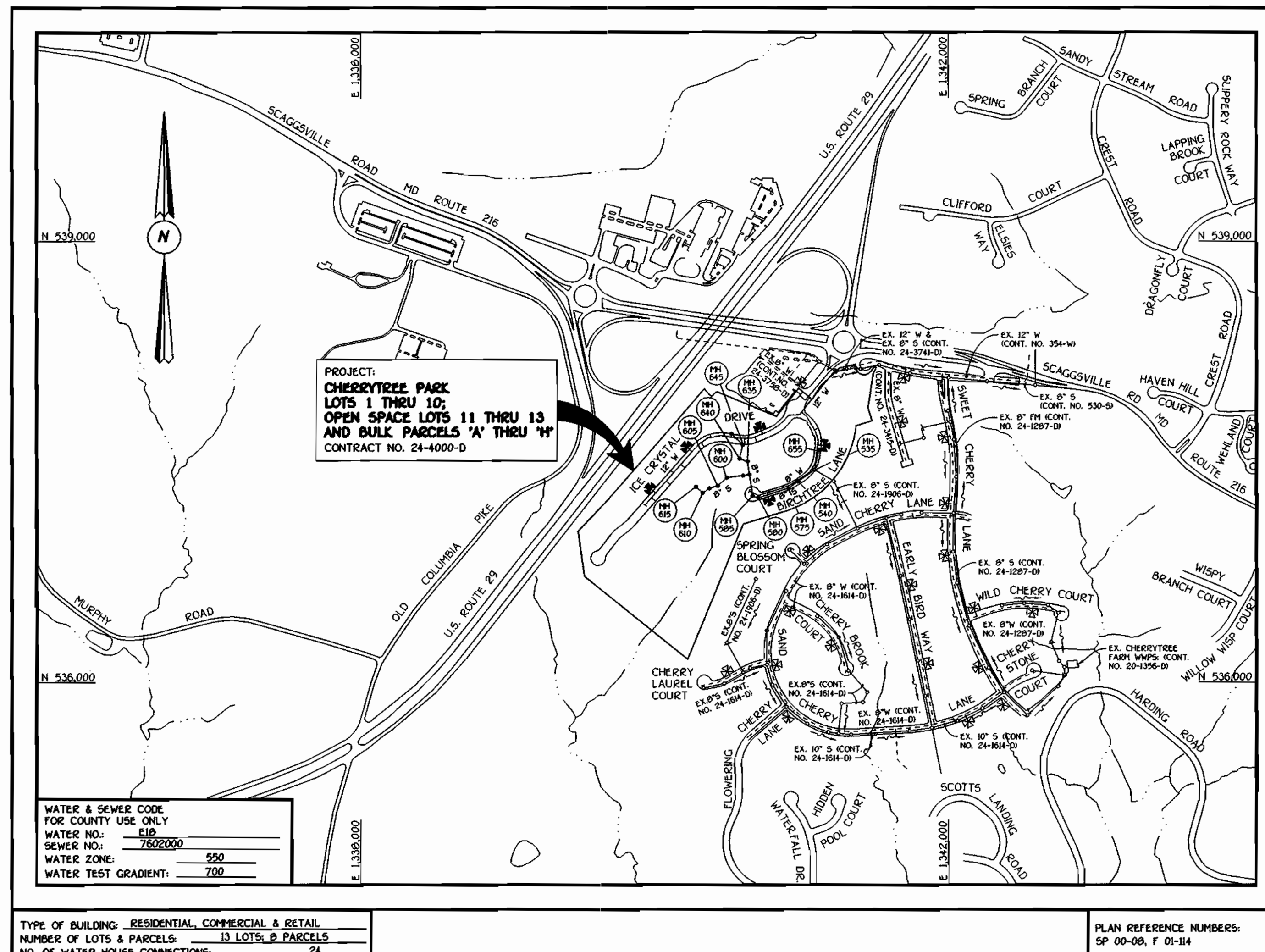


QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
			TYPE	
12" WATER	1,665 L.F.			
8" WATER	1,260 L.F.			
6" WATER	127 L.F.			
FIRE HYDRANTS	5 EACH			
1-1/2" WATER	100 L.F.			
1" WATER	432 L.F.			
12" X 12" TAPPING SLEEVE & VALVE	1 EACH			
12" X 6" TEE	9 EACH			
12" X 6" TEE	3 EACH			
12" VALVES	1 EACH			
12"-1/8 H.B.	3 EACH			
12"-1/16 H.B.	2 EACH			
8" X 8" TEE	4 EACH			
8" X 6" TEE	2 EACH			
8" VALVES	13 EACH			
6" VALVES	5 EACH			
8"-1/8 H.B.	1 EACH			
8"-1/16 H.B.	3 EACH			
12" PLUG & BUTTRESS	1 EACH			
8" PLUG & BUTTRESS	13 EACH			
8" SEWER	1,071 L.F.			
8" SEWER D.I.P.	621 L.F.			
4" SEWER	427 L.F.			
SEWER MANHOLES	17 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY & DRAFTING DIVISION AS-BUILT DATE:				



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, NAD 83.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 29.
- ALL PIPE ELEVATIONS ARE INVERTS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (99% 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 THE 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:
 - AT&T 1-800-526-2000
 - BGE (CONTRACTOR SERVICES) 410-850-4620
 - BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9096
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 410-313-4900
 - BELL ATLANTIC MARYLAND, INC. 1-800-621-9900
 - COLONIAL PIPELINE CO. 410-795-1990
 - MISS UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
- 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 THE 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 WATER-TIGHT FRAME AND COVERS, STANDARD DETAIL C5.52.
- WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR 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 C6.01.
- 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 TREES.
- 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 (W2.13). 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 MAIN SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH THE ANWA 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 (5) 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 1B.1(K) OF THE HOWARD COUNTY CODE.

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 THE 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.

Paul W. Keibel FOR: **Cherrytree Park, LLC** 12-12-01
 SIGNATURE OF DEVELOPER 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.

Michael D. Trinkle 12/12/01
 SIGNATURE OF ENGINEER DATE

CONTRACT No. 24-4000-D

CHERRYTREE PARK

LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13 AND PARCELS 'A' THRU 'H'

WATER AND SEWER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

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

Jim Myers 1/30/02
 U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE

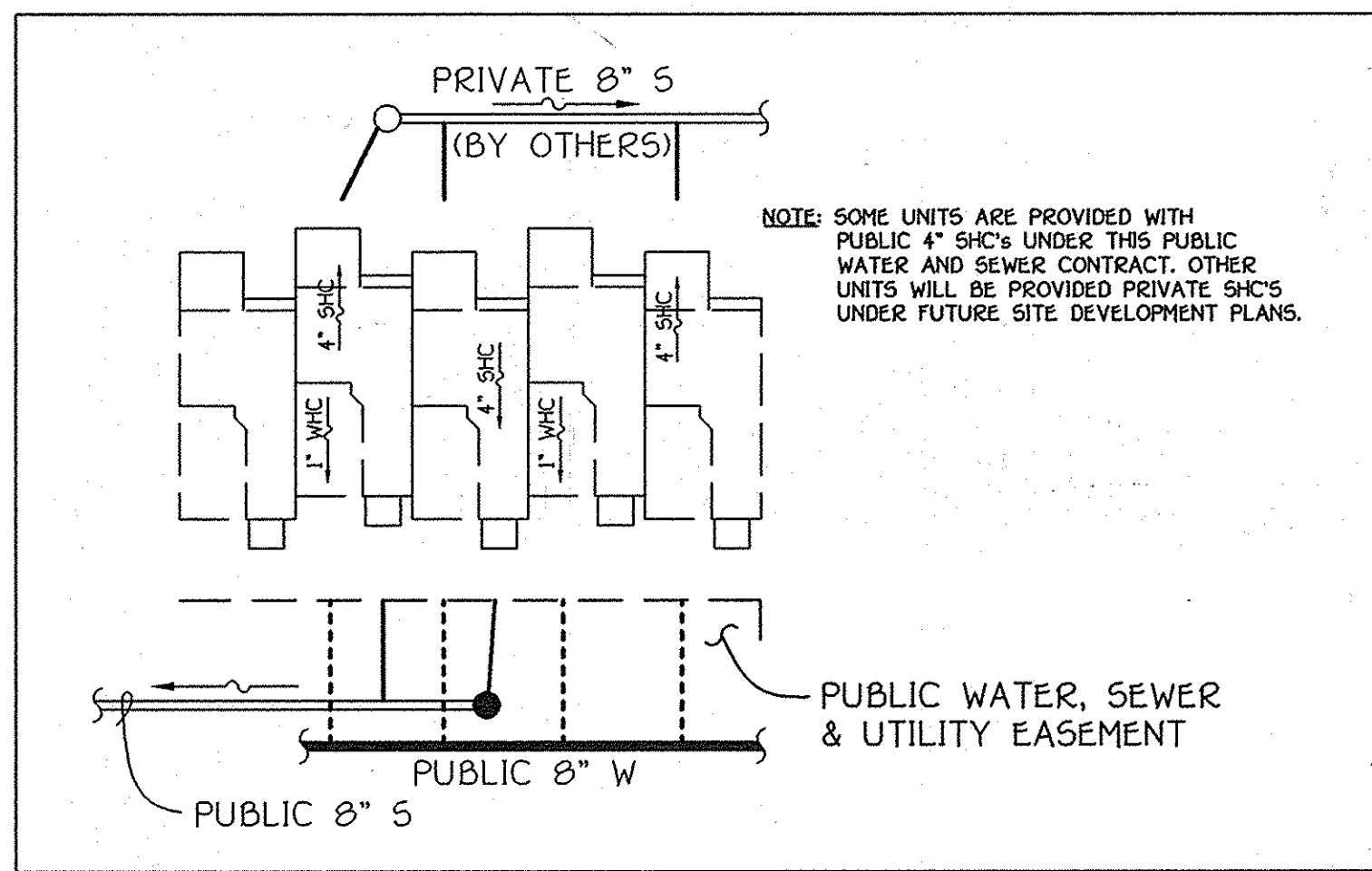
THIS DEVELOPMENT IS APPROVED FOR SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *John R. Robertson* 1/30/02
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT 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 AND AS SHOWN ON F01-114 AND AS SHOWN ON THESE PLANS.

Paul W. Keibel FOR: **Cherrytree Park, LLC** 12-12-01
 SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Rodney Bumpus</i> 1-31-02 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND <i>John D. ...</i> 2/1/02 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	*9757 FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS 10770 BALTIMORE NATIONAL PkE ELKOTT CITY, MARYLAND 21042 410-481-2955 TERRELL A. FISHER	DESIGNED BY: P.W.K. DRAWN BY: M.D.T. CHECKED BY: P.W.K. DATE: DECEMBER, 2001	TITLE SHEET 600' SCALE MAP NO. 46 BLOCK NO. 4 & 10 F.C.C. WORK ORDER NO. 30639 FILE NAME: 30639 FINAL WATER AND SEWER TITLE SHT 1	CHERRYTREE PARK LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13 AND BULK PARCELS 'A' THRU 'H' CONTRACT NO. 24-4000-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 7
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TYPICAL WHC & SHC DETAIL @ CONDOMINIUM UNITS

NO SCALE

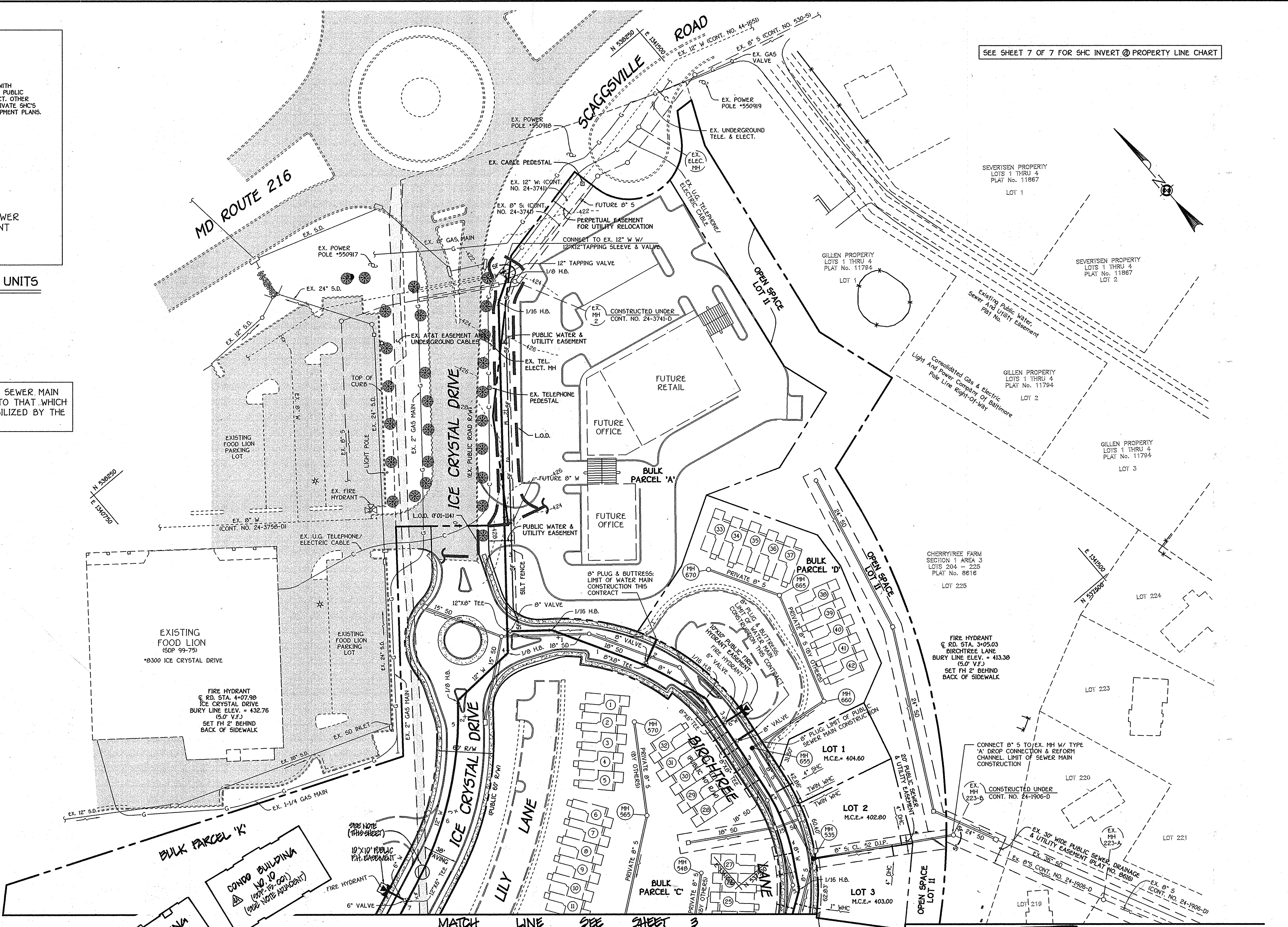
NOTE: THE LENGTH OF WATER AND SEWER MAIN TRENCH SHALL BE LIMITED TO THAT WHICH CAN BE BACKFILLED & STABILIZED BY THE END OF EACH WORKING DAY.

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE WATER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.

SEE SHEET 7 OF 7 FOR MANHOLE TABULATION CHART

SEE SHEETS 4 & 5 OF 7 FOR WATER MAIN TABULATION CHARTS

NOTE: AS SHOWN ON SHEET 3, THE PUBLIC 8" WATER MAIN FROM ICE CRYSTAL DRIVE, THE PUBLIC PORTION OF THE 8" WATER MAIN EXTENDING TO THE 4" WATER MAIN FOR THE PROVISION OF SERVICE TO BULK NO. 9 & THE PUBLIC PORTION OF THE 4" WATER MAIN FOR THE PROVISION OF SERVICE TO BULK NO. 10 WERE INSTALLED UNDER ADVANCE PERMIT ORDER (ADO) NO. 2742.



SEE SHEET 7 OF 7 FOR SHC INVERT @ PROPERTY LINE CHART

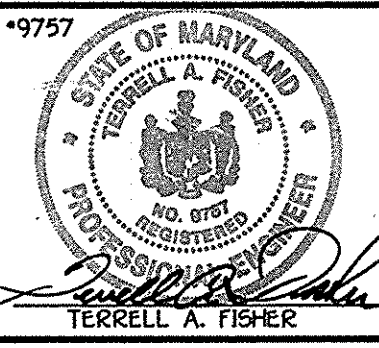
AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 24-4000-D
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
CONTRACT NO. 24-4000-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-31-02
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
2/1/02
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALDORNE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 481-2295



DESIGNED BY:	M.D.T.
DRAWN BY:	M.D.T.
CHECKED BY:	P.W.K.
DATE:	DECEMBER, 2001
BY:	NO.
REVISION:	

WATER AND SEWER MAINS PLAN VIEW	
600' SCALE MAP NO. 46	BLOCK NO. 4 & 10
F.C.C. WORK ORDER NO. 30638	
FILE NAME:	30638 FINAL WATER AND SEWER PLAN SHT 2

SCALE AS SHOWN
SHEET 2 OF 7

NOTE:
A. CONDOMINIUM BUILDING NOS. 9 & 10
CONSTRUCTED UNDER
SOP-15-001

NOTE: THE PUBLIC 8" WATER MAIN FROM ICE CRYSTAL DRIVE, THE PUBLIC PORTION OF THE 8" WATER MAIN EXTENDING TO THE 4" WATER MAIN FOR THE PROVISION OF SERVICE TO BULK NO. 9 & THE PUBLIC PORTION OF THE 4" WATER MAIN FOR THE PROVISION OF SERVICE TO BULK NO. 10 WERE INSTALLED UNDER ADVANCE PERMIT ORDER (ADO) NO. 2749.

NOTE: THE LENGTH OF WATER AND SEWER MAIN TRENCH SHALL BE LIMITED TO THAT WHICH CAN BE BACKFILLED & STABILIZED BY THE END OF EACH WORKING DAY.

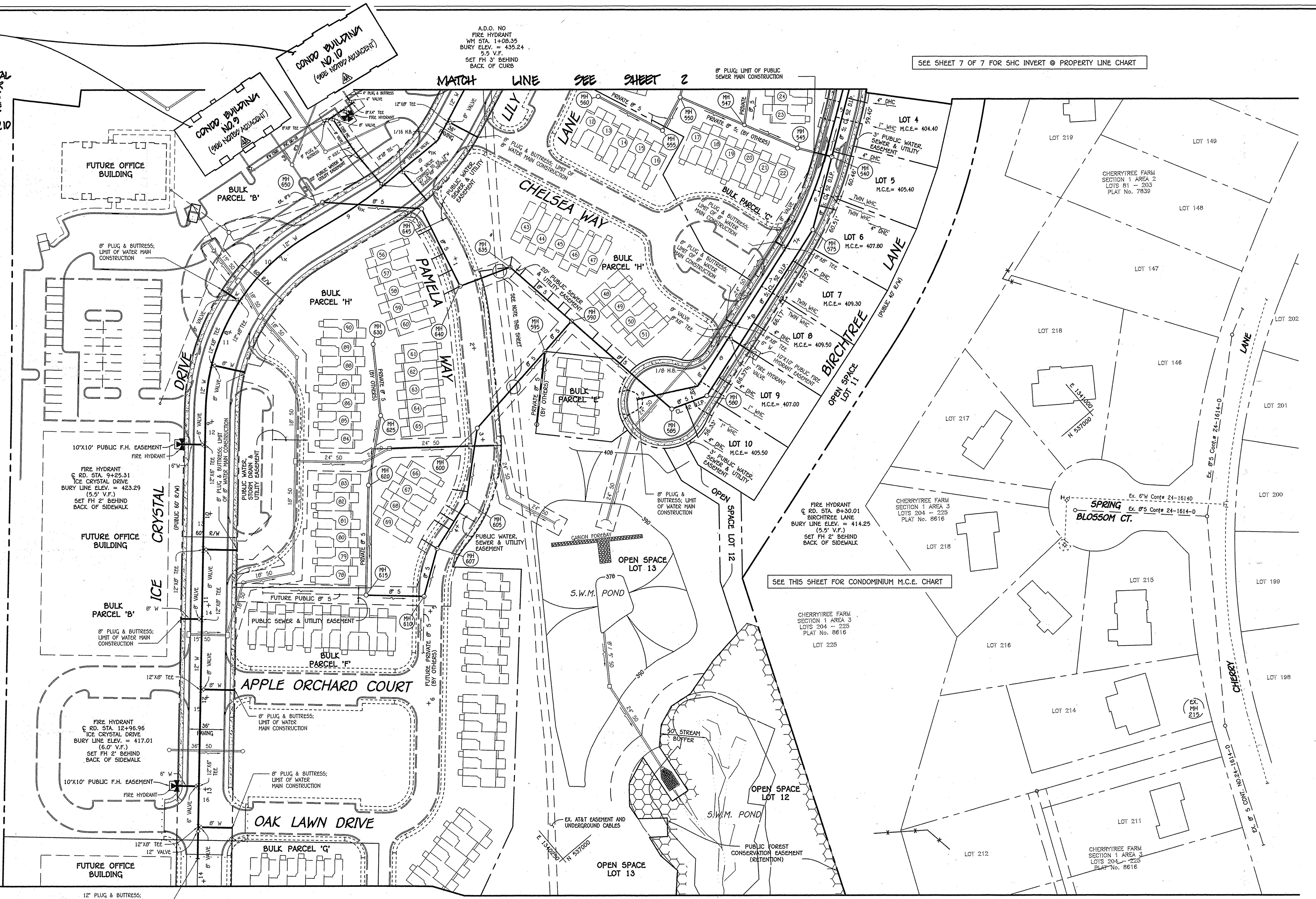
CONDOMINIUM M.C.E. CHART	
UNIT	M.C.E.
CHELSEA WAY	
43	418.60
44	417.60
45	416.70
46	415.80
47	415.40
48	414.60
49	412.00
50	411.40
51	409.90
PAMELA WAY	
56	422.50
57	423.60
58	423.60
59	419.30
66	404.30
67	404.80
68	404.70
69	405.20

COLUMBIA PIKE; U.S. ROUTE 29

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE SEWER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.

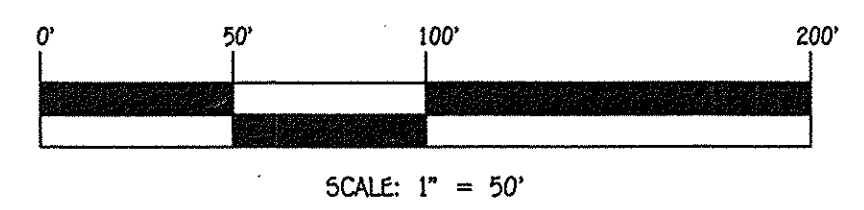
SEE SHEETS 7 OF 7 FOR MANHOLE TABULATION CHART

SEE SHEETS 4 & 5 OF 7 FOR WATER MAIN TABULATION CHARTS



PLAN
SCALE: 1" = 50'

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 7 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON FEBRUARY 1, 2002. REFERENCE ADO NO. 2749



SCALE: 1" = 50'

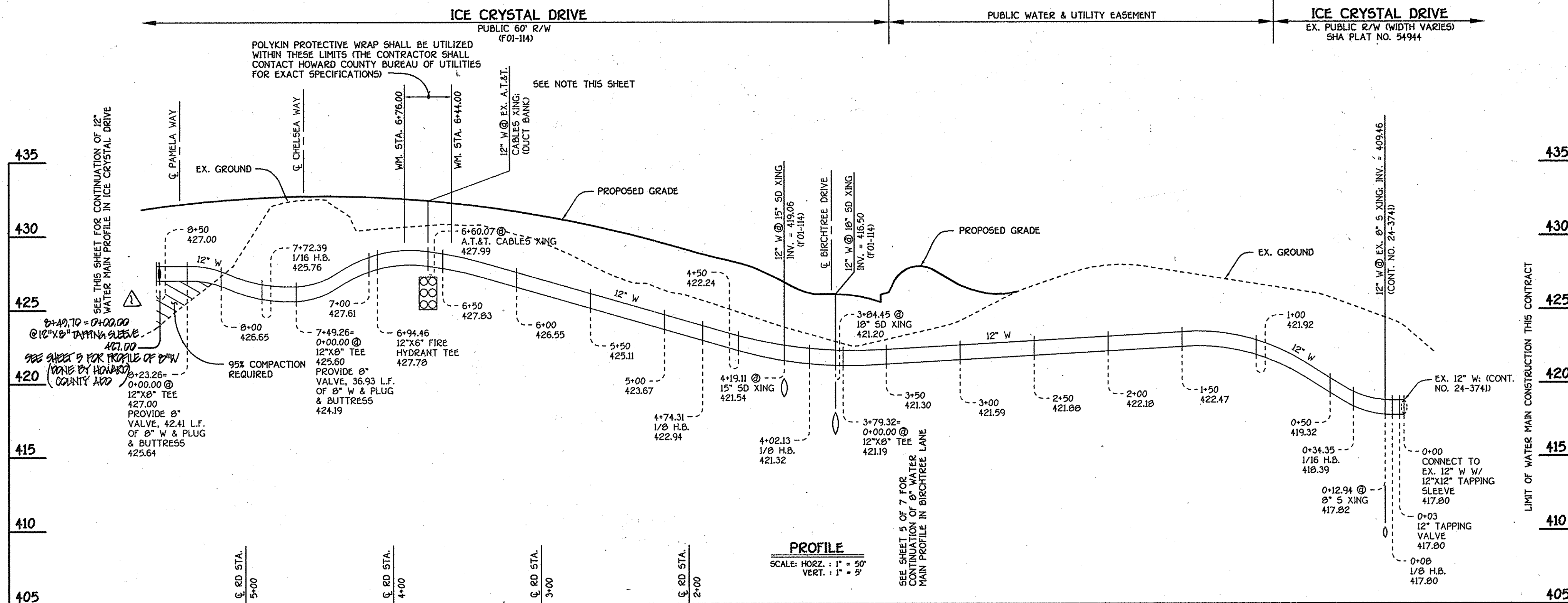
CONTRACT NO. 24-4000-D
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE
LOTS 11 THRU 13 AND BULK
PARCELS 'A' THRU 'H'
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities 11/19/14	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division M.G. 11/27/14	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16. FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE BUILDING - 10722 BALTIMORE NATIONAL PARK BLVD ELLETT CITY, MARYLAND 21042 (410) 461-2255	#12043 DESIGNED BY: M.O.T. DRAWN BY: M.O.T. CHECKED BY: P.M.K. DATE: NOVEMBER, 2014	WATER AND SEWER MAINS PLAN VIEW 600' SCALE MAP NO. 46 BLOCK NO. 4 & 10 F.C.C. WORK ORDER NO. 30638 FILE NAME: WATER & SEWER MAIN EXTENSION PLAN	CHERRYTREE PARK LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13 AND BULK PARCELS 'A' THRU 'H' WATER & SEWER MAIN EXTENSION CONTRACT NO. 24-4000-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 7

I:\2004\0404\dwg\Water & Sewer\Contract No. 24-452-d\Buildings 9 & 10\24-4000-D (ORIGINAL) SET - REVISED NOV 2014\Sheet 3 - 30638 Final Water and Sewer Plan.dwg, 11/19/2014, 1:04:04 PM

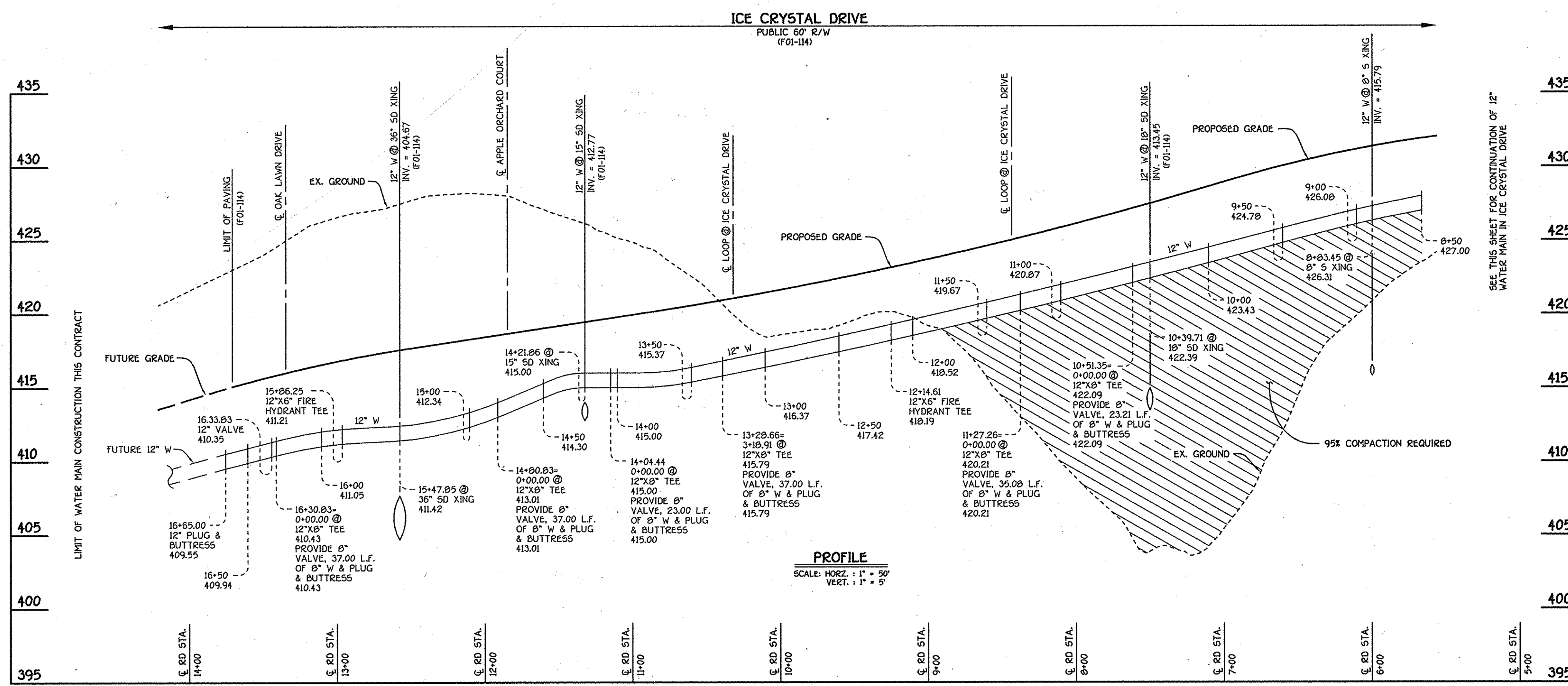
NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE WATER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.

WATER MAIN TABULATION CHART			
W.M. STATION	APPURTENANCE	NORTHING	EASTING
ICE CRYSTAL DRIVE			
0+00.00	12" X 12" TAPPING SLEEVE	530150.99	1341220.10
0+03.00	12" TAPPING VALVE	530148.05	1341227.51
0+08.00	1/8" H.B.	530143.31	1341226.53
0+34.35	1/16" H.B.	530129.71	1341203.86
3+79.32	12" X 8" TEE	537850.79	1340987.80
4+02.13	1/8" H.B.	537843.01	1340973.51
W.M. STATION	APPURTENANCE	ROAD STATION	DISTANCE
4+74.31	1/8" H.B.	1+02.93	7.00' RT.
4+78.83	P.C. (CRIMP RADIUS = 380.00')	1+07.45	7.00' RT.
6+74.08	P.T. (CRIMP RADIUS = 380.00')	3+07.60	7.00' RT.
6+94.46	12" X 6" TEE	4+07.90	7.00' RT.
7+48.66	8" PLUG & BUTTRESS	4+62.94	30.00' LT.
7+49.26	12" X 8" TEE	4+62.18	6.94' RT.
7+72.39	1/16" H.B.	4+86.67	5.15' RT.
8+23.26	12" X 8" TEE	5+39.25	12.40' RT.
8+23.31	8" PLUG & BUTTRESS	5+40.12	30.00' LT.
8+50.99	P.C. (CRIMP RADIUS = 380.00')	5+68.53	11.17' RT.
9+08.49	P.T. (CRIMP RADIUS = 380.00')	6+22.52	7.00' RT.
9+48.91	P.C. (CRIMP RADIUS = 227.00')	6+66.69	7.00' RT.
10+51.35	12" X 8" TEE	7+65.98	7.00' RT.
10+51.35	8" PLUG & BUTTRESS	7+65.98	30.00' RT.
11+26.24	8" PLUG & BUTTRESS	8+38.56	30.00' LT.
11+27.26	12" X 8" TEE	8+39.55	7.00' RT.
11+78.23	P.T. (CRIMP RADIUS = 227.00')	8+88.94	7.00' RT.
12+14.61	12" X 6" TEE	9+25.31	7.00' RT.
13+28.66	12" X 8" TEE	10+39.36	7.00' RT.
13+28.66	8" PLUG & BUTTRESS	10+39.36	30.00' LT.
14+04.44	12" X 8" TEE	11+15.15	7.00' RT.
14+04.44	8" PLUG & BUTTRESS	11+15.15	30.00' RT.
14+80.83	12" X 8" TEE	11+91.54	7.00' RT.
14+80.83	8" PLUG & BUTTRESS	11+91.54	30.00' LT.
15+86.25	12" X 6" TEE	12+96.96	7.00' RT.
16+30.83	12" X 8" TEE	13+41.54	7.00' RT.
16+30.83	8" PLUG & BUTTRESS	13+41.54	30.00' LT.
16+33.83	12" VALVE	13+44.54	7.00' RT.
16+65.00	12" PLUG & BUTTRESS	13+75.71	7.00' RT.



12" WATER MAIN: ICE CRYSTAL DRIVE

SEE THIS SHEET FOR WATER MAIN TABULATION CHART



12" WATER MAIN: ICE CRYSTAL DRIVE

AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 24-4000-D
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature] 1-31-02
CHIEF, BUREAU OF UTILITIES

[Signature] 2/1/02
CHIEF, DEVELOPMENT-ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKE
ELLICOTT CITY, MARYLAND 21114
410 481 - 2995

TERRELL A. FISHER
REGISTERED PROFESSIONAL ENGINEER
NO. 8757

DESIGNED BY: M.D.T.
DRAWN BY: M.D.T.
CHECKED BY: P.W.K.
DATE: DECEMBER, 2001

DATE: FEBRUARY 2005
BY: NO. REVISION

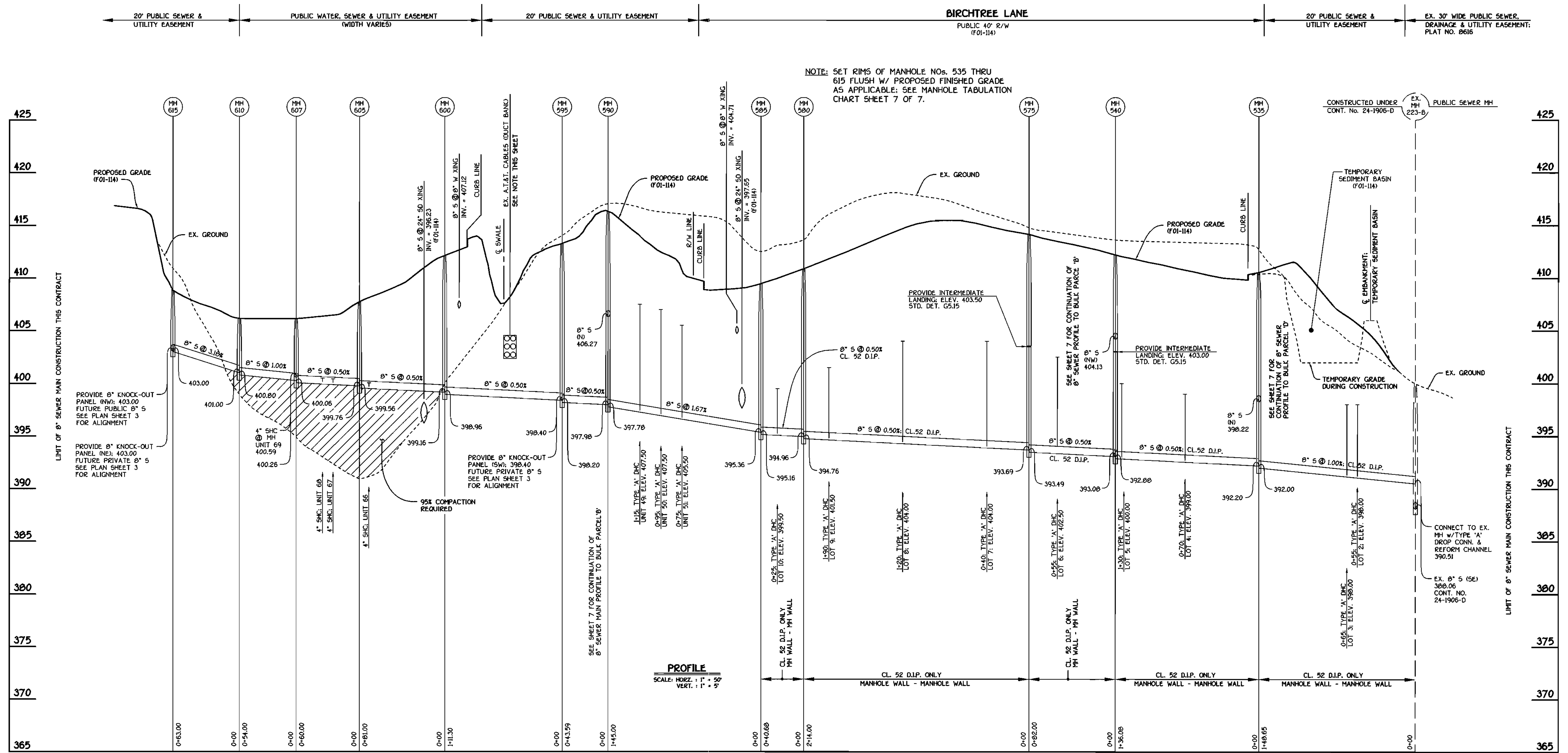
WATER MAINS PROFILES

60' SCALE MAP NO. 46 BLOCK NO. 4 & 10
F.C.C. WORK ORDER NO. 30638
FILE NAME: 30638 FINAL WATER MAIN PROFILES SHT 4

CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
CONTRACT NO. 24-4000-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 7

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE SEWER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.



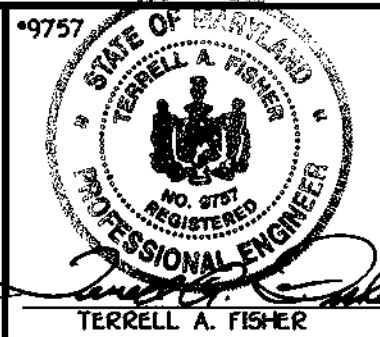
8" OUTFALL SEWER MAIN; 8" SEWER MAIN IN BIRCHTREE LANE AND TO BULK PARCEL 'H'

CONTRACT NO. 24-4000-D
 CHERRYTREE PARK
 LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
 AND BULK PARCELS 'A' THRU 'H'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21117
 (410) 461-3995



DESIGNED BY:	P.W.K.
DRAWN BY:	D.A.N.
CHECKED BY:	P.W.K.
DATE:	DECEMBER, 2001
BY NO.	
REVISION	

SEWER MAINS PROFILES	
600' SCALE MAP NO. 46	BLOCK NO. 4 & 10
F.C.C. WORK ORDER NO. 30536	
FILE NAME: 30536.FINAL SEWER MAIN PROFILES.SHT.6	

CHERRYTREE PARK
 LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
 AND BULK PARCELS 'A' THRU 'H'
 CONTRACT NO. 24-4000-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE
 AS
 SHOWN
 SHEET
 6 OF 7

1-31-02
 DATE

2/1/02
 DATE

13/01/02 10:58:33

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
EX. MH 223-B TO MH 535		
0+55 RT.	2 (DHC)	398.18
0+85 LT.	3 (DHC)	398.22
MH 535 TO MH 540		
0+70 LT.	4 (DHC)	399.45
1+30 LT.	5 (DHC)	400.45
MH 540 TO MH 575		
0+55 LT.	6 (DHC)	402.88
MH 575 TO MH 580		
0+40 LT.	7 (DHC)	404.32
1+20 LT.	8 (DHC)	404.32
1+90 LT.	9 (DHC)	401.82
MH 580 TO MH 585		
0+25 LT.	10 (DHC)	400.30
MH 535 TO MH 650		
0+80 RT.	1	399.59

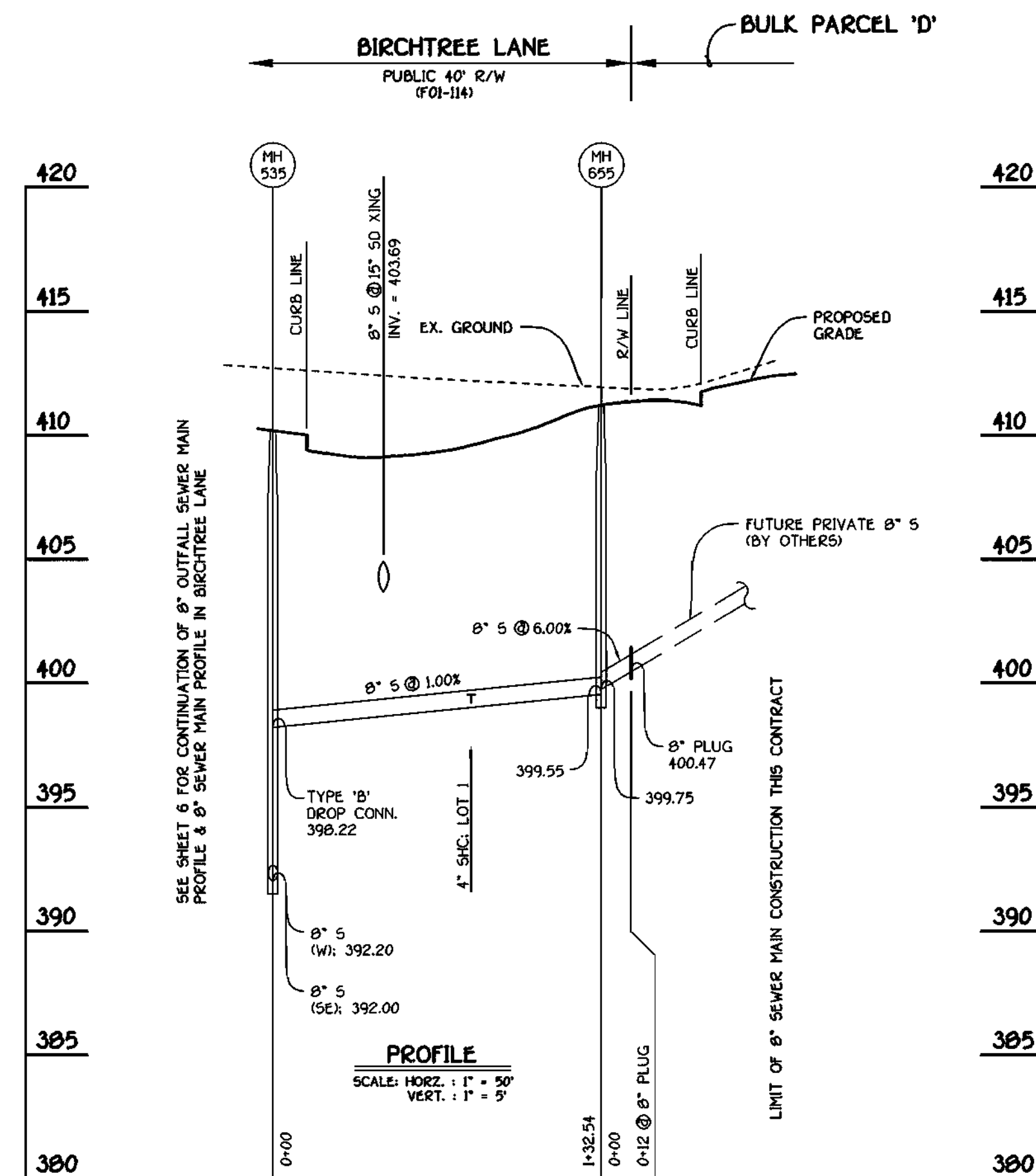
SHC INVERT @ PROPERTY LINE CHART		
STATION	UNIT	ELEVATION
MH 585 TO MH 590		
0+75 RT.	51 (DHC)	405.70
0+95 RT.	50 (DHC)	407.20
1+15 RT.	49 (DHC)	407.70
MH 600 TO MH 605		
0+70 RT.	66	400.02
MH 605 TO MH 607		
0+25 RT.	67	400.42
0+35 RT.	68	400.49
@ MH 607 RT.	69 (DHC @ MH)	400.99
MH 590 TO MH 635		
0+10 RT.	48 (DHC)	410.20
0+20 RT.	47 (DHC)	410.70
0+35 RT.	46 (DHC)	411.20
0+55 RT.	45 (DHC)	412.20
0+75 RT.	44 (DHC)	413.20
@ MH 635 RT.	43 (DROP CONN. @ MH)	414.24
MH 635 TO MH 640		
@ MH 640 LT.	59 (DROP CONN. @ MH)	415.19
MH 640 TO MH 645		
0+20 LT.	58 (DHC)	419.34
0+40 LT.	57 (DHC)	421.30
0+70 LT.	56 (DHC)	423.32

MANHOLE TABULATION CHART				
NO.	€ ROAD STATION	DISTANCE	SLOPE	RIM ELEVATION
655	3+43.07 BIRCHTREE DRIVE	7.39' LT.	-4.15%	411.16
535	4+70.78 BIRCHTREE DRIVE	17.00' LT.	-----	409.81
540	6+02.36 BIRCHTREE DRIVE	€ @ ROAD	+2.23%	412.46
575	6+83.08 BIRCHTREE DRIVE	8.95' LT.	+2.23%	413.99
580	L.P. STATION 0+41.56	5.00' RT.	-----	410.90
585	L.P. STATION 0+78.61	29.12' RT.	-----	409.62
NORTHING EASTING				
590	COLLECTOR SEWER MAIN*	537439.65	1340635.76	416.30
595	COLLECTOR SEWER MAIN*	537433.32	1340592.63	413.20
600	COLLECTOR SEWER MAIN*	537417.18	1340482.51	412.10
605	COLLECTOR SEWER MAIN*	537363.85	1340421.52	407.70
607	COLLECTOR SEWER MAIN*	537345.48	1340364.40	406.00
610	COLLECTOR SEWER MAIN*	537314.93	1340319.87	406.00
615	COLLECTOR SEWER MAIN*	537356.80	1340272.79	408.70
635	COLLECTOR SEWER MAIN*	537527.42	1340622.88	419.80
640	COLLECTOR SEWER MAIN*	537546.76	1340568.12	423.40
645	COLLECTOR SEWER MAIN*	537638.14	1340590.79	430.40
650	COLLECTOR SEWER MAIN*	537713.16	1340513.62	430.98

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE SEWER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.

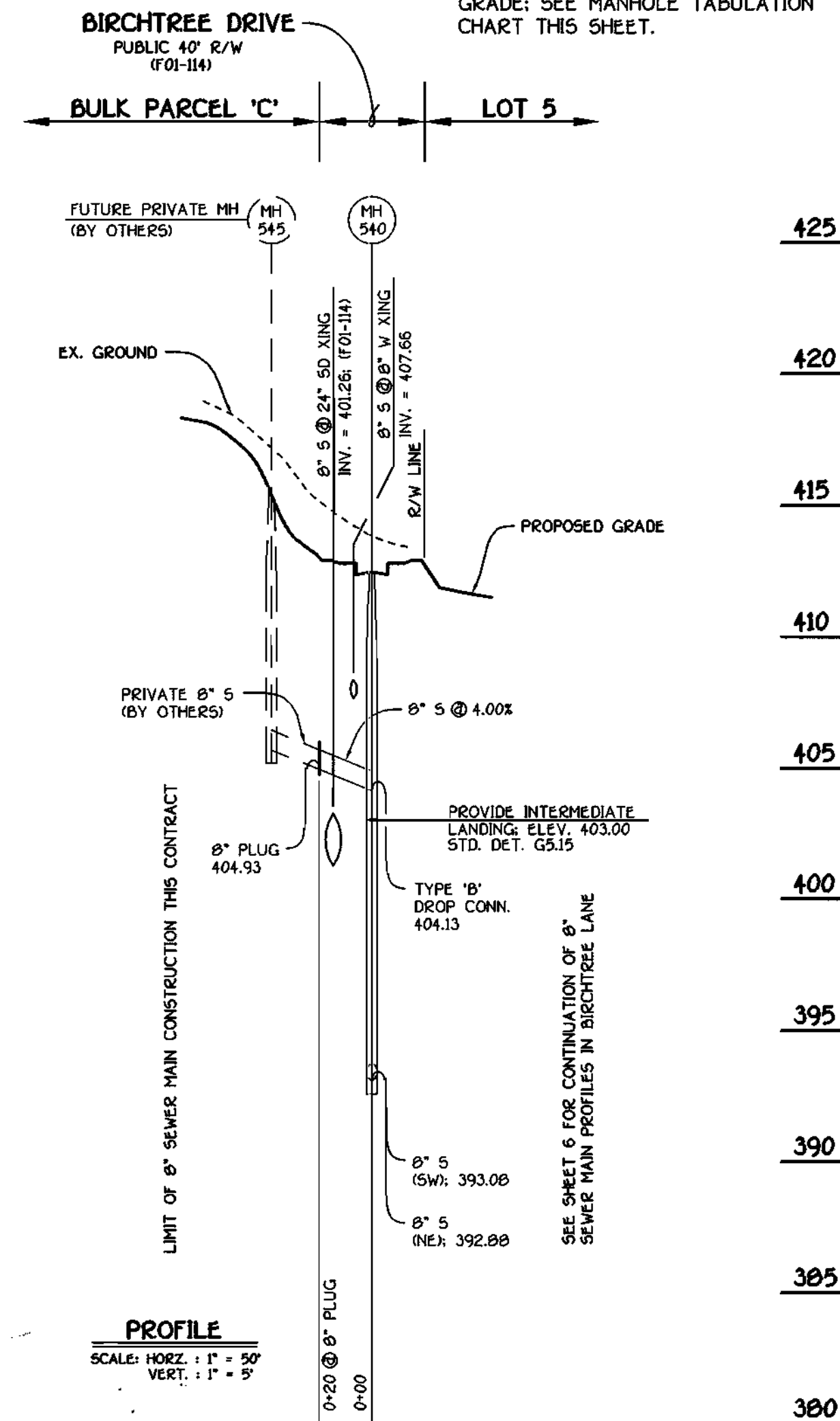
* SET MH RIMS FLUSH W/ PROPOSED FINISHED GRADE OR EXISTING GROUND AS APPLICABLE
 ** SET MH RIMS 1'-6" ABOVE EXISTING GROUND, STD. DET. G5.92

NOTE: SET RIMS OF MANHOLE NOS. 535 AND 650 FLUSH W/ PROPOSED FINISHED GRADE; SEE MANHOLE TABULATION CHART THIS SHEET.

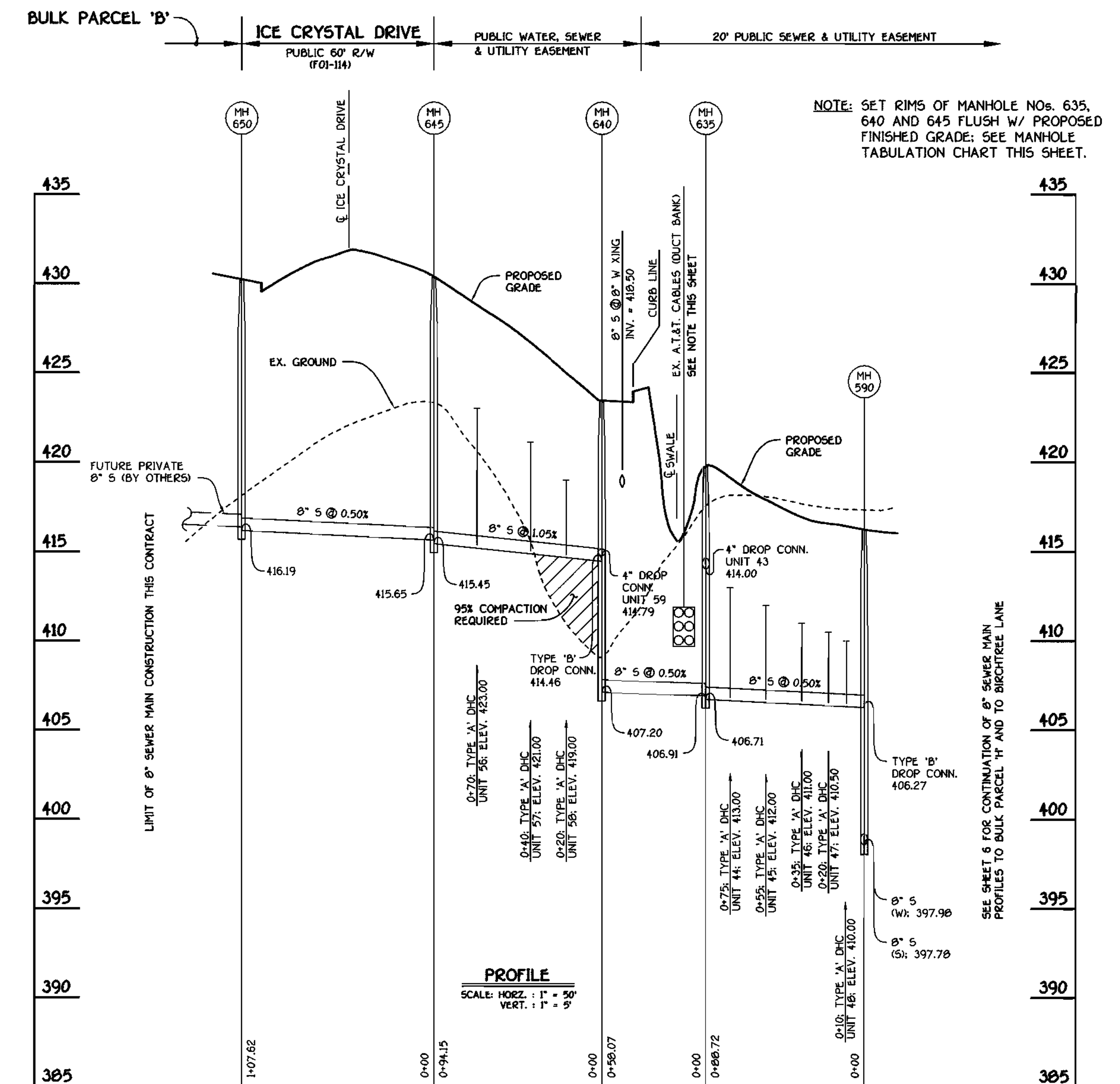


8" SEWER MAIN TO BULK PARCEL 'D'

NOTE: SET RIMS OF MANHOLE NOS. 540 FLUSH W/ PROPOSED FINISHED GRADE; SEE MANHOLE TABULATION CHART THIS SHEET.



8" SEWER MAIN; BIRCHTREE LANE TO BULK PARCEL 'C'

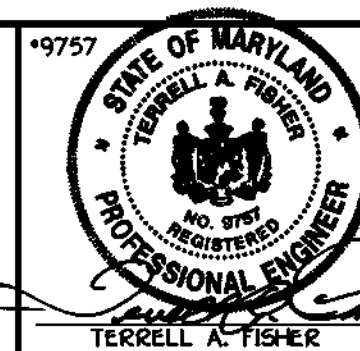


8" SEWER MAIN TO BULK PARCEL 'B'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
410-418-2995



DESIGNED BY: P.W.K.
 DRAWN BY: M.D.T.
 CHECKED BY: P.W.K.
 DATE: DECEMBER, 2001

SEWER MAINS
PROFILES

60' SCALE MAP NO. 46 BLOCK NO. 4 & 10
 F.C.C. WORK ORDER NO. 30638
 FILE NAME: 30638 FINAL SEWER MAINS PROFILES SHIT 7

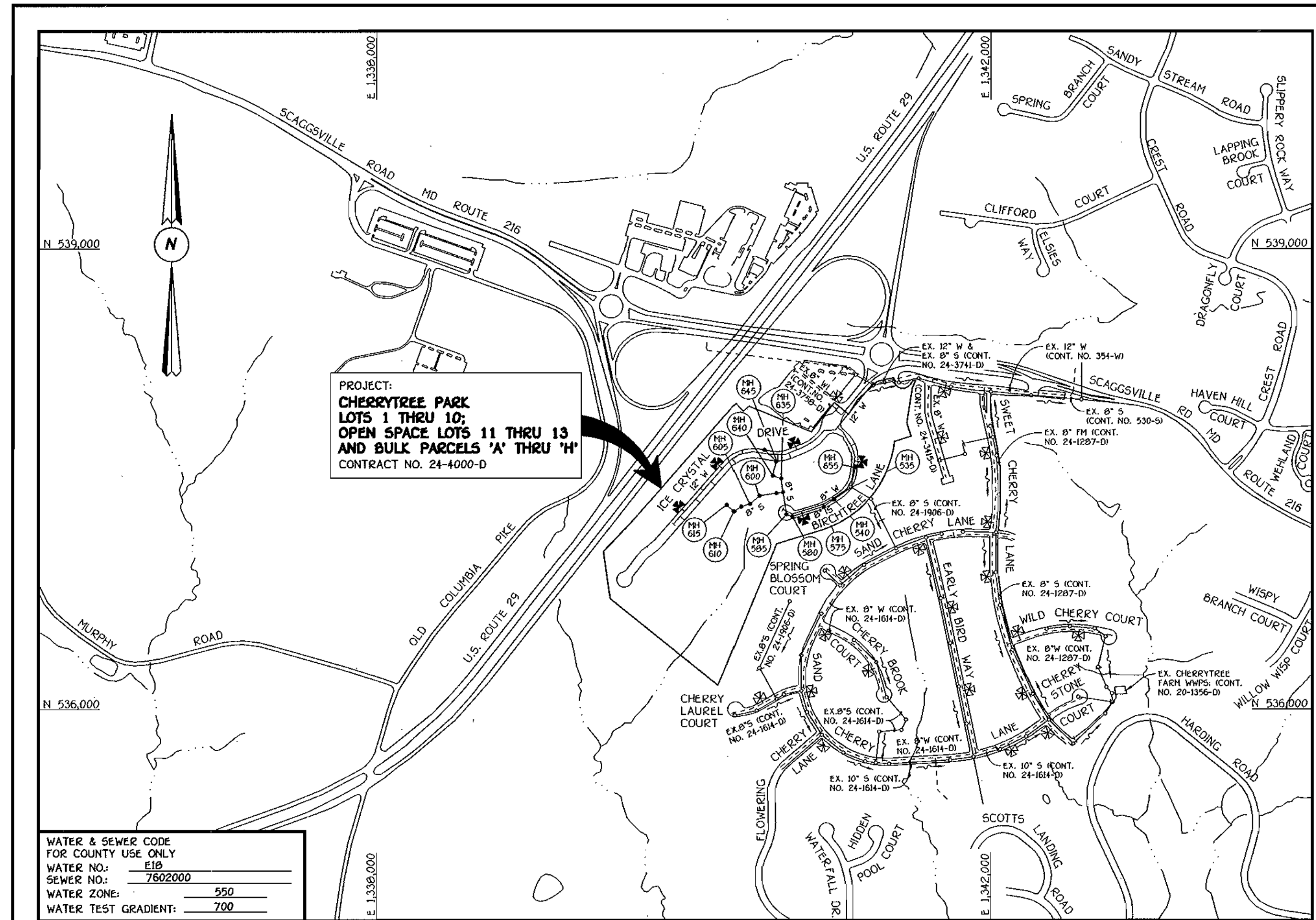
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
CONTRACT NO. 24-4000-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
7 OF 7

CONTRACT NO. 24-4000-D
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
12" WATER	1,665 L.F.	1,058 L.F.	TYTON D.I.P.	GRIFFIN PIPE
8" WATER	1,260 L.F.	1,202 L.F.	TYTON D.I.P.	GRIFFIN PIPE
6" WATER	127 L.F.	110 L.F.	TYTON D.I.P.	GRIFFIN PIPE
FIRE HYDRANTS	5 EACH	5 EACH	MUELLER	MUELLER
1-1/2" WATER	100 L.F.	900 L.F.	K-COPPER	READING TUBE
1" WATER	432 L.F.			
12" X 12" TAPPING SLEEVE & VALVE	1 EACH	1 EACH	SS TAPSLEEVE	DRESSOR MUELLER
12" X 8" TEE	9 EACH	9 EACH	M. J.	U.S. PIPE & FOUNDRY
12" X 6" TEE	3 EACH	5 EACH	HYDRANT TEE	U.S. PIPE & FOUNDRY
12" VALVES	1 EACH	1 EACH	GATE	MUELLER
12"-1/8" H.B.	3 EACH	3 EACH	M. J.	U.S. PIPE & FOUNDRY
12"-1/16" H.B.	2 EACH	2 EACH	M. J.	U.S. PIPE & FOUNDRY
8" X 8" TEE	4 EACH	4 EACH	M. J.	U.S. PIPE & FOUNDRY
8" X 6" TEE	2 EACH	2 EACH	HYDRANT TEE	U.S. PIPE & FOUNDRY
8" VALVES	13 EACH	13 EACH	GATE	MUELLER
6" VALVES	5 EACH	5 EACH	GATE	MUELLER
8"-1/8" H.B.	1 EACH	1 EACH	M. J.	U.S. PIPE & FOUNDRY
8"-1/16" H.B.	3 EACH	3 EACH	M. J.	U.S. PIPE & FOUNDRY
12" PLUG & BUTTRESS	1 EACH	1 EACH	M. J.	U.S. PIPE & FOUNDRY
8" PLUG & BUTTRESS	13 EACH	13 EACH	M. J.	U.S. PIPE & FOUNDRY
8" SEWER	1,071 L.F.	1,081 L.F.	SDR 35 PVC	J.M. MANUFACTURING
4" SEWER D.I.P.	621 L.F.	457 L.F.	D.I.P.	GRIFFIN PIPE
4" SEWER	427 L.F.	284 L.F.	SDR 35 PVC	J.M. MANUFACTURING
SEWER MANHOLES	17 EACH	10 EACH	STD. 48"	ATLANTIC CONG.

NAME OF UTILITY CONTRACTOR: **GAINES AND CO., INC.**
 SURVEY & DRAFTING DIVISION AS-BUILT DATE: **FEBRUARY 2005**



WATER & SEWER CODE FOR COUNTY USE ONLY	
WATER NO.:	E18
SEWER NO.:	7602000
WATER ZONE:	590
WATER TEST GRADIENT:	700

TYPE OF BUILDING: RESIDENTIAL, COMMERCIAL & RETAIL	
NUMBER OF LOTS & PARCELS: 13 LOTS, 8 PARCELS	
NO. OF WATER HOUSE CONNECTIONS: 24	
NO. OF SEWER HOUSE CONNECTIONS: 27	
DRAINAGE AREA: LITTLE PATUXENT	
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION CENTER VIA THE CHERRYTREE FARM WASTEWATER PUMPING STATION.	

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, NAD 83.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 29.
- ALL PIPE ELEVATIONS ARE INVERTS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (1991 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 THE 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:
 - AT&T 1-800-526-2000
 - BGE (CONTRACTOR SERVICES) 410-850-4620
 - BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9096
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 410-313-4900
 - BELL ATLANTIC MARYLAND, INC. 1-800-621-9900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MISS UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
- 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 THE 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.S. 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 C5.52.
- WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR 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 C5.51.
- 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 TREES.
- 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 MAIN SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH THE 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 (5) 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 10.11(A) OF THE HOWARD COUNTY CODE.

DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE 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 REQUIRED NECESSARY.

Paul W. Keubel FOR: **Cherrytree Park, LLC** 12-12-01
 SIGNATURE OF DEVELOPER 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.

Michael D. Tuttle 12/12/01
 SIGNATURE OF ENGINEER DATE

CONTRACT No. 24-4000-D

CHERRYTREE PARK

LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
 AND PARCELS 'A' THRU 'H'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

AS BUILT
 DATE: FEBRUARY 2005

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

Jim Myers 1/30/02
 U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *John R. Roberts* 1/30/02
 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 AND AS SHOWN ON FD-1M AND AS SHOWN ON THESE PLANS.

Paul W. Keubel FOR: **Cherrytree Park, LLC** 12-12-01
 SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Ruth Berman 1-31-02
 CHIEF, BUREAU OF UTILITIES DATE

John D. Damm 2/1/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 LELICOTT CITY, MARYLAND 20842
 410-461-2999

TERRELL A. FISHER

DESIGNED BY: P.W.C.

DRAWN BY: M.D.T.

CHECKED BY: P.W.C.

DATE: DECEMBER, 2001

TITLE SHEET

600' SCALE MAP NO. 46 BLOCK NO. 4 & 10

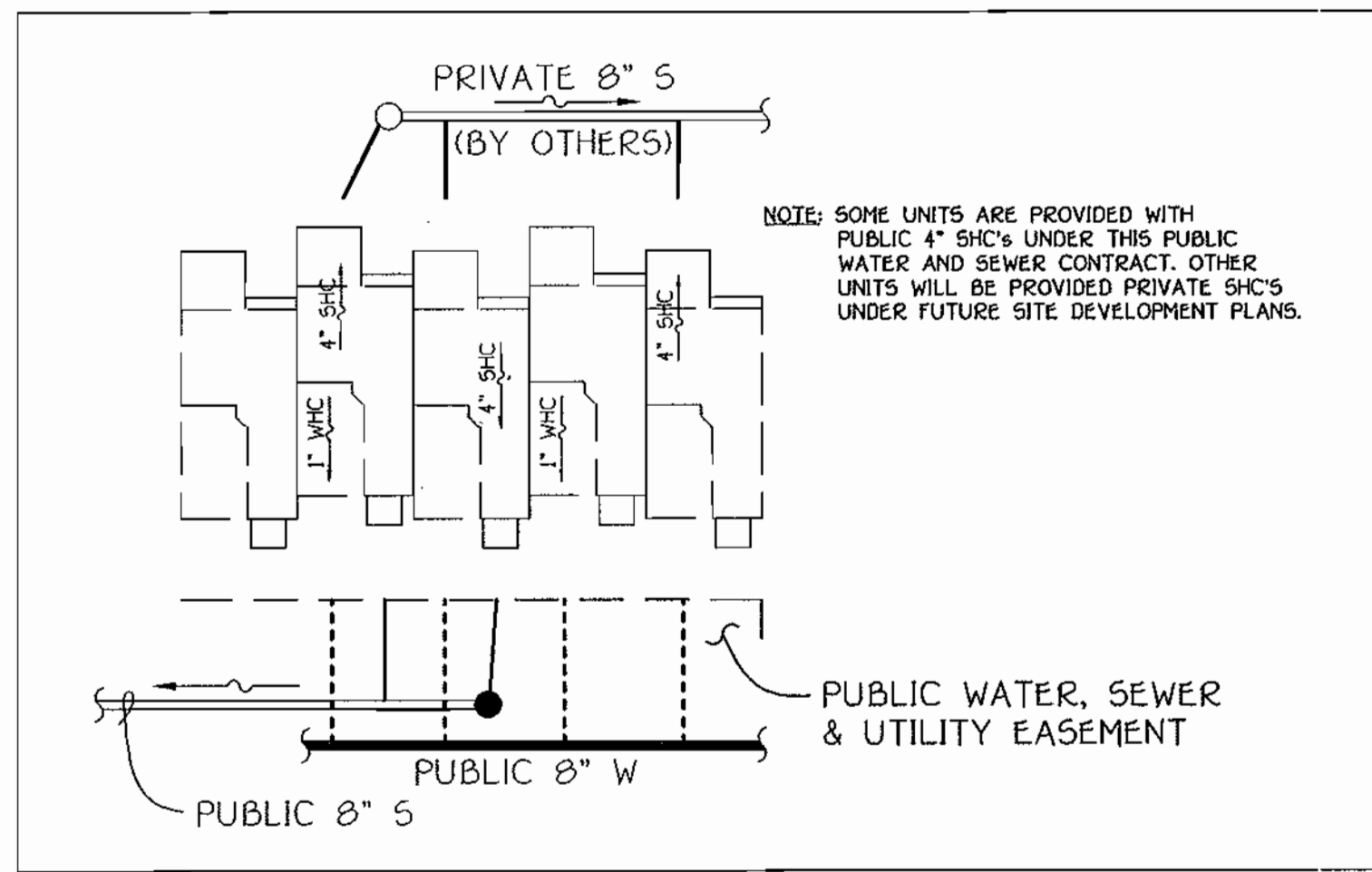
F.C.C. WORK ORDER NO. 30639

FILE NAME: 30639.FINAL.WATER.AND.SEWER.TITLE.SHT.1

CONTRACT NO. 24-4000-D
CHERRYTREE PARK
 LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13 AND BULK PARCELS 'A' THRU 'H'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 7

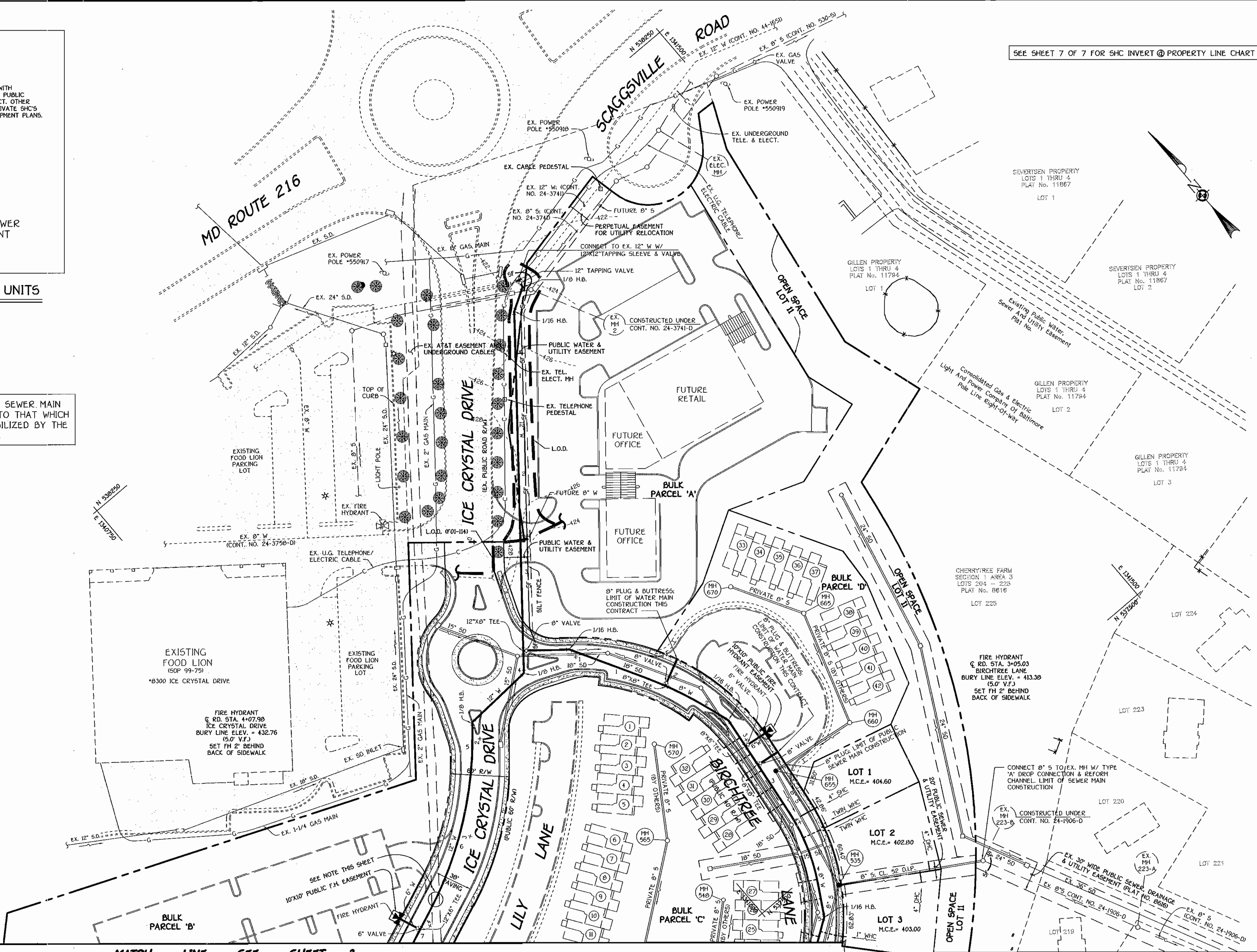


TYPICAL WHC & SHC DETAIL @ CONDOMINIUM UNITS

NO SCALE

NOTE: THE LENGTH OF WATER AND SEWER MAIN TRENCH SHALL BE LIMITED TO THAT WHICH CAN BE BACKFILLED & STABILIZED BY THE END OF EACH WORKING DAY.

SEE SHEET 7 OF 7 FOR SHC INVERT @ PROPERTY LINE CHART



NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE WATER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.

SEE SHEET 7 OF 7 FOR MANHOLE TABULATION CHART

SEE SHEETS 4 & 5 OF 7 FOR WATER MAIN TABULATION CHARTS

MATCH LINE SEE SHEET 3

PLAN
SCALE: 1" = 50'

AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 24-4000-D
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-31-02 DATE		DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND 2/1/02 DATE		FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLSWORTH CITY, MARYLAND 20826 410-481-2095		DESIGNED BY: M.D.T. DRAWN BY: M.D.T. CHECKED BY: P.W.K. DATE: DECEMBER, 2001		WATER AND SEWER MAINS PLAN VIEW 600' SCALE MAP NO. 46 BLOCK NO. 4 & 10 F.C.C. WORK ORDER NO. 30630 FILE NAME: 30630 FINAL WATER AND SEWER PLAN SHT 2		CHERRYTREE PARK LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13 AND BULK PARCELS 'A' THRU 'H' CONTRACT NO. 24-4000-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 2 OF 7
--	--	--	--	---	--	---	--	--	--	--	--	--------------------------------

MATCH LINE SEE SHEET 2

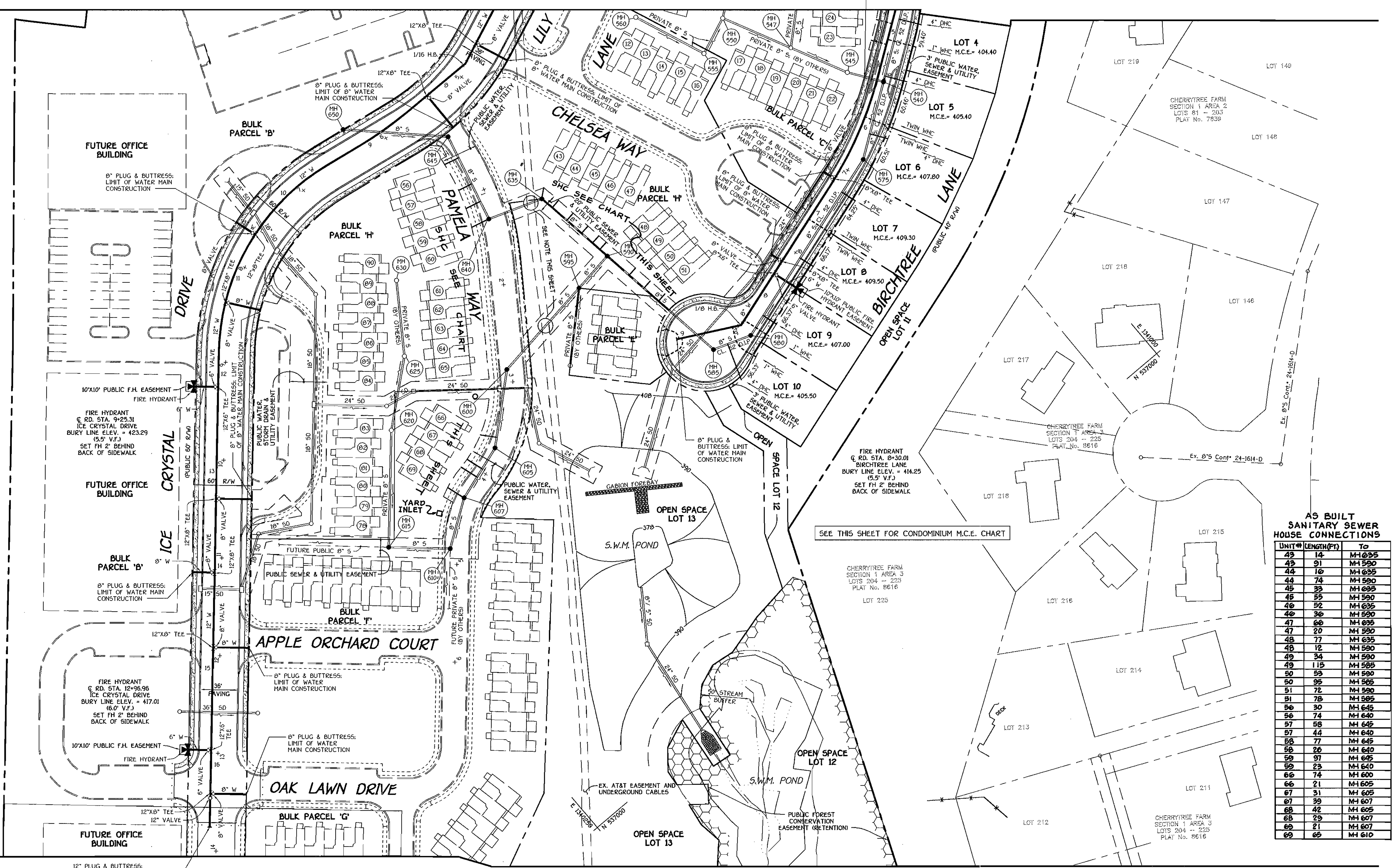
SEE SHEET 7 OF 7 FOR SHC INVERT @ PROPERTY LINE CHART

NOTE: THE LENGTH OF WATER AND SEWER MAIN TRENCH SHALL BE LIMITED TO THAT WHICH CAN BE BACKFILLED & STABILIZED BY THE END OF EACH WORKING DAY.

CONDOMINIUM M.C.E. CHART	
UNIT	M.C.E.
CHELSEA WAY	
43	410.60
44	417.60
45	416.70
46	415.80
47	415.40
48	414.60
49	412.00
50	411.40
51	409.90
PAMELA WAY	
56	422.50
57	429.60
58	423.60
59	419.30
66	404.30
67	404.60
68	404.70
69	405.20

COLUMBIA PIKE; U.S. ROUTE 29

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE SEWER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.



SEE SHEETS 7 OF 7 FOR MANHOLE TABULATION CHART

SEE SHEETS 4 & 5 OF 7 FOR WATER MAIN TABULATION CHARTS

PLAN SCALE: 1" = 50'

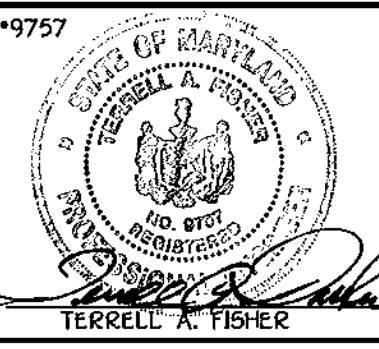
AS BUILT DATE: FEBRUARY 2005

AS BUILT SANITARY SEWER HOUSE CONNECTIONS		
UNIT#	LENGTH (FT)	TO
43	14	MH 635
45	91	MH 590
44	16	MH 635
44	74	MH 590
45	33	MH 635
45	55	MH 590
46	52	MH 635
46	36	MH 590
47	66	MH 635
47	20	MH 590
48	77	MH 635
48	12	MH 590
49	34	MH 590
49	115	MH 595
50	53	MH 590
50	95	MH 595
51	72	MH 590
51	78	MH 595
56	30	MH 645
56	74	MH 640
57	58	MH 645
57	44	MH 640
58	77	MH 645
58	26	MH 640
59	97	MH 645
59	23	MH 640
66	74	MH 600
66	21	MH 605
67	31	MH 605
67	39	MH 607
68	42	MH 605
68	29	MH 607
69	21	MH 607
69	65	MH 610

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-31-02

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
2/1/02

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21142
410-461-2955



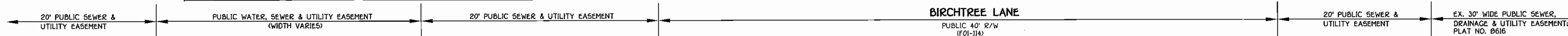
DESIGNED BY: M.D.T.
DRAWN BY: M.D.T.
CHECKED BY: P.W.K.
DATE: DECEMBER, 2001

WATER AND SEWER MAINS PLAN VIEW
60' SCALE MAP NO. 46 BLOCK NO. 4 & 10
F.C.C. WORK ORDER NO. 30539
FILE NAME: 30539 FINAL WATER AND SEWER PLAN SHT 3

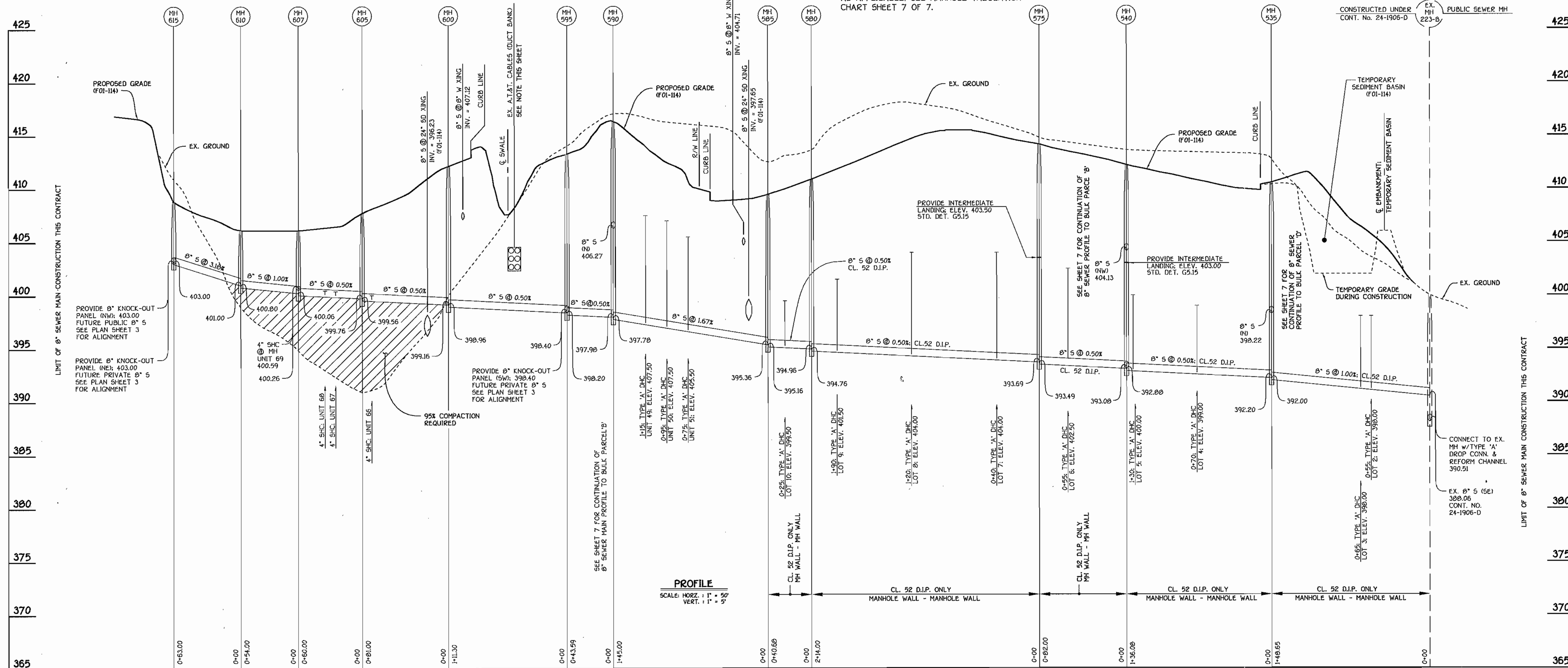
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
CONTRACT NO. 24-4000-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 3 OF 7

BIRCHTREE LANE SANITARY SEWER AS-BUILT				PAMELA WAY				WATER LINE AS-BUILT BIRCHTREE LANE			
UNIT#	LENGTH(FT.)	TO	TO	UNIT#	LENGTH(FT.)	TO	TO	UNIT#	LENGTH(FT.)	TO	TO
10	42	MH 585	INLET	50	MH 535	8" VALVE	87	8" VALVE	56	YARD INLET	LOT 23
10	46	MH 582	LOT 19HC	33	SDMH	8" VALVE	25	FIRE HYDRANT	SMH 610	42	YARD INLET
9	34	MH 585	LOT 19HC	92	MH 600	8" VALVE	115	8" VALVE	SMH 607	35	YARD INLET
9	41	FIRE HYDRANT	LOT 19HC	58	SMH 655	8" VALVE	114	8" VALVE	SMH 610	54	SMH 607
8	27	FIRE HYDRANT	8" VALVE	17	SMH 655	8" VALVE	70	8" VALVE	SMH 607	58	SMH 605
8	37	VALVE	8" VALVE	32	FIRE HYDRANT	8" VALVE	21	INLET	SMH 605	55	SHC
8	41	VALVE	8" VALVE	21	8" VALVE (FH)	8" VALVE	34	INLET	SMH 600	41	SHC
7	100	VALVE	SDMH	50	FIRE HYDRANT	INLET	81	8" VALVE	INLET	75	SMH 600
7	30	VALVE	8" VALVE	100	8" VALVE (FH)	8" VALVE	67	INLET	SMH 600	65	SMH (PARCEL 'E')
7	47	MH 575	8" VALVE	33	SDMH	FH	110	8" VALVE	SMH 600	150	SDMH
6	38	MH 575	8" VALVE	70	SDMH	8" VALVE	107	8" VALVE	SMH 635	92	SMH 595
6	73	VALVE	8" VALVE	84	SDMH	FH	54	12" VALVE	SMH 599	82	SMH (PRIVATE)
6	38	MH 540	8" VALVE	10	SDMH	FH	53	8" VALVE	SMH 595	43	SMH 590
5	95	MH 575	INLET	95	8" VALVE	8" VALVE	48	12" VALVE	SMH 595	84	SMH 590
5	25	MH 540	ICE CRYSTAL DRIVE	8" VALVE	45	8" VALVE	45	8" VALVE	SMH 640	59	SMH 635
4	70	MH 540	8" VALVE	42	FIRE HYDRANT	8" VALVE	42	FIRE HYDRANT	SMH 640	94	SMH 645
4	55	SDMH	8" VALVE	57	VALVE	8" VALVE	57	VALVE			
4	74	MH 535	8" VALVE	75	VALVE	8" VALVE	22	FIRE HYDRANT			
3	65	MH 535	8" VALVE	42	SMH 645	8" VALVE	208	INLET			
3	65	EX. MH 223-B	8" VALVE	94	SMH 650	FH	207	INLET			
2	53	EX. MH 223-B	8" VALVE	140	SMH 650	INLET	12	EX. MH 2			
2	40	INLET	INLET	17	8" VALVE	INLET	24	12" TAPPING V.			
INLET	33	EX. MH 223-B	INLET	32	8" VALVE	INLET	11	EX. MH 2			
2	90	MH 535	8" VALVE	70	8" VALVE	INLET	59	12" TAPPING V.			
3	25	LOT 2 SHC	8" VALVE	70	INLET	INLET	95	INLET			
SDMH	30	MH 535	8" VALVE	91	FIRE HYDRANT	8" VALVE	10	SDMH			

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE SEWER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.



NOTE: SET RIMS OF MANHOLE NOS. 535 THRU 615 FLUSH W/ PROPOSED FINISHED GRADE AS APPLICABLE; SEE MANHOLE TABULATION CHART SHEET 7 OF 7.



8" OUTFALL SEWER MAIN; 8" SEWER MAIN IN BIRCHTREE LANE AND TO BULK PARCEL 'H'

AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 24-4000-D
CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

1-31-02
DATE

2/1/02
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21117
(410) 481-2000



DESIGNED BY: P.W.K.
DRAWN BY: D.A.N.
CHECKED BY: P.W.K.
DATE: DECEMBER, 2001

BY	NO.	REVISION	DATE

SEWER MAINS
PROFILES

600' SCALE MAP NO. 46 BLOCK NO. 4 & 10
F.C.C. WORK ORDER NO. 30639
FILE NAME: 30639 FINAL SEWER MAIN PROFILES SHT 6

CHERRYTREE PARK
LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
AND BULK PARCELS 'A' THRU 'H'
CONTRACT NO. 24-4000-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 6 OF 7

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
EX. MH 223-B TO MH 535		
0+55 RT.	2 (DHC)	398.18
0+65 LT.	3 (DHC)	398.22
MH 535 TO MH 540		
0+70 LT.	4 (DHC)	399.46
1+30 LT.	5 (DHC)	400.46
MH 540 TO MH 575		
0+55 LT.	6 (DHC)	402.00
MH 575 TO MH 580		
0+40 LT.	7 (DHC)	404.32
1+20 LT.	8 (DHC)	404.32
1+90 LT.	9 (DHC)	401.82
MH 580 TO MH 585		
0+25 LT.	10 (DHC)	400.30
MH 535 TO MH 650		
0+80 RT.	1	399.59

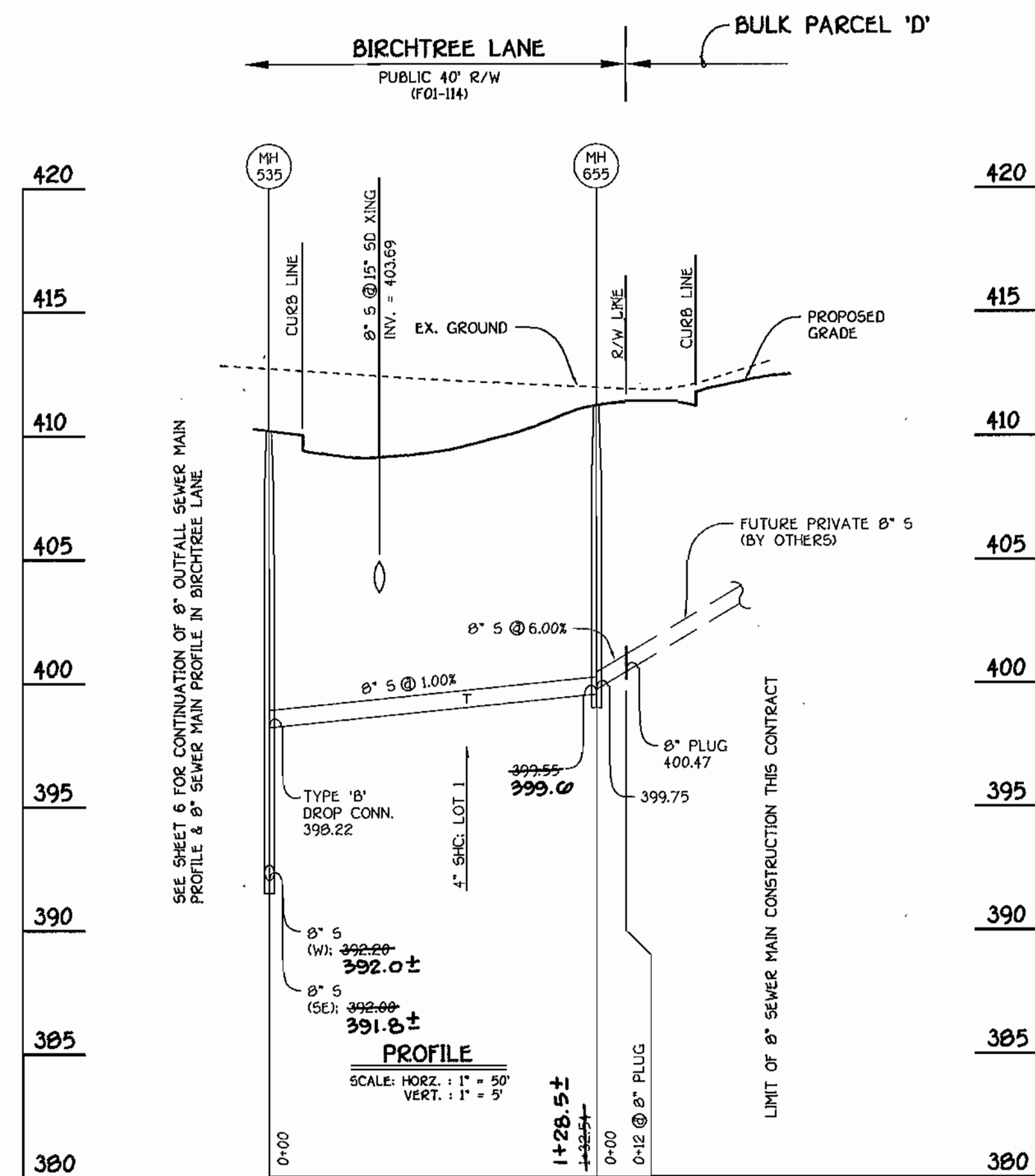
SHC INVERT @ PROPERTY LINE CHART		
STATION	UNIT	ELEVATION
MH 585 TO MH 590		
0+75 RT.	51 (DHC)	405.70
0+95 RT.	50 (DHC)	407.20
1+15 RT.	49 (DHC)	407.70
MH 600 TO MH 605		
0+70 RT.	66	400.02
MH 605 TO MH 607		
0+25 RT.	67	400.42
0+35 RT.	68	400.49
⊕ MH 607 RT.	69 (DHC @ MH)	400.99
MH 590 TO MH 635		
0+10 RT.	48 (DHC)	410.20
0+20 RT.	47 (DHC)	410.70
0+35 RT.	46 (DHC)	411.20
0+55 RT.	45 (DHC)	412.20
0+75 RT.	44 (DHC)	413.20
⊕ MH 635 RT.	43 (DROP CONN. @ MH)	414.24
MH 635 TO MH 640		
⊕ MH 640 LT.	59 (DROP CONN. @ MH)	415.19
MH 640 TO MH 645		
0+20 LT.	58 (DHC)	419.34
0+40 LT.	57 (DHC)	421.30
0+70 LT.	56 (DHC)	423.32

MANHOLE TABULATION CHART				
NO.	℄ ROAD STATION	DISTANCE	SLOPE	RIM ELEVATION
655	3+43.07 BIRCHTREE DRIVE	7.39' LT.	-4.16%	411.16
535	4+70.78 BIRCHTREE DRIVE	17.00' LT.	-----	409.81
540	6+02.36 BIRCHTREE DRIVE	℄ @ ROAD	+2.23%	412.46
575	6+83.08 BIRCHTREE DRIVE	8.95' LT.	+2.23%	413.99
580	L.P. STATION 0+41.56	5.00' RT.	-----	410.90
585	L.P. STATION 0+78.61	29.12' RT.	-----	409.62
NORTHING EASTING				
590	COLLECTOR SEWER MAIN*	537439.65	1340635.76	416.30
595	COLLECTOR SEWER MAIN*	537433.32	1340592.63	413.20
600	COLLECTOR SEWER MAIN*	537417.16	1340482.51	412.10
605	COLLECTOR SEWER MAIN*	537363.85	1340421.52	407.70
607	COLLECTOR SEWER MAIN*	537345.48	1340364.40	406.00
610	COLLECTOR SEWER MAIN*	537314.93	1340319.87	406.00
615	COLLECTOR SEWER MAIN*	537356.80	1340272.79	408.70
635	COLLECTOR SEWER MAIN*	537527.42	1340622.88	419.80
640	COLLECTOR SEWER MAIN*	537546.76	1340568.12	423.40
645	COLLECTOR SEWER MAIN*	537638.14	1340590.79	430.40
650	COLLECTOR SEWER MAIN*	537713.16	1340513.62	430.98

NOTE: NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN THE AT&T CABLE EASEMENT WITHOUT DIRECT SUPERVISION BY AT&T PERSONNEL. NOTICE TO ENTER, CROSS & INSTALL THE SEWER MAIN WITHIN THE AT&T EASEMENT MUST BE GIVEN TO AT&T A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.

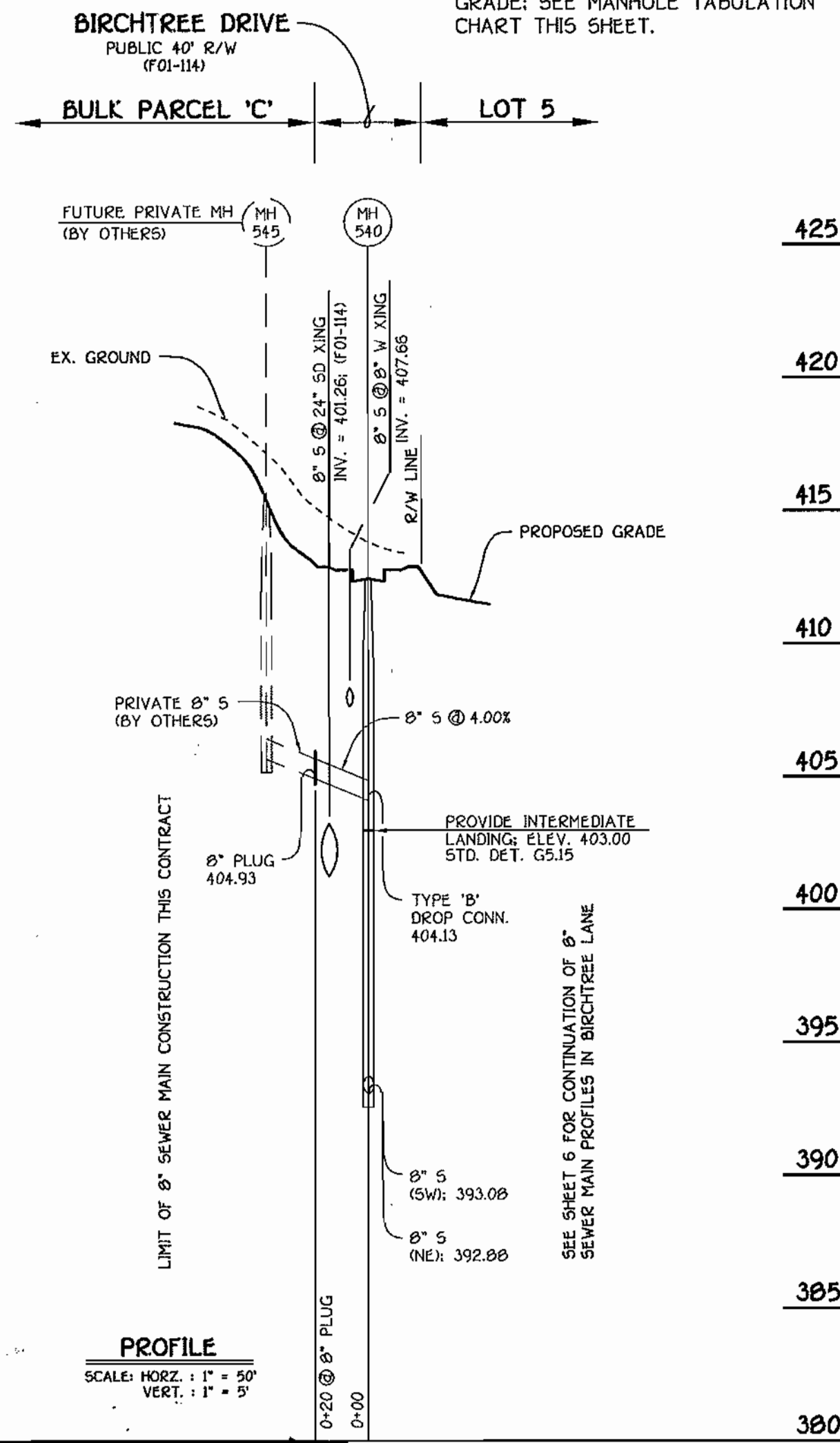
* SET MH RIMS FLUSH W/ PROPOSED FINISHED GRADE OR EXISTING GROUND AS APPLICABLE
 ** SET MH RIMS 1'-6" ABOVE EXISTING GROUND; STD. DET. G5.52

NOTE: SET RIMS OF MANHOLE Nos. 535 AND 650 FLUSH W/ PROPOSED FINISHED GRADE; SEE MANHOLE TABULATION CHART THIS SHEET.

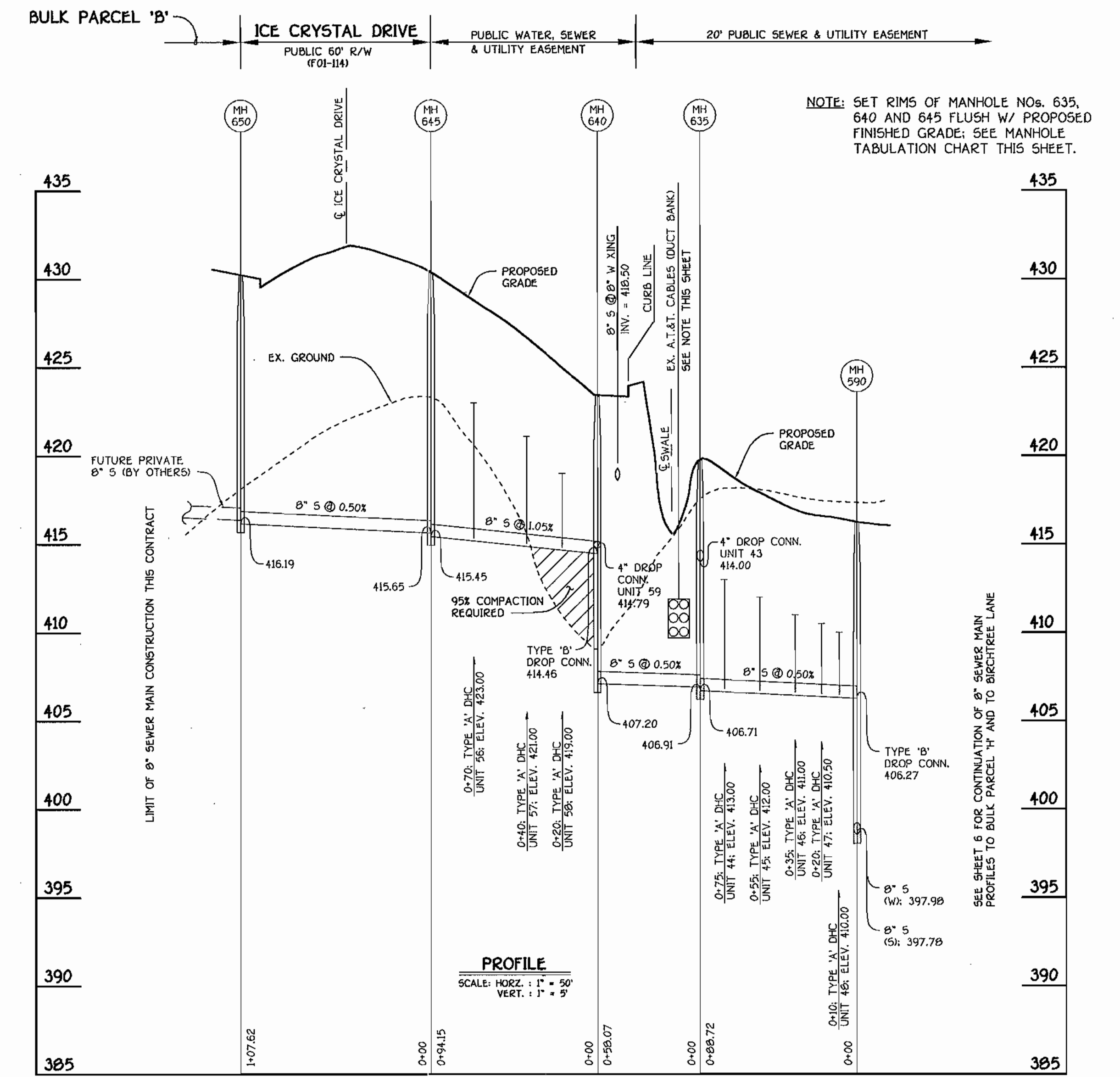


8" SEWER MAIN TO BULK PARCEL 'D'

NOTE: SET RIMS OF MANHOLE Nos. 540 FLUSH W/ PROPOSED FINISHED GRADE; SEE MANHOLE TABULATION CHART THIS SHEET.



8" SEWER MAIN; BIRCHTREE LANE TO BULK PARCEL 'C'



8" SEWER MAIN TO BULK PARCEL 'B'

AS BUILT
 DATE: FEBRUARY 2005

CONTRACT NO. 24-4000-D
 CHERRYTREE PARK
 LOTS 1 THRU 10, OPEN SPACE LOTS 11 THRU 13
 AND BULK PARCELS 'A' THRU 'H'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

1-31-02 DATE

2/1/02 DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 200 CENTRAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL FIRE
 ELLICOTT CITY, MARYLAND 21114
 (410) 461-2955

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 TERRELL A. FISHER

DESIGNED BY: P.W.K.
 DRAWN BY: M.D.T.
 CHECKED BY: P.W.K.
 DATE: DECEMBER, 2001

SEWER MAINS PROFILES

600' SCALE MAP NO. 46 BLOCK NO. 4 & 10
 F.C.C. WORK ORDER NO. 30638
 FILE NAME: 30638.FINAL SEWER MAINS PROFILES SHIT 7

SCALE AS SHOWN

SHEET 7 OF 7