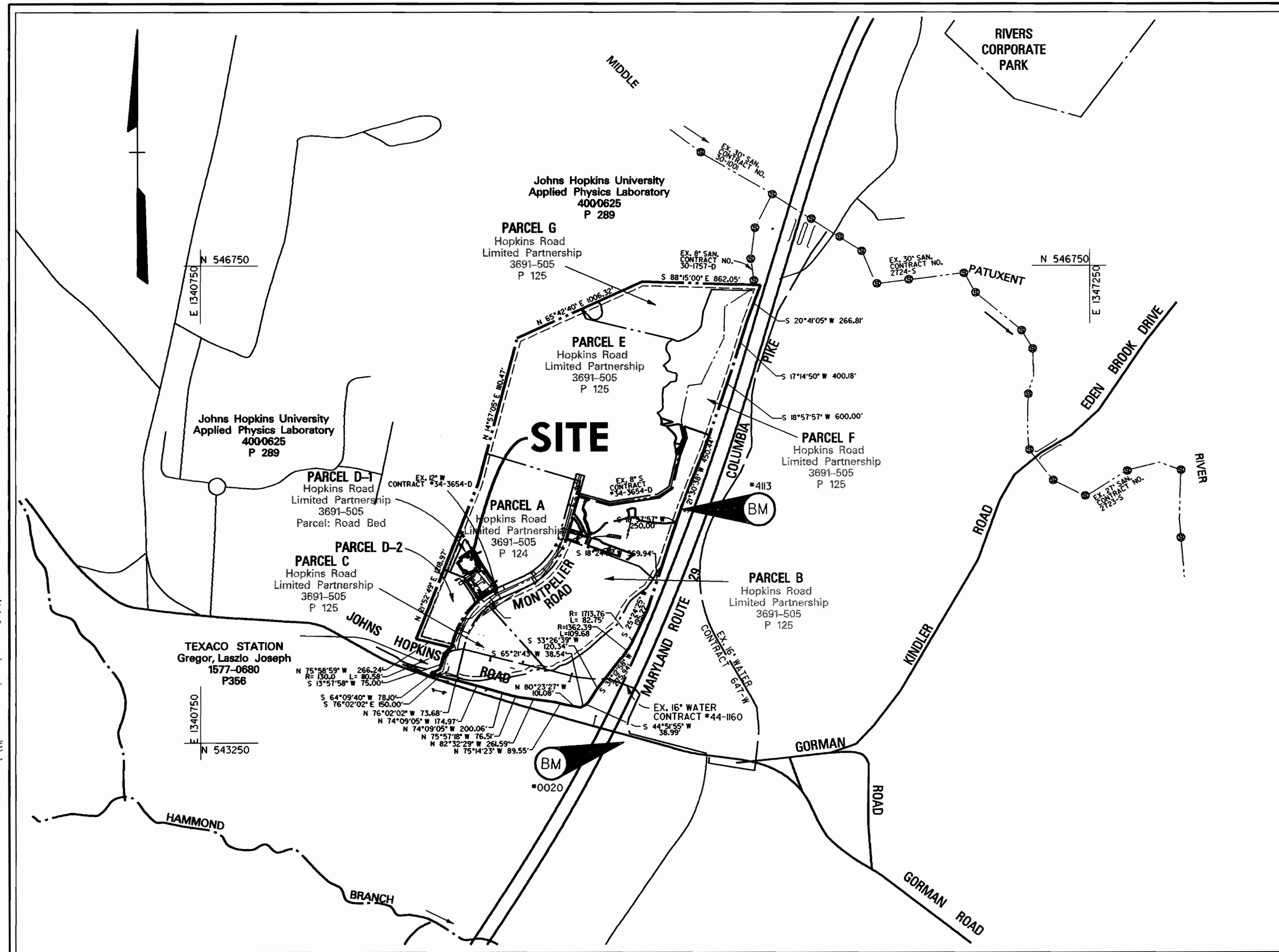
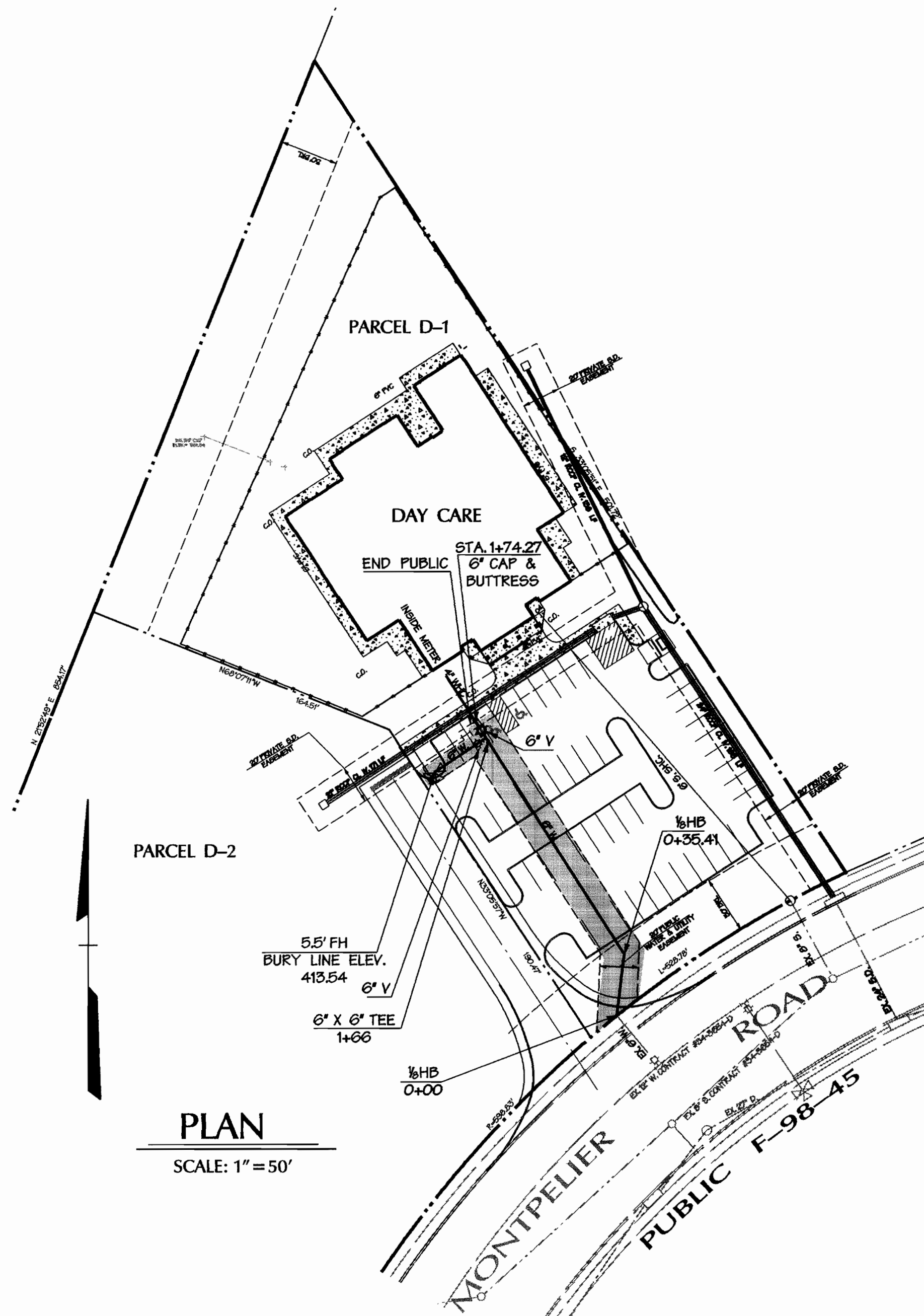


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER /SUPPLIER
6" D.I.P.	208 LF			
6" x 6" TEE	1			
6" VALVE	2			
6" CAP	1			
6" FIRE HYDRANT	1			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				

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 1'.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS 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 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 VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
STATE HIGHWAY ADMINISTRATION - (410) 531-5533
BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 850-4620
MESS UTILITY - 1-800-257-7777
CHESAPEAKE AND POTOMAC TELEPHONE CO. (410) 795-1390
COLONIAL PIPELINE CO. - (410) 795-1390
BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - (410) 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.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 410-313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADSTOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.141(c) OF THE HOWARD COUNTY CODE.

APPURTENANCE SCHEDULE				
WATER LINE	APPURTENANCE	NORTHING	EASTING	W.L. STATION
'A'	1/8" HORIZ. BEND			STA. 0+00
	1/8" HORIZ. BEND	544349.44	1342801.10	STA. 0+35.41
	6" x 6" Tee	544918.83	1336574.51	STA. 1+66
	6" Cap & Buttress	544466.55	1342726.49	STA. 1+74.27
	6" Hydrant	544441.48	1342706.34	STA. 1+68 32' LT



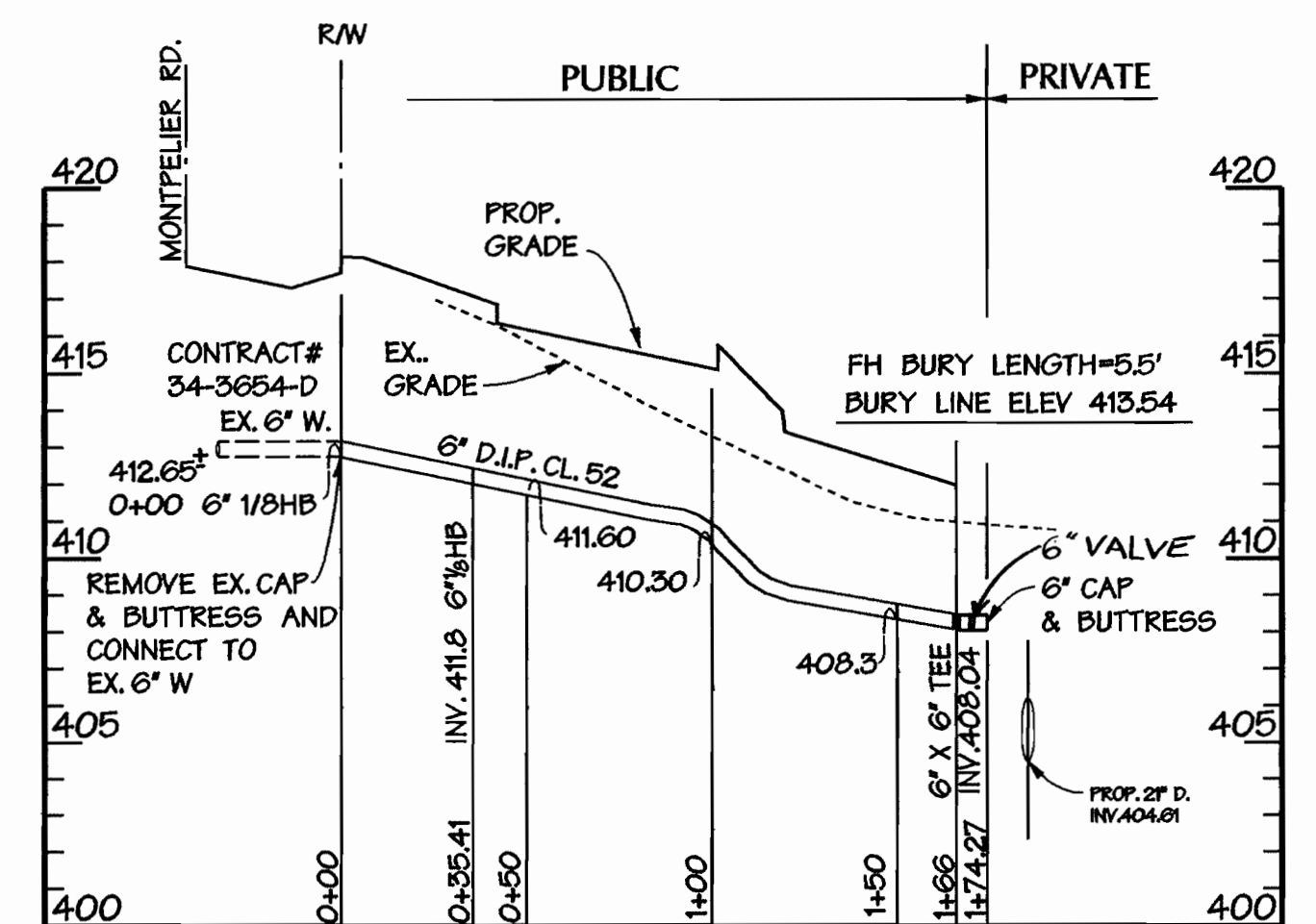
PART II - WATER

- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1303 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 THE PLANS OR IN THE SPECIFICATIONS.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-53 DUCTILE IRON COMPACT 12 INCH THROUGH 12 INCH FOR WATER AND OTHER LIQUIDS.
- ALL EXISTING VALVES TO BE CLOSED WHEN CONNECTION TO THE SYSTEM IS MADE.

BENCHMARK

DESCRIPTION

*413
N 544492.88
E 1344177.82
ELEVATION = 391.65
CONCRETE MONUMENT 4" WEST OF TOP OF BANK
OFF SOUTH BOUND LANE OF MARYLAND ROUTE 29 AT SURFACE.
*0020
N 543170.96
E 1343222.16
ELEVATION = 403.62
STANDARD MBCS SURVEY DISC SET ON CONCRETE MONUMENT,
FLUSH WITH THE GROUND.



PUBLIC WATER PROFILE

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

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Cheryl Simmons 6/30/99
SIGNATURE DATE

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

APPROVED *John Robertson* 6/30/99
HOWARD S.C. DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-99-145.

TYPE OF BUILDING: DAY CARE CENTER
NO. OF LOTS / PARCELS: 1
NO. OF WATER HOUSE CONNECTIONS: 1
NO. OF SEWER HOUSE CONNECTIONS: 1
DRAINAGE AREA: MIDDLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE, HOWARD COUNTY

VICINITY MAP
SCALE: 1" = 600'
CONTRACT NO. 44-3782-D

WATER CODE: E21
TEST GRADIENT: 700
SEWER CODE: 6440000

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Michael Duranillo 6/22/99
CHIEF - BUREAU OF UTILITIES - DATE

John Robertson 7/2/99
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, 200 East Pennsylvania Avenue
Landscape Architects, Towson, Maryland 21286
Engineers, Surveyors & Environmental Professionals 410-296-3333 Fax 296-4705

STATE OF MARYLAND
PROFESSIONAL ENGINEER

DESIGN BY:	
DRAWN BY:	
CHECKED BY:	
DATE:	June 15, 1999
BY NO.	
REVISION	
DATE	

WATER MAIN PLAN AND PROFILE

600 SCALE MAP NO. 41 BLOCK NO. 17

Childrens Discovery Center
At Montpelier Research Park-Parcel D-1
Howard County, Maryland
Parcel: D-1; ELECT. DISTRICT: 5
OWNER: HOPKINS ROAD LIMITED PARTNERSHIP-3030 RED BRANCH ROAD SUITE 200, COLUMBIA, MD 21045
DEVELOPER: CHILDRENS DISCOVERY CENTERS 4124 HIGH COUNTRY DRIVE- DOUGLASVILLE, GA. 30135
CONTRACT NO. 44-3782-D

AS SHOWN
SHEET 1 OF 1

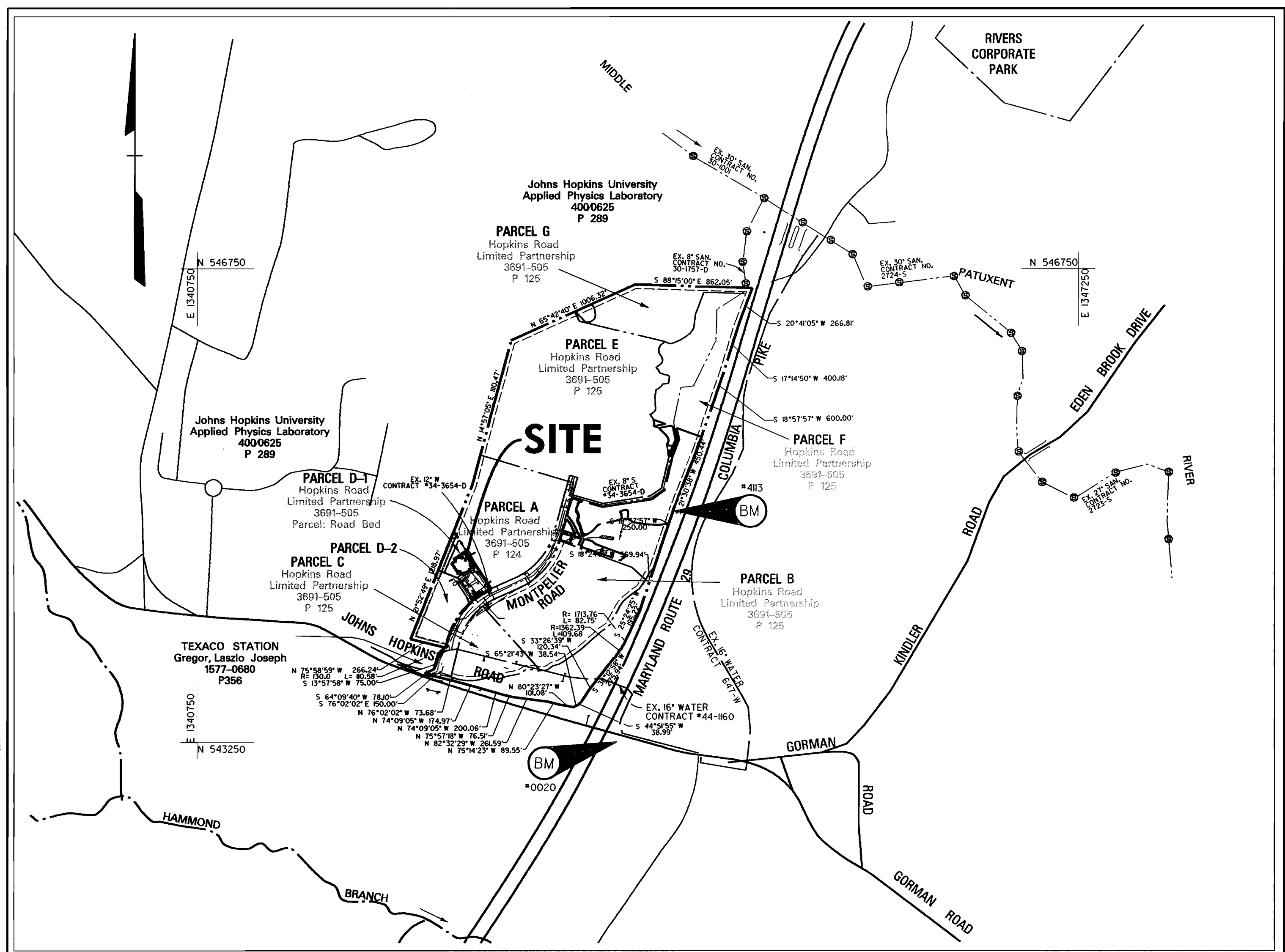
GENERAL NOTES

- 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 1'.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY MANUAL, VOLUME IV, STANDARD SPECIFICATIONS 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 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 DIG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
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 - STATE HIGHWAY ADMINISTRATION - (410) 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 850-4620
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - (410) 787-9068
 - MISS UTILITY - 1-800 257-7777
 - CHESAPEAKE AND POTOMAC TELEPHONE CO. (410) 795-1390
 - COLONIAL PIPELINE CO. (410) 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - (410) 313-4900
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APPURTENANCE SCHEDULE				
WATER LINE	APPURTENANCE	NORTHING	EASTING	W.L. STATION
'A'	18 HORIZ. BEND			STA. 0+00
	18 HORIZ. BEND	544349.44	1342801.10	STA. 0+35.41
	6" x 6" Tee	544918.83	1336574.51	STA. 1+66
	6" Cap & Buttress	544486.55	1342726.49	STA. 1+74.27
	6" Hydrant	544441.48	1342706.34	STA. 1+66 32' LT

QUANTITIES				
AS-BUILT				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER /SUPPLIER
6" D.I.P.	208 LF	160 LF	CL 52 DIP	Atlantic States / U.S. Filter
6" x 6" TEE	1	1 EA	MJ Tee	Union Foundry / U.S. Filter
6" VALVE	2	2 EA	Res. Valve	Mueller Co. / U.S. Filter
4" x 6" CAP	1	1 EA	MJ Cap	Union Foundry / U.S. Filter
6" FIRE HYDRANT	1	1 EA	Centurian	Mueller Co. / U.S. Filter

NAME OF UTILITY CONTRACTOR: *Gaines & Co.*
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:



VICINITY MAP
SCALE: 1" = 600'
CONTRACT NO. 44-3782-D

TYPE OF BUILDING: DAY CARE CENTER
NO. OF LOTS / PARCELS: 1
NO. OF WATER HOUSE CONNECTIONS: 1
NO. OF SEWER HOUSE CONNECTIONS: 1
DRAINAGE AREA: MIDDLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT, PATUXENT, HOWARD COUNTY

WATER CODE: E21
TEST GRADIENT: 100
SEWER CODE: 6480000

AS - BUILTS

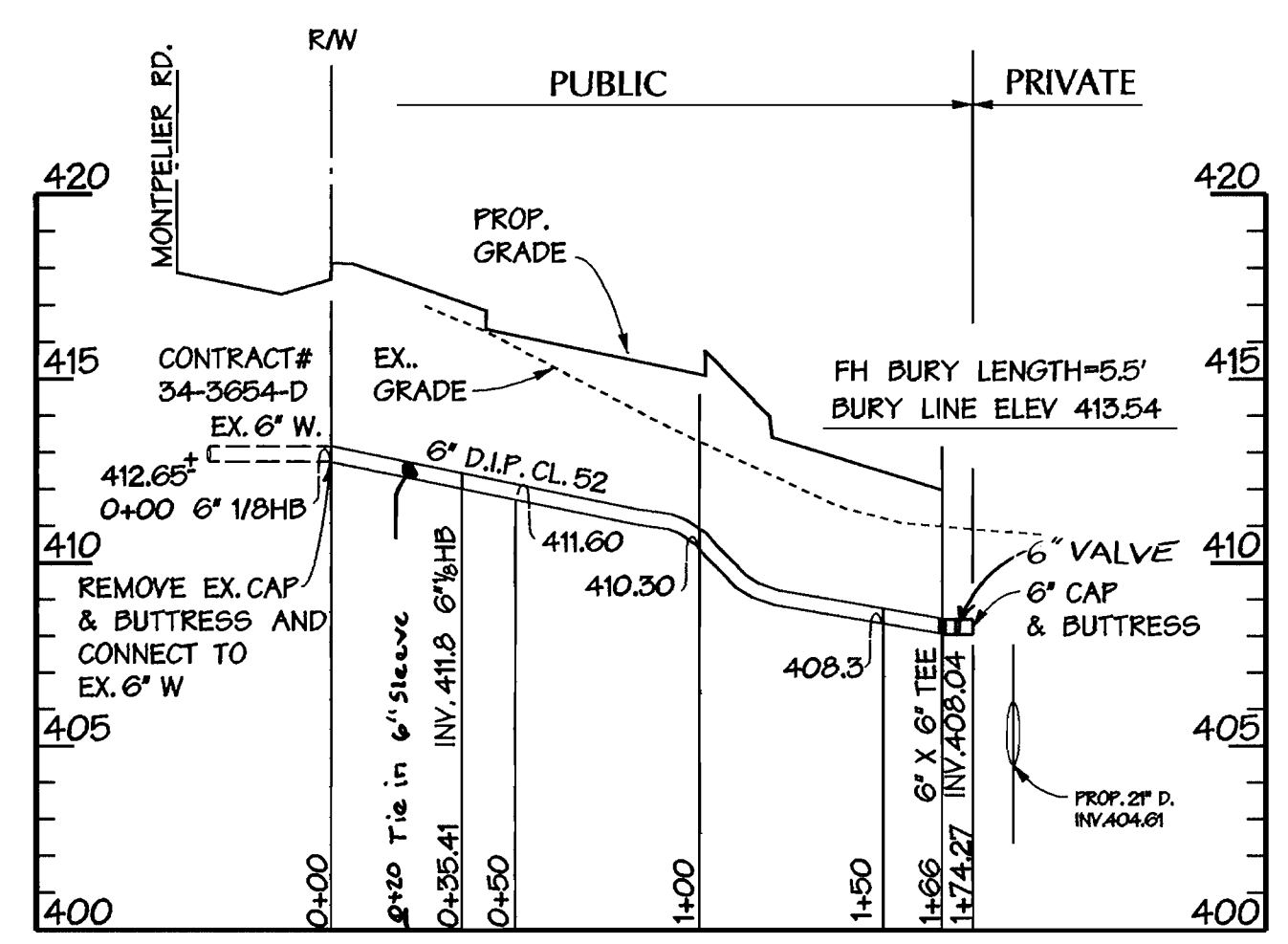
PART II - WATER

- 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.
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- 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 THE PLANS OR IN THE SPECIFICATIONS.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3 INCH THROUGH 12 INCH FOR WATER AND OTHER LIQUIDS.
- ALL EXISTING VALVES TO BE CLOSED WHEN CONNECTION TO THE SYSTEM IS MADE.

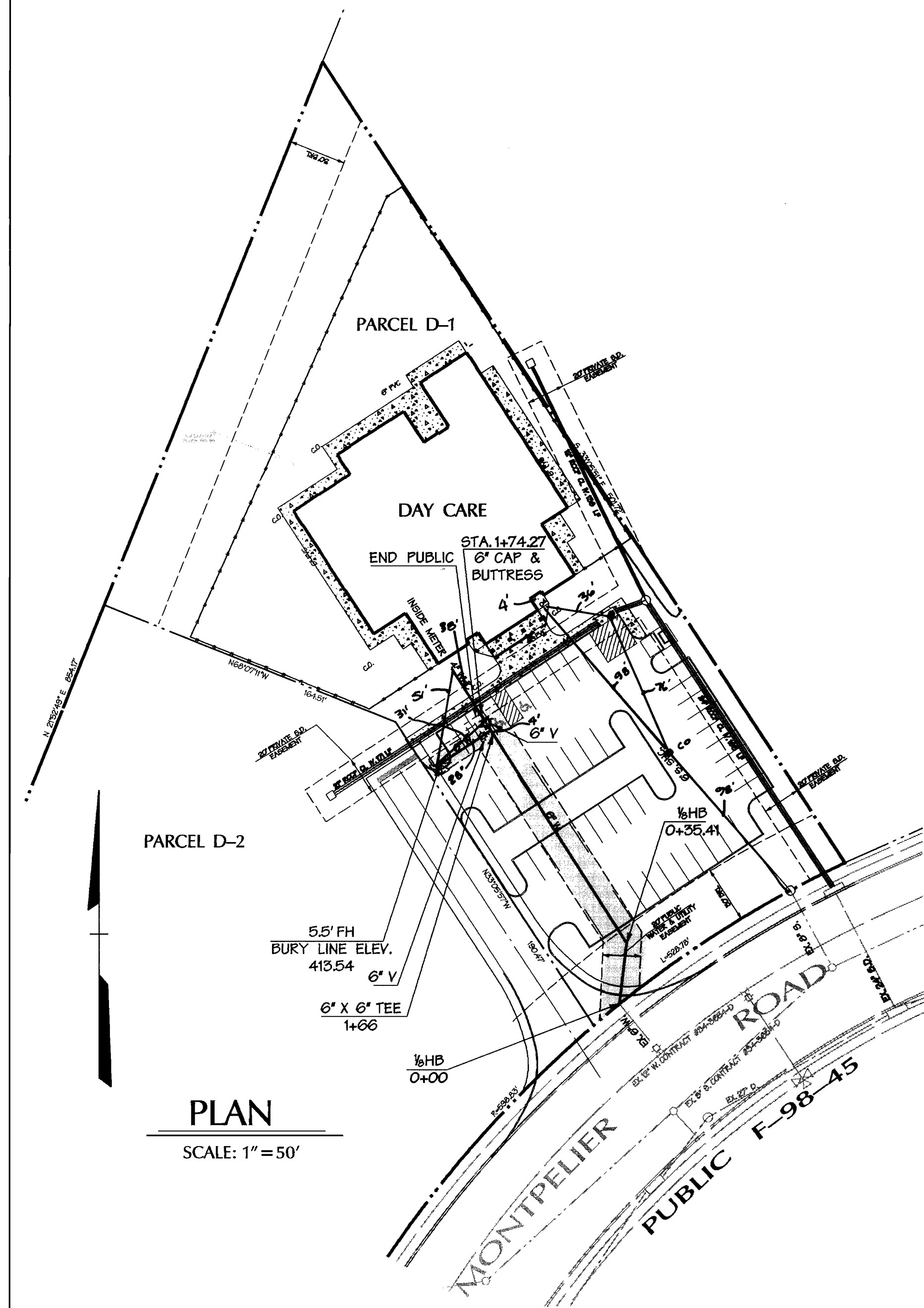
BENCHMARK DESCRIPTION

*413
N 544492.88
E 134417.82
ELEVATION = 391.65
CONCRETE MONUMENT 4" WEST OF TOP OF BANK OFF SOUTH BOUND LANE OF MARYLAND ROUTE 29 AT SURFACE.

*0020
N 543170.96
E 134322.46
ELEVATION = 403.62
STANDARD MBCS SURVEY DISC SET ON CONCRETE MONUMENT, FLUSH WITH THE GROUND.



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



PLAN
SCALE: 1" = 50'

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Chief Simmons 6/30/99
SIGNATURE DATE

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

APPROVED *John Robertson* 6/30/99
HOWARD S.C.D. DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-99-145.

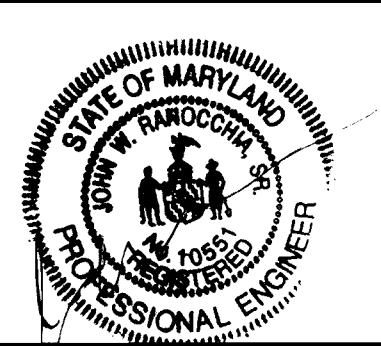
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Michael A. Dumanilla 6/22/99
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John Robertson 7/2/99
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705



DESIGN BY:	
DRAWN BY:	
CHECKED BY:	
DATE:	June 15, 1999
BY NO.	
REVISION	
DATE	

WATER MAIN PLAN AND PROFILE

600 SCALE MAP NO. 41 BLOCK NO. 17

Childrens Discovery Center
At Montpelier Research Park-Parcel D-1
Howard County, Maryland
PARCEL: D-1; ELECT. DISTRICT: 5
OWNER: HOPKINS ROAD LIMITED PARTNERSHIP-9030 RED BRANCH ROAD SUITE 200, COLUMBIA, MD 21045
DEVELOPER: CHILDRENS DISCOVERY CENTERS 4124 HIGH COUNTRY DRIVE-DOUGLASVILLE, GA 30135
CONTRACT NO. 44-3782-D

AS SHOWN
SHEET 1 OF 1