

BALTIMORE - WASHINGTON AUTO EXCHANGE, INC.

CONTRACT NO. 44-3757-D

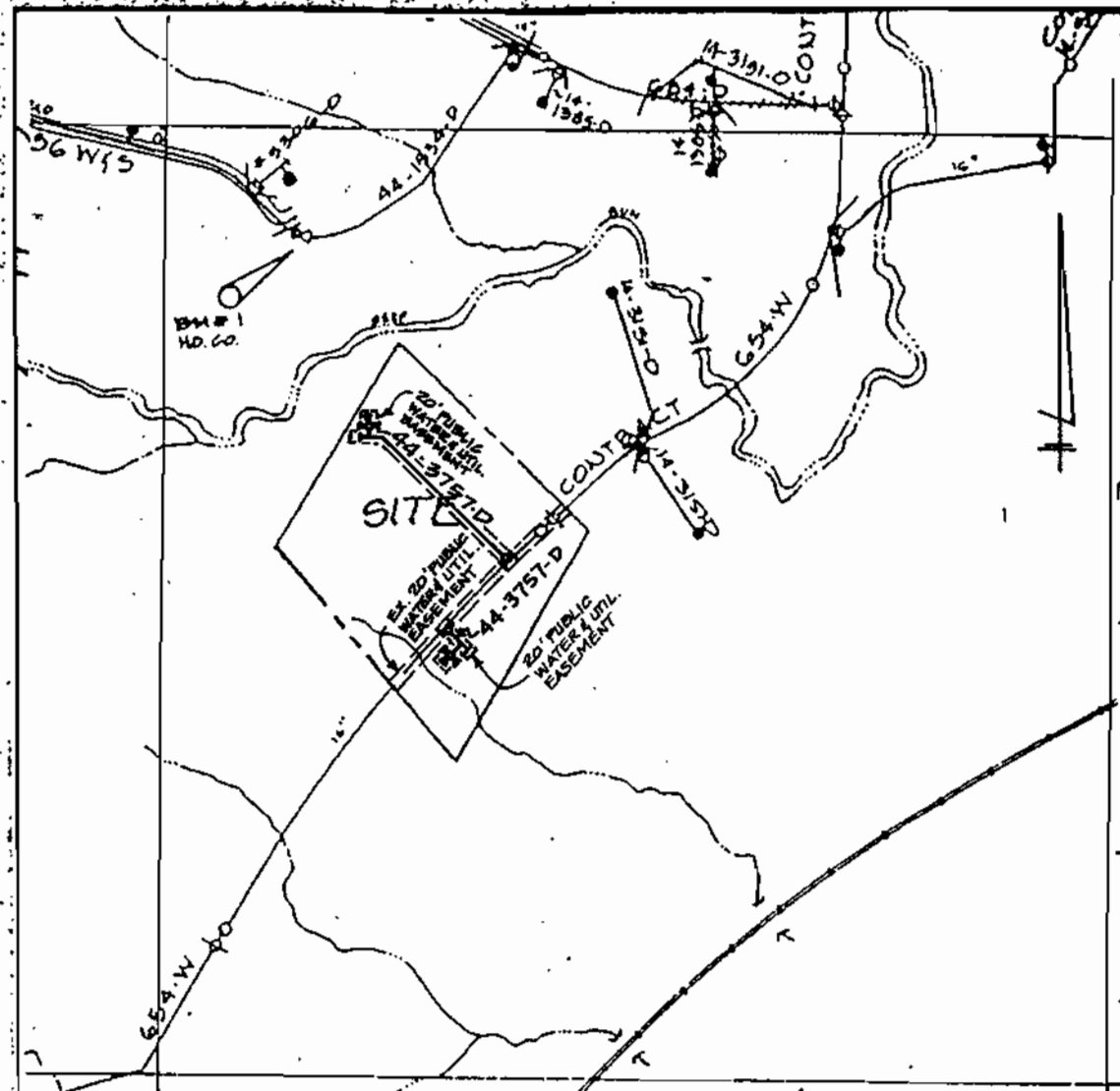
N/F
LEE GANEY, JR.
L. 3995, F. 54
ZONED: M-2

GENERAL NOTES

- Appropriate location of existing mains are shown. The contractor shall take all the necessary precautions to protect existing mains and service 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 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 \square at the location of the test pit. A note or notes containing the results of the test pit or pits is included on the drawing. 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 at his own expense.
- 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
Baltimore Gas & Electric Co. Contractor Services 410-850-4620
Baltimore Gas & Electric Co. Underground Damage Control 410-787-9068
Miss Utility 800-257-7777
Colonial Pipeline Co. 410-795-1390
Bureau of Utilities, Howard Co. Dept. Public Works 410-313-4900
- 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.
- Contractor 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.

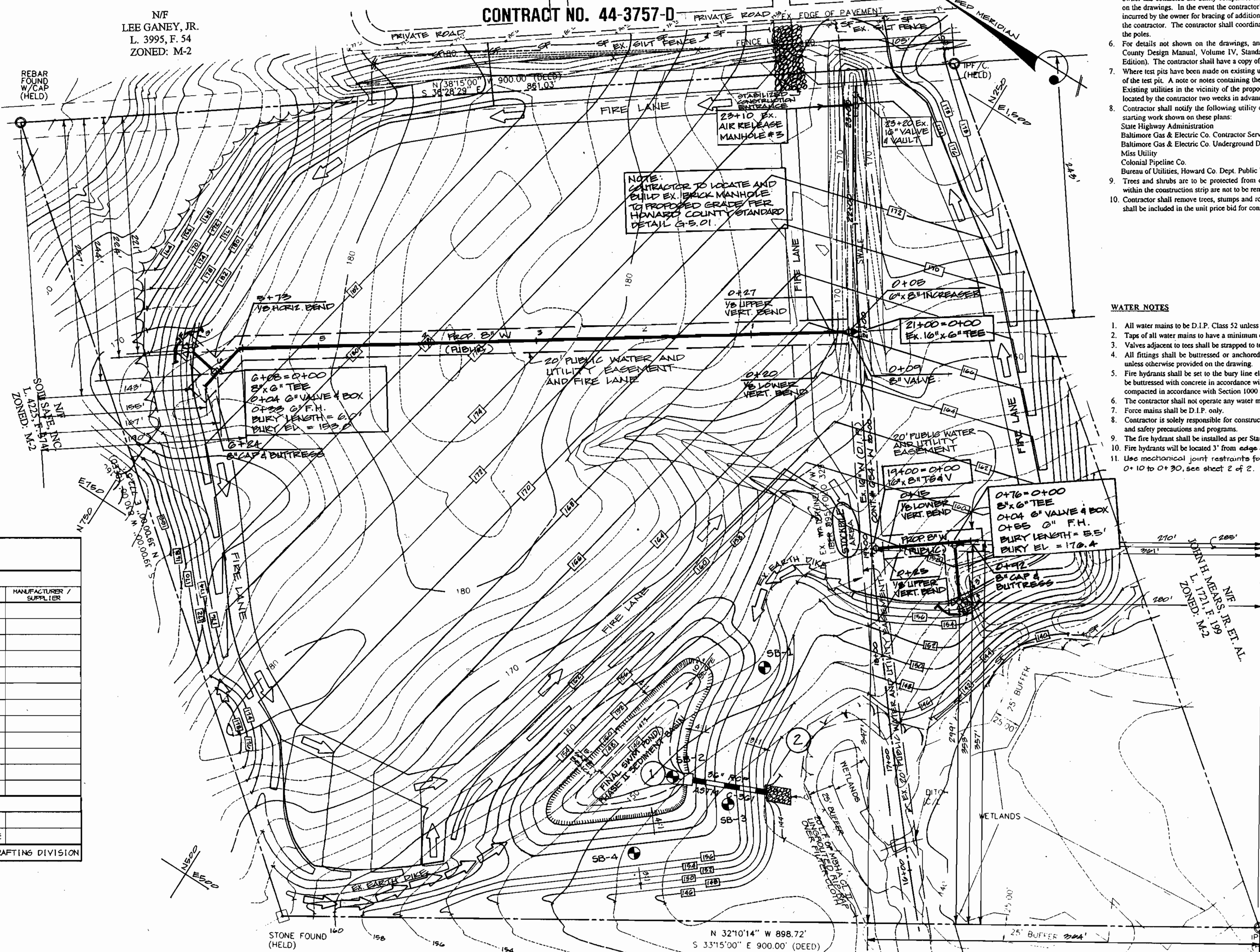
WATER NOTES

- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Taps of all water mains to have a minimum of 3'-1/2" cover unless otherwise noted.
- Valves adjacent to trees shall be strapped to trees.
- All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided on the drawing.
- Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1090 and 1005 of the Standard Specifications.
- The contractor shall not operate any water main valves on the existing water system.
- Force mains shall be D.I.P. only.
- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per Standard Detail W.1.11.
- Fire hydrants will be located 3' from edge of paving, unless otherwise noted.
- Use mechanical joint restraints for 8" water at stations 0+10 to 0+40 and 0+10 to 0+30, see sheet 2 of 2.



VICINITY MAP SCALE 1" = 600'

TYPE OF BUILDING: WATER CODE: B-1
NO. OF LOTS/PARCELS: 1 SEWER CODE: N/A
NO. OF WATER HOUSE CONNECTIONS: 0 TEST GRADIENT: 550
NO. OF SEWER HOUSE CONNECTIONS: 0
DRAINAGE AREA: LITTLE PATUXENT RIVER
TREATMENT PLANT: PATAPSCO



NOTE:
CONTRACTOR TO LOCATE AND
BUILD EX. BRICK MANHOLE
TO PROPOSED GRADE PER
HOWARD COUNTY STANDARD
DETAIL G.S.01.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER (P.I.P.)	716 L.F.			
6" WATER (P.I.P.)	88 L.F.			
FIRE HYDRANTS	2			
8" X 6" TEE	2			
6" VALVES	2			
6" X 8" INCREASER	1			
8"-1/8 HD	1			
8"-1/8 VB	4			
8" CAP & BUTTRESS	2			
8" VALVES	1			
16" X 8" TAPPING SUBM & VALVE	1			

NAME OF UTILITY CONTRACTOR:

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on MP-99-17 + SDP-99-55

Review for Howard Soil Conservation District and meets technical requirements.

Cheryl Simmons 6/8/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Roberts 6/8/99
HOWARD SOIL CONSERVATION DISTRICT DATE

CHECKBOX
AS-BUILT DATE
SURVEY AND DRAFTING DIVISION

N/F
MARY B. JOHNSON, ET. AL.
L. 921, F. 739
ZONED: M-2

PLAN VIEW
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Beaman 6-7-99
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John R. Roberts 6/8/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

THAYER & ASSOCIATES, INC.
2868 CONSTELLATION WAY
FINNSBURG, MD 21048-2068
PHONE/FAX: (410) 840-8797



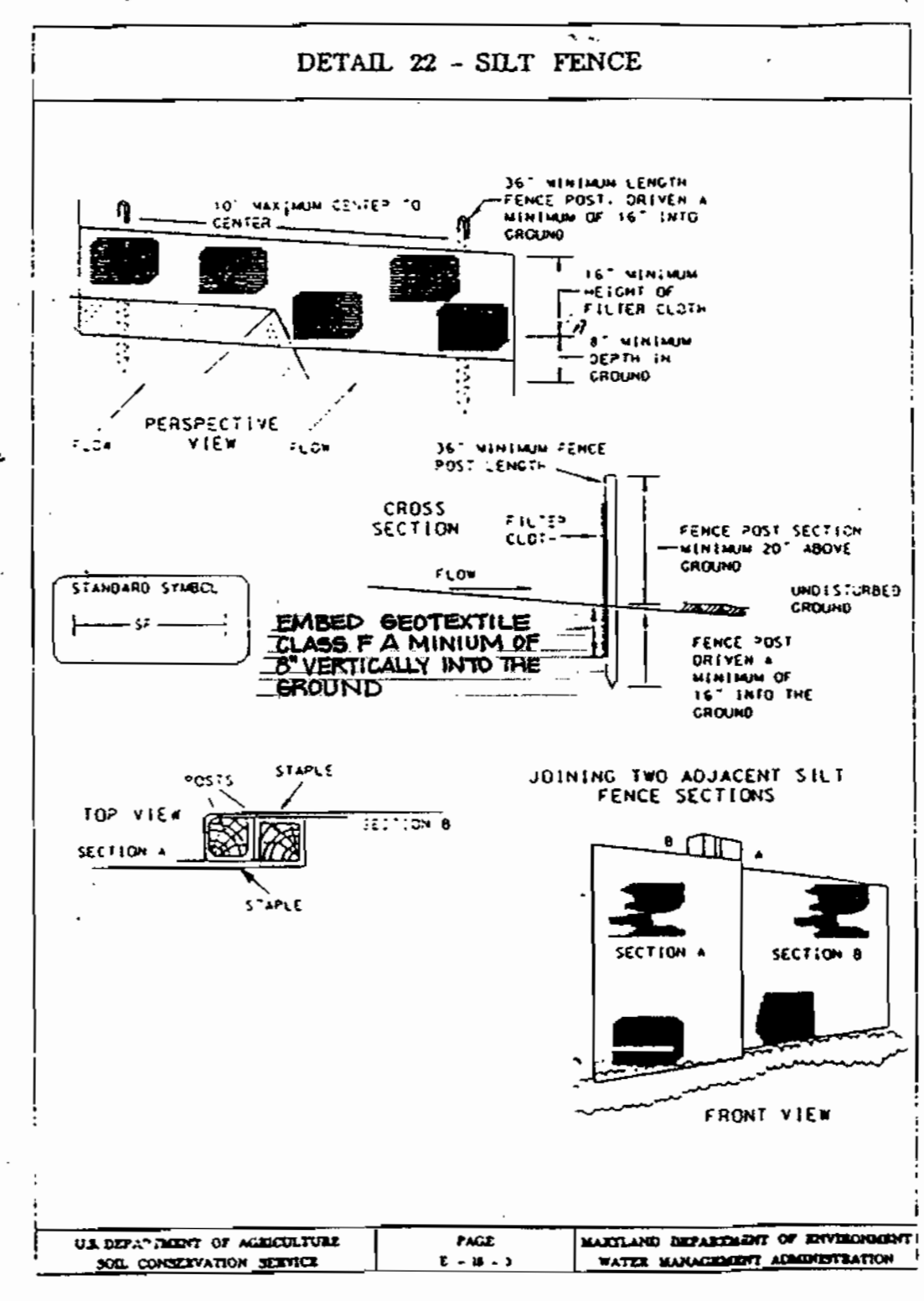
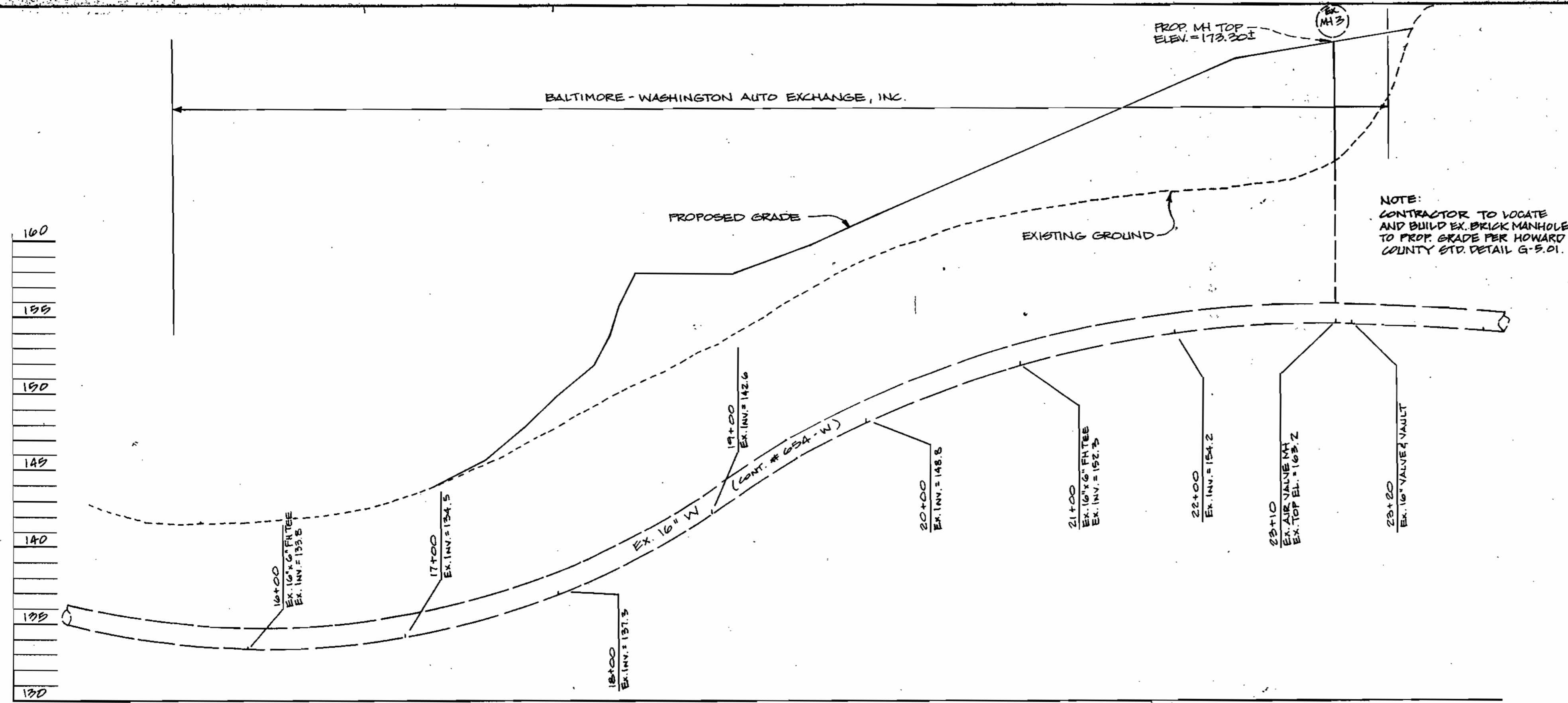
DES: MW					
DRN: SP/MW					
CHK: TG					
DATE: 1/28/99	BY: NO.	REVISION	DATE		

PLAN OF WATER MAIN

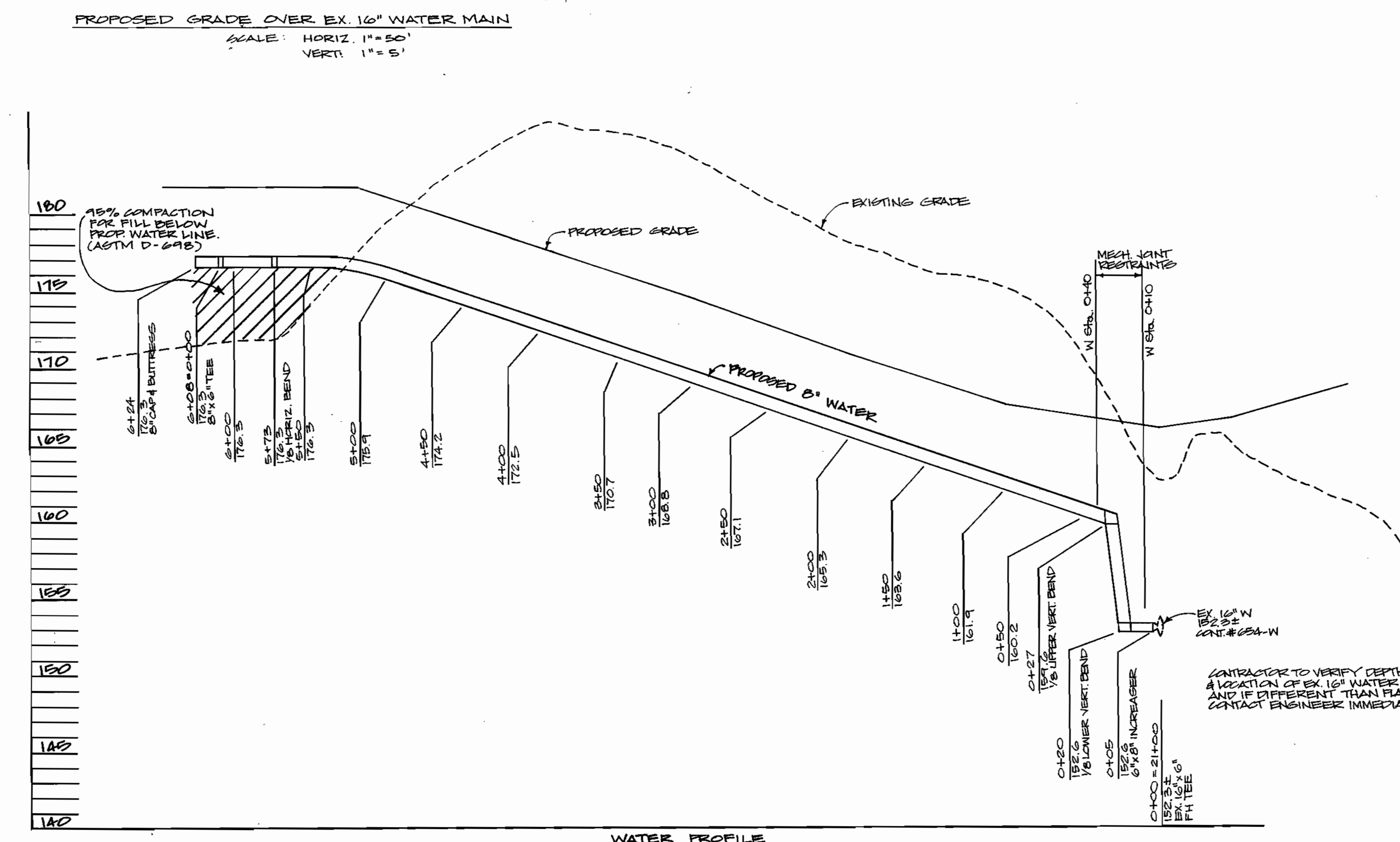
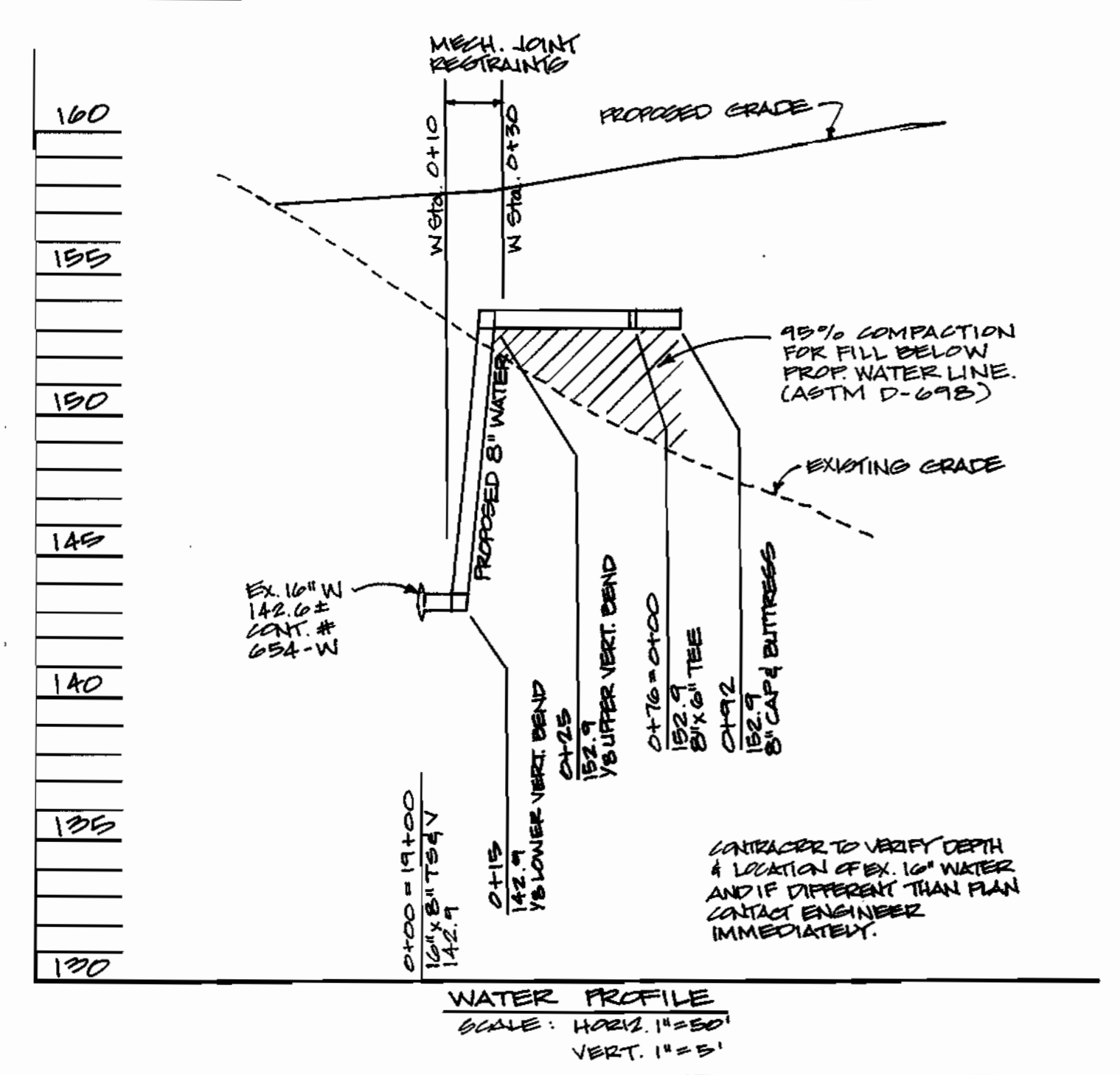
600' SCALE MAP NO. 43 BLOCK NO.

BALTIMORE - WASHINGTON AUTO EXCHANGE STORAGE YARD
TAX MAP 43, PARCEL NO. 50
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO.: 44-3757-D

SCALE AS SHOWN
SHEET 1 OF 2



- HOWARD SOIL CONSERVATION DISTRICT**
STANDARD SEDIMENT CONTROL NOTES
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1653).
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in compliance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
 - Following initial and disturbance or re-disturbance, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes steeper than 3:1, by 14 days as to all other disturbed or graded areas on the project site.
 - All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 - All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. 6). Temporary stabilization with mulch alone shall only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 - All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:**
- | | |
|------------------------------------|----------------|
| Total Area of Site | 15.6 ACRES |
| Area to be seeded or paved | 13.2 ACRES |
| Area to be vegetatively stabilized | 2.0 ACRES |
| Total Cut | 61700 Cu. Yds. |
| Total Fill | 61000 Cu. Yds. |
- Off-site waste/borrow area location:
Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter. REV 8/96



- HOWARD SOIL CONSERVATION DISTRICT**
PERMANENT SEEDING NOTES
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:
1. Preferred -- Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 400 lbs/acre 10-10-10 fertilizer (16 lbs/1000 sq. ft.) before tilling. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs/acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq. ft.).
2. Acceptable -- Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs/acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.
Seeding: -- For the periods March 1 -- April 30, and August 1 -- October 15, seed with 40 lbs/acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 tall fescue. For the period May 1 -- July 31, seed with 60 lbs/acre (2.1 lbs/1000 sq. ft.) of tall fescue per acre and 2 lbs/acre (1.05 lbs/1000 sq. ft.) of vernal ryegrass. During the period of October 16 -- February 28, project site by 20 lbs/acre (0.7 lbs/1000 sq. ft.) of vernal ryegrass and seed as soon as possible in the spring. **Soil Seed:** -- Use sod. **Mulch:** -- Seed with 60 lbs/acre Kentucky 30 tall fescue and mulch with 2 tons/acre well anchored straw.
Mulching: -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 340 gal. per acre (8 gal/1000 sq. ft.) for anchoring.
Inspections: -- Inspect all seeding areas and make needed repairs, replacements and reseedings.
- TEMPORARY SEEDING NOTES:**
Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.
Seedbed Preparation: -- Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
Soil Amendments: -- Apply 400 lbs/acre 10-10-10 fertilizer (16 lbs/1000 sq. ft.).
Seeding: -- For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.), for the period May 1 -- August 14, seed with 3 lbs/acre of vernal ryegrass (1.07 lbs/1000 sq. ft.), for the period November 16 -- February 28, project site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
Mulching: -- Apply 1-1/2 to 2 tons/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 ft. or higher, use 340 gal. per acre (8 gal/1000 sq. ft.) for anchoring.
Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

- WATER MAIN SEQUENCE OF CONSTRUCTION**
- CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS BEFORE BEGINNING CONSTRUCTION.
 - A PRE-CONSTRUCTION MEETING MUST BE CONDUCTED BETWEEN PARTICIPANTS. NOTIFY THE SEDIMENT AND EROSION CONTROL INSPECTOR 48 HOURS PRIOR TO START OF CONSTRUCTION.
 - CALL MISS UTILITY TO LOCATE EXISTING WATER MAINS. CONTRACTOR IS RESPONSIBLE FOR DAMAGES.
 - INSTALL SILT FENCE AS INDICATED ON PLAN OR AS DIRECTED BY THE SEDIMENT AND EROSION CONTROL INSPECTOR. SELECT STOCKPILE AREAS WITHIN THE DRAINAGE DIVIDE OF SEDIMENT BASIN.
 - WITH APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR EXCAVATE TRENCH AND INSTALL WATER LINE. FOLLOW THE DIVISION 5.00 SPECIAL PROVISION PROCEDURES FOR CONTRACT NO. 44-3757-D.
 - WITH APPROVAL OF THE BUREAU OF UTILITIES INSPECTOR BACKFILL TRENCH TO FINISH GRADE AT SPECIFIED DENSITY AND RESTORE EARTH BERM.
 - NOTIFY SEDIMENT AND EROSION CONTROL INSPECTOR TO OBTAIN APPROVAL TO REMOVE SILT FENCE.
- NOTE: ESTIMATED TIME OF CONSTRUCTION FOR WATER MAIN IS FOUR (4) DAYS. THIS ESTIMATE MAY VARY DUE TO INCLEMENT WEATHER

NAME OF UTILITY CONTRACTOR _____

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on NP-99-17 +SDP-99-55

Review for Howard Soil Conservation District and meets technical requirements.

Clayton Simmons 6/5/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Pritchard 6/5/99
HOWARD SOIL CONSERVATION DISTRICT DATE

CHECKBOX	
AS-BUILT DATE	
SURVEY AND DRAFTING DIVISION	

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

James Cook 3-24-99 Date
Signature of Developer

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

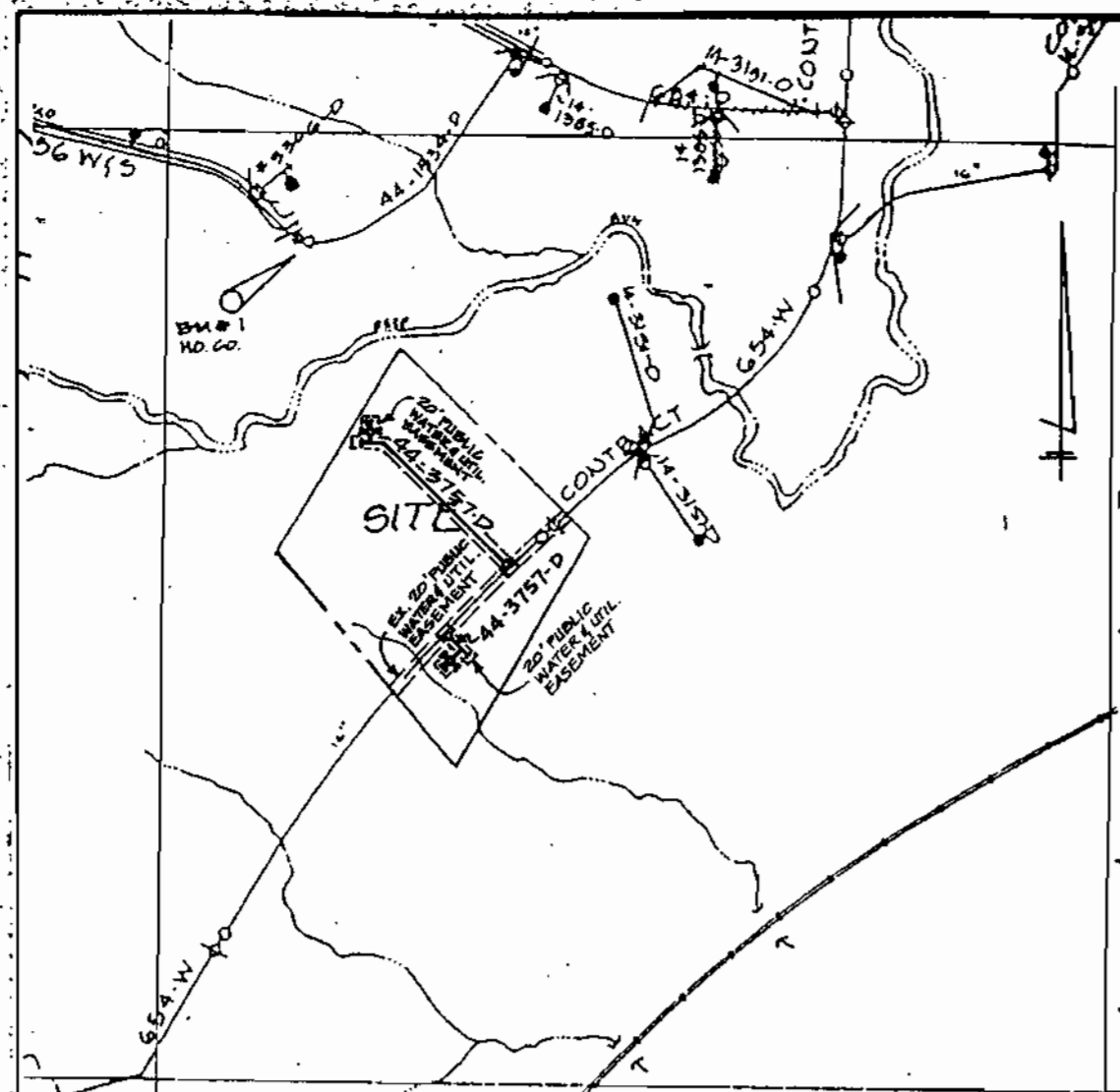
Victor Chen 5-5-99 Date
Signature of Engineer
Victor Chen, P.E.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND	THAYER & ASSOCIATES INC. 2868 CONSTELLATION WAY FINKSBURG, MD 21048-2068 PHONE/FAX: (410) 840-8737	STATE OF MARYLAND VICTOR CHEN, #18543	DES: _____ DRN: _____ CHK: _____ DATE: 1/28/99	BY: NO. _____ REVISION _____ DATE _____	WATER MAIN PROFILES & DETAILS	BALTIMORE - WASHINGTON AUTO EXCHANGE STORAGE YARD TAX MAP 43, PARCEL NO. 50 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO.: 44-3757-D	SCALE AS SHOWN	SHEET 2 OF 2
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BALTIMORE - WASHINGTON AUTO EXCHANGE, INC.

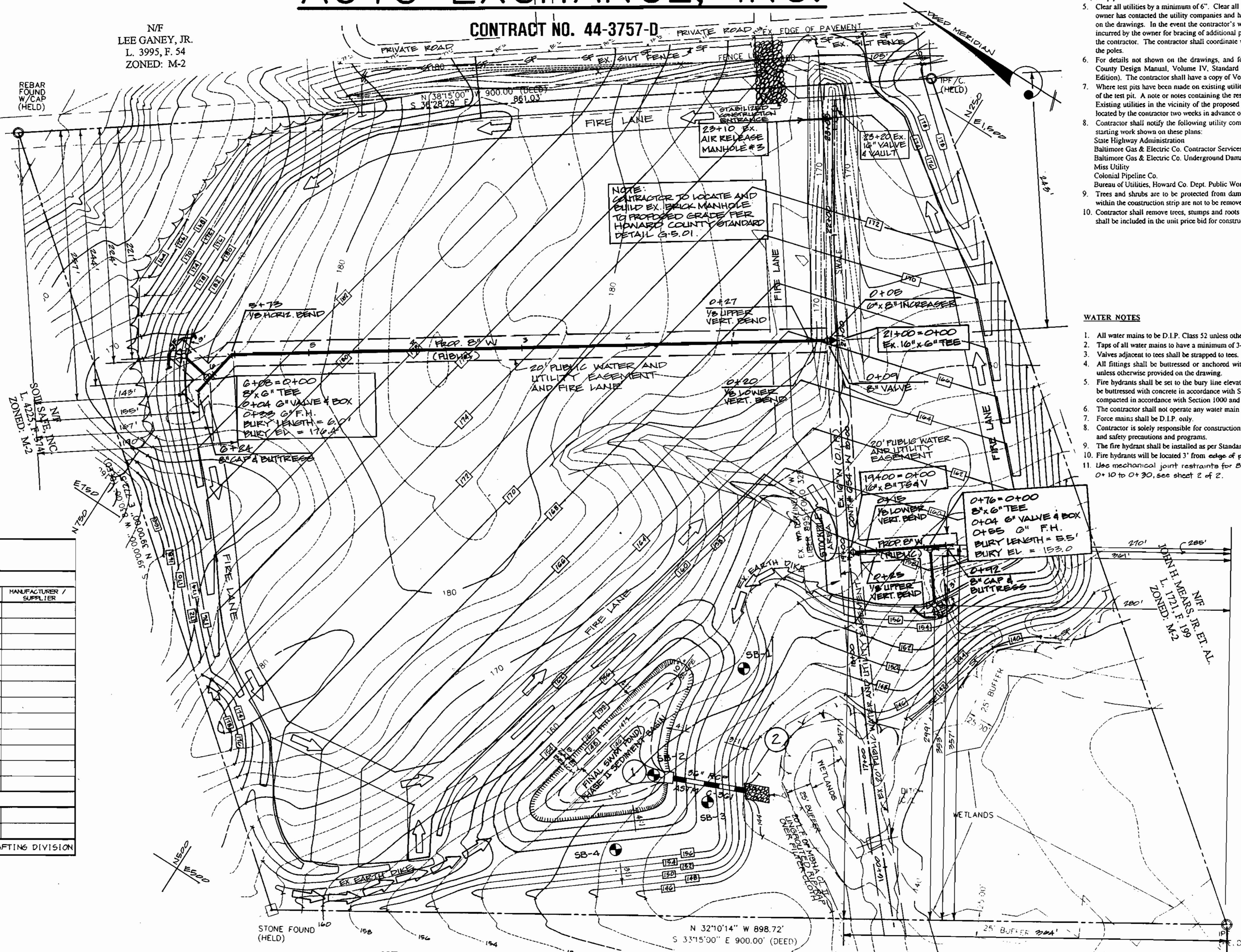
CONTRACT NO. 44-3757-D

N/F
LEE GANEY, JR.
L. 3995, F. 54
ZONED: M-2



VICINITY MAP SCALE 1" = 600'

TYPE OF BUILDING: WATER CODE: B-1
NO. OF LOTS/PARCELS: 1 SEWER CODE: N/A
NO. OF WATER HOUSE CONNECTIONS: 0 TEST GRADIENT: 95.0
NO. OF SEWER HOUSE CONNECTIONS: 0
DRAINAGE AREA: LITTLE PATUXENT RIVER
TREATMENT PLANT: PATAPSCO



GENERAL NOTES

- Appropriate location of existing mains are shown. The contractor shall take all the necessary precautions to protect existing mains and service 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 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.
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WATER NOTES

- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Taps 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 on the drawing.
- Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
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- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per Standard Detail W.1.111.
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- Use mechanical joint restraints for 8" water at stations 0+10 to 0+40 and 0+10 to 0+30, see sheet 2 of 2.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER (D.I.P.)	710 L.F.			
8" WATER (D.I.P.)	88 L.F.			
FIRE HYDRANTS	2			
8" X 6" TEE	2			
8" VALVES	2			
6" X 8" INCREASER	1			
8"-1/8" HB	1			
8"-1/8" VB	4			
8" CAP & BUTRESS	2			
8" VALVES	1			
16" X 8" TAPPING SLEEVE & VALVE	1			

NAME OF UTILITY CONTRACTOR: _____

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on MP-99-17 + SDP-99-55

CHECKBOX
AS-BUILT DATE _____
SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

Cheyl Simmons 6/8/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Robertson 6/8/99
HOWARD SOIL CONSERVATION DISTRICT DATE

N/F
MARY B. JOHNSON, ET. AL.
L. 921, F. 739
ZONED: M-2

PLAN VIEW
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bennett 6-7-99
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John R. Robertson 6/8/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

THAYER & ASSOCIATES INC.

2668 CONSTELLATION WAY
FINKSBURG, MD 21048-2068
PHONE/FAX: (410) 840-8797

VICTOR CHEN, #18543

DES: MW	
DRN: SP/MW	
CHK: TG	
DATE: 1/28/99	
BY: MW	
NO.:	
REVISION:	
DATE:	

PLAN OF WATER MAIN

600' SCALE MAP NO. 43 BLOCK NO. _____

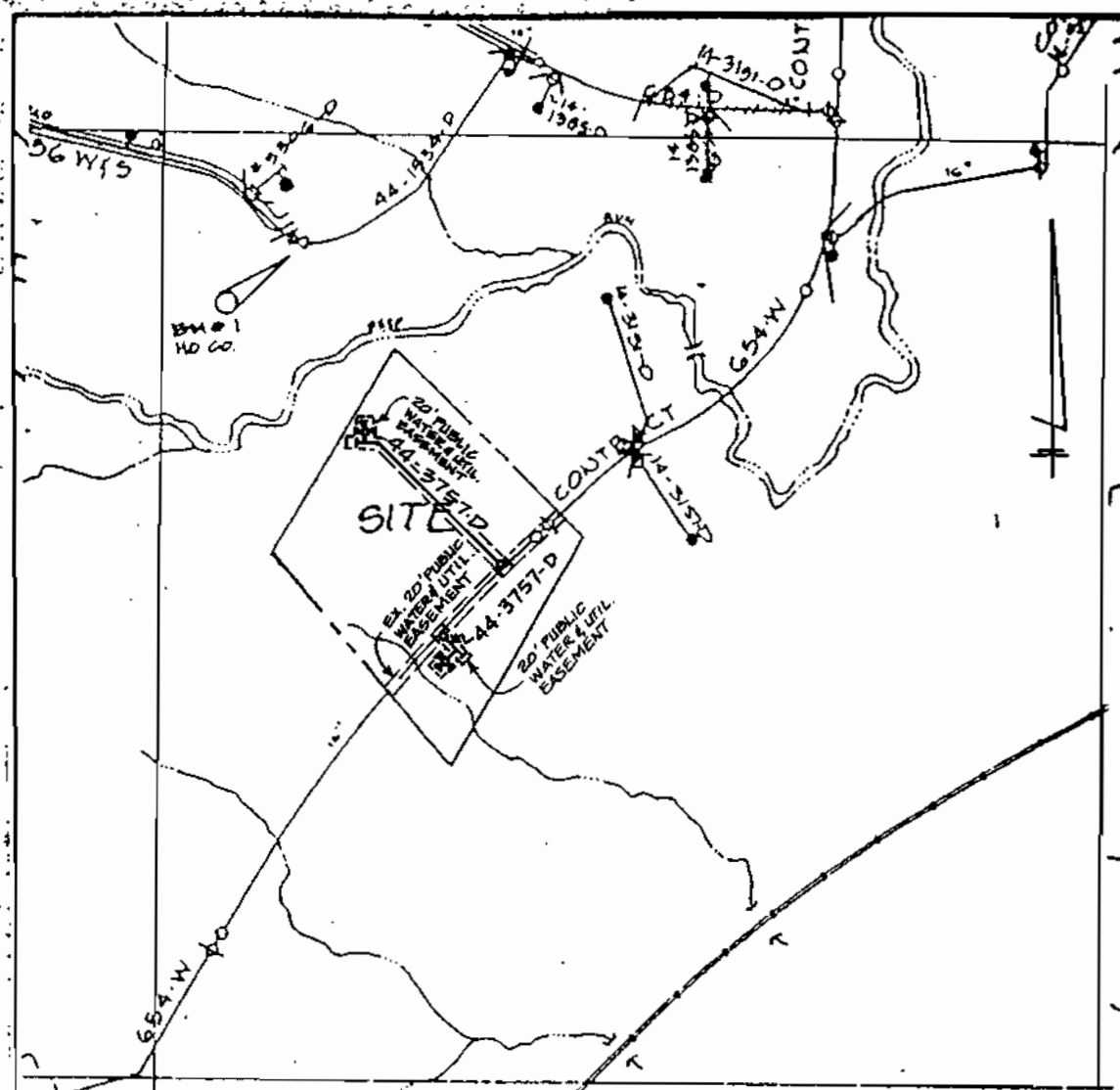
BALTIMORE - WASHINGTON AUTO EXCHANGE STORAGE YARD
TAX MAP 43, PARCEL NO. 50
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO.: 44-3757-D

SCALE AS SHOWN
SHEET 1 OF 2

BALTIMORE - WASHINGTON AUTO EXCHANGE, INC.

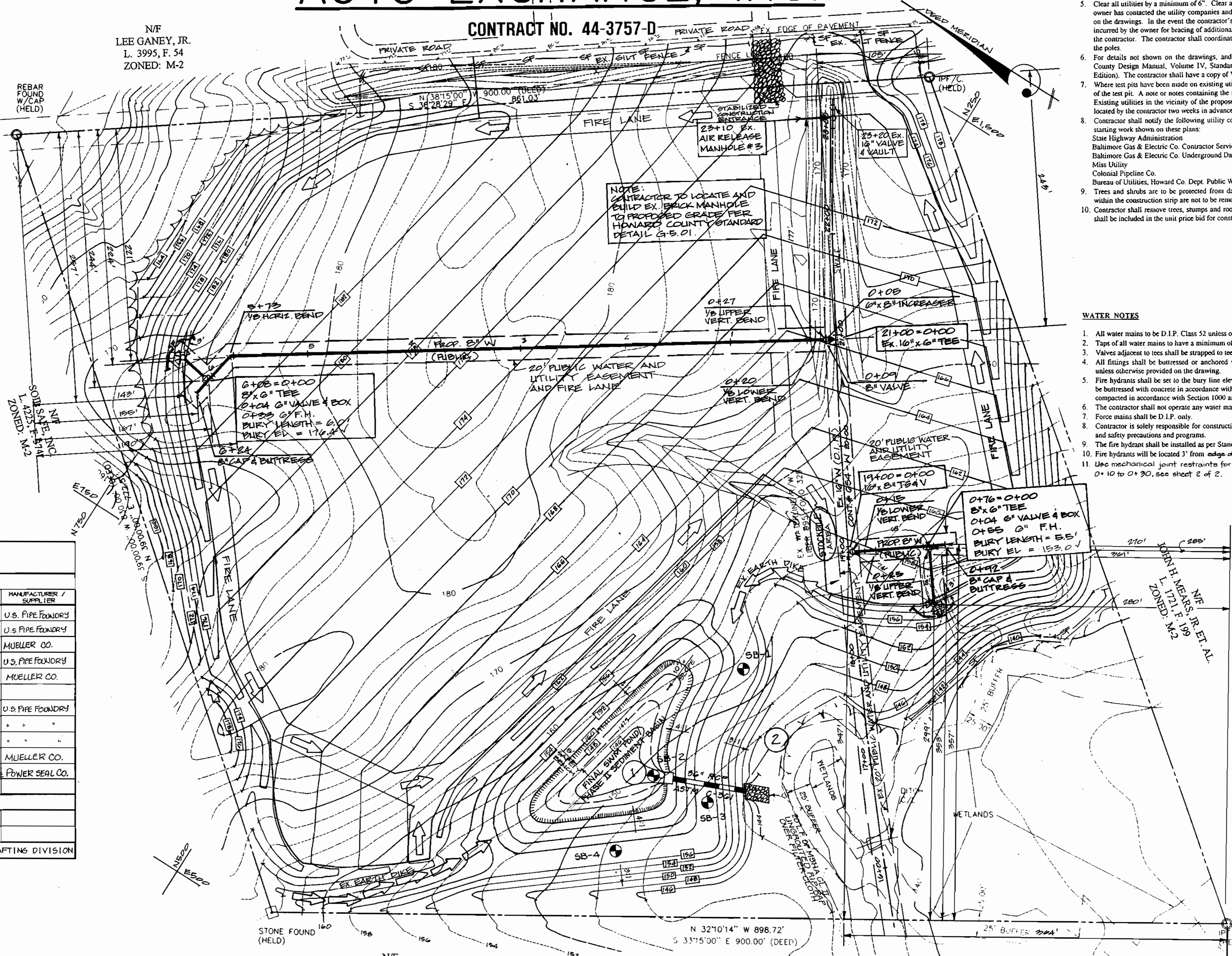
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6" WATER (D.I.P.)	88 L.F.	88 L.F.	D.I.P.	U.S. PIPE FOUNDRY
FIRE HYDRANTS	2	2		MUELLER CO.
8" X 6" TEE	2	2	HYDRATE TEE	U.S. PIPE FOUNDRY
6" VALVES	2	2	GATE VALVE	MUELLER CO.
6" X 8" INCREASER	1	0		
8"-1/8" HB	1	1	D.I.P.	U.S. PIPE FOUNDRY
8"-1/8" VB	4	4	D.I.P.	" " "
8" CAP & BUTRESS	2	2	D.I.P.	" " "
8" VALVES	1	1	GATE VALVES	MUELLER CO.
16" X 8" TAPPING SLEEVE & VALVE	1	2	S.S. TAPPING SLEEVE	POWER SEAL CO.

NAME OF UTILITY CONTRACTOR: _____

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on MP-99-17 & SDP-99-85

CHECKBOX
AS-BUILT DATE _____

SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

Cheyl Simmons 6/8/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Robertson 6/8/99
HOWARD SOIL CONSERVATION DISTRICT DATE

N/F
MARY B. JOHNSON, ET. AL.
L. 921, F. 739
ZONED: M-2

PLAN VIEW
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Beavers 6-7-99
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John R. Robertson 6/8/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

THAYER & ASSOCIATES INC.

2888 CONSTITUTION WAY
FARMERSBURG, MD 21048-2068
PHONE/FAX: (410) 840-8797

VICTOR CHEN, #18543

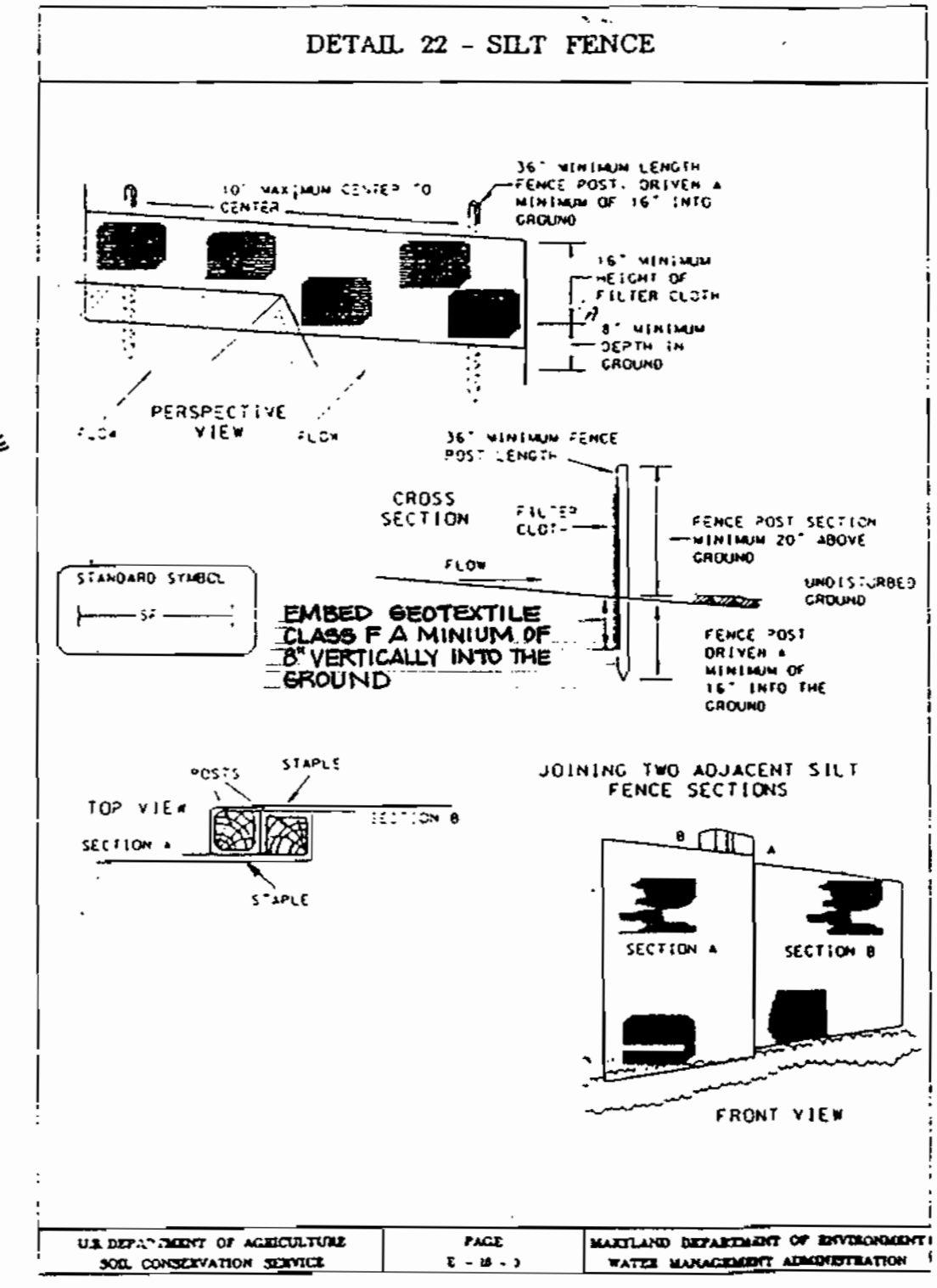
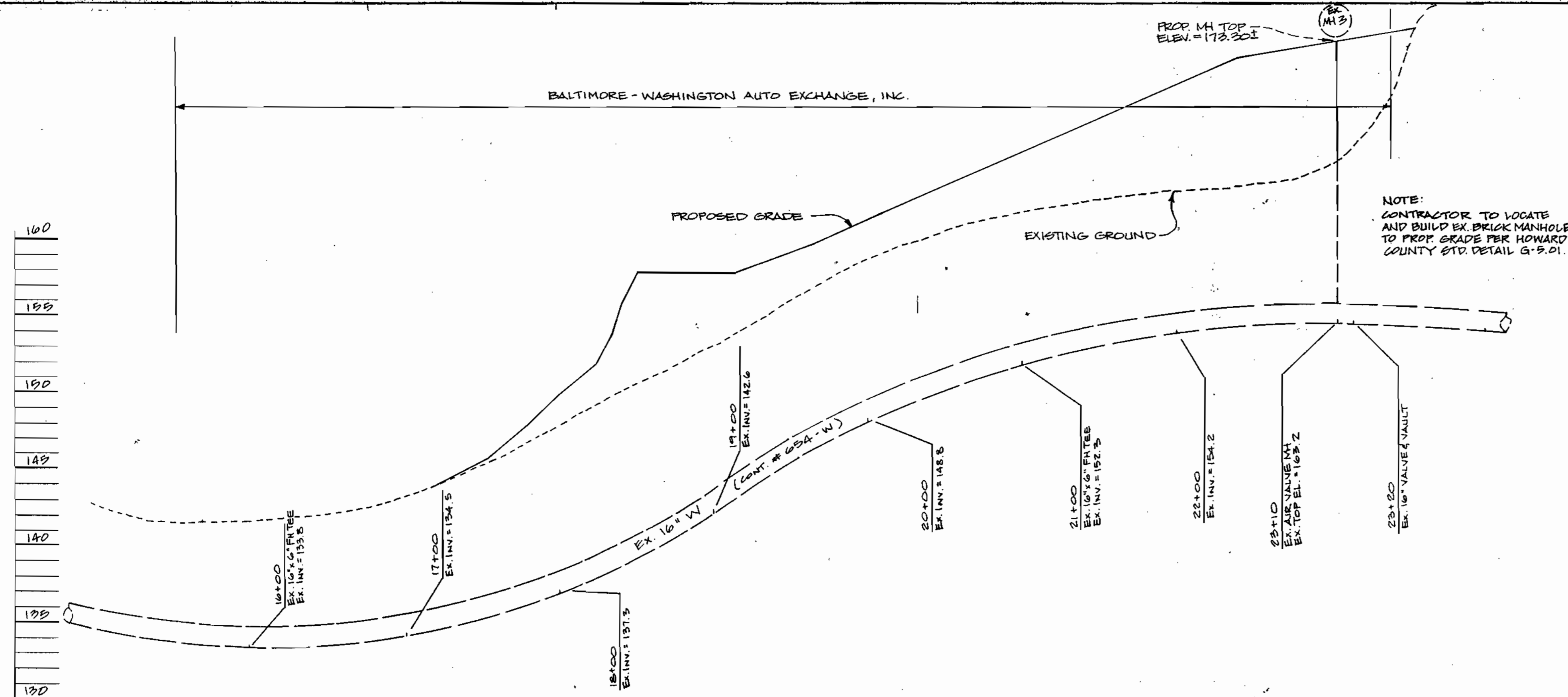
DES: MW			
DRN: SP/MW			
CHK: TG	KCI	2	AS-BUILT CONDITIONS ADDED TO PLAN
DATE: 1/28/99	MW	1	REMOVE FIRE HYDRANT BURY ELEVATIONS
BY NO.			
REVISION			
DATE			

PLAN OF WATER MAIN

600' SCALE MAP NO. 43 BLOCK NO. _____

BALTIMORE - WASHINGTON AUTO EXCHANGE STORAGE YARD
TAX MAP 43, PARCEL NO. 50
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO.: 44-3757-D

SCALE AS SHOWN
SHEET 1 OF 2



HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (333-1803).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes steeper than 3:1; b) 14 days for all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
Total Area of Site = 15.6 Acres
Area Disturbed = 13.2 Acres
Area to be roofed or paved = 7.1 Acres
Area to be vegetatively stabilized = 2.0 Acres
Total Cut = 6150 Cu. Yds.
Total Fill = 6102 Cu. Yds.
- Off-site waste/borrow area location:
Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of perimeter erosion and sediment controls; but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter. REV 8/74.

HOWARD SOIL CONSERVATION DISTRICT
PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendment: In lieu of soil test recommendations, use one of the following schedules:
1. **Pre-Seed:** Apply 2 tons/acre dolomitic limestone (92 lb/1000 sq. ft.) and 400 lb/acre 10-10-10 fertilizer (14 lb/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lb/acre 30-0-0 ureaform fertilizer (9 lb/1000 sq. ft.).
2. **Acceptable:** Apply 2 tons/acre dolomitic limestone (92 lb/1000 sq. ft.) and 1000 lb/acre 10-10-10 fertilizer (23 lb/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

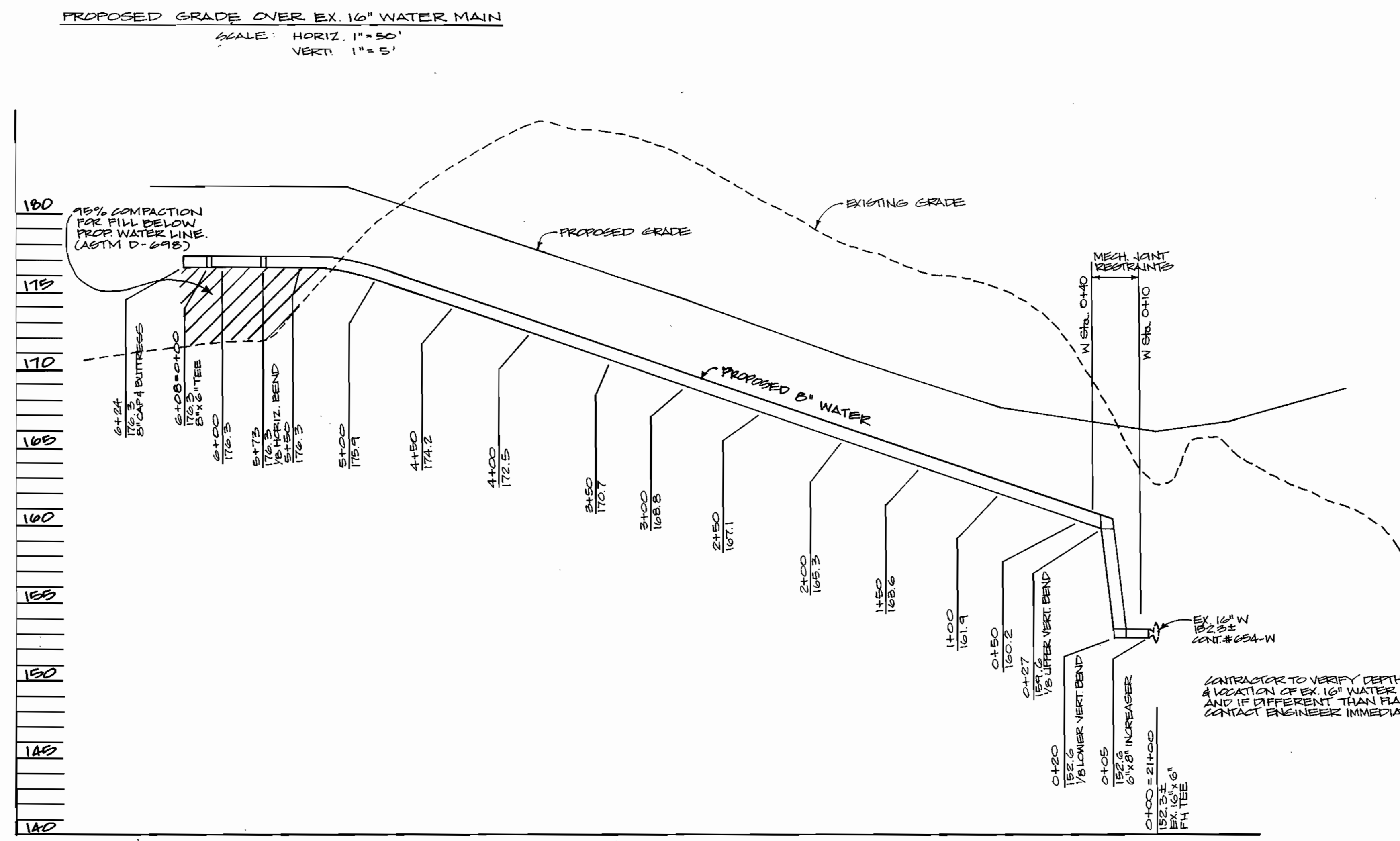
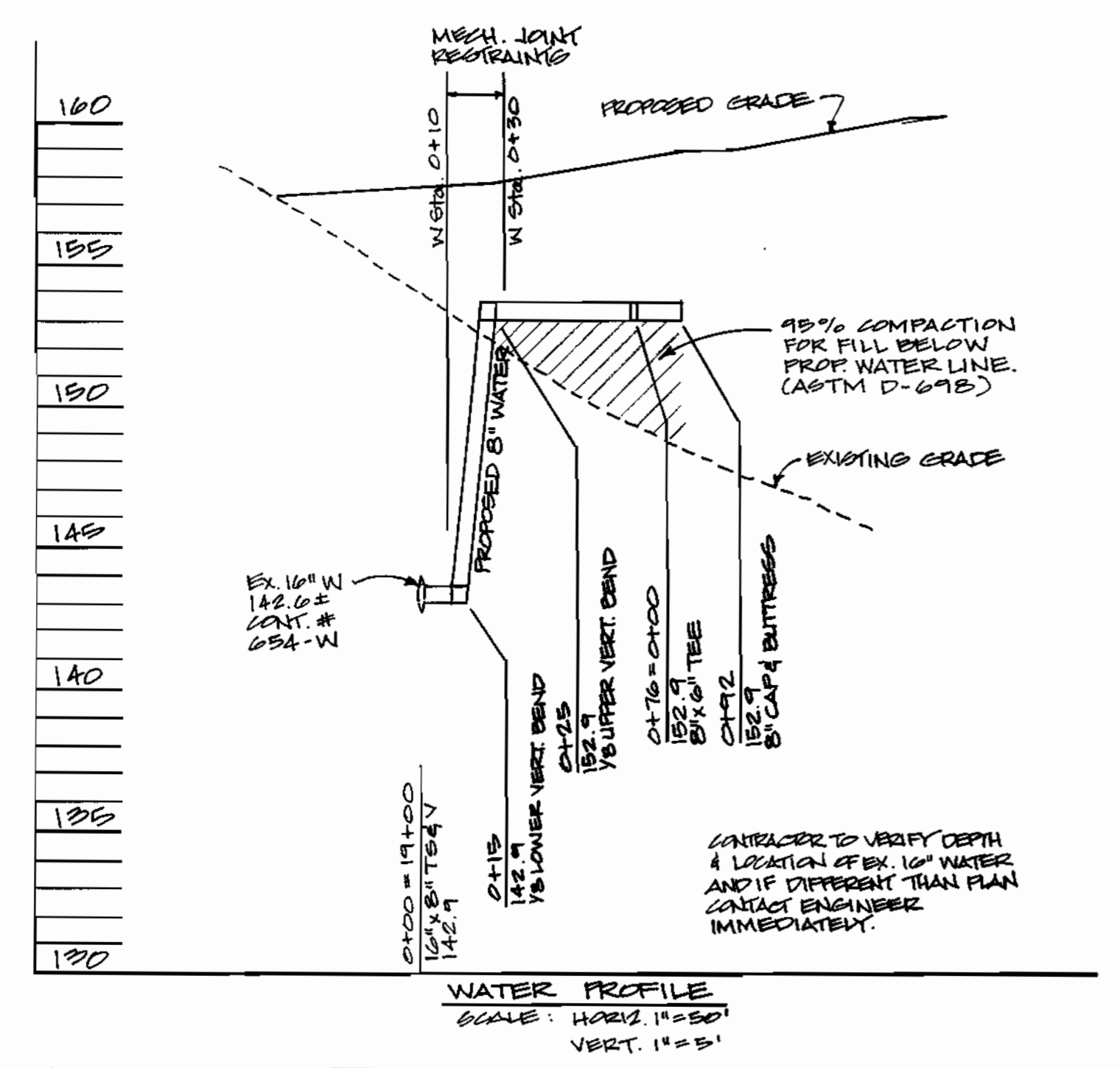
Seeding: For the periods March 1 - April 30, and August 1 - October 15, seed with 60 lb/acre (1.4 lb/1000 sq. ft.) of Kentucky 31 Tall fescue. For the period May 1 - July 31, seed with 60 lb/acre Kentucky 31 Tall fescue per acre and 2 lb/acre (0.05 lb/1000 sq. ft.) of weeping lovegrass. During the period of October 16 - February 28, protect site by: **SOIL LOG 1** - Two tons per acre of well anchored straw mulch and seed as soon as possible in the spring. **SOIL LOG 2** - Use sod. **SOIL LOG 3** - Seed with 60 lb/acre Kentucky 30 Tall fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons/acre (70 to 90 lb/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas; on slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

Inspections: Inspect all seeding areas and make needed repairs, replacements and reseedings.

IMPORTANT SEEDING NOTES:
Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
Soil Amendment: - Apply 400 lb/acre 10-10-10 fertilizer (14 lb/1000 sq. ft.).
Seeding: - For periods March 1 - April 30 and from August 15 - October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lb/1000 sq. ft.). For the period May 1 - August 14, seed with 3 lb/acre of weeping lovegrass (0.07 lb/1000 sq. ft.). For the period November 16 - February 28, protect site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
Mulching: - Apply 1-1/2 to 2 tons/acre (70 to 90 lb/1000 sq. ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas; on slope 8 feet or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.



WATER MAIN SEQUENCE OF CONSTRUCTION

- CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS BEFORE BEGINNING CONSTRUCTION.
- A PRE-CONSTRUCTION MEETING MUST BE CONDUCTED BETWEEN PARTICIPANTS. NOTIFY THE SEDIMENT AND EROSION CONTROL INSPECTOR 48 HOURS PRIOR TO START OF CONSTRUCTION.
- CALL MISS UTILITY TO LOCATE EXISTING WATER MAINS. CONTRACTOR IS RESPONSIBLE FOR DAMAGES.
- INSTALL SILT FENCE AS INDICATED ON PLAN OR AS DIRECTED BY THE SEDIMENT AND EROSION CONTROL INSPECTOR. SELECT STOCKPILE AREAS WITHIN THE DRAINAGE DIVIDE SEDIMENT BASIN.
- WITH APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR EXCAVATE TRENCH AND INSTALL WATER LINE. FOLLOW THE DIVISION 5.00 SPECIAL PROVISION PROCEDURES FOR CONTRACT NO. 44-3757-D.
- WITH APPROVAL OF THE BUREAU OF UTILITIES INSPECTOR BACKFILL TRENCH TO FINISH GRADE AT SPECIFIED DENSITY AND RESTORE EARTH BERM.
- NOTIFY SEDIMENT AND EROSION CONTROL INSPECTOR TO OBTAIN APPROVAL TO REMOVE SILT FENCE.

NOTE: ESTIMATED TIME OF CONSTRUCTION FOR WATER MAIN IS FOUR (4) DAYS. THIS ESTIMATE MAY VARY DUE TO INCLEMENT WEATHER.

NAME OF UTILITY CONTRACTOR: _____

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on MP-99-17 45DP-99-55

Review for Howard Soil Conservation District and meets technical requirements.

Cheyl Simmons 6/8/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Roberts 6/8/99
HOWARD SOIL CONSERVATION DISTRICT DATE

CHECKBOX	
AS-BUILT DATE	
SURVEY AND DRAFTING DIVISION	

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

James Cook 3-24-99
Signature of Developer Date

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Victor Chen 5-5-99
Signature of Engineer Date
Victor Chen, P.E.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND	THAYER & ASSOCIATES INC. 2868 CONSTELLATION WAY FINNSBURG, MD 21048-2068 PHONE/FAX: (410) 840-8797	STATE OF MARYLAND VICTOR CHEN, #18543	DES: _____ DRN: _____ CHK: _____ DATE: 1/28/99	BY: NO. _____ REVISION _____ DATE _____	800' SCALE MAP NO. 43 BLOCK NO. _____	BALTIMORE - WASHINGTON AUTO EXCHANGE STORAGE YARD TAX MAP 43, PARCEL NO. 50 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO.: 44-3757-D	SCALE AS SHOWN SHEET 2 OF 2
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