15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: Mary Jane Peachey, Regional Hazardous Waste Remediation Engineer, Region 8
FROM: James Van Hoesen, Chief, Western Field Services Section, Bureau of Construction
SUBJECT: Services, Division of Hazardous Waste Remediation
R.D. Specialties Site, Site No. 8-28-062
DATE:

AUG 2 7 1993

Attached is a copy of the Post Remediation Report for R.D. Specialties Site. This copy is for your records.

Attachment

cc: w/att.: C. Amento - NYSDOH
A. English
V. Nattanmai
G. Rider

POST REMEDIATION REPORT

FOR

R.D. SPECIALTIES SITE

TOWN OF WEBSTER

MONROE COUNTY

SITE NO. 8-28-62

James Van Hoesen
8-17-93

AUGUST 1993

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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1 Section One

SECTION 1 POST CONSTRUCTION REPORT

1.1 SITE LOCATION AND BACKGROUND SUMMARY

The R.D. Specialties, Inc., site is located at 560 Salt Road in the Town of Webster, Monroe County, New York, Figure 1. The R.D. Specialties site is on a rectangular lot which occupies 567 feet along Salt Road and extends 1,911 feet deep. The portion of the site to be remediated is the developed half of the property which abuts Salt Road. A one-story, wood-frame building which is used for the manufacturing operation and a two-story house are located on the western half of the property off of Salt Road.

As a result of chromium handling practices at the manufacturing plant chromium was released into soils. The scope of remedial work included excavation of contaminated soils to a specified depth and within pre-defined horizontal limits. Excavated soil was removed from the site for disposal at a Solid Waste Management Facility (SWMF) permitted to receive industrial waste. Also, a groundwater collection system was installed along sections of footings of manufacturing building to collect chromium contaminated groundwater underneath the building.

1.2 SUMMARY OF ACTIVITIES

1.2.1 Project Initiation

On July 27, 1992 the New York State Department of Environmental Conservation awarded the Excavation and Proper Disposal of Contaminated Soil Contract to Entech Management Services Corp. and issued a "Notice to Proceed" letter to the contractor. A pre-construction meeting was held on July 28, 1992 after which the contractor mobilized for the remedial work.

1.2.2 Site facilities and services

The contractor established a support zone that included two 500 gal. skid tanks for decon water, a locker trailer and a bermed decon pad made of gravel and PVC liner. Plastic fencing and tape was used to separate work zones from the support zone. 3 soil samples were taken from the area adjacent to the decon pad to establish background readings.

1.2.3 Soil Removal

Soil removal was begun on August 27, 1992 in area C_3. The objective was to remove soil to a depth where the concentration of total chromium is less than 31 ppm. At the end of each day every excavated area was covered with polyethylene sheets. The excavation continued to the specified depth at which soil samples were taken to verify that the clean up objective was achieved.

Excavated soil was initially stockpiled on polyethylene sheets until the waste was characterized for disposal. Piles of soil were covered at the end of each shift. During this remedial action the contractor excavated and disposed off site 1183.89 tons of contaminated soil. A total of 28 confirmatory soil samples were taken from excavated areas to confirm that the clean up objective was achieved. The final depth of excavations is shown on Drawing No. 1. Analytical results are included in the Air Monitoring and Analytical Results for R.D. Specialties report.

1.2.4 Disposal of Water

Since excavated areas were covered with the polyethylene sheets, the rainwater collected in excavations was not in contact with the soil, thus, there was no potential for cross contamination of rainwater. Based on this, the rainwater was determined clean, was pumped out of excavations and was discharged on the surface.

1.2.5 Installation of Groundwater Monitoring Wells

Three Groundwater Monitoring Wells, RD 9, RD 10 and RD 11 were installed at the site. The location of these wells was selected by the NYSDEC geologist, Michael DiPietro. These wells have the following characteristics.

	RD 9	RD 10	RD 11
Screened Interval	15.0'-20.0'	10.5'-5.5'	18.5'-13.5'
Sand Pack	13.0'	3.5'	11'
Bentonite	11.0'	2.5'	8.5'
Grout to Surface with Protective Casing	X	X	X
pH	7.6	6.7	7.4
Purge Volume	35 gal.	22 gal.	22 gal.

Purge water from well RD 10 had yellowish color and was found contaminated with chromium. Also, water in an existing well RD 5 was found visually contaminated. Both wells were sampled and analyzed for a total chromium. The analytical results are included in the Air Monitoring and Analytical Results for R.D. Specialties report.

1.2.6 Construction of drainage system

While excavating in areas D_1 and A_2 a yellowish liquid was found leaching from the soil beneath footings of the process building. The analyses of leachate sample showed high concentration of chromium in the leachate (2204 ppm of total chromium). To intercept this leachate, drainage pipes were installed along footings of the process building adjacent to excavations D_1, A_2 and A_1. Also, an extra sump was installed inside the process building. The location of drains and sumps is shown on Drawing No. 2. Details of the drainage are shown on Drawing No. 3.

1.2.7 Transportation and Disposal of Contaminated Soil

A total of 1174.90 tons of chromium contaminated soil was excavated from the site and transported by Dart Trucking Co., Inc. to the landfill located in Waynesburg, Ohio. This landfill is owned and operated by American Landfill, Inc., a subsidiary of American Waste Services, Inc., One American Way, Warren, Ohio, 44484-5555. The Department had verified that this landfill is permitted to receive industrial waste by contacting Ohio's Environmental Protection Agency. USEPA was contacted to verify the facility's compliance with "off-site policy" but no information was obtained since USEPA does not track solid waste disposal facilities.

1.2.8 Disposal of Hazardous Liquid

5700 gal. of chromium contaminated water had been classified as D007 waste and was disposed at Clean Harbors facility. This facility is a RCRA permitted TSDF located at 2900 Broadway, Cleveland, Ohio, 44115. The disposal cost was paid directly by R.D. Specialties, Inc., to Entech.

1.3 Health and Safety

Contractor was responsible for compliance with the Health and Safety Plan developed by the Contractor. Work was performed in level D protection. All pieces of equipment leaving the site were decontaminated at the decon facility built by the contractor and certified to decontamination by the Contractor. At the end of the remedial work PPE equipment was disposed at the American Landfill in Waynesburg, Ohio. The decontamination water was disposed at the Clean Harbors facility. During the remedial action, the contractor conducted real time air monitoring and documentation air monitoring around the perimeter of the site. One air monitoring station was set up in an upwind location, two other stations operated in downwind locations. During the course of remedial construction no contravention of air quality standards was recorded using the documentation air monitoring equipment with the following detection capabilities.

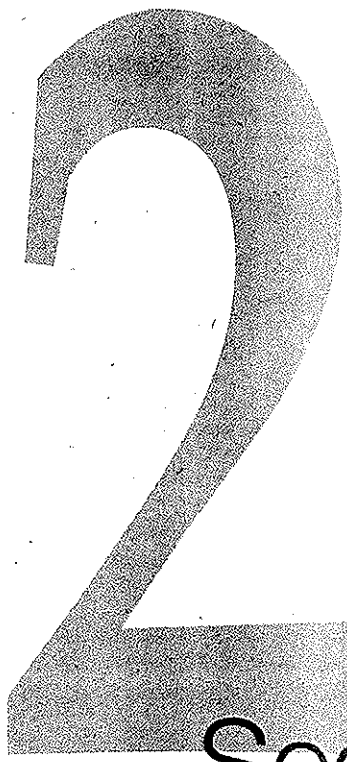
Parameter	Detection Limit
Total nuisance dust	0.0001 mg/m^3
Total respirable particles	10 ug/m^3

Readings and results of analyses for nuisance dust are on file together with the daily inspector's reports.

1.4 Changes to the Contract

All changes to the contract were addressed in Change Order No. 1. This change order included overruns, underruns and extra work needed to accomplish clean up goals at a cost $23,774.40 and increased the contract price from original $109,300.50 to $133,074.90. Bid items which were

overrun included handling and disposal of contaminated soil and confirmatory samples. Underruns included pay items such as non-hazardous aqueous liquids, health and safety and overburden wells. Dewatering of excavations was paid as an extra work. Also, the contractor was granted 30 days time extension to the contract. The extra time was necessary to remove and dispose of the additional contamination soil found at the site and to carry out additional confirmatory soil sampling.



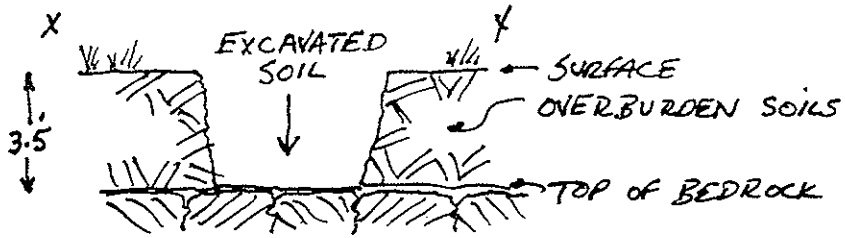
Section Two

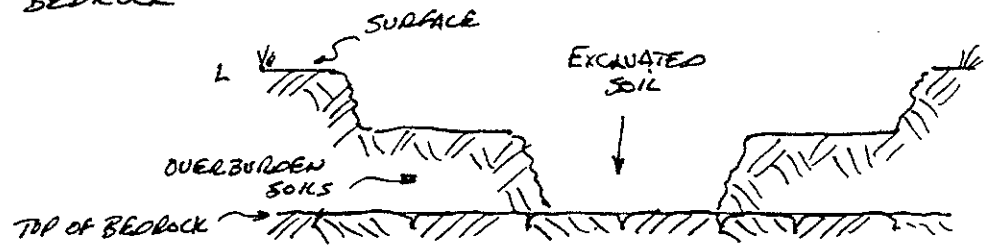
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

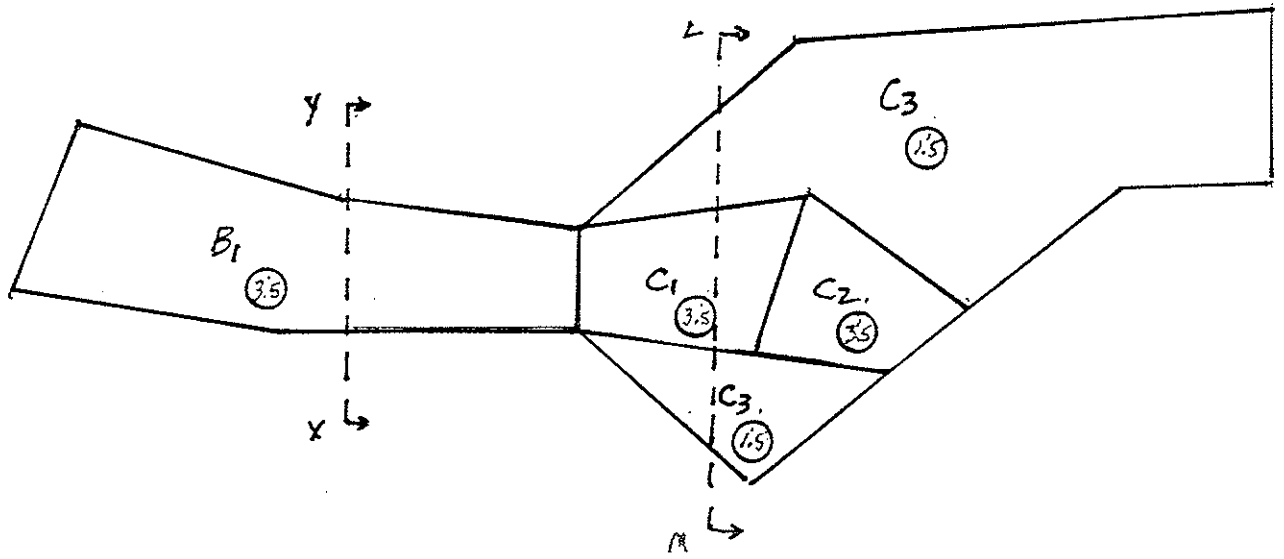
PROJECT GRID

JOB NUMBER	FILE NUMBER	SHEET NUMBER	CHECKED BY	DATE
828062			COMPUTED BY	DATE

RD SPECIALTIES — AS BUILTS







○ DEPTH OF EXCAVATION

SCALE 1" = 20'

RD LONG
INSPECTOR

Drawn: Robert Long
Checked: Lech Dolata
Approved: James Van Hoesen

Drawing No. 1
Excavated Areas
Post Construction Drawing

37-00-1 (6/85)

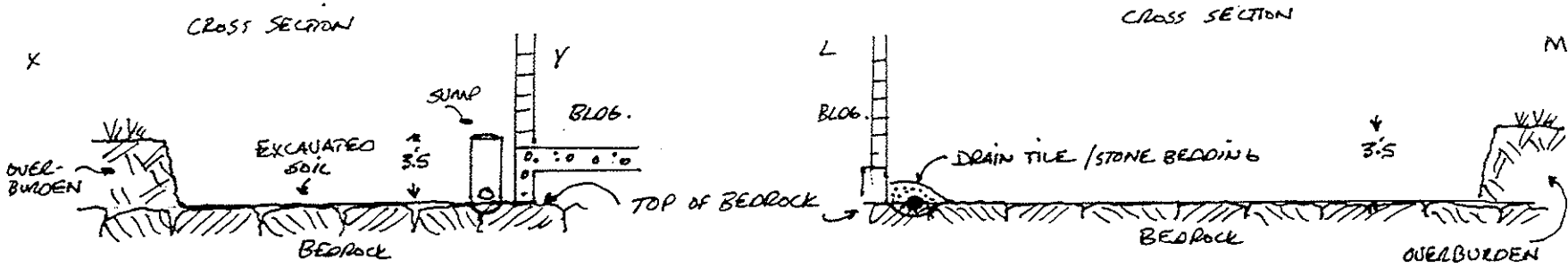
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

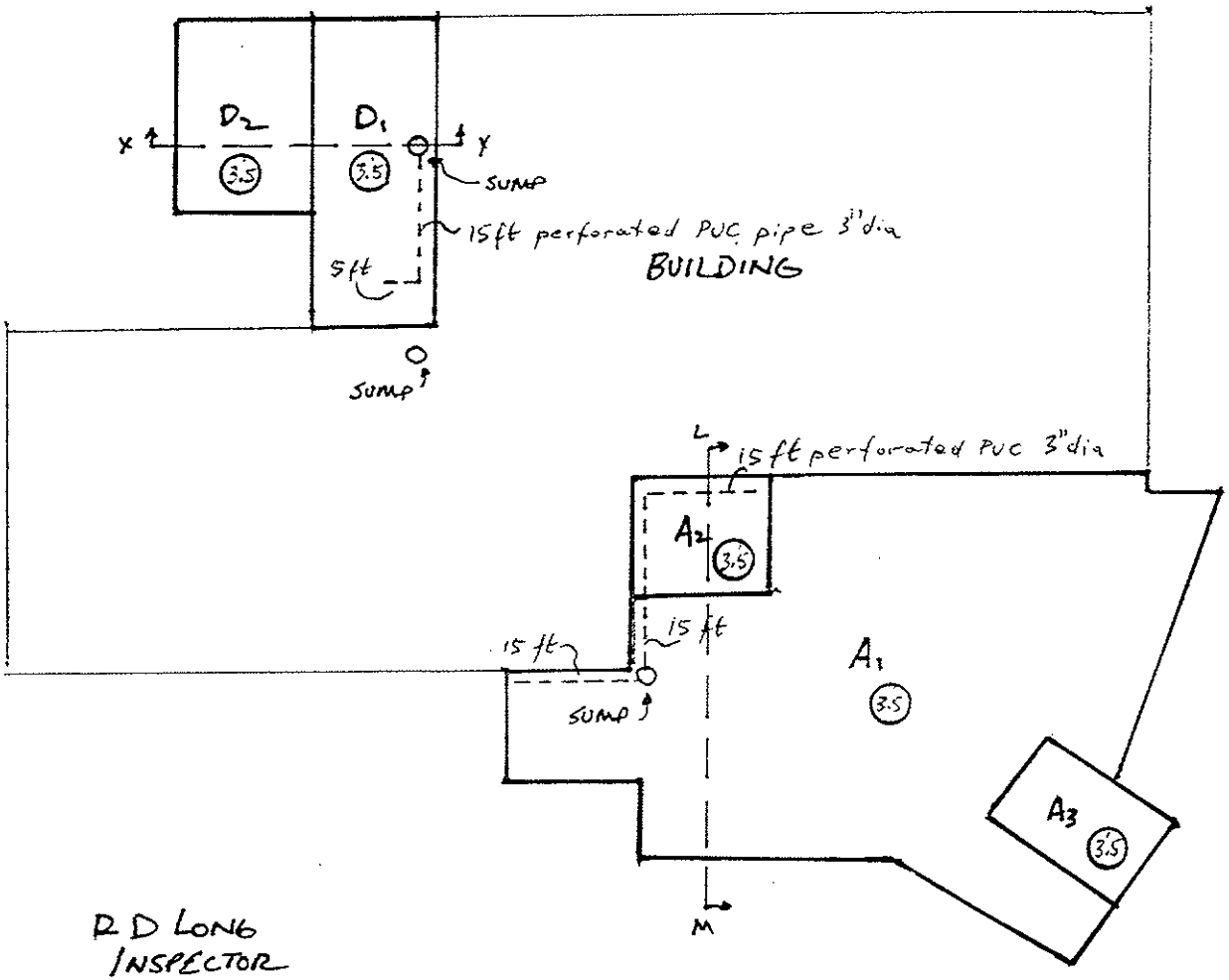
PROJECT GRID

JOB NUMBER	FILE NUMBER	SHEET NUMBER	CHECKED BY	DATE
828062			COMPUTED BY	DATE

R D SPECIALTIES

As Builts





Drawing No. 2
Leachate Collection
Drainage

SCALE 1" = 20'

R D LONG
INSPECTOR

Drawn: Robert Long
Checked: Lech Dolata
Approved: James Van Hoesen

37-00-1 (6/85)

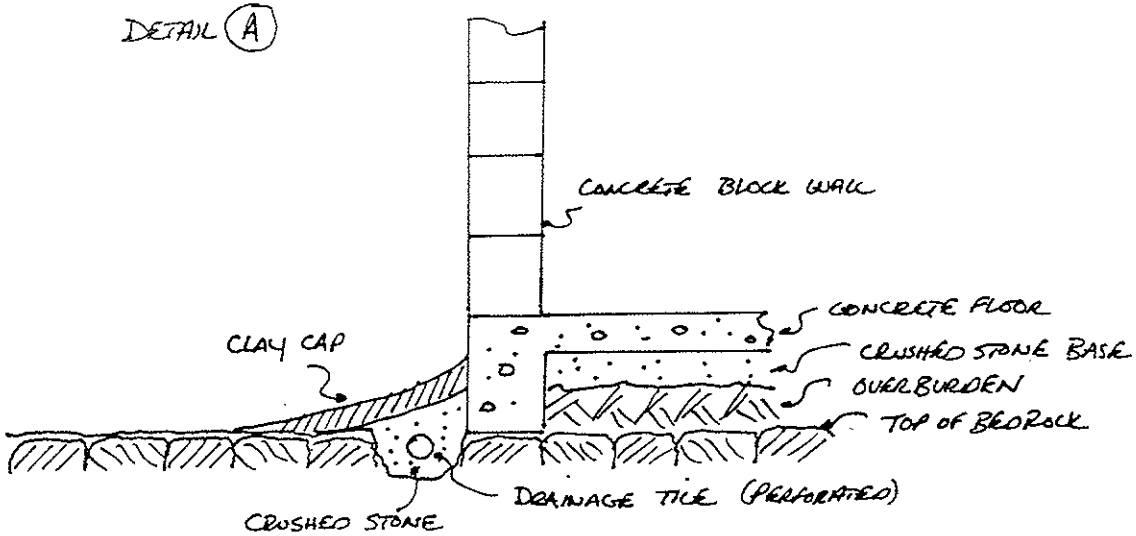
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PROJECT GRID

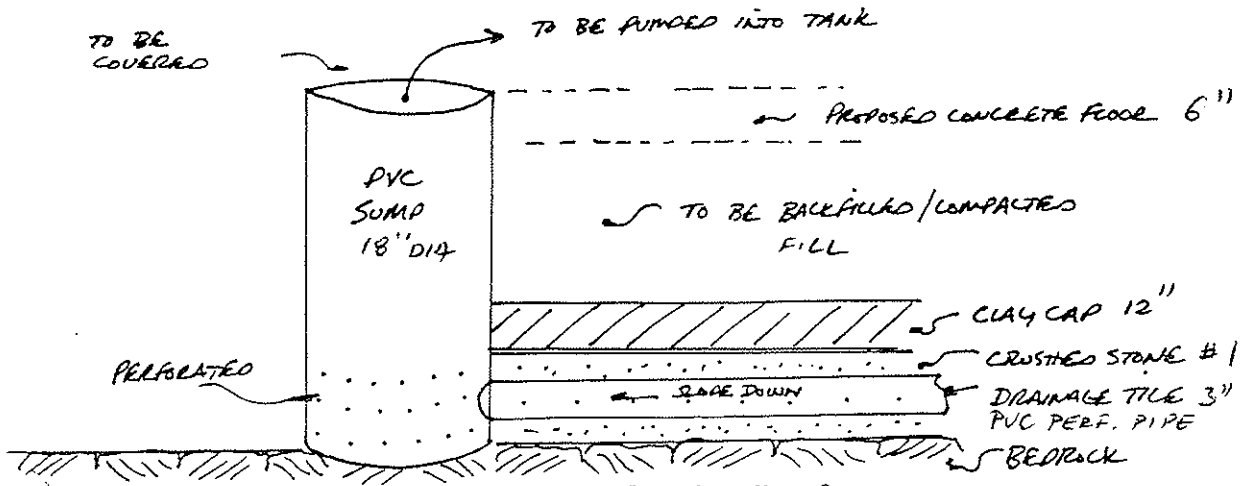
JOB NUMBER	FILE NUMBER	SHEET NUMBER	CHECKED BY	DATE
828062			COMPUTED BY	DATE

As Built Details RD Specifics

DETAIL (A)



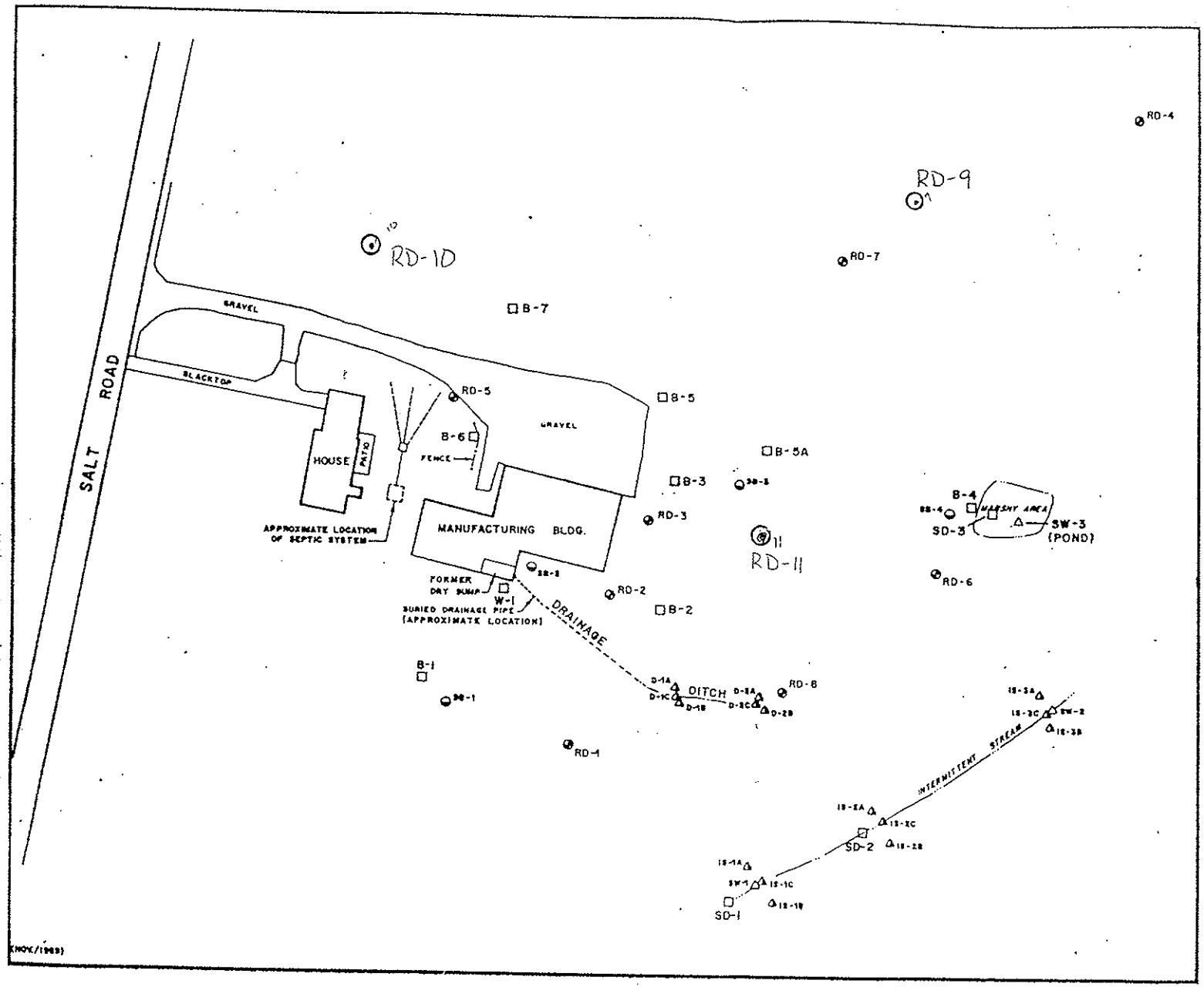
DETAIL (B)



Drawing No. 3
Leachate Collection Details
Detail A - Drain Cross Section
Detail B - Collection Sump

Drawn: Robert Long
Checked: Lech Dolata
Approved: James Van Hoesen

FIGURE 2



LEGEND

- MONITORING WELL
- SOIL BORING
- SOIL SAMPLE
- SURFACE WATER SAMPLE
- SOIL SAMPLE LOZIER, 1986.

RD SPECIALTIES INC.
WEBSTER, NEW YORK

FEASIBILITY STUDY

SAMPLING LOCATION PLAN

SCALE
60' 0 60'

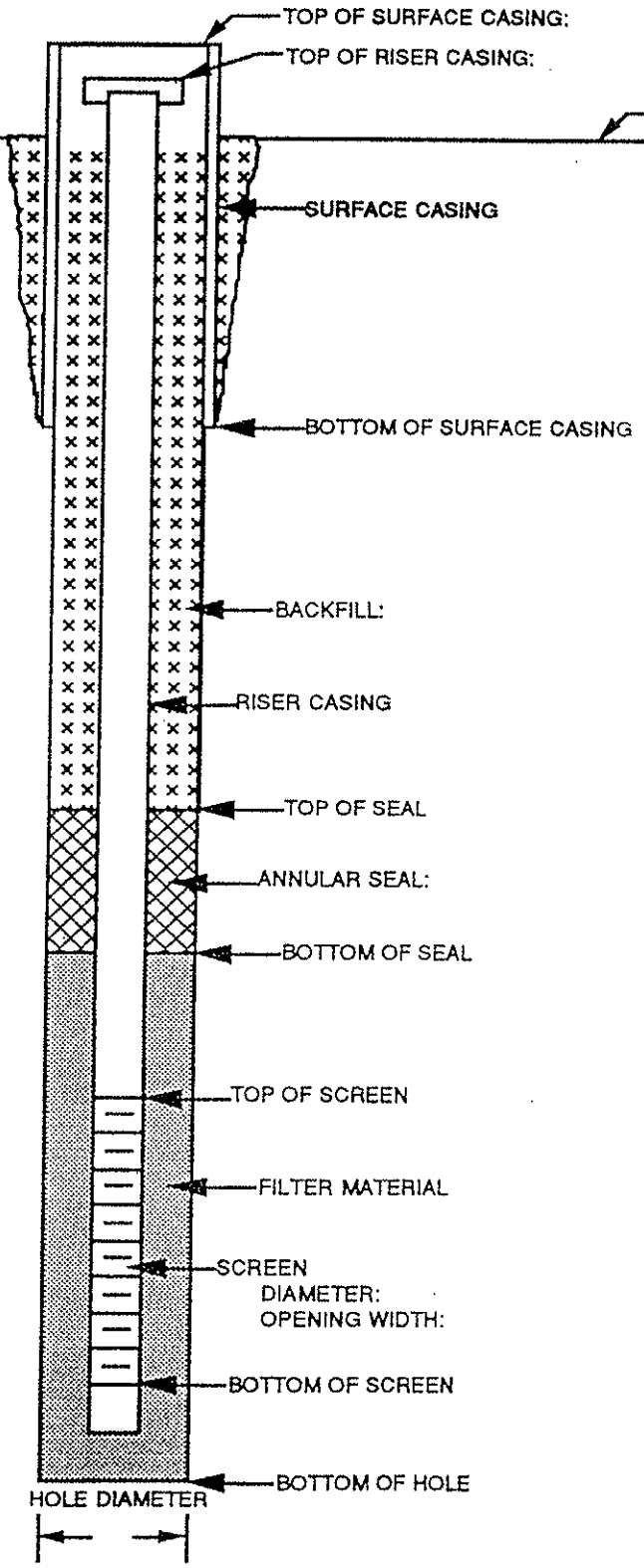
BEARLAND & BOUCK ENGINEERS, P.C.
ENGINEERS & GEOSCIENTISTS

Drawn: Robert Long
Checked: Lech Dolata
Approved: James Van Hoesen

Drawing No. 4
Location of Wells
Post Construction Drawing

MONITORING WELL CONSTR CTION	PROJECT: RD Specialties	3 NO.	WELL NO. RD-9
DRILLING CONTRACTOR: Empire Soils	COORDINATES:		
BEGUN: 9-1-92 1945	SUPERVISOR:	WELL SITE: RD Specialties	WATER LEVEL: DEPTH/ELEV
FINISHED: 9-1-92 1645	DRILLER:		

REFERENCE POINT & ELEVATION:



DEPTH	ELEVATION
5.0'	
9.5'	
12.5	
15'	
20'	

DIAMETER:
TYPE: Cement to surface

TYPE: Bentonite Slurry/ Type I Portland

DIAMETER: 2"
TYPE: PVC

TYPE: Bentonite Slurry

TYPE: Grade "O" Sand (#2G)

TYPE: 10 slot PVC

METHOD DRILLED: Rotary / coring (NX)

COMMENTS:

METHOD DEVELOPED:

SITE LOCATION: RD Specialties
BORING LOCATION: RD-9
DRILLER: Empire Soils

DATE DRILLED: 9-1-92
GEOLOGIST: M. DiPietro,
DRILLING METHOD: Rotary / coring NX

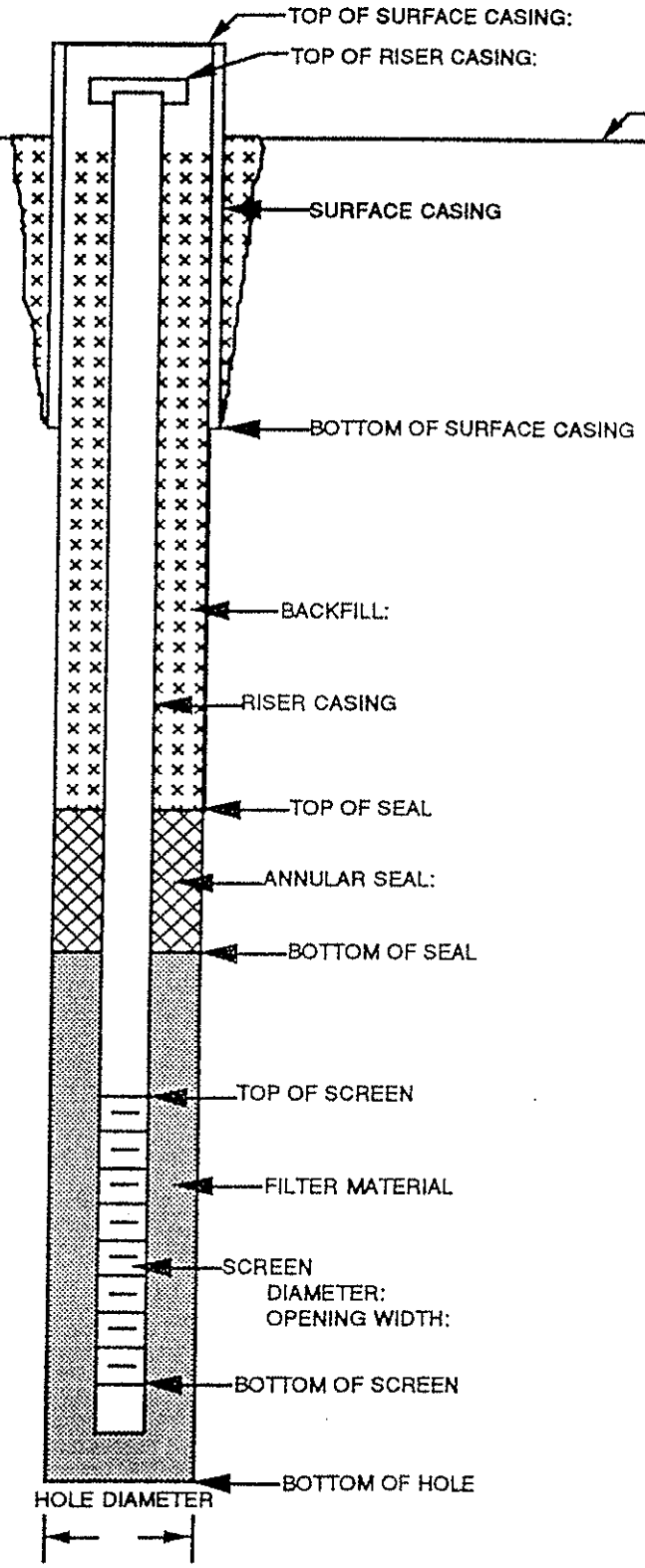
DEPTH (Ft)	SAMPLE NUMBER	SAMPLE INTERVAL	BLOW COUNT/6"	REC* (In)	HNu (ppm)	Lithologic Description
0		No Sample				Topsoil, 6"-10"; 10"-18" soil, sand, gravel with cobbles.
1	1'6"					
2						Top of bedrock (18") Interbedded, fine red & gray SS, moderately fractured
3	3'0"					
	3'8"					Bioturbated red SS; Vertical 6" fractures 1" layer of unconsolidated silty clay
4						Interbedded red & gray SS, natural horizontal fractures, some mechanical shatfracturing
5						
6						
7	7'6"					
8	7'10"					Bioturbated gray SS
9	9'1"					Interbedded red & gray SS; dry clay "lenses" in SS.
10	10'4"					Heavily fractured SS with clay.
11						Gray SS mod-heavy bioturbation. Fine interbedding of siltstones, some horizontal fractures. No vertical fractures.
12						
13	13'0"					
14	14'4"					Gray SS, mod bioturbation / recording
15	15'1"					Dark gray SS, poorly laminated.
	15'9"					Dark gray SS, coarse.
16						Fractured SS; Gray-green interbedded with fine gray SS;
17						
18	18'2"					
19						Alt. Red & gray SS; Interbedded Siltstone; Final 3"-4" Lt. tan SS.
20						

PROJECT No.:

PAGE:

MONITORING WELL CONSTRUCTION	PROJECT: RD Specialties	B NO.	WELL NO: RD-10
DRILLING CONTRACTOR: Empire Soils	COORDINATES:		
BEGUN: 9-2-92 7:50	SUPERVISOR:	WELL SITE: RD Specialties	WATER LEVEL: DEPTH/ELEV
FINISHED: 9-2-92 15:50	DRILLER:		

REFERENCE POINT & ELEVATION:



DIAMETER:
TYPE: Cement to surface

TYPE: Slurry/cement

DIAMETER: 2"
TYPE: PVC

TYPE: Bentonite Slurry

TYPE: Grade "0" Sand (#2 Q)

TYPE: 10 Slot PVC

DEPTH	ELEVATION
3.5	
9.0'	
5.5'	
10.5'	

BOB 11'

METHOD DRILLED: Rotary / NX Core

METHOD DEVELOPED:

COMMENTS:

SITE LOCATION: RD Speerathes
BORING LOCATION: RD-10
DRILLER: Empire Soils

DATE DRILLED: 9-2-92
GEOLOGIST: M. DiPietro
DRILLING METHOD: Rotary/ NX Core

DEPTH (Ft)	SAMPLE NUMBER	SAMPLE INTERVAL	BLOW COUNT/6"	REC* (in)	HNu (ppm)	Lithologic Description
0						Soil; mixed sandy soil and weathered cobbles.
1						
2	2'0"					
	2'3"					Fractured red-brown SS
3	3'0"					Red grading to gray SS; one 45° fracture at 28".
	3'1"					Fractured green silty SS with iron staining.
4	4'0"					Interbedded Red & Gray SS; several fractures
5	5'0"					Brown Red SS; Moderate bioturbation; gray SS heavily fractured; "hash" regolith at 4'7" dk brn coarse.
6						
7						Interbedded red & gray SS; mod-heavy bioturbation. ~~Fine green lenses throughout sections.~~ (Limited core recovery)
8	8'2"					
9						Interbedding of gray & red SS; ranging from heavily fractured to competent; bioturbated; 1" regolith - frequent green "clay lenses" through section 1/4"-3/4" across.
10						
11	11'0"					
	B.O.B.					
12						
13						
14						
15						
16						
17						
18						
19						

PROJECT No.:

3

Section Three

R.D.SPECIALTIES, INC. SITE, WEBSTER N.Y. SITE NO 8 28 062

ENGINEERING ESTIMATE AND BID TABULATION

BID OPENING APRIL 07,1992

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	ENGINEER ESTIMATE AMOUNT	ENTECH MGMT SERV CORP UNIT PRICE	ENTECH MGMT SERV CORP AMOUNT
00501	SITE PREPARATION	L.S.	1		22,500.00		16,000.00
00502	SITE SERVICES	DAY	45.0	260.00	11,700.00	150.00	6,750.00
00503	CONTAMINATED SOIL, HANDLING AND DISPOSAL	TONS	750	105.00	78,750.00	80.00	60,000.00
00504	NON HAZ AQUEOUS LIQUIDS	GAL	15,000	0.45	6,750.00	0.47	7,050.00
00505	CONFIRMATORY SAMPLES	EACH	25	110.00	2,750.00	140.00	3,500.00
00506	HEALTH AND SAFETY	DAY	20	1600	32,000.00	500.00	10,000.00
00507	MONITORING WELLS						
	A. OVERBURDEN	FOOT	15	75	1,125.00	73.34	1,100.10
	B. BEDROCK	FOOT	60	105.00	6,300.00	73.34	4,400.40
	TOTAL COST				$161,875.00		109,800.50
	POLLUTION LIABILITY INSURANCE						500.00
	G. TOTAL						109,300.50

SEVENSON ENV. SERVICES		MARCOR OF N.Y. INC.		ALLWASH OF SYRACUSE INC		OH MATERIALS		INTEGRATED
UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE
	47,610.00		18,374.00		12,825.00		65,700.00	
100.00	4,500.00	406.82	18,306.90	80.00	3,600.00	350.00	15,750.00	100.00
95.00	71,250.00	117.52	88,140.00	160.00	120,000.00	114.00	85,500.00	75.00
0.50	7,500.00	0.38	5,700.00	0.70	10,500.00	0.55	8,250.00	0.30
100.00	2,500.00	42.50	1,062.50	75.00	1,875.00	75.00	1,875.00	1,000.00
50.00	1,000.00	633.78	12,675.60	540.00	10,800.00	830.00	16,600.00	300.00
55.00	825.00	74.80	1,122.00	120.00	1,800.00	125.00	1,875.00	100.00
75.00	4,500.00	36.30	2,178.00	160.00	9,600.00	130.00	7,800.00	200.00
	139,685.00		147,559.00		171,000.00		203,350.00	
N.A.		0.00		1.00				

WASTE SER INC	MAXIMUM ENVR SER CORP		YOLAM CONST INC		ENVR SERV GROUP INC		OBG TECHNICAL SERVICES	
AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
112,472.00		113,000.00		126,250.00		26,000.00		54,045.00
4,500.00	125.00	5,625.00	110.00	4,950.00	1,535.00	69,075.00	2,520.00	113,400.00
56,250.00	130.00	97,500.00	115.00	86,250.00	109.00	81,750.00	208.95	156,712.50
4,500.00	0.15	2,250.00	0.30	4,500.00	1.02	15,300.00	1.12	16,800.00
25,000.00	140.00	3,500.00	171.00	4,275.00	175.00	4,375.00	547.85	13,696.25
6,000.00	300.00	6,000.00	500.00	10,000.00	582.00	11,640.00	710.00	14,200.00
1,500.00	75.00	1,125.00	65.00	975.00	150.00	2,250.00	130.20	1,953.00
12,000.00	76.00	4,560.00	80.00	4,800.00	270.00	16,200.00	103.95	8,237.00
222,222.00		233,560.00		242,000.00		226,590.00		377,043.75
60,000.00		60,000.00		97,000.00		22,400.00		4,000.00