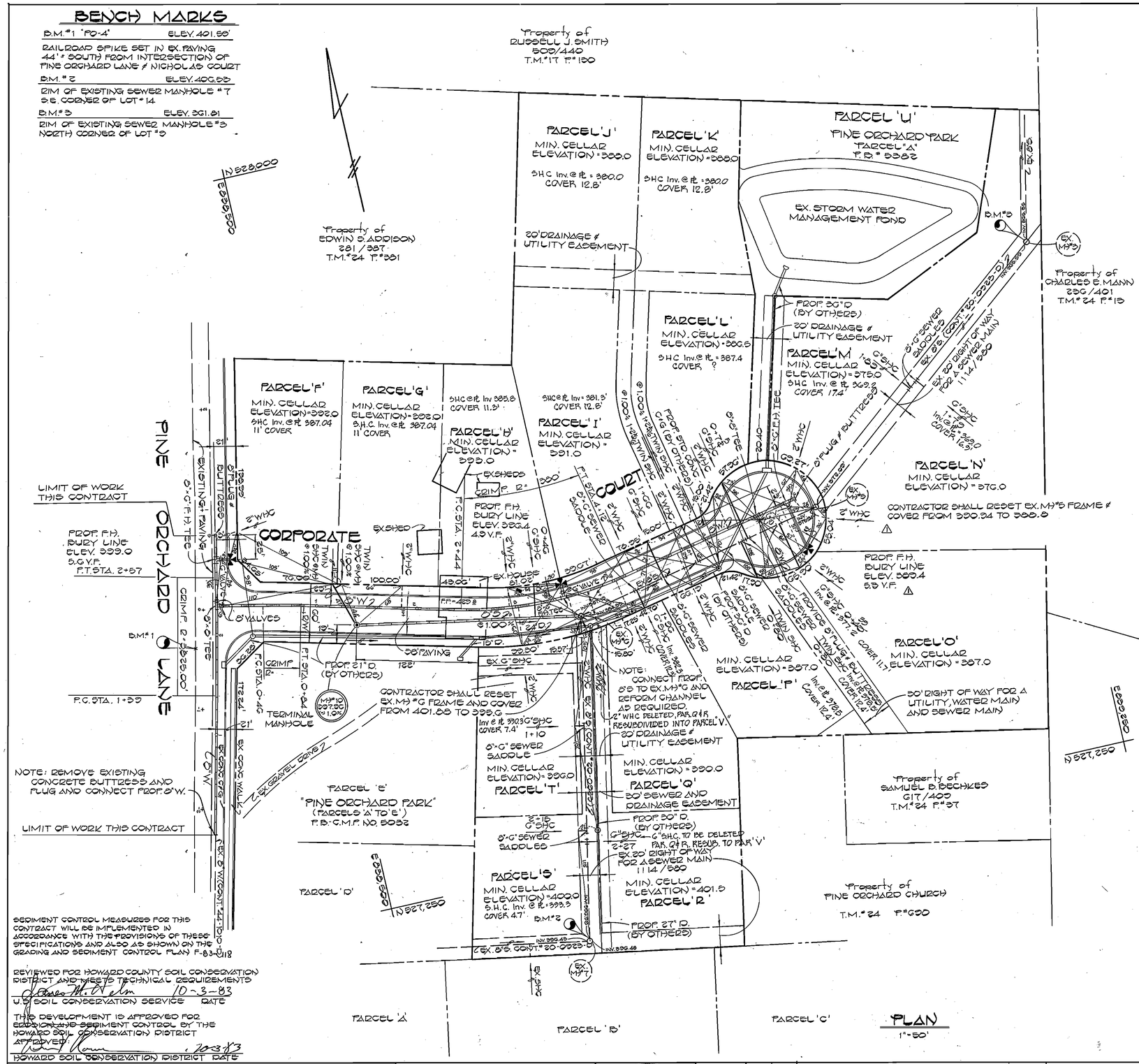
BENCH MARKS

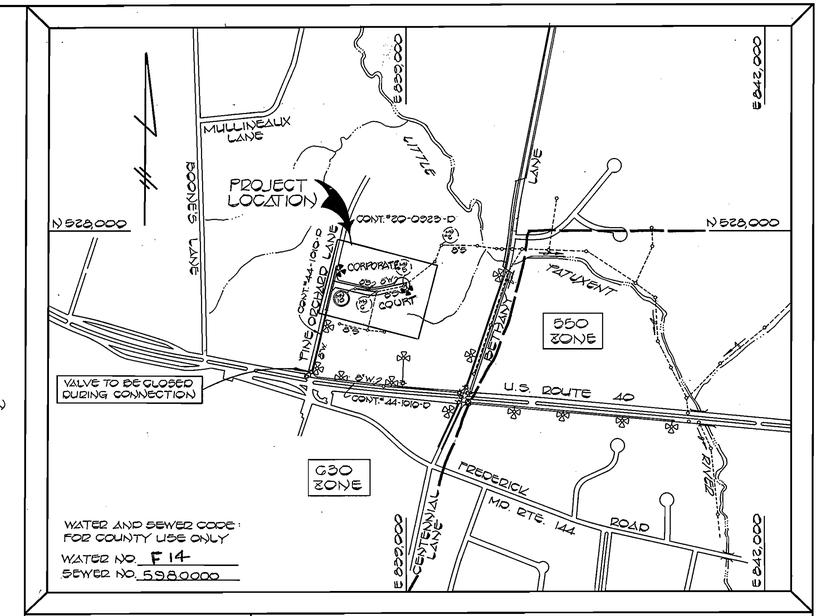
B.M.#1 "PO-4" ELEV. 401.50'
RAILROAD SPIKE SET IN EX. PAVING 44'± SOUTH FROM INTERSECTION OF PINE ORCHARD LANE & NICHOLAS COURT

B.M.#2 ELEV. 400.53
RIM OF EXISTING SEWER MANHOLE #7 S.E. CORNER OF LOT #14

B.M.#3 ELEV. 391.81
RIM OF EXISTING SEWER MANHOLE #3 NORTH CORNER OF LOT #9



PLAN
1"=50'



WATER AND SEWER CODE: FOR COUNTY USE ONLY
WATER NO. F14
SEWER NO. 598.0000

TYPE OF BUILDING:	BUSINESS
NUMBER OF LOTS:	15
NO. OF WATER HOUSE CONN.:	15
NO. OF SEWER HOUSE CONN.:	15
DRAINAGE AREA:	LITTLE PATUXENT

VICINITY MAP
SCALE: 1"=600'

GENERAL NOTES

1. APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. AND DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATIFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.C.& G.S..
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. 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 THE UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
6. FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
7. FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATION.
8. 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.
9. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

   BALTIMORE GAS AND ELECTRIC CO. — UNDERGROUND ELECTRIC DISTRIBUTION
   CUSTOMER SERVICE — (685-0123)
   BALTIMORE GAS AND ELECTRIC CO. — UNDERGROUND GAS DISTRIBUTION
   CUSTOMER SERVICE — (685-0123)
   ENGINEERING - "DAMAGE CONTROL" — (234-5621)
   "MISS UTILITY" — (1-559-0100)
   CHESAPEAKE AND POTOMAC (C & P) TELEPHONE COMPANY — (725-9976)
   BUREAU OF UTILITIES, HOWARD COUNTY — (992-2366)
10. TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREE LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
11. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
12. 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 OPERATION.
13. ALL WATER MAINS TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
14. TOP OF ALL WATER MAINS HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
15. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
16. BLOCK ALL FITTINGS WITH CONCRETE.
17. 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 HYDRANTS TO BE COMPACTED IN ACCORDANCE WITH SECTION 37.01 AND 37.05 OF THE STANDERD SPECIFICATIONS.
18. ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTINS.
19. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
20. ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X., A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
21. THE CONTRACTOR SHALL PROVIDE, A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
22. ALL MANHOLE SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
23. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
24. WATER MAIN AND WATER HOUSE CONNECTION LINE MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
25. FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.

QUANTITIES

ITEM	EST'D	AS-BUILT	SUPPLIER
8" WATER	964 L.F.	900.5 LF	A&P, W&S Supply
6" WATER	80 L.F.	76.5 LF	" " "
8" VALVES	3 EA.	3 EA.	Belair Rd. Supply
6" VALVES	3 EA.	3 EA.	" " "
FIRE HYD.	3 EA.	3 EA.	" " "
2" W.H.C.	500 L.F.	508 LF	" " "
8" SEWER	324 L.F.	220 LF	A&P Water & Sewer
6" SEWER	410 L.F.	386 LF	" " "
8"-6" SEWER SADDLE	11 EA.	11 EA.	Belair Rd. Supply
MANHOLES	1 EA.	1 EA.	Atlantic Precast

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE PROVISIONS OF THESE SPECIFICATIONS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-83-118

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
10-3-83
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
APPROVED: , 20 Oct 83
HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 24-1135-D
PINE ORCHARD PARK (PARCELS F-U)
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	DATE 10-14-83
CHIEF, BUREAU OF ENGINEERING	DATE 10/14/83
CHIEF, BUREAU OF UTILITIES	DATE Robert W. Word for RMB 10/11/83
CHIEF, LAND DEVELOPMENT DIVISION	DATE 10-17-83

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
461-2855

STATE OF MARYLAND — TERRELL A. FISHER — NO. 9757 — REGISTERED PROFESSIONAL ENGINEER
TERRELL A. FISHER DATE 5-6-83

DES:	D.B.S
DRN:	D.B.S.
CHK:	T.A.F.
D.B.S.	△ REVISE FIRE HYDRANT BURY LINE ELEV. IN CORPORATE COURT, REVISE ADJUSTMENT OF M.H.#5 — 5-2-84
DATE:	5-5-83

BY	NO.	REVISION	DATE

PLAN

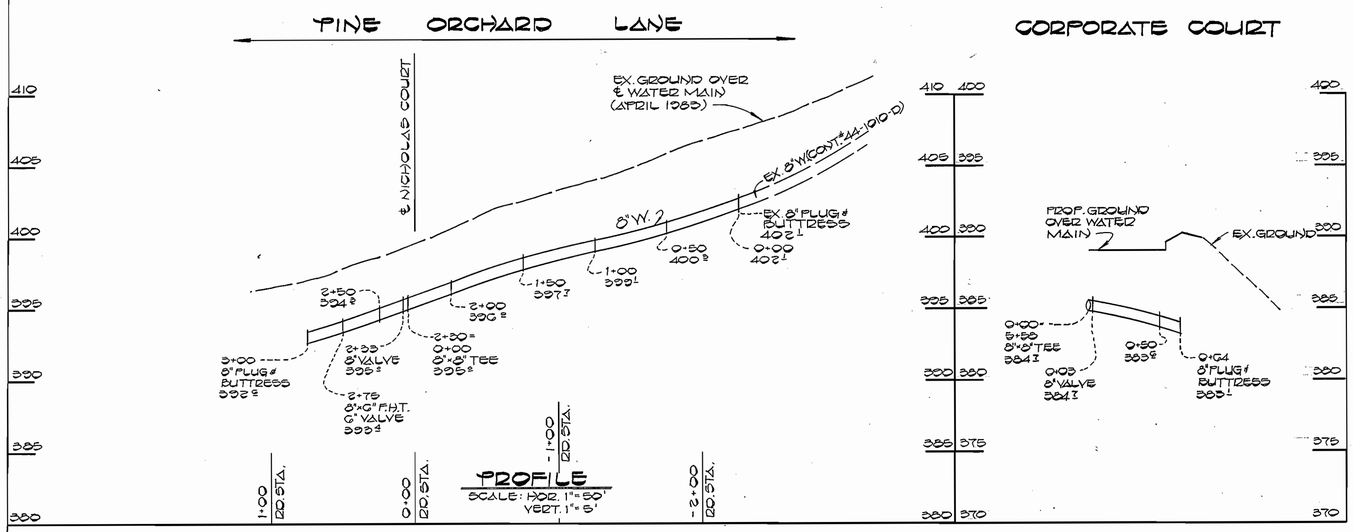
WATER AND SEWER MAINS

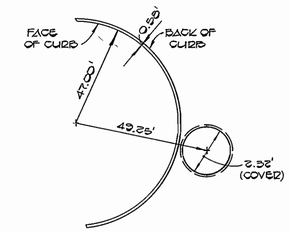
PINE ORCHARD PARK
(PARCELS F-U)
SECTION 2
CONTRACT NO. 24-1135-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

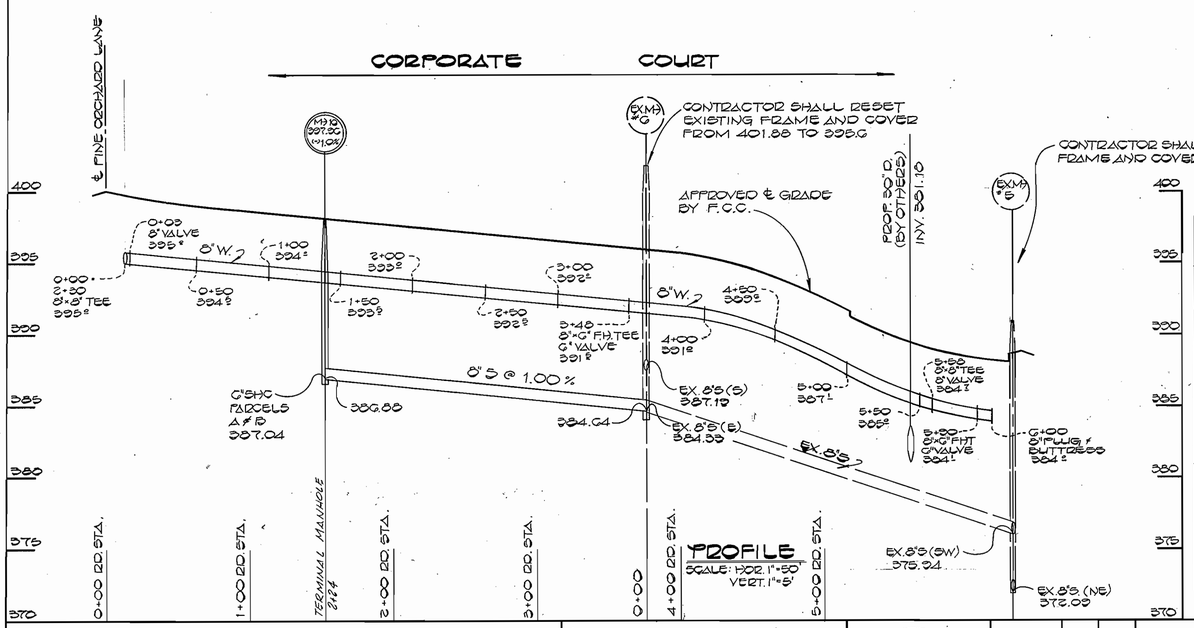
SCALE: AS SHOWN

SHEET 1 OF 2

AS BUILT, JULY, 1984

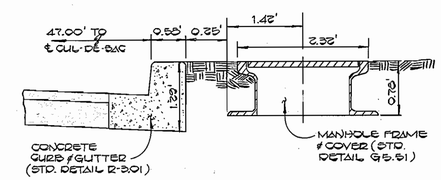






SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

STATION	PARCEL	INVERT
EX. MH #3 TO EX. MH #5		
1+79 LT ✓	PARCEL N	389.34
1+89 RT ✓	PARCEL M	389.~~39~~ 89
EX. MH #5 TO EX. MH #6		
0+38 LT	PARCEL O	378.22
0+78 RT	PARCEL L	378.~~08~~ 69
0+80 LT	PARCEL P AND BEYOND MAP	378.25
1+28 RT	PARCEL J & K	380.38.0
1+66 RT	PARCEL I	384.38.3
1+96 LT	PARCEL Q	382.~~82~~ 83
EX. MH #6 TO EX. MH #7		
1+10 RT	PARCEL T	390.58
2+15 RT	PARCEL S	393.583
~~2+27 RT~~	~~PARCEL R~~	~~393.83~~ (DELETED - SEE PLAN)
EX. MH #6 TO MH #10		
0+46 RT ✓	PARCEL H	385.70 ✓
MH 10	PARCEL F	387.84
MH 10	PARCEL G	387.84



CURB DETAIL AT EX. MH #5
NO SCALE

CONTRACT NO. 24-1135-D
PINE ORCHARD PARK (PARCELS F-U)
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	DATE 10-14-83
CHIEF, BUREAU OF ENGINEERING	DATE 10/14/83
CHIEF, BUREAU OF UTILITIES	DATE 10/11/83
CHIEF, LAND DEVELOPMENT DIVISION	DATE

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
461 - 2855

STATE OF MARYLAND — TERRELL A. FISHER — No. 9157 — REGISTERED PROFESSIONAL ENGINEER — 5/18/83
TERRELL A. FISHER DATE

DES: D.B.S.
DRN: D.B.S.
CHK: T.A.F.
DATE: 5-5-83

BY	NO.	REVISION	DATE
DBS	1	LOWER WATER MAIN INCORPORATE COURT STA. 4+00 TO 0+00 AND 0+50 TO 0+84 ADJUST FINISHED GRADE OF EXISTING MANHOLES ELIMINATE INTERMEDIATE LANDING (MH #2)	3-2-84

PROFILES AND DETAILS
WATER AND SEWER MAINS

PINE ORCHARD PARK
(PARCELS F-U)
SECTION 2
CONTRACT NO. 24-1135-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
SHEET 2 OF 2

AS BUILT JULY, 1984