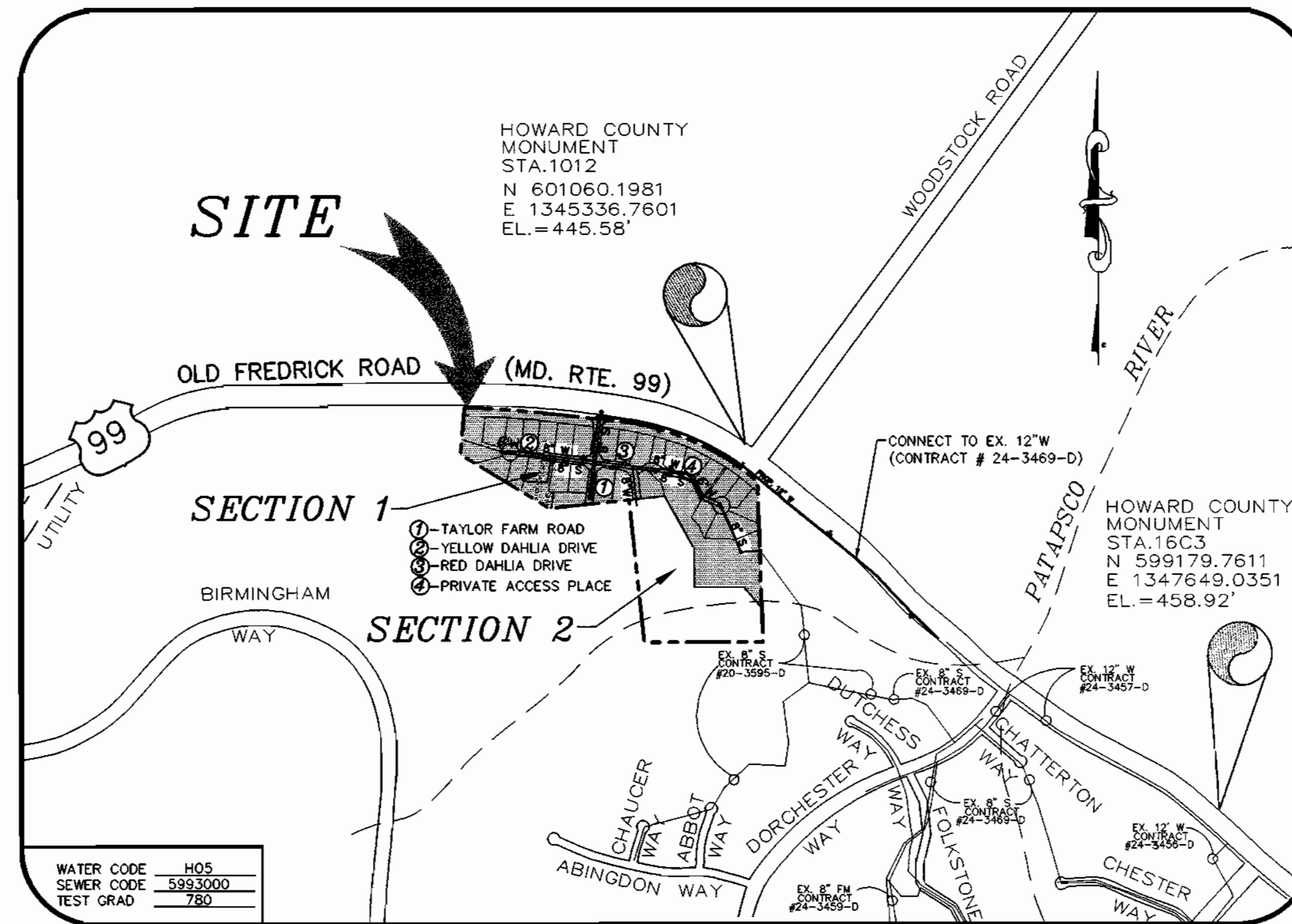


GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. 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 BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY 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 DETAIL 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 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 STATE HIGHWAY ADMINISTRATION (410) 531-5533
 BG & E CO. CONTRACTOR SERVICES (410) 850-4620
 BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068
 MISS UTILITY (1-800-257-7777)
 COLONIAL PIPELINE CO. (410) 795-1390
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS (410) 313-4900
 BUREAU OF UTILITIES
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO 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 TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- 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 COVERS, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1' - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- ALL WATER METERS TO BE LOCATED INSIDE PROPOSED UNITS.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- ALL CLEANOUTS AND BALL VALVES ARE TO BE LOCATED AT THE WATER, SEWER AND UTILITY EASEMENT LINE.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- ON-SITE SEDIMENT CONTROL TO BE PROVIDED BY F-98-141.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL CELLARS WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THERE WILL BE NO TWIN SEWER HOUSE CONNECTIONS ON SITE UNLESS APPROVED BY HOWARD COUNTY.
- ALL WATER MAINS TO BE 12, 8", OR 6" DIP CLASS 52.
- THE EXISTING WELL AND SEPTIC SERVICING THE EXISTING HOUSE ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY. SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

NOTE: WHERE WATER OR SEWER MAINS ARE WITHIN AN EASEMENT, THEY SHOULD BE LOCATED AT THE CENTER OF THE EASEMENT FOR ONE UTILITY OR 10' FROM THE BACK OF THE EASEMENT FOR TWO UTILITIES.

QUANTITY TABLE				
ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH (excluding drops)	11	11		ATLANTIC CONC. PROD.
MANHOLE, VERTICAL FEET	60 L.F.			
8" SEWER MAIN	1,943 L.F.	1,936 L.F.	PVC SDR-35	J.M. MANUFACTURING
4" SEWER HOUSE CONNECTION	709 L.F.	724 L.F.	PVC SDR-35	" /BRS.
4" SEWER HOUSE CONNECTION	30 EACH	30		DAVIS CONCRETE
STD. TYPE 'B' DROP MANHOLE	1	1		ATLANTIC CONC. PROP.
# MH CONNECTIONS	5 EACH			
12" WATER	2,033 L.F.	2,035 L.F.	CL-52	GRIFFIN PIPE
8" WATER	1,084 L.F.	1,041 L.F.	CL-52	GRIFFIN PIPE
6" WATER	751 L.F.	742 L.F.	CL-52	GRIFFIN PIPE
1" WATER HOUSE CONNECTION	580 L.F.			
F.H.	6 EACH	6		MUELLER CO./BRS.
8" x 8" CROSS	1 EACH	1	M.J.	U.S. PIPE & FOUNDRY/BRS.
12" x 12" T	1 EACH	1	"	"
8" x 8" T	1 EACH	1	"	"
8" x 6" T	2 EACH	2	"	"
12" x 8" T	1 EACH	1	"	"
12" x 6" T	4 EACH	4	"	"
12" V	3 EACH	3	"	MUELLER CO./BRS.
8" V	6 EACH	6	"	"
6" V	6 EACH	6	"	"
8" CAP & BUTTRESS	4 EACH	2	"	U.S. PIPE & FOUNDRY/BRS.
# 1" WHC	30-24 EACH	30	"	MUELLER CO./BRS.
# TWHC	3 EACH			
1/8 H.B. (8")	1 EA	1	M.J.	U.S. PIPE & FOUNDRY/BRS.
1/4 H.B. (8")	1 EACH	1	"	"
1/8 V.B. (8")	3 EACH	2	"	"
1/8 H.B. (12")	4 EACH	4	"	"
1/8 V.B. (12")	4 EACH	4	"	"
1/2 WHC	95 LF			
6" x 8" REDUCER	2 EACH	2	M.J.	U.S. PIPE & FOUNDRY/BRS.
6" CAP & BUTTRESS	2 EA	2	"	"
12" CAP & BUTTRESS	2 EA	2	"	"
1/8 H.B. (6")	3 EA	3	"	"
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP

SCALE: 1" = 600'

TYPE OF BUILDING: RESIDENTIAL: SINGLE FAMILY DETACHED
No. OF UNITS: 33 (30 BUILDABLE)
No. OF WATER HOUSE CONNECTION: 30
No. OF SEWER HOUSE CONNECTIONS: 30
DRAINAGE AREA: LITTLE PATUXENT
TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT VIA THE ROUTE 108 PUMPING STATION

CONTRACT No. 24-3656-D

**TAYLOR FARM
SECTION ONE
LOTS 1 THRU 33**

**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	SEWER PROFILES
4	WATER PROFILES
5	WATER PROFILES
6	SEDIMENT CONTROL NOTES & DETAILS, TRAFFIC CONTROL

CONTRACT No. 24-3656-D
TAYLOR FARM SECTION ONE
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

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 SOIL CONSERVATION DISTRICT.

Richard W. Doyle, Sr. 10/12/98
DEVELOPER'S SIGNATURE DATE
RICHARD W. DOYLE, SR.
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.

R. Jacob Hikmat 10/12/98
ENGINEER'S SIGNATURE DATE
R. JACOB HIKMAT
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
Carol Simmons 11/3/98
USDA-NATURAL RESOURCES CONSERVATION SERVICE
DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.
John R. Lohmeyer 11/3/98
HOWARD SCD
DATE

PLAN REFERENCE NUMBERS	
F-98-141	P-98-02
S-95-21	WP-98-19

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Michael A. ... 10-30-98
CHIEF, BUREAU OF UTILITIES RMC DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 11/5/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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) 997-0288 Fax

... 10/21/98
10/21/98

engineering	FCL			
illustration	RCJ			
approval	K.C.I.	3	ASEWULT CONDITIONS ADDED TO PLAN See ch 5/c	10/7/98
project	FCL	2	REVISE 8" SEWER LENGTH & ADJUST LOT LINES	4/16/99
	FCL	1	REVISE 1 STD MH TO 1 STD TYPE 'B' DROP MH	2/24/99
date	SEPT. 1998	BY	NO.	REVISION

TITLE SHEET
600' SCALE MAP NO. 16-42 BLOCK NO. 23

TAYLOR FARM, SECTION ONE
LOT 1 THRU 33
CONTRACT No. 24-3656-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale AS SHOWN
1 OF 6

MH #	ROAD OR NORTHING & EASTING	CL. STATION	OFFSET
1	N 600,630.3846, E 1,345,326.8010		
2	N 600,711.4182, E 1,345,187.2794		
3	PRIVATE ACCESS PLACE	5+49.73	8.43' RT.
4	PRIVATE ACCESS PLACE	4+38.89	15.24' RT.
5	PRIVATE ACCESS PLACE	3+62.39	5.0' RT.
6	PRIVATE ACCESS PLACE	2+62.66	4.2' LT.
7	PRIVATE ACCESS PLACE	1+45.88	20.47' RT.
8	TAYLOR FARM ROAD	2+35.38	7.0' LT.
9	TAYLOR FARM ROAD	4+13.34	7.0' LT.
10	YELLOW DAHLIA DRIVE	2+03.39	6.65' LT.
11	YELLOW DAHLIA DRIVE	4+66.65	6.5' LT.
12	TAYLOR FARM ROAD	-0+25.10	7.0' LT.

WATER MAIN TABULATION CHART	
OLD FREDERICK ROAD (MD. RT. 99)	
APPURTENANCE	NORTHING & EASTING
12" X 6" T	N 600,449,9367, E 1,345,392,2361
F.H.	N 600,440,4237, E 1,345,984,8284
1/8 H.B.	N 600,709,1944, E 1,345,988,0046
1/8 H.B.	N 600,714,5541, E 1,345,660,1189
6" V	N 600,784,3737, E 1,345,603,6641
F.H.	N 600,789,2537, E 1,345,597,7770
1/8 H.B.	N 600,877,3401, E 1,345,460,9809
1/8 H.B.	N 600,897,8886, E 1,345,450,3773
12" X 12" V	N 601,060,5316, E 1,345,249,6160
12" C & B	N 601,064,4975, E 1,345,252,5618
12" C & B	N 601,068,4633, E 1,345,256,7076
12" V	N 601,063,5198, E 1,345,245,5972
12" X 6" T	N 601,090,1880, E 1,345,208,1527
F.H.	N 601,081,8893, E 1,345,202,5779
1/8 V.B.	N 601,262,6158, E 1,344,853,0467
1/8 V.B.	N 601,264,6091, E 1,344,846,5131
12" X 6" T	N 601,273,7926, E 1,344,815,0180
F.H.	N 601,264,0088, E 1,344,812,5756
1/8 V.B.	N 601,275,7115, E 1,344,808,0659
1/8 V.B.	N 601,278,2420, E 1,344,798,7493

WATER MAIN TABULATION CHART	
TAYLOR FARM ROAD (WL STA -0+15 TO STA 34+50)	
C STATION	APPURTENANCE O/S FROM C
-0+15	12" X 8" T RT. 7'
-0+15	12" V RT. 12'
-0+15	12" C & B RT. 17'
-0+10	8" V RT. 7'
0+35.33	1/8 V.B. RT. 7'
0+41.39	1/8 V.B. RT. 7'
2+20.32	8" X 8" CROSS RT. 7'
2+25.32	8" V RT. 7'
4+35.00	8" C & B RT. 7'
RED DAHLIA DRIVE (WL STA 40+00 TO STA 42+10)	
1+92.72	8" X 8" T RT. 24.08'
1+94.43	8" V RT. 20.73'
2+04.61	1/8 H.B. LT. 6.17'
3+90.82	8" C & B RT. 7.3'

WATER MAIN TABULATION CHART	
YELLOW DAHLIA DR. (WL STA 50+00 TO STA 54+50)	
C STATION	APPURTENANCE O/S FROM C
4+67.29	8" C & B RT. 7.0'
1+46.69	8" X 6" T RT. 7.0'
1+46.69	6" V RT. 13.9'
1+46.69	F.H. RT. 24.9'
0+12	8" V RT. 7.0'
RED DAHLIA DR. (WL STA 54+50 TO STA 56+60.87)	
0+05	8" V LT. 7.0'
1+94.97	8" V LT. 26'
1+57.46	1/8 V.B. RT. 7'
2+63.29	1/8 H.B. LT. 16.2'
3+09.77	1/8 H.B. LT. 3'
1+95.63	8" X 6" T RT. 11.8'
1+95.69	6" V RT. 17.7'
1+95.69	F.H. RT. 22.7'
3+62.40	1/8 H.B. LT. 7'
4+37.34	1/4 H.B. LT. 7'
5+48.11	8" C & B LT. 7'

NOTE: EROSION AND SEDIMENT WITHIN THE LIMITS OF F-98-141 WILL BE PROVIDED PER THAT PROJECT.

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 SOIL CONSERVATION DISTRICT.

Richard W. Doyle, Sr. 10/12/98
DEVELOPER'S SIGNATURE DATE
RICHARD W. DOYLE, SR.
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.

R. Jacob Hillcoat 10/12/98
ENGINEER'S SIGNATURE DATE
R. JACOB HILLCOAT
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Cheryl Simmon 11/3/98
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robertson 11/3/98
HOWARD SCD DATE

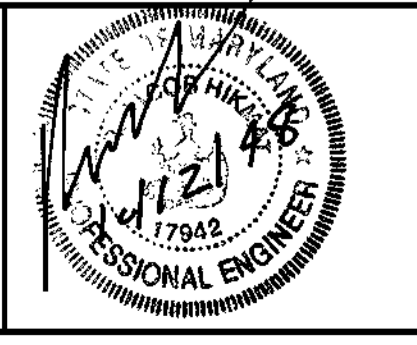
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Michael A. Rosenthal 11/30/98
CHIEF, BUREAU OF UTILITIES RMB DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Michael Dammann 11/30/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



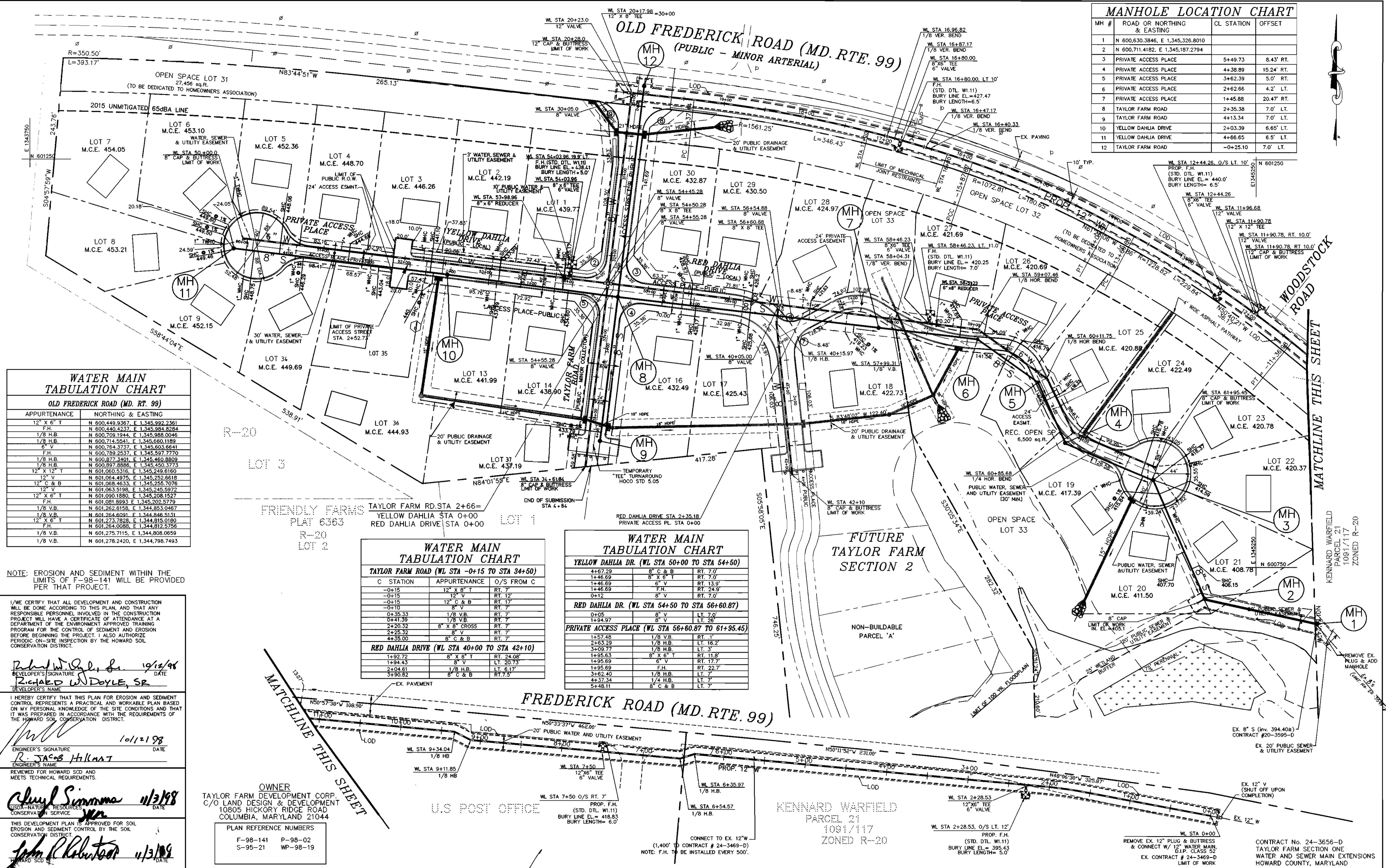
engineering	FCL				
illustration	RCJ				
approval	KCI	ASBUILT CONDITIONS ADDED TO PLAN	08/25/99		
project	FCL	2	ADJ. MH AND LOS 10, 11, 12 & 15.	4/13/99	
date	96085				
date	OCT. 1998	BY NO.	REVISION	DATE	

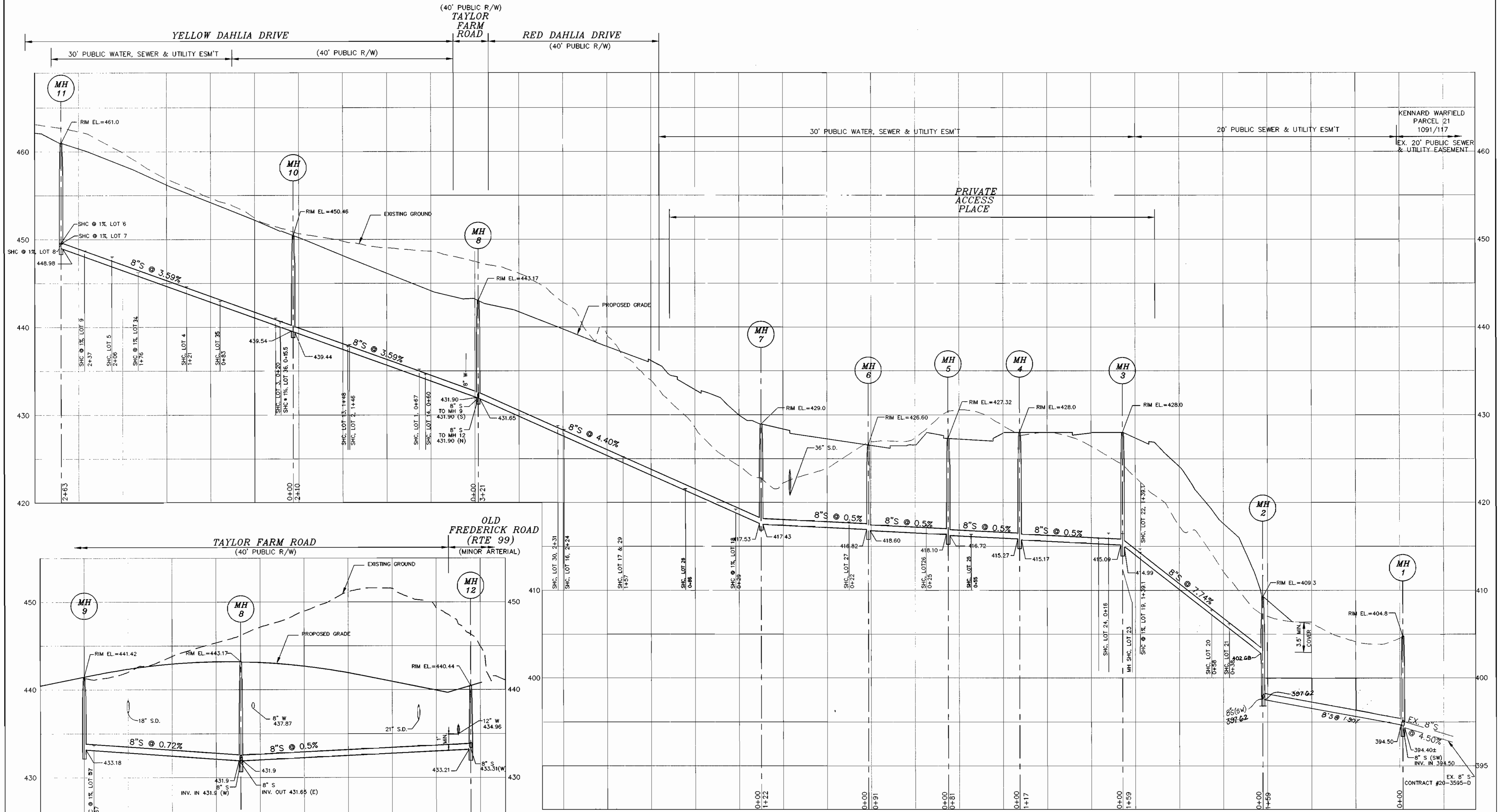
WATER & SEWER PLAN

600' SCALE MAP NO. 16.1A BLOCK NO. 23

TAYLOR FARM, SECTION ONE
LOTS 1 THRU 33
CONTRACT NO. 24-3656-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
1"=50'
2 of 6





MH 11 TO MH 1

8" SEWER MAIN

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

MH 9 TO MH 12

8" SEWER MAIN

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

CONTRACT No. 24-3656-D
TAYLOR FARM SECTION ONE
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax

Michael A. Stangorillo Jr. 10-20-98
CHIEF, BUREAU OF UTILITIES R/W DATE

11/5/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

10/12/98

engineering	FCL			
illustration	RCJ			
approval	KET	3	AS BUILT CONDITIONS ADDED TO PLAN 08/2/98	12/1/99
project	FCL	2	REVISE SHC FOR LOTS 10, 11 & 12	6/22/99
date	FCL	1	REVISE MH2 TO TYPE 'B' DROP MH & REVISE 8" S'S BETWEEN MH1-MH2	2/24/99
OCT. 1998	BY	NO.	REVISION	DATE

SEWER PROFILES

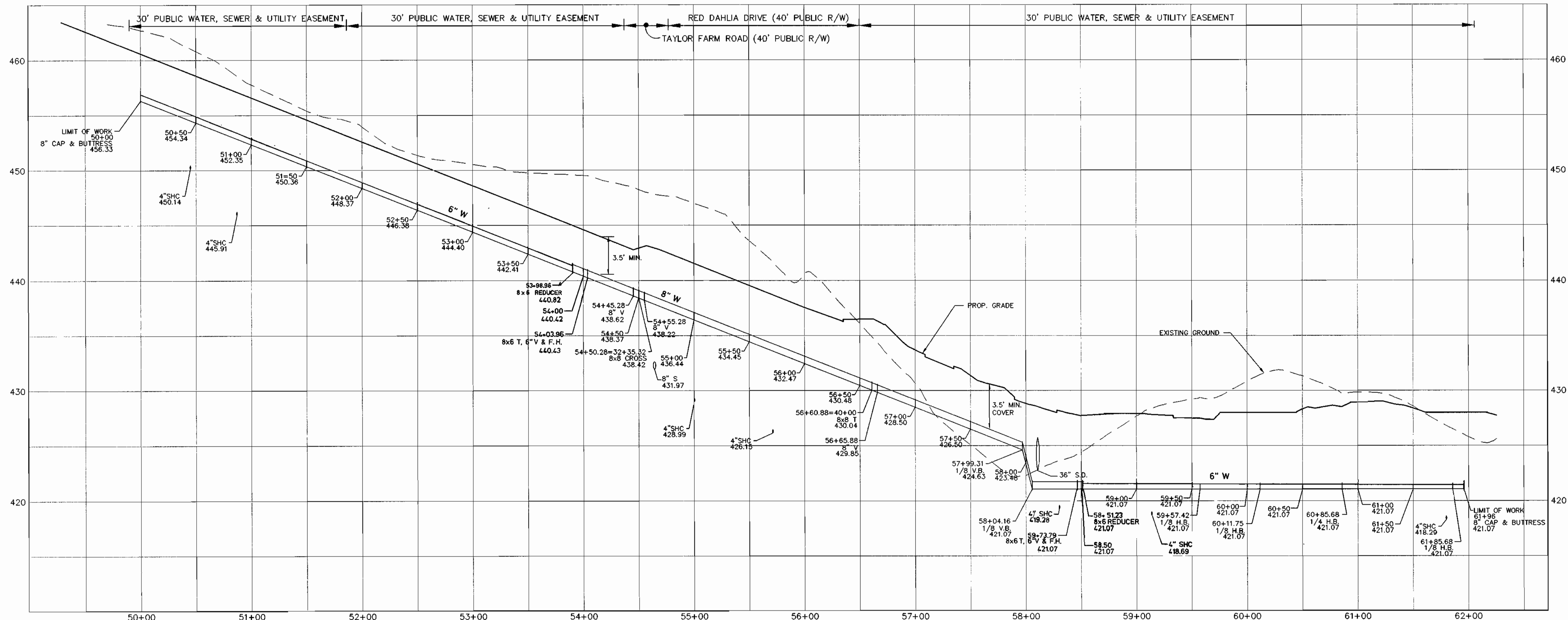
TAYLOR FARM, SECTION ONE

LOTS 1 THRU 33
CONTRACT No. 24-3656-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
AS SHOWN

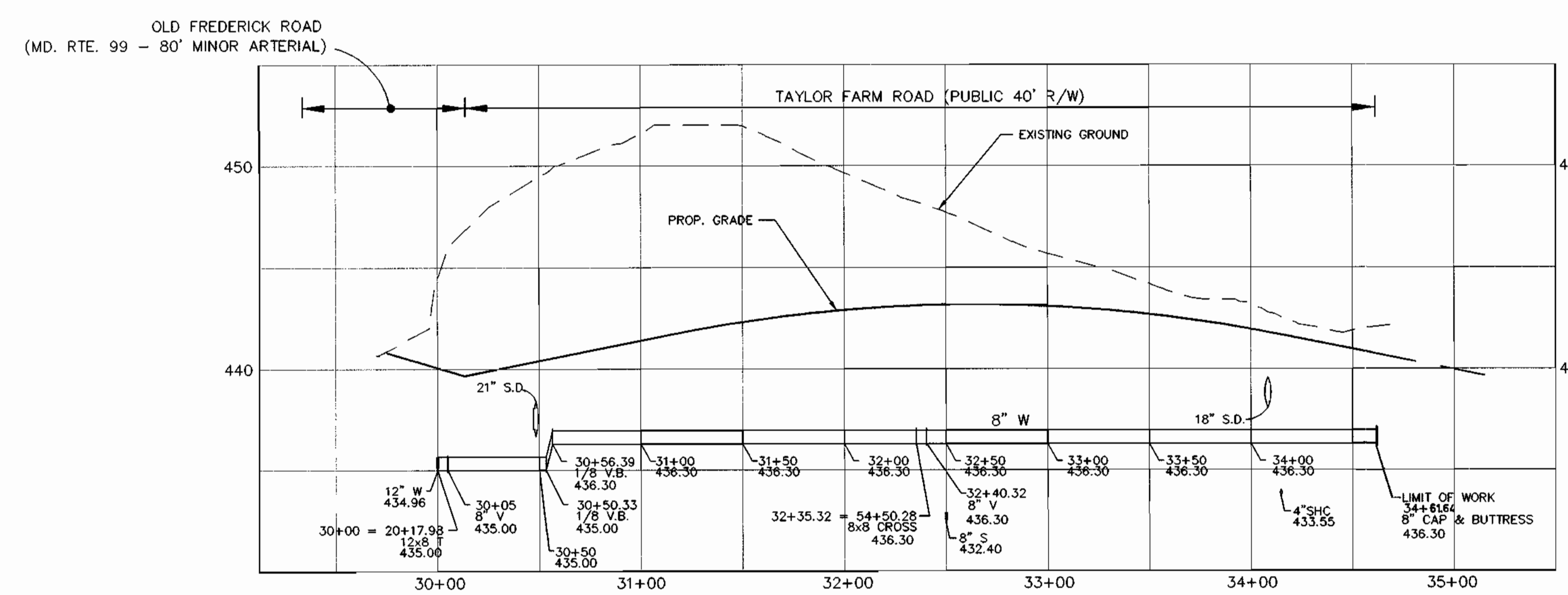
3 OF 6

600' SCALE MAP NO. 16 & 17 BLOCK NO. 23



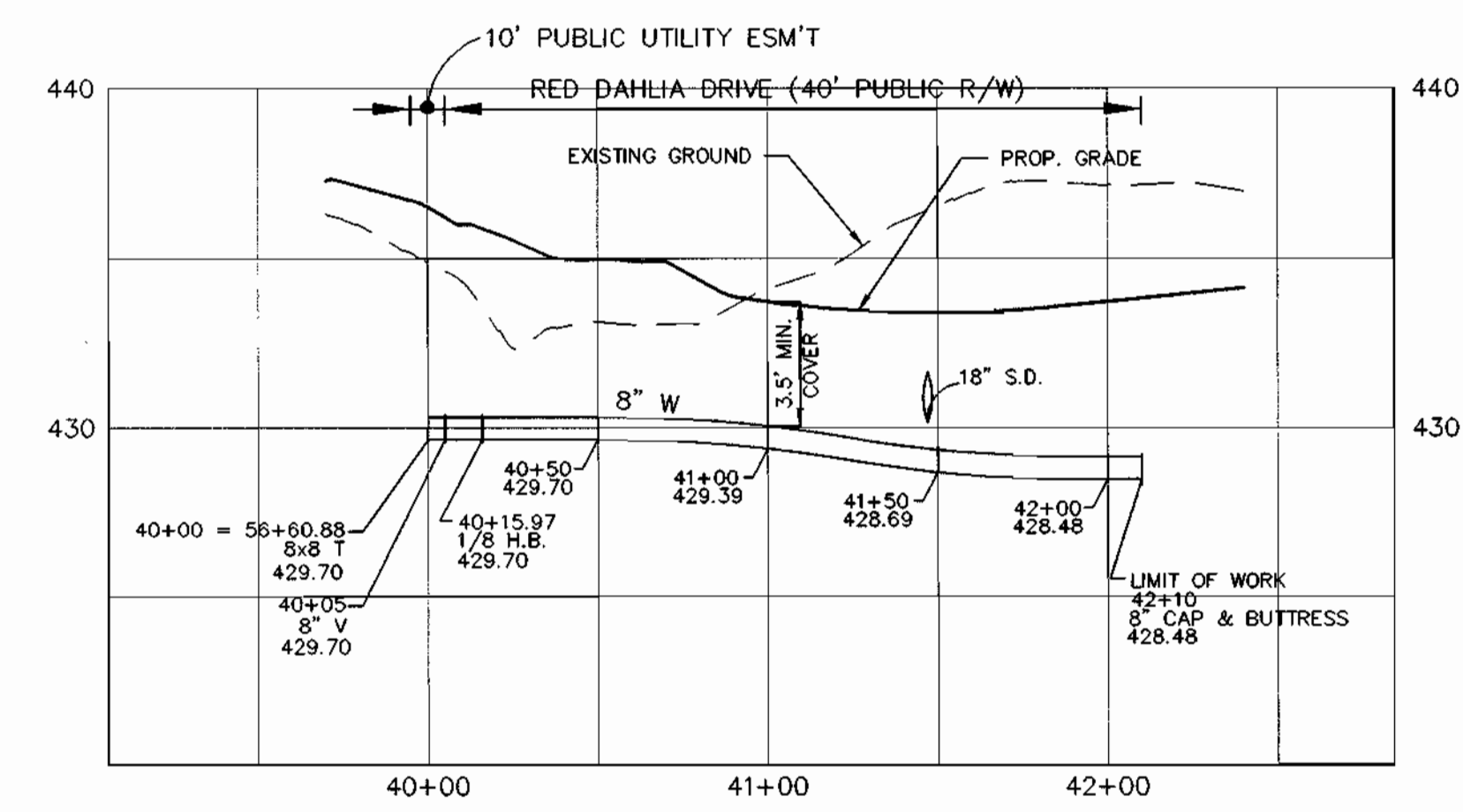
8" WATER MAIN PROFILE - STA. 50+00 TO STA. 61+96

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



8" WATER MAIN PROFILE - STA. 30+00 TO STA. 34+50

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



8" WATER MAIN PROFILE - STA. 40+00 TO STA. 42+10

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

OWNER & DEVELOPER
TAYLOR FARM DEVELOPMENT CORP.
C/O LAND DESIGN & DEVELOPMENT
RICHARD DOYLE, PRESIDENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MD 21044

CONTRACT No. 24-3656-D
TAYLOR FARM SECTION ONE
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors



engineering	FCL				
illustration	RCJ				
approval					
project	96085	KCI 1	AS BUILT CONDITIONS ADDED TO PLAN	12/7/99	
date	OCT. 1998	BY	NO.	REVISION	DATE

WATER PROFILES

TAYLOR FARM, SECTION ONE

LOTS 1 THRU 33
CONTRACT No. 24-3656-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
AS SHOWN
4 OF 6

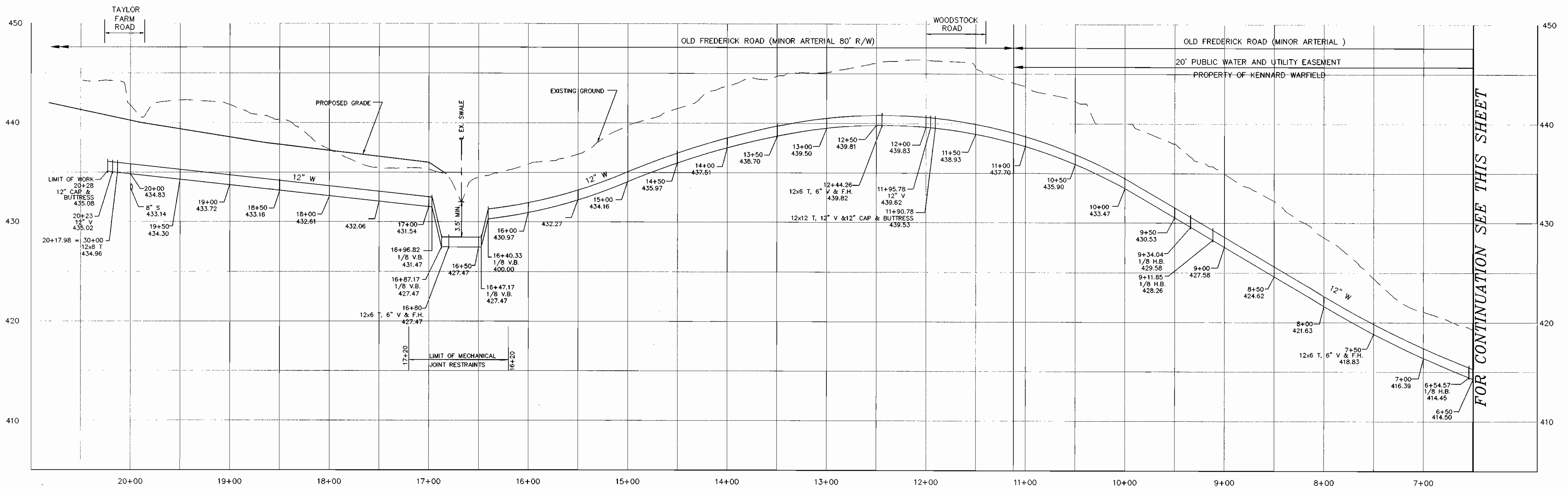
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Michael A. Guzmanillo 10/30/98
CHIEF, BUREAU OF UTILITIES RMB DATE

Richard Doyle
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

5872 Dorney Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0286 Fax (301) 821-5521 Wash. (410) 987-0238 Fax

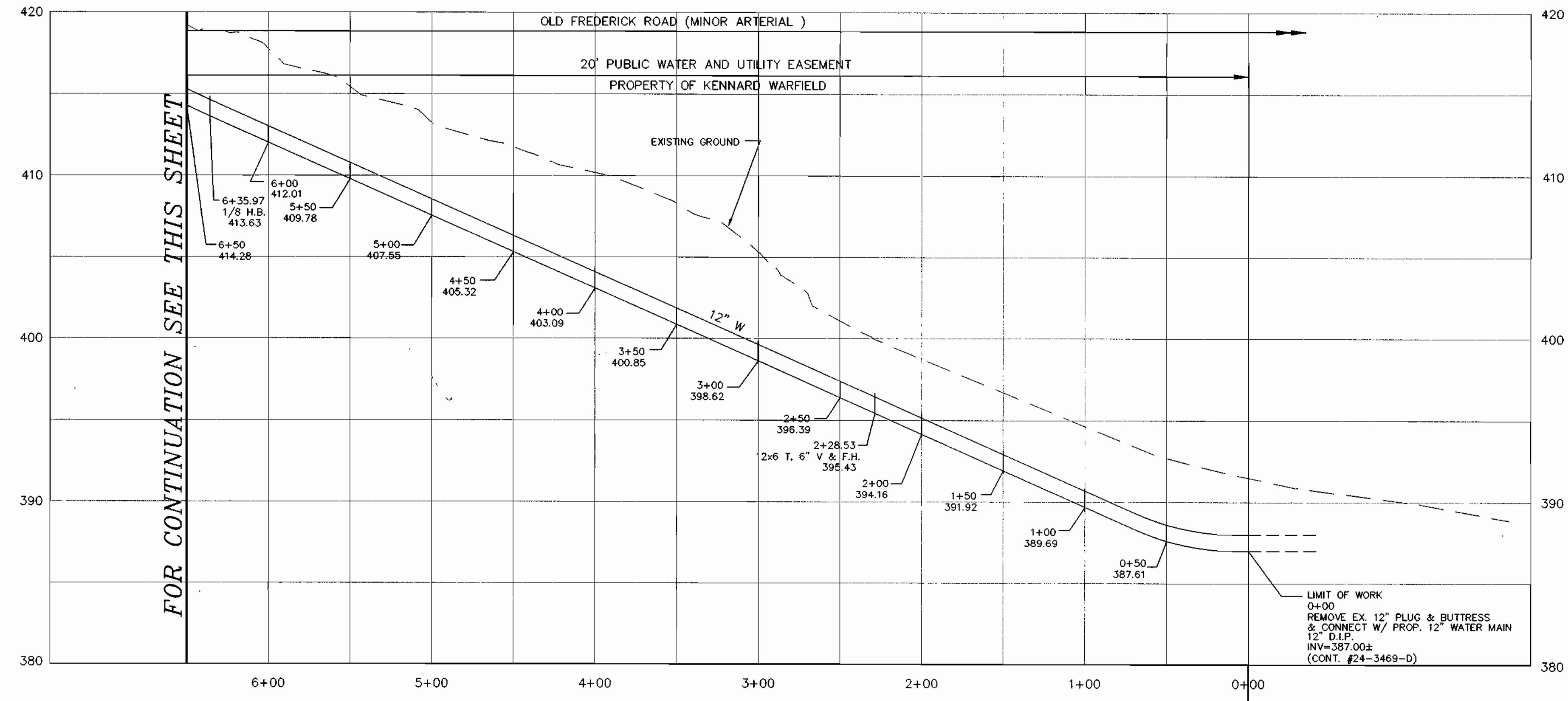
600' SCALE MAP NO. 16A12 BLOCK NO. 23



12" WATER MAIN
 ROUTE 99
 SCALE
 HOR: 1"=50'
 VER: 1"=5'

"WATER" AS-BUILT PULLS (FIELD MEASUREMENTS)

LOT #	PULL "TO"	FROM	DIST.	FROM	DIST.
1	WATER HSE CONN.	F.H.	78.0	F.H. TEE	25.0
2	"	MH # 10	62.0	W.H.C. LOT 13	50.0
3	"	"	44.0	W.H.C. LOT 11	47.0
4	"	"	126.0	W.H.C. LOT 11	55.0
5	"	MH # 11	52.0	W.H.C. LOT 6	7.2
6	"	MH # 11	49.5	W.H.C. LOT 7	40.5
7	"	MH # 11	23.0	W.H.C. LOT 8	5.5
8	"	MH # 11	20.0	W.H.C. LOT 9	8.4
9	"	MH # 11	34.0	W.H.C. LOT 10	6.0
10	"	MH # 11	75.0	W.H.C. LOT 2	25.0
11	"	MH # 10	92.0	W.H.C. LOT 4	57.5
12	"	"	32.0	W.H.C. LOT 3	47.0
13	"	"	59.0	W.H.C. LOT 2	50.0
14	"	8" V & F.H.	68.0	F.H. V & TEE	30.0
15	OPEN SPACE	"	"	"	"
16	"	MH # 8	78.0	W.H.C. LOT 30	42.0
17	"	8" V & TEE	54.0	W.H.C. LOT 29	47.0
18	"	MH # 7	38.0	8" V & TEE	32.0
19	"	MH # 4	80.0	MH # 3	40.0
20	"	MH # 3	33.0	MH # 4	137.0
21	"	MH # 3	37.0	MH # 4	154.0
22	"	MH # 3	53.0	W.H.C. LOT 23	6.5
23	"	MH # 3	54.0	W.H.C. LOT 22	6.3
24	"	MH # 3	51.0	MH # 4	117.0
25	"	MH # 4	68.0	MH # 5	28.0
26	"	MH # 4	64.0	MH # 6	48.6
27	"	F.H. 2" W.G.	43.0	F.H. 2" W.G.	23.0
28	"	MH # 7	40.0	8" V & TEE	38.0
29	"	8" V & TEE	47.0	W.H.C. LOT 17	47.0
30	"	MH # 8	82.0	W.H.C. LOT 16	42.0



12" WATER MAIN
 ROUTE 99
 SCALE
 HOR: 1"=50'
 VER: 1"=5'

"SEWER" AS-BUILT PULLS (FIELD MEASUREMENTS)

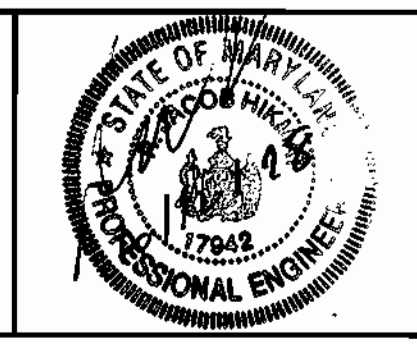
LOT #	PULLS TO	FROM	DIST.	FROM	DIST.
1	SEWER HSE CONN.	8" V & STR. INTER.	43.0	F.H. & LOT 1	9.7
2	"	MH # 10	62.0	S.H.C. LOT 13	45.0
3	"	"	26.0	S.H.C. LOT 12	48.0
4	"	MH # 10	126.0	S.H.C. LOT 11	53.0
5	"	MH # 11	74.0	S.H.C. LOT 10	61.0
6	"	MH # 11	36.0	S.H.C. LOT 7	28.0
7	"	MH # 11	28.0	S.H.C. LOT 6	20.0
8	"	MH # 11	17.0	S.H.C. LOT 9	58.0
9	"	MH # 11	40.0	S.H.C. LOT 8	52.0
10	"	MH # 11	85.0	S.H.C. LOT 9	85.0
11	"	MH # 10	85.0	S.H.C. LOT 4	53.0
12	"	MH # 10	24.0	S.H.C. LOT 3	45.0
13	"	MH # 10	69.0	S.H.C. LOT 2	45.0
14	"	8" V & STR. INTER.	82.0	G.V. & F.H.	29.0
15	"	MH # 8	28.0	MH # 8	107.0
16	"	MH # 8	94.0	S.H.C. LOT 30	42.0
17	"	8" V & TEE	47.0	S.H.C. LOT 29	42.0
18	"	MH # 7	38.0	8" V & TEE	32.0
19	"	MH # 3	37.0	MH # 4	154.0
20	"	MH # 3	33.0	MH # 4	137.0
21	"	MH # 3	115.0	MH # 2	40.0
22	"	MH # 3	43.0	MH # 2	145.0
23	"	MH # 3	50.0	MH # 4	106.0
24	"	MH # 4	62.0	MH # 5	33.0
25	"	MH # 5	54.0	MH # 6	55.0
26	"	MH # 6	33.0	8" V & TEE	41.0
27	"	MH # 7	38.0	8" V & TEE	38.0
28	"	S.H.C. LOT 17	42.0	8" V & TEE	36.0
29	"	MH # 8	90.0	S.H.C. LOT 16	42.0

F:\96085\DWG\FINAL\W&S\WPROF2

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief, Bureau of Utilities

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 Chief, Development Engineering Division

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 987-0286 Fax (301) 821-5521 Wash. (410) 987-0286 Fax



engineering	FCL				
illustration	RCJ				
approval					
project	96085	KCI	1	AS-BUILT CONDITIONS ADDED TO PLAN (This sheet)	12/7/98
date	OCT. 1998	BY	NO.	REVISION	DATE

WATER PROFILES
 60' SCALE MAP NO. 16+10 BLOCK NO. 23

TAYLOR FARM, SECTION ONE
 LOTS 1 THRU 33
 CONTRACT NO. 24-3656-D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

scale
 AS SHOWN
 5 OF 6

CONTRACT NO. 24-3656-D
 TAYLOR FARM, SECTION ONE
 WATER & SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

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 UREA FORM 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 1.4 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 (08 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 SOD. 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 GRAIN 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 RESEEDING.

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 (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (07 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 SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEEP FREE SMALL GRAIN 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 THERETO.
- 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), SOD (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:	N/A	ACRES
AREA DISTURBED:	2.26	ACRES
AREA TO BE ROOFED OR PAVED:	1.32	ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.94	ACRES
TOTAL CUT:	N/A	CU. YDS.
TOTAL FILL:	N/A	CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A	

- 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 CONTROL, 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. AREAS 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 5% BY VOLUME OF ONDERS, 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, JOHNSON-SON GRASS, NUTSEDGE, 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 PRESCRIBED 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 SOD 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 DISSIPATION OF PHYTO-TOXIC MATERIALS.

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.

- ii. 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 SEEDBED 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 26-04-06.
 - 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 SODDING, MD-VAB, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

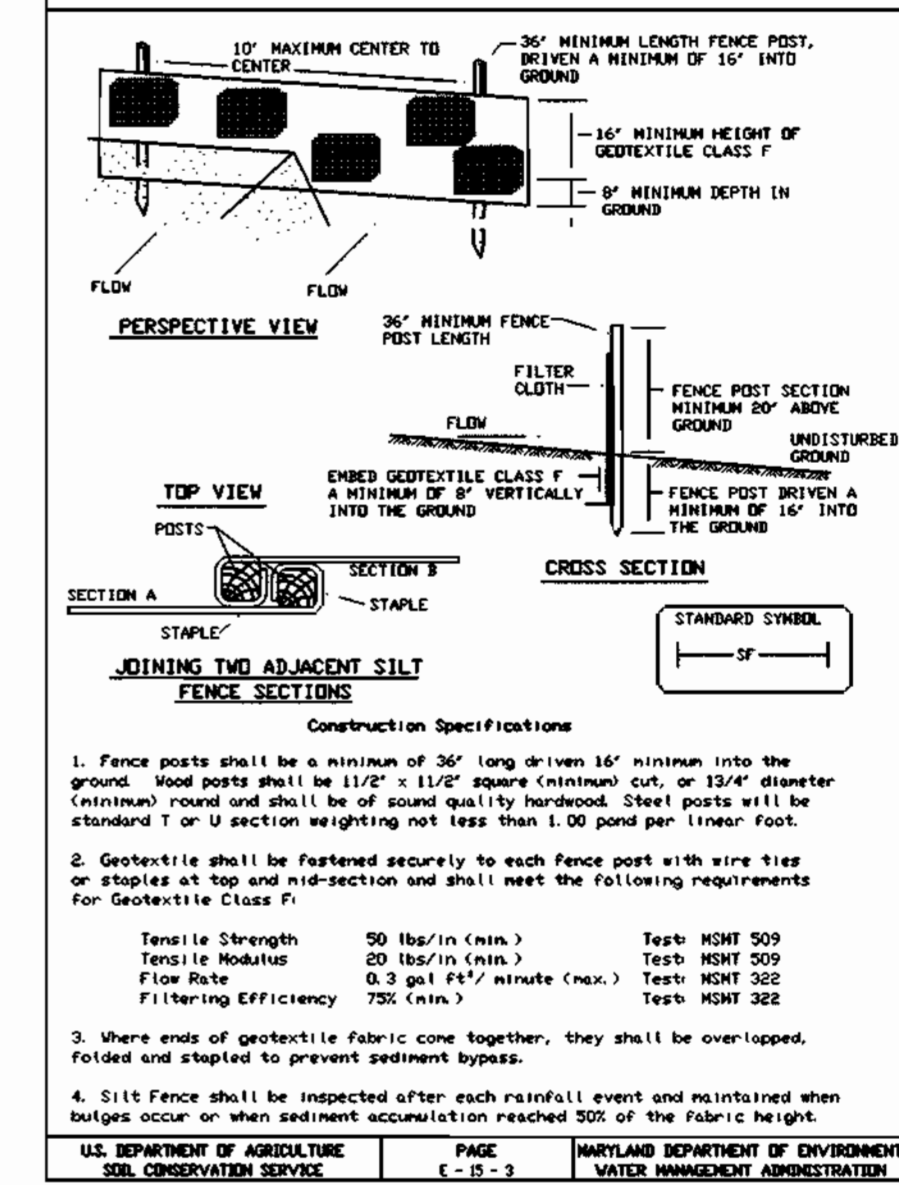
SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (1 DAY)
2. SEDIMENT AND EROSION CONTROL DEVICES INSTALLED UNDER F-98-61 WILL BE USED FOR INSTALLATION OF WATER AND SEWER MAINS WITHIN PROJECT LIMITS, EXCEPT AS NOTED HEREIN. INSPECT AND REPAIR ALL SEDIMENT AND EROSION CONTROL DEVICES, AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCEMENT OF WORK. (2 DAYS)
3. FOR WATER AND SEWER CONSTRUCTION OUTSIDE LIMITS OF F-98-141, ALL WORK SHALL CONFORM TO THE FOLLOWING:
 - A. CLEAR AND GRUB FOR STRAW BALE DIKES AND SILT FENCES. (2 DAYS)
 - B. INSTALL STRAW BALE DIKES AND SILT FENCES AS INDICATED. (3 DAYS)
 - C. EXCAVATION SHALL BE LIMITED TO THE AMOUNT OF TRENCH WHICH CAN BE COMPLETED, BACKFILLED, AND STABILIZED WITHIN ONE WORKING DAY.
 - D. REPAIR AND/OR REPLACE ANY DISTURBED STRAW BALE DIKES AND SILT FENCES AT END OF EACH WORKING DAY.
4. UPON STABILIZATION OF AREA, AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
3. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH.
4. EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
5. IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
6. THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
7. ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

DETAIL 22 - SILT FENCE



SILT FENCE

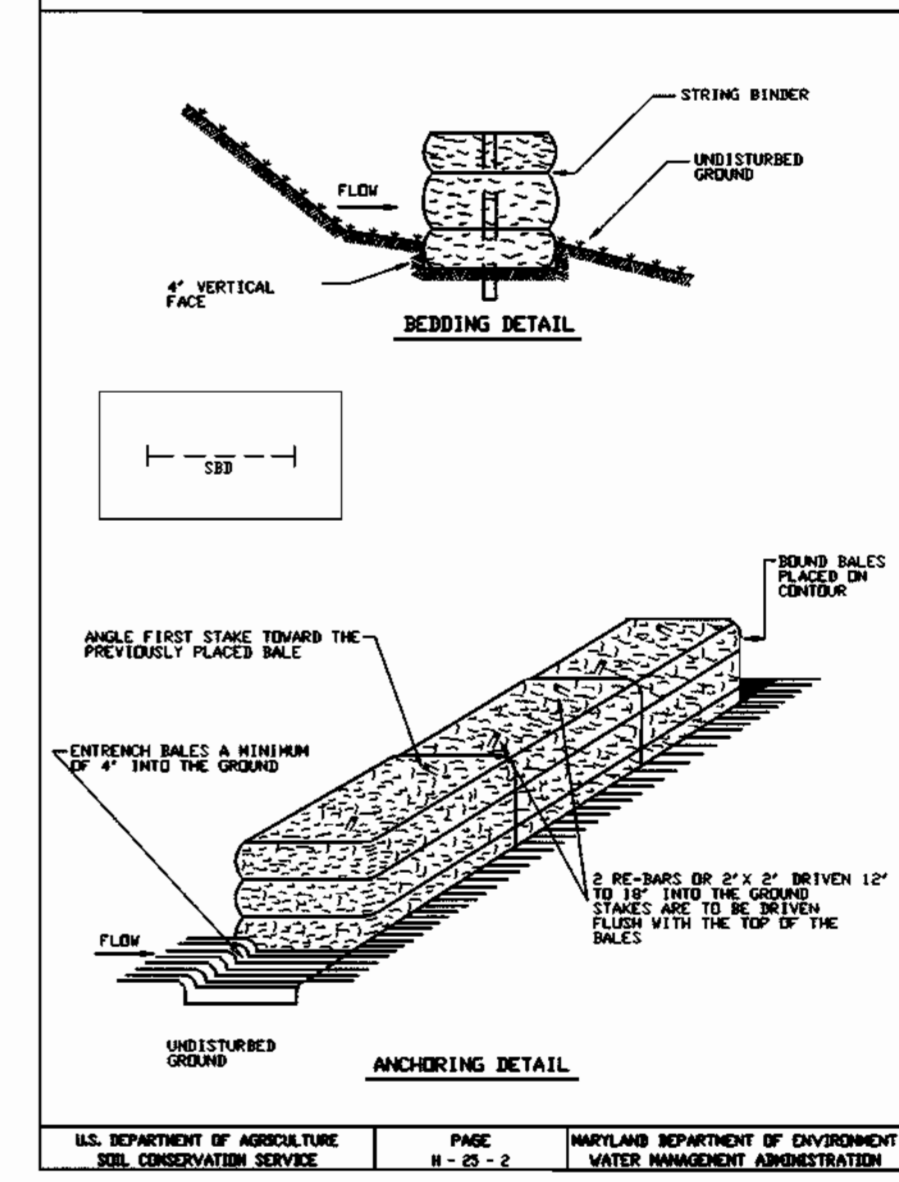
Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) 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.

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, PAGE 1-5-3, MARYLAND DEPARTMENT OF ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION

DETAIL 32 - STRAW BALE DIKE



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 SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE: *Richard W. Doyle, Sr.* DATE: 10/2/98
 DEVELOPER'S NAME: RICHARD W. DOYLE, SR.

ENGINEER'S SIGNATURE: *Clayd Simmonds* DATE: 10/12/98
 ENGINEER'S NAME: CLAYD SIMMONDS

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE: 11/3/98

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

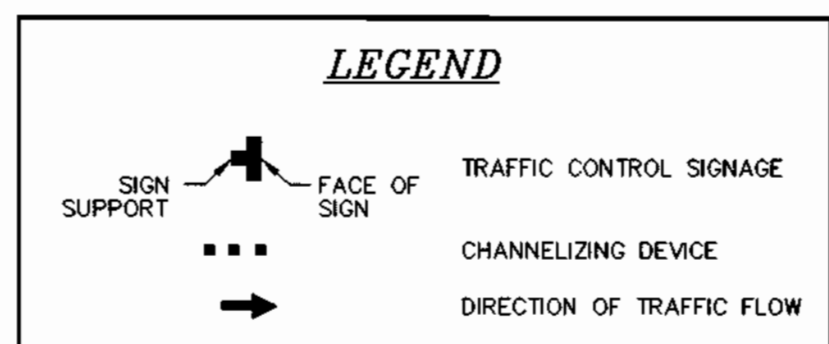
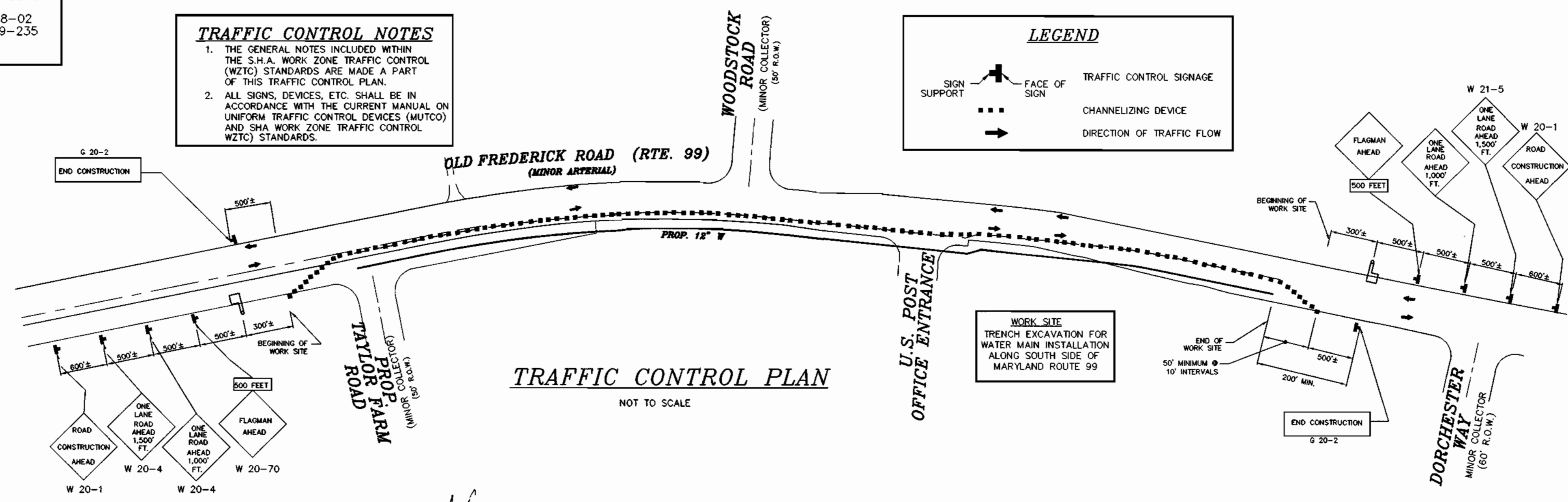
HOWARD SCD DATE: 11/3/98

PLAN REFERENCE NUMBERS

S-95-21	P-98-02
F-98-141	F-89-235

TRAFFIC CONTROL NOTES

1. THE GENERAL NOTES INCLUDED WITHIN THE S.H.A. WORK ZONE TRAFFIC CONTROL (WZTC) STANDARDS ARE MADE A PART OF THIS TRAFFIC CONTROL PLAN.
2. ALL SIGNS, DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND SHA WORK ZONE TRAFFIC CONTROL (WZTC) STANDARDS.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Michael Susannah 10-20-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Clayd Simmonds 11/6/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax: (301) 631-5521 Res: (410) 997-0298 Fax



engineering	FCL				
illustration	RCJ				
approval					
project	96085	K&I	1	AS-BUILT CONDITIONS ADDED TO PLAN	02/1/99
date	OCT. 1998	BY	NO.	REVISION	

SEDIMENT CONTROL NOTES & DETAILS, TRAFFIC CONTROL

DATE: 600' SCALE MAP NO. 16.4.10 BLOCK NO. 23

TAYLOR FARM, SECTION ONE
LOTS 1 THRU 33
CONTRACT No. 24-3656-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale: NOT TO SCALE
6 OF 6