

NO	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	DETAILS
4	DRAINAGE AREA MAP & SEDIMENT CONTROL PLAN
5	DETAILS
6	PLANTING PLAN

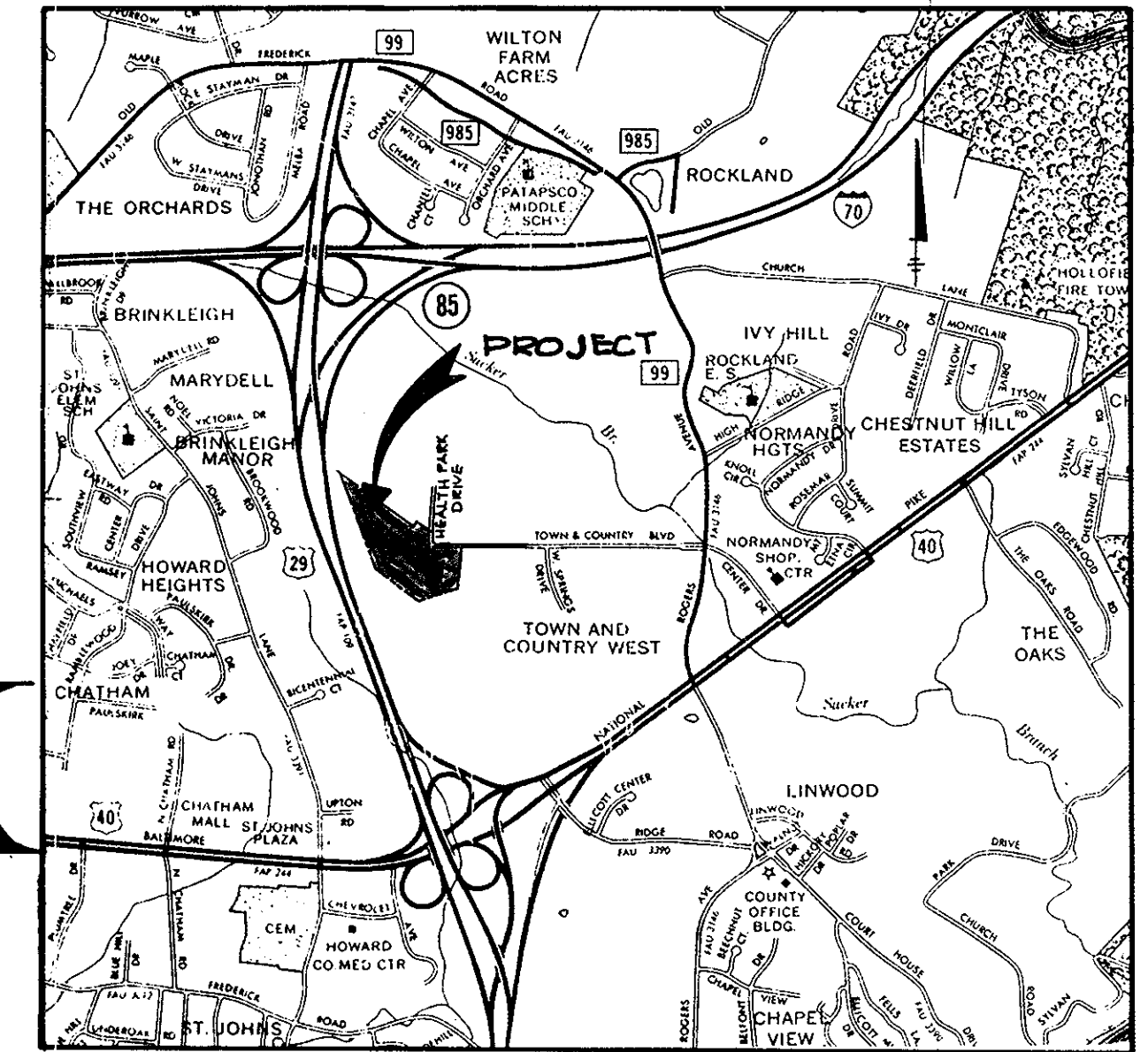
SITE DEVELOPMENT PLAN

HOWARD COUNTY

MEDICAL RESEARCH PARK

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 200'

GENERAL NOTES

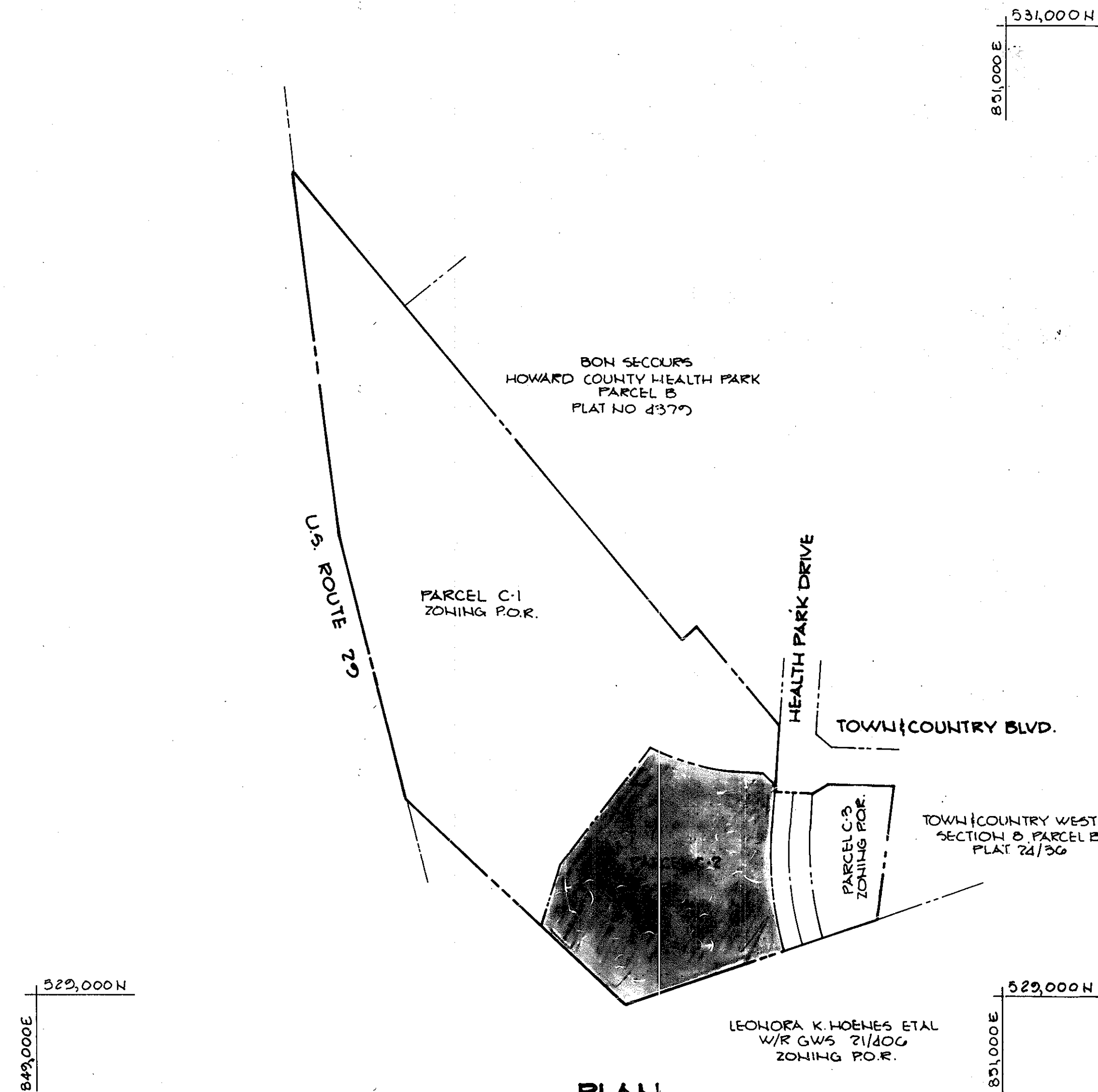
- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATERTIGHT NEOPRENE GASKET. DIMPLE BAND CONNECTORS WILL NOT BE PERMITTED.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. 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, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:

M&D UTILITY	550-0100
C & P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS AND 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, 1982 BY HUDKINS ASSOCIATES.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

SITE TABULATION

TOTAL AREA	4.086	
ZONING (REFER TO PLANNING BOARD CASE NO. 154)	P.O.R.	
BUILDING COVERAGE PERMITTED	62,295 SF (35%)	
	PHASE 1	TOTAL PROJECT
BUILDING COVERAGE PROPOSED	16,366 SF (9.2%)	22,882 SF (13%)
*NUMBER OF EMPLOYEES AT MAJOR SHIFT	18	33
NUMBER OF OCCUPANTS Based on number of beds	40	80
PARKING SPACES REQUIRED (Based on Zoning Regulation Section 123 B 2.b.14, Nursing Homes)		
@ 1 space per 2 employees	9	17
@ 1 space per 3 occupants	14	27
TOTAL SPACES REQUIRED	23	44
TOTAL SPACES PROVIDED	63	63
PARKING LOT AREA	24,930 SF	24,930 SF
landscape islands required (5%)	1247 SF	1247 SF
landscape islands provided	3989 SF (16%)	3989 SF (16%)
OPEN SPACE REQUIRED (20%)	35,597 SF	35,597 SF
OPEN SPACE PROVIDED	139,335 SF (78%)	119,557 SF (67%)

* THIS FACILITY IS TO BE A TREATMENT CENTER FOR SHORT TERM, RESIDENT PATIENTS WITH A STAFF OF 18 PROFESSIONAL AND SERVICE EMPLOYEES PER MAJOR SHIFT.

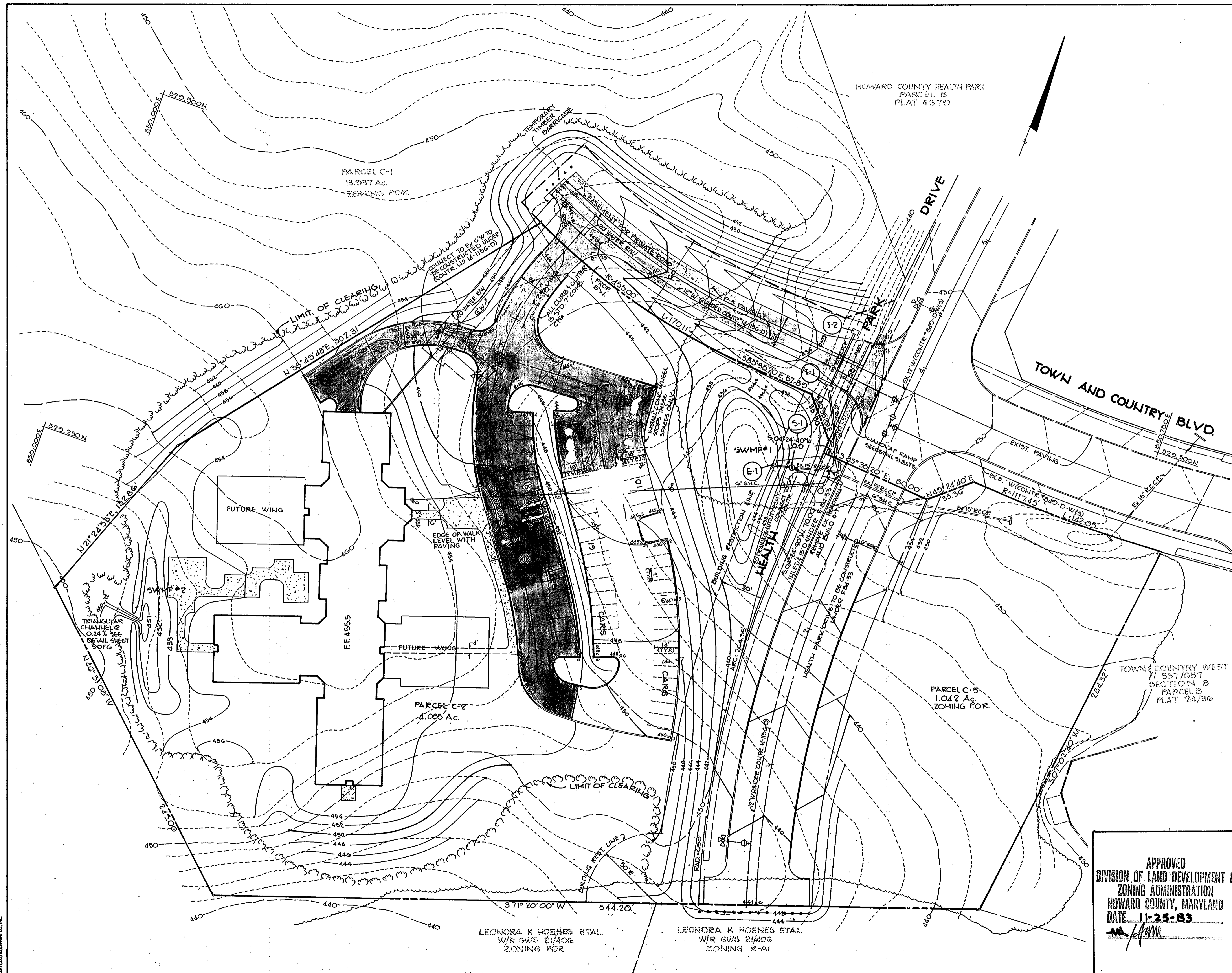


PLAN
SCALE: 1" = 200'

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 11-25-83
[Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	
<i>[Signature]</i> COUNTY HEALTH OFFICER	12-19-83 DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.	
<i>[Signature]</i> PLANNING DIRECTOR	12-19-83 DATE
APPROVED: CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION.	
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	12-19-83 DATE
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.	
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>[Signature]</i> DIRECTOR	12-14-83 DATE
APPROVED: CHIEF, BUREAU OF ENGINEERING.	
<i>[Signature]</i> CHIEF, BUREAU OF ENGINEERING	12-14-83 DATE
7-16-84	CHANGED PARKING TABULATIONS
DATE NO.	REVISION
OWNER: PETER KIRK, PATRICK MCCUJAN AND WILBUR E. SIMMONS JR. TRUSTEES 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21004	
DEVELOPER: K.M.S. INC. 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21004	
PROJECT: OAKVIEW TREATMENT CENTER PARCEL C-2	
HOWARD COUNTY MEDICAL RESEARCH PARK AREA RECORD PLAT RECORDING REFERENCE NO. 5677 TAX MAP NO. 17, PARCEL C-2 2 ND ELECTION DISTRICT HOWARD COUNTY MARYLAND	
TITLE: TITLE SHEET	
THE RIEMER GROUP, INC.	
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 8659 Baltimore National Pike, Ellicott City, Maryland, 21043 301 461-2690	
12-6-83 DATE	DESIGNED BY: G.R.B.
<i>[Signature]</i>	DRAWN BY: J.S.K.
	PROJECT NO: 003000
<i>[Signature]</i>	DATE: AUGUST 31, 1983
<i>[Signature]</i>	SCALE: AS SHOWN
<i>[Signature]</i>	DRAWING NO. 1 OF 6

ADDRESS CHART		SUBDIVISION NAME		SECT./AREA	PARCEL #
LOT NUMBER	STREET ADDRESS	HOWARD COUNTY MEDICAL RESEARCH PARK		N/A	C-2
C-2	3100 HEALTH PARK DRIVE	FLAT #	BLOCK #	TAX/ZONE MAP/ELEC. DIST.	CENSUS TR.
		5677	23	P.O.R.	17 240 6022
		WATER CODE		SEWER CODE	



HOWARD COUNTY HEALTH PARK
PARCEL B
PLAT 457D

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	
<i>James Boyd Wo</i> COUNTY HEALTH OFFICER	12-19-83 DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.	
<i>Donald Hamig</i> PLANNING DIRECTOR	12-19-83 DATE
<i>John W. Murrin</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	12-19-83 DATE
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.	
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Steve F. Neuman</i> DIRECTOR	12-19-83 DATE
<i>William W. Spr...</i> CHIEF, BUREAU OF ENGINEERING	DATE
7-17-84 (1) DATE NO.	CHANGED PARKING SPACES AND ADDED A HANDICAP RAMP REVISION
OWNER:	PETER KIRK, PATRICK MCQUAL AND WILBUR E. SIMMONS JR. TRUSTEES 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044
DEVEL:	KM.S., INC. 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044
PROJECT:	OAKVIEW TREATMENT CENTER PARCEL C-2
HOWARD COUNTY MEDICAL RESEARCH PARK AREA RECORD PLAT RECORDING REFERENCE NO. 5677 TAX MAP NO. 17 PARCEL C-2 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND	
TITLE:	SITE DEVELOPMENT PLAN

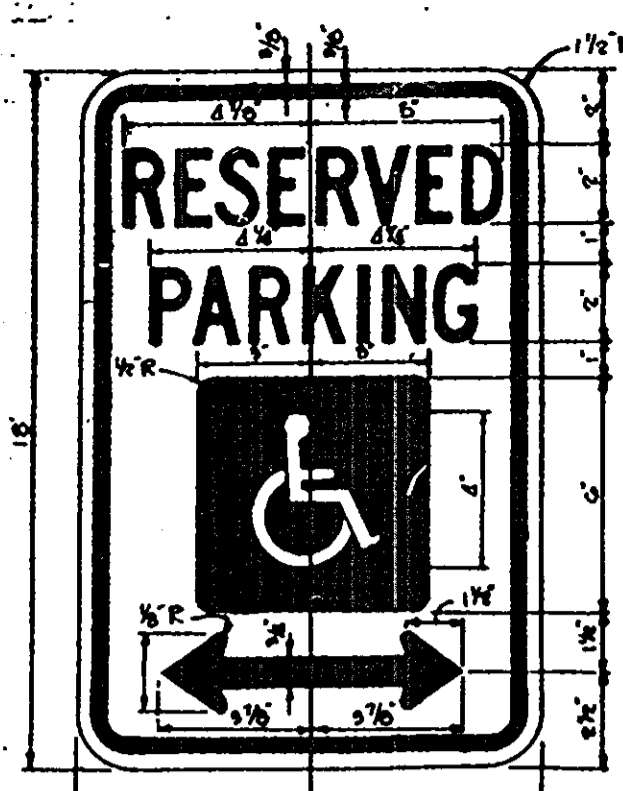
APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 11-25-83
M. J. ...

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
8659 Baltimore National Pike, Ellicott City, Maryland, 21043 301 461-2690

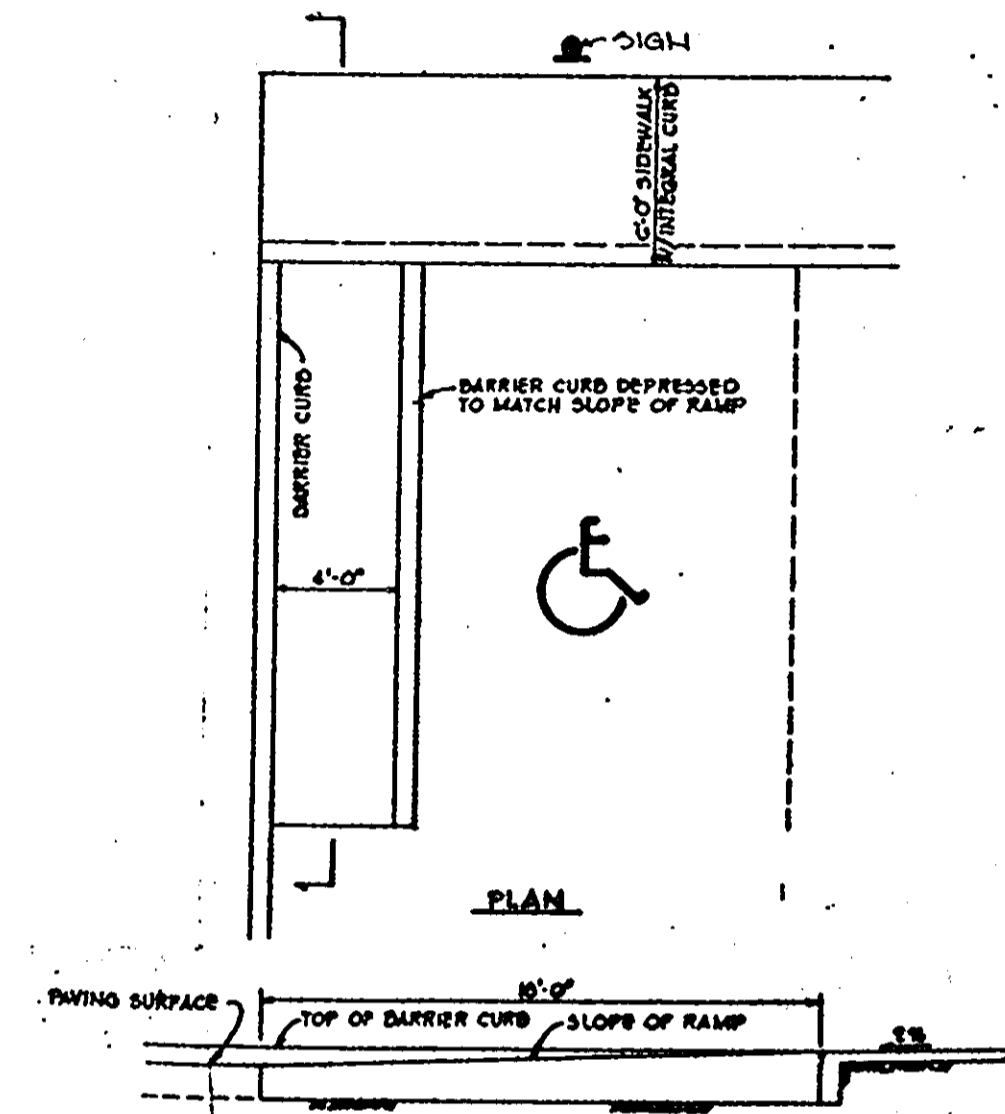
12-6-83
DATE OF DESIGN

DESIGNED BY: G.R.B.
DRAWN BY: G.R.B.
PROJECT NO: 003000
DATE: AUGUST 31, 1983
SCALE: 1"=50'
DRAWING NO. 2 OF 6

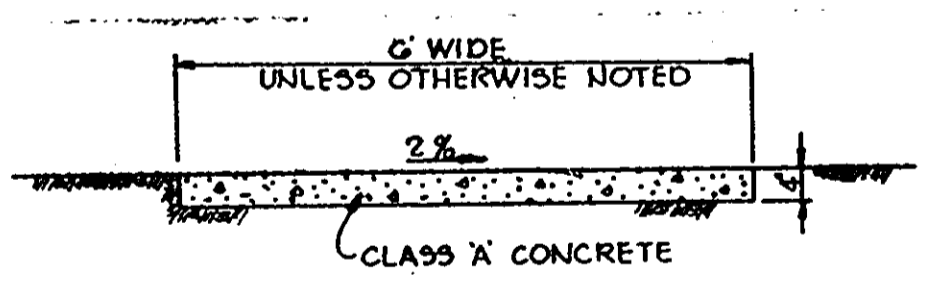
Richard E. Mung...



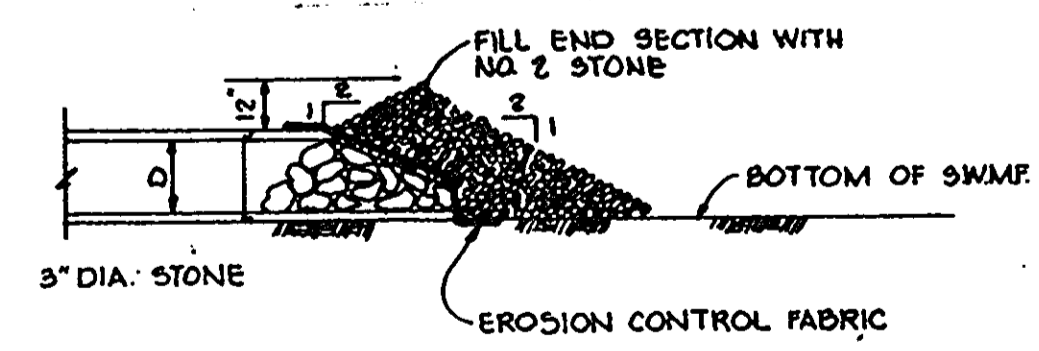
HANDICAP SIGN DETAIL
NO SCALE



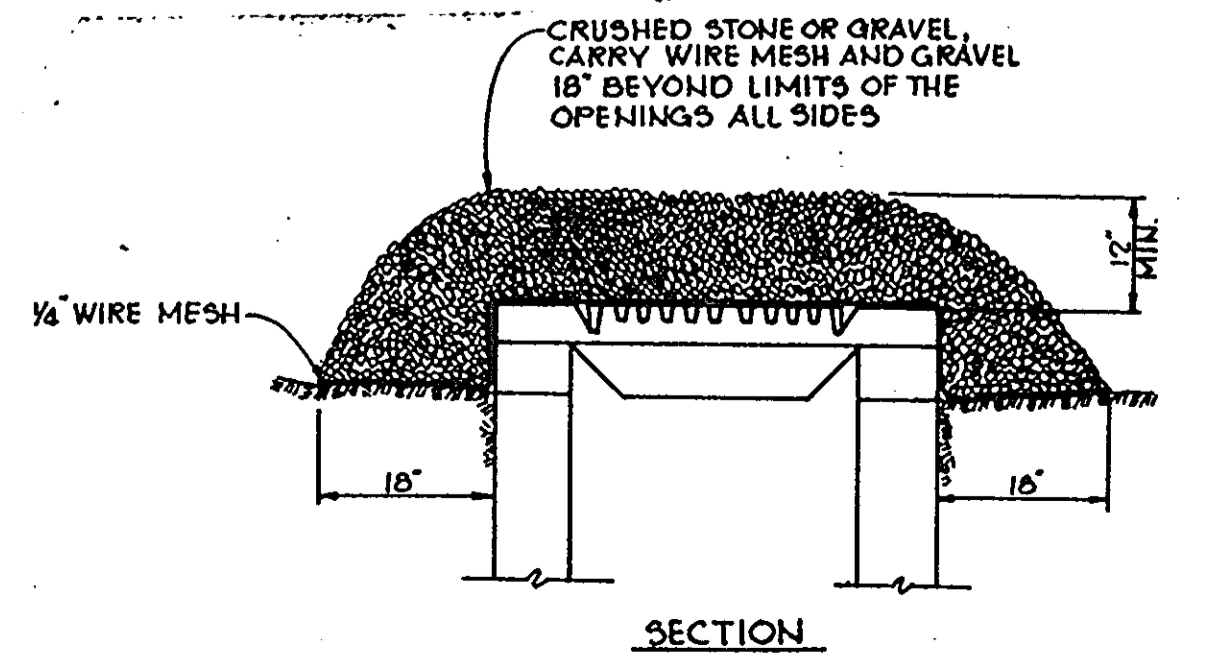
HANDICAP RAMP
NO SCALE



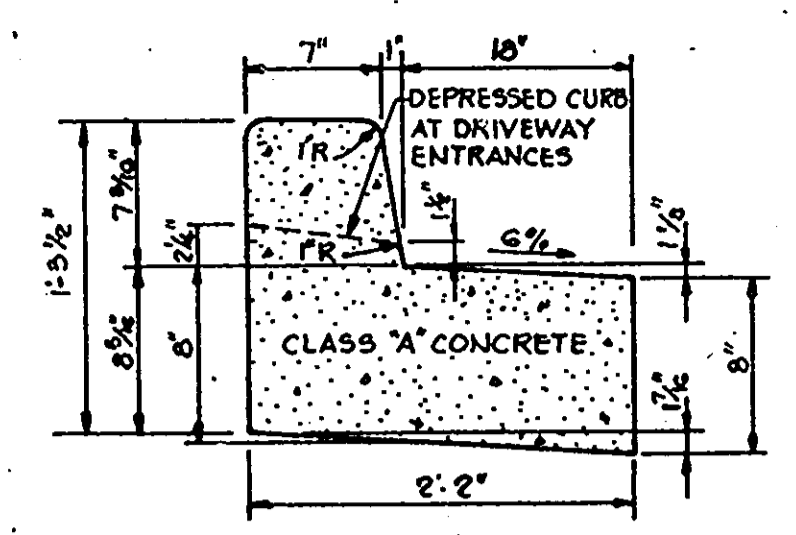
SIDEWALK DETAIL
NO SCALE



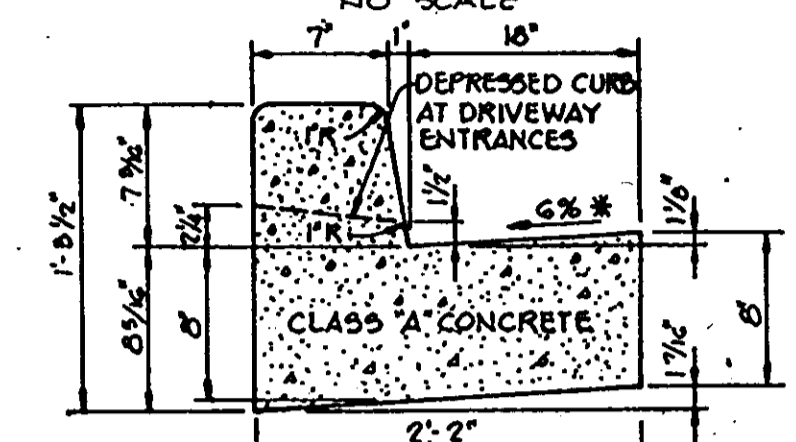
STONE FILTER @ E-1
NO SCALE



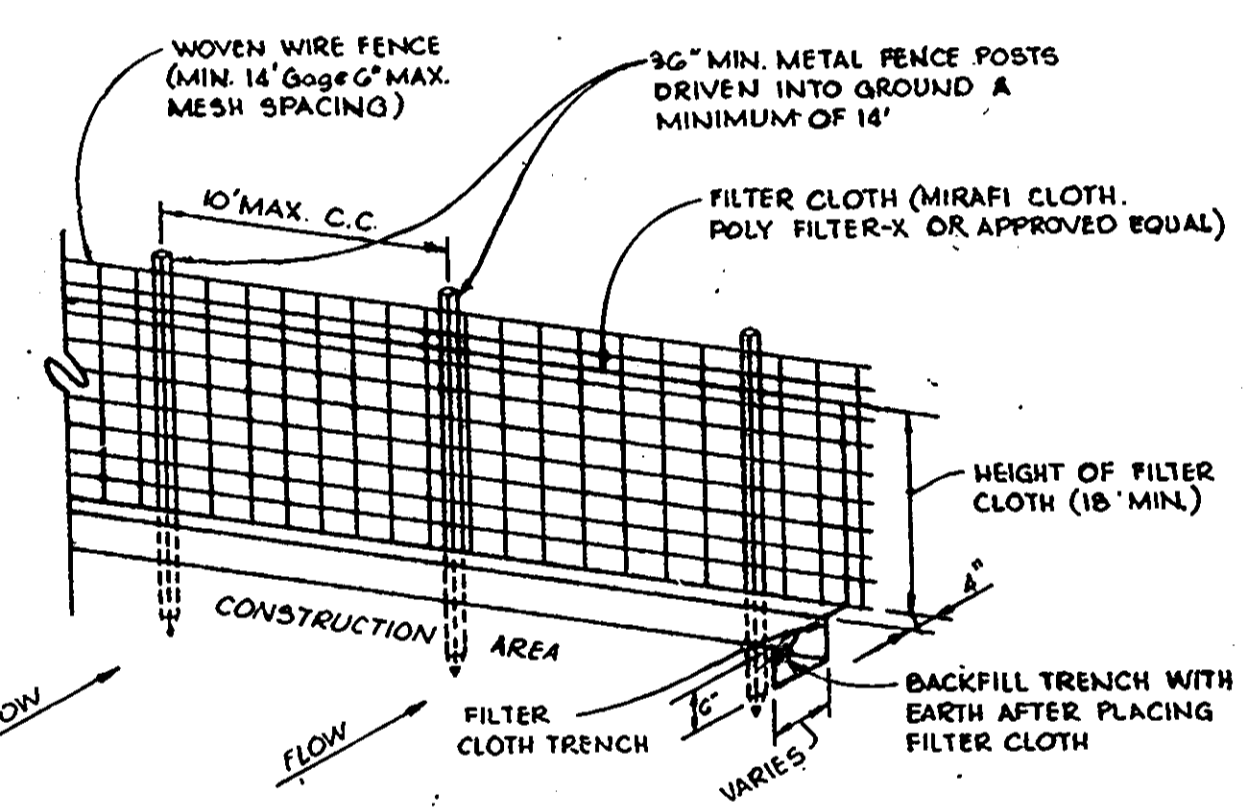
INLET BLOCKING DETAIL @ I-111-2
NO SCALE



REVERSE 7" COMBINATION CURB AND GUTTER
NO SCALE

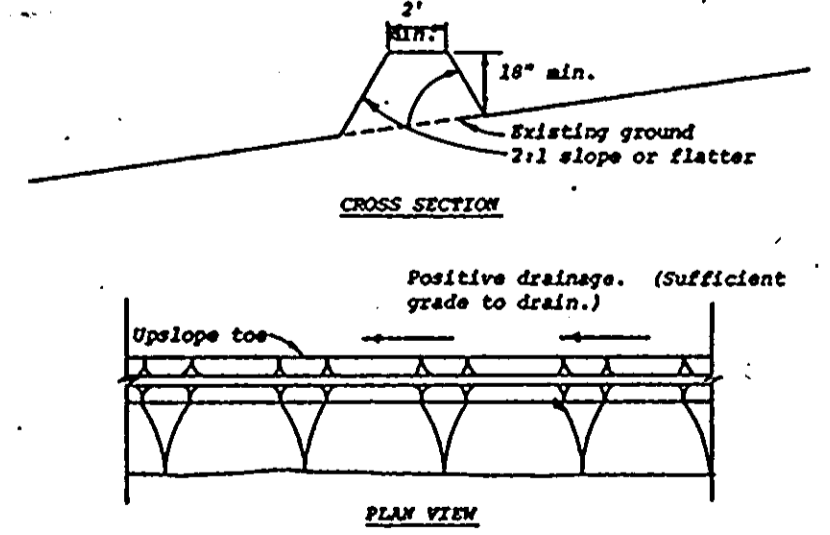


STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE

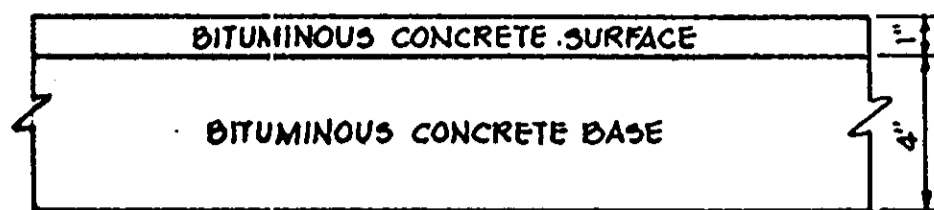
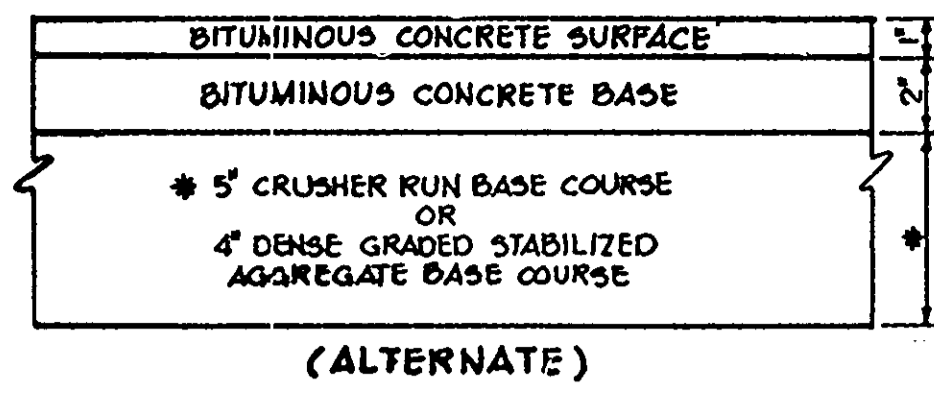


SILT FENCE
NO SCALE

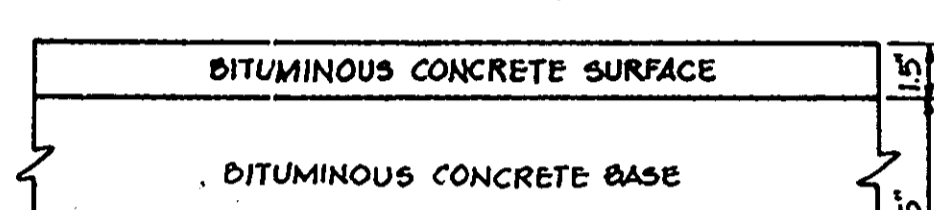
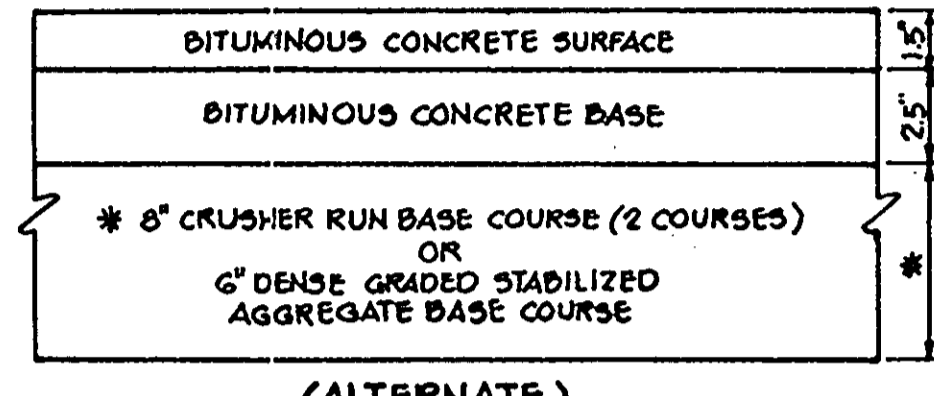
- NOTES:
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS BY USE OF WIRE TIES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES SPACED EVERY 24" X 24".
 3. SILT FENCE TO BE PLACED IN LIEU OF STRAIN BALES AND/OR DIVERSION DIKES AT THE OPTION OF THE DEVELOPER.



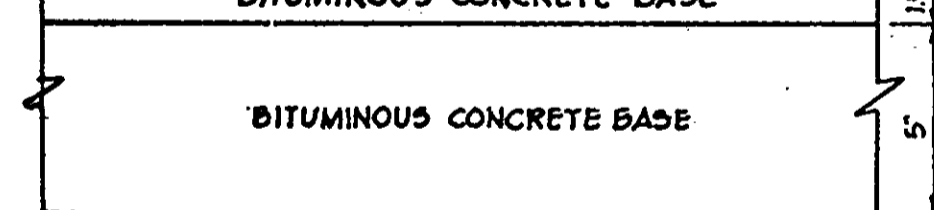
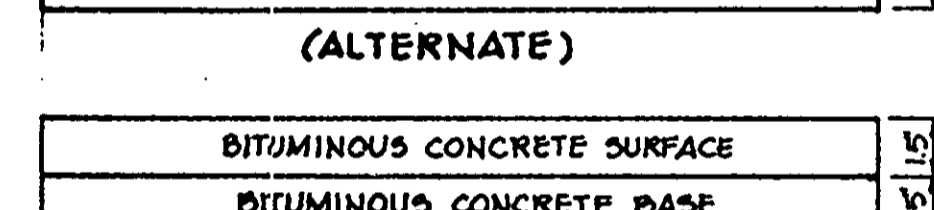
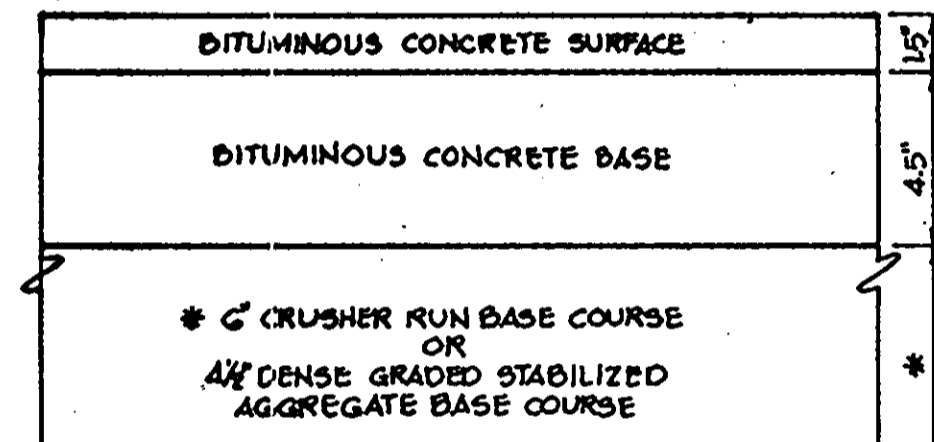
PERIMETER DIKE
NO SCALE



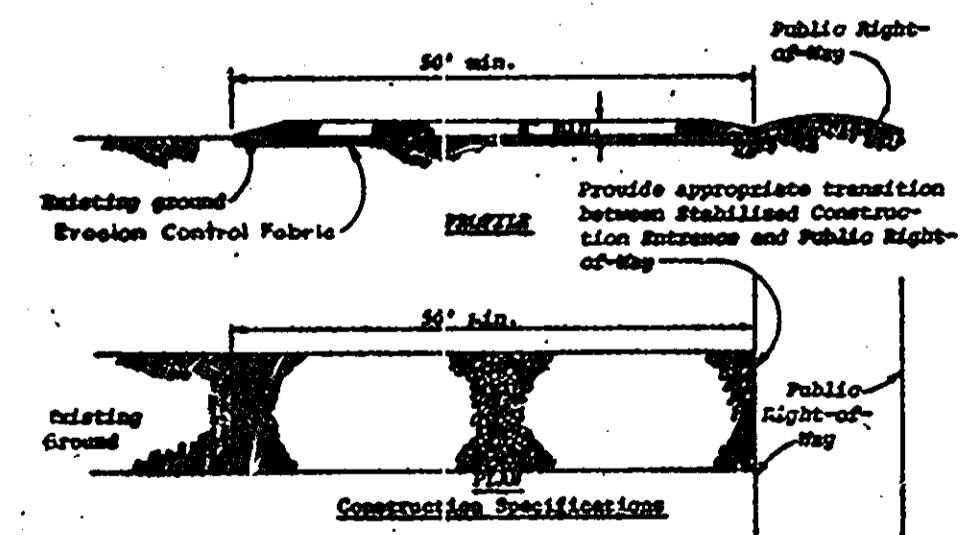
HOWARD COUNTY DESIGN MANUAL VOLUME IX - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)
(5" PAVING, P-1)



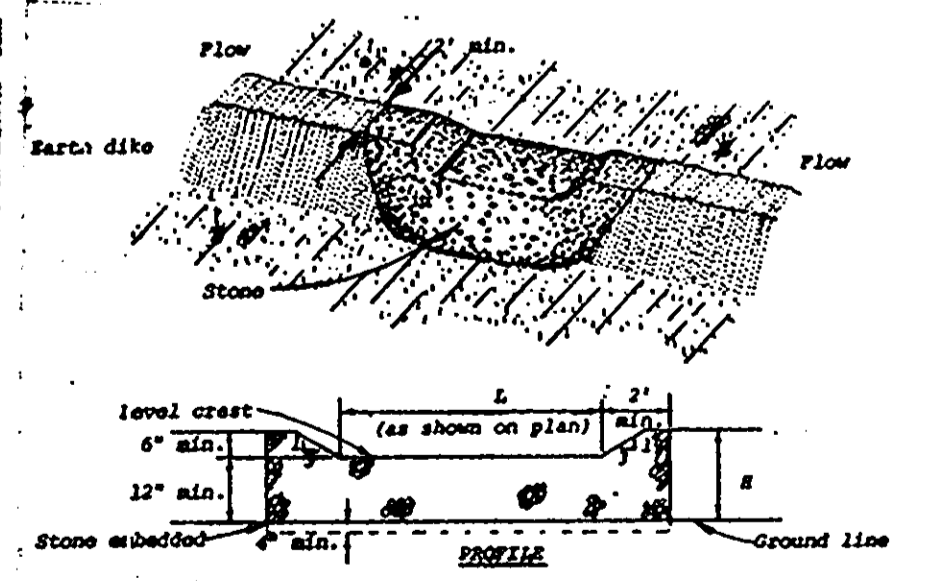
HOWARD COUNTY DESIGN MANUAL VOLUME IX - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)
(6" PAVING, P-2)



HOWARD COUNTY DESIGN MANUAL VOLUME IX - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)
(8" PAVING, P-3)



STABILIZED CONSTRUCTION ENTRANCE
NO SCALE



STONE OUTLET STRUCTURE
NO SCALE

SEDIMENT CONTROL CONSTRUCTION NOTES

- GENERAL 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 (922-2070).
 2. All sediment control structures will be installed in accordance with "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" as prepared by the U.S. Department of Agriculture Soil Conservation Service.
 3. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
 4. All disturbed areas are to be dressed and stabilized according to the temporary or permanent seeding schedules as soon as proper weather conditions exist for the establishment of a permanent vegetative cover.
 5. Sediment will be removed from traps when the depth reaches the clean out elevation shown on the plans.
 6. Fertilizer and lime rates may be changed through authorization by the Howard Soil Conservation District if soil tests determine a reduction in the specified rates is justified.
 7. 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.
 8. References called for on the sediment control construction plan and details are made to "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".
 9. Sediment control will be installed before clearing and grubbing remainder of site.
 10. No storm drains shall be installed under this contract.

TEMPORARY SEEDING

- Area to be seeded shall be recently loosened. If the ground is packed, crusted or hard, the top layer of soil shall be loosened by disking, raking or other acceptable means.
- A. Apply 10-20-10 fertilizer (or equivalent) at the rate of 600 lbs. per acre or 15 lbs. per 1000 square feet.
 - B. Where soil is known to be highly acid, apply dolomitic limestone at the rate of 1 ton per acre.
 - C. Work both into soil and seed with cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry will include seed and fertilizer) at the rate of 40 lbs. per acre of Italian or perennial ryegrass.
 - D. Mulch with unweathered small grain straw at the rate of 1 1/2 to 2 tons, per acre and anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gal. per 1000 square feet.

PERMANENT SEEDING

- Final stabilization will take place as soon as possible as weather conditions permit, as follows:
- A. Apply dolomitic limestone at the rate of 2 tons per acre (one ton per acre if application of ton per acre was made for temporary seeding.)
 - B. Apply 0-20-20 fertilizer at the rate of 600 lbs. per acre harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3" lawns or high maintenance areas will be dragged and leveled with a York rake. At the time of seeding apply 400 pounds of 30-0-0 ureaform fertilizer and 500 lbs. of 10-20-20 or equivalent fertilizer per acre.
 - C. Seed with a mixture of certified "Merion" Kentucky bluegrass - 40 lbs. per acre; common Kentucky bluegrass @ 40 lbs. per acre; Red Fescue, Pennlawn or Jamestown @ 20 lbs. per acre.
 - D. Mulch with unweathered small grain straw at the rate of 1 1/2 to 2 tons per acre and anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gallons per 1000 square feet.
 - E. Seed all slopes with a mixture of certified Kentucky 31 tall fescue @ 50 lbs. per acre and anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gallons per 1000 square feet.
 - F. Sodded swales shall be Kentucky 31 tall fescue.

SEQUENCE OF CONSTRUCTION

1. OBTAIN A GRADING PERMIT.
2. CLEAR AND GRUB ONLY AREAS FOR SEDIMENT CONTROL DEVICE INSTALLATION.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
4. INSTALL STORM WATER MANAGEMENT/SEDIMENT CONTROL POND #1 UPON INSTALLATION OF STORM WATER MANAGEMENT/ SEDIMENT CONTROL POND #2. DO NOT CONSTRUCT TRIANGULAR CHANNEL OUTFALL. STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
5. INSTALL PERIMETER DIKES AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
6. COMPLETE ALL GRADING.
7. INSTALL UTILITIES (WATER, SEWER AND STORM DRAINS) AND BLOCK STORM DRAIN INLETS.
8. COMPLETE ALL CONSTRUCTION AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
9. UPON APPROVAL OF THE SOIL CONSERVATION DISTRICT, REMOVE ALL SEDIMENT CONTROL DEVICES AND RESTORE STORM WATER MANAGEMENT PONDS TO ORIGINAL DIMENSIONS. CONSTRUCT TRIANGULAR CHANNEL OUTFALL AT STORM WATER MANAGEMENT POND #2. PERMANENTLY RESEED ALL DISTURBED AREAS.

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR 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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Samuel... 12/7/83
DEVELOPER: DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Arthur E. Mungge 12-6-83
ENGINEER: DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Nelson 12-13-83
U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED *Robert D. Zichow* 12-12-83
HOWARD S.C.D. DATE

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

Joseph Boyles 12-15-83
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Donald A. Haring 12-19-83
PLANNING DIRECTOR DATE

John W. Mueselmann 12-19-83
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

Deane E. Neumeier 12-15-83
DIRECTOR DATE

Michelle... 12-19-83
CHIEF, BUREAU OF ENGINEERING DATE

DATE	NO.	REVISION

OWNER: PETER KIRK, PATRICK McCUALL AND WILBUR E SIMMONS JR. TRUSTEES
1000 EQUITABLE BANK CENTER
COLUMBIA, MARYLAND 21044

DEVELOPER: K.M.S., INC.
1000 EQUITABLE BANK CENTER
COLUMBIA, MARYLAND 21044

PROJECT: OAKVIEW TREATMENT CENTER
PARCEL C-2
HOWARD COUNTY MEDICAL RESEARCH PARK
AREA RECORD PLAT RECORDING REFERENCE NO. 5677
TAX MAP NO. 17 PARCEL C-2
2ND ELECTION DISTRICT
HOWARD COUNTY MARYLAND

TITLE: DETAILS

THE RIEMER GROUP, INC.

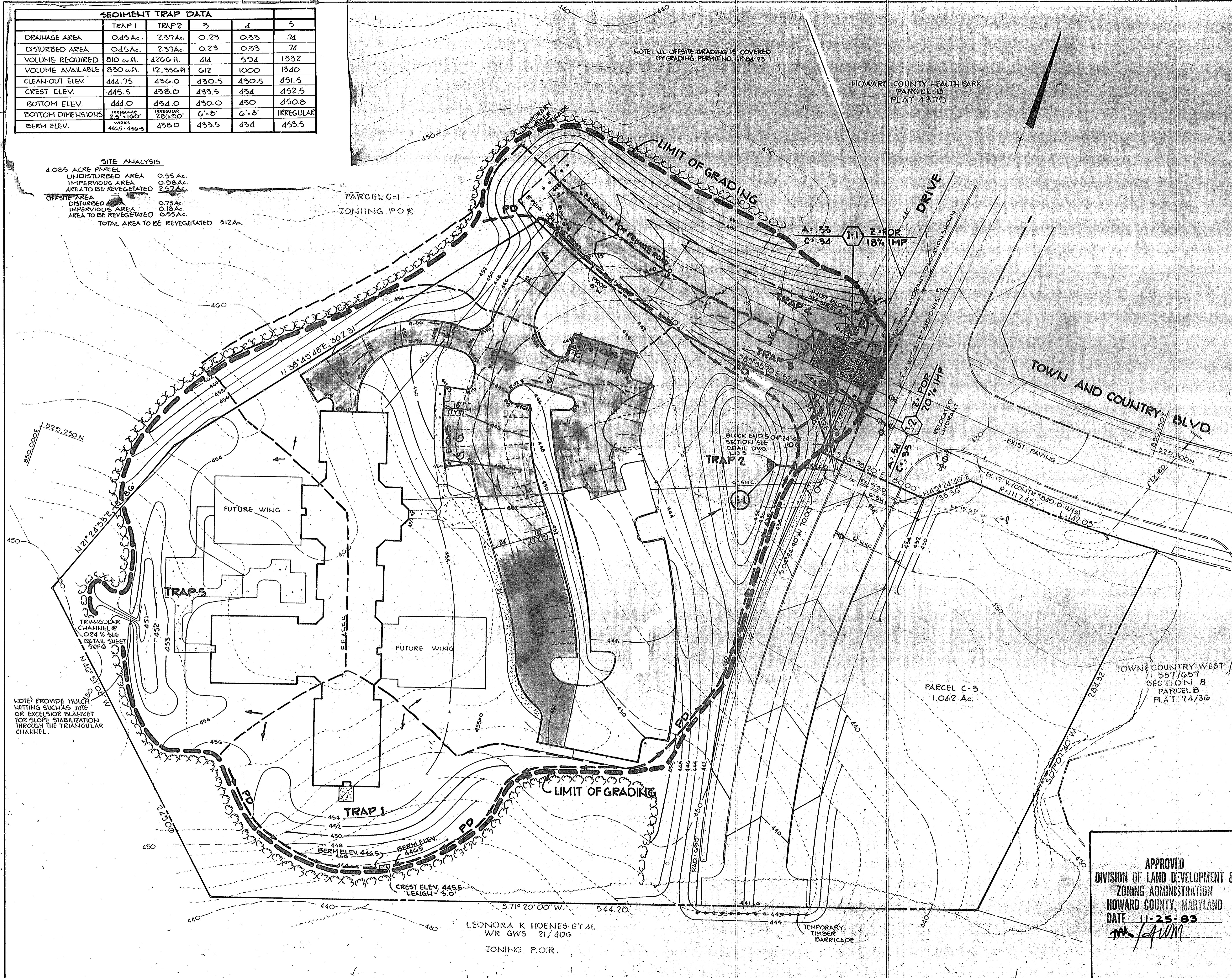
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
8659 Baltimore National Pike, Ellicott City, Maryland, 21043 301 461-2690

12-6-83 DATE
DESIGNED BY: G.R.B.
DRAWN BY: J.S.K.
PROJECT NO: 003000
DATE: AUGUST 31, 1983
SCALE: AS SHOWN
DRAWING NO. 3 OF 6

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 12-25-83
Samuel...

SEDIMENT TRAP DATA					
	TRAP 1	TRAP 2	3	4	5
DRAINAGE AREA	0.45 Ac.	2.37 Ac.	0.23	0.33	.74
DISTURBED AREA	0.15 Ac.	2.37 Ac.	0.23	0.33	.74
VOLUME REQUIRED	810 cu ft.	4266 ft.	414	504	1332
VOLUME AVAILABLE	830 cu ft.	12,356 ft.	612	1000	1340
CLEAN-OUT ELEV.	444.75	436.0	430.5	430.5	451.5
CREST ELEV.	445.5	438.0	433.5	434	452.5
BOTTOM ELEV.	444.0	434.0	430.0	430	450.8
BOTTOM DIMENSIONS	REGULAR 2.2' x 16.0'	IRREGULAR 2.2' x 20.0'	6' x 8'	6' x 8'	IRREGULAR
BERM ELEV.	VARIABLE 446.5-450.5	438.0	433.5	434	453.5

SITE ANALYSIS
 4.085 ACRE PARCEL
 UNDISTURBED AREA 0.55 Ac.
 IMPERVIOUS AREA 0.98 Ac.
 AREA TO BE REVEGETATED 2.57 Ac.
 OFFSITE AREA
 DISTURBED AREA 0.73 Ac.
 IMPERVIOUS AREA 0.18 Ac.
 AREA TO BE REVEGETATED 0.55 Ac.
 TOTAL AREA TO BE REVEGETATED 3.12 Ac.



BY THE DEVELOPER:
 I CERTIFY THAT ALL DEVELOPMENT AND/OR 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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 DEVELOPER: *[Signature]* DATE: 12/7/83

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 ENGINEER: *[Signature]* DATE: 12-6-83

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 U.S. SOIL CONSERVATION SERVICE DATE: 12-13-83

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *[Signature]* DATE: 12-12-83
 HOWARD S.O.D.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 12-19-83

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *[Signature]* DATE: 12-19-83

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION: *[Signature]* DATE: 12-19-83

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 12-19-83
 CHIEF, BUREAU OF ENGINEERING: *[Signature]* DATE: 12-19-83

DATE	NO.	REVISION

OWNER: PETER KIRK, PATRICK McQUAN AND WILBUR E. SIMMONS JR. TRUSTEES
 1000 EQUITABLE BANK CENTER
 COLUMBIA, MARYLAND 21044

DEVELOPER: KMS, INC.
 1000 EQUITABLE BANK CENTER
 COLUMBIA, MARYLAND 21044

PROJECT: OAKVIEW TREATMENT CENTER
 PARCEL C-2
 HOWARD COUNTY MEDICAL RESEARCH PARK
 AREA RECORD PLAT RECORDING REFERENCE NO. 6677
 TAX MAP NO. 17 PARCEL C-2
 2ND ELECTION DISTRICT
 HOWARD COUNTY MARYLAND

TITLE: DRAINAGE AREA MAP
 EROSION AND SEDIMENT CONTROL

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 8659 Baltimore National Pike, Ellicott City, Maryland 21041 301-461-2690

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 11-25-83
[Signature]

DESIGNED BY: GRB
 DRAWN BY: GRB
 PROJECT NO: 003000
 DATE: AUGUST 31, 1983
 SCALE: 1"=30'
 DRAWING NO. 4 OF 6

SDP-84-10 DECEMBER 6, 1983

STRUCTURE SCHEDULE						
TYPE	LOCATION	INV/IN	INV/OUT	THEAT OPENING	REMARKS	
I-1	K	STA. 0+46.15'R	428.57	428.17	430.8	Ho.Co. STD. 5D4.13
I-2	K	STA. 0+46.15'L	-	428.70	430.8	Ho.Co. STD. 5D4.13
S-1	SEE PLAN	431.98	431.48	438.5*	-	
E-1	SEE PLAN	433.25	432.71	-	Ho.Co. STD. 5D.551	

* TOP ELEVATION

POND CONSTRUCTION NOTES

I. SITE PREPARATION

Areas designated for embankment and works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed.

II. EARTH FILL

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

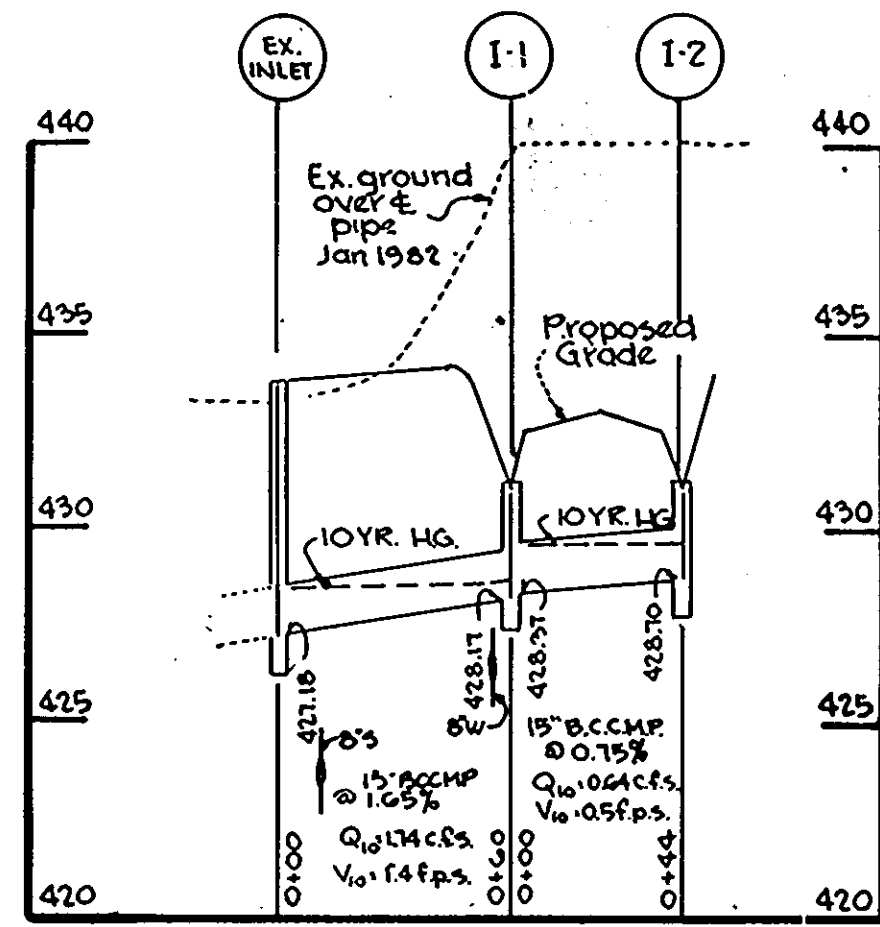
The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Cutoff Trench

A cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The dimensions shall be as shown in detail, sheet 5 of 6. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

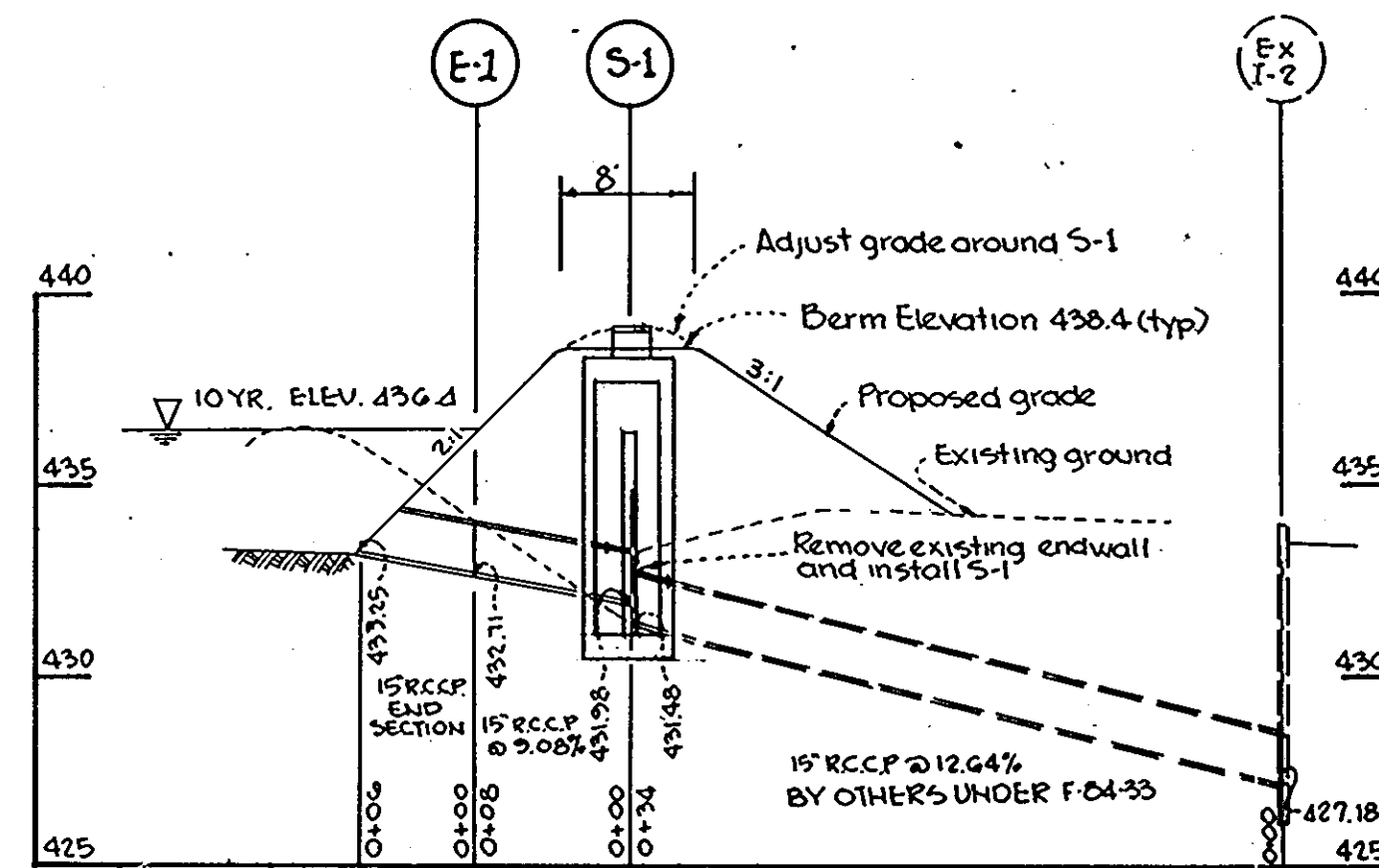
III. REINFORCED CONCRETE PIPE

Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.



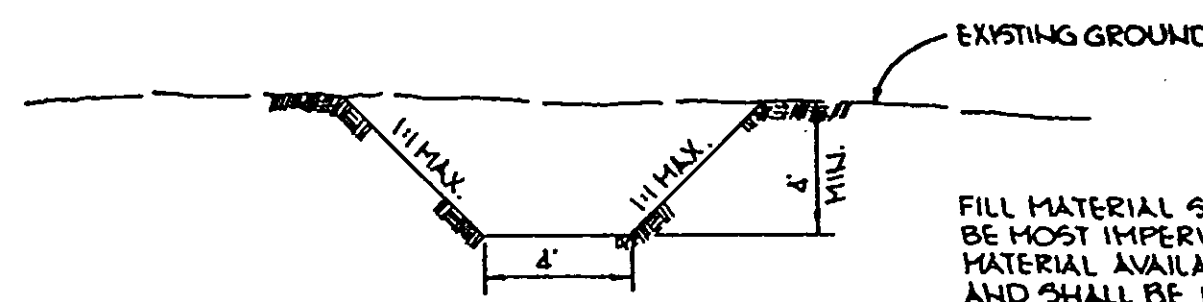
STORM DRAIN PROFILE I-2-S-1

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



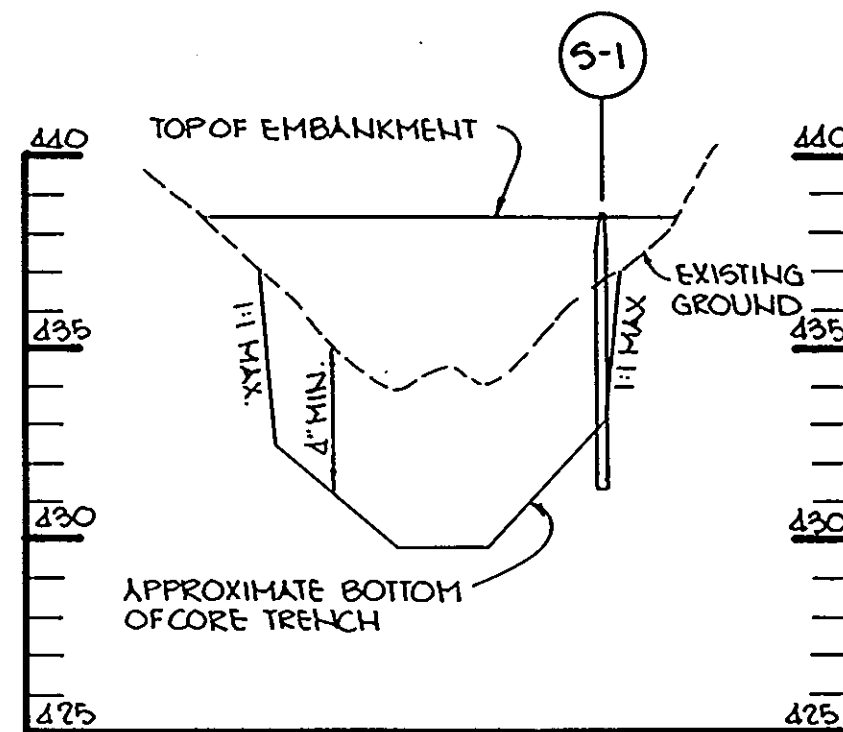
S.W.M. CONTROL PROFILE

SCALE: HOR: 1"=10' VERT: 1"=5'



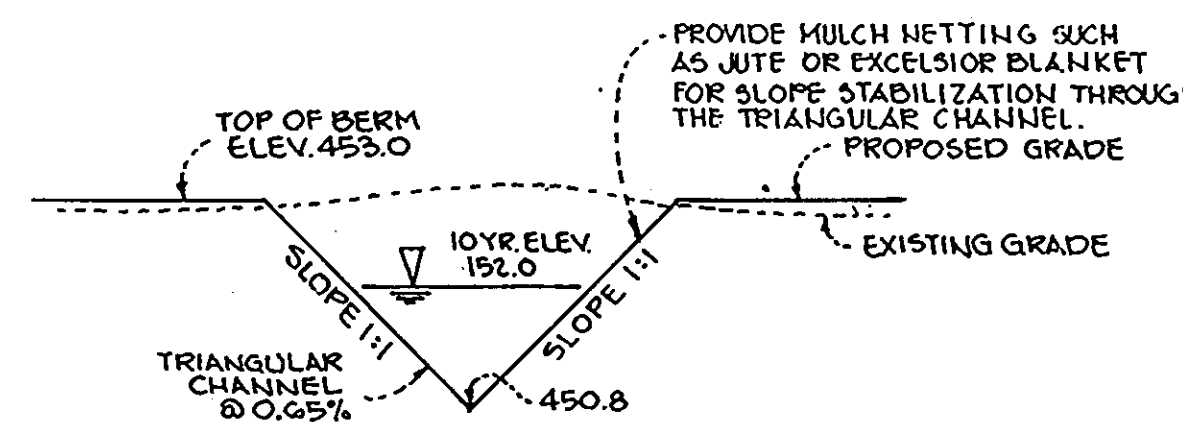
CORE TRENCH TYP. SECTION

NO SCALE



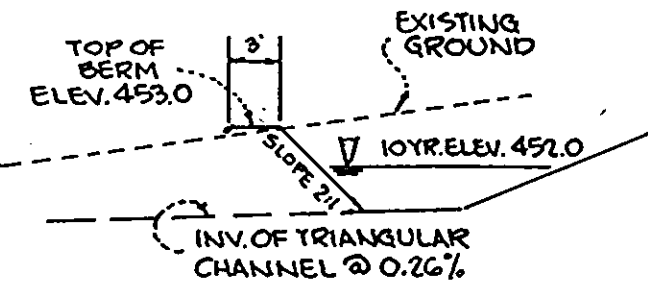
EMBANKMENT PROFILE

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



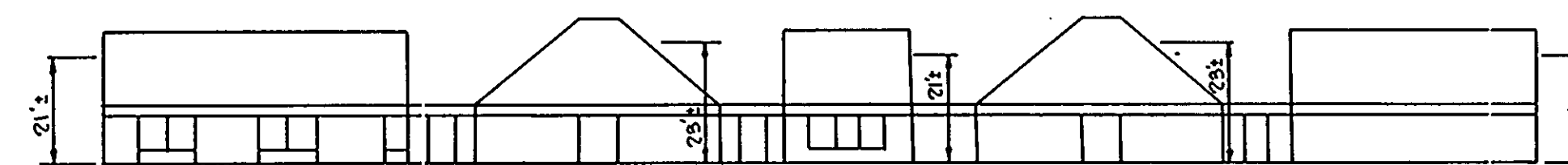
TRIANGULAR CHANNEL DETAIL

NO SCALE



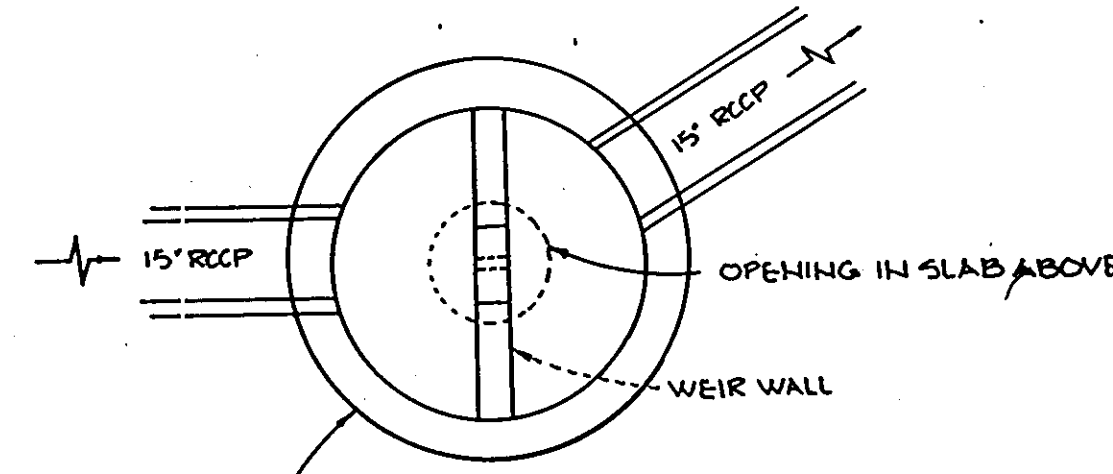
CROSS-SECTION THRU BERM S.W.M. AREA 2

NO SCALE



PROPOSED BUILDING ELEVATION (EAST)

SCALE: 1"=30'



PLAN

MODIFIED 5'-0" PRECAST MANHOLE SEE HO. CO. STD. DETAIL G.5.13

STD. MANHOLE FRAME & COVER 439.2

10" SLAB SEE HO. CO. STD. DETAIL G.5.13

ELEV. 431.02

430.4

435.7

431.50

431.48

CONC. INVERT

25" OPENING

15" RCCP BY OTHERS

15" RCCP

15" RCCP

15" RCCP

15" RCCP

15" RCCP

15" RCCP

15" RCCP

15" RCCP

15" RCCP

15" RCCP

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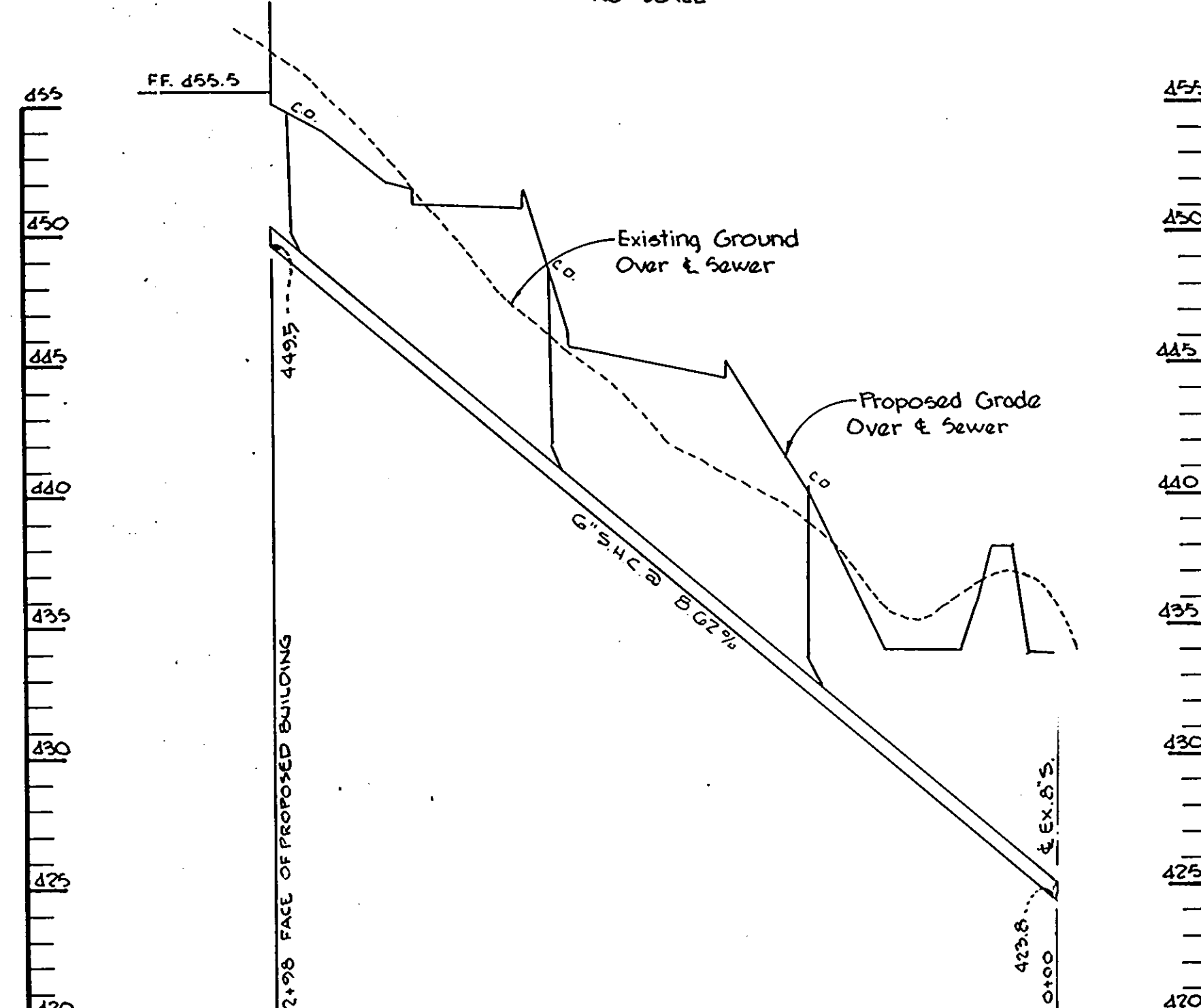
15" RCCP

15" RCCP

15" RCCP

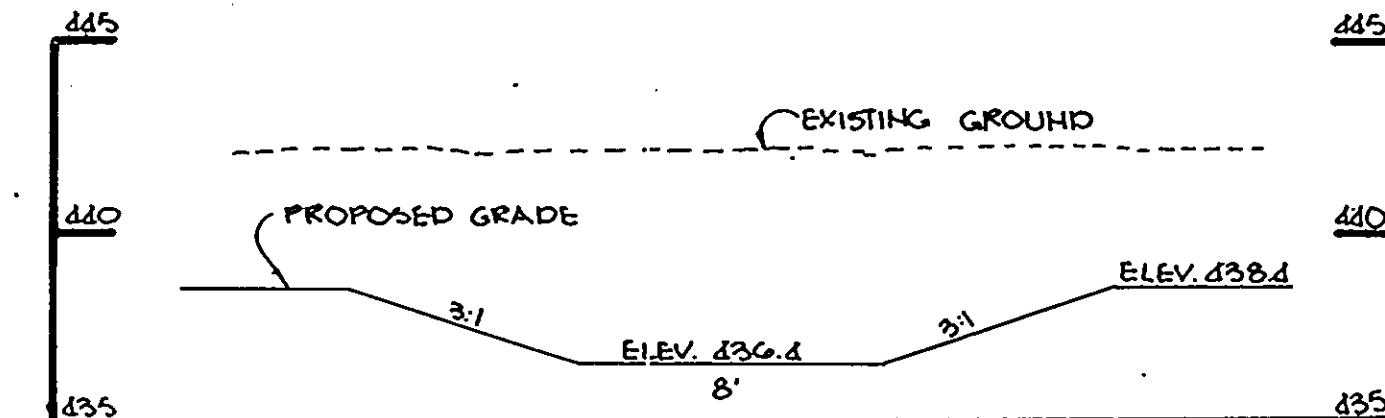
PROFILE

NO SCALE



PROFILE

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



PROFILE THRU EMERGENCY SPILLWAY

SCALE: 1"=5'

BY THE DEVELOPER:
 I CERTIFY THAT ALL DEVELOPMENT AND/OR 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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

James M. Hela 12-7-83
 DEVELOPER: DATE

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Arthur E. Mugg 12-6-83
 ENGINEER: DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Hela 12-13-83
 U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED *Robert Zilman* 12-12-83
 HOWARD S.C.D. DATE

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

Joseph Byrd 12-19-83
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Thomas L. Hamid 12-19-83
 PLANNING DIRECTOR DATE

John W. McNeerhan 12-19-83
 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

Henry F. Neuman 12-19-83
 DIRECTOR DATE

Mark R. ... 12-19-83
 CHIEF, BUREAU OF ENGINEERING DATE

DATE NO. REVISION

OWNER: PETER KIRK, PATRICK MCQUAI AND WILBUR E. SIMMONS JR TRUSTEES 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21048

DEVELOPER: K.M.S. INC. 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044

PROJECT: OAKVIEW TREATMENT CENTER PARCEL C-2

HOWARD COUNTY MEDICAL RESEARCH PARK AREA RECORD PLAT RECORDING REFERENCE NO. 5677 TAX MAP NO. 17 PARCEL C-2 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND

TITLE: DETAILS

THE RIEMER GROUP, INC.

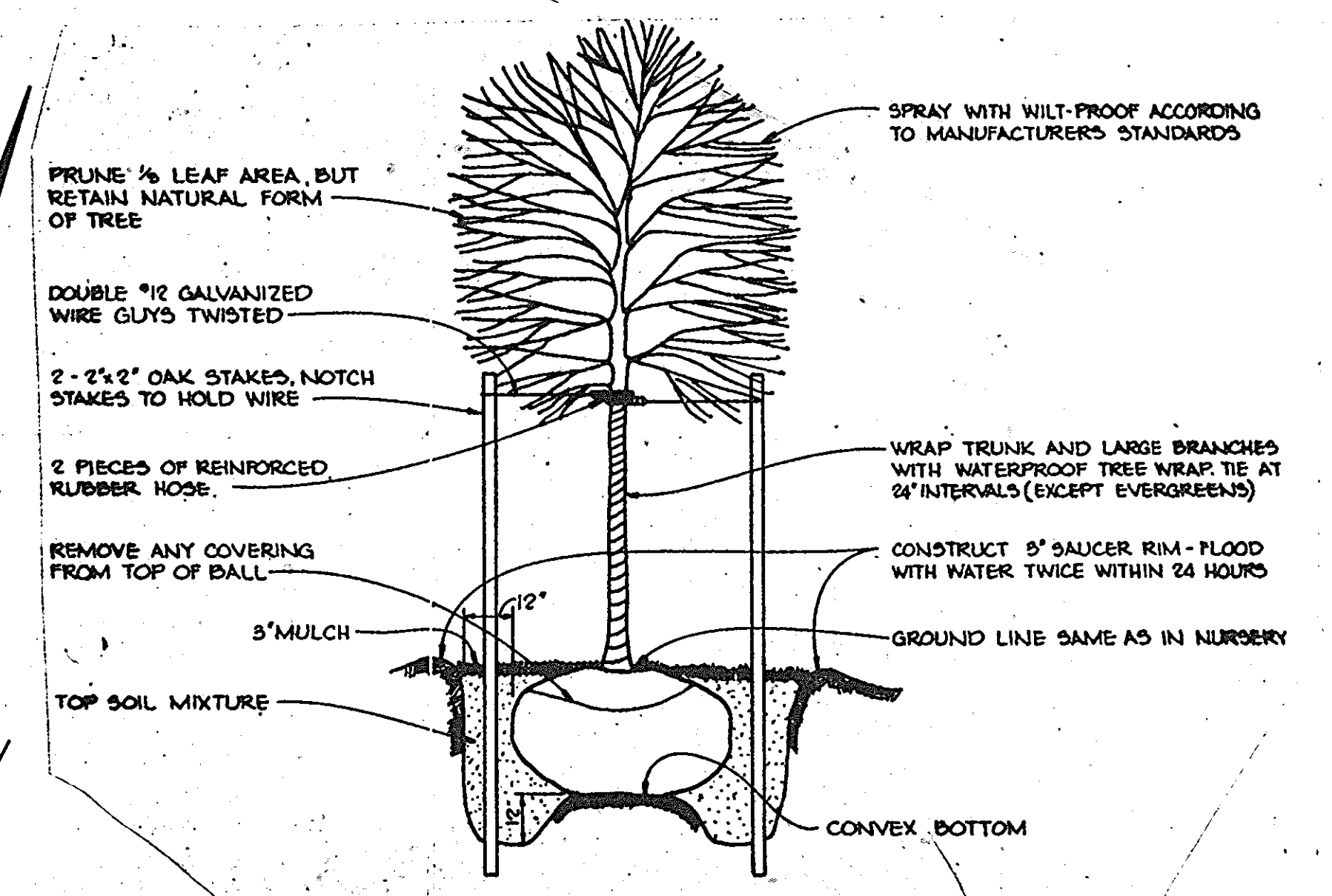
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 8659 Baltimore National Pike, Ellicott City, Maryland, 21043 301 461-2690

12-6-83 DATE
 DESIGNED BY: G.R.B.
 DRAWN BY: J.S.K.
 PROJECT NO: 003000
 DATE: AUGUST 31, 1983
 SCALE: AS SHOWN
 DRAWING NO. 5 OF 6

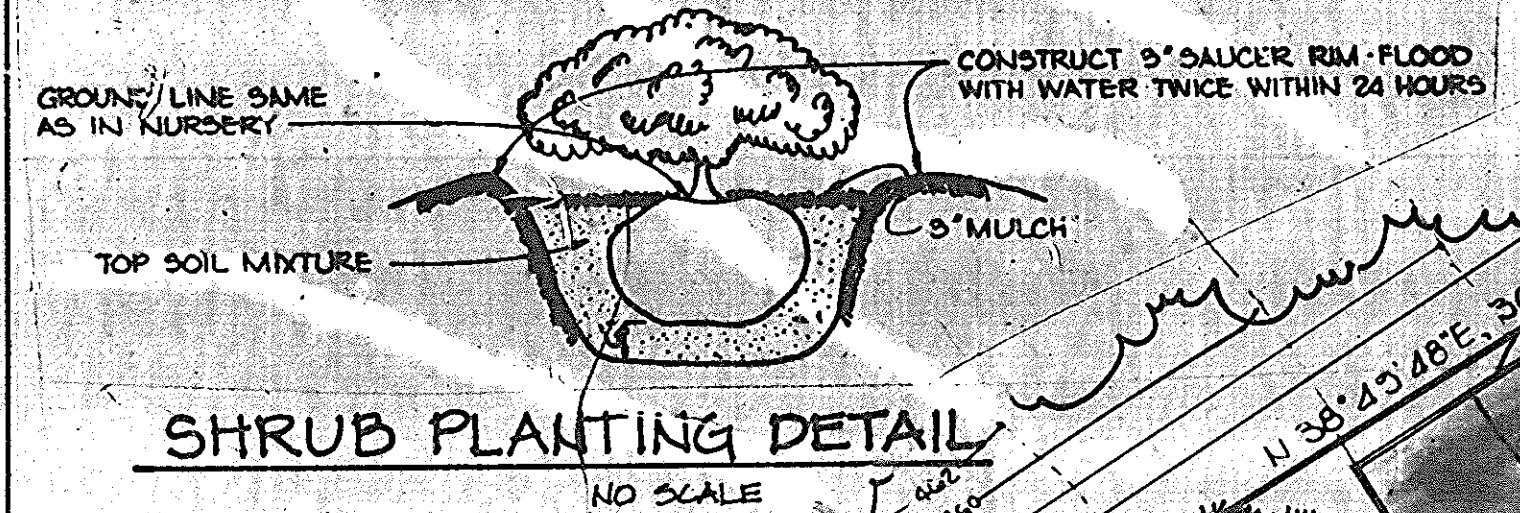
APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 11-25-83
M. ...

PLANT LIST

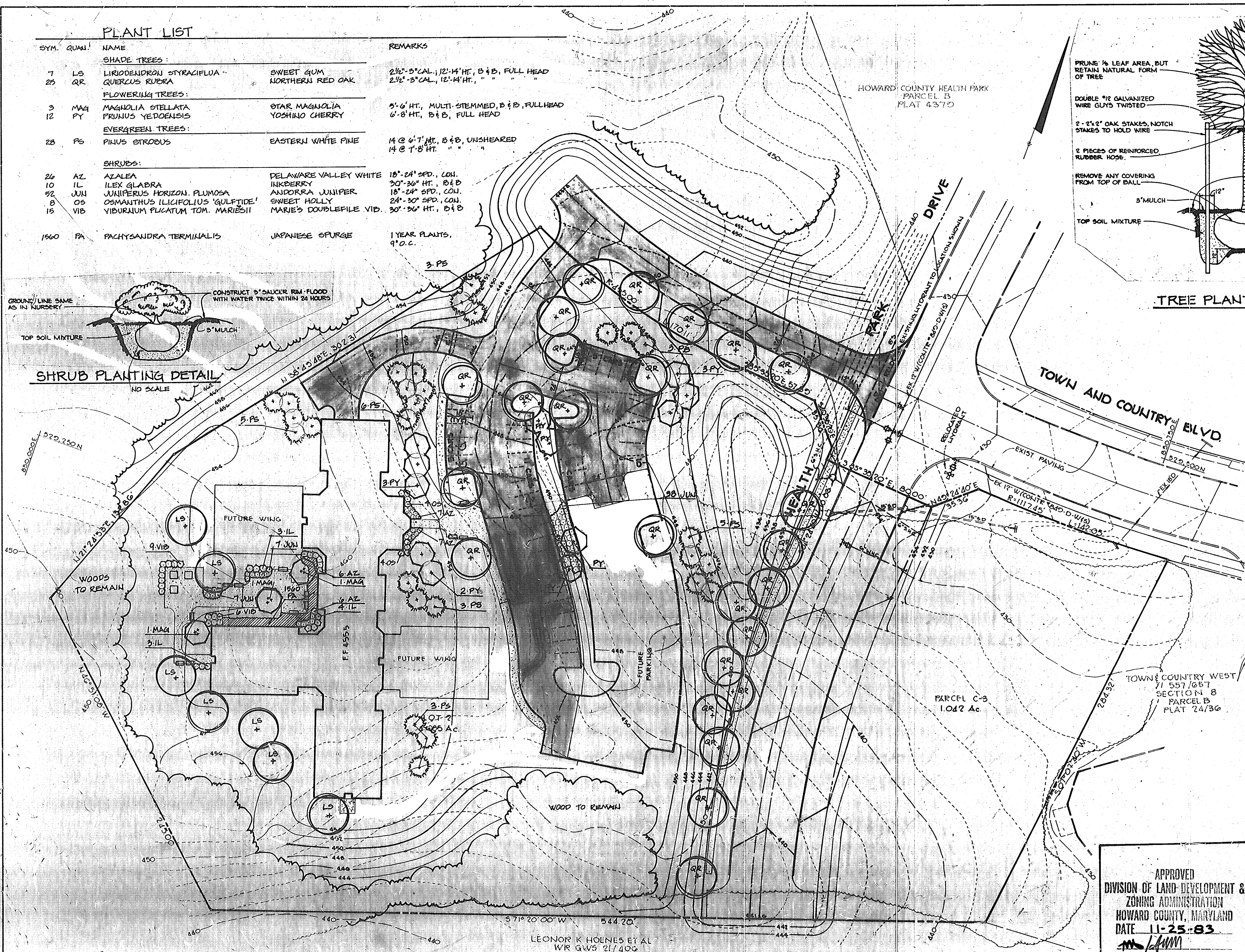
SYM.	QUANT.	NAME	REMARKS
SHADE TREES:			
7	LS	LIRIODENDRON STRACIFLUA	SWEET GUM
25	QR	QUERCUS RUBRA	NORTHERN RED OAK
FLOWERING TREES:			
3	MAQ	MAGNOLIA STELLATA	STAR MAGNOLIA
12	PY	PRUNUS YEDOENSIS	YOSHINO CHERRY
EVERGREEN TREES:			
28	PS	PINUS STROBUS	EASTERN WHITE PINE
SHRUBS:			
26	AZ	AZALEA	DELAWARE VALLEY WHITE
10	IL	ILEX GLABRA	INKBERRY
82	JUN	JUNIPERUS HORIZON. PLUMOSA	ANDORRA JUNIPER
9	OS	OSMANTHUS ILICIFOLIUS 'GULFTIDE'	SWEET HOLLY
15	VB	VIBURNUM PLICATUM TOM. MARIENII	MARIE'S DOUBLEFILE VIB.
1560	PA	PACHYSANDRA TERMINALIS	JAPANESE SPURGE
			1 YEAR PLANTS, 9" O.C.



TREE PLANTING DETAIL
NO SCALE



SHRUB PLANTING DETAIL
NO SCALE



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	<i>J. J. ...</i> 12-19-83 COUNTY HEALTH OFFICER DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.	<i>Thomas A. ...</i> 12-19-83 PLANNING DIRECTOR DATE
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.	<i>John W. ...</i> 12-19-83 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	<i>George F. ...</i> 12-19-83 DIRECTOR DATE
	<i>William ...</i> 12-19-83 CHIEF, BUREAU OF ENGINEERING DATE
DATE NO.	REVISION
OWNER:	PETER KIRK, PATRICK McGUIR AND WILBUR E. SIMMONS JR. TRUSTEES 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044
DEVEL:	K.M.S. INC. 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044
PROJECT:	OAKVIEW TREATMENT CENTER PARCEL C-2 HOWARD COUNTY MEDICAL RESEARCH PARK AREA RECORD PLAT RECORDING REFERENCE NO. 5677 TAX MAP NO. 17 PARCEL C-2 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND
TITLE:	PLANTING PLAN

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 11-25-83
[Signature]

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
8659 Baltimore National Pike, Ellicott City, Maryland 21041 301-461-2693

DATE	DESIGNED BY: MEM
STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER	DRAWN BY: MEM
	PROJECT NO: 003000
<i>William ...</i>	DATE: 8-31-83
	SCALE: 1"=30'
	DRAWING NO. 6 OF 6

MARYLAND BLUEPRINT CO. INC.