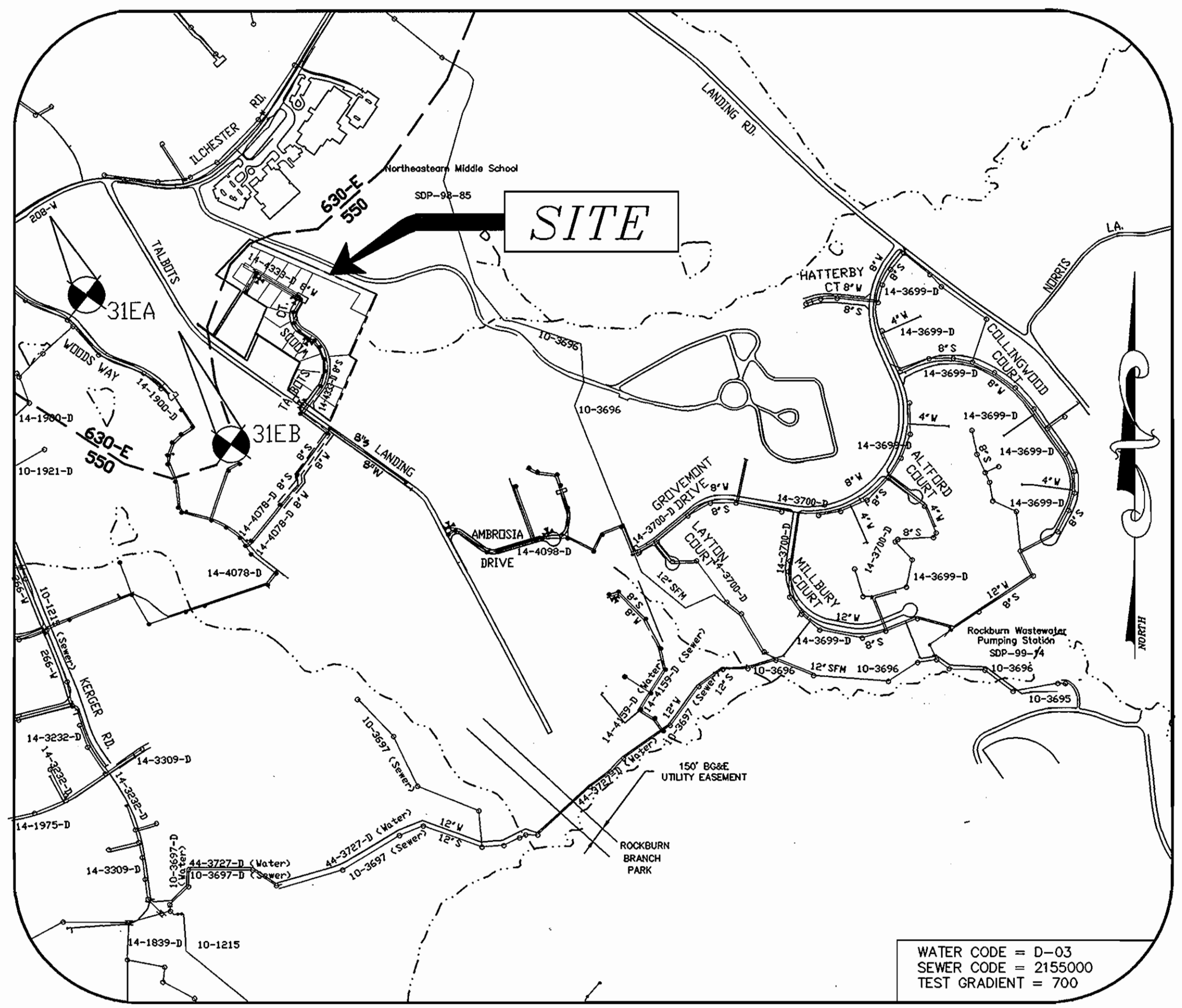


GENERAL NOTES

- 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 FEBRUARY 2003 BY WINGS AERIAL MAPPING SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY MILDENBERG BOENDER & ASSOCIATES IN AUGUST 2004.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 43R1 AND NO. 43B2. ALL VERTICAL CONTROLS ARE BASED ON NAVD '29. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE HO.CO. GEODETIC CONTROL STA. 43R1 & 43B2.
- 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 THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWNED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- 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.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATIONS OF THE TEST PITS. 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 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&T1-800-252-1133
 BGE(CONSTRUCTION SERVICES).....410-850-4620
 BGE(EMERGENCY).....410-685-1400
 BUREAU OF UTILITIES.....410-313-4900
 COLONIAL PIPELINE CO.....410-795-1390
 MISS UTILITY1-800-157-7777
 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.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATED. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- 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(g) OF THE HOWARD COUNTY CODE.
- PLEASE USE CAUTION WHEN EXCAVATING IN THE VICINITY OF OVERHEAD ELECTRIC LINES.



VICINITY MAP

SCALE 1"=600'

TYPE OF BUILDING	SED
No. OF UNITS	11
No. OF WATER HOUSE CONNECTION	11
No. OF SEWER HOUSE CONNECTIONS	11
DRAINAGE AREA	ROCKBURN
TREATMENT PLANT	ROCKBURN PUMPING STATION

QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER	REVISOR	ADDITION TOTAL
STANDARD MH (HO. CO. STD.G-5.01)	10 EACH	15	PRE CAST CONC.	CAPITAL FOUNDRY	SAME	20 EA.
8" SEWER MAIN	2,930 L.F.	1,970 L.F.	PVC	JM MFG/BRS	SAME	2579 L.F.
4" SEWER HOUSE CONNECTION	332 L.F.	285 L.F.	PVC	JM MFG/BRS	SAME	577 L.F.
# SEWER HOUSE CONNECTIONS	7 EACH	6 EA	PVC	JM MFG/BRS	SAME	19 EA.
# MANHOLE SEWER HOUSE CONNECTIONS	4 EACH	3 EA	PVC	JM MFG/BRS	SAME	5 EA.
8" WATER MAIN	2,930 L.F.	2,015 L.F.	PVC	JM MFG/BRS	SAME	2564 L.F.
1" WATER HOUSE CONNECTION	166 L.F.	135 L.F.	COPPER	READING	SAME	468 L.F.
# 1" WHC	11 EACH	9 EA.	STL	MUELLER CO	SAME	24 EA.
8" x 8" TEE	5 EACH	3 EA.	DI	SIGMA CORP.	SAME	5 EA.
8" CAP & BUTTRISS	7 EACH	4 EA.	D.I CONC.	SIGMA CORP.	SAME	7 EA.
1/8 H.B. (8")	4 EACH	4 EA	DI	SIGMA CORP.	SAME	4 EA.
1/16 H.B. (8")	6 EACH	4 EA.	DI	SIGMA CORP.	SAME	6 EA.
1/32 H.B. (8")	8 EACH	8 EA	DI	SIGMA CORP.	SAME	8 EA.
F.H.	4 EACH	4 EA	STL	MUELLER CO.	SAME	5 EA.
8"x6" F.H.T. & V.	4 EACH	4 EA	DI STL	SIGMA CO.	SAME	5 EA.
8" V.	12 EACH	10 EA	STL	MUELLER CO.	SAME	12 EA.
DEFLECTION COUPLING	6 EACH	4 EA	DI	SIGMA CO.	SAME	4 EA.

NAME OF UTILITY CONTRACTOR: C.C.S.(CONSOLIDATED CONSTRUCTION SERVICES)
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE

NOTE : SEE SHEET 7 OF 7 FOR ASBUILT DATA .

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-06-074



TERRELL A. FISHER #27157
 FOR REVISIONS 2, 3, 4 & 5

**CONTRACT NO.: 14-4333-D
 TALBOTS WOODS 1 PROPERTY
 PHASE I
 LOTS 1-9 & OPEN SPACE LOTS: 10-13
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS**

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PLAN & PROFILE
4	WATER PROFILE
5	SEWER PROFILE
6	SEDIMENT CONTROL PLAN
7	WATER AND SEWER DETAILS

DEVELOPER
 ELLICOTT CITY LAND HOLDING, INC.
 C/O DON REUMER
 5330 DORSEY HALL DR # 101
 ELLICOTT CITY, MD 21042
 (443) 367-0422

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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 FURTHER ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE: *[Signature]* DATE: 10/17/06

DEVELOPER'S NAME: DON REUMER

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.

ENGINEER'S SIGNATURE: *[Signature]* DATE: 10/17/06

ENGINEER'S NAME: JOHN B. MILDENBERG

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE: *[Signature]* DATE: 10/18/06

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

HOWARD SCD: *[Signature]* DATE: 10/18/06

PLAN REFERENCE NUMBERS:
 F-06-074

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert B. Benjamin, 10-27-06
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 [Signature], 11/16/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0296 Fax



engineering	MMM	10/16/06
illustration	MMM	10/20/06
approval	MMM	10/20/06
project	03-073	10/20/06
date	OCT. 06	10/19/07

REVISION: 31

600' SCALE MAP NO. 31 BLOCK NO. 22

TITLE SHEET

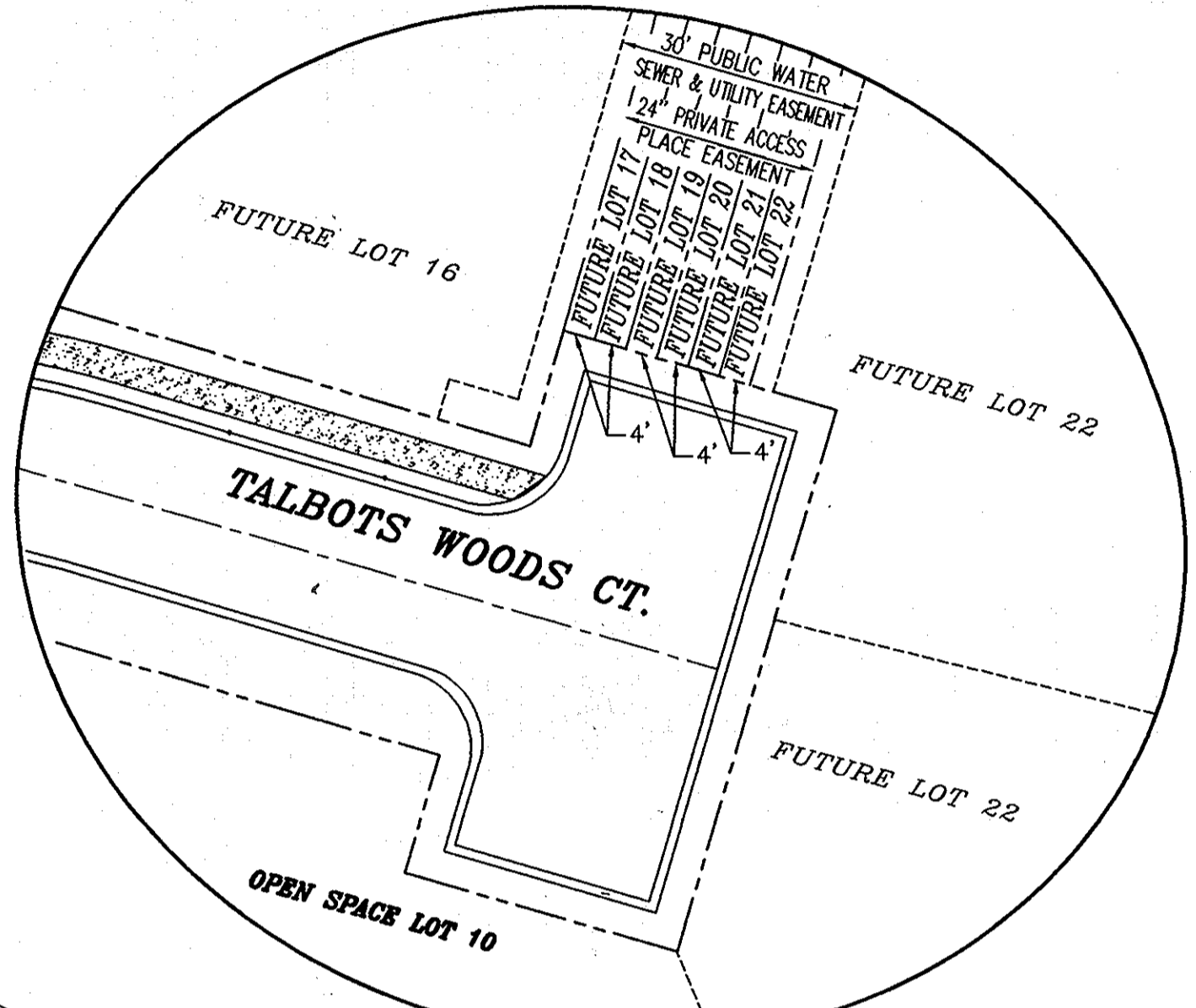
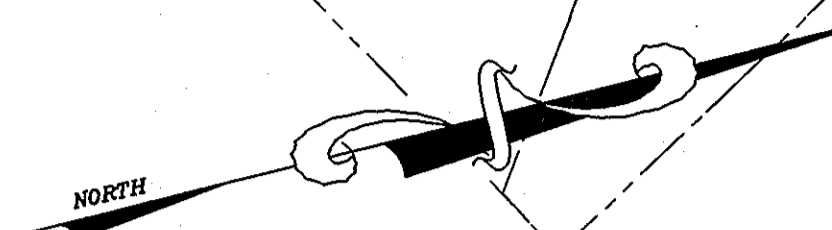
TALBOTS WOODS I PROPERTY PHASE I
 LOTS 1-9, OPEN SPACE LOTS 10-13
 & LOTS 14-24
 CONTRACT NO.: 14-4333-D
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SEWER HOUSE CONNECTION TABLE

UNIT #	% SLOPE	INV. @ R.O.W.	MIN. CELLAR ELEV.
1 (DROP)	2	431.74	437.00
2 (DROP)	2	425.57	439.00
3 (DROP)	2	422.59	429.00
4 (DROP)	2	423.95	431.00
5 (DROP)	2	427.89	435.00
6	2	416.83	421.00
7	2	417.10	423.00
8	2	421.44	427.00
9	2	425.86	431.50
14 (DROP)	2	429.43	435.6
15 (DROP)	2	428.80	434.7
16	2	422.20	428.0
17	2	423.90	427.2
18	2	425.84	429.0
19	2	428.90	433.3
20	2	421.90	427.4
21	2	425.80	429.0
22	2	428.17	432.2
23	2	420.12	424.5
24	2	419.32	424.4

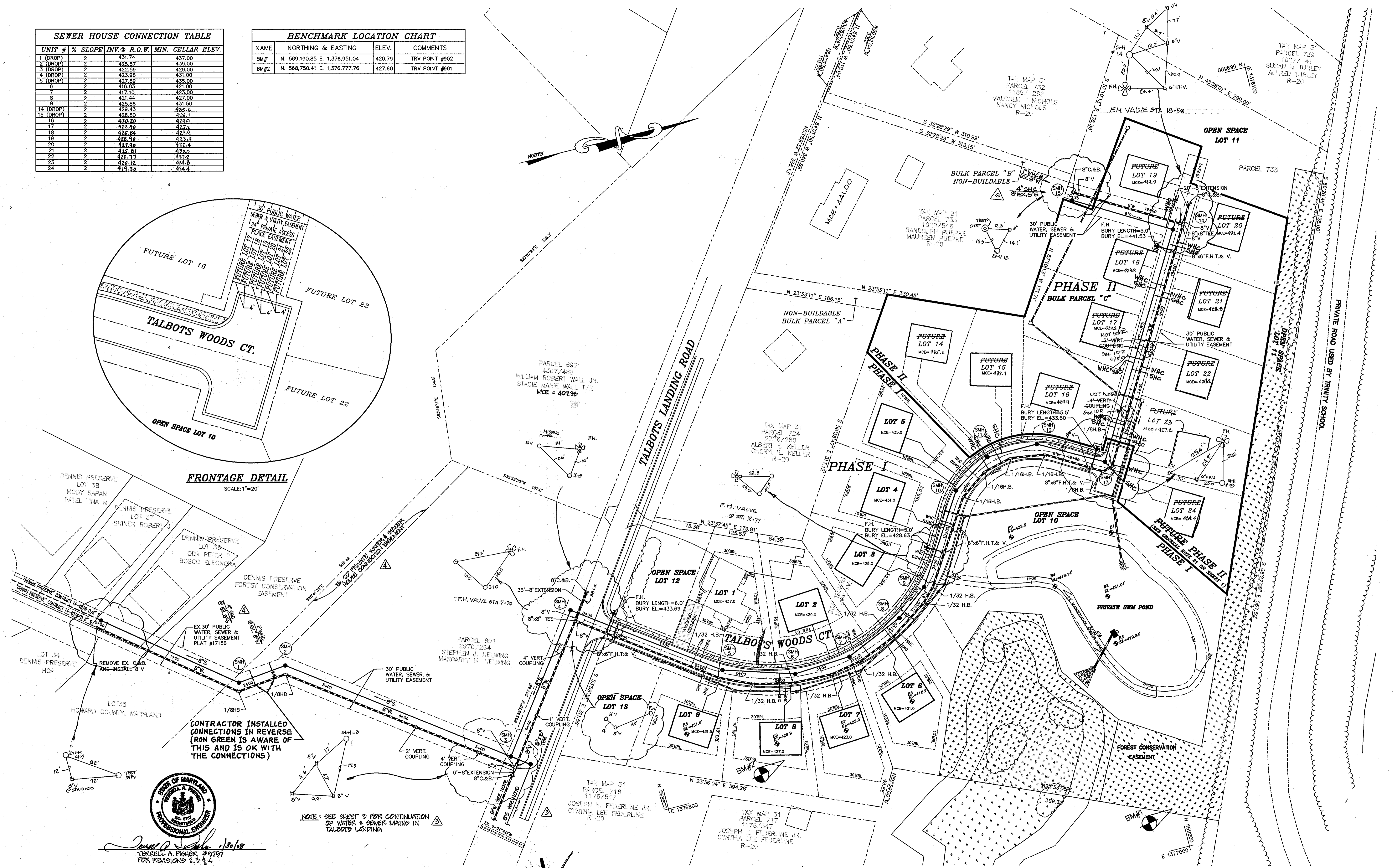
BENCHMARK LOCATION CHART

NAME	NORTHING & EASTING	ELEV.	COMMENTS
BM#1	N. 569,190.85 E. 1,376,951.04	420.79	TRV POINT #902
BM#2	N. 568,750.41 E. 1,376,777.76	427.60	TRV POINT #901



FRONTAGE DETAIL

SCALE: 1"=20'



CONTRACTOR INSTALLED CONNECTIONS IN REVERSE (RON GREEN IS AWARE OF THIS AND IS OK WITH THE CONNECTIONS)

NOTE: SEE SHEET 2 FOR CONTINUATION OF WATER & SEWER MAINS IN TALBOT'S LANDING



Terrell A. Fisher 1/30/18
FOR REVISIONS 2, 3, & 4

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
10-27-06
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
11/5/06
DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Beltsville, Maryland 20842
(410) 997-0298 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax.

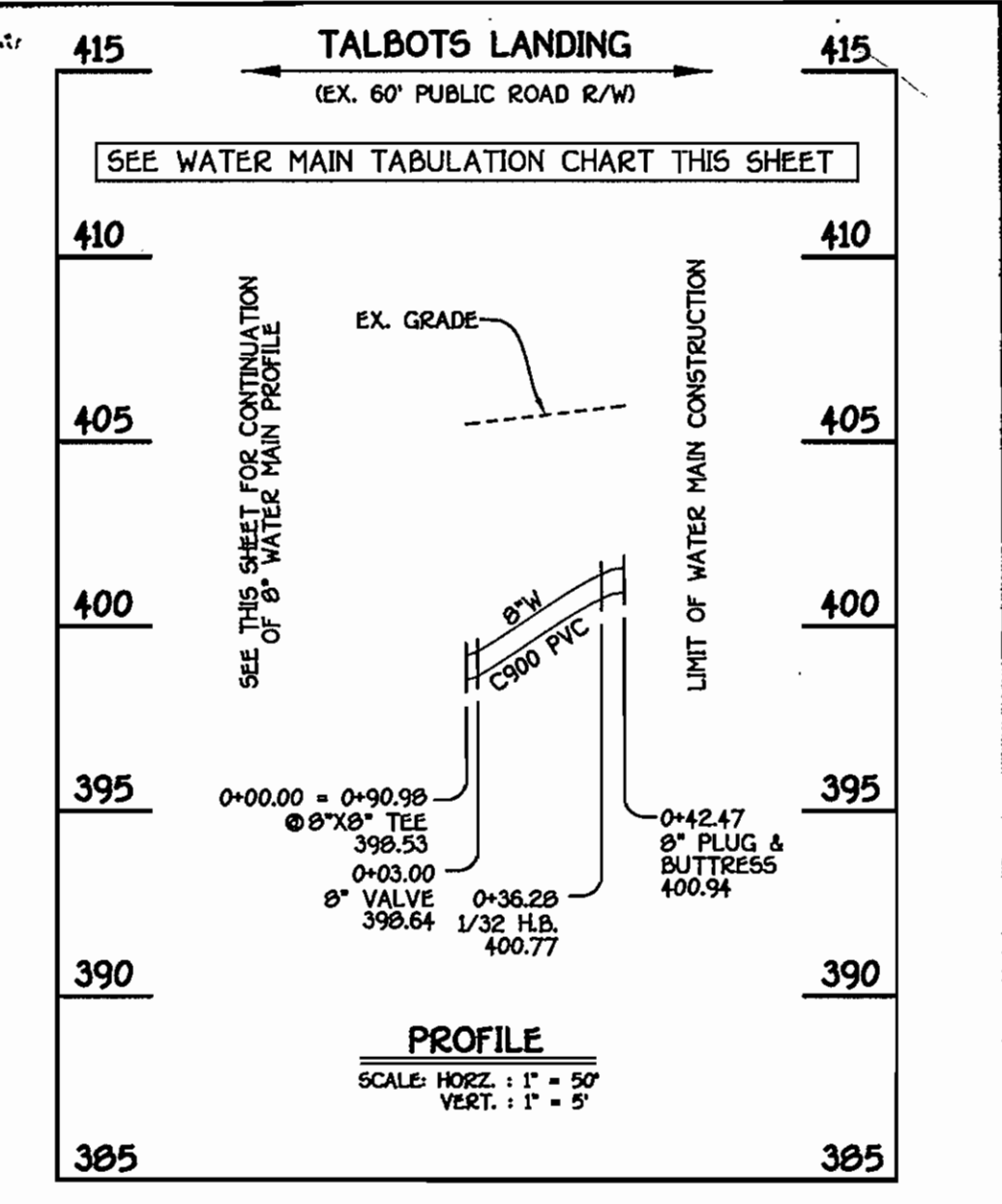
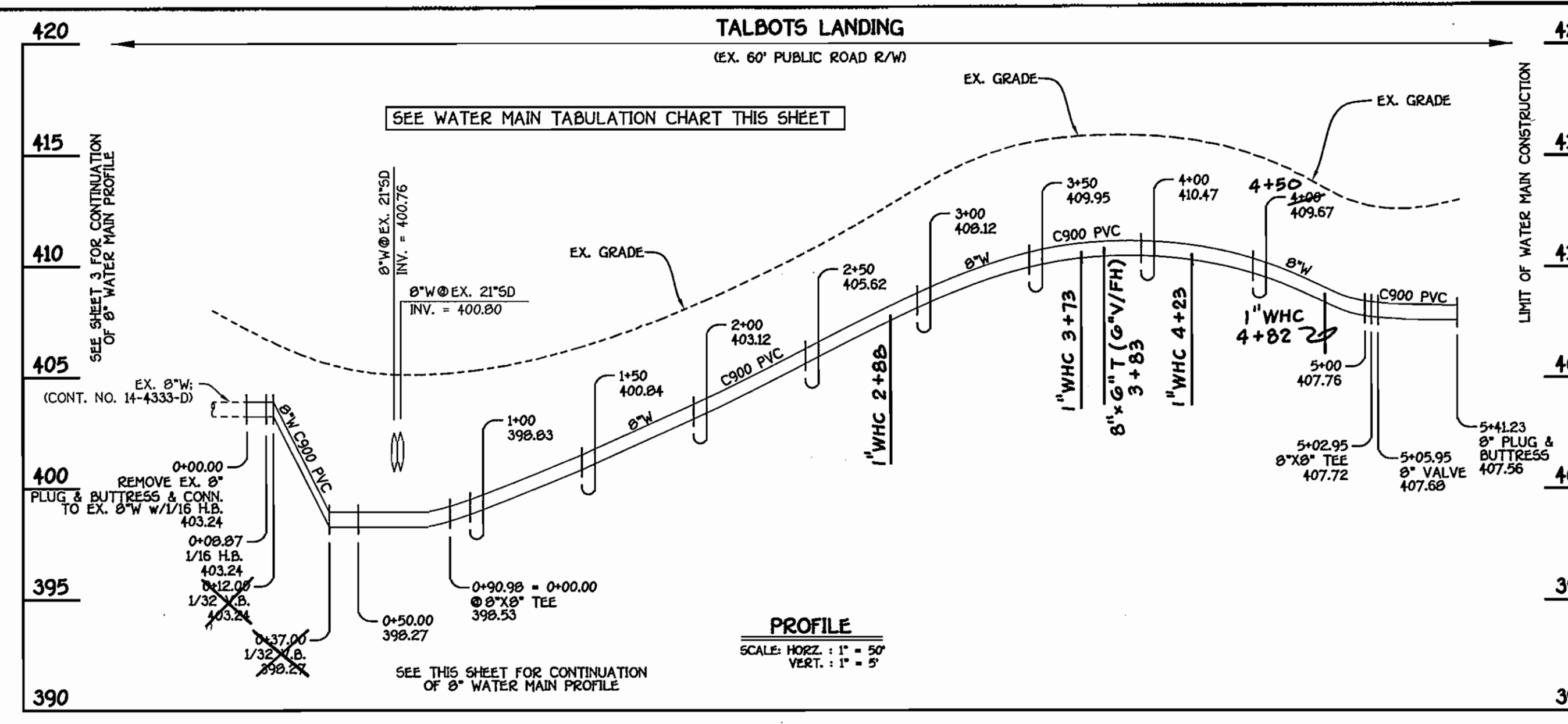
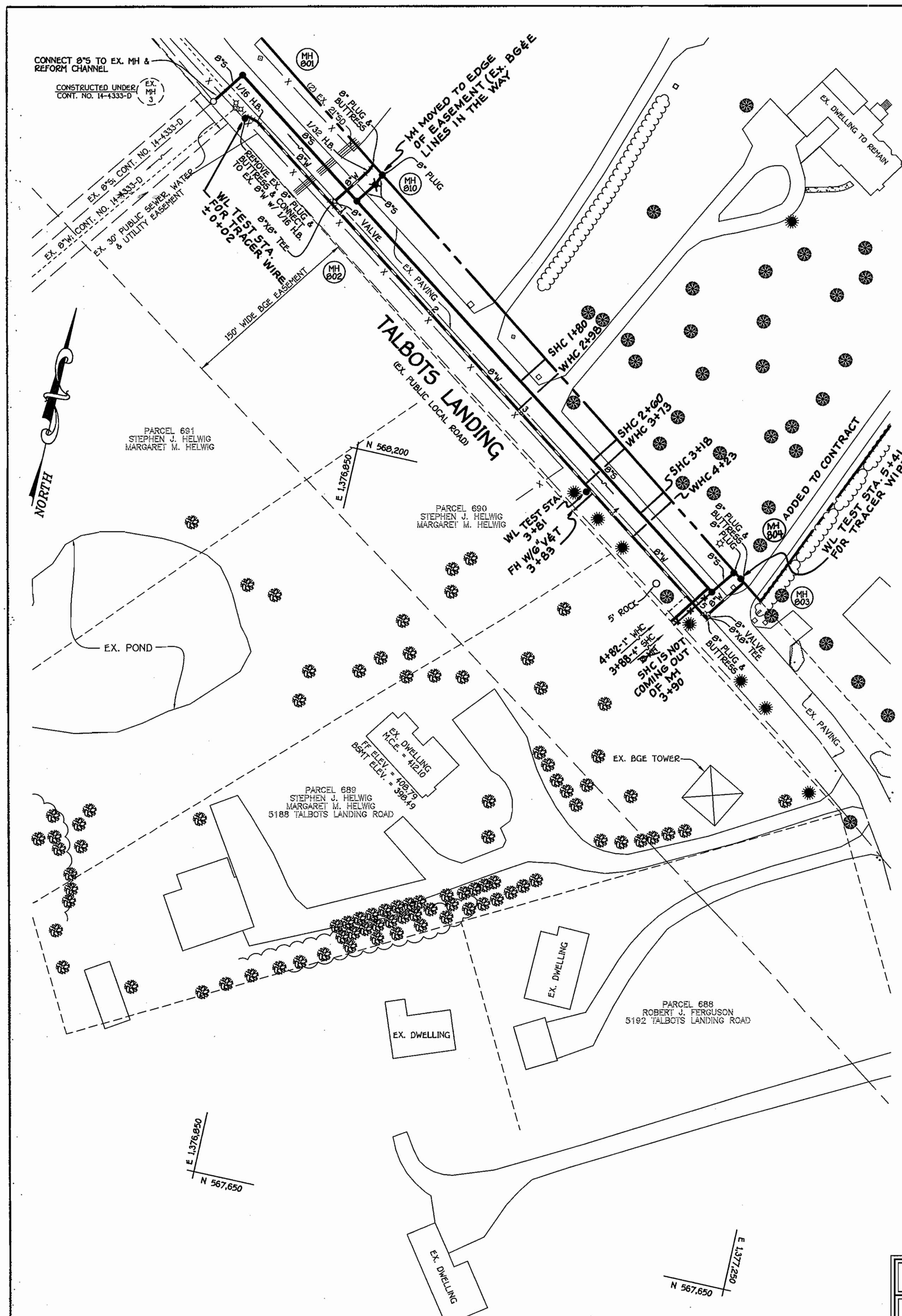


engineering	MM	MB	ADD WHC & SHC TO PARCEL 735, 'PUEPKE PROPERTY'	10/21/07
illustration	MM	MB	ADD WHC & SHC LOTS 14-24, REVISE CHART	6/12/08
approval	MM	MB	ADD WHC & SHC TO WALL PROPERTY WITH EASEMENT	1/29/08
project	MM	MB	ADD WATER & SEWER MAINS IN TALBOT'S LANDING	1/29/08
date	03-073	KC1	REVISE SHEET NO.; ADDITIONAL SHEET INCLUDED	1/29/08
			"AS-BUILT" DATA SHOWN	10/25/07
date	OCT. 06	BY	NO.	REVISION

WATER & SEWER PLAN
600' SCALE MAP NO. 31 BLOCK NO. 22

LOTS 1-9, OPEN SPACE LOTS 10-13 & LOTS 14-24
CONTRACT NO: 14-4333-D
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
2 OF 7

03-073.dwg/FINAL-WS WATER-PROF



WATER MAIN TABULATION CHART

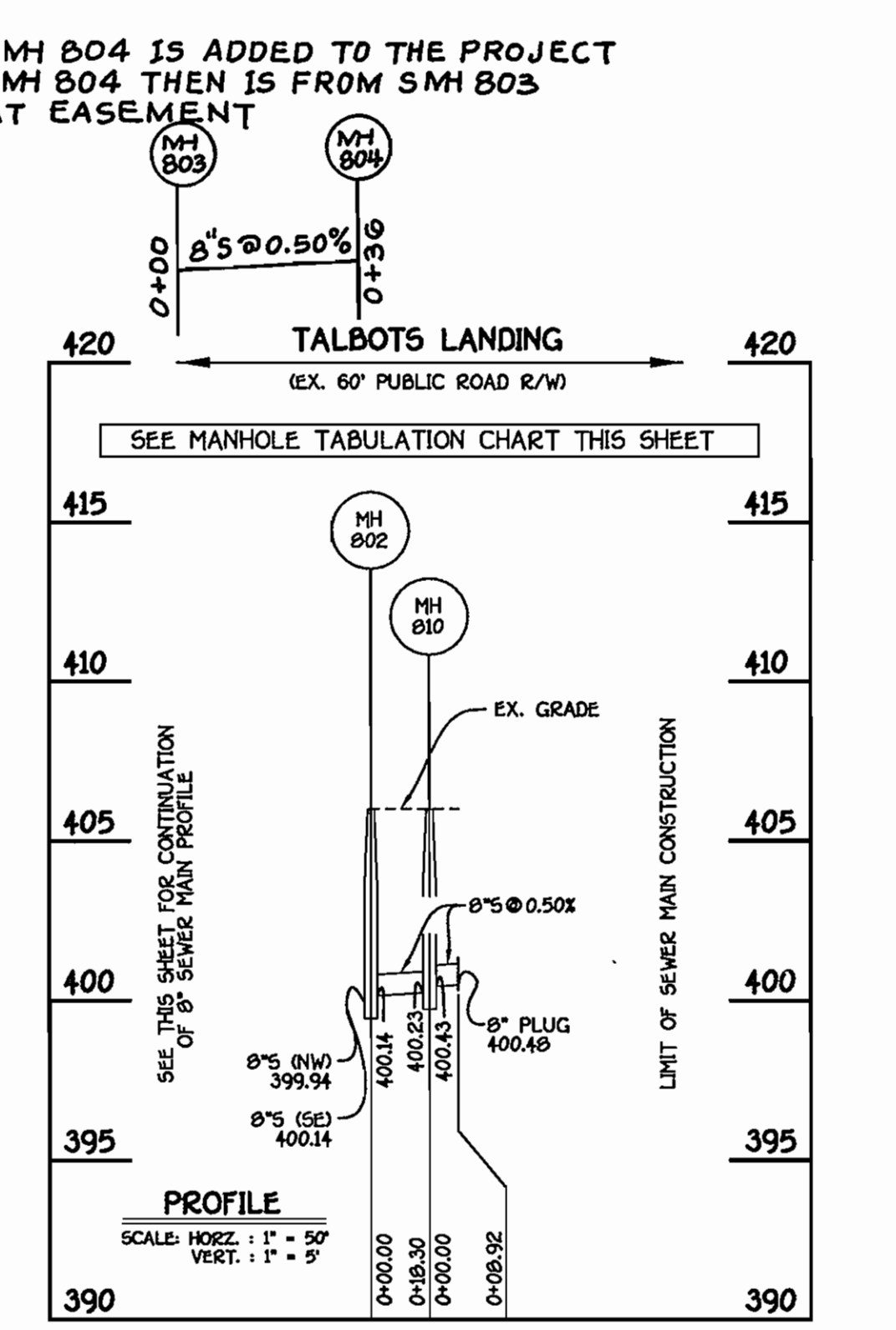
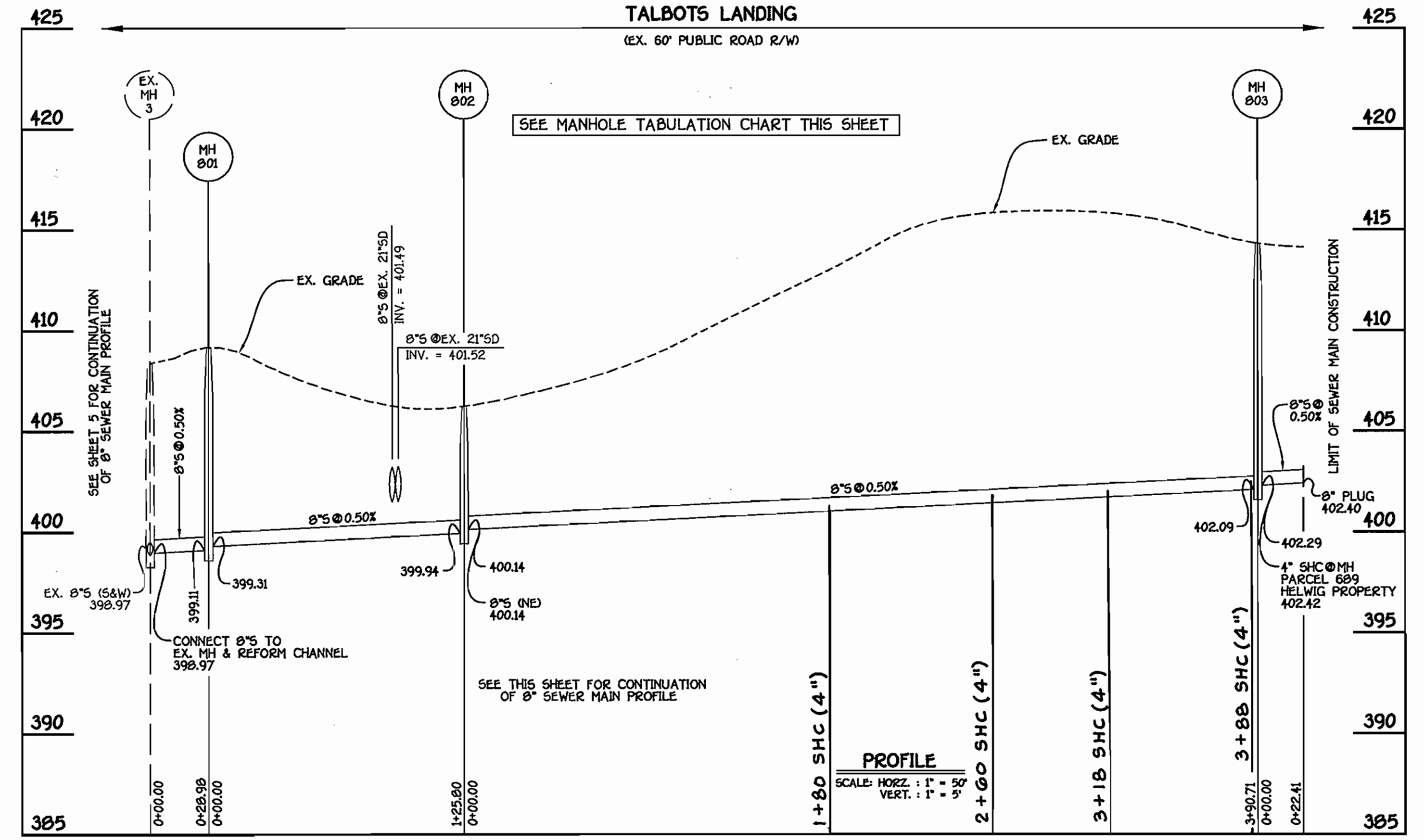
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN; TALBOTS LANDING			
0+00.00	1/16 H.B.	568423.12	1376716.48
0+08.87	1/16 H.B.	568420.81	1376725.05
0+50.98	8"X8" TEE	568373.19	1376791.94
5+02.95	8"X8" TEE	568134.29	1377127.55
5+05.95	8" VALVE	568136.73	1377129.29
5+41.23	8" PLUG & BUTTRESS	568165.47	1377149.75

8" WATER MAIN; TALBOTS LANDING

STATE OF MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 ENGINEER
 TERRELL A. FISHER #9757
 FOR: NEW CONSTRUCTION PLAN, SHEET 3 OF 7

WATER MAIN TABULATION CHART

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN; TALBOTS LANDING			
0+00.00	8"X8" TEE	568373.19	1376791.94
0+03.00	8" VALVE	568375.61	1376793.72
0+36.28	1/32 H.B.	568402.75	1376812.98
0+42.47	8" PLUG & BUTTRESS	568408.43	1376815.45



MANHOLE TABULATION CHART

NO.	NORTHING	EASTING	RIM ELEVATION
801	568452.06	1376706.98	409.20*
802	568379.30	1376809.60	406.25*
803	568153.33	1377128.33	414.35*
8" PLUG	568171.35	1377141.66	---

SHC INVERT @ PROPERTY LINE CHART

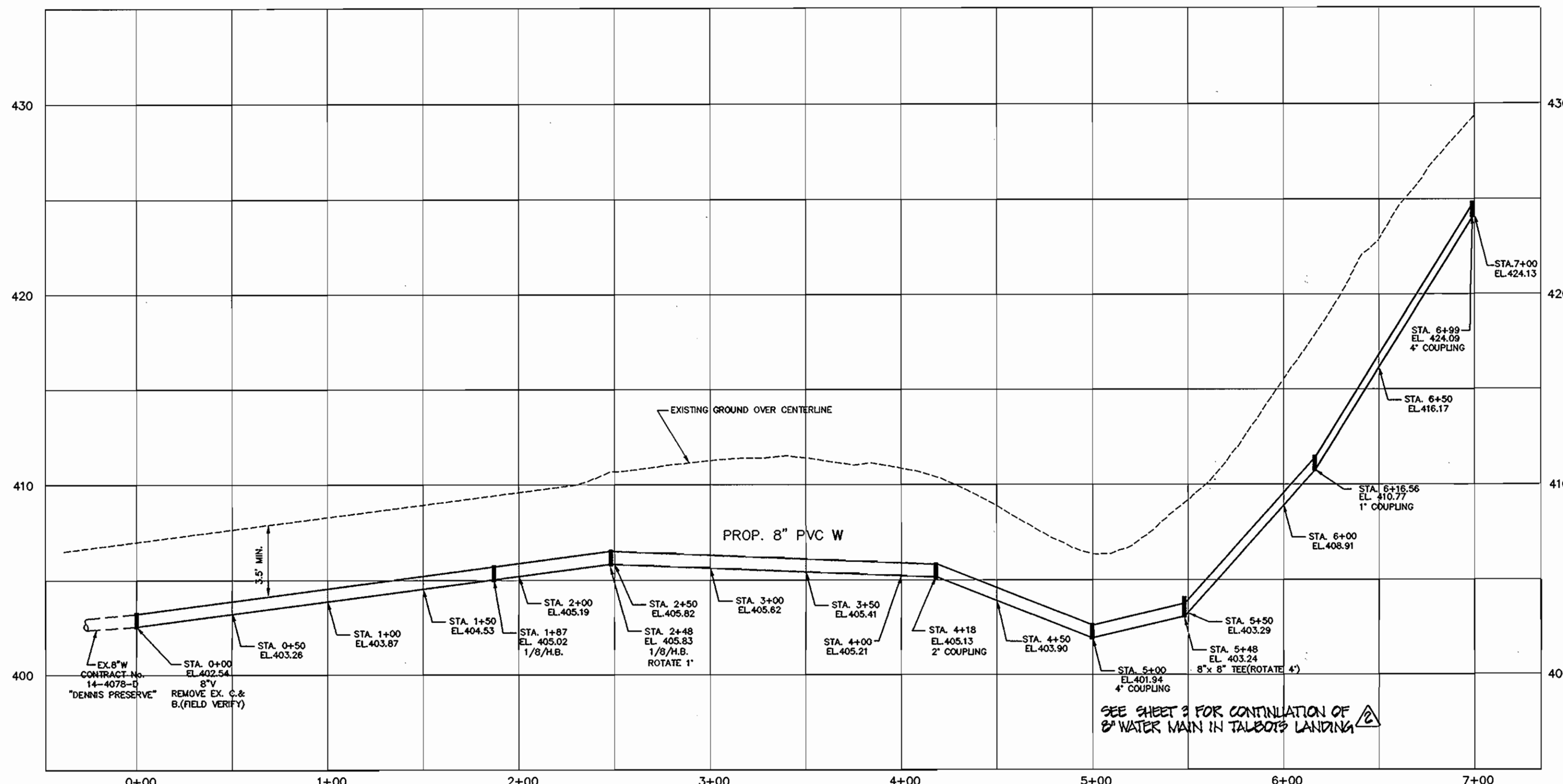
STATION	LOT	ELEVATION
MH 802 TO MH 803		
8" MH 803 RT.	PARCEL 689; HELWIG	403.16

MANHOLE TABULATION CHART

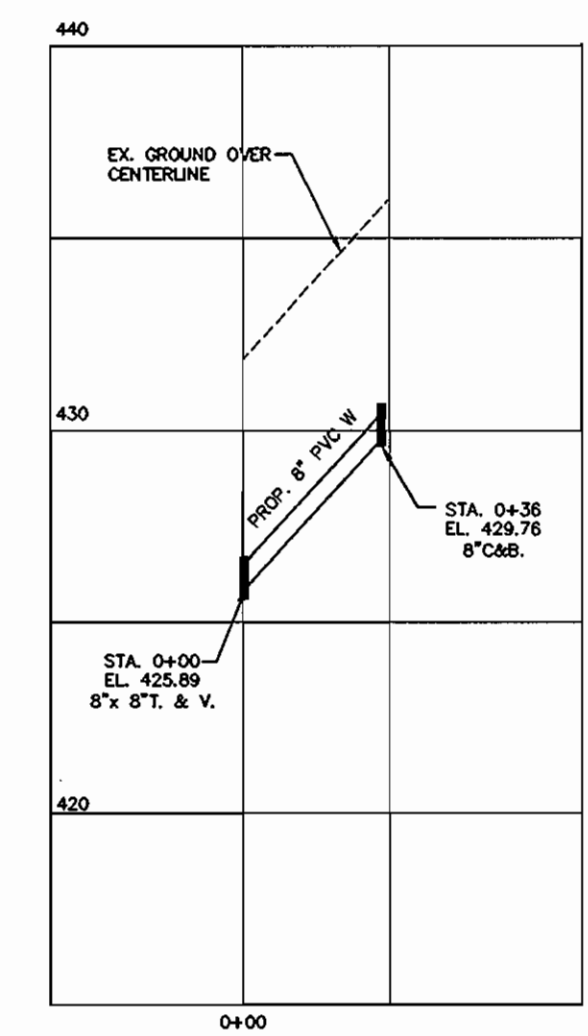
NO.	NORTHING	EASTING	RIM ELEVATION
810	568394.23	1376820.18	406.00*
8" PLUG	568402.41	1376823.73	---

NOTE: THIS NEW CONSTRUCTION PLAN, SHEET 3 OF 7, HAS BEEN ADDED TO THE WATER & SEWER MAIN CONSTRUCTION PLANS PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON NOVEMBER 3, 5 & 6, 2006.

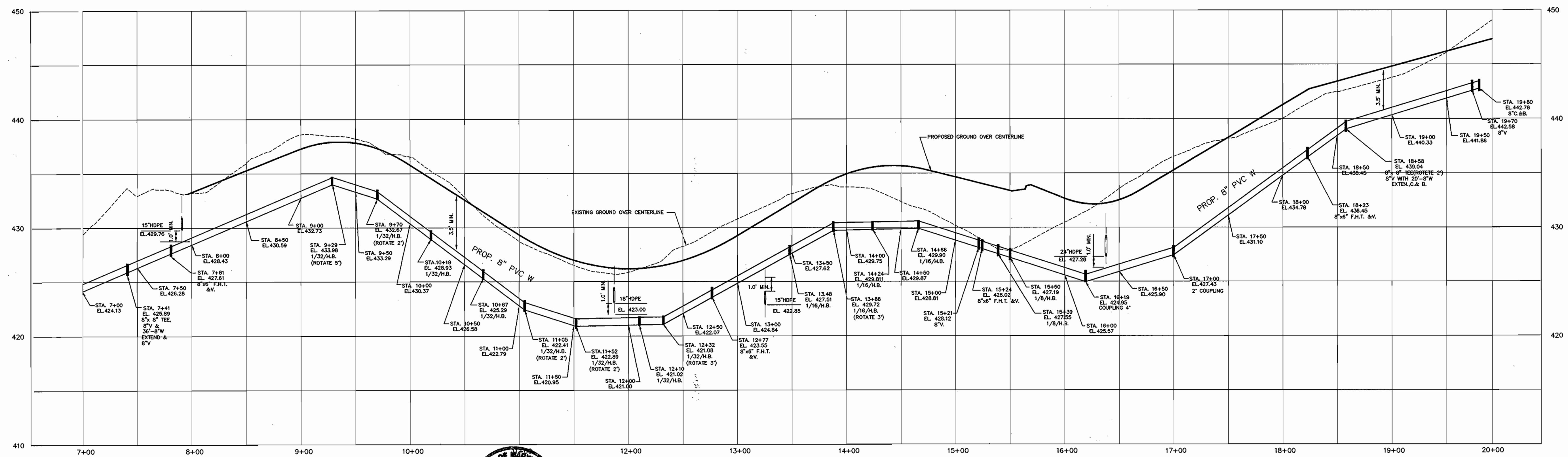
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND S. C. COON CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND [Signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION	MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 6072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042 (410) 987-0288 Ext. (301) 621-5522 Wash. (410) 987-0289 Fax.	STATE OF MARYLAND PROFESSIONAL ENGINEER TERRELL A. FISHER #9757	WATER & SEWER PLAN & PROFILES 600' SCALE MAP NO. 31 BLOCK NO. 22	TALBOTS WOODS I PROPERTY PHASE I LOTS 1-9, OPEN SPACE LOTS 10-13 & LOTS 14-24 CONTRACT NO: 14-4333-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	scale 1"=50' 3 OF 7
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8" WATER PROFILE
SCALE: HOR. 1"=50'
VRT. 1"=5'



**36' EXTENSION
8" WATER PROFILE**
SCALE: HOR. 1"=50'
VRT. 1"=5'



8" WATER PROFILE
SCALE: HOR. 1"=50'
VRT. 1"=5'

8" WATER MAIN TABULATION CHART		
NORTHING & EASTING	APPURTENANCE	
N 567,984.8 E 1,376,414.6	8"V.	
N 568,131.33 E 1,376,532.6	1/8 H.B.	
N 568,191.2 E 1,376,526.2	1/8"H.B.	
N 568,239.3 E 1,376,627.9	2" COUPLING	
N 568,393.8 E 1,376,676.3	4" COUPLING	
N 568,432.9 E 1,376,705.2	8"x8" T.	
N 568,473.5 E 1,376,649.9	1" COUPLING	
N 568,522.9 E 1,376,583.1	4" COUPLING	
N 568,435.1 E 1,376,702.3	8"V.	
N 568,547.3 E 1,376,550.4	8"x8" T.	
N 568,550.1 E 1,376,552.5	8"V.	
N 568,431.0 E 1,376,707.9	8"V.	
TALBOTE WOODS CT. STATION & OFFSET	APPURTENANCE	
STA. 0+30; 5.0' RT	F.H.T.&V.	
STA. 0+30; 17.0' LT.	F.H.	
STA. 1+78; 7.3' RT.	1/32 H.B.	
STA. 2+17; 7.5' RT.	1/32 H.B.	
STA. 2+65; 7.6' RT.	1/32 H.B.	
STA. 3+11; 8.0' RT.	1/32 H.B.	
STA. 3+48; 7.8' RT.	1/32 H.B.	
STA. 3+94; 6.7' RT.	1/32 H.B.	
STA. 4+50; 6.9' RT.	1/32 H.B.	
STA. 4+71; 6.3' RT.	1/32 H.B.	
STA. 5+15; 2.8' RT.	F.H.T.&V.	
STA. 5+14; 19.3' LT.	F.H.	
STA. 5+87; 4.2' RT.	1/16 H.B.	
STA. 6+29; 5.2' RT.	1/16 H.B.	
STA. 6+67; 5.4' RT.	1/16 H.B.	
STA. 7+12; 4.4' RT.	1/16 H.B.	
STA. 7+67; 5.2' RT.	8"V.	
STA. 7+70; 5.1' RT.	F.H.T.&V.	
STA. 7+70; 19.0' LT.	F.H.	
STA. 7+85; 5.0' RT.	1/8 H.B.	
STA. 7+94; 3.7' LT.	1/8 H.B.	
NORTHING & EASTING	APPURTENANCE	
N 569,258.1 E 1,376,471.7	4" COUPLING	
N 569,299.3 E 1,376,401.8	2" COUPLING	
N 569,362.3 E 1,376,295.4	F.H.T. & V.	
N 569,343.1 E 1,376,284.1	F.H.	
N 569,378.1 E 1,376,268.9	8"V.	
N 569,379.8 E 1,376,265.9	8"x8" T.	
N 569,267.3 E 1,376,199.3	8"V.	
N 569,261.6 E 1,376,196.0	8" C & B.	

TERRELL A. FISHER # 07871
 FOR REVISIONS 1 & 2

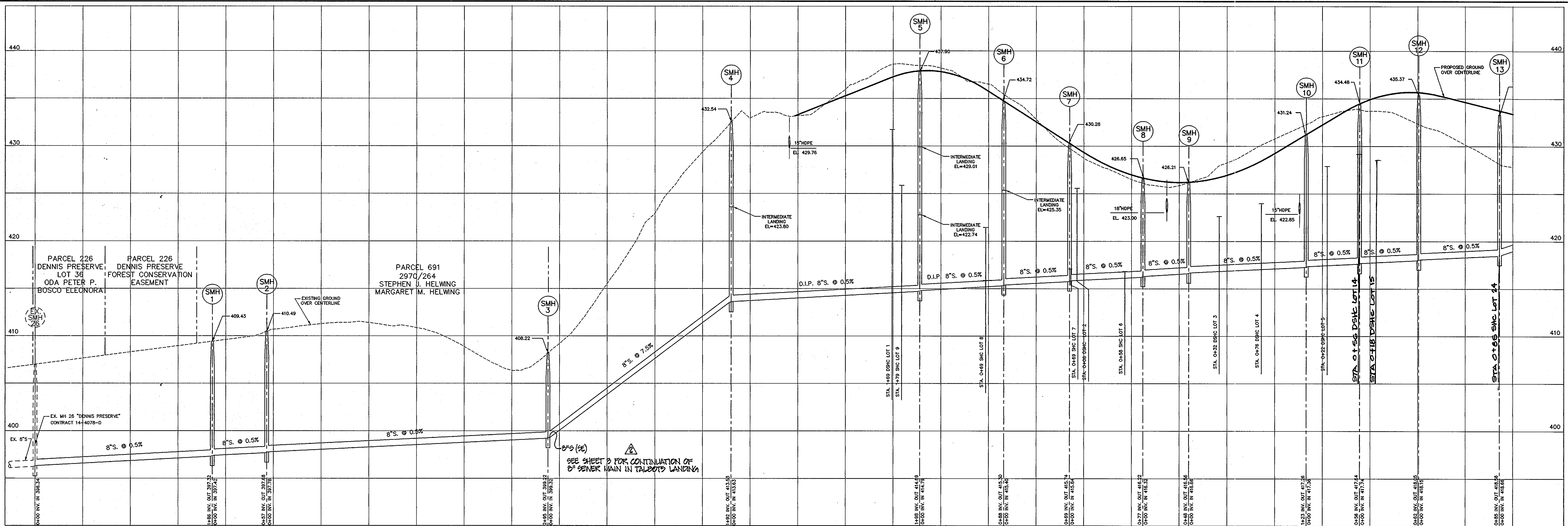
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 R. H. B... 10-27-06
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0288 Fax. (301) 821-5521 Wash. (410) 997-0288 Fax.

engineering	MMM				
illustration	MMM				
approval					
project	03-073				
date	OCT. 06	BY	NO.	REVISION	DATE
				REFERENCE WATER MAIN IN TALBOTE WOODS CT.	1/29/06
				REVISE SHEET NO. 3 ADDITIONAL SHEET INCLUDED	1/29/06

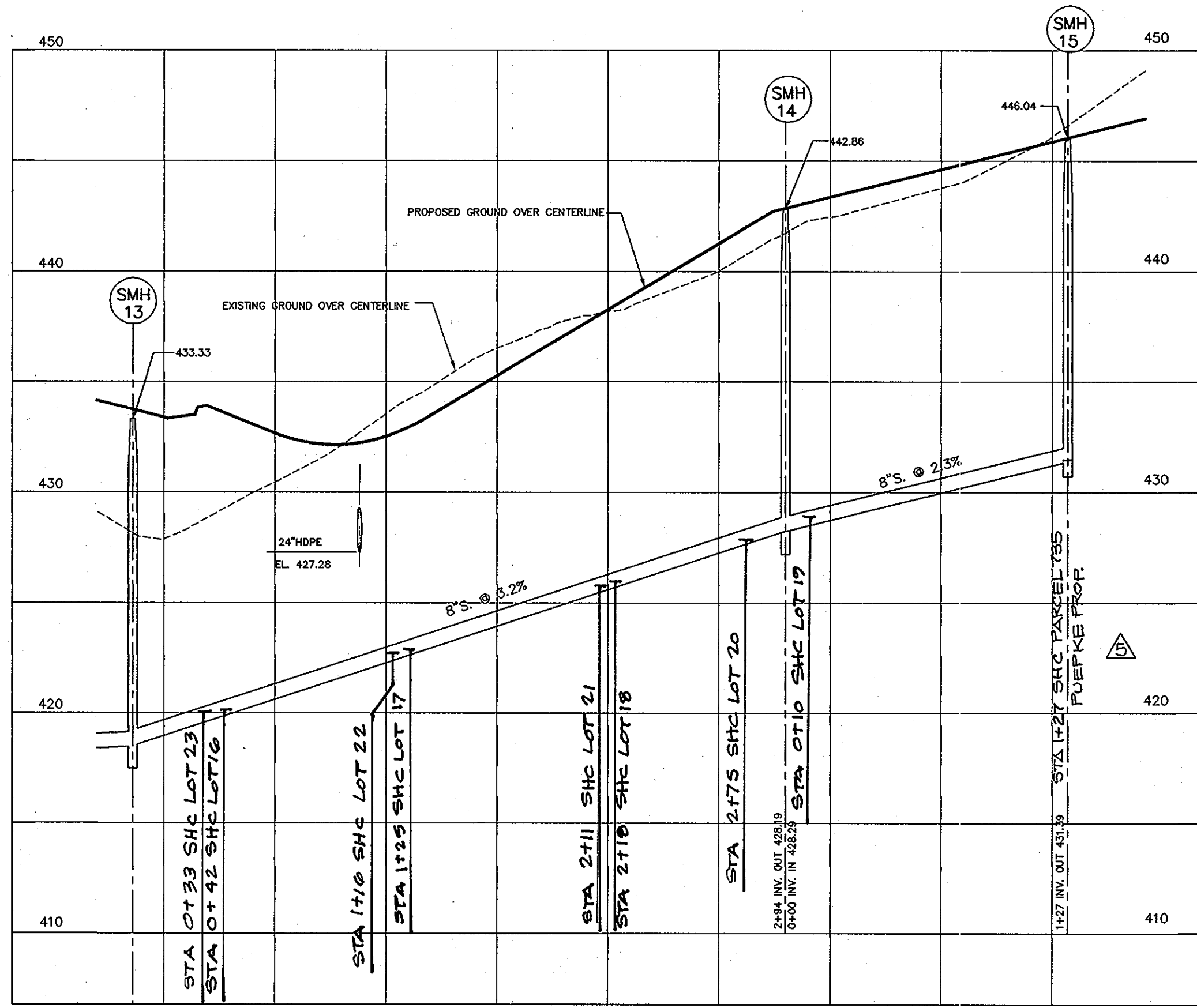
WATER PROFILE
 600' SCALE MAP NO. 31 BLOCK NO. 22

PHASE I LOTS 1-9, OPEN SPACE LOTS 10-13
 PHASE II LOTS 14-24.
 CONTRACT NO: 14-4333-D
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 scale 1"=50'
 4 OF 7



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
MH 1 TO MH 2		
0+17 LT.	WALL PROPERTY	397.80
1+27 MH 15	FUEPKE PROP. PAR. 735	431.59

MANHOLE LOCATION CHART		
MH #	TALBOTS WOODS CT. STA./OFFSET	NORTHING & EASTING
01	N 568,134.4 E 1,376,522.2	
02	N 568,194.0 E 1,376,515.8	
03	N 568,431.0 E 1,376,691.0	
04	N 568,545.1 E 1,376,536.5	
05	STA. 1+78; 3.8' LT.	
06	STA. 2+68; 3.3' LT.	
07	STA. 3+39; 3.5' LT.	
08	STA. 4+18; 4.7' LT.	
09	STA. 4+67; 2.8' LT.	
10	STA. 5+90; 7.1' LT.	
11	STA. 6+42; 7.4' LT.	
12	STA. 7+01; 7.4' LT.	
13	STA. 7+84; 6.8' LT.	
14	N 569,366.4 E 1,376,288.9	
15	N 569,257.2 E 1,376,204.4	



Terrell A. Pender 1/30/08
TERRELL A. PENDER #0757
FOR REVISIONS 1, 2 & 3

03-073 (Rev) FINAL - WS SEWER - PROF

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. H. Bunn</i> 10-27-06 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Debra Damm</i> 11/30/06 CHIEF, DEVELOPMENT ENGINEERING DIVISION	MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042 (410) 997-0298 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax.	<table border="1"> <tr><td>engineering</td><td>MMM</td><td></td><td></td><td></td><td></td></tr> <tr><td>illustration</td><td>MMM</td><td></td><td></td><td></td><td></td></tr> <tr><td>approval</td><td>MMM</td><td></td><td></td><td></td><td></td></tr> <tr><td>project</td><td>03-073</td><td></td><td></td><td></td><td></td></tr> <tr><td>date</td><td>OCT. 06</td><td></td><td></td><td></td><td></td></tr> </table>	engineering	MMM					illustration	MMM					approval	MMM					project	03-073					date	OCT. 06					<table border="1"> <tr><td>MBA</td><td>ADD SHC INVERT TO CHART, FUEPKE PROP. PAR. 735</td><td>10/21/06</td></tr> <tr><td>MBA</td><td>ADD SHCS TO PROFILE LOTS 14-24</td><td>8/20/06</td></tr> <tr><td>PC</td><td>ADD SHC INVERT CHART FOR WALL PROPERTY</td><td>1/25/08</td></tr> <tr><td>PC</td><td>REFERENCE WATER MAIN IN TALBOTS LANDS</td><td>1/25/08</td></tr> <tr><td>PC</td><td>REVISE SHEET NO.; ADDITIONAL SHEET INCLUDED</td><td>1/29/08</td></tr> </table>	MBA	ADD SHC INVERT TO CHART, FUEPKE PROP. PAR. 735	10/21/06	MBA	ADD SHCS TO PROFILE LOTS 14-24	8/20/06	PC	ADD SHC INVERT CHART FOR WALL PROPERTY	1/25/08	PC	REFERENCE WATER MAIN IN TALBOTS LANDS	1/25/08	PC	REVISE SHEET NO.; ADDITIONAL SHEET INCLUDED	1/29/08	<p align="center">SEWER PROFILE</p> <p align="center">TALBOTS WOODS I PROPERTY PHASE I LOTS 1-9, OPEN SPACE LOTS 10-13 & LOTS 14-24 CONTRACT NO: 14-4333-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	scale 1"=50' 5 OF 7
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HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.)
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (20 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOO. OPTION (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (32 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF PERENNIAL LOVEGRASS (67 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WOOD FREE SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL./1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1855).
 - 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERE TO.
 - 3) FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - 4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
 - 5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC.51), SOO (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC.52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
 - 6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 - 7) SITE ANALYSIS:

TOTAL AREA OF SITE:	0.36	ACRES
AREA DISTURBED:	0.36	ACRES
AREA TO BE ROOFED OR PAVED:		ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.36	ACRES
TOTAL CUT:	0	CU. YDS.
TOTAL FILL:	0	CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A	
- THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITIES MEASUREMENTS.
- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 - 9) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 - 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
 - 11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

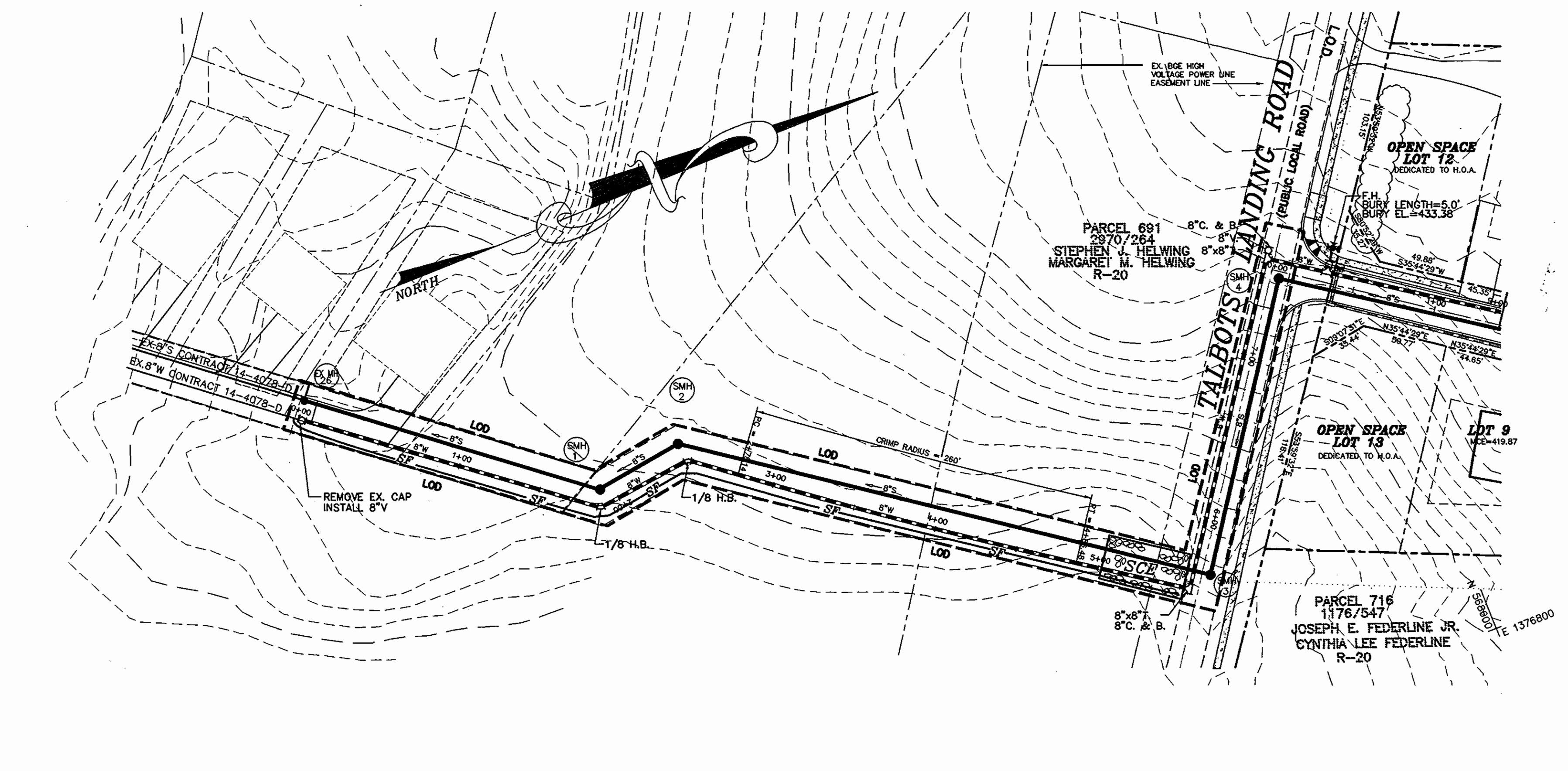
CONDITIONS WHERE PRACTICE APPLIES

- I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 - c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

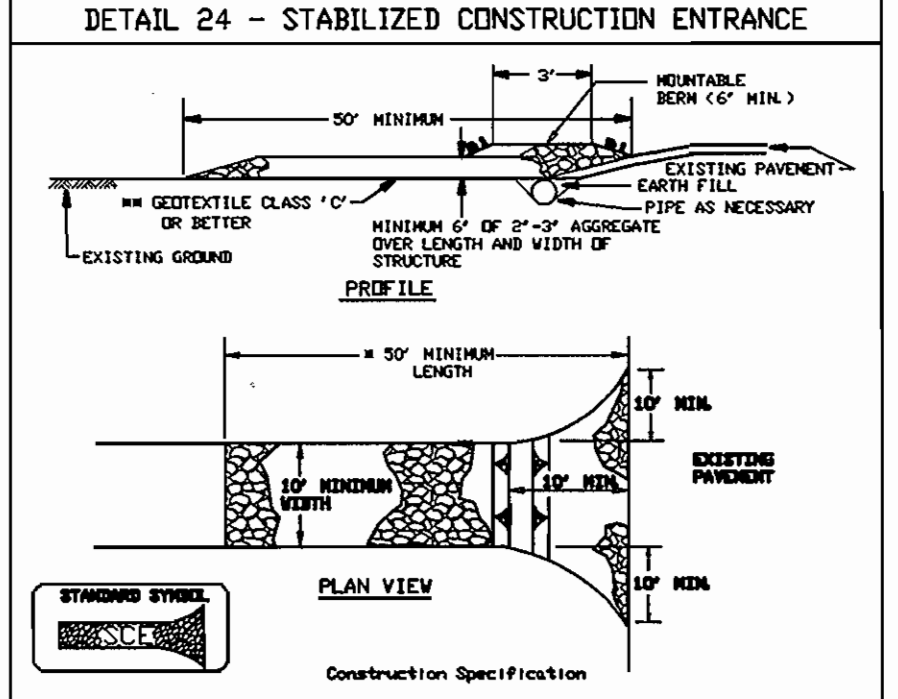
- I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
 - i. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 3% BY VOLUME OF CONDEERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.
 - ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONSON GRASS, HUTCHESON, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - iii. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
- III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - i. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
 - i. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
 - a. pH FOR TOPSOILS SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A pH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE FERTILIZER TO RAISE THE pH TO 6.5 OR HIGHER.
 - b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
 - d. NO SOO OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL, UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISPERSION OF PHYTO-TOXIC MATERIALS.
 - ii. NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
 - iii. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- V. TOPSOIL APPLICATION
 - i. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 - ii. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4" - 8" HIGHER IN ELEVATION.
 - iii. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - iv. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION.
- VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
 - i. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - a. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.02.
 - b. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
 - c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
 - ii. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB./1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SOODING, MD-VI, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

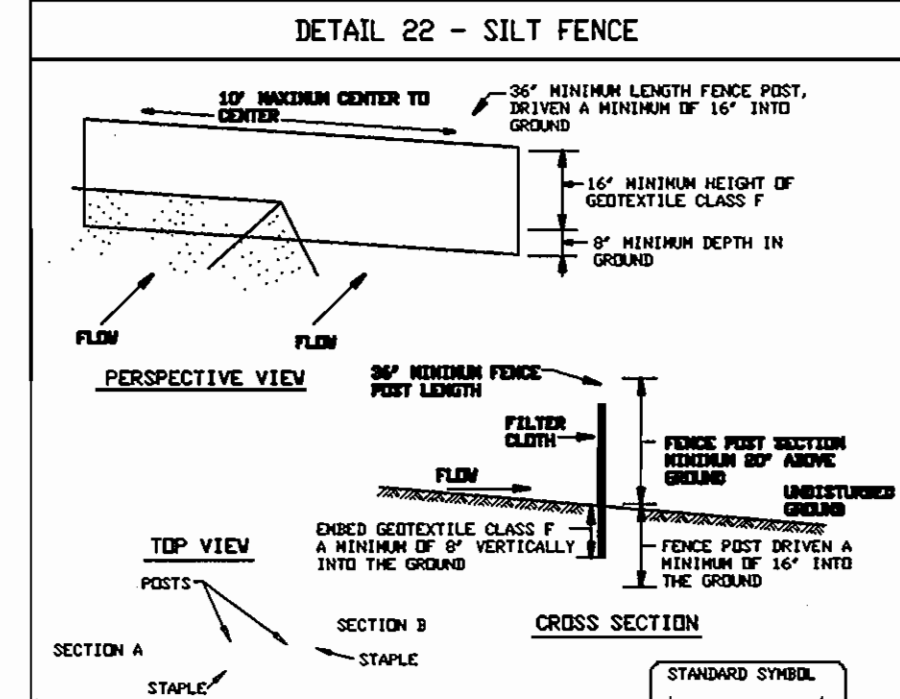


SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT (ONE DAY)
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES (2 DAYS)
3. CONSTRUCT SILT FENCES AS SHOWN (2 DAYS)
4. COMMENCE CONSTRUCTION OF UTILITIES (14 DAYS):
 - A. TRENCH EXCAVATION SHALL BE LIMITED TO THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY.
 - B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE EXCAVATION.
5. WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED, AND WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS.



1. Length - minimum of 50' (30' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a roundabout beam with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.



1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard I or U section weighting not less than 1.00 pound per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	30 lbs/in (min.)	Test: HMT 509
Tensile Modulus	20 lbs/in (min.)	Test: HMT 509
Flow Rate	0.3 gal per 7 minute (max.)	Test: HMT 322
Filtering Efficiency	70% (min.)	Test: HMT 322
3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.

SILT FENCE

Silt Fence Design Criteria

Slope Steepness	Silt Fence Length	
	(Maximum) Slope Length	(Minimum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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 COUNTY CONSERVATION DISTRICT.

[Signature] 10/10/06 DATE
DEVELOPER'S SIGNATURE
DEVELOPER'S NAME

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.

[Signature] 2/27/06 DATE
ENGINEER'S SIGNATURE
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

[Signature] 10/12/06 DATE
USDA-NATURAL RESOURCES CONSERVATION SERVICE

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

[Signature] 10/19/06 DATE
HOWARD SCD

LEGEND:

DENOTES STABILIZED CONSTRUCTION ENTRANCE

DENOTES SILT FENCE



[Signature] 10/10/06
TERRELL A. PEAKER #97571
FOR REVISION 1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature] 10-27-06
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 11/3/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5972 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 887-0266 Ball. (301) 621-5521 Wash. (410) 887-0286 Fax.

engineering	MMM		
illustration	MMM		
approval			
project	03-073	REVISE SHEET NO. 3 ADDITIONAL SHEET INCLUDED	1/23/06
date	SEP. 06	BY NO.	REVISION

SEDIMENT CONTROL PLAN AND GENERAL NOTES

600' SCALE MAP NO. 31 BLOCK NO. 22

TALBOTS WOODS I PROPERTY PHASE I
LOTS 1-9 & OPEN SPACE LOTS 10-13
LOT 14-24

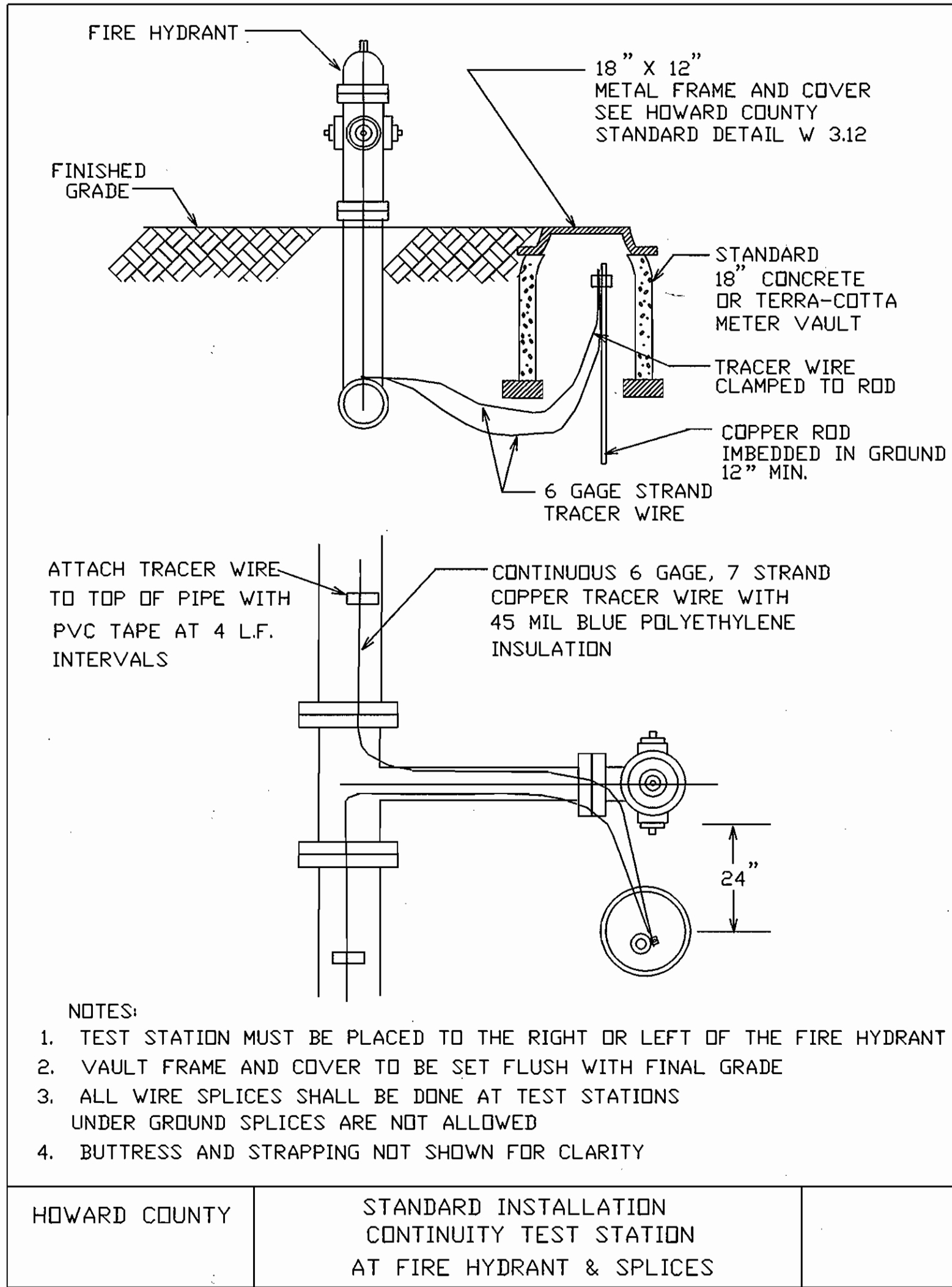
CONTRACT NO: 14-4333-D
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

scale 1"=50'
6 OF 7

AS-BUILT DATA

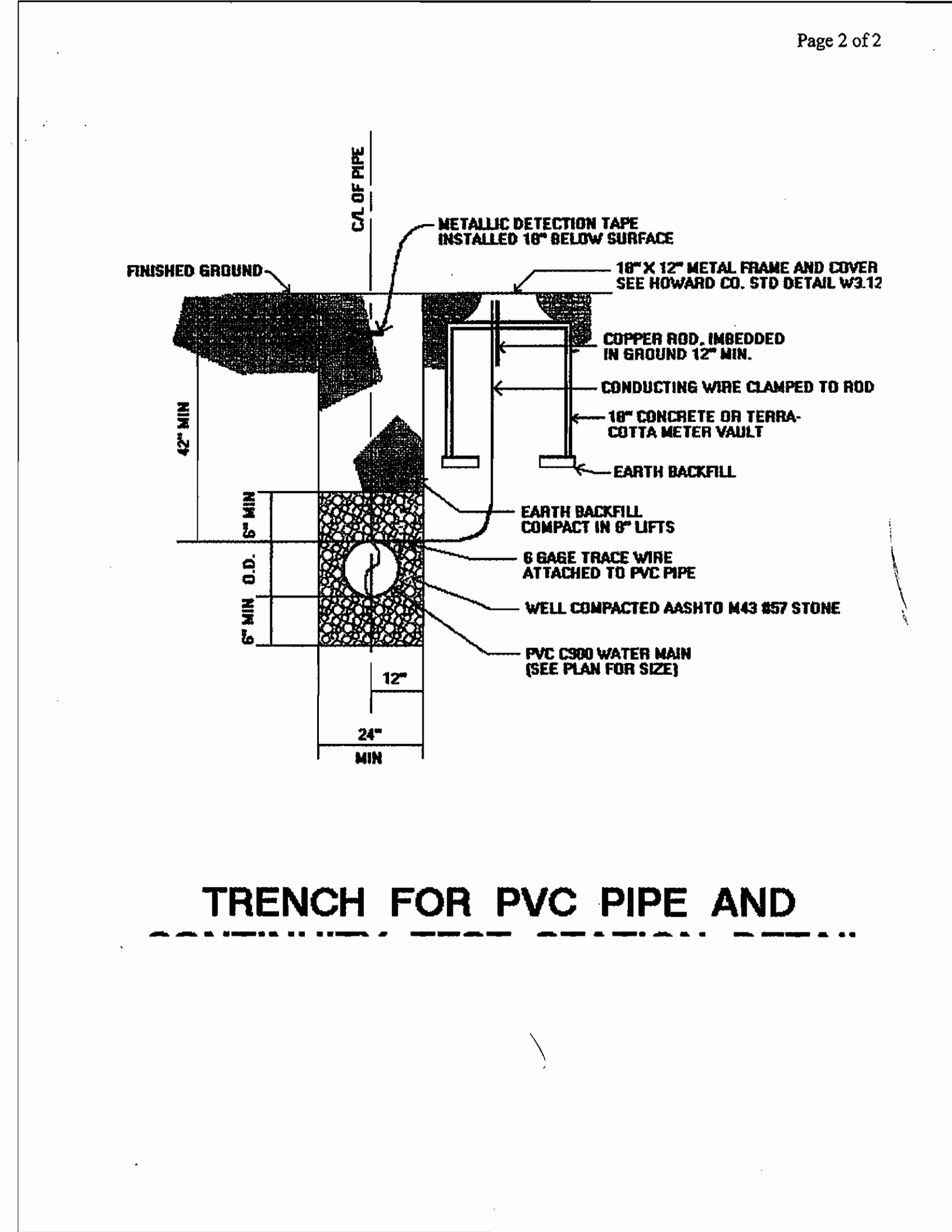
WATER AND SEWER FIELD MEASUREMENTS

LOT NO	TO	FROM	DISTANCE	
1	WAC	F.H. @ STA. 7+70	114.0	
"	WAC	SMH 5	57.0	
"	SHC	F.H. @ STA 7+70	121.0	
"	SHC	SMH 5	30.0	
2	WAC	MH 5 (STORM DRAIN)	40.5	
"	WAC	SMH 7 (SEWER)	24.3	
"	SHC	MH 5	41.0	
"	SHC	SMH 7	20.6	
3	WAC	F.H. @ STA 12+77	89	
"	WAC	SMH 9	42.2	
"	SHC	F.H. @ STA 12+77	15.3	
"	SHC	SM 8	35.6	
4	WAC	F.H. @ STA 12+77	30.0	
"	WAC	I-G	17.0	
"	SHC	F.H. @ STA 12+77	20.7	
"	SHC	I-G	22.1	
5	WAC	SMH 10	32.0	
"	WAC	SMH 11	32.0	
"	SHC	SM 10	30.5	
"	SHC	SM 11	38.0	
6	WAC	I-7	25.6	
"	WAC	SMH 8	26.5	
"	SHC	I-7	32.6	
"	SHC	SMH 8	31.5	
7	WAC	MH 5	15.0	
"	WAC	SMH 7	26.8	
"	SHC	MH 5	11.2	
"	SHC	SMH 7	20.4	
8	WAC	MH 5	13.1	
"	WAC	SMH 7	28.4	
"	SHC	MH 6	12.1	
"	SHC	SMH 7	31.0	
9	WAC	MH 7	24.0	
"	WAC	SMH 9	24.8	
"	SHC	MH 7	26.7	
"	SHC	SMH 9	31.0	
10	OPEN SPACE			
11	OPEN SPACE			
12	OPEN SPACE			
13	OPEN SPACE			
14	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	SMH 12	70.7	
"	SHC	SMH 11	13.4	
15	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	SMH 12	40.6	
"	SHC	SMH 11	19.6	
16	WAC	F.H. @ STA 15+24	37.8	
"	WAC	SMH 12	51.0	
"	SHC	F.H. @ STA 15+24	32.8	
"	SHC	SMH 13	47.0	
17	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	I-13	43.0	
"	SHC	I-2	54.6	
18	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	F.H. @ STA 18+58	45.6	
"	SHC	SMH 14	72.5	
19	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	F.H. @ STA 18+58	44.6	
"	SHC	SMH 14	18.6	
20	WAC	F.H. @ STA 18+58	24.9	
"	WAC	SMH 14	24.9	
"	SHC	F.H. @ STA 18+58	45.0	
"	SHC	SMH 14	16.4	
21	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	F.H. @ STA 18+58	42.5	
"	SHC	SMH 14	83.2	
22	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	F.H. @ STA 18+24	113.0	
"	SHC	I-2	38.0	
23	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	F.H. @ STA 18+24	40.6	
24	WAC	NOT INSTALLED		
"	WAC	NOT INSTALLED		
"	SHC	F.H. @ STA 18+24	52.6	
"	SHC	SMH 13	22.7	



- NOTES:
- TEST STATION MUST BE PLACED TO THE RIGHT OR LEFT OF THE FIRE HYDRANT
 - VAULT FRAME AND COVER TO BE SET FLUSH WITH FINAL GRADE
 - ALL WIRE SPLICES SHALL BE DONE AT TEST STATIONS UNDER GROUND SPLICES ARE NOT ALLOWED
 - BUTTRESS AND STRAPPING NOT SHOWN FOR CLARITY

HOWARD COUNTY STANDARD INSTALLATION CONTINUITY TEST STATION AT FIRE HYDRANT & SPLICES



TRENCH FOR PVC PIPE AND

VALVES	FROM	TO	DISTANCE	REMARKS
8"V 5+41	SMH 804	8"V	43'	
	SMH 803	8"V	12'	
	SHC 3+88	8"V	32'	
6" FHV 3+83	FH 3+83	6"V	10.5'	
	TEST STA 3+81	6"V	11'	
	SHC 2+00	6"V	30'	
TEST STATION 5+40	8"V 5+41	TEST STATION	20'	FOR TRACER WIRE C-900
	SMH 804	TEST STATION	20'	WIRE C-900
	SMH 804	TEST STATION	19'	WATERLINE
TEST STATION 3+81	FH 3+83	TEST STATION	2.5'	FOR TRACER WIRE C-900
	FHV 3+83	TEST STATION	11'	WIRE C-900
	SMH 803	TEST STATION	110'	WATERLINE
TEST STATION 0+02	SMH 801	TEST STATION	31'	FOR TRACER WIRE C-900
	SMH 802	TEST STATION	100'	WIRE C-900
	SMH 810	TEST STATION	113'	WATERLINE
8"V 0+90	SMH 802	8" VALVE	119'	
	SMH 810	8" VALVE	29'	
	SMH 801	8" VALVE	10'	

REVISED ADDITION

NO LOT #'S	FROM	TO	DISTANCE
SAME FUTURE LOT	SHC 1+80 SEWER STA.	WAC 2+88	18'
		SHC 2+00	86'
		FH 3+83	113'
SAME FUTURE LOT	WAC 2+88 WL STA.	SHC 2+00	69'
		FH 3+83	95'
		SHC 1+80	18'
SAME FUTURE LOT	SHC 2+00 SEWER STA.	WAC 3+73	10'
		FH 3+83	40.5'
		SHC 3+18	69'
SAME FUTURE LOT	WAC 3+73 WL STA.	SHC 2+00	10'
		FH 3+83	45'
		SHC 3+18	59'
SAME FUTURE LOT	SHC 3+18 SEWER STA.	FH 3+83	70'
		6" FHV 3+83	64'
		WAC 4+23	10'
SAME FUTURE LOT	WAC 4+23 WL STA.	FH 3+83	75'
		SHC 3+18	10'

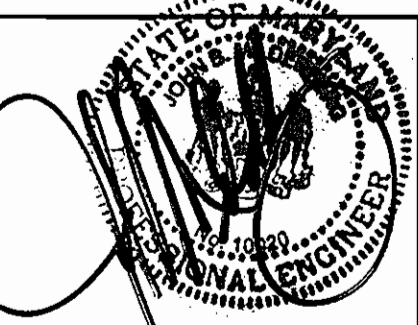
NO LOT #'S	FROM	TO	DISTANCE
SAME FUTURE LOT	SHC 3+98 SEWER STA.	WAC 4+23	69'
		SMH 803	37'
		WAC 4+82	10'
SAME FUTURE LOT	WAC 4+82 WL STA.	WAC 4+23	73'
		SMH 803	38'
		SHC 3+98	10'
SEE PLAN SHEET 2 OF 7	WAC (ADD ON) BETWEEN Ex. SMH 1 & SMH 2	SMH 1	17'
		SMH 2	39'
		SHC C/O	27'
SEE PLAN SHEET 2 OF 7	SHC (ADD ON) BETWEEN Ex. SMH 1 & SMH 2	SMH 1	44'
		SMH 2	23'
		WAC	17'



Terrell A. Fisher 1130/08
TERRELL A. FISHER, #0767
FOR REVISION 2



2072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0298 Fax



Robert A. Bowers 1027/06
ROBERT A. BOWERS, #0767
FOR REVISION 2

engineering	MMM			
illustration	MMM			
approval				
project	FCG	Δ	REVISE SHEET NO. 5 ADDITIONAL SHEET INCLUDED	1/29/06
date	03-07-03	FCG	AS-BUILT DATA SHOWN	10/17/07
date	SEP. 06	BY	NO.	REVISION

WATER & SEWER DETAILS

TALBOTS WOODS I PROPERTY PHASE I

LOTS 1-9, OPEN SPACE LOTS 10-13 & LOTS 14-24

CONTRACT NO: 14-4333-D
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND