTRACTOR IS RESPONSIBLE FOR HAVING EACH UTILITY LOCATED PRIOR TO COMMENCING WORK.

ESTIMATE OF MATERIALS SUPPLIED BY CONTRACTOR:

ESTIMATE OF MATERIALS IS FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF.

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8-IN WATER; 8-IN SANITARY

(2) 8-IN WATER

1 - 6-IN X 6-IN TAPPING SLEEVE W/VALVE & BOX

88-FT 6-IN PIPE 1400-FT 8-IN PIPE 540-FT 12-IN PIPE 1050-FT 16-IN PIPF

3385-FT POLYWRAP 56-FT 2-IN INSULATION (7 SHEETS)

- 9 6-IN VALVE & BOX 9 8-IN VALVE & BOX 7 - 12-IN VALVE & BOX 2 - 16-IN VALVE & BOX
- 1 6-IN 90° BEND
- 4 8-IN 45° BEND - 8-IN 90° BEND - 8-IN X 6-IN TEE
- 1 8-IN X 6-IN CROSS 2 8-IN X 6-IN REDUCER - 8-IN X 12-IN OFFSET - 8-IN MJ PLUG

MATERIALS SUPPLIED BY CITY:

ESTIMATE OF MATERIALS SALVAGED:

WATER UTILITY ULO SCHEDULE:

LT

RT

7 - 8-IN MJ CAP

NONE

19"16WM"+50

20"16WM"+85

- 4 12-IN 22-1/2° BEND 10 12-IN 45° BEND
- 1 12-IN X 6-IN REDUCER 2 12-IN X 8-IN REDUCER
- 4 12-IN X 12-IN TEE
- 1 16-IN 11/14° BEND
- 1 16-IN 22-1/2° BEND 2 16-IN 90° BEND

SHEET NO.

W-2, W-3

W-2, W-3, D-2

REMARKS

AT 16-IN 90º BEND TO EAST

AT BOOSTER STATION

- 2 16-IN X 6-IN TEE 1 16-IN X 16-IN TEE
- 6 5-IN HYDRANT (PERMANENT) 2 5-IN HYDRANT (TEMP FLUSHING)

1-IN COPPER SERVICE (AS NEEDED)

MEMBFA

WN1 REPLACE THE EXISTING LEAD SERVICE WITH A NEW COPPER SERVICE.

WN2 EXTEND AND RECONNECT THE EXISTING COPPER SERVICE TO THE NEW WATER MAIN.

WN3 EXISTING SERVICE TO BE ABANDONED WHEN THE WATER MAIN IS CUT OFF.

WN4 DISCONNECT FROM THE OLD WATER MAIN AND RECONNECT THE EXISTING COPPER WATER SERVICE LATERAL TO THE NEW

WN5 RELOCATE THE EXISTING FIRE HYDRANT.

WN6 ABANDON WATER VALVE ACCESS STRUCTURE.

WN7 FURNISH AND INSTALL THE NEW TOP SECTION FOR THE WATER ACCESS STRUCTURE.

WN8 ABANDON THE VALVE BOX.

WN9 FURNISH THE DITCH, COMPACTION, AND ALL MATERIALS AND LABOR FOR THE INSTALLATION OF NEW SERVICE LATERAL.

WN10 REMOVE AND SALVAGE EXISTING HYDRANT

WN11 REPLACE THE EXISTING COPPER SERVICE WITH A COPPER

WN20+ SEE WATER IMPACT PLAN FOR CONNECTION POINT ISOLATION AND WATER SHUT-OFF NOTFICATION INFORMATION.

> TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND **FACILITIES BEFORE YOU** DIG IN WISCONSIN

CALL DIGGERS HOTLINE TOLL FREE 811 OR 1-800-242-8511 FAX-A-LOCATE 1-800-338-3860 TDD (FOR HEARING IMPAIRED) 1-800-542-2289

> WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.



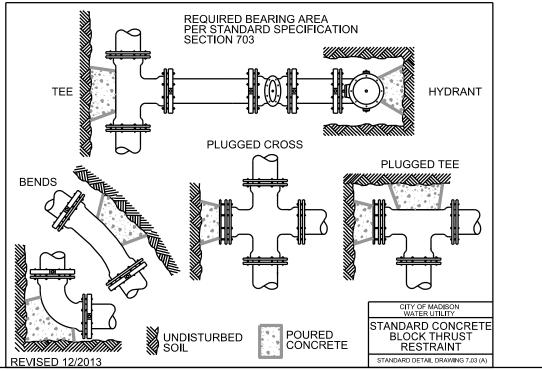
SISTEMS INTE **DISCLAIMER NOTE:** UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING WORK

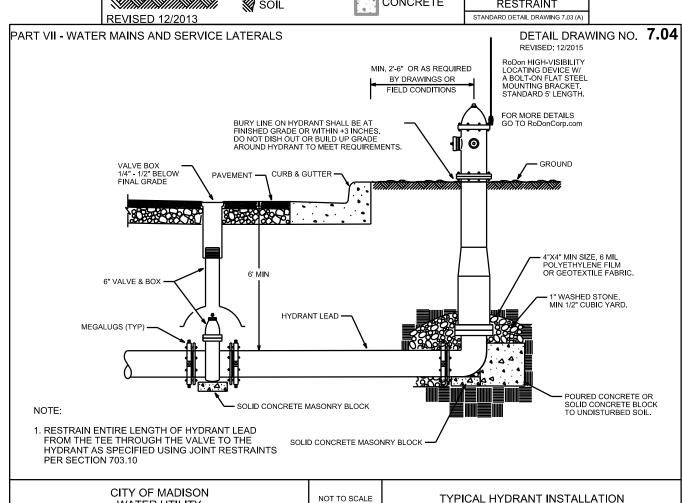
LAKEVIEW RESERVOIR PIPELINE IMPR. PH. 2 SHEET NO. PROJECT NO. 53W1903

WATER ESTIMATE OF MATERIALS

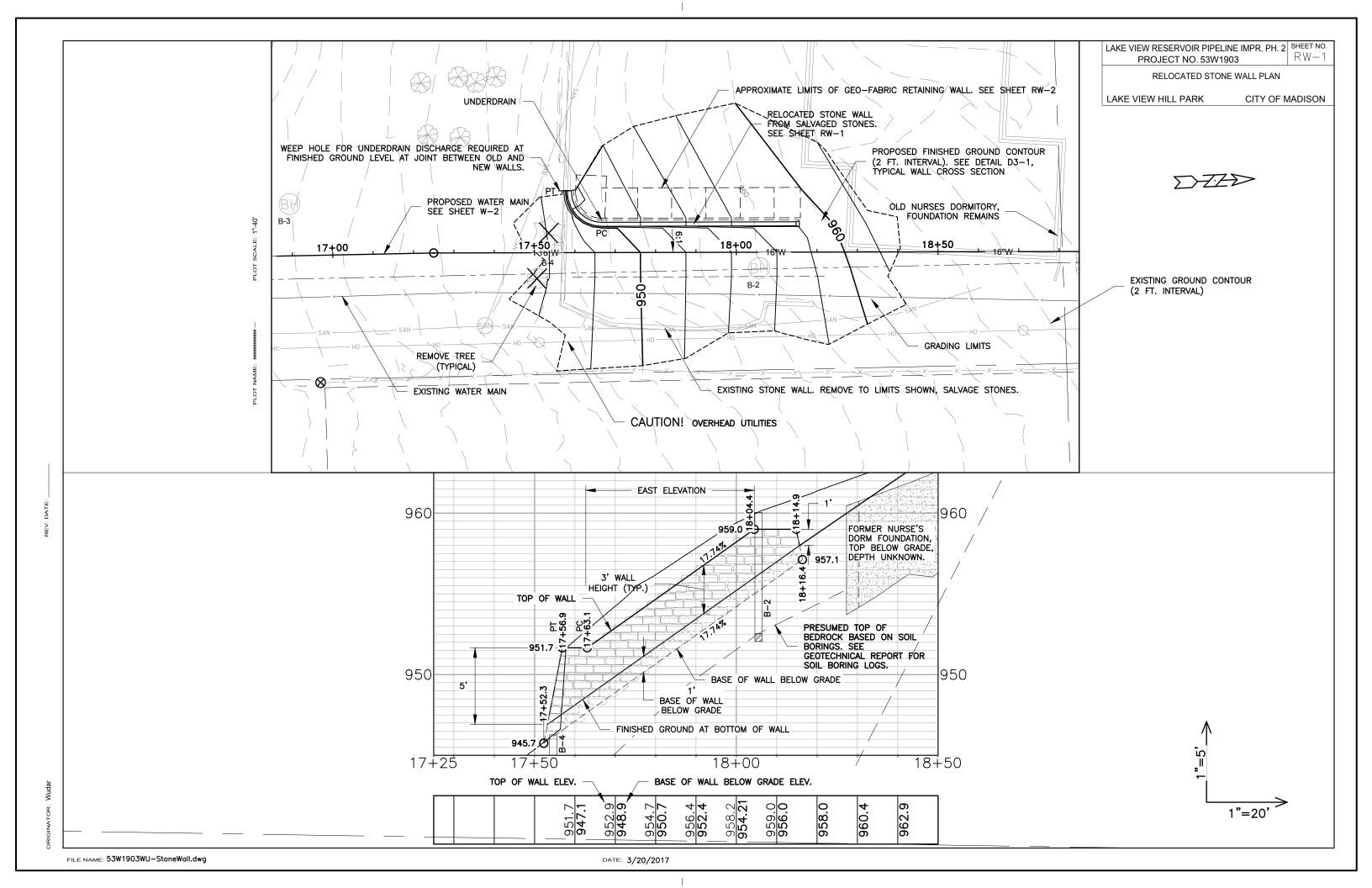
MADISON WATER UTILITY

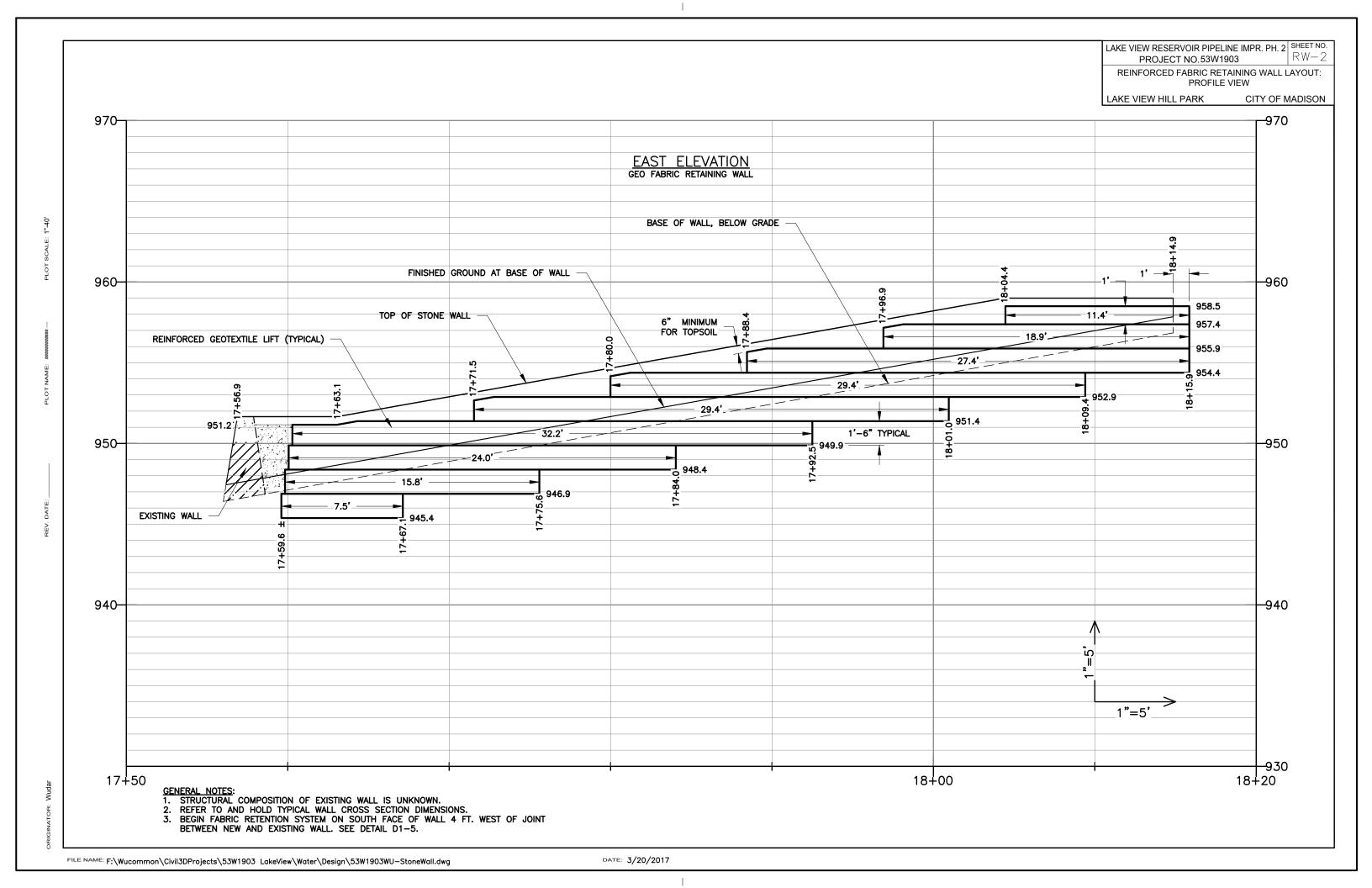
CITY OF MADISON

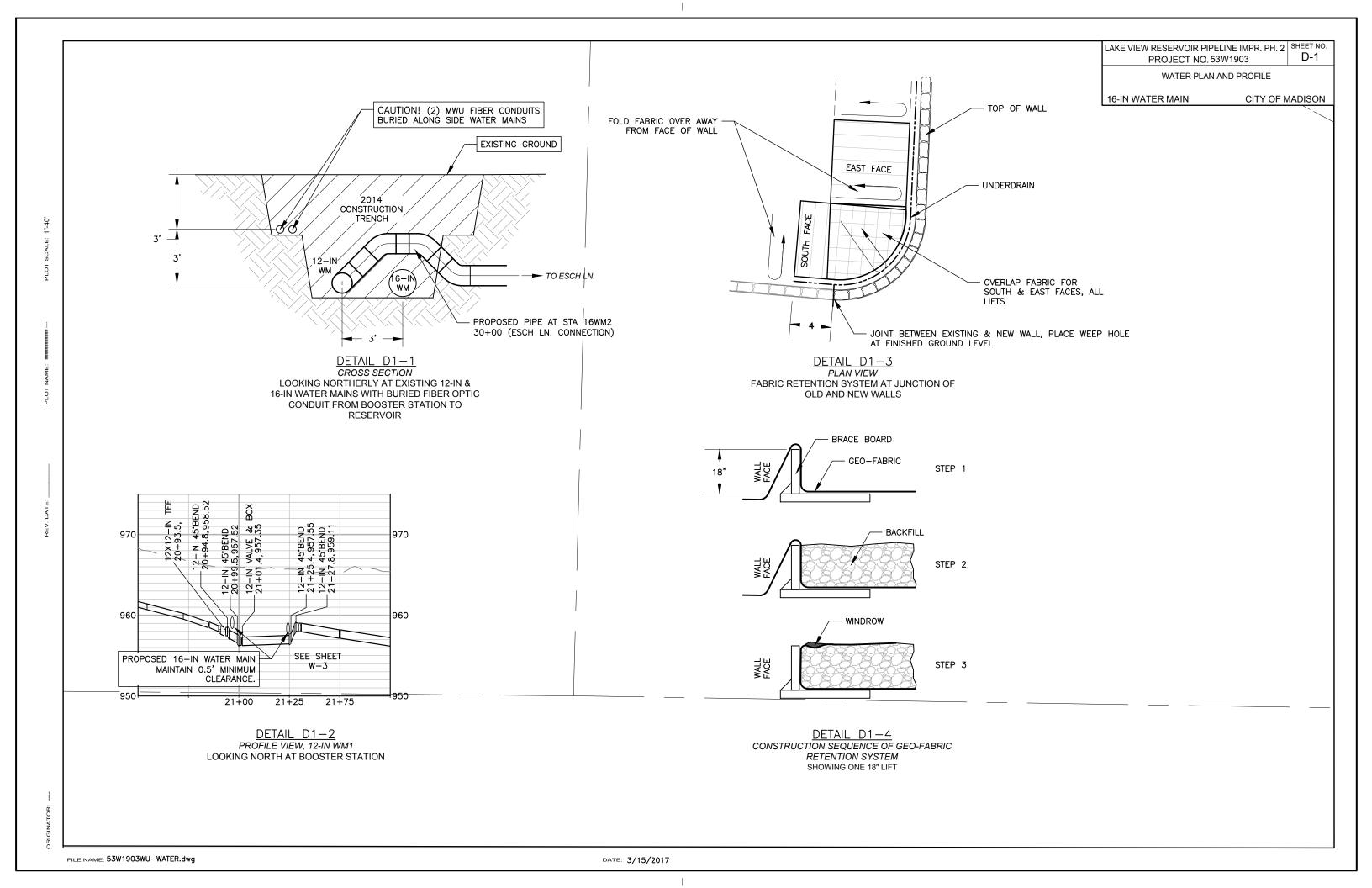


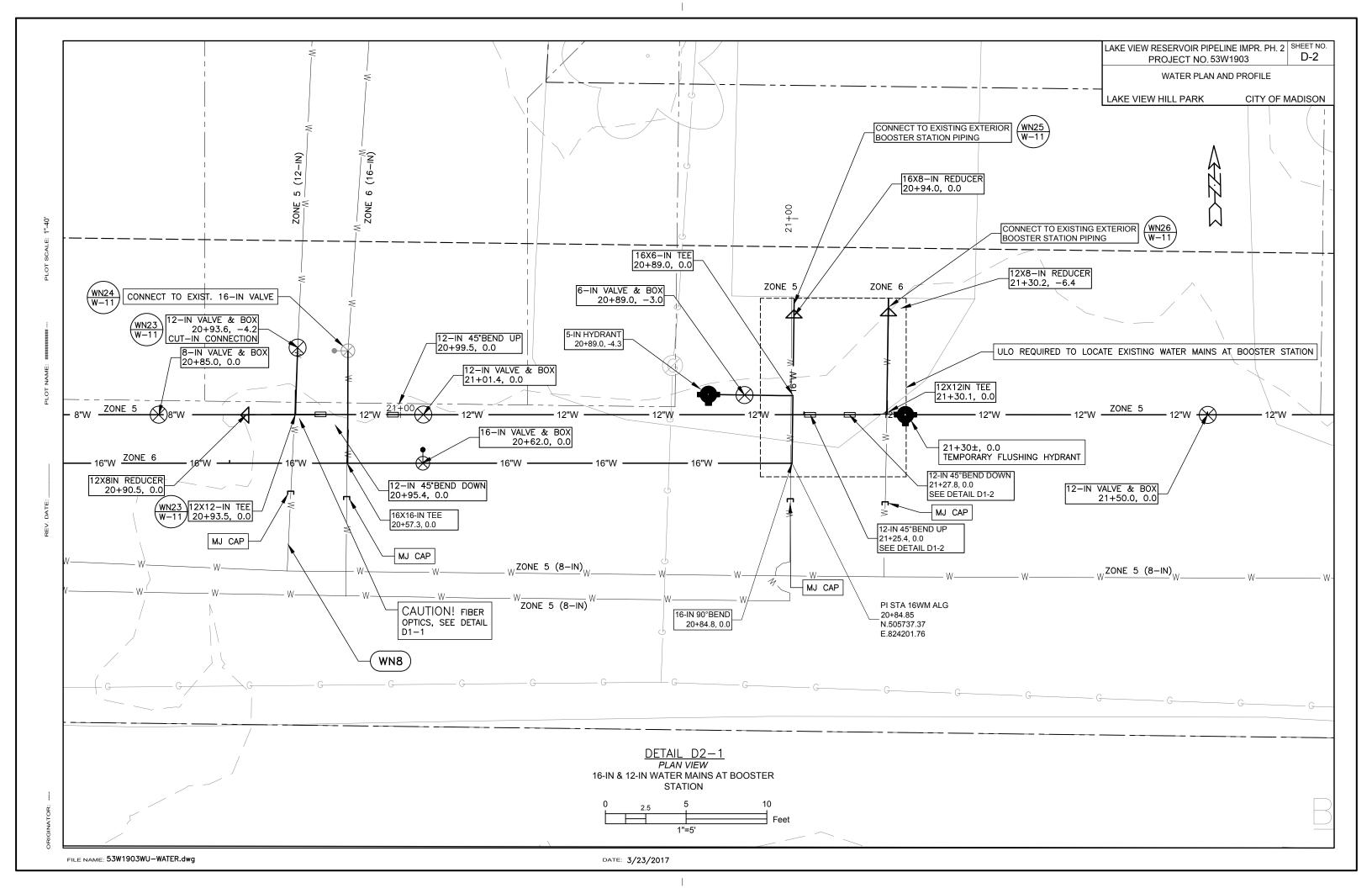


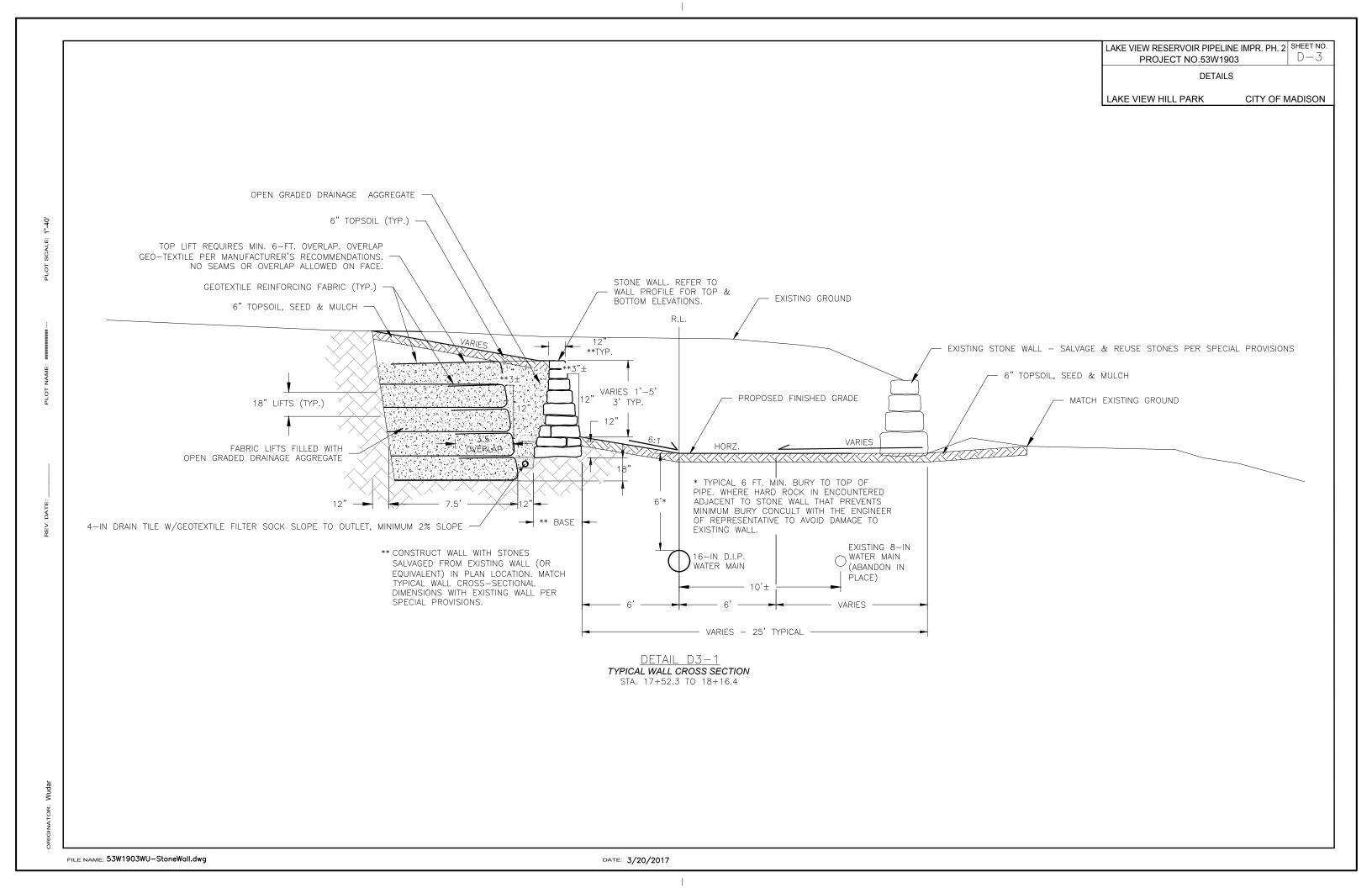
WATER UTILITY

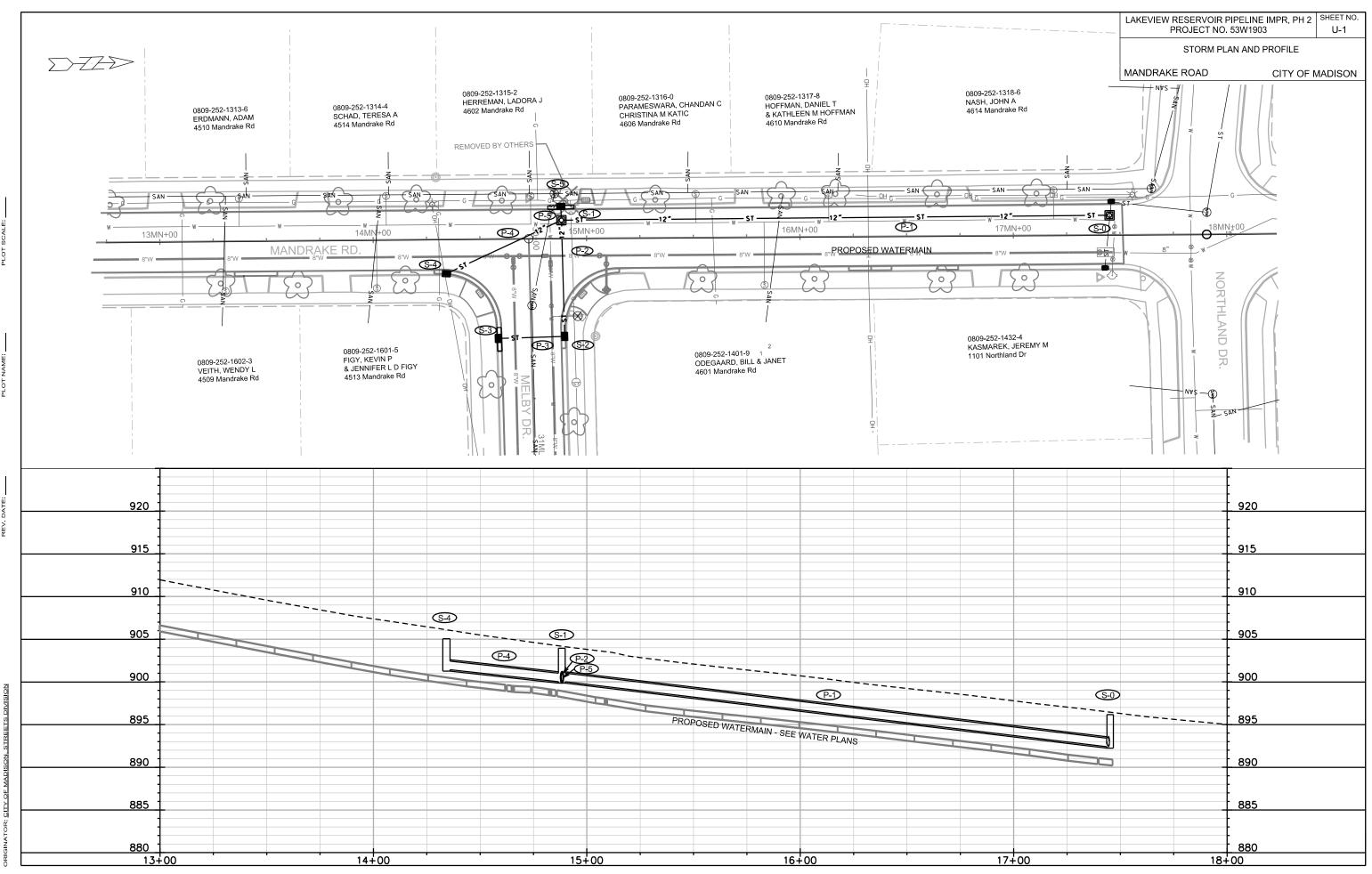












LT-15.24

H INLET

904.12

900.06 4.06 W/R-3067-7004-V

LAKEVIEW RESERVOIR PIPELINE IMPR, PH 2 SHEET NO.

PROJECT NO. 53W1903 U-2

STORM SEWER SCHEDULE

MANDRAKE ROAD CITY OF MADISON

PROPOSED STRUCTURES						<u>PIPES</u>												
STRUC.	STATION	LOCATION	TYPE	TOP OF	E.I.	DEPTH	NOTES	PIPE	FROM	TO	DISCH.	INLET	PLAN (PAY)	PIPE	SLOPE	PIPE	TYPE	NOTES
NO.		(OFFSET)		CASTING				NO.	(DNSTM)	(UPSTM)	E.I.	E.I.	LGTH (FT)	LGTH (FT)	(%)	SIZE		
MANDRAKE ROAD						MANDRAK	E ROAD											
S-0	17+45.19	LT-9.47	3X3 SAS	896.17	892.40	3.77	W/R-1550-0054; (1)	P-1	S-0	S-1	892.4	900.02	257.0	254.0	3.00%	12"	RCP	(1)
S-1	14+88.27	LT-8.80	3X3 SAS	903.85	900.02	3.83	W/R-1550-0054	P-2	S-1	S-2	900.02	900.27	54.5	51.5	0.50%	12"	RCP	
S-2	14+89.42	RT-45.65	H INLET	903.93	900.27	3.66	W/R-3067-7004-V	P-3	S-2	S-3	900.27	900.57	31.0	29.0	1.00%	12"	RCP	
S-3	14+58.22	RT-46.41	H INLET	904.93	900.57	4.36	W/R-3067-7004-V	P-4	S-1	S-4	900.02	901.42	59.5	56.0	2.50%	12"	RCP	
S-4	14+34.21	RT-15.83	H INLET	905.50	901.42	4.08	W/R-3067-7004-V	P-5	S-1	S-5	900.02	900.06	6.5	4.0	1.00%	12"	RCP	

NOTE:

PLAN LENGTH IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL

LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING

PIPE LENGTH.

SPECIFIC NOTES:

S-5

14+88.03

(1) MATCH EXISTING PIPE INVERT

STANDARD NOTES:

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES

- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS's.
- TOP OF CONCRETE ROOF (TR) IS 1.25' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.
- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT ERIC DUNDEE OF CITY ENGINEERING AT (608) 266-4913 FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608) 264-9275, OR EMAIL SHOP DRAWINGS TO EDUNDEE@CITYOFMADISON.COM

