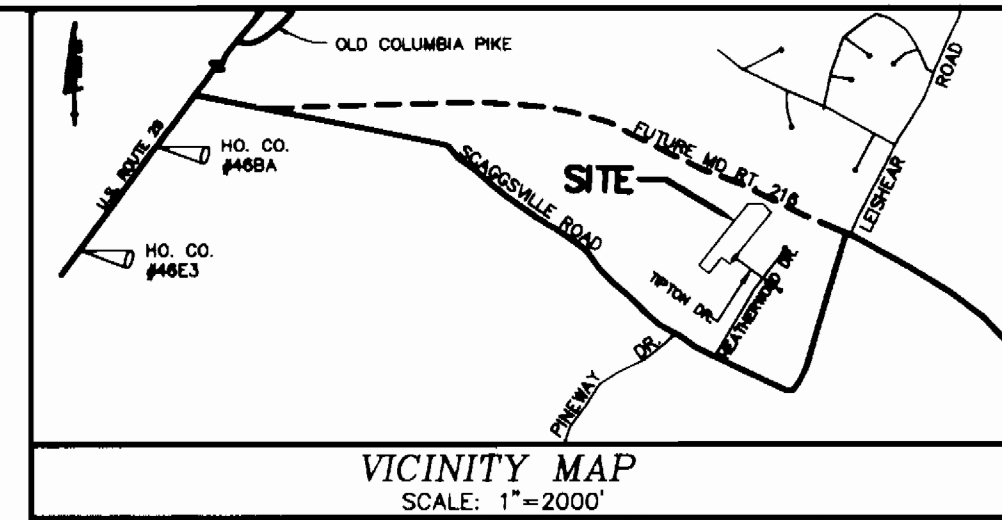


AS-BUILT 11-9-95

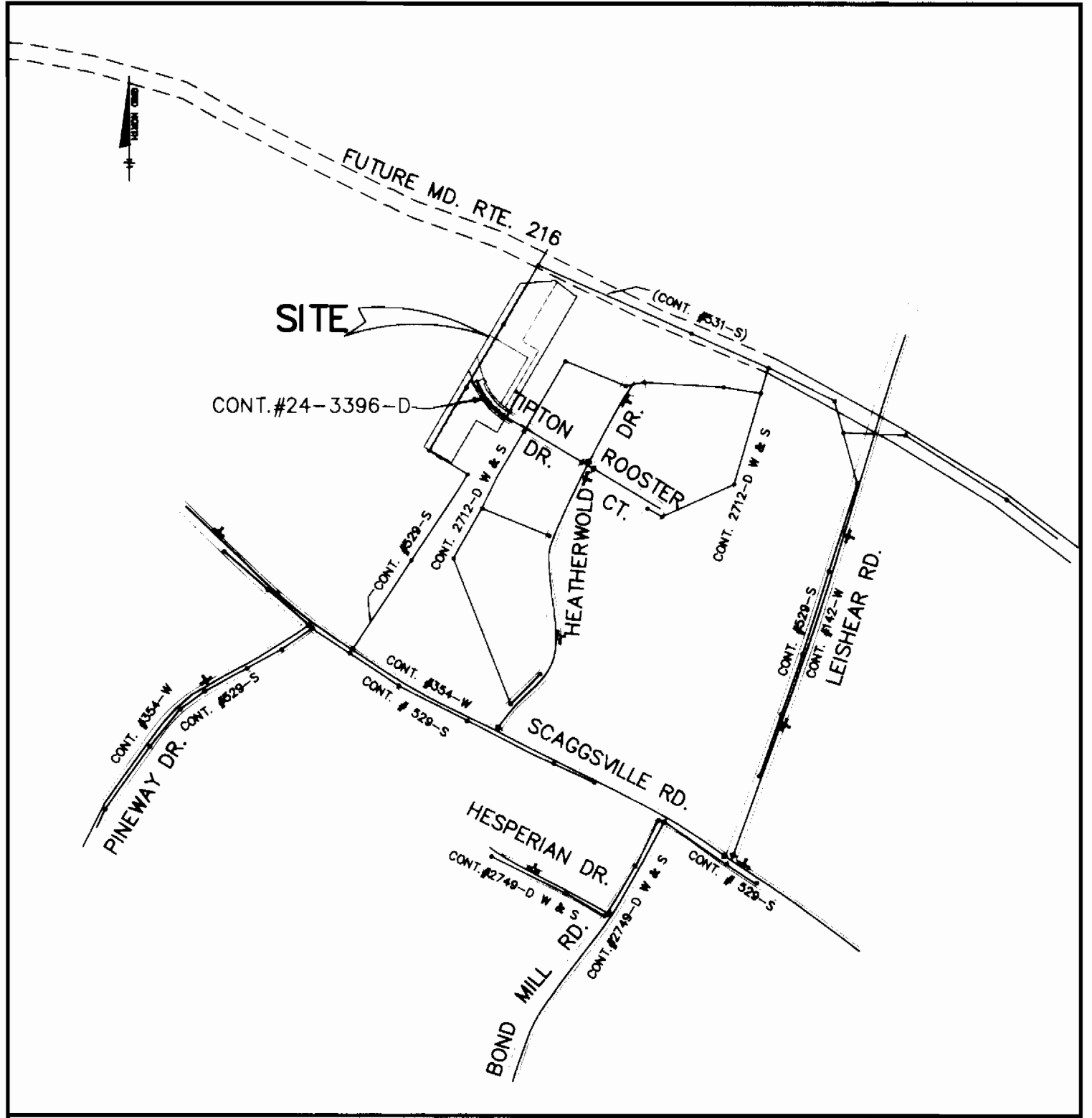
3396 W/1 TIPTON MANOR (lots 1-4)

WATER EXTENSION CONTRACT NO. 24-3396-D

TIPTON MANOR 6th. ELECTION DISTRICT HOWARD COUNTY, MARYLAND



BENCH MARKS
 HOWARD COUNTY CONTROL STA. 468A
 STAMPED CONC. MONUMENT
 LOCALITY: ROUTE 29
 0.15 MILES SOUTH OF ROUTE 216
 N 537545.840 E 1339849.069
 HOWARD COUNTY CONTROL STA. 46E3
 STAMPED CONC. MONUMENT
 LOCALITY: ROUTE 29
 N 535610.716 E 1337927.633
 HO. CO. BM. # 2039001 ELEV. 447.251
 CONCRETE MONUMENT 0.1' BELOW SURFACE
 N 477614.342 E 828108.318



LOCATION MAP
SCALE: 1" = 600'

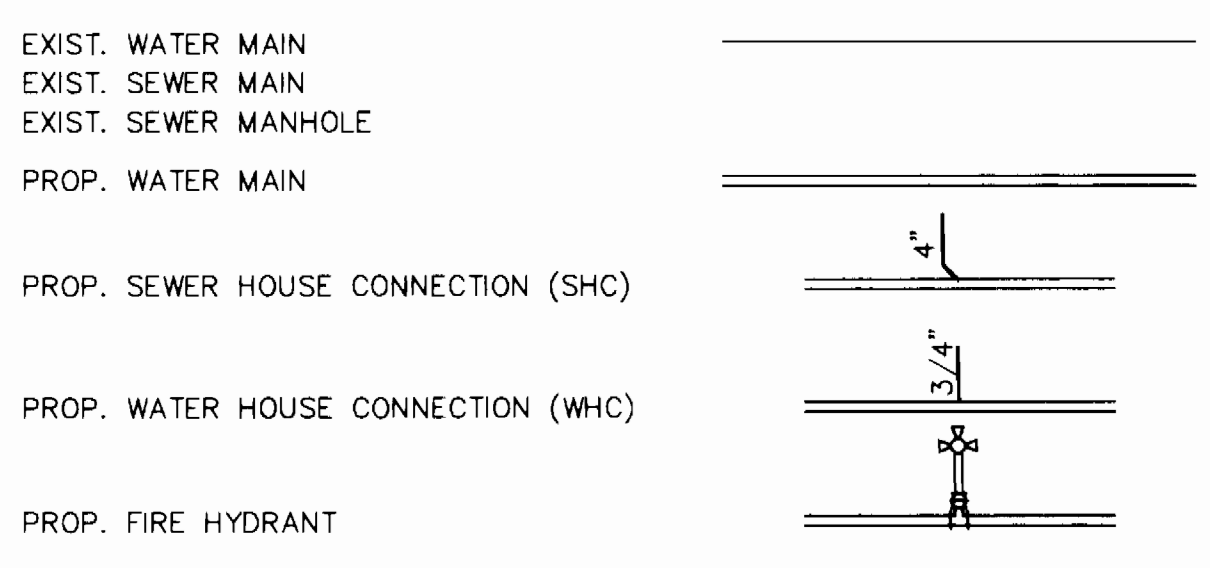
WATER AND SEWER COUNTY CODE	TYPE OF BUILDING : SINGLE FAMILY DETACHED
WATER CODE: E18	NUMBER OF LOTS : 4
SEWER CODE: 7550000	NUMBER OF SHCS : 3
TEST GRADIENT: 700	NUMBER OF WHCS : 3
	DRAINAGE AREA : LITTLE PATUXENT
	TREATMENT PLANT: LITTLE PATUXENT QUALITY MANAGEMENT CENTER, SAVAGE, MD.

QUANTITIES

ITEM	QUANTITIES ESTIMATED		AS-BUILT		MANUFACTURER/SUPPLIER
	QUANTITIES	QUANTITIES	TYPE	TYPE	
8" WATER	209 L.F.	209 L.F.	CL 52	ATLANTIC STATES	
8" x 8" FHT	1 EA.	1 EA.	CL 52	UNION FOUNDRY	
8" VALVES	1 EA.	1 EA.	GATE VALVE	MUSKOGEE CO.	
8" PLUG & BUTTRESS	1 EA.	1 EA.	CL 52	UNION FOUNDRY	
FIRE HYDRANTS	3 EA.	3 EA.	TYPE "K"	AMERICAN FLOW	
3/4" MHC	30 L.F.	14 L.F.	TYPE "K"	MALDEN CO.	
1" WHC	52 L.F.	69 L.F.	TYPE "K"	MALDEN CO.	
4" SHC	30 L.F.	30 L.F.	PVC	J.M. MFG.	

NAME OF UTILITY CONTRACTOR: C. J. MILLER
 SURVEY AND DRAFTING AS-BUILT DATE: 11-9-95

LEGEND



GENERAL NOTES

- PART 1 - GENERAL**
- 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 (NAD 83).
 - 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" CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL 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 (C.N.S.) 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

STATE HIGHWAY ADMINISTRATION	531-5533
BALTIMORE GAS & ELECTRIC CO.	850-4620
BALTIMORE GAS & ELECTRIC CO. CONTRACTOR SERVICES	787-9068
UNDERGROUND DAMAGE CONTROL	1-800-287-7777
MISS UTILITY	795-1390
COLONIAL PIPELINE CO.	313-4900
BUREAU OF UTILITIES	
HOWARD CO. DEPT. OF PUBLIC WORKS	
 - 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.
 - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
 - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPM REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

- PART 2 - WATER**
- 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 RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- PART 3 - SEWER**
- ALL SEWER MAINS SHALL BE DIP, AND P.V.C., UNLESS OTHERWISE NOTED.
 - ALL MANHOLES SHALL BE 4' - 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1" - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

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

John R. Reinhart 5/23/95
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-95-132

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Patricia Engle 5/23/95
 NATURAL RESOURCES CONSERVATION SERVICE DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James A. ... 5/11/95
 DIRECTOR OF PUBLIC WORKS DATE

Robert ... 5/31/95
 CHIEF, BUREAU OF ENGINEERING DATE

Michael A. ... 5-19-95
 CHIEF, BUREAU OF UTILITIES DATE

... 5/21/95
 CHIEF, LAND DEVELOPMENT DIVISION DATE

TSA GROUP, INC.
 planning • engineering • surveying
 8480 Baltimore National Pike • Suite 418
 Ellicott City, Maryland 21043

DES: JVP			
DRN: JVP			
CHK: CAM	SFL	A. J. ...	11/95
DATE: FEB. 95	YSL	1	REVISED PER 4/19/95 COMMENTS - SUBMIT ORIGINALS 5/17/95
	BY	NO.	REVISIONS

COVER SHEET OF
 WATER MAIN

600 SCALE MAP NO. 46 BLOCK 12

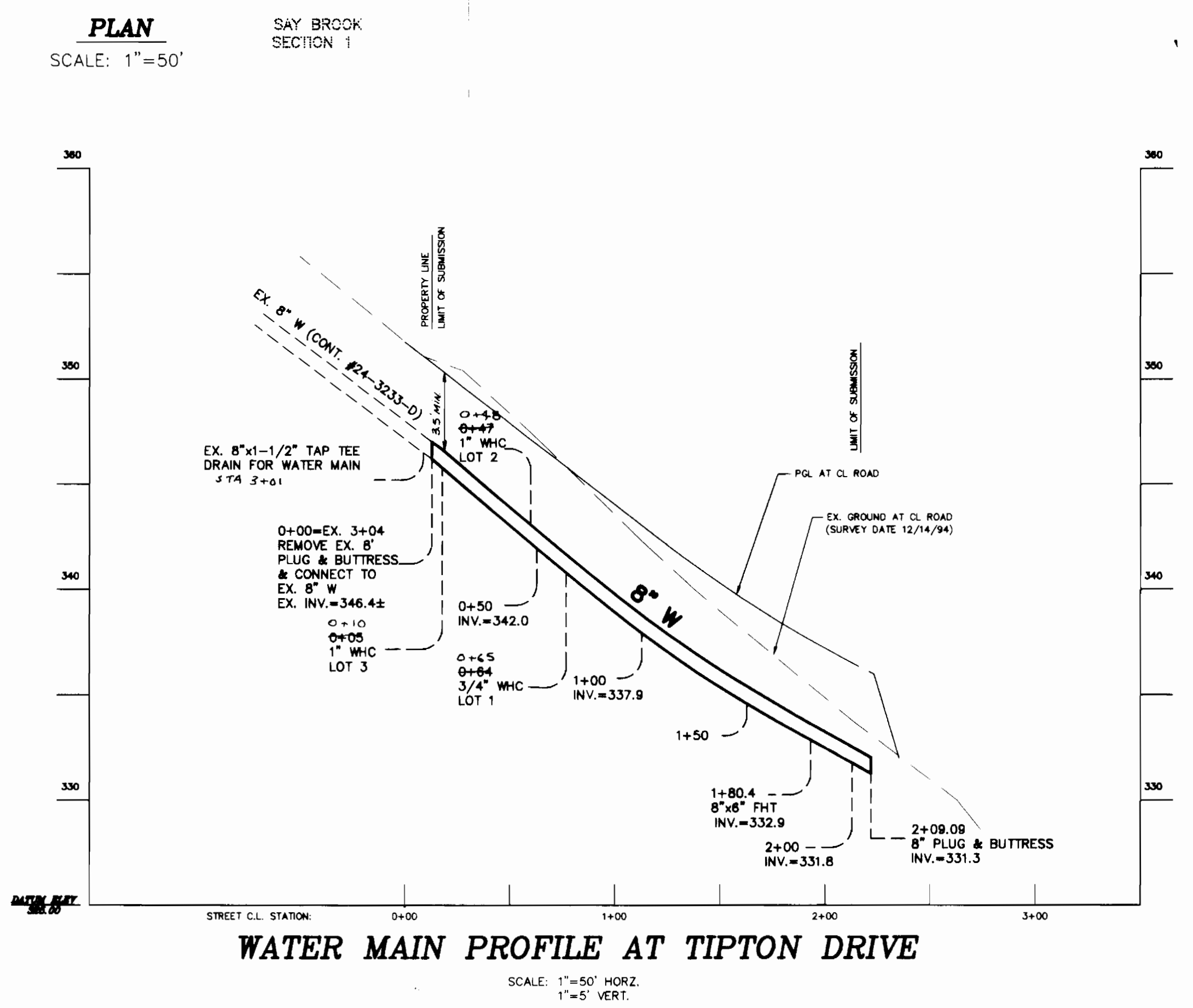
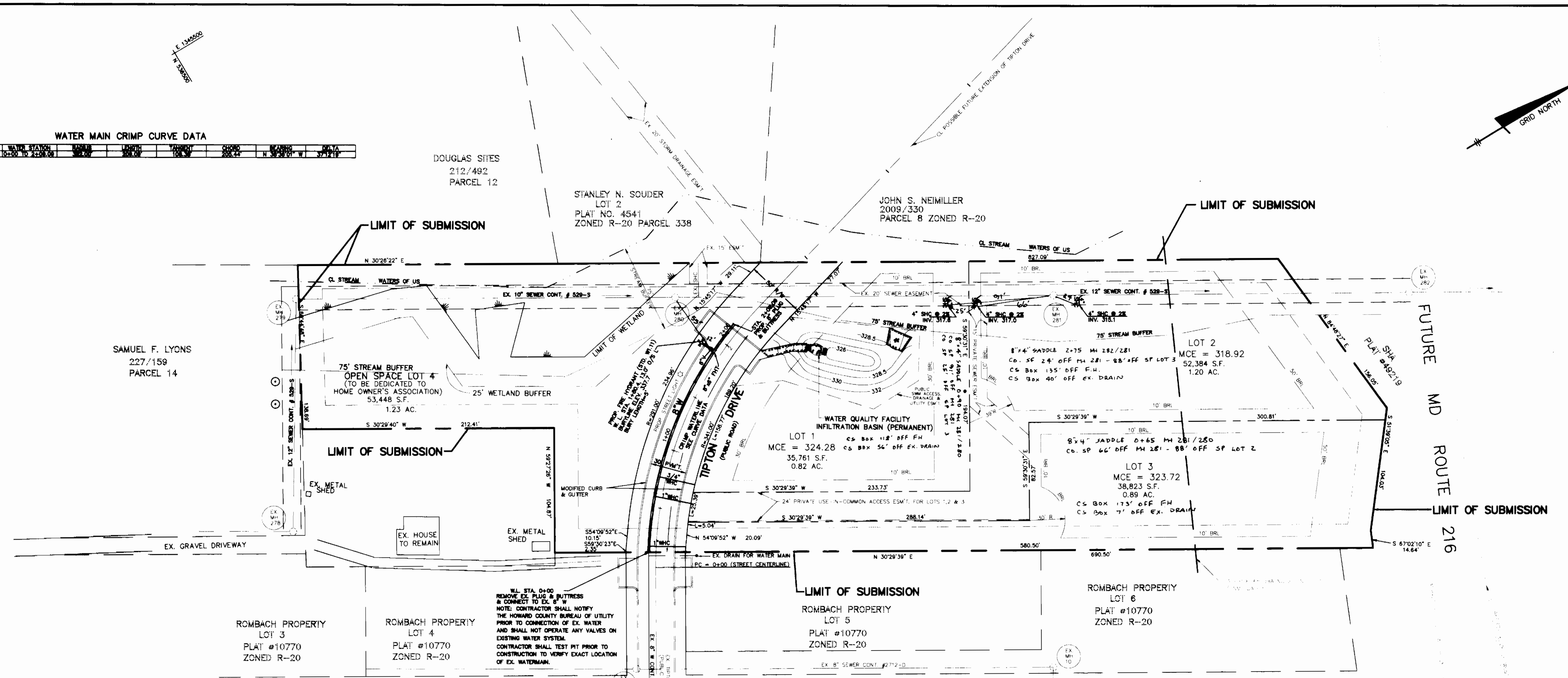
TIPTON MANOR
 LOTS 1 THRU 4
 ELECTION DISTRICT NO. 6
 CONTRACT NO. 24-3396-D

SCALE AS SHOWN
 SHEET 1 OF 2

3396 W/2 TIPTON MANOR (lots 1-4)

WATER MAIN CRIMP CURVE DATA

CRIMP STATION	WATER STATION	CRIMP	WATER	CRIMP	WATER	CRIMP	WATER	CRIMP	WATER
0+12.24	2+17.81	1.00	2.00	2.00	3.00	3.00	4.00	4.00	5.00



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

John R. Robertson 5/23/95
 HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Patricia Engler 5/23/95
 NATURAL RESOURCES CONSERVATION SERVICE DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-95-132

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James J. Lee 5/19/95
 DIRECTOR OF PUBLIC WORKS DATE

Richard A. Robinson 5/19/95
 CHIEF, BUREAU OF UTILITIES DATE

TSA GROUP, INC.
 planning • engineering • surveying
 8480 Baltimore National Pike • Suite 418
 Ellicott City, Maryland 21043

John J. Starnes

DES: JVP	
DRN: JVP	
CHK: CAM	
DATE: FEB. 95	
YSL	1
NO.	
REVISIONS	
DATE	5/17/95
REVISOR	REVISOR

PLAN AND PROFILE
 WATER MAIN

600 SCALE MAP NO. 46

TIPTON MANOR
 LOTS 1 THRU 4
 ELECTION DISTRICT NO. 6
 CONTRACT NO. 24-3396-D

SCALE AS SHOWN

SHEET 2 OF 2

3396 POS. SHT. #1 of 1

MAP NO.: 46-536-1346
Contract 24-3396-D
Tipton Mayor
Lots 1-4

HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

SCALE: 1" = 50'

