

WAIVER

SCANNED

3-0173

NORFOLK

17 LAWRENCE STREET

RELEASE ABATEMENT MEASURE (RAM) PLAN  
for  
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS  
BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Prepared by

CAMP DRESSER & McKEE INC.  
CAMBRIDGE, MASSACHUSETTS

April 23, 1996

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Licensed Site Professional # 7798

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Licensed Site Professional # 6406

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RELEASE ABATEMENT MEASURE (RAM) PLAN  
for  
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS  
BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Owner and responsible party conducting the RAM:

Stephen Mann and Richard Mann  
Buckley & Mann, Inc.  
14 Bush Pond Lane  
Norfolk, MA 02056

Daytime telephone (617) 828-0029 Stephen Mann at x3427, Richard Mann at x3442

Description of the release, site conditions and surrounding receptors

Refer to the enclosed Site Assessment and Remediation Status Report. The Buckley & Mann (B&M) site is under a Waiver pursuant to the 1988 MCP.

In summary, building debris, waste, and contaminated soils on the grounds of a former textile plant deposited prior to 1970 will be excavated and removed from the site for landfill disposal or reuse as daily landfill cover, depending on analytical results. Site assessment data show that soil contaminant concentrations are only slightly above the applicable S-2 MCP No Significant Risk Criteria.

The 140 acre property is currently unused, but may be developed for residential use in the future. Only a few of these acres were used in past industrial activities, while the remainder was undeveloped. This RAM Plan addresses the two acres on which Carbonizer spoils, coal ash and building demolition debris were disposed.

Objectives, plans and schedules

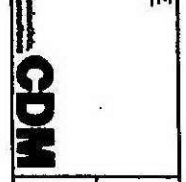
Refer to the enclosed Site Assessment and Remediation Status Report.

The excavation and off-site recycling and disposal work is scheduled for summer and fall 1996. Drawings C-1, C-2 and C-3 included with this RAM Plan show the locations of the work. In summary, B&M would remove Remediation Waste, including contaminated soils, Carbonizer

REV. NO.	DATE	BY	CHKD
00	3/28/95	C.C.C. A.M.A.	

DESIGNED BY: A.M.A.  
 DRAWN BY: C.C.C.  
 CHECKED BY:  
 APPROVED BY:  
 ENGINEER:

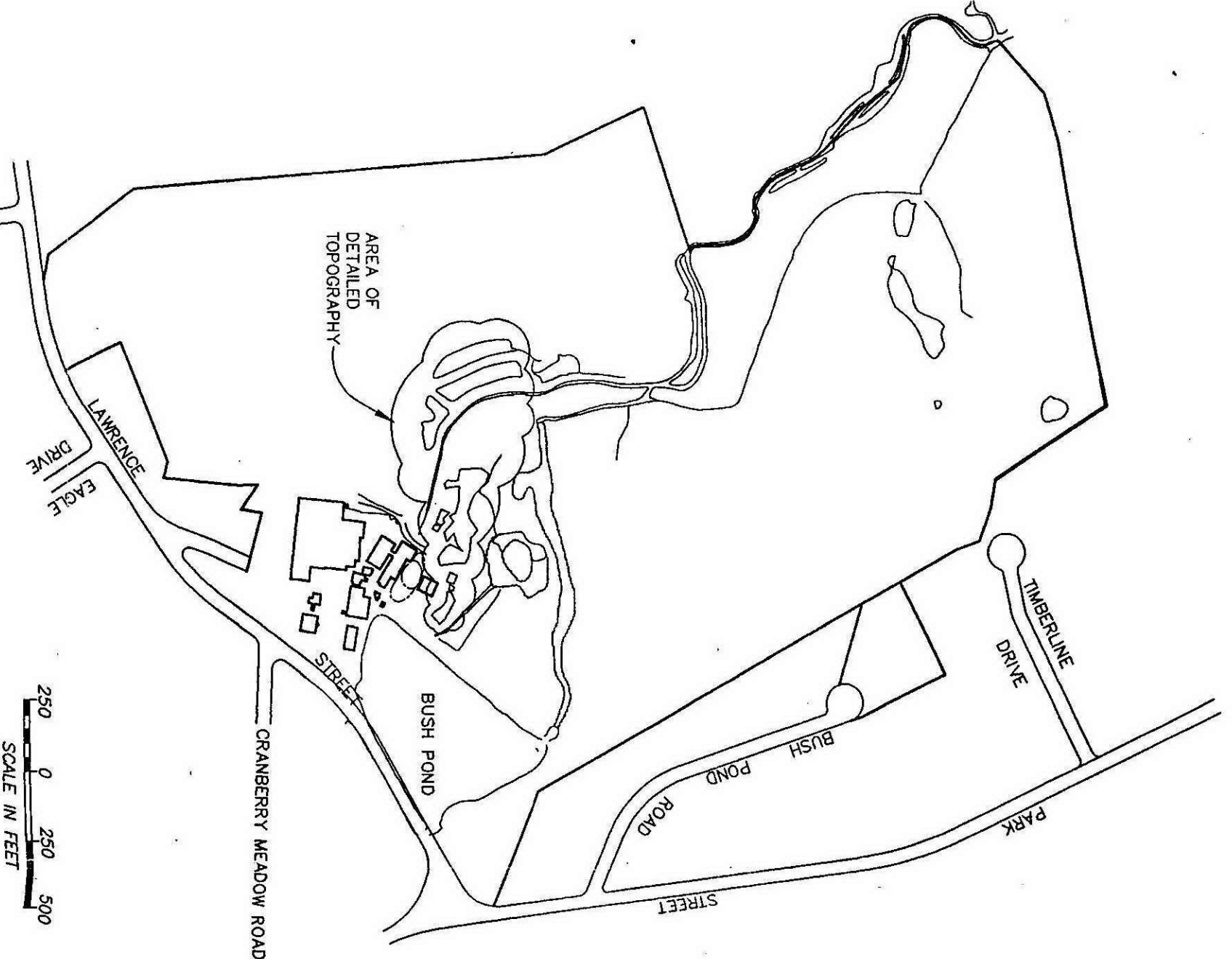
CAMP DRESSER & MCKEE  
 500 Cambridge Center  
 Cambridge, Massachusetts 02142  
 Telephone: 617-452-1100  
 Fax: 617-452-1101



BUCKLEY & MANN PROPERTY  
 NORFOLK, MASSACHUSETTS  
 PRELIMINARY DESIGN

B+M PROPERTY

CDM PROJECT NO. 1121-006	SHEET NO. C-1
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**PLAN NOTES**

1. THE PROPERTY LINES SHOWN ON THESE PLANS HAVE BEEN TAKEN FROM A PLAN ENTITLED "PLAN OF LAND IN NORFOLK, MASS." LATEST REVISION DATE APRIL 19, 1990 BY STAVNSKI ENGINEERING ASSOCIATES, INC.
2. THE TOPOGRAPHY AND DETAILS SHOWN ON THIS PLAN HAS BEEN OBTAINED FROM AERIAL PHOTOGRAPHY WITH A FLIGHT DATE OF APRIL 16, 1990. PHOTOGRAMETRIC SERVICES HAVE BEEN PROVIDED BY COL-EAST, INC. OF NORTH ADAMS, MASSACHUSETTS. SUPPLEMENTARY DATA SUCH AS MONITORING WELL LOCATIONS AND ELEVATIONS, TAILRACE ELEVATIONS, LOCATIONS AND ELEVATIONS OF LAGOON SPOOLS, ETC. HAS BEEN OBTAINED FROM AN ACTUAL FIELD SURVEY PERFORMED DURING NOVEMBER AND DECEMBER, 1994.
3. THE SPOT ELEVATIONS SHOWN WITHIN THE TAIL RACE ARE BOTTOM ELEVATIONS. THEY WERE OBTAINED BY PROJECTING A SURVEYORS ROD THROUGH THE SOFT SEDIMENTS IN THE TAILRACE UNTIL A FIRM RESISTANCE WAS ENCOUNTERED.
4. THE LOCATION OF STATE INLAND DEED RESTRICTED WETLANDS No's 4 & 5 ARE BASE ON THE PLANS FILED WITH THE WETLAND ORDER. THE APPLICABLE PLAN IS RECORDED AS PLAN No. 205A OF 12 OF 1978 IN DEEDS BOOK 5447 PAGE 614.
5. THE LOCATION OF THE TOWN OF NORFOLK WETLAND PROTECTION DISTRICT No. 5 IS BASED ON MAPPING SHOWN ON NORFOLK ASSESSOR'S PLOTS ON FILE WITH THE NORFOLK TOWN CLERK.
6. THE LIMIT OF THE FEMA 100 YEAR FLOOD PLAIN HAS BEEN SHOWN BASED ON DATA SHOWN ON THE FIRM FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. 255217 0005C REVISION DATED AUGUST 19, 1985 AND DATA PRESENTED IN "FLOOD HAZARD ANALYSES TOWN OF NORFOLK, MASSACHUSETTS" BY THE SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE DATED MARCH 1973.
7. THE LIMITS OF THE NORFOLK BOARD OF HEALTH SITE ASSIGNMENT HAVE BEEN TAKEN FROM A PLAN ENTITLED "SITE ASSIGNMENT IN NORFOLK, MASS." DATED SEPTEMBER 21, 1987 BY STAVNSKI ENGINEERING ASSOCIATES, INC.
8. BASE MAP PREPARED BY NORWOOD ENGINEERING CO, INC. ISSUE DATE 1/3/95.



NO.	REV.	DATE	BY	DESCRIPTION
00		3/28/95	CCG	AKA

DESIGNED BY:	AKA
DRAWN BY:	CCG
CHECKED BY:	
APPROVED BY:	
ENGINEER:	

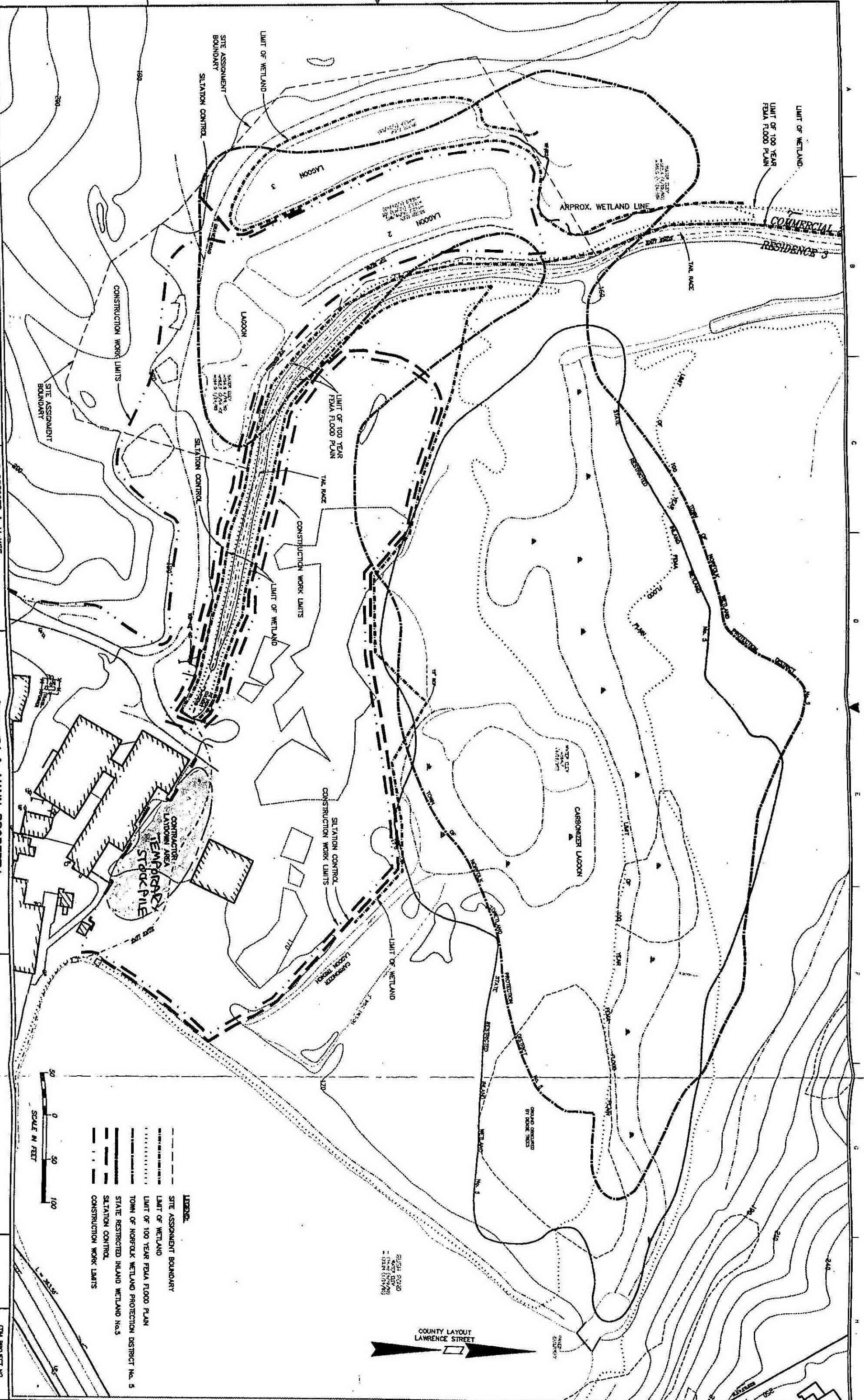
DESIGNED BY: AKA  
 DRAWN BY: CCG  
 CHECKED BY:  
 APPROVED BY:  
 ENGINEER:



BUCKLEY & MANN PROPERTY  
 NORFOLK, MASSACHUSETTS  
 PRELIMINARY DESIGN

OVERLAYS AND  
 LIMITS OF WORK

CDM PROJECT NO.  
 1121-008  
 SHEET NO.  
 C-2





REV. NO.	DATE	BY	CHKD.	REVISION RECORD
00	2/29/95	C.C.C.	A.V.L.	

DESIGNED BY: A.V.L.  
 DRAWN BY: C.C.C.  
 CHECKED BY: [Signature]  
 APPROVED BY: [Signature]  
 DIMENSIONS: [Blank]

**CDM**  
 CAMP DRESSER & MCKEE  
 100 Cambridge Center  
 Cambridge, Massachusetts 02142

**BUCKLEY & MANN PROPERTY**  
 NORFOLK, MASSACHUSETTS  
 PRELIMINARY DESIGN  
 ASSESSMENT AND REMEDIATION AREAS  
 CDM PROJECT NO. 1121-006  
 SHEET NO. C-3



SCALE IN FEET  
 0 50 100

\* AREAS FOR RAM (1992)

- NOTES:**
- AREAS OF PRIMARY CONCERN FOR THE MGP AND WETLAND REGULATIONS
- LAGOON #1 BOTTOM SOILS
  - LAGOON #2 BOTTOM SOILS
  - LAGOON #1 SOILS EXCAVATED PRIOR TO 1975
  - DRAINAGE MATERIAL SCRAPED FROM LAGOON #1 IN 1988
  - SOILS SCRAPED FROM LAGOON #1 IN 1988, STOCKPILED SOUTHWEST OF LAGOON #1
  - SOILS EXCAVATED FROM THE FORMER DYERHOUSE TRENCH TO LAGOON #1
  - DRAINAGE MATERIAL COLLECTED IN 1988 FROM A SMALL PIT WHERE WOODEN DRUM(S) WITH DYE PASTE WAS BURIED
  - PIT FROM WHICH WOODEN DRUM(S) WITH DYE PASTE WAS EXCAVATED IN 1988
  - CARBONIZER LAGOON
  - CARBONIZER SOILS AND BUILDING DEMOLITION DEBRIS
  - TRENCH TO CARBONIZER LAGOON
  - FIRE PIT
  - GROUNDWATER (NOT SHOWN)
  - SOILS IN BUILDING COMPLEX

BUSH POND  
 WATER LEVEL  
 = 175.0 (1/24/90)  
 = 174.0 (1/24/90)

COUNTY LAYOUT  
 LAWRENCE STREET

SHOULDER  
 GRAVEL  
 WATER LEVEL  
 = 174.0 (1/24/90)

spoils, coal ash and building demolition debris under the RAM from the following Areas:

Area #3, Soil excavated from Lagoon #1 prior to 1975  
Remove 100 to 200 cubic yards for reuse as daily landfill cover.

Area #4, Soil scraped from Lagoon #1 in 1988  
Empty the 11 55-gallon drums with this material on a tarp one at a time and inspect for possible dye paste pockets. For those with no dye paste, composite in bulk for non-hazardous landfill disposal. Segregate any soil contaminated with dye paste for hazardous waste disposal.

Area #5, Soil scraped from Lagoon #1 in 1988  
Remove 8 cubic yards for non-hazardous landfill disposal.

Area #6, Soil excavated from the former dyehouse trench to Lagoon #1  
Remove 130 cubic yards for reuse as daily landfill cover.

Area #7, Soil and dye paste  
Empty the 3 55-gallon drums with this material on a tarp one at a time and inspect for possible dye paste pockets. For those with no dye paste, composite in bulk for non-hazardous landfill disposal. Segregate any soil contaminated with dye paste for hazardous waste disposal. (These drums are stored with the 11 drums from Area #4, but are not separately identified.)

Area #10, Carbonizer spoils, coal ash and building demolition debris  
Between 500 and 2,000 cubic yards of this material was land filled over two acres of the site over many years ending in approximately 1965. Because the amount of material cannot be readily estimated until excavation begins, materials will be stockpiled on a 20-mil HDPE liner for inspection prior to transport off-site for reuse as landfill daily cover or disposed at the landfill. Any drum, containers or other questionable, unanticipated materials will be tested, packaged, and disposed as required by regulation.

Remediation Waste will be transported under a MCP Bill of Lading, or a hazardous waste manifest (dye paste), as appropriate.

Excavated material from Areas #3 and #6 will be loaded directly into trucks for transport to the landfill as daily cover. Building debris (concrete block, roofing materials, etc.) from Area #10 will be stockpiled and then transported to the landfill for disposal as loads are accumulated. Contaminated soils from Area #10 will be temporarily stockpiled on a 20 mil HDPE liner at the site and may be screened to remove large pieces prior to transport for either reuse or disposal at the landfill. Material from Areas #4, #5 and #7 will be managed as described above.



Area #10 will be regraded as needed to fill excavation holes and create a uniform bank sloping down toward the wetlands north of this area. Clean sand available on site will be used to replace material removed for off site disposal or reuse. The area will be hydroseeded with grasses for an initial cover. Additional vegetation such as tree saplings may be added, depending on the amount of forest clearing required during the debris removal work.

#### Environmental monitoring program after removal of Remediation Waste

Refer to the enclosed Site Assessment and Remediation Status Report.

In summary, Area #10 will be resampled after unsuitable material is removed for off-site disposal or reuse. The samples will be collected in a grid system with randomized sample locations within each grid cell and analyzed for metals and base/neutral SVOCs. The results will be compared with the MCP Method 1 S-2 soil criteria.

This approach will eliminate the natural tendency to collect samples which visually appear most contaminated. In the October 1995 site assessment program, such a bias did not discover contaminant concentrations which could be classified as serious hot spots. Hence, randomized sampling will provide a fair basis to estimate average exposure point concentrations.

Monitoring Wells 1, 4, 5, 6 near Area #10 and upgradient Well #2 will also be sampled at this time and analyzed for soluble metals and base/neutral extractable Semi-Volatile Organic Compounds to confirm past findings that groundwater is not contaminated.

#### Permits required

B&M obtained an Order of Conditions from the Norfolk Conservation Commission for the RAM work. The Order is included in the enclosed Site Assessment and Remediation Status Report. No other permits are required.

#### Fees

The RAM Plan does not require a filing fee because the site has a Waiver under the 1988 MCP.

#### Certification of Financial Resources

A letter from B&M is attached certifying that there are sufficient financial resources available to excavate and remove from the site up to 2,000 tons of debris and contaminated soil, as described above.

Public Notification Requirements

Refer to the enclosed Site Assessment and Remediation Status Report for a list of the required Notices.

LSP Signature and Seal

Refer to the cover sheet of this RAM Plan.