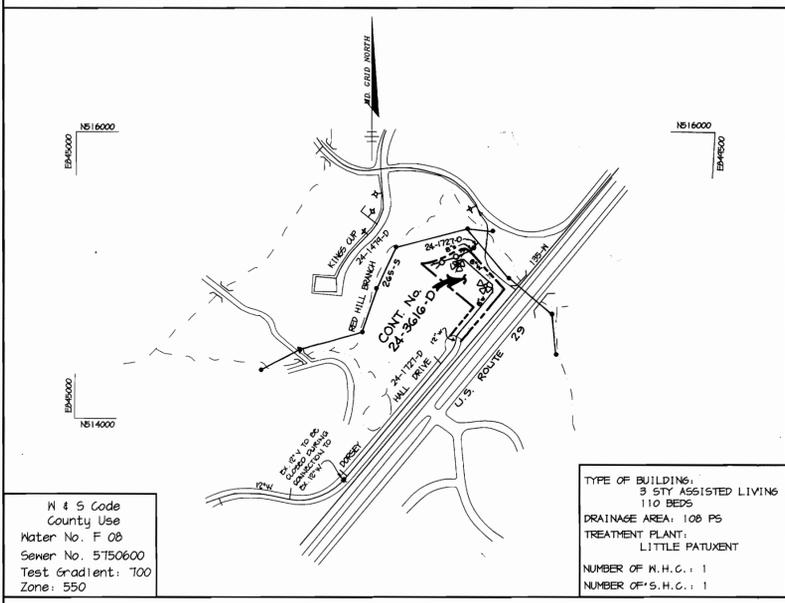


X:\PROJECTS\CL\8089\8089.dwg 12/11/2014 11:13:00 AM 100% 11/11/2014 11:13:00 AM 100% 11/11/2014 11:13:00 AM 100%

SHEET INDEX	
NO.	DESCRIPTION
1	PLAN OF WATER AND SEWER MAINS
2	PROFILES OF WATER AND SEWER MAINS



**VICINITY MAP**  
SCALE: 1" = 600'

**BENCHMARKS**

SURVEY CONTROL STATION 30BA  
N 573,149.04 E 1,357,083.22  
ELEVATION 397.91

SURVEY CONTROL STATION 30D1  
N 572,311.62 E 1,353,139.10  
ELEVATION 409.97

TYPE OF BUILDING:  
3 STY ASSISTED LIVING  
110 BEDS  
DRAINAGE AREA: 108 PS  
TREATMENT PLANT:  
LITTLE PATUXENT  
NUMBER OF N.H.C.: 1  
NUMBER OF S.H.C.: 1

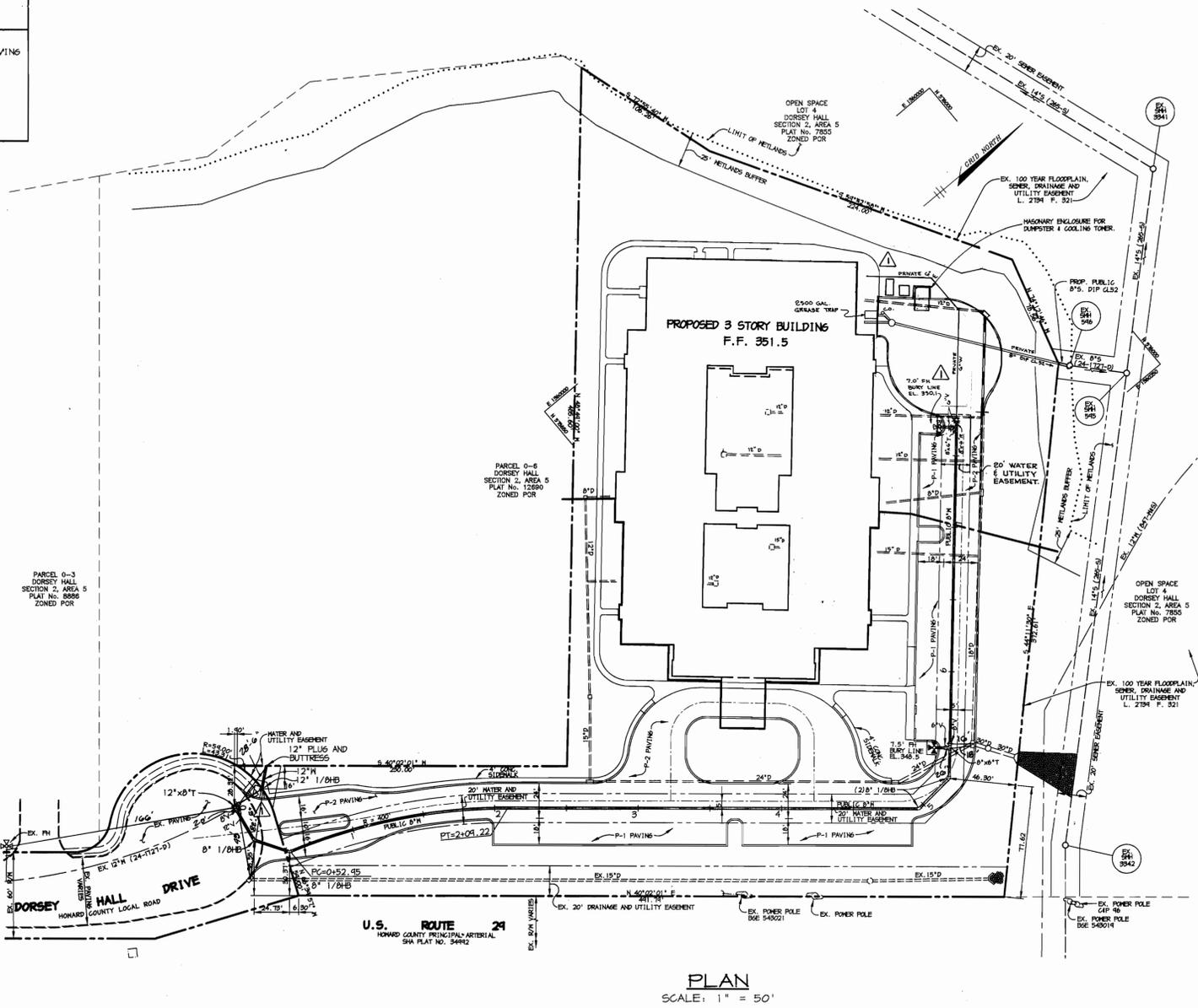
Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-97-102

Review for Howard Soil Conservation District and meets technical requirements.

*[Signature]* 6/2/97  
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

*[Signature]* 6/2/97  
HOWARD SOIL CONSERVATION DISTRICT DATE



**PLAN**  
SCALE: 1" = 50'

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	220 LF	220 L.F.	T/Top Joint D.I.P. Class 52	GRIFFIN PIPE
6" WATER	19 LF	19 L.F.	" " "	" " "
6" VALVES	3 EA.	3 EA.	U.S.	U.S. FILTER
8"x6" REDUCER	1 EA.	1 EA.	"	"
12"x8" T	1 EA.	1 EA.	"	"
8" V.O. HD	5 EA.	5 EA.	"	"
FIRE HYDRANT	2 EA.	2 EA.	U.S.	U.S. FILTER
12" WATER	16 LF	36 L.F.	"	"
12" V.O. HD	1 EA.	1 EA.	"	"
12" VALVES	1 EA.	1 EA.	U.S.	U.S. FILTER
8" VALVES	2 EA.	2 EA.	U.S.	U.S. FILTER
SEWER DIP CLASS 52	8 LF	10 L.F.	D.I.P.	GRIFFIN PIPE

NAME OF UTILITY CONTRACTOR: *STEVIE CLAPPER*

CHECKBOX	
AS-BUILT DATE	
SURVEY AND DRAFTING DIVISION	

**WATER & SEWER GENERAL NOTES**

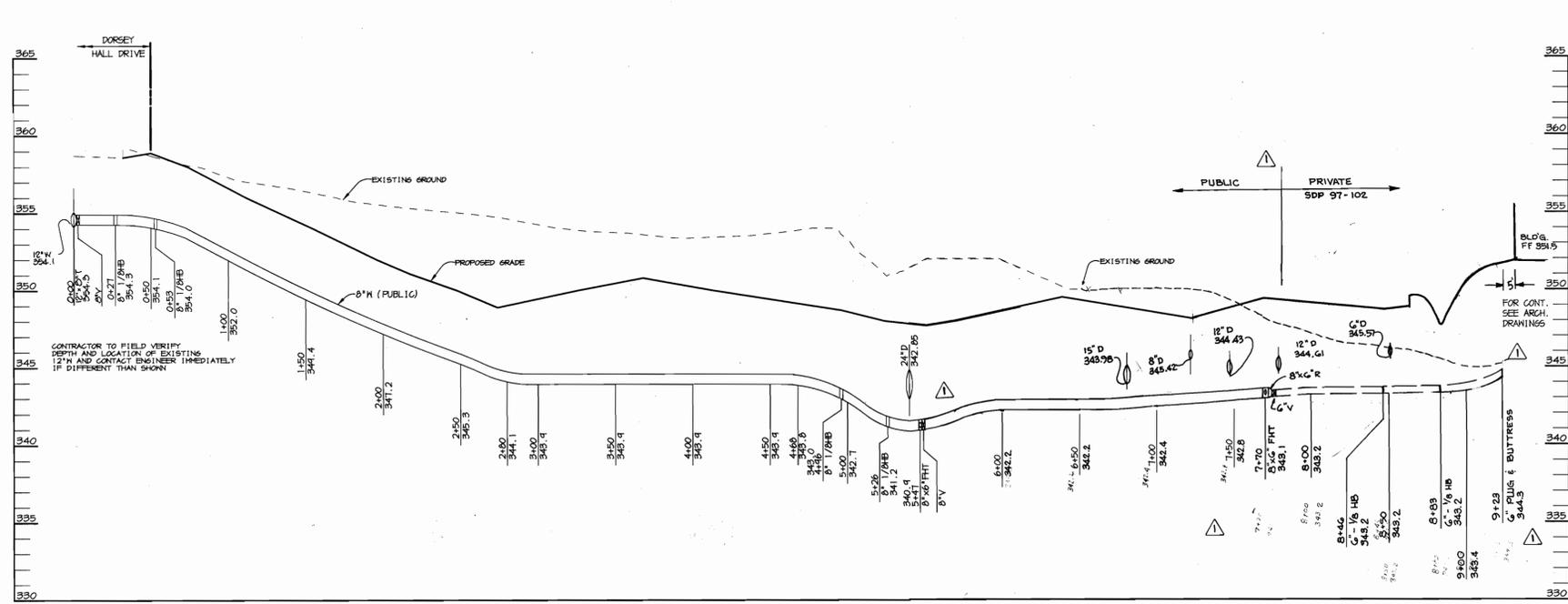
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the contractor's expense.
- All horizontal 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". 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 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 (Latest Edition). 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	531-5535
Baltimore Gas & Electric Co. Contractor Services	950-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9068
Miss Utility	1-800-251-7777
Colonial Pipeline Co.	745-1340
Bureau of Utilities, Howard County Department of Public Works	313-4400
- 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 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.
- All sewer mains shall be D.I.P. 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 M.T. in plan and profile shall have watertight frame and covers, Standard Detail 85.52. 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.
- Manholes can be either brick or precast concrete structures.
- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail M.1.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
- For sprinkler systems, all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five (5) 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 DPW requirements per Section 18.114(a) of the Howard County Code.

CAREMATIX ASSISTED LIVING FACILITY, DORSEY HALL DRIVE.

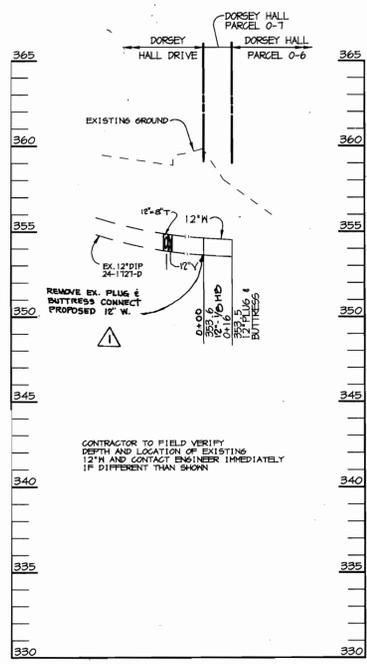
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND  <i>[Signature]</i> 5-27-97 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND  <i>[Signature]</i> 6/2/97 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	<b>RIEMER MUEGGE &amp; ASSOCIATES, INC.</b> ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282 8000/00000 00.090	DES: C.J.R. DRN: DAM CHK: <i>[Signature]</i> 8/00 RJC: <i>[Signature]</i> 3/17/98 DATE: 5-15-97 BY: NO. REVISION DATE	<b>PLAN OF WATER &amp; SEWER MAINS</b>  600' SCALE MAP NO. 30 BLOCK NO. 4	<b>DORSEY HALL</b> SECTION 2 AREA 5 PARCEL 0-7 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3616-D	SCALE AS SHOWN SHEET 1 OF 2
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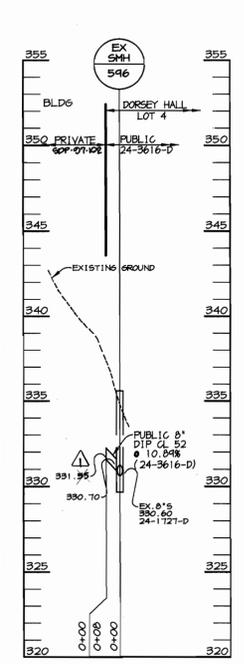
**WATER PROFILE**

SCALE:  
HOR. - 1"=50'  
VERT. - 1"=5'



**WATER PROFILE**

SCALE:  
HOR. - 1"=50'  
VERT. - 1"=5'



**SEWER PROFILE**

SCALE:  
HOR. - 1"=50'  
VERT. - 1"=5'

NOTE:  
CONTRACTOR TO FIELD VERIFY  
DEPTH AND LOCATION OF EXISTING  
P'S AND CONTACT ENGINEER IMMEDIATELY  
IF DIFFERENT THAN SHOWN.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
R. J. ...  
CHIEF, BUREAU OF UTILITIES  
5-27-97  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
  
...  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
6/3/97  
DATE

**RIEMER MUEGGE & ASSOCIATES, INC.**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282  
HOCO/00000 00.000

J. Parekh  
JAYKANT D. PAREKH # 19148

DES:	C.J.R.				
DRN:	DAM				
CHK:					
DATE:	5-15-07				
RJC	Δ	REVISED BOTH WATER PROFILES & SEWER PROFILE		5-17-98	
BY	NO.	REVISION		DATE	

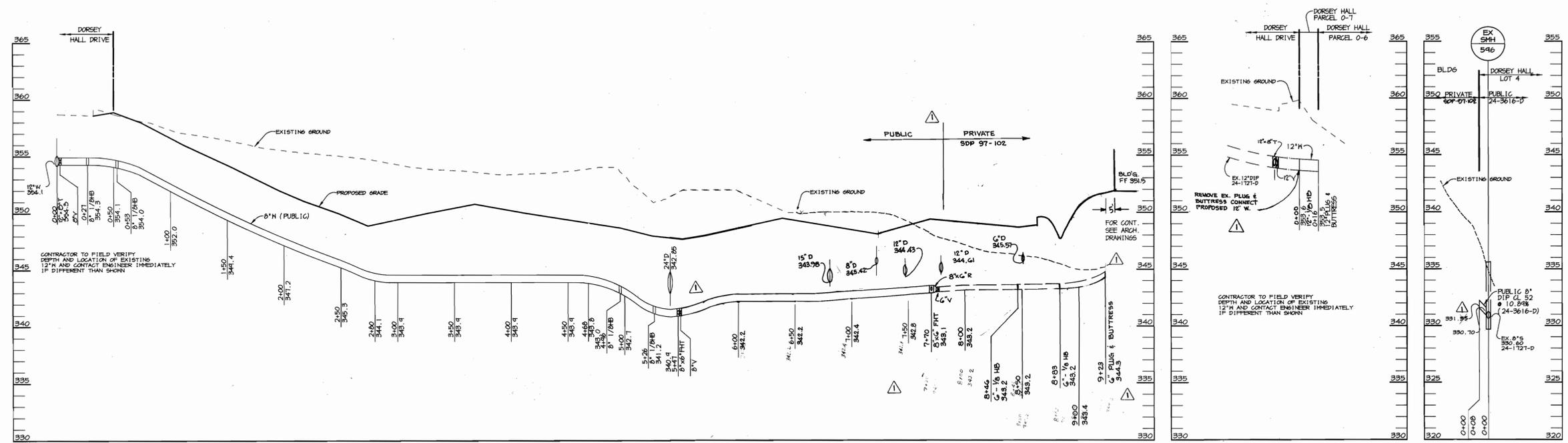
**PROFILE OF WATER & SEWER MAINS**  
600' SCALE MAP NO. 30 BLOCK NO. 4

**DORSEY HALL**  
SECTION 2 AREA 5  
PARCEL 0-7  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 24-3616-D

SCALE AS SHOWN  
SHEET 2 OF 2



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**WATER PROFILE**

SCALE:  
HOR. - 1" = 50'  
VERT. - 1" = 5'

**WATER PROFILE**

SCALE:  
HOR. - 1" = 50'  
VERT. - 1" = 5'

**SEWER PROFILE**

SCALE:  
HOR. - 1" = 50'  
VERT. - 1" = 5'

NOTE:  
CONTRACTOR TO FIELD VERIFY  
DEPTH AND LOCATION OF EXISTING  
8" S AND CONTACT ENGINEER IMMEDIATELY  
IF DIFFERENT THAN SHOWN

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert W. ...*  
CHIEF, BUREAU OF UTILITIES

5-27-97  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*...*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

6/3/97  
DATE

**RIEMER MUEGGE & ASSOCIATES, INC.**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282  
8000/0000 00.000

*J. Parekh*  
JAYKANT D. PAREKH # 19148

DES: C.J.R.					
DRN: DAM					
CHK:					
DATE: 5-15-97					
RJC	Δ	REVISED BOTH WATER PROFILES & SEWER PROFILE	3-17-98		
BY	NO.	REVISION	DATE		

**PROFILE OF WATER & SEWER MAINS**

600' SCALE MAP NO. 30 BLOCK NO. 4

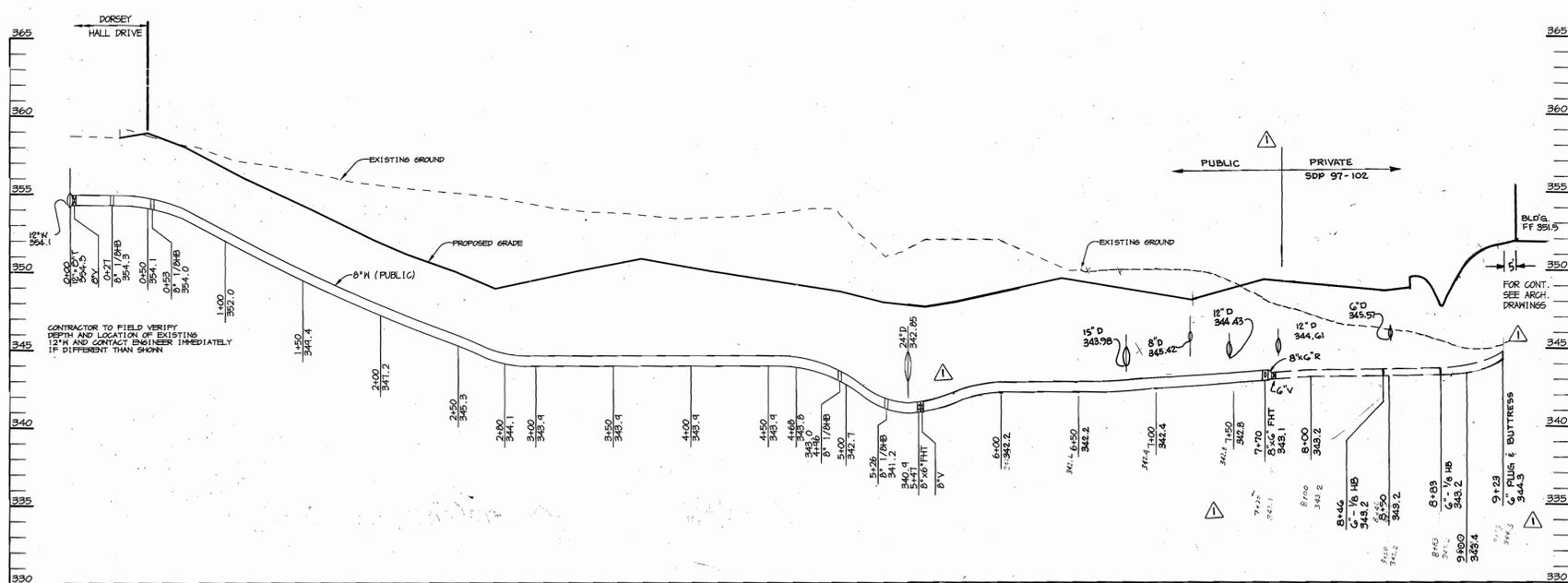
**DORSEY HALL**  
SECTION 2 AREA 5  
PARCEL 0-7  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 24-3616-D

SCALE AS SHOWN  
SHEET 2 OF 2



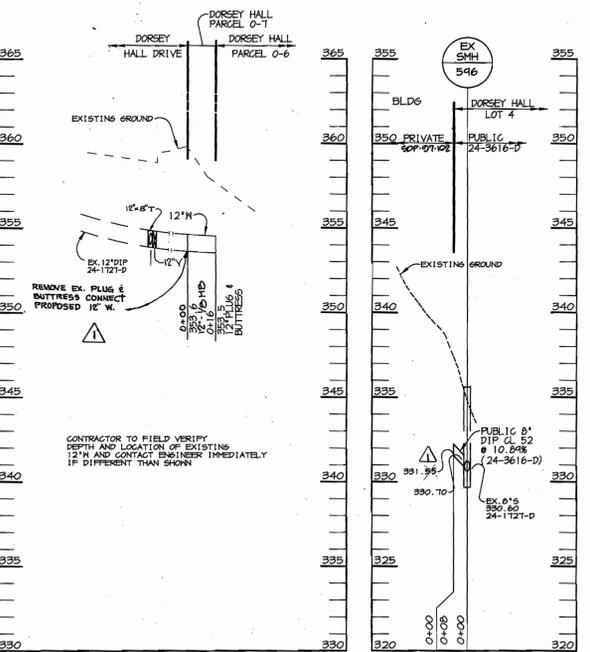
2016  
 2/5  
 200 E.D.  
 2016

2016 2/5 200 E.D. 2016



**WATER PROFILE**

SCALE:  
 HOR. - 1"=50'  
 VERT. - 1"=5'



**SEWER PROFILE**

SCALE:  
 HOR. - 1"=50'  
 VERT. - 1"=5'

NOTE:  
 CONTRACTOR TO FIELD VERIFY  
 DEPTH AND LOCATION OF EXISTING  
 8" AND CONTACT ENGINEER IMMEDIATELY  
 IF DIFFERENT THAN SHOWN

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 5-27-97  
 DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 6/3/97  
 DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
 8818 Centre Park Drive, Columbia, Maryland 21045  
 tel 410.997.8900 fax 410.997.9282  
 8000/00000 00.DWG

J. Parekh  
 JAYKANT D. PAREKH # 19148

DES: C.J.R.	
DRN: DAM	
CHK:	
DATE: 5-15-07	
BY NO.	REVISION
RJC	REVISED BOTH WATER PROFILES & SEWER PROFILE
	3-17-98

PROFILE OF WATER & SEWER MAINS  
 SCALE:  
 HOR. - 1"=50'  
 VERT. - 1"=5'

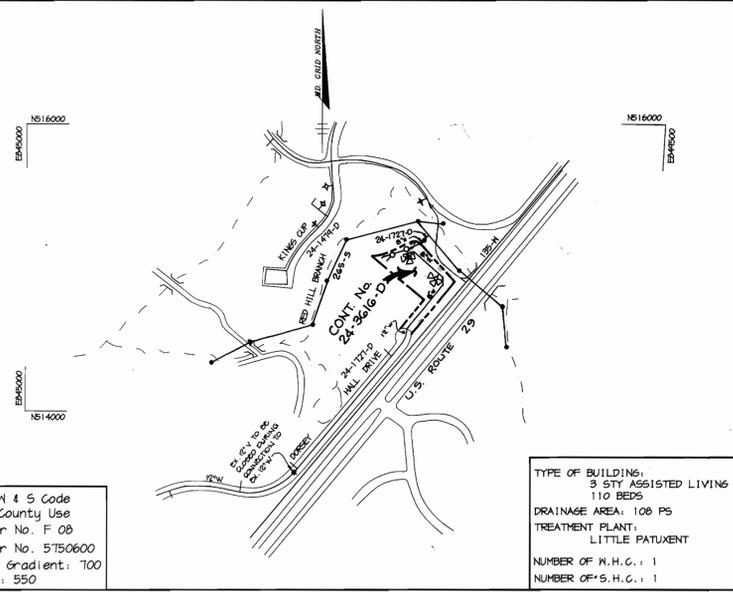
DORSEY HALL  
 SECTION 2 AREA 5  
 PARCEL 0-7  
 2nd ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 24-3616-D

SCALE AS SHOWN  
 SHEET 2 OF 2

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### SHEET INDEX

No.	DESCRIPTION
1	PLAN OF WATER AND SEWER MAINS
2	PROFILES OF WATER AND SEWER MAINS



### VICINITY MAP

SCALE: 1"=600'

### BENCHMARKS

SURVEY CONTROL STATION 30BA  
N 573,149.04 E 1,357,083.22  
ELEVATION 397.91

SURVEY CONTROL STATION 30D1  
N 572,311.62 E 1,353,139.10  
ELEVATION 409.97

TYPE OF BUILDING:  
3 STY ASSISTED LIVING  
110 BEDS

DRAINAGE AREA: 108 FS

TREATMENT PLANT:  
LITTLE PATUXENT

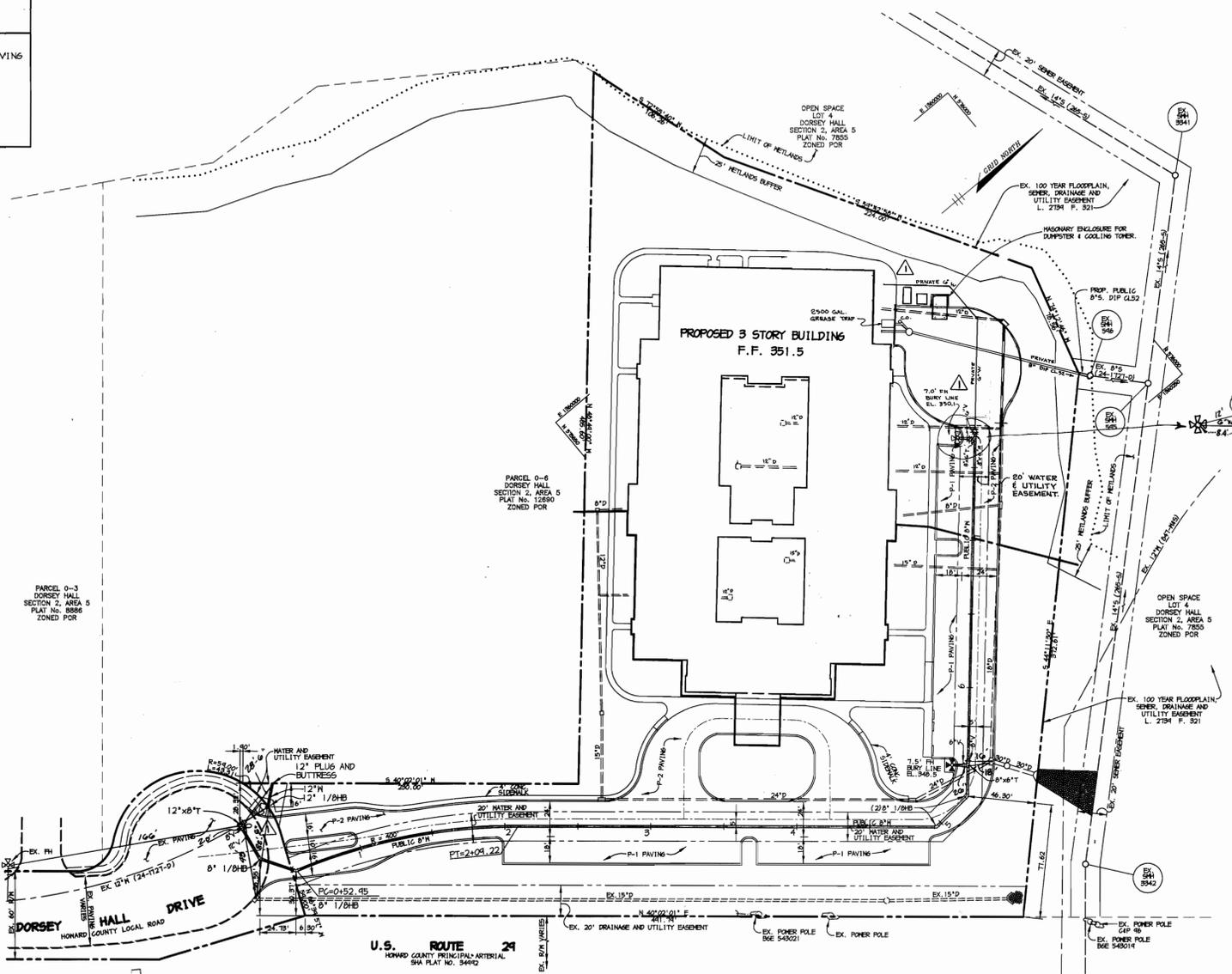
NUMBER OF N.H.C.: 1

NUMBER OF S.H.C.: 1

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-97-102

Review for Howard Soil Conservation District and meets technical requirements.

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.



### PLAN

SCALE: 1"=50'

### QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	828 LF	828 L.F.	7" TOP JOINT D.I.P. CLASS 52	GRIFFIN PIPE
6" WATER	19 LF	19 L.F.	" " "	" " "
6" VALVES	3 EA.	3 EA.	U.S.	U.S. FILTER
8"x6" REDUCER	1 EA.	1 EA.	"	"
12"x8" T	1 EA.	1 EA.	"	"
8" 1/2" HD	5 EA.	5 EA.	"	"
FIRE HYDRANT	2 EA.	2 EA.	U.S.	U.S. FILTER
12" WATER	16 LF	36 L.F.	"	"
12" 1/2" HD	1 EA.	1 EA.	"	"
12" VALVES	1 EA.	1 EA.	U.S.	U.S. FILTER
8" VALVES	2 EA.	2 EA.	U.S.	U.S. FILTER
SEWER DIP CLASS 52	8 LF	10 L.F.	D.I.P.	GRIFFIN PIPE

NAME OF UTILITY CONTRACTOR: STEVE CLAPPER

CHECKBOX	
AS-BUILT DATE	
SURVEY AND DRAFTING DIVISION	

### WATER & SEWER 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.
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Baltimore Gas & Electric Co. Underground Damage Control	781-5008
Miss Utility	1-800-251-7777
Colonial Pipeline Co.	745-1340
Bureau of Utilities, Howard County Department of Public Works	313-4900
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- 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.
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- All sewer mains shall be D.I.P. 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 N.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.
- Manholes can be either brick or precast concrete structures.
- Contractor is solely responsible for construction means, methods, techniques, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail N.1.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
- For sprinkler systems, all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-1450 at least five (5) working days before any open cut of any county road or boring/lacking 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.

CAREMATIX ASSISTED LIVING FACILITY, DORSEY HALL DRIVE.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*[Signature]*  
CHIEF, BUREAU OF UTILITIES

5-27-97  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

6/2/97  
DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282  
8000/00000 00.DWG

*[Signature]*  
JAYKANT D. PAREKH # 19148

DES: C.J.R.

DRN: DAM

CHK: *[Signature]*

DATE: 5-15-97

BY	NO.	REVISION	DATE
K.R.I.	3	AS-BUILT CONDITIONS ADDED TO PLAN	12/8/99
K.R.I.	2	AS-BUILT CONDITIONS ADDED TO PLAN	8/00
R.J.C.	1	REVISED LOADING AREA, LAYOUT & AFFECTED UTILITIES NE BLDG. CORNER 1 ADDED ROOF DRAIN REFERENCE LOCATIONS	9/17/98

PLAN OF WATER & SEWER MAINS

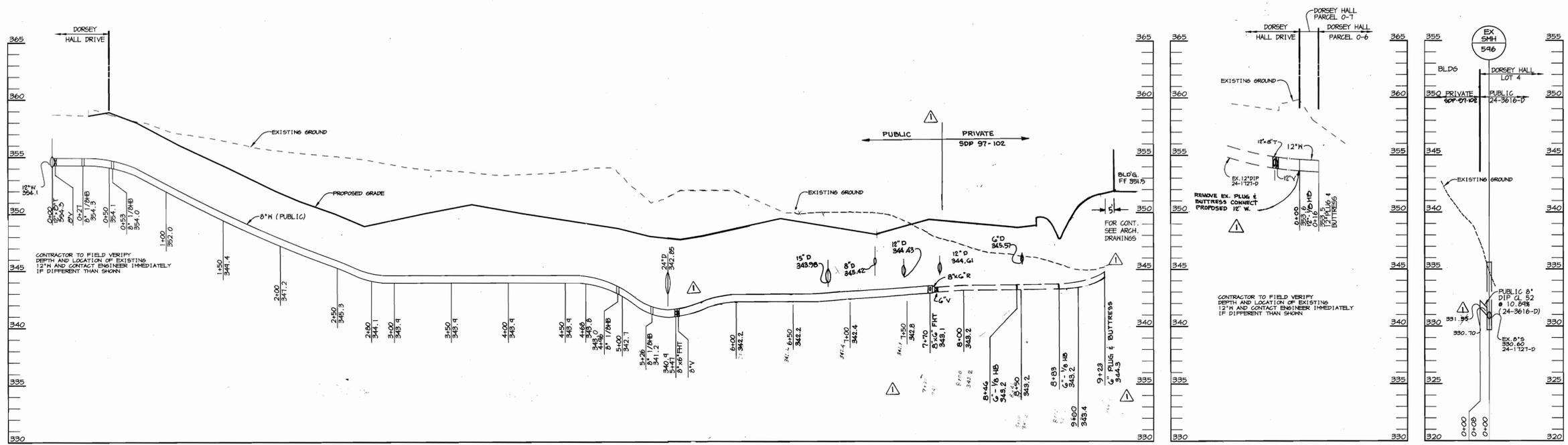
600' SCALE MAP NO. 30 BLOCK NO. 4

DORSEY HALL  
SECTION 2 AREA 5  
PARCEL 0-7  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 24-3616-D

SCALE AS SHOWN

SHEET 1 OF 2

D:\PROJECTS\24-3616\DWG\24-3616-07.DWG



**WATER PROFILE**

SCALE:  
HOR. - 1"=50'  
VERT. - 1"=5'

**WATER PROFILE**

SCALE:  
HOR. - 1"=50'  
VERT. - 1"=5'

**SEWER PROFILE**

SCALE:  
HOR. - 1"=50'  
VERT. - 1"=5'

NOTE:  
CONTRACTOR TO FIELD VERIFY  
DEPTH AND LOCATION OF EXISTING  
SIS AND CONTACT ENGINEER IMMEDIATELY  
IF DIFFERENT THAN SHOWN

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND  <i>Robert J. ...</i> CHIEF, BUREAU OF UTILITIES DATE: 5-27-97	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND  <i>... ..</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 6/3/97	<b>RIEMER MUEGGE &amp; ASSOCIATES, INC.</b> ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8618 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.8282 8000/00000 00.DWG	<i>J. Parekh</i> JAYKANT D. PAREKH # 19148	DES: C.J.R.				<b>PROFILE OF WATER &amp; SEWER MAINS</b>	60' SCALE MAP NO. 30 BLOCK NO. 4	DORSEY HALL SECTION 2 AREA 5 PARCEL 0-7 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3616-D	SCALE AS SHOWN  SHEET 2 OF 2
				DRN: DAM							