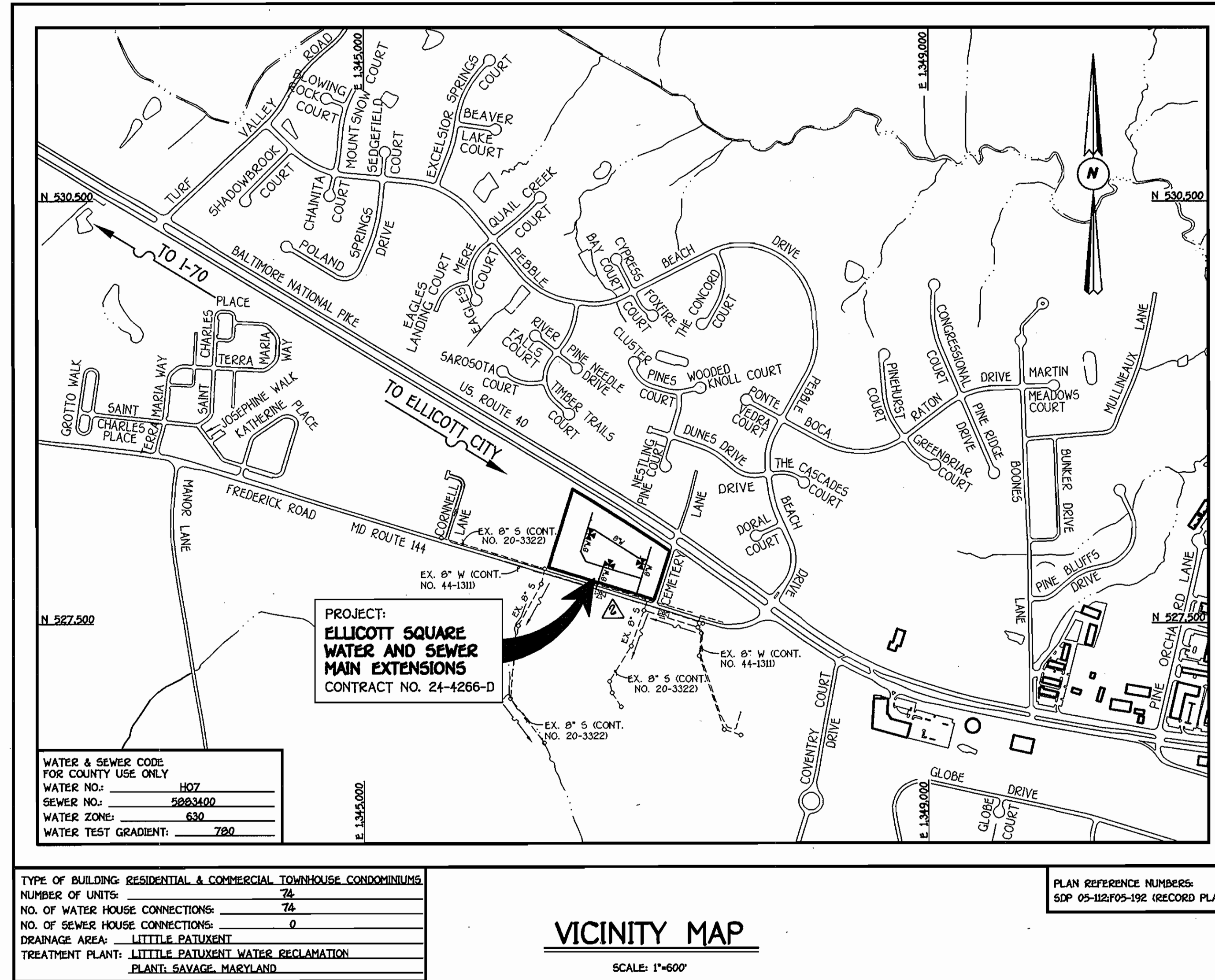


QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" SEWER	36 L.F.	36 L.F.	SDR 35	BRS/JAM MFG.
MANHOLES	1 EACH	1 EA.	ASTM C478	ATLANTIC CONC.
8" WATER	1830 L.F.	1830 L.F.	TYTON JT. DI.	GRIFFIN PIPE
6" WATER	63 L.F.	63 L.F.	TYTON JT. DI.	GRIFFIN PIPE
1 1/2" WVC	1,121 L.F.	1,121 L.F.	K. COPPER	READING/BRS
8" X 8" TEE	4 EACH	4 EACH	M.J.	SIGMA/BRS
8" X 6" TEE	3 EACH	3 EACH	M.J.	SIGMA/BRS
8" X 8" TAPPING SLEEVE & VALVE	2 EACH	2 EACH	S.S.	ROMAC/BRS
8" VALVE	5 EACH	5 EACH	R.S.O.R. GATE	MUELLER/BRS
6" VALVE	3 EACH	3 EACH	R.S.O.R. GATE	MUELLER/BRS
1/8" BEND	2 EACH	2 EACH	M.J.	SIGMA/BRS
1/16" BEND	1 EACH	1 EACH	M.J.	SIGMA/BRS
1/32" BEND	2 EACH	0		
8" PLUG & BUTTRESS	2 EACH	2 EACH	M.J.	SIGMA/BRS
FIRE HYDRANTS	3 EACH	3 EACH	HYD. ORANGE	MUELLER/BRS

NAME OF UTILITY CONTRACTOR: **G.C.S. INC.**
 SURVEY & DRAFTING DIVISION AS-BUILT DATE:



GENERAL NOTES

- PART I
- 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.
 - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT FEBRUARY, 2004 BY FISHER, COLLINS & CARTER, INC.
 - HORIZONTAL AND VERTICAL CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/94 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 151A & NO. 151B. SEE THIS SHEET FOR BENCHMARK INFORMATION. ALL VERTICAL CONTROLS ARE BASED ON NAVD 1984. VERTICAL CONTROLS ARE BASED ON TRAVERSE POINT NO. 70022 A REBAR & CAP SET ON THE NORTH SIDE OF FREDERICK ROAD, ELEV. 447.13
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE 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.
 - 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 (LATEST EDITION). 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 LOCATIONS OF THE TEST PITS. A NOTE INDICATES 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - 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) 410-850-4620
 - BGE (REGULATORY) 410-855-1400
 - BUREAU OF UTILITIES 410-313-4900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MS&E UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - VERIZON 1-800-743-0033/410-224-9210
 - 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.
 - 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.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7454 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/DRILLING 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 10.34(a) OF THE HOWARD COUNTY CODE.
- PART II: WATER
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-0" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- PART III: SEWER
- 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.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - 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 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.
 - HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

DEVELOPER'S CERTIFICATION

I 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. Koebel FOR:
 LAND DESIGN & DEVELOPMENT, INC. 11/10/05
 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.

Paul W. Koebel 11/10/05
 SIGNATURE OF ENGINEER DATE

GP06-36

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

Jim Murray 12/1/05
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

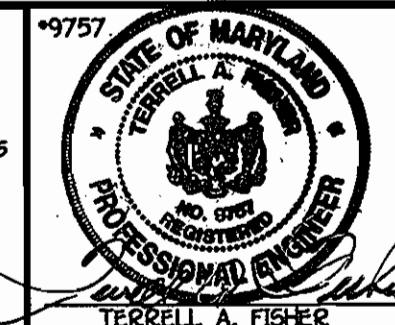
APPROVED: *John R. Robertson* 12/1/05
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDDIMENT 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 SEP-05-112.

SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND



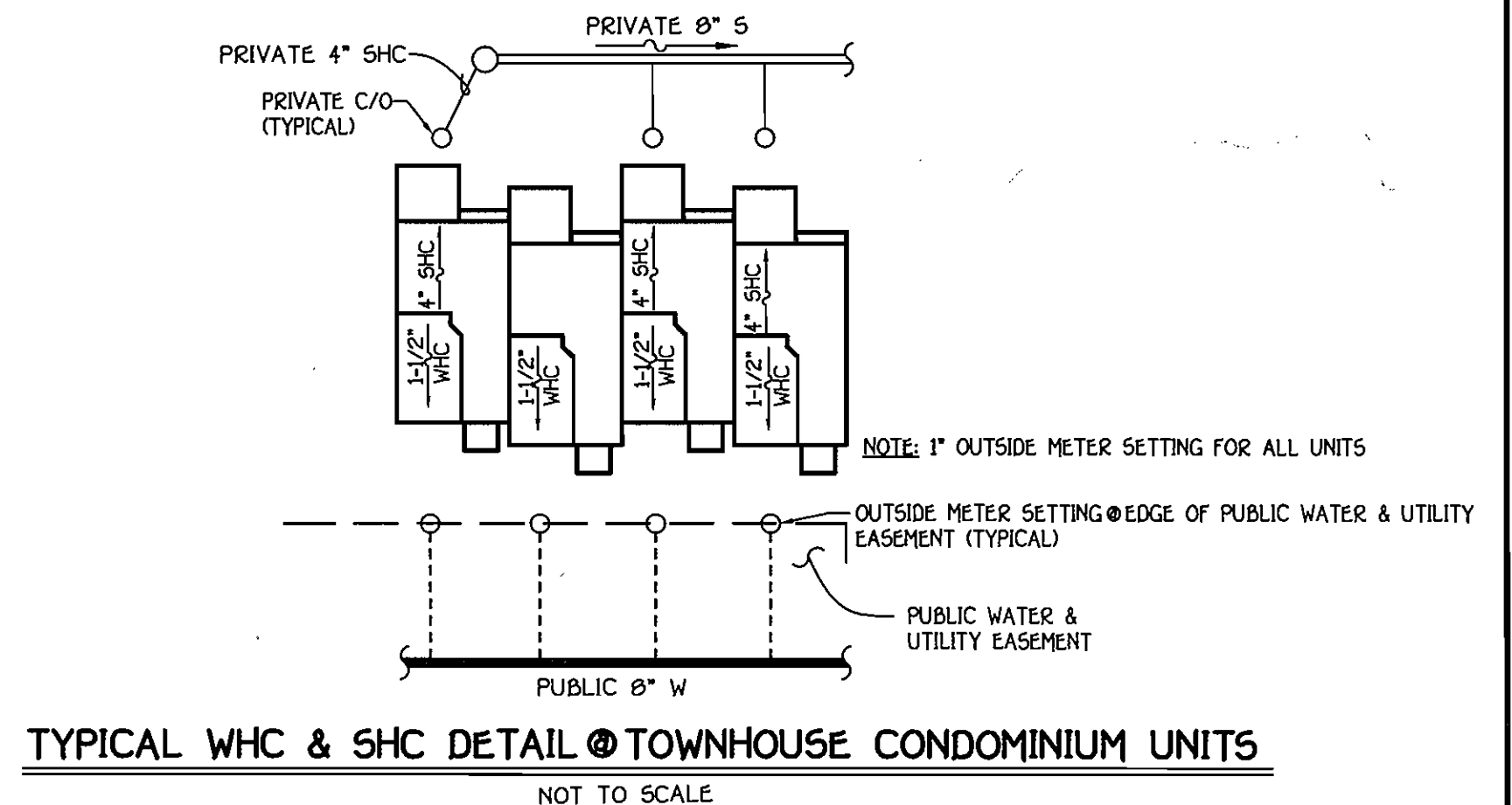
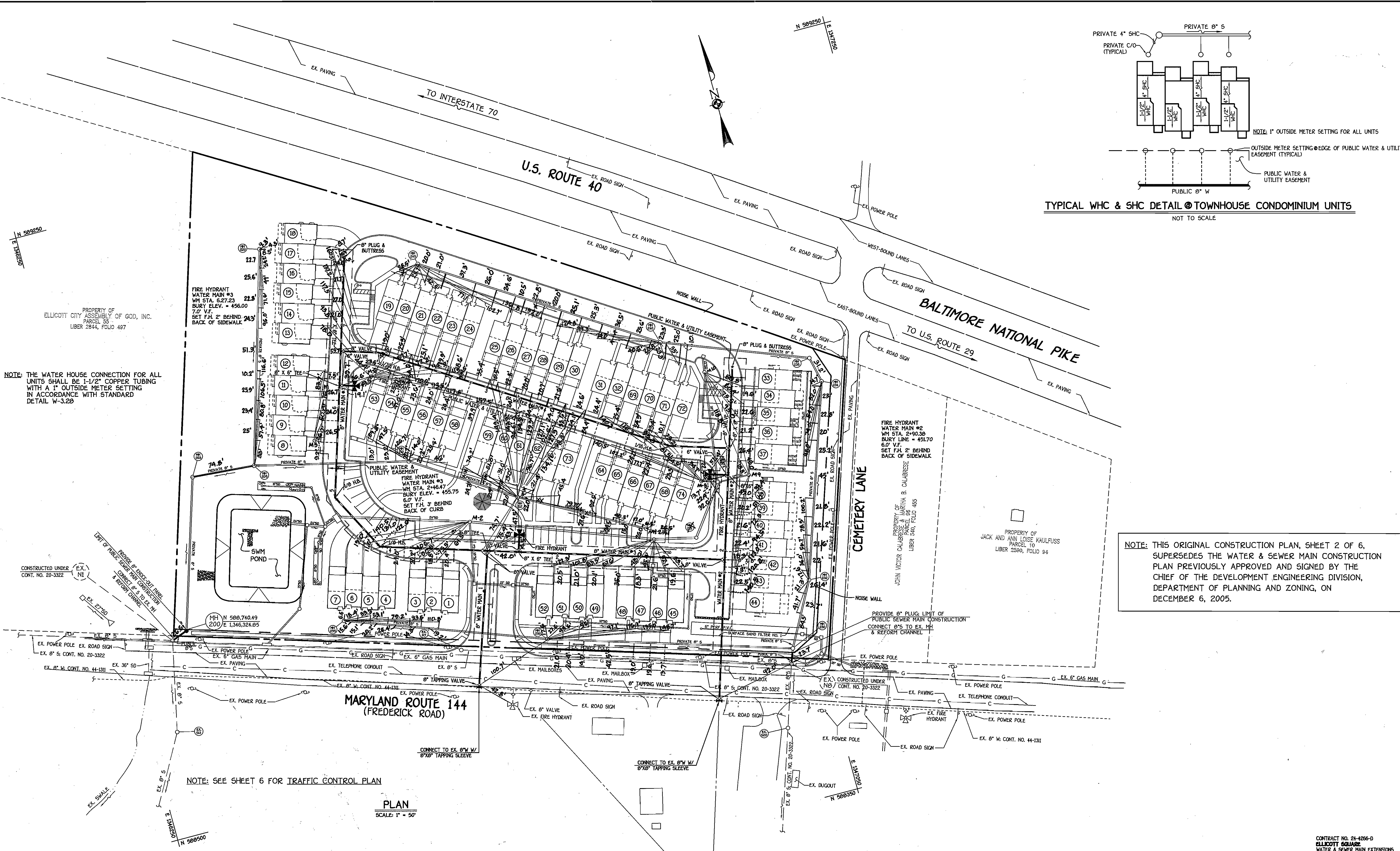
DESIGNED BY:	B.C.R.	
DRAWN BY:	B.C.R.	
CHECKED BY:	P.W.K.	
DATE:	NOVEMBER, 2005	
BY NO.		

WATER & SEWER MAINS TITLE SHEET	
600' SCALE MAP NO. 16 & 23 BLOCK NO. 24 & 6	
F.C.C. WORK ORDER NO. 30780	
FILE NAME:	FINAL WATER AND SEWER PLAN SH1

DEVELOPER	
LAND DESIGN & DEVELOPMENT, INC. SUITE 209 5300 DORSEY HALL DRIVE ELLICOTT CITY, MARYLAND 21042	
PARCELS 59, 60 & 63	
CONTRACT NO. 24-4266-D ELLICOTT SQUARE WATER & SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND	
SCALE AS SHOWN	SHEET 1 of 6

Ruth B... 11-17-05
 CHIEF, BUREAU OF UTILITIES DATE

John R. Robertson 12/1/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



NOTE: THE WATER HOUSE CONNECTION FOR ALL UNITS SHALL BE 1-1/2" COPPER TUBING WITH A 1" OUTSIDE METER SETTING IN ACCORDANCE WITH STANDARD DETAIL W-3.20

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 6, SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON DECEMBER 6, 2005.

NOTE: SEE SHEET 6 FOR TRAFFIC CONTROL PLAN

PLAN
SCALE: 1" = 50'

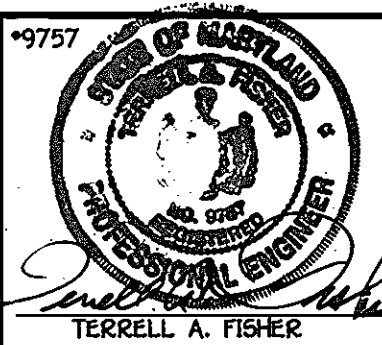
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410.461.0299



DESIGNED BY: P.W.K.

DRAWN BY: B.C.R.

CHECKED BY: P.W.K.

DATE: JUNE, 2009

BY NO. REVISION

WATER & SEWER MAINS PLAN

600' SCALE MAP NO. 15 & 23 BLOCK NO. 24 & 6

F.C.C. WORK ORDER NO. 30780

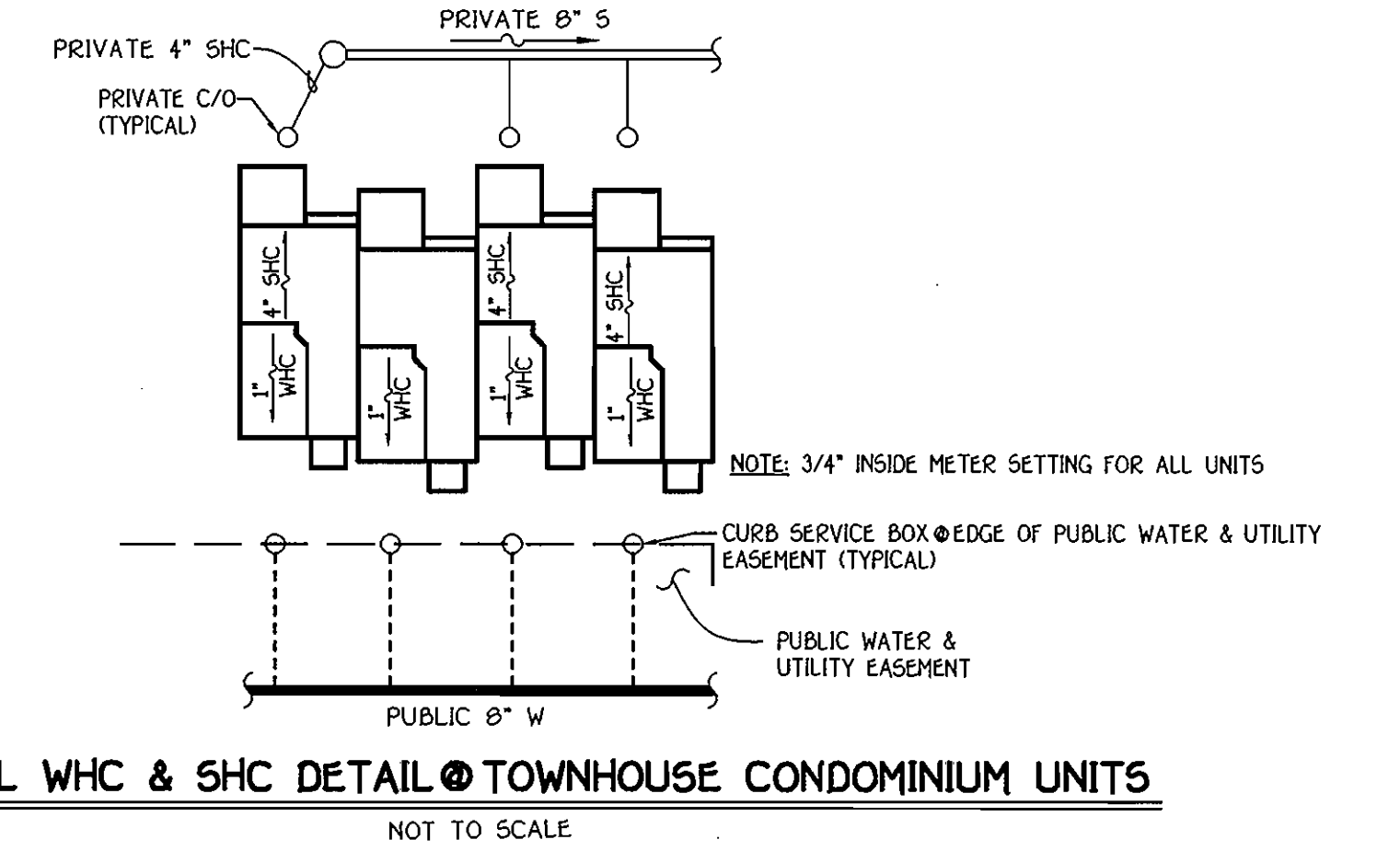
FILE NAME: FINAL WATER AND SEWER PLAN SH2

ELLICOTT SQUARE
WATER AND SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4266-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 6

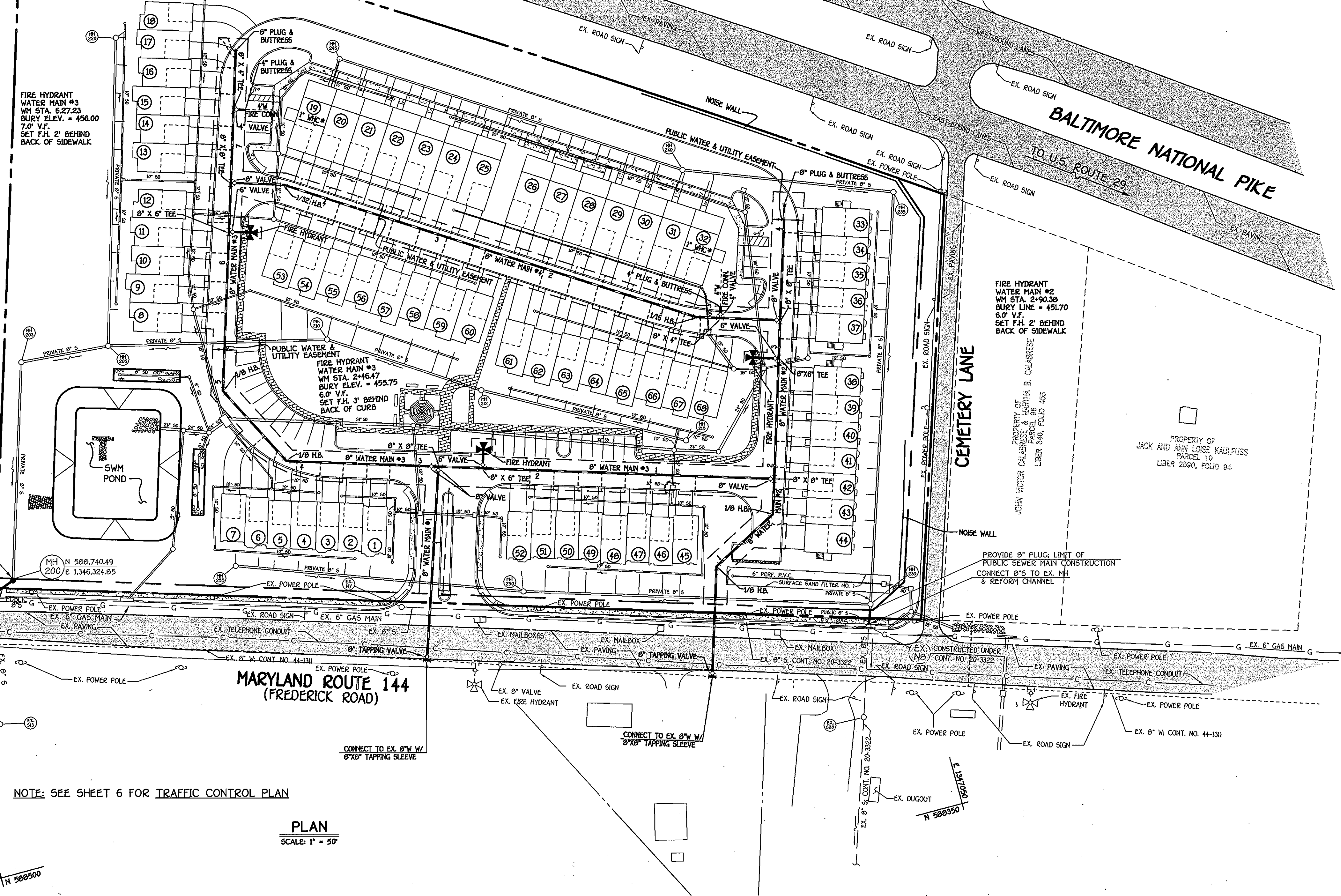
CONTRACT NO. 24-4266-D
ELLICOTT SQUARE
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



PROPERTY OF
ELLCOTT CITY ASSEMBLY OF GOD, INC.
PARCEL 55
LIBER 2844, FOLIO 487

FIRE HYDRANT
WATER MAIN #3
WM STA. 6.27.23
BURY ELEV. = 456.00
7.0' V.F.
SET F.H. 2' BEHIND
BACK OF SIDEWALK

* THE 1" DOMESTIC WATER HOUSE
CONNECTION FOR UNITS 19 & 32
SHALL BE "SPLIT" FROM THE 4"
WATER MAIN (SPRINKLER LINE)
INSIDE THE MECHANICAL ROOM



MARYLAND ROUTE 144
(FREDERICK ROAD)

NOTE: SEE SHEET 6 FOR TRAFFIC CONTROL PLAN

PLAN
SCALE: 1" = 50'

VOID

CONTRACT NO. 24-4266-D
ELLCOTT SQUARE
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. M. Berman
CHIEF, BUREAU OF UTILITIES

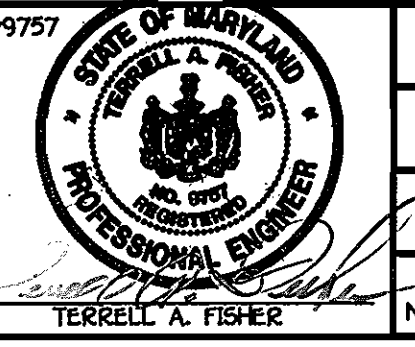
11-17-05
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Chad D. ...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

16/01/05
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE
ELLCOTT CITY, MARYLAND 21042
410.464.2995



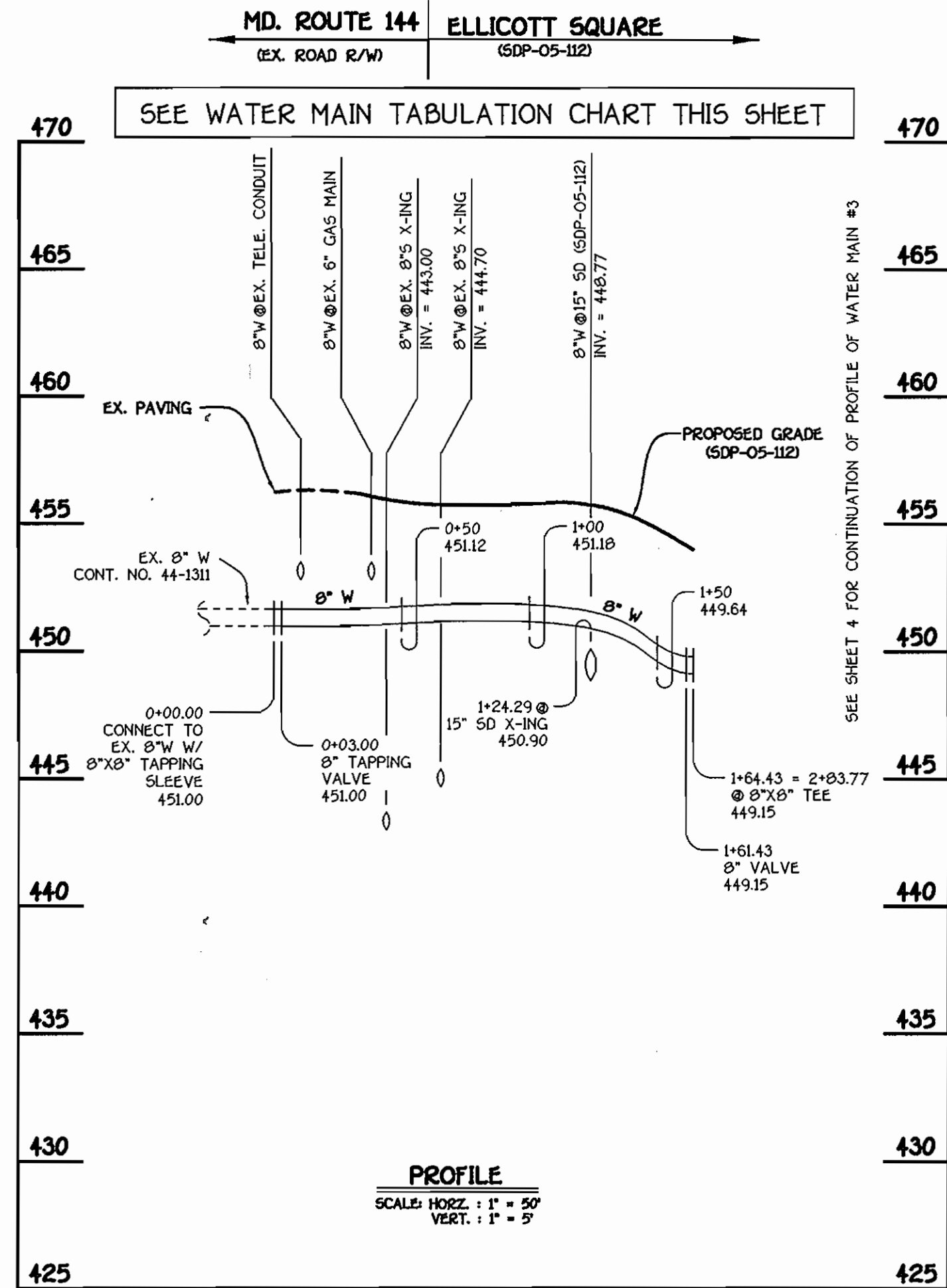
DESIGNED BY:	P.W.K.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	NOVEMBER, 2005
BY NO.	
REVISION	

WATER & SEWER MAINS PLAN	
60' SCALE MAP NO. 16 & 23	BLOCK NO. 24 & 6
F.C.C. WORK ORDER NO. 30780	
DATE	FILE NAME: FINAL WATER AND SEWER PLAN SH1

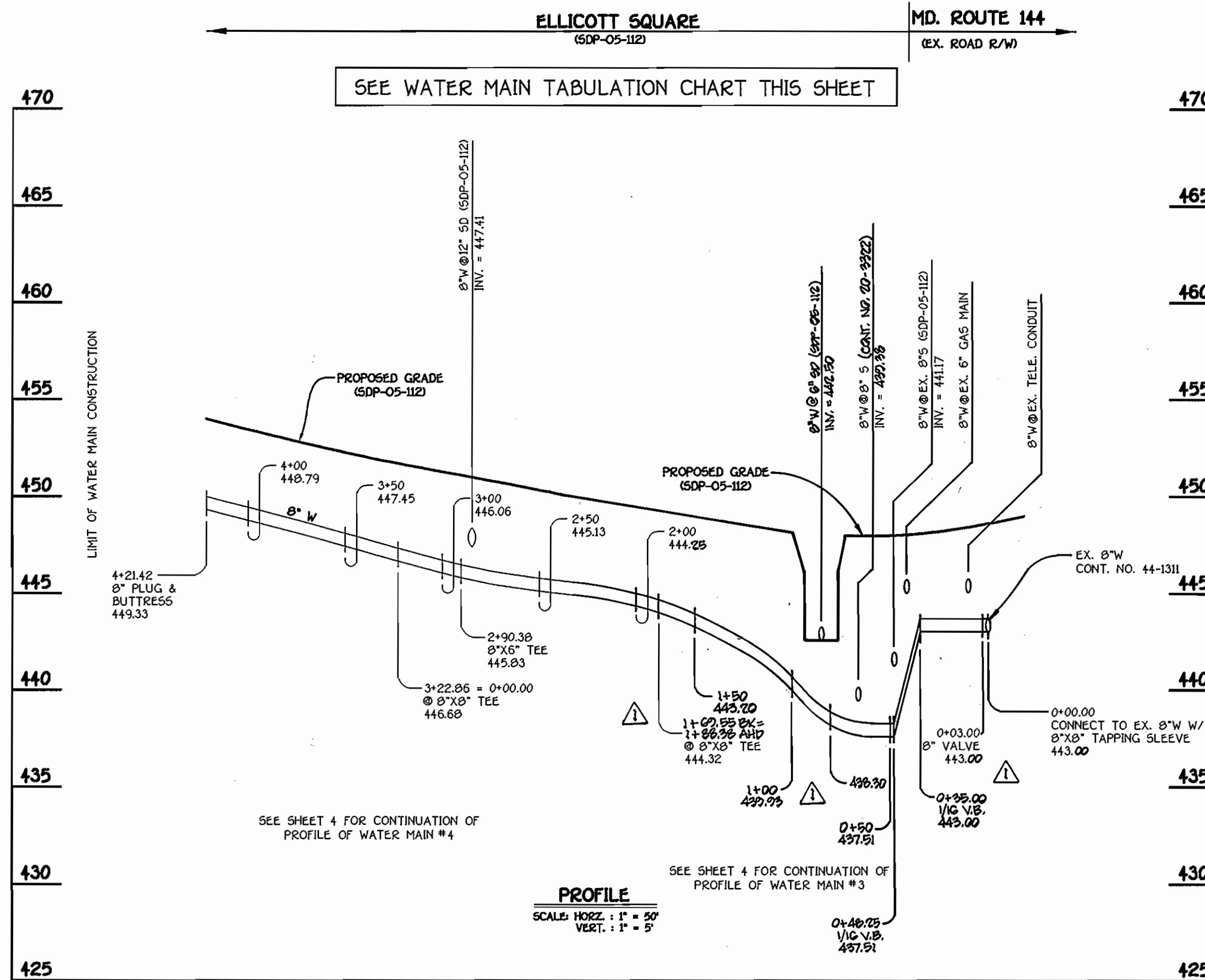
SCALE
AS
SHOWN

SHEET
2 of 6

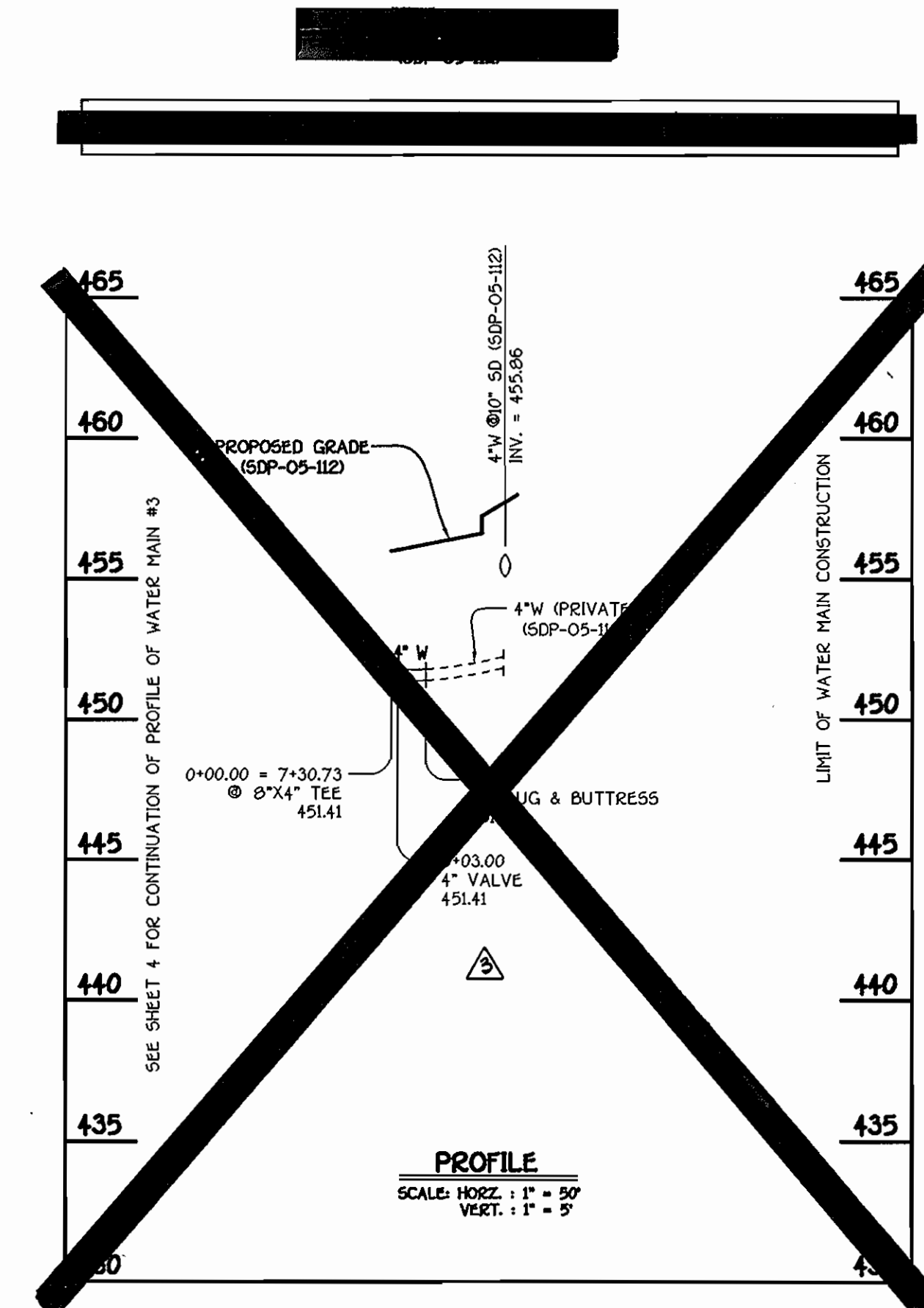
ELLCOTT SQUARE
WATER AND SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4266-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



ELLICOTT SQUARE: 8" WATER MAIN #1



ELLICOTT SQUARE: 8" WATER MAIN #2



WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
ELLICOTT SQUARE: WATER MAIN #1			
0+00.00	8" X 8" TAPPING SLEEVE	500504.50	1346644.04
0+03.00	8" TAPPING VALVE	500507.36	1346645.79
1+61.43	8" VALVE	500737.69	1346695.70
1+64.43	8" X 8" TEE	500740.50	1346696.73

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
ELLICOTT SQUARE: WATER MAIN #2			
0+00.00	8" X 8" TEE	500424.04	1346917.07
0+03.00	8" VALVE	500427.71	1346918.74
1+02.55 EX. = 1+50.00	8" X 8" TEE	500656.03	1346967.09
2+90.29	8" X 6" TEE	500754.29	1346997.98
3+22.06	8" X 8" TEE	500785.32	1347007.56
4+21.42	8" PLUG & BUTTRESS	500873.40	1347036.63

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
ELLICOTT SQUARE: WATER MAIN #3			
0+00.00	8" X 8" TEE	500424.04	1346917.07
0+03.00	8" VALVE	500427.71	1346918.74
0+03.00	8" VALVE	500737.69	1346695.70
0+03.00	8" X 8" TAPPING SLEEVE	500740.50	1346696.73
0+03.00	4" PLUG & BUTTRESS	500740.50	1346696.73

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert B. ...
CHIEF, BUREAU OF UTILITIES

11-17-05

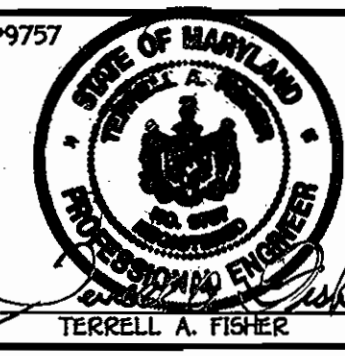
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

12/6/05

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

CENTRAL SQUARE OFFICE PARK - 2272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2055



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: NOVEMBER, 2005

REVISIONS:

1	REVISE PROFILE & TABULATION CHART FOR 4" WATER MAIN	6/1/09
2	REVISE WM #2 TAB. CHART BASED ON REVISED ALIGNMENT	6/1/09
3	REVISE PROFILE OF WM #2 BASED ON REVISED ALIGNMENT	6/1/09

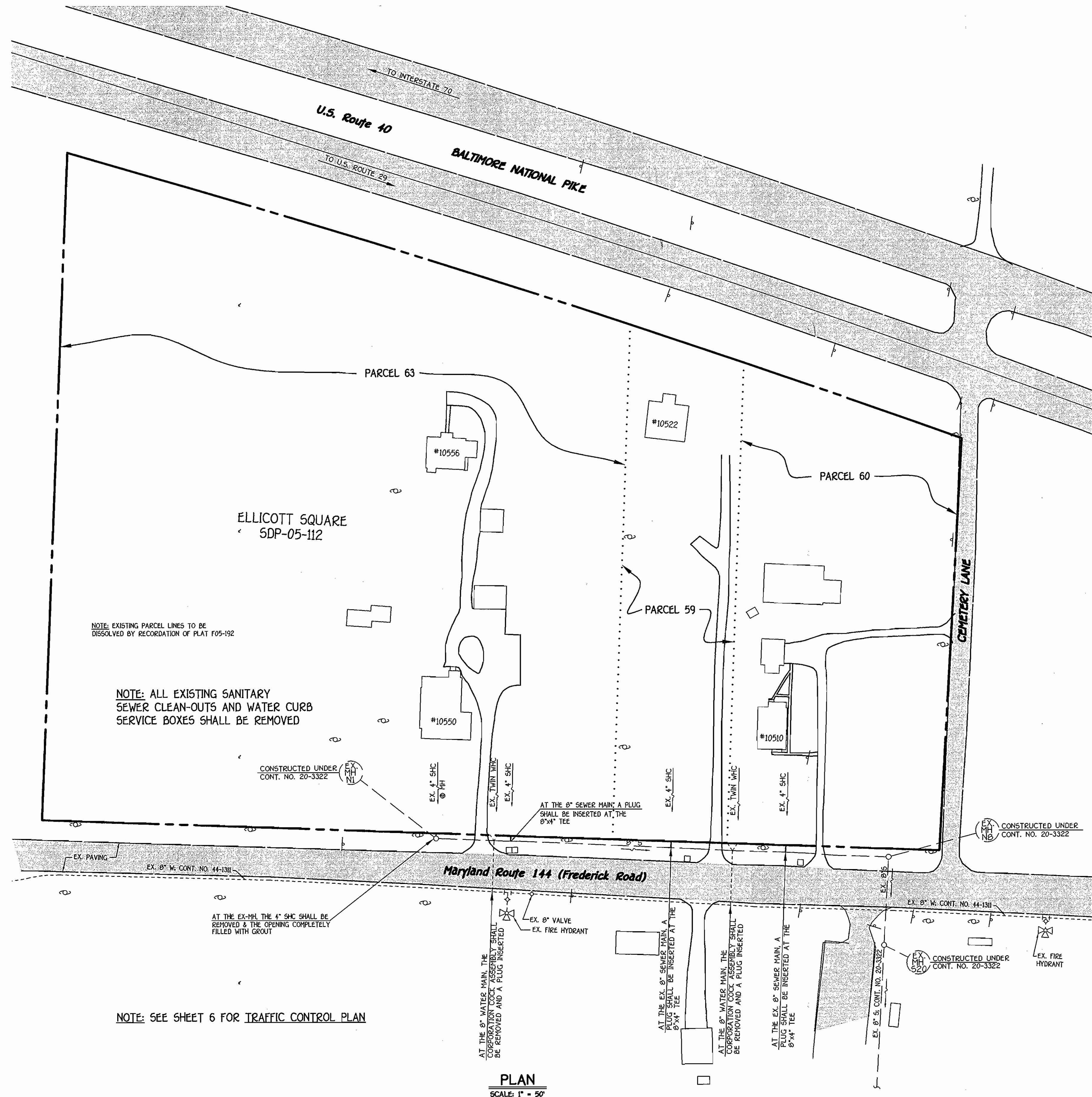
WATER & SEWER MAINS PROFILES

600' SCALE MAP NO. 15 & 23 BLOCK NO. 24 & 6
F.C.C. WORK ORDER NO. 30780
FILE NAME: FINAL WATER AND SEWER PLAN_SHT_3

CONTRACT NO. 24-4266-D
ELLICOTT SQUARE
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

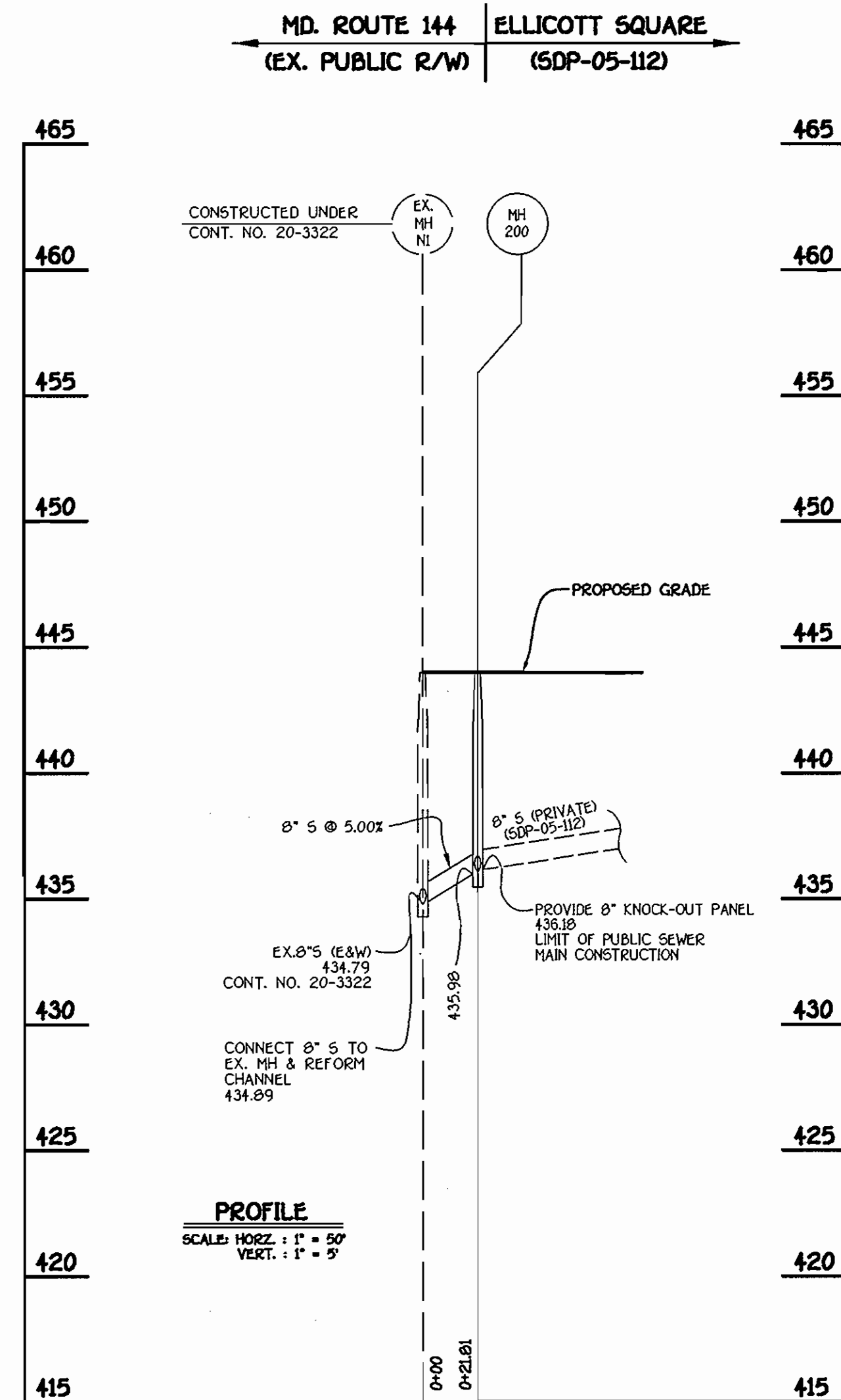
ELLICOTT SQUARE
WATER AND SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4266-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 6

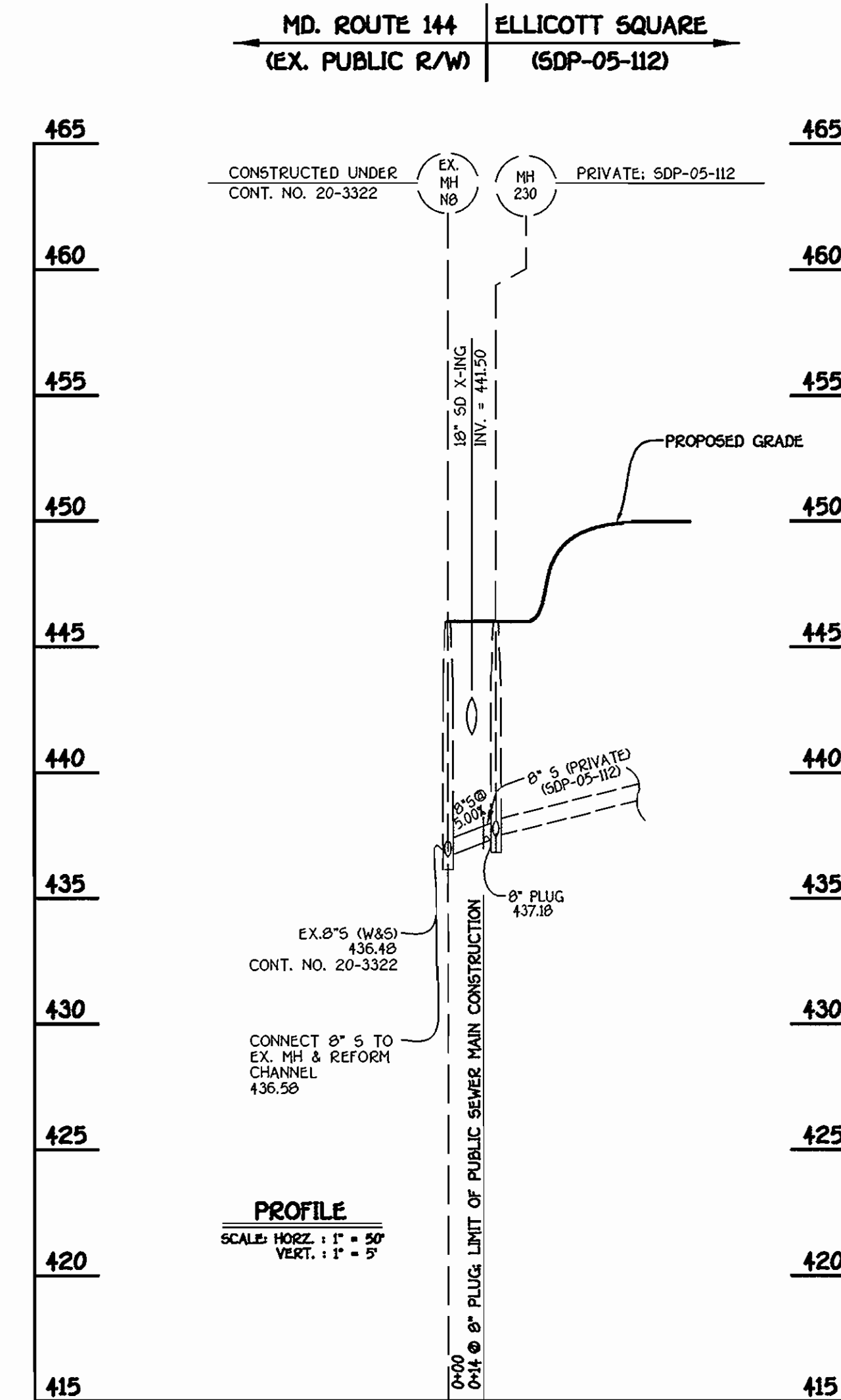


PLAN
SCALE: 1" = 50'

ABANDONMENT OF EXISTING WATER & SEWER HOUSE CONNECTIONS



ELLICOTT SQUARE; 8" SEWER MAIN



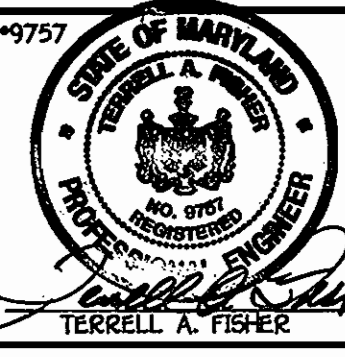
ELLICOTT SQUARE; 8" SEWER MAIN

CONTRACT NO. 24-4266-D
ELLICOTT SQUARE
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. ...
11-17-05
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
...
12/6/05
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2055



DESIGNED BY : B.C.R.
DRAWN BY : B.C.R.
CHECKED BY : P.W.K.
DATE : NOVEMBER, 2005
BY NO. REVISION DATE

WATER & SEWER MAINS PROFILES
600' SCALE MAP NO. 16 & 23 BLOCK NO. 24 & 6
F.C.C. WORK ORDER NO. 30790
FILE NAME : FINAL WATER AND SEWER PLAN SHT 5

ELLICOTT SQUARE
WATER AND SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4266-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 6

K:\SDS\PRJ\031076\dwg\Water and Sewer Plan.dwg, 11/19/2005, 1:56:04 PM

