

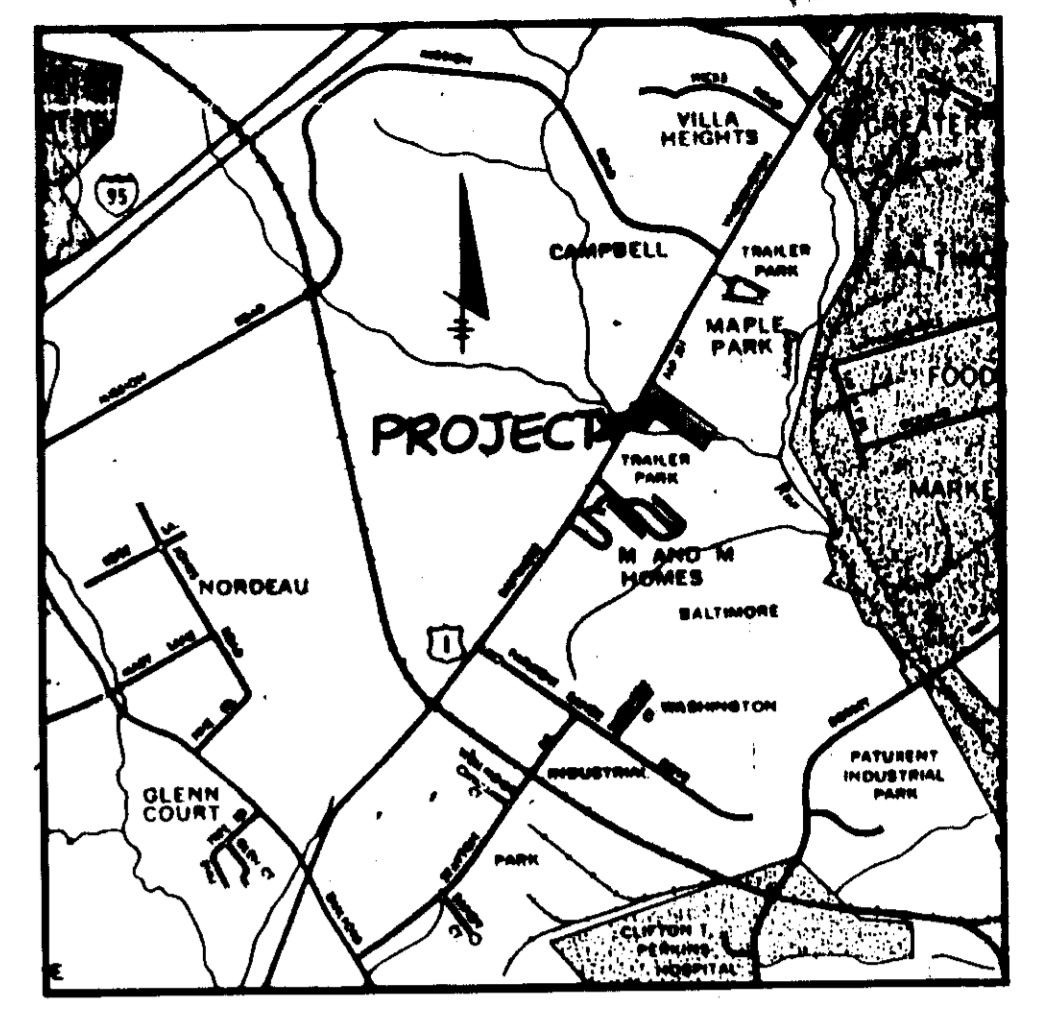
SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	PROFILES AND DETAILS
4	GRADING AND SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL NOTES AND DETAILS
6	PLANTING PLAN

# SITE DEVELOPMENT PLAN

# WATERLOO MINI-STORAGE

## 6TH ELECTION DISTRICT

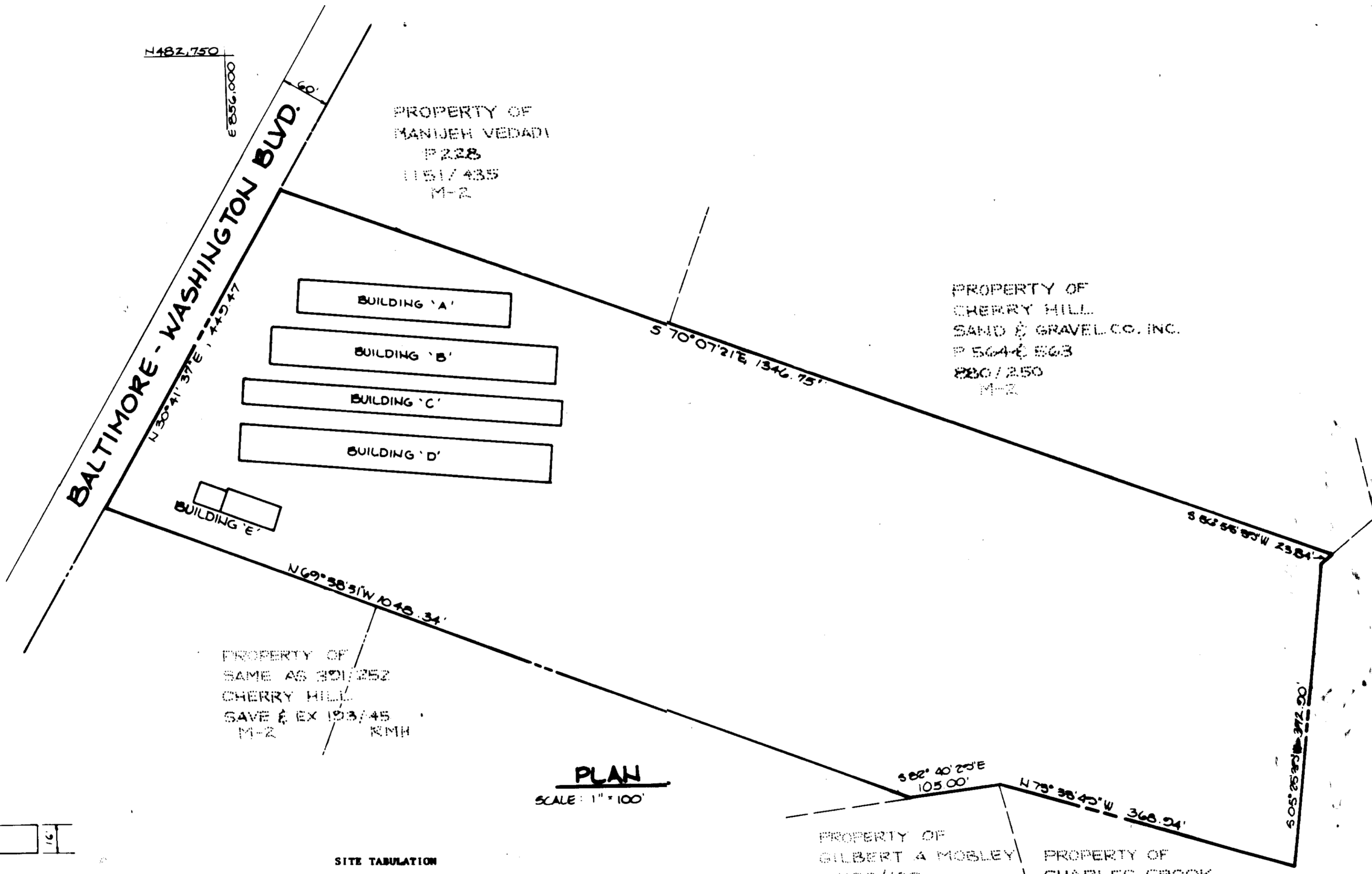
## HOWARD COUNTY MARYLAND



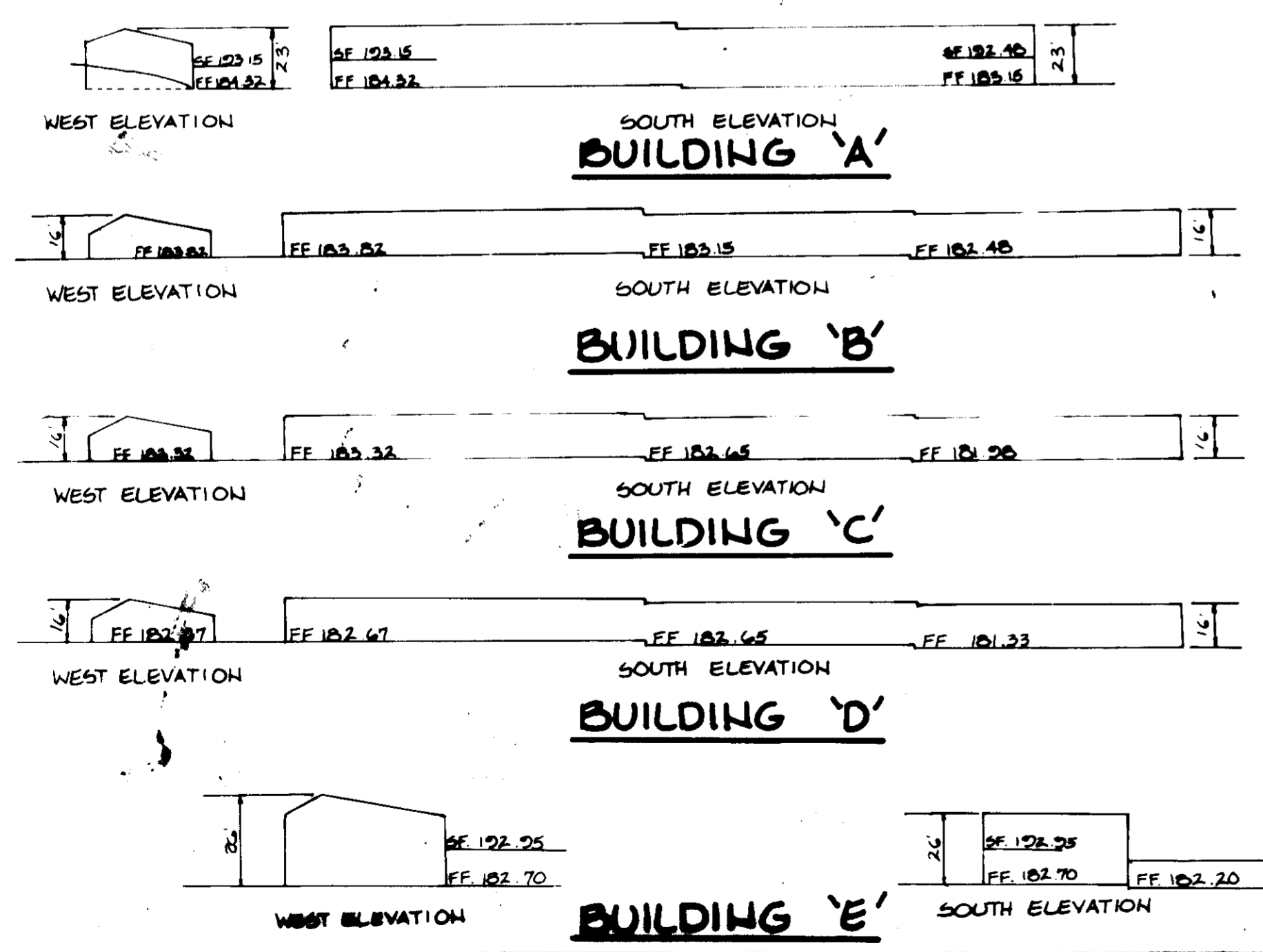
VICINITY MAP  
SCALE: 1" = 2000'

- GENERAL NOTES**
- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
  - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
  - APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. FROM BEST AVAILABLE INFORMATION THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
  - THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
  - CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
 

MISS UTILITY	1-800-257-7777
C & P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATION DIVERSION	393-3553
BALTIMORE GAS & ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
  - ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
  - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
  - PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
  - NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
  - TOPO TAKEN FROM FIELD RUN SURVEY DATED JANUARY, 1987 BY THE RIEMER GROUP, INC.
  - ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
  - ALL STORM-DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
  - THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
  - REFERENCES GP 87-85 AA 87 04



**BUILDING ELEVATIONS**  
NO SCALE



**PLAN**  
SCALE: 1" = 100'

**SITE TABULATION**

TOTAL AREA OF PROPERTY 14.47 AC.  
 AREA OF SUBMISSION 14.47 AC.  
 EXISTING ZONING: M-2  
 PROPOSED USE: WAREHOUSE/OFFICE/APARTMENT  
 PROPOSED BUILDING AREA: 69,928 S.F.  
 WAREHOUSE 67,450 S.F.  
 OFFICE 954 S.F.  
 APARTMENT 954 S.F.  
 OPEN SPACE REQUIRED: 20% (126,062.6)  
 OPEN SPACE PROVIDED: 77% (488,700)  
 PARKING REQUIRED:  
 2 EMPLOYEES @ 1 PER 2 EMPLOYEES 1 SPACE  
 1 APARTMENT UNIT @ 2 PER UNIT 1 SPACE  
 TOTAL PARKING REQUIRED 6 SPACES  
 PARKING PROVIDED  
 HANDICAPPED PARKING REQUIRED 1 SPACE  
 HANDICAPPED PARKING PROVIDED 1 SPACE  
 LANDSCAPED ISLANDS REQUIRED 5% 158 SQ. FT.  
 LANDSCAPED ISLANDS PROVIDED 6% 165 SQ. FT.  
 TOTAL PARKING AREA PROVIDED 2746 SQ. FT.

GROSS FLOOR AREAS	
BUILDING A	FIRST FLOOR 10,400 S.F.
BUILDING B	SECOND FLOOR 10,400 S.F.
BUILDING C	FIRST FLOOR 11,700 S.F.
BUILDING D	FIRST FLOOR 17,100 S.F.
BUILDING E	FIRST FLOOR 994 S.F.
	OFFICE 954 S.F.
	STORAGE 2100 S.F.
	SECOND FLOOR APARTMENT 954 S.F.
<b>TOTAL</b>	<b>69,928 S.F.</b>

ADDRESS CHART	
PARCEL NO.	STREET ADDRESS
291	8295 BALT. WASHINGTON BOULEVARD

SUBDIVISION NAME	BLK./AREA	PARCEL #	ZONING
WATERLOO MINI-STORAGE	291	8295 BALT. WASHINGTON BOULEVARD	M-2

APPROVED  
 DIVISION OF LAND DEVELOPMENT &  
 ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 3-18-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
 COUNTY HEALTH OFFICER: [Signature] 5/21/87 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
 PLANNING DIRECTOR: [Signature] 5-22-87 DATE

APPROVED: CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION.  
 [Signature] 5-22-87 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR: [Signature] DATE

CHIEF, BUREAU OF ENGINEERING: [Signature] 5-20-87 DATE

DATE	NO.	REVISION

OWNER: WATERLOO LAND LTD. PARTNERSHIP  
 SUITE 101  
 8850 BRISTOL COURT  
 JESSEUP, MARYLAND 20724

DEVELOPER: SIENA CORPORATION  
 SUITE 100  
 8850 BRISTOL COURT  
 JESSEUP, MARYLAND 20724

PROJECT: WATERLOO MINI-STORAGE

AREA TAX MAP 45 PARCEL 251  
 6TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE SHEET

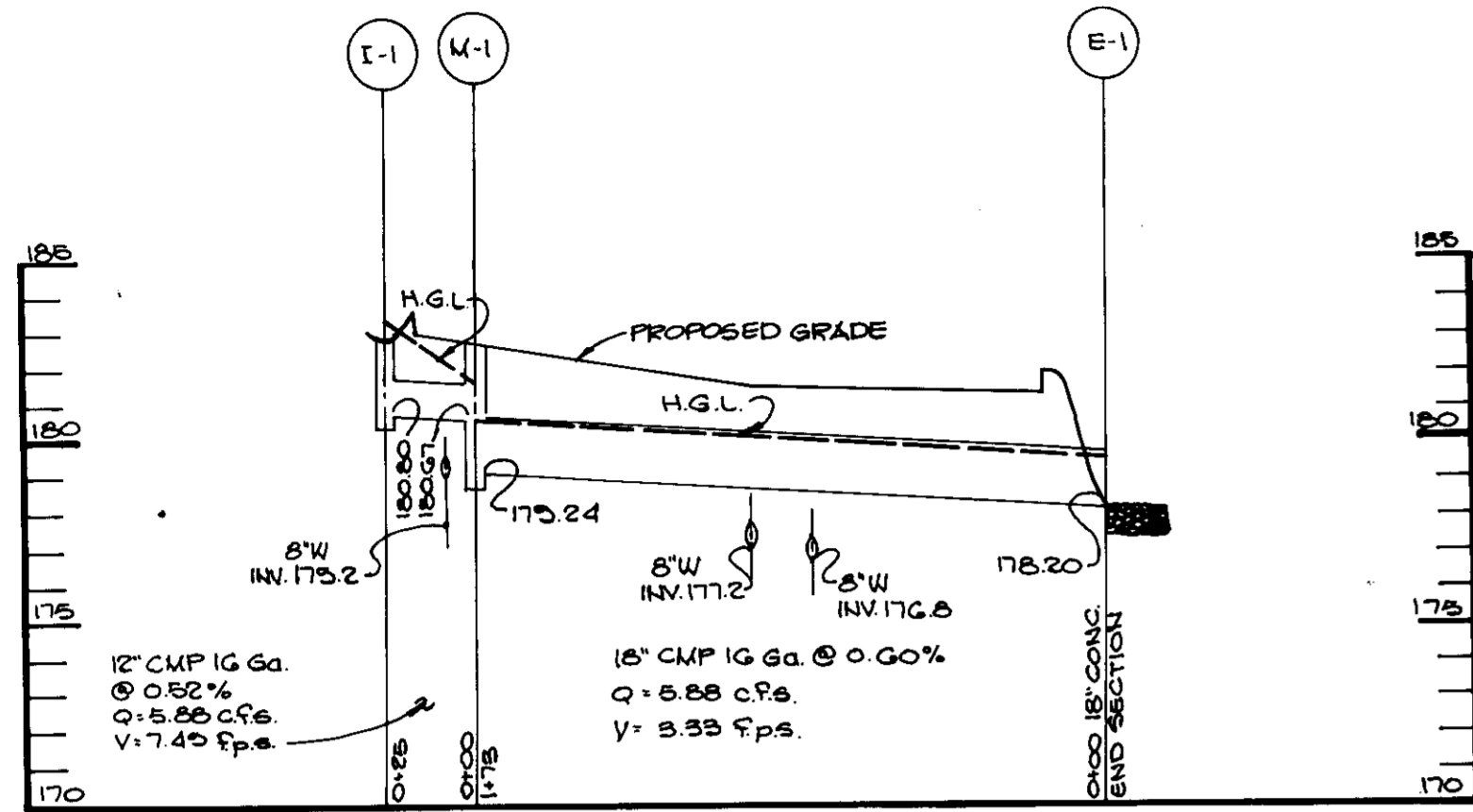
THE RIEMER GROUP, INC.  
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm  
 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-8880

DATE 5-13-87

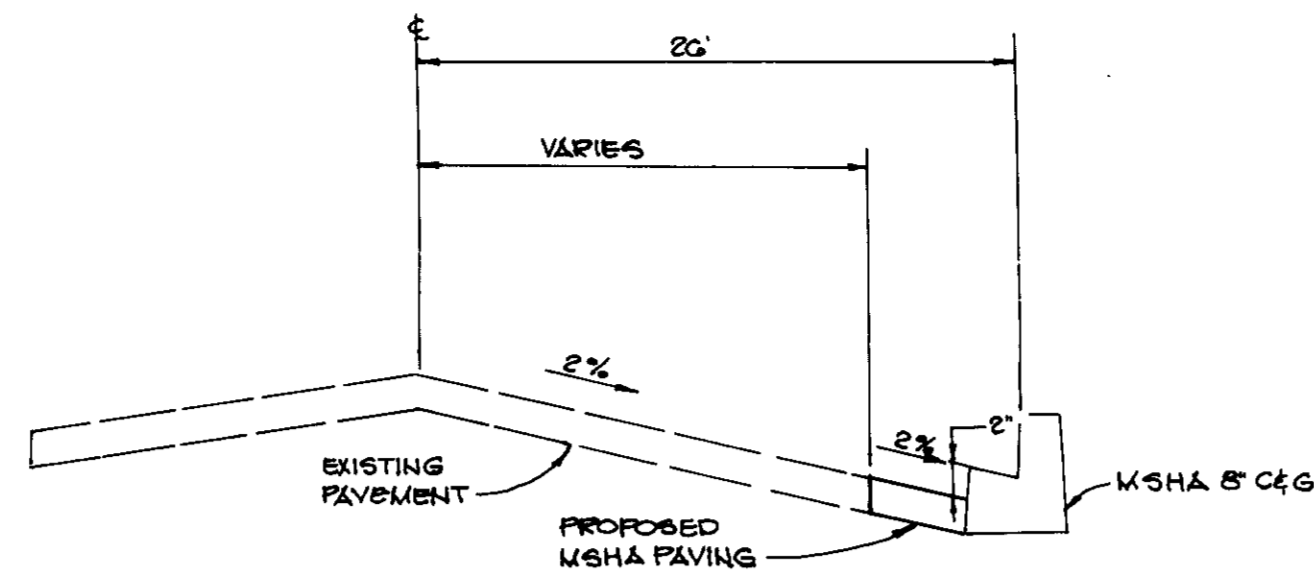
DESIGNED BY: J.K.B.  
 DRAWN BY: D.D.B.  
 PROJECT NO: 34500  
 DATE: FEBRUARY 13, 1987  
 SCALE: AS SHOWN  
 DRAWING NO. 1 OF 6





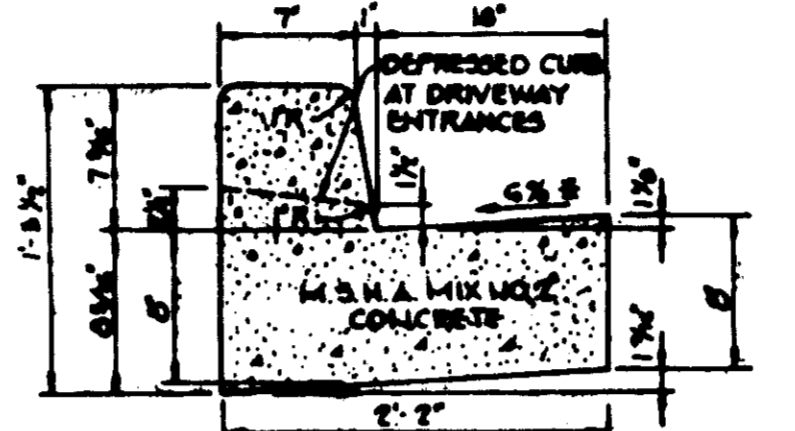
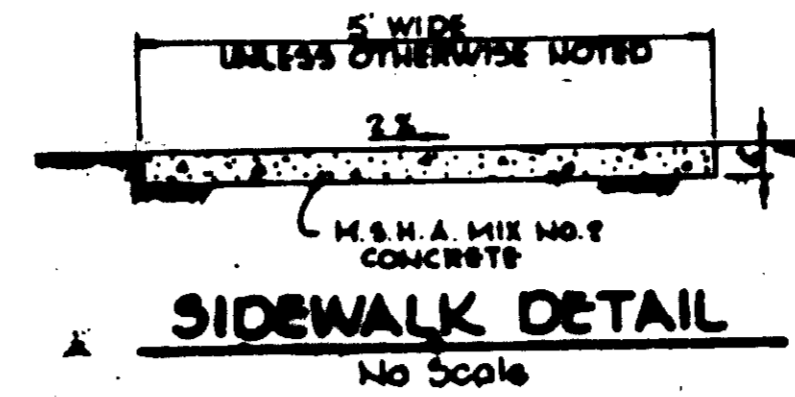


**STORM DRAIN PROFILE**  
SCALE: HOR. 1"=50'  
VERT. 1"=5'



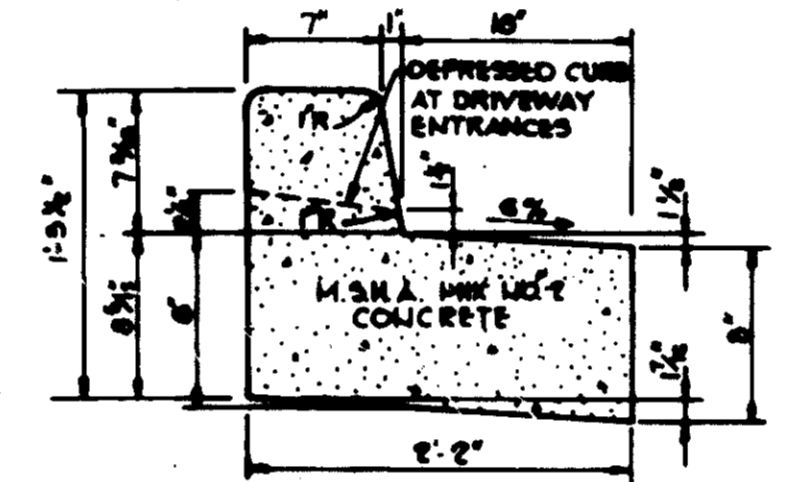
**TYPICAL SECTION U.S.1**  
NO SCALE  
(LOOKING NORTH)

NOTE: PAVING SHALL BE PLACED AS A CONTINUATION OF EXISTING 2% CROSS SLOPE. THE CURB AND GUTTER SHALL BE PLACED WITH THE GUTTER PAN 2 INCHES\* ABOVE THE PAVING TO ALLOW FOR FUTURE SURFACE OVERLAY BY THE SHA.  
\* OR AS DIRECTED BY THE SHA.

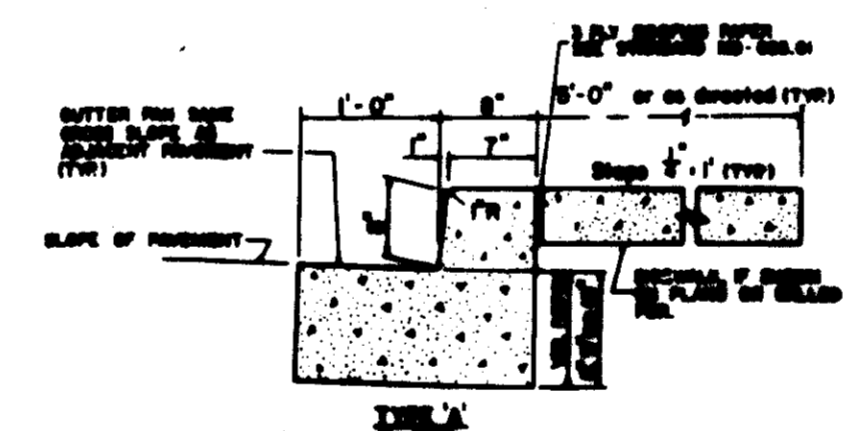


HOWARD COUNTY DESIGN MANUAL VOLUME III - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)  
\* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

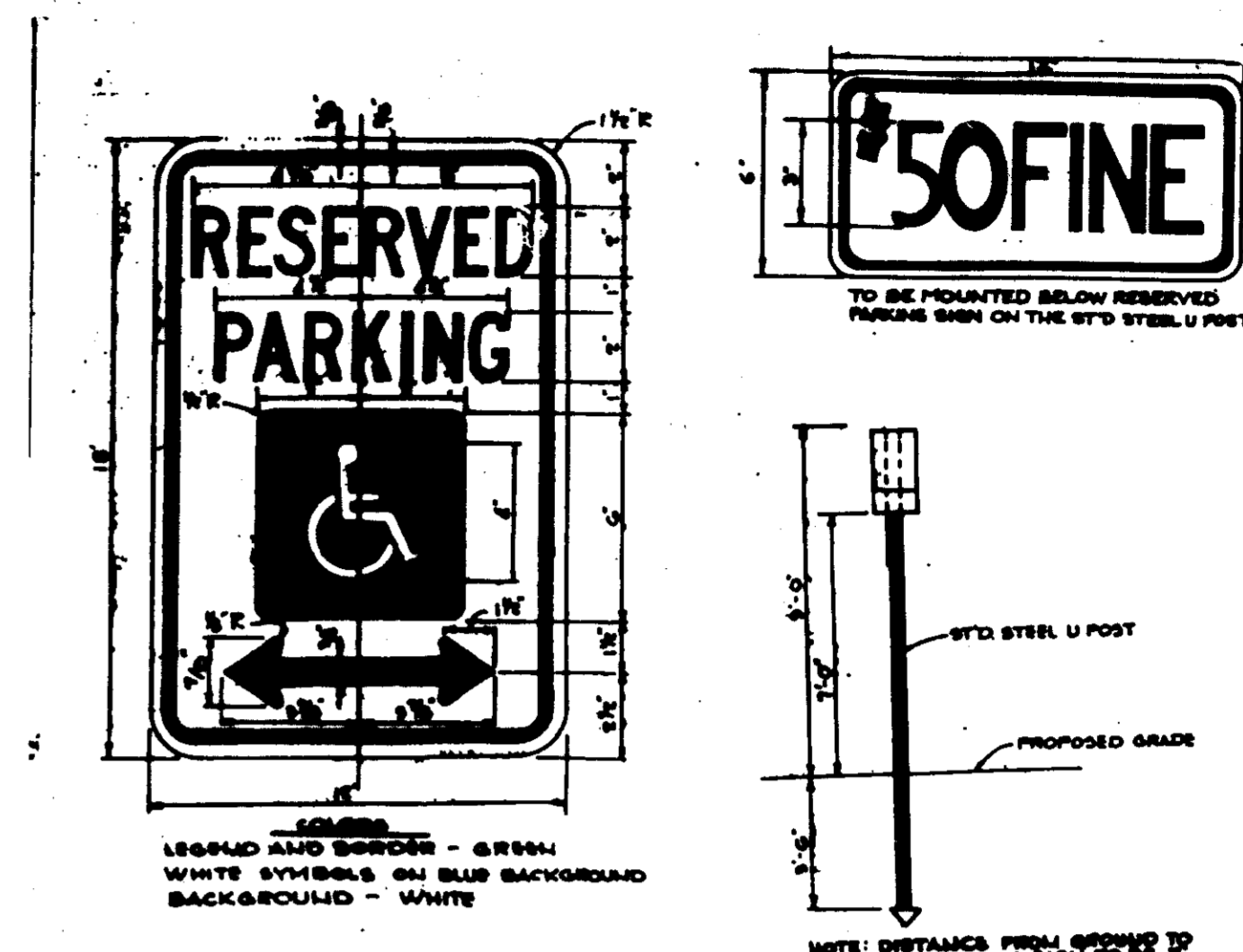
**STANDARD 7" COMBINATION CURB AND GUTTER**  
NO SCALE



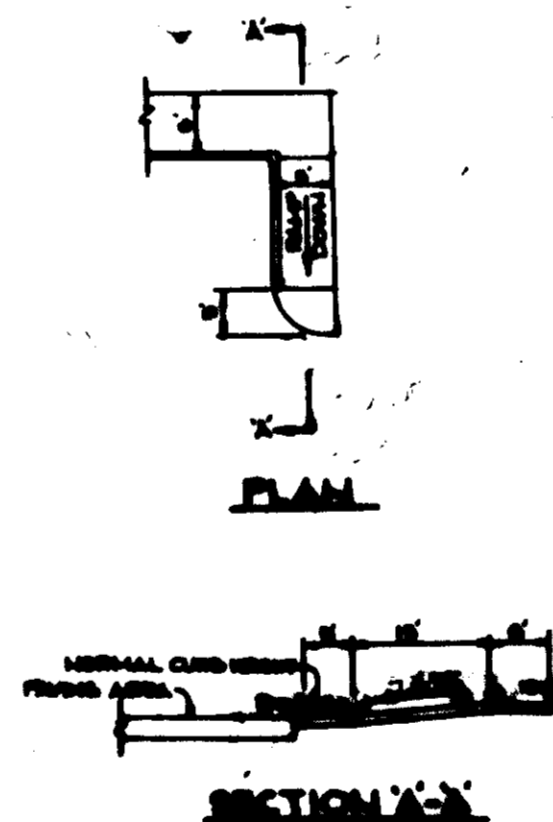
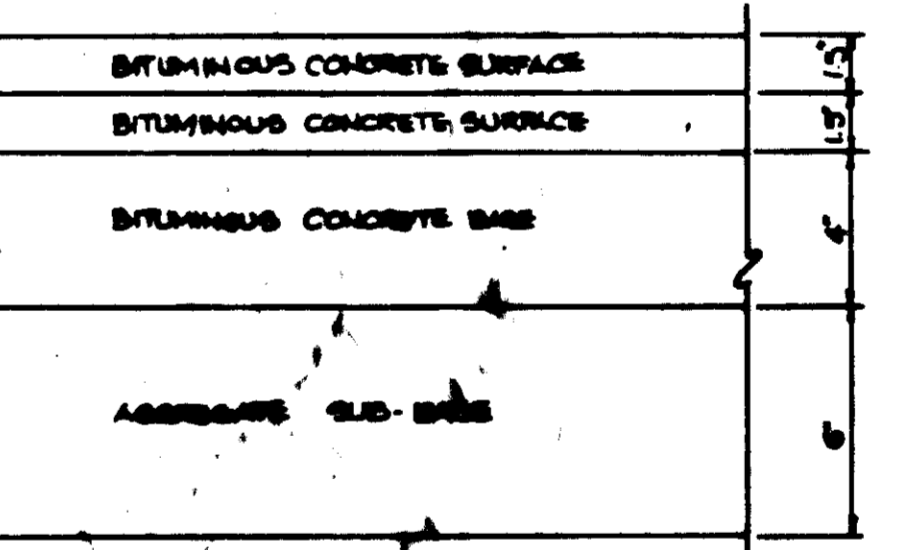
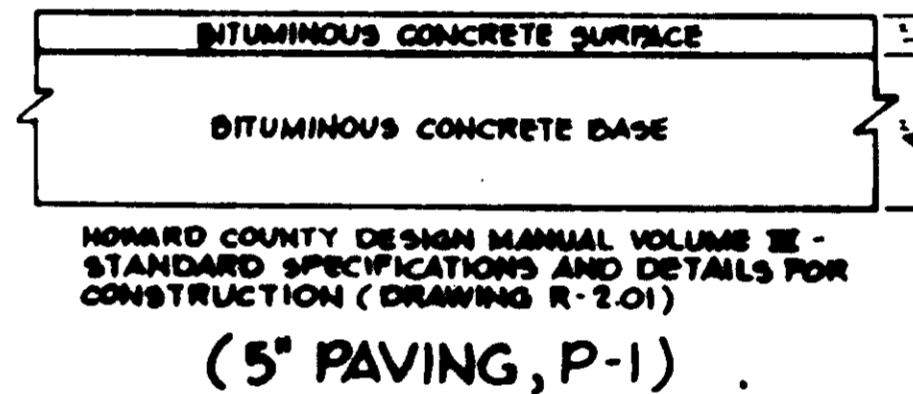
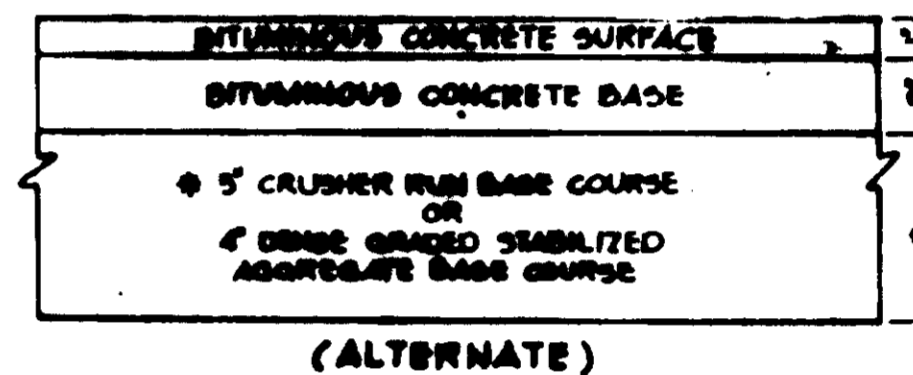
**REVERSE 7" COMBINATION CURB AND GUTTER**  
NO SCALE



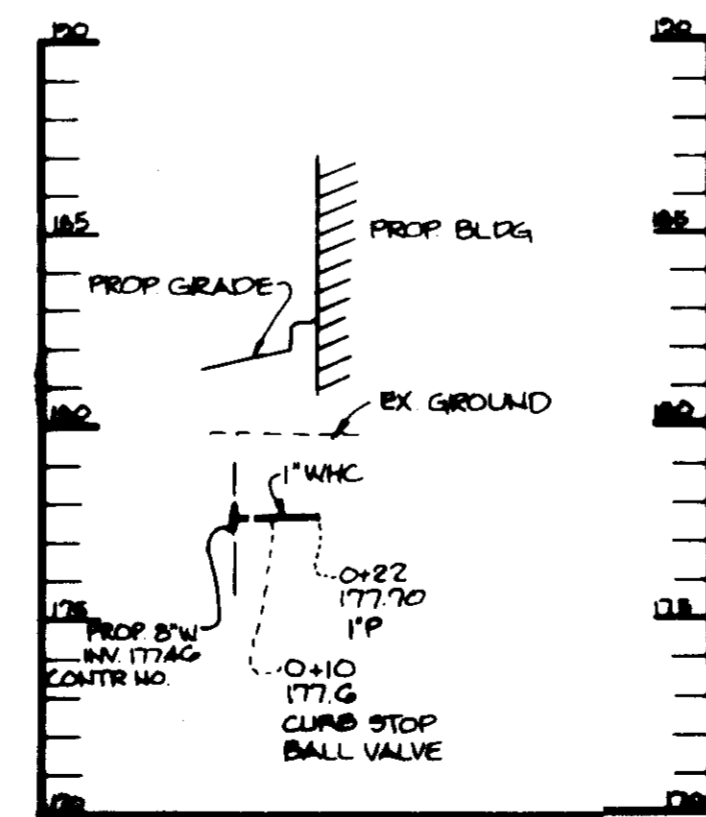
**M.S.H.A. CURB AND GUTTER**  
NO SCALE



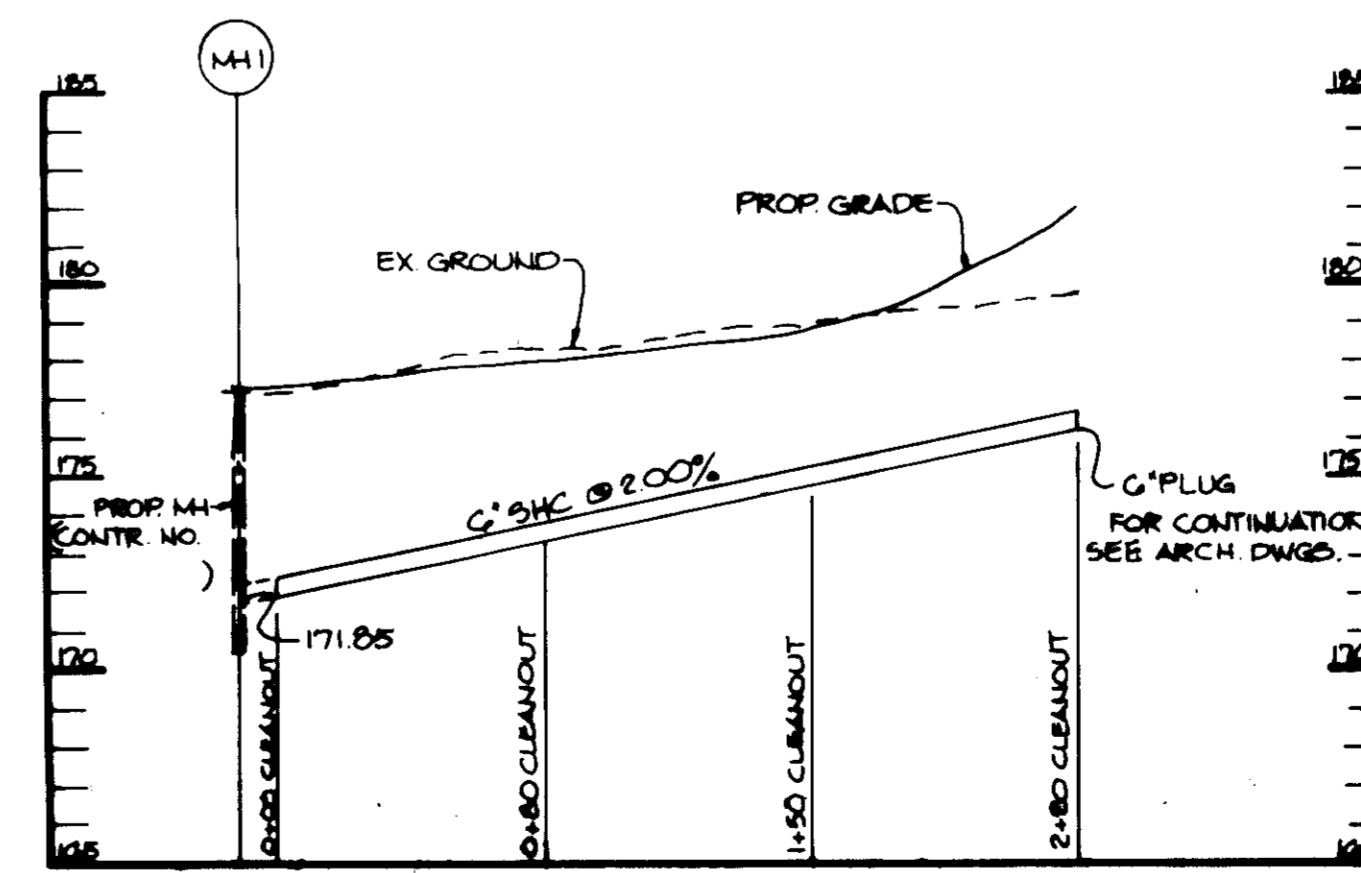
**HANDICAP SIGN DETAIL**  
NO SCALE



**HANDICAP RAMP DETAIL**  
NO SCALE



**WATER PROFILE**  
SCALE: HOR. 1"=50'  
VERT. 1"=5'



**SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VERT. 1"=5'

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 3-18-87  
10/278

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*J. J. ...* 5/21/87  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
*John W. ...* 5-22-87  
PLANNING DIRECTOR DATE

ACTIVE: *Lois ...* 5-22-87  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*George ...* 5-21-87  
DIRECTOR DATE

*...* 5-20-87  
CHIEF, BUREAU OF ENGINEERING DATE

10-8-87	1	ADDED TYP. SECTION U.S.1 & STORM DRAIN PROFILE
DATE	NO.	REVISION
OWNER	WATERLOO LAND LTD. PARTNERSHIP SUITE 101 8850 BRISTOL COURT JESSUP, MARYLAND 20794	
DEVELOPER	SINA CORPORATION SUITE 101 8850 BRISTOL COURT JESSUP, MARYLAND 20794	
PROJECT	WATERLOO MINI-STORAGE	
AREA	TAX MAP 43	PARCEL 251
	6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND 21044	
TITLE:	PROFILES AND DETAILS	

**THE RIEMER GROUP, INC.**  
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm  
3100 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-8800

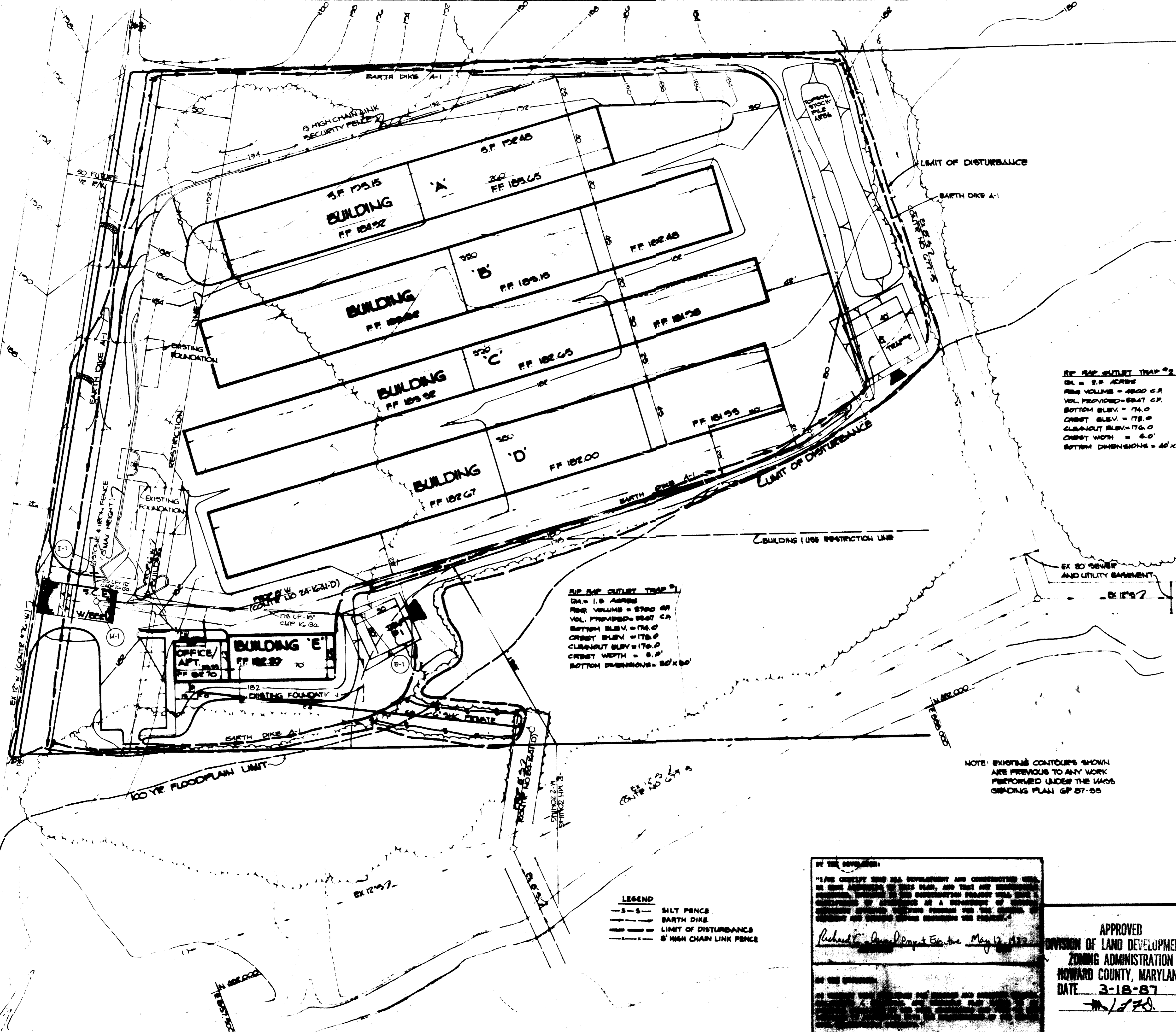
5/13/87  
DATE

DESIGNED BY: J.K.B.  
DRAWN BY: DAM  
PROJECT NO: 34500  
DATE: FEBRUARY 1987  
SCALE: AS SHOWN  
DRAWING NO. 3 OF 6



BALTIMORE-WASHINGTON BOULEVARD

U.S. ROUTE 1



RFP TRAP OUTLET TRAP #1  
 SA = 1.0 ACRES  
 RFR VOLUME = 5700 CF  
 VOL. PROVIDED = 6047 CF  
 BOTTOM ELEV. = 174.0  
 CREST ELEV. = 178.0  
 CLEANOUT ELEV. = 176.0  
 CREST WIDTH = 8.0'  
 BOTTOM DIMENSIONS = 80' x 50'

RFP TRAP OUTLET TRAP #2  
 SA = 2.5 ACRES  
 RFR VOLUME = 4800 CF  
 VOL. PROVIDED = 6047 CF  
 BOTTOM ELEV. = 174.0  
 CREST ELEV. = 178.0  
 CLEANOUT ELEV. = 176.0  
 CREST WIDTH = 8.0'  
 BOTTOM DIMENSIONS = 40' x 40'

- LEGEND**
- - - SILT FENCE
  - BARTH DIKE
  - LIMIT OF DISTURBANCE
  - 6' HIGH CHAIN LINK FENCE

NOTE: EXISTING CONTOURS SHOWN ARE PREVIOUS TO ANY WORK PERFORMED UNDER THE WACS GRADING PLAN GP 87-55

REVIEWED FOR: <u>HOWARD</u> S.C.D. AND BEST TECHNICAL REQUIREMENTS U.S. SOIL CONSERVATION SERVICE DATE: <u>5-18-87</u>
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. APPROVED: <u>Stephen L. Fisher</u> 5/18/87 HOWARD S.C.D. DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. APPROVED: <u>Josephine Proctor</u> 5/21/87 COUNTY HEALTH OFFICER DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING. APPROVED: <u>John M. Murrain</u> 5-22-87 PLANNING DIRECTOR DATE
APPROVED: <u>James J. Feltus</u> 5-22-87 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS APPROVED: <u>Richard S. Reed</u> 5-22-87 CHIEF, BUREAU OF ENGINEERING DATE
10-7-87 2 SHA PERMIT REQUIREMENTS, ADDED STORM DRAIN 10-7-87 1 REVISED FENCE TO 6' HIGH
OWNER: WATERLOO LAND LTD PARTNERSHIP SUITE 101 8350 BRISTOL COURT JESSUP, MARYLAND 20794
DEVELOPER: SIENA CORPORATION SUITE 101 8350 BRISTOL COURT JESSUP, MARYLAND 20794
PROJECT: <b>WATERLOO MINI-STORAGE</b>
AREA TAX MAP 45 PARCEL 251 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: <b>GRADING AND SEDIMENT CONTROL PLAN</b>
THE RIEMER GROUP, INC. The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 8100 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-0000
DATE: <u>5-18-87</u> DESIGNED BY: J.K.B. DRAWN BY: M.A.D. PROJECT NO: 34500 DATE PERIODICALLY: 13, 1987 SCALE: 1" = 50' SHEET NO. 4 OF 6

BY THE SOVEREIGN:  
 "I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION SHOWN ON THIS PLAN ARE IN ACCORDANCE WITH THE PLAN, AND THAT ALL NECESSARY PERMITS, INCLUDING THE CONSTRUCTION PERMIT, HAVE BEEN OBTAINED BY THE DEVELOPER AS A DEPARTMENT OF ZONING ADMINISTRATION AND ZONING ADMINISTRATION FOR THE PURPOSES OF GRADING AND SEDIMENT CONTROL UNDER THE WACS GRADING PLAN GP 87-55."  
Richard S. Reed Executive May 14, 1987

APPROVED  
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE: 3-18-87  
M.A.D.

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

**Seeded Preparation** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

**Soil Amendments** Apply 0-20-20 fertilizer at the rate of 600 lbs. per acre. Apply 10-10-10 fertilizer at the rate of 1000 lbs. per acre. Apply 10-10-10 fertilizer at the rate of 1000 lbs. per acre. Apply 10-10-10 fertilizer at the rate of 1000 lbs. per acre. Apply 10-10-10 fertilizer at the rate of 1000 lbs. per acre.

**Seeding** For the period March 1 thru April 30 and August 1 thru November 15, seed with 140 lbs. per acre of annual ryegrass (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 15, seed with 3 lbs. per acre of creeping fescue (1.0 lb./1000 sq.ft.). For the period November 15 thru February 28, protect site by applying 2 tons per acre of well-rotted straw mulch and seed as soon as possible in the spring. For the period March 1 thru April 30 and August 1 thru November 15, seed with 140 lbs. per acre of annual ryegrass (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 15, seed with 3 lbs. per acre of creeping fescue (1.0 lb./1000 sq.ft.). For the period November 15 thru February 28, protect site by applying 2 tons per acre of well-rotted straw mulch and seed as soon as possible in the spring.

**Mulching** Apply 15 to 2 tons per acre (10 to 90 lbs./1000 sq.ft.) of well-rotted straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallon per acre (15 gal./1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 300 gallon per acre (18 gal./1000 sq.ft.) for anchoring.

**Maintenance** Inspect all seeded areas and make needed repairs, replacement and reseedings.

**TEMPORARY SEEDING NOTES**

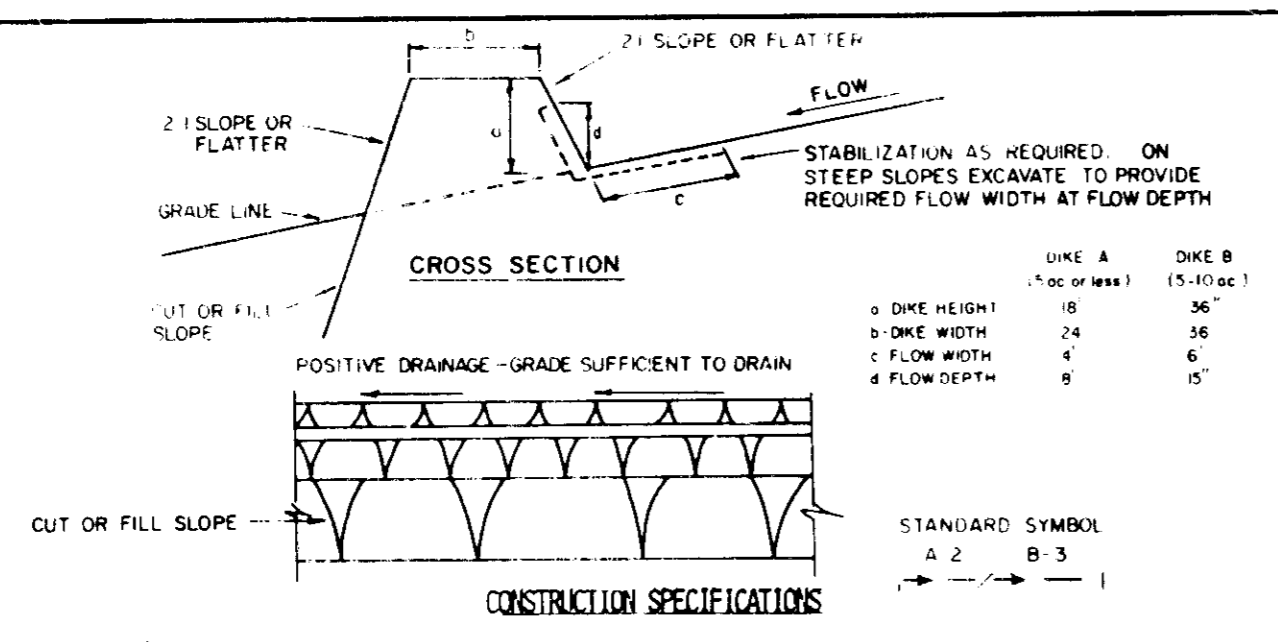
Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

**Seeded Preparation** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

**Soil Amendments** Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) where soil is highly acidic; apply dolomitic limestone at the rate of 1 ton per acre.

**Seeding** For the period March 1 thru April 30 and August 1 thru November 15, seed with 140 lbs. per acre of annual ryegrass (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 15, seed with 3 lbs. per acre of creeping fescue (1.0 lb./1000 sq.ft.). For the period November 15 thru February 28, protect site by applying 2 tons per acre of well-rotted straw mulch and seed as soon as possible in the spring. For the period March 1 thru April 30 and August 1 thru November 15, seed with 140 lbs. per acre of annual ryegrass (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 15, seed with 3 lbs. per acre of creeping fescue (1.0 lb./1000 sq.ft.). For the period November 15 thru February 28, protect site by applying 2 tons per acre of well-rotted straw mulch and seed as soon as possible in the spring.

**Mulching** Apply 15 to 2 tons per acre (10 to 90 lbs./1000 sq.ft.) of well-rotted straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallon per acre (15 gal./1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 300 gallon per acre (18 gal./1000 sq.ft.) for anchoring.



**CONSTRUCTION SPECIFICATIONS**

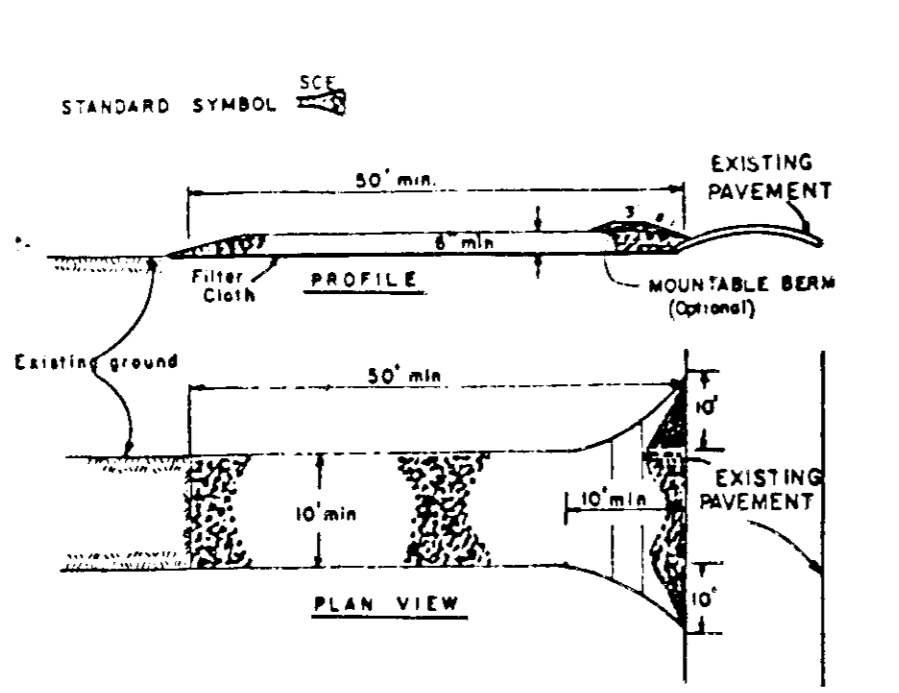
- All dikes shall be compacted by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
- Field location should be adjusted as needed to utilize a stabilized safe outlet.
- 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.
- 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.

**FLUX 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 LIME, OR EXCELSTOR, SO2, 2" STONE
3	5.1-8.0%	SEED WITH LIME, OR SO2, 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

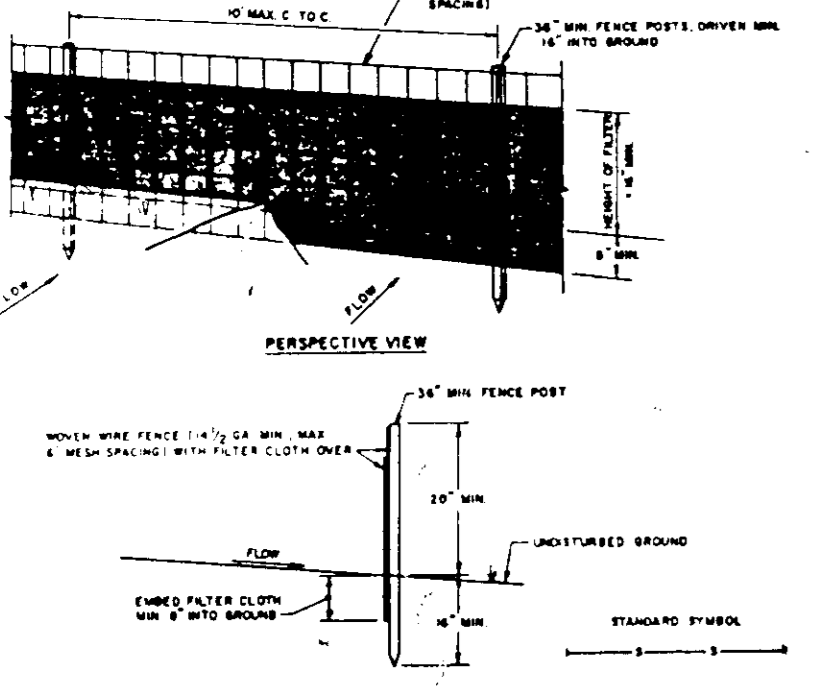
A. Stone to be 2" inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.  
 B. RIP-RAP to be 4-8 inches in a layer at least 8 inches thickness and pressed into the soil.  
 C. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

**EARTH DIKE**  
NO SCALE



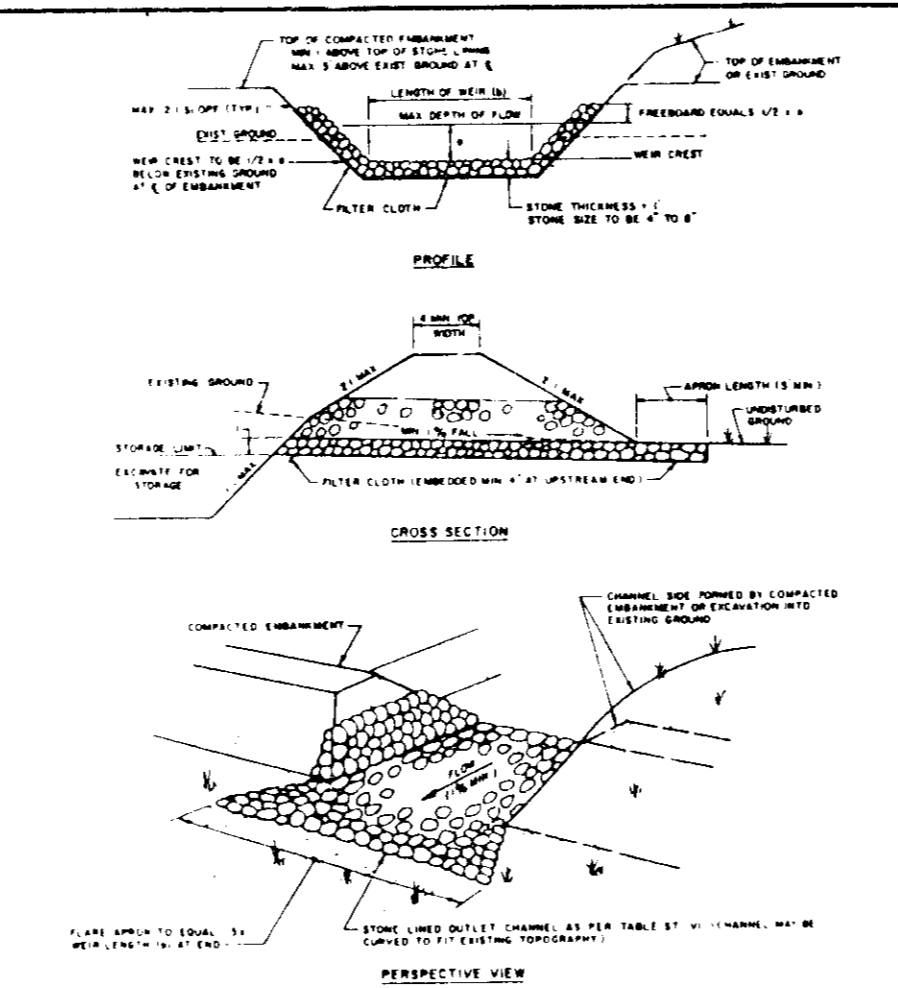
- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone, or recycled or recycled concrete equivalent.
  - Length - As required, but not less than 30 feet (except on a single residence lot where a 30 foot minimum length would apply).
  - Thickness - Not less than six (6) inches.
  - Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
  - 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.
  - Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a mountable beam with 5% slopes will be permitted.
  - 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 rags 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.
  - 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.
  - Periodic inspection and needed maintenance shall be provided after each rain event.

**STABILIZED CONSTRUCTION ENTRANCE**  
NO SCALE



- CONSTRUCTION NOTES FOR STABILIZED CONSTRUCTION ENTRANCE**
- When wire fence is to be fastened securely to fence posts with wire ties or staples.
  - Filter cloth to be fastened securely to mesh wire fence with wire staples.
  - When sections of filter cloth overlap, they shall be overlapped by six inches and folded.
  - Maintenance shall be performed as needed and material removed when needed, disposed in the still fence.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD  
 FENCE: MESH WIRE 18 GA. OR 20 GA. GALV. STEEL  
 FILTER CLOTH: FILTER CLOTH (NON-WEAVING) 1/2" MESH (100 PERCENT OPENING) OR APPROVED EQUAL  
 PREPARATED UNIT: GEOTEX, POLYPROPYLENE, OR APPROVED EQUAL

**SILT FENCE**  
NO SCALE



- CONSTRUCTION SPECIFICATIONS FOR SI-VI**
- The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
  - The fill material for the embankment shall be free of roots or 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. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
  - All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
  - Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
  - Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
  - Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
  - Stone used in the outlet channel shall be four (4) to eight (8) inches (rippap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
  - Sediment shall be removed and trap returned to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
  - The structure shall be inspected after each rain and repaired as needed.
  - Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
  - The structure shall be removed and the area stabilized when the trapping area has been properly stabilized.
  - Drainage area for this practice is limited to 15 acres or less.

**RIP RAP OUTLET SEDIMENT TRAP**  
NO SCALE

- OBTAIN A GRADING PERMIT
- CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROLS ONLY. (1 DAY)
- INSTALL STABILIZED CONSTRUCTION ENTRANCE; EARTH DIKES, SILT FENCE AND SEDIMENT TRAPS. (3 DAYS)
- CLEAR AND GRADE REMAINDER OF SITE AND ROUGH GRADE. (2 WEEKS)
- INSTALL UTILITIES AND COMPLETE REMAINING CONSTRUCTION. (6 WEEKS)
- STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES. (3 DAYS)
- UPON PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL SEDIMENT CONTROLS AND STABILIZE AREAS DISTURBED IN THEIR REMOVAL IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.

**SEQUENCE OF CONSTRUCTION**

BY THE DEVELOPER:

Richard E. Muegg, Project Executive  
 May 12, 1987  
 DEVELOPER

BY THE ENGINEER:

Arthur E. Muegg, Engineer  
 5-13-87  
 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

John M. Hahn, P.E., Soil Conservation Service  
 5-18-87  
 DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT.

Stephen L. Hahn, P.E., Howard County Health Department  
 5/21/87  
 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Joanna Boyce, County Health Officer  
 5/21/87  
 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

John W. Hanchman, Planning Director  
 5-22-87  
 DATE

ACTING SOIL CONSERVATION DISTRICT OFFICER, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION.

ACTING SOIL CONSERVATION DISTRICT OFFICER, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION.

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC RIGHTS-OF-WAY.

Howard County Department of Public Works.

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC RIGHTS-OF-WAY.

Howard County Department of Public Works.

William E. Kelly, Chief, Bureau of Engineering  
 5-20-87  
 DATE

DATE	NO.	REVISION

OWNER: WATERLOO LAND LIMITED PARTNERSHIP  
 SUITE 101  
 8850 BRISTOL COURT  
 JESSUP, MARYLAND 20754

CLIENT: SIELA CORPORATION  
 SUITE 101  
 8850 BRISTOL COURT  
 JESSUP, MARYLAND 20754

PROJECT: WATERLOO MINI-STORAGE

AREA: 1.5 ACRES (APPROX.)

TITLE: SEDIMENT CONTROL NOTES AND DETAILS

THE RIEMER GROUP, INC.  
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm  
 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2600

APPROVED  
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE: 3-18-87  
 M/JZ

5/13/87  
 DATE

DESIGNED BY: J.E.H.  
 DRAWN BY: M.A.C.  
 PROJECT NO: 87-153  
 DATE: FEBRUARY 13, 1987  
 SCALE: AS SHOWN  
 DRAWING NO: 5 OF 6



