

**GENERAL NOTES**

**PART I:**

1. 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.
2. All horizontal controls are based on Maryland State Coordinates.
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert elevations.
5. 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.
6. 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.
7. Where test pits have been made on existing utilities, they are noted by the symbol  $\odot$  at the location of the test pit. A note or notes containing the results of the test pit or test pits 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. 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 531-5533
  - Baltimore Gas & Electric Co. Contractor Services 850-4620
  - Baltimore Gas & Electric Co. Underground Damage Control 787-9008
  - Miss Utility 1-800-257-1777
  - Colonial Pipeline Co. 795-1390
  - Howard County Dept. of Public Works Bureau of Utilities 313-4900
9. 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.
10. 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.

**PART II - WATER:**

1. All water mains to be D.I.P. Class 52 unless otherwise noted.
2. Tops of all water mains to have a minimum of 3 1/2 ft. 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 the Standard Details unless otherwise provided for on the drawings.
5. Fire hydrants shall be set to the curb line elevations shown on the drawings. All fire hydrants shall be strapped and buttressed with concrete in accordance with the Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
6. The contractor shall not operate any water main valves on the existing water system.
7. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.

**PART III - SEWER:**

1. All sewer mains to be D.I.P., R.C.P., V.C.P.X., C.S.P.X., R.C.C.P. or P.C.V. unless otherwise noted.
2. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
3. All manholes shall be 4'-0" inside diameter unless otherwise noted.
4. Force mains shall be D.I.P. only.
5. Manholes designated "W.T." in plan and profile shall have water tight frame and covers. Standard Detail 6552. Where water tight manhole frame and cover is used, set top of frame 1'-0" above finished grade unless otherwise noted on the drawings.
6. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
7. Manholes shown with 12" and 16" walls are for brick manholes only.

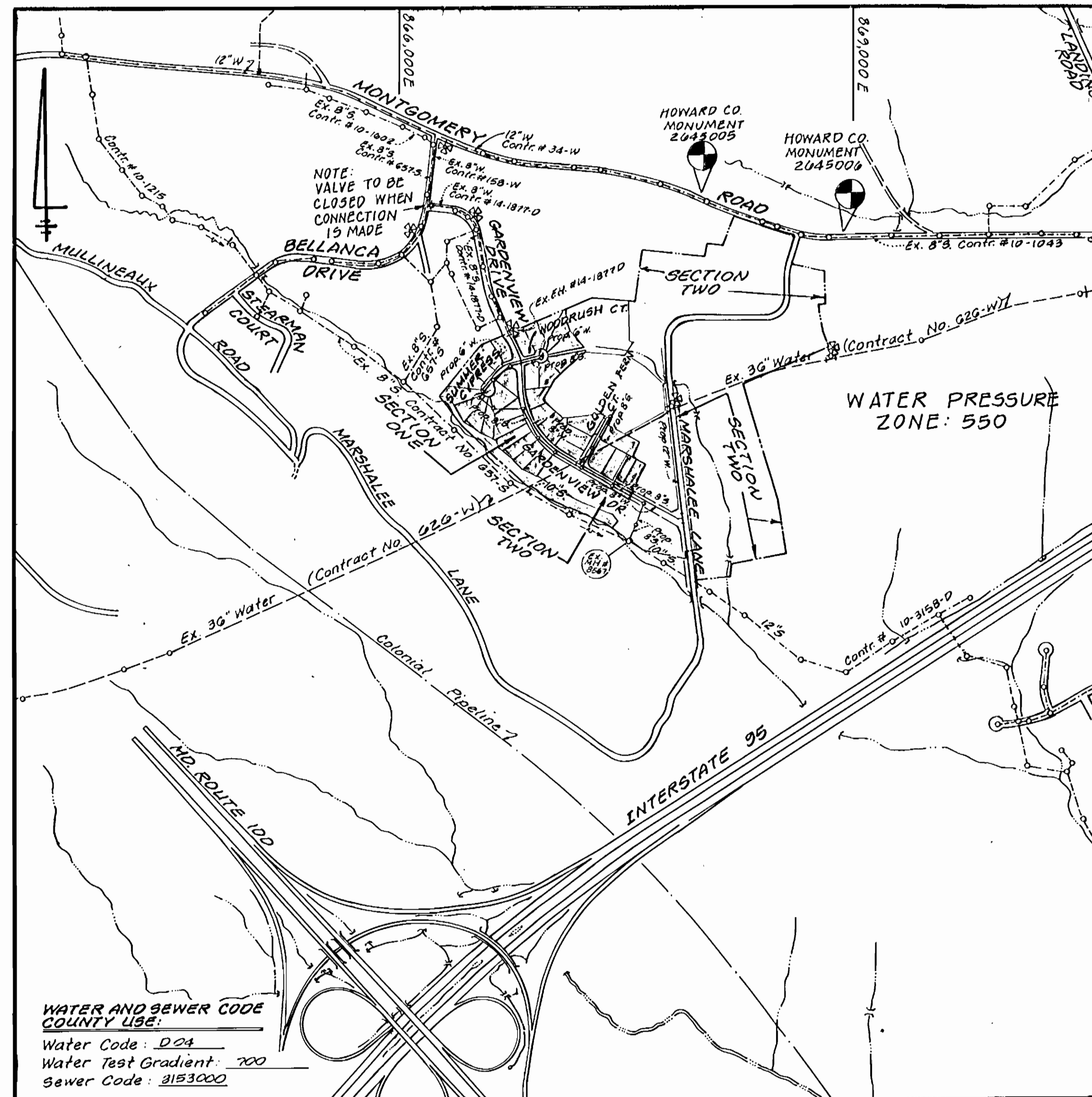
**BENCH MARKS:**

HOWARD COUNTY MONUMENT # 2045005 - ELEV. 291.929  
CONCRETE MONUMENT 0.3' BELOW SURFACE  
AT TOP OF BANK

HOWARD COUNTY MONUMENT # 2045004 - ELEV. N/A  
CONCRETE MONUMENT 0.2' BELOW SURFACE  
AT TOP OF BANK

**SEWER HOUSE CONNECTIONS**

| LOT NO. | INV. @ MAIN | INV. @ P.L. | MINIMUM ELEVATION |
|---------|-------------|-------------|-------------------|
| 1       | 244.61      | 245.15      | 248.65            |
| 2       | 245.77      | 246.50      | 249.70            |
| 3       | 246.63      | 247.35      | 250.58            |
| 4       | 247.57      | 248.32      | 251.72            |
| 5       | 254.87      | 254.77      | 258.97            |
| 6       | 267.10      | 267.72      | 270.92            |
| 7       | 255.69      | 256.33      | 259.53            |
| 8       | 254.27      | 255.07      | 258.30            |
| 9       | 256.81      | 257.64      | 261.82            |
| 10      | 257.00      | 260.17      | 262.93            |
| 11      | 261.05      | 261.72      | 265.96            |
| 12      | 262.51      | 263.52      | 267.90            |
| 13      | 287.54      | 288.06      | 291.66            |
| 14      | 288.32      | 289.12      | 293.12            |
| 15      | 288.97      | 289.61      | 292.71            |
| 16      | 288.74      | 289.54      | 292.44            |
| 17      | 288.74      | 289.84      | 293.44            |
| 18      | 288.67      | 289.67      | 293.67            |
| 19      | 288.46      | 289.60      | 292.80            |
| 20      | 287.67      | 288.27      | 291.47            |
| 21      | 286.33      | 286.45      | 289.66            |
| 22      | 282.35      | 283.25      | 286.45            |
| 23      | 276.65      | 277.29      | 280.79            |
| 24      | 271.71      | 272.33      | 275.83            |
| 25      | 264.83      | 265.77      | 269.17            |
| 26      | 264.83      | 265.03      | 265.83            |
| 27      | 264.83      | 264.80      | 268.40            |
| 28      | 264.04      | 264.24      | 267.64            |
| 29      | 271.25      | 272.67      | 276.36            |
| 30      | 281.44      | 281.63      | 285.63            |
| 31      | 269.40      | 269.77      | 273.67            |
| 32      | 261.60      | 262.06      | 267.06            |
| 33      | 260.92      | 261.36      | 266.36            |
| 34      | 260.44      | 260.80      | 265.80            |
| 35      | 258.32      | 258.87      | 262.90            |
| 36      | 256.84      | 257.18      | 262.18            |
| 1       | 255.78      | 257.30      | 260.50            |
| 2       | 250.34      | 250.90      | 254.0             |
| 3       | 248.08      | 248.53      | 251.73            |
| 4       | 246.99      | 247.40      | 250.60            |
| 5       | 245.71      | 246.27      | 249.47            |
| 6       | 244.88      | 245.13      | 248.33            |
| 7       | 241.02      | 241.38      | 244.58            |



WATER AND SEWER CODE COUNTY USE:  
Water Code: D24  
Water Test Gradient: 700  
Sewer Code: 3153000

Type of Building: Single Family Detached  
Number of Lots/Parcels: 39 (36 Buildable 3 0.5)  
Number of W.H.C.'s: 36  
Number of S.H.C.'s: 36  
Drainage Area: Deep Run  
Treatment Plant: Patapsco Waste Water Treatment Plant

**VICINITY MAP**  
SCALE: 1" = 600'

**QUANTITIES**

| ITEM                                   | QTY EST'D | QTY  | TYPE          | AS BUILT                             |  |
|--|-----------|------|---------------|--------------------------------------|--|
|  |           |      |               | MANUFACTURER/SUPPLIER                |  |
| 6" Water - D.I.P.                      | 562       | 601  | CL#2          | ATLANTIC STATES/WATER PRO            |  |
| 8" Water - D.I.P.                      | 2065      | 2025 | CL#2          | ATLANTIC STATES/WATER PRO            |  |
| 8" Sewer                               | 2749      | 2660 | 9DR 3/4PVC    | J-M MANUFACTURING/WATER PRO          |  |
| 8" Valve                               | 4         | 3    | RE-5 SEAT     | MUELLER CO./WATER PRO                |  |
| 12" Water D.I.P.                       | 765       | 701  | CL#2          | ATLANTIC STATES/WATER PRO            |  |
| 6" Valve (Excl. EN)                    | 3         | 3    | RE-5 SEAT     | MUELLER CO./WATER PRO                |  |
| 8" x 6" Cross                          | 1         | 1    | MJ CROSS      | UNION FOUNDRY/WATER PRO              |  |
| 8" x 8" Tee                            | 1         | 1    | MJ TEE        | UNION FOUNDRY/WATER PRO              |  |
| 4" SHC                                 | 1472      | 1502 | 9DR 3/4PVC    | J-M MANUFACTURING/WATER PRO          |  |
| 4" Dia. MH                             | 13        | 14   |               | ATLANTIC CONCRETE PRODUCTS/WATER PRO |  |
| 3/4" WHC/1" WHC                        | 1480/50   | 1389 | TYPE X COPPER | CAMBRIDGE-LEE/WATER PRO              |  |
| 6" Cap                                 | 2         | 2    | MJ CAP        | UNION FOUNDRY/WATER PRO              |  |
| 8" Cap                                 | 1         | 1    | MJ CAP        | UNION FOUNDRY/WATER PRO              |  |
| 4" Drop MH                             | 1         | 1    |               | ATLANTIC CONCRETE PRODUCTS/WATER PRO |  |
| 8" x 6" F.H. Tee                       | 3         | 3    | MJ UNDTTEE    | UNION FOUNDRY/WATER PRO              |  |
| Fire Hydrant                           | 3         | 3    |               | MUELLER CO./WATER PRO                |  |
| 18" Cap                                | 2         | 1    |               | UNION FOUNDRY/WATER PRO              |  |
| 12" x 8" Cross                         | 1         | 1    | MJ CROSS      | UNION FOUNDRY/WATER PRO              |  |
| Sewer - D.I.P.                         | 150 L.F.  | 150  | CL#2          | ATLANTIC STATES/WATER PRO            |  |
| Blow Off                               | 1         | 1    |               | FORN METER PCK/WATER PRO             |  |
| Name of Contractor UTILITIES UNLIMITED |           |      |               |                                      |  |

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
Signature: [Signature] 8/26/93  
DATE: 8/26/93  
SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
Signature: [Signature] 8/26/93  
DATE: 8/26/93  
HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION AND FINAL ROAD CONSTRUCTION PLANS: F-93-20

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MD  
Signature: [Signature] 8/26/93  
DATE: 8/26/93  
CHIEF - BUREAU OF UTILITIES

Land Design Engineering, Inc.  
8835 Columbia 100 Parkway, Suite N  
Columbia, Maryland 21045  
Phone: (410) 715-1070 (301) 596-3424  
Signature: [Signature] 8/26/93  
DATE: 8/26/93  
CHIEF - LAND DEVELOPMENT DIVISION

Designed: [Blank]  
Drawn: [Blank]  
Checked: [Blank]  
Date: 8-26-93  
By: [Blank]

CHECK BOX:  
Survey & Drafting Div  
As-Built Date

**TITLE SHEET**

**MARSHALEE WOODS**

CONTRACT No. 14-3284-0  
SECTION ONE  
LOTS 1 THRU 39  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

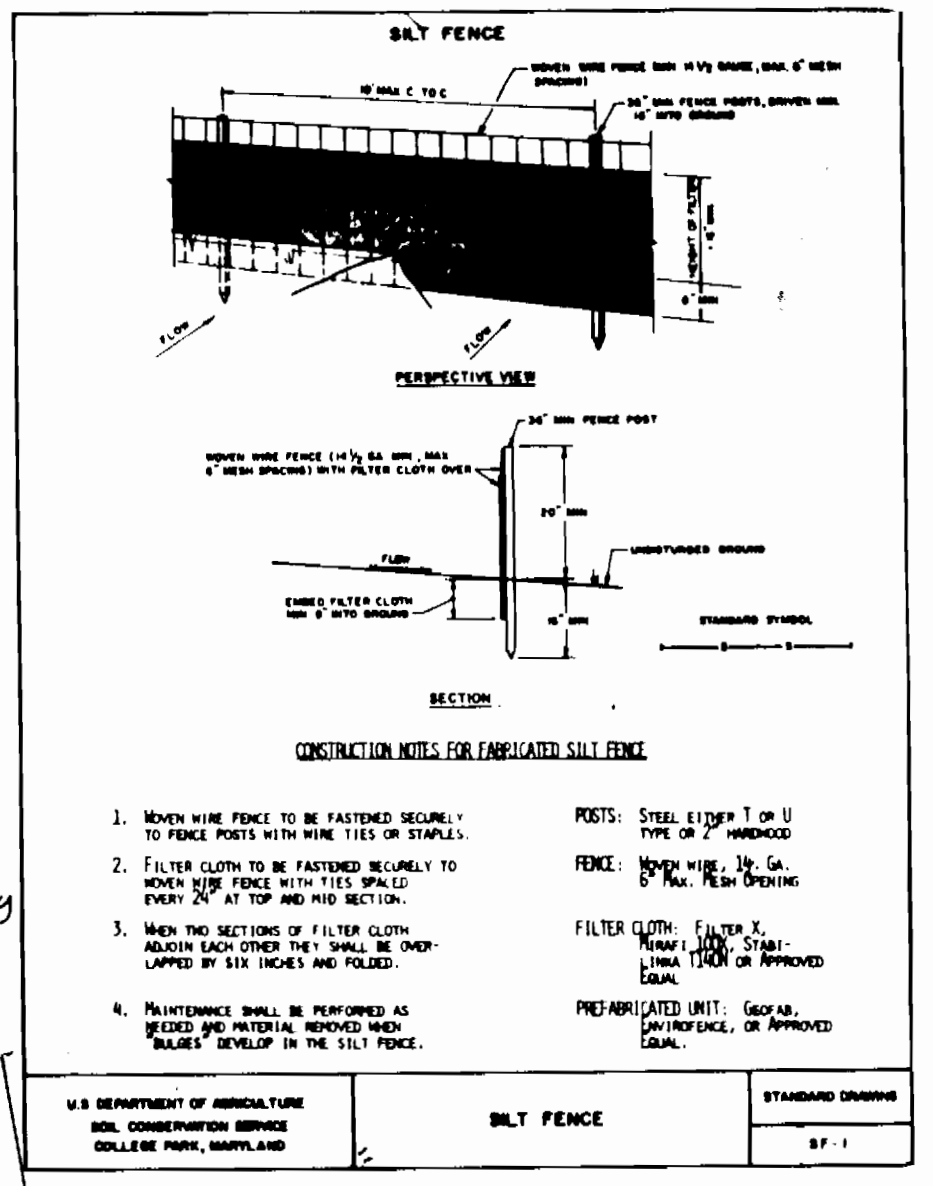
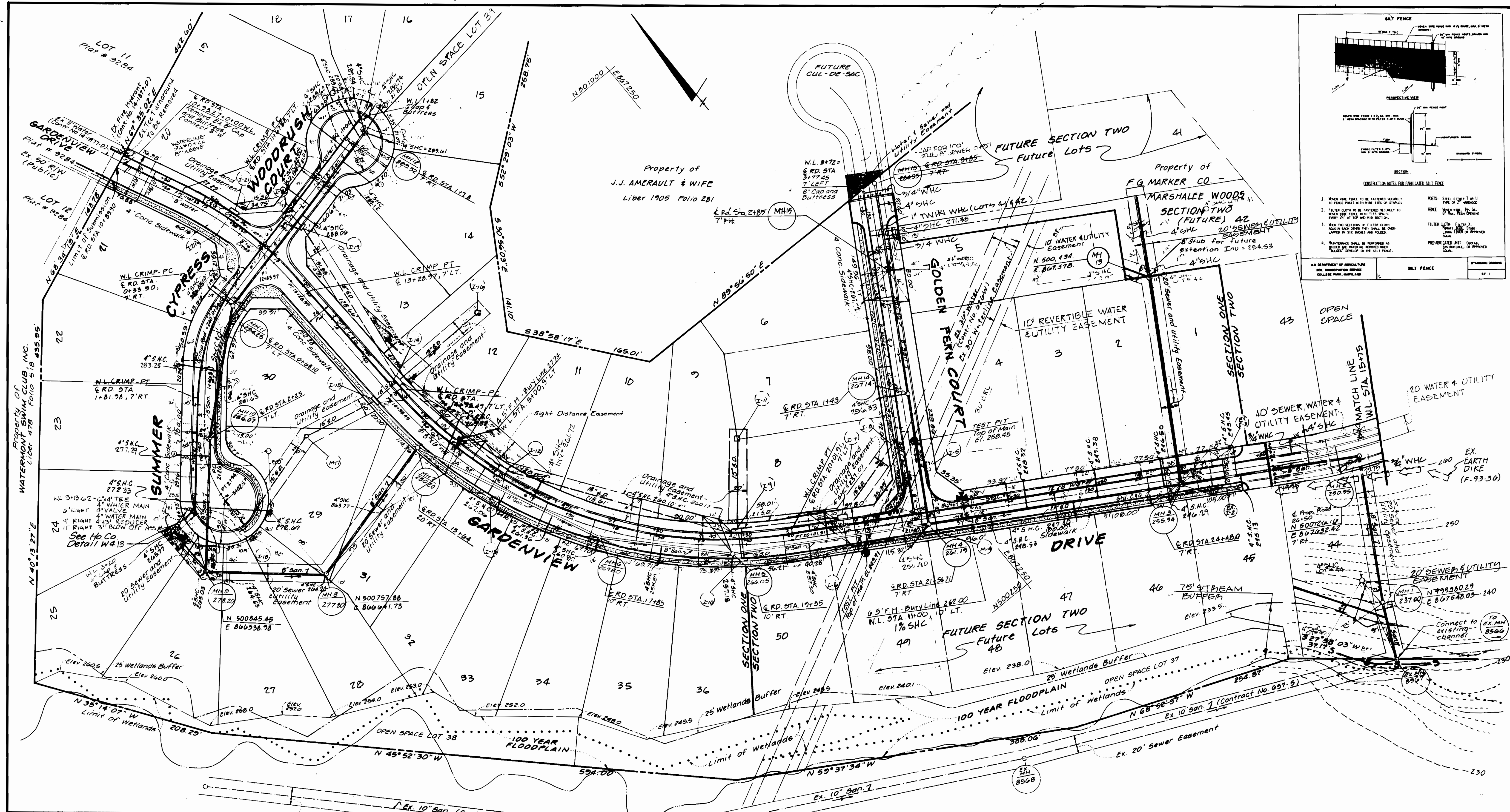
800 SCALE MAP No. 37 BLOCK No. 11

SCALE AS SHOWN  
SHEET 1 OF 8



3284

3284 w/s 2 MARSHALEE WOODS



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*James M. Williams* 8/26/93  
Signature Date  
SOIL CONSERVATION SERVICE

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

*Hub Selig* 8/26/93  
Signature Date  
HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION AND FINAL ROAD CONSTRUCTION PLANS E-92-36

- SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION**
1. Install silt fence as shown.
  2. Install sewer from MH-2 to MH-1 to connect to existing MH-8567.
  3. Stabilize disturbed area.
  4. Upon approval of sediment & erosion control inspector, remove silt fence.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MD.

*James P. Lane* 8/26/93  
DIRECTOR OF PUBLIC WORKS DATE

*Michael A. Kucianville* 8-18-93  
CHIEF - BUREAU OF UTILITIES DATE

Land Design Engineering, Inc.

8835 Columbia 100 Parkway  
Suite N  
Columbia, Maryland 21045  
Phone: (410) 715-1070 (301) 596-3424

|               |         |  |         |
|---------------|---------|--|---------|
| Designed: MVD |         |  |         |
| Drawn: KBW    |         |  |         |
| Checked: BL   | 8/26/93 | Add House connections & Lot details, Lot 40-49 | 5-18-94 |
|               |         | Realignement of Rd in Future Gardenview Dr.    | 2-24-94 |
|               |         | Eliminate S.N.C. to Lot # 29                   | 9-30-93 |
| By: No.       |         |  |         |

PLAN

600 SCALE MAP No. 37 BLOCK No. 11

**MARSHALEE WOODS**

CONTRACT No. 14-3284-D  
SECTION ONE  
LOTS 1 THRU 39  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

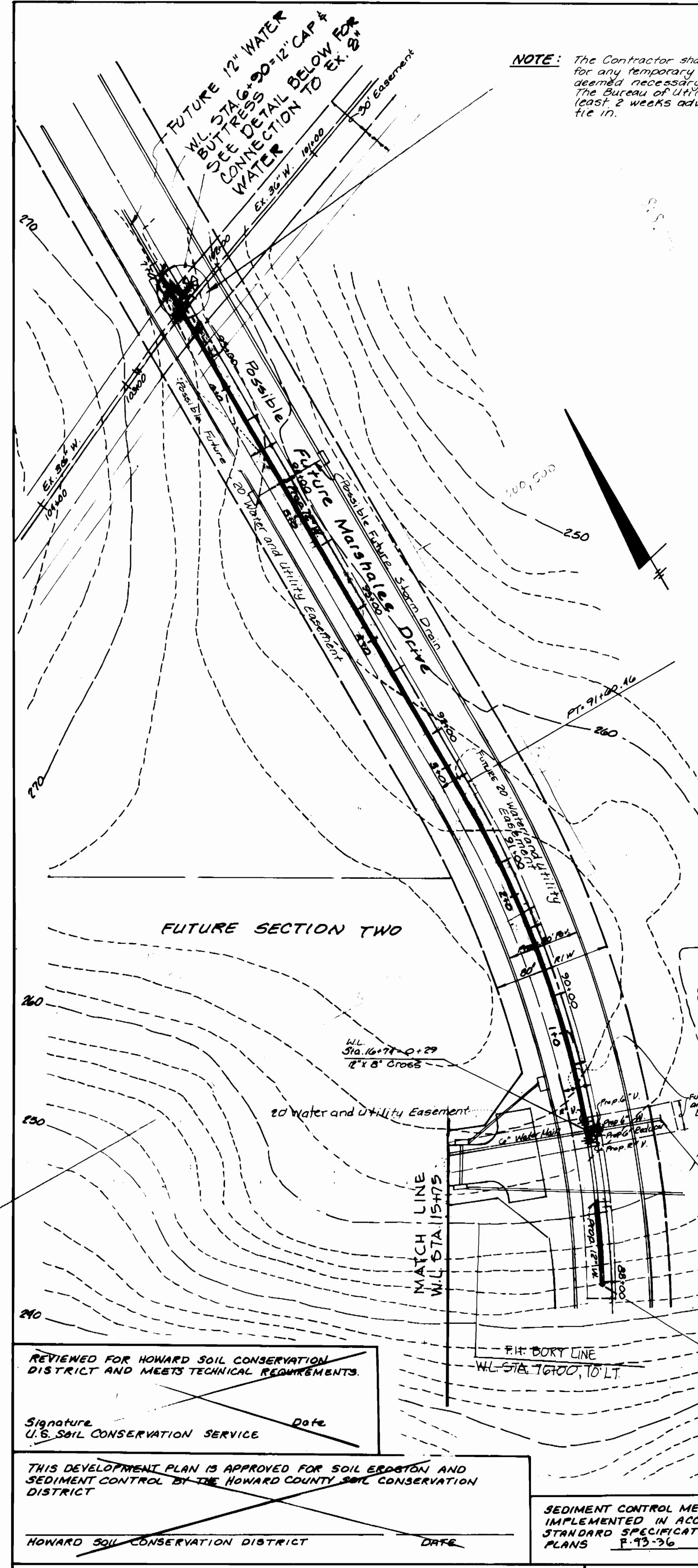
SCALE: 1"=50'  
SHEET 2 OF 5



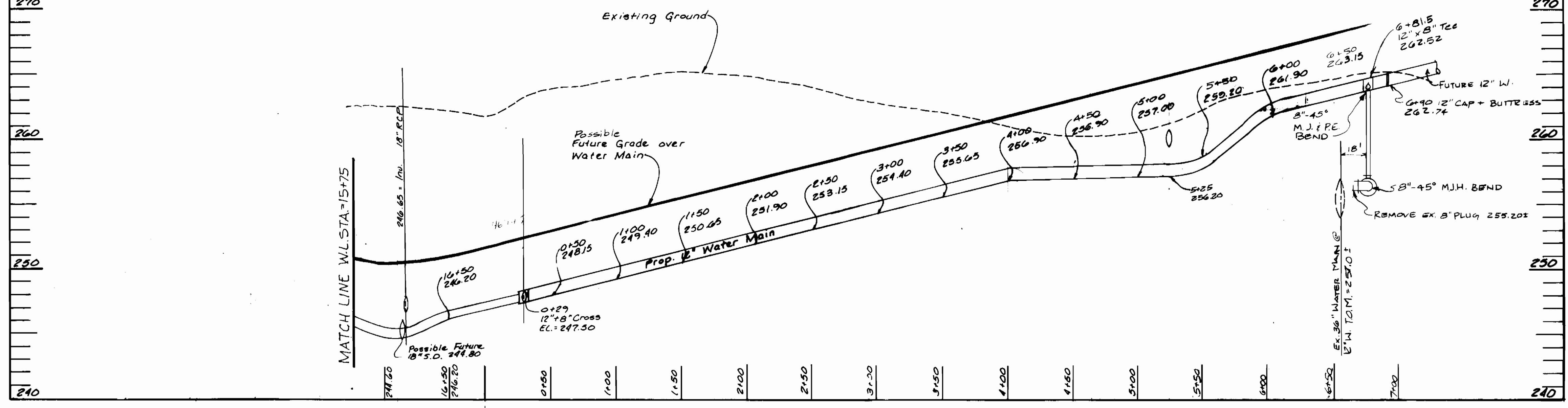
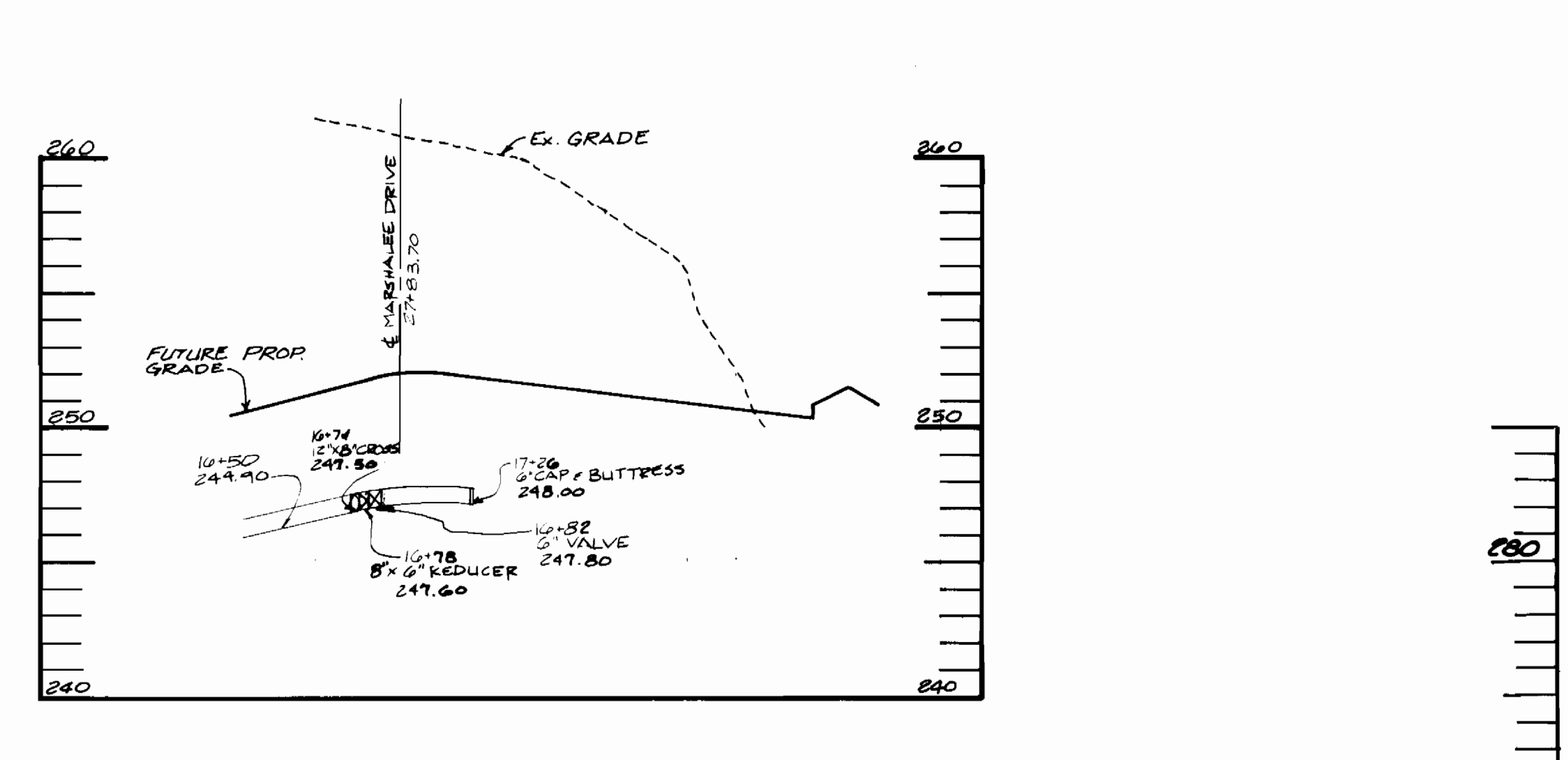
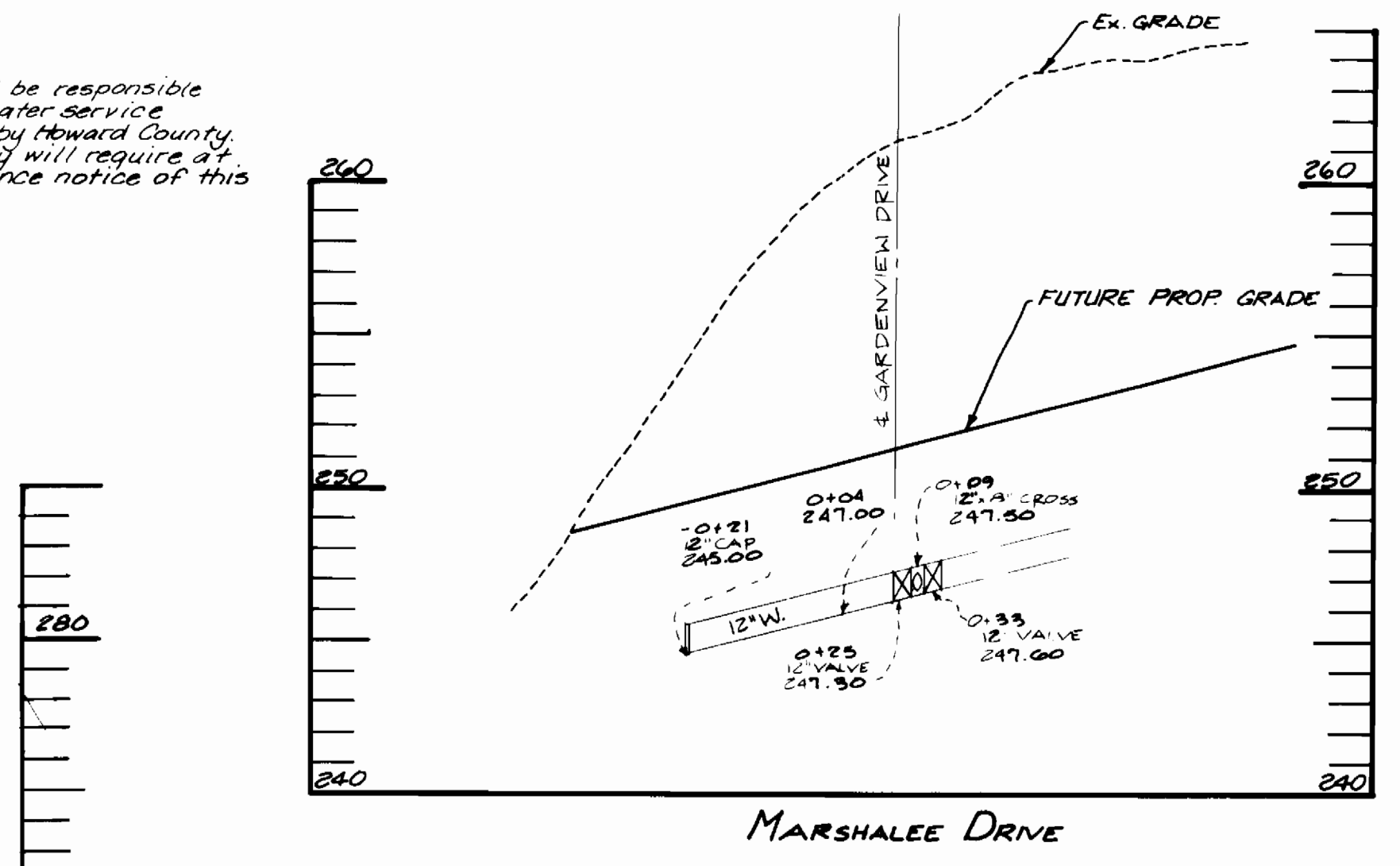
3284

w/s 3 MARSHALEE WOODS

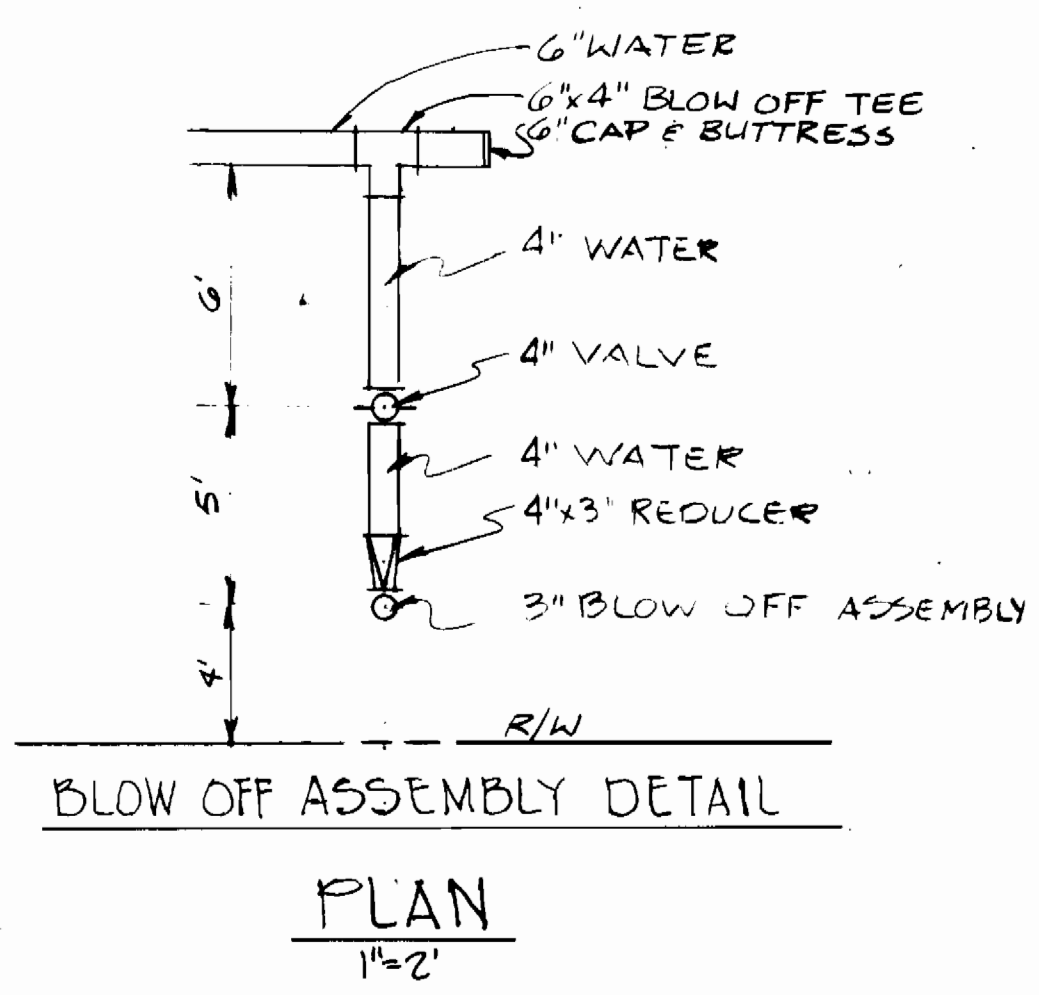
3284



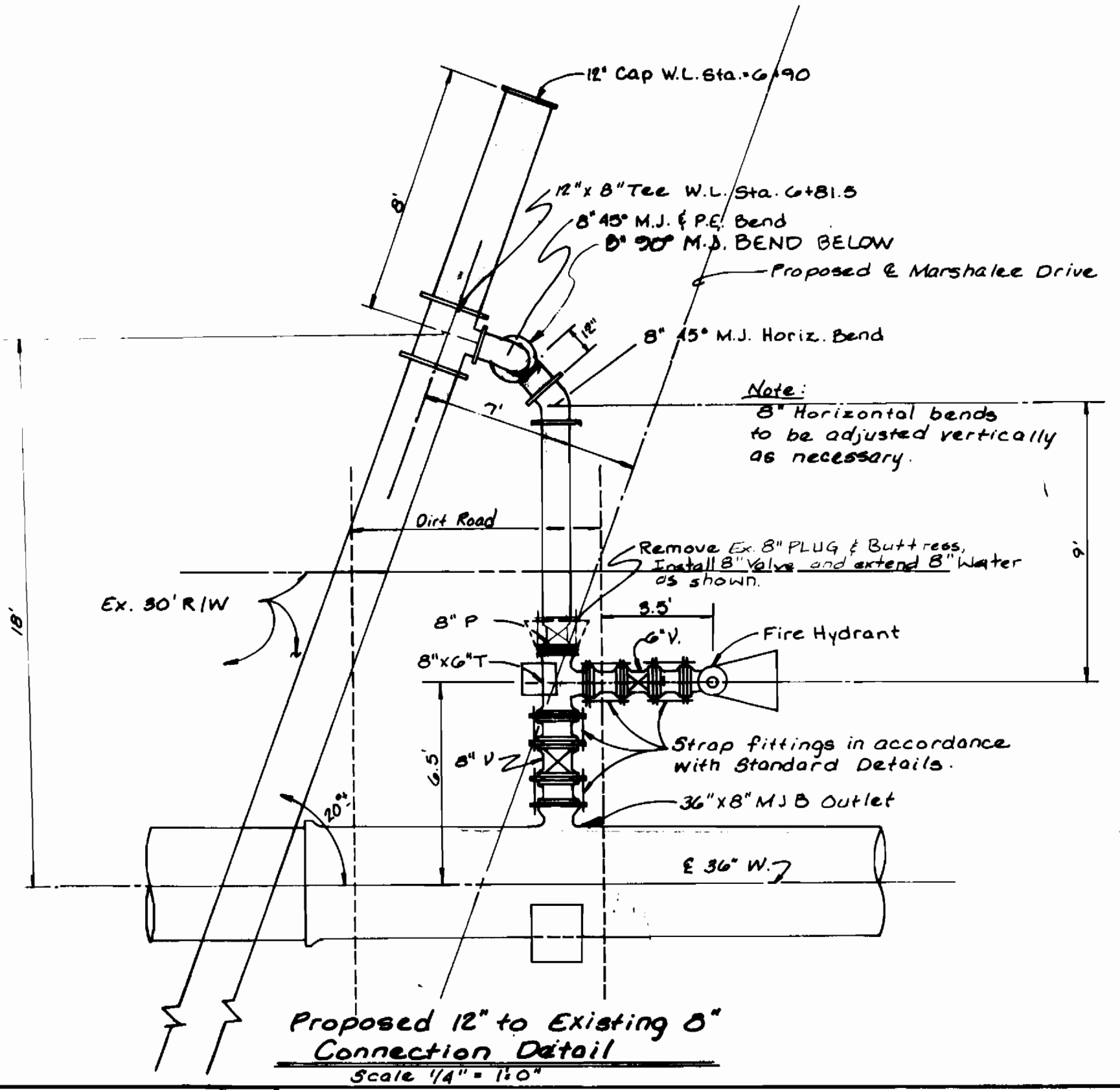
**NOTE:** The Contractor shall be responsible for any temporary water service deemed necessary by Howard County. The success of utility will require at least 2 weeks advance notice of this tie in.



**PLAN**  
1"=50'



**NOTE:** SEE HOWARD COUNTY DETAIL W 4.13 FOR STRAPPING AND OTHER DETAILS NOT SHOWN.



**Proposed 12\"/>**

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
U.S. SOIL CONSERVATION SERVICE

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

HOWARD SOIL CONSERVATION DISTRICT DATE: \_\_\_\_\_

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 217 OF THE STANDARD SPECIFICATION AND FINAL ROAD CONSTRUCTION PLANS P-93-26

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MD.

James P. Shaw 8/26/93  
DIRECTOR OF PUBLIC WORKS DATE

Richard A. Williams 8-18-93  
CHIEF - BUREAU OF UTILITIES DATE

\_\_\_\_\_ 11/15/93  
CHIEF - LAND DEVELOPMENT DIVISION DATE

**Land Design Engineering, Inc.**

8835 Columbia 100 Parkway  
Suite N  
Columbia, Maryland 21045  
Phone: (410) 715-1070 (301) 596-3424

*Robert Ward*  
8-2-93

|           |        |     |    |         |
|-----------|--------|-----|----|---------|
| Designed: |        |     |    |         |
| Drawn:    |        |     |    |         |
| Checked:  |        |     |    |         |
| Date:     | 8-2-93 | By  | MM | 2-24-94 |
|           |        | No. |    |         |

Lower 12" W. Main between Sta. 5+88 & 6+00  
Marshalee Dr. Change 12" Inv. in Water Main.

**PROFILES**

600 SCALE MAP No. 37 BLOCK No. 11

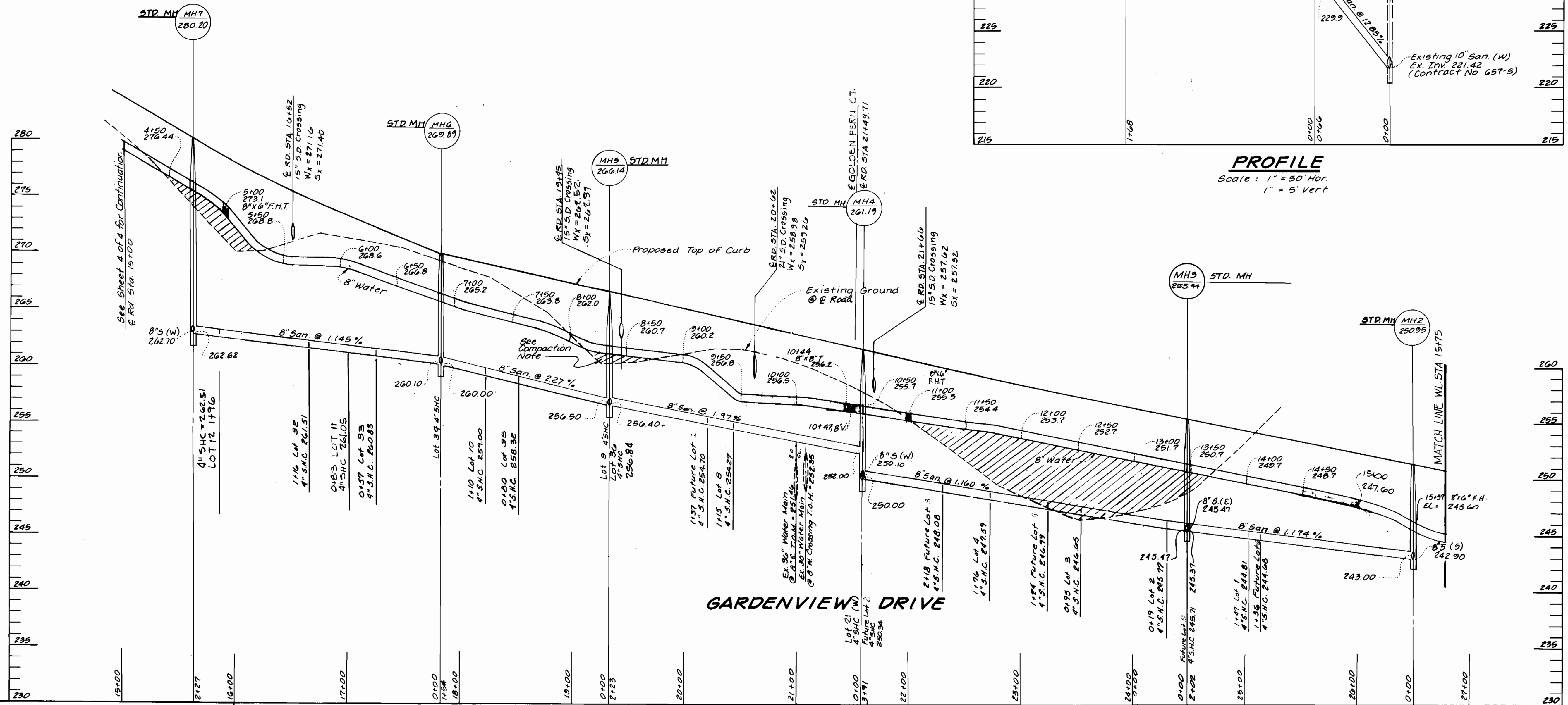
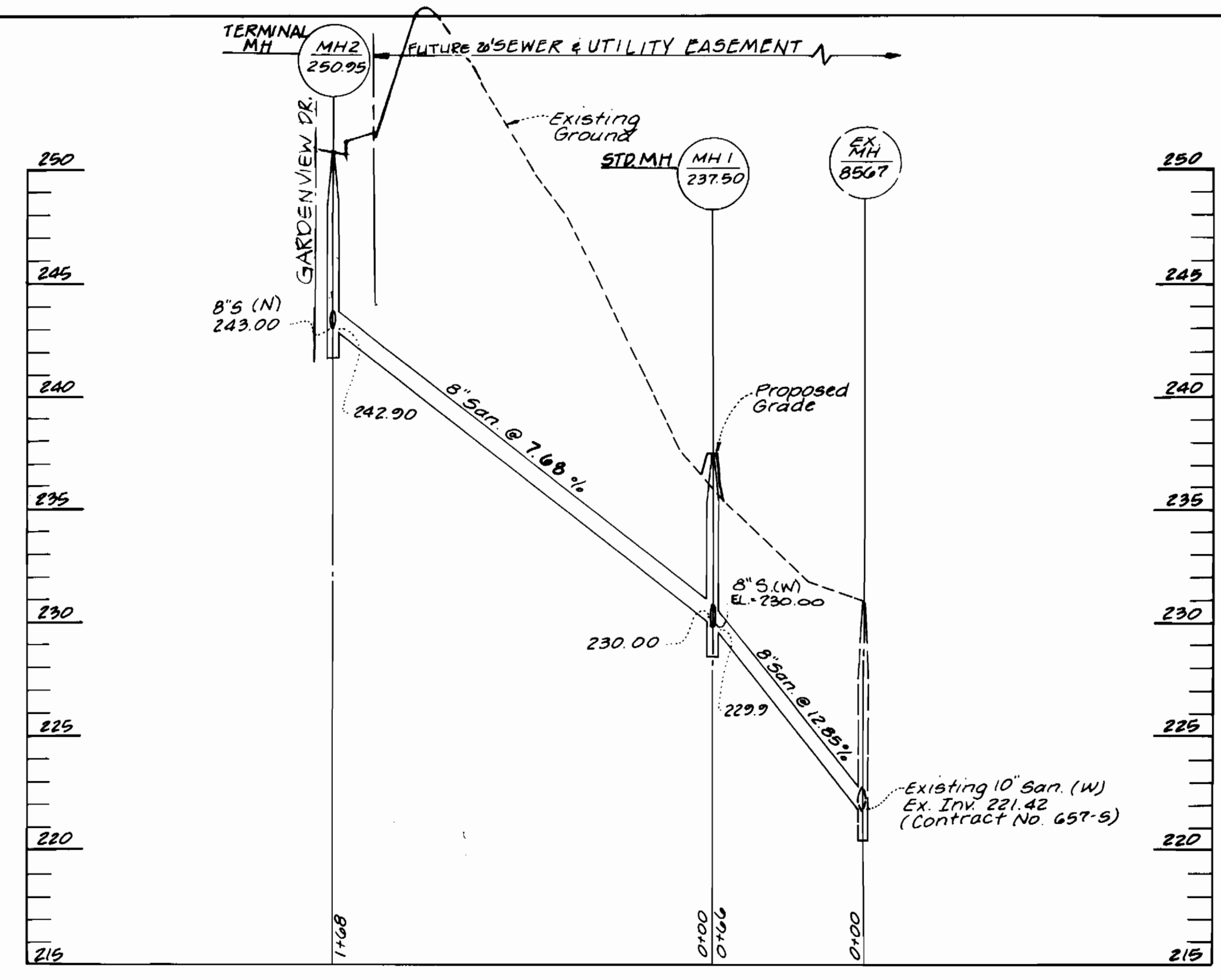
**MARSHALEE WOODS**

CONTRACT No. M-3284-0  
SECTION ONE  
LOTS 1 THRU 39  
18<sup>th</sup> ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 3 OF 5

**COMPACTION NOTE:** Provide compaction in fill areas as required in the Howard County Design Manual Volume 4, Standard Specifications and Details, Article 10, Section 1000.03.10. The required compaction specification is AASHTO 7-180 A.



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
U.S. SOIL CONSERVATION SERVICE

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

HOWARD SOIL CONSERVATION DISTRICT Date: \_\_\_\_\_

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 213 OF THE STANDARD SPECIFICATION AND FINAL ROAD CONSTRUCTION PLANS - F-13-34

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MD.

Signature: \_\_\_\_\_ Date: 8/26/93  
DIRECTOR OF PUBLIC WORKS

Signature: \_\_\_\_\_ Date: 8-18-93  
CHIEF - BUREAU OF UTILITIES

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
DIVISION

**Land Design Engineering, Inc.**

8835 Columbia 100 Parkway  
Suite N  
Columbia, Maryland 21045  
Phone: (410) 715-1070 (301) 596-3424

Signature: \_\_\_\_\_ Date: 8-93

|           |        |  |         |
|-----------|--------|--|---------|
| Designed: |        |  |         |
| Drawn:    |        |  |         |
| Checked:  | MM     | Relocate F.H. on Gardenview Dr. @ Sta. 15+50 | 2/24/94 |
| Date:     | 0-3-93 | Elim. Drod MH @ # A                          | 7/30/93 |
| By:       | No.    | REVISION                                     | Date    |

**PROFILES**

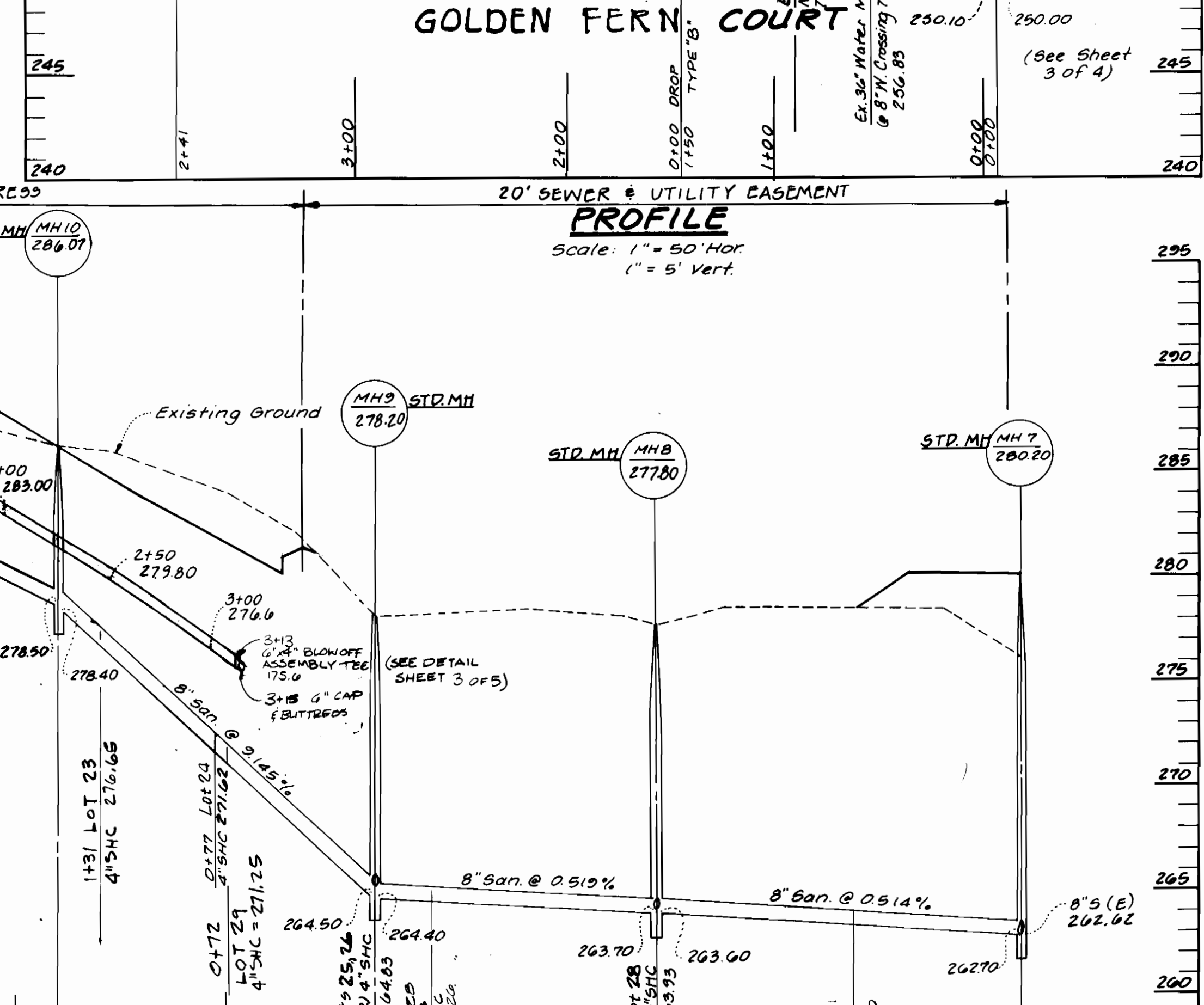
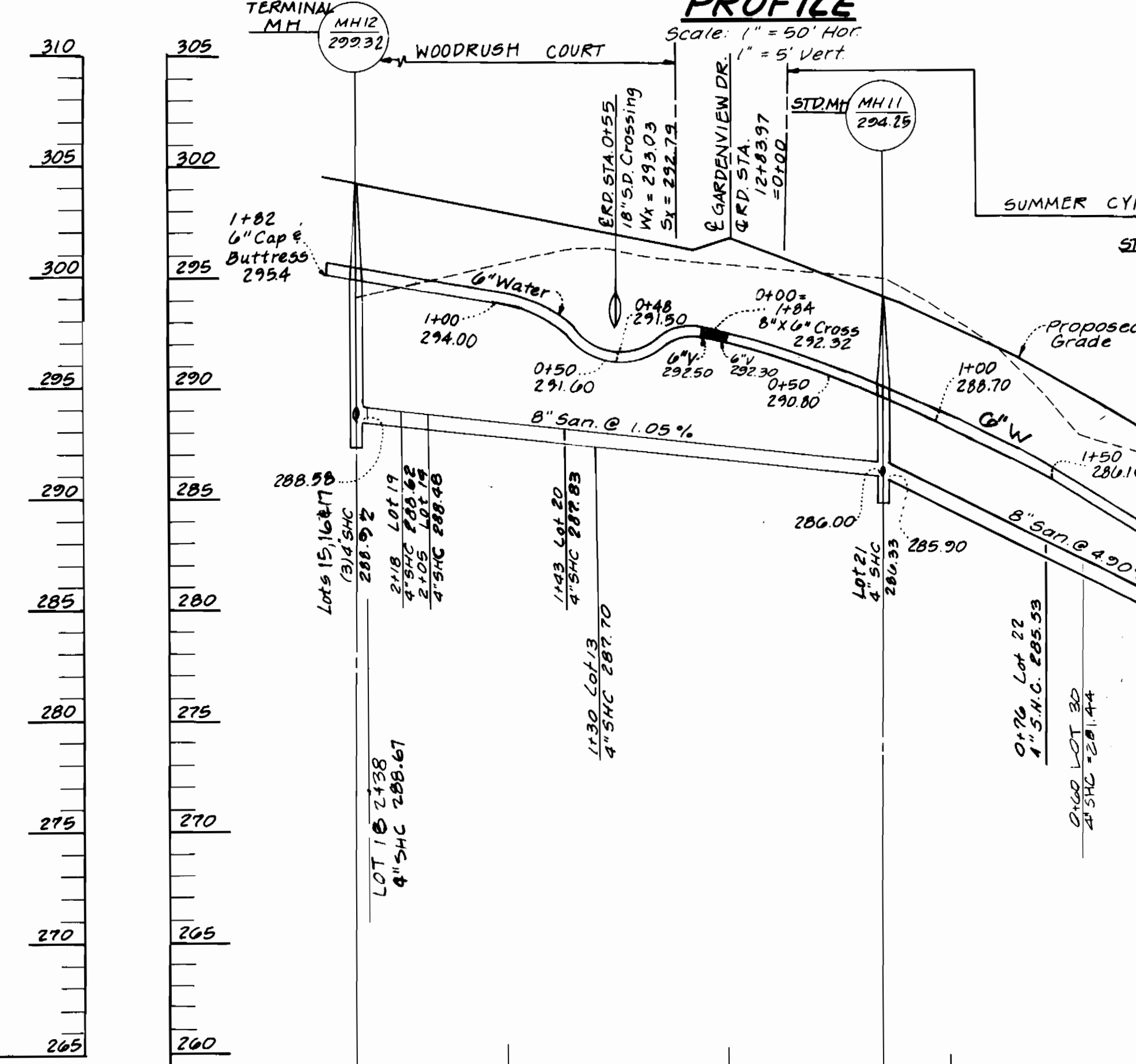
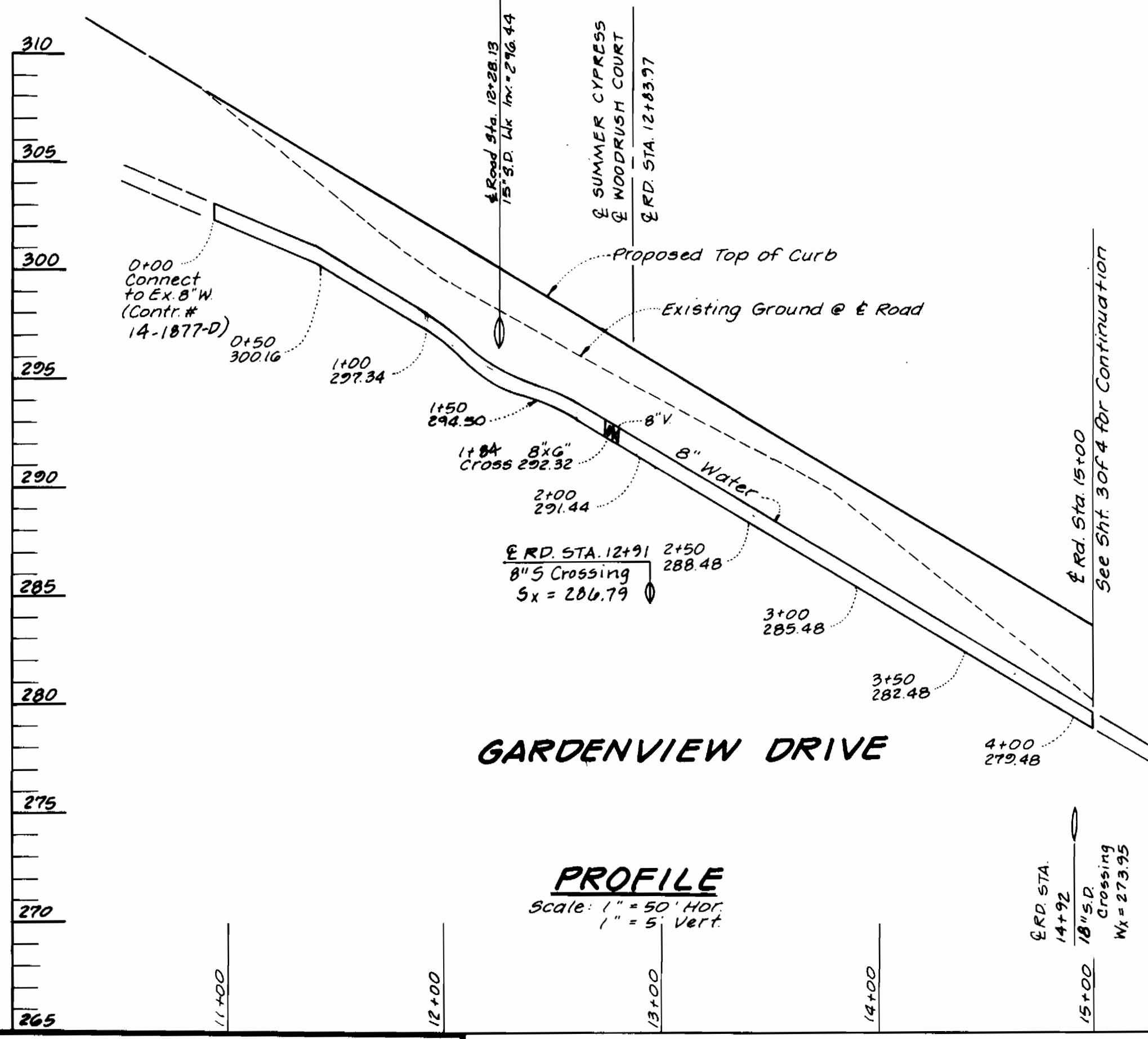
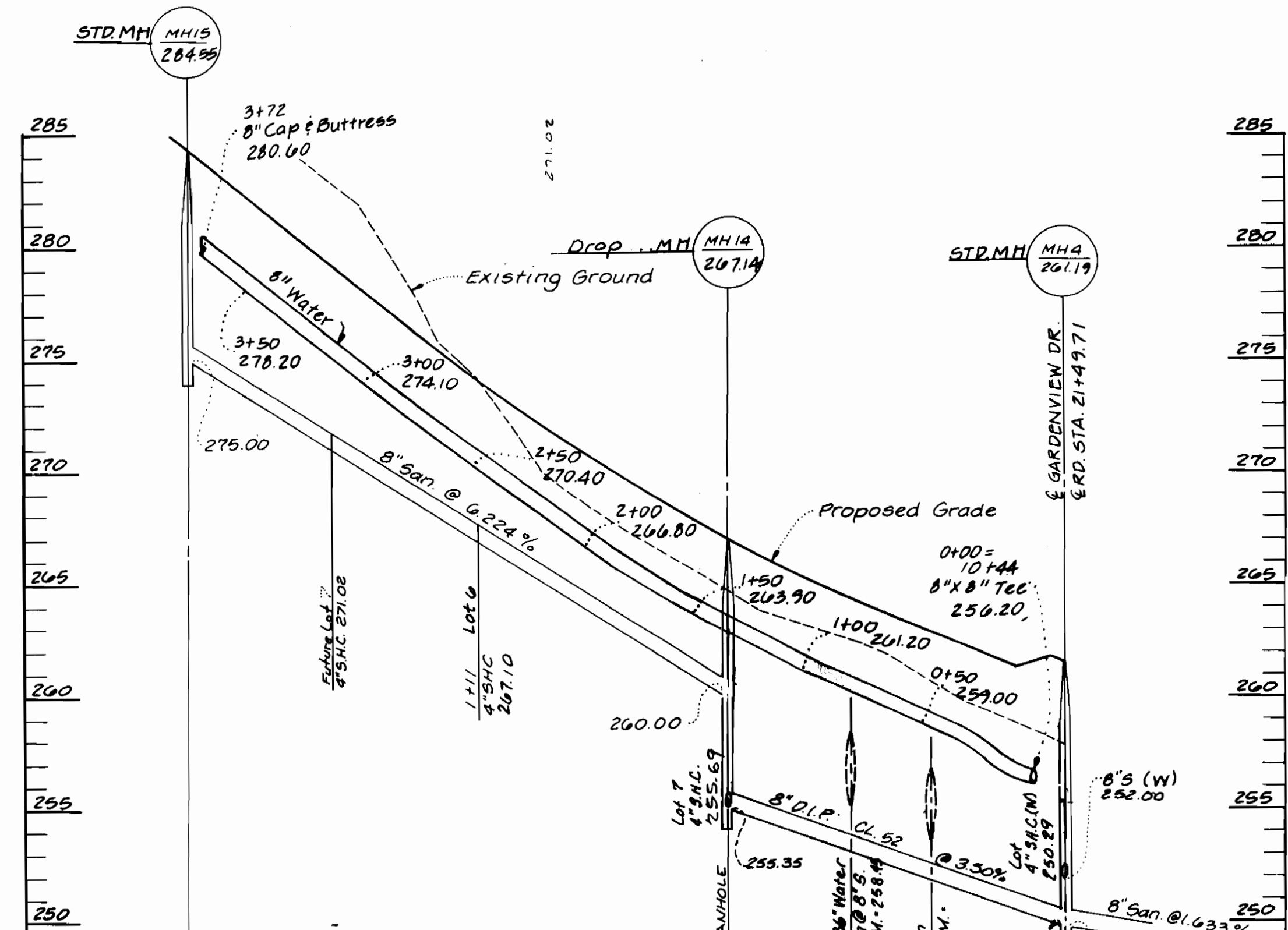
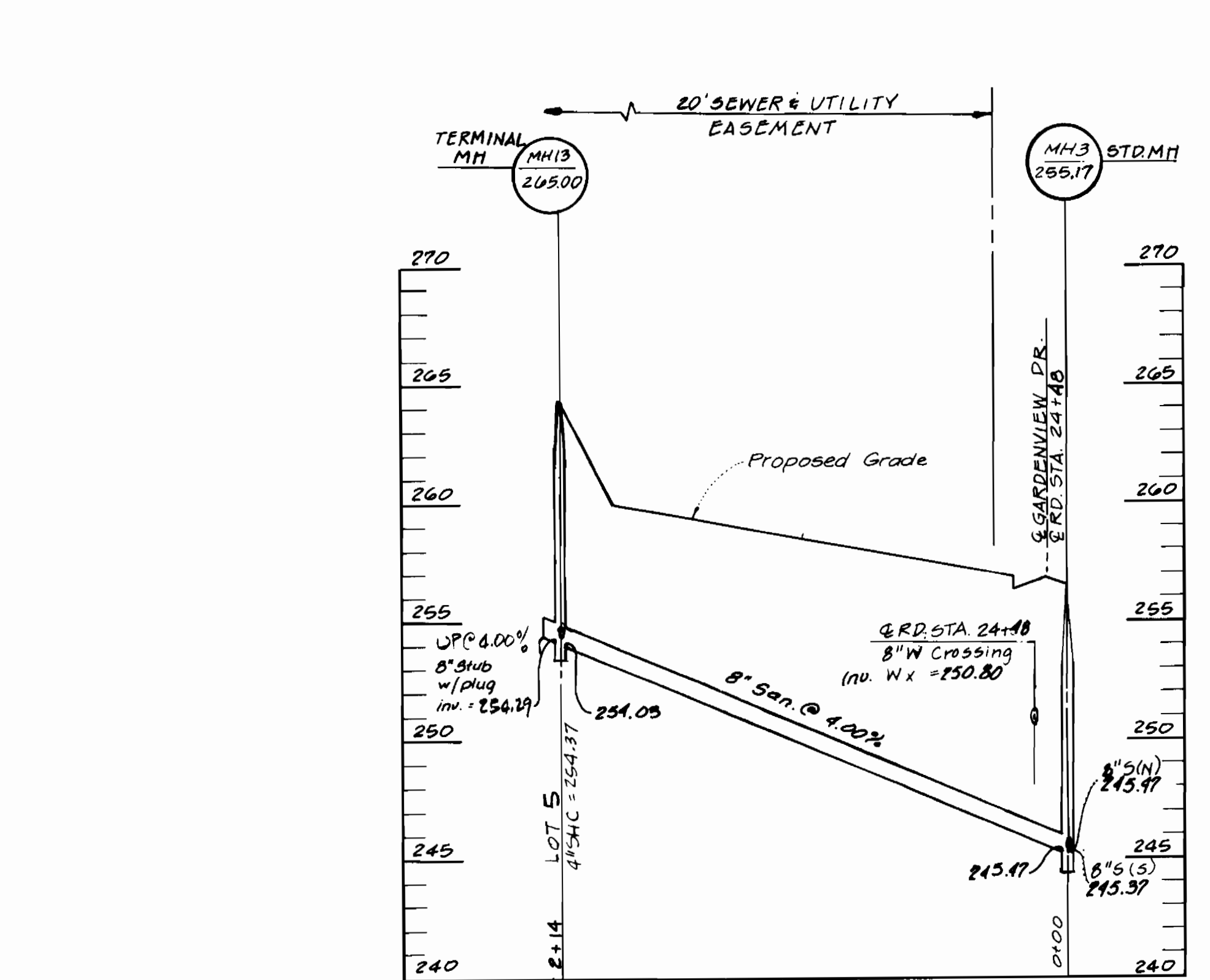
600 SCALE MAP NO. 37 BLOCK No. 11

**MARSHALEE WOODS**

CONTRACT NO. 14-3284-0  
SECTION ONE  
LOTS 1 THRU 39  
1ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 5





REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 U.S. SOIL CONSERVATION SERVICE

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION AND FINAL ROAD CONSTRUCTION PLANS: F-93-30

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MD

Director of Public Works: \_\_\_\_\_ Date: 8/26/93  
 Chief - Bureau of Engineering: \_\_\_\_\_ Date: 8/26/93

Chief - Bureau of Utilities: \_\_\_\_\_ Date: 8/18/93  
 Chief - Land Development: \_\_\_\_\_ Date: 8/26/93

Land Design Engineering, Inc.  
 8835 Columbia 100 Parkway  
 Suite N  
 Columbia, Maryland 21045  
 Phone: (410) 715-1070 (301) 696-3424

Designed: \_\_\_\_\_  
 Drawn: \_\_\_\_\_  
 Checked: \_\_\_\_\_  
 Date: 8-3-93

| By | No. | REVISION                                    | Date    |
|----|-----|---|---------|
| MM | Δ   | In. In MH3 to 245.47 MH14 From Std. to Drop | 9.30.93 |
| MM | Δ   | Rev. 5D size 15" to 18" N.C. Sta. 1492. In. | 9.30.93 |

PROFILES

600 SCALE MAP No. 37 BLOCK No. 11

MARSHALEE WOODS  
 CONTRACT No. 14-3284-D  
 SECTION ONE  
 LOTS 1 THRU 39  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 5 OF 5