

KATHRYN H. RICHARDS  
733 - 567  
ZONED: R

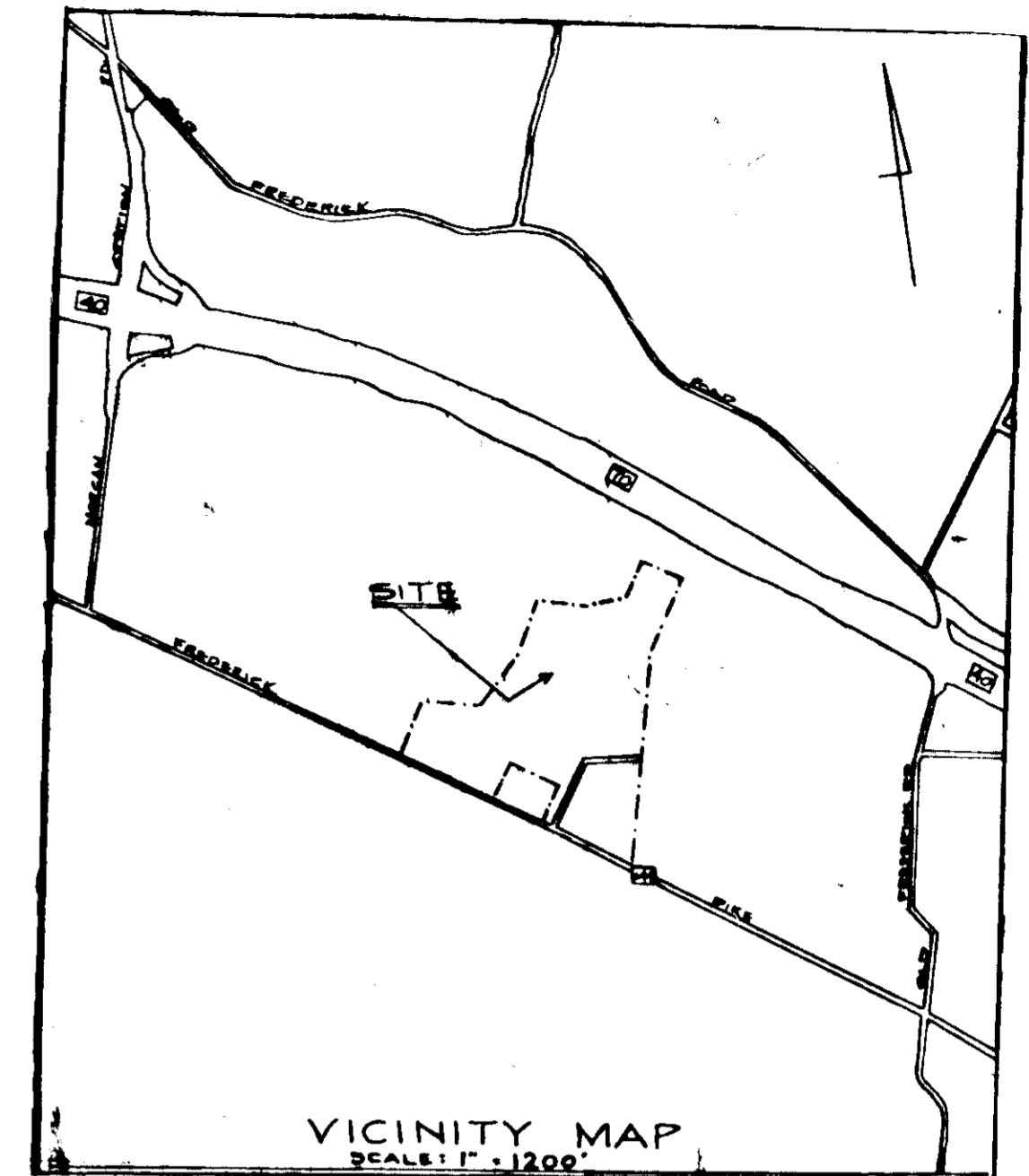
JOHN M. HARBIN  
530/51  
ZONED: R

AUGUST M. KERN  
749 - 660  
ZONED: R

P.J. HIGGINS  
663 - 524  
ZONED: R

A.P. THIRUVENGADAM  
892 - 131  
ZONED: R

J. SANDS  
556/532  
ZONED: R



**GENERAL NOTES**

1. TAX MAP 8 ; PARCEL NO. 130 AND 174
  2. DEED REFERENCE: GMP 0643/001, 789/212
  3. EXISTING ZONING: R
  4. HORIZONTAL CONTROL IS ASSUMED
  5. VERTICAL CONTROL IS ASSUMED
  6. PROPOSED SITE USE: LABORATORY RESEARCH
  7. TOTAL AREA OF SITE: 31.27 AC
  8. TOTAL AREA PROJECT AREA: 159 AC
  9. PARKING REQUIREMENTS:
    - 7 SPACES / 10 EMPLOYEES
    - TOTAL NO. OF EMPLOYEES: 65 FUTURE: 100
    - TOTAL SPACES REQUIRED: 40
    - TOTAL SPACES PROVIDED: 77 PLUS 5 HANDICAPPED SPACES = 80 SPACES
  10. TOPOGRAPHY IS FIELD RUN BY BOENDER ASSOCIATES, INC.
  11. MD. ROUTE 144 IS AN EXISTING PUBLIC ROAD.
  12. PRIVATE WATER AND PRIVATE SEWER ARE TO BE UTILIZED.
  13. PROPERTY SUBJECT TO SPECIAL EXCEPTIONS GRANTED MAY 10, 1974, MAY 11, 1976 AND SEPTEMBER 26, 1977 AND BOARD OF APPEALS CASE NO. 005-C.
  14. PLATTED PER PLAN PREPARED BY PURDUM & JESCHKE
  15. ANY DAMAGE TO COUNTY OWNED RIGHTS-OF-WAY SHALL BE CORRECTED AT THE DEVELOPERS EXPENSE.
  16. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH MD. CO. ROAD CONSTRUCTION CODE INDEX OF SHEETS
- SHT NO. 1: SITE PLAN  
 SHT NO. 2: PARTIAL SITE PLAN  
 SHT NO. 3: STORM WATER MANAGEMENT PLAN  
 SHT NO. 4: STORM DRAIN AND STORM WAT. MAN. PROFILES, SECTIONS & DETAILS.  
 SHT NO. 5: POND CONSTRUCTION SPECIFICATIONS, SEWAGE LIFT STATION DETAILS & SPECS  
 SHT NO. 6: SEDIMENT CONTROL PLAN  
 SHT NO. 7: SEDIMENT CONTROL, ROAD AND RETAINING WALL DETAILS.  
 SHT NO. 8: SEWAGE PUMPING STATION PLAN, SECTIONS, PROFILES AND SPECIFICATIONS



APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer: *Joseph P. ...* DATE: 10-11-79  
 APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
 Planning Officer: *Thomas J. ...* DATE: 10-23-79  
 Chief, Division of Land Development: *Phillip ...* DATE: 10-23-79  
 APPROVED FOR DRAINAGE SYSTEMS AND PUBLIC ROADS. STORM  
 District Engineer: *John F. ...* DATE: 10-22-79  
 Surveyor: *W.O. ...* DATE: 10-19-79

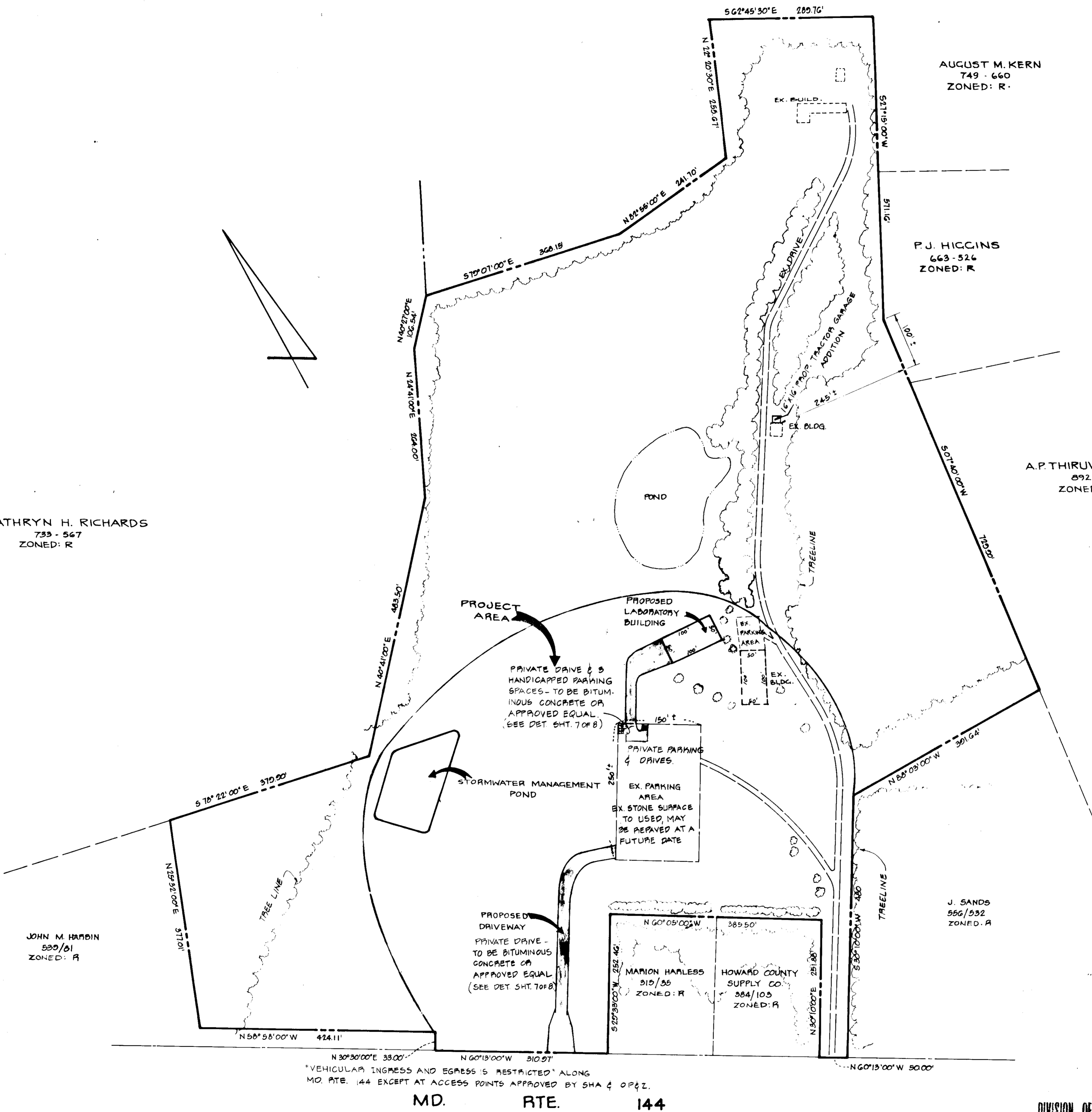
RODOLPH L. MAY JR.  
MD. P.E. NO. 8700

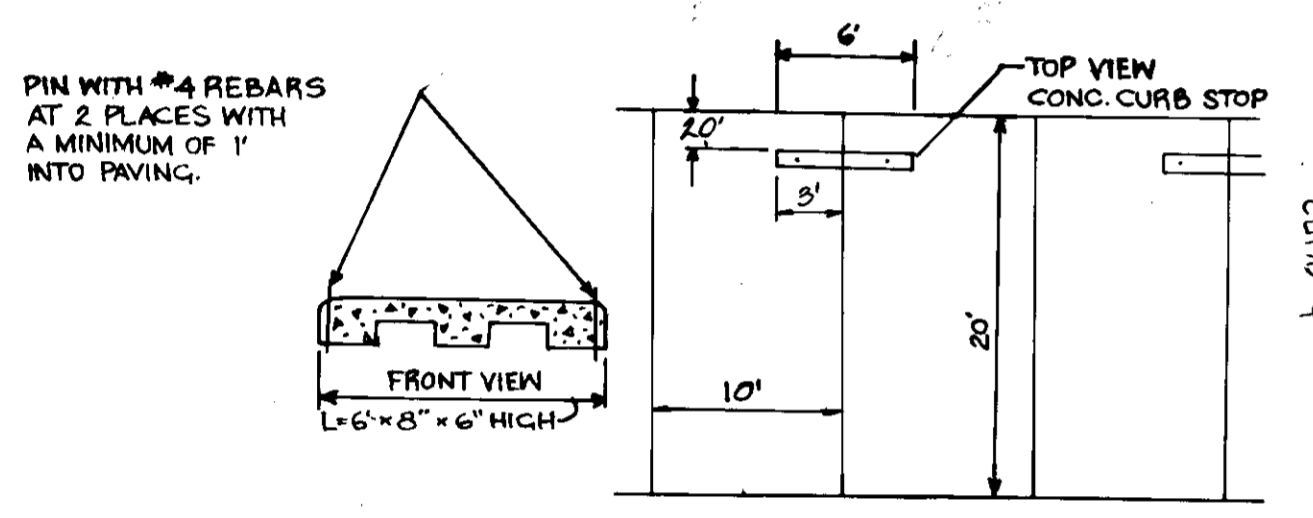
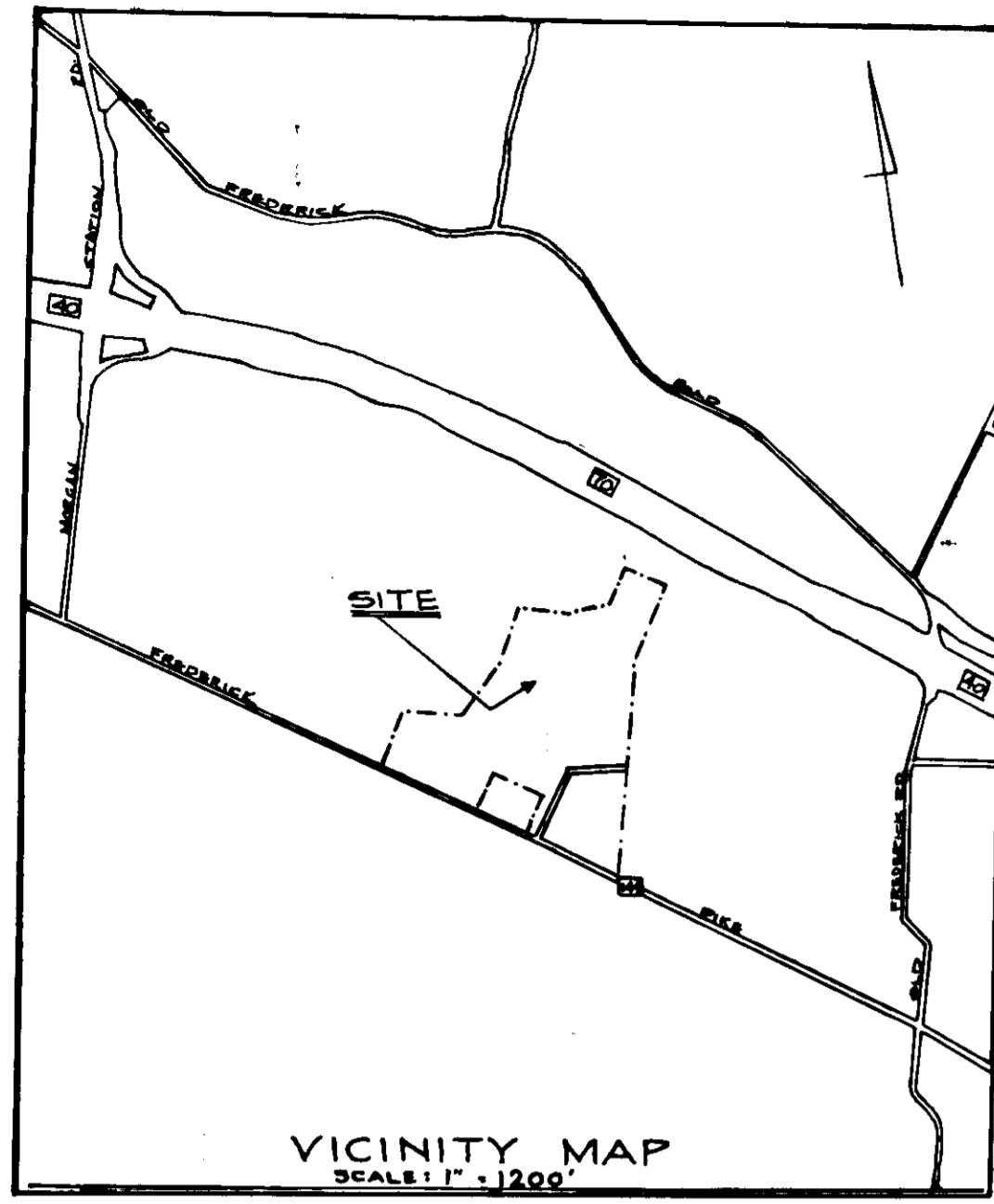
OWNER AND DEVELOPER  
 DAEDALEAN ASSOCIATES  
 1510 FREDERICK RD.  
 WOODBINE, MARYLAND 21797

APPROVED  
 DIVISION OF LAND DEVELOPMENT  
 HOWARD COUNTY, MARYLAND  
 DATE: 9-20-79  
*Jum*

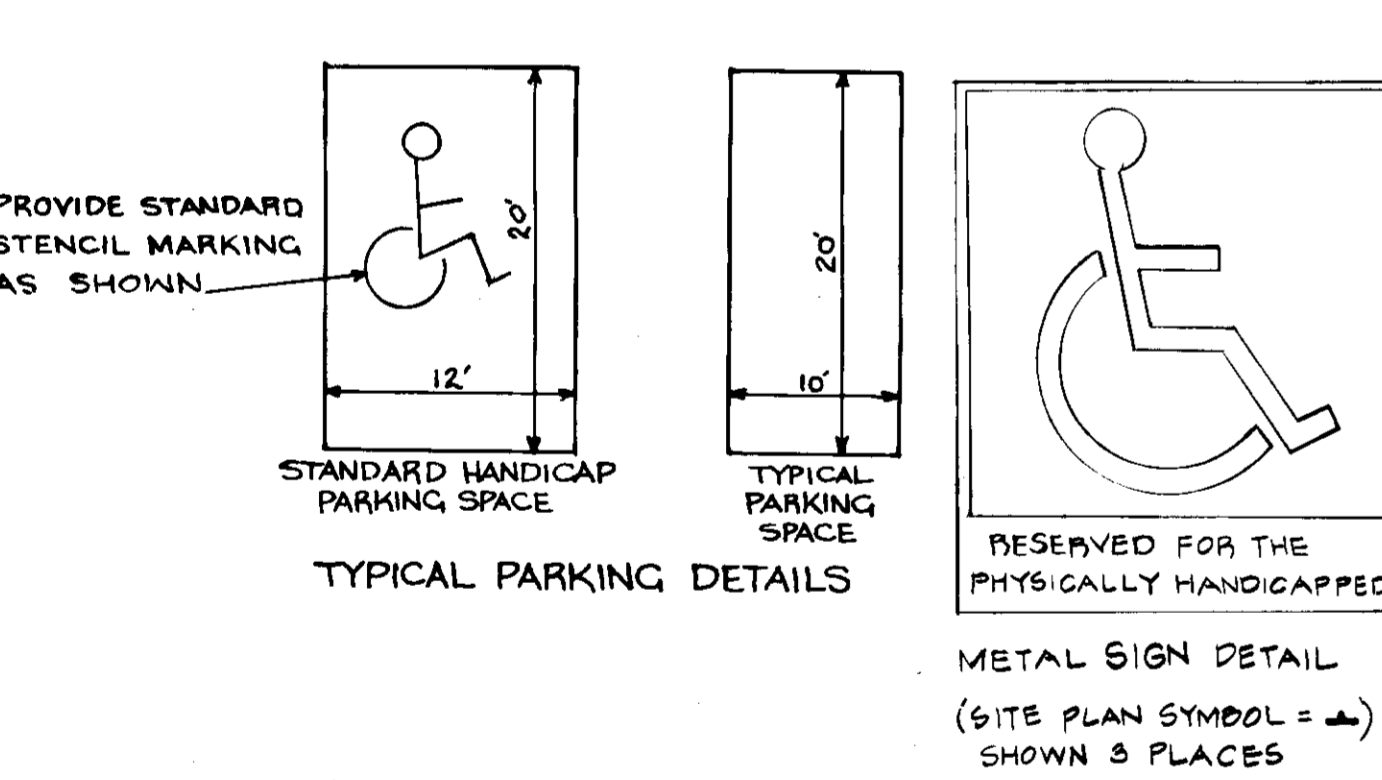
TITLE: SITE PLAN			
PROJECT: SPRINGLAKE RESEARCH CENTER			
LOCATION: 4TH ELECTION DISTRICT		HOWARD COUNTY, MD	
DATE: MAY, 1979	DESIGN BY: WHN	DRAWN BY: S.E.W.	CHECKED BY: PLM
SCALE: 1" = 100'	JOB NO.: 7957	DRAWING NO.: 1 OF 8	
boender associates SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLICOTT CITY, MARYLAND 21042 BALTIMORE 301-482-7777 SALISBURY 301-748-1286			engineers surveyors planners

SDP-79-162

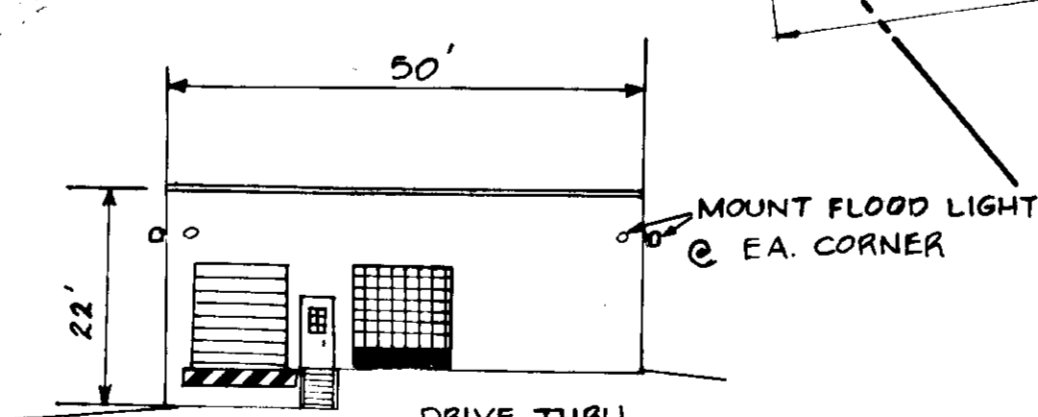
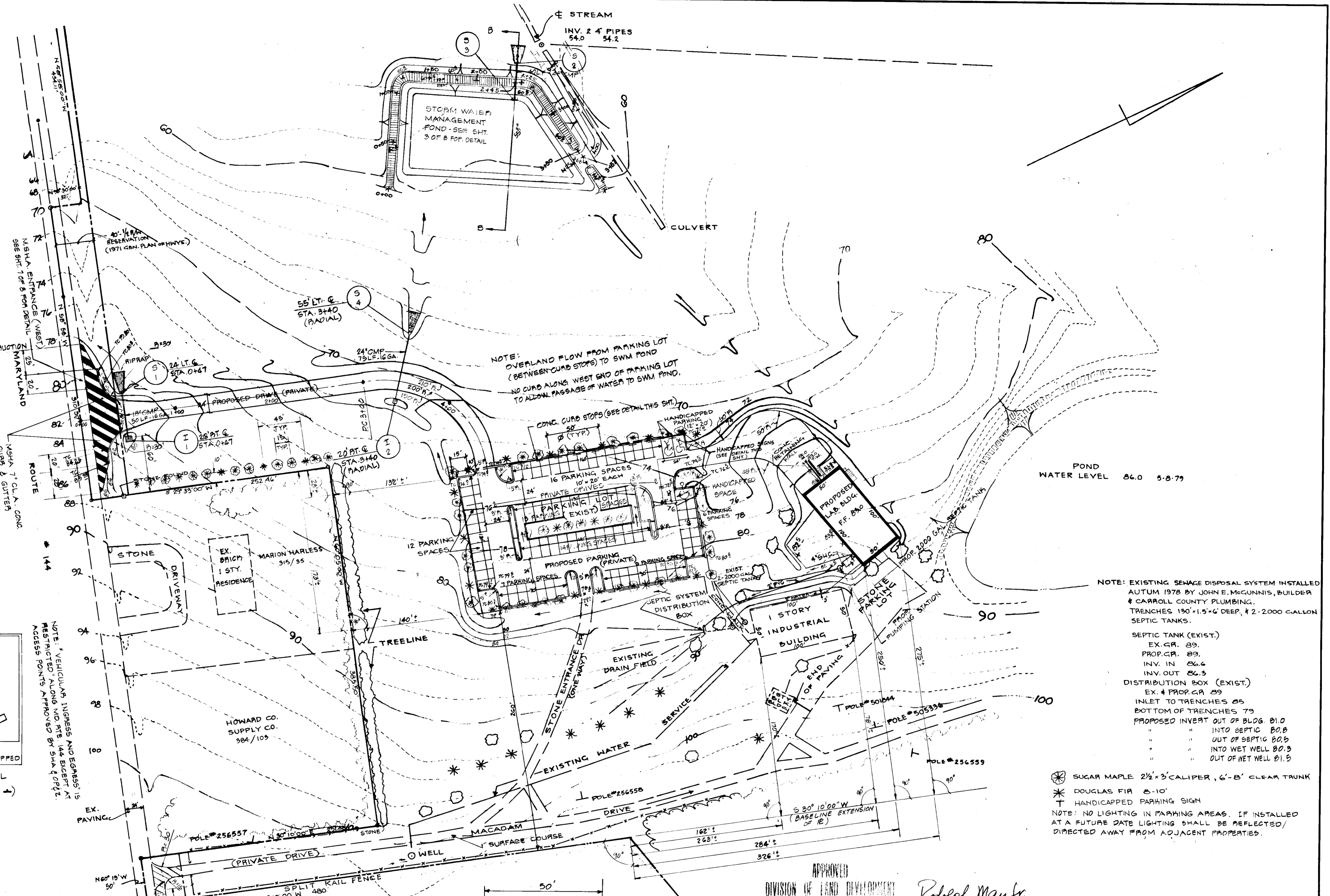




TYPICAL PARKING SPACE WITH INSTALLATION OF CURB STOP



APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT	DATE 10-11-79
COUNTY HEALTH OFFICER	
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.	DATE 10-23-79
PLANNING DIRECTOR	
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10-23-79
APPROVED: FOR DRAINAGE SYSTEMS AND PUBLIC ROADS.	DATE 10-22-79
DIRECTOR	
CHIEF, BUREAU OF ENGINEERING	DATE 10-19-79

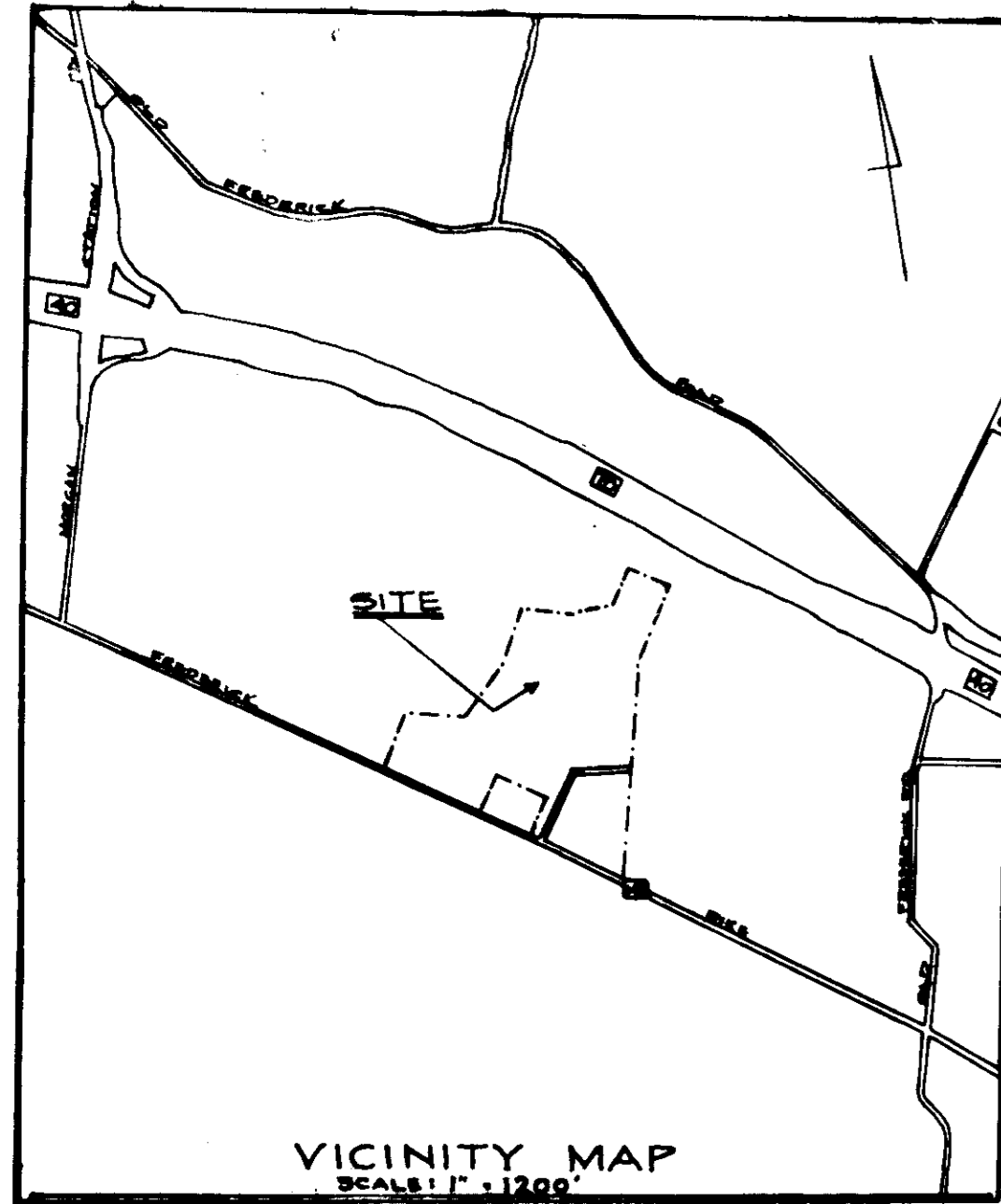


APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE 9-20-79

*Rodolph May Jr.*  
2-24-79  
RODOLPH L. MAY JR.  
MD. P.E. NO. 8700

OWNER AND DEVELOPER  
DAEDALEAN ASSOCIATES, INC.  
15110 FREDERICK ROAD  
WOODBINE, MD. 21797

TITLE PARTIAL SITE PLAN			
PROJECT SPRINGLAKE RESEARCH CENTER			
LOCATION ELECTION DISTRICT 4 HOWARD COUNTY MD.			
DATE: MAY, 1979	DESIGN BY: WHN	DRAWN BY: G.E.W.	CHECKED BY: R.L.M.
SCALE: 1" = 50'	JOB NO: 7957	DRAWING NO: 2 OF 8	
boender associates SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLCOTT CITY, MARYLAND 21043 BALTIMORE 301-488-7777 SALISBURY 301-748-1288		engineers surveyors planners	



VICINITY MAP  
SCALE: 1" = 1200'

**CERTIFICATION OF THE ENGINEER**

I CERTIFY THAT THIS PLAN FOR A POND 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.

*Rodolph L. May Jr.*  
RODOLPH L. MAY JR.  
MD. PE. NO. 8700

**CERTIFICATION BY THE DEVELOPER**

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR A POND AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATIONS FROM THESE PLANS WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

*Ron Hudson* 10/17/79  
DEVELOPER - RON HUDSON DATE

THESE PLANS FOR SMALL POND CONSTRUCTION MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

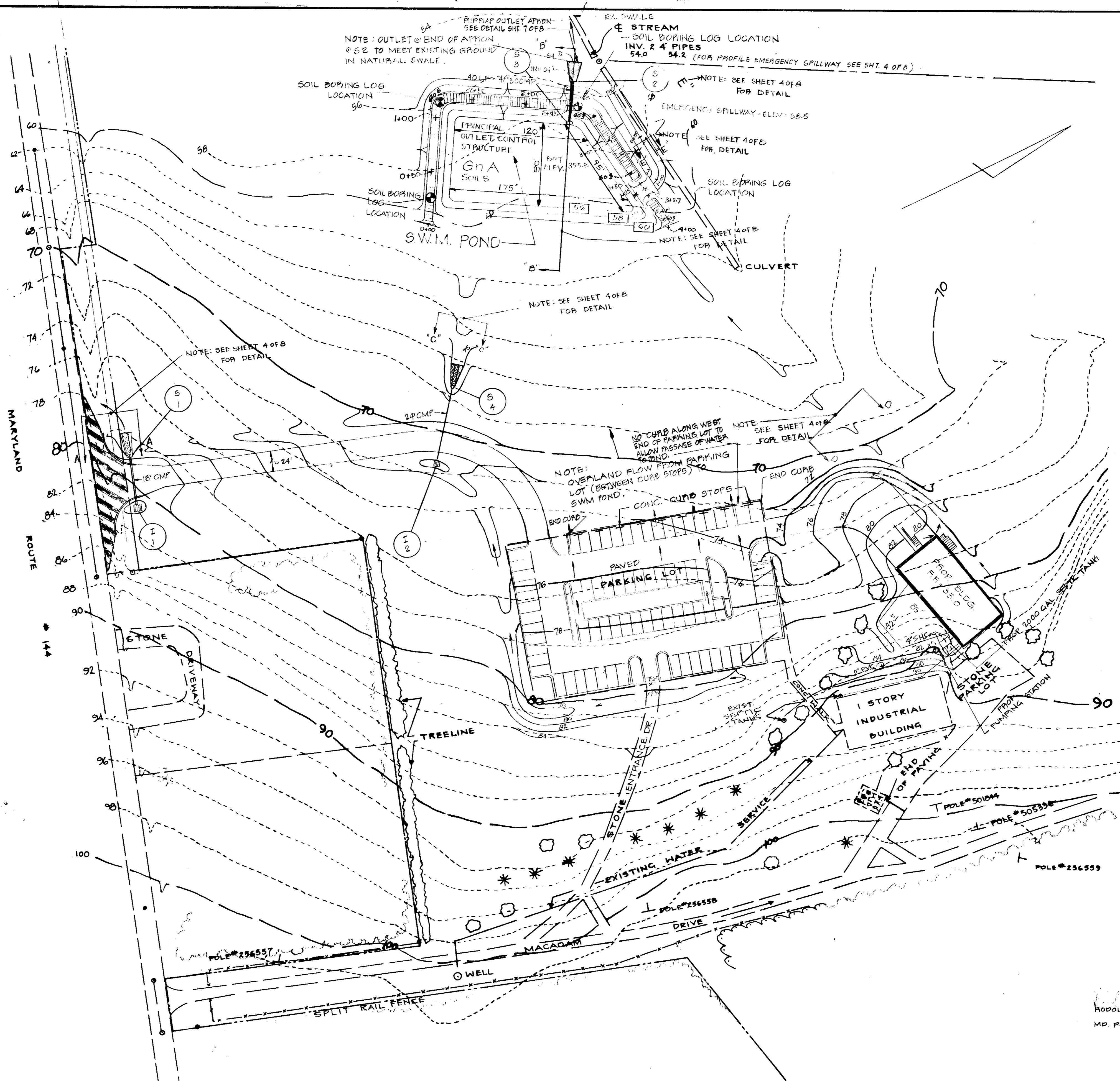
*Robert W. Ziehm* 10/10/79  
APPROVED, HO. CO. S.C.D. DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION.

*James M. DeLo* 10/10/79  
U.S. SOIL CONSERVATION SERVICE DATE

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

*James M. DeLo* 10-11-79  
COUNTY HEALTH OFFICER DATE  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
*James E. Hamig* 10-23-79  
PLANNING DIRECTOR DATE  
*William W. ...* 10-24-79  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
APPROVED: FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
*William W. ...* 10-22-79  
DIRECTOR DATE  
*W. O. ...* 10-19-79  
CHIEF, BUREAU OF ENGINEERING DATE



**SOIL BORING LOG & CLASSIFICATIONS**

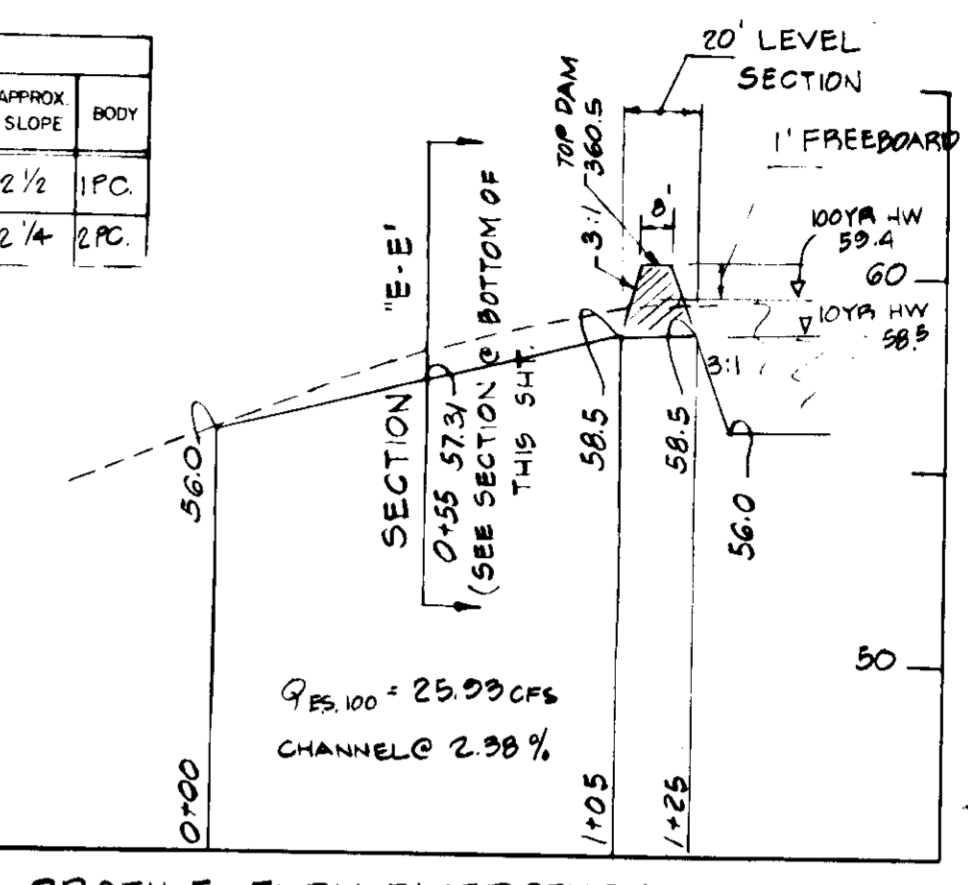
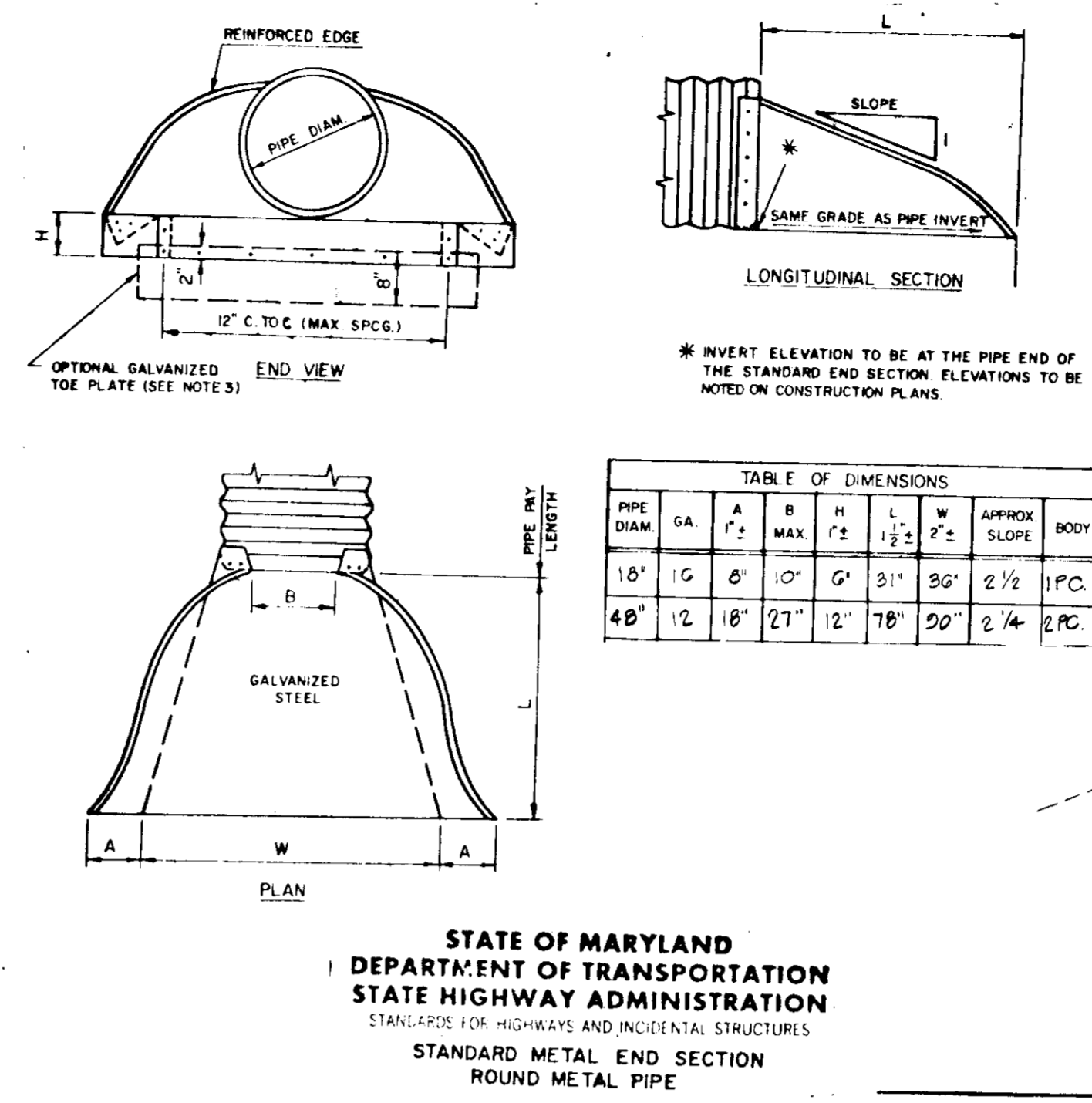
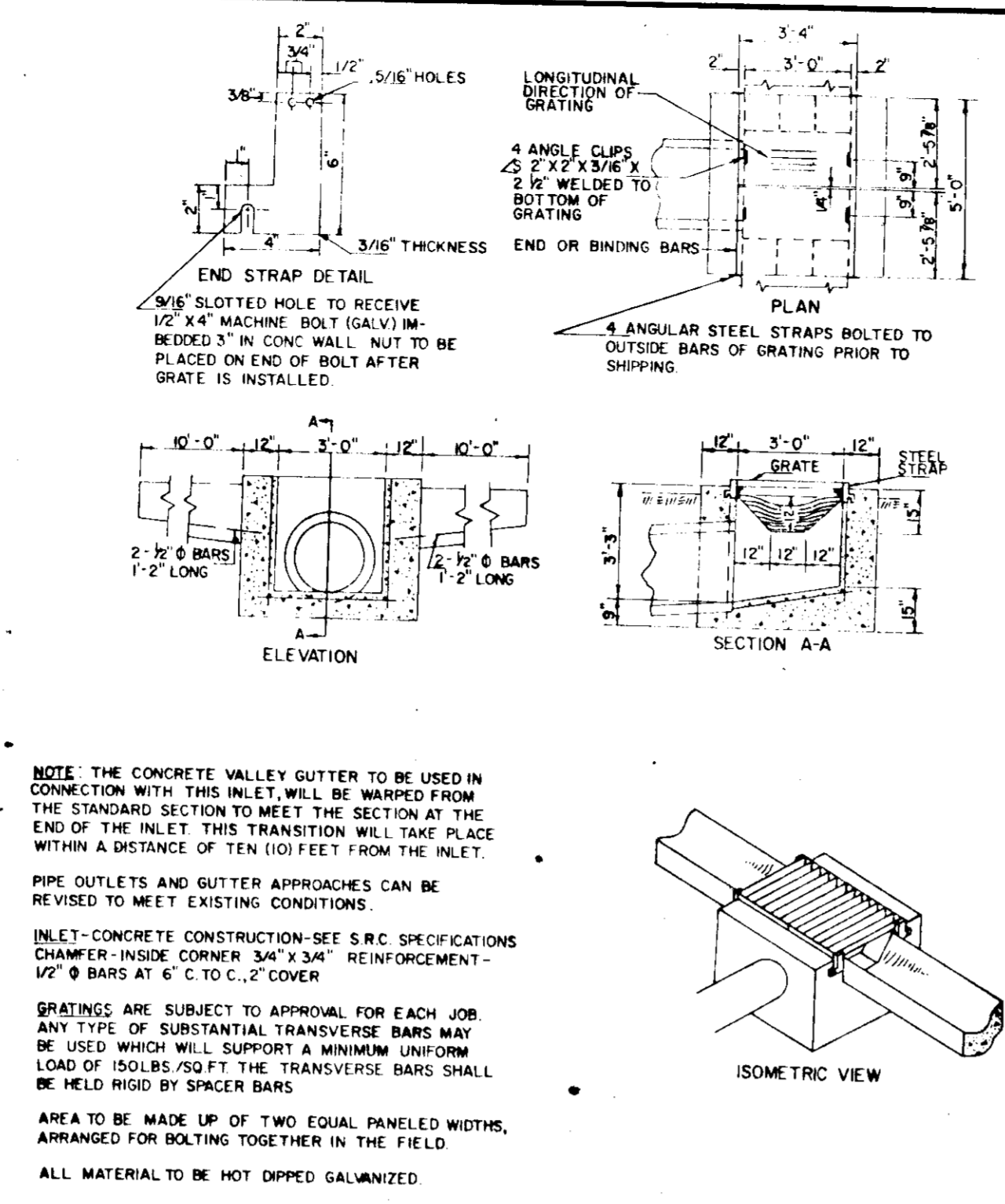
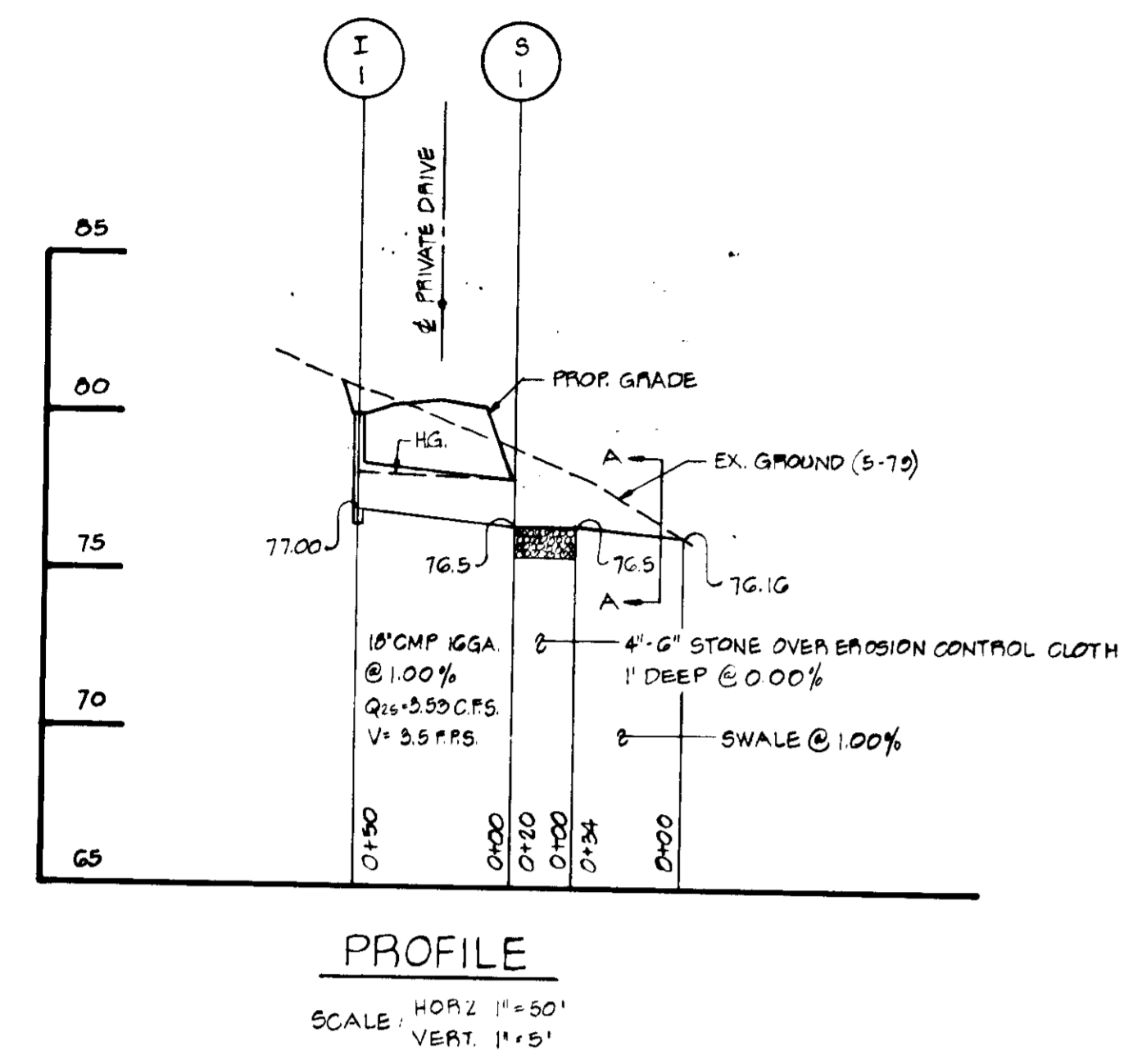
- 01 - 1 1/2 INCHES TO 0, LITTER OF HARDWOOD LEAVES
  - A1 - 0 TO 3 INCHES, DARK GRAYISH-BROWN (10YR 4/2) SILT LOAM; WEAK, MEDIUM, GRANULAR STRUCTURE; FRIABLE WHEN MOIST, SLIGHTLY STICKEY AND SLIGHTLY PLASTIC WHEN WET; ROOTS ABUNDANT; STRONGLY ACID; GRADUAL, SMOOTH BOUNDARY. 1 TO 4 INCHES THICK.
  - A2 - 3 TO 9 INCHES, LIGHT YELLOWISH-BROWN (10YR 6/4) SILT LOAM; WEAK, FINE AND MEDIUM, GRANULAR STRUCTURE; FRIABLE WHEN MOIST, SLIGHTLY STICKEY AND SLIGHTLY PLASTIC WHEN WET; ROOTS PLENTIFUL; VERY STRONGLY ACID; CLEAR SMOOTH BOUNDARY. 3 TO 8 INCHES THICK.
  - B2t - 9 TO 17 INCHES; YELLOWISH-BROWN (10YR 5/6) LIGHT SILTY CLAY LOAM; MODERATE, MEDIUM, SUBANGULAR BLOCKY STRUCTURE; FIRM WHEN MOIST, STICKEY AND SLIGHTLY PLASTIC WHEN WET; ROOTS PLENTIFUL; SOME FAINT CLAY FILMS; VERY STRONGLY ACID; GRADUAL, SMOOTH BOUNDARY. 6 TO 9 INCHES THICK.
  - Bk1 - 17 TO 26 INCHES, LIGHT YELLOWISH-BROWN (10YR 6/4) LIGHT SILTY CLAY LOAM; COMMON FINE AND MEDIUM, FAINT MOTTLES OF GRAYISH BROWN (10YR 5/2), INCREASING IN SIZE WITH DEPTH; STRONG, MEDIUM, PLATY STRUCTURE AND MODERATE, MEDIUM, BLOCKY STRUCTURE; VERY FIRM AND VERY BRITTLE WHEN MOIST, STICKEY AND PLASTIC WHEN WET; FEW ROOTS; THICK, PROMINENT, YELLOWISH-BROWN (10YR 5/6) CLAY FILMS AND FLOWS; MICA EVIDENT; VERY STRONGLY ACID; GRADUAL, WAVY BOUNDARY. 8 TO 18 INCHES THICK.
  - Bk2 - 26 TO 37 INCHES, YELLOWISH-BROWN (10YR 5/6) LIGHT SILTY CLAY LOAM; ABUNDANT, MEDIUM AND COARSE, DISTINCT MOTTLES OF GRAYISH BROWN (10YR 5/2) AND COARSE, FAINT MOTTLES OF LIGHT YELLOWISH BROWN (10YR 6/4); MODERATE, THIN AND MEDIUM, PLATY STRUCTURE WITH SOME ANGLULAR BLOCKS; FIRM TO VERY FIRM WHEN MOIST, STICKEY AND PLASTIC WHEN WET; PRACTICALLY NO ROOTS; A FINE THICK, YELLOWISH-BROWN (10YR 5/6) CLAY FILMS AND FLOWS; MICA COMMON; VERY STRONGLY ACID TO EXTREMELY ACID; ABRUPT WAVY BOUNDARY. 8 TO 12 INCHES THICK.
  - C - 37 TO 50 INCHES, PALE-OLIVE (5Y 6/8), HIGHLY MICACEOUS SAPROLITE OF LOAM OR SILT LOAM TEXTURE; BLOTCHED AND STREAKED WITH STRONG BROWN (7.5YR 5/6); VERY FRIABLE; VERY STRONGLY ACID TO EXTREMELY ACID.
- BEDROCK RANGES FROM ABOUT 4 FT. TO 10 FT. IN PLACES THERE IS SOME GRAVEL. GRAVEL ON OR NEAR THE SURFACE COMMONLY IS COLLUVIAL.
- NOTE: SOILS DATA ACQUIRED FROM "SOIL SURVEY HOWARD COUNTY MD - JULY 1968"

APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE: 9-20-79  
*fwm*

*Rodolph L. May Jr.*  
MD. PE. NO. 8700  
OWNER AND DEVELOPER  
DAEDALEAN ASSOCIATES  
15110 FREDERICK ROAD  
WOODBINE, MD. 21797

TITLE STORMWATER MANAGEMENT PLAN			
PROJECT SPRINGLAKE RESEARCH CENTER			
LOCATION ELECTION DISTRICT 4		HOWARD COUNTY MD.	
DATE MAY, 1970	DESIGN BY WHN	DRAWN BY G.E.W.	CHECKED BY B.L.M.
SCALE 1" = 50'	JOB NO. 7957	DRAWING NO. 3 OF 8	
boender associates SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLICOTT CITY, MARYLAND 21043 BALTIMORE 201-485-7777 SALISBURY 301-748-1288			engineers/ surveyors/ planners

STRUCTURE SCHEDULE				
NO	DESCRIPTION	INVERT ELEV.		REMARKS
		IN	OUT	
I-1	STD. M. INLET - SINGLE GRATE	77.00	80.00	M.S.H.A. STD. 378.02
S-1	STD. METAL END SECTION	76.50	-	M.S.H.A. STD. 370.01
S-2	STD. METAL END SECTION	84.76	-	M.S.H.A. STD. 370.01
S-3	MODIFIED A-B INLET	95.00	60.00	SEE DETAIL THIS SHEET
E-2	STD. M. INLET	71.00	69.50	HOWARD CO. STD. D-58, PG. 150
S-4	STD. METAL END SECTION	68.00	-	M.S.H.A. STD. 370.01



**CERTIFICATION OF THE ENGINEER**  
 I CERTIFY THAT THIS PLAN FOR A POND 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.

RODOLPH L. MAY JR. DATE  
 M.P. PE NO. 8700

**CERTIFICATION BY THE DEVELOPER**  
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR A POND AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATIONS FROM THESE PLANS WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE 5/23/79  
 DEVELOPER

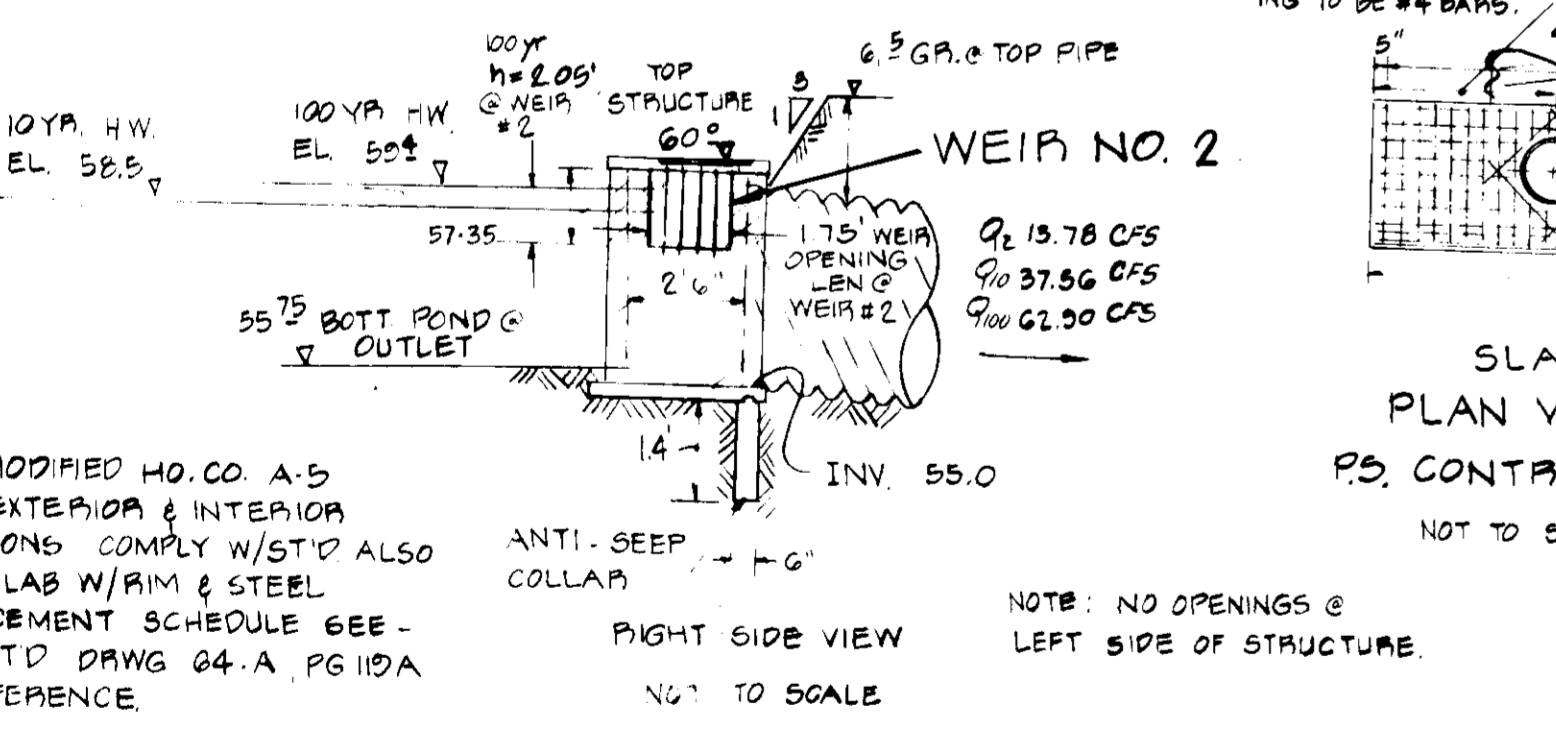
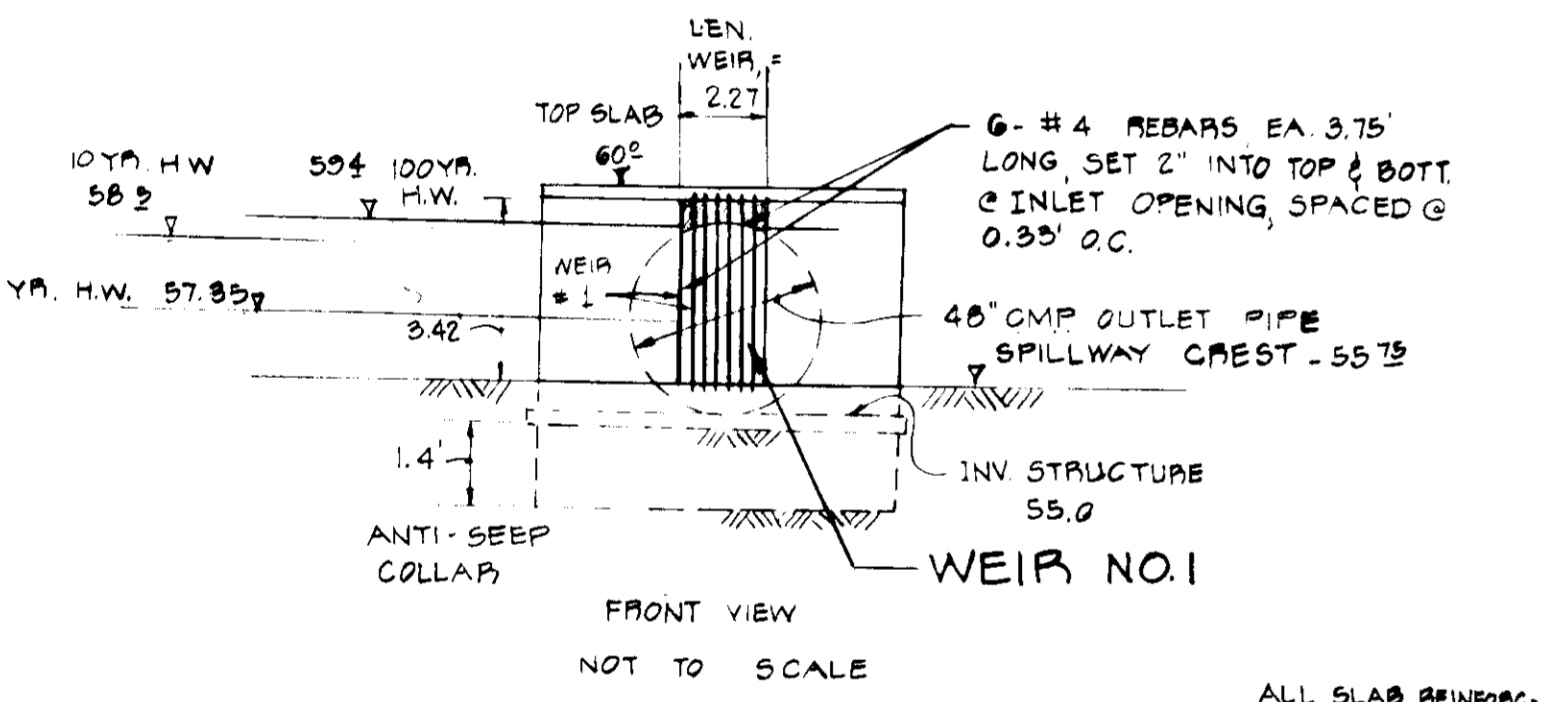
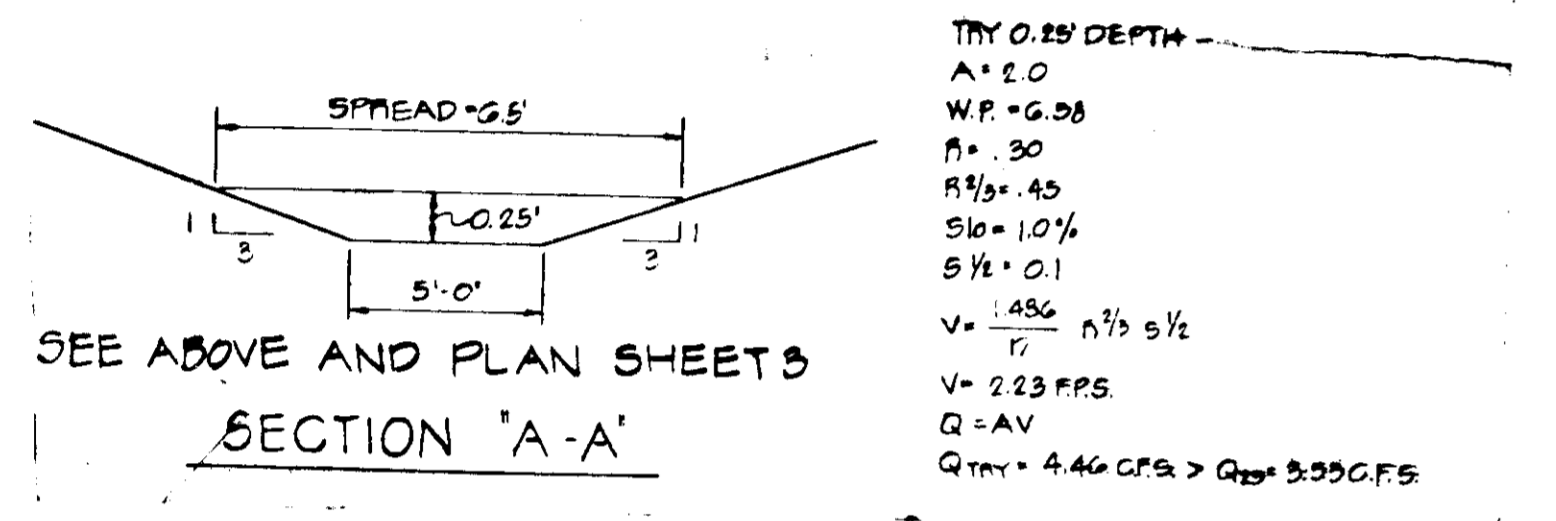
THESE PLANS FOR SMALL POND CONSTRUCTION MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

APPROVED (HOWARD CO. S.C.D.) DATE 10/10/79

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION.

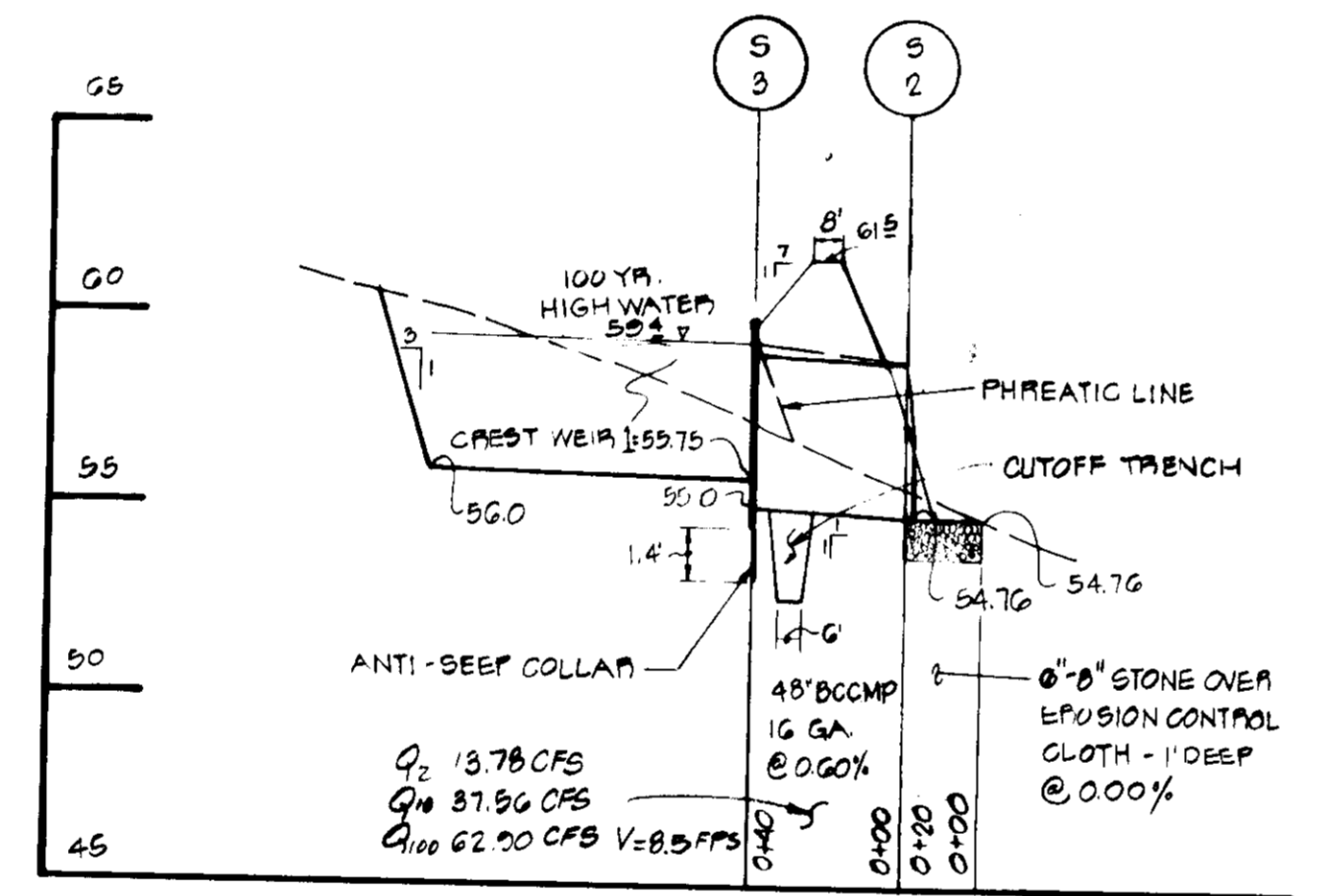
DATE 10/12/79  
 U.S. SOIL CONSERVATION SERVICE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
 COUNTY HEALTH OFFICER DATE 10-11-79  
 APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
 PLANNING DIRECTOR DATE 10-23-79  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 10-23-79  
 APPROVED FOR URBAN/INDUSTRIAL SYSTEMS AND PUBLIC ROADS, STORM  
 DIRECTOR DATE 10-22-79  
 CHIEF, BUREAU OF ENGINEERING DATE 10-19-79

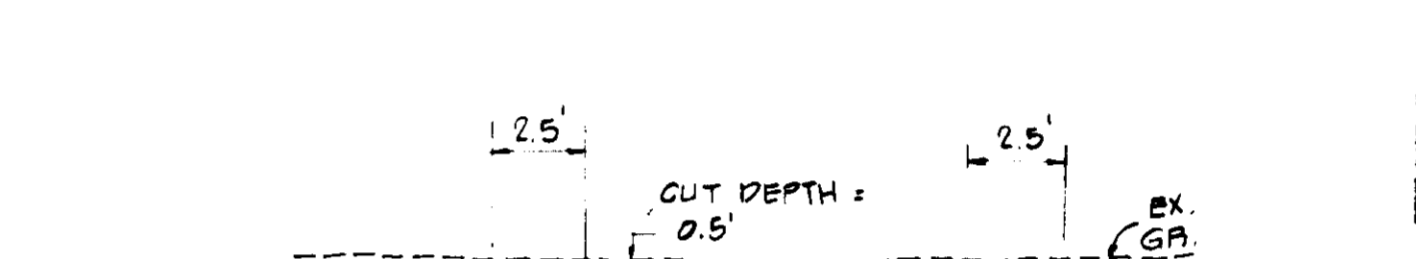
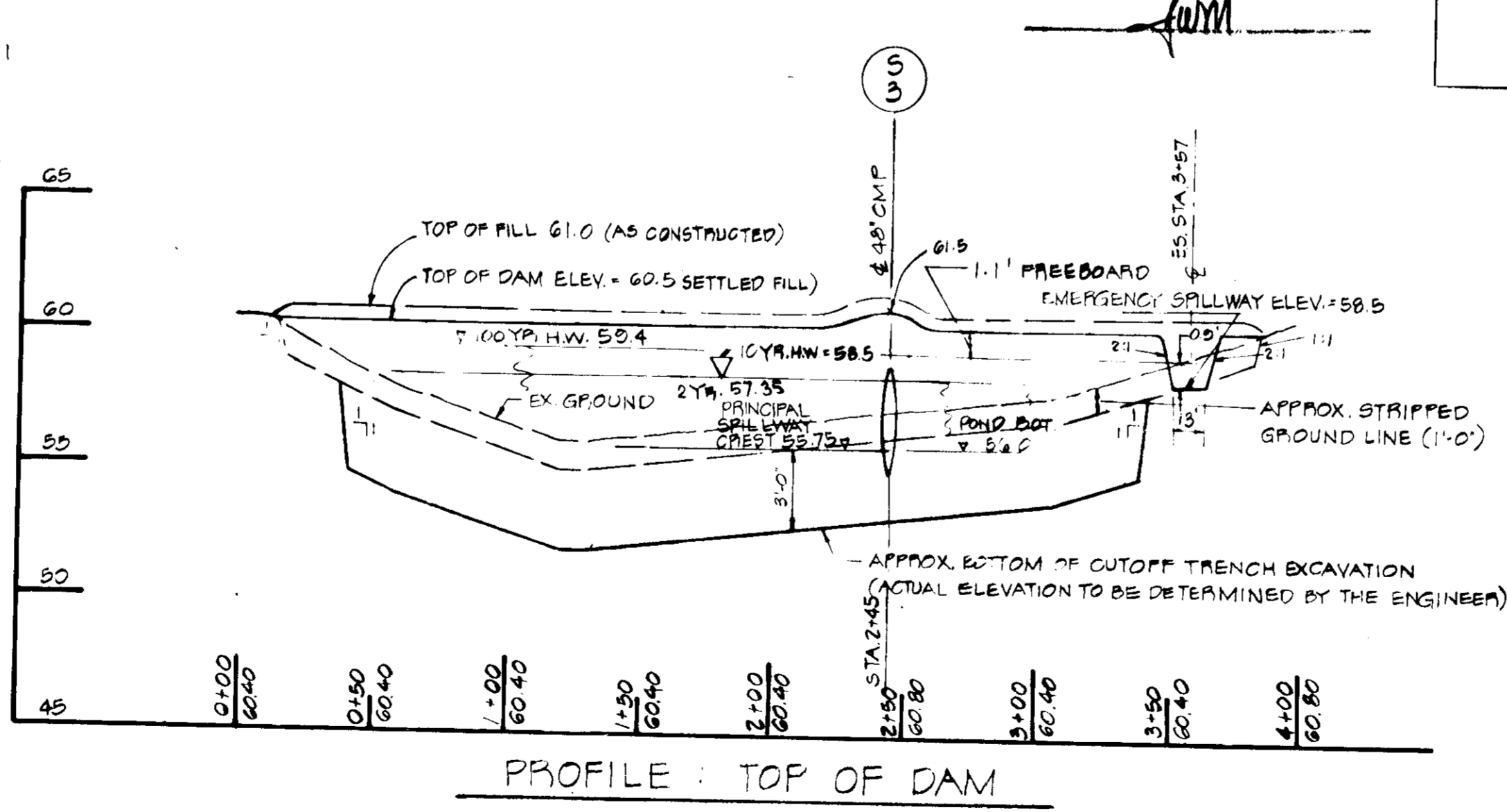


S-3 DETAIL PRINCIPAL SPILLWAY CONTROL STRUCTURE @ STORM WATER MANAGEMENT POND

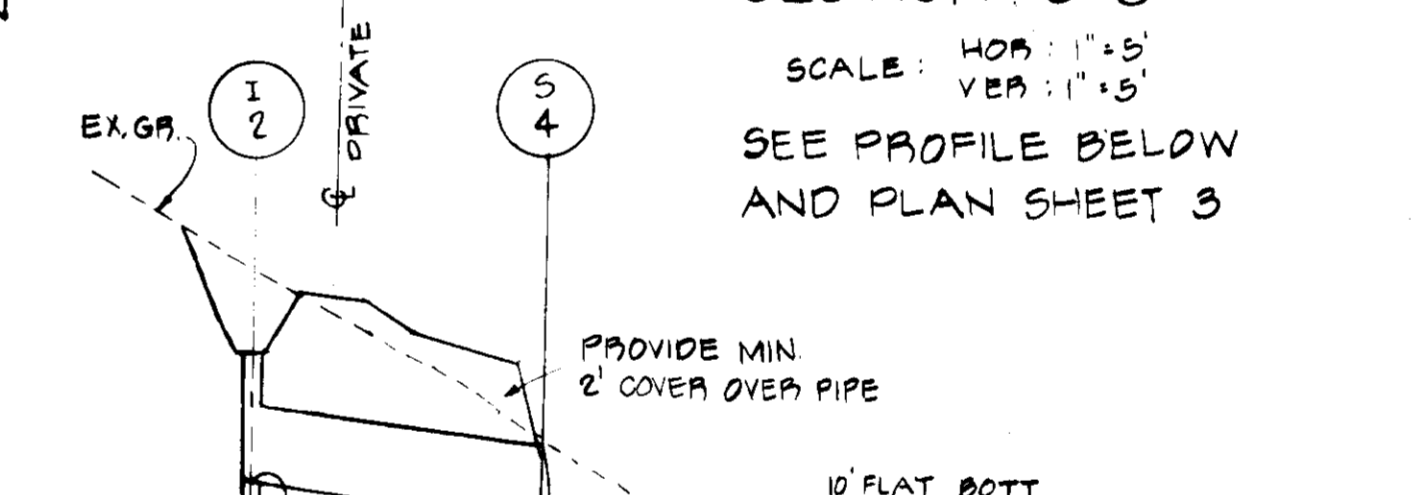
STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES SPECIAL TYPE K INLET NON-TRAFFIC AREAS



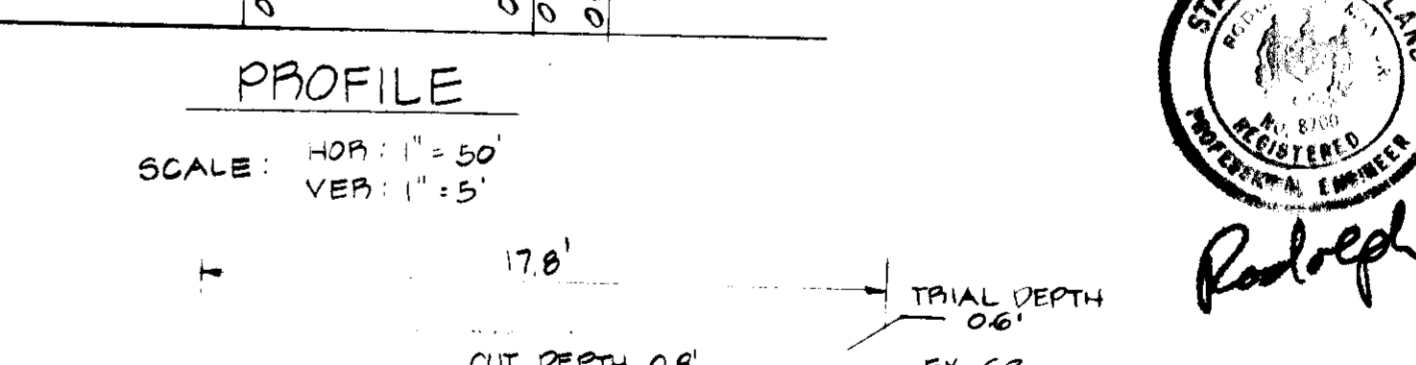
SECTION 'B-B' PROFILE, PRINCIPAL SPILLWAY



SECTION 'C-C' PROFILE SCALE: HORIZ. 1\"/>



PROFILE SCALE: HORIZ. 1\"/>



SECTION 'E-E' EMERGENCY SPILLWAY SCALE: HORIZ. 1\"/>

OWNER AND DEVELOPER  
 RODOLPH L. MAY JR. DAEDALEAN ASSOCIATES, INC.  
 1510 FREDERICK ROAD WOODRINE, MD 21797

TITLE: STORM DRAINAGE PROFILES, SECTIONS AND DETAILS  
 PROJECT: SPRINGLAKE RESEARCH CENTER  
 LOCATION: 4TH ELECTION DISTRICT HOWARD COUNTY, MD  
 DATE: MAY, 1975 DESIGN BY: WHN DRAWN BY: WHN / JJD CHECKED BY: P.L.M.  
 SCALE: AS SHOWN JOB NO.: 7057 DRAWING NO.: 4 OF 8

boender associates engineers/surveyors  
 SUITE 102 107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLICOTT CITY, MARYLAND 21043 BALTIMORE 301-468-7777 SALISBURY 301-746-1386

SOIL CONSERVATION SERVICE  
MARYLAND  
CONSTRUCTION SPECIFICATIONS  
FOR  
PONDS

These specifications are appropriate to ponds within the scope of the Standard for practice 378.

I. SITE PREPARATION  
Areas under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.  
Areas covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.  
All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL  
Material  
The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, over-size 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  
Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. 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.

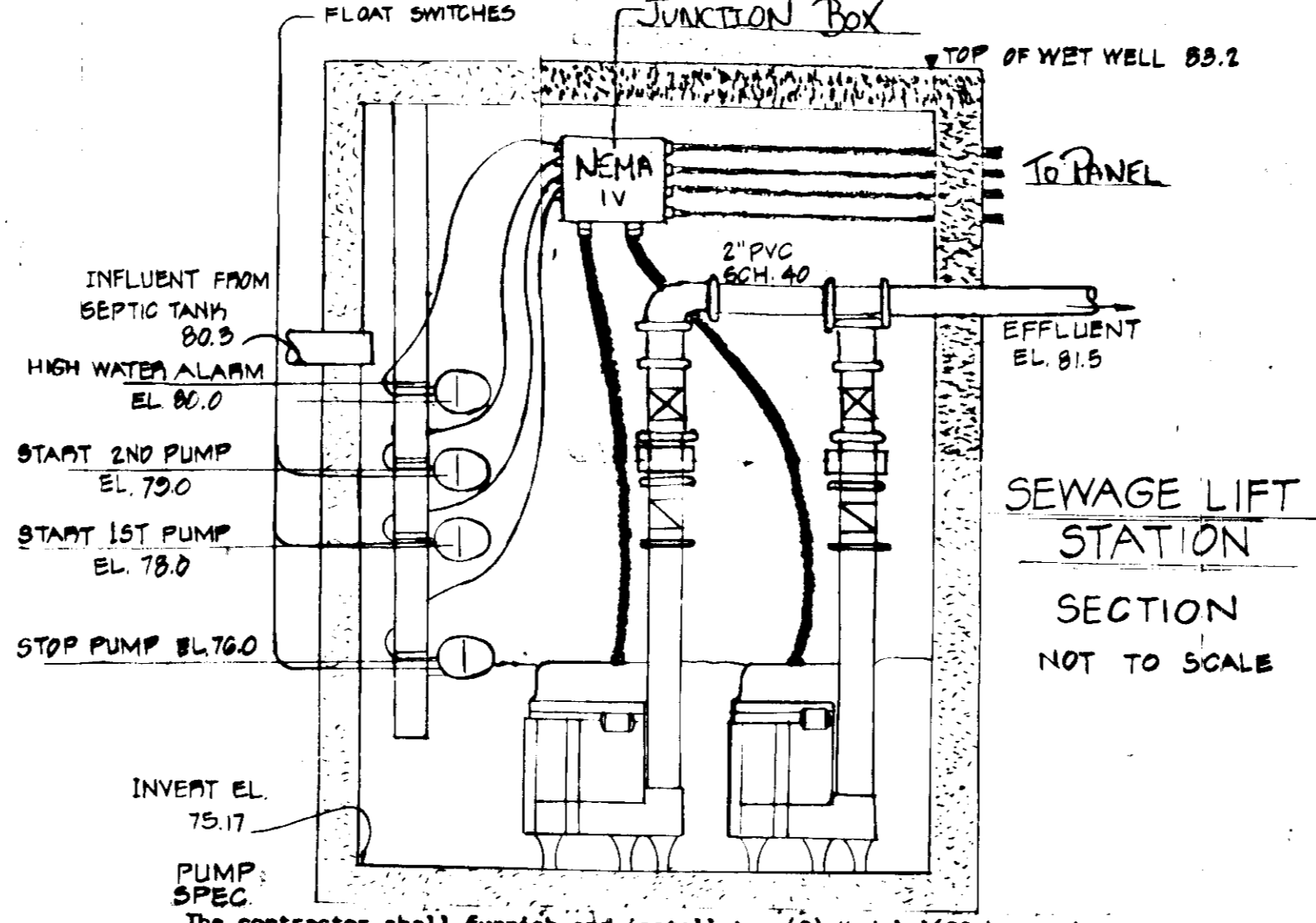
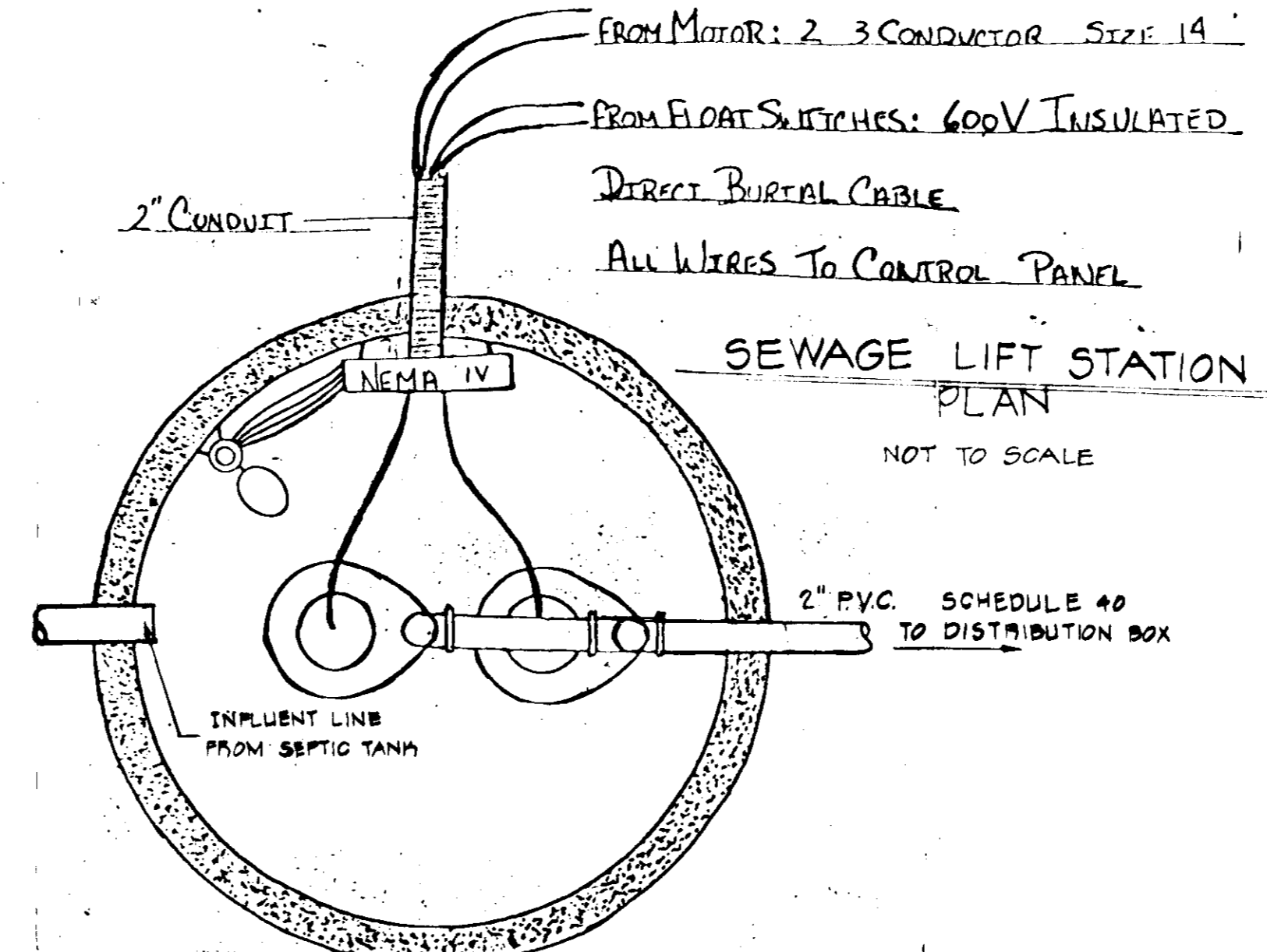
III. STRUCTURAL BACKFILL  
Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS  
A. Corrugated Metal Pipe  
1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling hands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.  
Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling hands. Coupling hands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.  
Helically corrugated pipe in addition to the requirements above shall have either continuously welded seams or have lock seams which are caulked, during fabrication, with a neoprene bead.

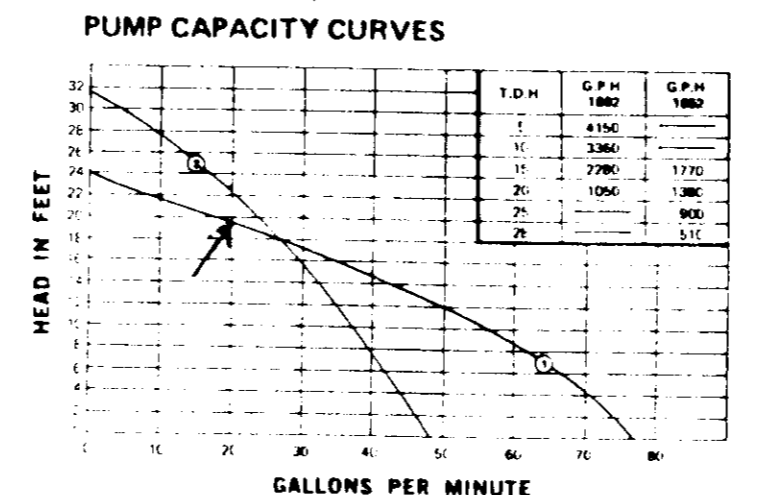
- 2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling hands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.
- 3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
- 4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
- 5. Backfilling shall conform to structural backfill as shown above.
- 6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
- 7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.
- 8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.
- 9. Placing Temperature - Concrete may not be placed at temperatures below 37° F with the temperature falling, or 34° with the temperature rising.

V. STABILIZATION  
All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spill and borrow areas, and berms shall be stabilized by seeding, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications shown on or accompanying the drawings.

- V. CONCRETE
- 1. Materials
    - a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
    - b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
    - c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
    - d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
    - e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.
  - 2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U. S. gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 2-3-1-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.
  - 3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixing operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.
  - 4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.  
The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.  
Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.
  - 5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.
  - 6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by tamping and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.



The contractor shall furnish and install two (2) Model 1602 heavy-duty submersible sump pumps as manufactured by Enpo-Cornell Pump Company or approved equal.  
The motors shall be submersible 1/3 H.P., 1750 R.P.M., 230 volt/60/1 phase. The motors shall have automatic thermal overload protection. The pumps may be operated in liquids up to 150° F. without damage to the motor. The power cord shall be three conductor, and at lengths as shown on the plans or indicated in other sections of the specifications.  
The pump impeller shall be a two blade, dynamically balanced, threaded on shaft with cast volute and base.  
The motor housing and volute shall be cast iron. The impeller is bronze and the motor shaft is stainless steel.



CERTIFICATION BY THE DEVELOPER

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR A POND AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATIONS FROM THESE PLANS WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

Re Hudson DEVELOPER 150N HUDSON DATE 5/23/79

APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE 9-20-79

THESE PLANS FOR SMALL POND CONSTRUCTION MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

APPROVED 10/10/79 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION.

APPROVED 10/10/79 DATE

SPECIFICATIONS FOR SURGE CHAMBER

A surge chamber shall be supplied as an integral part of the septic tank system. The volume of this chamber shall not be less than \_\_\_\_\_ gallons.

Two pumps shall be installed in the surge tank as shown on the plans to pump the excess overflow into the drain field. Further, each pump shall have a capacity of 20 GPM at 17 TDH.

The pumps shall be controlled by liquid level sensors installed in the surge chamber. The liquid sensors shall control the pumps as follows: Level Sensor #1 shall be set to stop the lead or both pumps at a pre-determined level. Level Sensor #2 shall start the lead pump at a pre-determined level. Level Sensor #3 shall start the lag pump if the lead pump fails or for any reason cannot handle the total load. A fourth level sensor will energize a red light and audible alarm system to warn the operator of high water conditions. The red light and audible alarm shall be furnished and installed in the control panel by the manufacturer of the panel. The pumps shall alternate after each cycle through an electrical alternating system. The alternator, all relays, lights and the on-off-automatic switches shall be furnished and installed in the control panel by the manufacturer. All electrical wiring from the pumps and the liquid level sensors to the control panel shall be by the contractor.

MESSCO MODEL MB-3R CONTROL PANEL

Furnish and install one Raintight NEMA 3R Duplex Control Panel, with maximum dimension of 16" H X 12" W X 6" D. It shall control the duplex set of pumps, and include the following:

- Panel shall be constructed in accordance with UL requirements, and internal wiring shall be according to the National Electric Code.
- Contactors for each pump, rated max. 1 HP, 120/240V, AC.
- Circuitry to incorporate energization of second contactor upon level rise above third float switch.
- Test-Off-Automatic switches for each pump.
- Pump running light for each pump.
- Control power-on indicator light.
- Fused control power circuit.
- Automatic alternating system utilizing mechanical sequencing relay.
- Circuit breaker for each pump.
- High water alarm light.
- Audible high water alarm.
- Silencing/reset switch for audible high water alarm.

The above shall be complete in one assembly, to be used with four ENPO-CORNELL Model 476-E single pole mercury float switches. The panel shall be furnished with standard electrical schematic, and a simplified connection diagram for the convenience of the owner's personnel.

SEWAGE LIFT STATION NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS AND HOWARD COUNTY HEALTH DEPARTMENT STANDARDS.
- 2. ALL MATERIALS TO BE AS SPECIFIED AND SUPPLIED BY THE O.H. WHEELER CO. 8208 TYSON RD. ELLICOTT CITY MD. OR APPROVED EQUAL.
- 3. MESSCO MODEL MB-3R CONTROL PANEL TO BE WALL MOUNTED ON PROPOSED BUILDING.

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT. COUNTY HEALTH OFFICER: [Signature] DATE: 10-11-79. APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING. [Signature] DATE: 10-23-79. APPROVED FOR DRAINAGE SYSTEMS AND PUBLIC ROADS. [Signature] DATE: 10-23-79. DIRECTOR: [Signature] DATE: 10-19-79. CHIEF, BUREAU OF ENGINEERING.

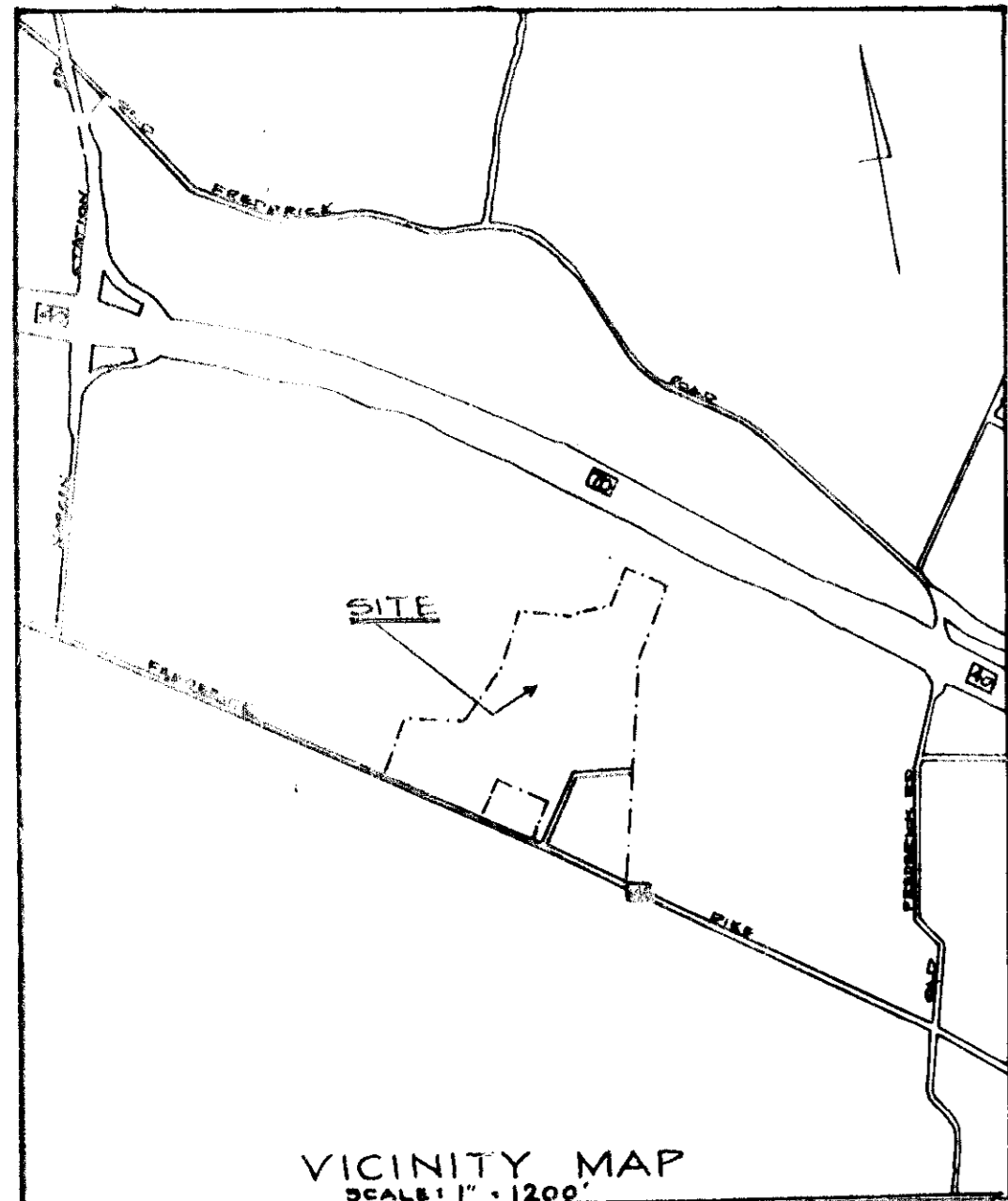
CERTIFICATION OF THE ENGINEER

I CERTIFY THAT THIS PLAN FOR A POND 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.

RODOLPH L. MAY JR. MD. PE. No. 8700. DATE: 9-28-79. OWNER AND DEVELOPER

DAEDALEAN ASSOCIATES, INC. 1510 FREDERICK ROAD WOODBINE, MD 21797

PROJECT: POND CONSTRUCTION SPECIFICATIONS SEWAGE LIFT STATION DETAILS & SPECIFICATIONS. LOCATION: SPRINGLAKE RESEARCH CENTER. 4TH ELECTION DISTRICT. HOWARD COUNTY, MD. DATE: MAY, 1979. DESIGN BY: [Signature]. DRAWN BY: [Signature]. CHECKED BY: P.L.M. SCALE: NONE. JOB NO.: 7057. DRAWING NO.: 5 OF 8. boender associates engineers, surveyors, planners. SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLICOTT CITY, MARYLAND 21045 BALTIMORE 301-468-7777 SALISBURY 301-740-1288



APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT.

*Joseph P. ...* 10-11-79 DATE  
HEALTH OFFICER

*...* 10-23-79 DATE  
PLANNING DIRECTOR

*...* 10-23-79 DATE  
CABLE DIVISION OF LAND DEVELOPMENT

*...* 10-19-79 DATE  
AFFILIATED STATE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

*...* 10-19-79 DATE  
CHIEF, DEPT. OF ENGINEERING

REVIEWER FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

*...* 10/10/79 DATE  
DISTRICT SOIL CONSERVATION SERVICE

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

*...* 10/10/79 DATE  
HOWARD SOIL CONSERVATION DISTRICT

**DEVELOPER'S CERTIFICATE**

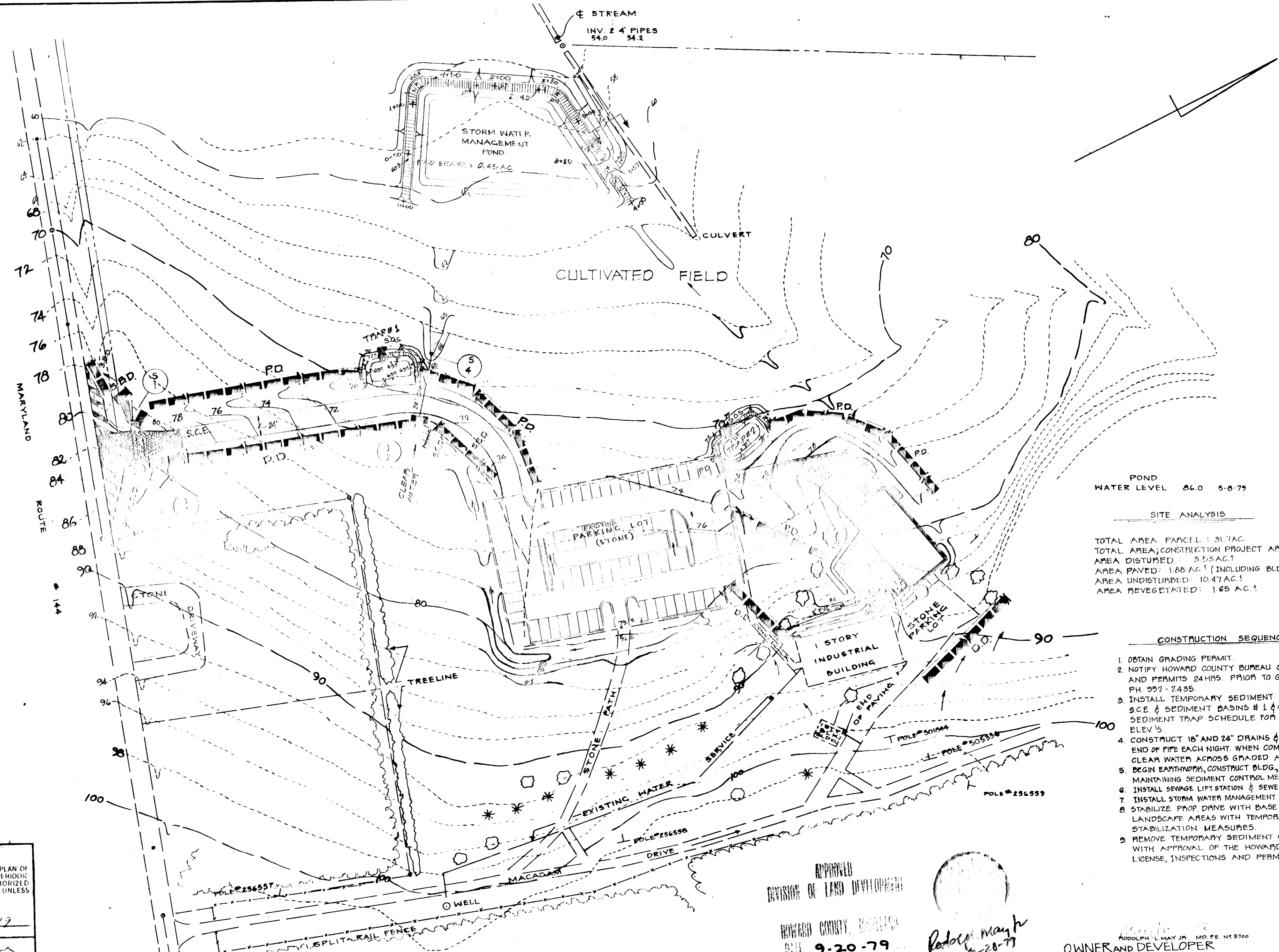
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC OR SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OF THEIR AUTHORIZED PERSONS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Ron Hudson* 10/10/79 DATE  
DEVELOPER RON HUDSON

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Rodolph L. May Jr.* 10/10/79 DATE  
ENGINEER RODOLPH L. MAY JR. MD. PE. NO. 8700



POND WATER LEVEL 86.0 5-8-79

**SITE ANALYSIS**

TOTAL AREA PARCEL: 31.7 AC.  
TOTAL AREA CONSTRUCTION PROJECT AREA: 14.0 AC.  
AREA DISTURBED: 8.58 AC.  
AREA PAVED: 1.88 AC. (INCLUDING BLDG. AREAS)  
AREA UNDISTURBED: 10.47 AC.  
AREA REVEGETATED: 1.65 AC.

- CONSTRUCTION SEQUENCE**
- OBTAIN GRADING PERMIT.
  - NOTIFY HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS - PH. 992-2435
  - INSTALL TEMPORARY SEDIMENT CONTROL MEASURES - PD, SCE & SEDIMENT BASINS #1 & #2 & D.O.'S. (SEE SEDIMENT TRAP SCHEDULE FOR DIMEN'S & CLEANOUT ELEV'S)
  - CONSTRUCT 18" AND 24" DRAINS & INLETS. BLOCK UPSTREAM END OF PIPE EACH NIGHT. WHEN COMPLETE, OPEN PIPES TO PASS CLEAR WATER ACROSS GRADED AREA.
  - BEGIN EARTHWORK, CONSTRUCT BLDG., DRIVES & PARKING PAVING, MAINTAINING SEDIMENT CONTROL MEASURES.
  - INSTALL SEWAGE LIFT STATION & SEWER CONNECTIONS.
  - INSTALL STORM WATER MANAGEMENT POND & SWALES.
  - STABILIZE PROP. DRIVE WITH BASE COURSE, AND LANDSCAPE AREAS WITH TEMPORARY OR PERMANENT STABILIZATION MEASURES.
  - REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE 9-20-79  
*AWM*

*Rodolph L. May Jr.*  
10-28-79

OWNER AND DEVELOPER  
DAEDALEAN ASSOCIATES, INC.  
1510 FREDERICK ROAD  
WOODBINE, MARYLAND 21797

**SEDIMENT TRAP SCHEDULE**

TRAP NO.	DRAINAGE AREA	VOLUME REQ'D	VOLUME PROVIDED	DIMENSIONS	BOT. ELEV.	CLEANOUT ELEV.	CRIBST. ELEV.	STONE OUTLET CRIBST. LEN.
1	0.68 AC.	1,170 CF	1,500 CF	15' x 40' x 2.5' DEEP	69.0	70.25	71.5	5 FT.
2	0.99 AC.	1,782	2,000 CF	20' x 40' x 2.5' DEEP	71.0	72.25	73.5	6 FT.

TITLE: SEDIMENT CONTROL PLAN

PROJECT: SPRINGLAKE RESEARCH CENTER

LOCATION: ELECTION DISTRICT 4 HOWARD COUNTY MD.

DATE: MAY 1979 DESIGN BY: WHN DRAWN BY: G.E.W. CHECKED BY: B.L.M.

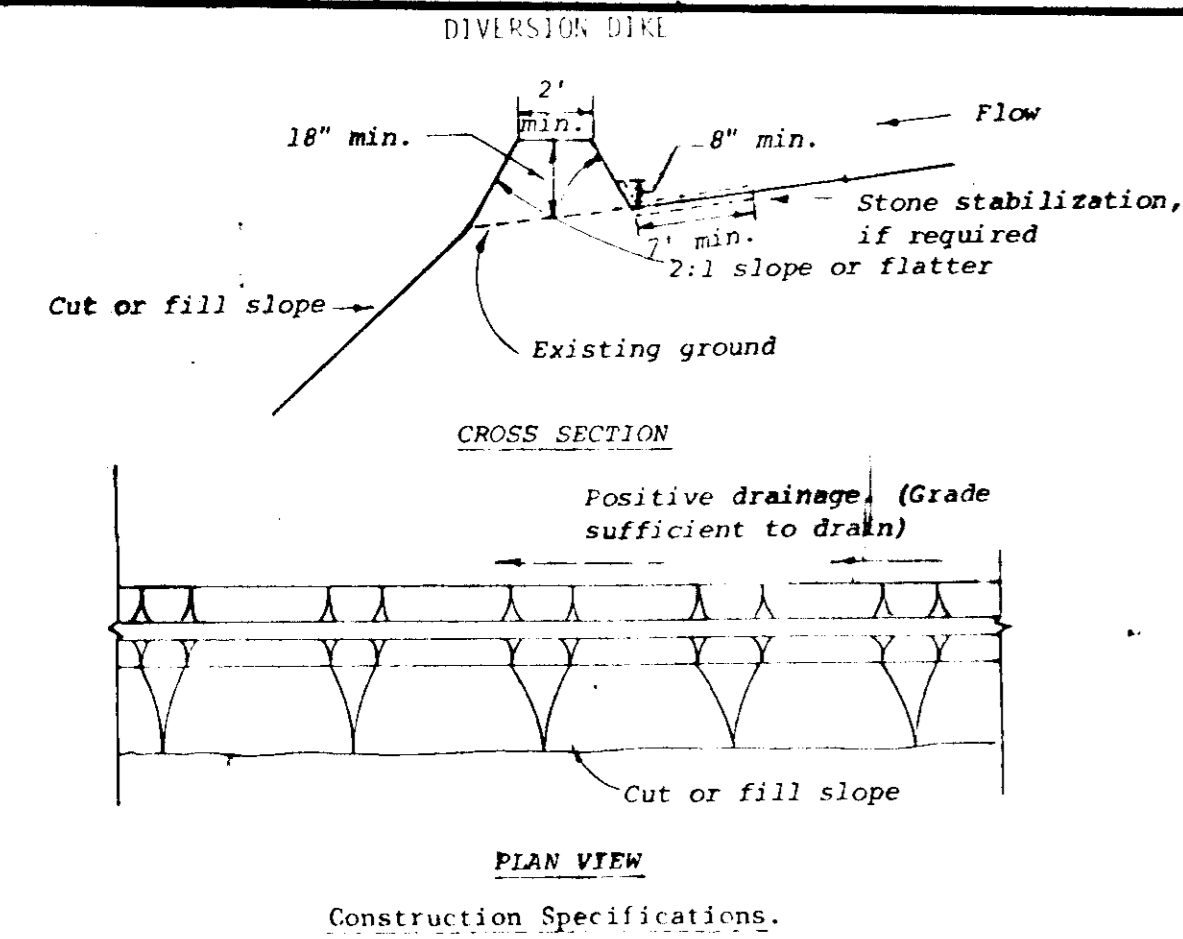
SCALE: 1" = 50' JOB NO.: 7957 DRAWING NO.: 6 OF 8

boender associates  
SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING  
ELLCOTT CITY, MARYLAND 21043  
BALTIMORE 301-488-7777 BALTIMORE 301-748-1288

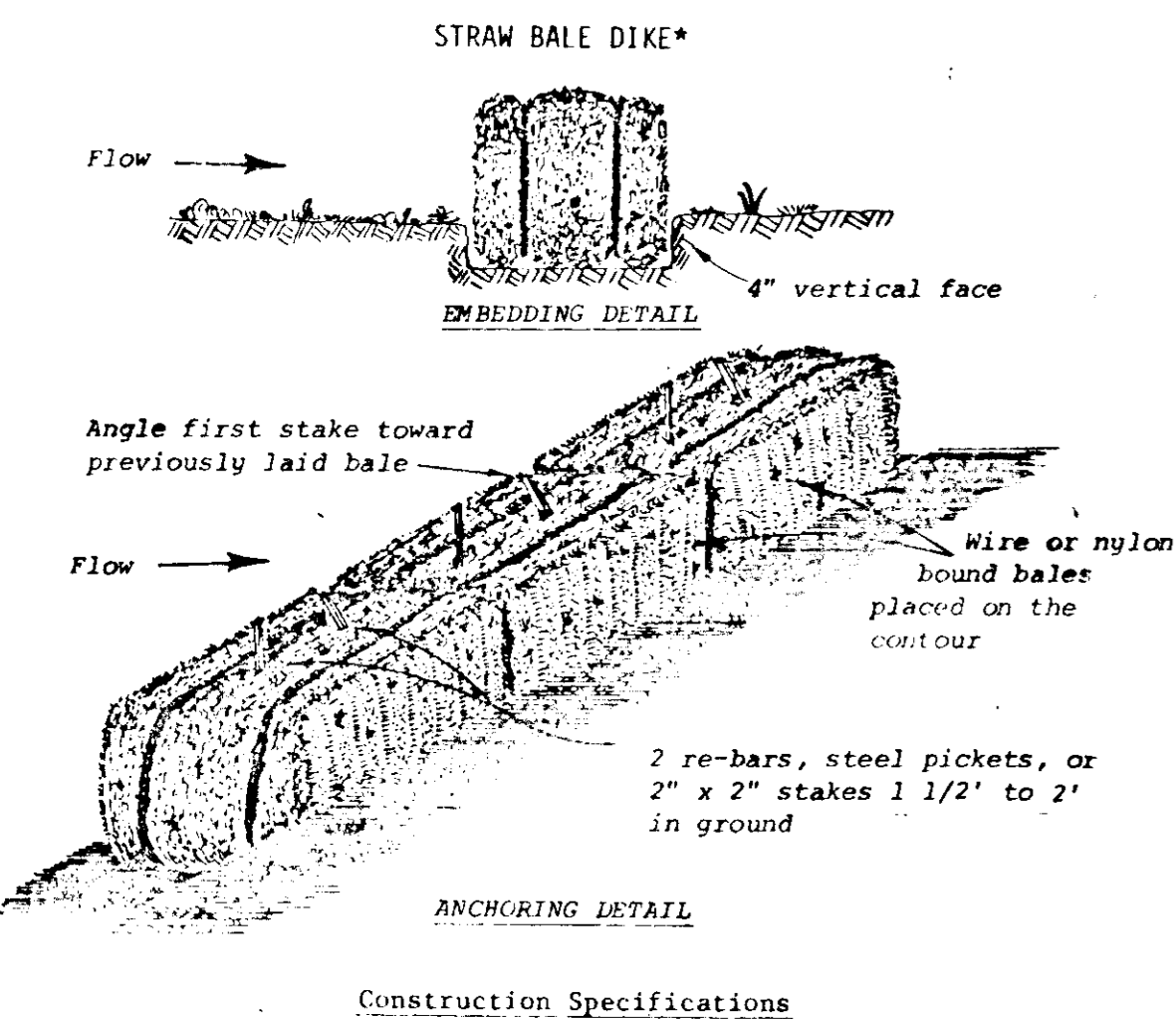
engineers  
surveyors  
planners

**SEDIMENT CONTROL NOTES**

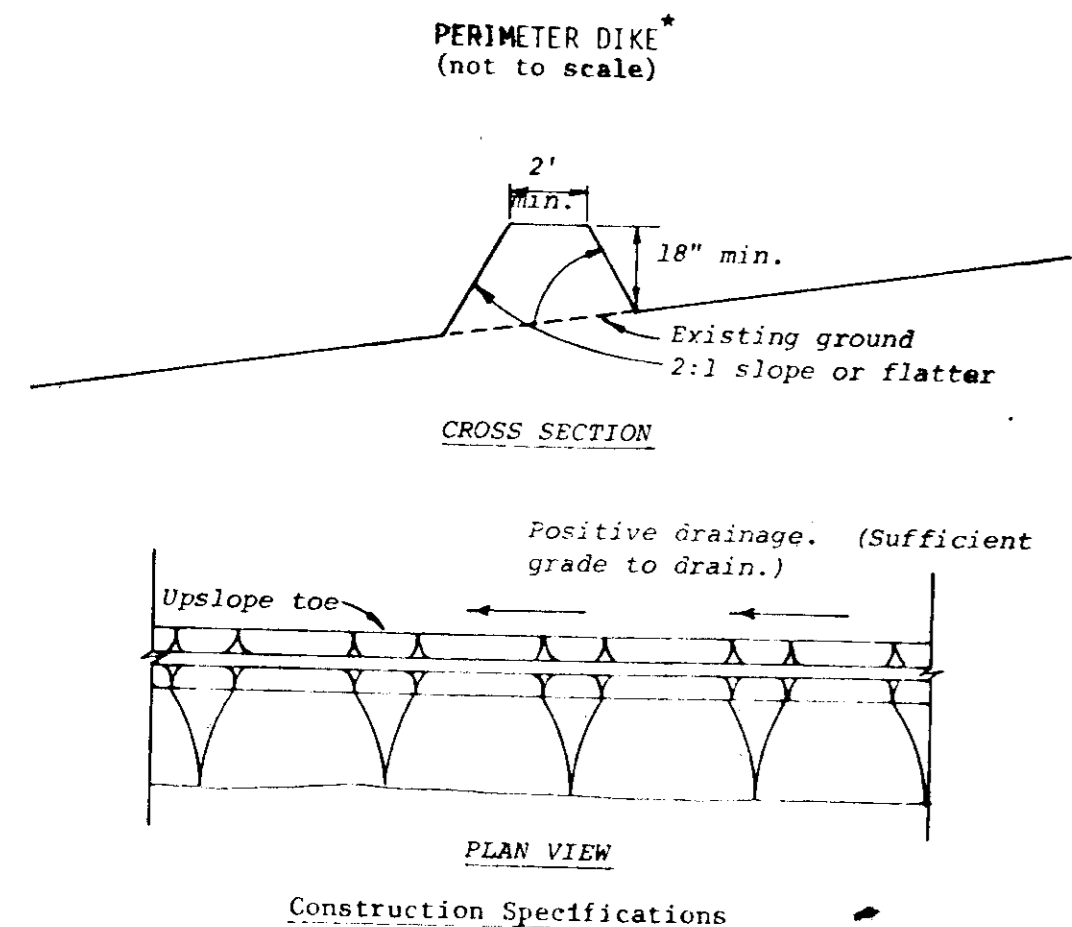
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE.
  2. APPLY FOR GRADING PERMIT.
  3. NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.
  4. CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
  5. CUT AND FILL SLOPES SHALL BE 2:1 MAXIMUM.
  6. ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.
  7. ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
  8. SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
  9. STABILIZATION MEASURES:
    - TEMPORARY STABILIZATION:
      - APPLY 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER, PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.
    - PERMANENT STABILIZATION:
      - APPLY 2000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OF 10-10-10 FERTILIZER, 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE, 40 LBS./AC. OF KENTUCKY BLUE GRASS, 25 LBS./AC. OF ANNUAL RYEGRASS.
- NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. 1 ONLY. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING. MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW, TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.



1. All dikes shall be machine compacted.
2. All diversion dikes shall have positive drainage to an outlet.
3. A. Diverted runoff from a protected or stabilized area shall outlet directly to an undisturbed stabilized area or into a level spreader or grade stabilization structure.
- B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or to an area protected by any of these practices.
4. Stabilization, as specified by the plans, shall be: (1) in accordance with Standard and Specifications for Grassed Waterway, and the area to be stabilized shall be the channel (flow area); or (2) the flow area shall be lined with stone that meets MSHA size No. 2 or AASHTO M43 size No. 2 or 24 which is placed in a 3 inch thick layer and pressed into the soil. The area covered by the stone shall be as shown on the drawing above.
5. Periodic inspection and required maintenance shall be provided.



1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.



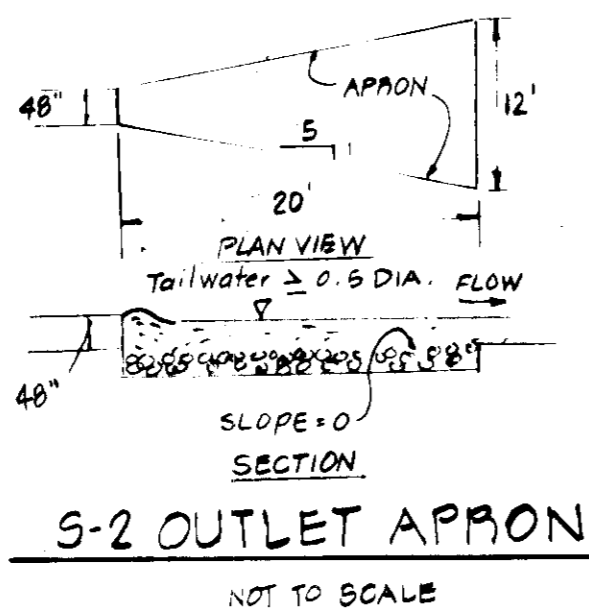
1. All dikes shall be machine compacted.
2. All perimeter dikes shall have positive drainage to an outlet.
3. A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or into a level spreader or grade stabilization structure.
- B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as sediment trap or a sediment basin or to an area protected by any of these practices.
4. Stabilization, when required, shall be done in accordance with Standard and Specifications for Grassed Waterway. The minimum area to be stabilized shall be the channel flow area.
5. Periodic inspection and required maintenance shall be provided.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. DATE: 10-11-79. COUNTY HEALTH OFFICER: [Signature].

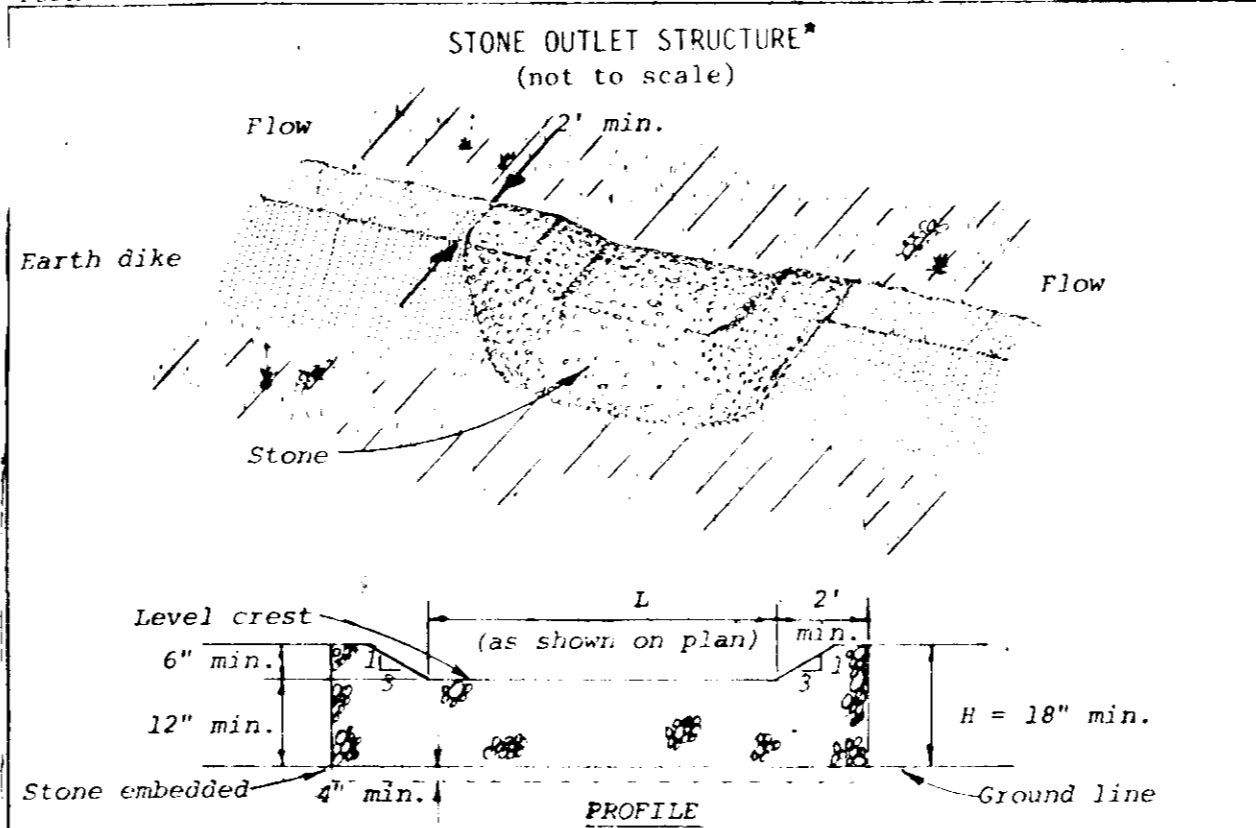
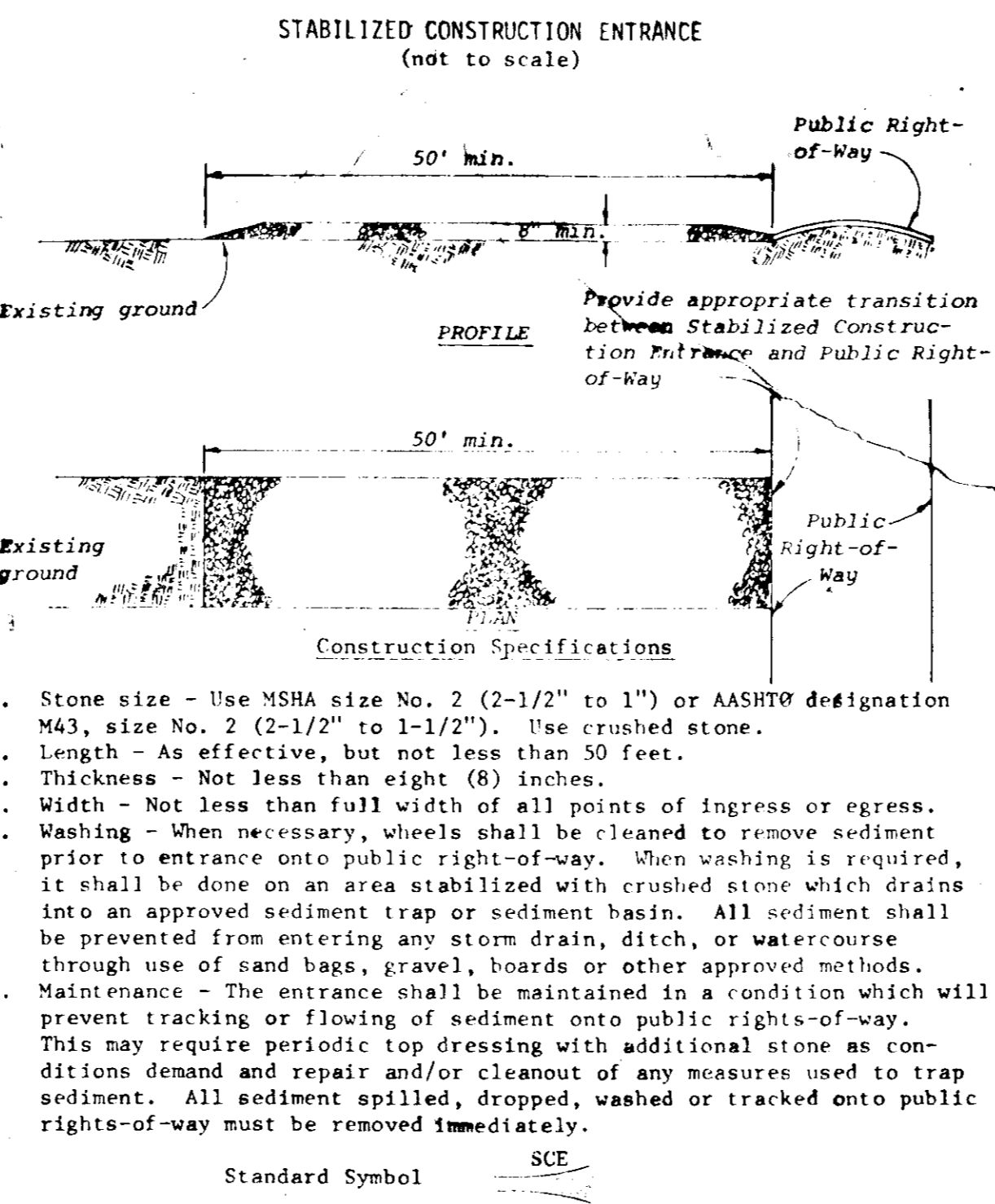
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING. DATE: 10-23-79. PLANNING DIV. CHIEF: [Signature].

APPROVED: FOR DRAINAGE SYSTEMS AND PUBLIC ROADS, STORM. DATE: 10-23-79. CHIEF DIVISION OF LAND DEVELOPMENT: [Signature].

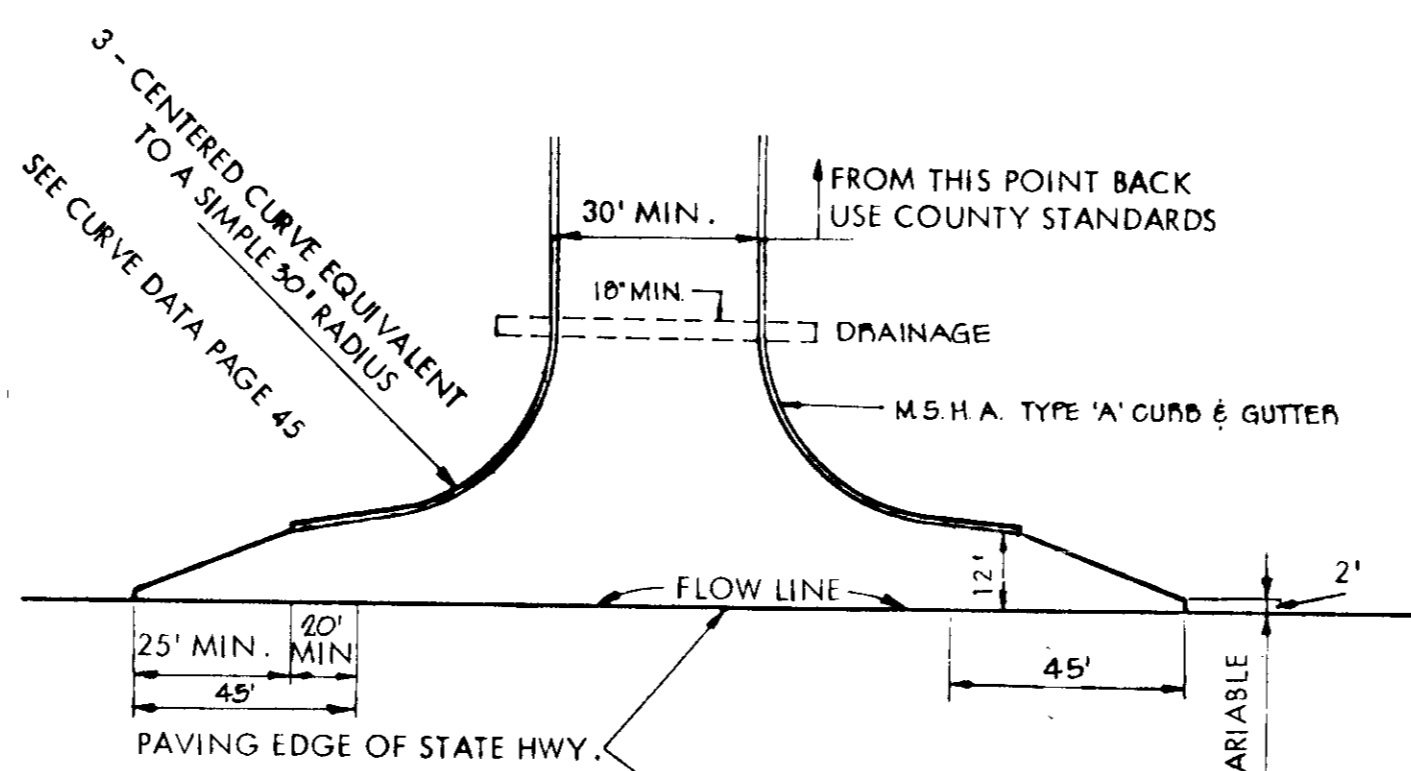
APPROVED: DIRECTOR. DATE: 10-19-79. [Signature].



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES STANDARD TYPES OF CONCRETE CURB COMBINATION CONCRETE CURB & GUTTER STANDARD NO. MD - 620.02

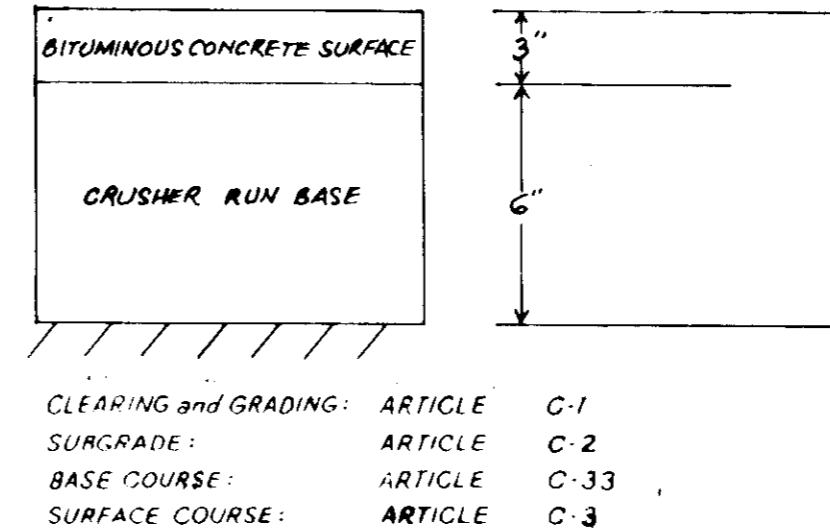


1. The stone shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet MSHA Size No. 2 or AASHTO designation M43 Size No. 2 or 24.
2. The crest of the stone dike shall be at least six inches lower than the lowest elevation of the top of the earth dike and shall be level.
3. The stone outlet structure shall be embedded into the soil a minimum of four inches.
4. The minimum length, in feet, of the crest of the stone outlet structure shall be equal to six times the number of acres of contributing drainage area.
5. The stone outlet structure shall be inspected after each rain, and the stone shall be replaced when the structure ceases to function as intended due to silt accumulation among the stone, washout, construction traffic damage, etc.



MD RTE 144 - FREDERICK RD. 11.04.10 .07 CHANNELIZATION OF COMMERCIAL ENTRANCES H. MINIMUM DESIGN STANDARDS FOR CONCRETE CURB CHANNELIZED INTERSECTION OF SUBDIVISION ROAD WITH STATE HIGHWAY WEST ENTRANCE

**PRIVATE PARKING AND DRIVEWAY**



CLEARING and GRADING: ARTICLE C-1  
SURGRADE: ARTICLE C-2  
BASE COURSE: ARTICLE C-33  
SURFACE COURSE: ARTICLE C-3

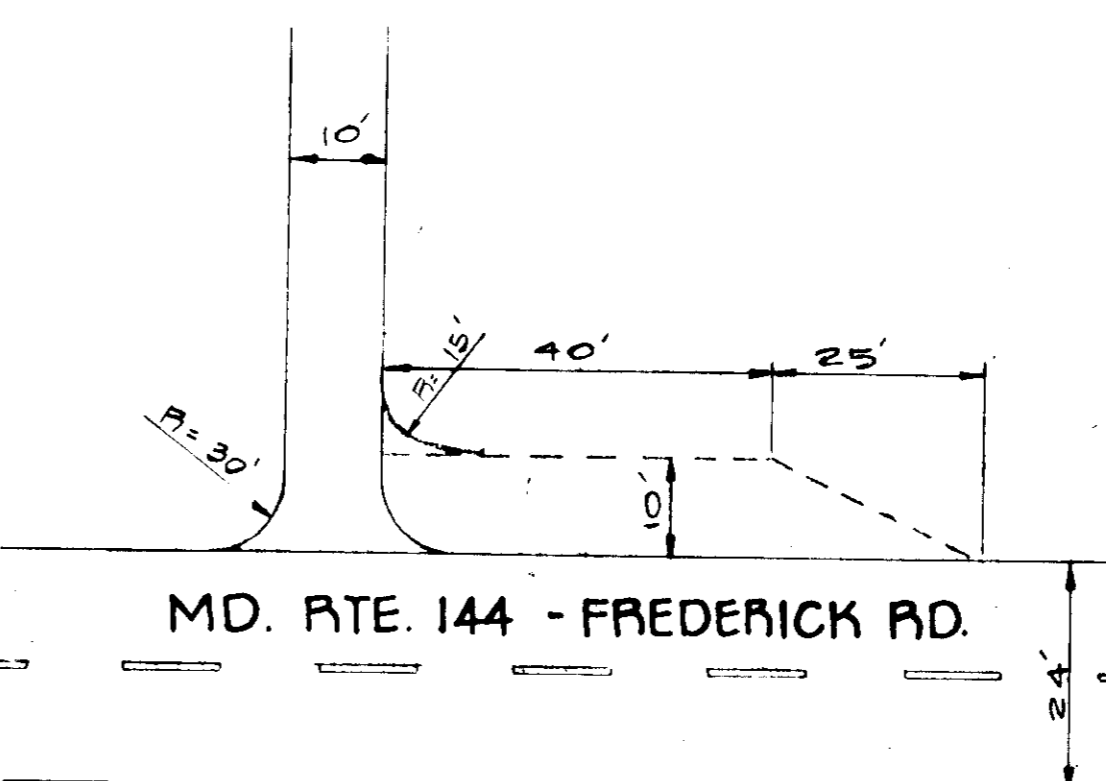
1. TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD CO. ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS
2. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-3 AS PROVIDED IN THE HOWARD CO. ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS
3. EACH COAT IS IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD CO. ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.

**PAVING SPECIFICATION**

BITUMINOUS CONC. SURFACE	6" M.S.H.A. SPEC B
BITUMINOUS CONC. BASE	6" M.S.H.A. SPEC B

BITUMINOUS CONCRETE BASE TO BE PLACED IN TWO 3" LIFTS

**M.S.H.A. TYPICAL PAVING SECTION**



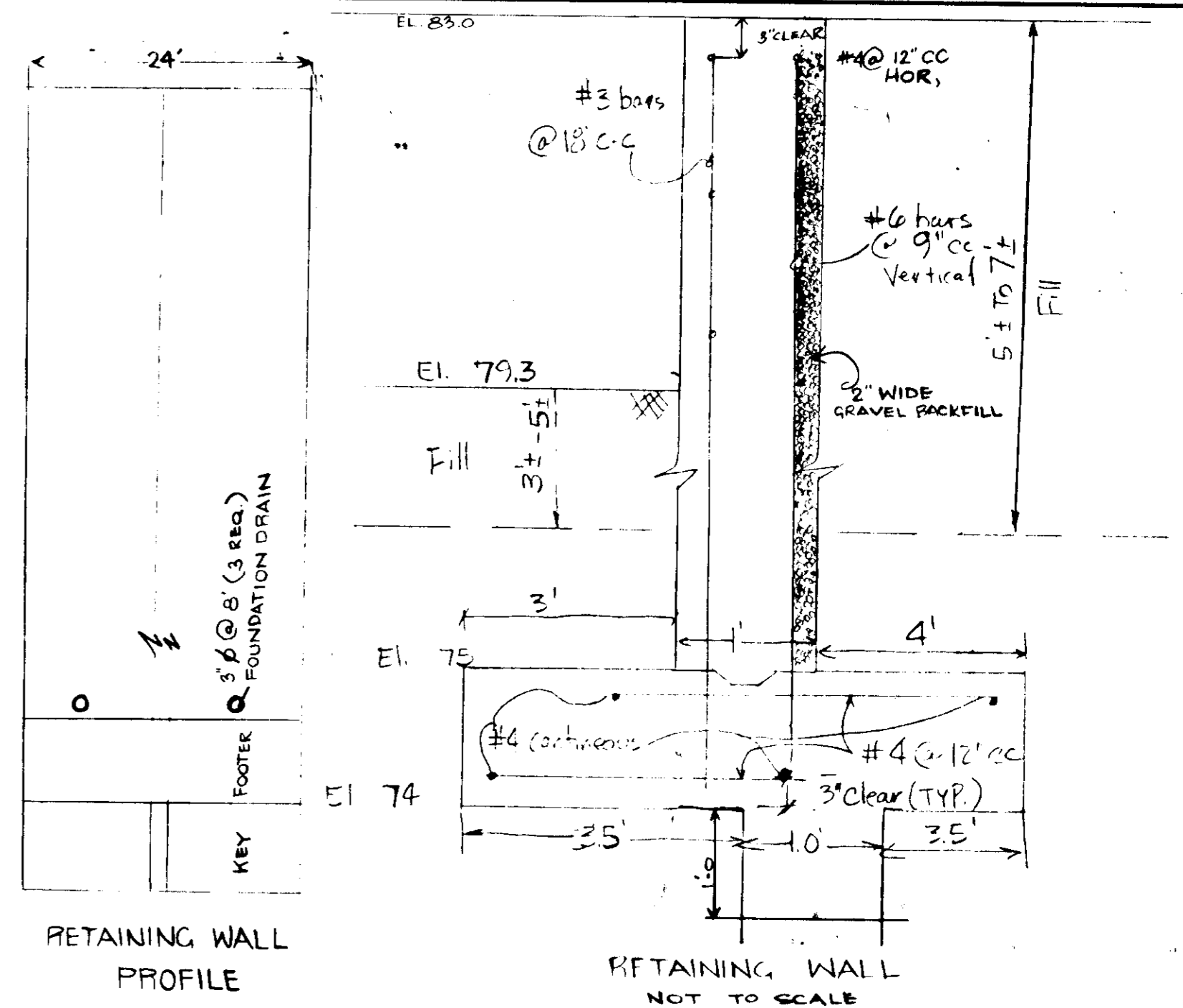
**CHANNELIZATION OF COMMERCIAL ENTRANCE - EAST ENTRANCE**

APPROVED DIVISION OF LAND DEVELOPMENT

HOWARD COUNTY, MARYLAND DATE: 9-20-79

RODOLPH L. MAY JR. MD. P.E. NO. 8700

OWNER AND DEVELOPER: DAEDALEAN ASSOCIATES, INC. SPRINGLAKE RESEARCH CENTER 15110 FREDERICK ROAD WOODRIDGE, MD. 21797



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS. DATE: 10/10/79. U.S. SOIL CONSERVATION SERVICE. THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. DATE: 10/10/79.

DEVELOPER'S CERTIFICATE: I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OF THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DATE: 5/23/79. DEVELOPER: RON HUDSON.

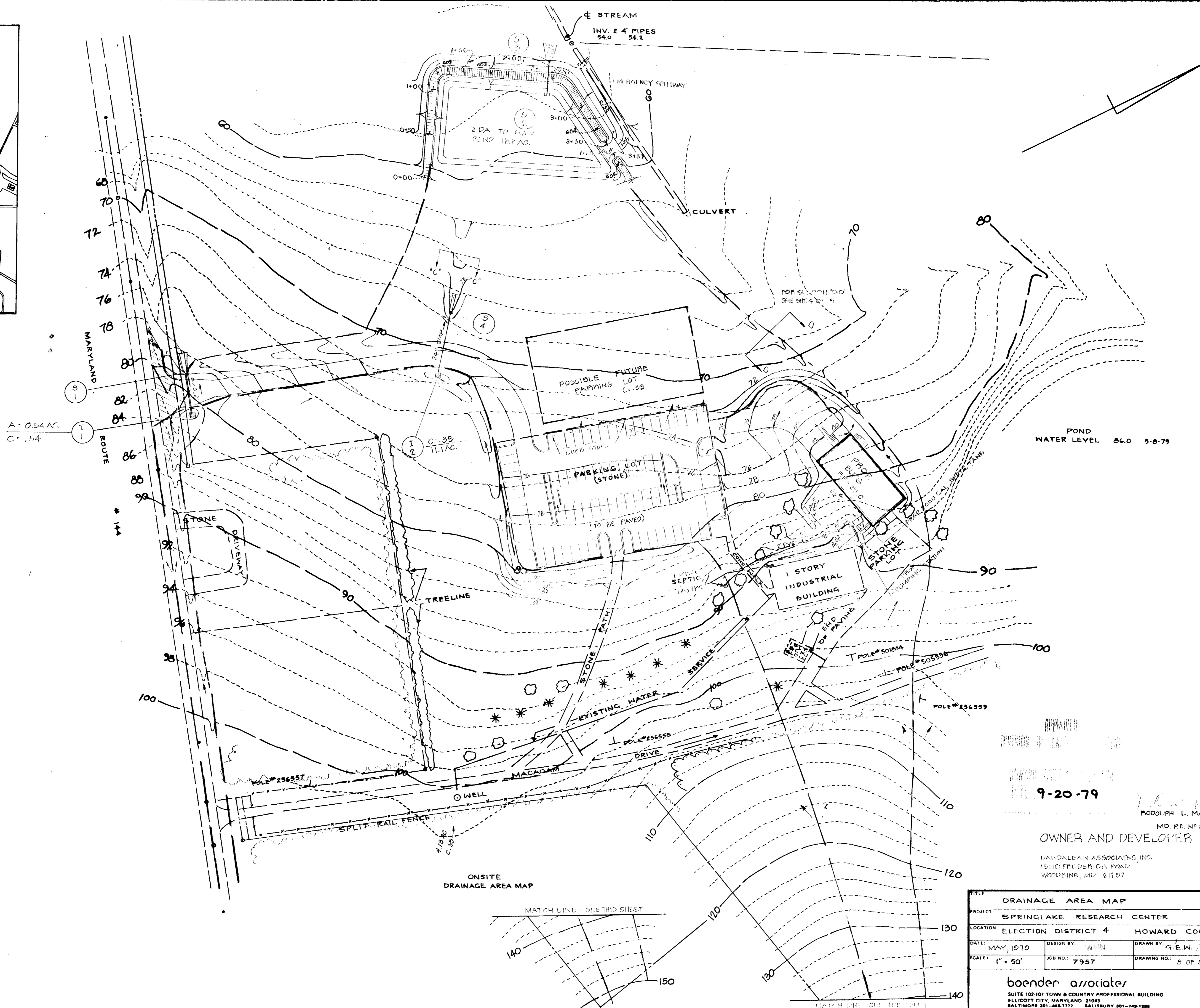
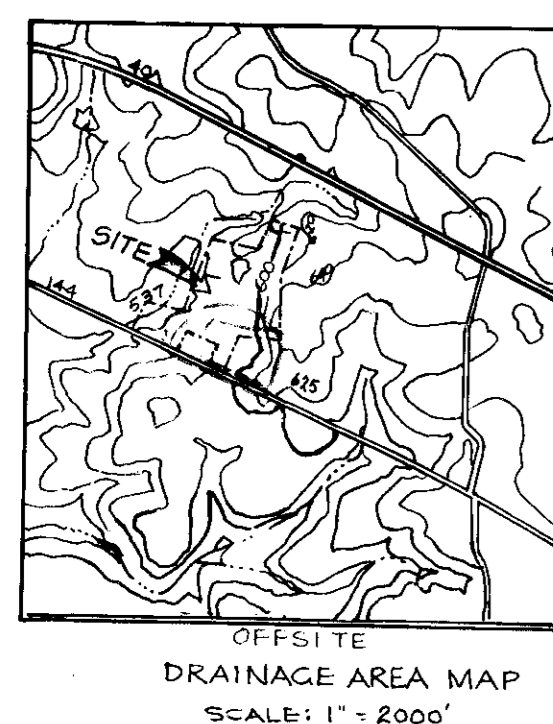
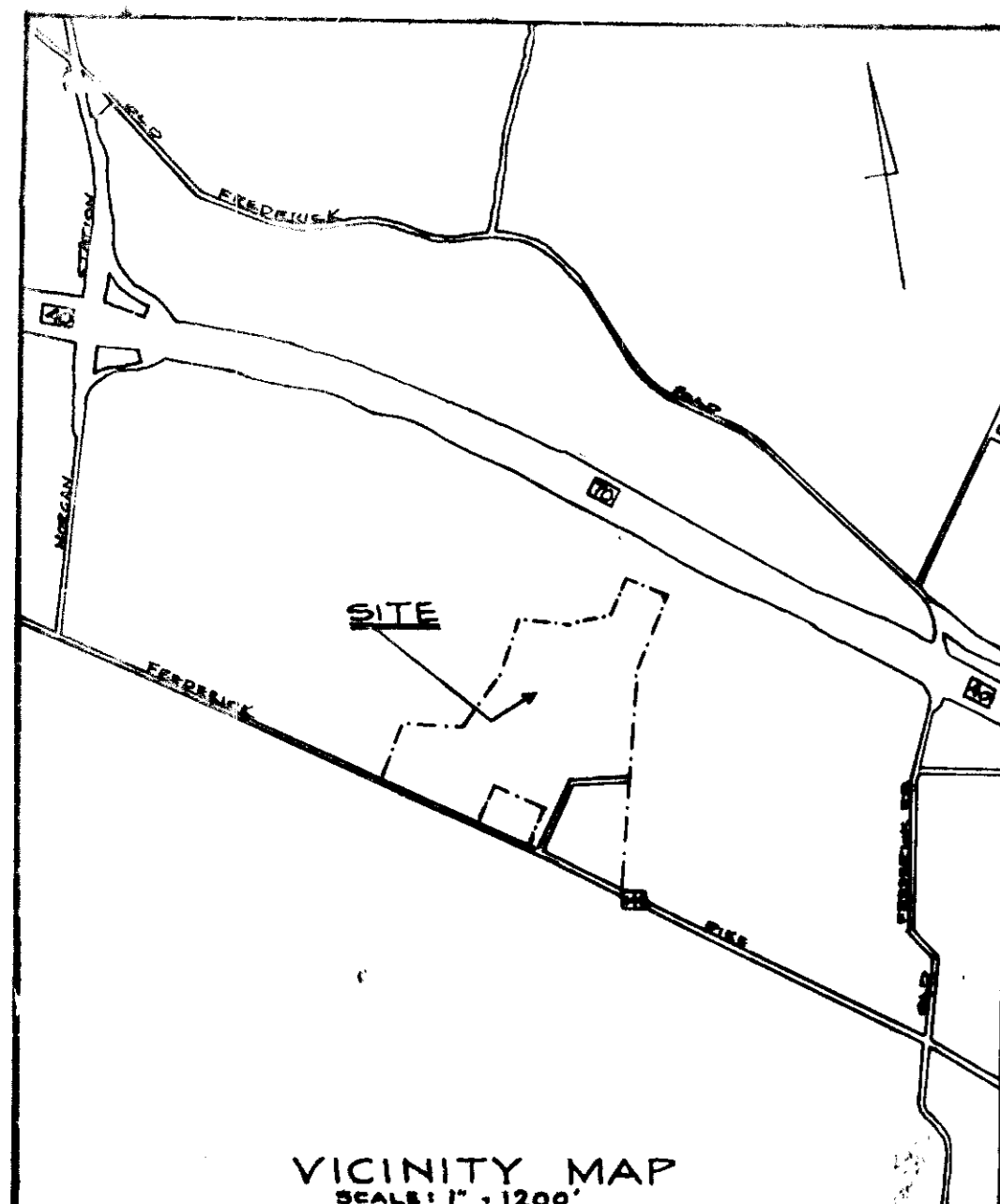
ENGINEER'S CERTIFICATE: I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. DATE: [Blank]. ENGINEER: RODOLPH L. MAY JR. MD. P.E. NO. 8700.

LIST OF STANDARD SYMBOLS

Diversion Dike	DD	2/
Interceptor Dike	ID	2/
Perimeter Dike	PD	2/
Straw Bale Dike	SBD	2/
Stabilized Construction Entrance	SCE	
Stone Outlet Structure	SOS	

TITLE: STANDARD SEDIMENT CONTROL AND MARYLAND STATE ROAD DETAILS. PROJECT: SPRINGLAKE RESEARCH CENTER. LOCATION: 4TH ELECTION DISTRICT HOWARD COUNTY MD. DATE: MAY - 1979. DESIGN BY: WHN. DRAWN BY: GEW. CHECKED BY: PLM. SCALE: JOB NO.: 7957. DRAWING NO.: 7 OF 8.

boender associates engineers/surveyors/planners. SUITE 102 107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLICOTT CITY, MARYLAND 21043. BALTIMORE 301-468-7377. SALISBURY 301-748-1288. SDP-79-162



POND WATER LEVEL 84.0 5-8-79

APPROVED  
 9-20-79  
 RODOLPH L. MAY JR.  
 M.D. P.E. No. 8700

OWNER AND DEVELOPER

DAEDALEAN ASSOCIATED, INC.  
 15110 FREDERICK ROAD  
 WOODRINE, MD. 21787

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TITLE DRAINAGE AREA MAP			
PROJECT SPRINGLAKE RESEARCH CENTER			
LOCATION ELECTION DISTRICT 4 HOWARD COUNTY MD.			
DATE MAY, 1979	DESIGN BY WHN	DRAWN BY G.E.W./WHN	CHECKED BY R.L.M.
SCALE 1" = 50'	JOB NO. 7957	DRAWING NO. 8 OF 8	
boender associates SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING ELLCOTT CITY, MARYLAND 21043 BALTIMORE 301-468-7777 BALTIMORE 301-746-1288			engineers surveyors planners