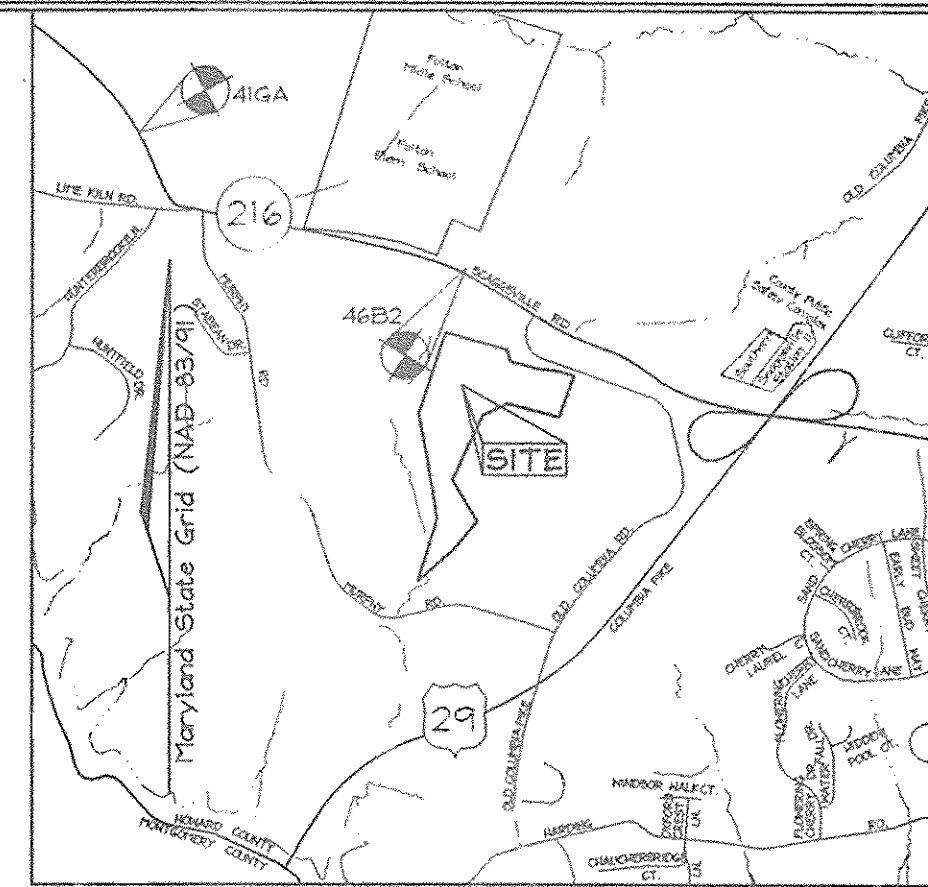


# PUBLIC WATER AND SEWER PLANS

## GRACE COMMUNITY CHURCH

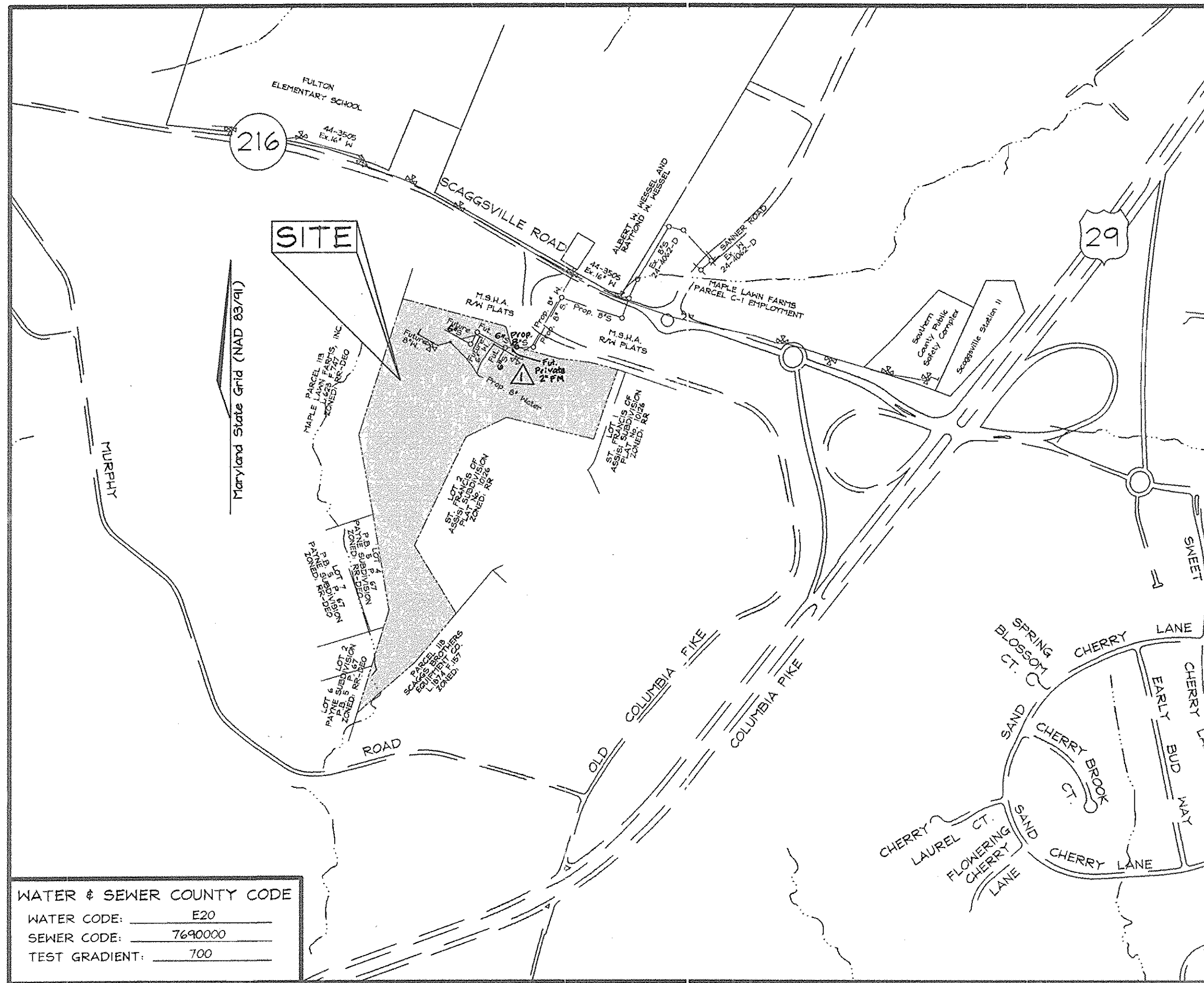
### HOWARD COUNTY, MARYLAND

### CONTRACT NO. 24-4181-D



VICINITY MAP  
SCALE: 1"=2000'

QUANTITIES				
NAME OF UTILITY CONTRACTOR : RONKIN CONSTRUCTION				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE : JUNE 6, 2005/REV.4-12-00				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
MANHOLE	4	0	TYPE B DROP TRANSITION	ATLANTIC
8" SEWER	1,003 LF	1000	SDR 35 PIPE	MJ MANUFACTURING
8"x6" TEE	1	2	MJ TAP CAP	TYLER
FIRE HYDRANT	2	2	4.5" FIRE HYDRANT	KENNEDY VALVE
6" CAP & BUTTRESS	1	1	MJ TAP CAP	TYLER
8" WATER	10 LF	34	DIP CL 52 TYTON JOINT	US PIPE & FOUNDRY
8" WATER	1,205 LF	1,150	DIP CL 52 TYTON JOINT	US PIPE & FOUNDRY
8"x16" TS&V	1	1	TAP SLEEVE	FORD KENNEDY VALVE
8" VALVE	1	5	GATE VALVE	KENNEDY VALVE



WATER & SEWER COUNTY CODE  
 WATER CODE: E20  
 SEWER CODE: 7690000  
 TEST GRADIENT: 700

LOCATION MAP  
SCALE: 1"=600'

TYPE OF BUILDING:	RELIGIOUS FACILITY
NO. OF LOTS/PARCELS:	2
NO. OF WATER HOUSE CONNECTIONS:	2
NO. OF SEWER HOUSE CONNECTIONS:	2
DRAINAGE AREA:	PATUXENT
TREATMENT PLANT:	PATUXENT

#### BENCHMARKS

Howard County Monuments:

Sta. 41GA	N 165,018.7642 E 406,545.5671	El.: 141.0632 (meters)
	N 541,399.078 E 1,333,808.248	El.: 462.805 (feet)
	(Concrete Monument 5.5' SW of paving edge, 42.8' NW of C&P Pole #36.)	
Sta. 46B2	N 164,588.5849 E 407,584.9442	El.: 144.8732 (meters)
	N 539,987.715 E 1,333,210.435	El.: 475.305 (feet)
	(Concrete Monument 62.7' NE of G&E Pole, 34.2' N of nail in cedar stump.)	

#### GENERAL NOTES

- PART I - GENERAL**
- Approximate locations of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted service. 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, NAD 83/91.
  - All vertical controls are based on NAVD 88.
  - All pipe elevations shown are invert elevations unless otherwise noted on the plans.
  - Clear all utilities by a minimum of 12". Clear all poles by 5'-0" minimum or tunnel as required unless otherwise noted. 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 monies owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
  - For details not shown on the drawing, 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 (P) at the locations of the test pits. 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.
  - The contractor shall notify the following utility companies or agencies at least five 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
Pita Utility	1.800.257.7777
Colonial Pipeline Company	410.785.1390
Bureau of Utilities	410.313.4900
AT&T	1.800.252.1133
Verizon	1.800.743.0337 / 410.224.9210
  - 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 open cutting or boring/jacking of any County road 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.
- PART II - WATER**
- All water mains shall be D.I.P. Class 52 unless otherwise noted.
  - Tops of all water mains shall have a minimum of 3'-6" of 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 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 installed in accordance with Standard Details soil around the fire hydrant shall be compacted in accordance with Section 1000 and Section 1005 of the Standard Specifications.
  - The contractor shall not operate any water main valves on the existing water system.
- PART III - SEWER**
- All sewer mains shall be D.I.P. or 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 W.T. in plan and profile shall have watertight frame and cover. Standard Detail G5.52. Where watertight manhole frames and covers are used, set top of frame 1'-0" above finished grade unless otherwise noted on the drawings.
  - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND WITH SITE DEVELOPMENT PLANS SDP-04-079

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.

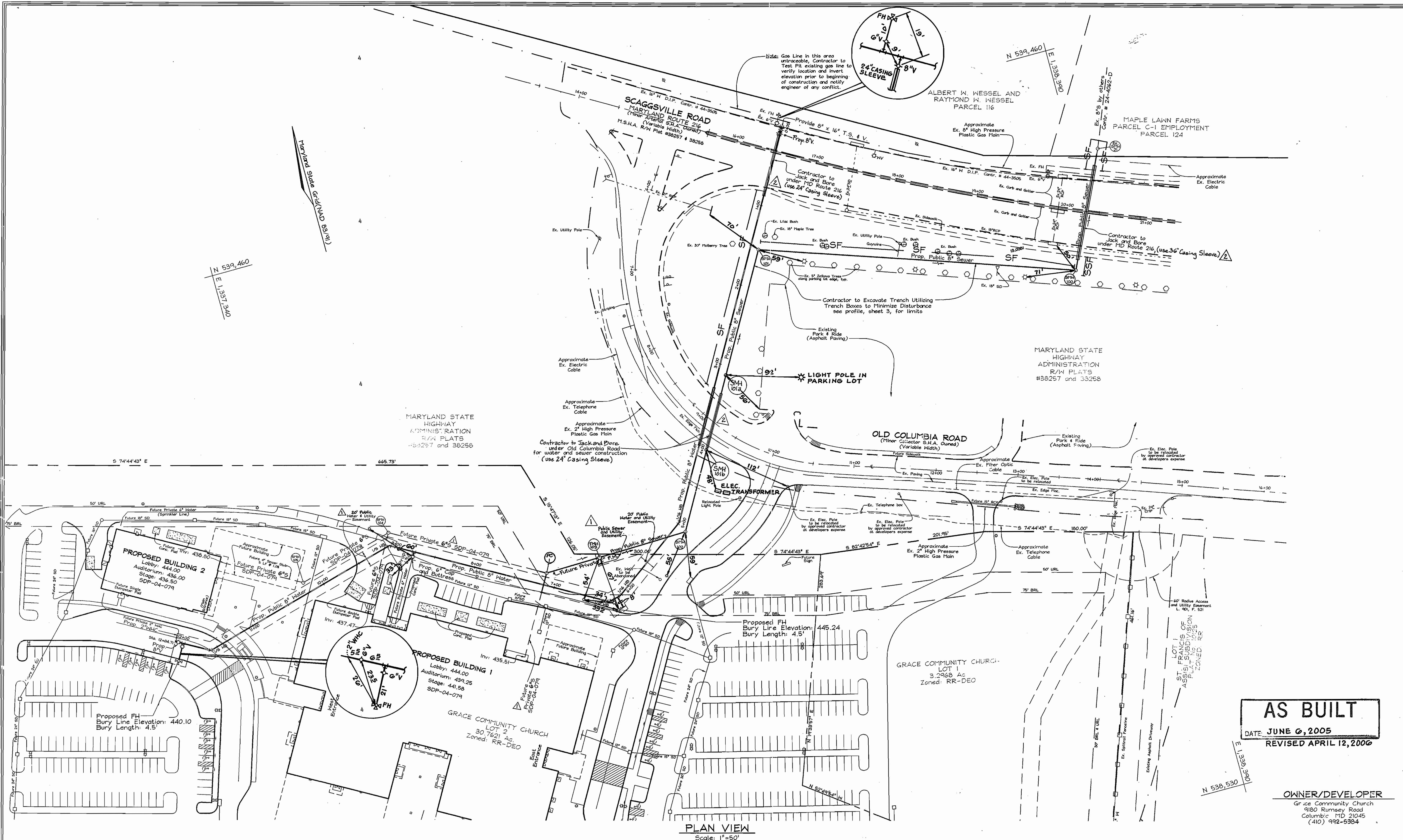
*John K. Lauter* 6/28/04  
 CHIEF, SOIL CONSERVATION DISTRICT

*Jim M...* 6/28/04  
 U.S. SOIL CONSERVATION DISTRICT

**AS BUILT**  
 DATE: JUNE 6, 2005  
 REVISED APRIL 12, 2006

**OWNER/DEVELOPER**  
 GRACE COMMUNITY CHURCH  
 9180 Farmsey Road  
 Columbia, MD 21045  
 (410) 992-5384

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND  <i>John K. Lauter</i> 6-21-04 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND  <i>Jim M...</i> 7/1/04 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: KSZ CHECKED BY: ZYF DATE: Jun 08, 2004	FSH BY NO. REVISION DATE 0118.05 Revise Plan and Profile to provide for Future Private Force Main	<b>WATER AND SEWER COVER SHEET</b>	<b>GRACE COMMUNITY CHURCH</b> RELIGIOUS FACILITY AND PRIVATE RELIGIOUS SCHOOL CONTRACT NO. 24-4181-D TAX MAP 46 GRID 3 5TH ELECTION DISTRICT PARCEL 337 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET NO. 1 OF 3
--	---	---	---	--	------------------------------------	---	------------------------------------



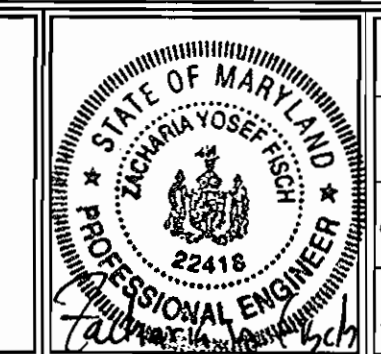
**AS BUILT**  
 DATE: JUNE 6, 2005  
 REVISED APRIL 12, 2006

**OWNER/DEVELOPER**  
 Grace Community Church  
 9180 Rumsey Road  
 Columbia, MD 21045  
 (410) 992-5984

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

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



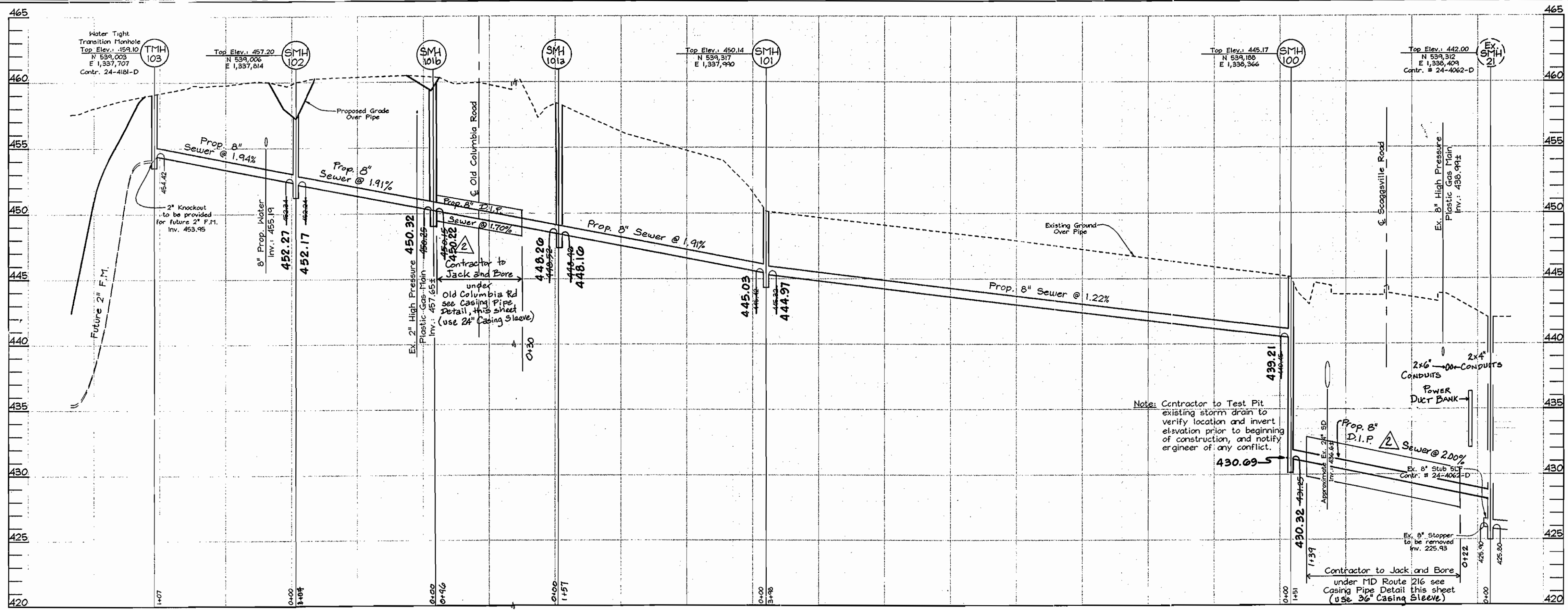
DESIGN BY: PS			
DRAWN BY: KSZ/Slim			
CHECKED BY: ZYF			
DATE: Jun 18, 2004			
BY NO.	REVISION	DATE	
FSH	Revise vertical alignment for MD216 and Old Columbia Road	04.11.05	
FSH	Revise Plan and Profile to provide for Future Private Force Main	01.18.05	

**WATER AND SEWER PLAN**

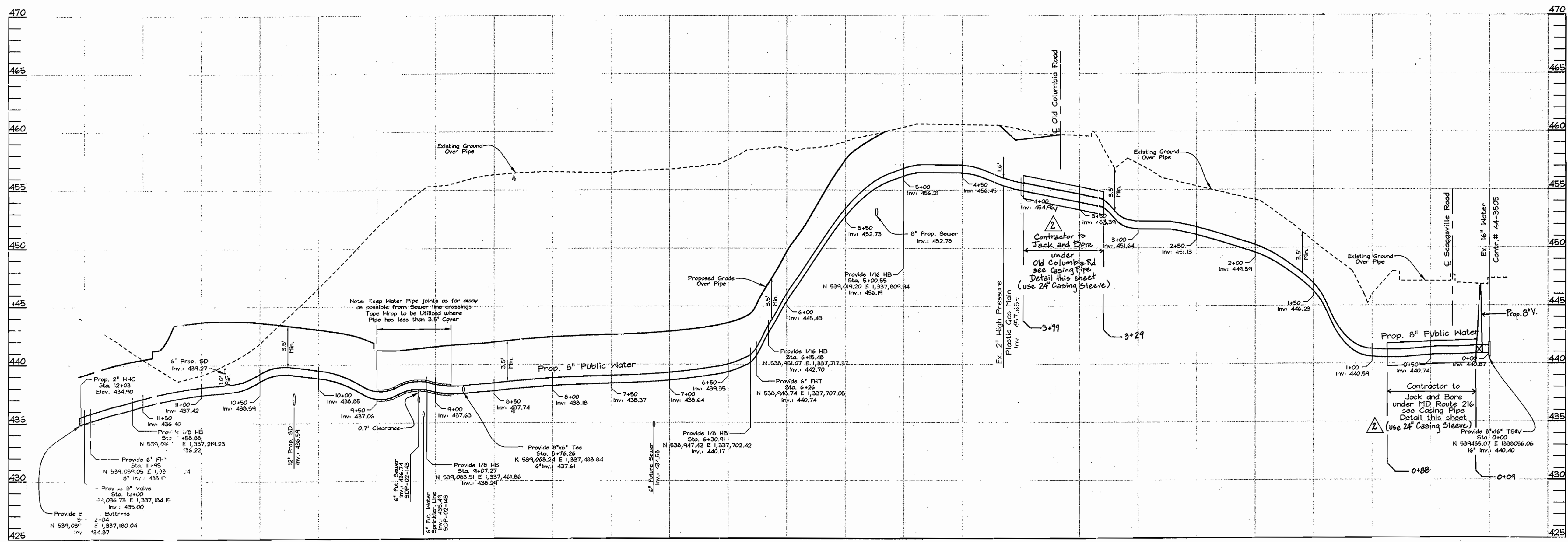
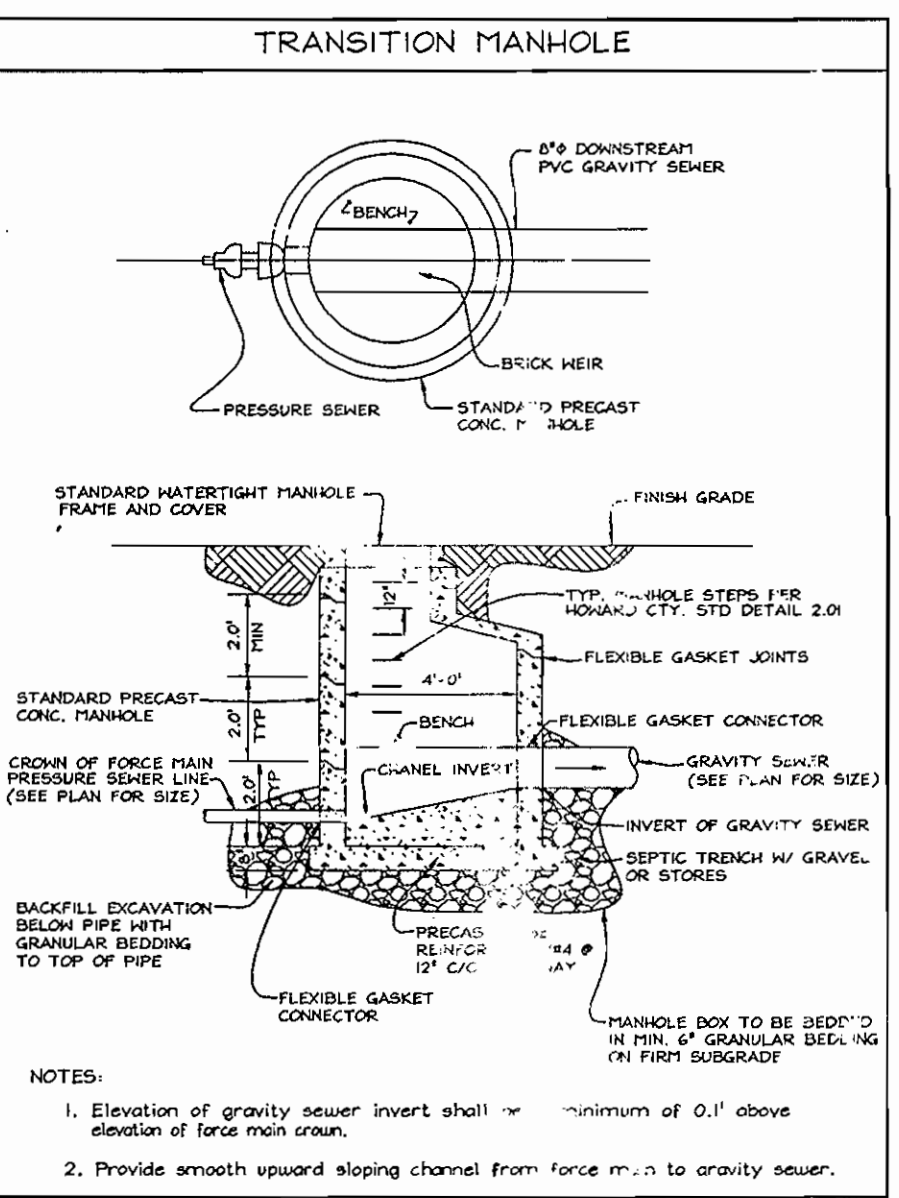
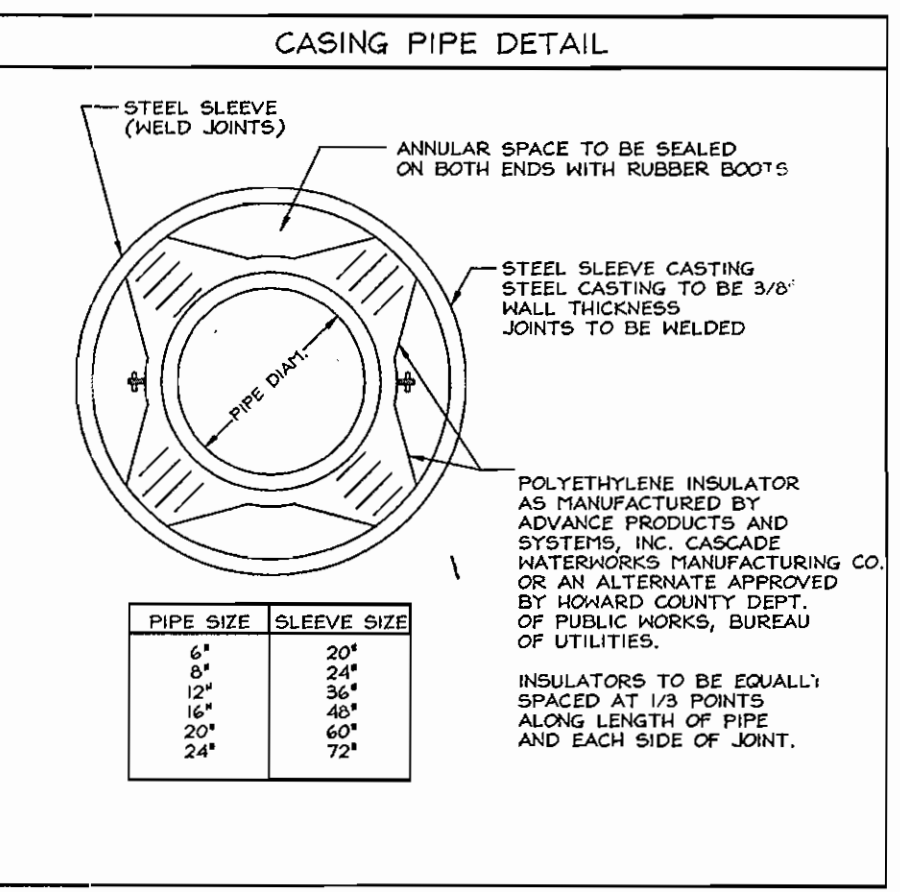
600' SCALE MAP NO.: 46 BLOCK NO.: 03

**GRACE COMMUNITY CHURCH**  
 RELIGIOUS FACILITY AND PRIVATE RELIGIOUS SCHOOL  
**CONTRACT NO. 24-4181-D**  
 TAX MAP 46 GRID 3 PARCEL 337  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET NO. 2 OF 3



**SEWER PROFILES**  
Scale: Horizontal-1"=50'  
Vertical-1"=5'



**WATER PROFILES**  
Scale: Horizontal-1"=50'  
Vertical-1"=5'

**AS BUILT**  
DATE: JUNE 8, 2005

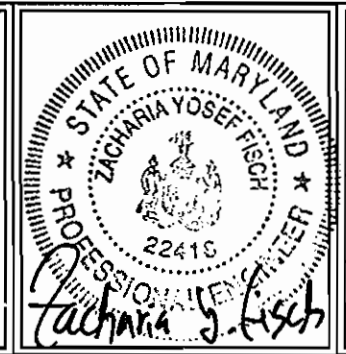
NOTE: THIS SHEET, 3 OF 3, REPLACES PREVIOUSLY APPROVED SHEET SIGNED BY D.P.Z. ON JULY 1, 2004

OWNER/DEVELOPER  
Grace Community Church  
9180 Rumses Rd  
Columbia, MD 21045  
(410) 384-384

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
R. L. B. B. 2-1-05  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
2/1/05  
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: FSHassociates@cs.com



DESIGN BY: PS  
DRAWN BY: KSZ/Slim  
CHECKED BY: ZYF  
DATE: Jan. 10, 2005

BY	NO.	REVISION	DATE
FSH	1	Revise Vertical alignment for Md26 and Old Columbia Rd	04.11.05
FSH	2	Revise Plan and Profile to Provide for Future Private force main	01.18.05

**WATER AND SEWER PROFILES**  
600' SCALE MAP NO.: 31 BLOCK NO.: 07

**GRACE COMMUNITY CHURCH**  
RELIGIOUS FACILITY  
CONTRACT NO. 24-4181-D  
TAX MAP 46 GRID 3  
5TH ELECTION DISTRICT  
PARCEL 337  
HOWARD COUNTY, MARYLAND

SCALE  
AS  
SHOWN  
SHEET NO.  
3 OF 3