

WATER AND SEWER CODE
COUNTY USE
Water Code: E16
Water Test Gradient: 700
Sewer Code: 7840000

Type of Buildings: Single Family Detached
Lots: 8 Lots
Number of Lots/Parcels: 7 Proposed / 1 Existing
Number of W.H.C.'S: 7 Proposed / 1 Existing
Number of S.H.C.'S: 7 Proposed / 1 Existing
Drainage Area: Hammond Branch
Treatment Plant: 27th Potomac Water Reclamation Plant, Savage, Md. Co.

VICINITY MAP
Scale: 1"=600'

INDEX OF SHEETS	
SHEET NO.	TITLE
1	COVER SHEET
2	PLAN VIEW
3	PROFILES
4	SEDIMENT & EROSION CONTROL PLAN

GENERAL NOTES

PART I

- 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.
- 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 owned 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 at the location of the test pit. 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.
- Contractor shall notify the following utility companies or agencies at least five (5) working days before starting work shown on these plans:
 - SHA: 531-5533
 - BGE (Contractor Services): 850-4620
 - BGE (Underground damage control): 787-9088
 - Miss Utility: 1-800-257-7777
 - Colonial Pipeline Company: 795-1390
 - Howard County Dept. of Public Works, Bureau of Utilities: 313-4900
- Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs 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.

PART II: WATER

- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Tops of all water mains to have a minimum of 3 1/2" cover unless otherwise noted.
- Valves adjacent to the tees shall be strapped to the tees.
- All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
- Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be 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.
- 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 plans or in specifications.

PART III: SEWER

- All sewer mains to be D.I.P. and P.V.C. unless otherwise noted.
- All proposed sewers shall be public.
- All manholes shall be 4' 0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes designated W.T. in plan and profile shall have water tight frame and covers; Standard Detail G5.52. Where watertight manhole frame and cover is used, set top of frame 1' 6" above finished grade unless otherwise noted on the drawings.
- Houses with the symbol "C.N.S." indicates that cellar cannot be served.
- Manholes shown with 12" and 16" walls are for brick manholes only.

WATER & SEWER CONSTRUCTION PLANS

MAGNOLIA MEADOWS I & II

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO. 24 - 3569 - D

F-16-15C (I)
F-16-157 (II)

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS.

QUANTITIES				
AS BUILT 02-11-98				
ITEM	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8"Ø	376 L.F.	381 L.F.	P.V.C. (SDR 35)	J.M. Manufacturing / A-1 Pipe
4"Ø (Water)	427 L.F.	417 L.F.	D.I.P.	Atlantic States / A-1 Pipe
6"Ø (Water)	10 L.F.	20 L.F.	D.I.P.	Atlantic States / A-1 Pipe
6" x 4" Reducer	1 Ea.	1 Ea.	M.J. Fitting	Tyler Pipe / A-1 Pipe
4" 1/8" Horiz. Bend	2 Ea.	2 Ea.	M.J. Fitting	Tyler Pipe / A-1 Pipe
12" x 6" TS 4V	1 Ea.	1 Ea.		Mueller / A-1 Pipe
4" Cop & Buttress	1 Ea.	1 Ea.		Tyler Pipe / A-1 Pipe
1 1/2" Drain	1 Ea.	1 Ea.		Mueller / A-1 Pipe
3/4" W.H.C.	82 L.F.	91 L.F.	"K" Copper	Cerro Copper / A-1 Pipe
1" W.H.C.	86 L.F.	98 L.F.	"K" Copper	Cerro Copper / A-1 Pipe
4" S.H.C.	346 L.F.	386 L.F.	P.V.C. (SDR 35)	J.M. Manufacturing / A-1 Pipe
3rd. Manhole	2 Ea.	2 Ea.	Precast Concrete	Atlantic Concrete
Ø 6.14 4th	1 Ea.	1 Ea.	Precast Concrete	Atlantic Concrete

GP-97-49
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS.
Signature: J.S. Warfield
Date: 9/17/96
NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Signature: John L. Robertson
Date: 9/17/96
HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
Signature: Robert B...
Date: 9-17-96
CHIEF-BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
Signature: ...
Date: 9/17/96
CHIEF-DEVELOPMENT ENGINEERING DIVISION

LDE, INC.
9250 RUMSEY ROAD, SUITE 108
COLUMBIA, MARYLAND 21045
(410) 715-1070 (301) 596-3424



DESIGNED	DRAWN	CHECKED	DATE	BY	NO.	REVISION	DATE
EDS	CAO	BDB	July 1996				

TITLE SHEET
600 SCALE MAP NO. 47
BLOCK 1

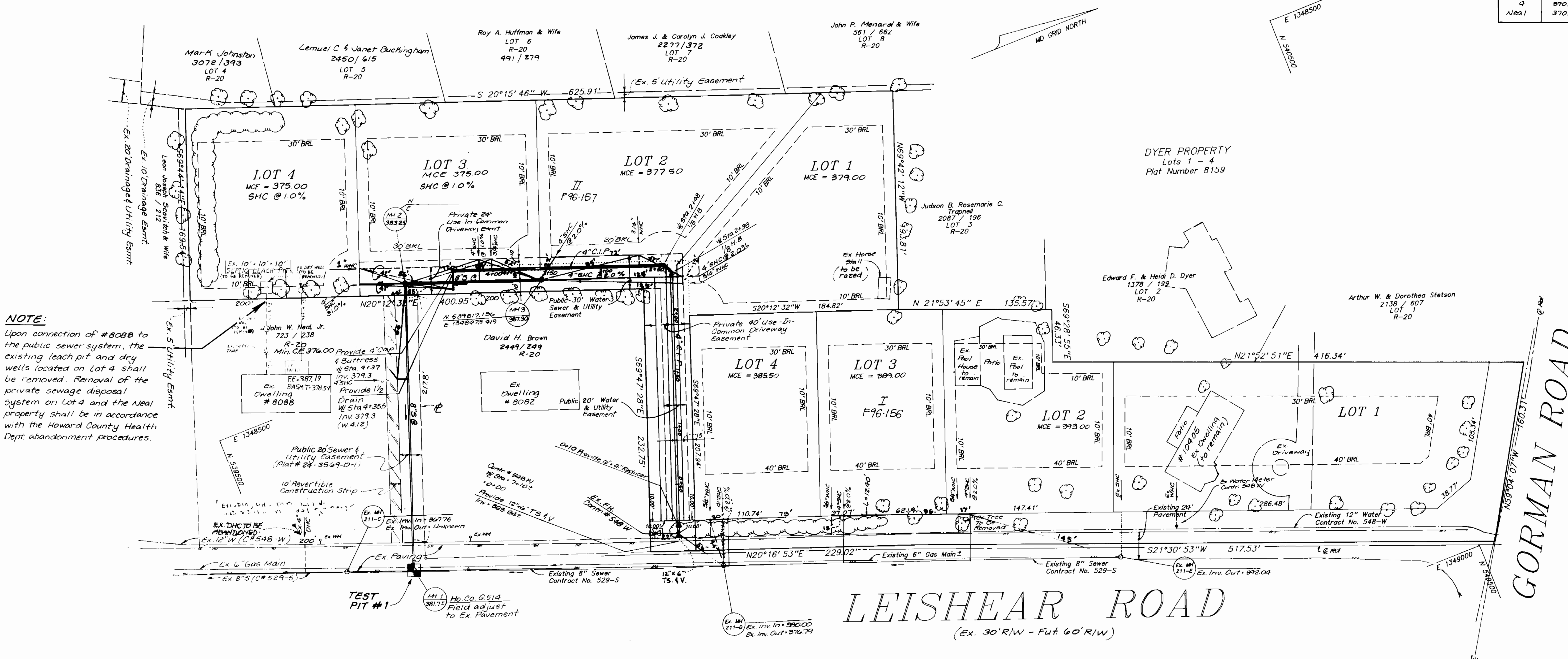
MAGNOLIA MEADOWS I & II
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
CONTRACT NO. 24 - 3569 - D
SCALE AS SHOWN
SHEET 1 OF 4

WELLINGTON ESTATES
Section 2
Plat Book 12 - Folio 11

Sewer House Connection Table

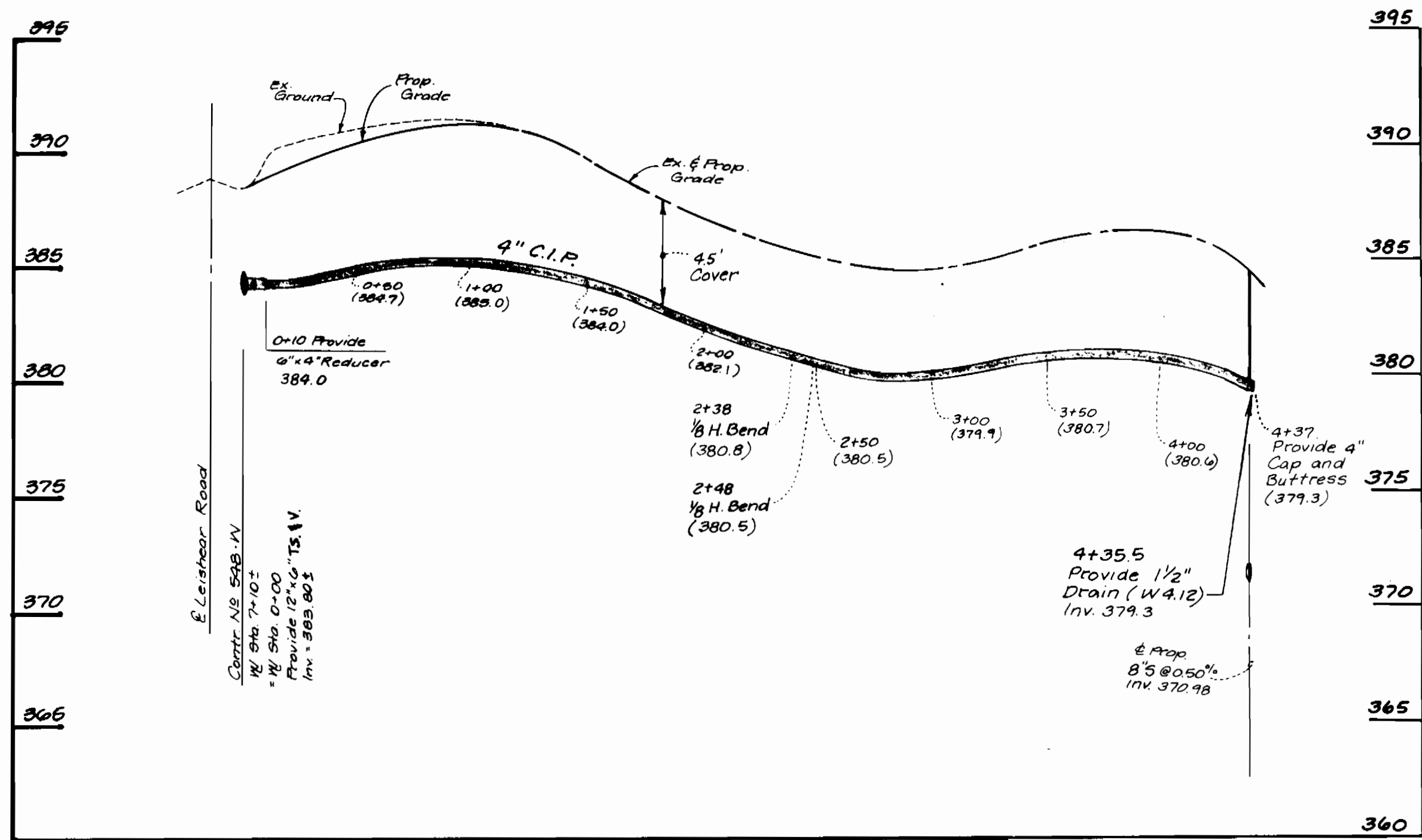
Magnolia Meadows I			
Lot #	Inv @ Main	Inv @ R	Min. C.E.
1 (Ex)	N/A	N/A	N/A (Ex. Per Conn. = 829'-0")
2	387.66	388.51	389.00
3	388.01	384.66	389.00
4	380.34	381.18	385.50

Magnolia Meadows II			
Lot #	Inv @ Main	Inv @ R	Min. C.E.
1	371.99	374.99	379.00
2	371.99	372.49	372.50
3	371.41	371.61	375.00 (SHC @ 1.0%)
4	370.94	371.34	375.00 (SHC @ 1.0%)
Ave A	370.42	370.62	376.00

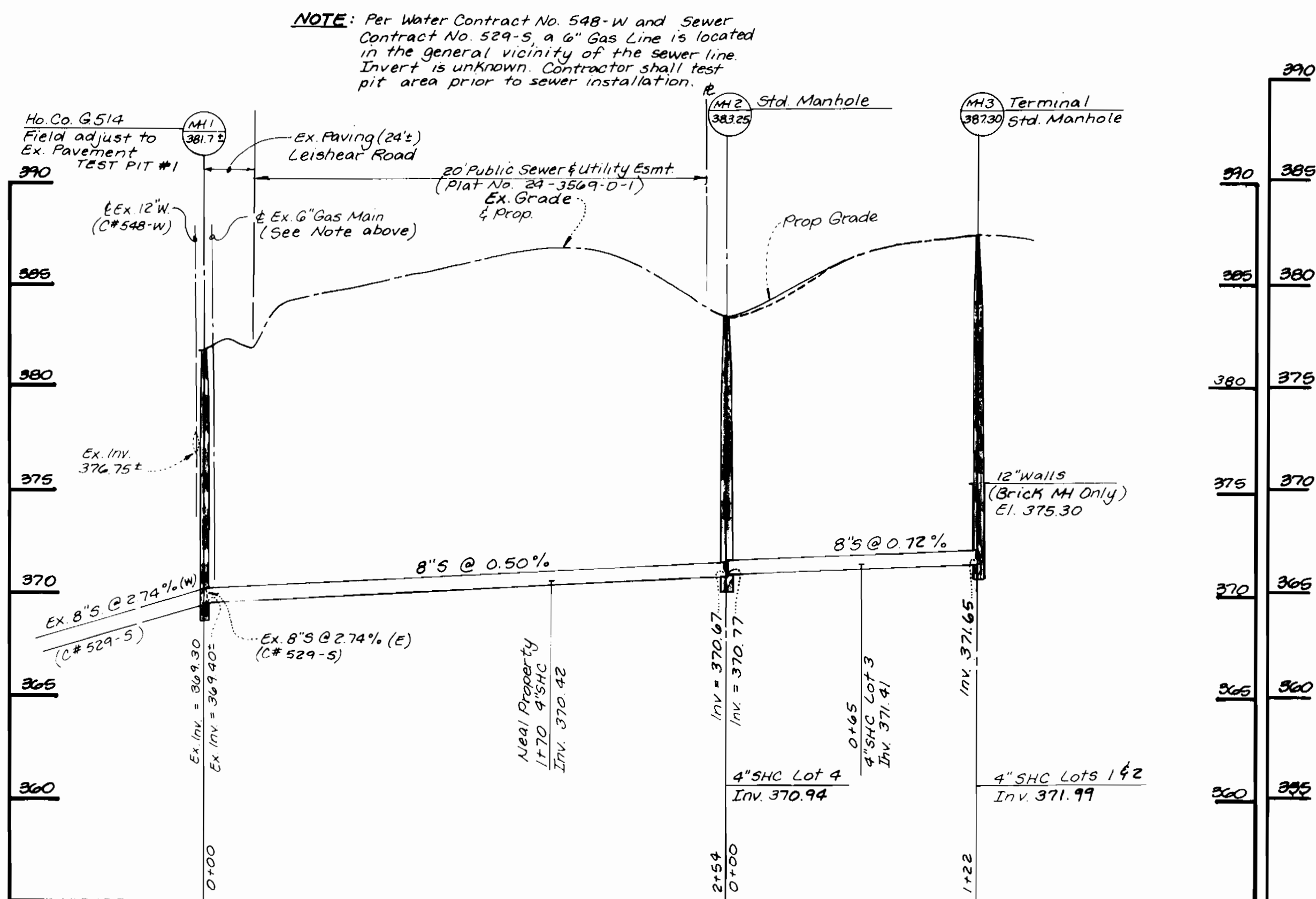


SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS.

DEPARTMENT OF PUBLIC WORKS R. J. [Signature] CHIEF - BUREAU OF UTILITIES 7-17-94 DATE	DEPARTMENT OF PLANNING & ZONING [Signature] CHIEF - DEVELOPMENT ENGINEERING DIVISION 9/10/94 DATE	LDE, INC. 9250 RUMSEY ROAD, SUITE 106 COLUMBIA, MARYLAND 21045 (410) 715-1070 (301) 596-3424	DESIGNED: BOB/LECS DRAWN: CHECKED: BOB DATE: 7/19/94	BY: NO. REVISION DATE	PLAN 600 SCALE MAP NO. 47 BLOCK 1	MAGNOLIA MEADOWS I & II 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND Contract No. 24-3569-D	SCALE: 1" = 50' SHEET: 2 of 4
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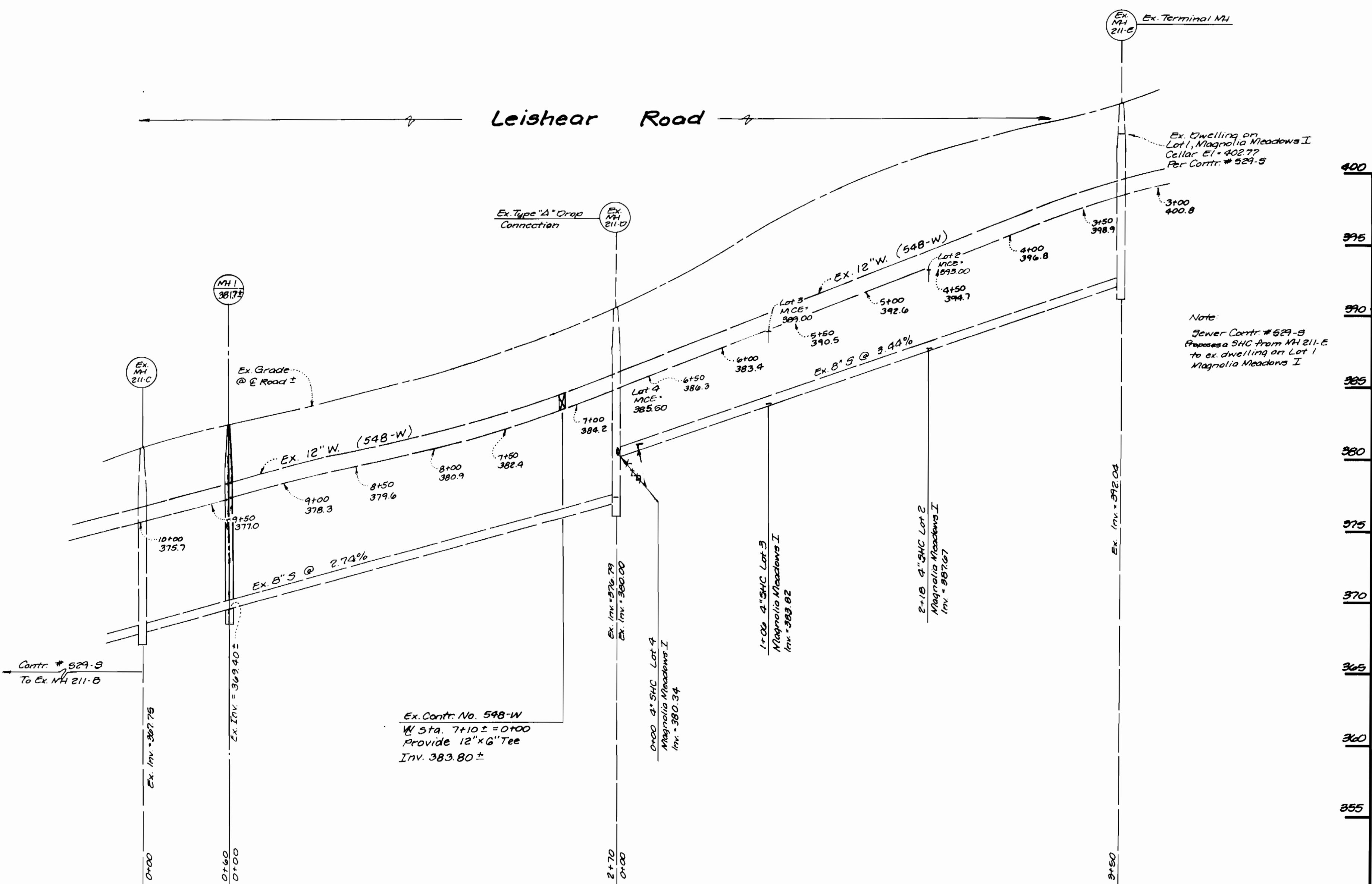
Water Profile Along Use-In-Common Drive
Scale: 1" = 5' Vert.
1" = 50' Hor.



Sewer Profile Thru J. Neal Property
and Along Use-In-Common Drive

Scale: 1" = 50' Horz.
1" = 5' Vert.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS.



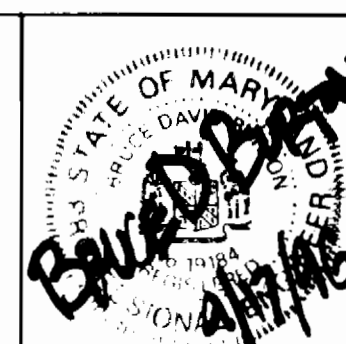
Existing Profiles Per Sewer Contract 529-S & Water Contract 548-W

Sewer Contract No. 529-S / Drawing 16 of 16 / As Built 10.23.76
Water Contract No. 548-W / Drawing 8 of 9 / As Built 11.13.76
Scale: 1" = 50' Horz.
1" = 5' Vert.

DEPARTMENT OF PUBLIC WORKS
9-17-90
R. J. ...
CHIEF-BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
a/c/b/c
CHIEF-DEVELOPMENT ENGINEERING DIVISION

LDE, INC.
9250 RUMSEY ROAD, SUITE 106
COLUMBIA, MARYLAND 21045
(410) 715-1070 (301) 596-3424



DESIGNED	EDS				
DRAWN	BEI				
CHECKED	BDB				
DATE	7/96				
BY	NO.	REVISION	DATE	600 SCALE MAP NO. 47	BLOCK 1

PROFILES

MAGNOLIA MEADOWS I & II

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3569-D

SCALE AS SHOWN
SHEET 3 OF 4

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. (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1. b) 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 (Section G) for permanent seeding, and temporary seeding and mulching. Temporary stabilization with mulch alone can 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	5.9182	Acres ±
Area Disturbed	0.60	Acres ±
Area to be roofed or paved	2.4	Acres
Area to be vegetatively stabilized	0.60	Acres ±
Total Cut	N/A	Cu. Yds.
Total Fill	N/A	Cu. Yds.

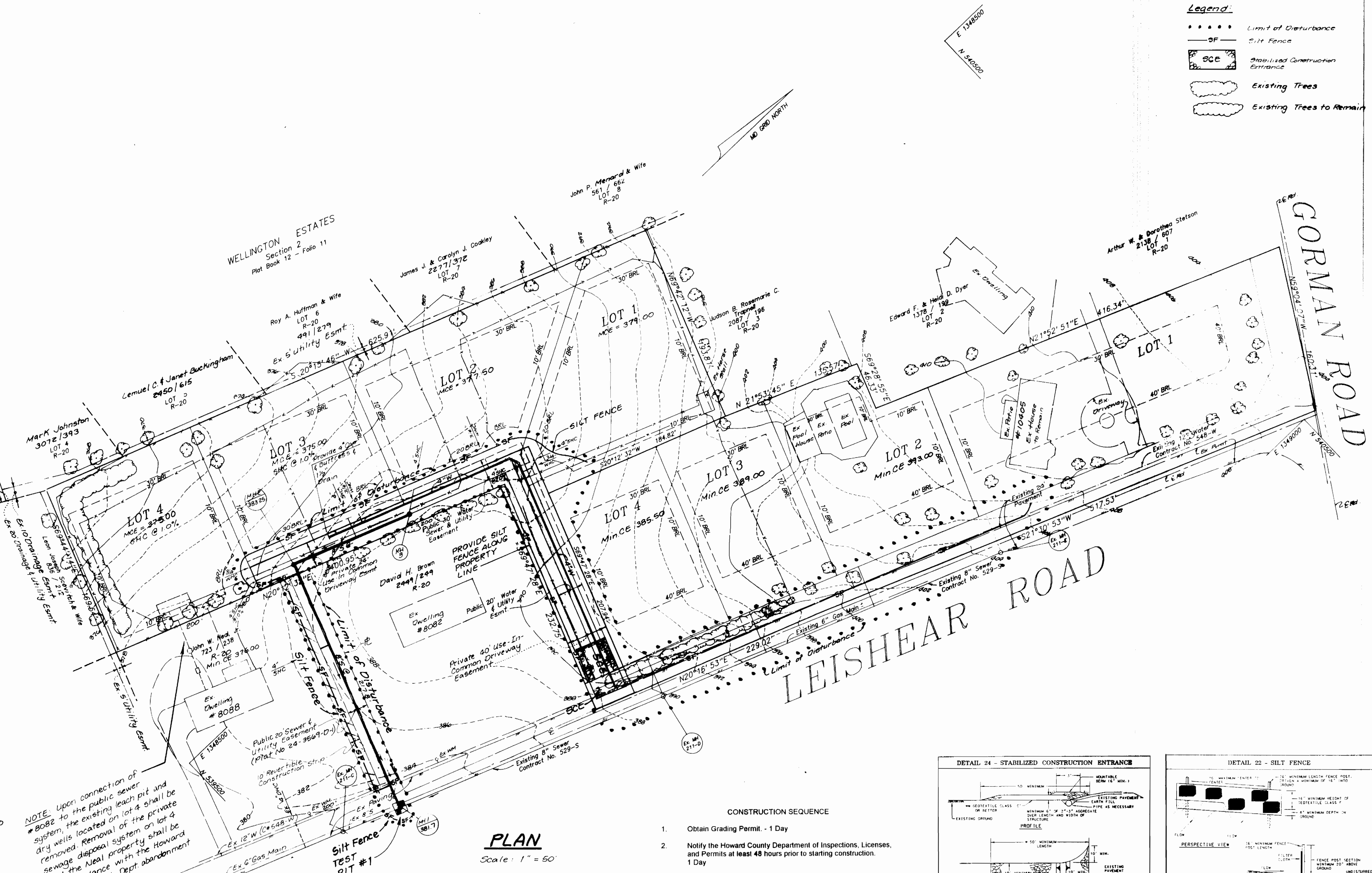
HOWARD SOIL CONSERVATION DISTRICT
PERMANENT SEEDING NOTES

- Apply to grades or cleared areas not subject to immediate further disturbance where a permanent and 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 AMENUMENTS: In lieu of soil test recommendations, use one of the following schedules:
- PREFERRED: Apply 2 tons per acre dolomitic limestone (92 lbs/1000sq. ft.) and 500 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre (9 lbs/1000sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - seed with 60 lbs per acre Kentucky 31 Tall Fescue and mulch 2 tons / acre well anchored straw.
 - ACCEPTABLE: Apply 2 tons per acre dolomitic limestone (92 lbs/1000sq. ft.) and 1000 lbs per 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 thru April 30, and August 1 thru October 15 seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue and 2 lbs. per acre (0.5 lbs/1000sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - seed with 60 lbs per acre Kentucky 31 Tall Fescue and mulch 2 tons / acre well anchored straw.
- MULCHING: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2 1/8 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.
- MAINTENANCE: Inspect all seeding areas and make needed repairs, replacements and reseedings.

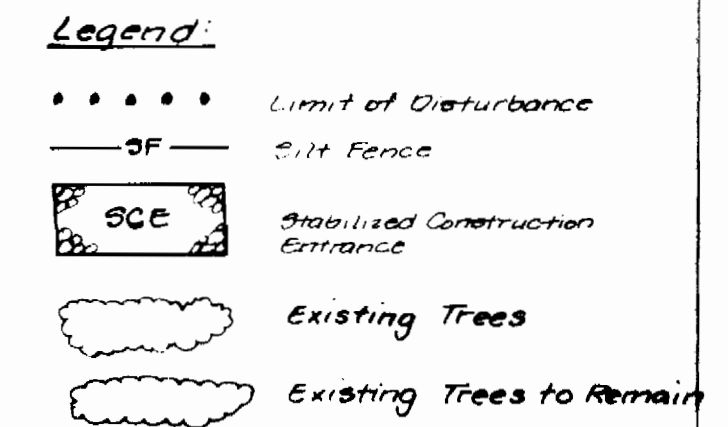
HOWARD SOIL CONSERVATION DISTRICT
TEMPORARY SEEDING NOTES

- Apply to grades or cleared areas likely to be redisturbed 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 AMENUMENTS: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000sq. ft.).
- SEEDING: For periods March 1 thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual rye (3.2 lbs/1000sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 lbs/1000sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per 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 per acre (70 to 90 lbs/1000sq. ft.) of unrotted weed free small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2 1/8 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.
- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

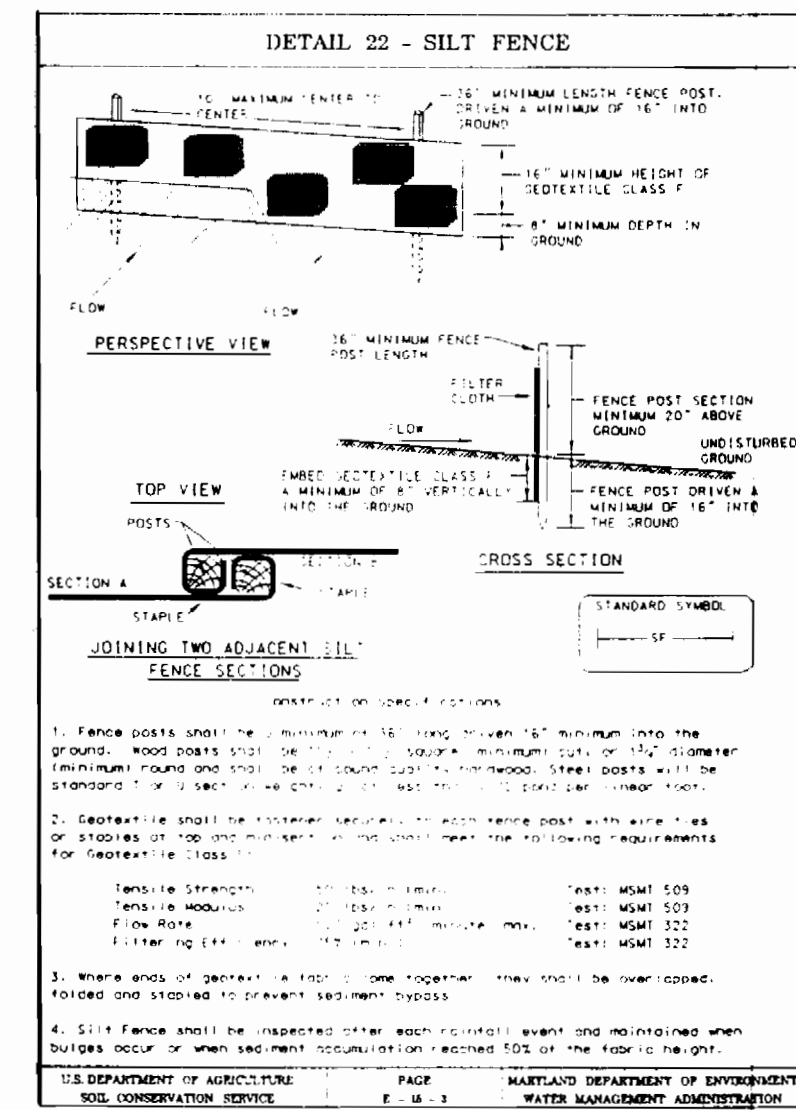
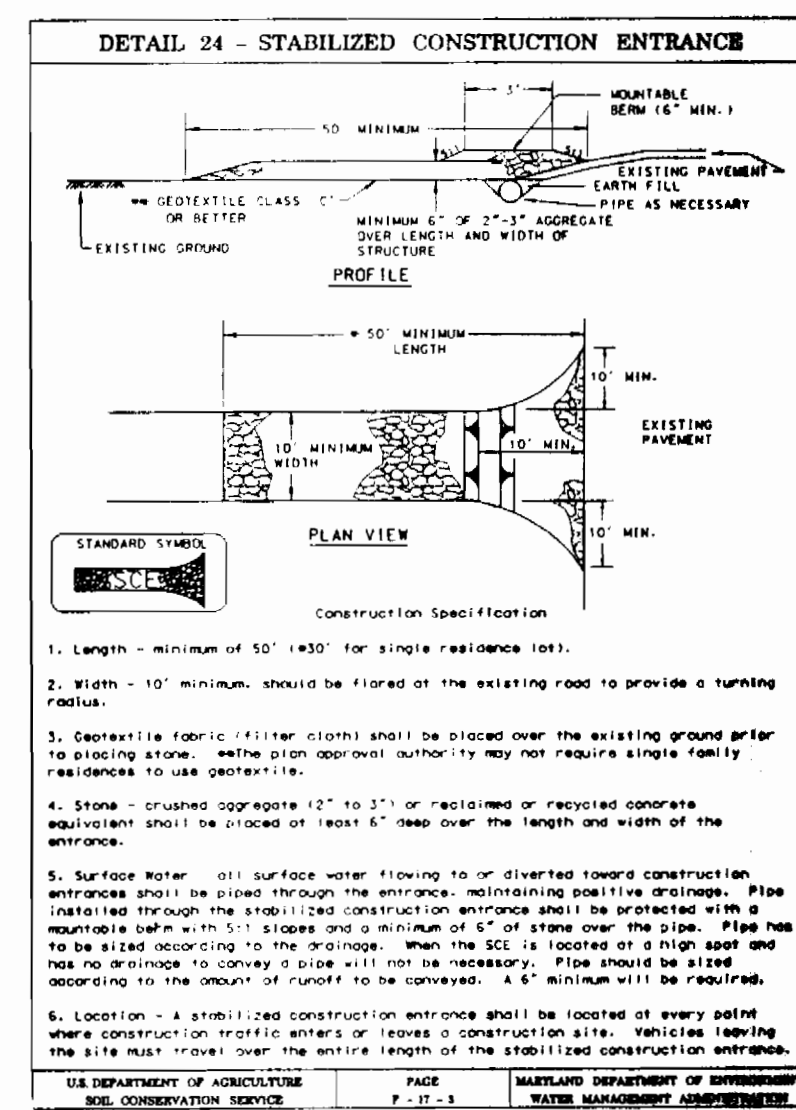
NOTE: Upon connection of #8082 to the public sewer system, the existing leach pit and dry wells located on lot 4 shall be removed. Removal of the private sewage disposal system on lot 4 and the Neal property shall be in accordance with the Howard County Health Dept abandonment procedures.



PLAN
Scale: 1" = 50'



- CONSTRUCTION SEQUENCE
- Obtain Grading Permit. - 1 Day
 - Notify the Howard County Department of Inspections, Licenses, and Permits at least 48 hours prior to starting construction. 1 Day
 - Install stabilized construction entrance. - 1 Day
 - Install silt fence at limit of disturbance where shown. - 1 Day
 - Install Water and Sewer mains. - 2 Weeks
 - Fine grade and construct use-in-common driveway - 1 Week
 - Complete any grading and stabilize disturbed areas with permanent seeding mixture and straw mulch - 1 Day
 - After permission has been given by Sediment Control Inspector, remove silt fence, and stabilize disturbed areas with permanent seeding mixture and straw mulch - 1 Day



Reviewed For Howard Soil Conservation District And Meet Technical Requirements
 J. S. Wofford
 Signature
 Natural Resources Conservation Service
 9/17/96
 Date

This Development Plan is Approved For Soil Erosion and Sediment Control By The Howard Soil Conservation District
 John P. Rubenstein
 Howard Soil Conservation District
 9/17/96
 Date

Engineer's Certificate
 I hereby certify that this plan and Sediment Control represents a practical and feasible design based on my personal knowledge of the site conditions and the requirements of the Howard Soil Conservation District.
 Bruce D. Brown
 Signature of Engineer
 9/17/96
 Date

Developer's Certificate
 I hereby certify that all development and construction will be done according to these plans and that any responsible personnel involved in the construction project will have a certificate of attendance at a development and erosion control seminar held by the Howard Soil Conservation District or its authorized representative.
 M. C. Mauldin
 Signature of Developer
 9/17/96
 Date

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS.

DEPARTMENT OF PUBLIC WORKS
 DEPARTMENT OF PLANNING & ZONING
 9-17-96
 DATE

LDE, INC.
 9250 RAMSEY ROAD, SUITE 106
 COLUMBIA, MARYLAND 21045
 (410) 715-1070 (301) 596-3424

DESIGNED: EDS
 DRAWN: RSL
 CHECKED: EDS
 DATE: 7/96
 BY: NO.
 REVISION: DATE

Sediment and Erosion Control Plan
 800 SCALE MAP NO. 47
 BLOCK 1

MAGNOLIA MEADOWS I & II
 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 Contract No. 24-3569-D
 SCALE: AS SHOWN
 SHEET: 4 OF 4