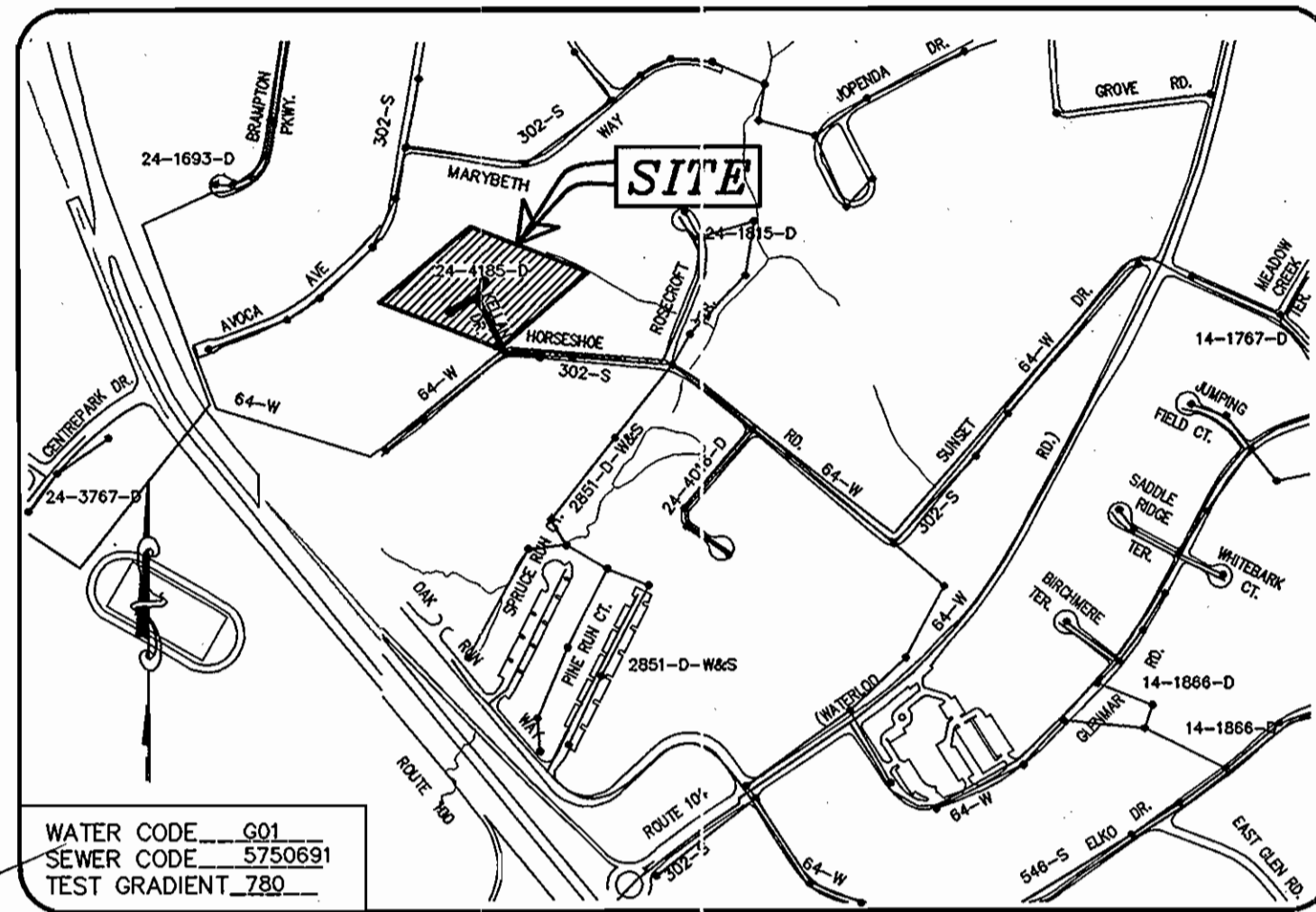


**QUANTITY TABLE**

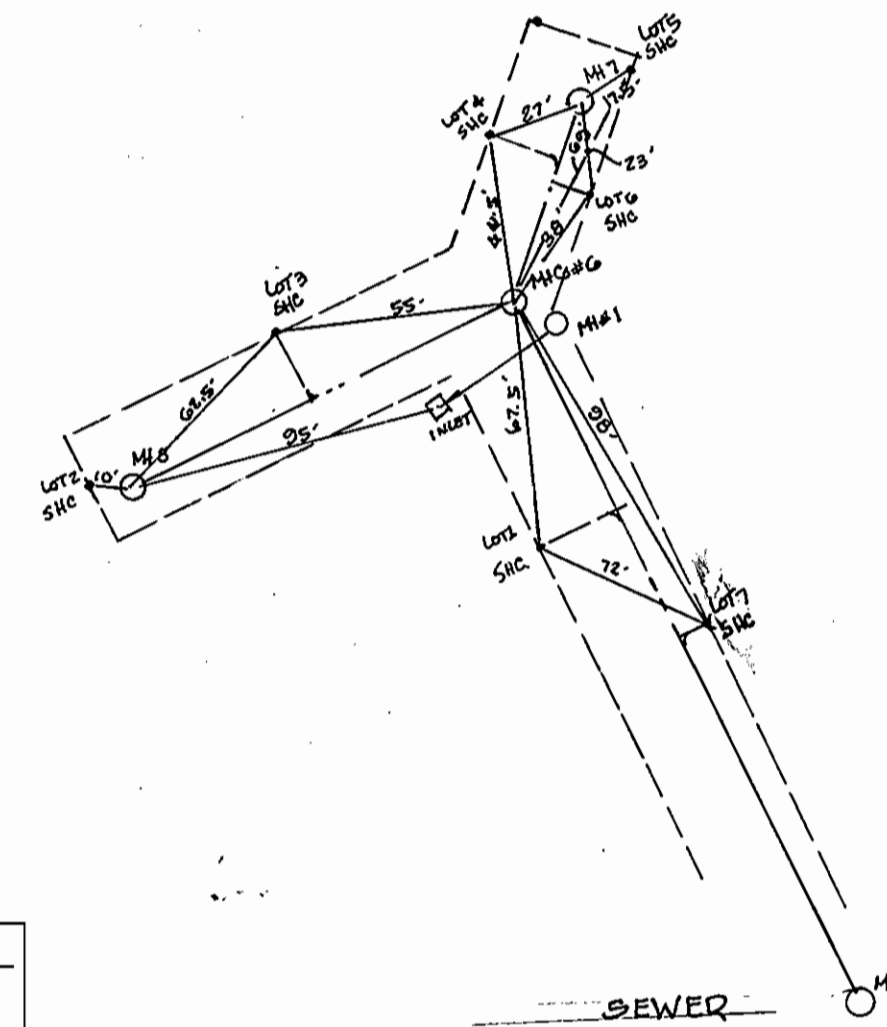
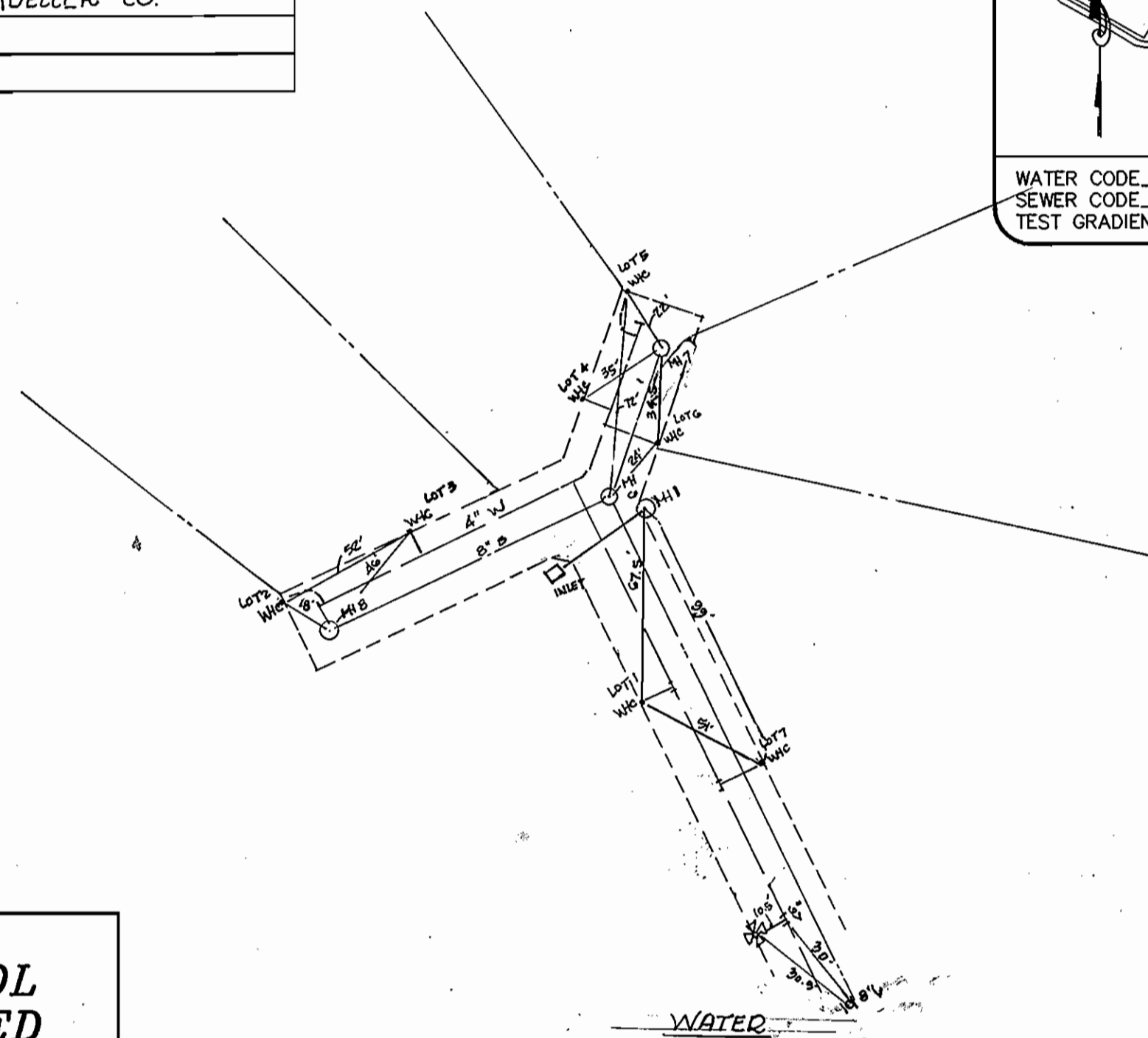
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH (HO. CO. STD.G-5.12)	7	7	PC	ATLANTIC
DROP MH TYPE "B"(HO. CO. STD.S-1.32)	1	1	PC	"
8" SEWER MAIN	599 L.F.	594	PVC	J.M. MFG
4" SEWER HOUSE CONNECTION	100 L.F.	109	PVC	"
# SEWER HOUSE CONNECTIONS	7 EACH	7	~	~
8" WATER MAIN	36 L.F.	35	D.I.P.	U.S. PIPE
6" WATER MAIN	168 L.F.	168	"	"
4" WATER MAIN	163 L.F.	161	"	"
1" WATER HOUSE CONNECTION	100 L.F.	100	COPPER	CAMBRIDGE LEE
# 1" WHC	7 EACH	7	~	~
8" x 8" T.S. & V.	1 EACH	1	~	JCM INDUSTRIES
4" CAP & BUTTRESS	2 EACH	2	~	U.S. PIPE
1/8 H.B. (4")	1 EACH	1	~	"
6"x4" T.	1 EACH	1	~	"
8"x6" T.& V.	1 EACH	1	~	"
8"x6" R	1 EACH	1	~	"
F.H.	1 EACH	1	~	MUELLER CO.

NAME OF UTILITY CONTRACTOR: MARTIN CONSTRUCTION  
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE



**VICINITY MAP**

SCALE 1"=600'



TYPE OF BUILDING	SFD
No. OF UNITS	7
No. OF WATER HOUSE CONNECTION	7
No. OF SEWER HOUSE CONNECTIONS	7
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT WATER RECLAMATION PLANT

**EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-04-35**

**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 SERVICE. 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 NAD83/91 AS PROJECTED BY HOWARD COUNTY HORIZONTAL AND VERTICAL GEODETIC CONTROL NOS. 31D4 & 31A. THESE WATER AND SEWER DRAWINGS ARE BASED ON A FIELD RUN TOPOGRAPHIC STUDY PERFORMED BY MILDENBERG, BOENDER AND ASSOC., INC. ON OR ABOUT MARCH 2002.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 88.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLAN.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-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 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 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 LOCATIONS 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:  
 AT & T 1-800-252-1133  
 BGE (CONTRACTOR SERVICES) (410) 850-4620  
 BGE (UNDERGROUND DAMAGE CONTROL) (410) 787-9068  
 BUREAU OF UTILITIES (410) 313-4900  
 COLONIAL PIPELINE CO. (410) 795-1390  
 MISS UTILITY 1-800-257-7777  
 STATE HIGHWAY ADMINISTRATION (410) 431-5533  
 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 LINE OF EXCAVATION. 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 (5) WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" 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 INSTALLED 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. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAIN SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" OR 16" WALLS ARE FOR BRICK MANHOLE 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN AND PROFILES

**CONTRACT NO.: 24-4185-D**

**JASMYN WOODS  
 WATER AND SEWER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS**

**OWNER/DEVELOPER**

JASMYN WOODS, LLC  
 C/O MILDENBERG, BOENDER AND ASSOC. INC.  
 5072 DORSEY HALL DRIVE, SUITE 202  
 ELLICOTT CITY, MARYLAND 21043  
 (410) 997-0296

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 \_\_\_\_\_ DATE \_\_\_\_\_

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.

ENGINEER'S SIGNATURE *John Mildenberg* DATE *9/22/04*

ENGINEER'S NAME \_\_\_\_\_

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE *7/21/04*

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

HOWARD SCD DATE *7/21/04*

PLAN REFERENCE NUMBERS:  
 SP-03-08  
 F-04-35

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) 997-0296 Fax

engineering	MMP			
illustration	MMP			
approval				
project	KCI	2	ASBUILT DATA	8/19/04
date	02-046	KCI	1	ASBUILT DATA
date	JUNE 04	BY	NO.	REVISION

**TITLE SHEET**

**JASMYN WOODS**

CONTRACT NO.: 24-4185-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY

scale  
 AS SHOWN  
 1 OF 2

### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
01	N 569,242.8 E 1,367,041.8		
02	N 569,251.0 E 1,367,029.3		
03	N 569,268.8 E 1,366,849.2		
04	N 569,255.2 E 1,366,834.3		
05	N 569,241.4 E 1,366,828.5		
06	KELLAN DR.	2+00	7.0' RT.
07	N 569,510.4 E 1,366,778.8		
08	N 569,403.6 E 1,366,600.2		

### 8", 6" & 4" WATER MAIN TABULATION CHART

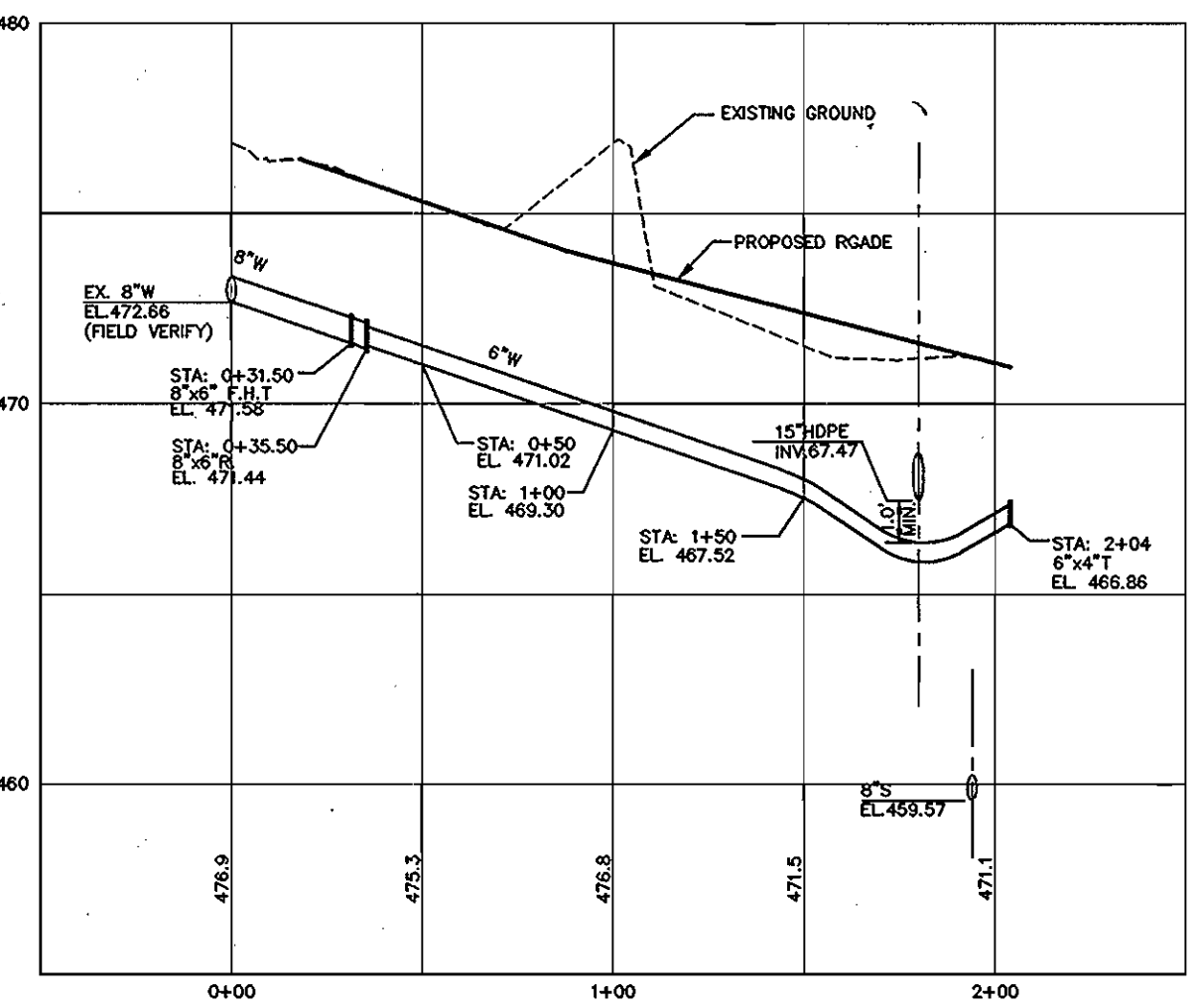
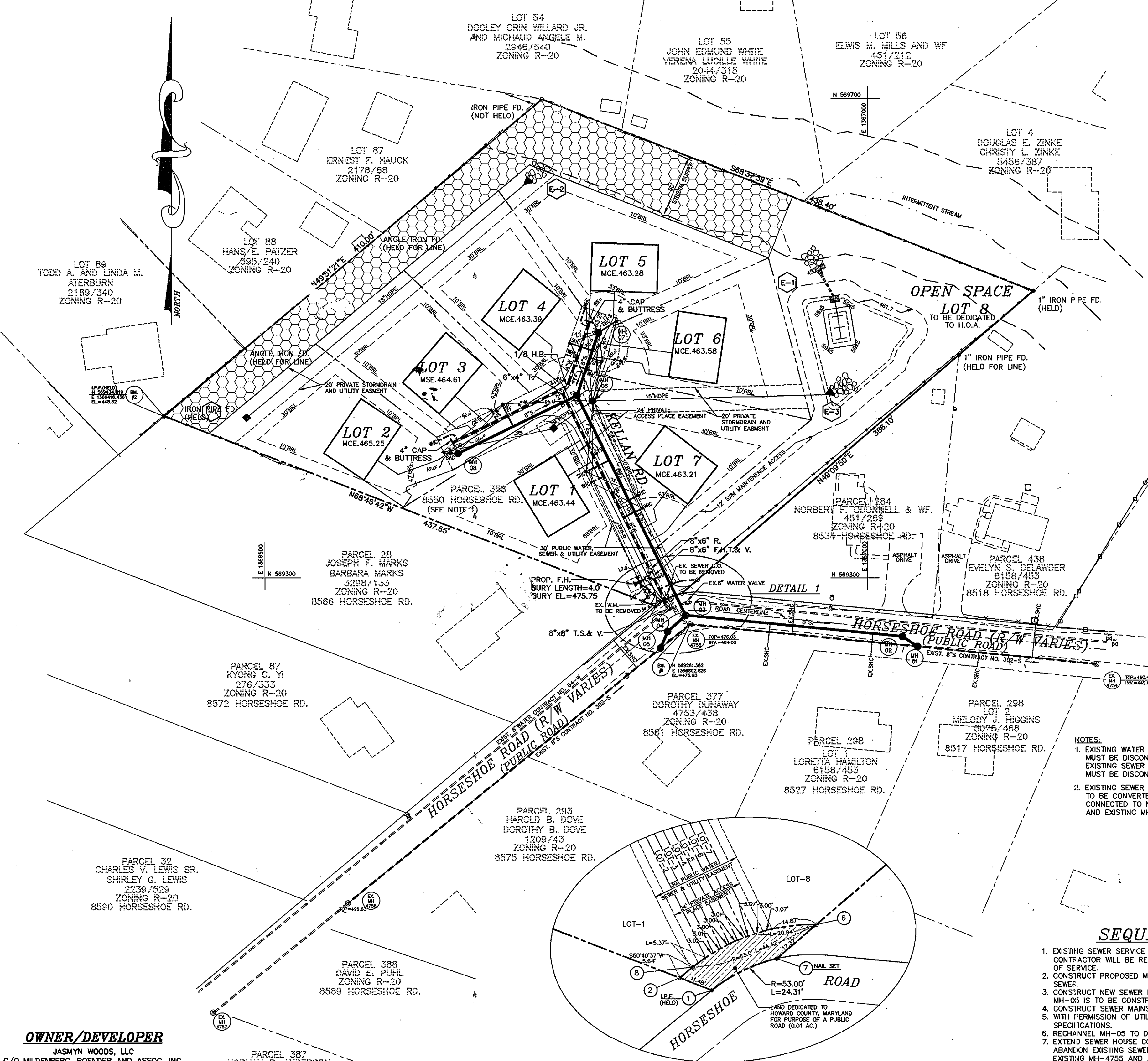
#### KELLAN DR. PUBLIC ACCESS

STATION	APPURTENANCE	O/S FROM C
0+06.5	8"x8" T.S. & V.	3.0' LT.
0+37.8	8"x6" F.H.T. & V.	3.0' LT.
0+37.8	F.H.	13.5' LT.
0+41.8	8"x6" R.	3.0' LT.
2+10.0	6"x4" T.	3.0' LT.
2+10.0	4"-1/8" H.B.	3.0' RT.

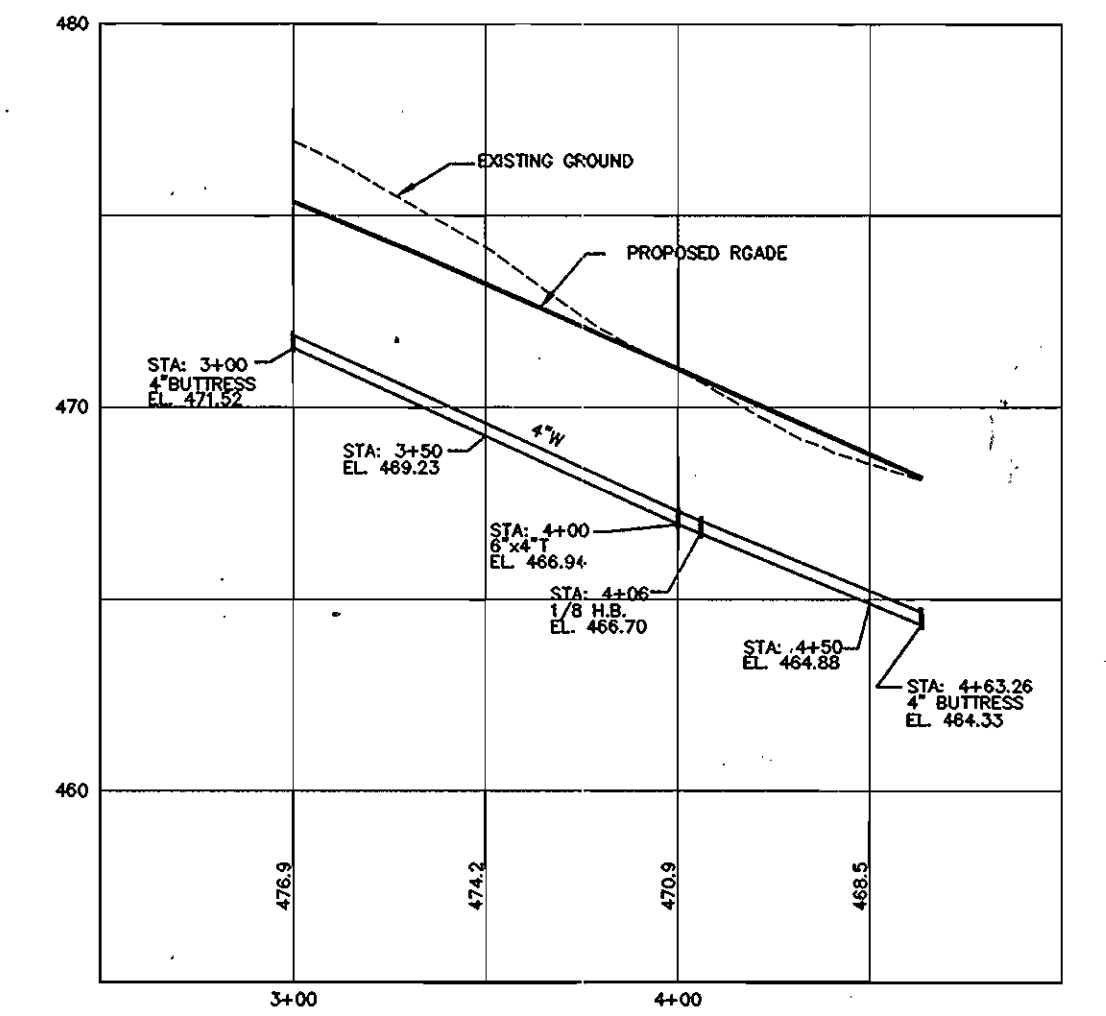
NORTHING & EASTING		APPURTENANCE
N 569,412.6	E 1,366,655.8	4" CAP. & BUTRESS
N 569,513.6	E 1,366,769.3	4" CAP. & BUTRESS

### SEWER HOUSE CONNECTION TABULATION CHART

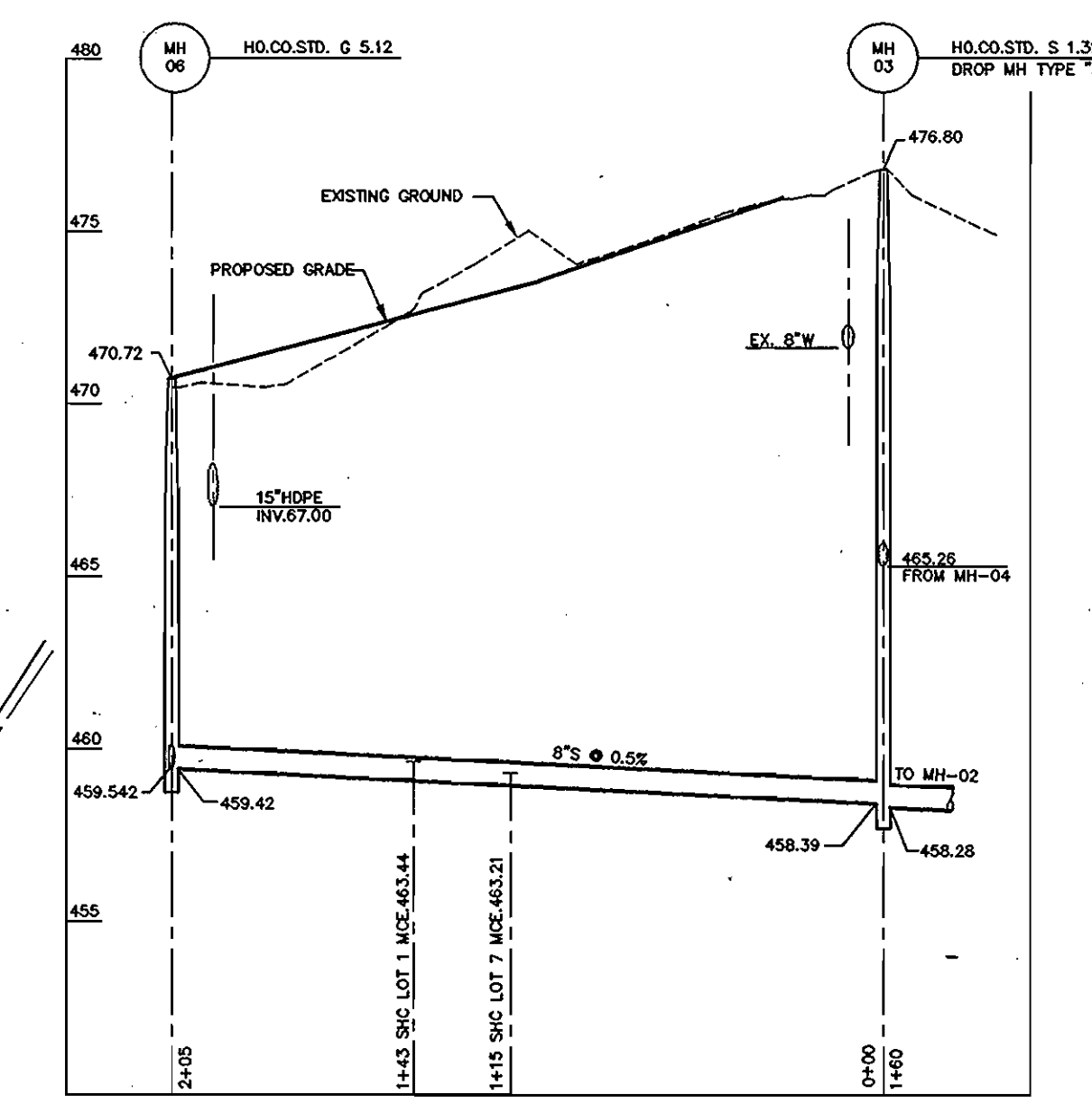
LOT NO.	INV. @ EASEMENT	MCE	SLOPE
1	459.65	463.44	2%
2	460.42	465.25	2%
3	460.19	464.61	2%
4	460.09	463.39	1%
5	460.13	463.28	1%
6	459.96	463.58	1%
7	459.31	463.21	2%



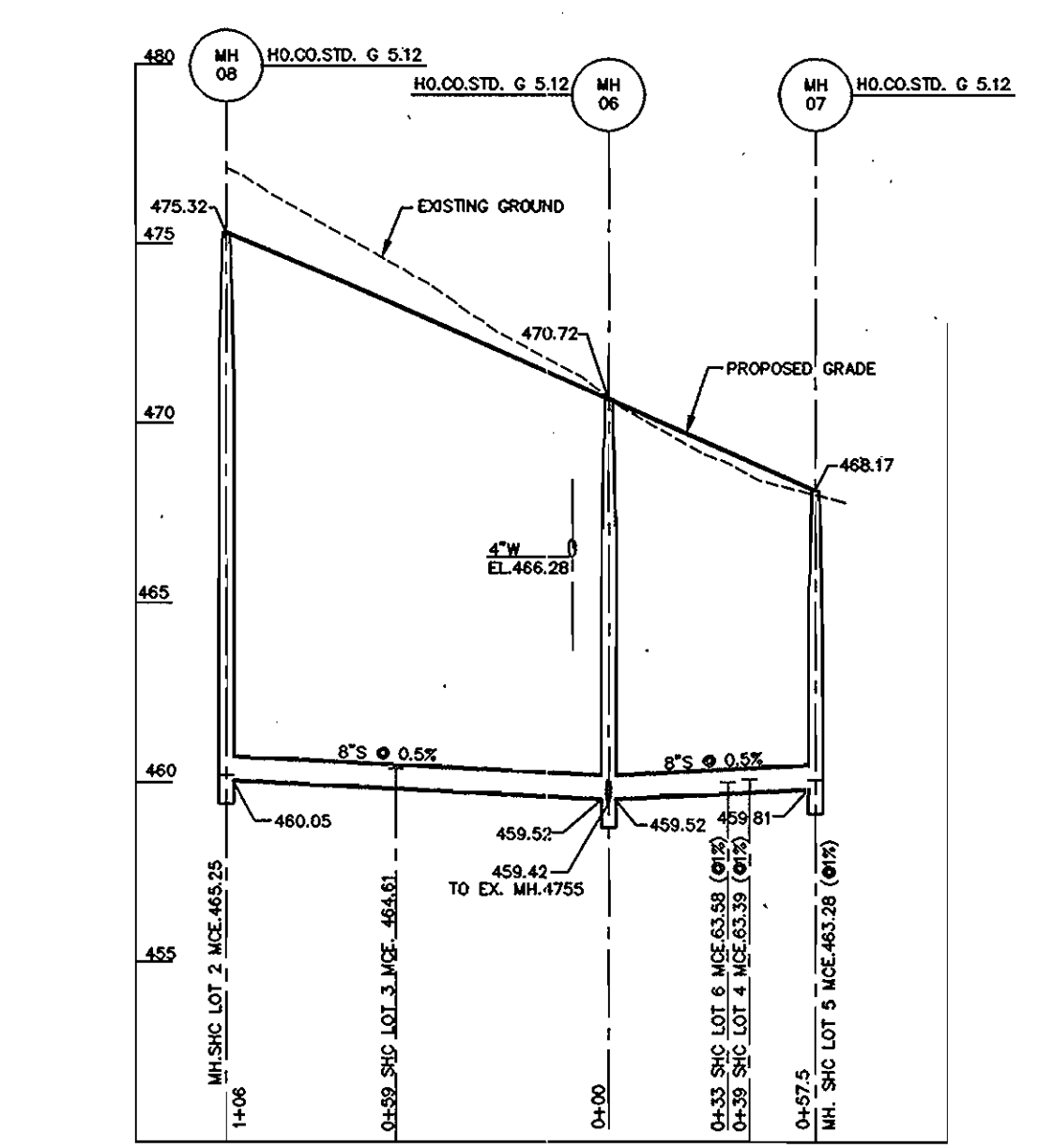
8" & 6" WATER PROFILE  
SCALE: HOR: 1"=50' VER: 1"=5'



4" WATER PROFILE  
SCALE: HOR: 1"=50' VER: 1"=5'



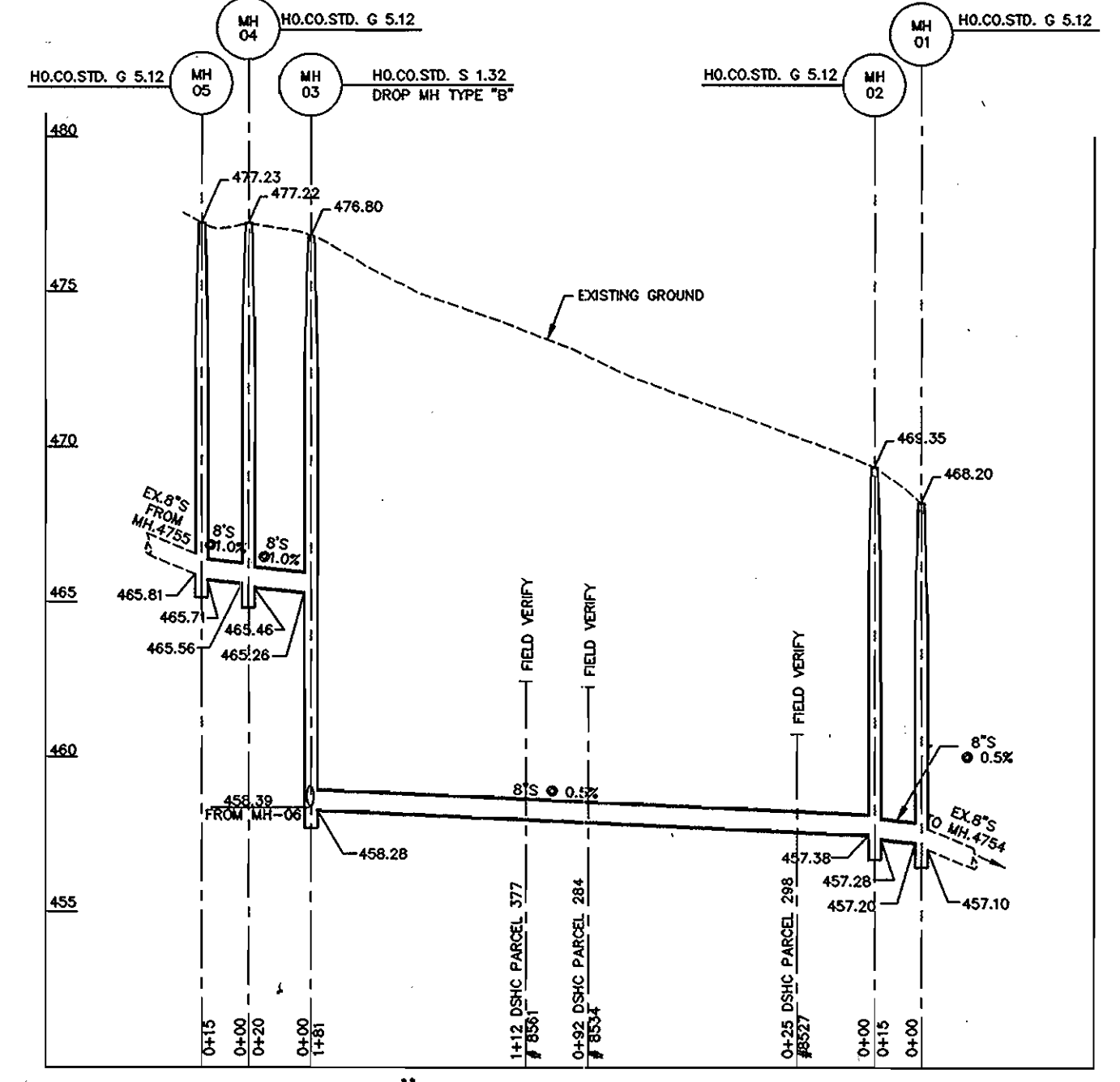
8" SEWER PROFILE  
SCALE: HOR: 1"=50' VER: 1"=5'



4" SEWER PROFILE  
SCALE: HOR: 1"=50' VER: 1"=5'

- NOTES:
- EXISTING WATER HOUSE CONNECTION FOR 8050 HORSESHOE RD MUST BE DISCONNECTED AND THE MAIN MUST BE PLUGGED. EXISTING SEWER HOUSE CONNECTION FOR 8550 HORSESHOE RD. MUST BE DISCONNECTED FROM MH-4755 AND ABANDONED.
  - EXISTING SEWER HOUSE CONNECTIONS FOR 8561, 8527 AND 8534 TO BE CONVERTED TO DROP SEWER HOUSE CONNECTIONS AND CONNECTED TO NEW SEWER MAIN BETWEEN PROPOSED MH #1 AND EXISTING MH #4755.

- SEQUENCE OF CONSTRUCTION:
- EXISTING SEWER SERVICE MAY NOT BE INTERRUPTED EXCEPT AS SPECIFICALLY INDICATED HEREIN. CONTRACTOR WILL BE REQUIRED TO NOTIFY ALL AFFECTED PROPERTIES PRIOR TO ANY DISRUPTION OF SERVICE.
  - CONSTRUCT PROPOSED MANHOLE (MH-01) OVER EXISTING 8" SEWER. MAINTAIN FLOW IN EXISTING SEWER.
  - CONSTRUCT NEW SEWER MAINS AND MANHOLES FROM PROPOSED MANHOLE (MH-01) TO (MH-05) MH-03 IS TO BE CONSTRUCTED OVER EXISTING 8" SEWER.
  - CONSTRUCT SEWER MAINS AND MANHOLES FROM (MH-05) TO (MH-08).
  - WITH PERMISSION OF UTILITY INSPECTOR, TEST SEWER MAINS PER HOWARD COUNTY STANDARD SPECIFICATIONS.
  - RECHANNEL MH-05 TO DIVERT FLOW INTO NEW SEWER.
  - EXTEND SEWER CONNECTIONS TO NEW SEWER MAIN. ABANDON EXISTING SEWER LINE BETWEEN PROPOSED MH-05 AND MH-01. REMOVE TOP FROM EXISTING MH-4755 AND ABANDON THIS MANHOLE PER COUNTY SPECIFICATIONS.



8" SEWER PROFILE  
SCALE: HOR: 1"=50' VER: 1"=5'

**OWNER/DEVELOPER**  
JASMYN WOODS, LLC  
C/O MILDENBERG, BOENDER AND ASSOC. INC.  
5072 DORSEY HALL DRIVE, SUITE 202  
ELLCOTT CITY, MARYLAND 21043  
(410) 997-0298

PARCEL 387  
NORMAN R. ANDERSON  
ZONING R-20  
8595 HORSESHOE RD.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

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engineering	MMP				
illustration	MMP				
approval					
project	KC.1	2	ASBUILT DATA	8/1/07	
	KC.1	1	ASBUILT DATA	8/26/06	
date	JUNE 04	BY	NO.	REVISION	DATE

**WATER AND SEWER  
PLAN AND PROFILES**

**JASMYN WOODS**  
CONTRACT NO.: 24-4185-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
1"=50'  
2 OF 2