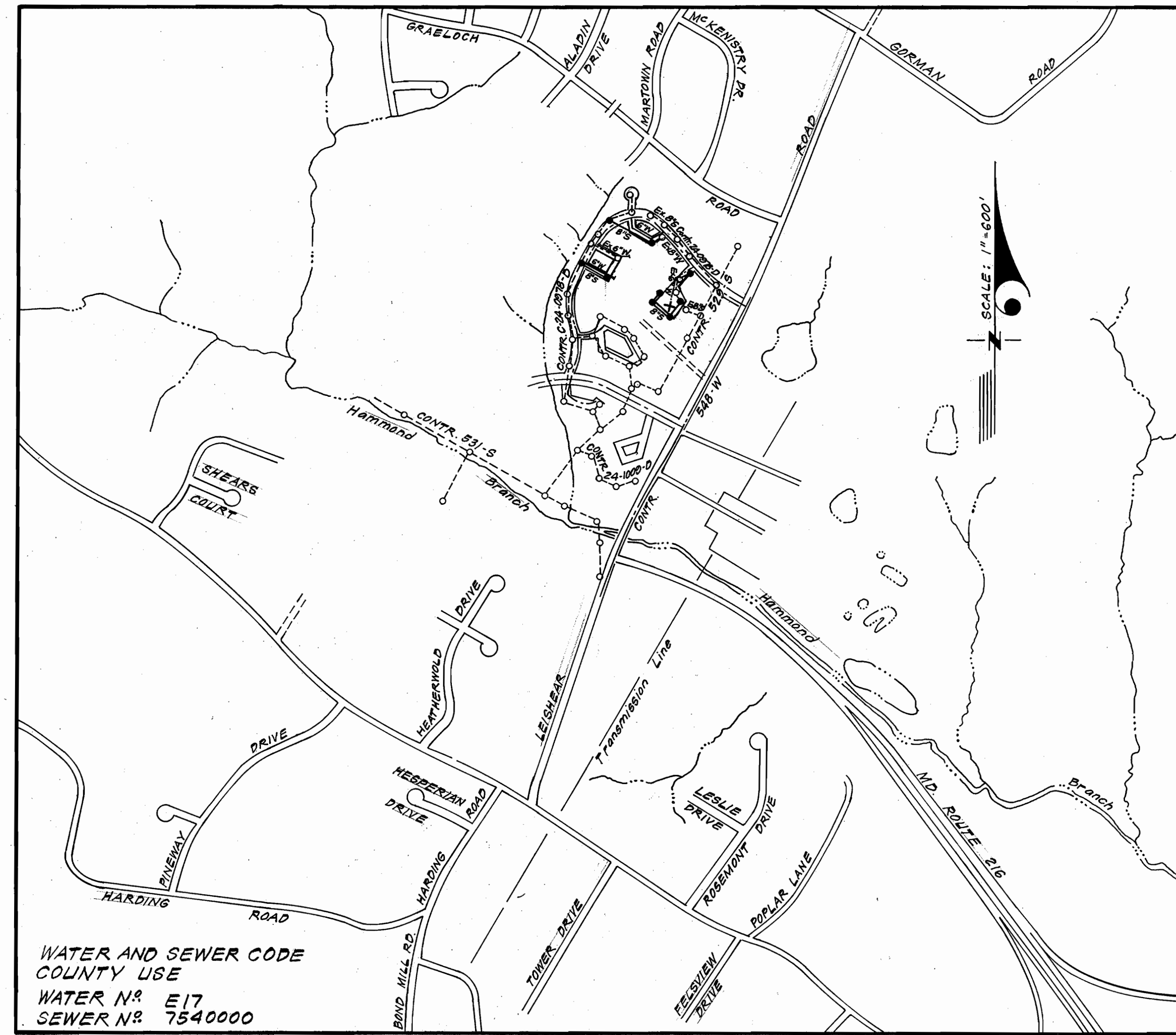


Type of Buildings	Town House
Number of Lots	76
Number of Water House Connections	76
Number of Sewer House Connections	76
Drainage Area	Little Patuxent



WATER AND SEWER CODE
COUNTY USE
WATER N^o E17
SEWER N^o 7540000

VICINITY MAP
SCALE: 1" = 600'

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.
- 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 - Underground Electric Distribution Customer Service - 685-0123
 - Baltimore Gas & Electric Company - Underground Gas Distribution Customer Service - 685-0123
 - Engineering - Damage Control - 234-5621
 - Miss Utility - 1-559-0100
 - Chesapeake & Potomac (C & P) Telephone Company - 725-9976
 - American Telephone and Telegraph - Cable Location Division - 393-3553
 - Colonial Pipeline Company - 781-4641
 - 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. or 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 Section 5-15 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'.
- Existing connections that are to be abandoned are marked thus: (A). See special provisions for requirements for abandonment and for utilizing existing connections.
- Sewer House Connections that are to be shortened are marked thus: (S). Remove existing pipe within proposed lot.

Sediment Control Measures will be implemented in accordance with Article No. 15 of the Specifications & with Road Construction Plan F.82-113; Drawing 3, Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

James M. Lavin 5-28-82
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:
William J. Rowe 5-28-82
Howard S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James M. Lavin Chief Bureau of Engineering - DATE
Robert M. Switzer 6-4-82 Chief Bureau of Utilities - DATE
CHIEF BUREAU OF UTILITIES - DATE CHIEF LAND DEVELOPMENT - DATE

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

CONTRACT NO. 24-1058 D W&S

MURRAY HILL

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

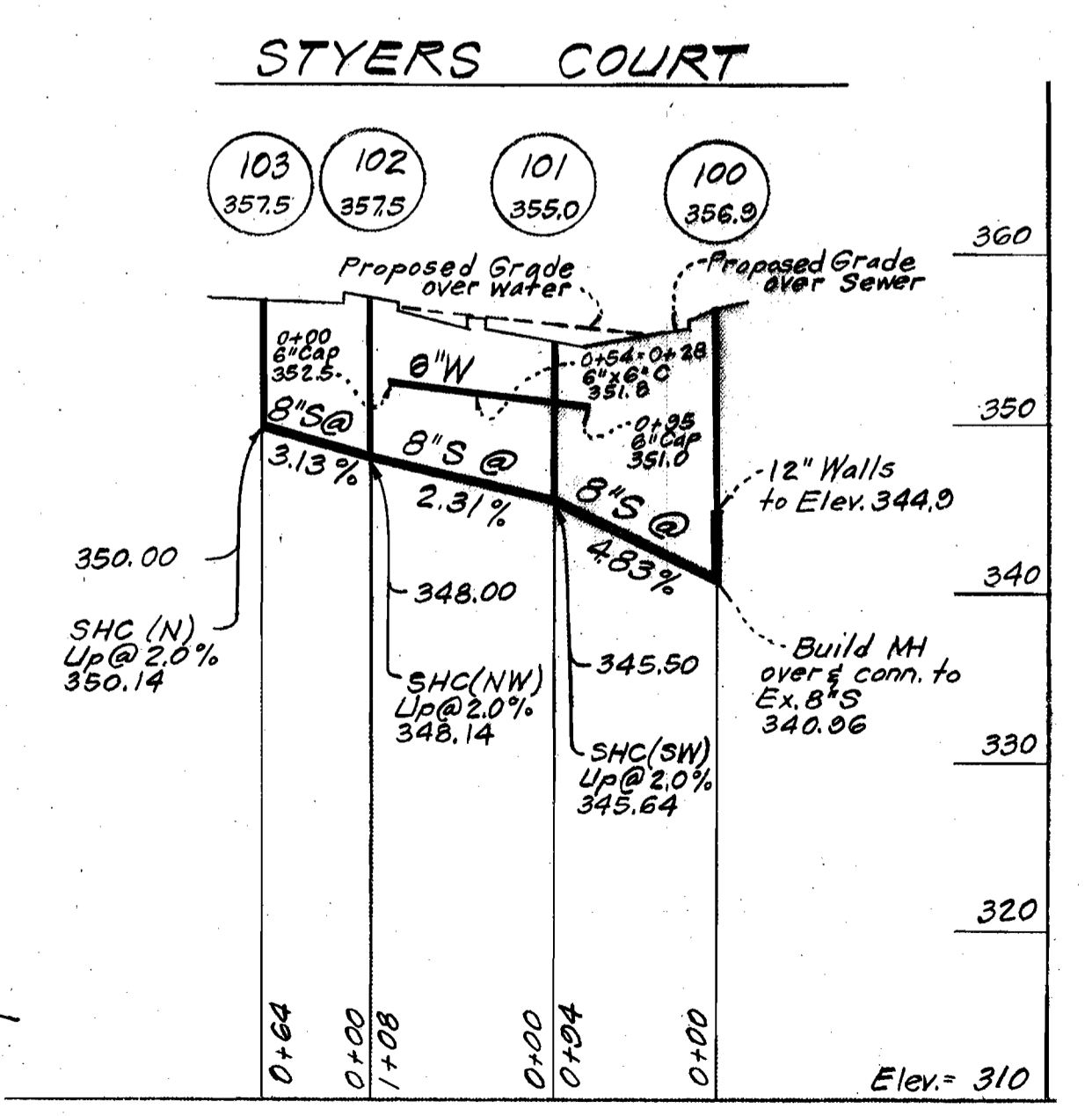
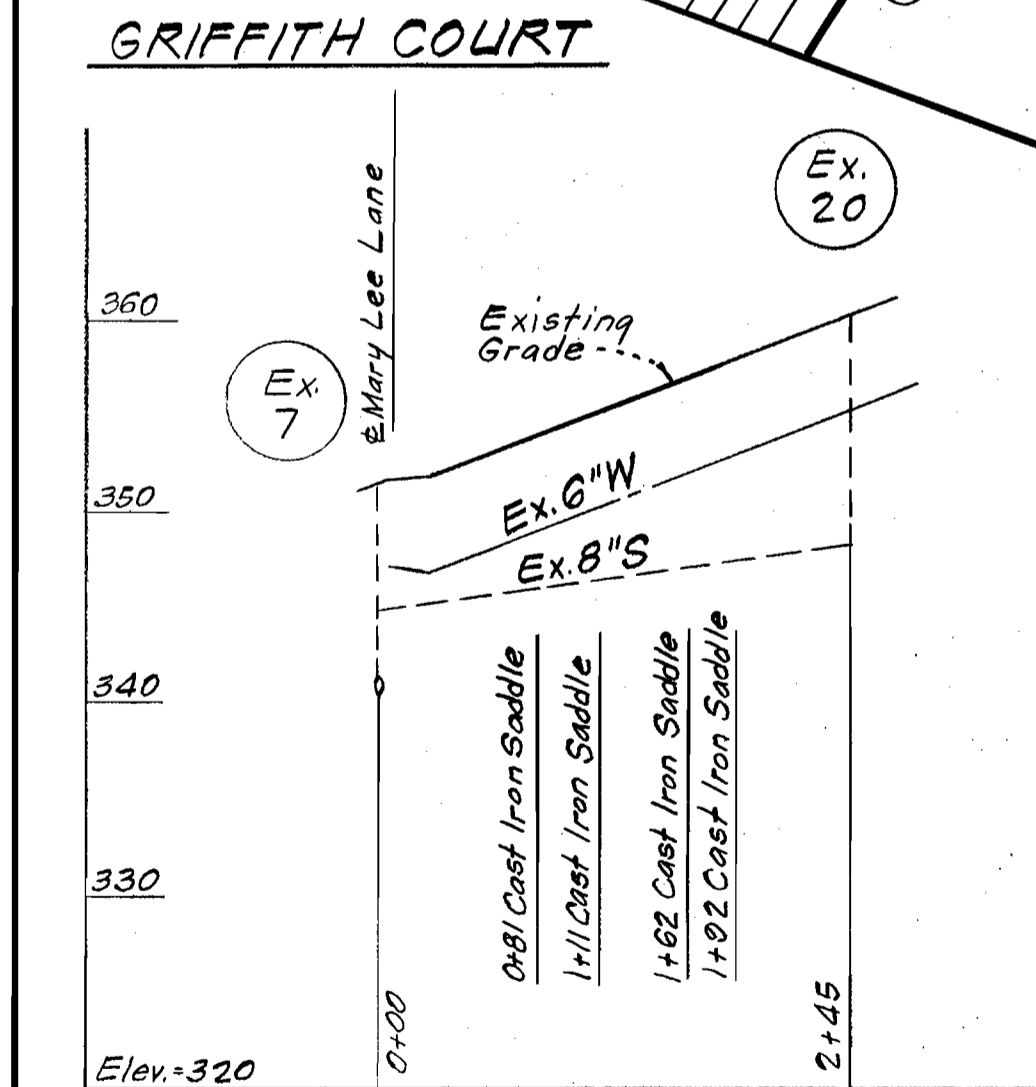
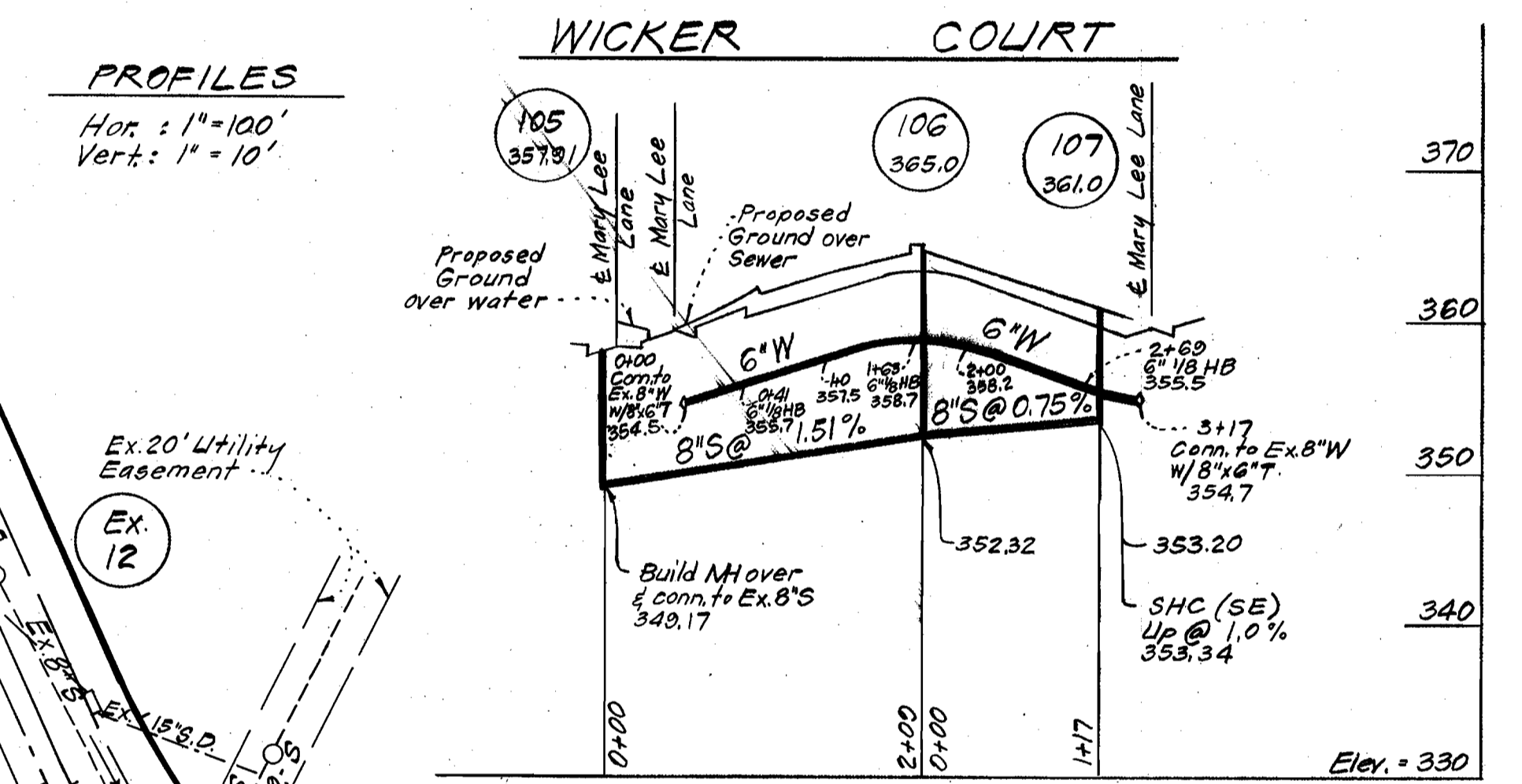
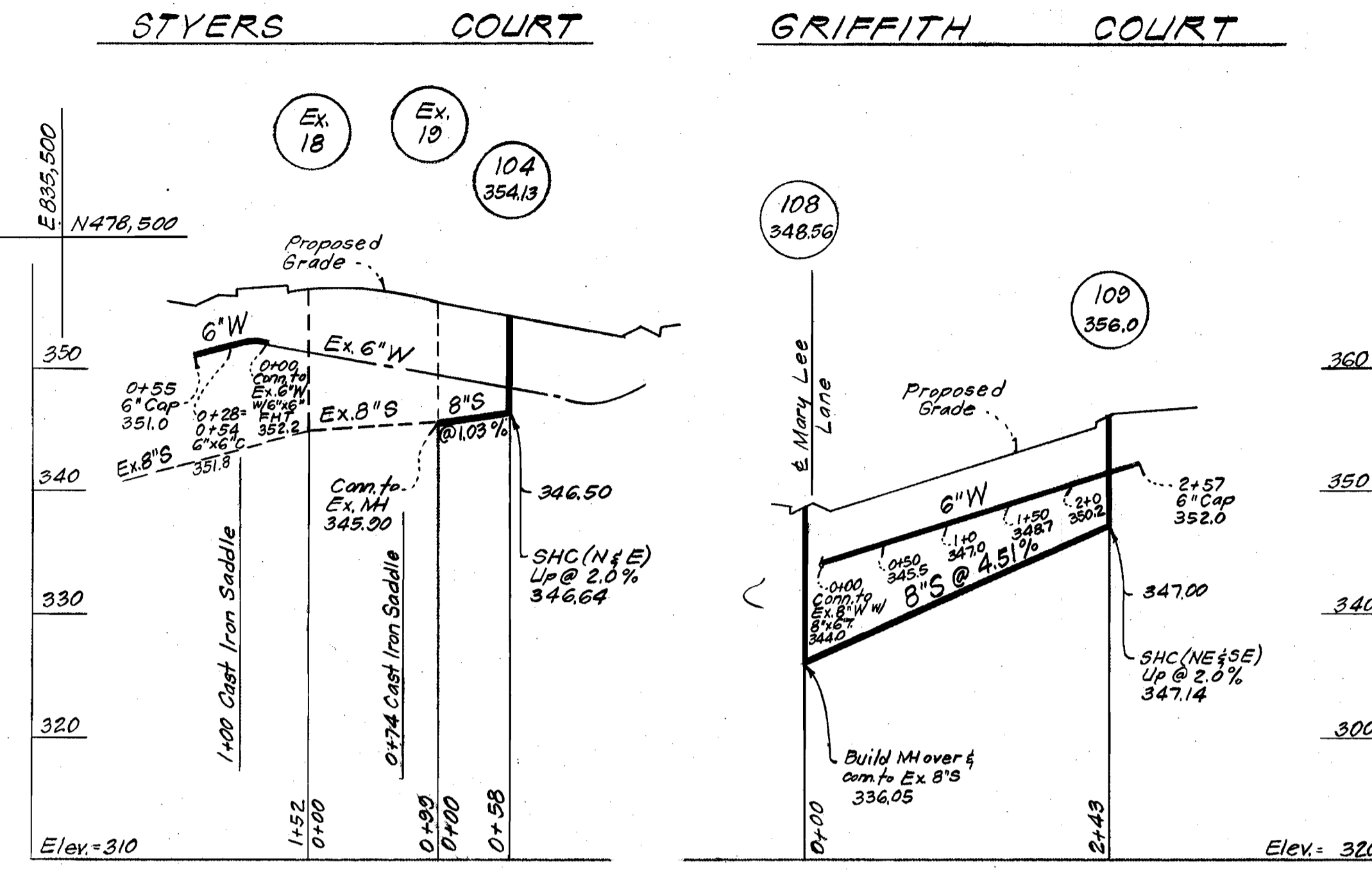
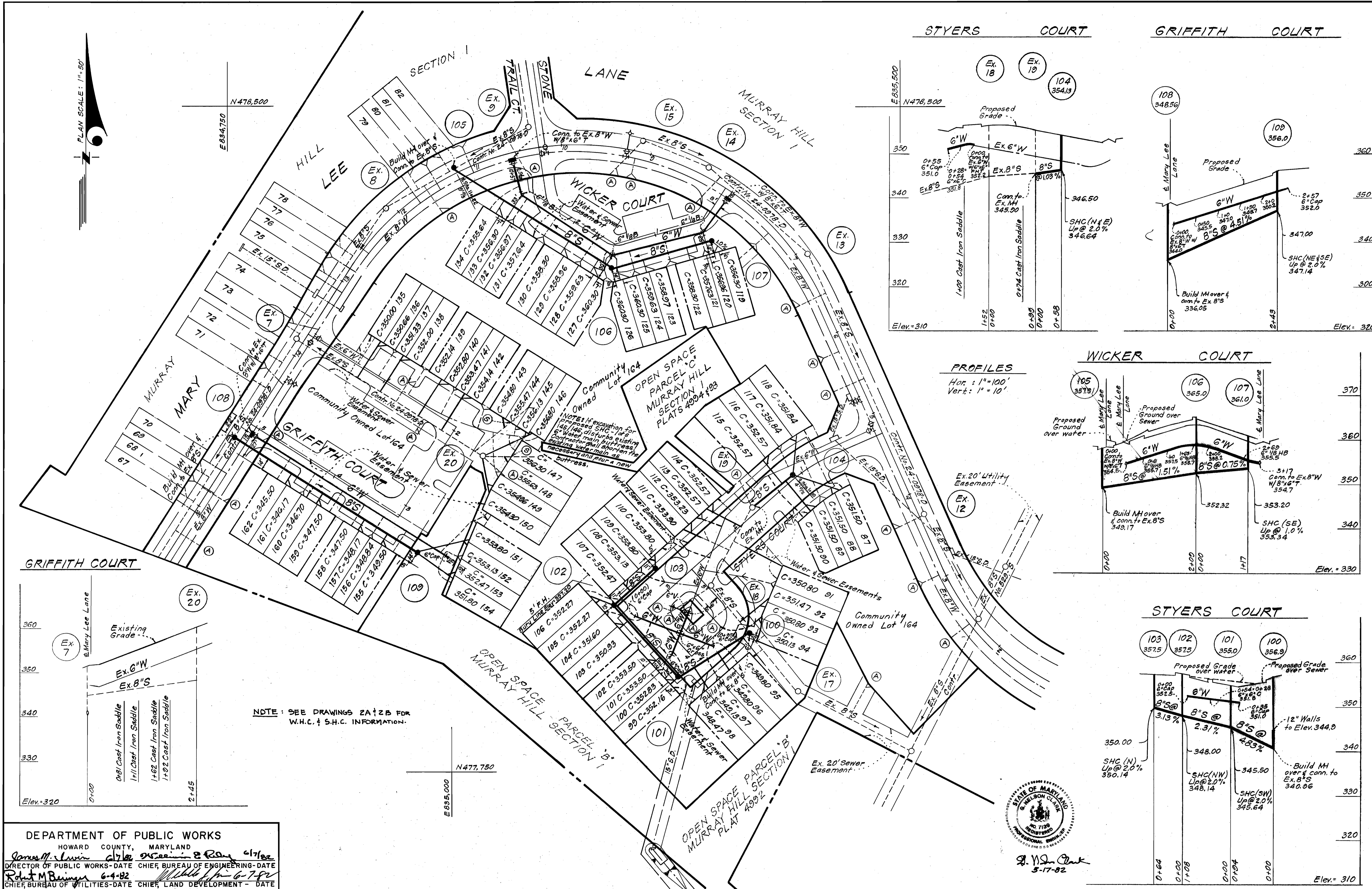


QUANTITIES			
ITEM	BID	AS-BUILT	MATERIALS/SUPPLIER
6" W	724	719	D.I.P. / GRIFFIN
8" S	893	852	V.C.P. / SUPERIOR
F.H.	1	1	M&H

MURRAY HILL
SECTION I
LOTS 87 THRU 162
RESUBDIVISION OF LOTS 1 THRU 38
C. 24-1058-D

CONTRACT NO. 24-1058-D	TITLE SHEET	MURRAY HILL SECTION ONE 6TH ELECTION DISTRICT	DRAWING NO. 1 OF 2	SCALE As Shown
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1058/2 WS



NOTE: SEE DRAWINGS 2A & 2B FOR W.H.C. & S.H.C. INFORMATION.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James M. Lewis City Engineer
Robert M. Bringer Chief, Bureau of Utilities

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

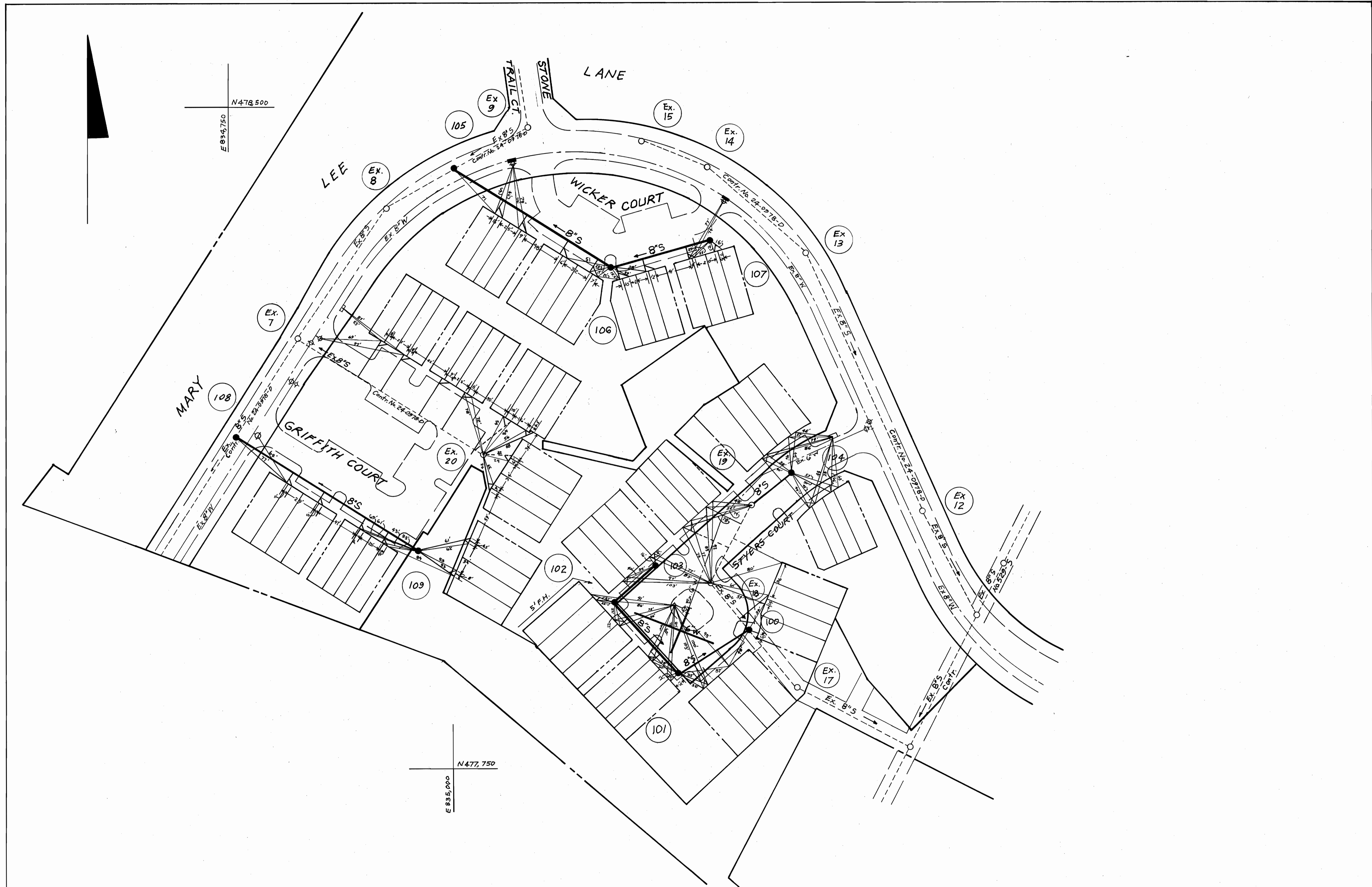
CONTRACT NO. 24-1058-D

PLAN & PROFILES OF WATER & SEWER MAINS

MURRAY HILL SECTION ONE
6TH ELECTION DISTRICT

DRAWING NO. 2 OF 2
SCALE As Shown

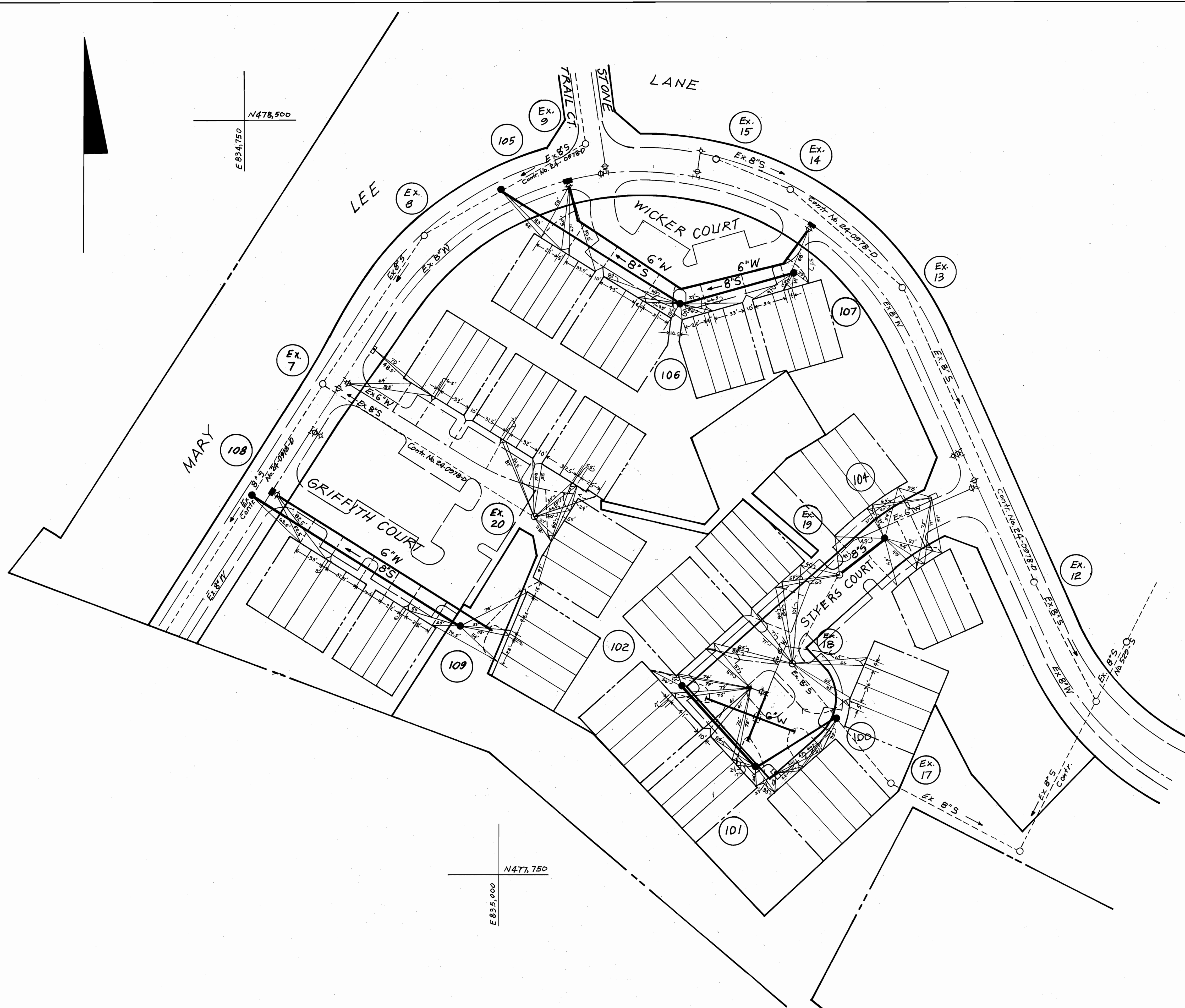
1058/2A WS



	CONTRACT NO. <u>24-1058-D</u>	SEWER HOUSE CONNECTIONS - AS-BUILT	MURRAY HILL SECTION ONE 6TH ELECTION DISTRICT	DRAWING NO. <u>2A</u> OF <u>2</u>	SCALE 1"=50'
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AS-BUILT OCT. 18, 1982

1058/2B WS



N478,500
E834,750

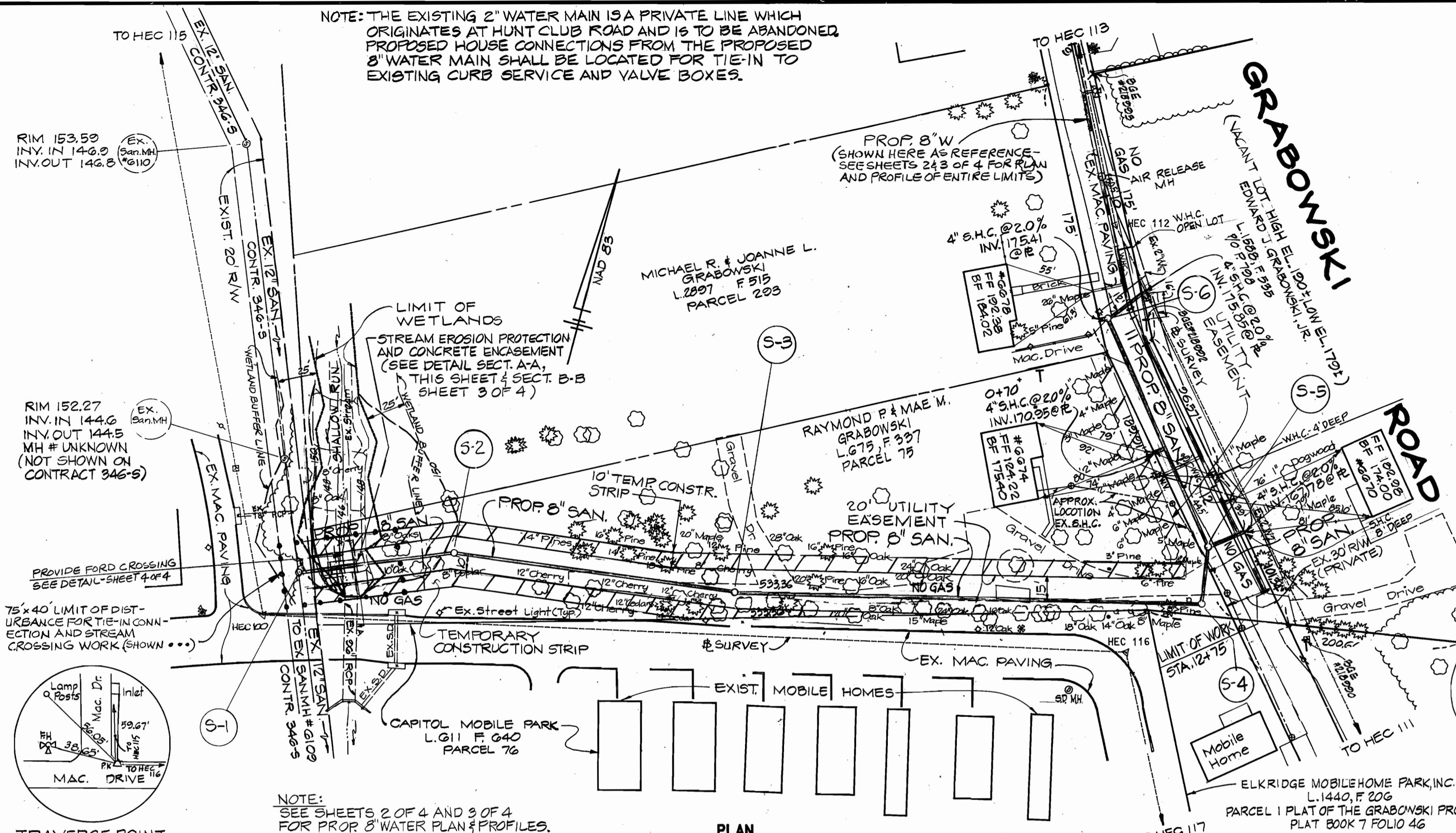
N477,750
E835,000

		CONTRACT NO. <u>24-1058-D</u>	WATER HOUSE CONNECTIONS AS-BUILT	MURRAY HILL SECTION ONE 6 TH ELECTION DISTRICT	DRAWING NO. <u>2B</u> OF <u>2</u>	SCALE 1"=50'
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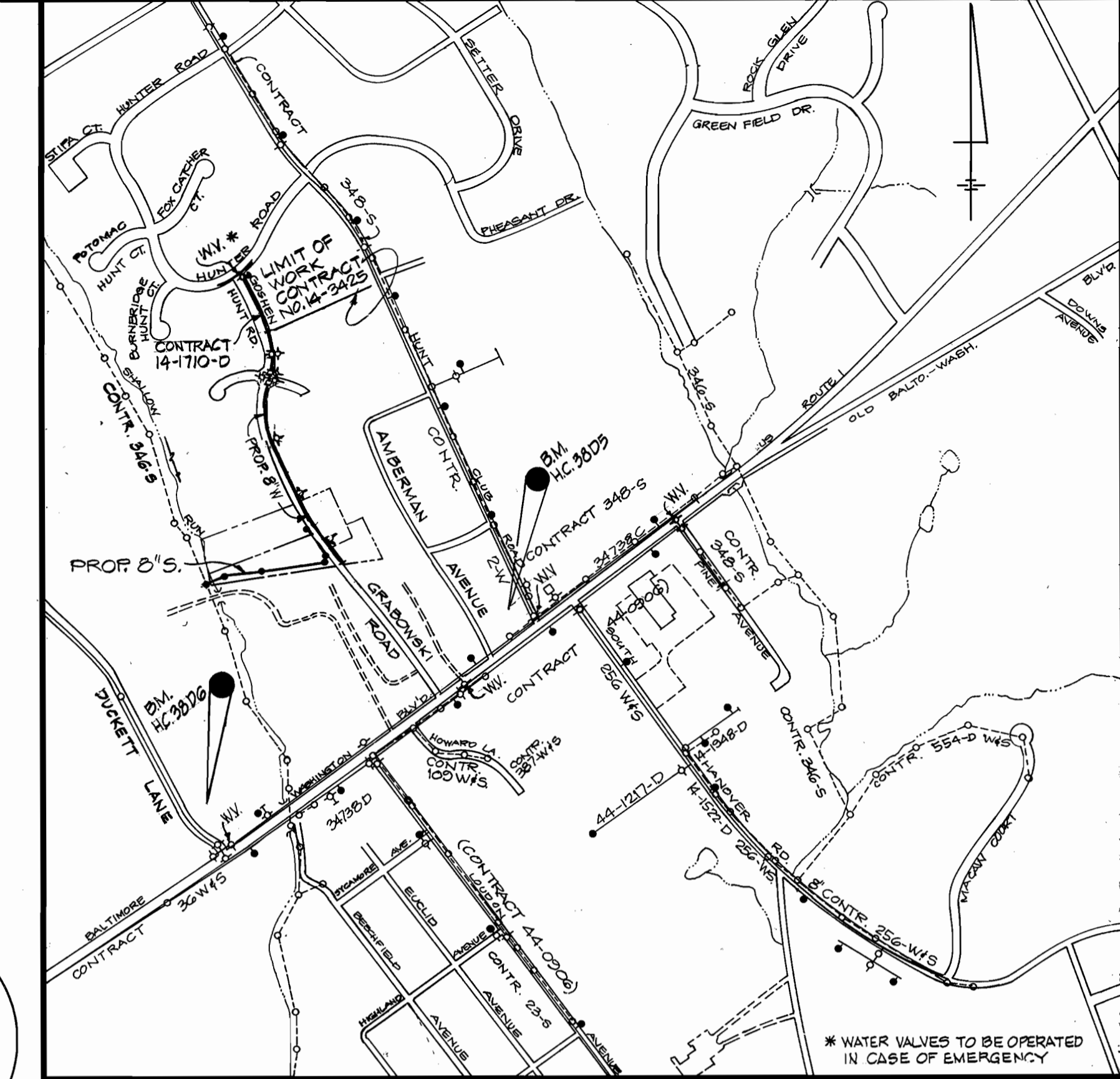
AS-BUILT - OCT. 26, 1982

3425 Ws/1 U.S. Rte 1 Water & Sewer Mains I.C.P.# W-8202 AS BUILT 7/8/95

NOTE: THE EXISTING 2" WATER MAIN IS A PRIVATE LINE WHICH ORIGINATES AT HUNT CLUB ROAD AND IS TO BE ABANDONED. PROPOSED HOUSE CONNECTIONS FROM THE PROPOSED 8" WATER MAIN SHALL BE LOCATED FOR TIE-IN TO EXISTING CURB SERVICE AND VALVE BOXES.



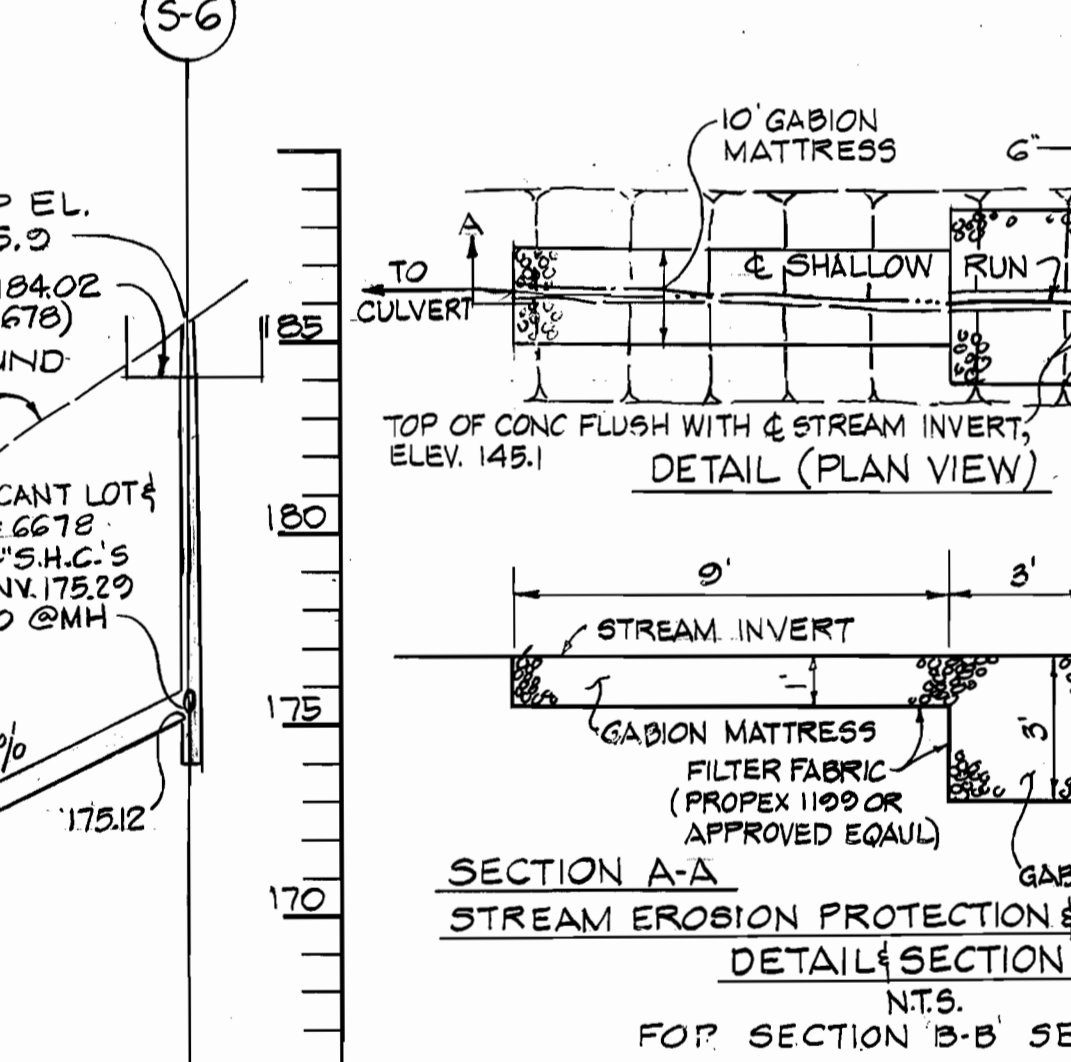
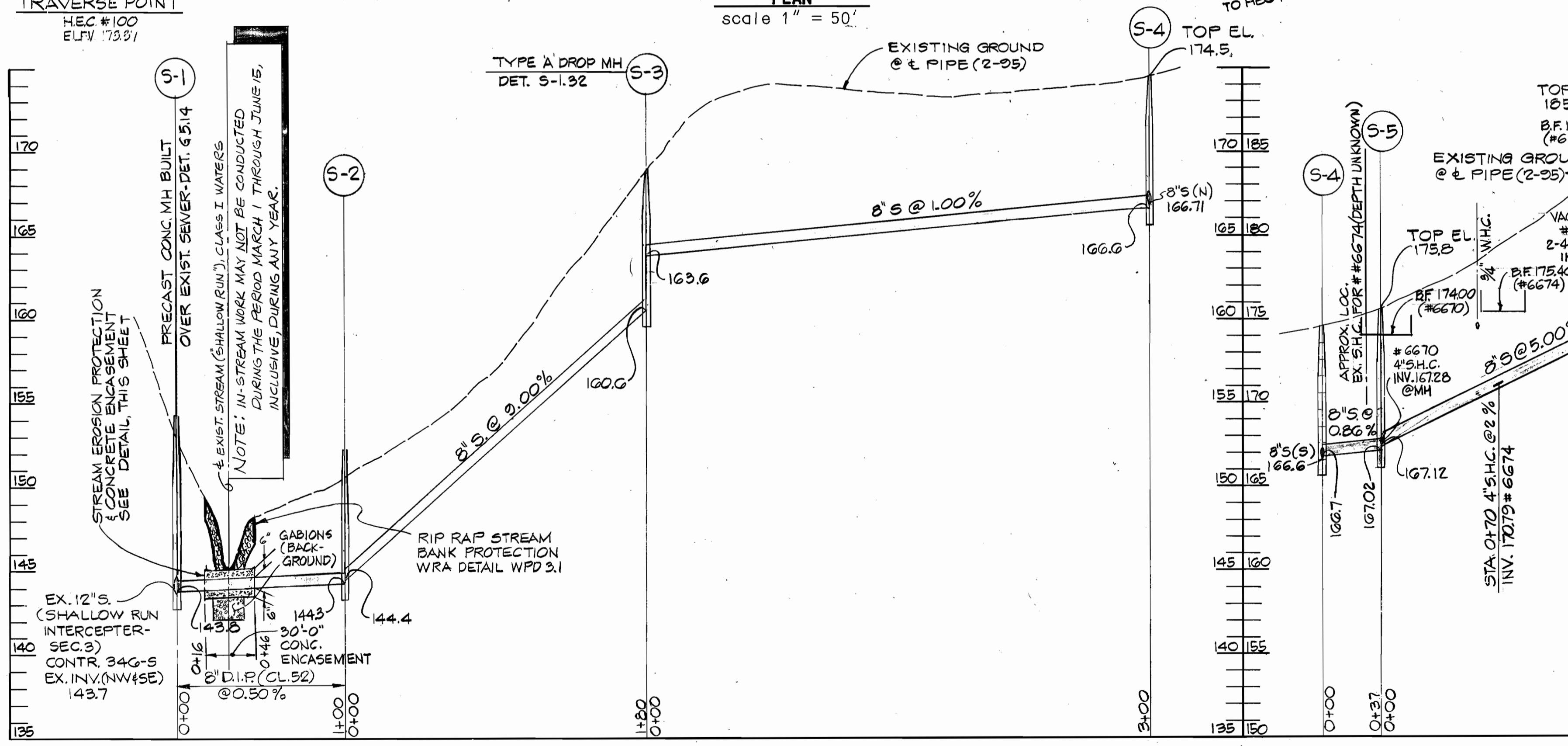
QUANTITIES				
ITEM	UNIT	ESTIMATE	AS-BUILT	SUPPLIER
8" SAN (D.I.P. CL52)	L.F.	96		
8" SANITARY	L.F.	661		
ST'D 4" MANHOLE	EA.	4		
4" SAN. HSE. CONN.	L.F.	70		
TYPE A DROP MH	EA.	1		
DOGHOUSE MH	EA.	1		
8" WATER MAIN	L.F.	1,278		
8" x 4" TEE	EA.	1		
8" VALVE	EA.	3		
8" 1/2 HOR. BEND	EA.	2		
8" CAP	EA.	3		
8" x 6" TEE	EA.	4		
6" VALVE	EA.	4		
6" FH (5' BURY)	EA.	3		
6" WATER MAIN	L.F.	80		
3/4" WATER H.C.	L.F.	150		
AIR RELEASE MH	EA.	2		
4" CAP	EA.	1		
6" CAP	EA.	1		
4" WATER MAIN	L.F.	10		
4" VALVE	EA.	1		
8" 1/4 VERT. BEND	EA.	1		
1 1/2" DRAIN	EA.	1		



TYPE OF BUILDINGS - RESIDENTIAL
 NO. OF SAN. HOUSE CONNECTIONS - 4
 NO. OF WATER HOUSE CONNECTIONS - 9
 DRAINAGE AREA - PATAPSCO RIVER

VICINITY MAP
 scale 1" = 600'

SEWER CODE: 215215
 WATER CODE: D08



- 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 SHOWN 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.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATION 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 LOCATION OF 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 TESTS HAVE NOT BEEN MADE SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS PRIOR TO STARTING WORK SHOWN ON THIS PLAN:
 - BELL ATLANTIC-MD. 597-8585
 - STATE HIGHWAY ADMINISTRATION. 531-5533
 - BALTIMORE GAS ELECTRIC CO. CONTRACTOR SERVICES. 850-4620
 - BALTIMORE GAS ELECTRIC CO. UNDERGROUND DAMAGE CONTROL. 787-9068
 - BALTIMORE GAS ELECTRIC CO. TROUBLE SHOOTING. 298-9001
 - MISS UTILITY. 1-800-257-7777
 - COLONIAL PIPELINE. 1-800-451-1390
 - BUREAU OF UTILITIES, HOWARD CO. DEPT. OF PUBLIC WORKS. 313-4900
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE 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 FOR CONSTRUCTION OF THE MAIN AND SERVICE CONNECTIONS.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - TRENCH REPAIRS TO BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAILS.
 - ALL WORK WILL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL SECTION 219.
 - LENGTH OF OPEN TRENCH WILL BE LIMITED TO THAT WHICH MUST BE FILLED AND STABILIZED WITHIN ONE WORKING DAY.
 - ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
 - ALL WATER MAINS SHALL BE D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
 - TOP OF WATER MAIN PIPE TO HAVE A MINIMUM OF 3.5' OF 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 STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR IN THE DRAWING.
 - 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 UNLESS OTHERWISE PROVIDED FOR IN THE DRAWING.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM. CALL HOWARD COUNTY BUREAU OF UTILITIES AT 313-4900. COORDINATE THE TIE-IN TO THE EXISTING WATER AT LEAST FIVE WORKING DAYS PRIOR TO SCHEDULING.

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

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED, HOWARD COUNTY S.C.D. *John R. Robertson* 12/15/95
 U.S. NATURAL RESOURCES CONSERVATION SERVICE *Patricia Eng* 12/15/95

PROFILE
 SCALE: HORIZ. 1" = 50' -
 VERT. 1" = 5'

DEVELOPERS CERTIFICATION
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT A MARYLAND DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

Paul Depon 11/20/95
 BUREAU OF ENGINEERING
 DEPARTMENT OF PUBLIC WORKS

ENGINEERS CERTIFICATION
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Walter G. Hill P.E. 3/10/95
 HICKS ENGINEERING COMPANY, INC.
 ENGINEERS-SURVEYORS-PLANNERS
 200 EAST JOPPA ROAD-SUITE 402
 TOWSON, MARYLAND 21286 TEL(410)494-0001

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS <i>John Depon</i> 11/20/95 CHIEF, BUREAU OF UTILITIES <i>John Depon</i> 11/20/95	HICKS ENGINEERING CO., INC. ENGINEERS, SURVEYORS & PLANNERS 200 EAST JOPPA ROAD - SUITE 402 TOWSON, MARYLAND 21286	DES: JKW DRN: FW/MAB CHK: DEH DATE: 3/10/95	WATER QUALITY CERTIFICATION (88-GWQC-001) NATIONWIDE PERMIT #12 UTILITY LINE BACKFILL AND BEDDING	U.S. ROUTE 1 WATER AND SEWER MAINS FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND CAPITAL PROJECT W8202 C-240993-05-LE	SCALE AS SHOWN SHEET 1 OF 4
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