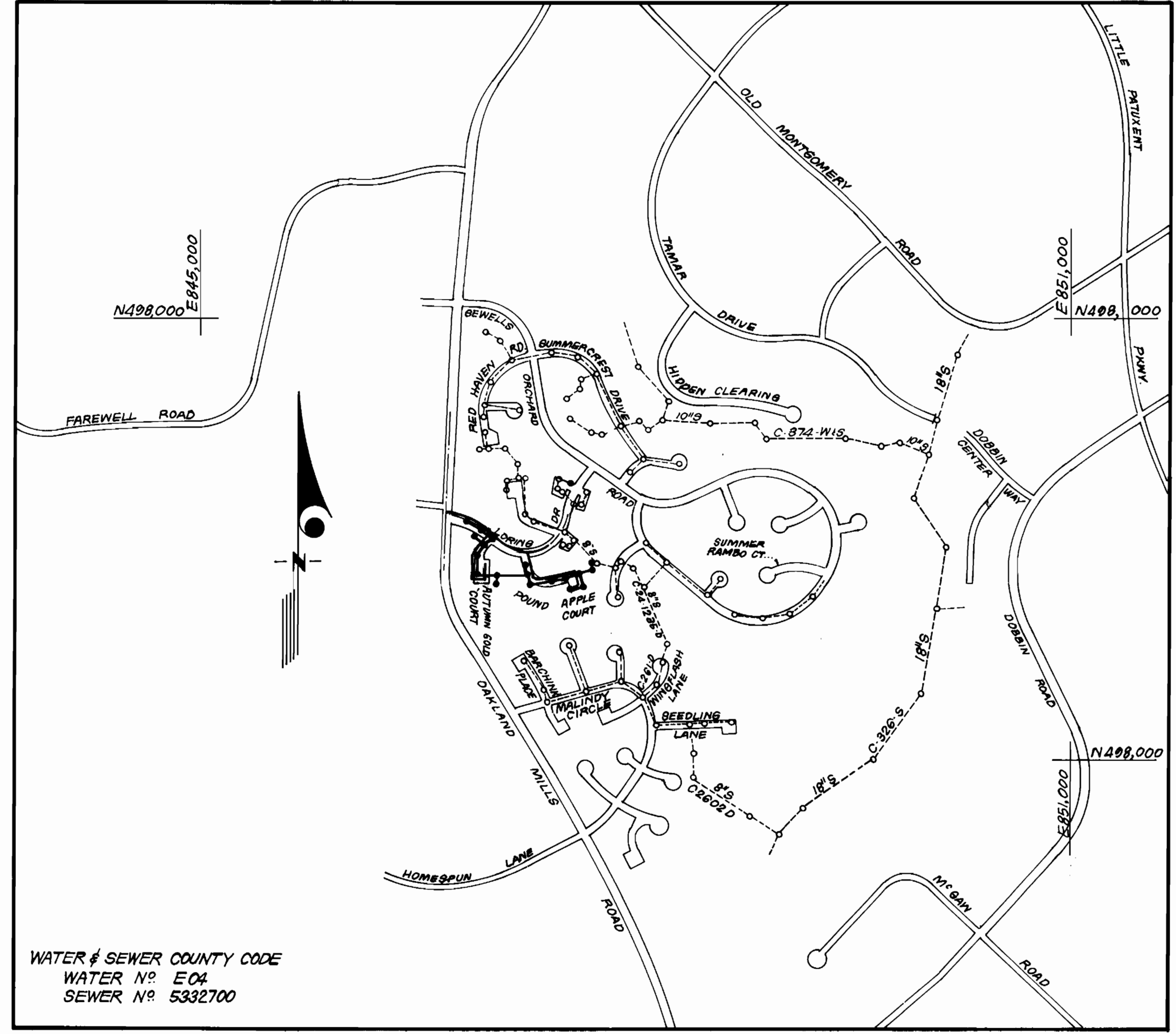


SEWER HOUSE CONNECTION TABLE					
LOTS	Inv. @ R.	Min. C.	LOTS	Inv. @ R.	Min. C.
213/214	377.8	381.0	255/256	377.0	380.8
215/216	377.2	380.4	257/258	373.6	376.8
217/218	368.7	371.9	259/260	373.3	376.5
219/220	368.5	371.7	261/262	372.1	375.3
221/222	367.0	371.1	263/264	373.1	376.3
223/224	367.0	370.2	265/266	374.4	377.6
225/226	365.2	368.5	267/268	372.8	375.9
227/228	365.4	368.7	269/270	372.1	373.2
229/230	367.0	370.2	271/272	372.6	373.6
231/232	367.6	370.8	273/274	371.7	374.9
233/234	368.5	371.7	275/276	371.9	375.1
235/236	368.1	371.3	277/278	372.3	375.5
237/238	372.0	375.2	279/280	372.7	375.9
239/240	370.8	374.0	281/282	373.1	376.3
241/242	368.9	372.1	283/284	373.3	382.5
243/244	369.0	372.2	285/286	385.4	388.0
245/246	369.5	372.7	287/288	384.8	388.0
247/248	370.5	376.5	289/290	384.1	387.3
249/250	371.4	376.4	291/292	383.5	386.7
251/252	370.9	375.9	293/294	377.5	380.7
253/254	377.0	380.2	295/296	378.2	381.4

TYPE OF BUILDING	Townhouses
NUMBER OF UNITS	84
NUMBER OF SHC's	84
NUMBER OF WHO's	84
DRAINAGE AREA	Little Patuxent

**GENERAL NOTES**

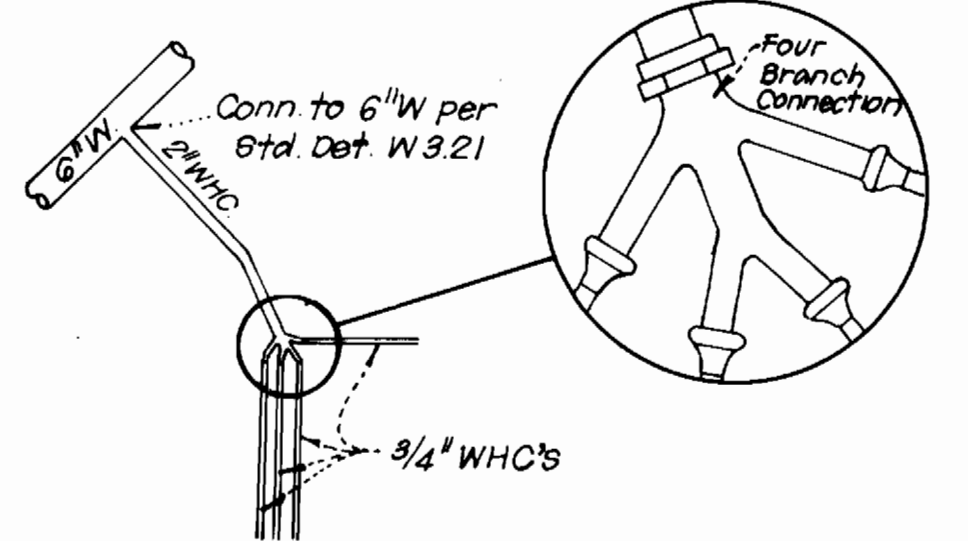
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Inspector, at the contractor's expense.
- All 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. Co. Design Manual, Volume III. The Contractor shall have a copy of Volume III 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 - Contract Services 561-2585
  - Baltimore Gas & Electric Company - Underground Damage Control 234-5021
  - Baltimore Gas & Electric Company - Trouble Shooting 208-9013
  - "Miss Utility" - 1-559-0100
  - Chesapeake & Potomac (C & P) Telephone Company - 725-9976
  - Colonial Pipeline Company - 795-1390
  - 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 D.I.P. 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 Sections 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., or A.C.P. Class 2400 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'.
- For all Copper Water House Connections, utilize flared type fittings only.



VICINITY MAP

WATER & SEWER COUNTY CODE  
 WATER No. E04  
 SEWER No. 5332700

Note: If double strap method is used to connect 2" WHC to main, straps shall be stainless steel.



4-WAY WHC DETAIL

LOTS 225 thru 228 ; LOTS 232 thru 235  
 LOTS 248 thru 251 and LOTS 281 thru 284

Sediment Control Measures will be implemented in accordance with Article No. 15 of the Specifications & with Road Construction Plan F-54-148 ; Drawing , Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.  
 Signature: [Signature] DATE: 5-13-80  
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.  
 APPROVED: [Signature] DATE: 5/13/86  
 Howard S.C.D. DATE

CONTRACT NO. 24-1431-D W&S  
 SEWELLS ORCHARD  
 SECTION 3 AREA 3  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS



QUANTITIES			
ITEM	EST 'MD	AS-BUILT	MATERIAL/SUPPLIER
8" DC TYPE 'B'	1 EA	1	
8" S	2,112 LF	1848	SDR-35 PVC / J.M. Manufacturing
6" W	584 LF	584	Class 52 D.I.P. / GRIFFIN
8" W	1,553 LF	1,553	Class 52 D.I.P. / GRIFFIN
4" MH	20 EA.	20	ATLANTIC PRECAST I
FH	5 EA.	5	5/4" #29 FIRE HYDRANT, 4" BRANCH M.H. VALVE CO.
6" SHC	1,588 LF	1835	SDR-35 / J.M. Manufacturing
2" WHC	185 LF.	-	
1" WHC	405 LF	800	TYPE K COPPER DRINKING HALSTEAD METALS
3/4" WHC	1,526 LF.	1526	TYPE K COPPER DRINKING HALSTEAD METALS
6" V (excl. FHV)	2 EA.	2	#1067 METRO PATENT 3-WAY VALVE M.H. VALVE CO.
1 1/2" Drain	2 EA.	2	BRASS CLOSE NIPPLE / TRENTON
8" V.	2 EA.	2	82-2000 Ball Valve #8 7000 CORROSION FORD #1067 METRO PATENT 3-WAY VALVE M.H. VALVE CO.
12" x 8" T.S.I.V.	1 EA	2	12" x 8" Tapping Sleeve, 6" Low 9" Metro. Pat. Tapping Valve M.H. VALVE CO.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 [Signature] DATE: 5-14-80  
 DIRECTOR OF PUBLIC WORKS  
 [Signature] DATE: 5-8-80  
 CHIEF, BUREAU OF UTILITIES

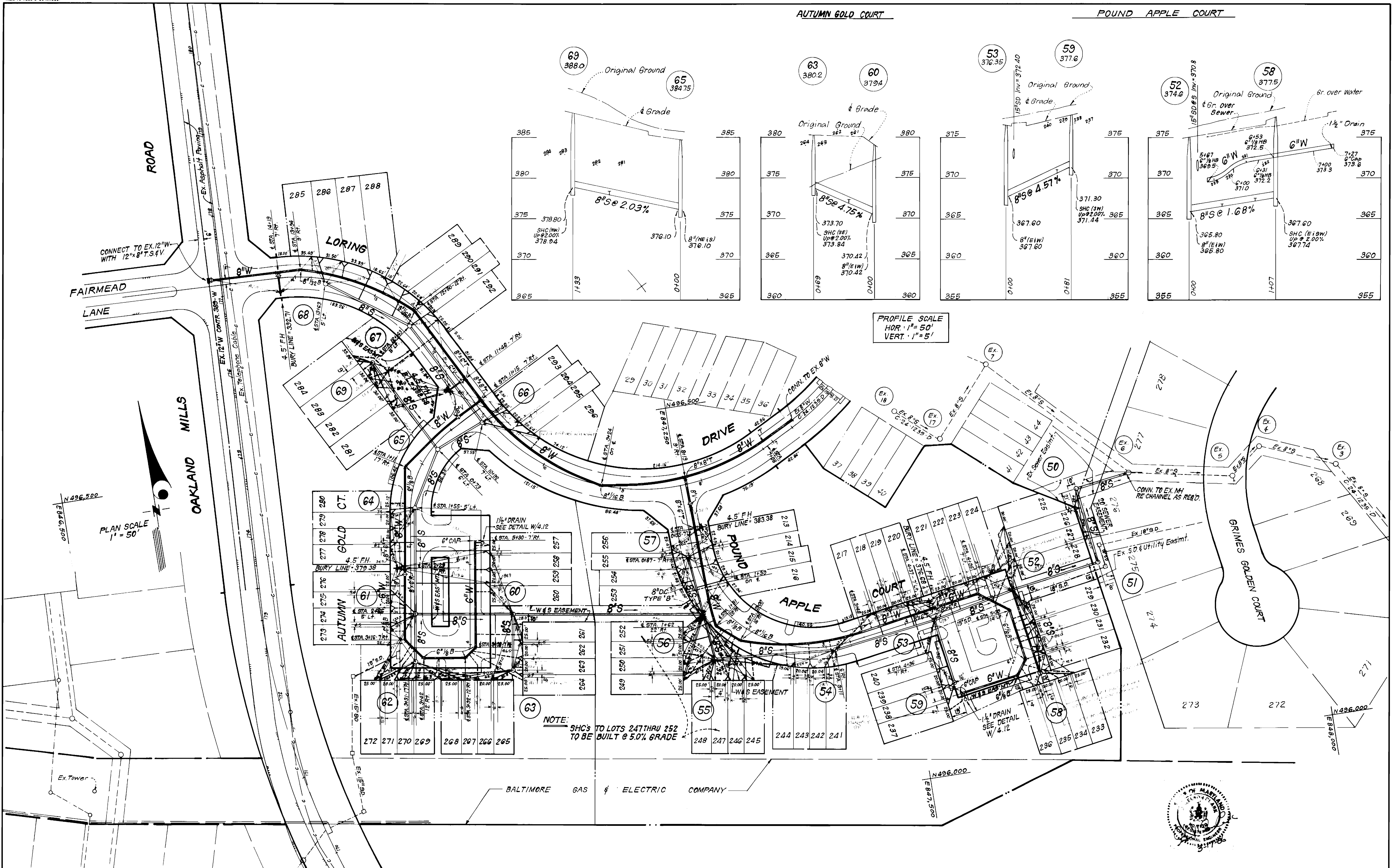
[Signature] DATE: 5-14-80  
 CHIEF, BUREAU OF ENGINEERING  
 [Signature] DATE: 5-13-86  
 CHIEF, LAND DEVELOPMENT DIV.

CLARK FINEPROCK & SACKETT  
 ENGINEERS - PLANNERS - SURVEYORS  
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904  
 (301) 993-3400

DES:			
DRN:			
CHK:			
DATE:	BY	NO.	REVISION

TITLE SHEET  
 600' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

SEWELLS ORCHARD  
 SECTION 3 AREA 3, LOTS 212-301  
 6TH ELECTION DISTRICT  
 CONTRACT NO. 24-1431-D  
 SCALE: 1" = 600'  
 SHEET 1 OF 3



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

[Signature] 5-15-96  
 DIRECTOR OF PUBLIC WORKS DATE  
 [Signature] 5-2-96  
 CHIEF, BUREAU OF UTILITIES DATE

[Signature] 5-15-96  
 CHIEF, BUREAU OF ENGINEERING DATE  
 [Signature] 5-15-96  
 CHIEF, LAND DEVELOPMENT DIV. DATE

**CFE** CLARK · FINEPROCK & SACKETT  
 ENGINEERS · PLANNERS · SURVEYORS  
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904  
 (301) 593-3400

DES:	VLM	1	Added 1/2" Drain to profile.	7-24-96
DRN:				
CHK:				
DATE:	BY	NO.	REVISION	DATE

PLAN & PROFILES OF  
 WATER & SEWER MAINS

600' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

SEWELLS ORCHARD  
 SECTION 3 AREA 3, LOTS 212-301  
 6TH ELECTION DISTRICT  
 CONTRACT NO. 24-1431-D

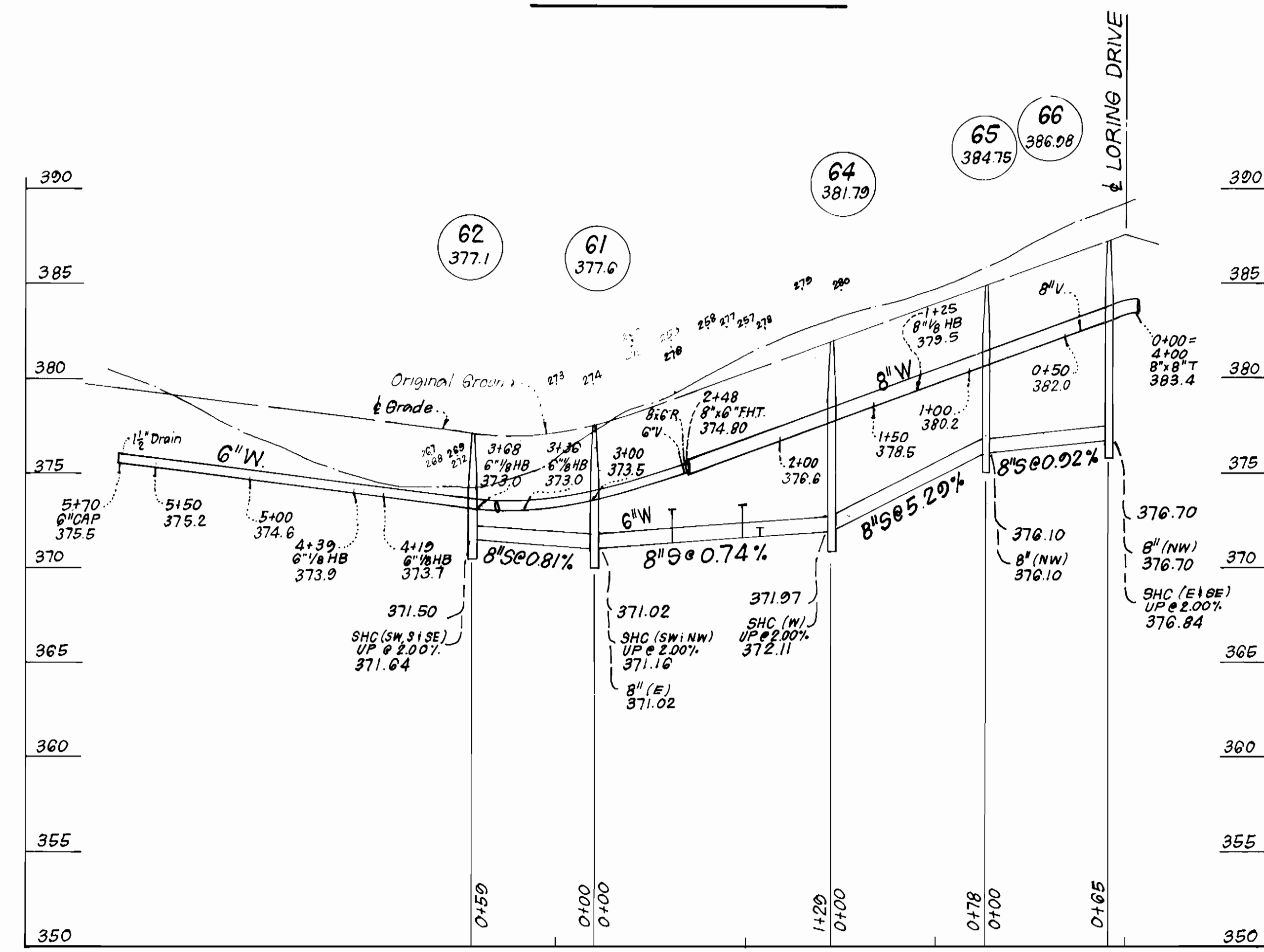
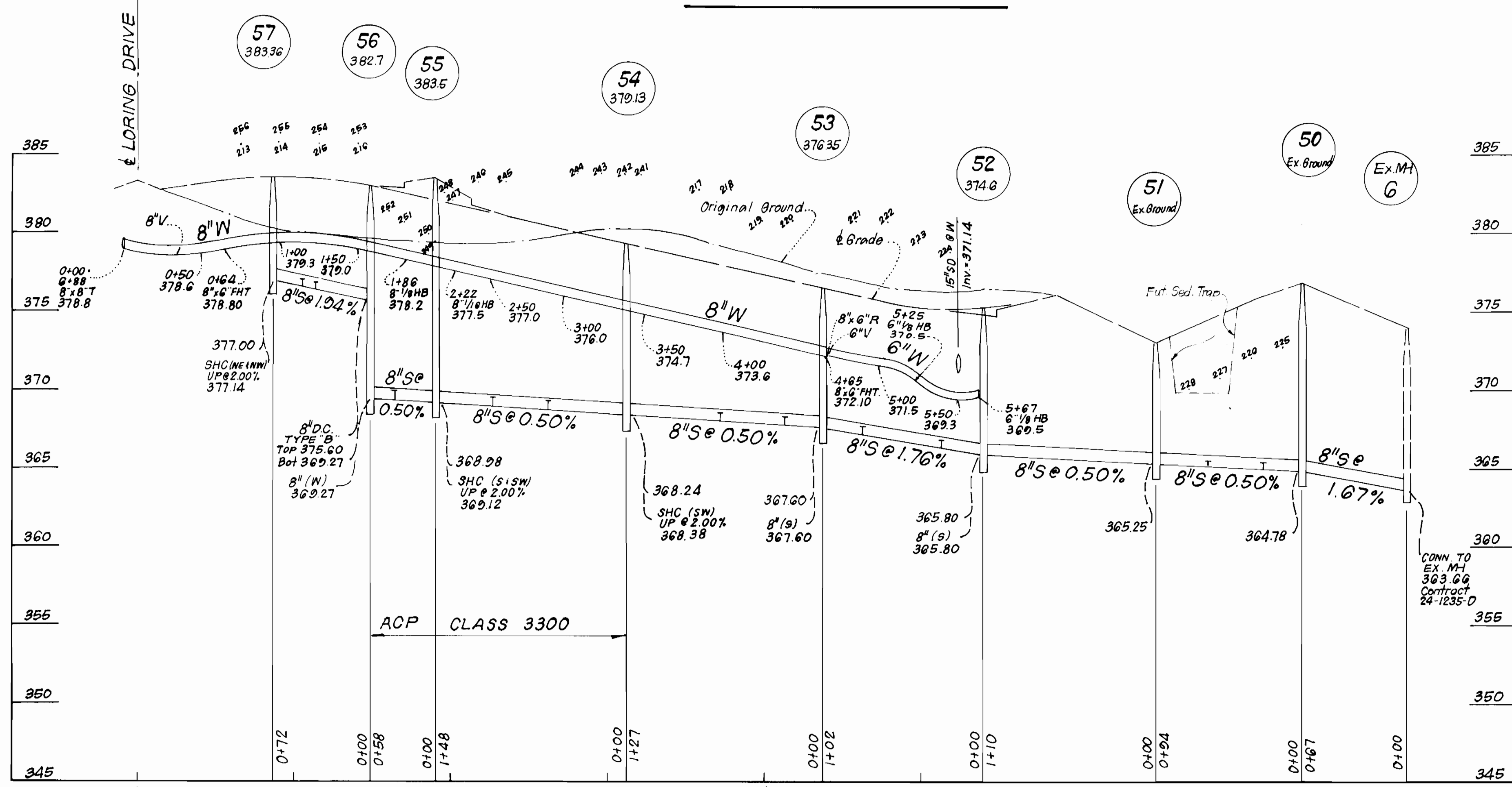
SCALE AS SHOWN

SHEET 2 OF 3



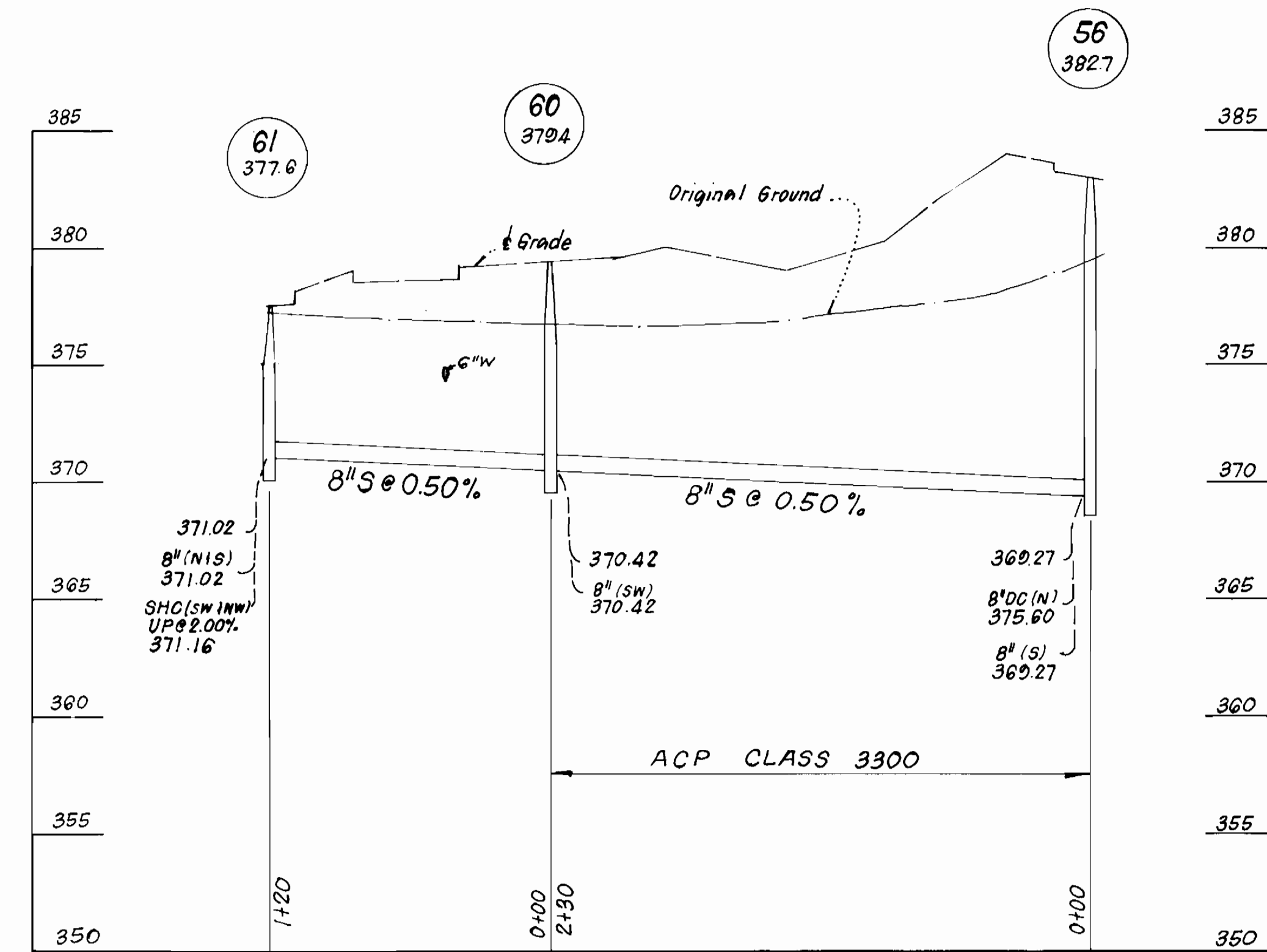
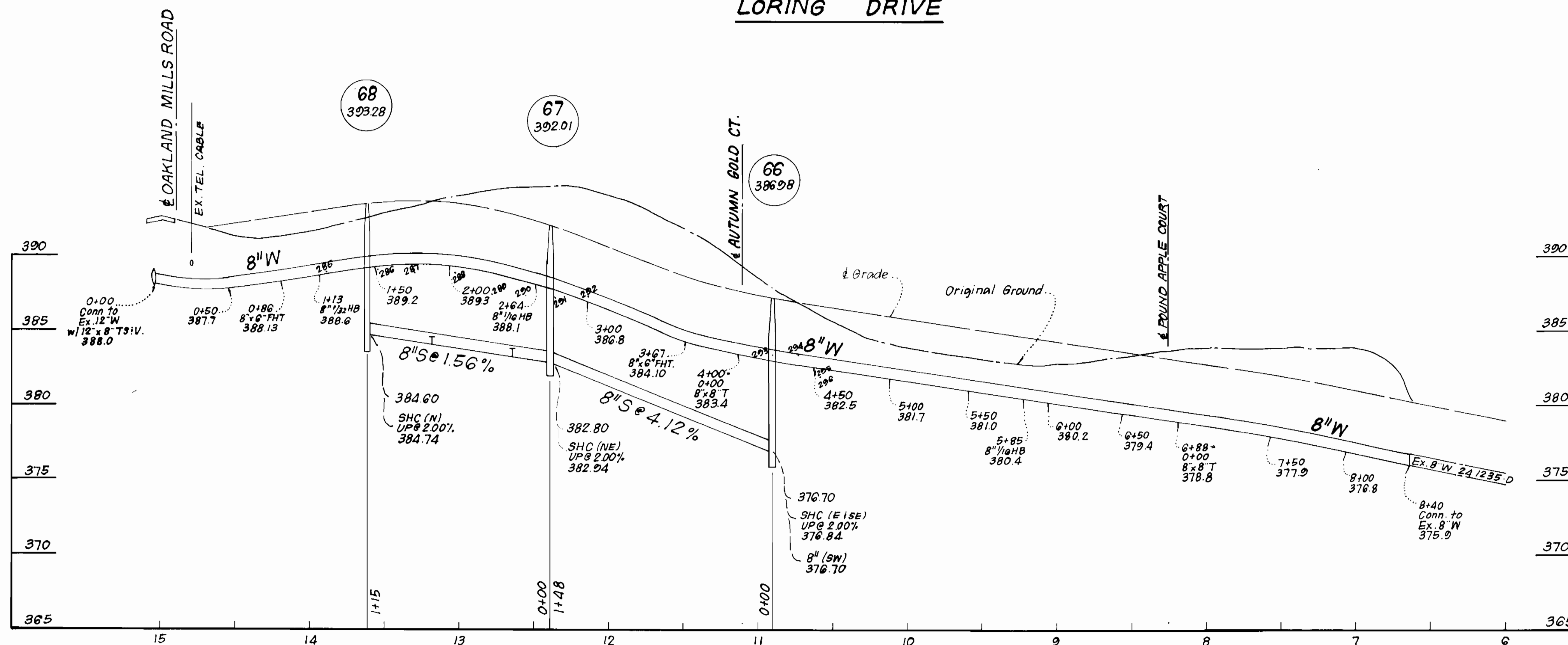
POUND APPLE COURT

AUTUMN GOLD COURT



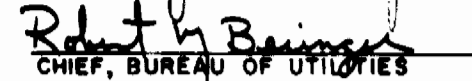



PROFILE SCALE  
HOR. 1" = 50'  
VERT. 1" = 5'

LORING DRIVE



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

 DATE 5-15-86  
 DATE  
 DATE 5-8-86  
 DATE

 CLARK - FINEROCK & SACKETT  
 ENGINEERS - PLANNERS - SURVEYORS  
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904  
 (301) 593-3400



DES:	VLM /	Added bands to profiles & removed 1/2" drain.	7/24/86
DRN:			
CHK:			
DATE:	BY	NO.	REVISION

PROFILES OF  
WATER & SEWER MAINS

SEWELLS ORCHARD  
 SECTION 3 AREA 3, LOTS 212 - 301  
 6<sup>TH</sup> ELECTION DISTRICT  
 CONTRACT NO. 24-1431-D

SCALE  
 AS  
 SHOWN  
 SHEET  
 3 OF 3