

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
			TYPE	
8" SEWER	1,330 L.F.	1,330 L.F.	SDR-35	J.M.
8" SEWER (DIP)	72 L.F.	92 L.F.	CL-52	GRIFFIN
4" SEWER	681 L.F.	681 L.F.	SDR-35	J.M.
MANHOLES	11 EACH	11 EACH	PRE-CAST	CONTR. PRE-CAST
8" WATER	1,609 L.F.	1,605 L.F.	DIP CL-52	GRIFFIN
6" WATER	46 L.F.	46 L.F.	" "	" "
1 1/2" WVC	146 L.F.	146 L.F.	TYPE COPPER	READING TUBE
1" WVC	305 L.F.	305 L.F.	" "	" "
FIRE HYDRANTS	4 EACH	4 L.F.	KENNEDY	KENNEDY
8" x 8" TEE	1 EACH	1 EACH	M.J. TEE	TYLER
8" x 6" TEE	4 EACH	4 EACH	" "	" "
8" VALVE	4 EACH	4 EACH	C.V.	KENNEDY
6" VALVE	4 EACH	4 EACH	C.V.	" "
8" - 1/16" HD	3 EACH	3 EACH	M.J.	TYLER
8" - 1/32" HD	1 EACH	1 EACH	" "	" "
8" PLUG & BUTTRESS	1 EACH	1 EACH	" "	" "
8" x 8" BUTTING SUBE	1 EACH	1	M.J.	" "

NAME OF UTILITY CONTRACTOR: BOSLEY INC.
 SURVEY & DRAFTING DIVISION AS-BUILT DATE: 12-30-98

DEVELOPER'S CERTIFICATION

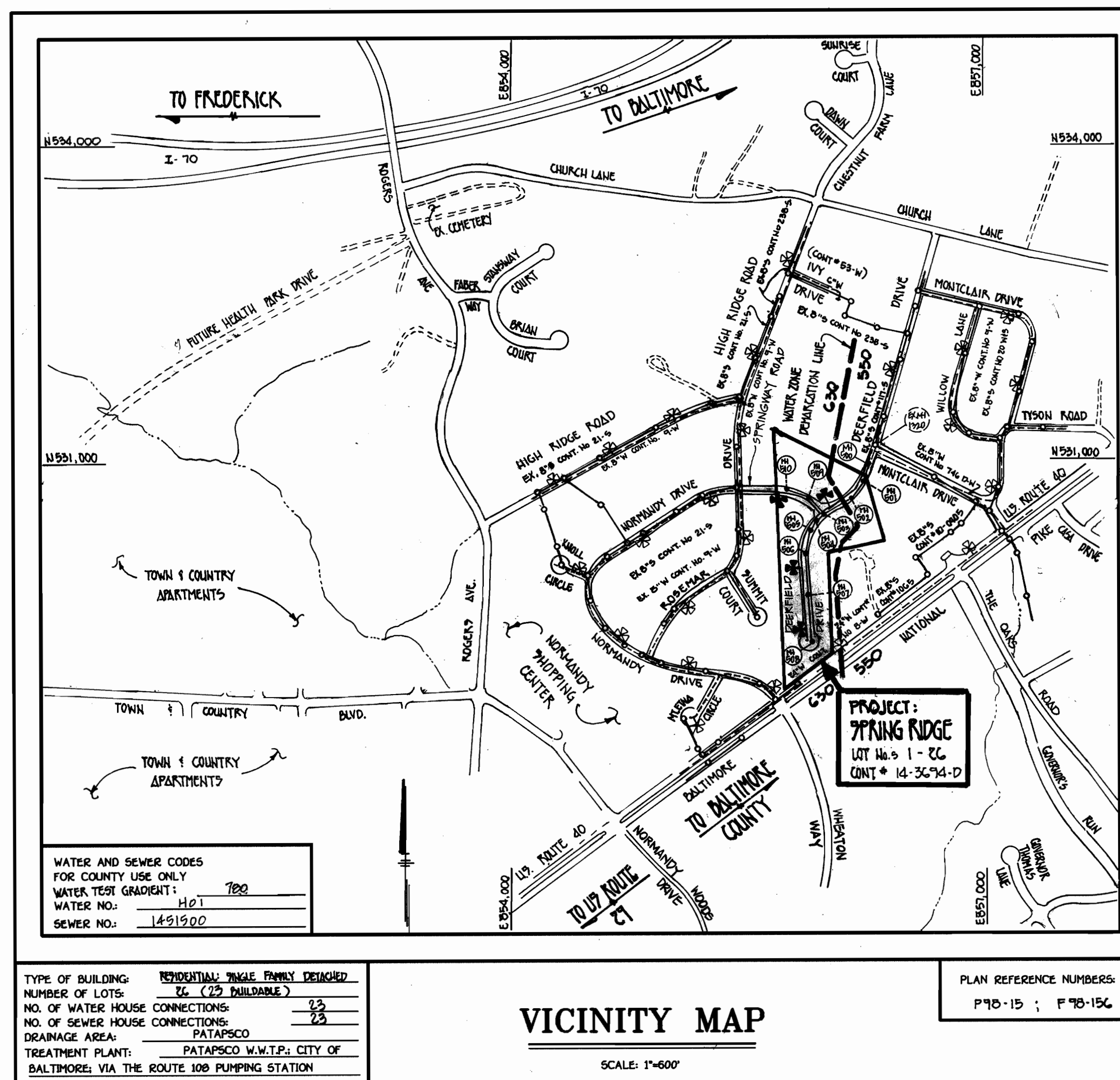
I/WE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Michael J. McCann
 SIGNATURE OF DEVELOPER
 FOR CHATEAU BUILDERS, INC.
 6-15-98
 DATE

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Terrell A. Fisher
 SIGNATURE OF ENGINEER
 6-15-98
 DATE



WATER AND SEWER CODES
 FOR COUNTY USE ONLY
 WATER TEST GRADIENT: 780
 WATER NO.: H-01
 SEWER NO.: 1451200

TYPE OF BUILDING: RESIDENTIAL SINGLE FAMILY DETACHED
 NUMBER OF LOTS: 26 (25 BUILDABLE)
 NO. OF WATER HOUSE CONNECTIONS: 23
 NO. OF SEWER HOUSE CONNECTIONS: 23
 DRAINAGE AREA: PATAPSCO
 TREATMENT PLANT: PATAPSCO W.W.T.P. CITY OF BALTIMORE VIA THE ROUTE 100 PUMPING STATION

PLAN REFERENCE NUMBERS:
 F70-15; F70-15C

VICINITY MAP

SCALE: 1"=600'

GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6'. CLEAR ALL POLES BY 2'-0" MINIMUM.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (0991 AMENDMENTS) THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [] AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- 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.
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G.5.2.
- WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G.5.1.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL BE D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W11 AND W21.3). SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS 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.
- CONSTRUCTION OF THE WATER & SEWER MAINS INDICATED ON THESE PLANS SHALL NOT BEGIN UNTIL THE SEDIMENT & EROSION CONTROL MEASURES SHOWN AS A PART OF THE ROAD & STORM DRAIN CONSTRUCTION PLAN, F70-15C, ARE IN PLACE & UNTIL PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR IS GRANTED TO PROCEED.
- SINGLE WATER HOUSE CONNECTIONS SHALL BE 1" IN SIZE. TWIN WATER HOUSE CONNECTIONS SHALL BE 1 1/2" IN SIZE UP TO THE "Y" BRANCH AND 1" IN SIZE THEREAFTER. ALL METERS SHALL BE 3/4" IN SIZE.

MDE NON-TIDAL WETLANDS AUTHORIZATION NO.
 MDE APPLICATION TRACKING NO.

F70-15C

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Cheryl Swimmann 9/14/98
 U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John K. Pantone 9/14/98
 HOWARD SOIL CONSERVATION DISTRICT DATE

EROSION CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON F70-15C (SEE GENERAL NOTE NO. 27)

Michael J. McCann
 SIGNATURE OF DEVELOPER
 FOR CHATEAU BUILDERS, INC.
 6-15-98
 DATE

CONTRACT No. 14 - 3694 -D

SPRING RIDGE

LOT NOS. 1-26

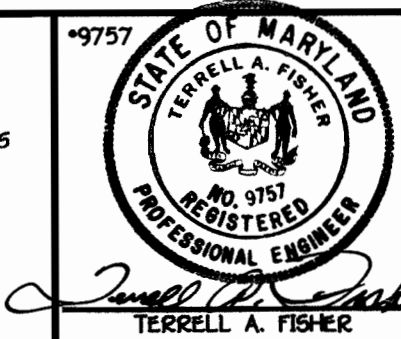
**WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND**

CONTRACT NO. 14-3694-D
 SPRING RIDGE
 LOT NOS. 1 - 26
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert B. ... 9-11-98
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 ... 9/14/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLSWORTH CITY, MARYLAND 21042
 (410) 461 - 2855



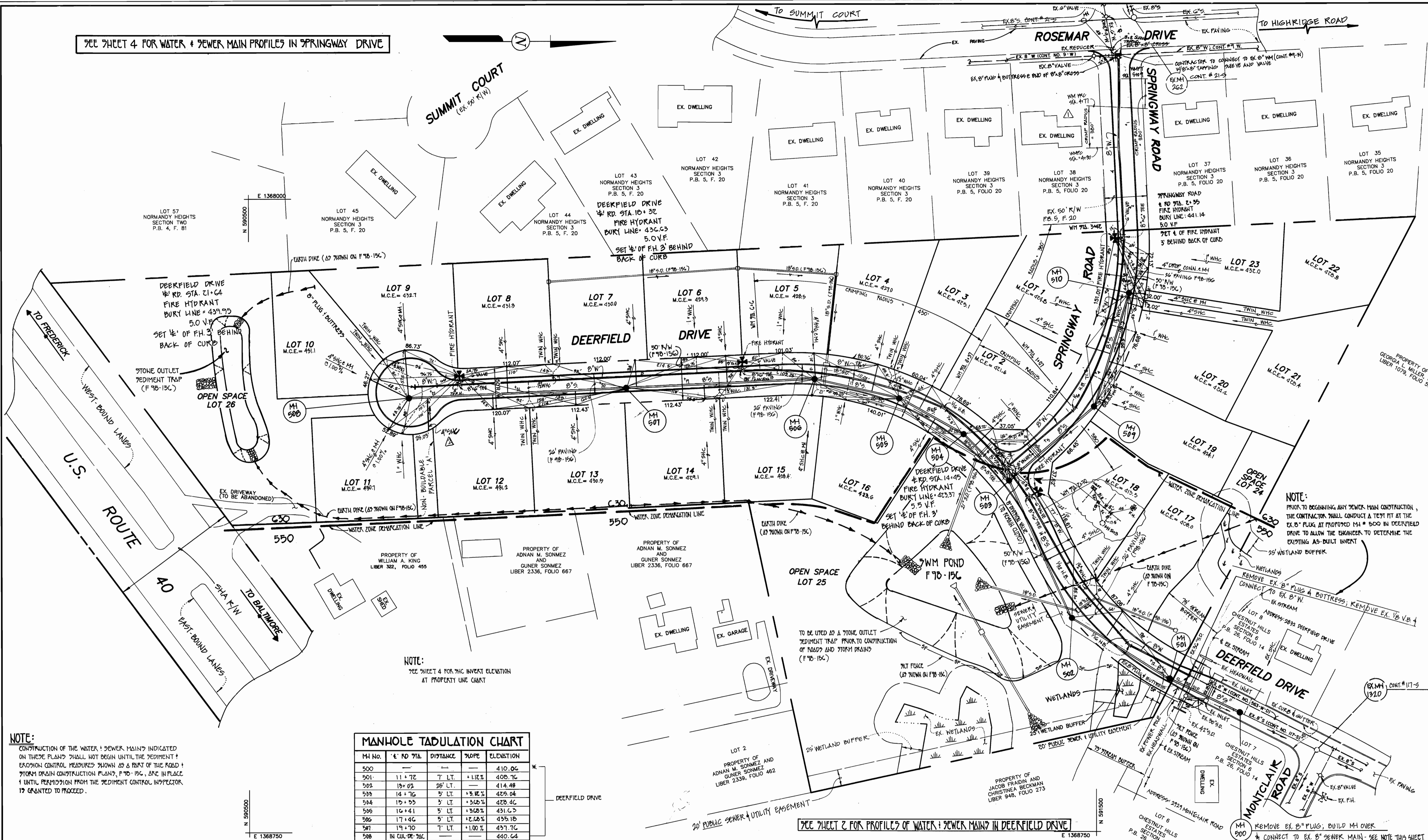
DESIGNED BY: M.J.M.
 DRAWN BY: L.M.A.
 CHECKED BY: M.J.M.
 DATE: MAY, 1998
 BY NO. []
 REVISION []

AS-BUILT CONDITIONS ADDED TO PLAN 5/99
 AS-BUILT QUANTITIES SHALL INCLUDE TAPPING SLEEVE 11/98

TITLE SHEET
 600' SCALE MAP NO. 13 BLOCK NO. 19
 F.C.C. WORK ORDER NO. 30915
 FILE NAME: G:\Drawings\30915\WAS\TitleSheet.dwg

SPRING RIDGE
 LOT NOS. 1 - 26
 CONTRACT NO. 14 - 3694 -D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 1 OF 4

SEE SHEET 4 FOR WATER & SEWER MAIN PROFILES IN SPRINGWAY DRIVE



NOTE:
SEE SHEET 4 FOR 7/16 INVERT ELEVATION AT PROPERTY LINE CHART

MANHOLE TABULATION CHART				
MH NO.	E. RD 71A	DISTANCE	GRADE	ELEVATION
500	—	—	—	410.06
501	11+72	7' LT.	+1.12%	408.76
502	13+02	28' LT.	—	414.48
503	14+76	5' LT.	+3.12%	429.04
504	15+55	3' LT.	+3.05%	428.40
505	16+41	5' LT.	+3.03%	431.03
506	17+46	5' LT.	+2.58%	435.18
507	19+70	7' LT.	+1.00%	437.70
508	IN CURVE 70C	—	—	440.64
509	4+35	10' LT.	—	431.94
510	3+00	6' LT.	-4.92%	437.72

* 7/16 INVERT ELEVATION AT PROPERTY LINE CHART

NOTE:
CONSTRUCTION OF THE WATER & SEWER MAINS INDICATED ON THESE PLANS SHALL NOT BEGIN UNTIL THE SEDIMENT & EROSION CONTROL MEASURES SHOWN AS PART OF THE ROAD & STORM DRAIN CONSTRUCTION PLANS, F 70-15C, ARE IN PLACE & UNTIL PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR IS GRANTED TO PROCEED.

SEE SHEET 2 FOR PROFILES OF WATER & SEWER MAINS IN DEERFIELD DRIVE

PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert Benner
CHIEF, BUREAU OF UTILITIES
DATE: 9-11-98

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 9/14/98

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
20700 SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2855

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
TERRELL A. FISHER

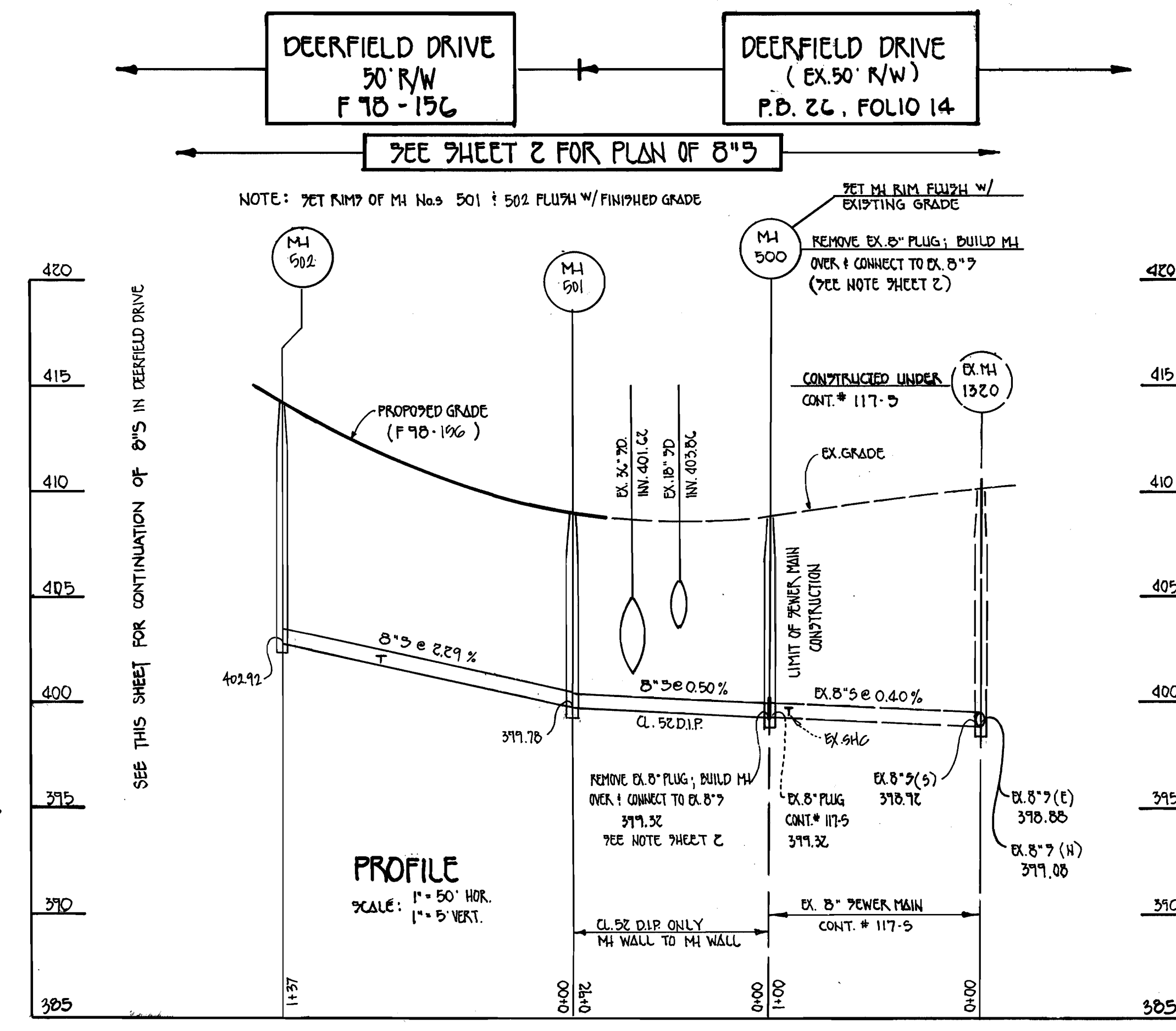
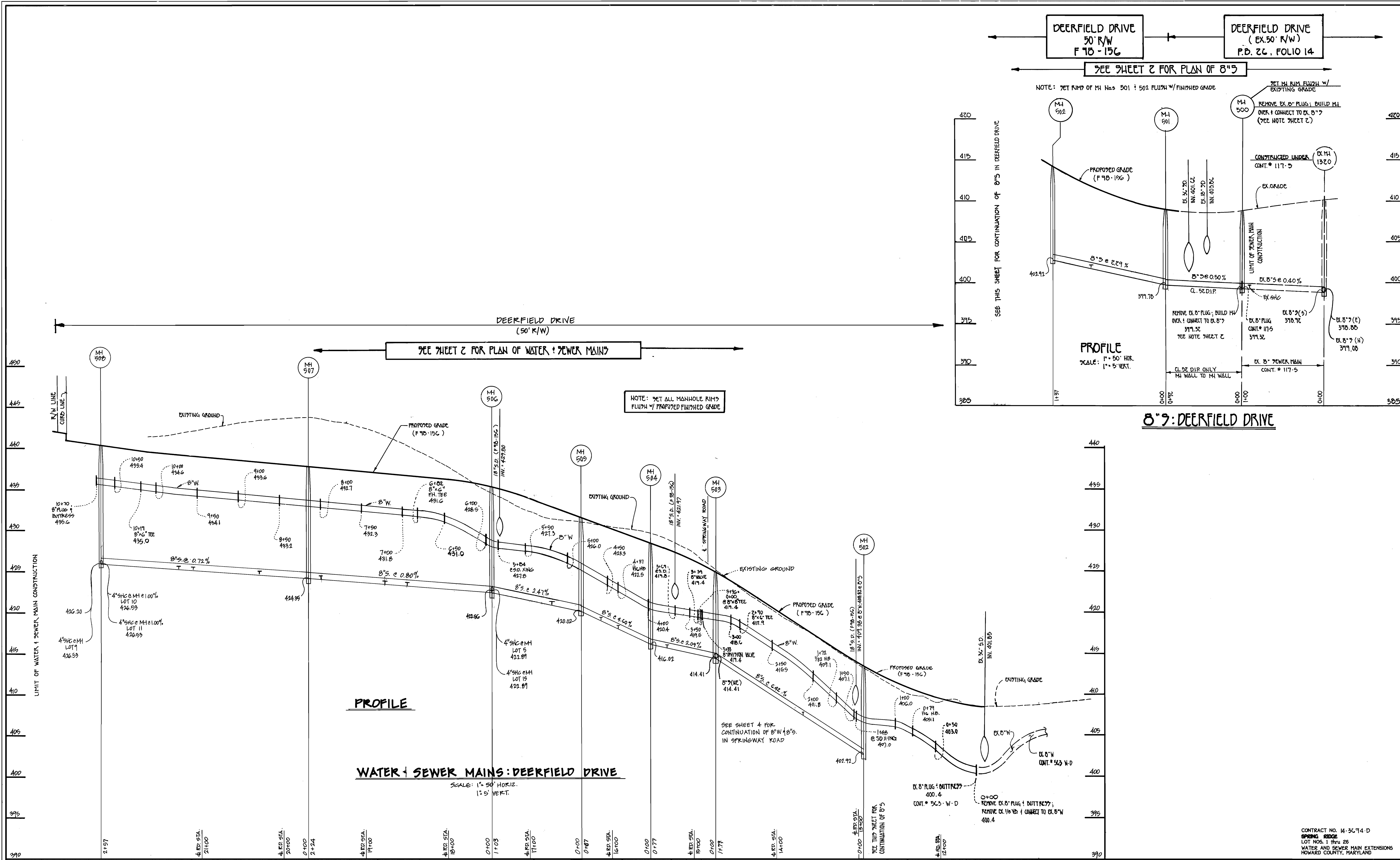
DESIGNED BY: M.J.M.
DRAWN BY: M.J.M.
CHECKED BY: P.W.K.
DATE: MAY, 1998
BY: NO.

REVISIONS:
FCC 1 ADD 4" SHC TO R/W LINE FOR SONMEZ PROPERTY 12/99
KCI 2 AS-BUILT CONDITIONS ADDED TO PLAN 5/00
PCC 1 INDICATE A CONNECTION TO THE WATER MAIN IN ROSEMAR DRIVE WITH 15.4 V. IN LINE OF CONNECTION TO EX. CROSS 11/98

PLAN VIEW
WATER AND SEWER MAINS
600' SCALE MAP NO. 18 BLOCK NO. 19
F.C.C. WORK ORDER NO. 30513
DATE: FILE NAME: G:\DRAWINGS\30513\W&S\SPRINGRID.DWG

SPRING RIDGE
LOT NOS. 1 thru 26
CONTRACT NO. 14 - 3674 - D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 2 OF 4

CONTRACT NO. 14-3674-D
SPRING RIDGE
LOT NOS. 1 thru 26
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. ...
CHIEF, BUREAU OF UTILITIES

7-11-98
DATE

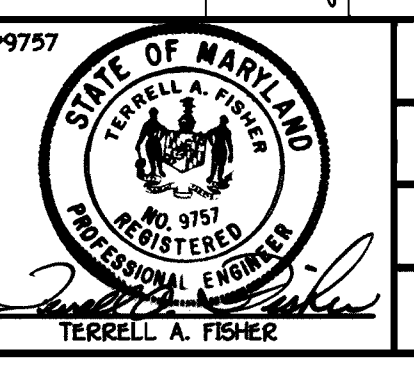
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

9/14/98
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-481-2950



DESIGNED BY: M.J.M.
DRAWN BY: J.A.U.
CHECKED BY: M.J.M.
DATE: MAY, 1998

BY	NO.	REVISION	DATE

PROFILES
WATER AND SEWER MAINS

60% SCALE MAP NO. 18 BLOCK NO. 19
F.C.C. WORK ORDER NO. 30915
FILE NAME: C:\DRAWINGS\30915\WAS\SPRINGRIDGEPROFILE.DWG

SPRING RIDGE
LOT NOS. 1 THRU 26

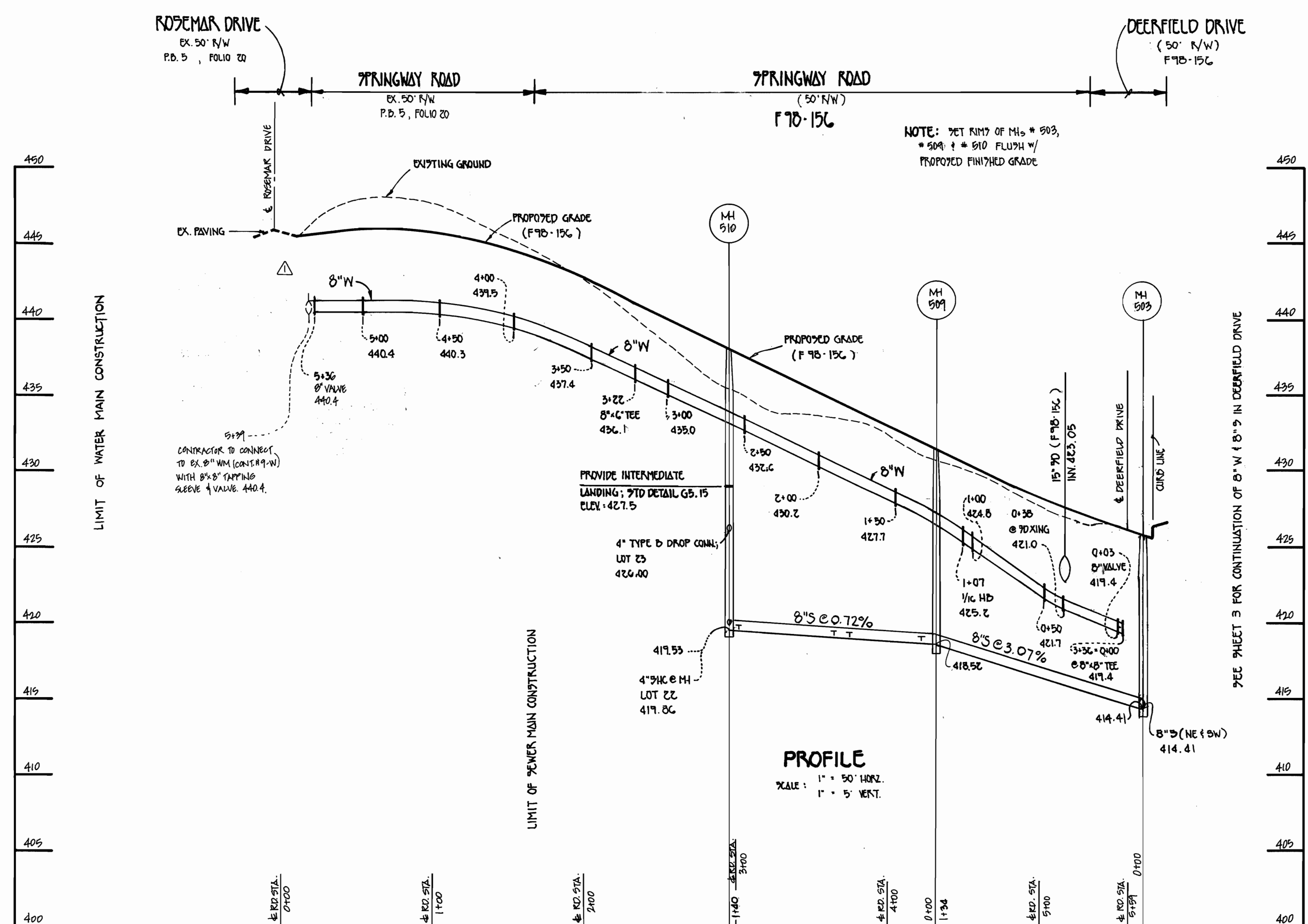
CONTRACT NO. 14 - 3674 - D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 4

CONTRACT NO. 14-3674-D
SPRING RIDGE
LOT NOS. 1 THRU 26
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

SHE INVERT & PROPERTY LINE CHART		
STATION	LOT	ELEVATION
MH 501 TO MH 502		
0+71 RT.	17	402.79
MH 502 TO MH 503		
0+74 RT.	18	408.54
MH 503 TO MH 504		
0+79 RT.	2	416.41
MH 504 TO MH 505		
0+80 LT.	16	418.43
0+81 RT.	3	419.64
MH 505 TO MH 506		
0+82 RT.	4	421.76
c MH 506 RT.	5	423.91
c MH 506 LT.	15	423.91
MH 506 TO MH 507		
1+04 RT.	6	424.20
1+30 LT.	14	424.13
2+12 RT.	7	425.07
MH 507 TO MH 508		
0+60 LT.	13	425.31
1+40 RT.	8	426.17
1+58 LT.	12	426.02
c MH 508 LT.	11 @ 1.00%	426.95
c MH 508 RT.	9	427.09
c MH 508 RT.	10 @ 1.00%	427.06
MH 509 TO MH 510		
0+10 RT.	19	418.96
0+57 RT.	20	419.40
0+67 LT.	1	419.79
1+31 RT.	21	420.07
c MH 510 RT.	22 (SHE c MH)	420.28
c MH 510 RT.	23 (DROPP CONN. c MH)	426.76

SEE SHEET 2 FOR PLAN OF 8" & 8" W



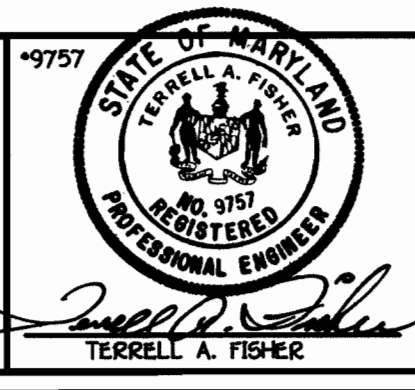
WATER & SEWER MAINS: SPRINGWAY ROAD

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
9-11-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
9/14/98
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL, ENGINEERING, CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELECTROT CITY, MARYLAND 20814
(410) 461 - 2855



DESIGNED BY:	M.J.M.
DRAWN BY:	J.A.U.
CHECKED BY:	M.J.M.
DATE:	MAY, 1998
BY NO.	
REVISION	

PROFILES
WATER AND SEWER MAINS
600' SCALE MAP NO. 18 BLOCK NO. 19
F.C.C. WORK ORDER NO. 30515
FILE NAME: G:\DRAWINGS\30515\WAS\SPRIDGEPROFILE.DWG

SPRING RIDGE
LOT NOS. 1 thru 26
CONTRACT NO. 14 - 3674-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 4 OF 4

CONTRACT NO. 14-3674-D
SPRING RIDGE
LOT NOS. 1 thru 26
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND