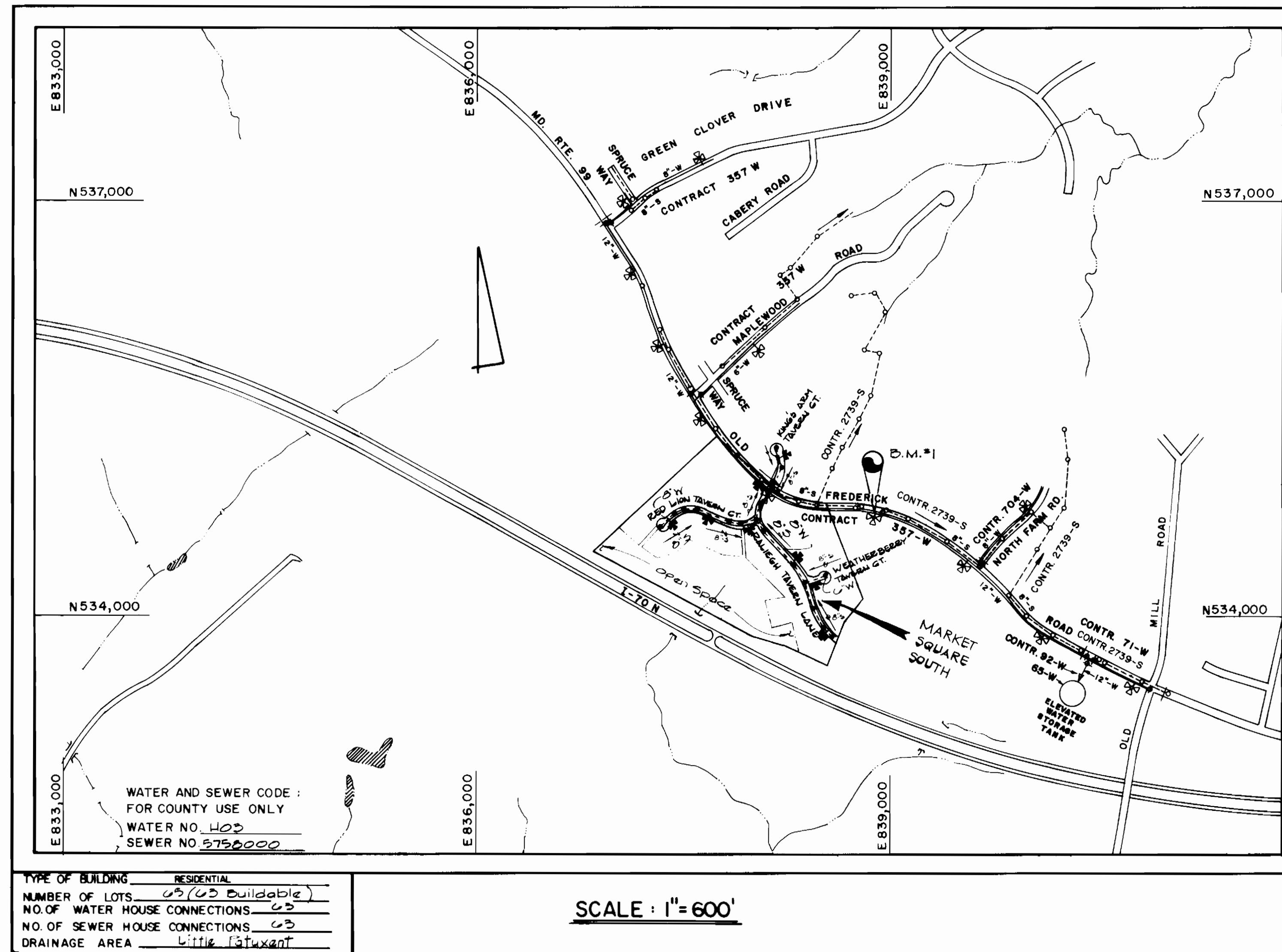


ITEM	QUANTITY		SUPPLIER
	ESTIMATED	AS-BUILT	
8" WATER	2103 L.F.	2103.0 L.F.	ATLANTIC STATES C.I.P. - TYTON PIPE
6" WATER	203 L.F.	319.5 L.F.	ATLANTIC STATES C.I.P. - TYTON PIPE
1" WATER HOUSE CONN.	950 L.F.	418.5 L.F.	A.P. - VINCENT BRASS VINCENT BRASS
3/4" WATER HOUSE CONN.	830 L.F.	1044.5 L.F.	A.P. - VINCENT BRASS VINCENT BRASS
RELOCATED F.H.	1 EACH	1 EA.	
8" VALVE	2 EACH	2 EA.	A+P - MUELER CO.
8"x6" F.H. TEE & VALVE	7 EACH	7 EA.	A+P - MUELER CO.
6" VALVES (EXCLUDING F.H.'S)	1 EACH	1 EA.	A+P - MUELER CO.
8" SEWER	2248 L.F.	2182.0 L.F.	A+P - SPANTANEE'S A+P - SPANTANEE'S
6" SEWER	1500 L.F.	1697.5 L.F.	A+P - SPANTANEE'S A+P - SPANTANEE'S
MANHOLES	15 EACH	15 EA.	ATLANTIC STATES ATLANTIC STATES
1 1/2" BLOW-OFF	2 EACH	2 EA.	A+P - MUELER CO.
1 1/2" WATER	80 L.F.	84 L.F.	A+P - VINCENT BRASS VINCENT BRASS
FIRE HYDRANT (EXC. BELOW)	6 EACH	6 EA.	A+P - MUELER CO.
20" STEEL CASING PIPE	30 L.F.	36 L.F.	



**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. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6".
- 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. 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 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: 561-2585
  - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL: 234-5621
  - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING: 298-9013
  - MISS UTILITY: 1-559-0100
  - COLONIAL PIPELINE COMPANY: 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS: 992-2366
- 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 LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO 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 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 SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPED FITTINGS ONLY.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- WATER MAINS AND WATER HOUSE CONNECTION LINES 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.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL 65-52 WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL 65-51.
- SEWER HOUSE CONNECTIONS FOR LOTS 12, 3, 4/5, 6, 35, 37, 38, 39, 40 & 41 SHALL BE ENCASED 20 L.F., 10 L.F. ON BOTH SIDES OF THE SEWER HOUSE CONNECTION FROM ITS PASSING OVER THE WATER MAIN.

**CONTRACT NO. 24-1424-D**  
**MARKET SQUARE SOUTH**  
**WATER AND SEWER MAIN EXTENSIONS**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F00-02

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*James M. Vela* 12-11-85  
US SOIL CONSERVATION SERVICE DATE

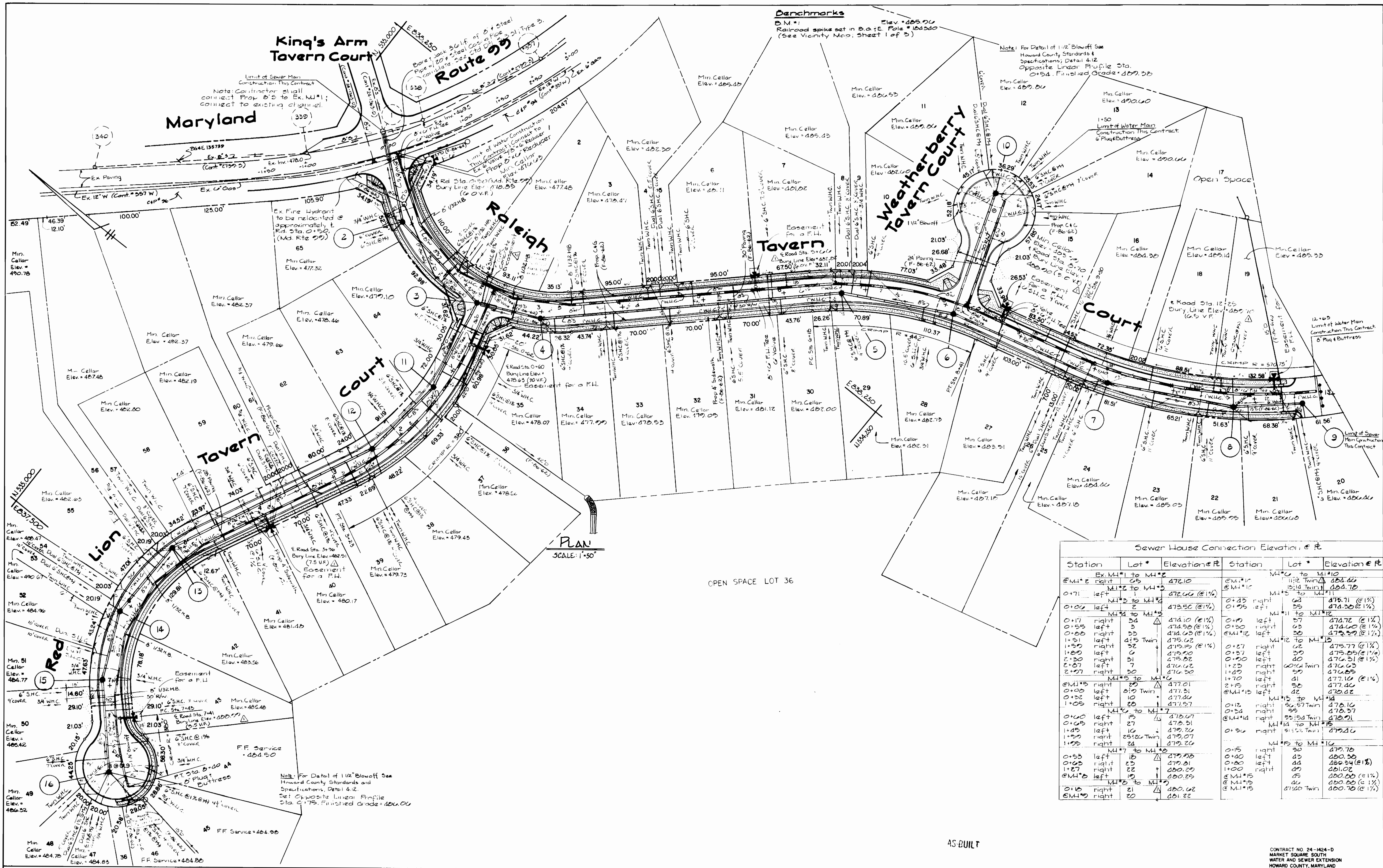
THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:  
*Stephen J. ...* 12-11-85  
HOWARD SOIL CONSERVATION DISTRICT DATE

AS-BUILT

CONTRACT NO. 24-1424-D  
MARKET SQUARE SOUTH  
WATER AND SEWER EXTENSION  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James M. Vela</i> 12/11/85 DIRECTOR OF PUBLIC WORKS DATE <i>William ...</i> 12-11-85 CHIEF, BUREAU OF UTILITIES DATE		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 		DES. DEV. <input checked="" type="checkbox"/> DRN. J.A.H. <input checked="" type="checkbox"/> CHK. T.A.F. DATE: 10/28/85	REVISION BY NO. DATE	TITLE SHEET 600' SCALE MAP NO. 17 BLOCK NO.	MARKET SQUARE SOUTH CONTRACT NO. 24-1424-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 3
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Sewer House Connection Elevation @ E

Station	Lot #	Elevation @ E	Station	Lot #	Elevation @ E
Ex. M1 to M2	25	472.10	Ex. M1 to M10	10	482.40
M1 to M2	25	472.10	M1 to M10	10	482.40
0+71 left	1	473.00 (0.1%)	0+23 right	28	475.71 (0.1%)
0+00 left	2	473.50 (0.1%)	0+05 left	25	474.30 (0.1%)
0+17 right	34	474.10 (0.1%)	0+19 left	27	474.72 (0.1%)
0+55 left	3	474.50 (0.1%)	0+30 right	25	474.00 (0.1%)
0+00 right	33	474.03 (0.1%)	Ex. M1 to M2	25	472.10
1+51 left	2	475.02	0+27 right	22	475.77 (0.1%)
1+50 right	32	475.15 (0.1%)	0+37 left	20	475.25 (0.1%)
1+30 left	31	475.22	0+50 right	20	476.31 (0.1%)
2+30 left	7	476.22	1+23 right	20	476.03 (0.1%)
2+27 right	30	476.20	1+70 right	21	476.05
Ex. M1 to M2	25	472.10	1+70 left	21	477.10 (0.1%)
0+00 right	20	477.01	2+15 right	20	477.00
0+02 left	10	477.21	Ex. M1 to M2	25	472.10
0+02 right	20	477.24	0+12 right	25	476.16
1+05 left	20	477.27	0+34 right	25	476.37
0+00 left	15	478.07	Ex. M1 to M2	25	472.10
0+05 right	27	478.21	0+30 right	25	476.00
1+45 left	10	479.20	0+55 left	20	479.70
1+50 right	25	479.27	0+40 left	25	480.30
1+05 right	24	479.20	0+80 left	22	480.34 (0.1%)
0+55 left	18	479.25	1+00 right	20	481.02
0+60 right	23	479.21	Ex. M1 to M2	25	472.10
1+27 right	22	480.20	0+15 left	20	480.00 (0.1%)
Ex. M1 to M2	25	472.10	0+15 right	20	480.00 (0.1%)
0+15 right	21	480.02	0+15 left	20	480.00 (0.1%)
Ex. M1 to M2	25	472.10	0+15 right	20	480.00 (0.1%)

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]*  
Date: 12-13-85

Chief, Bureau of Utilities: *[Signature]*  
Date: 12-13-85

**FISHER, COLLINS AND CARTER INC.**  
CONSULTING ENGINEERS AND LAND SURVEYORS

3838 COURT AVENUE  
ELLICOTT CITY, MARYLAND 21113

*[Signature]*  
Date: 12/28/85

DES: DEV	REV. 1	Revise Minimum Cellar for lots 3 through 34 to reflect changes in Profile on Sheet 2 of 3. Revise Bury Line Elevations of Stack lengths along Raleigh Tavern Court Road Lion Tavern Court to reflect changes in Profile on Dist. of B. Revise S.L.C. Elev. @ E in table on sheet 2 of 3.	2/10/86
DRN: JAH	REV. 2	Enclose 3" (5" to 2" to 2" to M1 to M10) and enclose Sewer House Connection; See Gen. Note #2.	2/10/86
CHK: TAF			
DATE: 12/28/85	BY: NO.	REVISION	DATE

**PLAN**

**WATER AND SEWER MAINS**

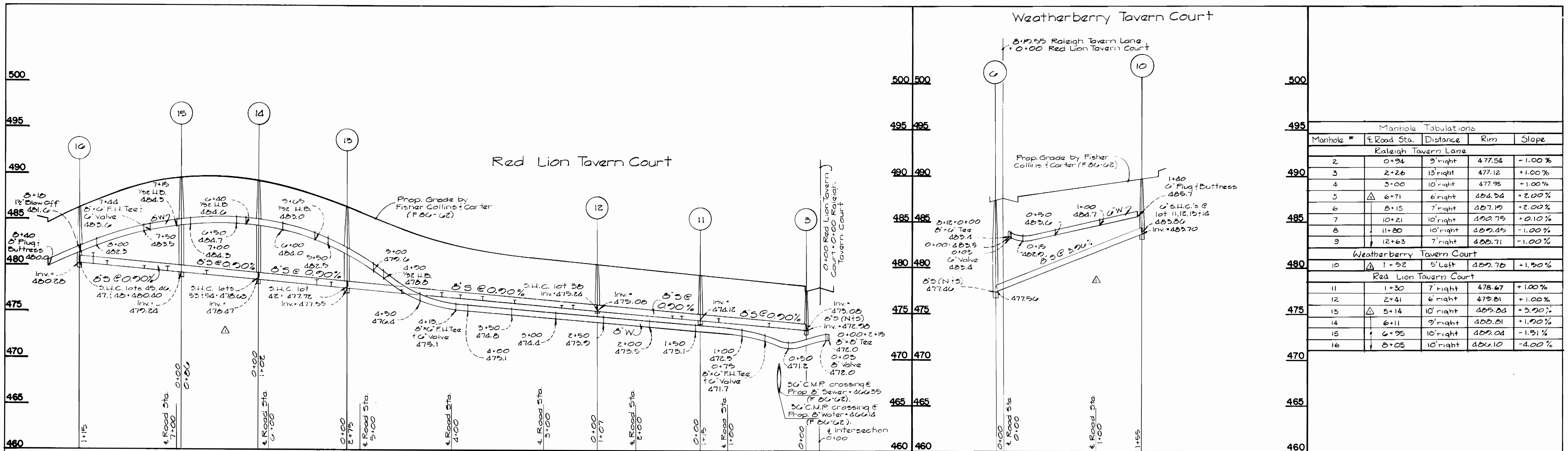
600' SCALE MAP NO. 12 BLOCK NO. \_\_\_\_\_

**MARKET SQUARE SOUTH**

CONTRACT NO. 24-1424-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 2 OF 3

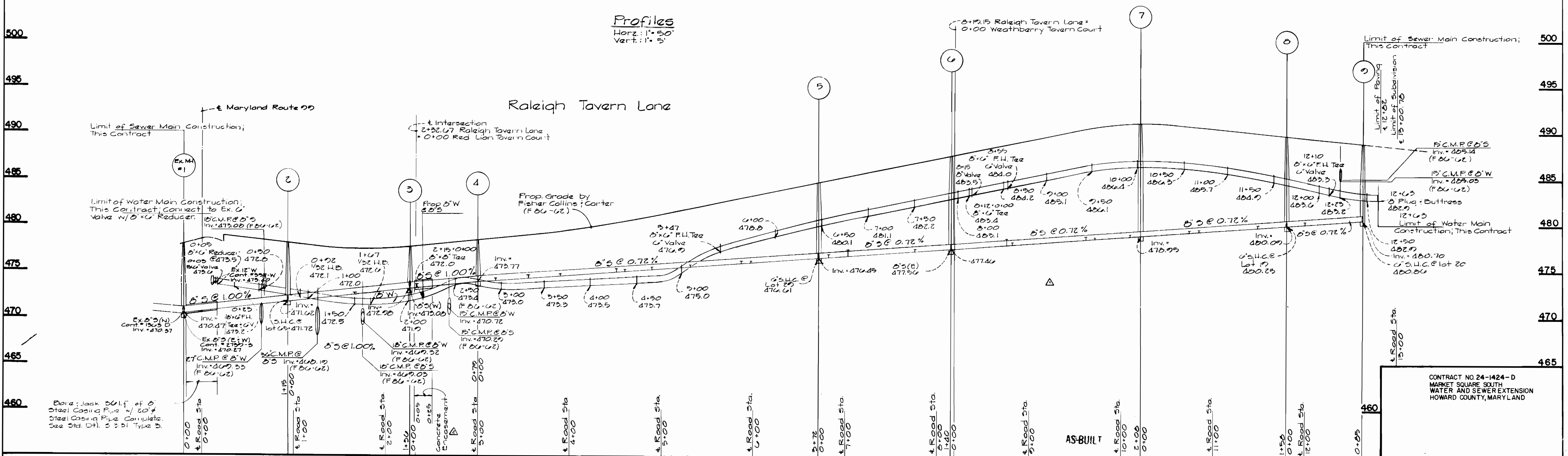
AS BUILT 1 15 76 ULLT 2/24/84



Manhole Tabulations				
Manhole #	Road Sta.	Distance	Rim	Slope
Raleigh Tavern Lane				
2	0+94	9' right	477.54	-1.00%
3	2+26	13' right	477.12	+1.00%
4	3+00	10' right	477.95	+1.00%
5	6+71	6' right	484.34	+2.00%
6	8+15	7' right	487.19	+2.00%
7	10+21	10' right	482.75	+0.10%
8	11+80	10' right	480.45	-1.00%
9	12+63	7' right	480.71	-1.00%
Weatherberry Tavern Court				
10	1+52	5' Left	489.70	+1.50%
Red Lion Tavern Court				
11	1+30	7' right	478.67	+1.00%
12	2+41	6' right	479.81	+1.00%
13	5+14	10' right	485.84	+3.00%
14	6+11	9' right	488.81	+1.00%
15	6+35	10' right	480.04	-1.51%
16	8+05	10' right	484.10	-4.00%

For Plan View of Profiles Shown; See Sheet 2 of 3

Profiles  
 Horiz.: 1" = 50'  
 Vert.: 1" = 5'



CONTRACT NO. 24-1424-D  
 MARKET SQUARE SOUTH  
 WATER AND SEWER EXTENSION  
 HOWARD COUNTY, MARYLAND

<b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND Director of Public Works: James M. Law Chief, Bureau of Engineering: [Signature] Chief, Bureau of Utilities: [Signature]		<b>FISHER, COLLINS AND CARTER, INC.</b> CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 Terrell A. Fisher		DES: DEV DRN: DEV CHK: TAF DATE: 10/28/85		<b>PROFILES</b> WATER AND SEWER MAINS		<b>MARKET SQUARE SOUTH</b> CONTRACT NO. 24-1424-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 3 OF 3
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AS-BUILT 7-15-86 2/24/89