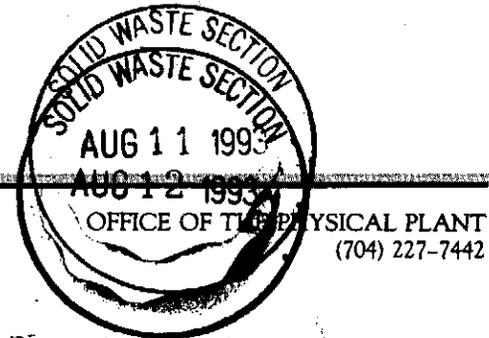


WESTERN CAROLINA UNIVERSITY



08 11 93

Fac/Perm/Co ID # B.C.	Date 08/09/93	Doc ID# DIN
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August 9, 1993

Mr. Larry Rose
Division of Solid Waste Management
NC Department of Environment, Health and Natural Resources
512 Salisbury Street
Raleigh, North Carolina 27604

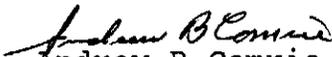
Reference: Western Carolina University
Landfill Monitoring Wells
Well Completion Record

Dear Mr. Rose:

Enclosed is a copy of referenced well completion record for the replacement background monitoring well. The figure shows the well as MW-1A but was reported as MW-5 in the recent test report.

Please call if you have any questions.

Sincerely,


Andrew B Comrie
Director of Physical Plant

ABC/cp

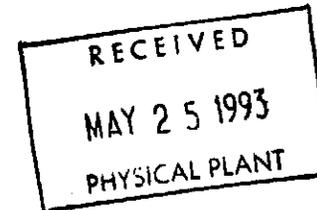
Enclosure

CULLOWHEE, NORTH CAROLINA 28723

Western Carolina University is one of the sixteen senior institutions of The University of North Carolina and an affirmative action/equal opportunity employer.



FILE: misc cont



May 25, 1993

North Carolina Department of Natural Resources
Division of Environmental Management
Groundwater Section
Post Office Box 27687
Raleigh, North Carolina 27611

Subject: Well Construction Record
Western Carolina University Landfill
Cullowhee, North Carolina
S&ME Project 1267-92-537

Dear Sirs:

Enclosed is the well construction record for monitor well MW-1A at the subject site. The well was installed adjacent to MW-1 which has been abandoned due to an obstruction in the well. The attached figure shows the approximate location of the well in relation to the abandoned well.

If you have any questions, please contact me at (803) 574-2360.

Sincerely,

S&ME, INC.


Stan Thornton
Drilling Services Manager

ST/1sc/ENV5C

cc: Andrew Comrie
Western Carolina University



FOR OFFICE USE ONLY

Quad. No. _____ Serial No. _____
 Lat. _____ Long. _____ Pc _____
 Minor Basin _____
 Basin Code _____
 Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR S&ME, Inc.

DRILLER REGISTRATION NUMBER 412

STATE WELL CONSTRUCTION
 PERMIT NUMBER: _____

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Cullowhee
Western Carolina University
 (Road, Community, or Subdivision and Lot No.)

County: Jackson

2. OWNER Western Carolina University
 ADDRESS Physical Plant
Cullowhee NC 18723
 (Street or Route No.)
 City or Town State Zip Code

Depth		DRILLING LOG
From	To	Formation Description
0	52	Casing advances (no samples)
52	60	weathered garnet biotite gneiss with minor pyrrhotite
60	70	brown slightly silty fine-coarse sand
70	80	no recovery
80	85	weathered garnet biotite gneiss w/ minor pyrrhotite & sulfur staining
85	91	Highly weathered to hard garnet biotite gneiss w/ minor pyrrhotite multiple weathered fractures
91	100	Very hard garnet biotite gneiss with some chlorite & pyrrhotite deposits on fracture faces. Altered plagioclase & fractures

3. DATE DRILLED 5/5-7/93 USE OF WELL monitor

4. TOTAL DEPTH 100' CUTTINGS COLLECTED Yes No

5. DOES WELL REPLACE EXISTING WELL? Yes No

6. STATIC WATER LEVEL: 71.5 FT. above TOP OF CASING,
 below TOP OF CASING IS 3.5 FT. ABOVE LAND SURFACE.

7. YIELD (gpm): _____ METHOD OF TEST _____

8. WATER ZONES (depth): _____

9. CHLORINATION: Type _____ Amount _____

10. CASING:

Depth	Diameter	Wall Thickness or Weight/Ft.	Material
From <u>0</u> To <u>75</u> Ft.	<u>2"</u>	<u>Sch 40</u>	<u>PVC</u>
From _____ To _____ Ft.	_____	_____	_____
From _____ To _____ Ft.	_____	_____	_____

If additional space is needed use back of form.

LOCATION SKETCH

(Show direction and distance from at least two State Roads, or other map reference points)

11. GROUT:

Depth	Material	Method
From <u>0</u> To <u>71</u> Ft.	<u>Portland</u>	<u>tremie</u>
From <u>71</u> To <u>73</u> Ft.	<u>Bentonite</u>	<u>tremie</u>

12. SCREEN:

Depth	Diameter	Slot Size	Material
From <u>75</u> To <u>90</u> Ft.	<u>2</u> in.	<u>0.010</u> in.	<u>PVC</u>
From _____ To _____ Ft.	_____ in.	_____ in.	_____
From _____ To _____ Ft.	_____ in.	_____ in.	_____

13. GRAVEL PACK:

Depth	Size	Material
From <u>73</u> To <u>100</u> Ft.	_____	<u>sand</u>
From _____ To _____ Ft.	_____	_____

14. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

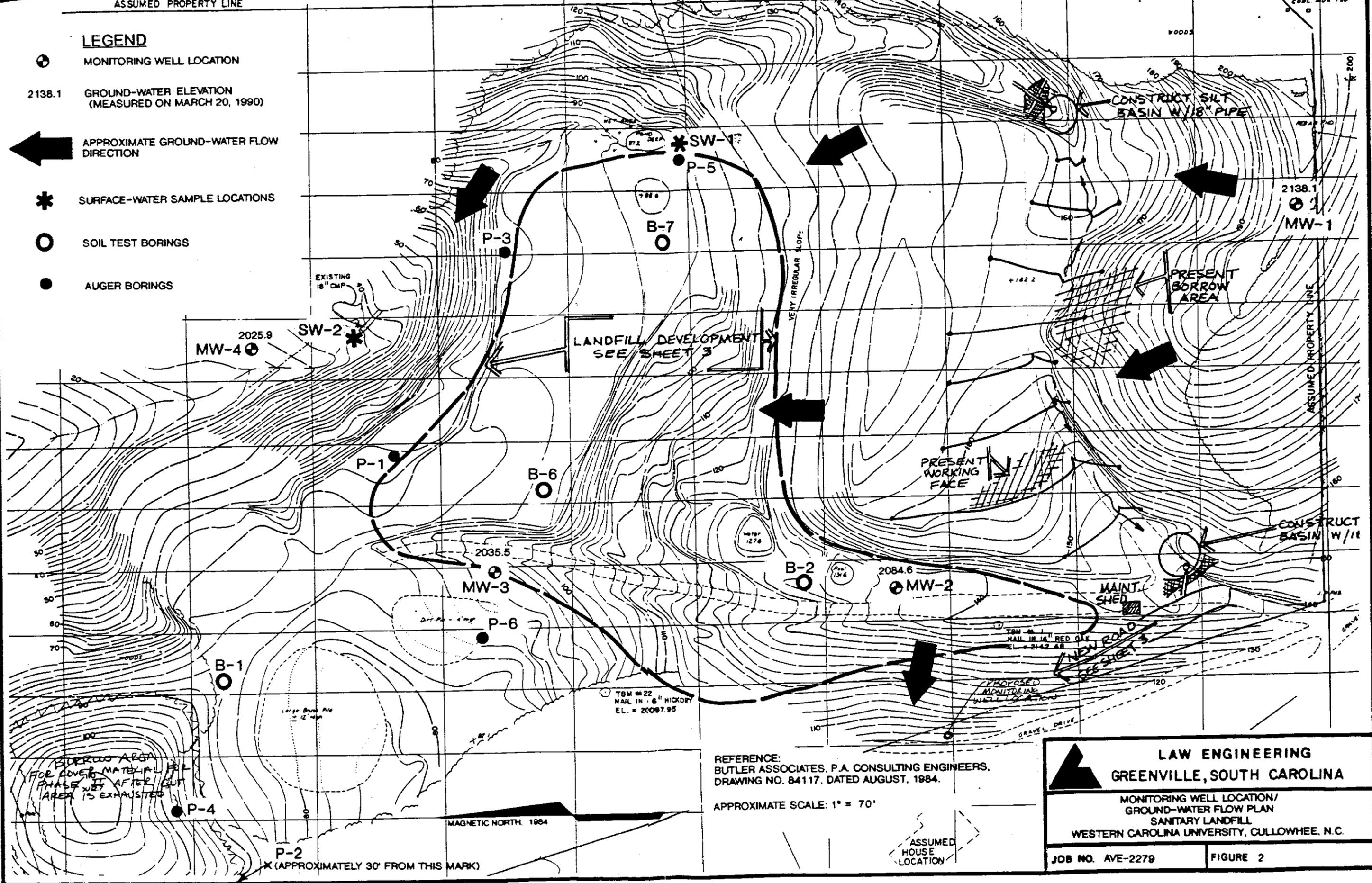
SIGNATURE OF CONTRACTOR OR AGENT

DATE

[Signature] 5/24/93

LEGEND

-  MONITORING WELL LOCATION
- 2138.1  GROUND-WATER ELEVATION (MEASURED ON MARCH 20, 1990)
-  APPROXIMATE GROUND-WATER FLOW DIRECTION
-  SURFACE-WATER SAMPLE LOCATIONS
-  SOIL TEST BORINGS
-  AUGER BORINGS

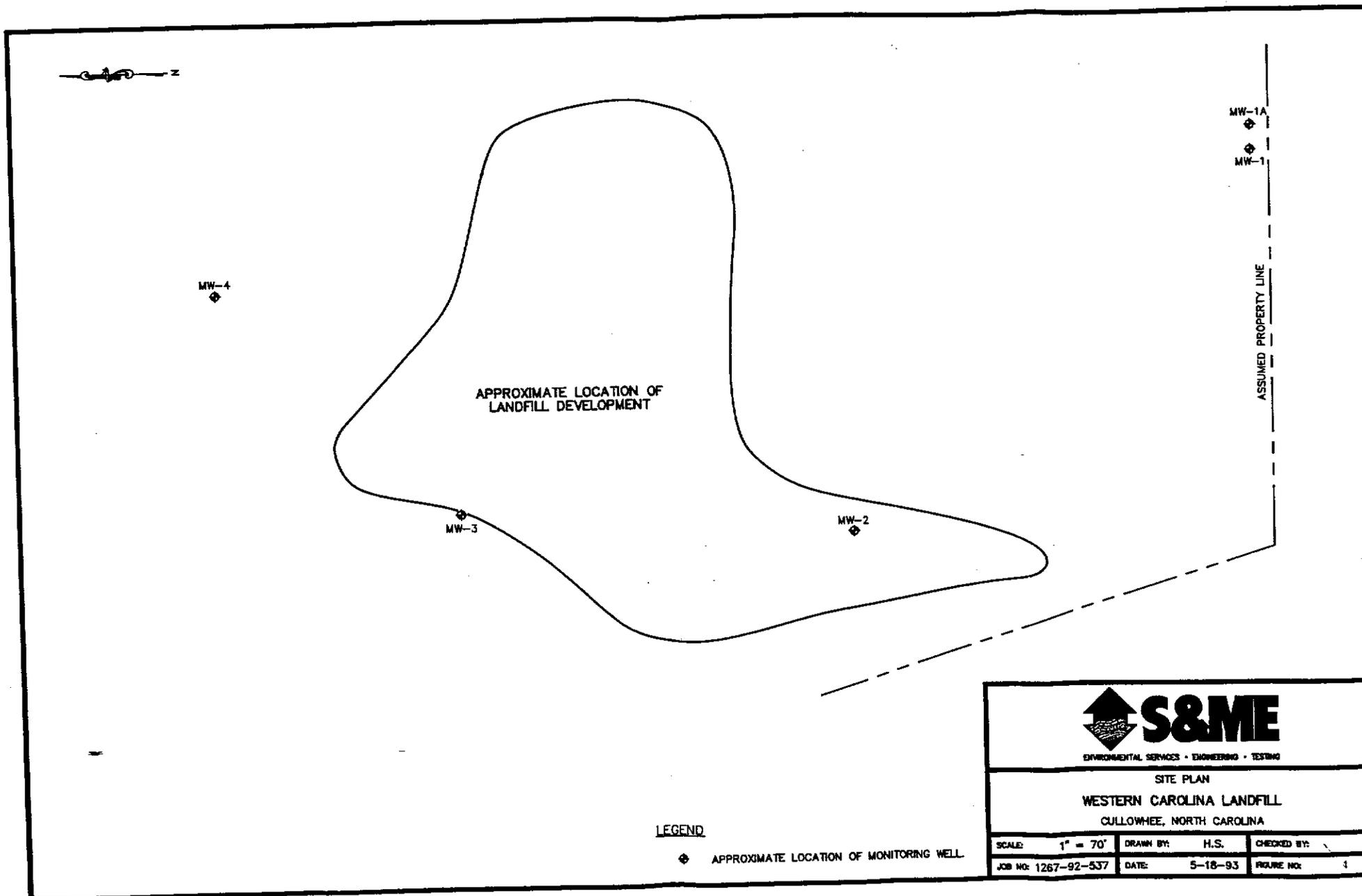


REFERENCE:
 BUTLER ASSOCIATES, P.A. CONSULTING ENGINEERS,
 DRAWING NO. 84117, DATED AUGUST, 1984.

APPROXIMATE SCALE: 1" = 70'

LAW ENGINEERING	
GREENVILLE, SOUTH CAROLINA	
MONITORING WELL LOCATION/ GROUND-WATER FLOW PLAN SANITARY LANDFILL WESTERN CAROLINA UNIVERSITY, CULLOWHEE, N.C.	
JOB NO. AVE-2279	FIGURE 2

THE PRINT MACHINE, INC. N42857



LEGEND

◆ APPROXIMATE LOCATION OF MONITORING WELL.



ENVIRONMENTAL SERVICES • ENGINEERING • TESTING

SITE PLAN

WESTERN CAROLINA LANDFILL

CULLOWHEE, NORTH CAROLINA

SCALE: 1" = 70'	DRAWN BY: H.S.	CHECKED BY:
JOB NO: 1267-92-537	DATE: 5-18-93	FIGURE NO: 1

