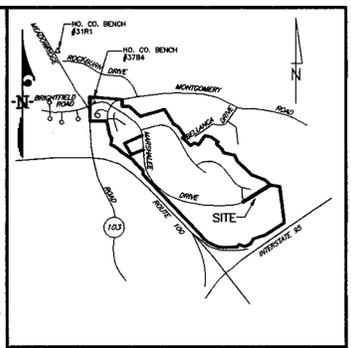


**LEGEND**

- CONTOUR INTERVAL: 2 FT.
- EXISTING CONTOUR: Dashed line
- PROPOSED CONTOUR: Solid line
- DIRECTION OF DRAINAGE: Arrow
- WALK OUT BASINEMENT: Dashed line with dots
- SPOT ELEVATION: +78.4
- STABILIZED CONSTRUCTION ENTRANCE: Solid line with cross-hatch
- EROSION CONTROL MATTING: Dashed line with cross-hatch
- SILT FENCE: Dashed line with cross-hatch
- SUPER SILT FENCE: Dashed line with cross-hatch
- LIMIT OF DISTURBED AREA: Solid line
- CURB INLET PROTECTION: Solid line with cross-hatch
- TREE PROTECTION FENCE: Dashed line with cross-hatch
- EXISTING TREES TO REMAIN: Dotted line
- STONE CHECK DAM: Solid line with cross-hatch



**BENCHMARKS:**  
Howard County Monument #26644004 Elev.402.135  
Howard County Monument #2644005 Elev.416.981

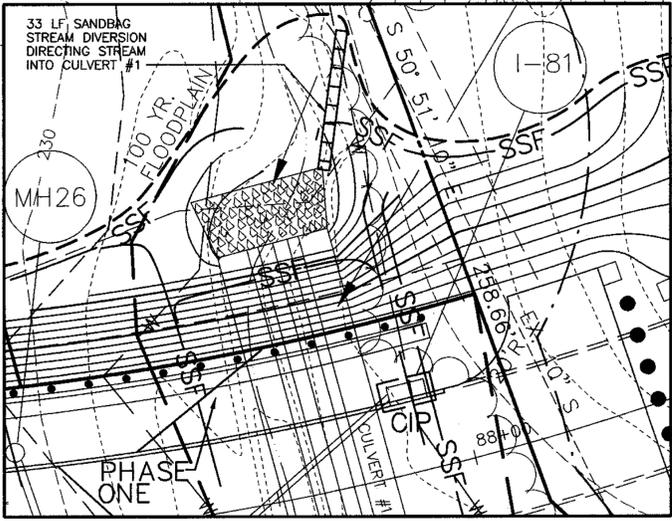
**NOTE:**  
IMMEDIATELY STABILIZE ALL REINFORCED SLOPES IN 10' SLOPE MAINTENANCE EASEMENT WITH CROWNVECH AND TEMPORARY SEED MIXTURE. REFER TO SHEET 11 FOR CROWNVECH SPECIFICATIONS.

EXISTING 100 YEAR FLOODPLAIN AND DRAINAGE & UTILITY EASEMENT  
16 LF CLII RIP-RAP OVER FILTER CLOTH

283LF 10" DIP Ex. 10" Sewer to be abandoned Contract No. 657-5

197 LF TEMPORARY 24" HDPE STREAM DIVERSION PIPE @ 1.7% APPROXIMATE INV. IN=223.5 APPROXIMATE INV. OUT=219.5 CONTRACTOR TO ADJUST IN THE FIELD AS NEEDED.

**NOTE:**  
1. CROSSING THE STREAM WITH EQUIPMENT IS PROHIBITED.  
2. A GEOTECHNICAL ENGINEER MUST BE PRESENT DURING THE CONSTRUCTION OF THE CULVERT CROSSING.



Reviewed for HOWARD S.C.D.  
and meets Technical Requirements  
*Jim Meyer* 2/12/04  
Signature Date  
U.S. Natural Resource Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Robertson* 2/14/04  
Approved

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*William J. Mahan* 3-1-04  
CHIEF, BUREAU OF HIGHWAYS DATE

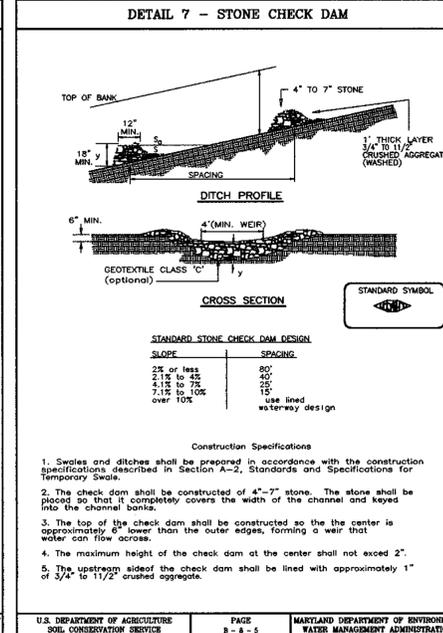
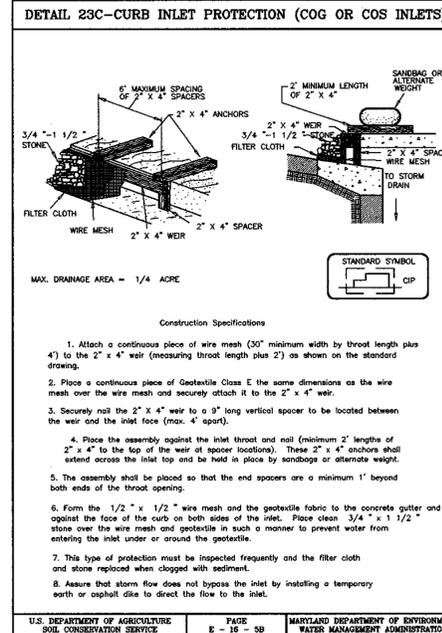
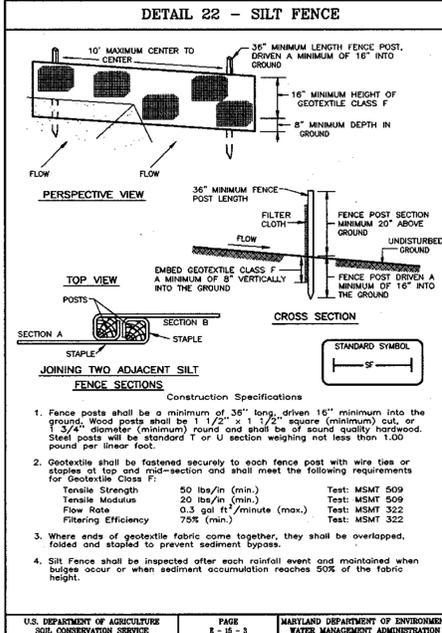
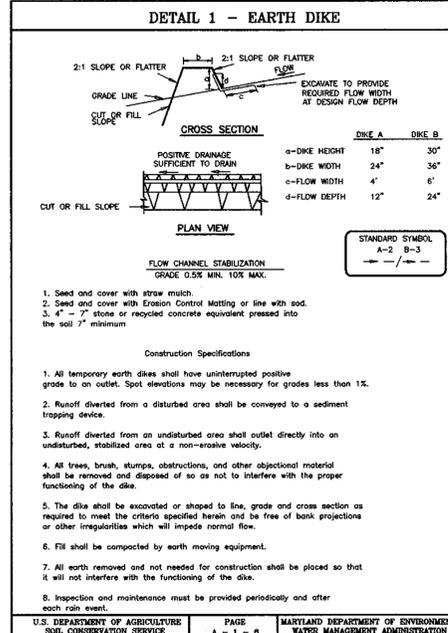
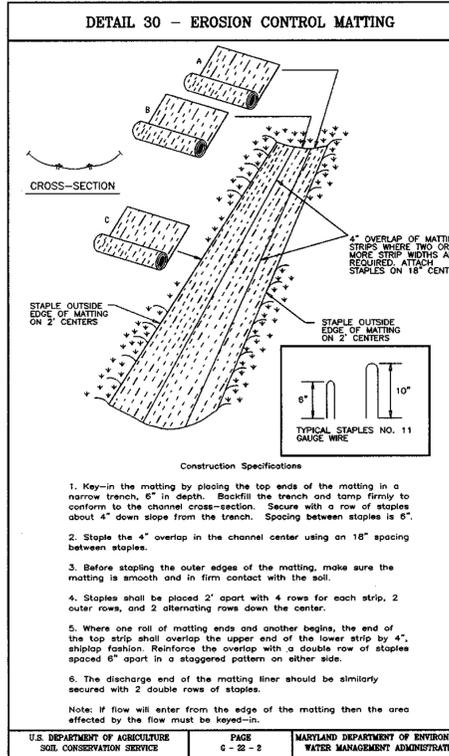
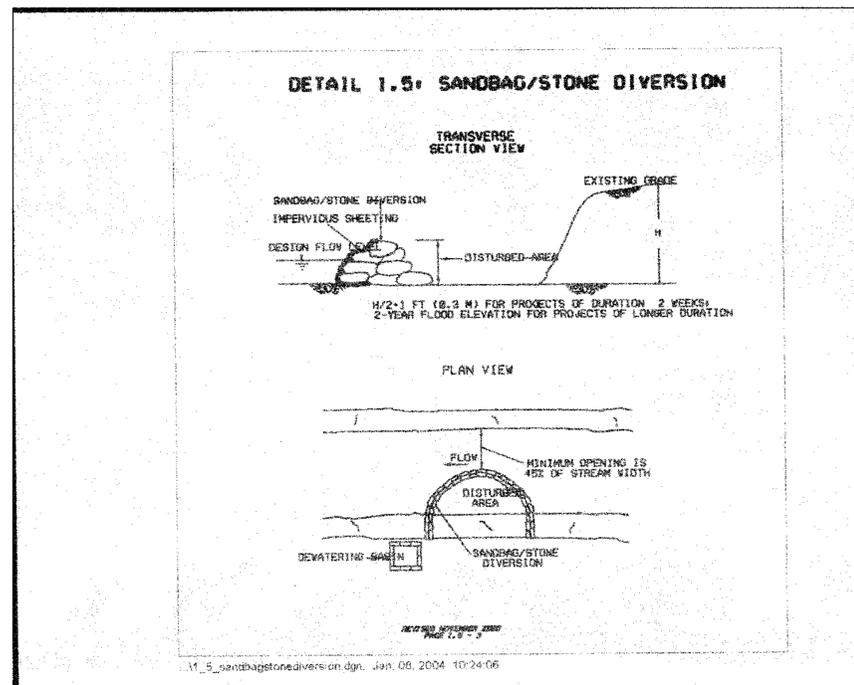
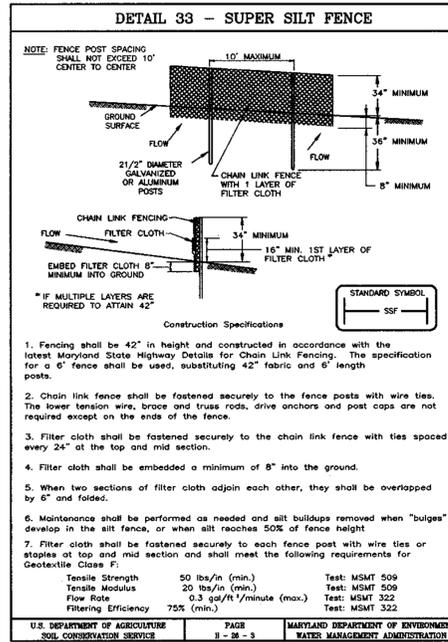
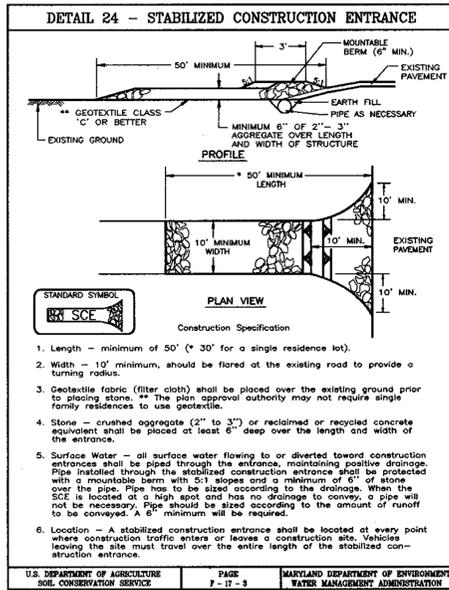
**DEVELOPER'S/BUILDER'S CERTIFICATE**  
I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their subgrantee agents, as are deemed necessary.  
*John M. Kochen* 1/30/04  
JACKSON G. KOCHEN, PRESIDENT DATE

APPROVED: DEPARTMENT OF PLANNING & ZONING  
*Chris Hammett* 3/15/04  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Chris Hammett* 3/15/04  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**NOTE:**  
Replaces Sheet 5 of 12



<b>CLARK · FINFROCK &amp; SACKETT, INC.</b> ENGINEERS · PLANNERS · SURVEYORS 7135 MINSTREL WAY · COLUMBIA, MD 21045 · (410) 381-7500 BALT. · (301) 621-8100 WASH.	
DESIGNED A.S.	SCALE 1" = 50'
DRAWN BC	DRAWING 5A OF 12
CHECKED A.S.	JOB NO. 97-146
DATE 1-30-04	FILE NO. 97-146-X
<b>REVISED ROAD CONSTRUCTION PLAN</b> <b>GRADING, SEDIMENT AND EROSION CONTROL PLAN</b> <b>LYNWOOD MANOR 3/2</b> SECTION THREE AREA TWO 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND DEVELOPER: 100 INVESTMENT LIMITED PARTNERSHIP 1220 ELMHURST ROAD SUITE 200 COLUMBIA, MD 21045	



### SEDIMENT AND EROSION 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 (312-1855).
  - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 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:
    - 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1
    - 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 perimeters 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 seedings, soil, temporary seeding and mulching (Sec. G). 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:                 | 2.2 Ac.        |
| Area to be Stabilized:              | 0.2 Ac.        |
| Area to be vegetatively stabilized: | 1.02 Ac.       |
| Area to be vegetatively stabilized: | 4.88 Ac.       |
| Total Dist.:                        | 25,000 sq. ft. |
| Total Fill:                         | 25,000 cu. yd. |
| Offsite 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 DPW 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 grading or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
  - Trenches for the construction of utilities shall be backfilled and stabilized within one working day, or be limited to three pipe lengths.
  - The total amount of earth dikes = 1190 LF.
  - The total amount of super silt fence = 785 LF.
  - The total amount of silt fence = 920 LF.
- \* It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

### CONSTRUCTION SEQUENCE:

- Obtain Grading Permit. 1 day
- Install stabilized construction entrance. 1 day
- Stakeout limits of disturbance. 3 days
- Walk limits of disturbance with project forester and adjust limits as required.
- Locate tree protection fence. 1 day
- Install phase 1 super silt fence, and clear water diversion dikes at limit of disturbance where shown herein or as directed by Sediment Control Inspector. 2 days
- Excavate overbank areas as shown on stream bed, and stabilize immediately. Clear and grub for installation of Temporary 24" HDPE stream diversion pipe and culvert # 1.
- Construct Temporary 24" HDPE stream diversion pipe and sand bags where shown on plan.
- Excavate culvert # 1 and toswall and the continuously into bedrock. Dewatering from the downslope and into filter bag. Any sediment removed from bag shall be placed up land within an acre of sediment control. Four toswall, culvert # 1 and divert stream into culvert # 1.
- Upon completion of superspan and triple culverts, install Phase 2 super silt fence where shown. Install silt fence for Pond # 6. 1 day
- Remove Temporary 24" HDPE stream diversion and stabilize.
- Install superspan and remaining culverts in coordination with construction of reinforced slope to maintain grid integrate. 3 weeks
- Upon completion of superspan and triple culverts, install Phase 2 super silt fence where shown. Install silt fence for Pond # 6. 1 day
- Construct water quality Pond # 6 in vicinity of structure S-25. Install S-25 to M-25. 7 days.
- Grade remaining site. 1 week
- Install utilities. Brick shut MH 24
- Repair diversion dikes damaged by utility installation and stabilize with permanent seeding mixture and straw mulch.
- The contractor shall inspect and provide necessary maintenance on the sediment and erosion control structures shown herein after each rainfall and on a daily basis. 1 day
- Install curb and gutter, paving. 2 weeks
- Install sidewalks. 1 week
- Complete any grading and stabilize disturbed areas with permanent seeding mixture and straw mulch. 2 days
- After permission has been given by Sediment Control Inspector, remove all fence and stabilize disturbed areas with permanent seeding mixture and straw mulch. 2 days.

Reviewed for HOWARD S.C.D. and meets Technical Requirements.  
 Signature: *John M. Roberts* Date: 2/12/04  
 S. Natural Resource Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Approved: *John K. Roberts* 2/12/04

APPROVED: DEPARTMENT OF PLANNING & ZONING  
 Chief, Development Engineering Division: *[Signature]* 3/4/04  
 Chief, Division of Land Development: *[Signature]* 3/5/04

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 Chief, Bureau of Highways: *[Signature]* 3-1-04

DEVELOPER'S/BUILDER'S CERTIFICATE  
 I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all 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 site inspection by the Howard Soil Conservation District or its representatives, as are deemed necessary.  
 Signature: *John G. Kochen* Date: 1/30/04  
 JACKSON G. KOCHEN, PRESIDENT



**CLARK · FINEFROCK & SACKETT, INC.**  
 ENGINEERS · PLANNERS · SURVEYORS  
 7135 MINSTREL WAY · COLUMBIA, MD 21045 · (410) 381-7500 BALT. · (301) 621-8100 WASH.

DESIGNED	A.S.	SCALE	N/A
DRAWN	B.S.	DRAWING	5B of 12
CHECKED	A.S.	JOB NO.	97-146
DATE	1-30-04	FILE NO.	97-146-X

REVISIONS:  
 REVISED ROAD CONSTRUCTION PLAN  
 SEDIMENT AND EROSION CONTROL DETAILS  
**LYNWOOD MANOR 3/2**  
 SECTION THREE AREA TWO  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 DEVELOPER: 100 INVESTMENT LIMITED PARTNERSHIP  
 2000 ELIZABETH ROAD SUITE 200  
 COLUMBIA, MD 21046

Replacement/Supplemental Sheet  
 [CP&S SERVER DRAWINGS]LYNWOOD MANOR[SEC.DET.DWG(R14)]

F-94-96