

GENERAL NOTES

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
UTILITY DESIGN DIVISION

GENERAL NOTES Part 1,

1. 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.

2. Topographic field surveys were performed on 09/04 by G.W. Stephens, Jr. and Associates - Consultant Engineers.

3. Horizontal and Vertical Survey Control All horizontal controls are based on Maryland State Coordinates, NAD 83 / 91. All vertical controls are based on NAVD 88.


The coordinates shown on the drawings are based on Maryland State Reference System NAD '83/' 91 as projected by Howard County Geodetic Control Stations No. U25 and J109.

All vertical controls are based on NAVD '88. Vertical controls provided on the drawings are as shown/indicated (this drawing).

4. All pipe elevations shown are invert elevations unless otherwise noted on the plans.

5. Clear all utilities by a minimum of 12 inches. Clear all poles by 5'-0" minimum or tunnels as require 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 monies owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.

6. 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?

7. Where test pits have been made on existing utilities, they are noted by the symbol  at the location 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.

8. The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

- *AT&T+1-800-252-1133
- *BGE (Construction Services)+410-850-4620
- *BGE (Emergency)+410-685-1400
- *Bureau of Utilities+410-313-4900
- *Colonial Pipeline Co+410-795-1390
- *Miss Utility+1-800-257-7777
- *State Highway Administration+410-531-5533
- *Verizon+1-800-743-0033 / 410-224-9210

9. Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrub located within the construction strip are not to be removed or damaged by the contractor.

10. 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.

11. The contractor shall notify the Bureau of Highways, Howard County, at (410)-3 13-7450 at least five working days before open cutting or boring/adding 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

1. All water mains shall be D.I.P. Class 52 unless otherwise noted.

2. Tops of all water mains shall have a minimum of 3'-6" of cover unless otherwise noted.

3. Valves adjacent to tees shall be strapped to tees.

4. All fittings shall be buttressed or anchored with concrete in accordance with Standard Details unless otherwise provided for on the drawings.

5. 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.

6. The contractor shall not operate any water main valves on the existing water system.

Part III SEWER

1. All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted.

2. All manholes shall be 4'-0" inside diameter unless otherwise noted.

3. Force mains shall be D.I.P. only.

4. Manholes shown with 12" and 16" walls are for brick manholes only.

5. Manholes designated W.T. in plan and profile shall have watertight frame and cover Standard Detail (35.52). Where watertight manhole frames and covers are used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.

6. House(s) with the symbol "C.N.S." indicates that the cellar cannot be served.

Revised - October 2004

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 05-072

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

APPROVED:  7/17/06
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

 7/14/06
HOWARD SOIL CONSERVATION DISTRICT DATE

OWNER / DEVELOPER
MERRITT PROPERTIES L.L.C.
2066 LORD BALTIMORE DRIVE
BALTIMORE, MARYLAND 21244
410-298-2600

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



**GEORGE W. STEPHENS, JR.
AND ASSOCIATES, INC.**
Civil Engineers and Land Surveyors
1020 CROMWELL BRIDGE ROAD
Towson, Maryland 21286
(410) 825-8120



DESIGNED : HP
DRAFTED : HP
CHECKED : HP

COVER SHEET, GENERAL NOTES & LOCATION MAP

CONTRACT NO.
600 SCALE MAP NO. 37

BLOCK NO. 8

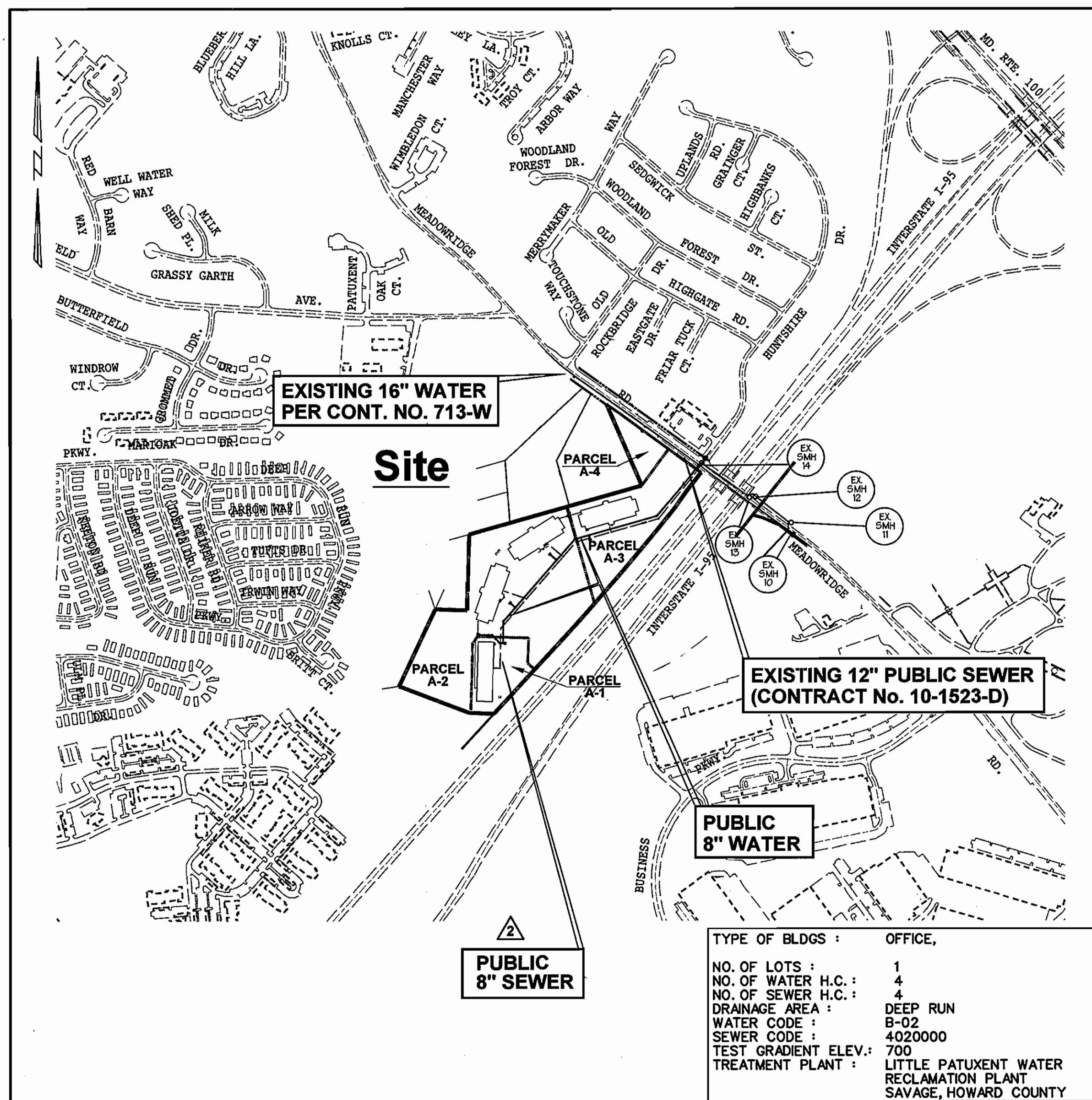
PUBLIC WATER and SEWER MAIN MEADOWS CORPORATE PARK PARCEL 'A'

CONTRACT NO. 14-4281-D

HOWARD COUNTY, MARYLAND
ELECTION DISTRICT *01

April 3, 2005
SHEET 1 OF 6

P/N 9698



LOCATION MAP

SCALE : 1" = 600'

WATER and SEWER CONSTRUCTION PLANS

MEADOWS CORPORATE PARK

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PARCEL 'A'

CONTRACT NO. 14-4281-D

INDEX OF SHEETS

SHEET NO.	TITLES
1	COVER SHEET, GENERAL NOTES & LOCATION MAP
2	PLAN VIEW
3	PLAN VIEW
4	SEWER PROFILES
5	WATER PROFILES
6	WATER PROFILES

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
8" P.V.C. Sanitary Sewer / 8" D.I.P. SEWER	1340/428 L.F.	1774	P.V.C.	
6" P.V.C. Sanitary Sewer	305 L.F.	303	P.V.C.	
Sanitary Manhole (G 5.01)	4 Each	4 EA		
Sanitary Manhole (S1.32 Type 'B' Drop MH)	4 Each	4 EA		
6" D.I.P. Water Main	130 L.F.	130 L.F.	DIP	
8" D.I.P. Water Main	1972 L.F.	1947 L.F.	DIP	
8" x 6" TEE	4 Each	4 EA	DIP	
8" x 8" TEE	4 Each	4 EA	DIP	
8" x 8" CROSS	1 Each	1 EA	DIP	
6" Valve and Roadway Box	4 Each	4 EA		
8" Valve and Roadway Box	6 Each	6 EA		
16" x 8" Tapping Sleeve & Valve	1 Each	1 EA		

NAME OF UTILITY CONTRACTOR : C.T.C.

SURVEY AND DRAFTING DIVISION AS-BUILT DATE _____

ITEM	QUANTITY
FIRE HYDRANTS	5 Each
2" WATER METER W/CHECK VALVE	1 Each
2" CURB STOP	1 Each

BY	NO.	REVISION	DATE
GWS	1	REVISED 8" WATER MAIN	8/30/05
GWS	2	REV. 8" PRIVATE SEWER TO PUBLIC SEWER	12/15/05
		& ADDED 2" WATER METER WITH CURB STOP	
KCI	3	AS-BUILT DATA	3/14/06

BY	NO.	REVISION	DATE
HP	1	REV. PRIVATE SEWER TO PUBLIC SEWER & RELOCATED F.H. No.1 AND ADDED 2" WATER METER	12/15/05

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

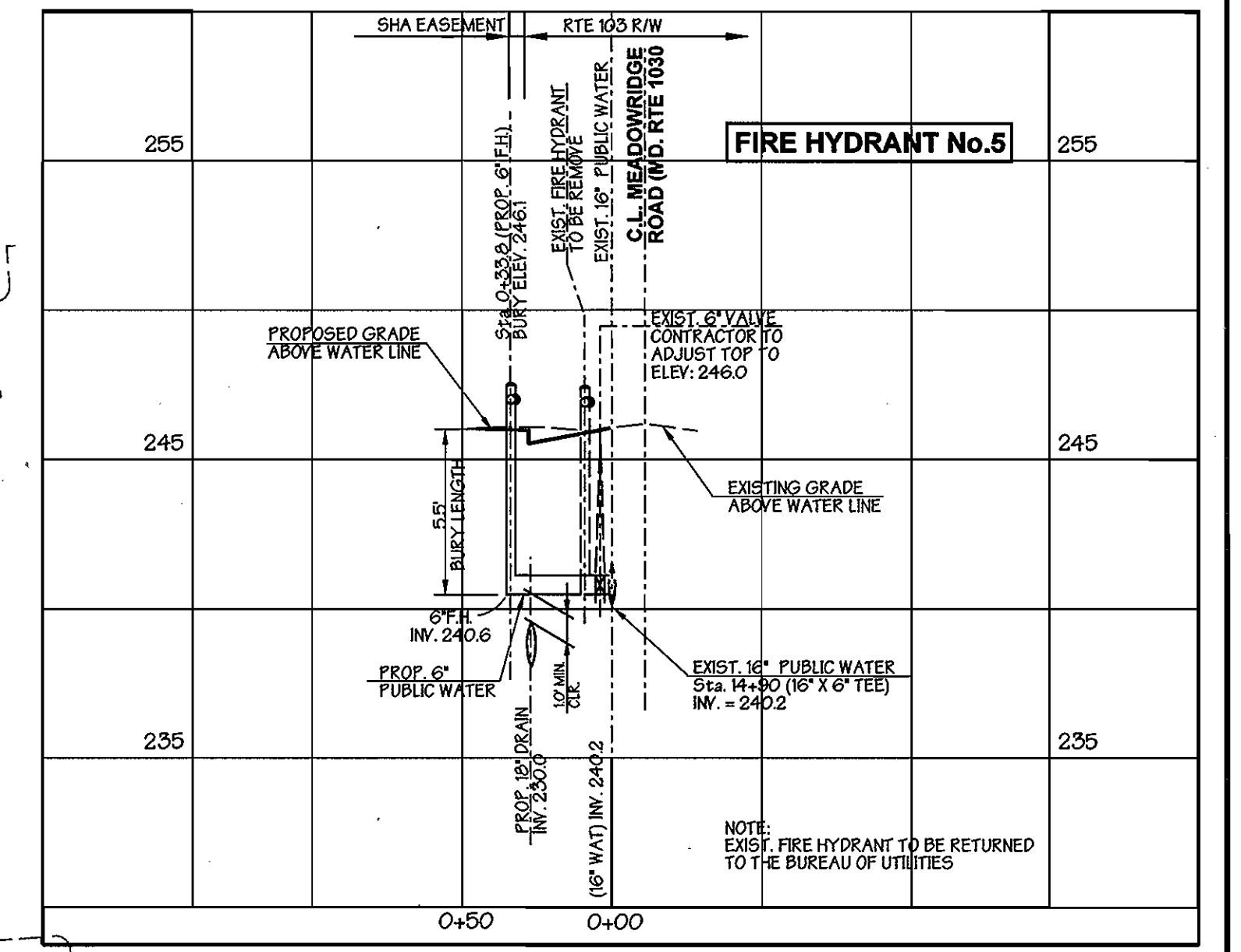
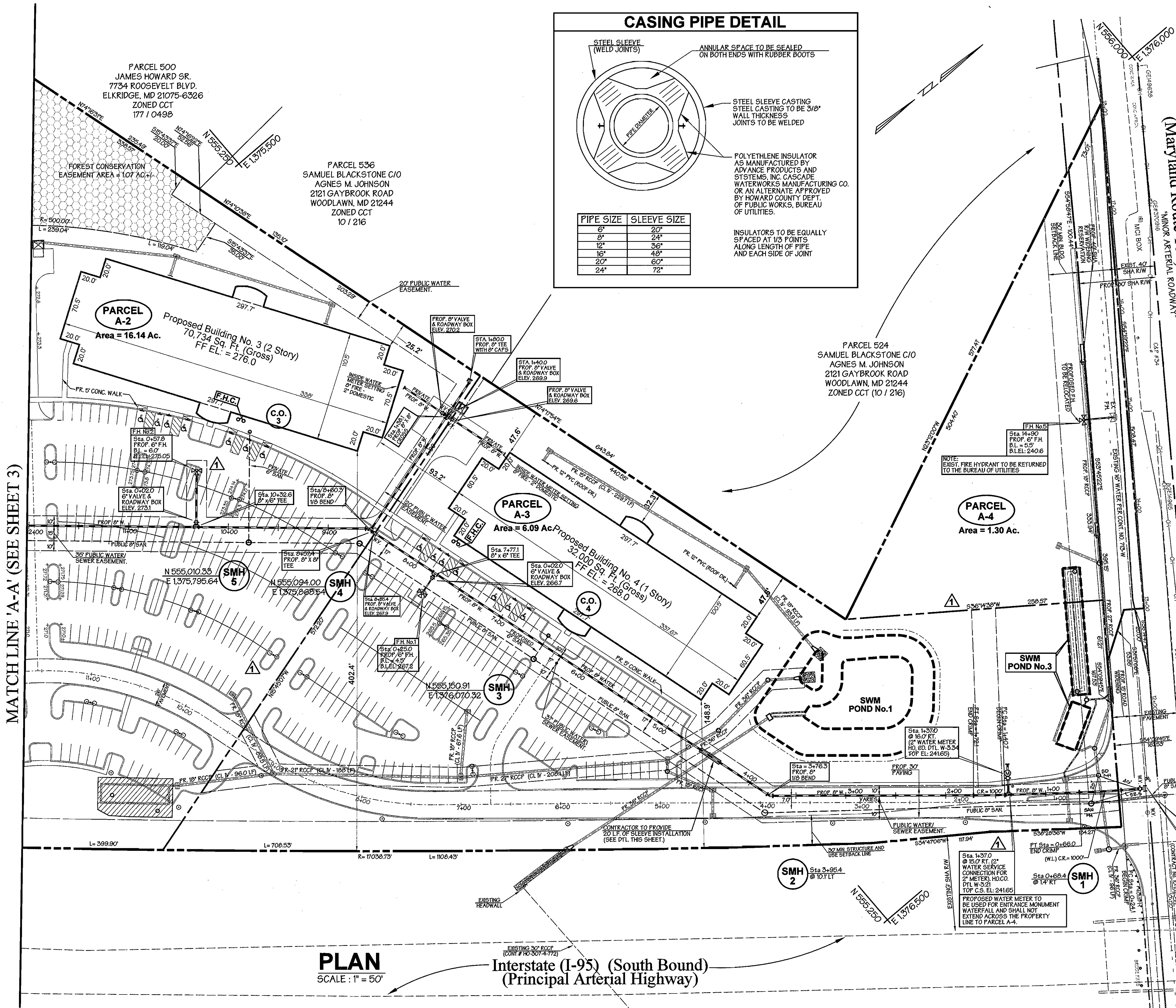
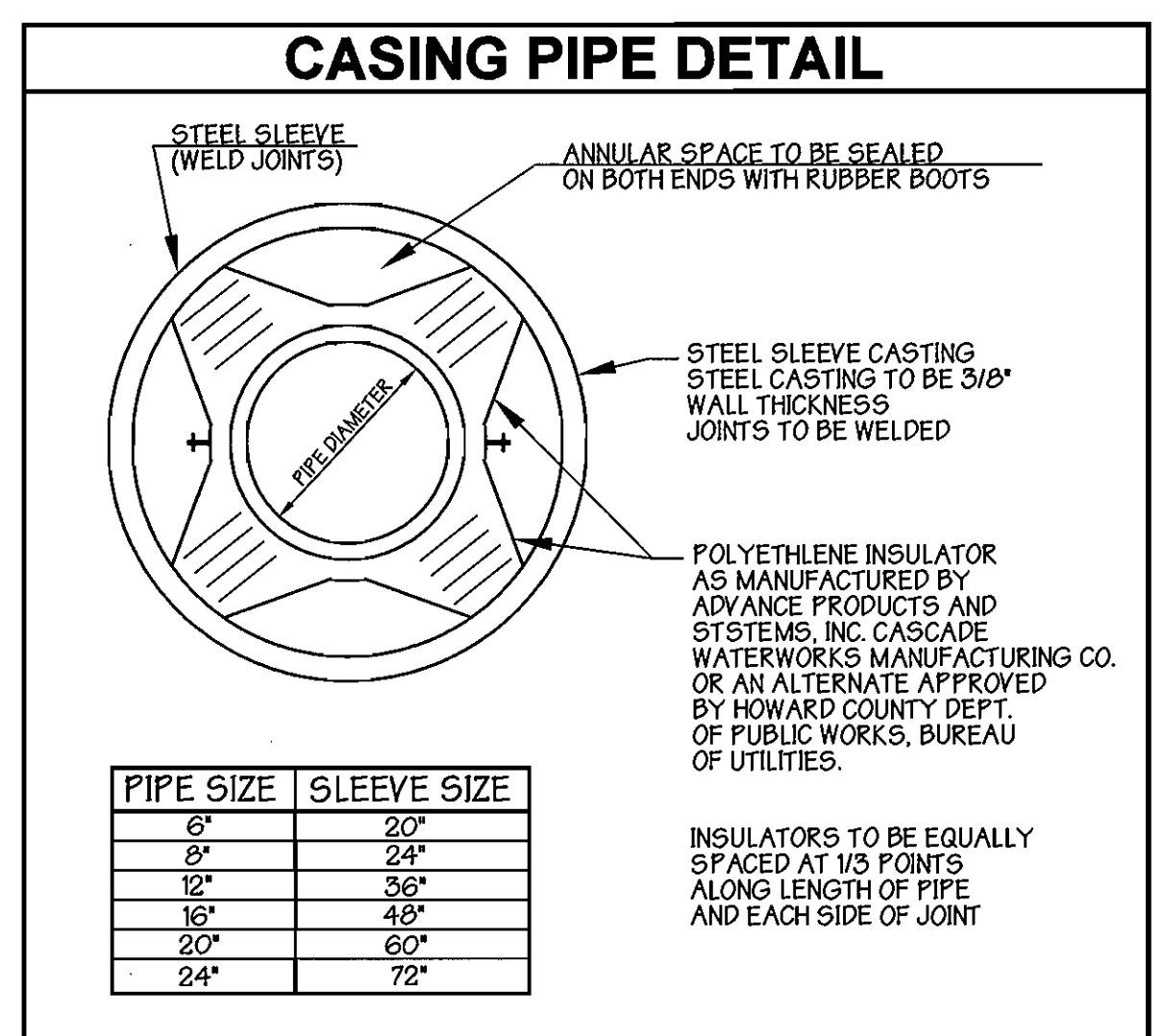
U.S. SOIL CONSERVATION SERVICE DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 05-072

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

APPROVED :
HOWARD SOIL CONSERVATION DISTRICT DATE

OWNER / DEVELOPER
MERRITT PROPERTIES L.L.C.
2066 LORD BALTIMORE DRIVE
BALTIMORE, MARYLAND 21244
410-288-2600



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. H. Deussen 7-10-06
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

M. J. Deussen 7/19/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GWS
GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
1020 CROMWELL BRIDGE ROAD
Towson, Maryland 21286
(410) 825-8120



DESIGNED : HPP
DRAFTED : HPP
CHECKED : HPP

PLAN VIEW

CONTRACT NO. 14-4281-D
600 SCALE MAP NO. 37 BLOCK NO. 8

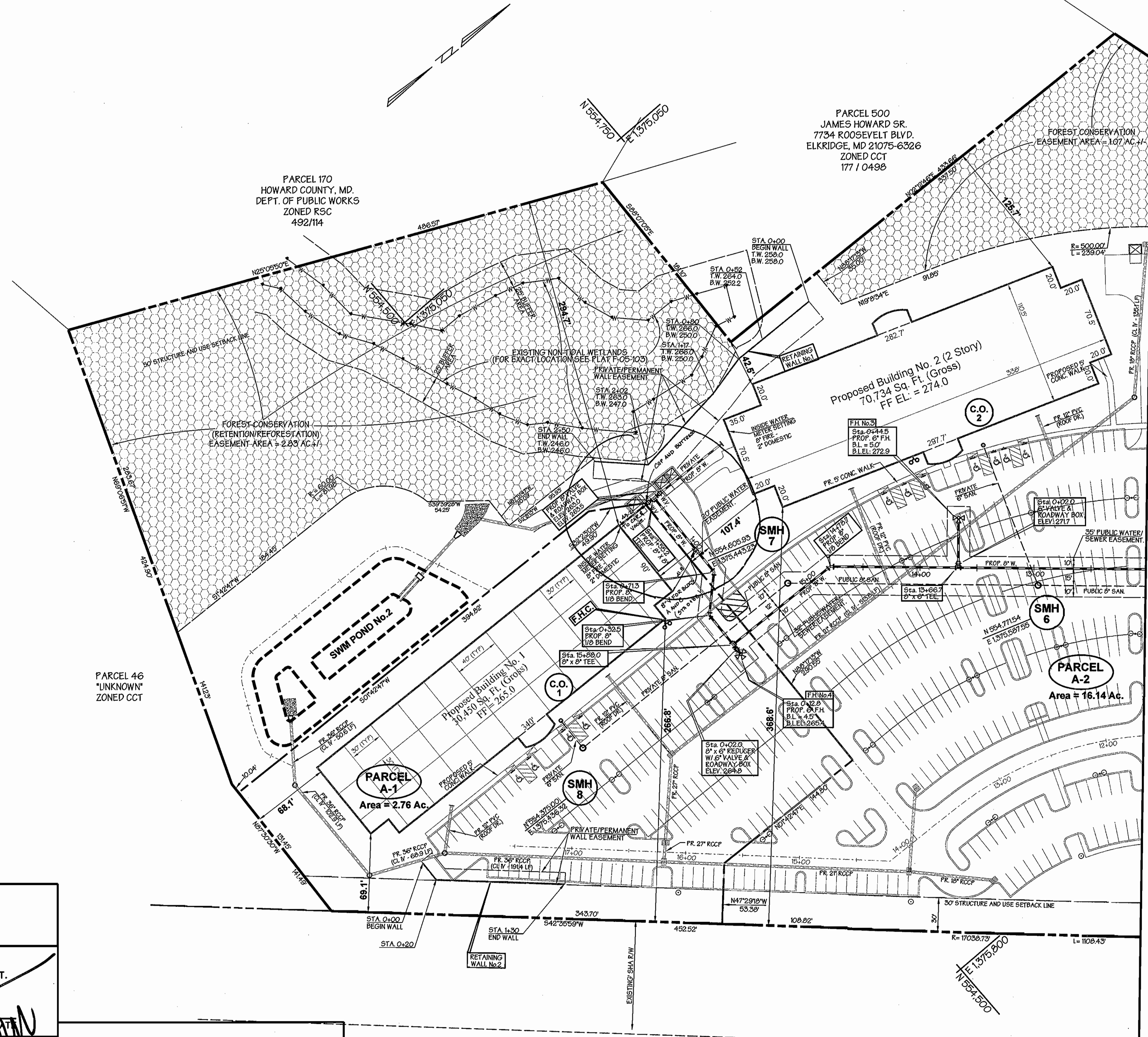
Public Water and Sewer Plan
MEADOWS CORPORATE PARK
PARCEL 'A'
CONTRACT NO. 14-4281-D
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT *01

APPROVED: *[Signature]* 2/06
April 3, 2005
SHEET 2 OF 6

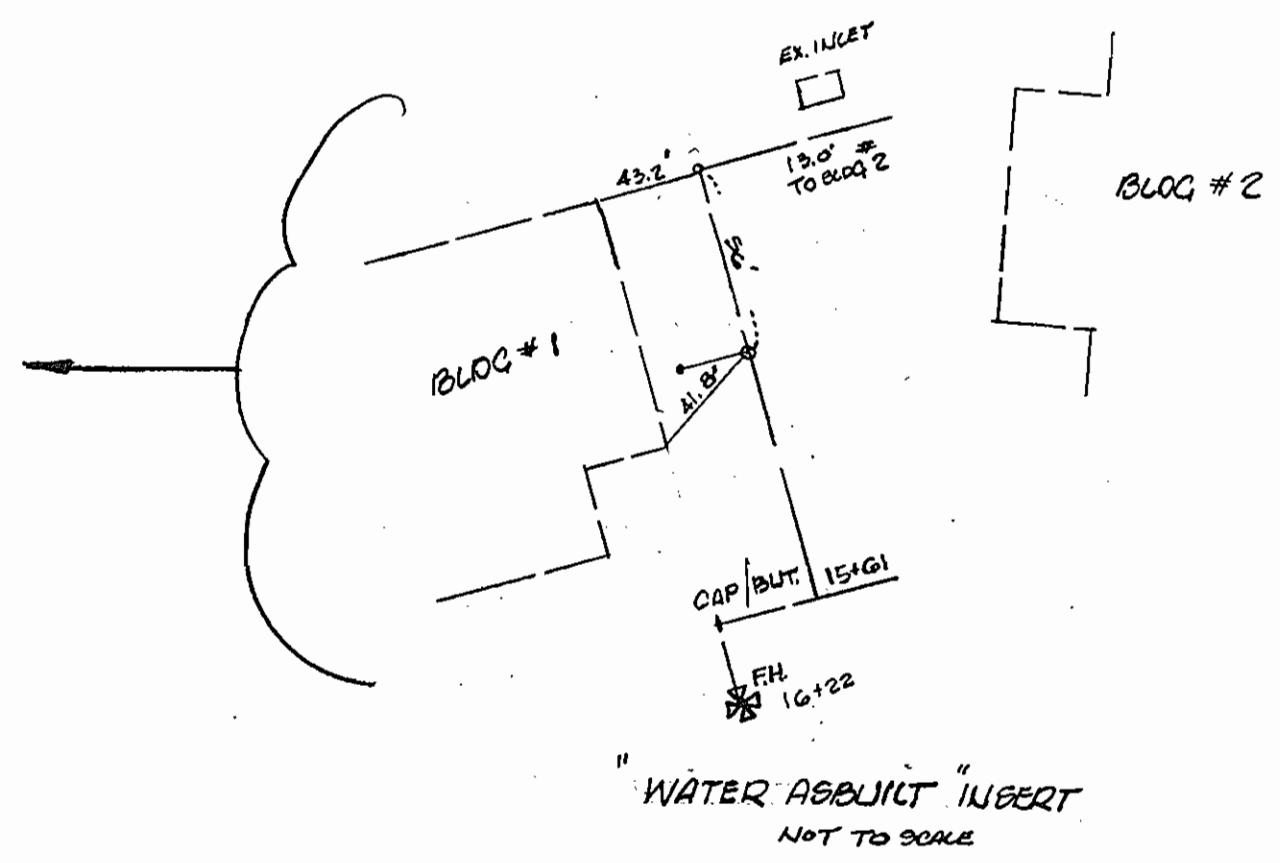
P/N 9698

"AS-BUILT" FIELD MEASUREMENTS CONTRACT # 14-4281-D

VALVES	FROM	TO	DISTANCE	REMARKS
0" F.H. VALVE 7+77	F.H. 7+77 8" V 8+55 SMH 4	VALVE VALVE	21.0 74.5 81.2	
8" VALVE 8+55	F.H. 7+77 6" F.H.V. 7+77 SMH 4	VALVE VALVE	78.7 74.5 20.0	
8" VALVE 1+40	8" V 1+38 LT 8" V 1+38 RT	VALVE VALVE	4.5 4.5	See Reverse side for details
6" F.H.V 10+17	F.H. 10+17 SMH 5	VALVE VALVE	58' 43'	
6" F.H.V 13+75	F.H. 13+75 SMH 6	VALVE VALVE	44.8 73.8	
6" F.H.V 16+22	F.H. 16+22 8" V 0+88	VALVE VALVE	10.0 55.0	See Reverse side for detail
	FACE OF CURB ON F.H.	VALVE	4.4	
8" VALVE 0+88	F.H. V 16+22 8" V 1+44	VALVE VALVE	55.0 56.0	
	BETWEEN BLDG #2 2 LT. COR. BLDG #1	VALVE	41.8	
8" VALVE 1+44	8" V 0+88 INLET	VALVE VALVE	56.0 13.0	Inlet between blgd. #1 & 2
	BETWEEN BLDG #2 RT. COR. BLDG. 1'	VALVE	43.2	no locked to project



MATCH LINE 'A-A' (SEE SHEET 2)



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 05-072

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

APPROVED : _____
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE DATE _____

OWNER / DEVELOPER
MERRITT PROPERTIES L.L.C.
2088 LORD BALTIMORE DRIVE
BALTIMORE, MARYLAND 21244
410-298-2600

Interstate (I-95) (South Bound)

PLAN
SCALE: 1" = 50'

BY	NO.	REVISION	DATE
GWS	1	REVISED 8" WATERLINE ALIGNMENT AT BLDG. No. 1	8/30/05
HP	2	REVISED PRIVATE 8" SEWER TO PUBLIC 8" SEWER & RELOCATED F.H. #3 AND #4.	12/15/05
KC1	3	AS-BUILT DATA	9/05

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

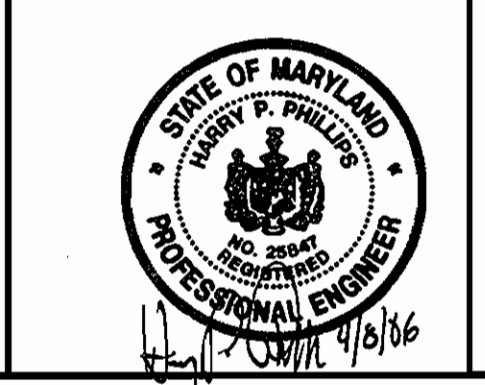
R. H. Bump 7-10-06
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

M. W. Williams 7/19/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GWS

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
1020 CROMWELL BRIDGE ROAD
Towson, Maryland 21286
(410) 825-8120



DESIGNED : HPP
DRAFTED : HPP
CHECKED : HPP

PLAN VIEW

CONTRACT NO. 14-4281-D
600 SCALE MAP NO. 3Z BLOCK NO. 8

Public Water and Sewer Plan
MEADOWS CORPORATE PARK
PARCEL 'A'
CONTRACT NO. 14-4281-D

HOWARD COUNTY, MARYLAND
ELECTION DISTRICT *Q1

April 3, 2005
SHEET 3 OF 6

P/N 9698

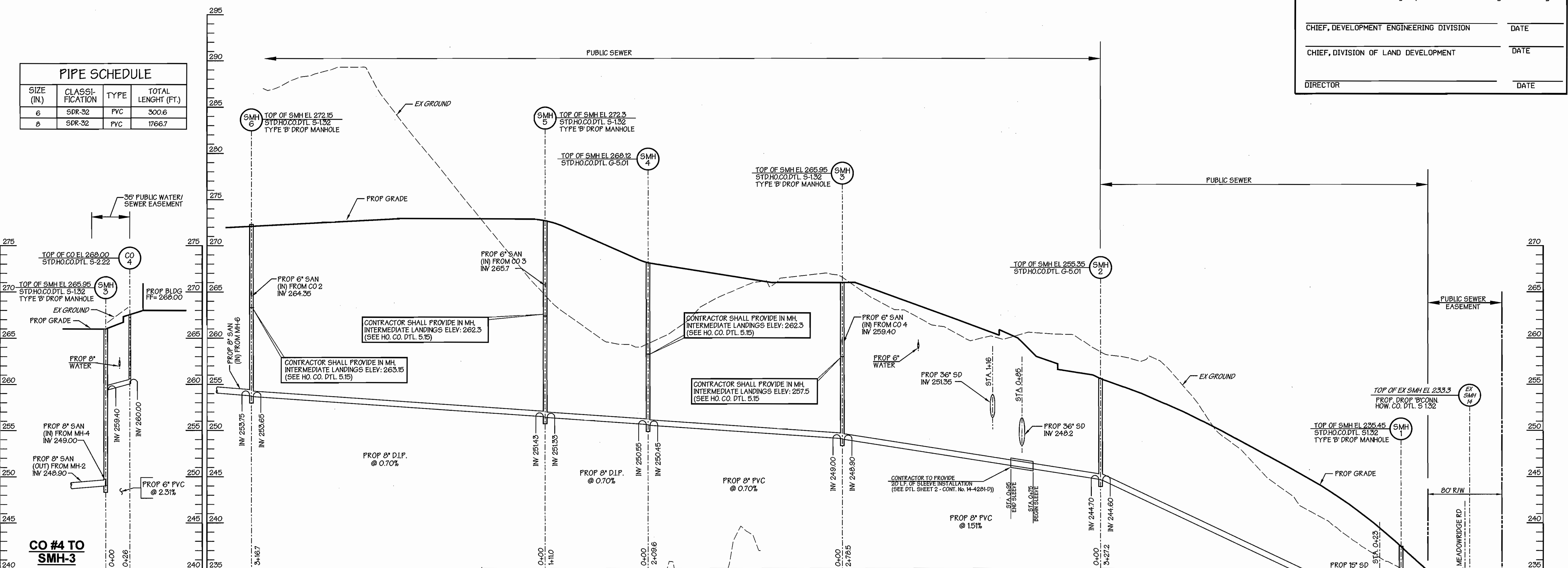
APPROVED: Howard County Department of Planning and Zoning

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE _____

CHIEF, DIVISION OF LAND DEVELOPMENT _____ DATE _____

DIRECTOR _____ DATE _____

PIPE SCHEDULE			
SIZE (IN.)	CLASSIFICATION	TYPE	TOTAL LENGTH (FT.)
6	SDR-32	PVC	300.6
8	SDR-32	PVC	1766.7



SMH-5 TO EX SMH-14
 Scales: Horiz: 1" = 50'
 Vert: 1" = 5'

COMPACTION NOTE NO. 1:
 FILL MATERIAL IS TO BE CONTROLLED AND COMPACTED AS CERTIFIED BY AN APPROVED SOILS ENGINEER. FILL MATERIALS TO BE PLACED NO GREATER THAN 8" LIFTS AND ROLLED TO 95% COMPACTION.

COMPACTION NOTE NO. 2:
 ALL FILL MATERIAL BENEATH WATER AND SEWER LINES TO BE MIN. 95% COMPACTION.

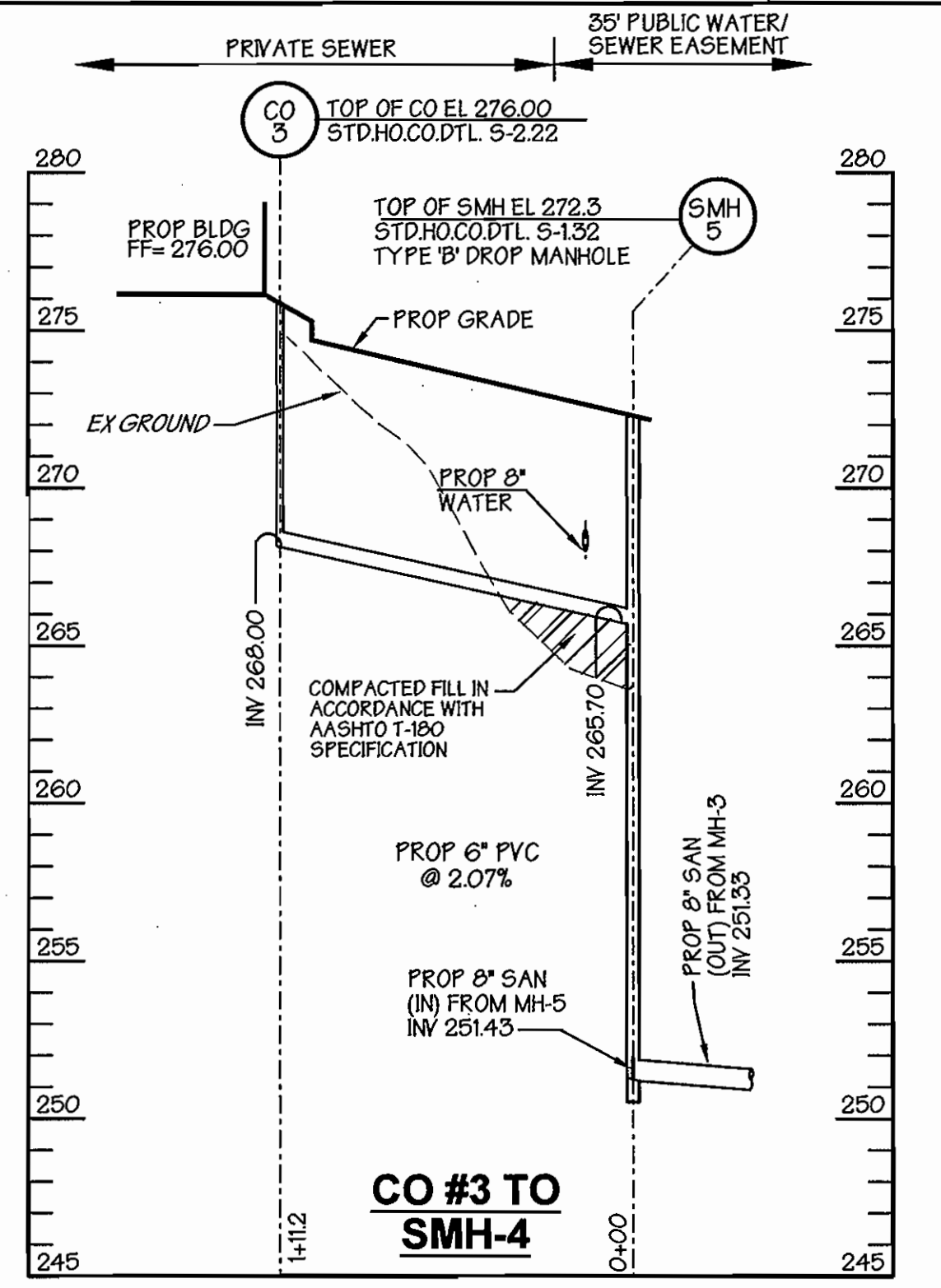
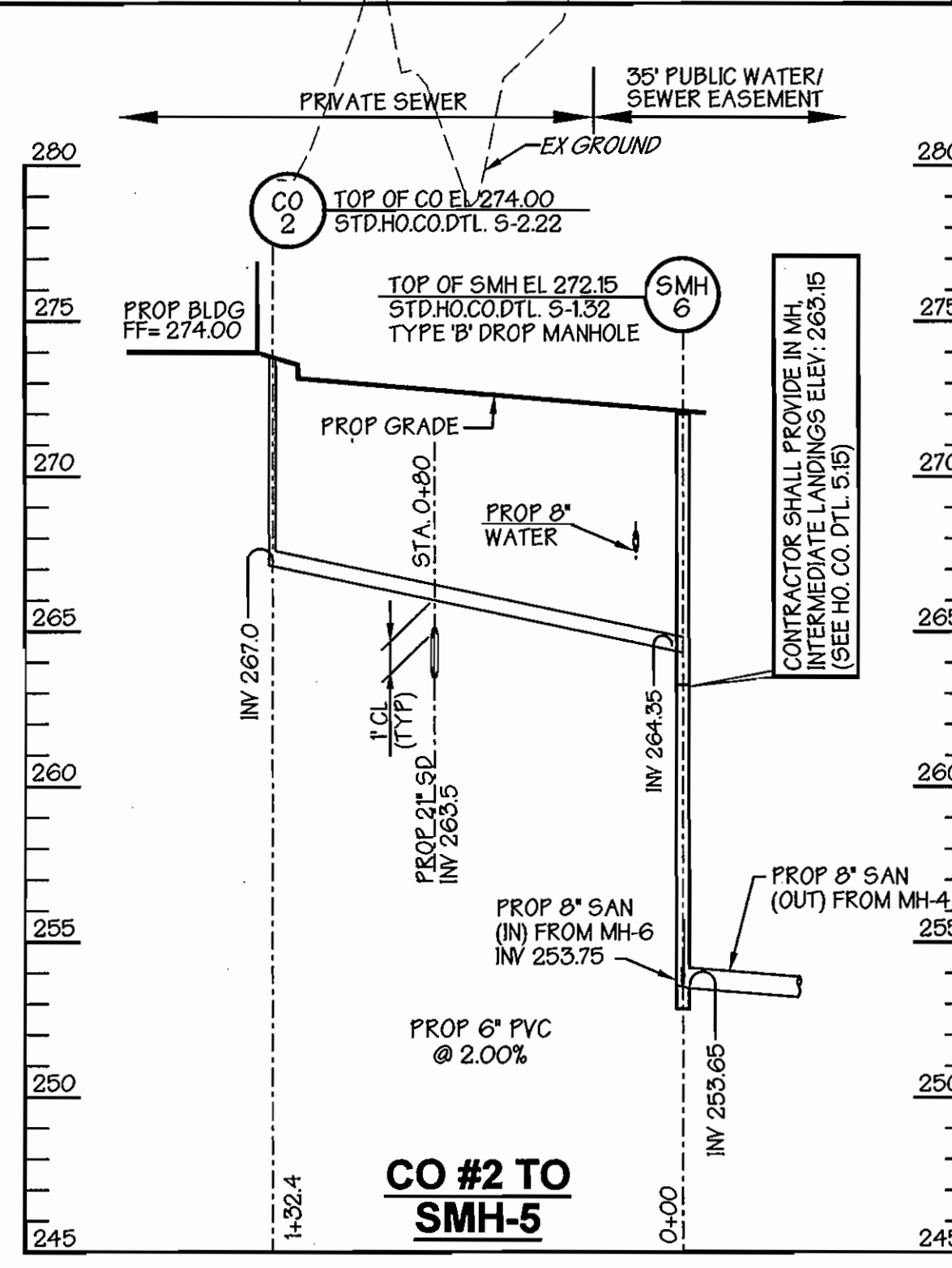
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THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *John R. Roberts* 7/14/06
 HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Jim Meyer 7/14/06
 S.O.S. SOIL CONSERVATION SERVICE DATE

OWNER / DEVELOPER
MERRITT PROPERTIES L.L.C.
 2066 LORD BALTIMORE DRIVE
 BALTIMORE, MARYLAND 21244
 410-298-2600



BY	NO.	REVISION	DATE
hp	1	Rev. sewer pipe slope and added drop 'B' connection (ho. co. dtl s.132)	8/30/05
hp	2	Rev. private 8" sewer to public 8" sewer	12/15/05

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
R. B. ... 7-10-06
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
... 7/14/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 1020 CROMWELL BRIDGE ROAD
 Towson, Maryland 21286
 (410) 825-8120

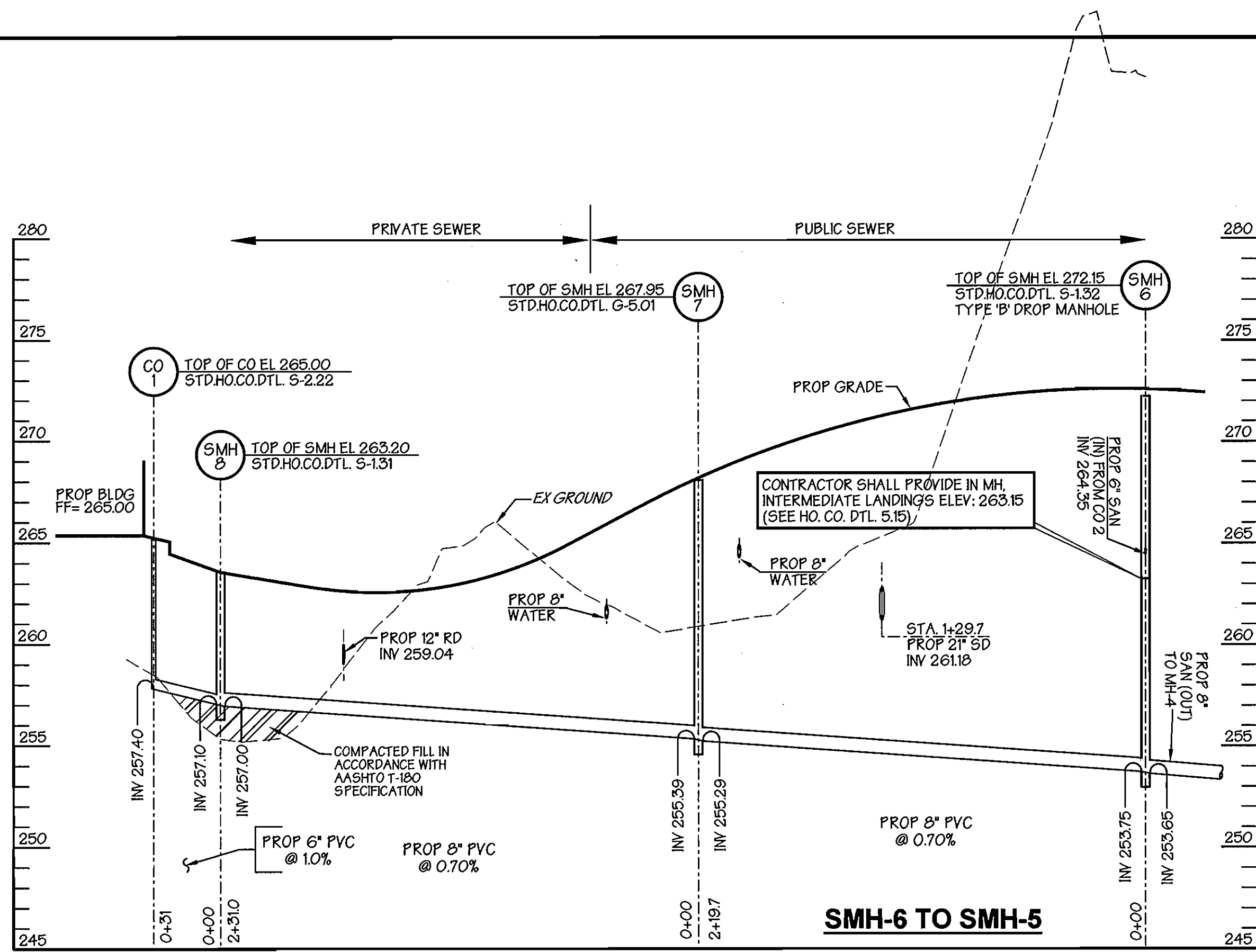


DESIGNED : HPP
 DRAFTED : HPP
 CHECKED : HPP

PROFILES

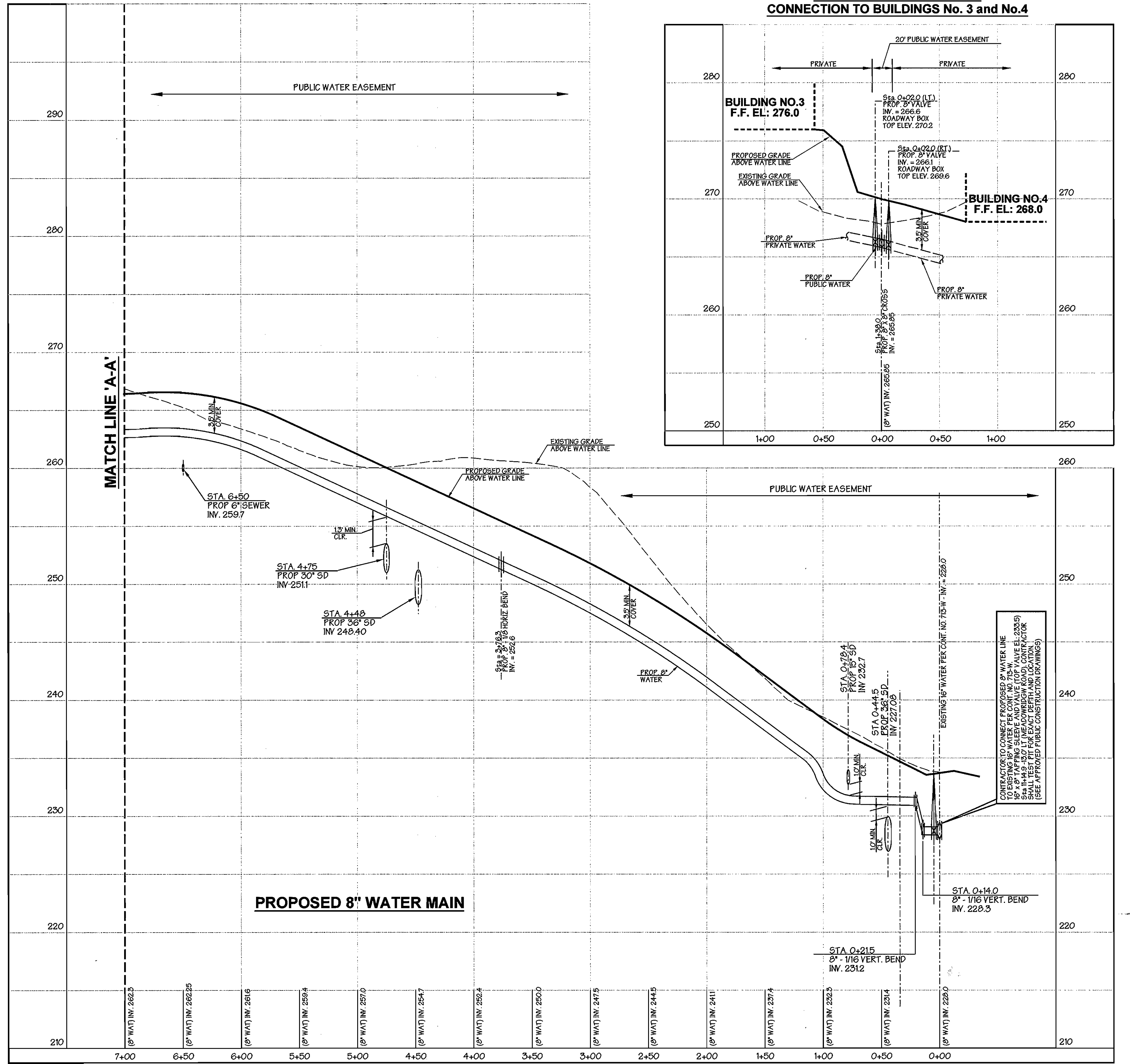
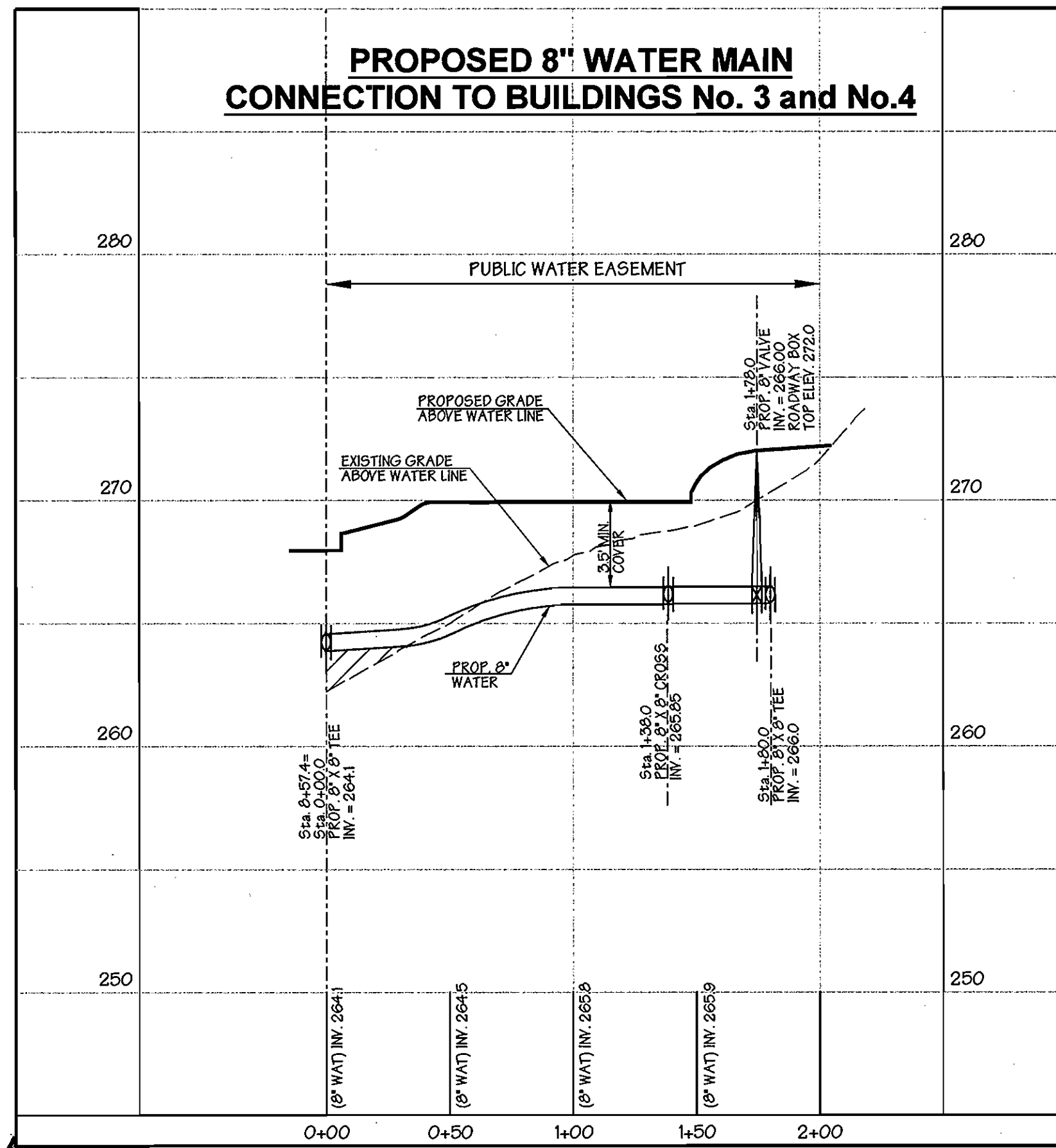
CONTRACT NO. 14-4281-D
 800 SCALE MAP NO. 37
 BLOCK NO. 8

Public Sanitary Sewer Profiles
MEADOWS CORPORATE PARK
PARCEL 'A'
 CONTRACT NO. 14-4281-D
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT *QJ
 April 3, 2005
 SHEET 4 OF 6

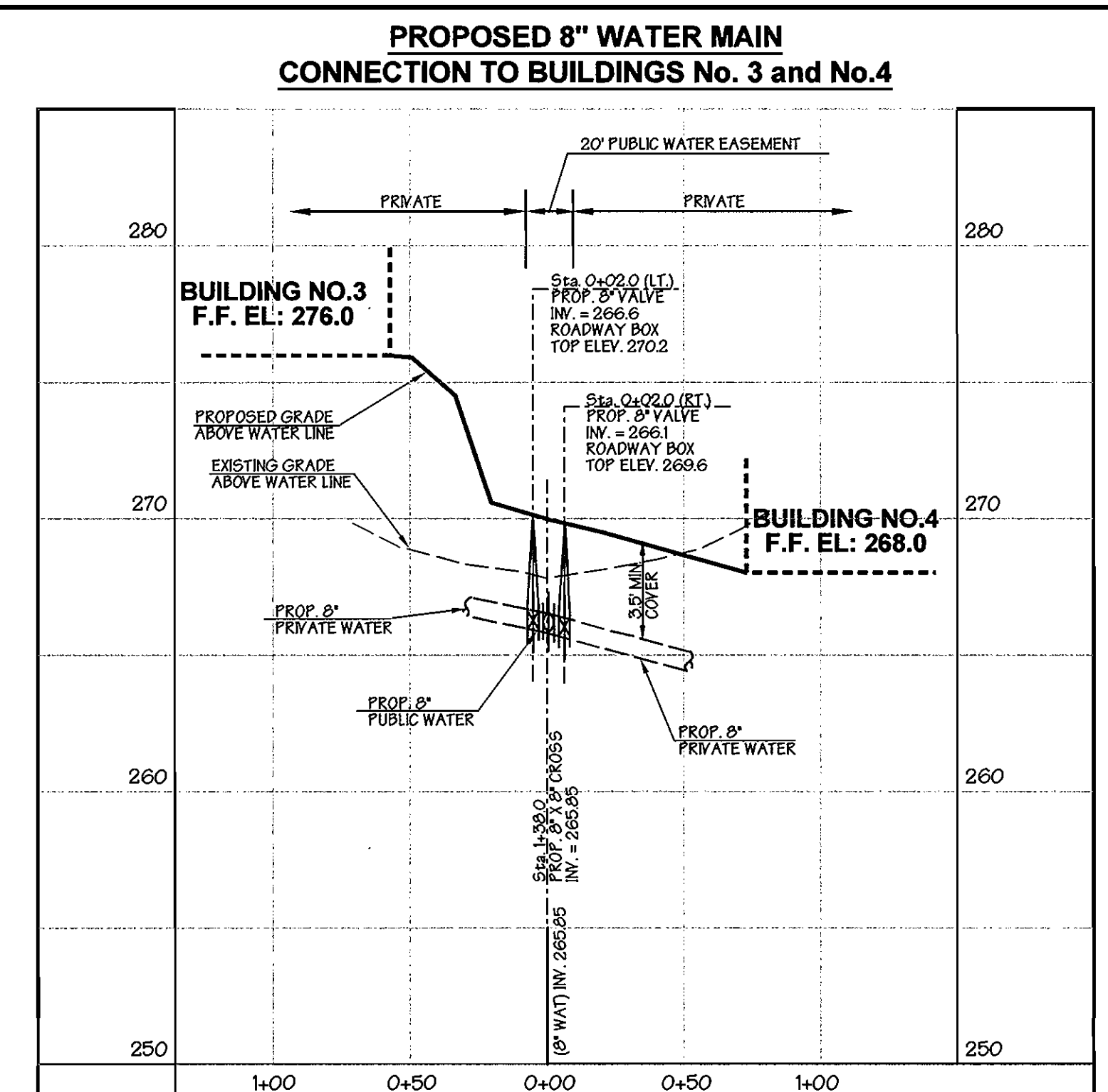


Scales: Horiz: 1" = 50'
Vert: 1" = 5'

**PROPOSED 8" WATER MAIN
CONNECTION TO BUILDINGS No. 3 and No.4**



Scales: Horiz: 1" = 50' (Based on Water Line Stationing)
Vert: 1" = 5'



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 05-072

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

APPROVED: *John R. Roberts* 7/14/06
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer 7/14/06
U.S. SOIL CONSERVATION SERVICE DATE

OWNER / DEVELOPER
MERRITT PROPERTIES L.L.C.
2066 LORD BALTIMORE DRIVE
BALTIMORE, MARYLAND 21244
410-298-2600

COMPACTON NOTE:
FILL MATERIAL IS TO BE CONTROLLED AND COMPACTED AS CERTIFIED BY AN APPROVED SOILS ENGINEER. FILL MATERIALS TO BE PLACED NO GREATER THAN 8" LIFTS AND ROLLED TO 95% COMPACTON.

COMPACTON NOTE NO.2:
ALL FILL MATERIAL BENEATH WATER AND SEWER LINES TO BE MIN. 95% COMPACTON.

BY	NO.	REVISION	DATE
1	HP	REV. PRIVATE 8" SEWER TO PUBLIC 8" SEWER	12/115/05

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Ruth Deussen 7-10-06
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
William J. Deussen 7/14/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**GEORGE W. STEPHENS, JR.
AND ASSOCIATES, INC.**
Civil Engineers and Land Surveyors
1020 CROMWELL BRIDGE ROAD
Towson, Maryland 21286
(410) 825-8120



DESIGNED : HPP
DRAFTED : HPP
CHECKED : HPP

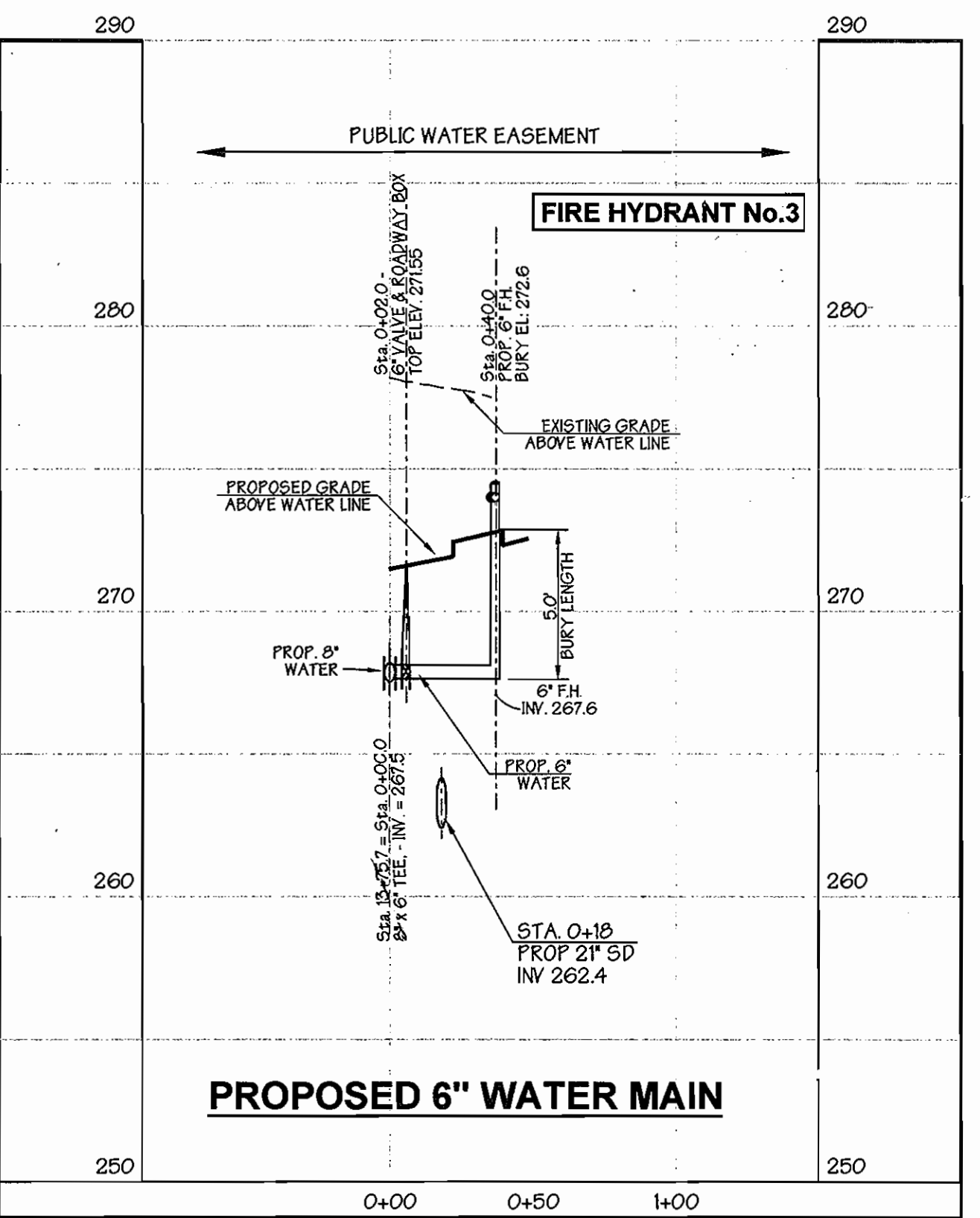
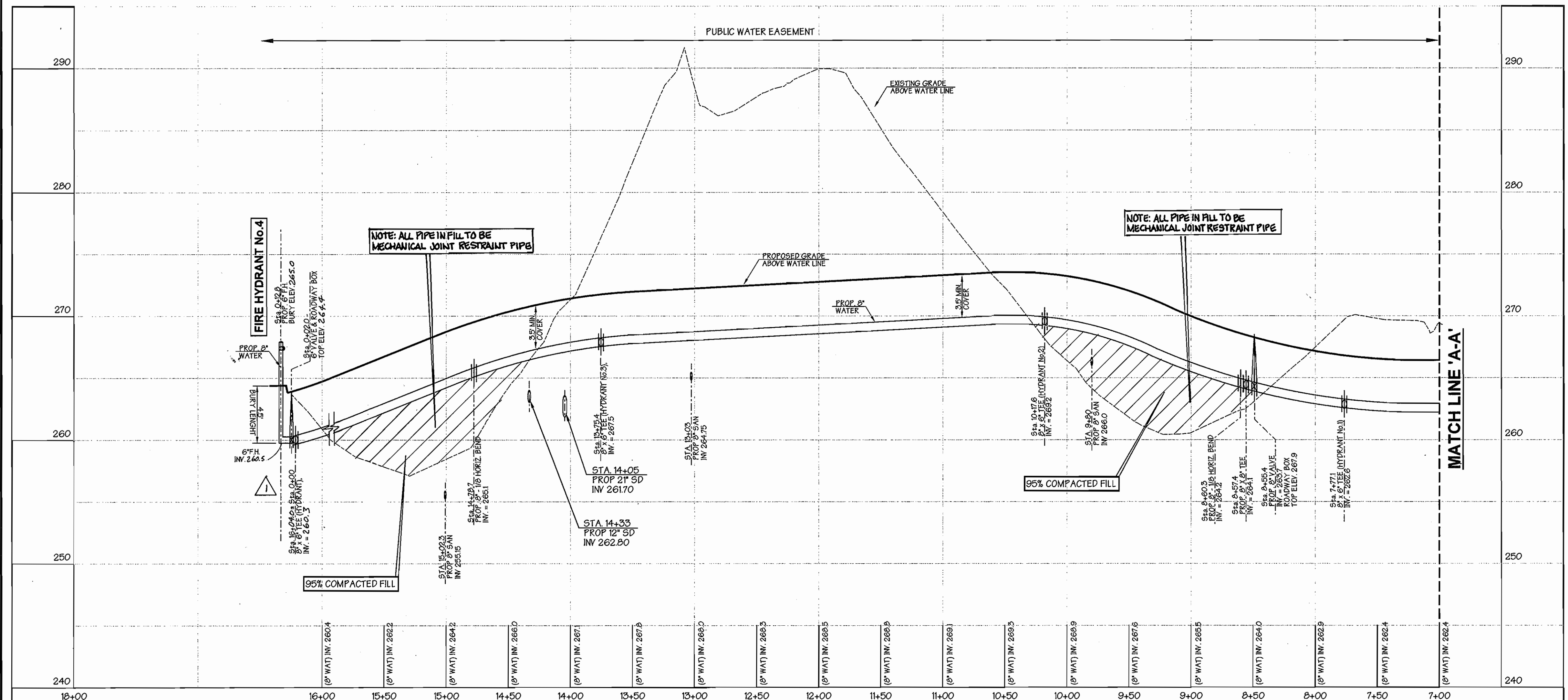
PROFILES

CONTRACT NO. 14-4281-D
60Q SCALE MAP NO. 3Z

BLOCK NO. 8

**Proposed 8" Water & Sewer Main Profiles
MEADOWS CORPORATE PARK
PARCEL 'A'**

CONTRACT NO. 14-4281-D
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT *Q1
April 3, 2005
SHEET 5 OF 6



COMPACTION NOTE NO.1:
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ALL FILL MATERIAL BENEATH WATER AND SEWER LINES TO BE MIN. 95% COMPACTION.

APPROVED: Howard County Department of Planning and Zoning

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE _____

CHIEF, DIVISION OF LAND DEVELOPMENT _____ DATE _____

DIRECTOR _____ DATE _____

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 05-072

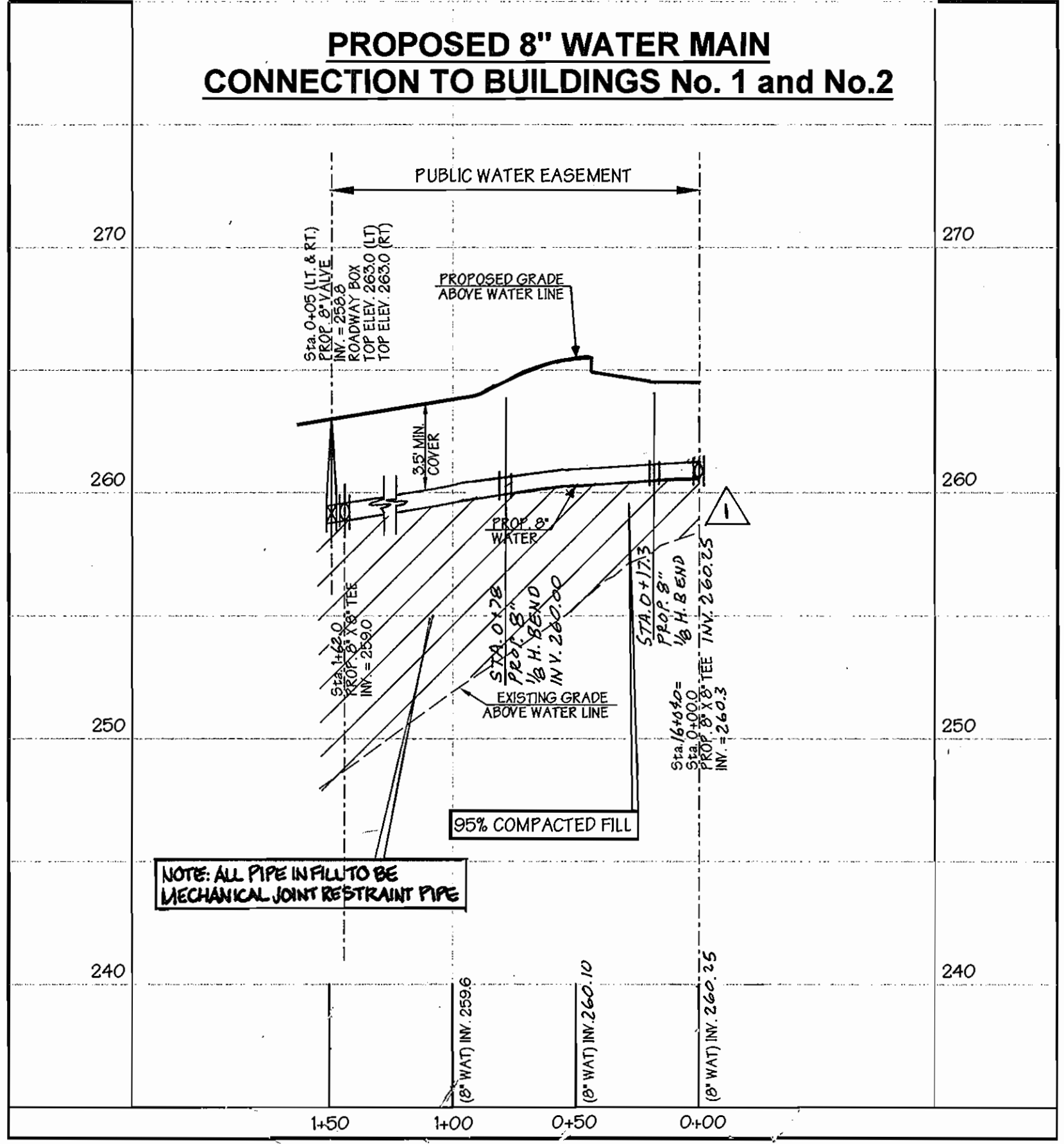
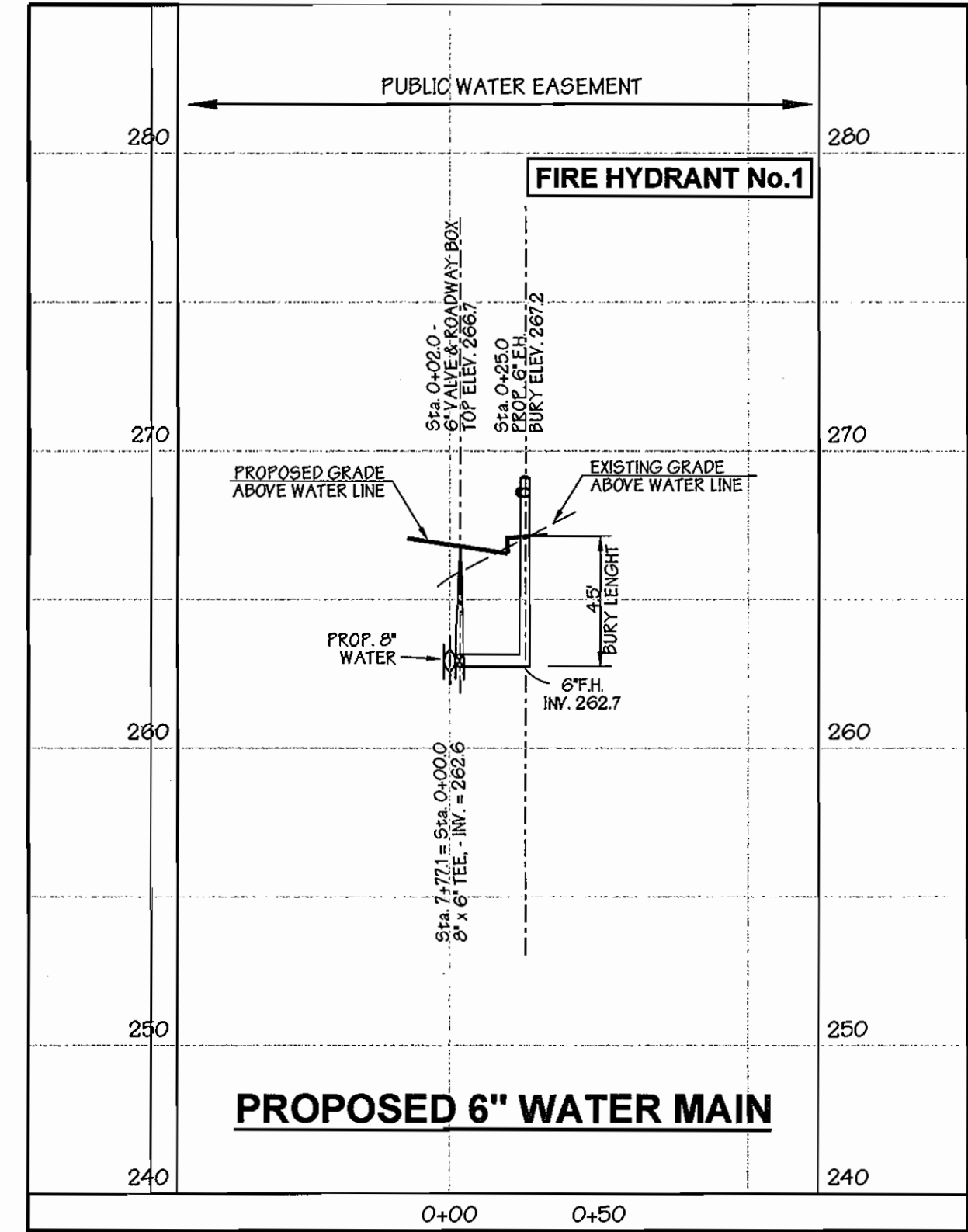
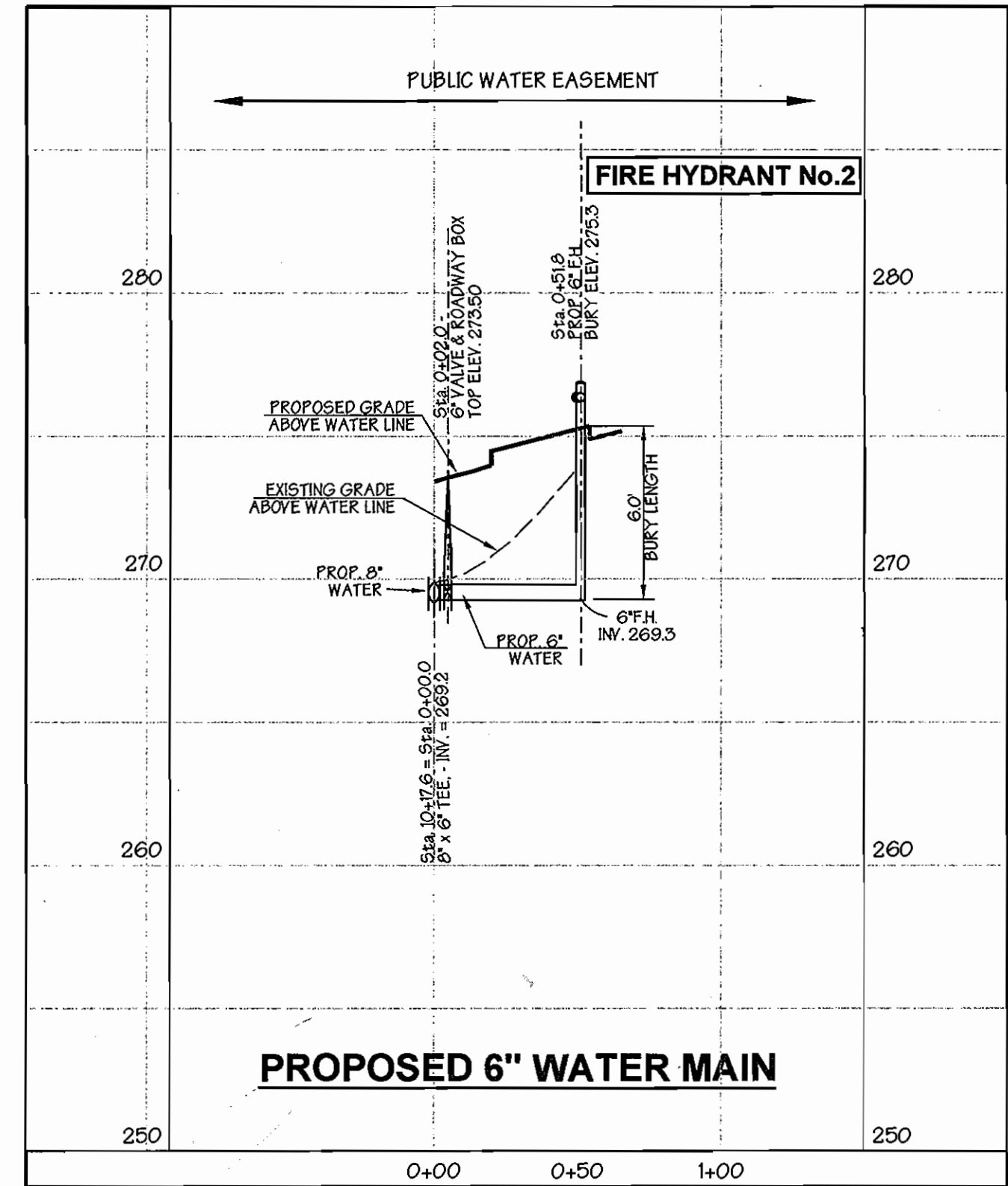
THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *Jim Meyer* *5/14/05*
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

APPROVED: *Jim Meyer* *5/14/05*
U.S. SOIL CONSERVATION SERVICE DATE

OWNER / DEVELOPER
MERRITT PROPERTIES L.L.C.
2066 LORD BALTIMORE DRIVE
BALTIMORE, MARYLAND 21244
410-298-2600



Scales: Horiz: 1" = 50' (Based on Water Line Stationing)
Vert: 1" = 5'

BY	NO.	REVISION	DATE
GWS	1	REVISED 8" WATER MAIN PROFILES	8/30/05

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

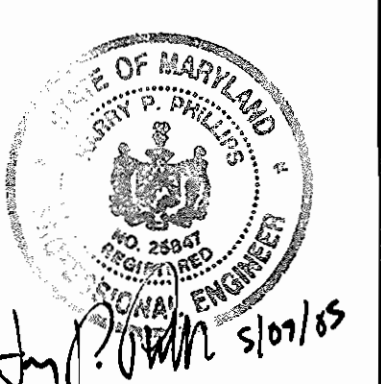
R.A. Reimer *5-27-05*
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

4/30
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GWS

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
1020 CROMWELL BRIDGE ROAD
Towson, Maryland 21286
(410) 825-8120



DESIGNED : HPP
DRAFTED : HPP
CHECKED : HPP

PROFILES

CONTRACT NO. 14-4281-D
800 SCALE MAP NO. 3Z BLOCK NO. 8

Proposed 8" Water Main Profiles
MEADOWS CORPORATE PARK
PARCEL 'A'
CONTRACT NO. 14-4281-D
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT *QJ

April 3, 2005
SHEET 6 OF 6
P/N 9698