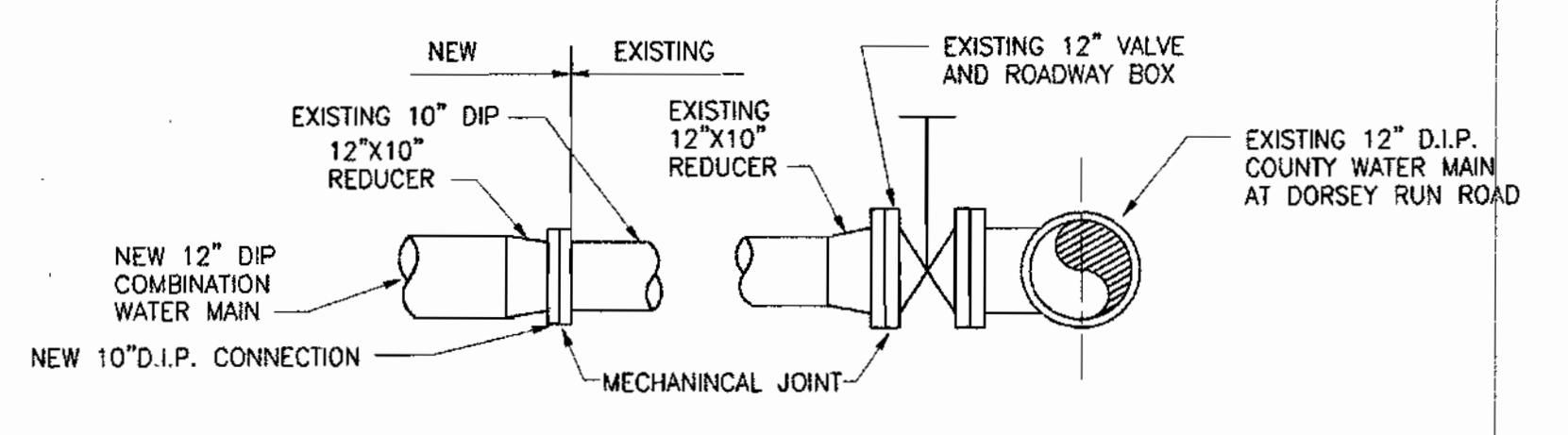


VICINITY MAP

GIANT DISTRIBUTION CENTER, EXETER INDUSTRIAL PARK WATER & SEWER MAIN EXTENSION HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

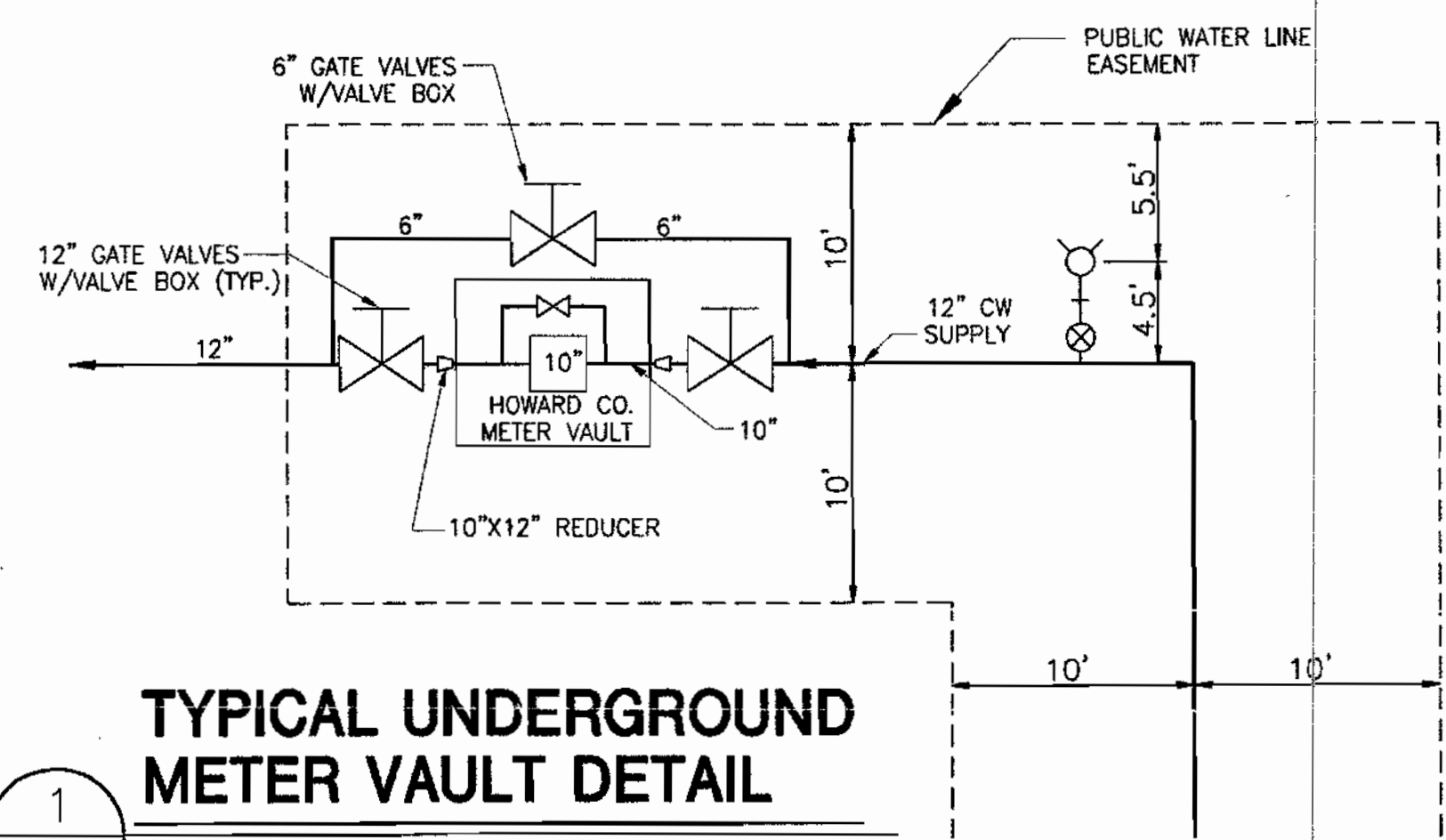
ITEM	PROPOSED	AS "BUILT"	MATERIAL SUPPLIER
8" SS	125 LF	125 LF	U.S. FILTER
6" SS	0 LF		
4" SS	0 LF		
MANHOLES	2 EACH (12' E)	2 EACH	
HOUSE CONNECTIONS	1 EACH	1 EACH	

ITEM	PROPOSED	AS "BUILT"	MATERIAL SUPPLIER
12" WATER	575 LF-DI	581 LF	DUCTILE IRON PIPE
6" WATER	27 LF-DI	27 LF	" " "
10" 1/16" BEND	1	1	
10"x12" INCREASER	3	1	
12" 1/8" BEND	2	2	
12" 1/4" BEND	1	1	
6" 1/4" BEND	2	2	
6"x12" TEE	3	3	
12" ROADWAY BOX W/ VALVE	2	2	
6" ROADWAY BOX W/ VALVE	2	2	
FIRE HYDRANT	1	1	MUELLER
10" METER VAULT	1	1	



PROPOSED WATER MAIN CONNECTION

SCALE: NONE
DWG REF:



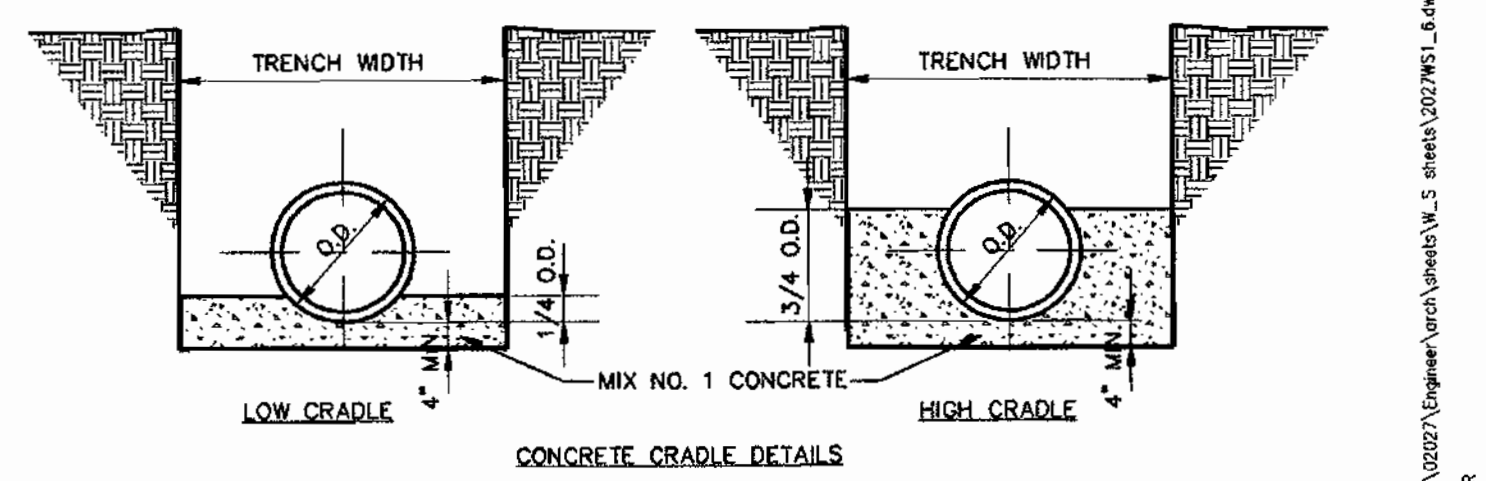
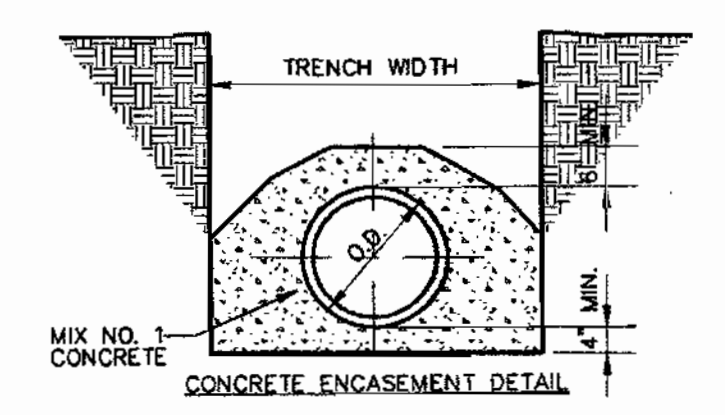
TYPICAL UNDERGROUND METER VAULT DETAIL

SCALE: NONE PER HOWARD COUNTY DETAIL W 3.37
DWG REF:
PROVIDE VAULT WITH 'BILCO' TYPE HATCH MINIMUM ENTRY 4 FT. BY 6 FT. WITH LADDER

- Part I**
- Approximate locations 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 upon Maryland State Coordinates NAD 83/91 as projected by Howard County Horizontal and Vertical GEODETIC CONTROL NOS. 0078, 48DB & 48DC. These water and sewer drawings are based on a field run topographic survey performed by Gunshick, Little and Weber in April 2002.
 - 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 6 inches. Clear all poles by 2'-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 the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the Owner for the bracing of additional poles or damages shall be deducted from the 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 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:
Bell Atlantic
BGE (Contractor Services) 1-800-446-5266
BGE (Underground Damage Control) 410-850-4620
Howard County Department of Public Works 410-291-4607
Bureau of Utilities 410-313-4900
Colonial Pipeline Co. 410-313-4900
Miss Utility 410-549-4120
State Highway Administration 1-800-257-7777
 - Trees and shrubs are to be protected from damage to the maximum extent possible. 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 the 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 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 the Standard Details unless otherwise provided 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. The 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.
 - All water house connections shall be for inside meter setting unless otherwise noted on plan or in specifications.
 - For sprinkler system for all town homes or multi-family dwelling units should have a minimum of 1' connection with a 3/4" meter.
- 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 with 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'-6" above finished grade unless otherwise noted on the drawings.
 - House(s) with the symbol "C.N.S." indicates that the cellar cannot be served.

NOMINAL PIPE DIAMETER	MAXIMUM PAYMENT (CU. FT. PER LIN. FT.)		
	LOW CRADLE	HIGH CRADLE	CONCRETE ENCASEMENT
6"	0.90	1.28	1.53
8"	1.03	1.58	2.55
10"	1.22	1.86	2.95
12"	1.51	2.33	3.63
15"	1.73	2.82	4.20
18"	2.35	4.02	5.71
21"	2.62	4.52	6.35
24"	3.34	5.95	8.22
27"	3.70	6.58	8.94
30"	4.18	7.42	9.83
33"	5.08	9.42	12.16
36"	5.65	10.53	13.09
42"	6.64	12.30	15.22
48"	8.49	16.25	19.83
54"	9.64	18.46	22.97
60"	10.95	20.80	24.95
66"	12.25	23.08	27.71



NOTES:
1. POUR CONCRETE TO UNDISTURBED EARTH. REMOVE SHEETING BEFORE POURING CONCRETE OR LEAVE LOWER PORTION OF SHEETING IN PLACE.
3 CONCRETE ENCASEMENT & CRADLE DETAILS
SCALE: N.T.S. PER HOWARD COUNTY STD. DETAIL G-2.02

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SDP-03-44.

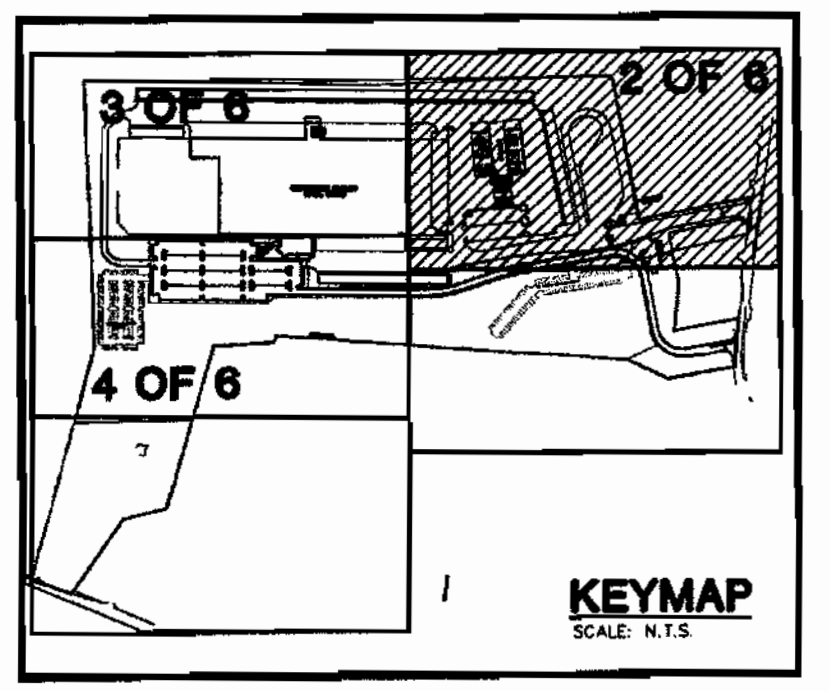
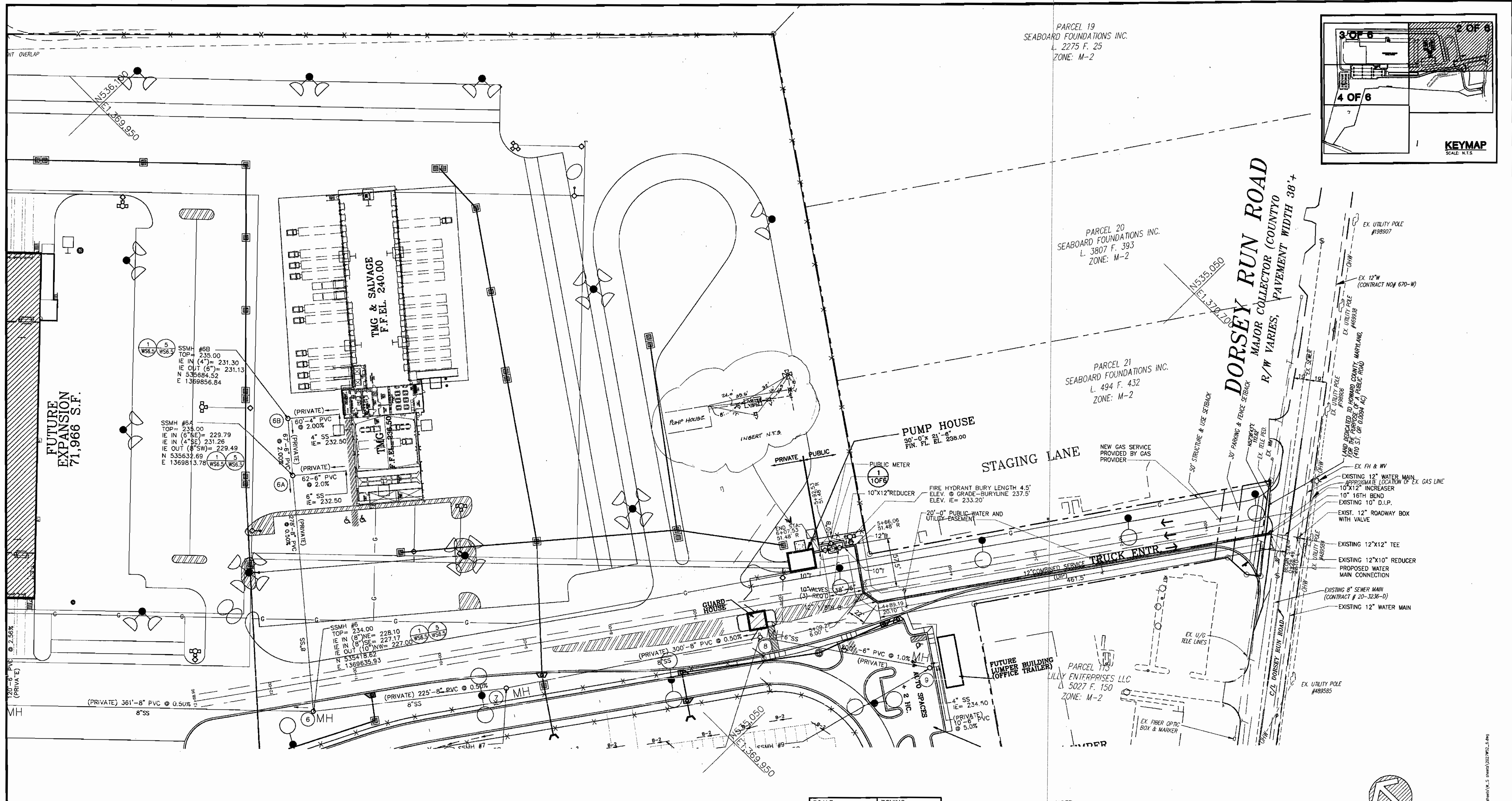
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John R. Robertson 1/2/03
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Jim Myer 1/2/03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
STATE OF MARYLAND PROFESSIONAL ENGINEER
THE FACILITY GROUP
FACILITY DESIGN GROUP INC.
ARCHITECTS & ENGINEERS
2233 LAKE PARK DRIVE
SMYRNA, GEORGIA 30080
TELEPHONE # (800) 525-2463
FAX # (770) 437-3939

SCALE: 1"=600'	ZONING: M-2	TYPE OF BUILDING: INDUSTRIAL
DATE: 10/05/02	TAX MAP 48	NO. OF UNITS PARCEL: 1
TEST GRADIENT: 550	BLOCKS 7&8	NO. OF HOUSE WATER CONNECTIONS: 1
WATER ZONE: 400		NO. OF HOUSE SEWER CONNECTIONS: 1
WATER CODE: B-02	SEWER CODE: 4150000	DRAINAGE AREA: LITTLE PATUXENT
		TREATMENT PLANT: LITTLE PATUXENT WWTP
REVISION 11/24/02 KCI	ABOULT DATA	
MARK DATE BY MGR RELEASE		

WATER AND SEWER MAIN EXTENSIONS

PREPARED FOR:
**GIANT DISTRIBUTION CENTER
EXETER INDUSTRIAL PARK
(PARCEL A) CONTRACT #24-4093-D**
6300 SHERIFF ROAD
LANDOVER, MARYLAND 20785
CONTACT: DAN CURRIE
TELEPHONE: 301-341-8445 HOWARD COUNTY, MD
PROJECT NO. 02027
SHEET NO. WS1.0
1 OF 6



PARCEL 19
SEABOARD FOUNDATIONS INC.
L. 2275 F. 25
ZONE: M-2

PARCEL 20
SEABOARD FOUNDATIONS INC.
L. 3807 F. 393
ZONE: M-2

PARCEL 21
SEABOARD FOUNDATIONS INC.
L. 494 F. 432
ZONE: M-2

PARCEL 115
LILLY ENTERPRISES LLC
L. 5027 F. 150
ZONE: M-2

DORSEY RUN ROAD
MAJOR COLLECTOR (COUNTY)
R/W VARIES, PAVEMENT WIDTH 38'+

STAGING LANE

TRUCK ENTR

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SDP-03-44.

SCALE:	1"=50'	ZONING:	M-2
DATE:	10/05/02	TAX MAP:	48
TEST GRADIENT:	550	BLOCKS:	7&8
WATER ZONE:	400	SEWER CODE:	4150000
WATER CODE:	B-02		

NOTE:
1. FOR SANITARY SEWER PROFILES, SEE SHEET 5 OF 6



THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John H. [Signature] 1/2/03
HOWARD SOIL CONSERVATION DISTRICT
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Jim Meyer 1/2/03
NATURAL RESOURCES CONSERVATION SERVICE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John [Signature] 12/31/02
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John [Signature] 1/9/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION



THE FACILITY GROUP
FACILITY DESIGN GROUP INC.
ARCHITECTS & ENGINEERS
2233 LAKE PARK DRIVE
SMYRNA, GEORGIA 30080
TELEPHONE # (800) 525-2463
FAX # (770) 437-3939

REVISION	DATE	BY	MGR	RELEASE
1	11/24/03	KCI		ADD/REV DATA ADDED
2	10/24/03	KCI	J.B.	ADD/REV DATA ADDED TO PLAN

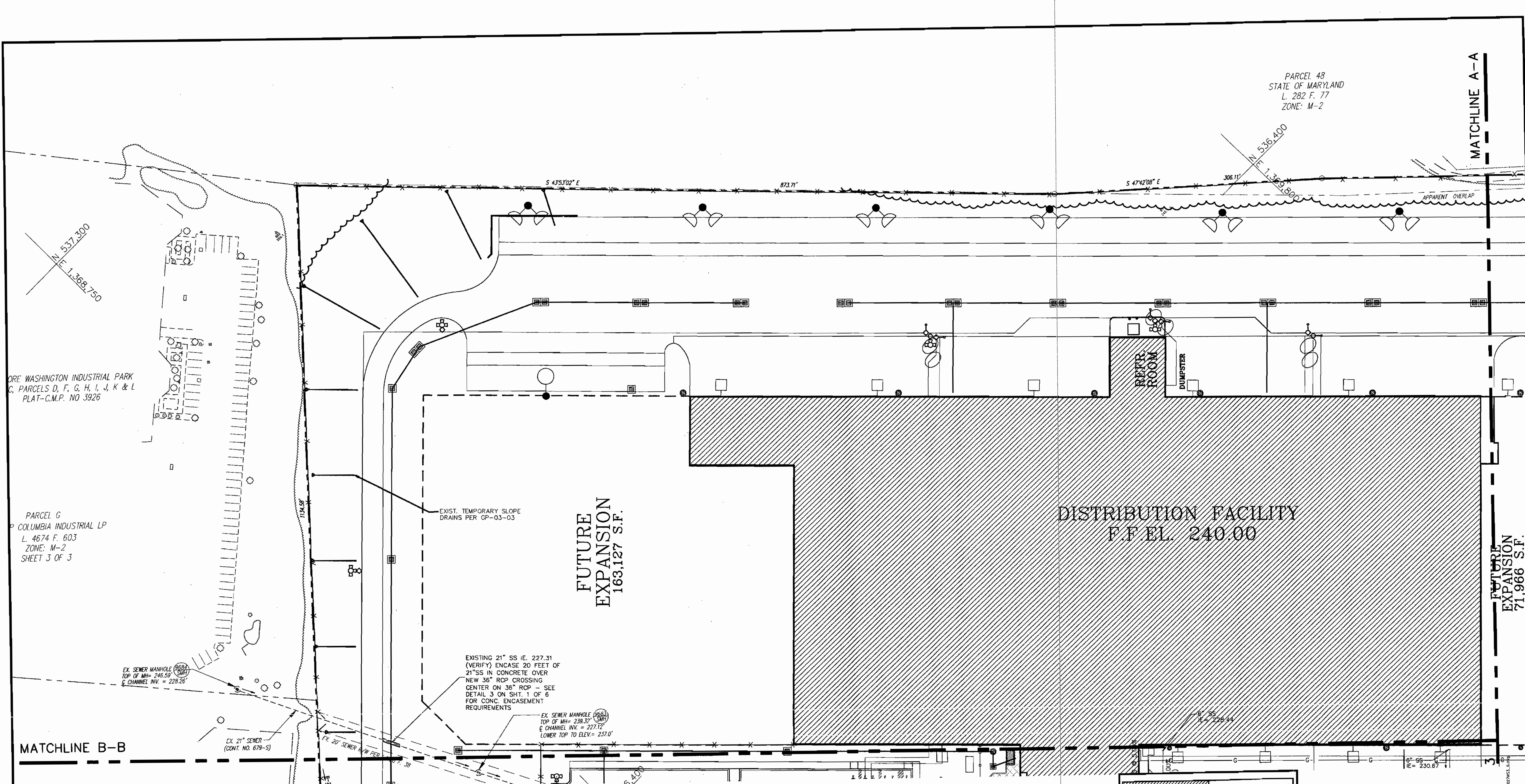
DRAWING TITLE:
WATER & SEWER PLAN

PREPARED FOR:
**GIANT DISTRIBUTION CENTER
EXETER INDUSTRIAL PARK
(PARCEL A) CONTRACT #24-4093-D**
6300 SHERIFF ROAD
LANDOVER, MARYLAND 20785
CONTACT: DAN CURRIE
TELEPHONE: 301-341-8445 HOWARD COUNTY, MD

PROJECT NO.
02027
SHEET NO. 2 OF 6
2 OF 6

PARCEL 48
STATE OF MARYLAND
L. 282 F. 77
ZONE: M-2

MATCHLINE A-A



ORE WASHINGTON INDUSTRIAL PARK
C, PARCELS D, F, G, H, I, J, K & L
PLAT-C.M.P. NO 3926

PARCEL G
COLUMBIA INDUSTRIAL LP
L. 4674 F. 603
ZONE: M-2
SHEET 3 OF 3

FUTURE
EXPANSION
163,127 S.F.

DISTRIBUTION FACILITY
F.F EL. 240.00

FUTURE
EXPANSION
71,966 S.F.

MATCHLINE B-B

NOTE:
1. FOR SANITARY SEWER PROFILES, SEE SHEET 5 OF 6

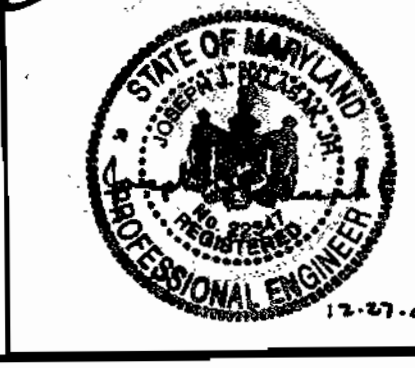
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SDP-03-44.

THIS PLAN 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.

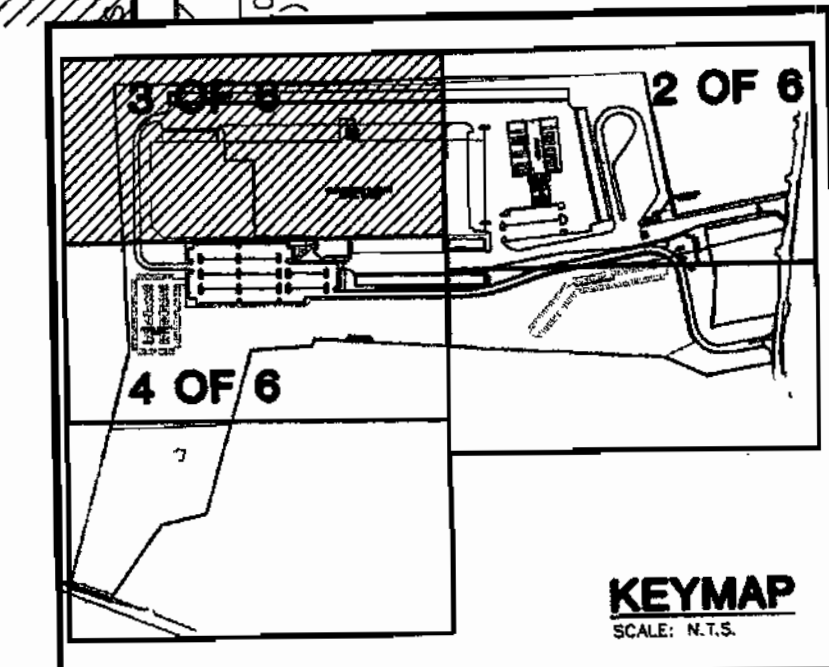
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



THE FACILITY GROUP
FACILITY DESIGN GROUP INC.
ARCHITECTS & ENGINEERS
2233 LAKE PARK DRIVE
SMYRNA, GEORGIA 30080
TELEPHONE # (800) 525-2463
FAX # (770) 437-3939

SCALE:	1"=50'	ZONING:	M-2
DATE:	10/05/02	TAX MAP:	48
TEST GRADIENT:	550	BLOCKS:	7&8
WATER ZONE:	400	SEWER CODE:	4150000
WATER CODE:	B-02		
MARK:	DATE:	BY:	MGR:
			RELEASE:

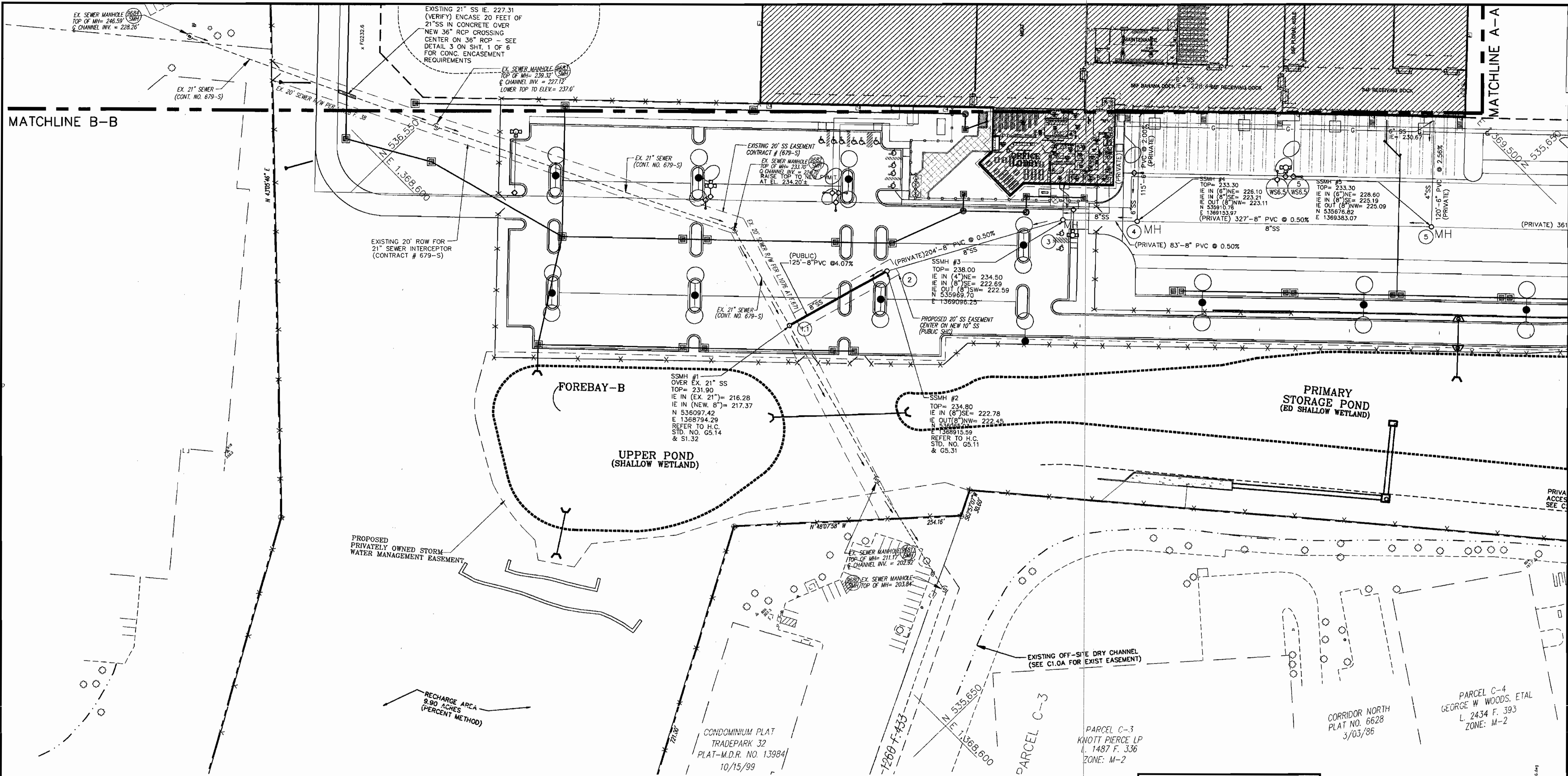


SCALE: 1"=50'

DRAWING TITLE:
SEWER PLAN

PREPARED FOR:
**GIANT DISTRIBUTION CENTER
EXETER INDUSTRIAL PARK
(PARCEL A) CONTRACT #24-4093-D**
6300 SHERIFF ROAD
LANDOVER, MARYLAND 20785
CONTACT: DAN CURRIE
TELEPHONE: 301-341-8445 HOWARD COUNTY, MD

PROJECT NO.
02027
SHEET NO.
3 OF 6



NOTE:
1. FOR SANITARY SEWER PROFILES, SEE SHEET 5 OF 6

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SDP-03-44.

THIS PLAN 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.
 DATE: 1/2/03
 DATE: 1/2/03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

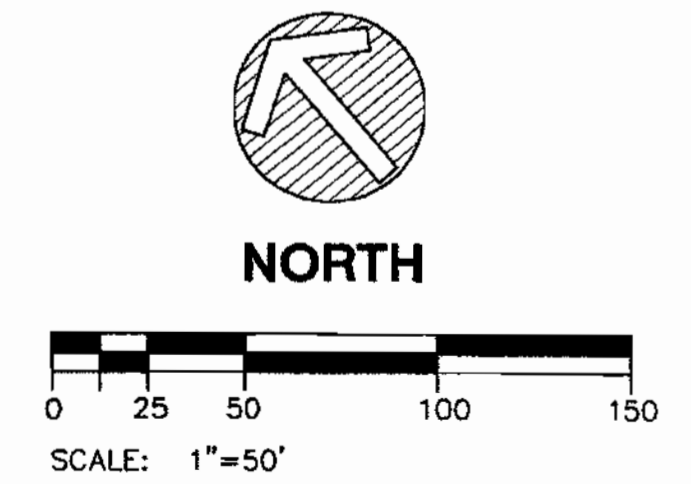
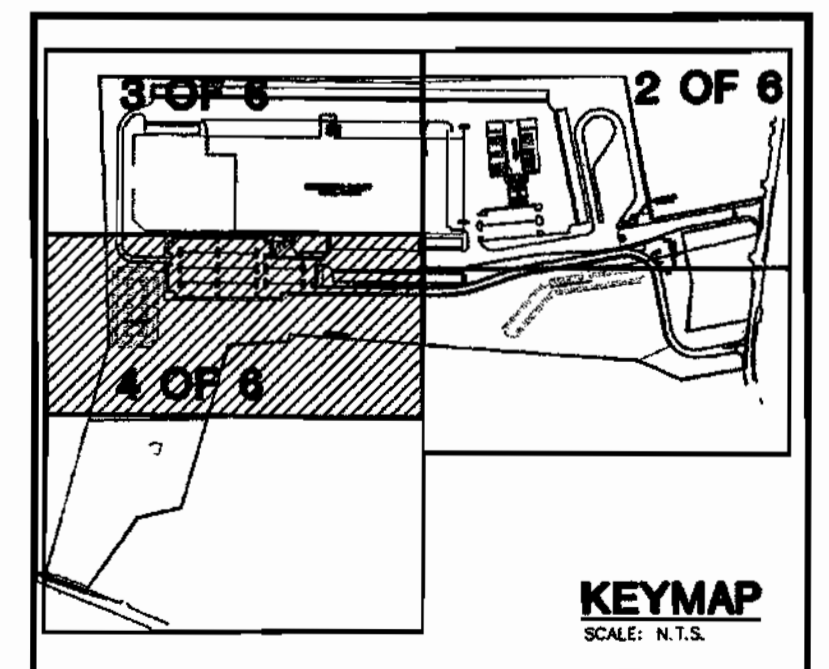
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



THE FACILITY GROUP
 FACILITY DESIGN GROUP INC.
 ARCHITECTS & ENGINEERS
 2233 LAKE PARK DRIVE
 SMYRNA, GEORGIA 30080
 TELEPHONE # (800) 525-2463
 FAX # (770) 437-3939

TEST GRADIENT: 550	SCALE: 1"=50'	ZONING: M-2
WATER ZONE: 400	DATE: 10/05/02	TAX MAP 48
WATER CODE: B-02	SEWER CODE: 4150000	BLOCKS 7&8
MARK	DATE	BY MGR
		RELEASE

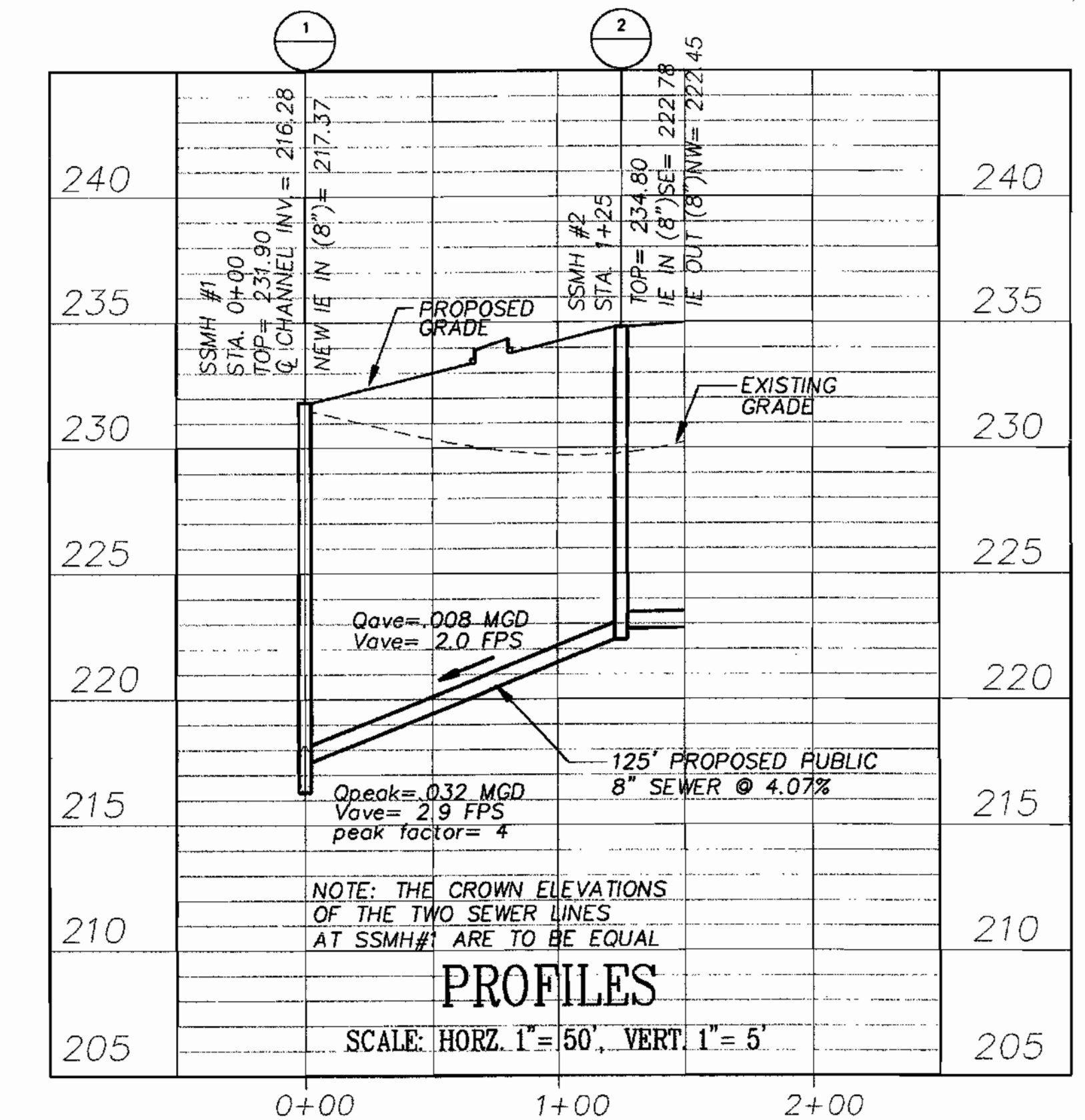
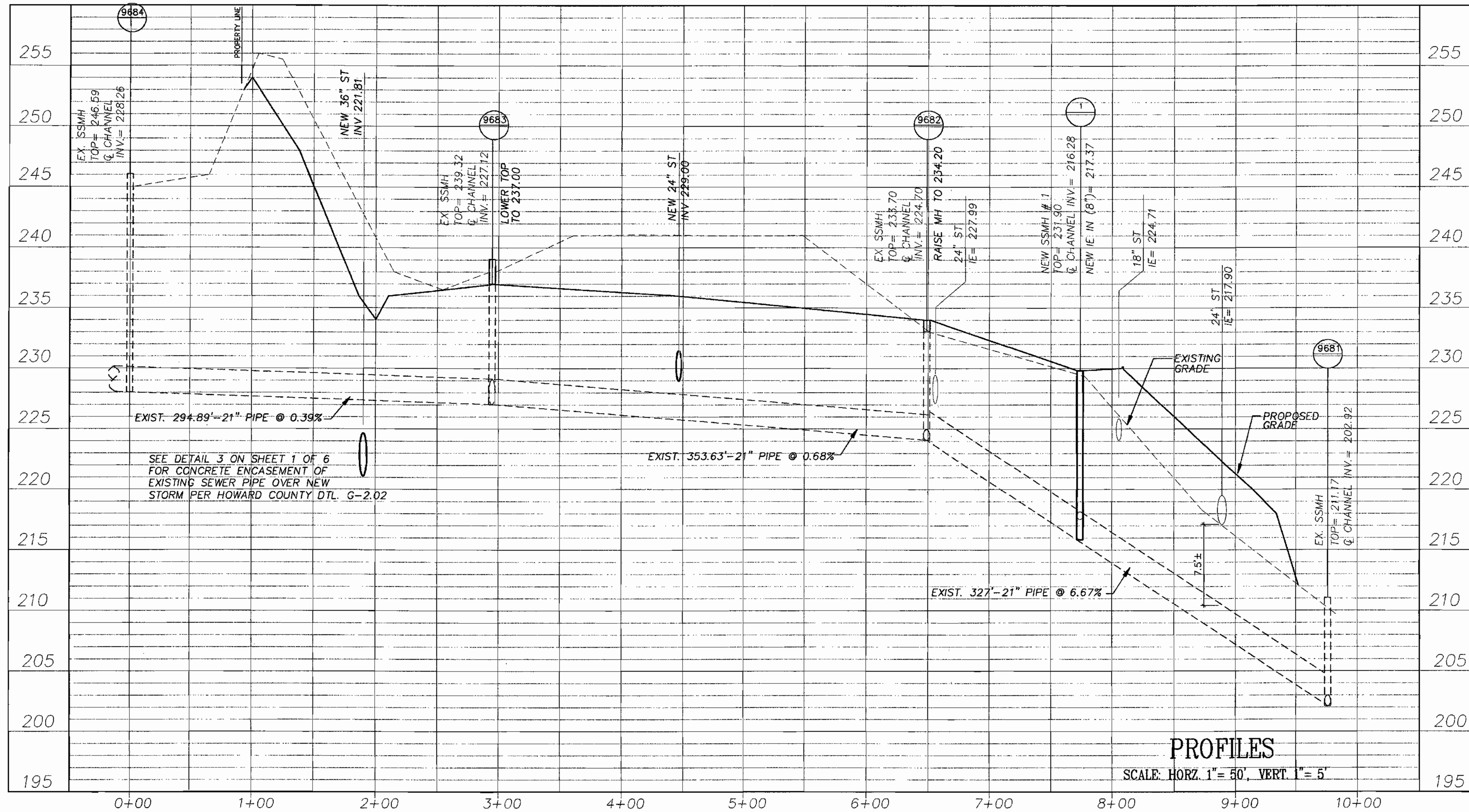
DRAWING TITLE:
SEWER PLAN



PREPARED FOR:
**GIANT DISTRIBUTION CENTER
 EXETER INDUSTRIAL PARK
 (PARCEL A) CONTRACT #24-4093-D**
 6300 SHERIFF ROAD
 LANDOVER, MARYLAND 20785
 CONTACT: DAN CURRIE
 TELEPHONE: 301-341-8445 HOWARD COUNTY, MD

PROJECT NO. 02027
 SHEET NO. WS3.3
4 OF 6

DATE PLOTTED: 11/20/02
 PLOTTER: HP PLOTTER
 PLOT SCALE: 1"=50'
 PLOT TIME: 11:00:12



PROFILES

SCALE: HORZ. 1"=50', VERT. 1"=5'

PROFILES

SCALE: HORZ. 1"=50', VERT. 1"=5'

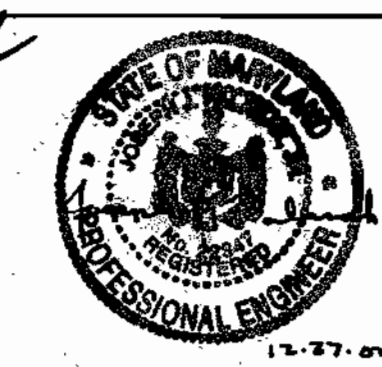
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SDP-03-44.

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. DATE: 1/2/03

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. DATE: 1/2/03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



THE FACILITY GROUP
FACILITY DESIGN GROUP INC.
ARCHITECTS & ENGINEERS
2233 LAKE PARK DRIVE
SMYRNA, GEORGIA 30080
TELEPHONE # (800) 525-2463
FAX # (770) 437-3939

TEST GRADIENT: 550	SCALE: 1"=50'	ZONING: M-2
WATER ZONE: 400	DATE: 10/05/02	TAX MAP 48
WATER CODE: B-02	SEWER CODE: 4150000	BLOCKS 7&8
MARK	DATE	BY
		MGR
		RELEASE

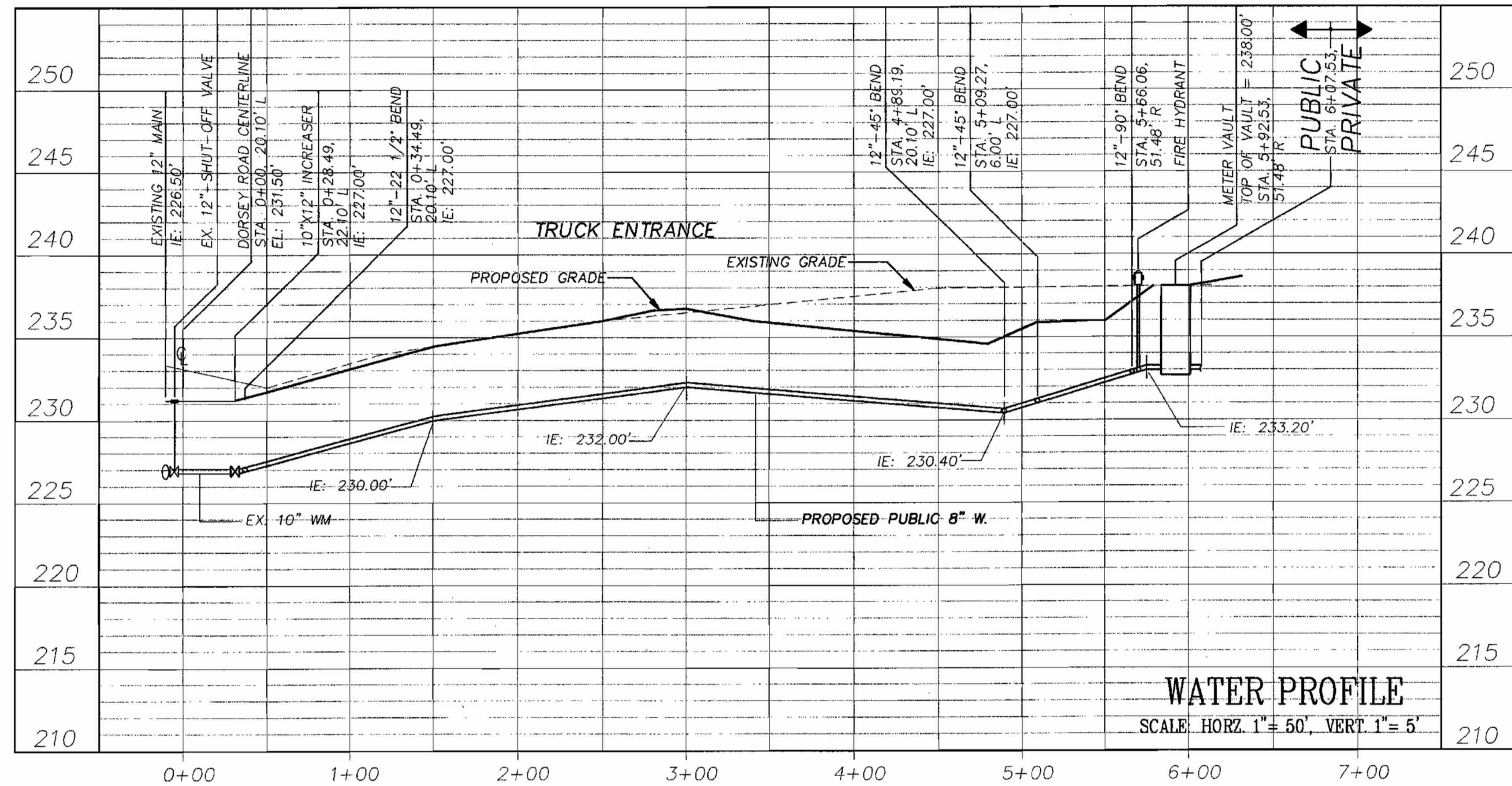
DRAWING TITLE:
**EXISTING & PROPOSED
SANITARY SEWER
PROFILES
(CONTRACT # 679-S)**

PREPARED FOR:
**GIANT DISTRIBUTION CENTER
EXETER INDUSTRIAL PARK
(PARCEL A) CONTRACT #24-4093-D**

6300 SHERIFF ROAD
LANDOVER, MARYLAND 20785
CONTACT: DAN CURRIE
TELEPHONE: 301-341-8445 HOWARD COUNTY, MD

PROJECT NO. 02027
SHEET NO. WS5.0A
5 of 6

DRAWING: I:\Projects\02027\Exeter\Drawings\679-S.dwg DATE: 12/27/02



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

NOTE: MINIMUM COVER SHALL BE MAINTAINED BY DEFLECTION IN JOINTS OF WATER MAIN.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SDP-03-44.

THIS PLAN 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 R. Rautson
HOWARD COUNTY SOIL CONSERVATION DISTRICT

Jim Myers
NATURAL RESOURCES CONSERVATION SERVICE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

William H. Kimo
BUREAU OF UTILITIES

12/31/02
DATE

Dan Currie
CHIEF DEVELOPMENT ENGINEERING DIVISION

1/9/03
DATE



THE FACILITY GROUP
FACILITY DESIGN GROUP INC.
ARCHITECTS & ENGINEERS
2233 LAKE PARK DRIVE
SMYRNA, GEORGIA 30080
TELEPHONE # (800) 525-2463
FAX # (770) 437-3939

SCALE: 1" = 50'	ZONING: M-2			
DATE: 10/05/02	TAX MAP - 48			
	BLOCKS - 7&8			
TEST GRADIENT: 550	SEWER CODE: 4150000			
WATER ZONE: 400				
WATER CODE: B-02				
MARK	DATE	BY	MGR	RELEASE

DRAWING TITLE:
WATER PROFILES

PREPARED FOR:
**GIANT DISTRIBUTION CENTER
EXETER INDUSTRIAL PARK
(PARCEL A) CONTRACT #24-4093-D**
8300 SHERIFF ROAD
LANDOVER, MARYLAND 20785
CONTACT: DAN CURRIE
TELEPHONE: 301-341-8445 HOWARD COUNTY, MD

PROJECT NO.
02027
SHEET NO.
6 OF 6

Drawing: F:\Projects\02027\Drawings\Water\W_5_south\0207WS6.dwg
 USER: MGR, E.L. CURRIE
 DATE: 12/28/02