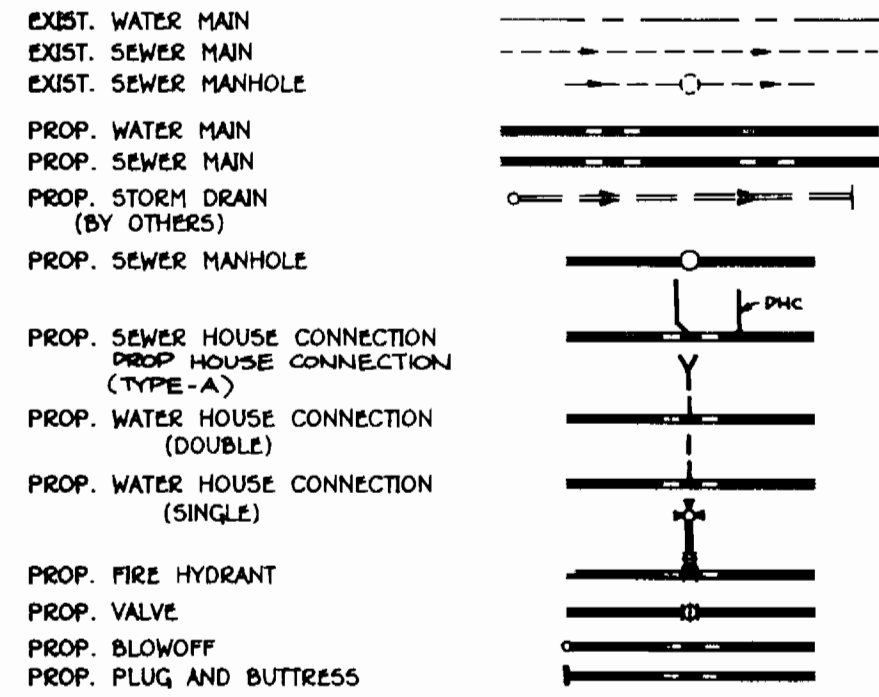


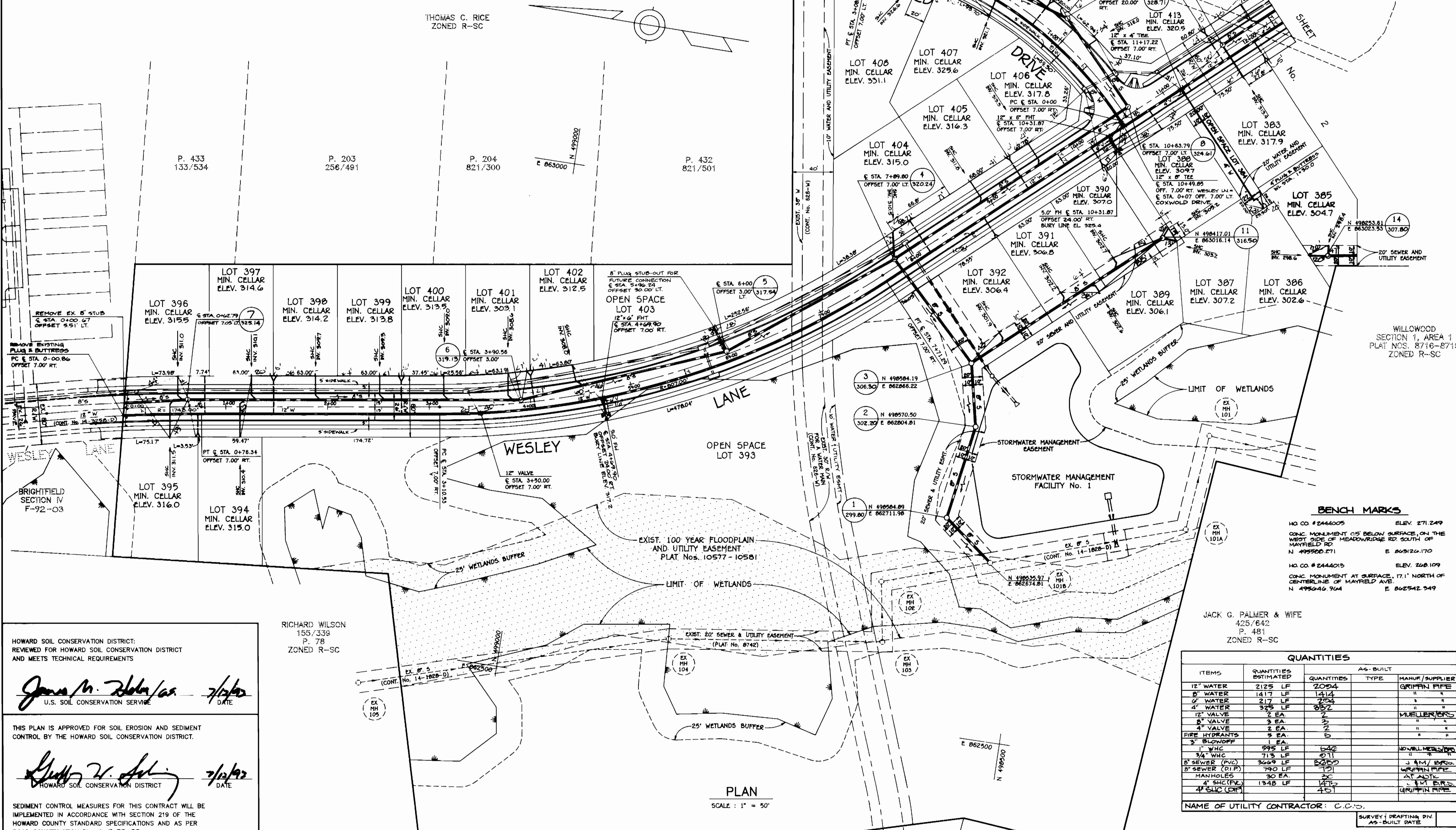
LEGEND



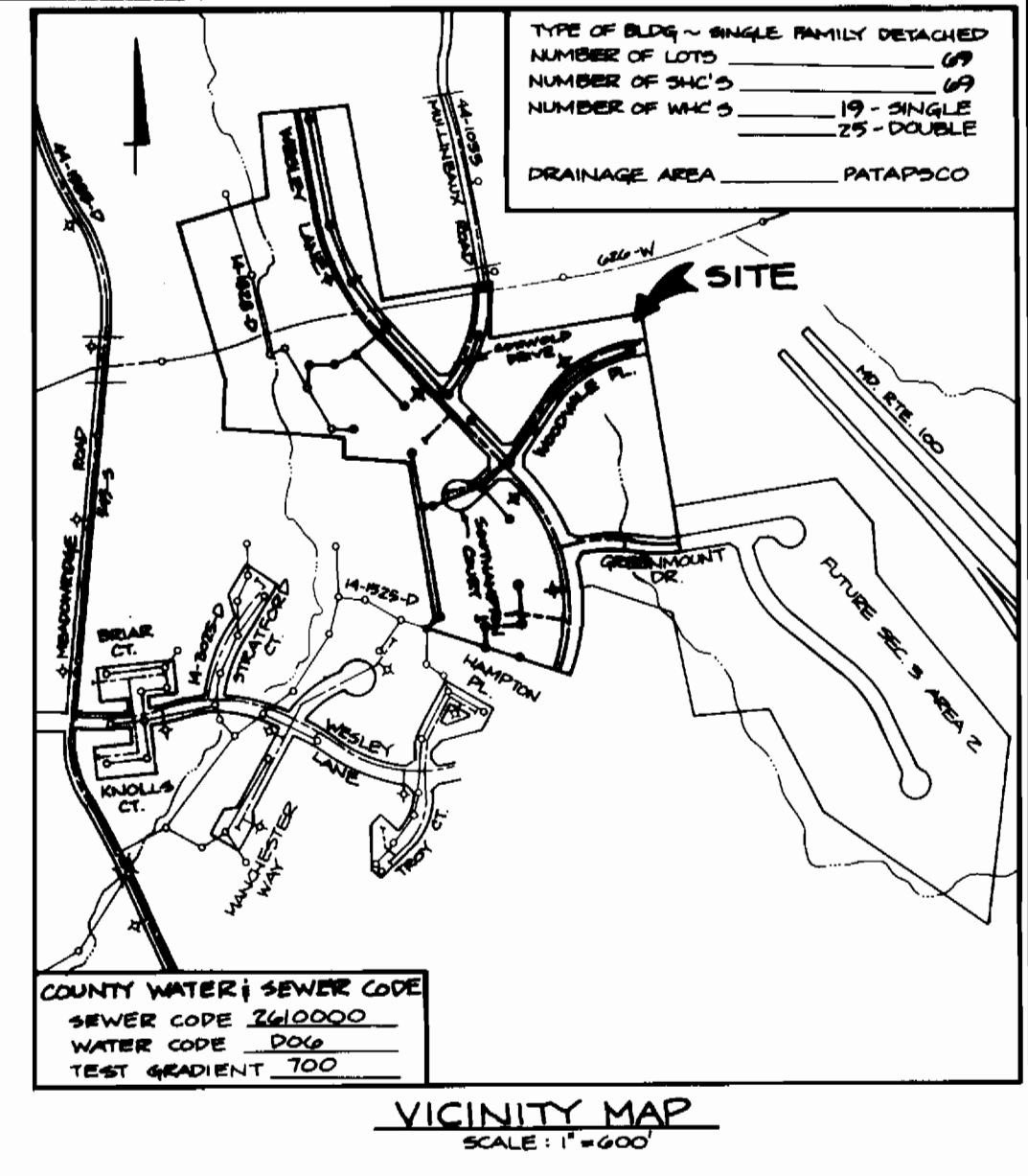
WATER HOUSE CONNECTION CHART

LOT No.	STATION	ROAD	LOT No.	STATION	ROAD
358-359	20+53.8	WESLEY LANE	397-398	1+46.9	WESLEY LANE
361	UL STA 1234.1		399-400	2+72.9	
362-363	UL STA 1237.4		401-402	1+11.1	
364-365	UL STA 1246.9		403-404	0+57.0	
366	12+06.2	SOUTHAMPTON COURT	407-408	0+57.0	COXWOLD DRIVE
367	12+06.2		409	0+57.0	
368-370	12+71.1		410	2+07.8	
371-372	14+49.7		411-412	12+56.0	
373	14+49.7	WESLEY LANE	413	12+56.0	WESLEY LANE
374-375	LP STA 2+44.8		414	12+56.0	
376-377	LP STA 2+97.1		415	12+56.0	
378-379	LP STA 2+97.1		416	12+56.0	
380	12+06.2	WESLEY LANE	417-418	2+70.3	WOODVALE PLACE
381	12+06.2		419-420	3+15.7	
382-383	12+06.2		421-422	0+57.0	
384	12+06.2		423-424	0+57.0	
385	UL STA 1130.0	WESLEY LANE	425	4+36.4	WESLEY LANE
386	UL STA 1130.0		426	2+95.0	
387	UL STA 1130.0		427	1+98.9	
388	0+78.9		428-429	1+98.9	
389-390	10+11.7	WESLEY LANE	431	18+78.0	WESLEY LANE
391-392	8+28.7		432	19+00.0	
393-394	0+72.8				
395	0+81.9				

NOTE: SEE PROFILES FOR SEWER HOUSE CONNECTION STATIONS



PLAN
SCALE: 1" = 50'



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 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 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 ON THESE PLANS:
- STATE HIGHWAY ADMINISTRATION.....531-5533
BALTIMORE GAS & ELECTRIC CO.....850-4620
BALTIMORE GAS & ELECTRIC CO.....865-2662
UNDERGROUND DAMAGE CONTROL.....787-9068
- MISS UTILITY.....1-800-257-7777
COLONIAL PIPELINE CO.....795-1390
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.
 - 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.
- PART 2 - WATER**
- ALL WATER MAINS SHALL 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, 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 G5.52, 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 CANNOT BE SERVED.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	QUANTITIES AS-BUILT	TYPE	MANUF./SUPPLIER
12" WATER	2125 LF	2004		GRIFIN PIPE
8" WATER	1417 LF	1414		"
6" WATER	217 LF	224		"
4" WATER	525 LF	522		"
12" VALVE	2 EA	2		MUELLERS
8" VALVE	3 EA	3		"
4" VALVE	2 EA	2		"
FIRE HYDRANTS	3 EA	5		"
3" BLOWOFF	5 EA	5		"
3" VHC	925 LF	0		"
3/4" VHC	713 LF	0		"
8" SEWER (PVC)	3669 LF	3600		JAM/ENR
8" SEWER (RCP)	790 LF	790		GRIFIN PIPE
MANHOLES	30 EA	20		ATLANTA
4" SHC (VCP)	1348 LF	1472		ATLANTA
4" SHC (RCP)		451		GRIFIN PIPE

NAME OF UTILITY CONTRACTOR: C.C.O.
SURVEY/ DRAFTING BY: AS-BUILT DATE

HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

James M. Holden 7/12/02
U.S. SOIL CONSERVATION SERVICE

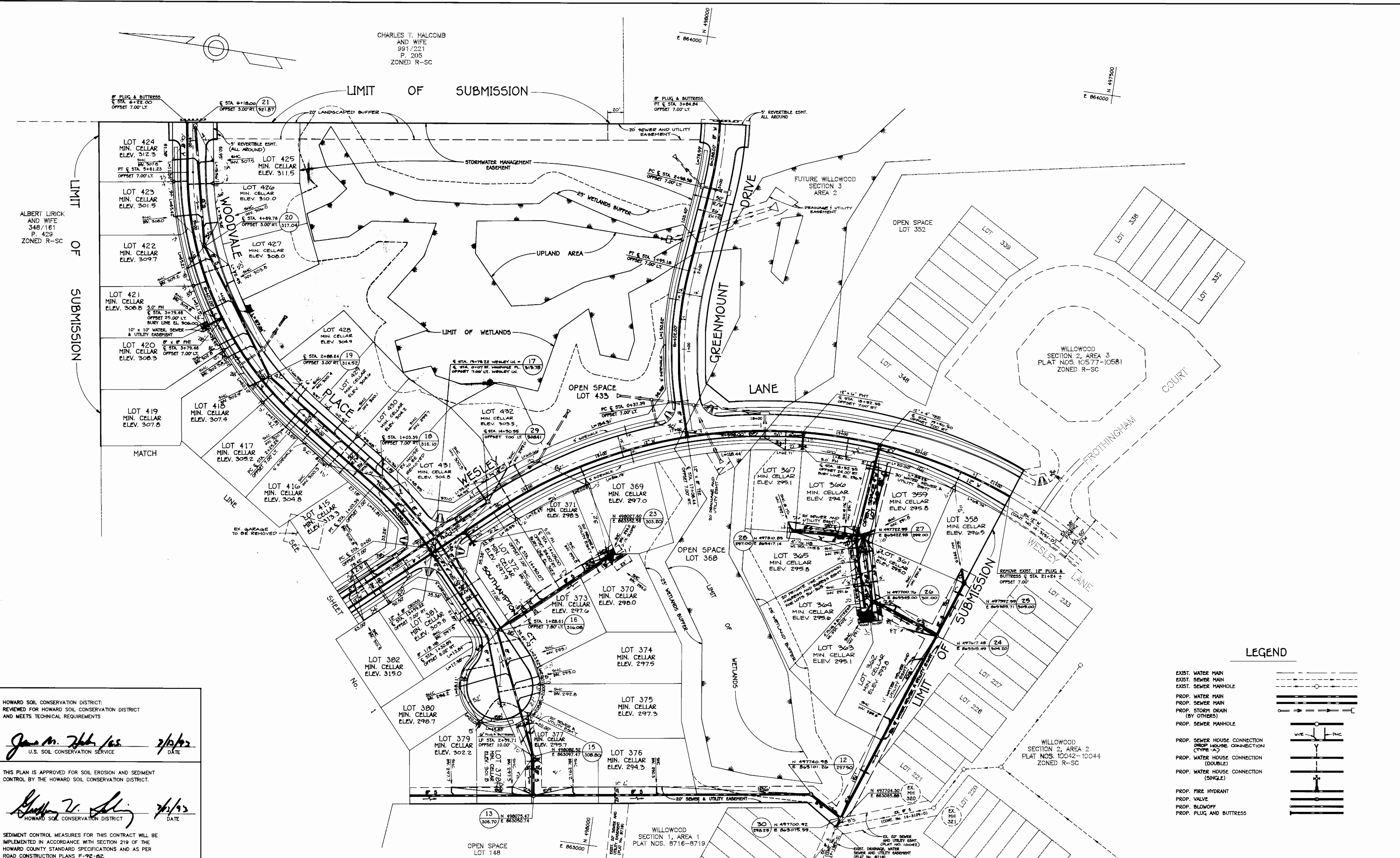
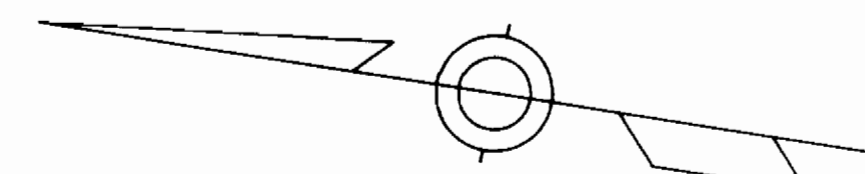
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Shelby W. Adley 7/12/02
HOWARD SOIL CONSERVATION DISTRICT

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-92-02.

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>James M. Holden</i> 7/12/02 DIRECTOR OF PUBLIC WORKS</p> <p><i>Richard Wilson</i> 7/12/02 CHIEF, BUREAU OF ENGINEERING</p> <p><i>Richard Wilson</i> 7/12/02 CHIEF, BUREAU OF UTILITIES</p>		<p>TSA GROUP, INC. planning • engineering • surveying 8480 Baltimore National Pike • Suite 418 Ellicott City, Maryland 21043</p> <p><i>John Amara</i></p>		<p>DES: MA/JME DRN: DBT/DRK CHK: JME DATE: 1-20-92 6-25-93</p>		<p>REVISIONS</p> <p>REVISIONS: REVISE SHCS FOR LOTS 390 & 401. REVISE WATER MAIN PROFILE. GREENMOUNT DRIVE DELETE DROP HOUSE CONNECTIONS. 10-20-93</p>		<p>PLAN OF WATER & SEWER MAINS</p> <p>600 SCALE MAP NO. 37</p>		<p>WILLOWOOD SECTION 3, AREA 1 LOTS 358 THRU 433 ELECTION DISTRICT NO. 1 CONTRACT NO. 14-3254-D</p>		<p>SCALE AS SHOWN</p> <p>SHEET 1 OF 5</p>	
---	--	--	--	--	--	--	--	---	--	--	--	---	--

CHARLES T. HALCOMB
AND WIFE
891/221
P. 205
ZONED R-SC



LEGEND

- EXIST. WATER MAIN
- EXIST. SEWER MAIN
- EXIST. SEWER MANHOLE
- PROP. WATER MAIN
- PROP. SEWER MAIN
- PROP. STORM DRAIN (BY OTHERS)
- PROP. SEWER MANHOLE
- PROP. SEWER HOUSE CONNECTION
- PROP. WATER HOUSE CONNECTION (TYPE "A")
- PROP. WATER HOUSE CONNECTION (DOUBLE)
- PROP. WATER HOUSE CONNECTION (SINGLE)
- PROP. FIRE HYDRANT
- PROP. VALVE
- PROP. BLOWOFF
- PROP. PLUG AND BUTTRESS

HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT
AND MEETS TECHNICAL REQUIREMENTS

James M. Hall 7/12/92
U.S. SOIL CONSERVATION SERVICE DATE

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

Stephen V. Slig 7/1/92
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 P-92-82.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Hall 7/12/92
DIRECTOR OF PUBLIC WORKS DATE

Richard A. ... 7-6-93
CHIEF, BUREAU OF UTILITIES DATE

William ... 7/1/92
CHIEF, LAND DEVELOPMENT DIVISION DATE

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

Thomas ...

DES: MA/JME	D.B.T.	REVISE SHCS FOR LOTS 385 & 425; REVISE WATER MAIN PROFILE GREENMOUNT DRIVE; DELETE PROP. HOUSE CONNECTIONS 10-20-92
DRN: DBT/DRK		
CHK: JME		
DATE: 1-20-92	BY NO.	REVISIONS
6-25-93		

PLAN OF
WATER & SEWER MAINS

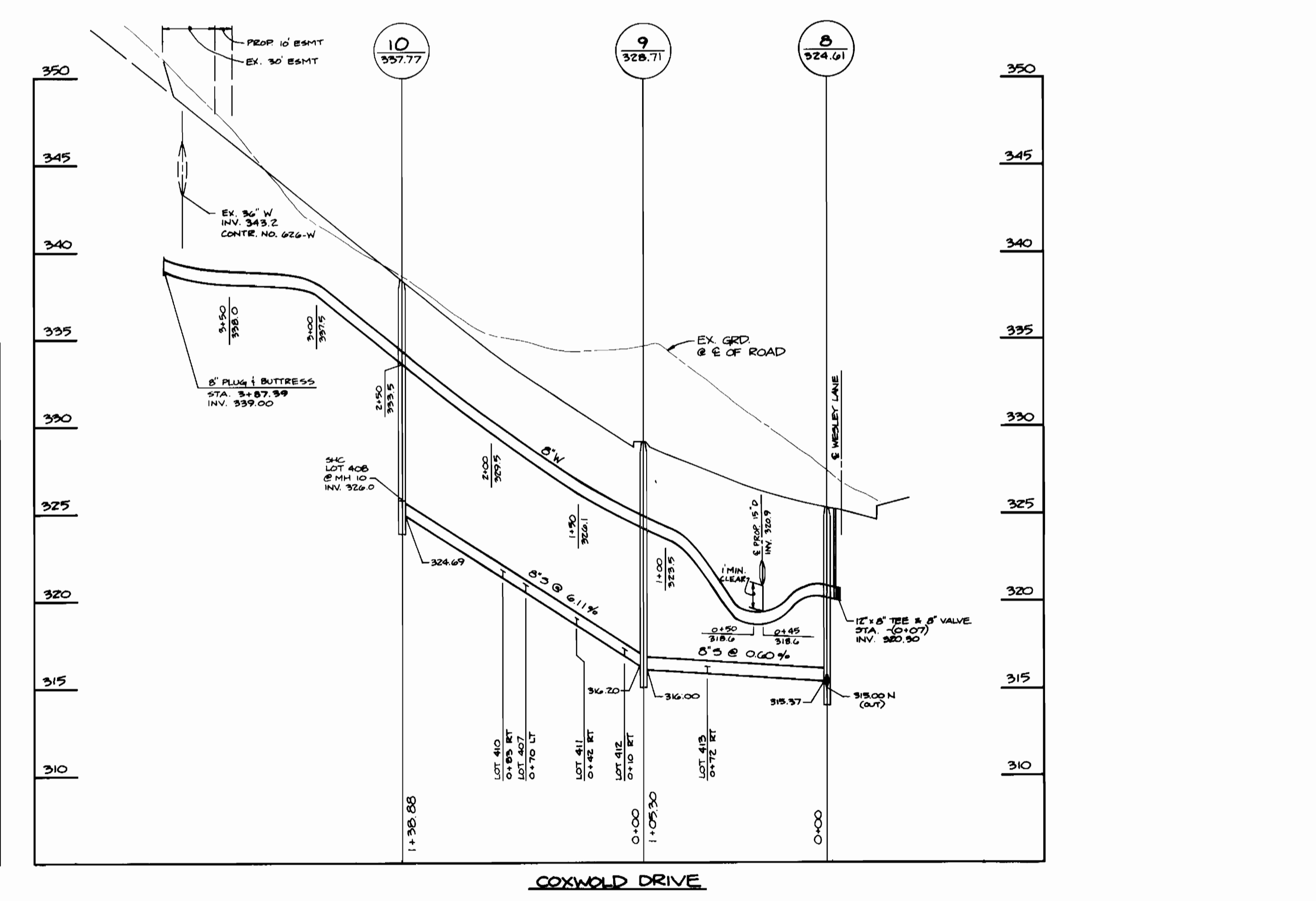
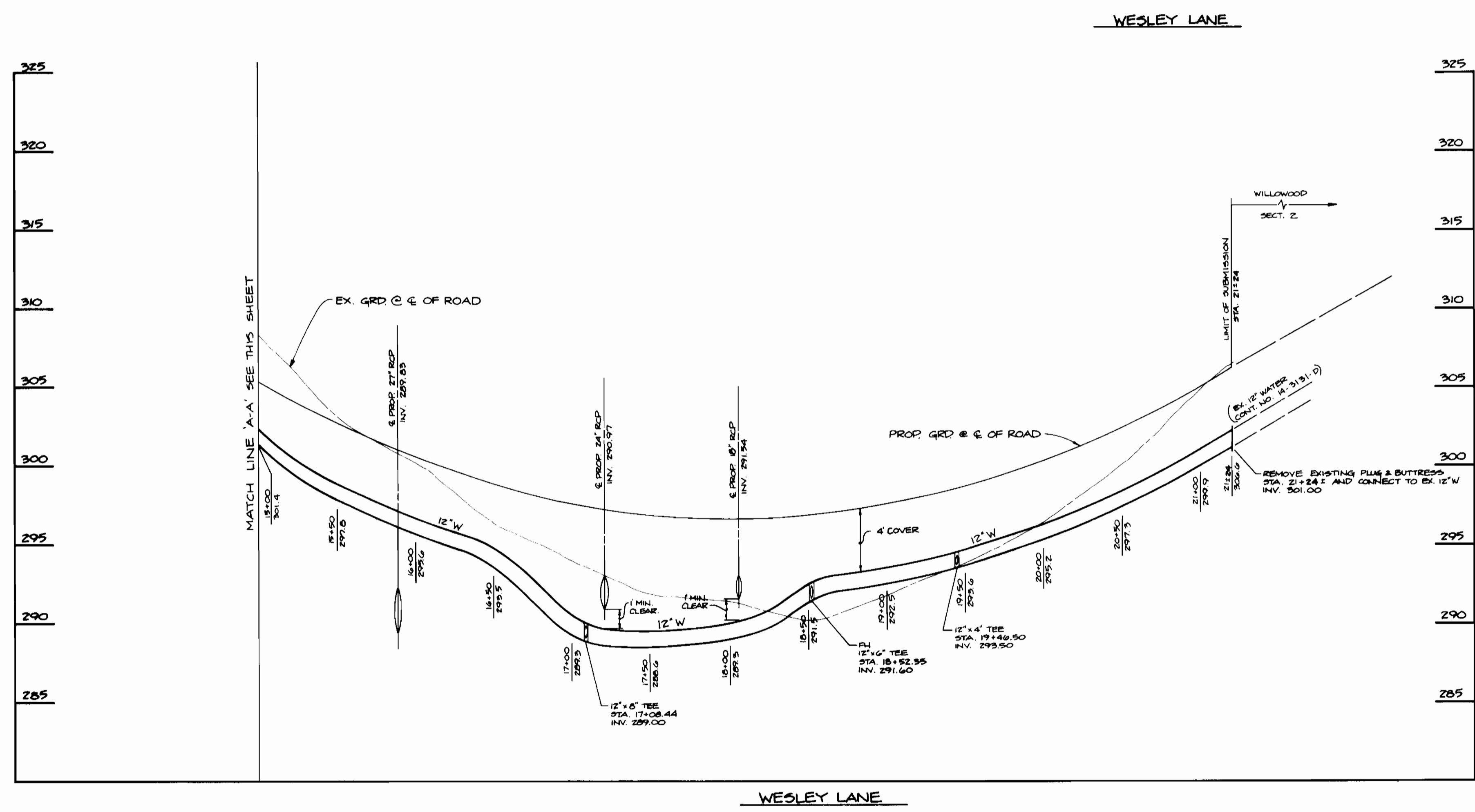
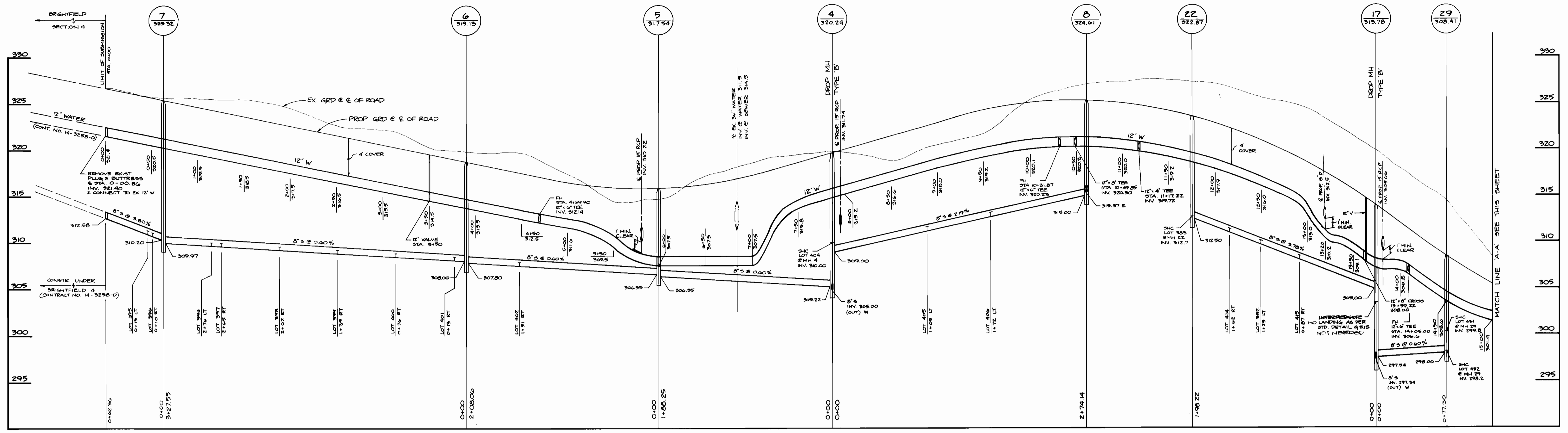
600 SCALE MAP NO. 37

WILLOWOOD
SECTION 3, AREA 1
LOTS 358 THRU 433
ELECTION DISTRICT NO. 1

CONTRACT NO. 14-3254-D

SCALE
1" = 50'

SHEET
2 OF 5



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James P. [Signature] 7/14/93
 DIRECTOR OF PUBLIC WORKS DATE

[Signature] 7/14/93
 CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 7/14/93
 CHIEF, BUREAU OF UTILITIES DATE

[Signature] 7/14/93
 CHIEF, LAND DEVELOPMENT DIVISION DATE

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

DES: MA/JME	DBT	REVISE SHC'S FOR LOTS 388-433; REVISE WATER MAIN PROFILE GREENMOUNT DRIVE. DELETE DROP HOUSE CONNECTIONS	10-20-93
DRN: DBT			
CHK: JME			
DATE: 1-20-92	BY: [Signature]	NO. [Signature]	REVISIONS

PROFILES OF
 WATER & SEWER MAINS

600 SCALE MAP NO. 37

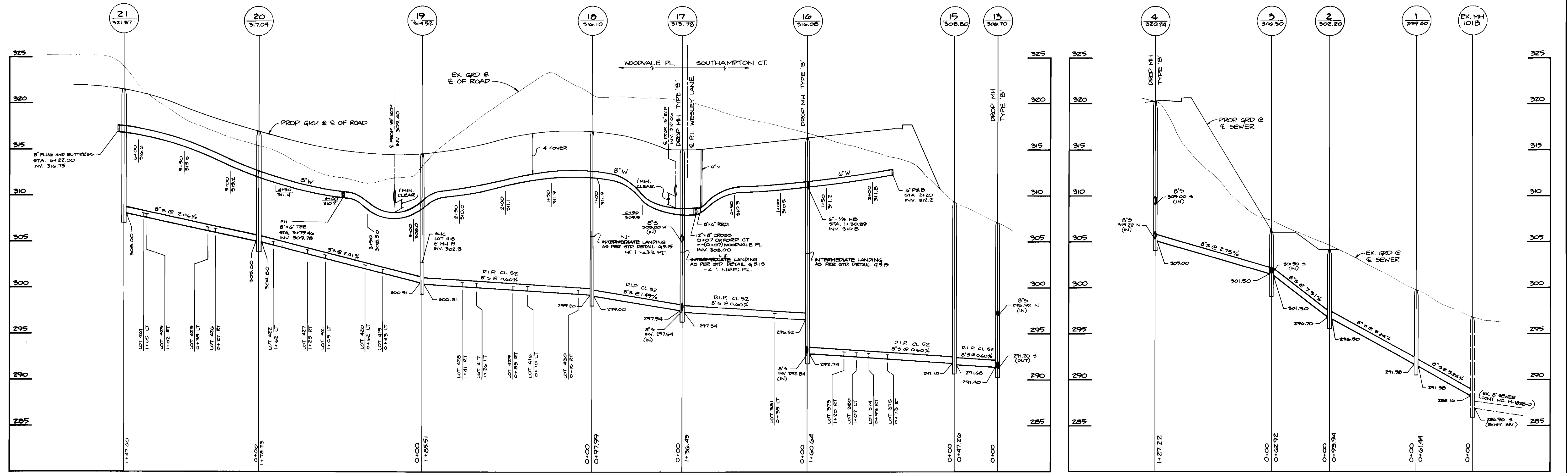
BLOCKS 10 & 16

WILLOWOOD
 SECTION 3, AREA 1
 LOTS 388-433
 ELECTION DISTRICT NO. 1

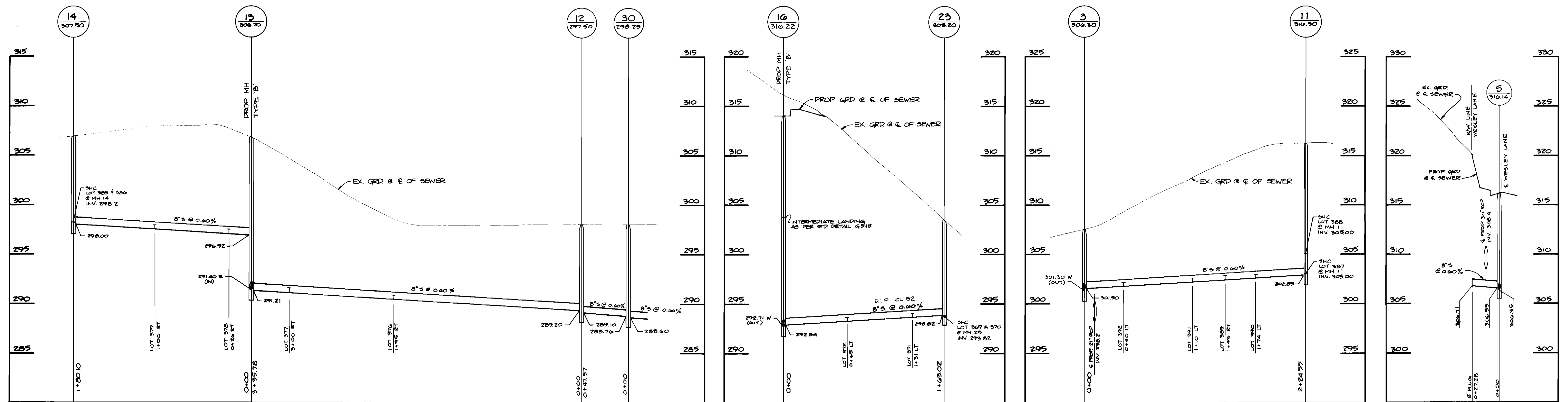
CONTRACT NO. 14-3254-D

SCALE
 1" = 50' HORIZ.
 1" = 5' VERT.

SHEET
 3 OF 5



WOODVALE PLACE / SOUTHAMPTON COURT



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Lane 7/19/93
DIRECTOR OF PUBLIC WORKS DATE
Robert J. Brown 7/19/93
CHIEF, BUREAU OF ENGINEERING DATE
Michael J. ... 7/14/93
CHIEF, BUREAU OF UTILITIES DATE
... 7/14/93
CHIEF, LAND DEVELOPMENT DIVISION DATE

TSA GROUP, INC.

planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

James M. Lane

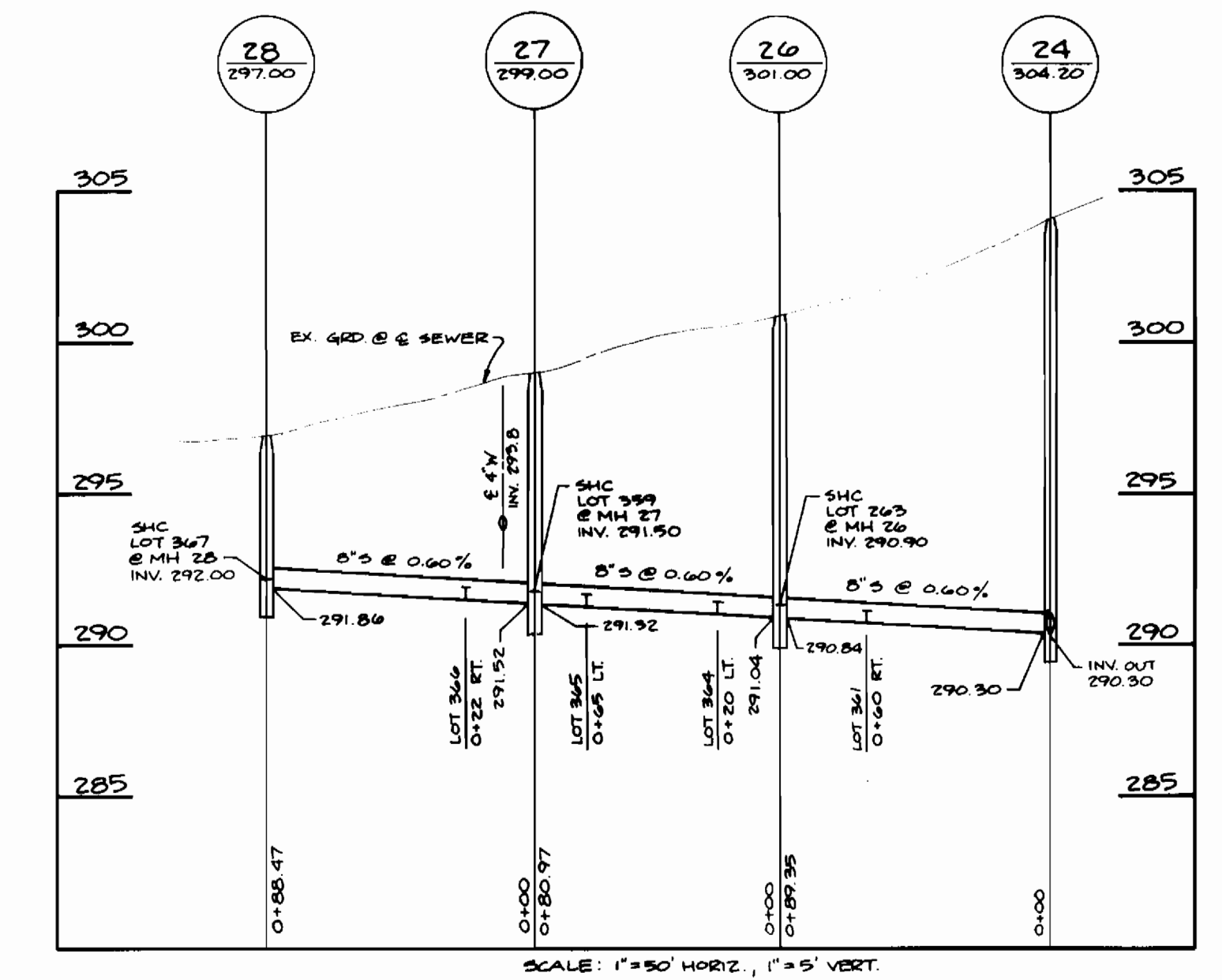
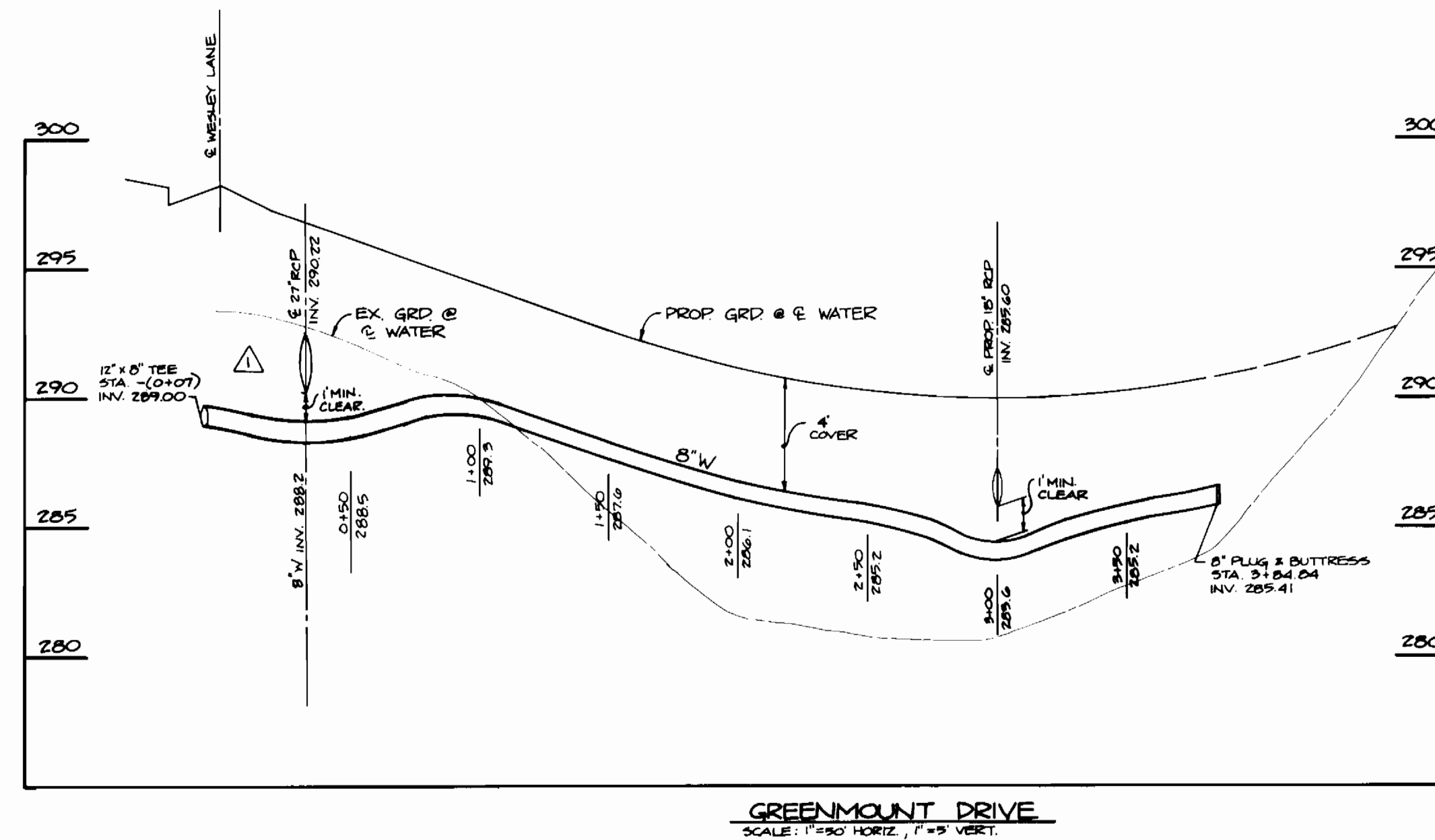
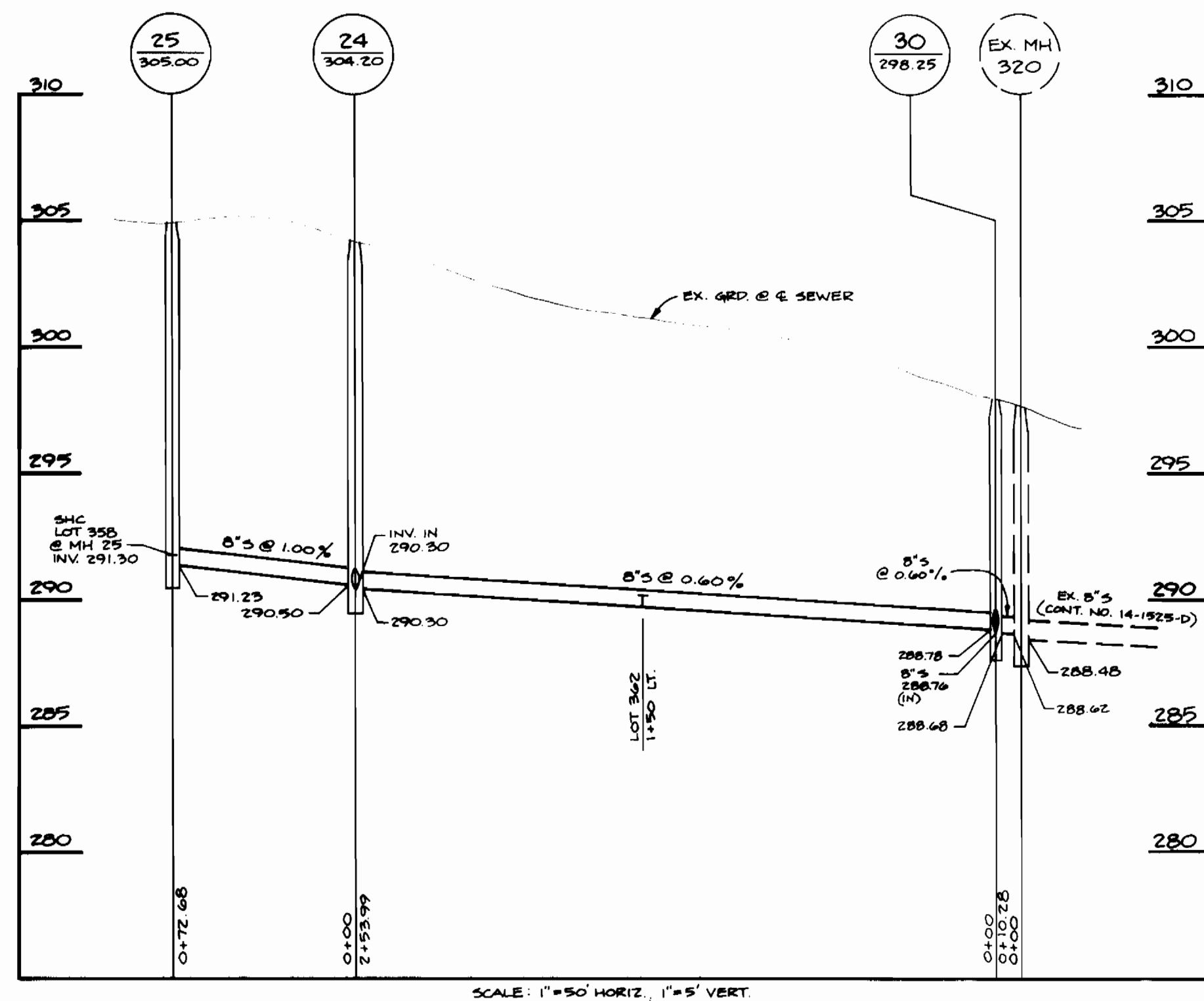
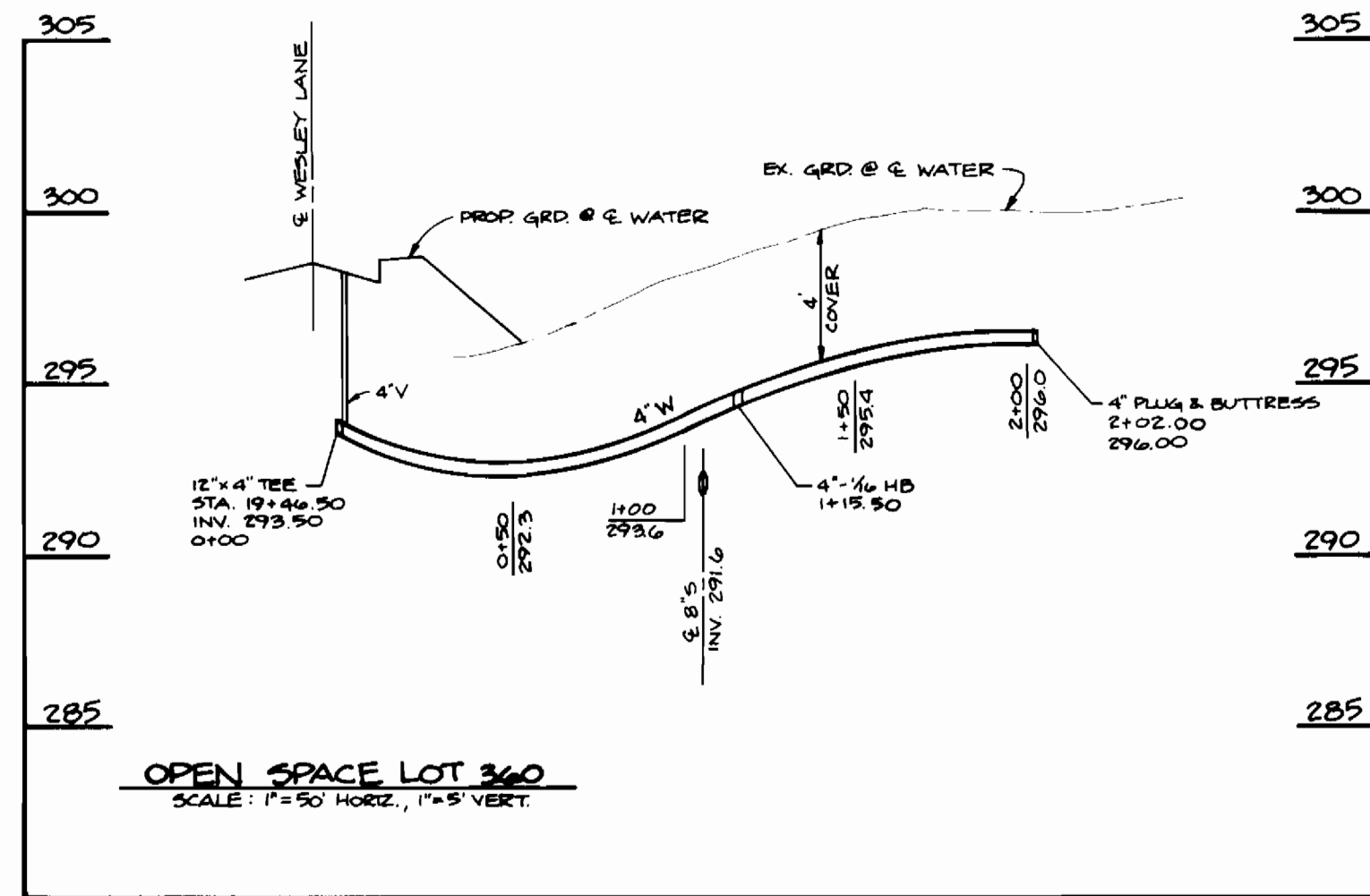
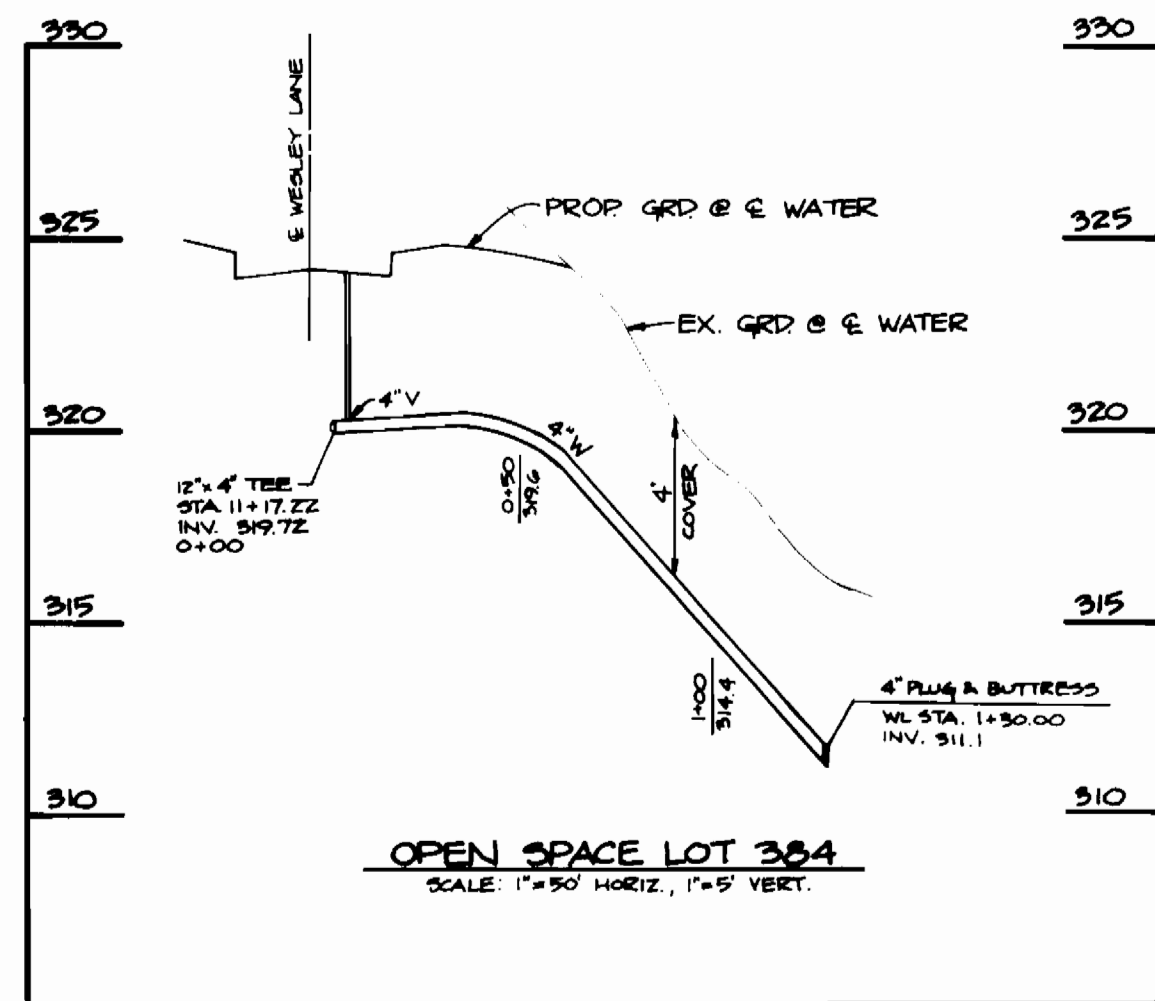
DES: MA/JME	D.B.T.	REVISIONS	10/24/95
DRN: DBT			
CHK: JME			
DATE: 1-20-92	BY: NO.	REVISIONS	DATE
6-25-93			

PROFILES OF
WATER & SEWER MAINS

600 SCALE MAP NO. 37 BLOCKS 10 & 16

WILLOWOOD
SECTION 3, AREA 1
LOTS 398-493
ELECTION DISTRICT NO. 1
CONTRACT NO. 14-3254-D

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



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

TSA GROUP, INC.

planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

DES: MA/JME	P.B.T.	REVISIONS	DATE
DRN: DBT		1-20-92	
CHK: JME		6-25-93	
DATE: 1-20-92	BY: NO.	REVISIONS	DATE

PROFILES OF
WATER & SEWER MAINS

WILLOWOOD
SECTION 3, AREA 1
LOTS 358-433
ELECTION DISTRICT NO. 1
CONTRACT NO. 14-3254-D

SCALE
AS
SHOWN

SHEET
5 OF 5