WATER & SANITARY SEWER PLANS ORCHARD MEADOWS

SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE

PARCEL NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
D-1			
D-2			
D-2			
D-3			
D-3			

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE

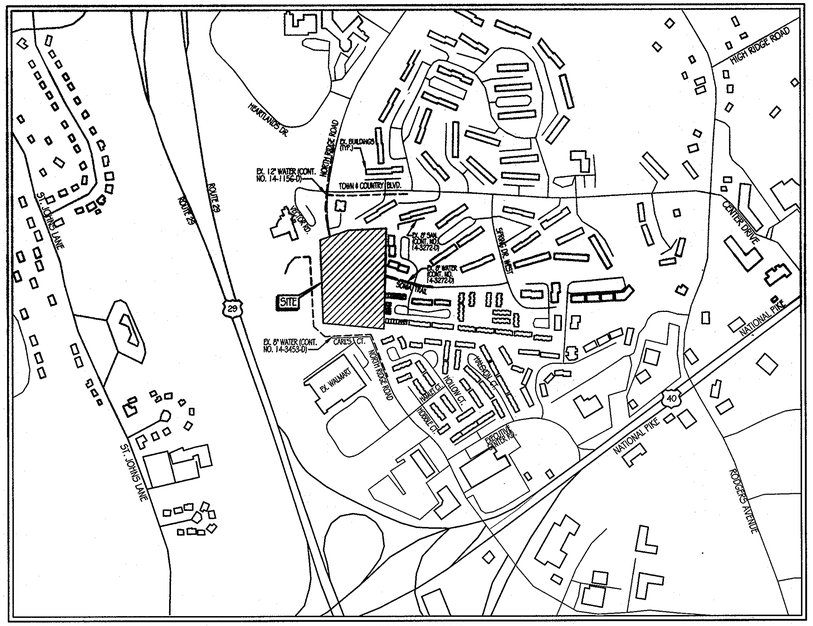
PARCEL NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
D-1			
D-2			
D-2			
D-3			
D-3			

WATER AND SEWER QUANTITIES

ITEM	ESTIMATE	UNIT	AS-BUILT
8" PVC SEWER	1,185	L.F.	
SANITARY MANHOLE 4' DIA.	11	EA	
SANITARY MANHOLE	135.3	V.F.	
12" DIP WATER	874	L.F.	
8" DIP WATER	608	L.F.	
6" DIP WATER	267	L.F.	
2" COPPER	70	L.F.	
12" x 8" TEE	1	EA	
12" x 6" TEE	5	EA	
8" x 8" TEE	2	EA	
8" x 6" TEE	2	EA	
12" VALVE	2	EA	
8" VALVE	4	EA	
6" VALVE	7	EA	
6" FIRE HYDRANT	4	EA	
12" - 11.6 HORIZ. BEND	2	EA	
8" - 11.6 HORIZ. BEND	2	EA	

LEGEND

- 423 — INTERMEDIATE CONTOUR
- 420 — INDEX CONTOUR
- EX. SANITARY MANHOLE
- EX. WATER METER
- SIGN
- UTILITY POLE
- EX. WATER VALVE
- EX. FIRE HYDRANT
- CO — EX. CLEANOUT
- TREE
- EX. SANITARY PIPE
- EX. WATER PIPE
- D — EX. STORM DRAIN PIPE
- CURB
- X — FENCE
- PROPERTY LINE
- RIGHT OF WAY
- SETBACK LINE
- 430 — CONTOUR
- CURB
- PROP. SIDEWALK
- PROP. 6" WATER — PROP. WATER
- PROP. 8" SAN. — PROP. SANITARY SEWER
- PROP. 15" DRAIN — STORM DRAIN
- SMH — PROP. SANITARY MANHOLE
- FH — PROP. FIRE HYDRANT
- WV — PROP. WATER VALVE
- FDC — FIRE DEPARTMENT CONNECTION
- STORM DRAIN INLET
- STORM DRAIN END SECTION
- LIGHT POLE (12' ARM)
- LIGHT POLE (POST TOPS)



VICINITY MAP
SCALE: 1" = 600'

INDEX OF SHEETS

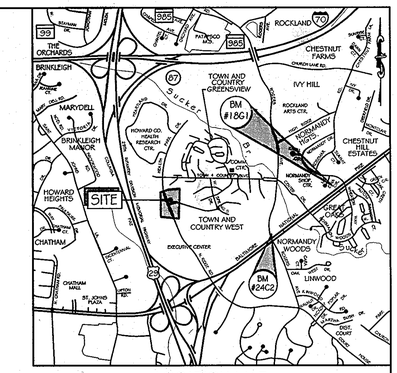
1 - COVER SHEET
2 - UTILITY PLAN
3 - WATER PROFILES
4 - WATER PROFILES
5 - SANITARY SEWER PROFILE
6 - SANITARY SEWER PROFILE

BENCHMARK DATA

THE HORIZONTAL AND VERTICAL DATUMS ARE BASED ON THE FOLLOWING HOWARD COUNTY GEODETIC SURVEY CONTROL POINTS

HORIZONTAL: NAD 83/07 VERTICAL: NAVD 29

CONTROL	NORTHING	EASTING	ELEV.
18G1	580985.015	1367750.237	407.740
24C2	580648.373	1366038.139	354.028



LOCATION MAP
SCALE: 1" = 2000'
ADC MAP COORDINATES: 12-6C

TYPE OF BUILDING: RESIDENTIAL
NUMBER OF PARCELS: 3
NUMBER OF WATER HOUSE CONNECTIONS: 5
NUMBER OF SEWER HOUSE CONNECTIONS: 5
DRAINAGE AREA: POTAPSCO
TREATMENT PLANT: PATAPSCO WASTE WATER TREATMENT PLANT
WATER ZONE: 550
TEST GRADIENT: 700

SEWER NOTES

1. ALL SEWER MAINS SHALL BE DIP OR P.V.C. UNLESS OTHERWISE NOTED.
2. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
3. FORCE MAINS SHALL BE D.I.P. ONLY.
4. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
5. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER. STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
6. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

WATER NOTES

1. ALL WATER MAINS TO BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
2. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
5. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
7. TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
8. FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
9. UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN(17) POUND SACRIFICED ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESS. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TREES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.

GENERAL NOTES

1. APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED BY FISHER, COLLINS, CARTER, INC. IN AUGUST 2006.
3. THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM AND 83 / 07 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 18G1 AND NO. 24C2. ALL VERTICAL CONTROLS ARE BASED ON NAVD 29. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE IRON BARS.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
6. FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
7. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE BORING SYMBOL ▬ AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS ARE INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

AT & T	1-800-252-1133
BGE (CONSTRUCTION SERVICES)	1-410-850-4620
BGE (EMERGENCY)	1-410-685-1400
BUREAU OF UTILITIES	1-410-313-4900
COLONIAL PIPELINE COMPANY	1-410-795-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	1-410-531-5533
VERIZON	1-800-743-0033 / 1-410-224-9210

9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING / JACKING OF ANY COUNTY ROAD FOR LAYING WATER / SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE STANDARD SPECIFICATION.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD S.C.D. — DATE 11/29/11

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 31069 EXPIRATION DATE: 11/12/12

STATE OF MARYLAND — RICHARD L. BEALL — No. 031069 — PROFESSIONAL ENGINEER — 11-8-11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CHIEF, BUREAU OF UTILITIES — DATE 11/16/11

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
CHIEF, DEVELOPMETN ENGINEERING DIVISION — DATE 12/5/11

KCI TECHNOLOGIES
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
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CONTRACT PURCHASER / DEVELOPER:
ORCHARD DEVELOPMENT CORPORATION
5032 DORSEY HALL DRIVE
ELLICOTT CITY, MD 21042
(410) 964-2334

OWNER:
WILDER BUILDING CORPORATION
3300 SONIA TRAIL
ELLICOTT CITY, MD 21043
(410)-461-2522

DESIGN: B.E.S.
DRAWN: C.T.B.
CHECKED: R.L.B.
DATE: 11-3-2011

BY	NO.	REVISION	DATE

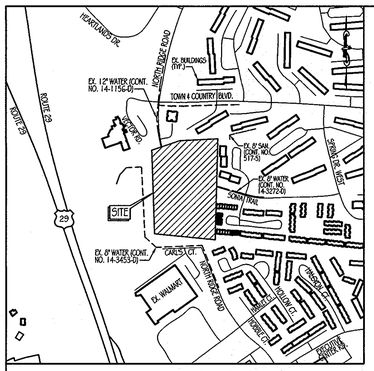
COVER SHEET

600' SCALE MAP NO.: 17 GRID: 7-C PARCEL: 711

ORCHARD MEADOWS
PARCEL D-1, D-2 & D-3
TAX MAP: 17 GRID: 23 PARCEL: 711
ZONED: R-A-15

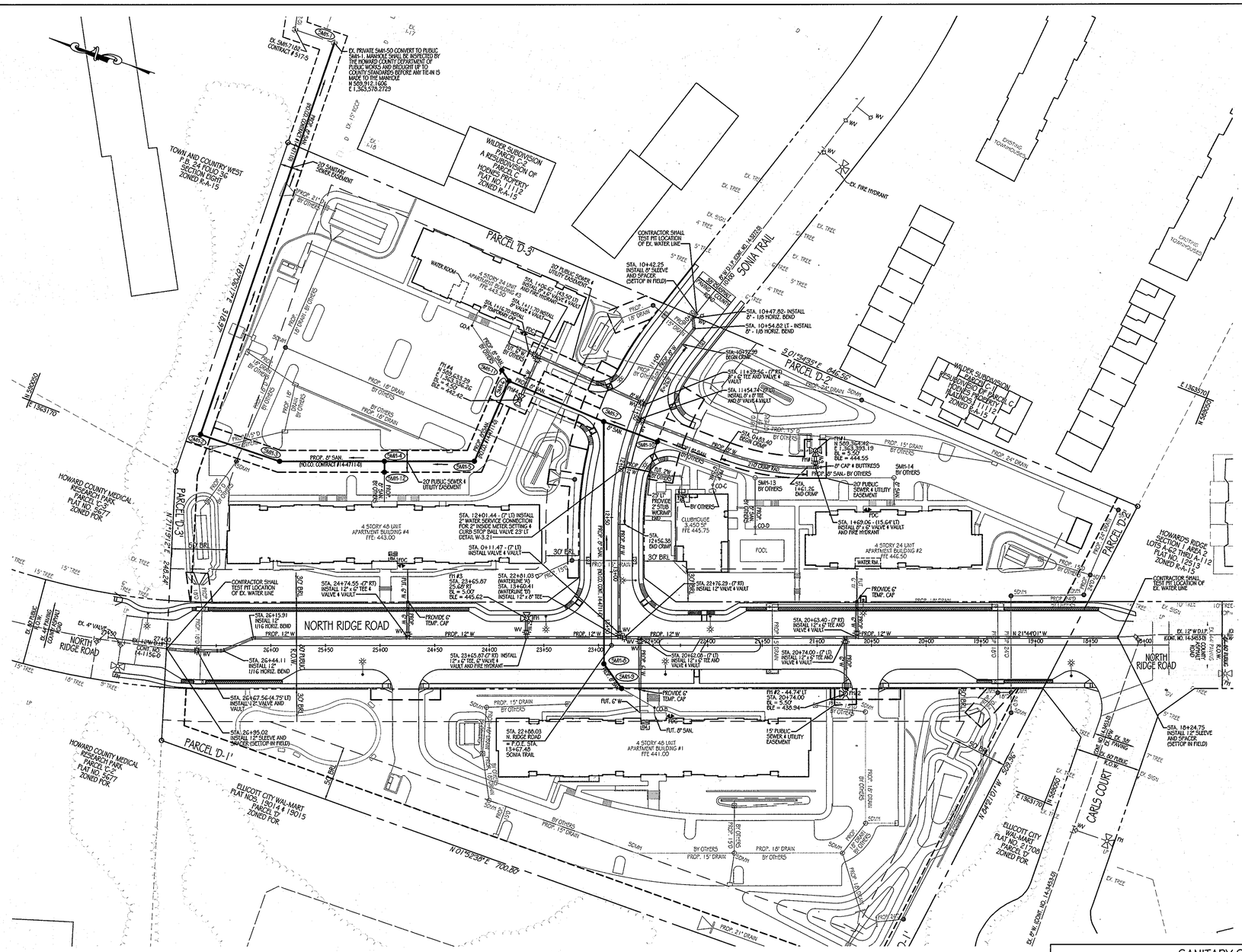
ELECTION DISTRICT NO. 2 | HOWARD COUNTY, MARYLAND | CONTRACT # 14-4711-D

SCALE 1" = 600'
PROJECT # 27101105
SHEET 1 OF 6



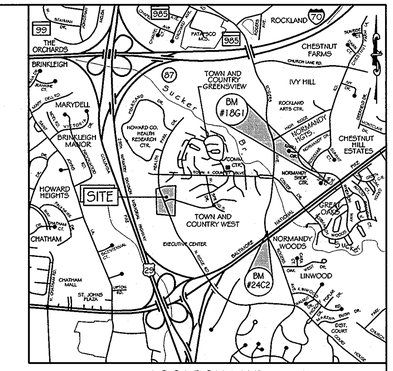
VICINITY MAP

SCALE: 1" = 600'



UTILITY PLAN

SCALE: 1" = 50'



LOCATION MAP

SCALE: 1" = 2000'

ADC MAP COORDINATES: 12-6C

LEGEND

438	INTERMEDIATE CONTOUR
430	INDEX CONTOUR
	EX. SANITARY MANHOLE
	EX. WATER METER
	SIGN
	UTILITY POLE
	EX. WATER VALVE
	EX. FIRE HYDRANT
CO	EX. CLEANOUT
	TREE
	EX. SANITARY PIPE
	EX. WATER PIPE
D D	EX. STORM DRAIN PIPE
	CURB
X X	FENCE
	PROPERTY LINE
	RIGHT OF WAY
	SETBACK LINE
430	CONTOUR
	CURB
	PROP. SIDEWALK
PROP. 6" WATER	PROP. WATER
PROP. 8" SAN.	PROP. SANITARY SEWER
PROP. 18" DRAIN	STORM DRAIN
SMH	PROP. SANITARY MANHOLE
FH	PROP. FIRE HYDRANT
WV	PROP. WATER VALVE
FDC	FIRE DEPARTMENT CONNECTION
	STORM DRAIN INLET
	STORM DRAIN END SECTION
	LIGHT POLE (12' ARM)
	LIGHT POLE (POST TOPS)

GRAPHIC SCALE

50 0 25 50 100

1 INCH = 50 FEET

SANITARY SEWER STRUCTURE SCHEDULE

NO.	DESCRIPTION	TOP ELEV.	INV. IN	INV. OUT	REMARKS	COORDINATES NORTHING	COORDINATES EASTING
EX. SMH-1	EX. MANHOLE	410.40	404.91	404.91	EXISTING	589,950.1119	1,363,576.3497
SMH-1	STD. 4' MANHOLE	414.94	406.61	406.71	HOWARD CO. STD. DETAIL G-5.12	589,912.1606	1,363,578.2729
SMH-2	STD. 4' MANHOLE	434.10	424.66	424.56	HOWARD CO. STD. DETAIL G-5.12	589,892.9595	1,363,198.6395
SMH-3	STD. 4' MANHOLE	439.74	425.45	425.35	HOWARD CO. STD. DETAIL G-5.12	589,816.5330	1,363,202.5050
SMH-4	TYPE B DROP MH	441.60	434.00 / 426.41	426.31	HOWARD CO. STD. DETAIL S-1.32	589,727.4006	1,363,238.0354
SMH-5	STD. 4' MANHOLE	441.75	427.23	427.13	HOWARD CO. STD. DETAIL G-5.12	589,679.9607	1,363,303.8734
SMH-6	TYPE B DROP MH	441.51	434.90 / 428.05	427.95	HOWARD CO. STD. DETAIL S-1.32	589,719.0189	1,363,350.7311
SMH-7	TYPE B DROP MH	445.35	434.94 / 429.00	428.90	HOWARD CO. STD. DETAIL S-1.32	589,554.3220	1,363,346.1040
SMH-8	STD. 4' MANHOLE	444.45	432.10	432.00	HOWARD CO. STD. DETAIL G-5.12	589,471.8535	1,363,139.2222
SMH-9	STD. 4' MANHOLE	445.22	431.76	431.66	HOWARD CO. STD. DETAIL G-5.12	589,448.3823	1,363,124.1749
SMH-10	STD. 4' MANHOLE	445.63	435.46	435.36	HOWARD CO. STD. DETAIL G-5.12	589,501.7713	1,363,347.2740
SMH-11	STD. 4' MANHOLE	441.73	435.24	435.14	HOWARD CO. STD. DETAIL G-5.12	589,658.4849	1,363,355.5133
SMH-12	STD. 4' MANHOLE	442.02	434.30	434.20	HOWARD CO. STD. DETAIL G-5.12	589,723.6977	1,363,228.7463

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STATE OF MARYLAND — RICHARD T. BLAKE — No. 031089 — PROFESSIONAL ENGINEER

11-8-11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES — DATE 11/14/11

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMETN ENGINEERING DIVISION — DATE 12/5/11

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PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

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DESIGN:	B.E.S.
DRAWN:	C.T.B.
CHECKED:	R.L.B.
DATE:	11-3-2011

BY	NO.	REVISION	DATE

UTILITY PLAN

600' SCALE MAP NO.: 17 GRID: 7-C PARCEL: 711

ORCHARD MEADOWS

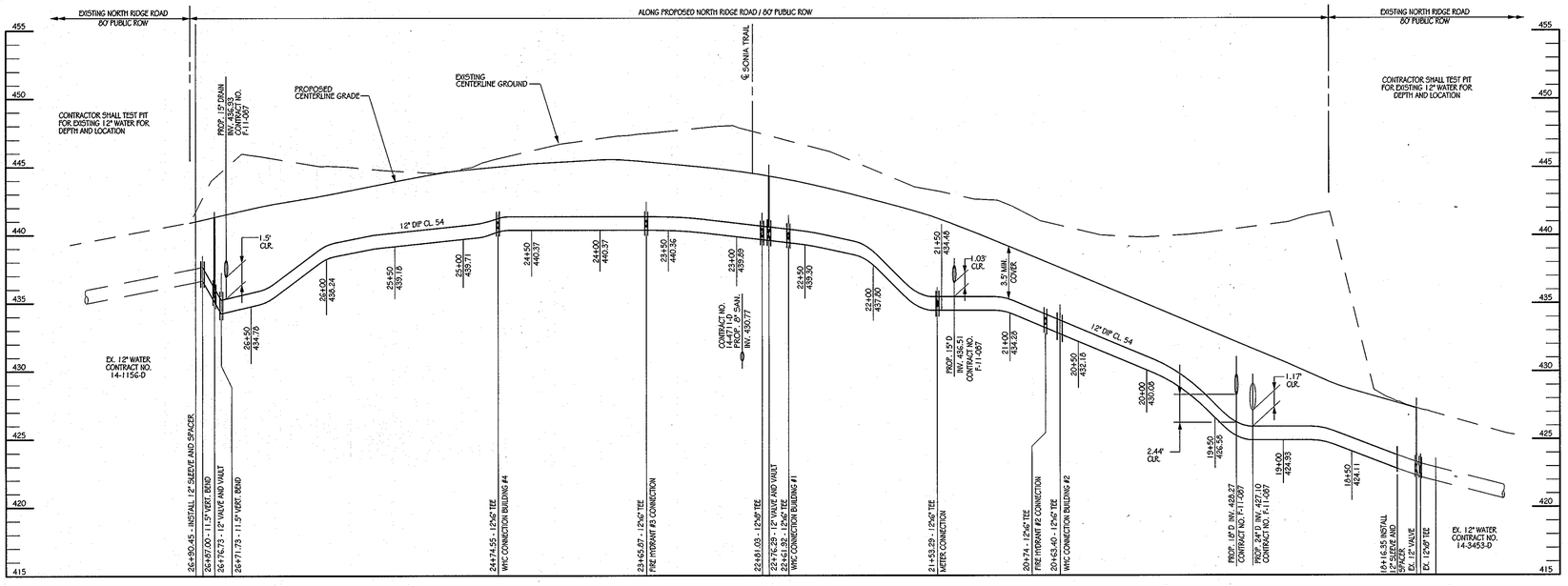
PARCEL D-1, D-2 & D-3
TAX MAP: 17 GRID: 23 PARCEL: 711
ZONED: R-A-15

ELECTION DISTRICT NO. 2 | HOWARD COUNTY, MARYLAND | CONTRACT # 14-4711-D

SCALE 1" = 50'

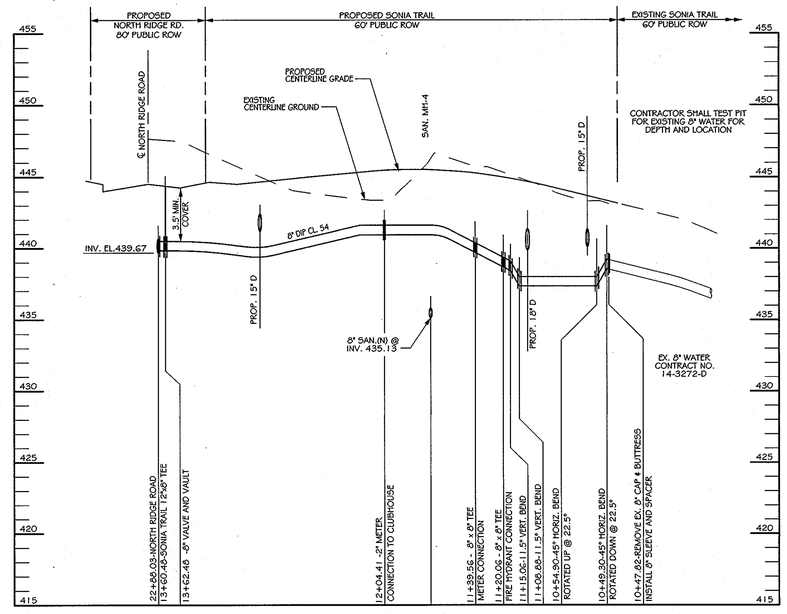
PROJECT # 27101105

SHEET 2 OF 6



12" PUBLIC WATER PROFILE

CENTERLINE STATIONING
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



8" PUBLIC WATER PROFILE

CENTERLINE STATIONING
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

GRAPHIC SCALE

5 0 5 10

1 INCH = 5 FEET

50 0 25 50 100

1 INCH = 50 FEET

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STATE OF MARYLAND · RICHARD L. BLOM · NO. 031089 · PROFESSIONAL ENGINEER

11-8-11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

11/10/11
CHIEF, BUREAU OF UTILITIES — DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

11/6/11
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

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BY	NO.	REVISION	DATE

WATER PROFILE SHEET

600' SCALE MAP NO.: 17 GRID: 7-C PARCEL: 711

ORCHARD MEADOWS

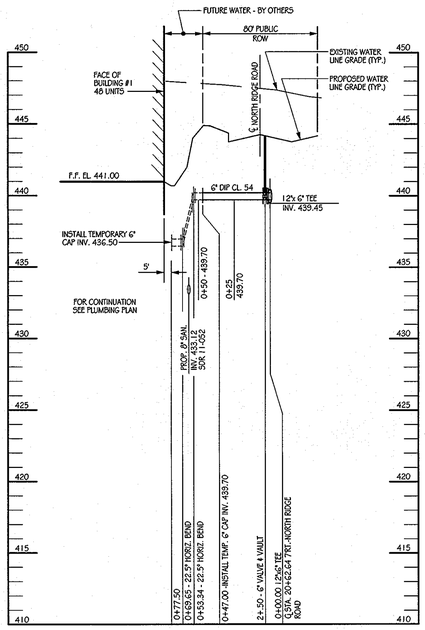
PARCEL D-1, D-2 & D-3
TAX MAP: 17 GRID: 23 PARCEL: 711
ZONED: R-A-15

ELECTION DISTRICT NO. 2 | HOWARD COUNTY, MARYLAND | CONTRACT # 14-4711-D

SCALE AS SHOWN

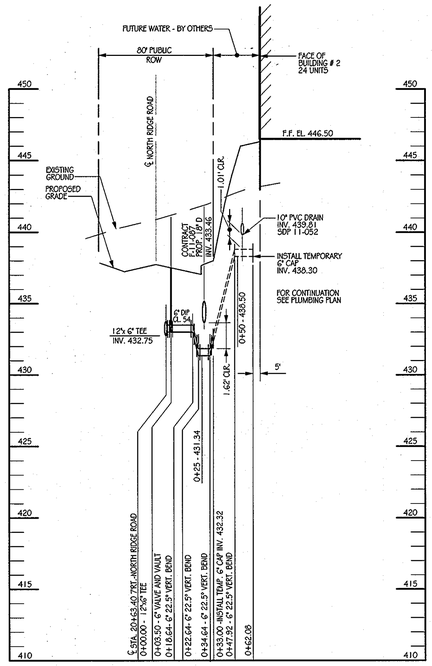
PROJECT # 27101105

SHEET 3 OF 6



6" WHC BUILDING #1 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



6" WHC BUILDING #2 PROFILE

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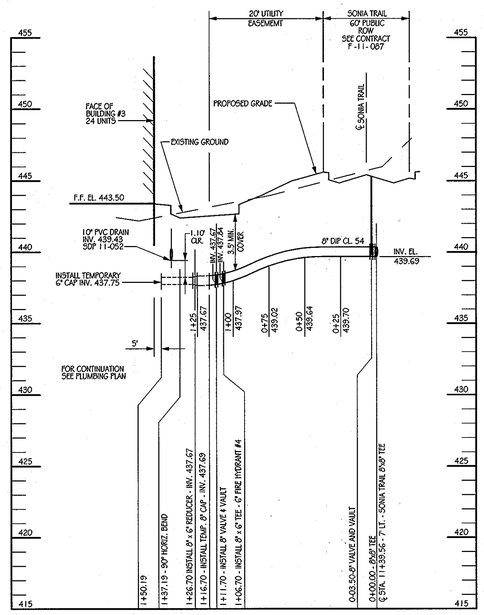
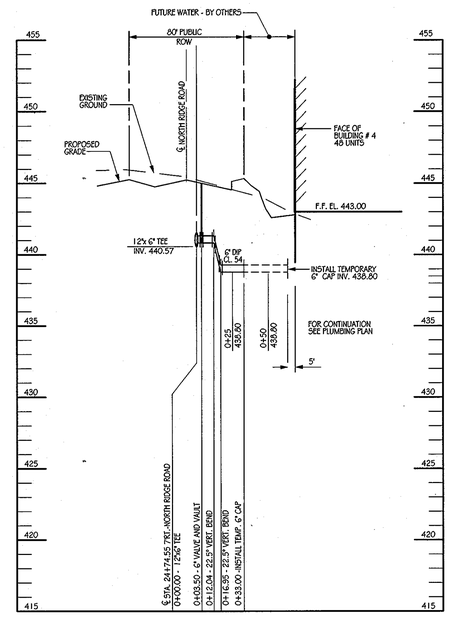
VERT. : 1" = 5'



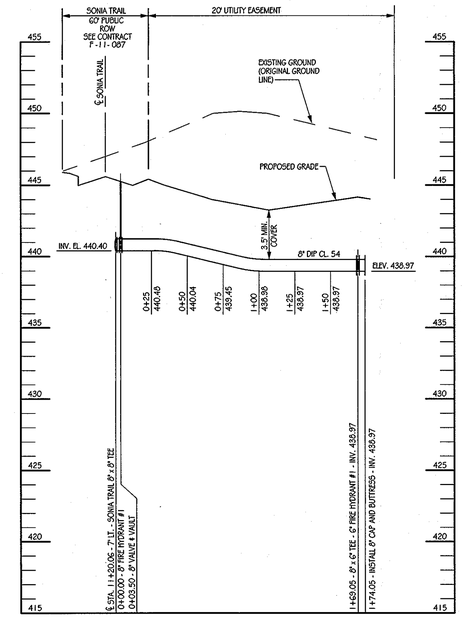
8" WHC BUILDING #3 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



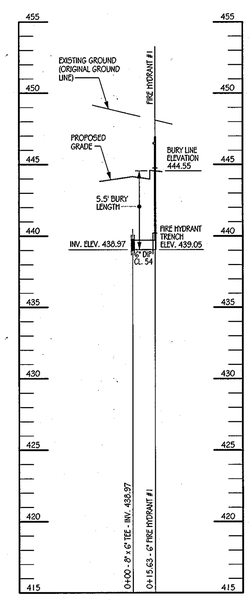
6" WHC BUILDING #4 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



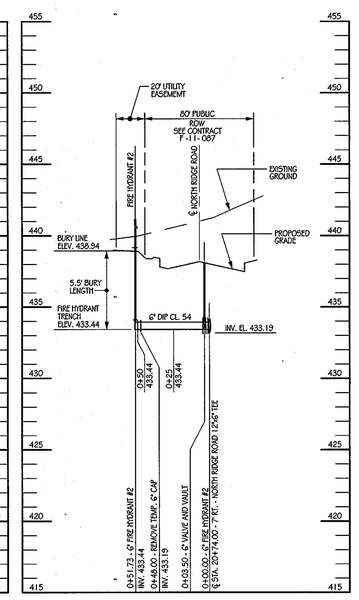
FIRE HYDRANT #1A PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



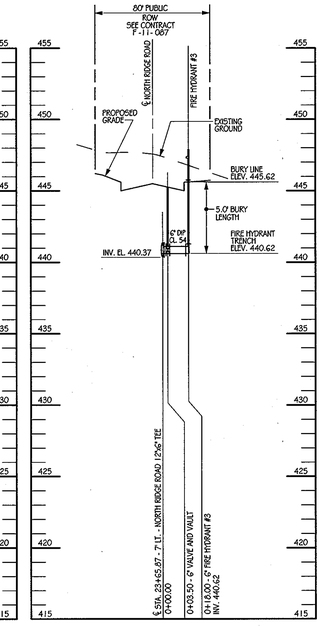
FIRE HYDRANT #1B PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



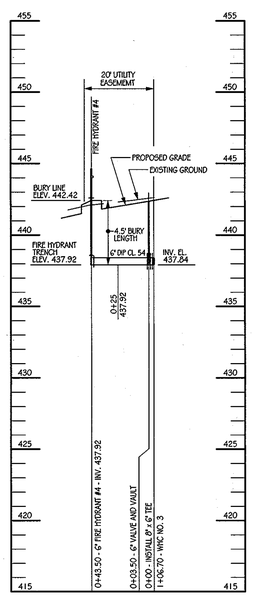
FIRE HYDRANT #2 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



FIRE HYDRANT #3 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



FIRE HYDRANT #4 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

GRAPHIC SCALE

5 0 5 10

1 INCH = 5 FEET

50 0 25 50 100

1 INCH = 50 FEET

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 31089 EXPIRATION DATE: 11/12/12

STATE OF MARYLAND · RICHARD L. BOTT · No. 031089 · PROFESSIONAL ENGINEER

11-8-11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES — DATE 11/16/11

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 12/5/11

KCI TECHNOLOGIES

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ELLICOTT CITY, MD 21042
(410) 964-2334

OWNER:
WILDER BUILDING CORPORATION
3300 SONIA TRAIL
ELLICOTT CITY, MD 21043
(410)-461-2522

DESIGN:	B.E.S.
DRAWN:	C.T.B.
CHECKED:	R.L.B.
DATE:	11-3-2011

BY	NO.	REVISION	DATE

WATER PROFILE SHEET

600' SCALE MAP NO.: 17 GRID: 7-C PARCEL: 711

ORCHARD MEADOWS

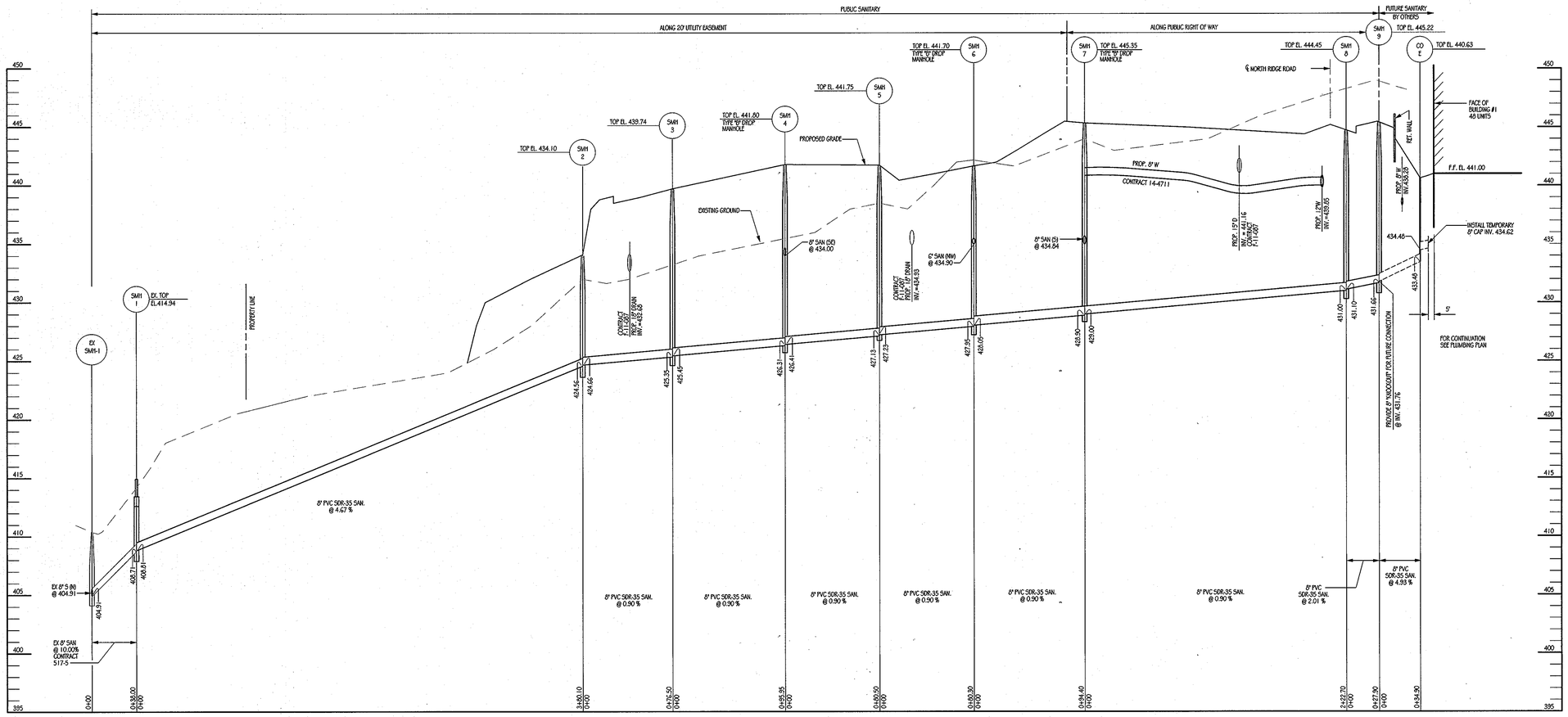
PARCEL D-1, D-2 & D-3
TAX MAP: 17 GRID: 23 PARCEL: 711
ZONED: R-A-15

ELECTION DISTRICT NO. 2 | HOWARD COUNTY, MARYLAND | CONTRACT # 14-4711-D

SCALE AS SHOWN

PROJECT # 27101105

SHEET 4 OF 6



SANITARY SEWER PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

GRAPHIC SCALE

5 0 5 10

1 INCH = 5 FEET

50 0 25 50 100

1 INCH = 50 FEET

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STATE OF MARYLAND RICHARD L. BUTT No. 031089 PROFESSIONAL ENGINEER

12-8-11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES — DATE 11/14/11

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMETN ENGINEERING DIVISION — DATE 12/5/11

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SANITARY PROFILE SHEET

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ORCHARD MEADOWS

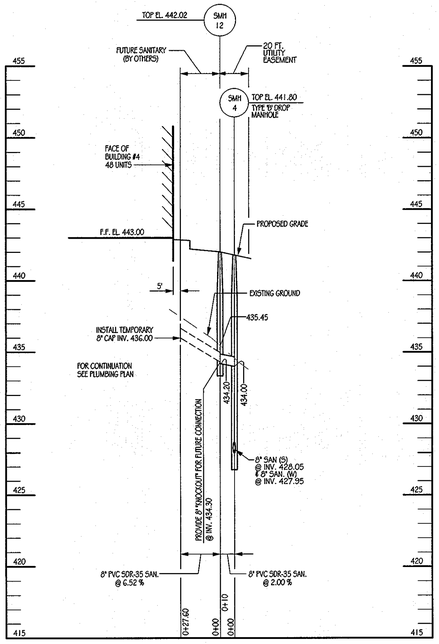
PARCEL D-1, D-2 & D-3
TAX MAP: 17 GRID: 23 PARCEL: 711
ZONED: R-A-15

ELECTION DISTRICT NO. 2 | HOWARD COUNTY, MARYLAND | CONTRACT # 14-4711-D

SCALE AS SHOWN

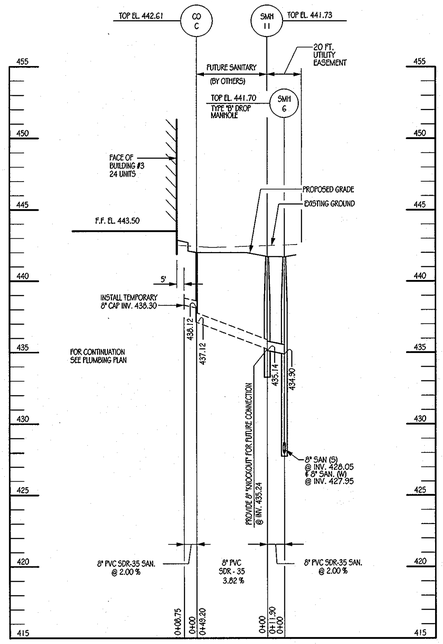
PROJECT # 27101105

SHEET 5 OF 6



SANITARY SEWER PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



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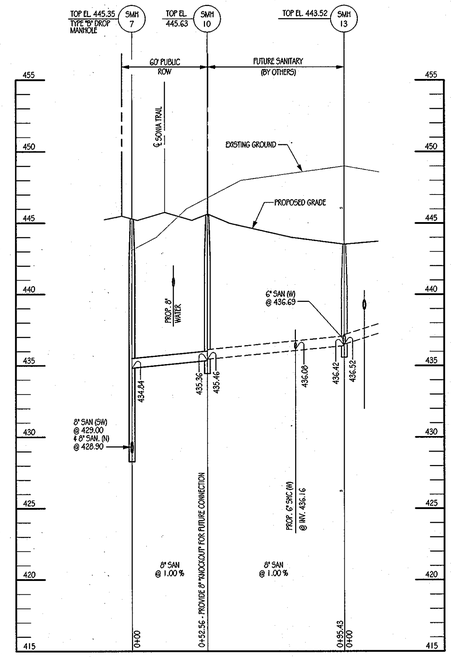

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SCALE AS SHOWN

PROJECT # 27101105

SHEET 6 OF 6