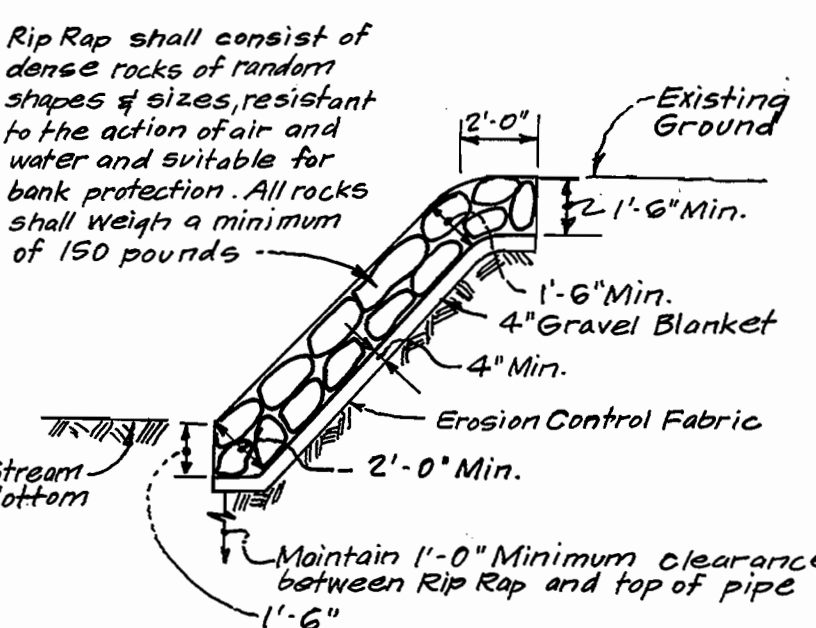
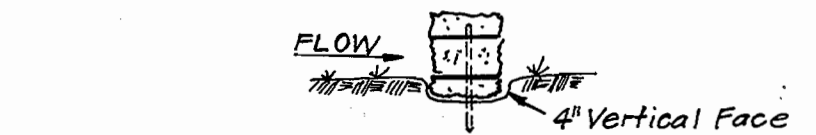


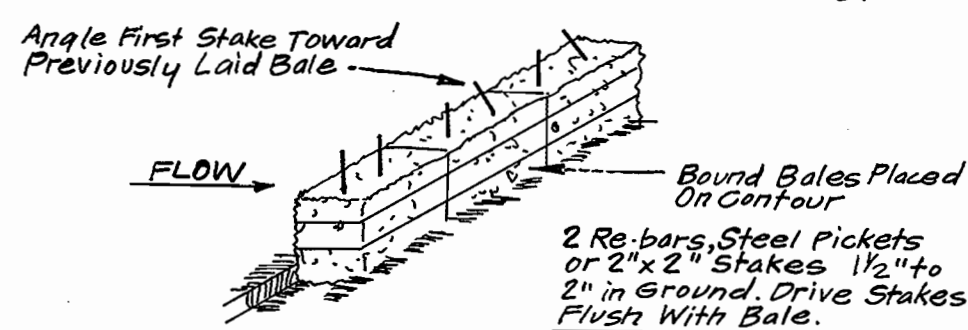
- NOTES:**
- Erosion Control Fabric shall be Poly Filter-X as manufactured by Cartridge Mills Inc., Erosion Control Division, 124 West 66th Street, Cincinnati, Ohio; Laurel Erosion Control Cloth as manufactured by Laurel Plastics Inc., Madison, Maine, or approved equal.
 - Rip Rap shall be placed 6' each side of sewer or as shown. Any disturbance to stream banks beyond these limits shall be protected with Rip Rap.



RIP RAP DETAIL
NO SCALE



BEDDING DETAIL



ANCHORING DETAIL
STRAW BALE DIKE
NO SCALE

SEQUENCE OF CONSTRUCTION

- Obtain grading permit _____ 1 Day
- Clear and grub area and install sediment erosion control devices _____ 5 Days
- Excavate and install 8" Sewer Pipe _____ 4 Days
- Backfill trench and stabilize in accordance with standard details and specifications _____ 4 Days
- Excavate and install 8" Water Main _____ 2 Days
- Backfill trench and stabilize in accordance with standard details and specifications _____ 2 Days
- Remove sediment and erosion control devices and stabilize upon approval of S & E Control Inspector. _____ 7 Days

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan F; Drawing Sediment & Erosion Control.

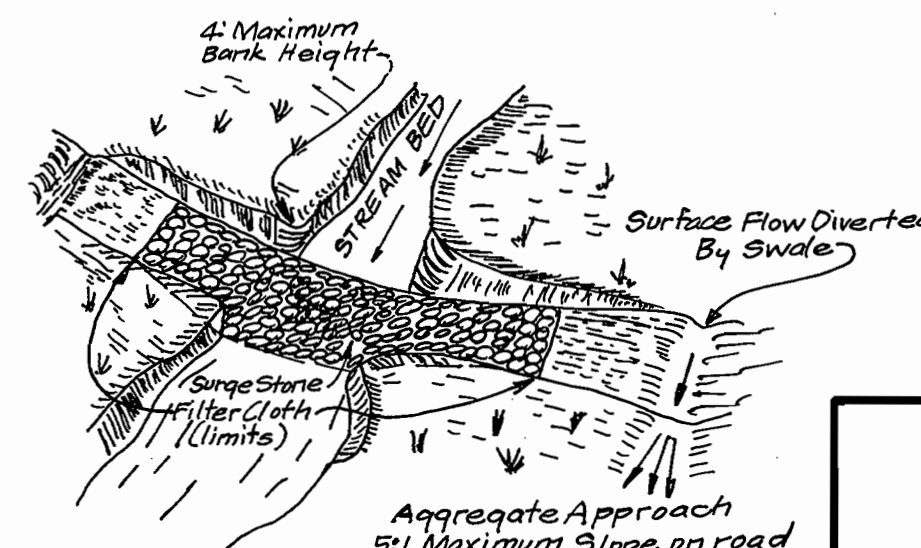
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

Thomas J. Stelm 4-15-88
SIGNATURE DATE

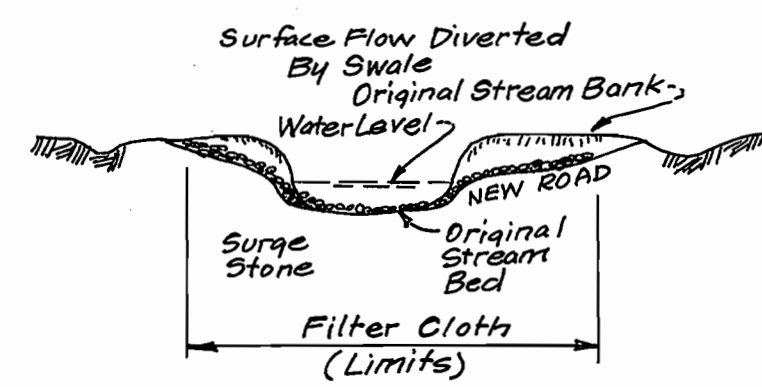
U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

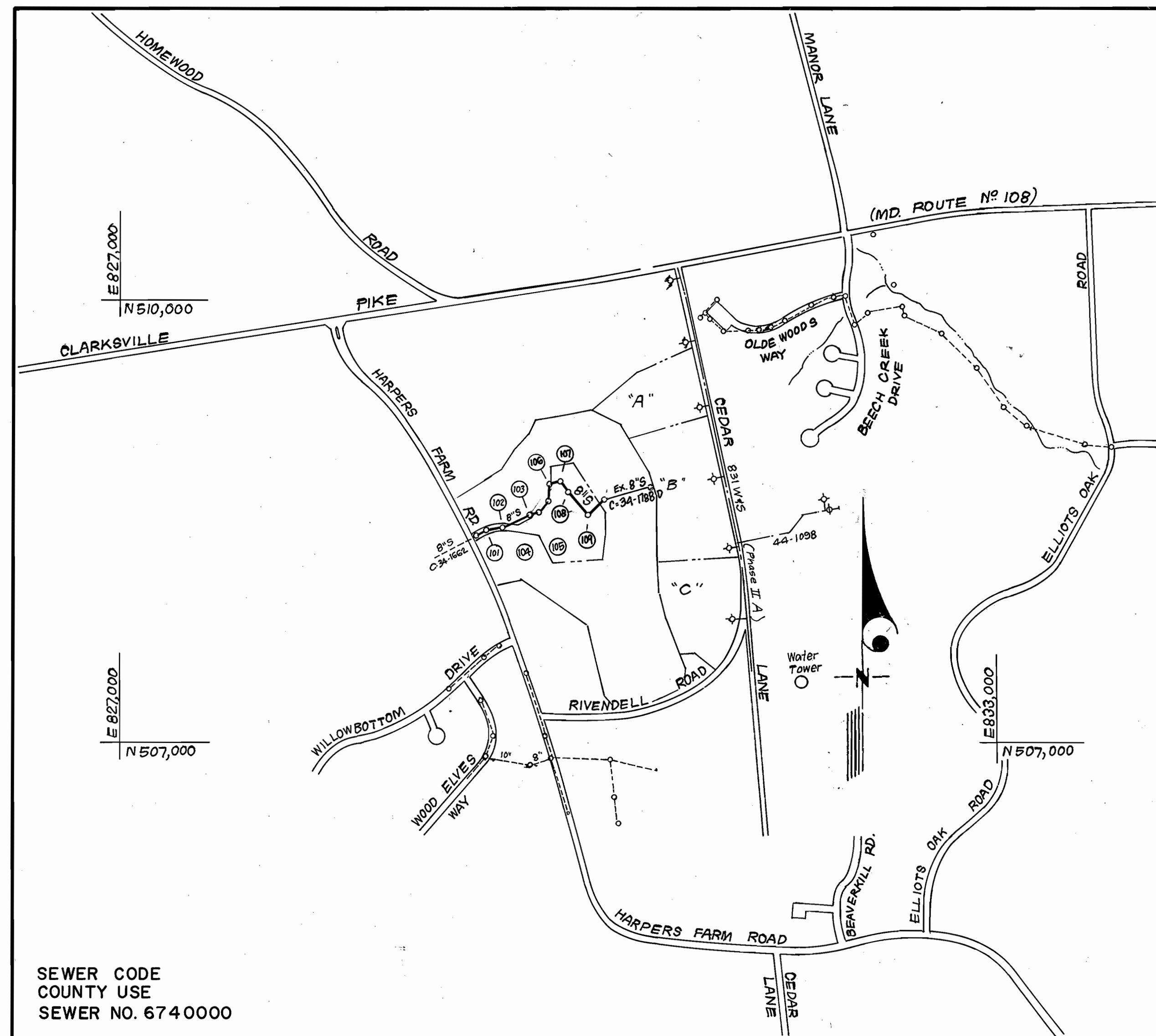
APPROVED:
Stephen L. Hyde 4/15/88
Howard S.C.D. DATE



PERSPECTIVE VIEW



PROFILE
TEMPORARY ACCESS FORD
NO SCALE



VICINITY MAP
SCALE: 1" = 600'

SEWER CODE
COUNTY USE
SEWER NO. 674 0000

TYPE OF BUILDING	N/A
NUMBER OF LOTS	(ONE) PARCEL A-1
NUMBER OF SHO'S	11
NUMBER OF WHC'S	0
DRAINAGE AREA	Little Patuxent W.W.T.P. (MIDDLE PATUXENT)

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 Inspector, 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 shown are invert elevations.
- Clear all utilities by a minimum of 6" clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred to the contractor for tunneling or bracing at poles shall be included in unit prices bid for excavation and backfill.
- For details not shown on the drawings use Howard County Standard Details.
- For materials and construction methods use Howard County Standard Specifications & H.C. Design Manual, Volume II. The contractor shall have Volume IV on the job.
- Contractor shall locate existing utilities a minimum of two (2) weeks in advance of construction operations in the vicinity of proposed utilities at his own expense.
- Contractor shall notify the following utilities or agencies at least five (5) working days before starting work shown on these plans.
State Highway Administration - 531-5533
Baltimore Gas & Electric Company - Contractor Services - 850-4820,
Baltimore Gas & Electric Company - Underground Damage Control - 859-9004
Baltimore Gas & Electric Company - Trouble Shooting - 298-9001.
"Miss Utility" -
Chesapeake & Potomac (C & P) Telephone Company - 1-800-257-7777
Colonial Pipeline Company - 705-1390
Bureau of Utilities Howard County - 992-2366
- Trees are to be protected from damage to maximum extent. Trees 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 as directed by the Inspector. Payment for such removal shall be included in the unit price bid for excavation and backfill.
- Place regulation "Men Working" and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction and Maintenance Operations.
- All water mains to be C.I.P. Class 52 unless otherwise noted.
- Top 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.
- Block all fittings with concrete.
- Bury line elevations on fire hydrants shall be set to the 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 to be compacted in accordance with Section 1003 & 1008 of the Standard Specifications.
- All water house connections shall be for an inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C., 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.
- Water main and water house connection lines must have a minimum of one foot separation from the sanitary sewer and sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.
- Manholes designated thus: WT shall have Watertight Frame & Covers.

CONTRACT NO. 30-1769-D
VILLAGE OF HARPER'S CHOICE
PARCEL A-1, SECTION 7 AREA I
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

QUANTITIES			
ITEM	ESTM'D	AS-BUILT	MATERIAL / SUPPLIER
8" S	1,222 LF	728 LF, PVC 506 LF, DIP	SCHEPPE GRIFFIN
4'-0" DIA MH	9 EA	9 EA	ATLANTIC PRECAST CONCRETE CORP
36" CMP	24 LF	NONE	
6" SHO	105 LF	124 LF, PVC 12 LF, DIP	NATIONAL ATLANTIC STATES CAST IRON PIPE CO.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. Quinn 4/18/88
DIRECTOR OF PUBLIC WORKS DATE

Michael J. ... 4/18/88
CHIEF, BUREAU OF ENGINEERING DATE

Olth ... 4-13-88
CHIEF, BUREAU OF UTILITIES DATE

Richard E.F. ... 4/18/88
CHIEF, LAND DEVELOPMENT DIV. DATE

CFE CLARK-FINEFROCK & SACKETT
ENGINEERS-PLANNERS-SURVEYORS

7155 MINSTREL WAY COLUMBIA, MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: V.L.M.	GES: 1	Rev. Quantities, gen. notes & vicinity map	12081
DRN: V.L.M.			
CHK: J.T.R.			
DATE: 1-18-88	BY: NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 29 BLOCK NO.

COLUMBIA
VILLAGE OF HARPER'S CHOICE
SECTION 7 AREA I
PARCEL A-1
5TH ELECTION DISTRICT
CONTRACT NO. 30-1769-D

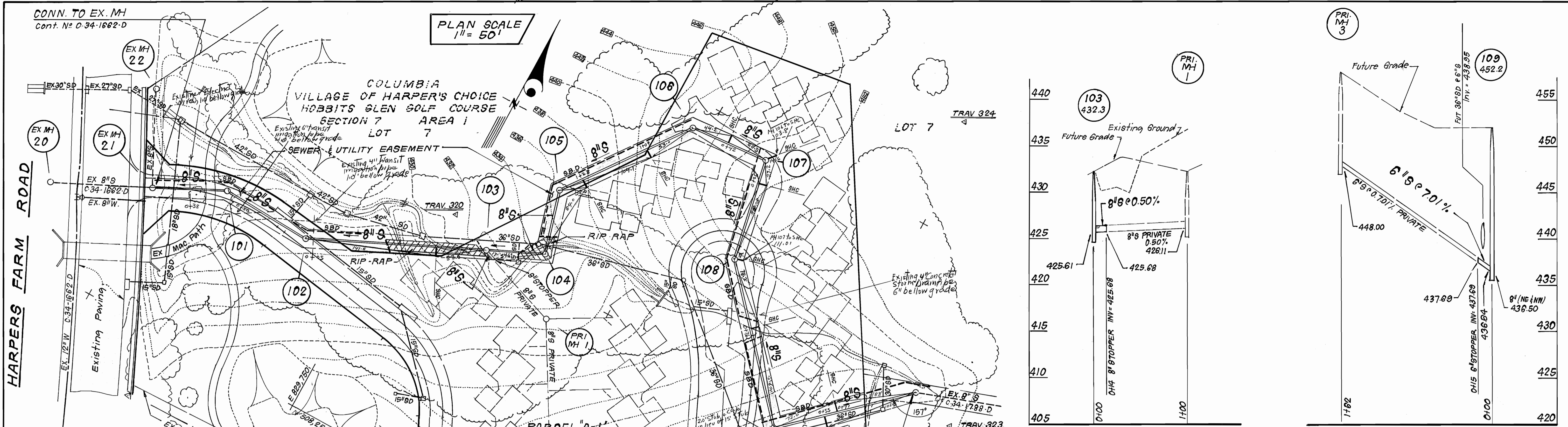
SCALE AS SHOWN

SHEET 1 OF 2

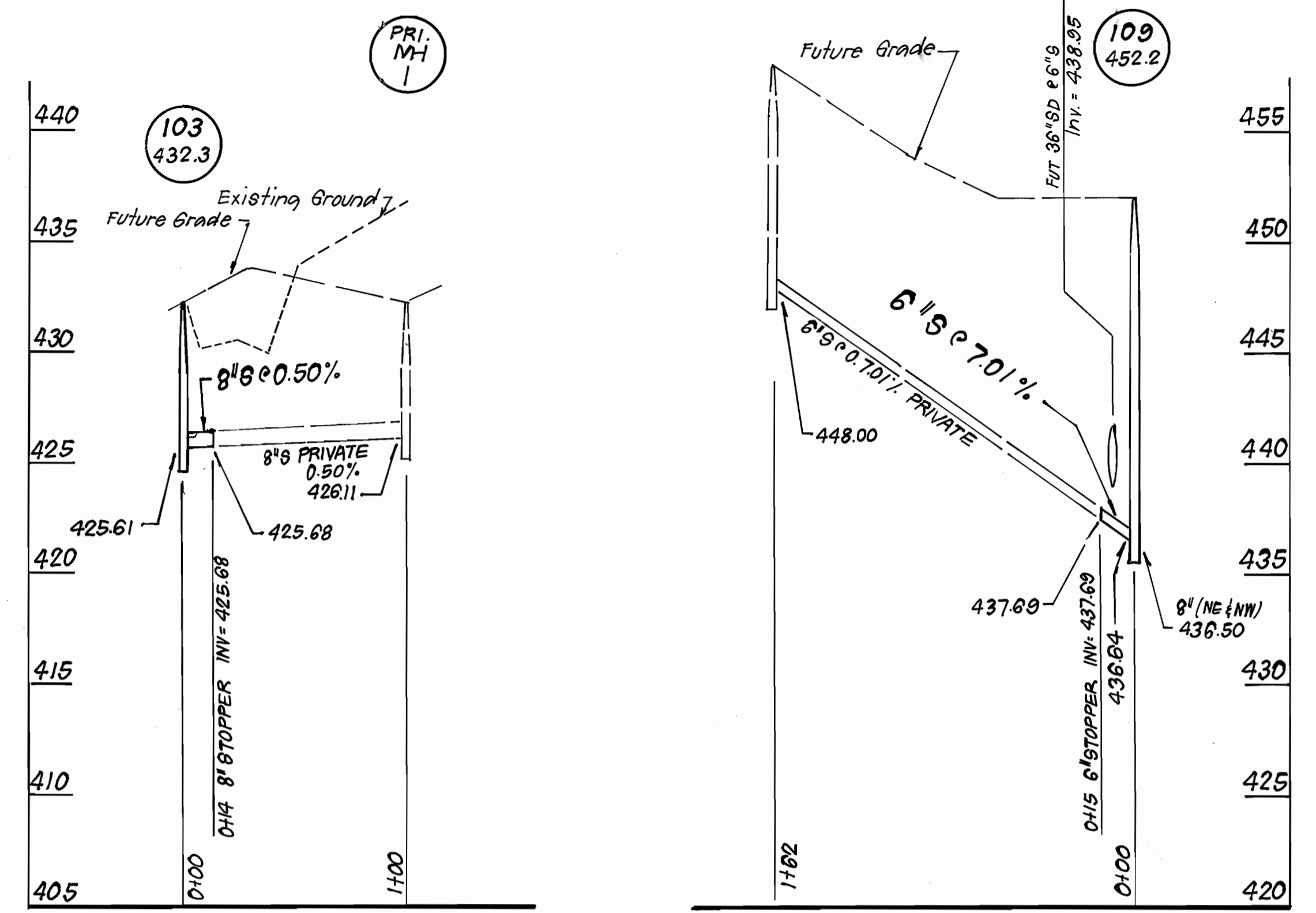
CONN. TO EX. MH
Cont. N^o 0-34-1662-D

PLAN SCALE
1" = 50'

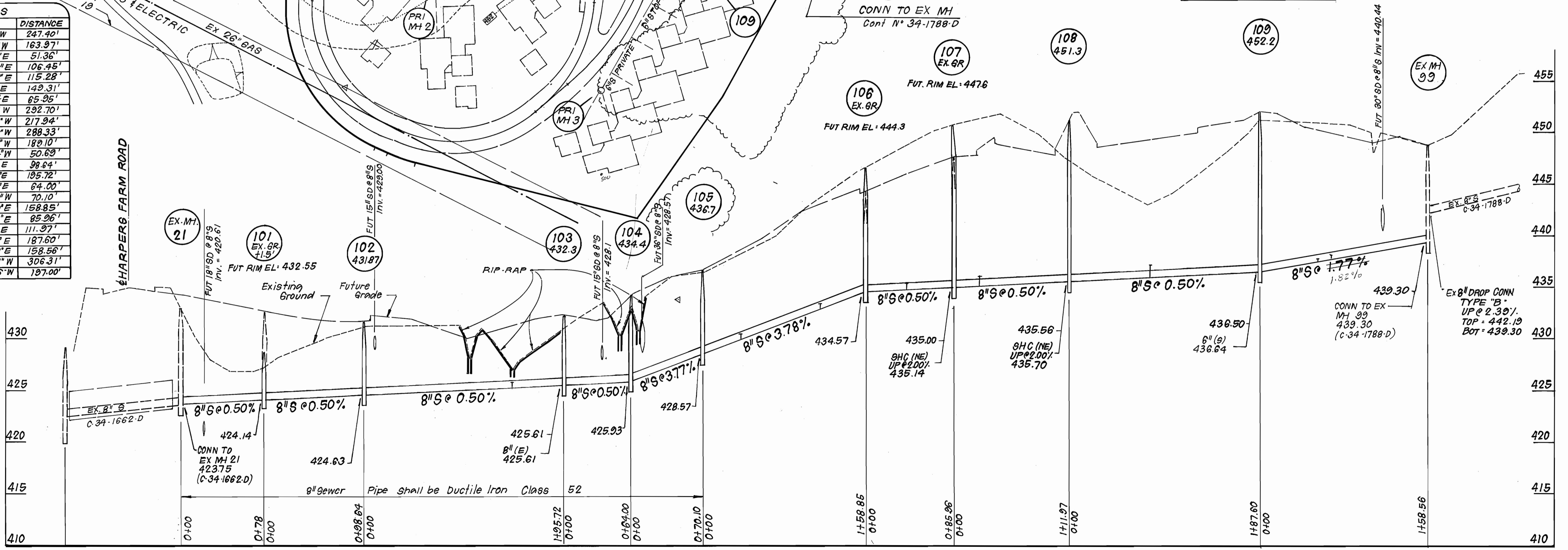
COLUMBIA
VILLAGE OF HARPER'S CHOICE
HOBBITS GLEN GOLF COURSE
SECTION 7 AREA 1
LOT 7



FROM	TO	BEARING	DISTANCE
TRAV. 320	MH 101	S 66° 49' 30" W	247.40'
TRAV. 320	MH 102	S 51° 48' 39" W	163.97'
TRAV. 320	MH 103	S 69° 37' 07" E	51.36'
TRAV. 320	MH 104	N 84° 55' 37" E	106.46'
TRAV. 320	MH 105	N 48° 20' 27" E	115.28'
TRAV. 320	PRI MH 1	S 71° 10' 52" E	149.31'
TRAV. 320	8" STOPPER	S 70° 08' 44" E	65.95'
TRAV. 324	MH 106	S 59° 53' 15" W	292.70'
TRAV. 324	MH 107	S 50° 15' 04" W	217.94'
TRAV. 324	MH 108	S 30° 14' 50" W	288.33'
TRAV. 323	MH 109	S 60° 25' 10" W	189.10'
TRAV. 323	MH 110	N 73° 02' 14" W	50.69'
MH 101	MH 102	S 87° 40' 00" E	98.64'
MH 102	MH 103	N 64° 45' 00" E	195.72'
MH 103	MH 104	N 84° 45' 00" E	84.00'
MH 104	MH 105	N 16° 30' 00" W	70.10'
MH 105	MH 106	N 36° 00' 00" E	158.85'
MH 106	MH 107	N 85° 00' 00" E	85.26'
MH 107	MH 108	S 11° 30' 00" E	111.97'
MH 108	MH 109	S 42° 00' 00" E	187.60'
MH 109	MH 110	N 47° 00' 00" E	158.56'
TRAV. 323	PRI MH 3	S 33° 33' 11" W	306.31'
TRAV. 323	6" STOPPER	S 56° 49' 16" W	197.00'



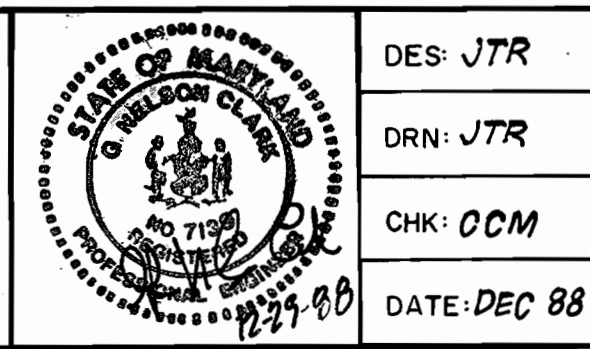
PROFILE SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



REVISED CONSTRUCTION PLAN - THIS SHEET 2 OF 2 OF THIS CONTRACT SUPERCEDES SHEET 2 OF 2 THAT WAS APPROVED ON 4-18-88

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1/22/89
1-19-89

CLARK · FINEFROCK & SACKETT, INC.
ENGINEERS · PLANNERS · SURVEYORS
7135 MINSTREL WAY · COLUMBIA MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: JTR
DRN: JTR
CHK: OCM
DATE: DEC 88

PLAN & PROFILE OF
SEWER

COLUMBIA
VILLAGE OF HARPER'S CHOICE
SECTION 7 AREA 1
PARCEL A-1
5TH ELECTION DISTRICT
CONTRACT NO. 30-1769 - D
SCALE AS SHOWN
SHEET 2 OF 2

AS-BUILT 10-17-89 J.U.