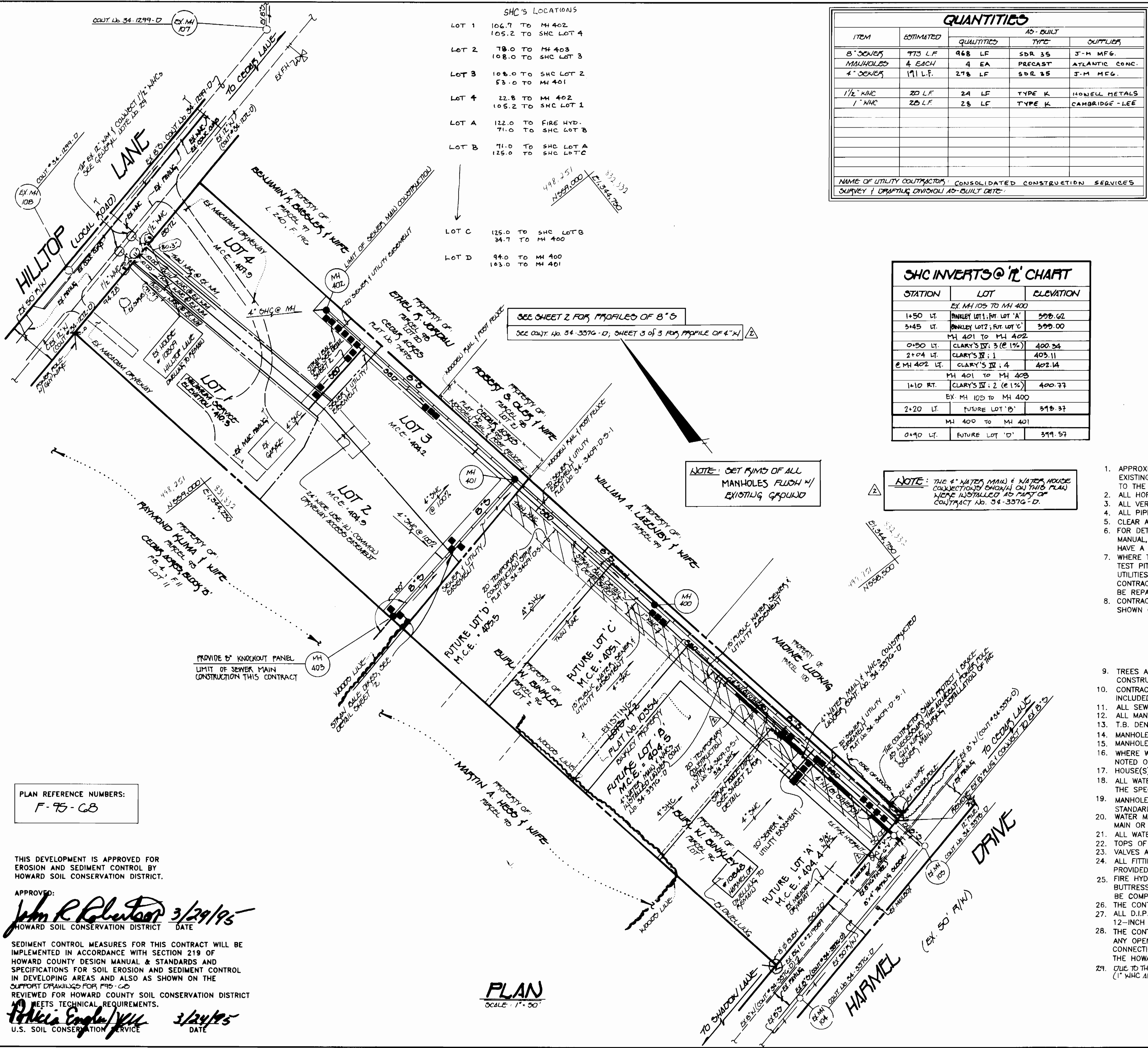


3409 S/I Clary's Discovery IV, lots 1-4



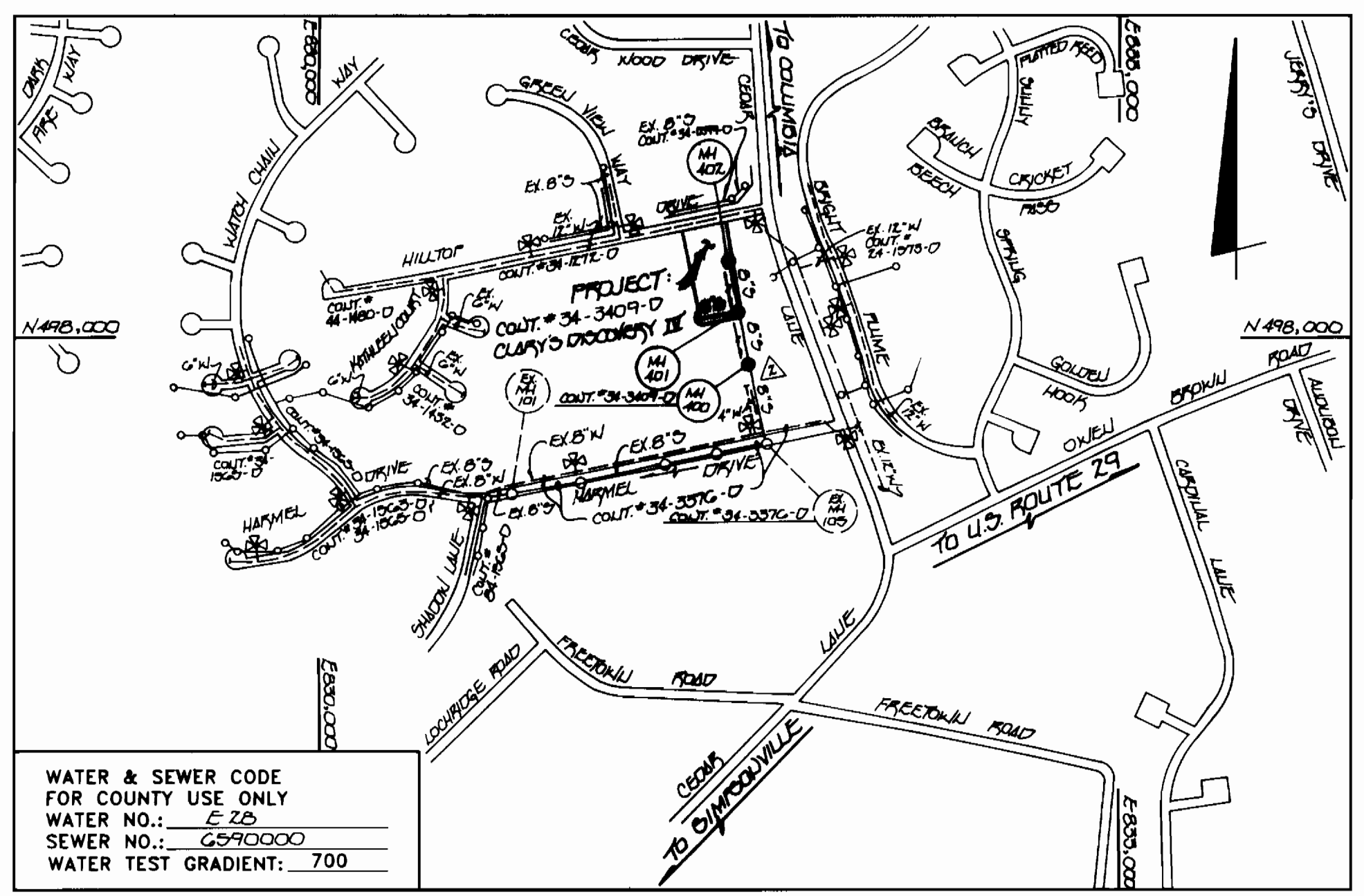
QUANTITIES

ITEM	ESTIMATED	AD-BUILT	
		QUANTITIES	TYPE
8" SEWER MANHOLES	4 EACH	4 EA	PRECAST ATLANTIC CONC.
4" SEWER	191 L.F.	278 L.F.	SDR 35
1 1/2" HMC	20 L.F.	24 L.F.	TYPE K
1" HMC	25 L.F.	28 L.F.	TYPE K

NAME OF UTILITY CONTRACTOR: CONSOLIDATED CONSTRUCTION SERVICES
SURVEY / DRAFTING DIVISION AD-BUILT DATE:

SHC INVERTS @ 1' CHART

STATION	LOT	ELEVATION
1450 LT.	EX MH 105 TO MH 400	399.62
3445 LT.	SHC LOT 2; FUT LOT 'C'	399.00
0150 LT.	MH 401 TO MH 402	400.34
2104 LT.	CLARY'S III: 3 (E 1%)	403.11
2104 LT.	CLARY'S III: 1	403.11
2104 LT.	CLARY'S III: 4	402.14
1410 RT.	EX MH 105 TO MH 400	400.73
2420 LT.	FUTURE LOT 'B'	398.97
0440 LT.	FUTURE LOT 'D'	399.57



WATER & SEWER CODE FOR COUNTY USE ONLY
WATER NO.: E 25
SEWER NO.: G590000
WATER TEST GRADIENT: 700

TYPE OF BUILDING: SINGLE FAMILY DETACHED
NUMBER OF LOTS: 4 BUILDINGS: 4
NO. OF WATER HOUSE CONNECTIONS: 4
NO. OF SEWER HOUSE CONNECTIONS: 4
DRAINAGE AREA: MIDDLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER, SAVAGE, MD.

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. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (1991 AMENDMENTS) THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL ■ AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL SEWER MAINS SHALL BE D.I.P., R.C.P., C.S.P.X., R.C.C.P., V.C.P.X., OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G 5.2.
- WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL BE D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO 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 ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W1.11 AND W2.13). SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153; DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(C) OF THE HOWARD COUNTY CODE.
- DUE TO THE INVERT ELEVATIONS OF THE EX. 12" KM 10 HILLTOP LANE, THE INDICATED THIN WATER HOUSE COLLECTIONS SHALL BE 1 1/2" HMC (1" HMC AFTER THE "Y" BRANCH WITH 3/4" INSIDE DIAMETER SETTINGS - STANDARD DETAIL W 5.23).

PLAN REFERENCE NUMBERS:
F-75-CB

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

APPROVED: *John R. Robertson* 3/29/95
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE SUPPORT DRAWINGS FOR F-75-CB REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT MEETS TECHNICAL REQUIREMENTS.
Patricia Engle 3/24/95
U.S. SOIL CONSERVATION SERVICE DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James J. Shaw 3/19/95
DIRECTOR OF PUBLIC WORKS DATE
Robert J. Bennett 3-22-95
CHIEF, BUREAU OF UTILITIES DATE
Richard J. ... 3/29/95
CHIEF, BUREAU OF ENGINEERING DATE
... 3/29/95
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
SUITE 100, 8171 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 481-2855



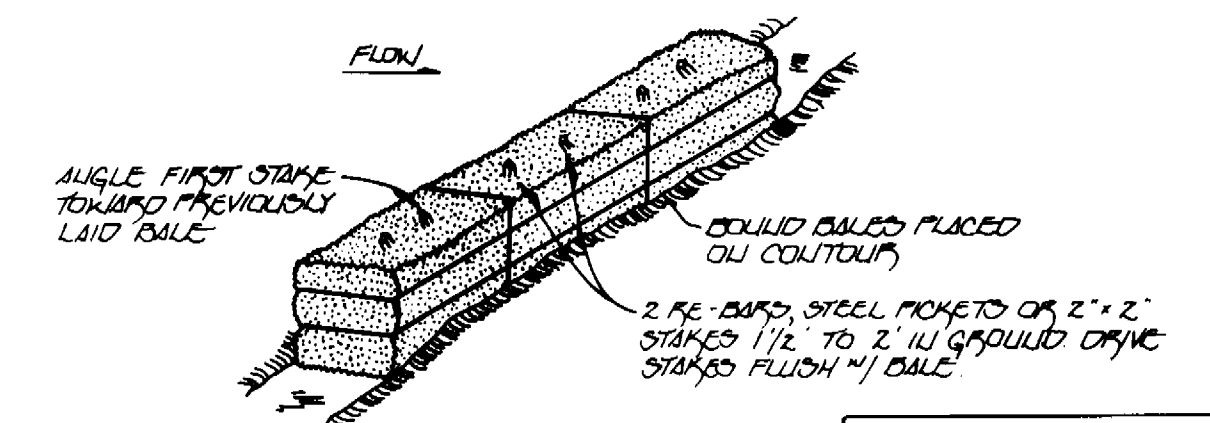
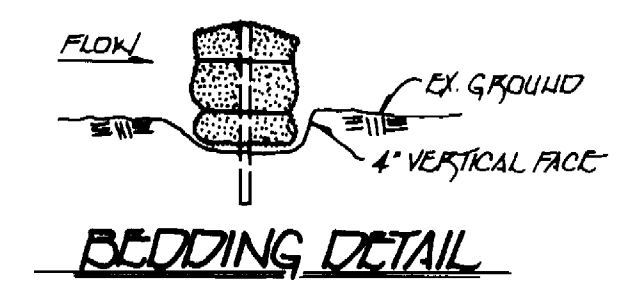
DES: M.J.M.			
DRWN: J.W.M./M.J.M.			
CHK: P.W.K.			
DATE: 02/20/95			
BY NO.	REVISION	DATE	
	ADD 4" HMC (BY OTHERS) & APPROPRIATE HOUSE CONNECTIONS; ADD NOTES REGARDING INSTALLATION OF 4" HMC CONTRACT NO. 34-3376-D	4-20-90	
	ADD SHC'S FOR FUTURE LOTS 'B' & 'D'	10/2/95	
		8/1/95	

PLAN VIEW
SEWER MAINS
600' SCALE MAP NO. 35 BLOCK NO. 11

CLARY'S DISCOVERY IV
LOTS 1-4
CONTRACT NO. 34-3409-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2
CDTS.DWG

34009 5/2 Clary's Discovery IV

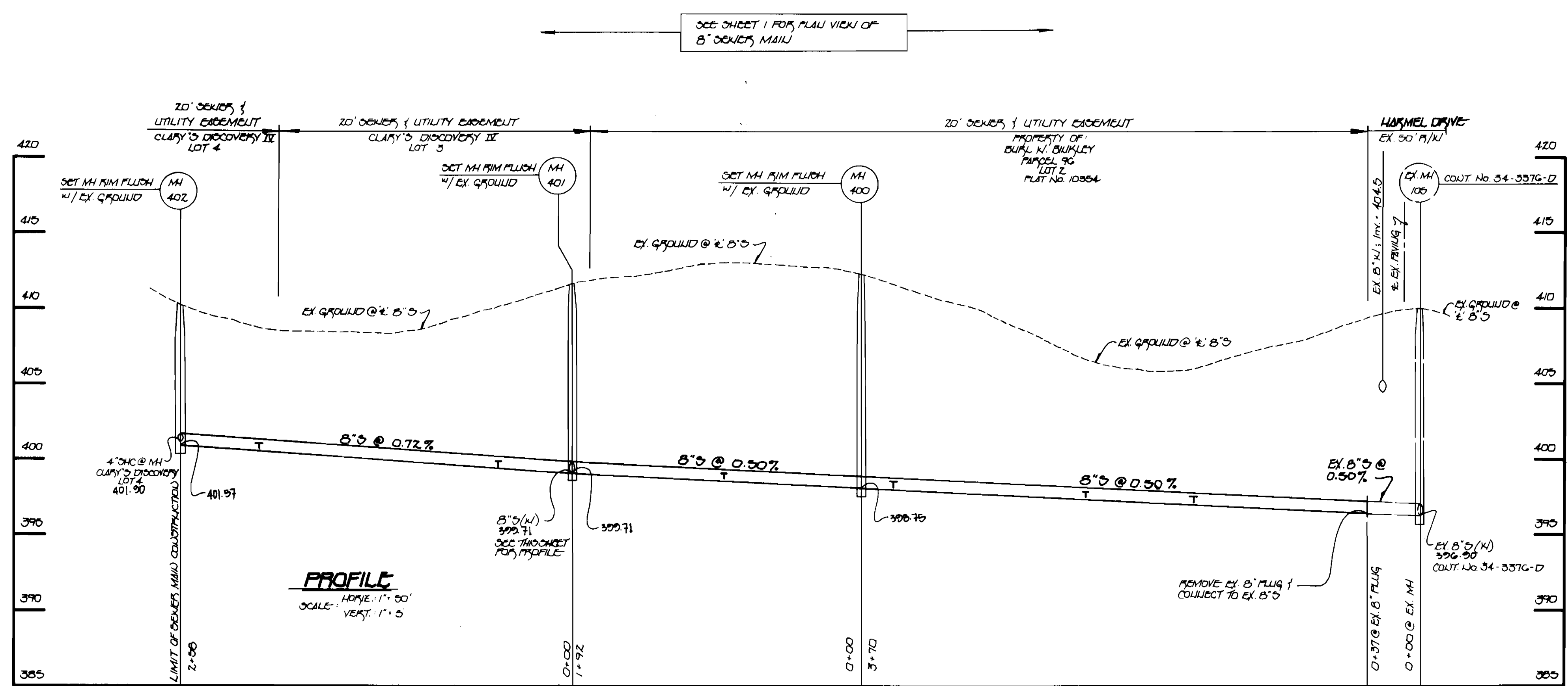


SEE SHEET 1 FOR LOCATIONS OF STRAW BALE DIKES

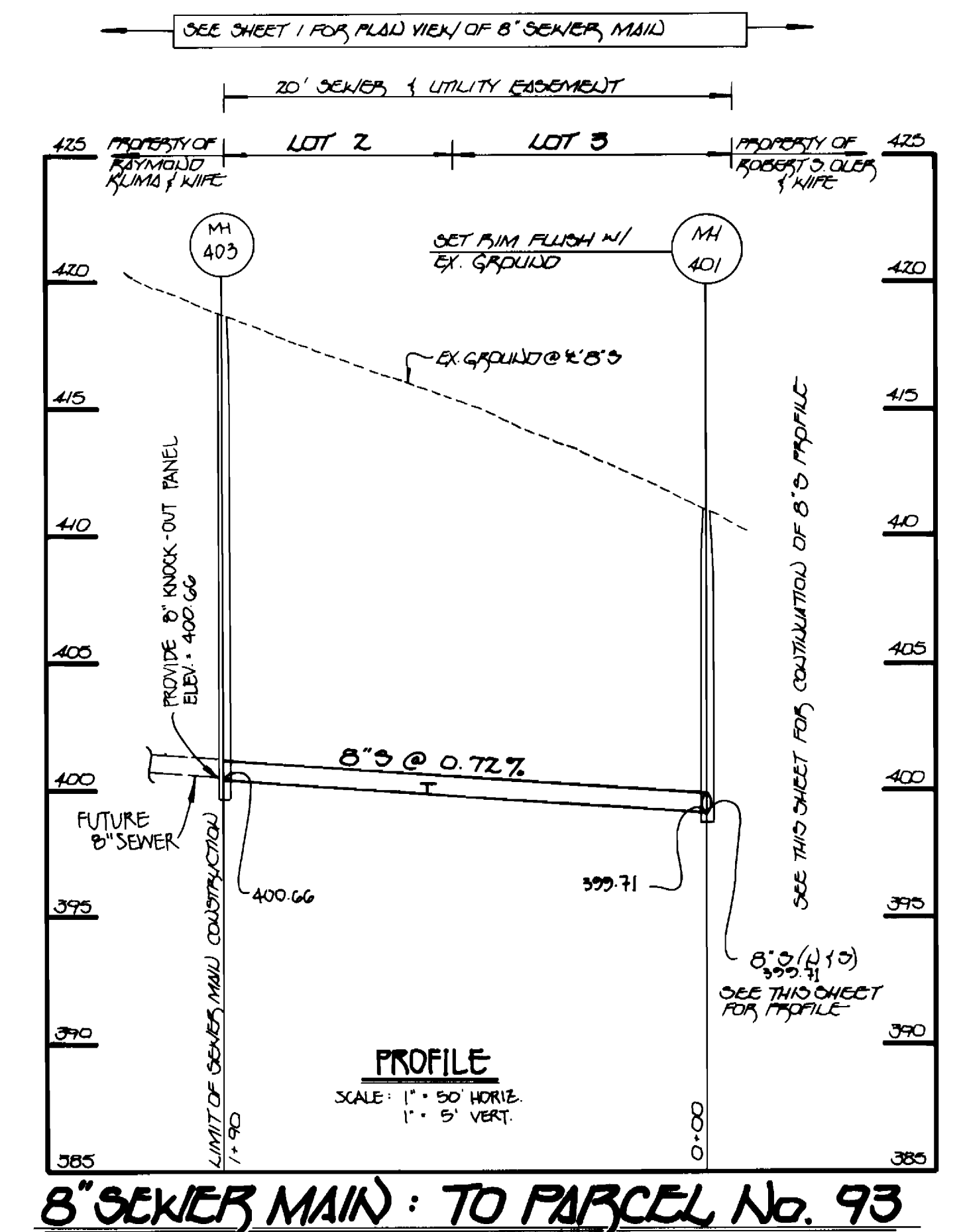
STRAW BALE DIKE

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE COUNTERSLOPE, & IN A ROW 1/2 BALE TIGHTLY ADJUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, & PLACED SO THE DIMENSIONS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTIONS SHALL BE FREQUENT & REPAIRS OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.

NOTE: THE PROFILE OF THE 4" WATER MAIN (SHOWN IN PLAN) ON SHEET 1 OF THIS CONTRACT IS INCLUDED ON SHEET 3 OF 3; CONT. No. 34-337G-D. THE 4" WATER MAIN & THE ASSOCIATED WATER HOUSE CONNECTIONS WERE INSTALLED AS PART OF CONT. No. 34-337G-C.



8-INCH SEWER MAIN EXTENSION



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James A. Shaw 3/2/99
DIRECTOR OF PUBLIC WORKS DATE

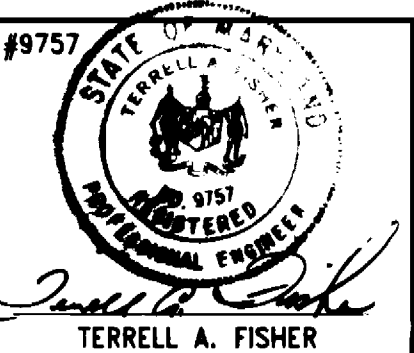
Robert W. Bennett 3-22-95
CHIEF, BUREAU OF UTILITIES DATE

Terrell A. Fisher 3/29/95
CHIEF, BUREAU OF ENGINEERING DATE

Michael J. Williams 3/1/95
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
SUITE 100, 9171 BALTIMORE NATIONAL PIKE
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(410) 461 - 2855



DES:	M.J.M.				
DRWN:	J.M.M./M.J.M.				
CHK:	P.W.K.				
DATE:	02/20/95				
BY:					
NO.					
REVISION					
DATE					

SEWER MAINS
PROFILES AND DETAILS

600' SCALE MAP NO. 35 BLOCK NO. 17

CLARY'S DISCOVERY IV
LOTS 1-4
CONTRACT NO. 34-3409-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2