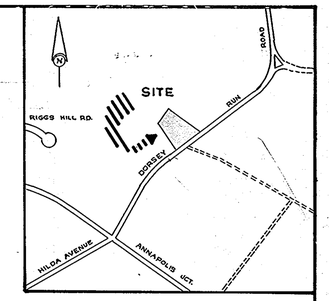
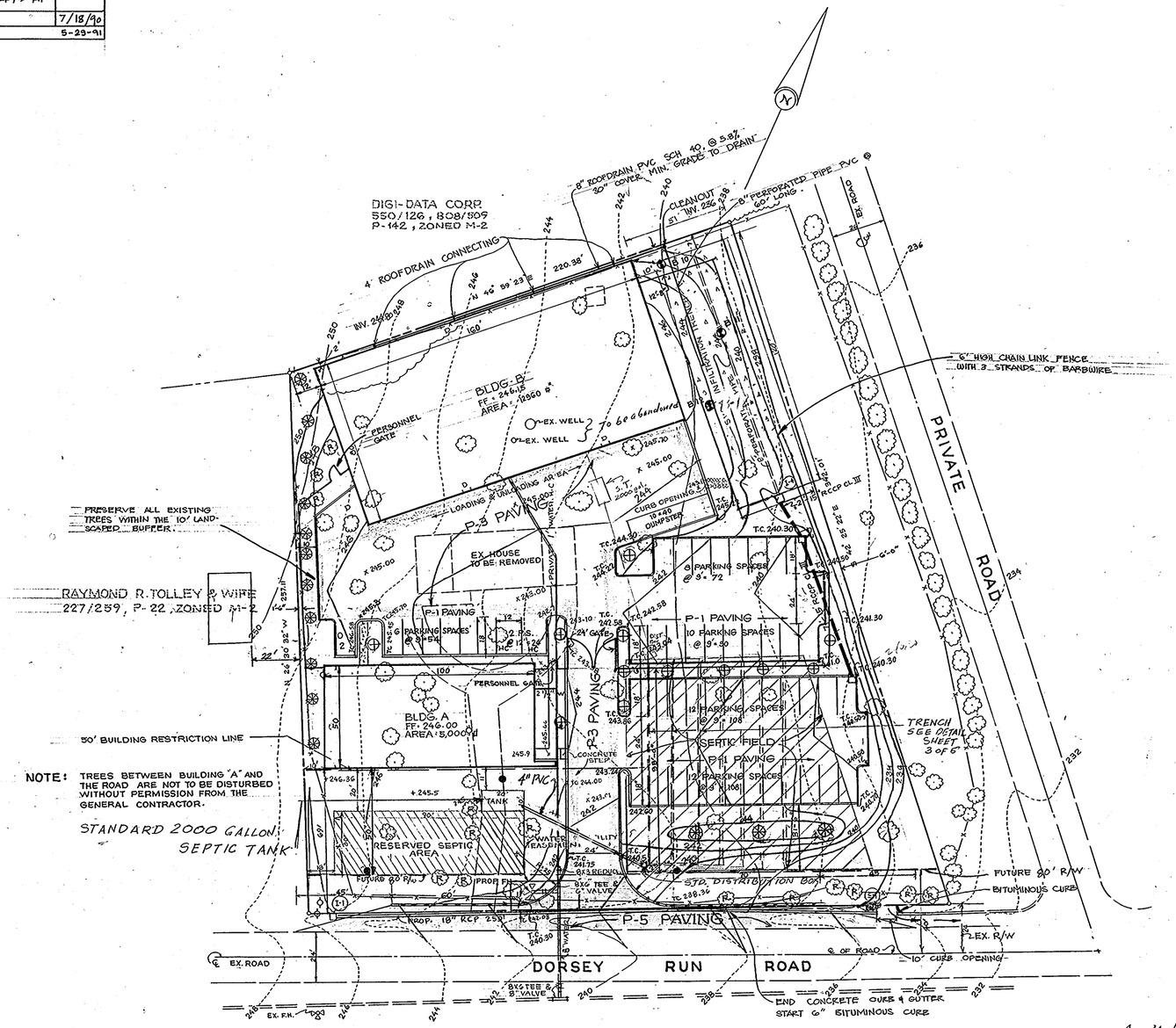
| REVISION | | |
|---|---|---|
| | 10' CURB OPENING AS SHOWN ON RIGHT HAND SIDE OF THE DRAWING | 6/20/90 |
| | BITUMINOUS CURB AND END CONCRETE CURB & GUTTER STARTS AT 6" BITUMINOUS CURB | 6/20/90 |
| GRP | ADD ROOF DRAIN | 7/18/90 |
| GRP | GATE ENTRANCE & CHAIN LINK FENCE | 5-29-91 |

## LANDSCAPE SCHEDULE

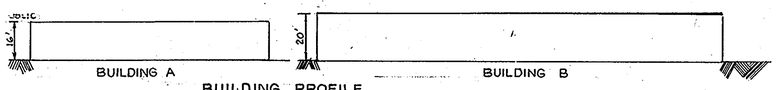
| SYMBOL | BOTANICAL NAME | COMMON NAME | QUANTITY | HEIGHT | CALIPER |
|---|---|---|---|---|---|
| ⊕ | ACERRUBRUM OCTGLORY | OCT GLORY REDMAPLE | 12 | 12'-14' | 2-2½" |
| ⊛ | PINUS STRIBUS | WHITE PINE | 14 | 7'-9' | 2½"-3½" |




VICINITY MAP
SCALE 1"=600'




PLAN
SCALE 1"=30'




BUILDING PROFILE
SCALE 1"=30'

APPROVED
DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MD.
5-22-89
LKS

R EXISTING TREES TO REMAIN

## GENERAL NOTES

1. PRIOR TO THE START OF ANY CONSTRUCTION THE STAKE OUT ALL BASELINES, BUILDING LOCATION, AND CURBS, AND VERIFY OFFSETS AND SETBACKS.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT TELEPHONE NO. (301) 559-0100 AT LEAST 72 HOUR PRIOR TO STARTING EXCAVATION TO VERIFY ALL LOCATIONS OF EXISTING UTILITIES.
3. ALL CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH HOWARD COUNTY, DEPARTMENT OF PUBLIC WORK STANDARDS, SPECIFICATIONS, AND REQUIREMENTS.
4. THE INFORMATION SHOWN ON THESE PLANS IS FOR THE CONVENIENCE OF THOSE CONCERNED ONLY. THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION SHOWN IS NOT WARRANTEED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS OWN AND OWNERS' SATISFACTION.
5. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WITH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
6. ALL DISTURBED AREAS NOT STABILIZED WITH PAVING, BUILDING, SODDING OF MULCH IN PLANTING AREAS SHALL BE SEEDED AND MULCH.
7. BOUNDARY & TOPOGRAPHIC SURVEY FURNISHED BY T&T SURVEYING.

## PARKING DATA

BUILDING "A" = 5000 S.F.
OFFICE = 5,000 S.F. = 20 EMPLOYEES
OFFICE PARKING = 20 x 7/10 = 14 SPACES
BUILDING "B" = 12800 S.F.
WAREHOUSE = 12800 S.F. = 26 EMPLOYEES
WAREHOUSE PARKING = 26/2 = 13 SPACES
TOTAL REQUIRED FOR BUILDING A & B = 27 SPACES

## SITE ANALYSIS

1. AREA OF SITE = 1.8 ACRES
2. MAXIMUM BUILDING HEIGHT = 30'
3. ZONING = M-2, TAX MAP 48,
4. OWNER: JEFF LILLY
   J&R ROOFING INC.
   7798 JESSUP RD.
   JESSUP, MD. 20794
5. SITE USE = OFFICE & WAREHOUSE
6. DENSITY CALCULATIONS:

| | AREA (S.F.) | % COVERAGE |
|---|---|---|
| A. SITE | = 78,408 | |
| B. PROPOSED BUILDING | = 17960 | 22.9% |
| C. PARKING LOT | = 29,405 | 37.50 |
| E. LANDSCAPE ISLANDS | = 2,447 | 8.32 |
| D. OPEN SPACE | = 27,956 | 35.66 |

7. PARKING
   TOTAL REQUIRED = 27 SPACES
   PARKING PROVIDED = 51 SPACES (INCLUDES 2 HANDICAPPED)

## LEGEND

- P-5 PAVING
- P-1 PAVING
- P-3 PAVING (HEAVY DUTY)
- SIDEWALK RAMP
- 251.74 SPOT ELEVATION
- 7" CURB AND GUTTER
- 6" BITUMINOUS CURB
- SOIL BORINGS
- PERCOLATION HOLES
- LIGHT POLE

| ADDRESS CHART | |
|---|---|
| LOT NO. | STREET ADDRESS |
| BLDG. A | 8592 DORSEY RUN ROAD |
| BLDG. B | 8590 DORSEY RUN ROAD |

| SUBDIVISION NAME | | SECT./AREA | | LOT/PARCEL # | |
|---|---|---|---|---|---|
| J.R. DORSEY | | | | P-113 | |
| PLAT # OR L/F | BLOCK # | ZONE | TAX NO. | ELEC DIST | CENSUS TR. |
| 397/578 | 8 | M-2 | 48 | 6 | 6064 |
| WATER CODE B02 | | SEWER CODE NA1 | | | |

APPROVED: DEPT. OF PLANNING AND ZONING
PLANNING DIRECTOR — DATE 8-30-89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 8/21/89 LKS

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEM
HEALTH OFFICER — DATE 7-31-89

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER AND STORM DRAINAGE SYSTEMS AND ROADS
DIRECTOR, PUBLIC WORKS — DATE 8/7/89
CHIEF, BUREAU OF ENGINEERING — DATE 8-4-89

| SUBDIVISION NAME | | SECTION/AREA | PARCEL NO. | | |
|---|---|---|---|---|---|
| PLAT NO | BLOCK NO | ZONE | TAX/ZONE | ELEC DIST | CENSUS TR |
| WATER CODE | | SEWER CODE | | | |

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE — DATE 7/18/89

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
APPROVED:
DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 7/18/89

### ENGINEER'S CERTIFICATE

I HEREBY 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 SOILS CONSERVATION DISTRICT.

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — No. 8236

SIGNATURE OF ENGINEER — DATE 5-22-89

### DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS. AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 7/18/89


LORIA ENGINEERING, INC.
ENGINEERS · PLANNERS · SURVEYORS
5585 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
(301) 465-7777


DESIGNED M.S | DRAWN V.S | CHECKED M.S | DATE

# SITE DEVELOPMENT PLAN
## OFFICE & WAREHOUSE
## J&R DORSEY

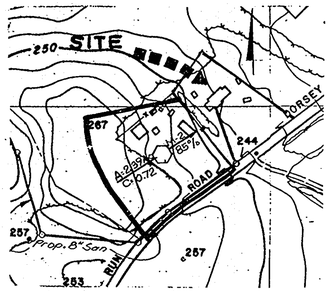
6TH ELECTION DISTRICT, TAX MAP 48, PARCEL 113
HOWARD COUNTY, MARYLAND, 20794

OWNER: JEFF LILLY
J&R ROOFING INC.
7798 JESSUP RD.
JESSUP, MD. 20794

JOB NO. | FILE NO. | SCALE | SHEET NO. 1 OF 5

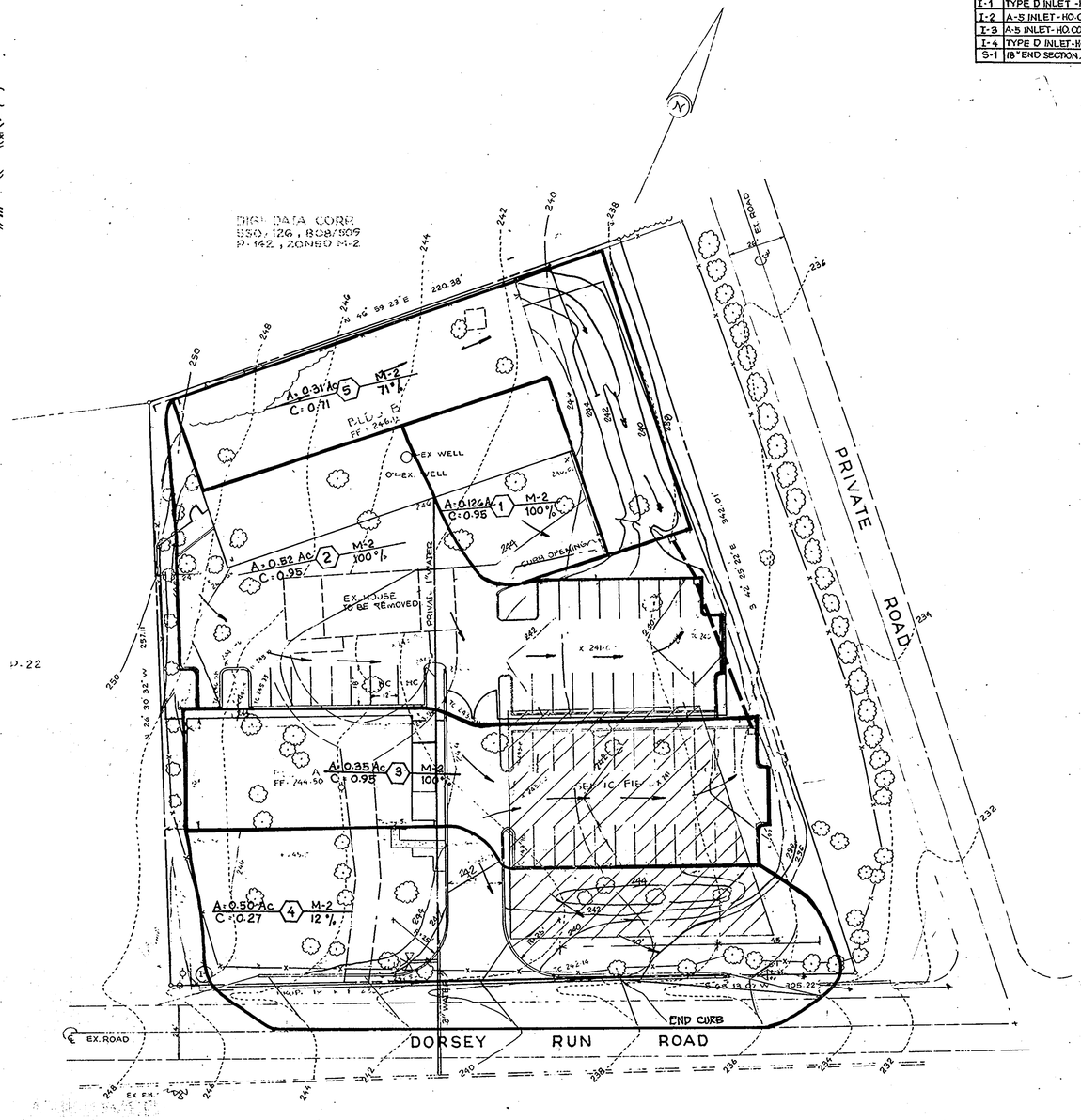
SDP-89-150

| STORM DRAIN STRUCTURE SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| NO | TYPE | TOP ELEV | INV. IN | INV. OUT | LOCATION | REMARKS |
| I-1 | TYPE D INLET - HO.CO.STD.SD-4.11 | 245.0 | – | 239.25 | SEE PLAN | |
| I-2 | A-5 INLET - HO.CO.STD., SD - 4.01 | 240.3 | – | 234.5 | SEE PLAN | |
| I-3 | A-5 INLET - HO.CO.STD., SD - 4.01 | 240.3 | 232.7 | 232.5 | SEE PLAN | |
| I-4 | TYPE D INLET - HO.CO.STD. SD - 4.11 | 240.0 | 232.0 | 231.50 | SEE PLAN | |
| S-1 | 18" END SECTION, HO.CO.STD. SD 5-51 | 235.0 | 233.5 | – | SEE PLAN | |



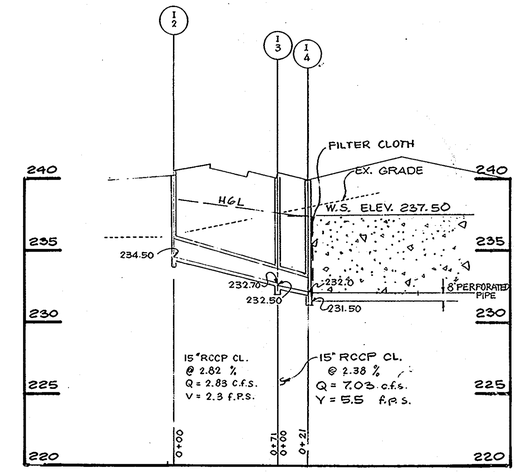

OFFSITE DRAINAGE AREA

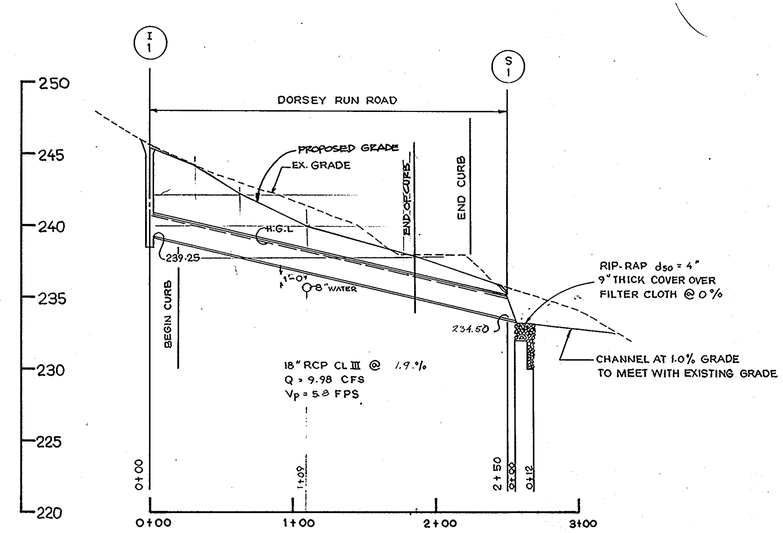
SCALE = 1" = 200'




PLAN

SCALE 1" = 30'




STORM DRAIN PROFILES

SCALE HORIZ. 1" = 50'
VERT. 1" = 5'

APPROVED
DIVISION of
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY,
MARYLAND
DATE 5-22-89
LKS

| GRP | GATE ENTRANCE & CHAIN LINK FENCE | 5-22-91 |
|---|---|---|
| BY | REVISION | DATE |

APPROVED: DEPT. OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 8.30.89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 5/2/89 LKS

APPROVED HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEM

HEALTH OFFICER — DATE 7-31-89

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER AND STORM DRAINAGE SYSTEMS AND ROADS

DIRECTOR, PUBLIC WORKS — DATE 8/7/89

CHIEF, BUREAU OF ENGINEERING — DATE 8.4.89

| SUBDIV. OR PLAT NAME | | | | | |
|---|---|---|---|---|---|
| PLAT NO. | BLOCK NO. | ZONE | TAX MAP | ELEC. DIST. | CENSUS TRACT |
| WATER CODE | | SEWER CODE | | | |

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 7/10/89

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

APPROVED:

DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 7/18/89

ENGINEER'S CERTIFICATE

I HEREBY 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 SOILS CONSERVATION DISTRICT.

STATE OF MARYLAND — RICHARD L. LORIA — No. 10708 — PROFESSIONAL ENGINEER

SIGNATURE OF ENGINEER — DATE 7-6-89

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 7/9/89


LORIA ENGINEERING, INC.
ENGINEERS · PLANNERS · SURVEYORS
3665 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
(301) 465-7777


DESIGNED
DRAWN
CHECKED
DATE

# DRAINAGE AREA MAP & STORM DRAIN PROFILES

J & R DORSEY

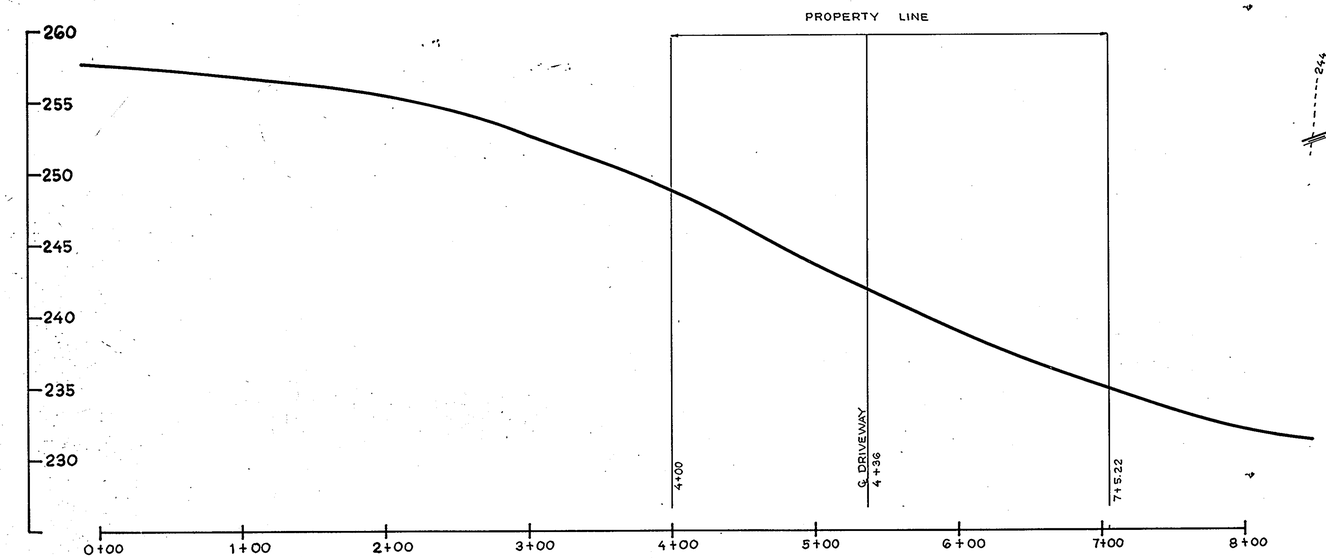
6TH ELECTION DISTRICT, TAX MAP 48, PARCEL 113

HOWARD COUNTY, MARYLAND, 20794

OWNER: JEFF LILLY
J&R ROOFING INC.
7798 JESSUP RD.
JESSUP, MD. 20794

SDP-89-150

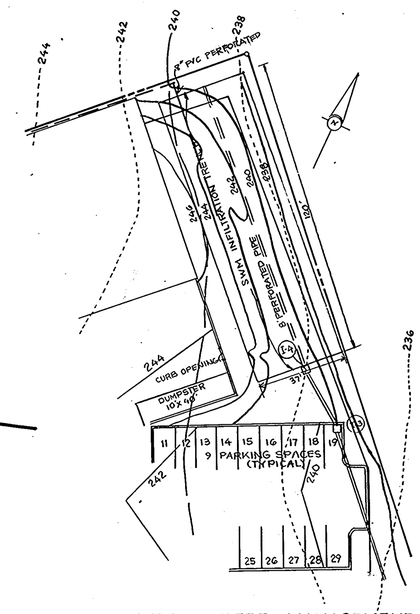
JOB NO.
FILE NO.
SCALE
SHEET NO. 2 OF 5




## ROAD PROFILE
## DORSEY RUN ROAD

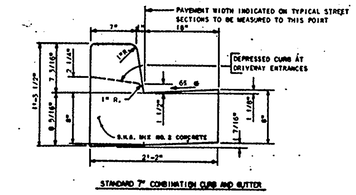
SCALE HORIZ. 1"=50'
VERT. 1"=5'

| BY | REVISION | DATE |
|---|---|---|
| GEB | GATE ENTRANCE & CHAIN LINK FENCE | 5-29-91 |



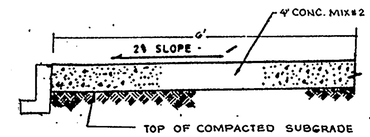

## STORM WATER MANAGEMENT INFILTRATION TRENCH

SCALE: 1"=30'



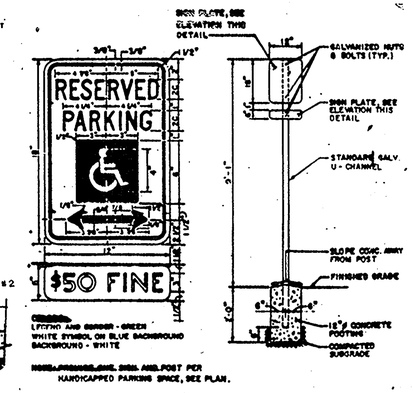

## CURB & GUTTER DETAIL

NO SCALE



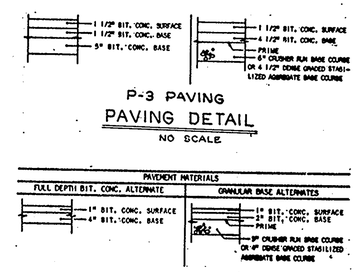

## SIDEWALK DETAIL

NO SCALE




## HANDICAPPED SIGN AND POST

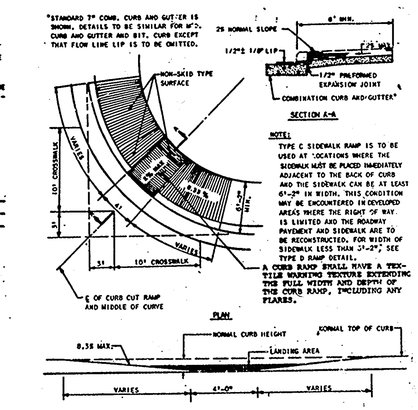
NOT TO SCALE




## P-3 PAVING
## PAVING DETAIL

NO SCALE

## P-1 PAVING



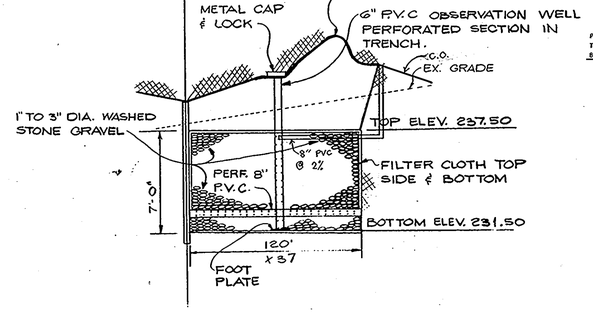

NOTE:
TYPE C SIDEWALK RAMP IS TO BE USED AT LOCATIONS WHERE THE SIDEWALK MUST BE PLACED IMMEDIATELY ADJACENT TO THE BACK OF CURB AND THE SIDEWALK CAN BE AT LEAST 6'-2" IN WIDTH. THIS CONDITION MAY BE ENCOUNTERED IN DEVELOPED AREAS WHERE THE RIGHT OF WAY IS LIMITED AND THE ROADWAY PAVEMENT AND SIDEWALK ARE TO BE RECONSTRUCTED. FOR WIDTH OF SIDEWALK LESS THAN 5'-2", SEE TYPE D RAMP DETAIL.
A CURB RAMP SHALL HAVE A TEXTILE WARNING TEXTURE EXTENDING THE FULL WIDTH AND DEPTH OF THE CURB RAMP, INCLUDING ANY FLARES.

## SIDEWALK RAMP DETAIL

NO SCALE

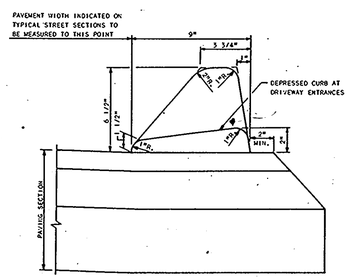
Typical Evergreen Tree Planting Detail

Not to Scale

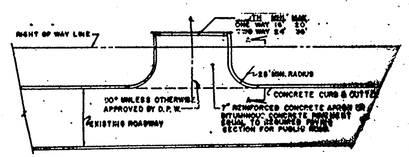



## S.W.M. INFILTRATION TRENCH DETAIL

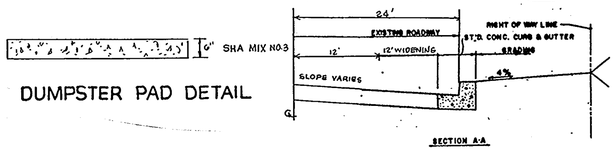
SCALE: HORI: 1"=50'
VERT: 1"=5'




STANDARD BITUMINOUS CURB

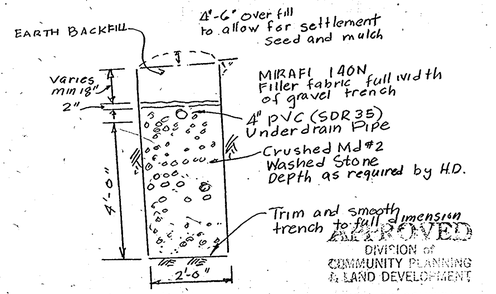



SECTION




## DUMPSTER PAD DETAIL

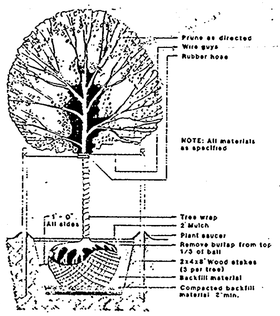
## DORSEY RUN ROAD WIDENING




APPROVED
DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
5-22-89

## TYPICAL TRENCH SECTION

NOT TO SCALE LWS




Typical Deciduous Tree Planting Detail

Not to Scale

| SECTION NUMBER | ROAD AND STREET CLASSIFICATION | PAVEMENT MATERIALS: FULL DEPTH BIT. CONC. ALTERNATE | PAVEMENT MATERIALS: GRANULAR BASE ALTERNATES |
|---|---|---|---|
| P-5 | COMMERCIAL-INDUSTRIAL ZONES<br>MAJOR COLLECTOR<br>ALL ZONES<br>MINOR ARTERIALS | 1 1/2" BIT. CONC. SURFACE<br>4 1/2" BIT. CONC. BASE<br>5" BIT. CONC. BASE | 1 1/2" BIT. CONC. SURFACE<br>1 1/2" BIT. CONC. BASE<br>5" BIT. CONC. BASE<br>PRIME<br>8" CRUSHER RUN BASE COURSE<br>(2 COURSES OR 6" CONE GRADED STABILIZED AGGREGATE BASE COURSE) |

## P-5 PAVING

STATE OF MARYLAND — DONALD L. LORIA — NO. 9220 REGISTERED PROFESSIONAL ENGINEER

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 7-31-89
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 8.30.89
CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 8/30/89 LWS
APPROVED: FOR PUBLIC WATER AND STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 8/7/89
CHIEF BUREAU OF ENGINEERING — DATE 8.4.89

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE — DATE 7/18/89
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:
DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 7/18/89


LORIA ENGINEERING, INC.
Engineers · Site Planners · Surveyors
3 ELLICOTT MILLS DRIVE
Ellicott City, MD 21043
(301) 465-0400


ENGINEER'S CERTIFICATE

I HEREBY 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 SOILS CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER — DATE 5-22-89

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS. AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 7/9/89

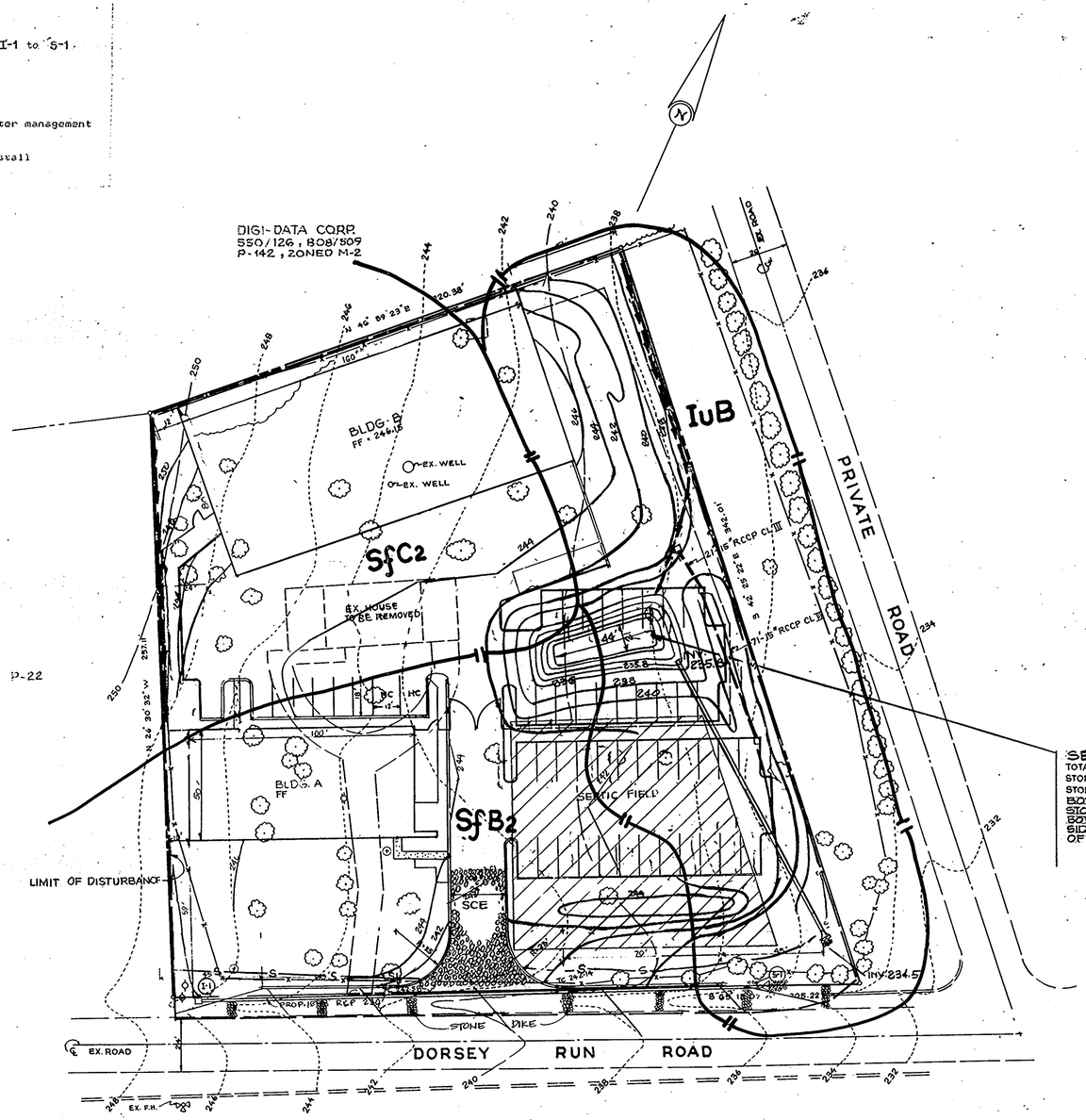
| SUBDIVISION NAME | | | SECTION / AREA | | PARCEL No. | |
|---|---|---|---|---|---|---|
| J & R DORSEY | | | | | | |
| PLAT No. | BLOCK No. | ZONE | TAX / ZONE | ELEC. DIST. | CENSUS TR. | |
| 397/578 | 8 | M-2 | 48 | 6 | 6069 | |
| WATER CODE | B 02 | | SEWER CODE | N.A. | | |

| | | |
|---|---|---|
| DESIGNED | STORM WATER MANAGEMENT<br>ROAD PROFILE & DETAILS<br>J & R DORSEY<br>TAX MAP 48, PARCEL 113<br>6TH ELECTION DISTRICT<br>HOWARD COUNTY, MD, 20794 | SCALE: |
| DRAWN | | DRAWING 3 OF 5 |
| CHECKED | | JOB NO. |
| DATE | OWNER: JEFF LILLY<br>J & R ROOFING INC.<br>7798 JESSUP RD.<br>JESSUP, MD 21043 | FILE NO. |

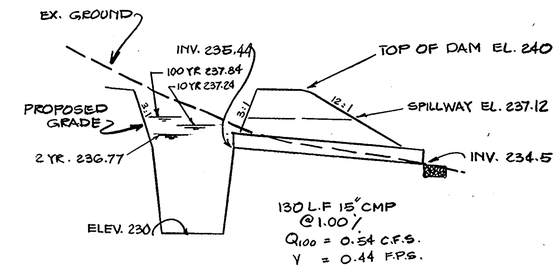
SDP-89-150

SEQUENCE OF CONSTRUCTION:

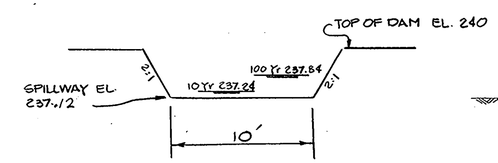
1. Obtain Grading Permit.
2. Install sediment and erosion control measures and temporary stormwater management pond. Install I-1 to S-1.
3. Cap wells
d. Install SWM infiltration trench. Temporarily cap pipe to trench.
5. Clear and rough grade site. Demolish building.
6. General excavation and temporary stabilization.
7. Install septic tank and construct utilities.
8. Install paving outside the temporary stormwater management pond.
9. Stabilize site.
10. Remove temporary stormwater management pond, install inlets and paving.
11. Plant landscaping trees..



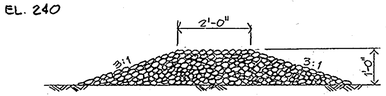

PLAN
SCALE 1"=30'




SECTION THROUGH TEMPORARY S.W.M. DAM
SCALE: HORIZ: 1"=50'
VERT: 1"=5'

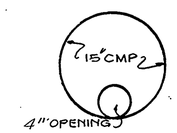



SPILLWAY
N.T.S.



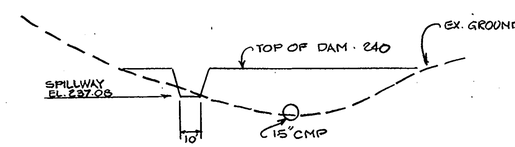

STONE-DIKE DETAIL
N.T.S.

SEDIMENT TRAP #1
TOTAL DRAINAGE AREA = 1.81 Ac
STORAGE REQUIRED = 3,258 CU. FT.
STORAGE PROVIDED = 4005 CU. FT.
BOTTOM EL. = 230
STORAGE EL. = 234.8
BOTTOM DIMENSION = 22'X12'
SIDE SLOPE BELOW INVERT OF PIPE = 1:1




* WELD A PLATE TO 15" CMP W/ 4" OPENING

ORIFICE PIPE
N.T.S.




SECTION ALONG DAM
SCALE: H: 1"=50'
V: 1"=5'

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 5-22-89
LWS

| | | |
|---|---|---|
| GP | GATE ENTRANCE & CHAIN LINK FENCE | 5-25-91 |
| BY | REVISION | DATE |

APPROVED: DEPT. OF PLANNING AND ZONING
PLANNING DIRECTOR — DATE 8-30-89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 8/21/89 LWS

APPROVED HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEM
HEALTH OFFICER — DATE 7-31-89

APPROVED DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER AND SEWER AND STORM DRAINAGE SYSTEMS AND ROADS
DIRECTOR, PUBLIC WORKS — DATE 8/7/89
CHIEF, BUREAU OF ENGINEERING — DATE 8-4-89
SOLD, SUB NAME | SEC | LOT | NAME
PLAT NO | BLOCK NO | ZONE | TAX MAP | ELEC DIST | CENSUS TR
WATER CODE | SEWER CODE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE — DATE 7/18/89
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
APPROVED:
DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 7/18/89

ENGINEER'S CERTIFICATE

I HEREBY 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 SOILS CONSERVATION DISTRICT.

STATE OF MARYLAND — RICHARD C. LORIA — No. 10001 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE OF ENGINEER — DATE 7-8-89

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS. AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 7/9/89


LORIA ENGINEERING, INC.
ENGINEERS · PLANNERS · SURVEYORS
3628 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
(301) 465-7777


| | |
|---|---|
| DESIGNED | M.F |
| DRAWN | V.S |
| CHECKED | M.S |
| DATE | |

SEDIMENT & EROSION CONTROL PLAN & SOIL MAP
J & R DORSEY
6TH ELECTION DISTRICT, TAX MAP 48, PARCEL 113
HOWARD COUNTY, MARYLAND, 20794

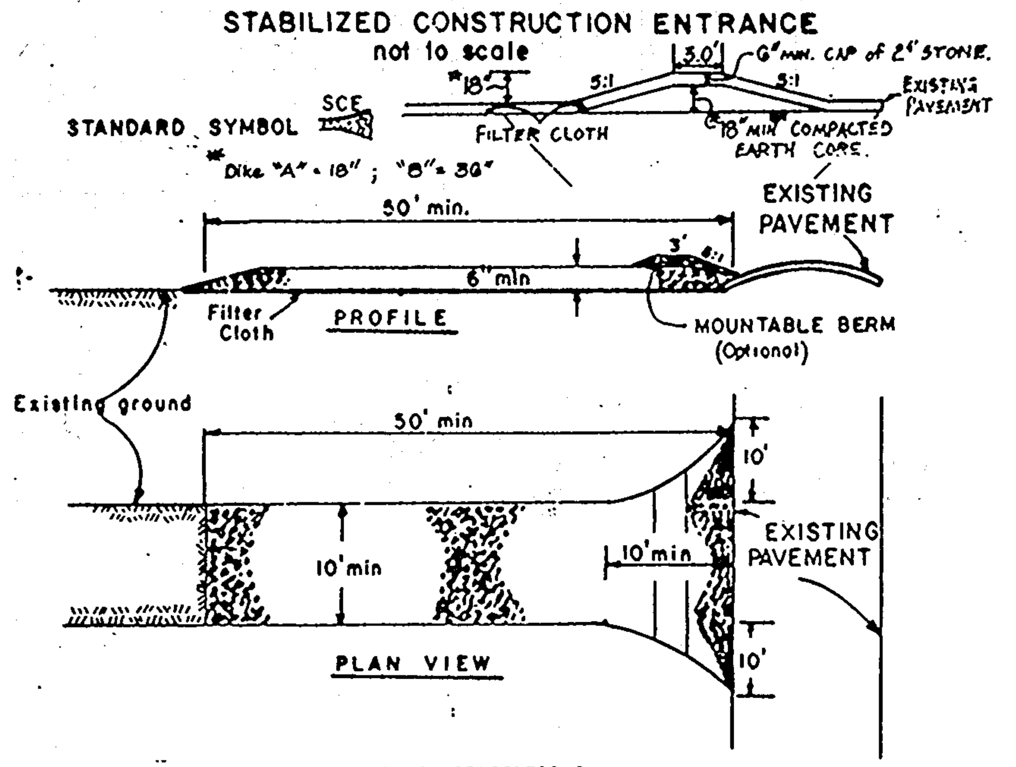
OWNER: JEFF LILLY
J&R ROOFING INC.
7798 JESSUP RD.
JESSUP, MD. 21043

JOB NO.
FILE NO.
SCALE
SHEET NO. 4 OF 5

SDP-89-150

## STABILIZED CONSTRUCTION ENTRANCE

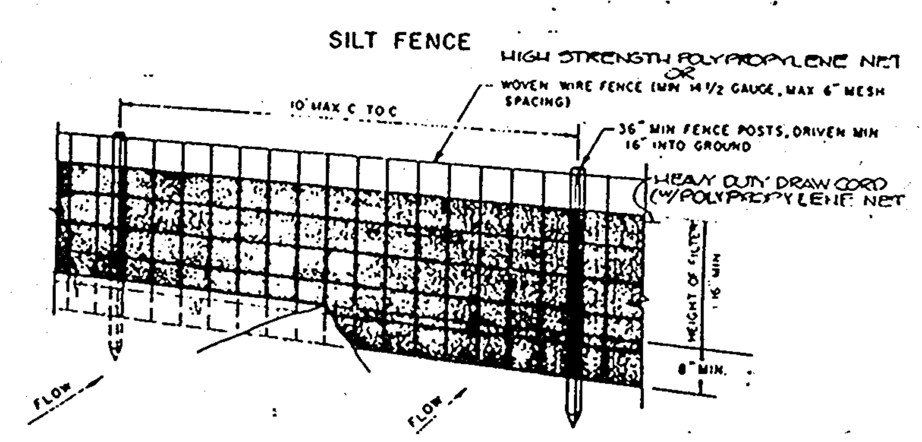
not to scale

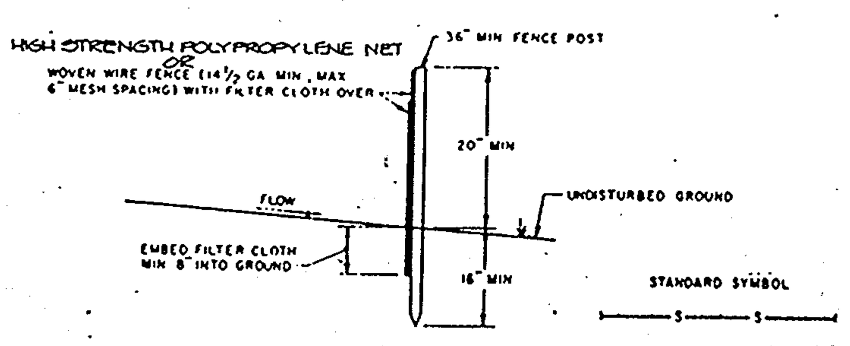



### CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

## SILT FENCE




### CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
3. When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
4. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

POSTS: Steel either T or U type or 1 1/4" x 1 1/4" Min (Actual) hardwood

FENCE: Woven wire, 14 Ga. 6" Max. Mesh Opening
High strength polypropylene netting

FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka T140N or approved equal

PREFABRICATED UNIT: Geofab, Envirofence, or approved equal.

## PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FUTURE DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES.

1.) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 square ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9lbs./1000 sq. ft.)

2.) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc 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./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq. 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./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ 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 218 gallons per acre (5 gal./1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

## TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

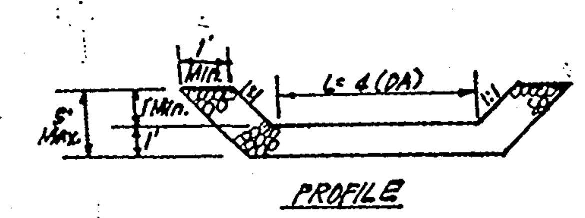
Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.

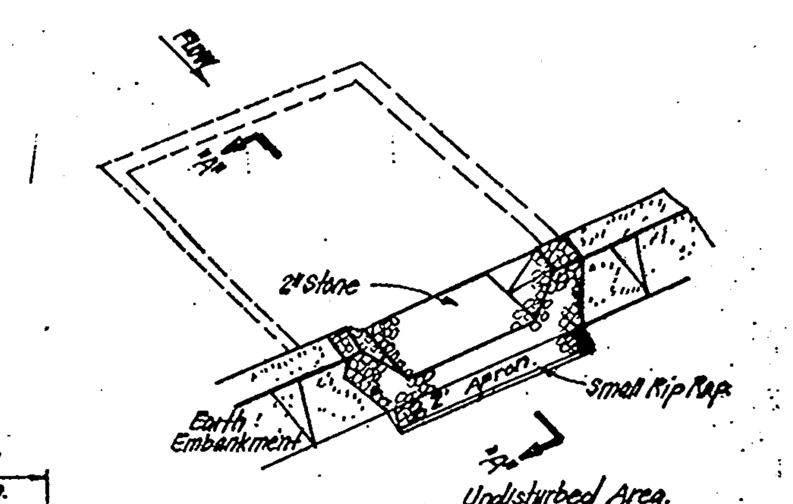
Soil Amendments: Apply 60 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.)

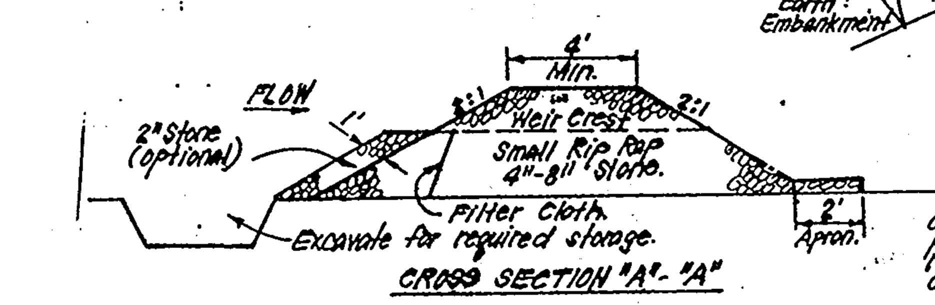
Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bu. per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 16 thru February 28, protect 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 1½ 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 218 gal. per acre (5 gal./1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq,ft.) for anchoring.

REFER TO THE 1983 MD. STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.




OPTION: A 1' layer of 2" Stone may be placed on the upstream side of the rip rap in place of embedded filter cloth.

### CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip-rap 4"-8" along with 1' thickness of 2" aggregate placed on the up-grade side on the small rip rap or embedded filter cloth in the rip rap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner than erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

## STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST-V.

NO SCALE

## STANDARD AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION WITH SOD

### SPECIFICATIONS

1. Class of turfgrass sod shall be Maryland or Virginia State Certified, or Maryland or Virginia State approved sod.
2. Sod shall be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness shall exclude top growth and thatch.
3. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
4. Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
5. Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
6. Sod shall be harvested, delivered and installed within a period of 36 hours. Sod not transplanted within this period shall be inspected and approved prior to its installation.

I. Site Preparation

Fertilizer and lime application rates shall be determined by soil tests. Under unusual circumstances where there is insufficient time for a complete soil test, fertilizer and lime materials may be applied in amounts shown under B, below.

A. Prior to sodding, the surface shall be cleared of all trash, debris, and of all roots, brush, wire, grade stakes and other objects that would interfere with planting, fertilizing or maintenance operations.

B. Where the soil is acid or composed of heavy clays, ground limestone shall be spread at the rate of 2 tons/acre or 100 pounds per 1,000 square feet. In all soils 1,000 pounds per acre or 25 pounds per 1,000 square feet of 10-10-10 fertiliser or equivalent shall be uniformly applied and mixed into the top 3 inches of soil with the required lime.

C. All areas receiving sod shall be uniformily fine graded Hard-packed earth shall be scarefied prior to placement of sod.

### SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 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.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. I, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) 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
7) Site Analysis:
   Total Area of Site 1.81 Acres
   Area Disturbed 1.81 Acres
   Area to be roofed or paved 1.05 Acres
   Area to be vegetatively stabilized 0.75 Acres
   Total Cut ____ Cu. yds
   Total Fill ____ Cu. yds
   Offsite waste/borrow area location N/A
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) 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.
11) If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
12) All pipes to be blocked at the end of each day (see detail below).
13) The total amount of straw bale dikes/silt fence equals 0.645 L.F.

## GENERAL NOTES

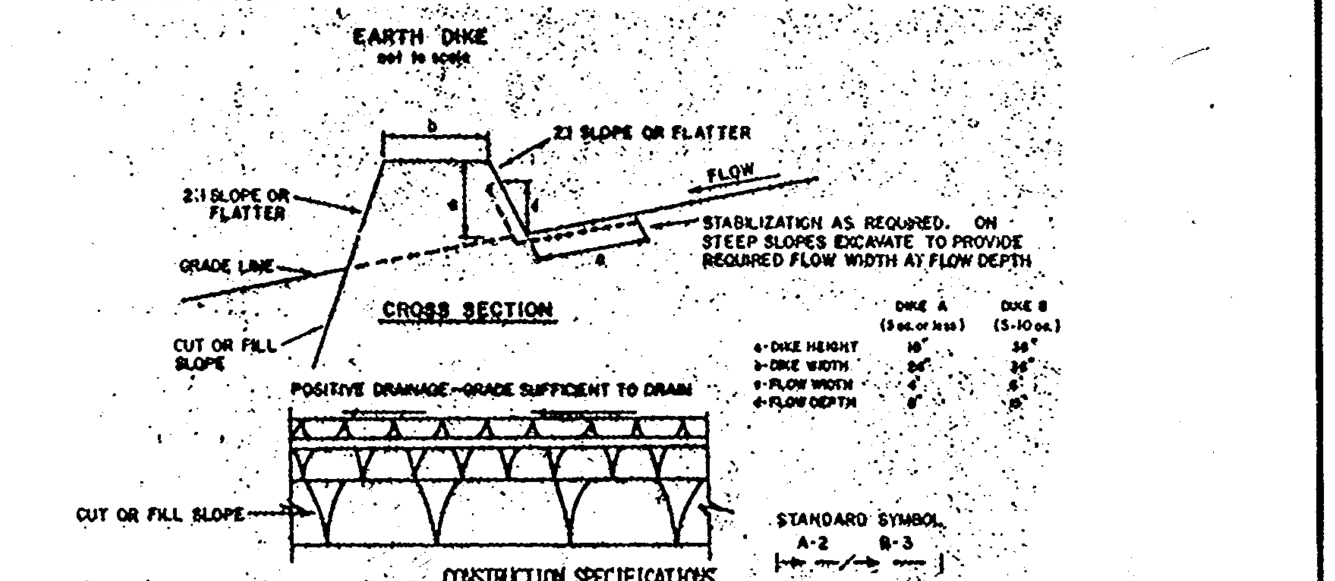
1) Refer to "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for standard details and detailed specifications of each practice specified herein.
2) With the approval of the sediment control inspector, minor field adjustments can and will be made to insure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the County Soil Conservation District.
3) At the end of each working day, all sediment control practices will be inspected and left in operational condition.
4) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a.) seven calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and b.) fourteen days as to all other disturbed or graded areas on the project site.
5) Any change to the grading proposed on this plan requires re-submission to County Soil Conservation District for approval.
6) Dust control will be provided for all disturbed areas. Refer to 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control, pp 6201 and 62.02 for acceptable methods and specifications for dust control.
7) Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the County Soil Conservation District prior to the initiation of the change.
8) Excess cut or borrow material shall go to or come from, respectively, a site with an approved sediment control plan.

The following item may be used as applicable:

9) Refer to "Maryland's Guidelines to Waterway Construction" by the Water Resources Administration (WRA), dated January, 1986 for standard details and detailed specifications of each practice specified herein for waterway construction.

## EARTH DIKE

not to scale




| | DIKE A (5 ac. or less) | DIKE B (5-10 ac.) |
|---|---|---|
| a-DIKE HEIGHT | 18" | 30" |
| b-DIKE WIDTH | 24" | 36" |
| c-FLOW WIDTH | 4' | 6' |
| d-FLOW DEPTH | 8" | 15" |

### CONSTRUCTION SPECIFICATIONS

1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per the chart below.

### FLOW CHANNEL STABILIZATION

| TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|---|---|---|---|
| 1 | .5-3.0% | Seed and Straw Mulch | Seed and Straw Mulch |
| 2 | 3.1-5.0% | Seed and Straw Mulch | Seed using Jute, or Excelsior; Sod; 2" Stone |
| 3 | 5.1-8.0% | Seed with Jute, or Sod; 2" Stone: | Lined Rip-Rap 4-8" |
| 4 | 8.1-20% | Lined Rip-Rap 4-8" | Engineering Design |

A. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
B. Rip-Rap to be 4-8 inches in a layer at least 8 inches thickness and pressed into the soil.
C. Approved equivalents can be substituted for any of the above materials.

7. Periodic inspection and required maintenance must be provided after each rain event.

EARTH DIKE

NO SCALE

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 5-22-89
LKS

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
[signature] 7-31-89
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[signature] 8-30-89
PLANNING DIRECTOR — DATE
[signature] 8/21/89
CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE
LKS

APPROVED: FOR PUBLIC WATER, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Granville W. Wehland 8/7/89
DIRECTOR — DATE
William E. Riley 8-4-89
CHIEF BUREAU OF ENGINEERING — DATE

Reviewed for SCD and meets technical requirements
Name [signature] 7/18/89
Signature — Date
U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.
[signature] 7/18/89
Approved — 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 EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

[signature] 7/9/89
DEVELOPER/BUILDER — DATE

### ENGINEER'S CERTIFICATE

I HEREBY 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 COUNTY SOIL CONSERVATION DISTRICT.

[seal: STATE OF MARYLAND, MEDALDO L. LORIA, NO. 9223, REGISTERED PROFESSIONAL ENGINEER]
[signature] 5-23-89
DATE

**LORIA ENGINEERING, INC.**
Engineers • Site Planners • Surveyors
3565 ELLICOTT MILLS DRIVE
Ellicott City, MD 21043
(301) 465-7777

| DESIGNED | SEDIMENT & EROSION CONTROL DETAILS | SCALE AS SHOWN |
|---|---|---|
| DRAWN | J&R DORSEY | DRAWING 5 OF 5 |
| CHECKED | 6TH ELECTION DISTRICT, TAX MAP 48, PARCEL 113 HOWARD COUNTY, MD. 20794 | JOB NO. |
| DATE | OWNER: JEFF LILLY, J&R ROOFING INC., 2798 JESSUP RD., JESSUP, MD. 20794 | FILE NO. |

SDP-89-150