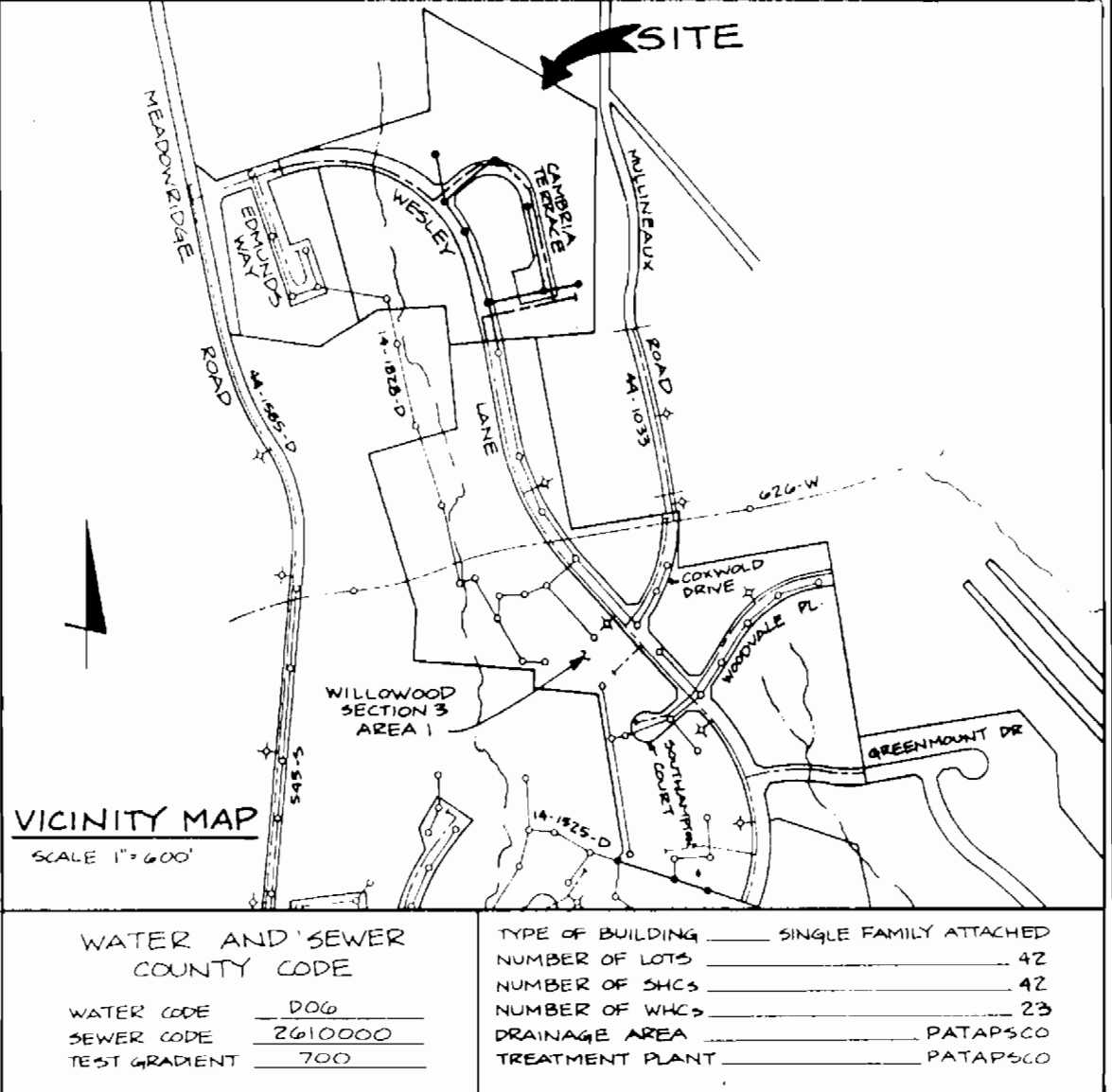


BENCH MARKS

HO. CO. #2444005	ELEV. 271.249
CONC. MONUMENT 0.5' BELOW SURFACE, ON THE WEST SIDE OF HEADROWIDGE RD. SOUTH OF MAYFIELD RD. N 495500.271	
E. 863126.170	
HO. CO. #2444013	ELEV. 268.109
CONC. MONUMENT AT SURFACE, 17.1' NORTH OF CENTERLINE OF MAYFIELD AVE. N 495546.964	
E. 862542.349	



WATER AND SEWER COUNTY CODE	TYPE OF BUILDING	SINGLE FAMILY ATTACHED
WATER CODE 006	NUMBER OF LOTS	42
SEWER CODE 2610000	NUMBER OF WHCS	23
TEST GRADIENT 7.00	DRAINAGE AREA	PATAPSCO
	TREATMENT PLANT	PATAPSCO

GENERAL NOTES

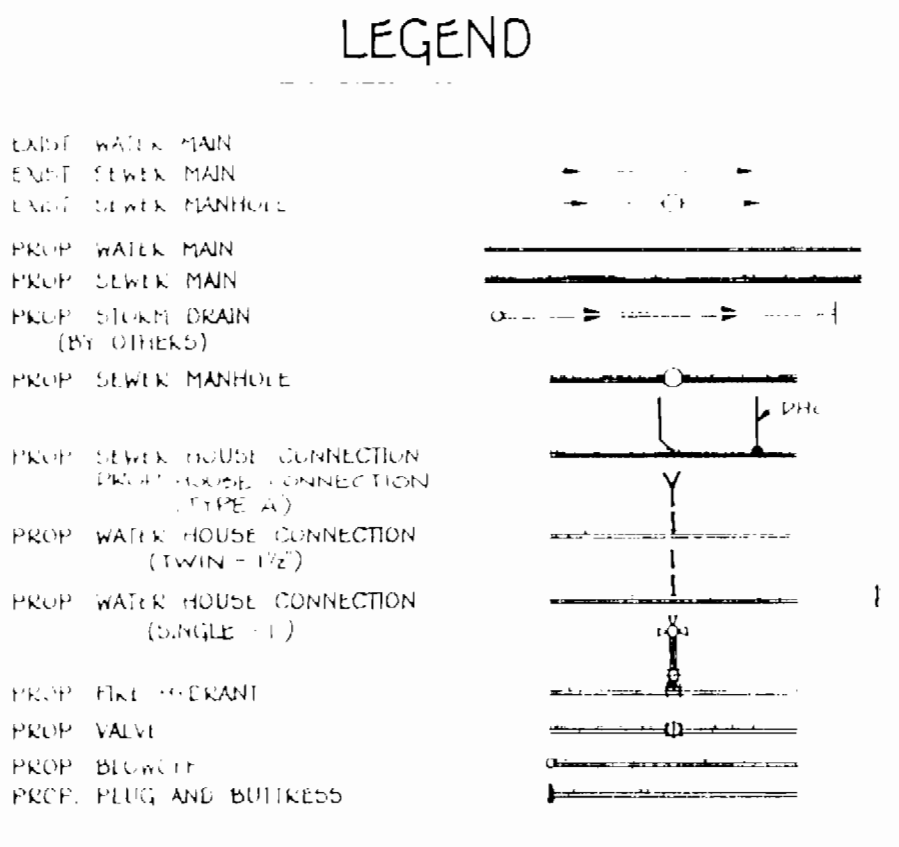
- PART 1 - GENERAL**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
 - 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 TO 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 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. UNDERGROUND DAMAGE CONTROL.....787-9068
 - MISS UTILITY.....1-800-257-7777
 - COLONIAL PIPELINE CO.....785-1390
 - BUREAU OF UTILITIES, HOWARD CO. DEPT. OF PUBLIC WORKS.....313-4900
 - 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.
 - PRICE 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.

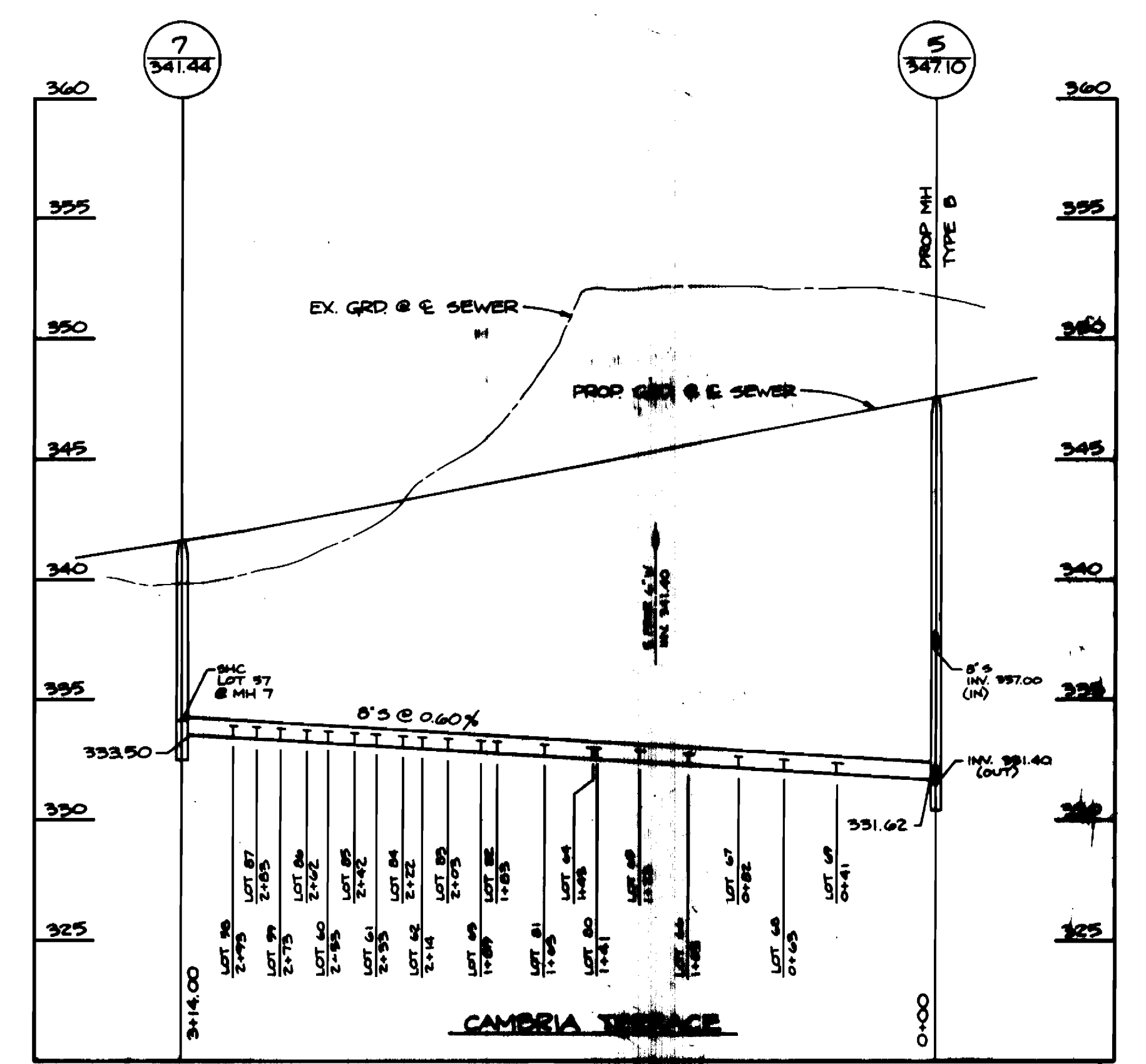
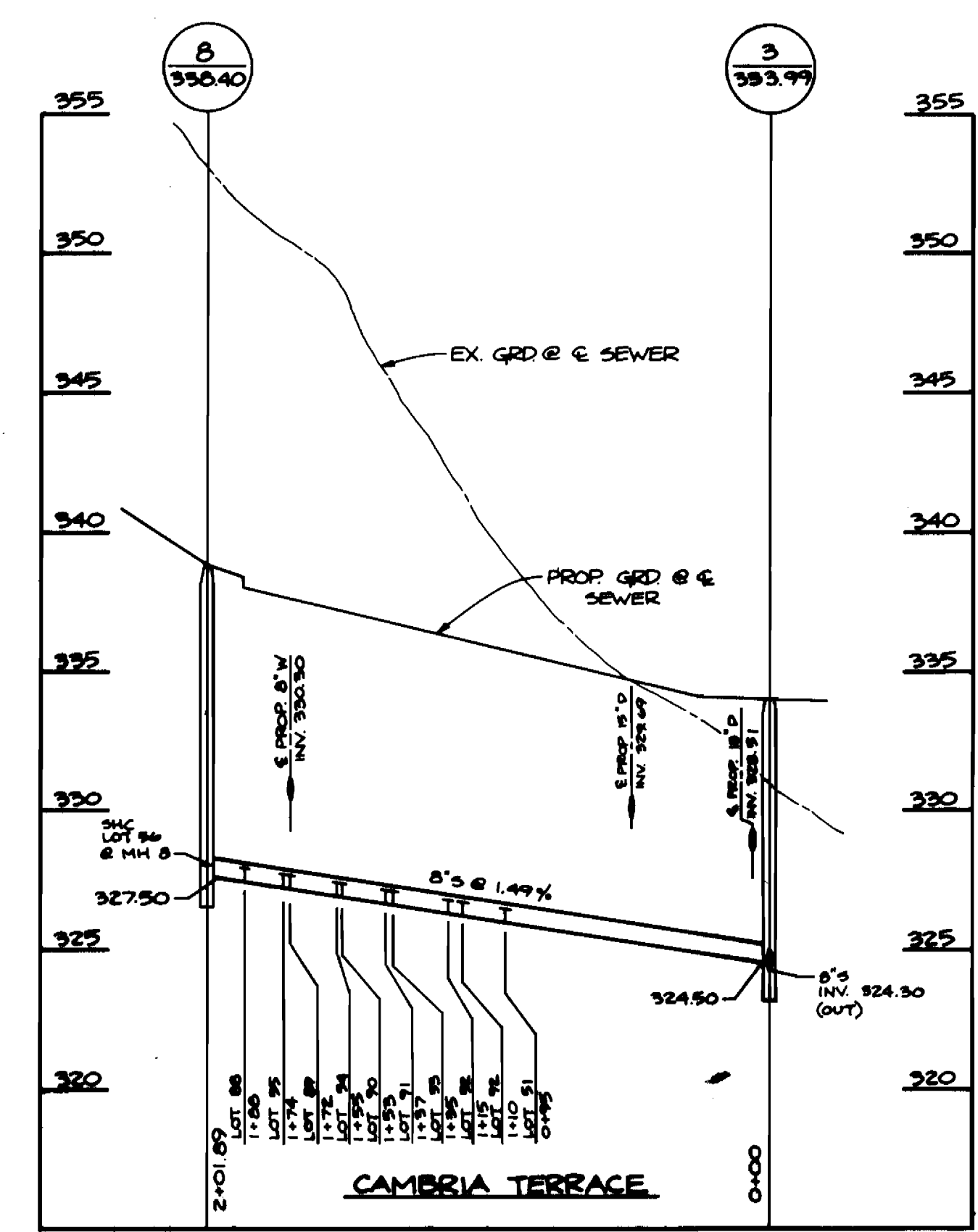
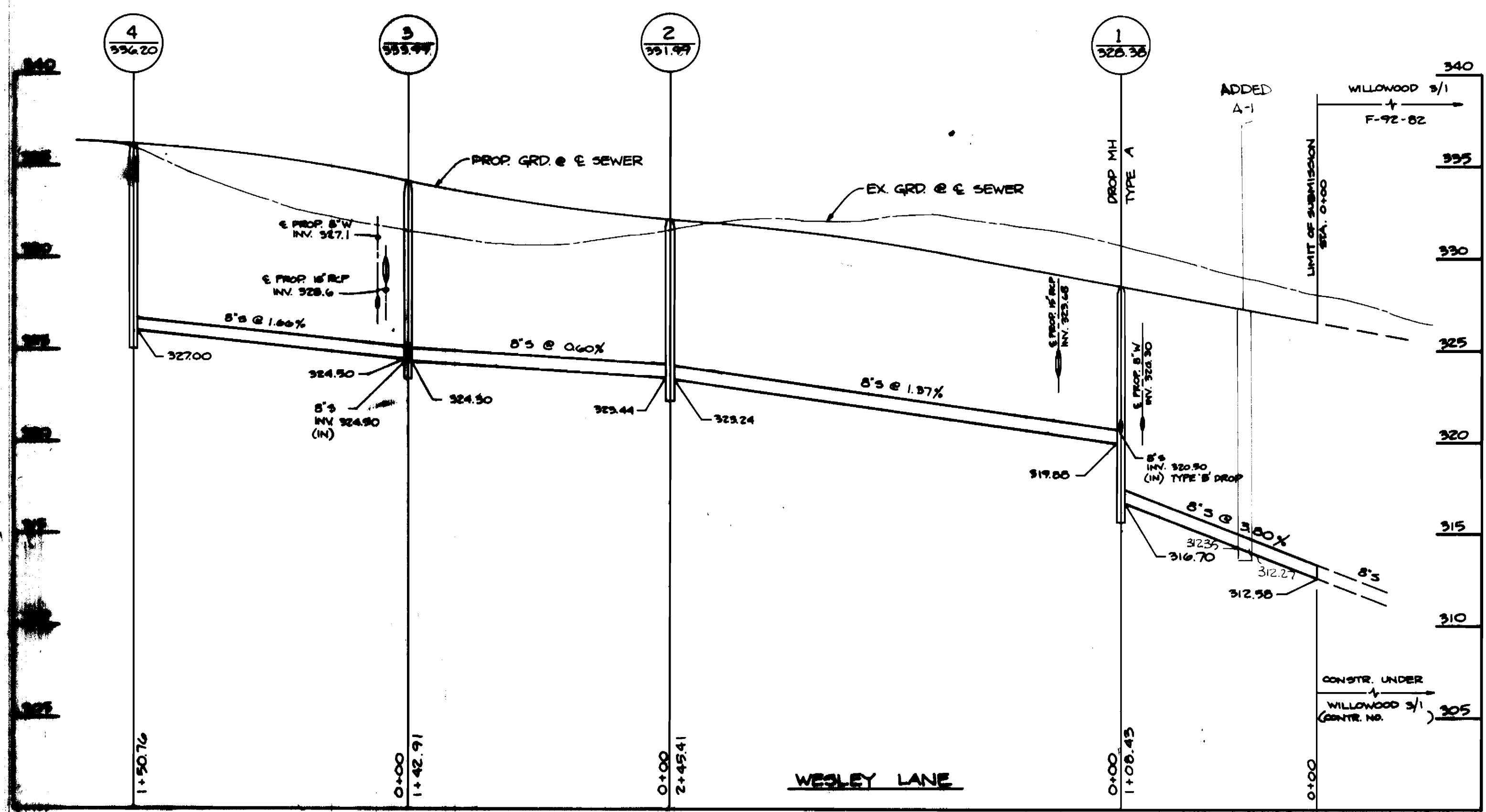
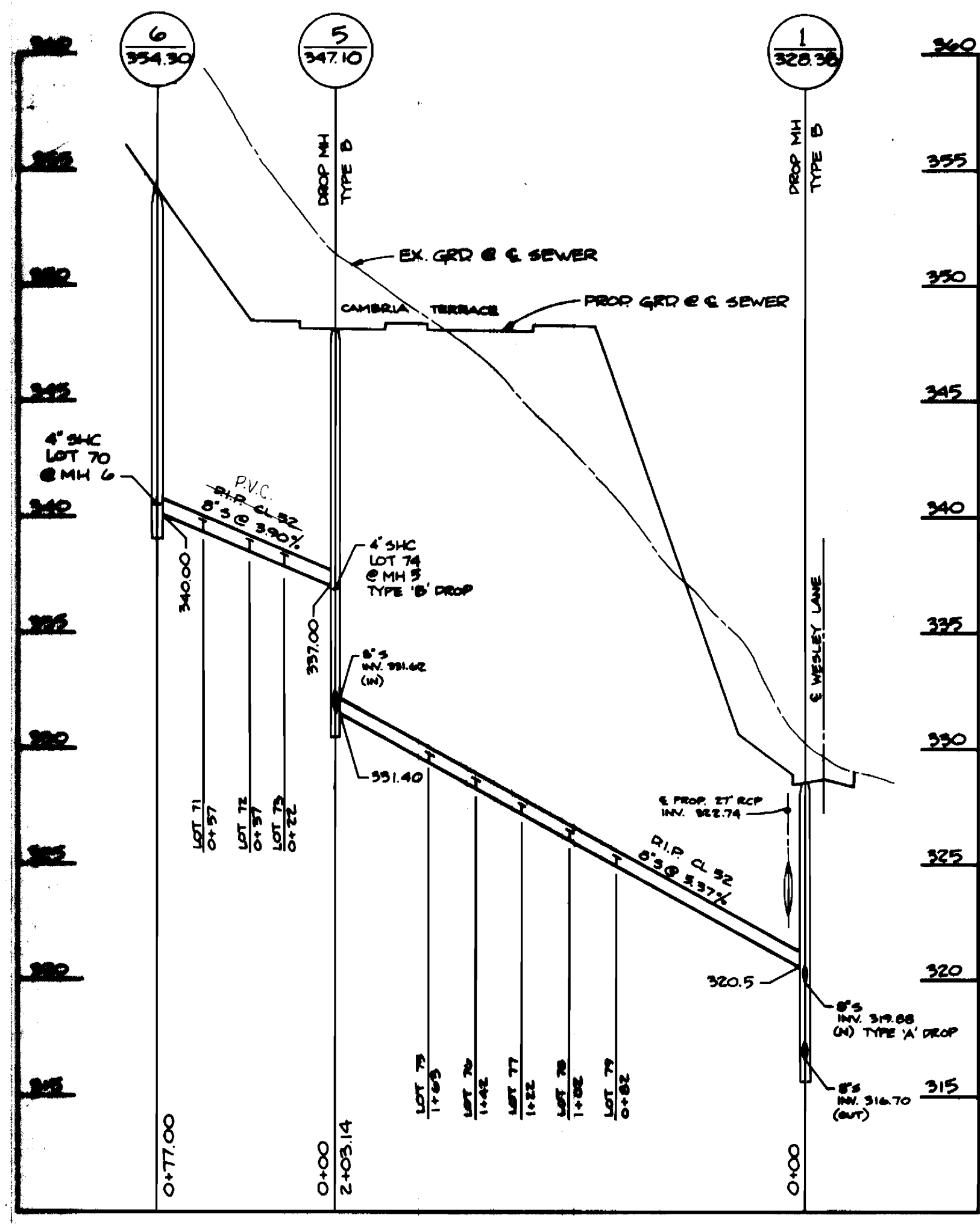
PART 2 - WATER

- 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

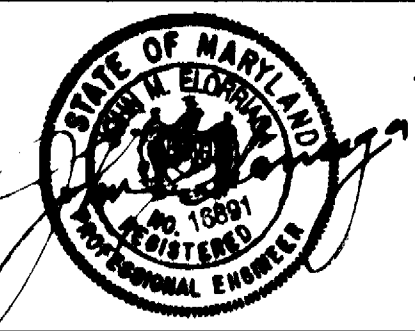
- ALL SEWER MAINS SHALL BE D.I.P. RCP, VCPX, CSPX, RSPS AND P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2' - 0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4' - 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS, STANDARD DETAIL 05.52. WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1' - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CRAWL(S) BE SERVED.





DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE 7-12-93
 BUREAU OF UTILITIES

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

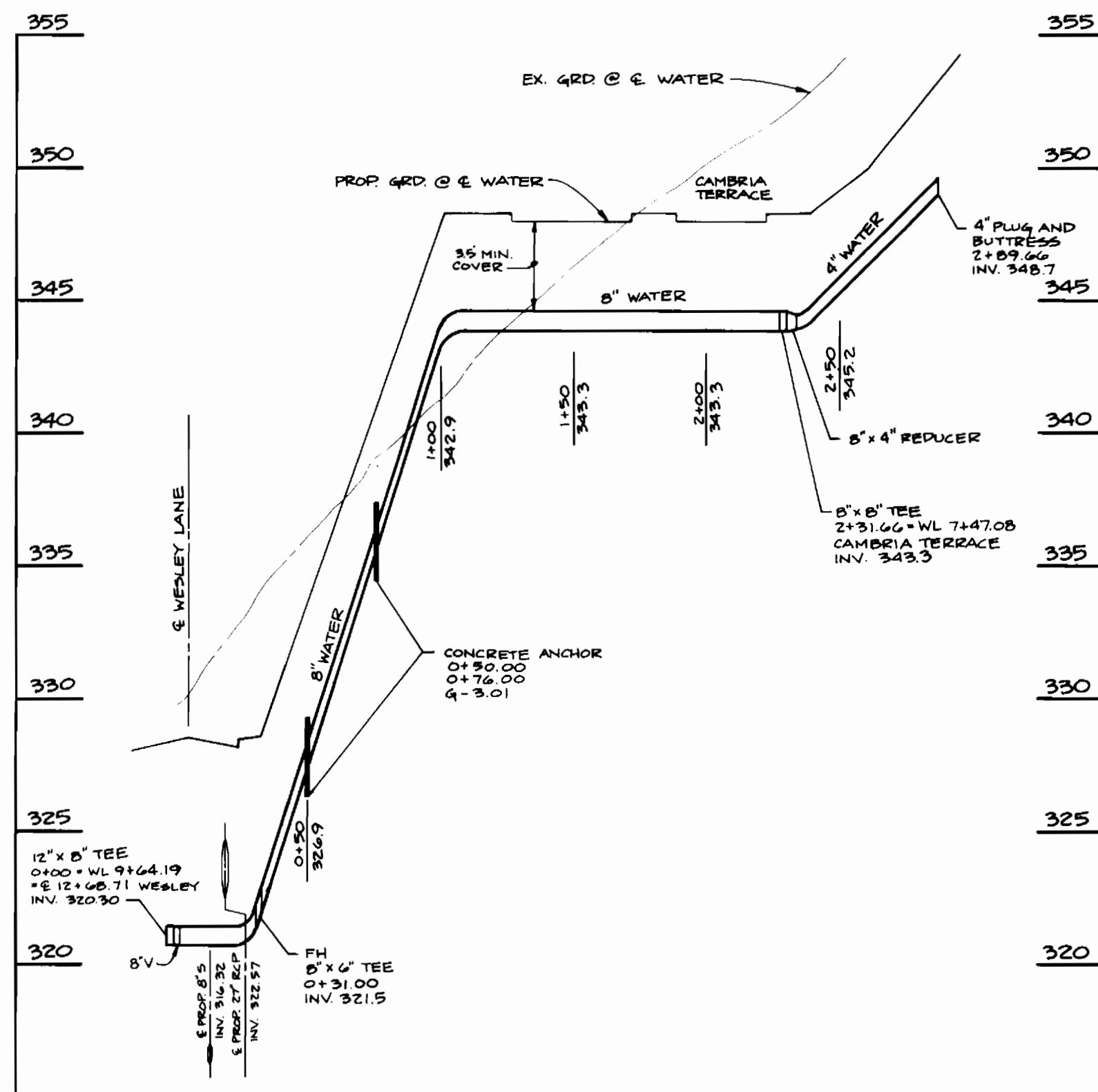
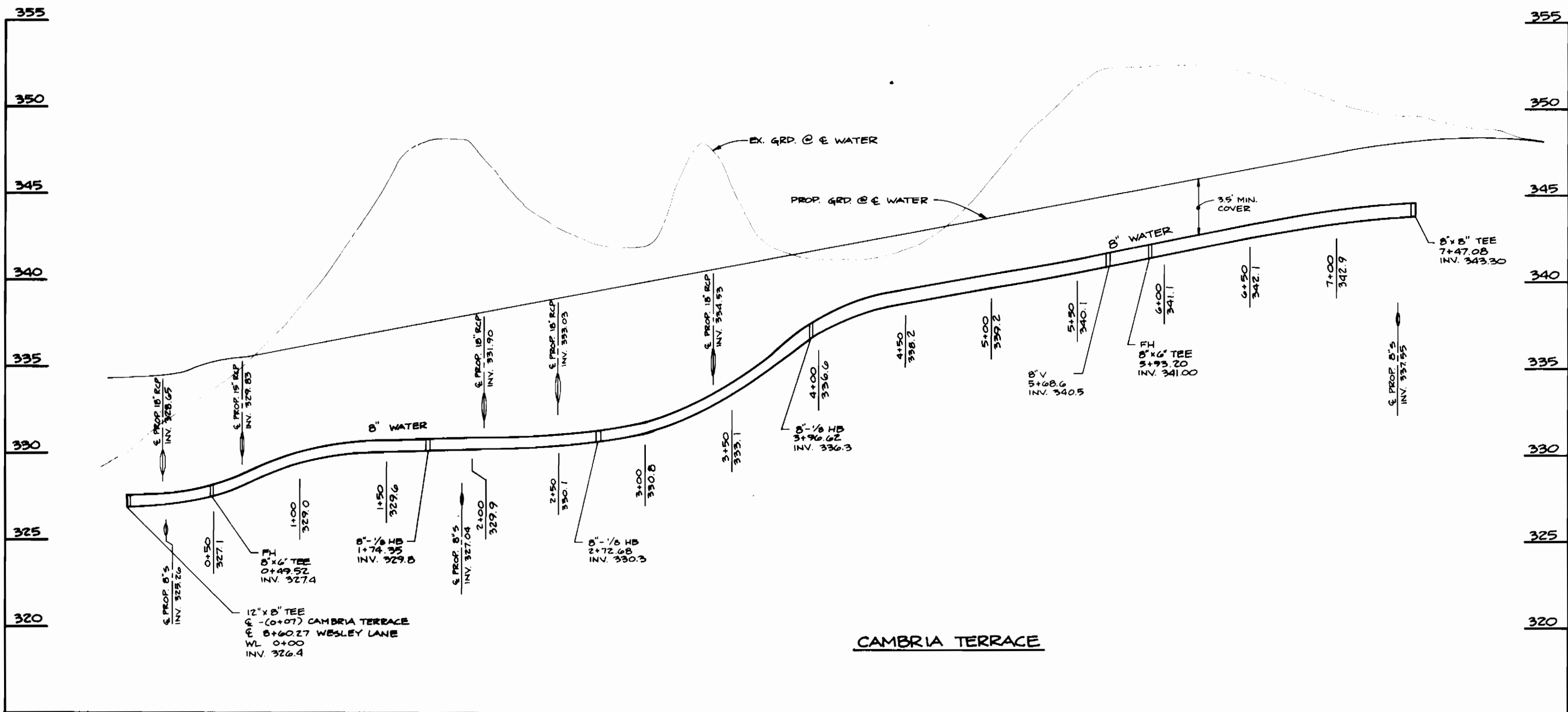
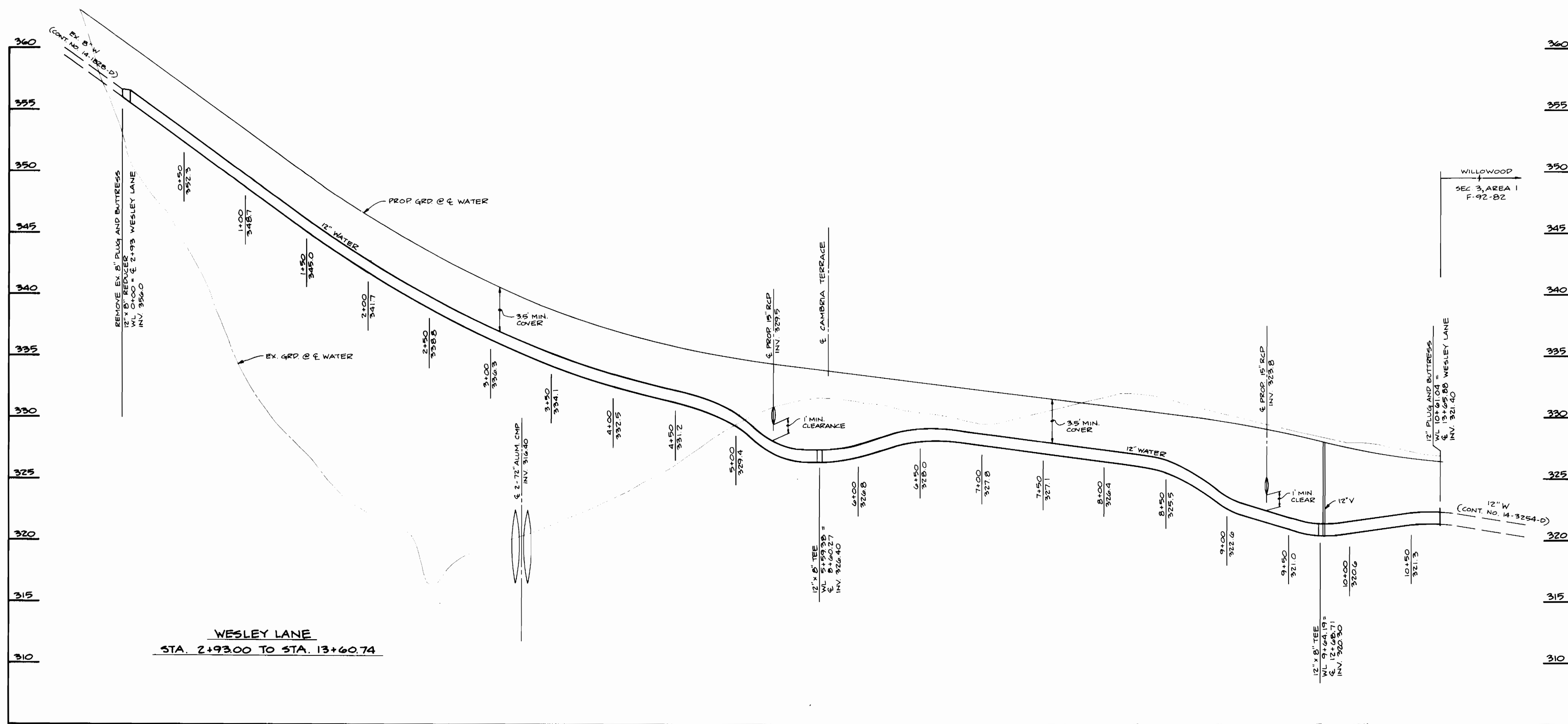


DES: MA	DATE: 6-15-93	BY: NO.	REVISIONS	DATE
DRN: DBT				
CHK: JME				

PROFILES OF SEWER MAINS
 600 SCALE MAP NO. 37
 BLOCKS 10 & 16

BRIGHTFIELD SECTION 4
 LOTS 50 THRU 94
 ELECTION DISTRICT NO. 1
 CONTRACT NO. 14-3258-D
 SCALE: 1" = 50' HORIZ. 1" = 5' VERT.
 SHEET 2 OF 3

AS BUILT 4/20/95



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

TSA GROUP, INC.

planning • engineering • surveying
2480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043



DES: MA	D.B.T.	DELETE DROP HOUSE CONNECTIONS CORRECT DROP MH TYPE	10/24/93
DRN: DBT			
CHK: JME			
DATE: 6-15-93	BY NO.	REVISIONS	DATE

PROFILES OF
WATER MAINS

600 SCALE MAP NO. 37 BLOCKS 10 & 16

BRIGHTFIELD
SECTION 4
LOTS 50 THRU 94
ELECTION DISTRICT NO. 1
CONTRACT NO. 14-3258-D

SCALE:
1" = 50' HORIZ.
1" = 5' VERT.
SHEET
3 OF 3

James P. Schmitt 7/19/93
DIRECTOR OF PUBLIC WORKS DATE
Richard J. ... 7/12/93
CHIEF, BUREAU OF UTILITIES DATE

Robert ... 7/19/93
CHIEF, BUREAU OF ENGINEERING DATE
... 7/16/93
CHIEF, LAND DEVELOPMENT DIVISION DATE

AS BUILT