REVISED APRIL 4, 2016

ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT	SEE SHEET
	ROADWAY			
201	CLEARING AND GRUBBING	1	LUMP	
201	TREES OR STUMPS REMOVED AND DISPOSED OF, 18" SIZE	12	EACH	7
201	TREES OR STUMPS REMOVED AND DISPOSED OF, 30" SIZE	10	EACH	7
201	TREES OR STUMPS REMOVED AND DISPOSED OF, 48" SIZE	4	EACH	7
202	HEADWALL REMOVED AND DISPOSED OF	1	EACH	
202	WALK REMOVED AND DISPOSED OF	3,021	SQ. FT.	
202	CURB AND GUTTER REMOVED AND DISPOSED OF	1,131	LIN. FT.	
202	PIPE REMOVED AND DISPOSED OF, 24" AND UNDER	185	LIN. FT.	
202	PIPE REMOVED AND DISPOSED OF, OVER 24"	32	LIN. FT.	
202	CATCH BASIN OR INLET REMOVED AND DISPOSED OF	2	EACH	
202	MANHOLE REMOVED AND DISPOSED OF	1	EACH	
202	FENCE REMOVED AND DISPOSED OF	140	LIN. FT.	
202	STONE WALL REMOVED AND DISPOSED OF	90	LIN. FT.	
203	EXCAVATION	6,207	CU. YD.	
203	EMBANKMENT	14,575	CU. YD.	
204 #	EXCAVATION OF SUBGRADE	400	CU. YD.	8
204 #	GRANULAR EMBANKMENT, W/ 304 AGGREGATE BASE AND GEOTEXTILE FABRIC	400	CU. YD.	8
204	SUBGRADE COMPACTION	15,783	SQ. YD.	
608	4" CONCRETE WALK, AS PER PLAN	6,570	SQ. FT.	9
608	CURB RAMP, AS PER PLAN	26	EACH	9
653	3" TOPSOIL FURNISHED AND PLACED AS PER PLAN	1,238	CU. YD.	9
SPECIAL	DETECTABLE WARNING PANEL	382	SF	10
SPECIAL	MAILBOX REMOVED AND RESET	3	EACH	
	EROSION CONTROL			
207 #	TEMPORARY SEEDING AND MULCHING	7,429	SQ. YD.	
207	FILTER FABRIC FENCE	2,158	LIN. FT.	
659	SEEDING AND MULCHING, AS PER PLAN	14,858	SQ. YD.	9
659	COMMERCIAL FERTILIZER	2.07	TON	
659	WATER (FOR IRRIGATION)	82	M. GAL	
SPECIAL	NO. 2 STONE CHECK DAM	8	EACH	16
SPECIAL	INLET SEDIMENT FILTER	22	EACH	16
	DRAINAGE			
601	TIED CONCRETE BLOCK MAT, TYPE 1	1	EACH	
601	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER	6	CU. YD.	
604	MANHOLE, TYPE C (AA-S102), AS PER PLAN	10	EACH	8
604	STANDARD CURB AND GUTTER INLET (AA-S125A) WITH BIKE SAFE GRATE, AS PER PLAN	13	EACH	8
604	DOUBLE CURB AND GUTTER INLET (AA-S125B) WITH BIKE SAFE GRATE, AS PER PLAN	7	EACH	8
604	STANDARD CATCH BASIN (AA-S133A), AS PER PLAN	2	EACH	8
604	PRECAST REINFORCED CONCRETE OUTLET	1	EACH	
605	4" PIPE UNDERDRAIN, (COLS. 720.01)	5,673	LIN. FT.	
605	4" PIPE UNDERDRAIN SCH, 80	34	LIN. FT.	
901	12" PIPE, 706.02, WITH TYPE I BEDDING	1,115	LIN. FT.	
901	12" PIPE, 706.02, WITH TYPE I BEDDING (CONCRETE ENCASED)	333	LIN. FT.	
901	15" PIPE, 706.02, WITH TYPE I BEDDING	85	LIN. FT.	
901	18" PIPE, 706.02, WITH TYPE I BEDDING	577	LIN. FT.	
901	30" PIPE, 706.02, WITH TYPE I BEDDING	57	LIN. FT.	
901	30" PIPE, 706.02, WITH TYPE I BEDDING (CONCRETE ENCASED)	55	LIN. FT.	
SPECIAL	12" ADS FLARED END SECTION	1	EACH	
SPECIAL	15" ADS FLARED END SECTION	1	EACH	

ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT	SEE SHEET
SPECIAL	30" FLARED END SECTION (CONCRETE)	1	EACH	
	PAVEMENT			
259	15" PERMANENT PAVEMENT, TYPE I	32	CU. YD.	
259	10.5" DRIVEWAY PAVEMENT REPLACEMENT, TYPE IIIA	3	CU. YD.	
301	3" ASPHALT CONCRETE BASE, PG64-22	515	TON	
301	6" ASPHALT CONCRETE BASE, PG64-22	3,402	TON	
304	4" AGGREGATE BASE	50	CU. YD.	
304	6" AGGREGATE BASE	2,400	CU. YD.	
423	CRACK SEALING, TYPE I	30	LB	
448	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM TRAFFIC, PG64-22 (BIKEPATH)	225	TON	
448	1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM TRAFFIC, PG64-22 (ROADWAY)	716	TON	
448	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, MEDIUM TRAFFIC, PG64-22 (ROADWAY)	1,003	TON	
609	6" CONCRETE COMBINATION CURB AND GUTTER (INCLUDING #57 AGGREGATE BASE)	4,790	LIN. FT.	
609	STRAIGHT 18" CONCRETE CURB	3,009	LIN. FT.	
609	CONCRETE MOUNTABLE CURB, AS PER PLAN	295	LIN. FT.	6
SPECIAL	BRICK PAVERS, AS PER PLAN	68	SQ. YD.	6,9
SPECIAL	TRUCK APRON PAVEMENT, AS PER PLAN	235	SQ. YD.	6,9
	WATER			
801	6" DUCTILE IRON WATER PIPE AND FITTINGS, CLASS 52 WITH TYPE 1 BEDDING	45	LIN.FT.	
801	8" DUCTILE IRON WATER PIPE AND FITTINGS, CLASS 52 WITH TYPE 1 BEDDING	1,653	LIN.FT.	
801	12" DUCTILE IRON WATER PIPE AND FITTINGS, CLASS 52 WITH TYPE 1 BEDDING	38	LIN.FT.	
801	16" DUCTILE IRON WATER PIPE AND FITTINGS, CLASS 52 WITH TYPE 1 BEDDING	1,512	LIN.FT.	
802	6" VALVE AND APPURTENANCES	1	EACH	
802	8" VALVE AND APPURTENANCES	1	EACH	
802	16" VALVE AND APPURTENANCES	4	EACH	
807	VALVE BOX ADJUSTED TO GRADE	1	EACH	
809	FIRE HYDRANT, TYPE 'A'	7	EACH	
809	FIRE HYDRANT, TYPE 'B'	7	EACH	
812	1 1/2" AIR RELEASE OUTLET	1	EACH	
SPECIAL	SURVEY COORDINATES	1	LUMP	
	TRAFFIC CONTROL			
630	GROUND-MOUNTED SUPPORT, NO. 3 POST, TYPE S, AS PER PLAN	635.2	LIN.FT.	9
630	GROUND-MOUNTED SUPPORT ANCHOR POST 2 1/4" SQUARE, AS PER PLAN	51	EACH	9
630	STREET NAME SIGN SUPPORT, AS PER PLAN	2	EACH	9
630	SIGN, FLAT SHEET, AS PER PLAN	316.3	SQ FT	9
630	REMOVAL OF GROUND MOUNTED SIGN AND DELIVERY, AS PER PLAN	2	EACH	9
630	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE, AS PER PLAN	10	EACH	9
630	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	10	EACH	
644	CENTER LINE, DOUBLE YELLOW, 4"	0.35	MILE	
644	EDGE LINE, YELLOW, 4"	0.50	MILE	
644	EDGE LINE, WHITE, 4"	0.12	MILE	
644	EDGE LINE, WHITE, 12"	0.03	MILE	
644	CHANNELIZING LINE, 8"	337	LIN.FT.	
644	STOP LINE, 24"	39	LIN.FT.	
644	CROSSWALK LINE, 12"	744	LIN.FT.	

# DENOTES CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER.

CALCULATED NRV CHECKED AVP

GENERAL SUMMARY

CHURCHMAN RD

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CHURCHMAN ROAD

SEE SHEET 64				AS-BUILT	
REF	ITEM	STATION	NORTHING	EASTING	℄ ELEVATION
1	CONNECT TO EXISTING 8" WM	526+13.28			
2	FIRE HYDRANT	527+45.00			
3	6" WATER VALVE	527+48.00			
4	6" 90° BEND (HORIZONTAL)	527+50.00			
5	8" x 6" TEE	527+50.00			
SEE SHEET 65					
1	8" 22.5° BEND (VERTICAL)	530+18.28			
2	8" 22.5° BEND (VERTICAL)	530+23.28			
3	FIRE HYDRANT	530+45.00			
4	6" WATER VALVE	530+48.00			
5	6" 90° BEND (HORIZONTAL)	530+50.00			
6	8" x 6" TEE	530+50.00			
7	FIRE HYDRANT	533+45.00			
8	6" WATER VALVE	533+48.00			
9	6" 90° BEND (HORIZONTAL)	533+50.00			
10	8" x 6" TEE	533+50.00			
SEE SHEET 66					
1	8" 22.5° BEND (VERTICAL)	535+42.14			
2	8" 22.5° BEND (VERTICAL)	535+48.26			
3	8" 22.5° BEND (VERTICAL)	535+68.26			
4	8" 22.5° BEND (VERTICAL)	535+74.07			
5	FIRE HYDRANT	536+45.00			
6	6" WATER VALVE	536+48.00			
7	6" 90° BEND (HORIZONTAL)	536+50.00			
8	8" x 6" TEE	536+50.00			
9	FIRE HYDRANT	539+45.00			
10	6" WATER VALVE	539+48.00			
11	6" 90° BEND (HORIZONTAL)	539+50.00			
12	8" x 6" TEE	539+50.00			
13	8" 3.5° BEND (HORIZONTAL)	539+68.27			
SEE SHEET 67					
1	CONNECT TO EXISTING 8" WM	540+49.92			
2	VALVE BOX ATG	540+62.64			
3	CONNECT TO EXISTING 8" WM	543+20.66			
4	8" 45° BEND (HORIZONTAL)	544+22.86			
5	8" GRADE BREAK	544+22.86			
6	8" GRADE BREAK	544+76.52			
7	8" WATER VALVE	545+00.00			
8	16" x 8" ANCHORING TEE	545+04.53			
9	CONNECT TO EXISTING 8" WM	300+02.01			
10	8" 11.25° BEND (VERTICAL)	300+07.01			
11	8" 11.25° BEND (VERTICAL)	300+14.49			
12	8" 11.25° BEND (VERTICAL)	300+22.48			
13	8" 11.25° BEND (VERTICAL)	300+29.40			
14	CONNECT TO EXISTING 8" WM	300+34.40			
15	8" x 6" ANCHORING TEE	600+10.00			
16	6" WATER VALVE	600+14.28			
17	6" WATER VALVE	600+47.85			
18	FIRE HYDRANT	600+52.26			

RINGS RD

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SEE SHEET 68				AS-BUILT	
REF	ITEM	STATION	NORTHING	EASTING	℄ ELEVATION
1	16" PLUG AND THRUST BLOCK	104+30.70			
2	16" WATER VALVE	104+45.59			
3	16" 22.5° BEND (VERTICAL)	105+62.63			
4	16" 22.5° BEND (VERTICAL)	105+68.79			
5	16" 22.5° BEND (VERTICAL)	105+88.79			
6	16" 22.5° BEND (VERTICAL)	105+93.94			
SEE SHEET 69					
1	FIRE HYDRANT	106+05.00			
2	6" WATER VALVE	106+10.00			
3	6" 90° BEND (HORIZONTAL)	106+12.00			
4	16" x 6" ANCHORING TEE	106+12.00			
5	16" WATER VALVE	106+20.00			
6	16" 22.5° BEND (HORIZONTAL)	108+23.68			
7	16" 22.5° BEND (VERTICAL)	108+47.68			
8	16" 22.5° BEND (VERTICAL)	108+59.44			
9	16" 22.5° BEND (VERTICAL)	108+79.41			
10	16" 22.5° BEND (VERTICAL)	108+91.03			
11	16" 22.5° BEND (HORIZONTAL)	108+97.63			
12	16" x 6" ANCHORING TEE	109+50.00			
13	6" WATER VALVE	109+50.00			
14	FIRE HYDRANT	109+50.00			
SEE SHEET 70					
1	16" x 6" ANCHORING TEE	112+50.00			
2	6" WATER VALVE	112+50.00			
3	FIRE HYDRANT	112+50.00			
4	16" 22.5° BEND (VERTICAL)	112+96.42			
5	16" 22.5° BEND (VERTICAL)	113+04.76			
6	16" 22.5° BEND (VERTICAL)	113+24.76			
7	16" 22.5° BEND (VERTICAL)	113+33.34			
8	16" x 6" ANCHORING TEE	115+50.00			
9	6" WATER VALVE	115+50.00			
10	FIRE HYDRANT	115+50.00			
SEE SHEET 71					
1	16" WATER VALVE	117+90.95			
2	16" x 12" TEE	118+29.02			
3	16" x 6" ANCHORING TEE	119+16.00			
4	6" WATER VALVE	119+16.00			
5	FIRE HYDRANT	119+16.00			
6	16" WATER VALVE	119+21.00			
7	16" PLUG AND THRUST BLOCK	119+42.00			
8	CONNECT TO EXISTING 12" WM	200+00.00			
9	1 1/2" AIR RELEASE VALVE	200+06.00			
10	12" 45° BEND (VERTICAL)	200+11.21			
11	12" 45° BEND (VERTICAL)	200+15.54			
12	12" 45° BEND (VERTICAL)	200+33.63			
13	12" 45° BEND (VERTICAL)	200+37.34			

CALCULATED NRV
CHECKED VDK

WATERLINE SURVEY COORDINATE TABLE

CHURCHMAN RD

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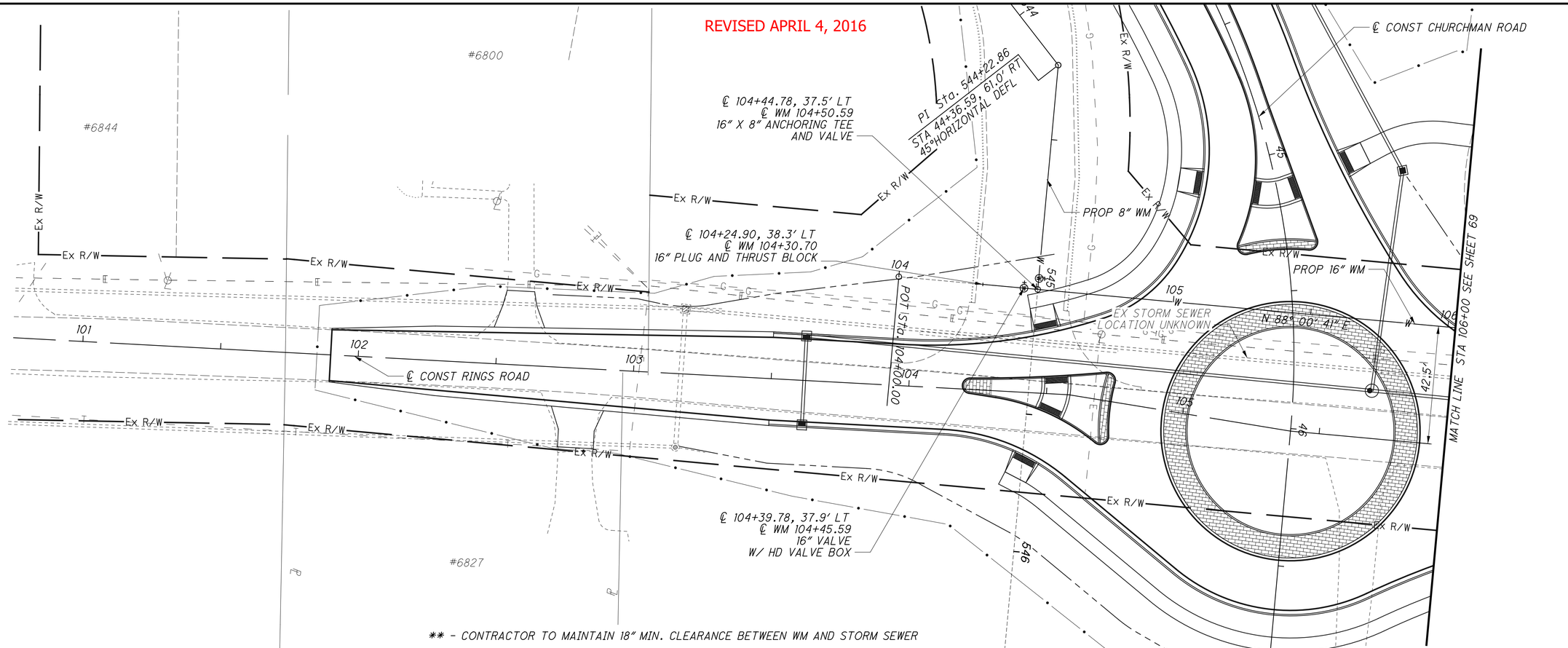

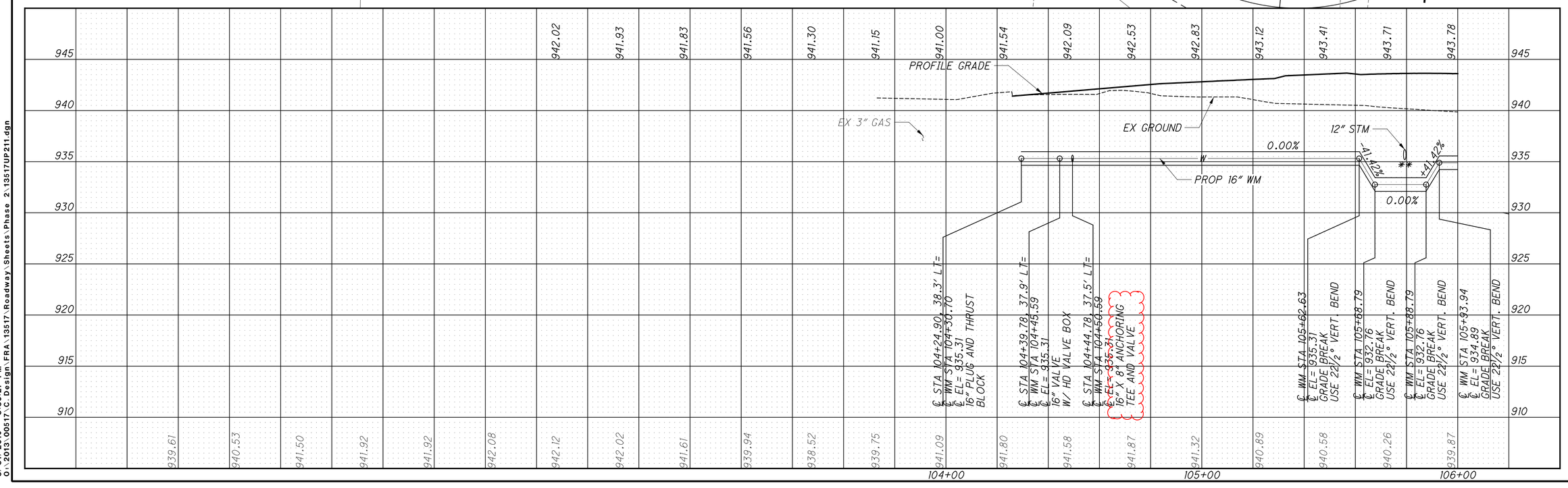

HORIZONTAL SCALE IN FEET 0 10 20 40

CALCULATED AVP
CHECKED AJR

WATER MAIN PLAN AND PROFILE
STA 101+50 TO STA 106+00

CHURCHMAN RD

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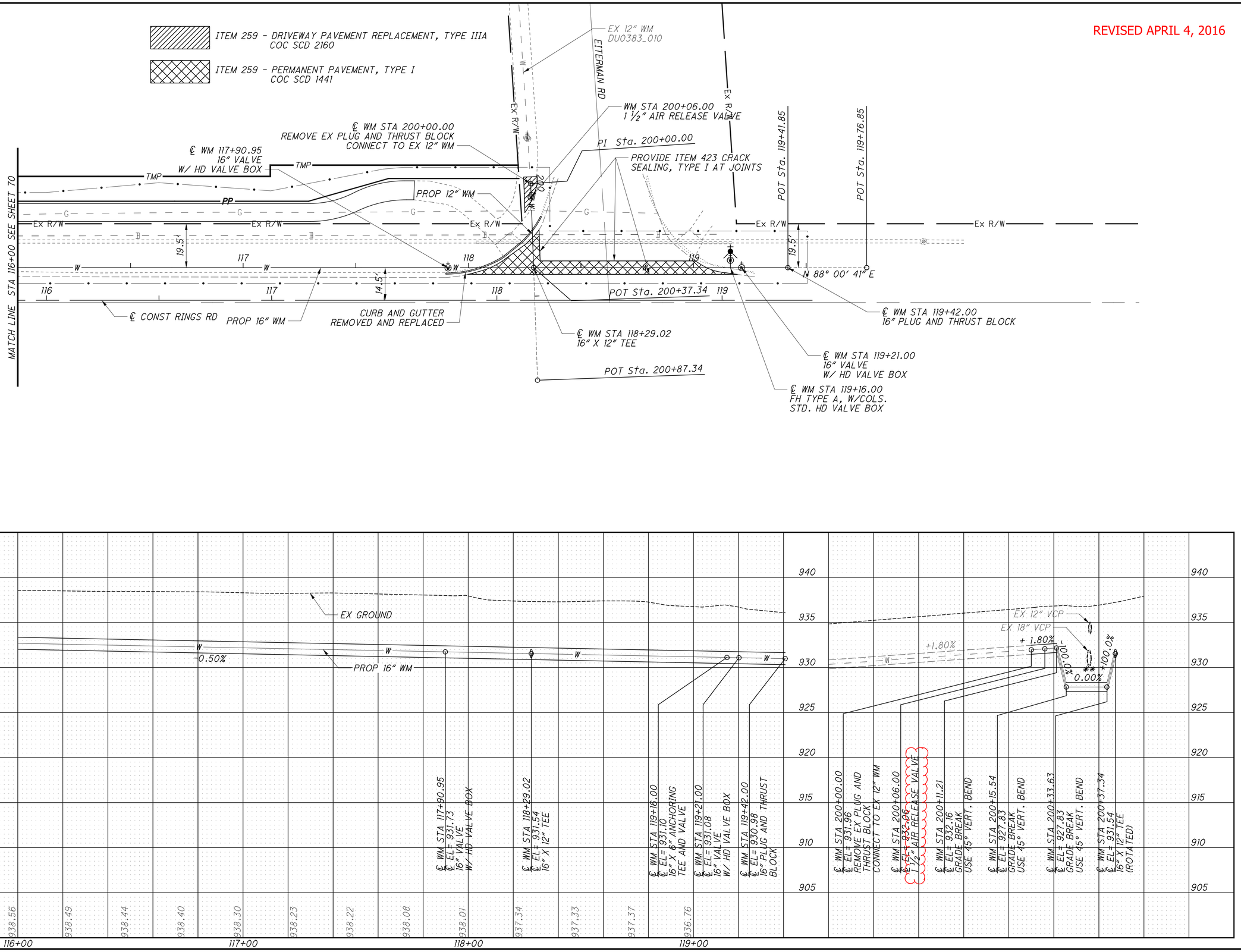

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED AVP
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WATER MAIN PLAN AND PROFILE
STA 116+00 TO STA 119+77

CHURCHMAN RD

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