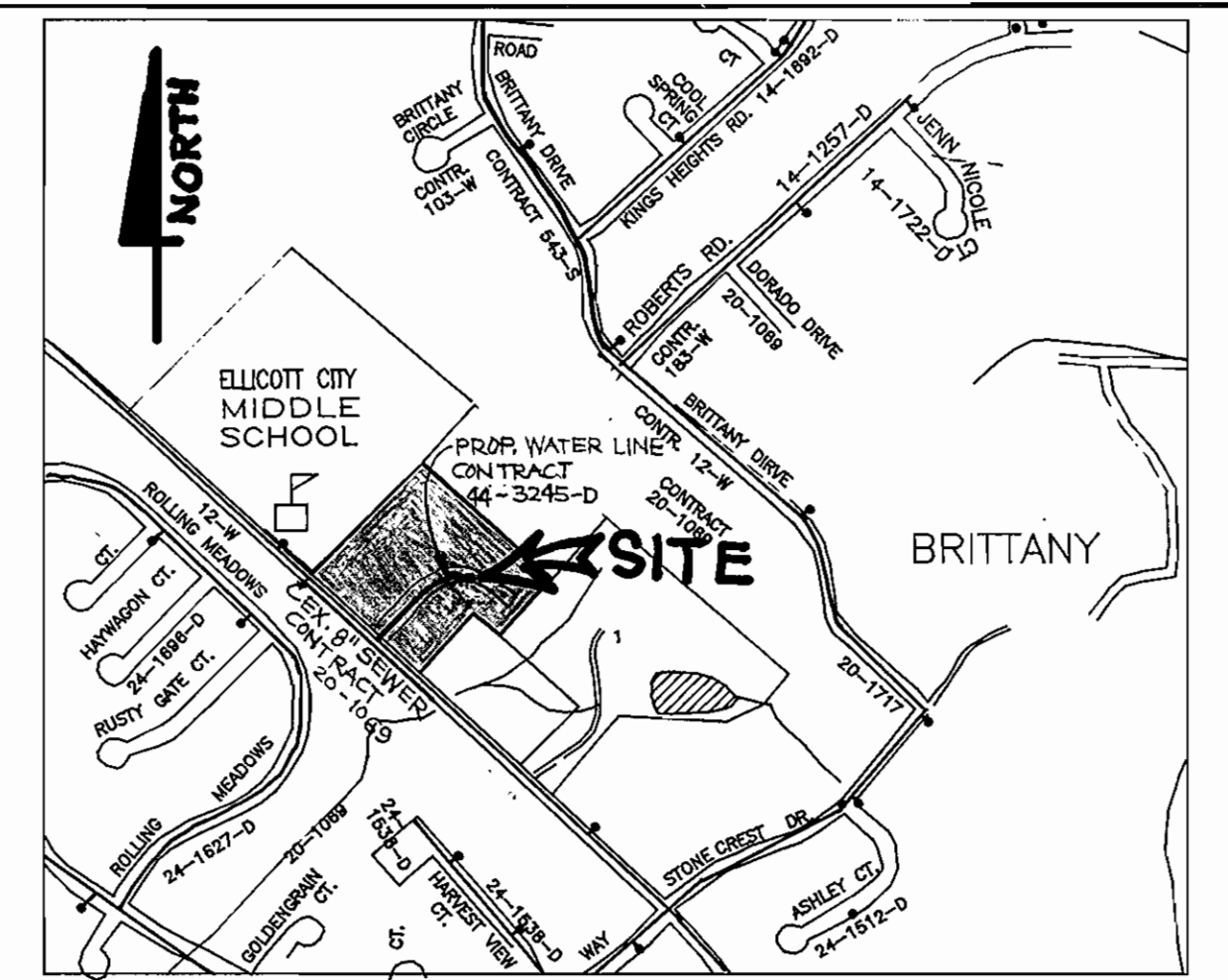


### QUANTITIES

ITEM	ESTIMATED	AS BUILT	MATERIAL / SUPPLIER
8" WATER	252.00 LF	227.00 LF	ATLANTIC
8"x6" TEE	1 EACH	1 EA.	MUSLER
6" VALVE	3 EACH	1 EA	MUSLER
8"x6" REDUCER	1 EACH		
8" VALVE	1 EACH	1 EA	MUSLER
FIRE HYDRANT	1 EACH	1 EA	KENNEDY
6" x 6" TEE	1 EACH	0 LF.	FORD
4" SHC	50 L.F.	0 LF.	ATLANTIC
10"x8" T.S. & V.	1 EACH	1 EA.	MUSLER
8" x 4" TEE	1 EA	1 EA	MUSLER
4" VALVE	1 EA	1 EA	MUSLER
4" WHC	10 L.F.	77 LF.	FORD

### CHART INFORMATION

TYPE OF BUILDING	COMMERCIAL
NO. OF SHC	4
NO. OF WHC	2
TREATMENT PLANT	PATAFSCO VIA ROUTE 198 PUMPING STATION
DRAINAGE AREA	LITTLE PATUXENT
WATER CODE	F-16
SEWER CODE	B750G33
TEST GRADIENT	700



LOCATION MAP  
SCALE: 1" = 600'

**NOTES:**

- At Existing 16" Dia. Water Line Elevation Top of Pipe 410.69
- At Existing 6" Dia. Gas Line Elevation Top of Pipe 415.00
- Elevation Top of 4" Dia. WHC At Caped End 3'-0" Below Finished Floor Elevation of Bldg. (Lower Level).
- Water Line 5'-2" To Ward Road From 6" Dia. Gas Line.

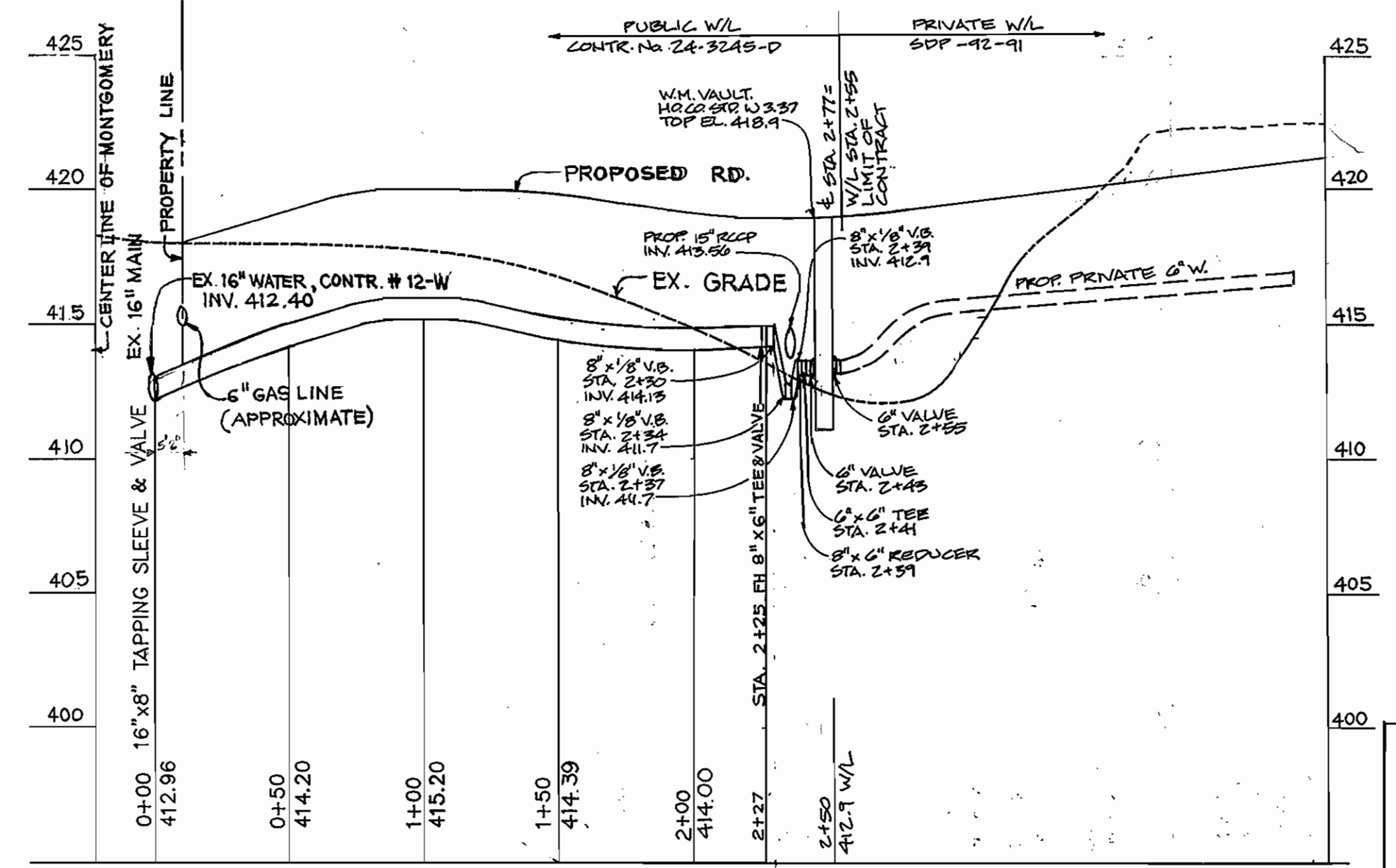
**GENERAL NOTES:**

- 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 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, Vol. 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 the construction operations at his own expense.
- Contractors 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
BG&E Co. Contractor Services	850-4620
BG&E Co. Under Ground Damage Control	787-9088
Miss Utility	1 800 257-7777
Colonial Pipeline Co.	785-1390
Howard County Department of Public Works Bureau of Utilities	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.
- Contractors 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 S2 unless otherwise noted.
- Tops of all water mains to have a minimum of 3 1/2' cover 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 in accordance with detail W-11 & W-2-19. 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 existing water system.
- All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- The contractor shall provide a joint all sewer mains with in 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 watertight frame and covers, Standard Details GS.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.S." indicates that cellar cannot be served.

NOTE: ABANDON EXISTING WATER HOUSE CONNECTION AT THE MAIN. THE CORPORATION MAYBE LEFT IN, REMOVE THE COPPER AND POUR A CONCRETE BOX AROUND CORPORATION.

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



PROPOSED 8" WATER  
SCALE: HOR. 1" = 50'  
VER. 1" = 5'

(SDP-92-91)

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

APPROVED: *John R. Blanton* 2/17/93  
HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

APPROVED: *James M. Nelson* 2/17/93  
U.S. SOIL CONSERVATION SERVICE DATE

OWNER/DEVELOPER:  
DEVELOPMENT PLANNERS, INC.  
10495 FAIROAKS  
COLUMBIA, MD. 21044

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

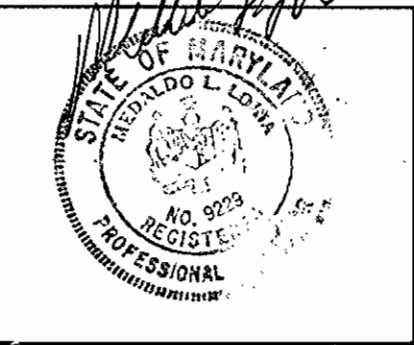
*James M. Nelson* 2/19/93  
DIRECTOR OF PUBLIC WORKS DATE

*Robert W. Beaman* 2-16-93  
CHIEF BUREAU OF UTILITIES DATE

*John R. Blanton* 2-19-93  
CHIEF BUREAU OF ENGINEERING DATE

*James M. Nelson* 2/19/93  
CHIEF, LAND DEVELOPMENT DIVISION DATE

**loria engineering inc.**  
CONSULTING ENGINEERS • LAND PLANNERS • SURVEYORS  
3230 Bethany Lane, Suite 4  
Ellicott City, Maryland 21043  
Tel. (301) 465-0400



DES: MLL		REVISED 2" WHC TO 4" WHC	7-8-93
DRN: AVG	MCR	REVISED LIMIT OF CONTRACT	10-21-93
CHK: MLL		REVISED TO SHOW PUBLIC WATER & UTILITY EASEMENT TO SHOW ABANDONMENT, SHOW PROP. 6" PRIVATE WATER LINES, SHOW PROP. 15" REAR ON PROPOSED 8" WATER LINE FROM STA. 2130 TO STA. 2152	12-14-93
DATE: 4-6-92	BY NO.	REVISION	DATE

**PLAN & PROFILE**  
**WATER MAIN**  
CONTRACT # 24-3245 - D

**SHANGRILA**  
MONTESSORI SCHOOL, RELIGIOUS FACILITY & ELDERLY HOUSING

TAX MAP 30,31 PARCEL 579 2nd ELECTION DIST., HOWARD CO. MD.

SCALE AS SHOWN  
SHEET 1 OF 1