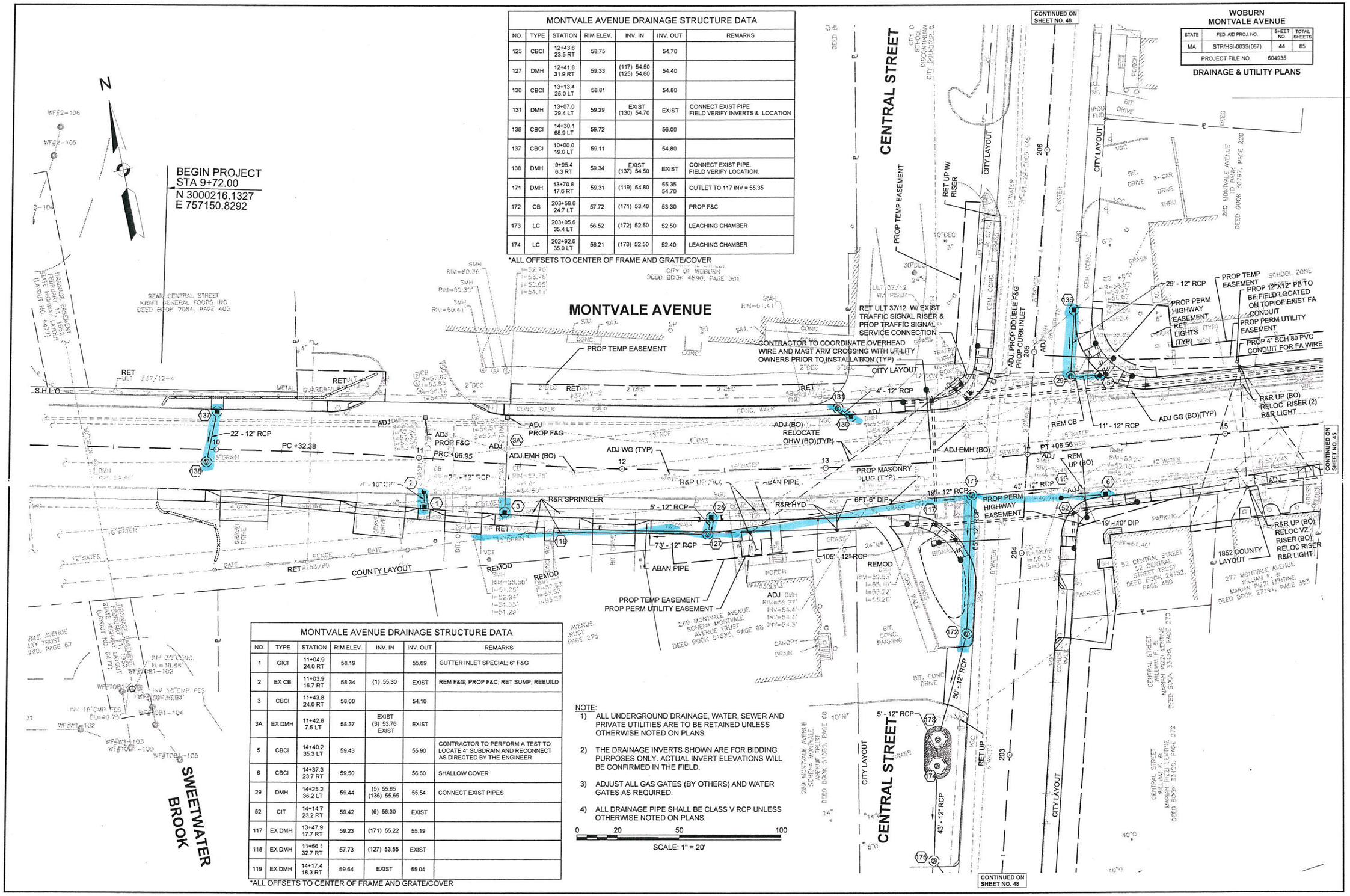
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP/HSI-003S(087)	44	85
PROJECT FILE NO.	604935		

WOBURN
MONTVALE AVENUE

DRAINAGE & UTILITY PLANS



MONTVALE AVENUE DRAINAGE STRUCTURE DATA

NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
125	CBCI	12+43.6 23.5 RT	58.75		54.70	
127	DMH	12+41.8 31.9 RT	59.33	(117) 54.50 (125) 54.60	54.40	
130	CBCI	13+13.4 25.0 LT	58.81		54.80	
131	DMH	13+07.0 29.4 LT	59.29	EXIST (130) 54.70	EXIST	CONNECT EXIST PIPE FIELD VERIFY INVERTS & LOCATION
136	CBCI	14+30.1 68.9 LT	59.72		56.00	
137	CBCI	10+00.0 19.0 LT	59.11		54.80	
138	DMH	9+95.4 6.3 RT	59.34	EXIST (137) 54.50	EXIST	CONNECT EXIST PIPE. FIELD VERIFY LOCATION.
171	DMH	13+70.8 17.6 RT	59.31	(119) 54.80	55.35 54.70	OUTLET TO 117 INV = 55.35
172	CB	203+58.6 24.7 LT	57.72	(171) 53.40	53.30	PROP F&C
173	LC	203+05.6 35.4 LT	56.52	(172) 52.50	52.50	LEACHING CHAMBER
174	LC	202+92.6 35.0 LT	56.21	(173) 52.50	52.40	LEACHING CHAMBER

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER

MONTVALE AVENUE DRAINAGE STRUCTURE DATA

NO	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
1	GICI	11+04.9 24.0 RT	58.19		55.69	GUTTER INLET SPECIAL; 6" F&G
2	EX CB	11+03.9 16.7 RT	58.34	(1) 55.30	EXIST	REM F&G; PROP F&C; RET SUMP; REBUILD
3	CBCI	11+43.8 24.0 RT	58.00		54.10	
3A	EX DMH	11+42.8 7.5 LT	58.37	EXIST (3) 53.76 EXIST	EXIST	
5	CBCI	14+40.2 35.3 LT	59.43		55.90	CONTRACTOR TO PERFORM A TEST TO LOCATE 4" SUBDRAIN AND RECONNECT AS DIRECTED BY THE ENGINEER
6	CBCI	14+37.3 23.7 RT	59.50		56.60	SHALLOW COVER
29	DMH	14+25.2 36.2 LT	59.44	(5) 55.65 (136) 55.65	55.54	CONNECT EXIST PIPES
52	CIT	14+14.7 23.2 RT	59.42	(6) 56.30	EXIST	
117	EX DMH	13+47.9 17.7 RT	59.23	(171) 55.22	55.19	
118	EX DMH	11+66.1 32.7 RT	57.73	(127) 53.55	EXIST	
119	EX DMH	14+17.4 18.3 RT	59.64	EXIST	55.04	

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER

NOTE:

1) ALL UNDERGROUND DRAINAGE, WATER, SEWER AND PRIVATE UTILITIES ARE TO BE RETAINED UNLESS OTHERWISE NOTED ON PLANS

2) THE DRAINAGE INVERTS SHOWN ARE FOR BIDDING PURPOSES ONLY. ACTUAL INVERT ELEVATIONS WILL BE CONFIRMED IN THE FIELD.

3) ADJUST ALL GAS GATES (BY OTHERS) AND WATER GATES AS REQUIRED.

4) ALL DRAINAGE PIPE SHALL BE CLASS V RCP UNLESS OTHERWISE NOTED ON PLANS.

08363.40-UTIL.DWG

Plotted on 31-Aug-2017 11:53 AM

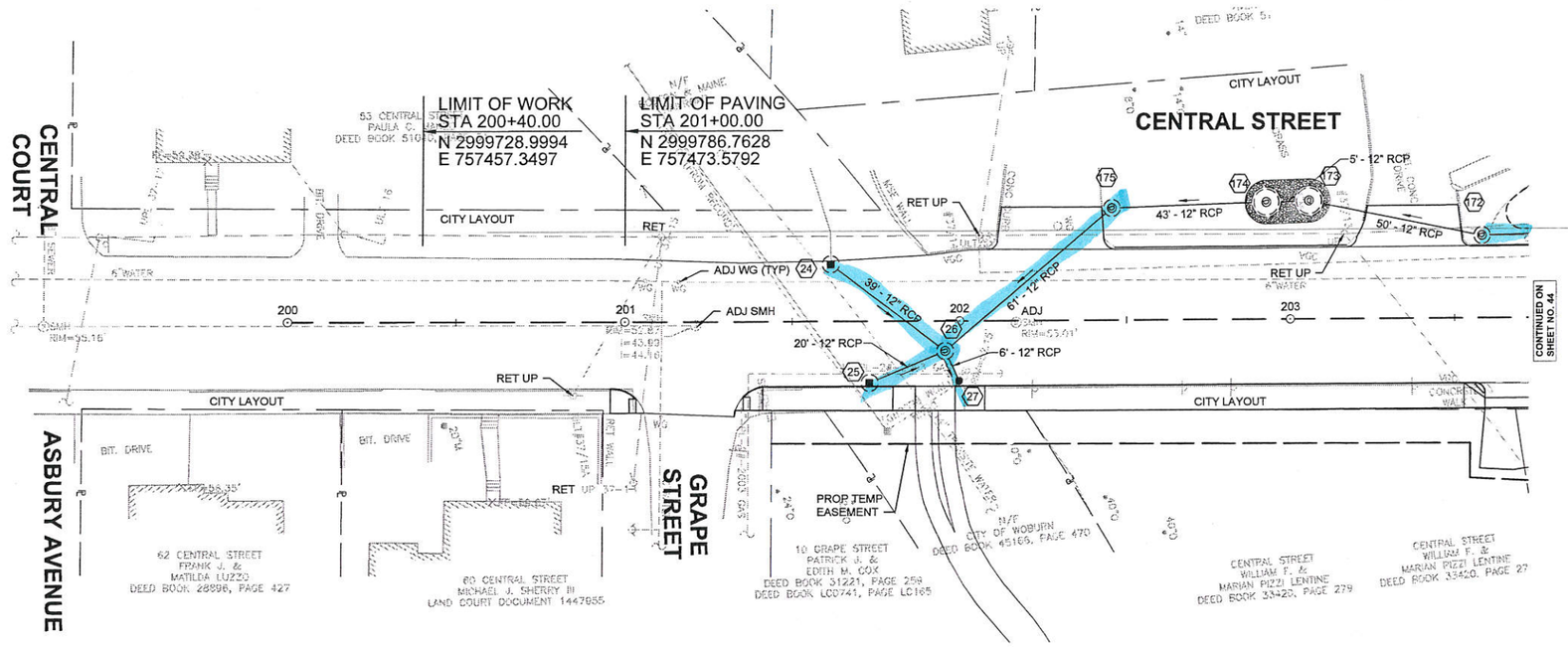
WOBURN
MONTVALE AVENUE

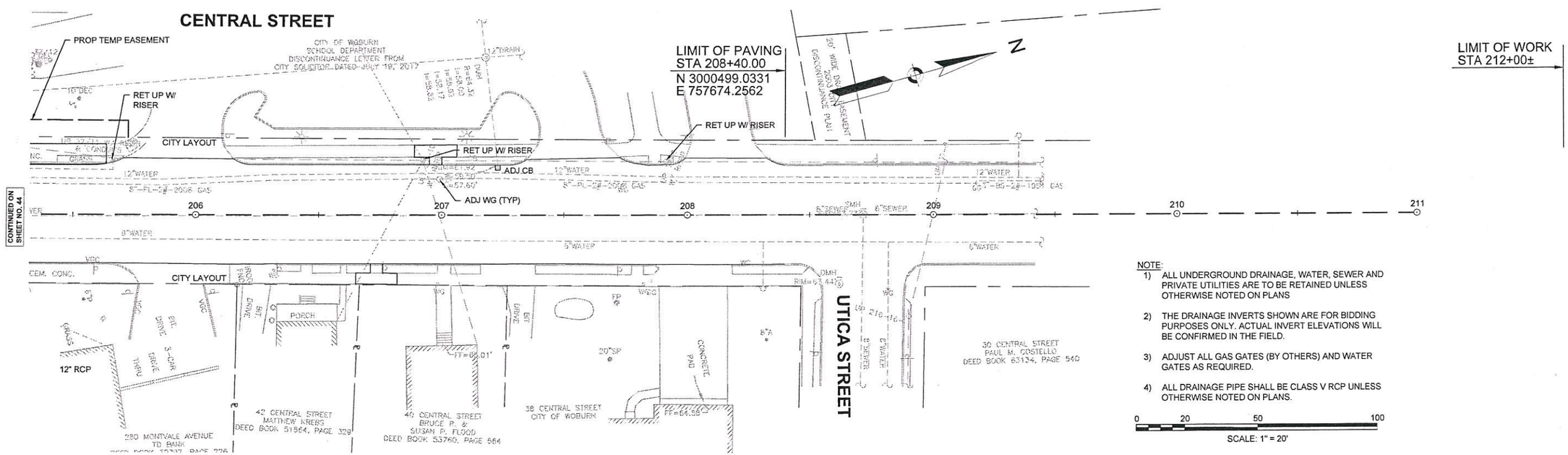
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP/HSI-003S(067)	48	85
PROJECT FILE NO.	604935		

DRAINAGE & UTILITY PLANS

CENTRAL STREET DRAINAGE STRUCTURE DATA						
NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
24	CB	201+61.5 17.1 LT	51.94		48.00	FIELD VERIFY INVERT
25	CBCI	201+73.1 18.5 RT	52.13		48.00	FIELD VERIFY INVERT
26	DMH	201+95.7 9.0 RT	52.52	(24) 47.50 (25) 47.50 (175) 48.00	47.40	FIELD VERIFY INVERTS
27	CIT	201+99.9 18.0 RT	52.40	(26) 47.10	47.00	FIELD VERIFY INVERTS
172	CB	203+58.6 24.7 LT	57.72	(171) 53.40	53.30	PROP F&C
173	LC	203+05.6 35.4 LT	56.52	(172) 52.50	52.50	LEACHING CHAMBER
174	LC	202+92.6 35.0 LT	56.21	(173) 52.50	52.40	LEACHING CHAMBER
175	DMH	202+45.4 33.5 LT	54.99	(174) 50.70	49.60	

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER





NOTE:

1) ALL UNDERGROUND DRAINAGE, WATER, SEWER AND PRIVATE UTILITIES ARE TO BE RETAINED UNLESS OTHERWISE NOTED ON PLANS
2) THE DRAINAGE INVERTS SHOWN ARE FOR BIDDING PURPOSES ONLY. ACTUAL INVERT ELEVATIONS WILL BE CONFIRMED IN THE FIELD.
3) ADJUST ALL GAS GATES (BY OTHERS) AND WATER GATES AS REQUIRED.
4) ALL DRAINAGE PIPE SHALL BE CLASS V RCP UNLESS OTHERWISE NOTED ON PLANS.

0 20 50 100

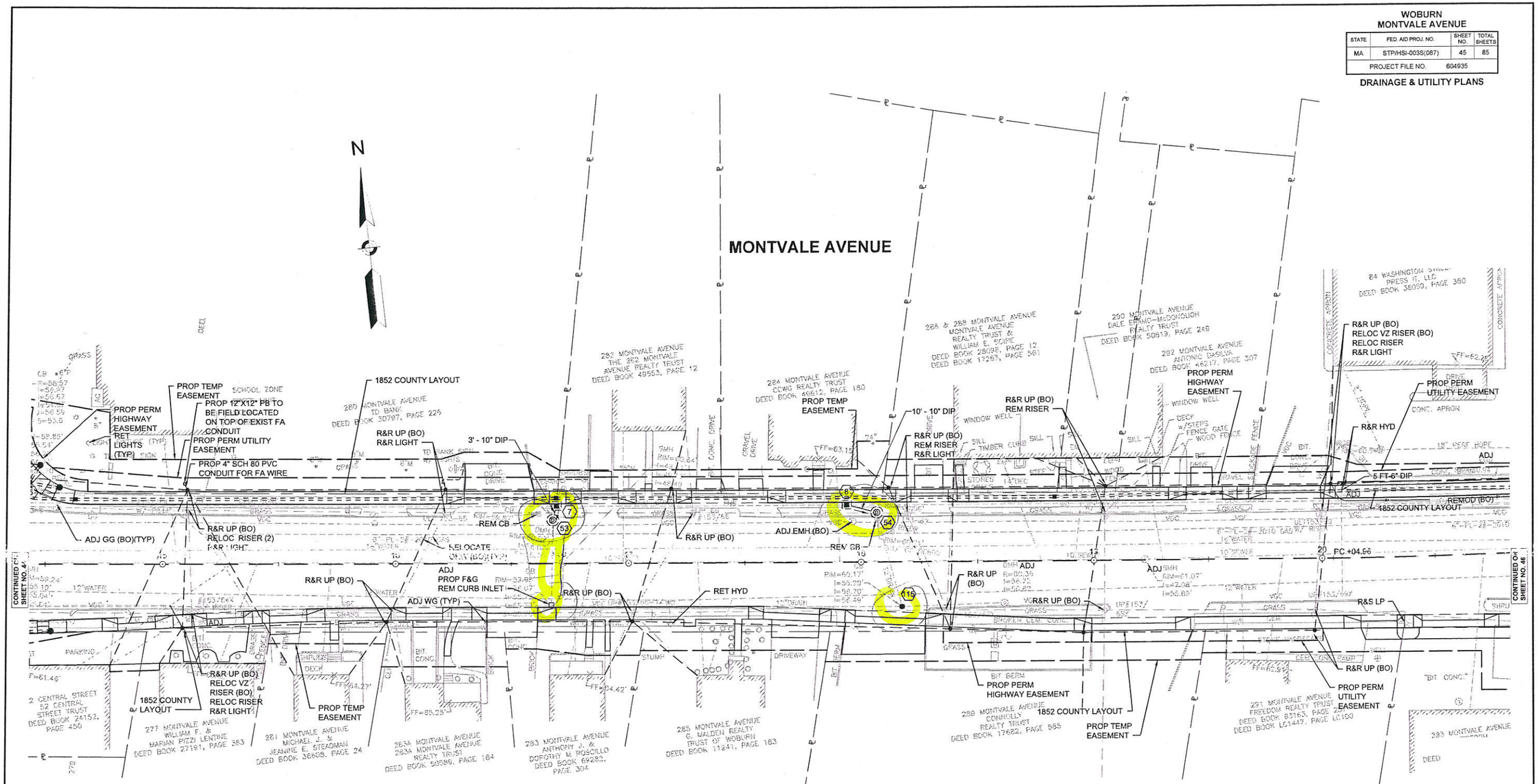
SCALE: 1" = 20'

08363.40-UTIL.DWG Plotted on 31-Aug-2017 11:54 AM

WOBURN
MONTVALE AVENUE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP/HSI-003S(087)	45	85
PROJECT FILE NO.	604935		

DRAINAGE & UTILITY PLANS



MONTVALE AVENUE DRAINAGE STRUCTURE DATA						
NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
7	GICI	16+69.1 25.0 LT	60.00		57.50	GUTTER INLET SPECIAL; 6" F&G
8	GICI	17+93.9 25.0 LT	60.90		58.39	GUTTER INLET SPECIAL; 6" F&G
53	CB	16+67.5 18.8 LT	60.28	(7) 57.30	EXIST	REM EXIST DMH; PROP F&C
54	CB	18+06.8 21.5 LT	61.02	(8) 58.00	EXIST	REM EXIST DMH & CB; PROP F&C
115	CIT	18+17.6 19.4 RT	61.10	EXIST	EXIST	

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER

0 20 50 100

SCALE: 1" = 20'

NOTE:

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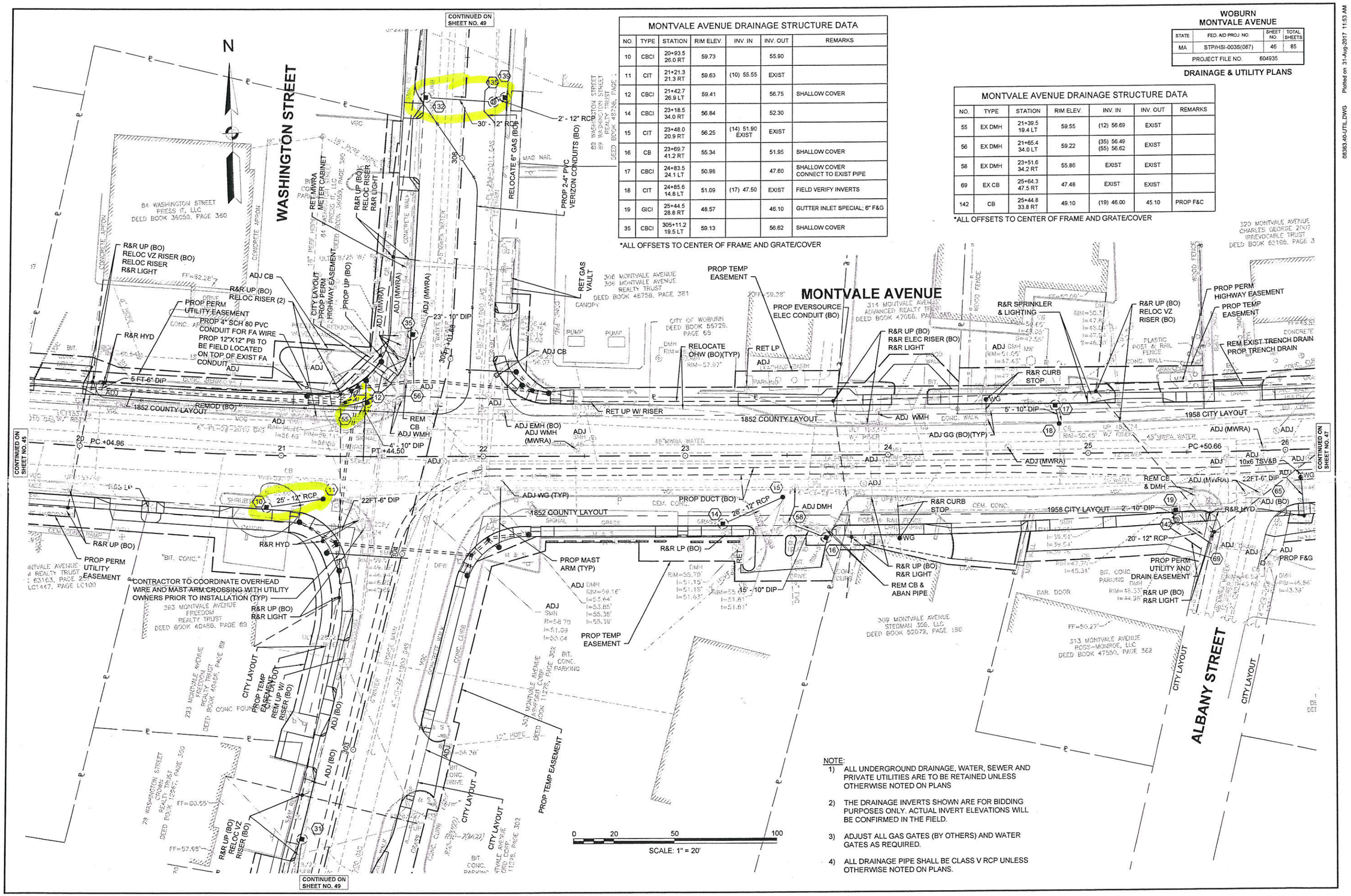
2) THE DRAINAGE INVERTS SHOWN ARE FOR BIDDING PURPOSES ONLY. ACTUAL INVERT ELEVATIONS WILL BE CONFIRMED IN THE FIELD.

3) ADJUST ALL GAS GATES (BY OTHERS) AND WATER GATES AS REQUIRED.

4) ALL DRAINAGE PIPE SHALL BE CLASS V RCP UNLESS OTHERWISE NOTED ON PLANS.

08363.40-UTIL.DWG Plotted on 31-Aug-2017 11:53 AM



MONTVALE AVENUE DRAINAGE STRUCTURE DATA

NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
10	CBCI	20+93.5 26.0 RT	59.73		55.90	
11	CIT	21+21.3 21.3 RT	59.63	(10) 55.55	EXIST	
12	CBCI	21+42.7 26.9 LT	59.41		56.75	SHALLOW COVER
14	CBCI	23+18.5 34.0 RT	56.84		52.30	
15	CIT	23+48.0 20.9 RT	56.25	(14) 51.90 EXIST	EXIST	
16	CB	23+69.7 41.2 RT	55.34		51.95	SHALLOW COVER
17	CBCI	24+83.5 24.1 LT	50.98		47.60	SHALLOW COVER CONNECT TO EXIST PIPE
18	CIT	24+85.6 14.8 LT	51.09	(17) 47.50	EXIST	FIELD VERIFY INVERTS
19	GICI	25+44.5 28.8 RT	48.57		46.10	GUTTER INLET SPECIAL; 6" F&G
35	CBCI	305+11.2 19.5 LT	59.13		56.62	SHALLOW COVER

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER

MONTVALE AVENUE DRAINAGE STRUCTURE DATA

NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
55	EX DMH	21+39.5 19.4 LT	59.55	(12) 56.69	EXIST	
56	EX DMH	21+65.4 34.0 LT	59.22	(35) 56.49 (55) 56.62	EXIST	
58	EX DMH	23+51.6 34.2 RT	55.86	EXIST	EXIST	
69	EX CB	25+64.3 47.5 RT	47.48	EXIST	EXIST	
142	CB	25+44.8 33.8 RT	49.10	(19) 46.00	45.10	PROP F&C

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER

WOBURN
MONTVALE AVENUE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP/HSI-003S(087)	46	85
PROJECT FILE NO.	604935		

DRAINAGE & UTILITY PLANS

NOTE:

1) ALL UNDERGROUND DRAINAGE, WATER, SEWER AND PRIVATE UTILITIES ARE TO BE RETAINED UNLESS OTHERWISE NOTED ON PLANS

2) THE DRAINAGE INVERTS SHOWN ARE FOR BIDDING PURPOSES ONLY. ACTUAL INVERT ELEVATIONS WILL BE CONFIRMED IN THE FIELD.

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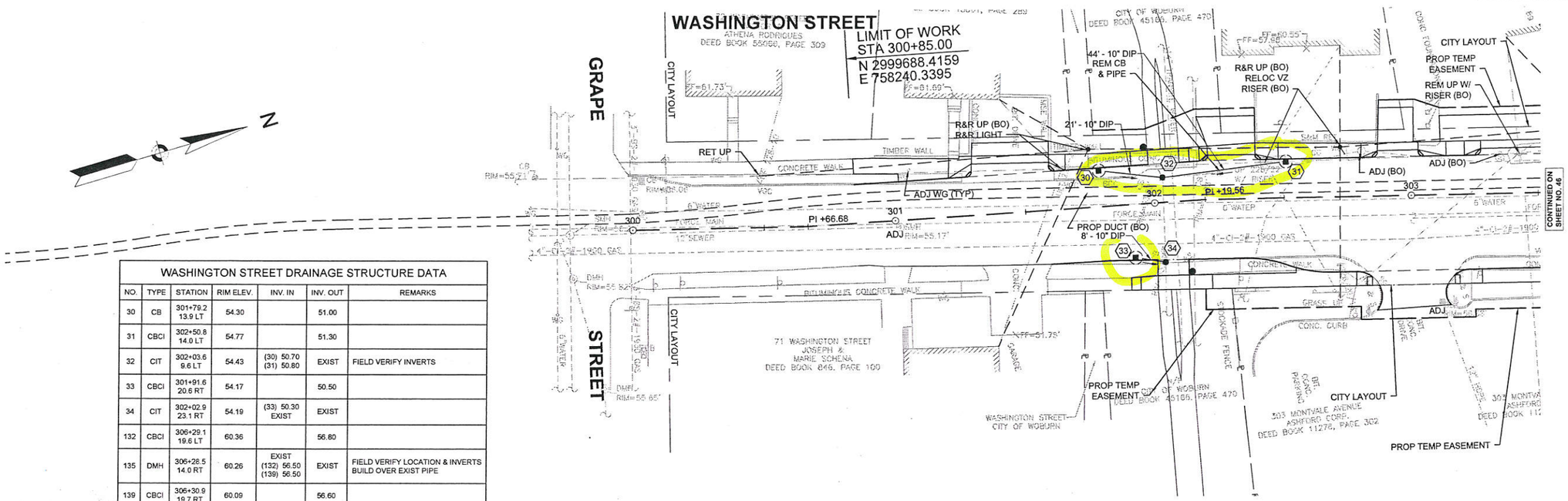
4) ALL DRAINAGE PIPE SHALL BE CLASS V RCP UNLESS OTHERWISE NOTED ON PLANS.

08383.40-UTIL.DWG Plotted on 31-Aug-2017 11:53 AM

WOBURN
MONTVALE AVENUE

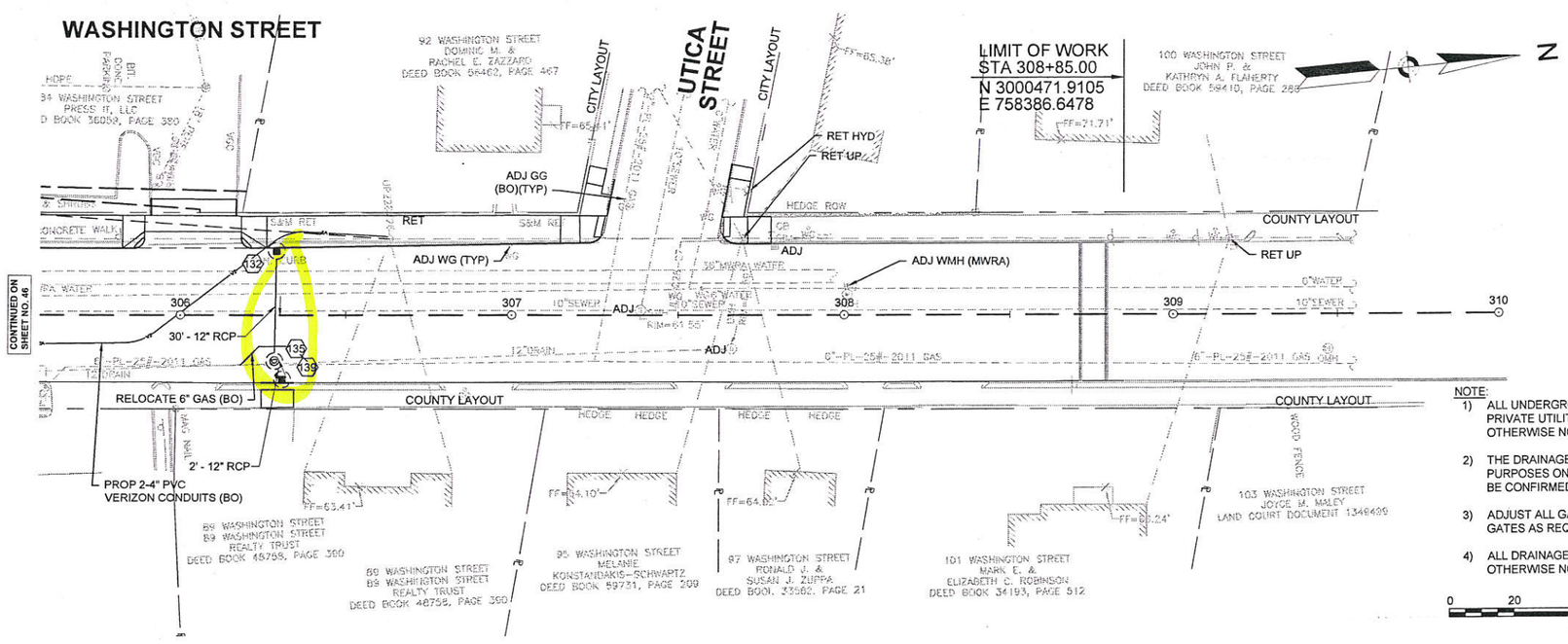
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	STP/HSI-003S(087)	49	85
PROJECT FILE NO.	604935		

DRAINAGE & UTILITY PLANS



WASHINGTON STREET DRAINAGE STRUCTURE DATA						
NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
30	CB	301+79.2 13.9 LT	54.30		51.00	
31	CBCI	302+50.8 14.0 LT	54.77		51.30	
32	CIT	302+03.6 9.6 LT	54.43	(30) 50.70 (31) 50.80	EXIST	FIELD VERIFY INVERTS
33	CBCI	301+91.6 20.6 RT	54.17		50.50	
34	CIT	302+02.9 23.1 RT	54.19	(33) 50.30 EXIST	EXIST	
132	CBCI	306+29.1 19.6 LT	60.36		56.60	
135	DMH	306+28.5 14.0 RT	60.26	EXIST (132) 56.50 (139) 56.50	EXIST	FIELD VERIFY LOCATION & INVERTS BUILD OVER EXIST PIPE
139	CBCI	306+30.9 19.7 RT	60.09		56.60	

*ALL OFFSETS TO CENTER OF FRAME AND GRATE/COVER



NOTE:

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0 20 50 100

SCALE: 1" = 20'

08383.40-UTIL.DWG Plotted on 31-Aug-2017 11:54 AM