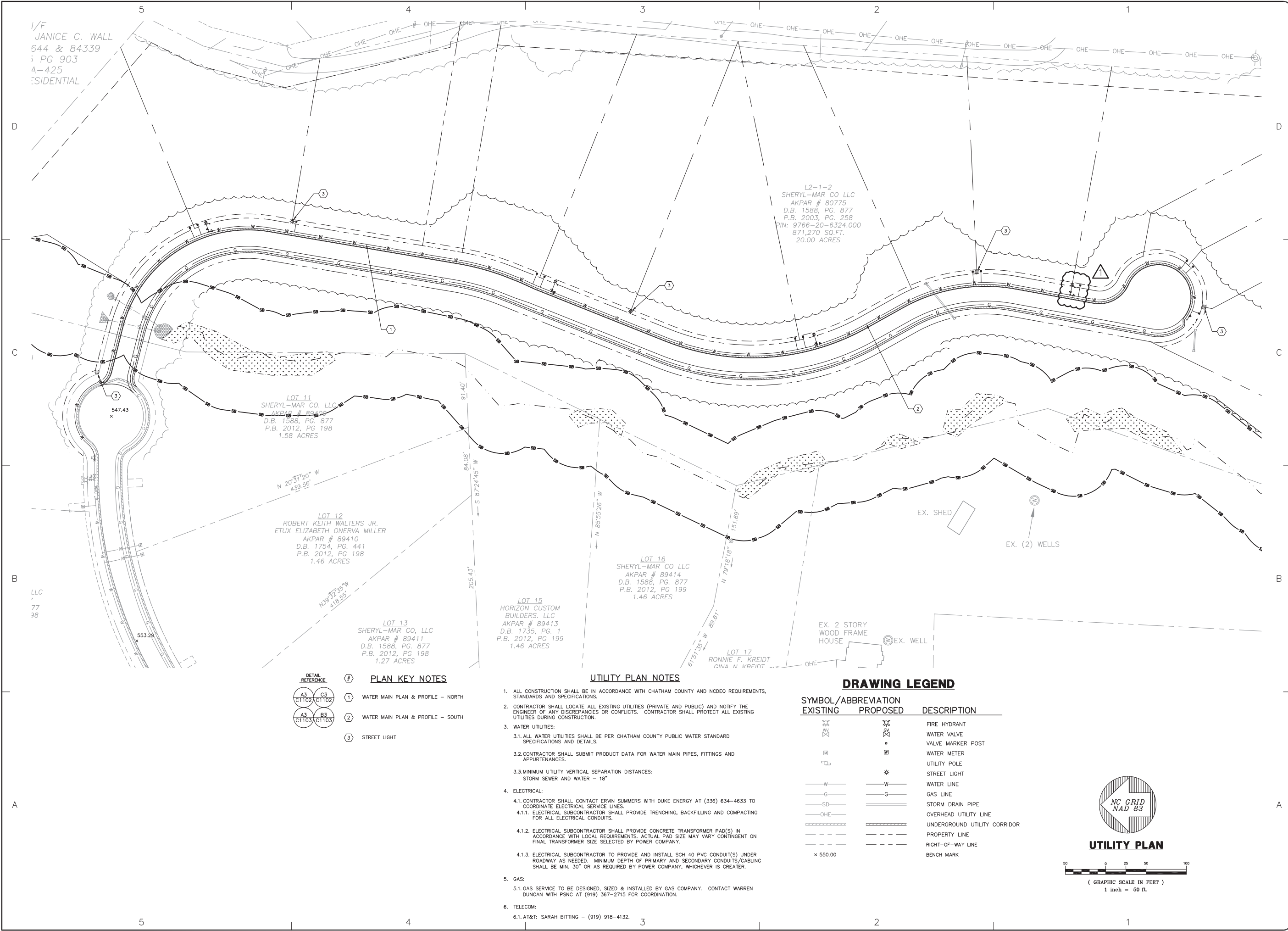


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GEORGE J. PETROSILE
NORTH CAROLINA
Professional Engineer
No. 3127

DATE	REVISIONS	NUM
5 MAY 16	PER CHATHAM CO. UTILITIES COMMENTS	1
		2
		3
		4
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		6
		7
		8
		9
		10

OWNER INFORMATION
SHERYL-MAR CO. LLC
87 NORWOOD ROAD
CHAPEL HILL, NC 27516

OWNERS REPRESENTATIVE:
JIM HODGIN
PH: 910-210-0920
FAX:
EMAIL: jmhodgin@hotmail.com

DATE	ISSUED
25 MAR 16	TO SHERYL-MAR
12 APR 16	CHATHAM UTILITIES & NC DOT
5 MAY 16	CHATHAM UTILITIES

BROOKSIDE AT FIELDSTONE

CHATHAM COUNTY, NORTH CAROLINA

CONSTRUCTION DRAWINGS

JOB NUMBER: 113022.00

DATE: 25 MAR 2016

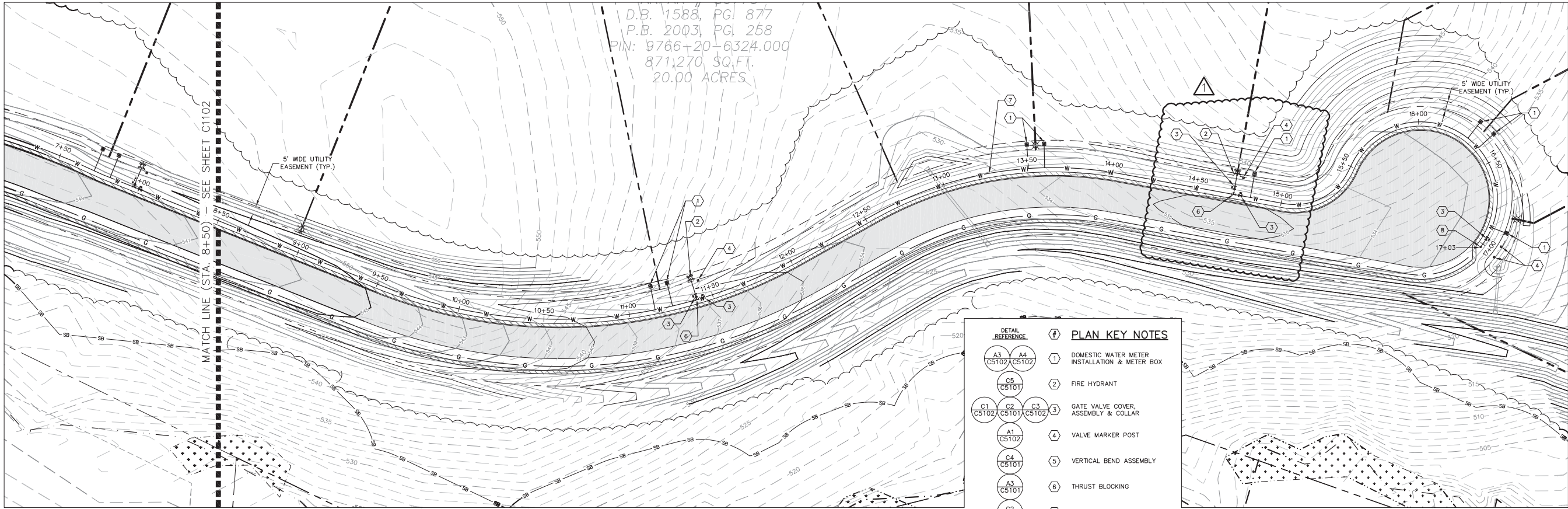
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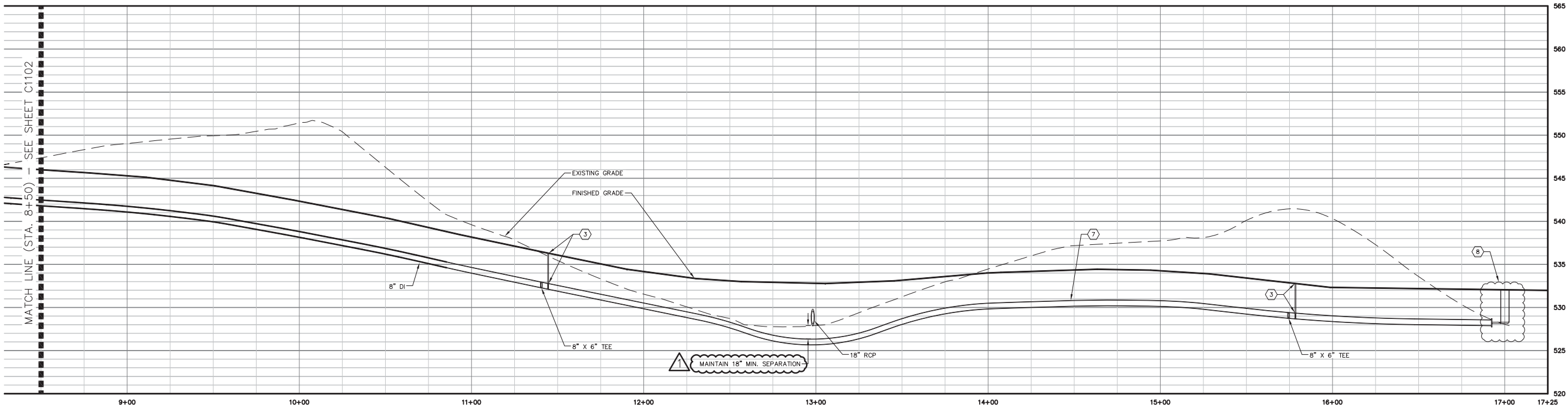
REVIEWED BY: GJR

SHEET

C1101



WATER MAIN PLAN - SOUTH
1" = 30'



WATER MAIN PROFILE - SOUTH
SCALE: H: 1" = 30'
V: 1" = 6'

**WATER MAIN
PLAN & PROFILE
SOUTH**

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DATE
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REVISIONS
PER CHATHAM CO. UTILITIES COMMENTS

NUM
1 2 3 4 5 6 7 8

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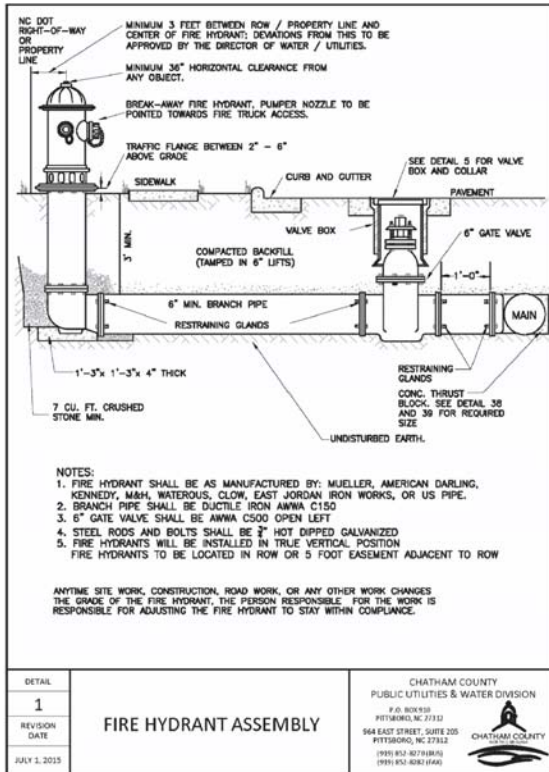
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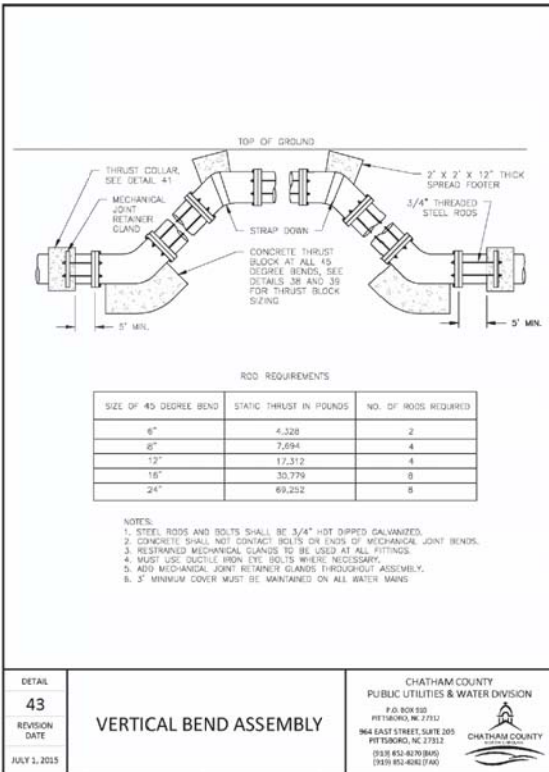
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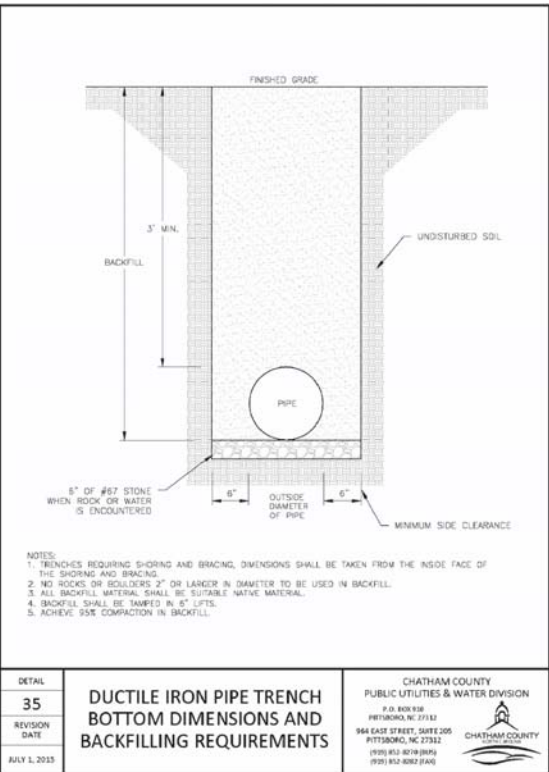
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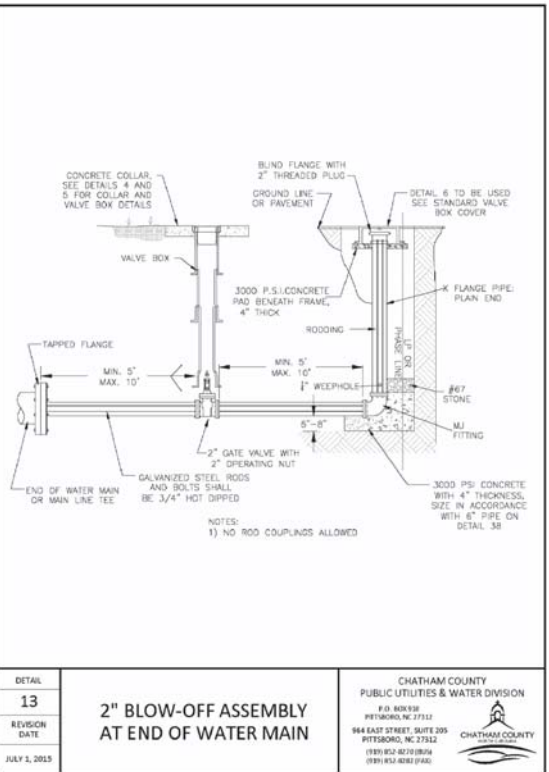
C5
C5101 FIRE HYDRANT
N.T.S.



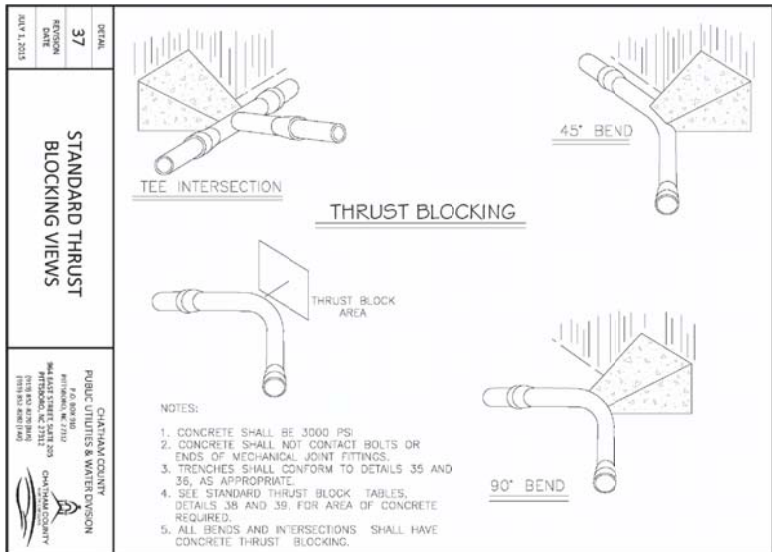
C4
C5101 VERTICAL BEND
N.T.S.



C2
C5101 DI WATER MAIN TRENCH
N.T.S.



C1
C5101 2" BLOW-OFF ASSEMBLY
N.T.S.

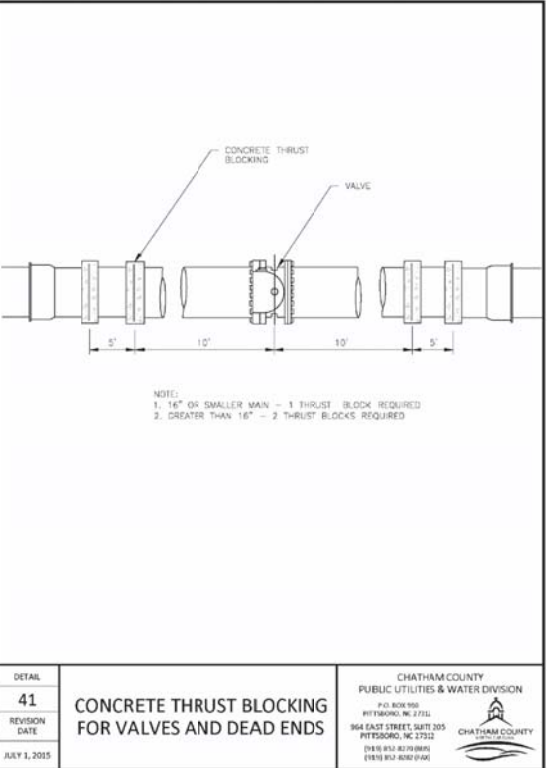
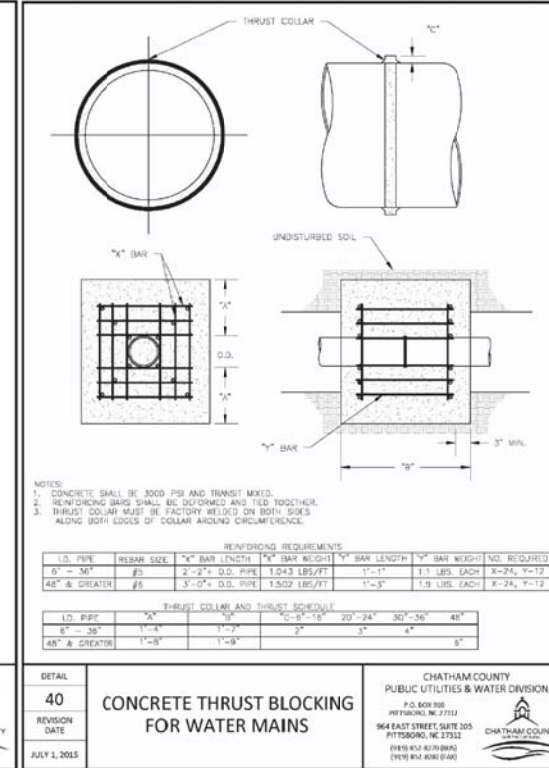


NOTES:
1. CONCRETE SHALL BE 3000 PSI.
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT FITTINGS.
3. TRENCHES SHALL CONFORM TO DETAILS 35 AND 36, AS APPROPRIATE.
4. SEE STANDARD THRUST BLOCK TABLES, DETAILS 38 AND 39, FOR AREA OF CONCRETE REQUIRED.
5. ALL BENDS AND INTERSECTIONS SHALL HAVE CONCRETE THRUST BLOCKING.

REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS (BASED ON TEST PRESSURE OF 200 P.S.I.) ALL AREAS GIVEN IN SQUARE FEET											
SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	MODERATELY DRY CLAY 4500 LB/SQ. FT.	SOFT CLAY 2000 LB/SQ. FT.	GRAVEL / CORREL SAND 1600 LB/SQ. FT.	RED CLAY - 1600 LB/SQ. FT.	5000 COMPACT LOAM 8000 LB/SQ. FT.	BACKFILL - 1000 LB/SQ. FT.	BACKFILL - 4500 LB/SQ. FT.	8000 LB/SQ. FT.	10,000 LB/SQ. FT.	
6"											
11 1/4"	1,108	1	1	1	1	1	1	2	1		
22 1/2"	2,207	1	2	2	1	1	1	3	1		
45°	4,326	2	3	3	1	1	2	5	1		
90°	7,996	2	4	5	1	1	2	8	1		
PLUG	5,659	2	3	4	1	1	2	6	1		
8"											
11 1/4"	1,970	1	1	2	1	1	1	2	1		
22 1/2"	3,922	1	2	3	1	1	1	4	1		
45°	7,894	2	4	5	1	1	2	8	1		
90°	14,213	4	8	9	2	2	4	15	2		
PLUG	10,053	3	5	6	2	2	3	10	1		
12"											
11 1/4"	4,433	2	3	3	1	1	2	5	1		
22 1/2"	8,826	3	5	6	2	2	3	9	1		
45°	17,312	5	9	11	3	3	5	18	2		
90°	31,983	8	18	19	4	4	8	32	4		
PLUG	22,618	6	12	14	3	3	6	23	3		
16"											
11 1/4"	7,881	2	4	5	1	1	2	8	1		
22 1/2"	15,691	4	8	10	2	2	4	16	2		
45°	30,779	8	16	19	4	4	8	31	4		
90°	56,851	16	29	35	8	8	15	57	6		
PLUG	40,213	10	21	25	5	5	10	41	3		
REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR. USE 67° - 90° DEGREE BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.											

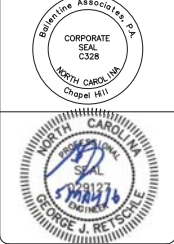
DETAIL 38
REVISION DATE: JULY 1, 2015
CONCRETE THRUST BLOCKING QUANTITY TABLE, 6" - 16" PIPE

A3
C5101 THRUST BLOCKING
N.T.S.



UTILITY DETAILS

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EMAIL: jmhodgin@hotmail.com

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BROOKSIDE AT FIELDSTONE
CHATHAM COUNTY, NORTH CAROLINA
CONSTRUCTION DRAWINGS

JOB NUMBER: 113022.00
DATE: 25 MAR 2016
SCALE: AS NOTED
DRAWN BY: DBB
REVIEWED BY: GJR

SHEET
C5101

5

4

3

2

1

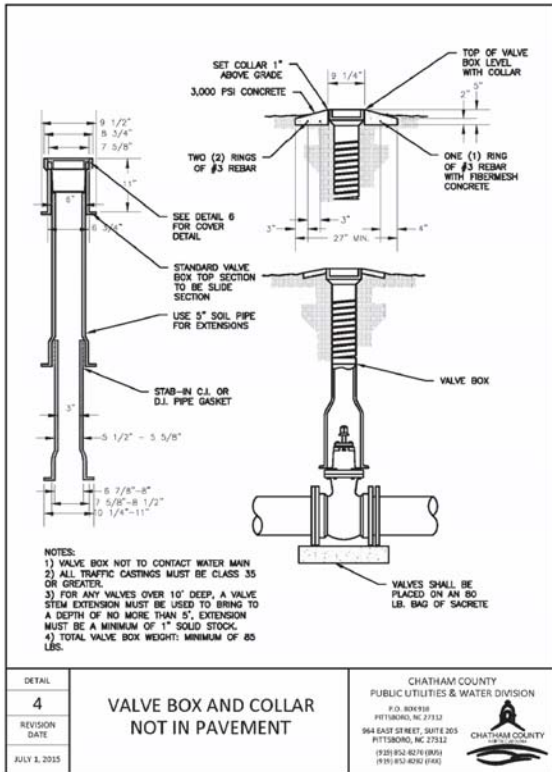
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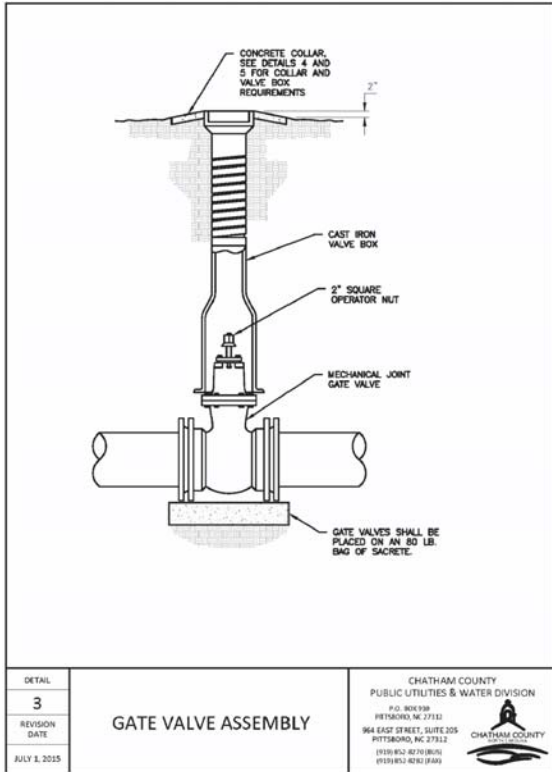
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B

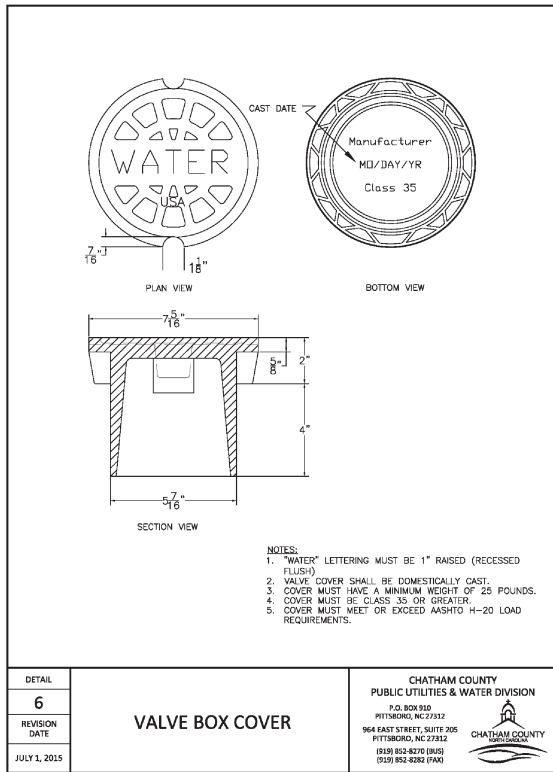
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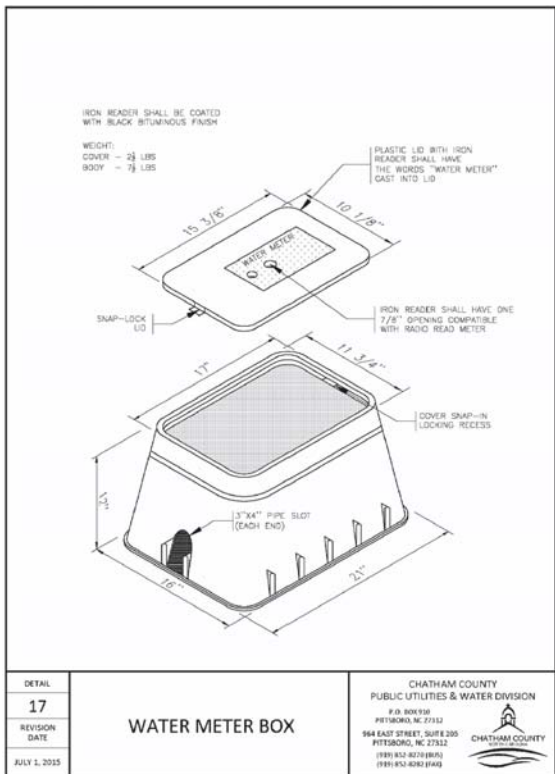
C3
C5102 GATE VALVE BOX & COLLAR
N.T.S.



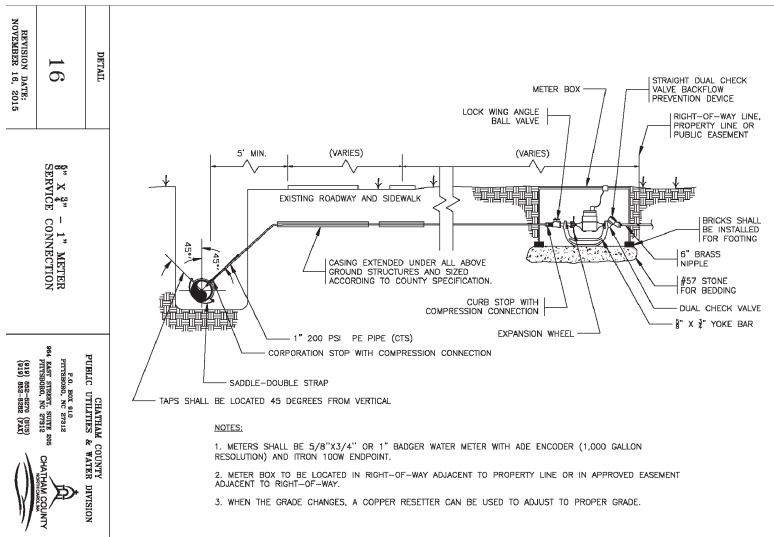
C2
C5102 GATE VALVE ASSEMBLY
N.T.S.



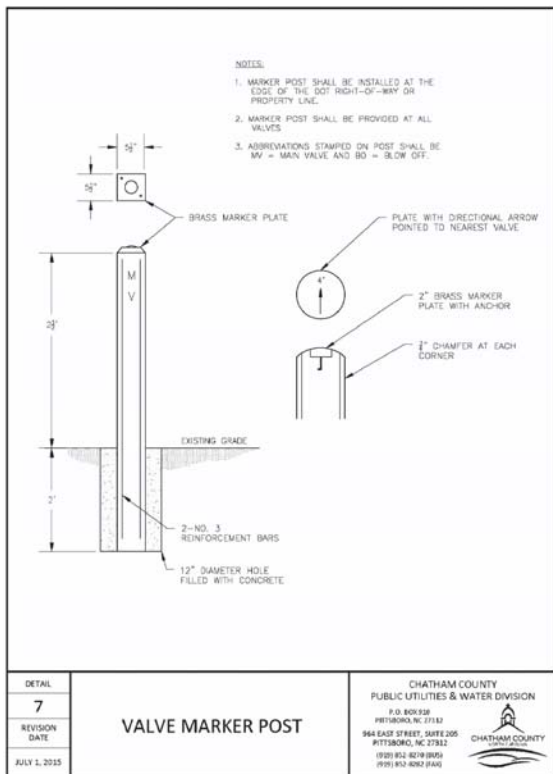
C1
C5102 GATE VALVE BOX COVER
N.T.S.



A4
C5102 DOMESTIC WATER METER BOX
N.T.S.



A3
C5102 DOMESTIC WATER METER INSTALLATION
N.T.S.



A1
C5102 VALVE MARKER POST
N.T.S.

UTILITY DETAILS

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SHEET
C5102