


GENERAL NOTES

PART I - 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 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 Details 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.
- The Contractor shall notify the following utility companies or agencies at least five(5) working days before starting work shown on these plans:
 

State Highway Administration	410.531.5533
BGE(Contractor Services)	410.850.4620
BGE(Underground Damage Control)	410.787.9068
Miss Utility	1.800.257.7777
Colonial Pipeline Company	410.795.1390
Howard County, Dept. of Public Works, Bureau of Utilities	410.313.4900
Howard County Health Department	410.313.2640
- Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the Contractor.
- The Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for the construction of the main.
- 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 DPW requirements per Section 18.14(a) of the Howard County Code.

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 restrained and buttressed with concrete in accordance with Standard Details. Soil around 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 settings unless otherwise noted on the plans or in specifications.

PART III - SEWER

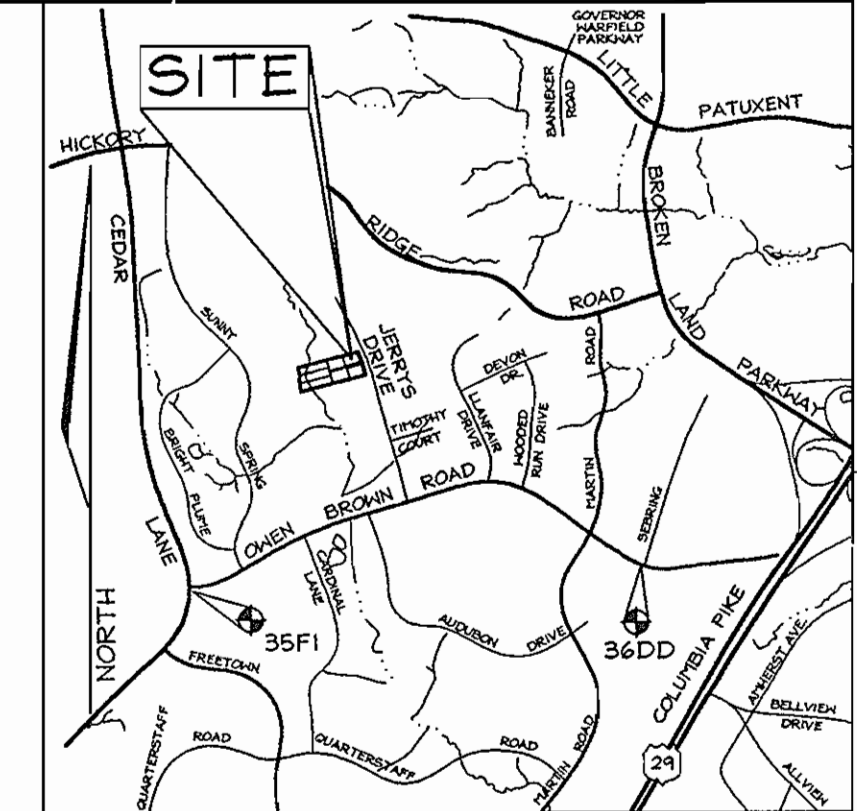
- All sewer mains shall be D.I.P. Class 52 or P.V.C. unless otherwise noted.
- The Contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame & covers, Standard Detail G-5.52. Where watertight manhole frame and cover is used, set top of frame 18" above finished grade unless otherwise noted on the drawings.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

# PUBLIC WATER AND SEWER PLANS

## NOLAN PROPERTY

### HOWARD COUNTY, MARYLAND

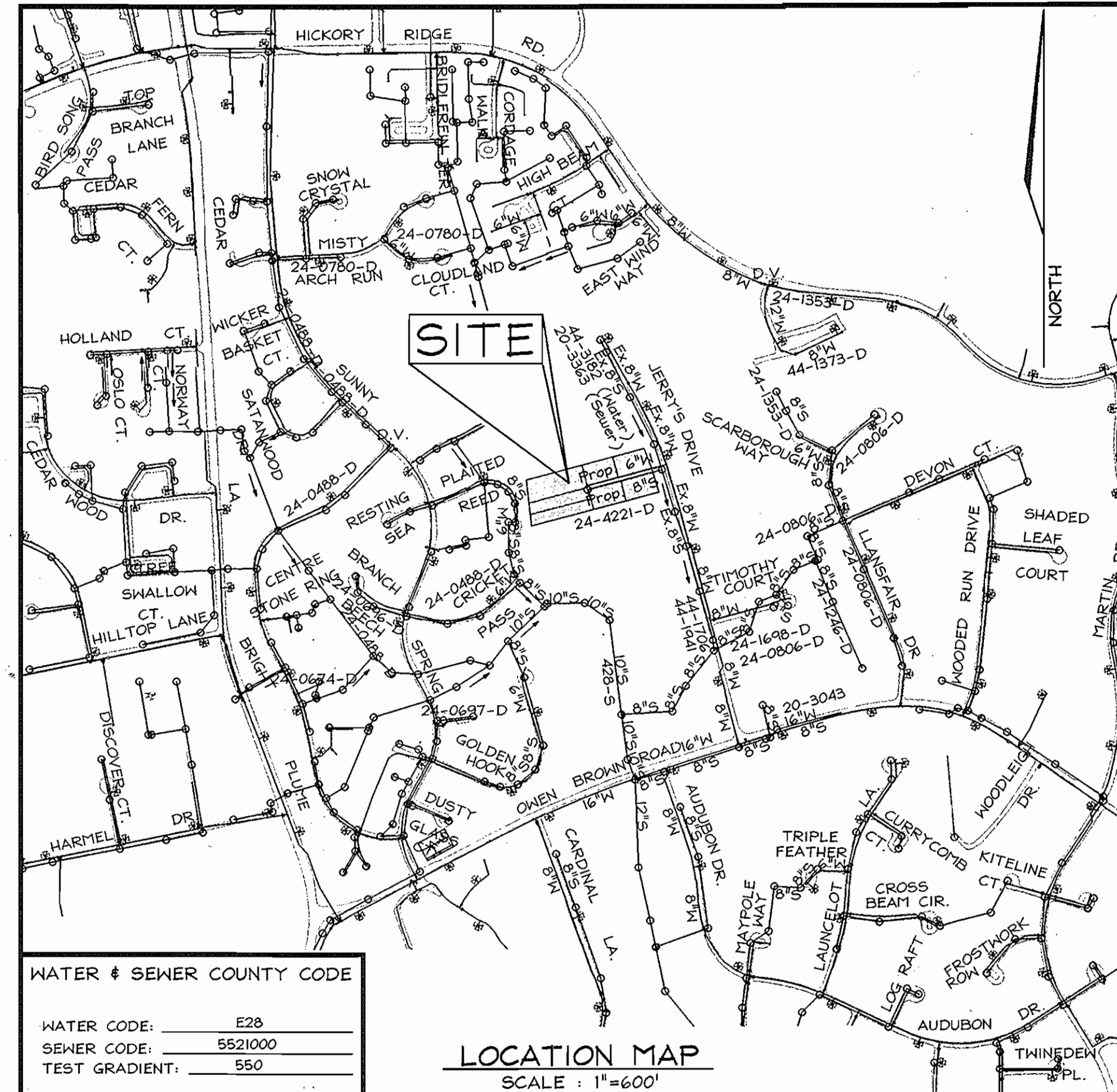
#### CONTRACT NO. 24-4221-D



VICINITY MAP  
SCALE: 1"=2000'

BENCHMARKS

Sta. 35F1	N 170,013.9297	E 410,023.0559	EI. 122.2752 (meters)
	N 557,787.367	E 1,345,217.309	EI. 401.165 (feet)
Sta. 36DD	N 170,005.9837	E 411,448.0204	EI. 119.8332 (meters)
	N 558,056.573	E 1,349,892.314	EI. 393.153 (feet)



TYPE OF BUILDING:	Single Family Dwelling
NO. OF LOTS/PARCELS:	7
NO. OF WATER HOUSE CONNECTIONS:	6
NO. OF SEWER HOUSE CONNECTIONS:	6
DRAINAGE AREA:	Little Patuxent River
TREATMENT PLANT:	Little Patuxent River

SEWER HOUSE CONNECTION CHART				
Lot #	Inv. of Main	Inv. @ Easement	Min. Cellar El.	Basement El.
2	396.16	406.28	401.38	414.73
3	396.73	398.02*	400.77*	401.43
4	396.98	397.75	402.31	398.93
5	396.98	397.79*	401.32*	394.40
6	396.21	406.29	401.02	414.73
7	395.48	406.06	400.49	414.70

\* Denotes SHC @ 1%

QUANTITIES				
NAME OF UTILITY CONTRACTOR : GAINES				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE : 6/15/06				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
4" MANHOLE	3	3	PRECAST	FREDERICK FEUCAST
8" D.I.P. SEWER	381 LF	381	DIP	GRIFFIN PIPE
4" SHC	150 LF	150	DIP	GRIFFIN PIPE
6" WATER	378 LF	378	DIP	GRIFFIN PIPE
1" WHC	204 LF	206	COPPER	BRS/READING TUBE
8"x6" TS&V	1	1		BRS/ JOM IND
6" CAP & BUTTRESS	1	1		BRS/ SIGMA

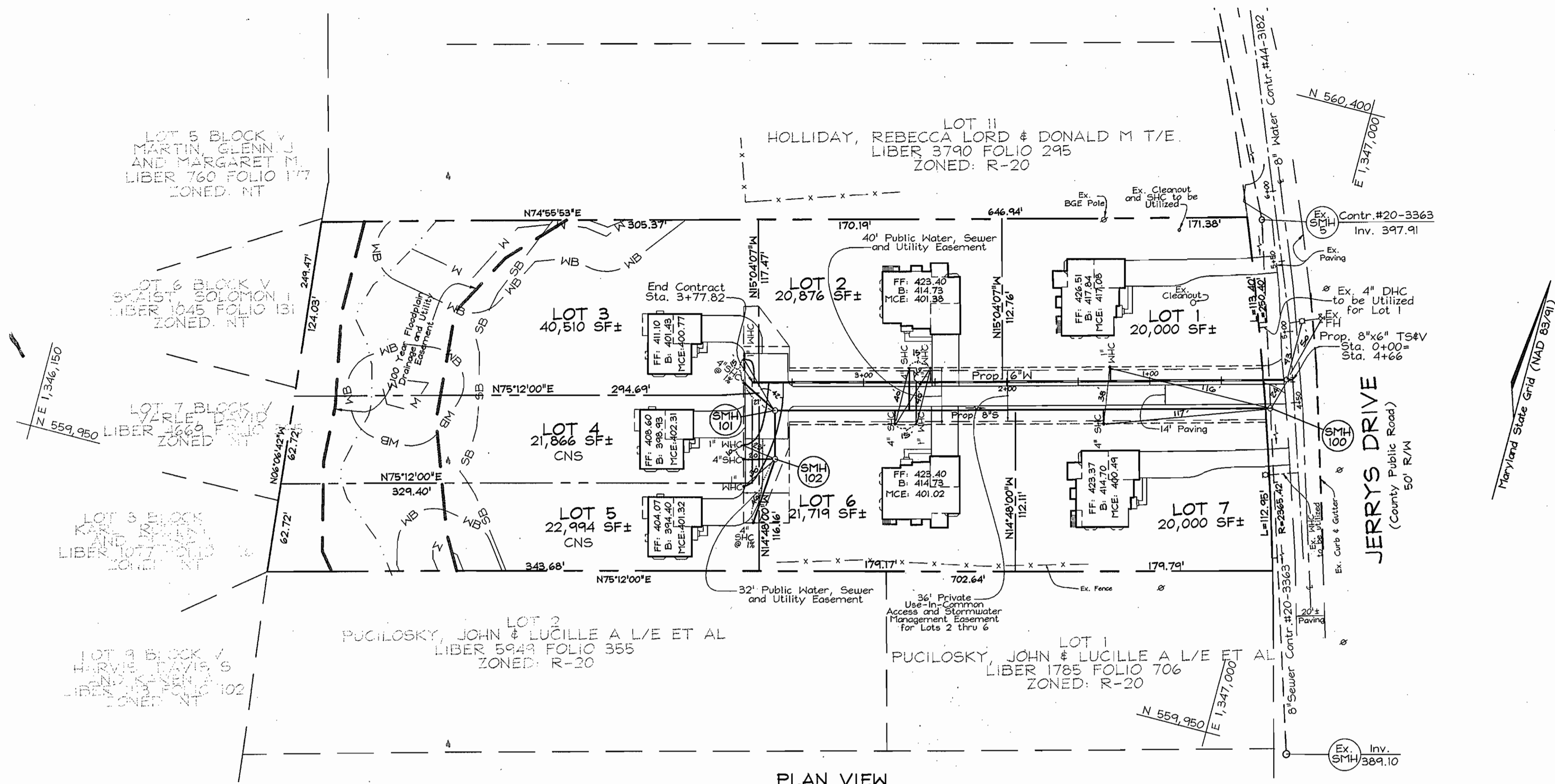
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-04-170

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

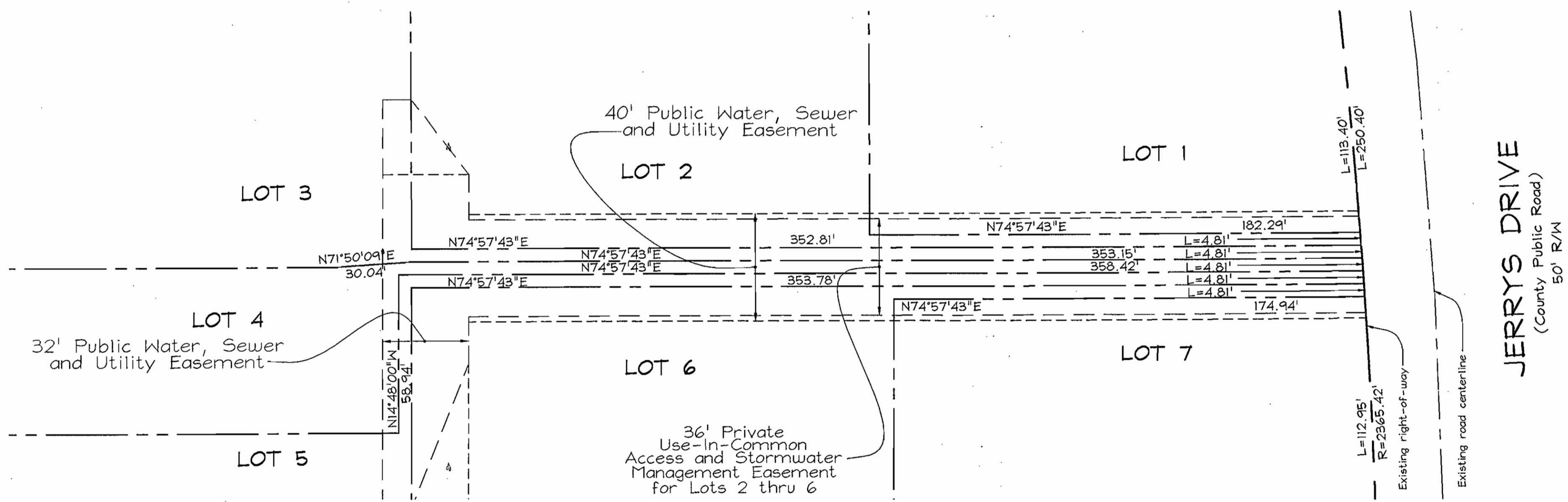
*John K. Robertson* 12/9/04 DATE  
*Jim M. ...* 12/9/04 DATE

OWNER/DEVELOPER  
 Cornerstone Holdings, LLC c/o Brian D. Boy  
 9691 Norfolk Avenue  
 Laurel, Maryland 20723  
 (410)742-2565 Fax: (410)742-2567

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert B. ...</i> 12-23-04 DATE CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>...</i> 1/4/05 DATE CHIEF, DEVELOPMENT ENGINEERING DIVISION	<b>FSH Associates</b> Engineers Planners Surveyors 8318 Forrest Street, Ellicott City, MD 21043 Tel: 410-750-2251 Fax: 410-750-7350 E-mail: FSHAssociates@cs.com	DESIGN BY: PS DRAWN BY: GS CHECKED BY: ZYE DATE: Nov. 23, 2004	KCI 1 BY NO. REVISION DATE: 07/11/06	WATER AND SEWER COVER SHEET 600' SCALE MAP NO.: 35 BLOCK NO.: 12	<b>NOLAN PROPERTY</b> LOTS 1 THRU 7 CONTRACT NO. 24-4221-D TAX MAP 35 GRID 12 PARCEL 178 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET NO. 1 OF 3
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Note: Lots 4 & 5 Have No Basement Gravity Sewer Service, Basement Sewer Service to be Provided by Private On-Site Pump

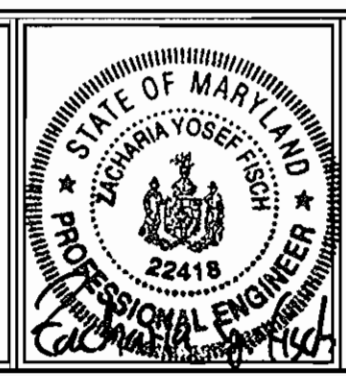


**OWNER/DEVELOPER**  
 Cornerstone Holdings, LLC c/o Brian D. Boy  
 4691 Norfolk Avenue  
 Laurel, Maryland 20723  
 (410)792-2565 Fax: (410)792-2567

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 R. H. B... 12-23-04  
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
 [Signature] 1/4/05  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

**FSH Associates**  
 Engineers Planners Surveyors  
 8318 Forrest Street Ellicott City, MD 21043  
 Tel: 410-750-2251 Fax: 410-750-7350  
 E-mail: info@fsha.biz

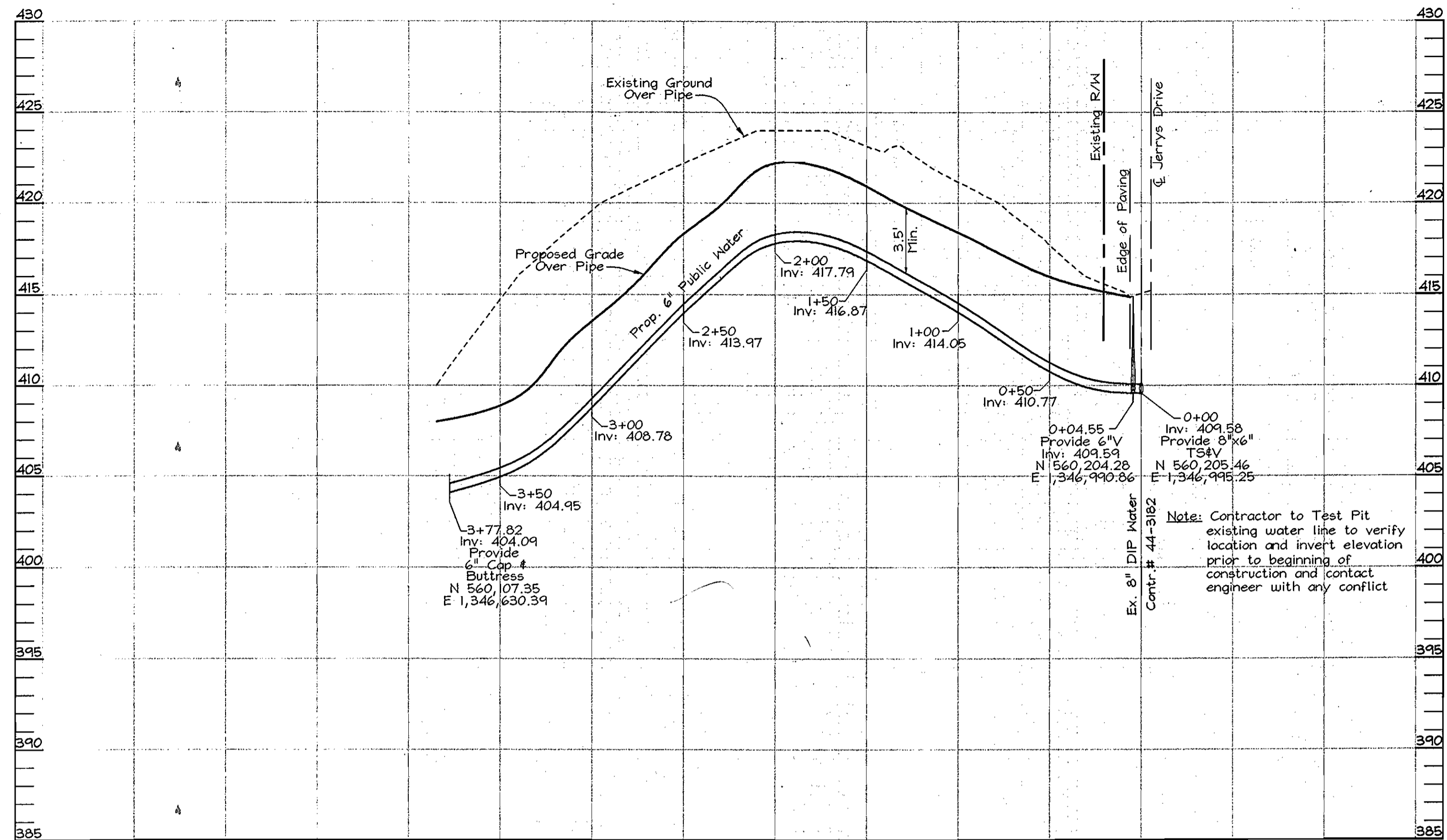


DESIGN BY:	PS		
DRAWN BY:	GS		
CHECKED BY:	ZYF		
DATE:	Nov. 23, 2004		
K01	1	ASBUILT DATA SHOWN	7/17/05
BY	NO.	REVISION	DATE

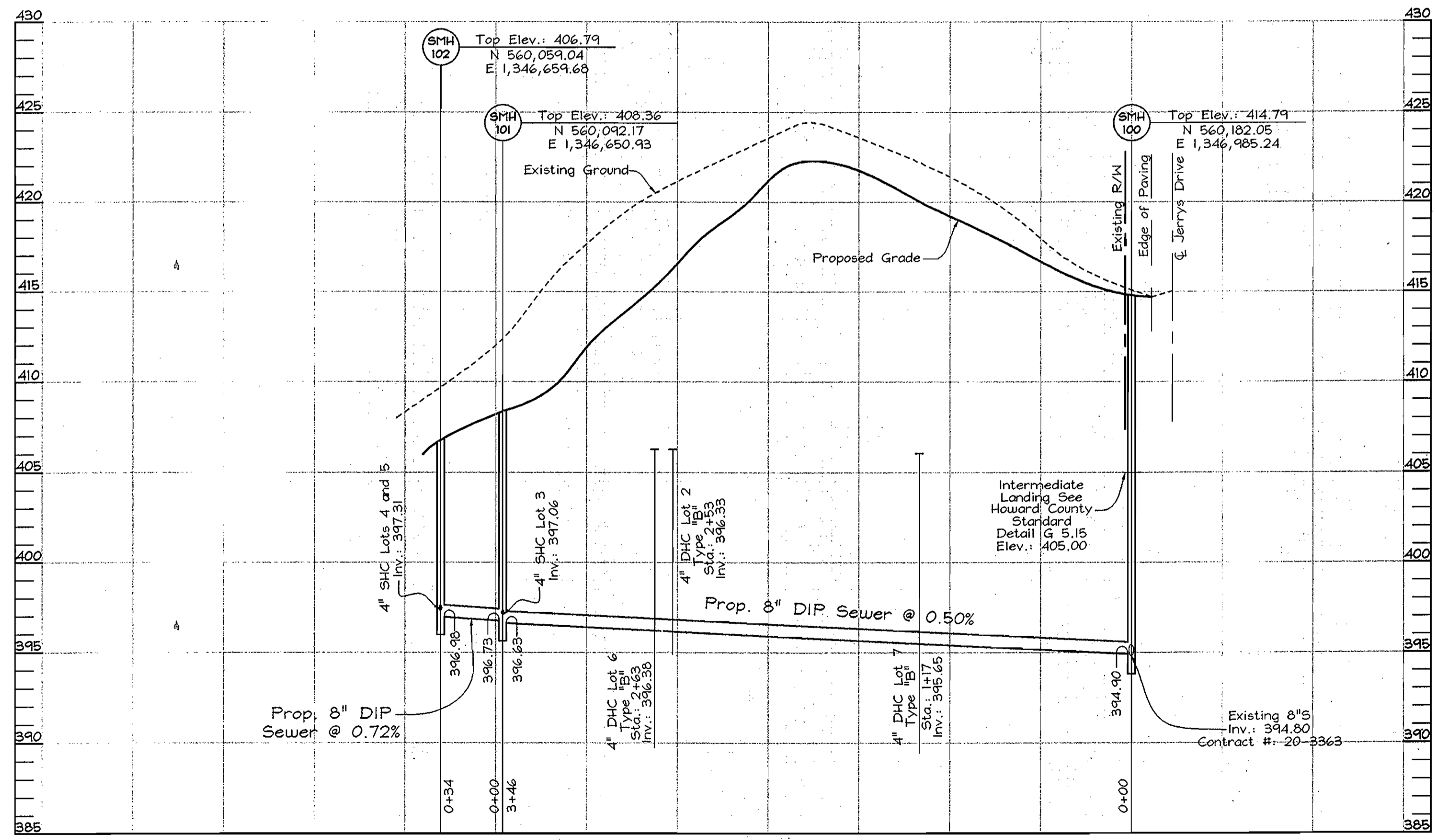
**WATER AND SEWER PLAN**  
 600' SCALE MAP NO. 35 BLOCK NO. 12

**NOLAN PROPERTY**  
 LOTS 1 THRU 7  
 CONTRACT NO. 24-4221-D  
 TAX MAP AP 35 GRID 12 PARCEL 178  
 5TH E CTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET NO. 2 OF 3



**WATER PROFILE**  
SCALE- HORIZONTAL: 1"=50'  
VERTICAL: 1"=5'



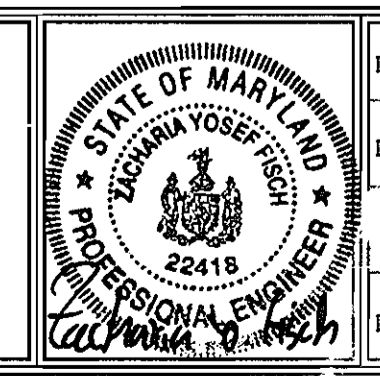
**SEWER PROFILE**  
SCALE- HORIZONTAL: 1"=50'  
VERTICAL: 1"=5'

**OWNER/DEVELOPER**  
Corners: ...  
... LLC c/o Brian D. Boy  
91 Norfolk Avenue  
... Maryland 20723  
(410) 256-... (410) 792-2567

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert M. Bauman* 12-23-04  
CHIEF BUREAU ENGINEER

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*[Signature]* 1/4/05  
CHIEF, DEVELOPMENT ENGINEER

**FSH Associates**  
Engineers Planners  
8318 Forrest Street, Ellicott City, MD 21043  
Tel: 410-750-2251 Fax: 410-750-2252  
E-mail: FSHAssociates@comcast.net



DESIGNED BY:	PS	DATE:	Nov. 23, 2004
DRAWN BY:	GS		
CHECKED BY:	ZYF		
DATE:	Nov. 23, 2004		

**WATER AND SEWER PROFILES**  
600' SCALE MAP NUMBER: ...  
CHECK NO.: 12

**NOLAN PROPERTY**  
LOTS 1 THRU 7  
CONTRACT NO 24-42  
TAX MAP 35 GRID 12  
5TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET NO. 3 OF 3