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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDING 77 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
12/10/2010
NAS BRUNSWICK

**ENVIRONMENTAL DEPARTMENT
NAVAL AIR STATION
437 HUEY DRIVE
BRUNSWICK, ME 04011**

December 10, 2010

Mr. Edward Vigneault
Maine Department of Environmental Protection
Division of Oil and Hazardous Waste Facilities Registration
17 State House Station
Augusta, ME 04333-0017

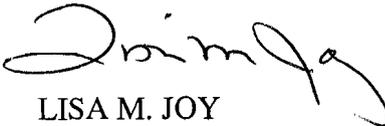
Subj: Final RCRA Partial Closure Report for Building 77

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Building 77 at Naval Air Station Brunswick is provided as Enclosure (1).

If you have any questions, please contact Mr. Mike Fagan at 921-1717 or via e-mail at michael.fagan1@navy.mil.

Sincerely,



LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for Building 77

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
EPA Region I (M. Daly)
MRRA (V. Boundy)
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Lepage Environmental (C. Lepage)
BRAC PMO NE (P. Burgio)

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 77 – WEAPONS BUILD-UP FACILITY
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
DECEMBER 2010

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) RCRA or hazardous waste closure requirements have been completed for Building 77 at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

Building 77, Weapons Build-Up Facility, is located in the southern portion of NAS Brunswick, approximately 2,000 feet southeast of the runway (Figure 1). It is located on an access road that runs southwest from the intersection of Merriconeag Road, New Gurnet Road, and Ordnance Road (Figure 2). The building is located along the western edge of a paved, unnamed access road that is surrounded by security fencing and by undeveloped, wooded land. A small, unnamed stream, which is a tributary of Mere Brook, flows south on the east side of the access road. Building 145 (Loading Platform), a concrete loading platform, is located directly to the south-southwest, at the end of the access road.

Building 77, constructed in 1993, consists of a 4,000-square-foot, single-story building on a concrete slab foundation. It has a metal exterior and roof with three overhead garage doors. The building's interior consists of two rooms, with a large open room consuming most of the space. A small mechanical room with exterior access occupies the southwest corner. Building 77 was heated by No. 1 fuel oil. Photographs of the building are provided as an attachment to this report.

The investigation conducted under this report applies only to the building footprint of Building 77 (as shown on Figure 2). The Weapons/Magazine Area RCRA Partial Closure Report addresses the land surrounding and the groundwater underlying Building 77.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning Building 77, including past use and operations at this location.

Records reviewed include historical aerial photographs, the NAS Brunswick Other Environmental Liabilities (OEL) Database, area-specific reports, facility plans and drawings, and hazardous waste records. Aerial photographs dated 1953, 1958, 1978, 1981, 1984, 1989, 1993 and 1997 (Sewall, 1953, 1958, 1978, 1981, 1984, 1989, 1993 and 1997) were reviewed. Public Works Department (PWD) site base maps dated 1943, 1946, 1952, 1956, 1957, 1975, 1976, 1989, 1991 and 2006 (PWD, 1943, 1946, 1952, 1956, 1957, 1975, 1976, 1989, 1991 and 2006) and site building lists for 1965, 1976, 2003, 2006, and 2008 (PWD, 1965, 1976, 2003, 2006, and 2008) were also reviewed.

According to historical records and NAS Brunswick Environmental Department personnel, following its construction in 1993, Building 77 was used as a weapons build-up facility where the final assembly of bombs was conducted; this was the sole use of Building 77 for its entire history. The 2006 buildings index is the first available building list to include Building 77, and indicates it

to be a 4000-square-foot structure constructed in 1993. This construction date is consistent with aerial photographs and historical site plans:

- The 1993 aerial photograph is the earliest to show Building 77, and it is shown in its current location; the area is undeveloped and tree-covered on aerial photographs prior to 1993.
- A drawing entitled “Construction Air/Underwater Weapons Facility” and dated 1991 shows planned construction details for Building 77. The plans indicate that the floor drains in the building drain through a storm drain line and two concrete catch basins, to an outfall located to the southeast across the access road. The plan also indicates an underground storage tank (UST) north of the pavement on the northeast side of the building. The drawing shows a railroad track is located east of Building 77 and the access road, and parallels the access road. (Historical information suggests that the railroad tracks were constructed in approximately the late 1950’s and are no longer intact.)

A historical site plan (unknown dates) shows that the interior of Building 77 included two “bomb tables” located in the northern portion of the building, a mechanical room in the southwestern corner of the building, and a “bomb breakout area” in the southern portion of the building. No sanitary facilities are shown in the building. On the Building 77 emergency evacuation plan, a bench is shown south of the southernmost doorway, on the southeast wall.

According to NAS Brunswick personnel, final aircraft-weapons-assembly activities were conducted in Building 77, prior to delivery of the ordnance to the Red Label Area for loading onto aircraft. The final assembly consisted of the attachment of external components to intact bomb casings, including fuses, arming-wire assemblies, suspension lugs, and fins and fin assemblies. The activities also included the uncrating of bomb casings and loading of the assembled weapons onto bomb carts for transport to the loading area.

According to NAS Brunswick Environmental Department personnel, hazardous waste was not generated at Building 77. While the hazardous waste database tracking system includes hazardous waste records waste for the Weapons Area, it does not distinguish between the various buildings within the Weapons Area.

The Building 77 area is not served by the base-wide sanitary sewer system and the building does not have an individual septic system (Navy, 2006). As discussed above, available drawings show that there no sanitary facilities in the building. The drawings also indicate that floor drains are connected to a storm drain that discharges to an unnamed stream on the east side of the access road.

The NAS Brunswick Transformer Database lists no electrical transformers associated with Building 77 (a pole-mounted transformer was observed northeast of the building during the site visits).

The NAS Brunswick Master/Historical Aboveground and Underground Storage Tank Inventory lists two tanks associated with Building 77. One 600-gallon UST (registration number 10045-492/500), used to store No. 2 fuel oil, was installed in September 1992 and removed in July 1997 (also see below). It was replaced in 1997 by a 500-gallon-capacity, double-walled, steel tank (registration number 10045-500) storing No. 1 fuel oil, which was installed in a subsurface concrete vault near the former UST location. Underground piping along the western side of Building 77 fed the boiler, located in the mechanical room in the building’s southwest corner. NAS Brunswick personnel reported that this tank was removed and cleaned in August 2010 and is currently stored in the northwest corner of Building 77, for possible reuse (Environmental Department, 2009).

The MEDEP spill records list a release of 15 gallons of No. 2 fuel oil from underground piping associated with a Weapons Area UST, on April 23, 1993 (spill number P-256-1993). The NAS

Brunswick spill records also list a Weapons Area release with the same date. Also according to MEDEP records, on June 24, 1997 (one month prior to the UST removal discussed above), a release of No. 2 fuel oil associated with a UST was reported at Building 77 (P-354-1997). A jar-headspace reading of 400 parts per million was noted in the stone bedding material around the UST. According to MEDEP records, no remediation was required since there was no visible contamination of the soil around the UST or the stone bedding material. There is no additional information about this release or any others associated with Building 77 (Environmental Department, 1988; Environmental Department, 1999; MEDEP, 2010).

There is no oil/water separator (OWS) associated with Building 77 on the NAS Brunswick Revised Oil/Water Separator List (PWD, 2008b).

4. SITE VISIT AND INVESTIGATION

A site visit was conducted on June 3, 2010 by Mr. James Forrelli, P.E., Mindi Messmer, and Chelsea Fellows of Tetra Tech. The purpose of the visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this closure report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Building 77 was visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- At the time of inspection, Building 77 was vacant and in good condition. The interior consisted of a main open space and a mechanical room located in the southwest corner of the building, and containing a boiler. No sanitary facilities were observed in the building.
- Inside the building, several stains (possibly oil) were identified on the floor during the initial site visit.
- At the exterior of the building, no signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed.
- Three floor drains were identified in the center of the building, along a north-south transect. A concrete catch basin was located east of the access road opposite Building 77. The outfall is located on the east side of the security fence and could not be observed due to heavy vegetative growth.
- No evidence of current or past hazardous waste generation activities was observed.
- No modifications to the structure, which may conceal signs of a past release, were observed.
- One pole-mounted transformer was observed northeast of Building 77, at the edge of the access road.
- At the time of the initial site visit, a tank was observed in a subsurface concrete vault to the north of the building. According to NAS personnel, the tank had been drained and was scheduled to be removed in July 2010. (NAS Brunswick personnel later reported that the tank was removed on August 30, 2010 and is currently stored in the northwest corner of Building 77.) No evidence of a past release from this tank was observed.
- No peeling paint was observed at Building 77.
- During an August 31, 2010 follow-up site visit, areas of disturbed pavement were observed on the west side of the building; NAS Brunswick personnel reported that small sections of pavement were removed to access and remove the buried fuel-oil piping along the western side of the building (piping led to the southwest corner of the building, the location of the boiler room).
- During a December 2, 2010 follow-up site visit, the closed, No. 2 fuel oil storage tank (removed from the vault) was being stored in the northwest area of the building.

Based on the site visit observations and records research findings, samples were collected at Building 77 to investigate the potential presence of hazardous waste residue that may have resulted from the building's use as a weapons final-assembly facility.

Other investigation areas related to Building 77 are the storm drain outfall area and the pole-mounted transformer, just north of the building. A historical drawing indicates the building's floor drains are connected to the storm drains. The NAS Brunswick Transformer Database provides no information for the transformer. These two areas (the storm drain outfall and transformer) will be investigated as part of the Weapons/Magazine Area RCRA partial closure.

The sampling activities and results for the Building 77 closure investigation are discussed in the following paragraphs.

On June 17, 2010, floor-wipe samples were collected from two locations in Building 77, as shown on Figure 3. The wipe samples were submitted for RCRA metals and semi-volatile organic compounds (SVOCs) analysis by Tetra Tech's subcontracted analytical laboratory, Analytics Environmental Laboratory (Analytics), of Portsmouth, New Hampshire. The resulting analytical data underwent limited data validation consisting of laboratory blank contamination evaluation and completeness evaluation.

Analytical results for the wipe samples are presented in Table 1. For lead, analytical results were compared to the following MEDEP criteria for lead-contaminated settled dust, applicable for RCRA closures:

- Floors: 40 micrograms per square foot ($\mu\text{g}/\text{ft}^2$)
- Walls and other flat surfaces up to a height of 8 feet: 250 $\mu\text{g}/\text{ft}^2$
- Surfaces above 8 feet: visibly clean (dust-free)

There are no Maine criteria for the other seven RCRA metals or the SVOCs. For informational purposes, wipe sample results for six of the other seven metals were compared to World Trade Center (WTC) Settled Dust Screening Values (there are no WTC screening values for selenium) (WTC, 2003).

As shown in Table 1, lead was detected in one of the floor-wipe samples at a level that exceeded the MEDEP criterion for floors (40 $\mu\text{g}/\text{ft}^2$). All levels of other detected metals in these samples were below the screening values. Based on the analytical results, cleaning of Building 77 was required to remove lead-contaminated residue exceeding the associated MEDEP criterion for dust on floors (discussed in Section 6).

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on site visit observations and sampling results, hazardous waste residue was generated at Building 77 in the form of lead-contaminated settled dust from activities related to the final assembly of weapons. The areas impacted by lead-dust were addressed by the closure actions described in Section 6.0.

6. CLOSURE ACTIONS

Based on analytical results discussed in Section 4, closure actions were required at Building 77 to satisfy the MEDEP hazardous waste closure requirements. Closure actions were conducted at Building 77 in September and October 2010, as discussed below.

Tetra Tech's cleaning subcontractor (Global Remediation Services [Global]) performed floor- and wall-cleaning activities at Building 77, based on the exceedance of the lead criterion in one wipe sample, as discussed in Section 4. On September 28, 2010, cleaning activities were conducted in the main room of Building 77. Prior to cleaning, floor openings were covered and sealed with

polyethylene sheeting. The floors were then manually swept and then vacuumed with a high-efficiency particulate air (HEPA) vacuum. After sweeping and vacuuming, floors and walls were sprayed with a 2-percent, lead-specific detergent solution, scrubbed, and pressure-washed, using a 5,000-pounds-per-square-inch (PSI) steam-cleaner. All cleaning wastewater was containerized using a wet-vacuum, placed in two 55-gallon drums, and transferred to the NAS Brunswick hazardous waste department for disposal. Upon completion, the Tetra Tech field representative performed a visual inspection of the cleaned areas.

Post-cleaning, confirmatory floor- and wall-wipe samples were collected from the cleaned floor area of Building 77 on September 30, 2010 (Figure 4). Samples were submitted to Analytics for lead analysis. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, reporting limit evaluation, and completeness evaluation. As seen in Table 2, which presents the September 30, 2010 wipe sample results, lead levels in the post-cleaning confirmatory floor-wipe samples were above the associated MEDEP floor criterion.

A second decontamination event (Event 2) was conducted at Building 77 on October 21 and 22, 2010, based on lead criterion exceedances in post-cleaning wipe samples, as discussed above. Floors and walls were cleaned again, using the procedures described above. After the work areas were allowed to dry, post-cleaning confirmatory wipe samples (Event 2) were collected on October 25, 2010. Four floor-wipe samples were collected for lead analysis by Analytics (Figure 5). The resulting analytical data underwent limited data validation consisting of blank contamination evaluation, reporting limit evaluation, and data completeness evaluation. The October 25, 2010 wipe sample results are included in Table 3. The confirmatory wipe sample results following the Event 2 decontamination indicated that lead was not detected at levels exceeding the associated MEDEP criterion (40 µg/ft²). Based upon these results, additional closure action is not warranted at Building 77.

7. OTHER ENVIRONMENTAL CONSIDERATIONS

As discussed in Section 4, two investigation areas related to Building 77, the storm drain outfall area and the nearby pole-mounted transformer, will be investigated as part of the Weapons/Magazine Area RCRA partial closure.

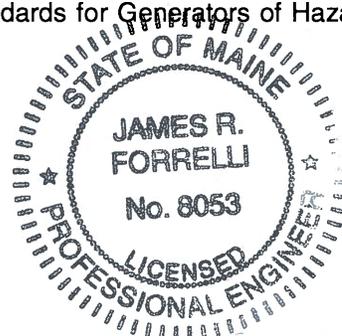
8. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the building footprint of Building 77 (building footprint shown on Figure 2). It does not apply to the land surrounding or the groundwater underlying Building 77.

9. CERTIFICATION

Historical operations resulted in the generation of hazardous waste residue at Building 77, NAS Brunswick, Maine, based on the findings of the investigation as presented in this Partial Closure Report. The hazardous waste closure of Building 77 was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.

James R. Forrelli
 James Forrelli, P.E.
 Senior Project Engineer
 Tetra Tech NUS, Inc.



⁽¹⁾ The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does not reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

REFERENCES

Environmental Department, 1988. Environmental Incident Log - Book No. 1, July 1988 - November 1999, Naval Air Station Brunswick Environmental Department, Brunswick, Maine.

Environmental Department, 1999. Environmental Incident Log - Book No. 2, December 1999 - July 2005, Naval Air Station Brunswick Environmental Department, Brunswick, Maine.

Environmental Department, 2009. Master/Historical Aboveground and Underground Storage Tank Inventory. NAS Brunswick, Maine. February.

Environmental Department, 2010. Hazardous Waste Database, Naval Air Station Brunswick Environmental Department, Brunswick, Maine.

MEDEP, 2010. MEDEP Spills Database. Maine Department of Environmental Protection, Augusta, Maine.

Navy (Department of the Navy, Base Realignment and Closure Program Management Office), 2006. "Final (Revision 2) Environmental Condition of Property Report for the Naval Air Station, Brunswick, Maine," NAS Brunswick, Maine. May 30.

PWD (Public Works Department), 1943. "Building Site Plan Showing Location of Underground Water Distribution Lines and Hydrants," US NAS Brunswick, Maine. September 4.

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Sewall, (James W. Sewall Company), 1953. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. June 29.

Sewall, 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 9.

Sewall, 1978. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. November 22.

Sewall, 1981. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 17.

Sewall, 1984. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 23.

Sewall, 1989. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 2.

Sewall, 1993. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. November 8.

Sewall, 1997. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. May 27.

**TABLE 1
PRE-CLEANING WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 77 – WEAPONS BUILD-UP
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	WTC	MEDEP Floor	MEDEP wall	B77-WP01	B77-WP02
LOCATION				former bomb bench floor (northwest)	former bomb bench floor (northeast)
MATRIX				wipe	wipe
EVENT				pre-cleaning	pre-cleaning
SAMPLE DATE				06/17/10	06/17/10
METALS ($\mu\text{g}/\text{ft}^2$)					
arsenic	36	--	--	4.6 U	4.6 U
barium	10000	--	--	71	43
cadmium	140	--	--	140	48
chromium	440	--	--	30	27
lead	NA	40	250	44	22
mercury	15	--	--	0.093 U	0.093 U
selenium	--	--	--	9.3 U	9.3 U
silver	730	--	--	1.9 U	1.9 U
SEMIVOLATILE ORGANIC COMPOUNDS ($\mu\text{g}/\text{ft}^2$)					
SVOCs	--	--	--	ND	ND

Notes:

(1) Sample prefix "NASB" is not shown.

Wipe sample surface area: 10 cm by 10 cm

WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003

Shading indicates criteria exceeded

 $\mu\text{g}/\text{ft}^2$ micrograms per square foot

U not detected (with associated detection limit)

-- no criteria available

ND not detected

**TABLE 2
POST-CLEANING WIPE SAMPLE RESULTS (EVENT 1)
RCRA PARTIAL CLOSURE REPORT
BUILDING 77 – WEAPONS BUILD-UP
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	WTC	MEDEP floor	MEDEP wall	B77-WP3	B77-WP4	B77-WP5	B77-WP5 (Duplicate)	B77-WP6	B77-WP7	B77-WP8
LOCATION				former bomb bench floor (northwest)	former bomb bench floor (northeast)	southeast floor	southeast floor	southwest floor	east wall	west wall
MATRIX				wipe	wipe	Wipe	wipe	wipe	wipe	wipe
EVENT				post-cleaning event 1	post-cleaning event 1	post-cleaning event 1	post-cleaning event 1	post-cleaning event 1	post-cleaning event 1	post-cleaning event 1
SAMPLE DATE				9/30/10	9/30/10	9/30/10	9/30/10	9/30/10	9/30/10	9/30/10
METALS (µg/ft ²)										
lead	NA	40	250	80	110	67	69	58	4.6	3.6 J

Notes:
 (1) Sample prefix "NASB" is not shown.
 Wipe sample surface area: 10 cm by 10 cm
 WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003
 Shading indicates criteria exceeded
 µg/ft² micrograms per square foot
 J estimated result
 U not detected (with associated detection limit)
 -- no criteria available

**TABLE 3
POST-CLEANING WIPE SAMPLE RESULTS (EVENT 2)
RCRA PARTIAL CLOSURE REPORT
BUILDING 77 – WEAPONS BUILD-UP
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	WTC	MEDEP floor	MEDEP wall	B77-WP9	B77-WP10	B77-WP11	B77-WP12
LOCATION				floor beneath former bomb bench (northwest)	floor beneath former bomb bench (northeast)	southeast floor	southwest floor
MATRIX				wipe	wipe	wipe	wipe
EVENT				post-cleaning event 2	post-cleaning event 2	post-cleaning event 2	post-cleaning event 2
SAMPLE DATE				10/25/10	10/25/10	10/25/10	10/25/10
METALS (µg/ft ²)							
lead	NA	40	250	15	8.7	19	14

Notes:

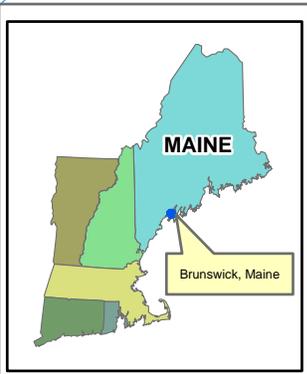
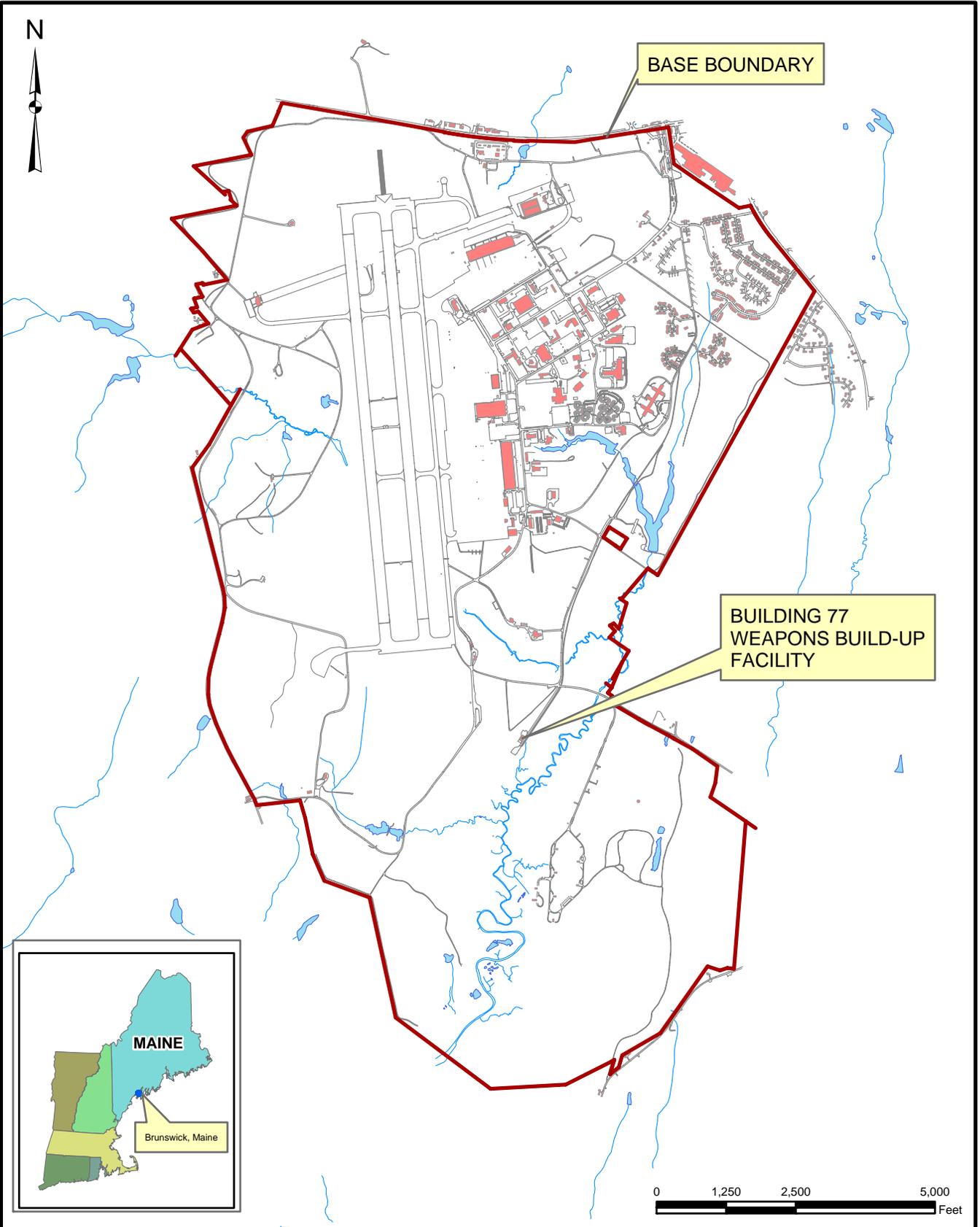
(1) Sample prefix "NASB" is not shown.

Wipe sample surface area: 10 cm by 10 cm

WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003

µg/ft² micrograms per square foot

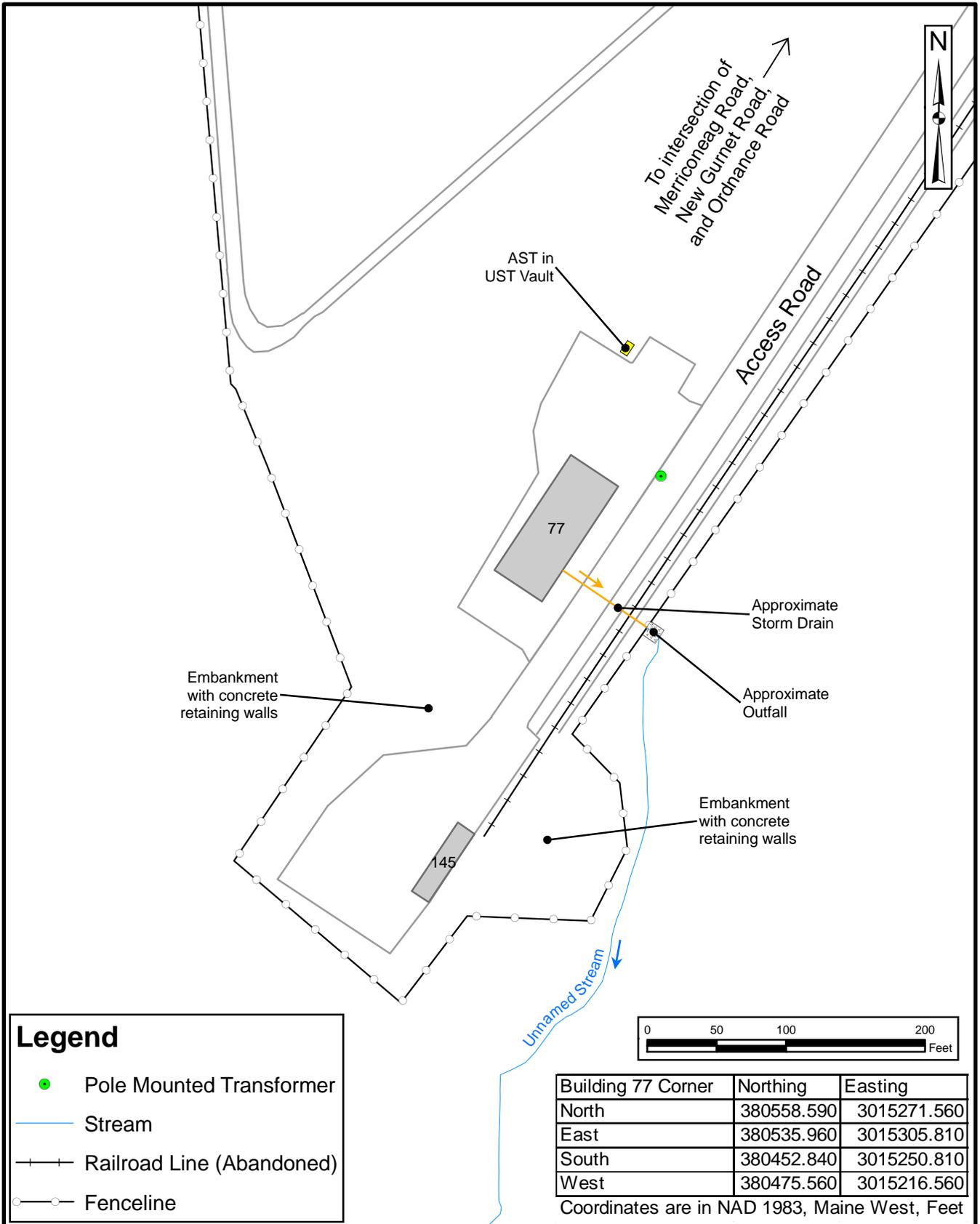
Shading indicates criteria exceeded



Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 77 - WEAPONS BUILD-UP FACILITY
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\02258\CP\DR\NASB_BLDG_77_LOCUS.MXD	
REV 0	DATE 11/30/10
FIGURE NUMBER 1	



Legend

- Pole Mounted Transformer
- Stream
- - - Railroad Line (Abandoned)
- Fenceline

Building 77 Corner	Northing	Easting
North	380558.590	3015271.560
East	380535.960	3015305.810
South	380452.840	3015250.810
West	380475.560	3015216.560

Coordinates are in NAD 1983, Maine West, Feet



Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 77 - WEAPONS BUILD-UP FACILITY
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

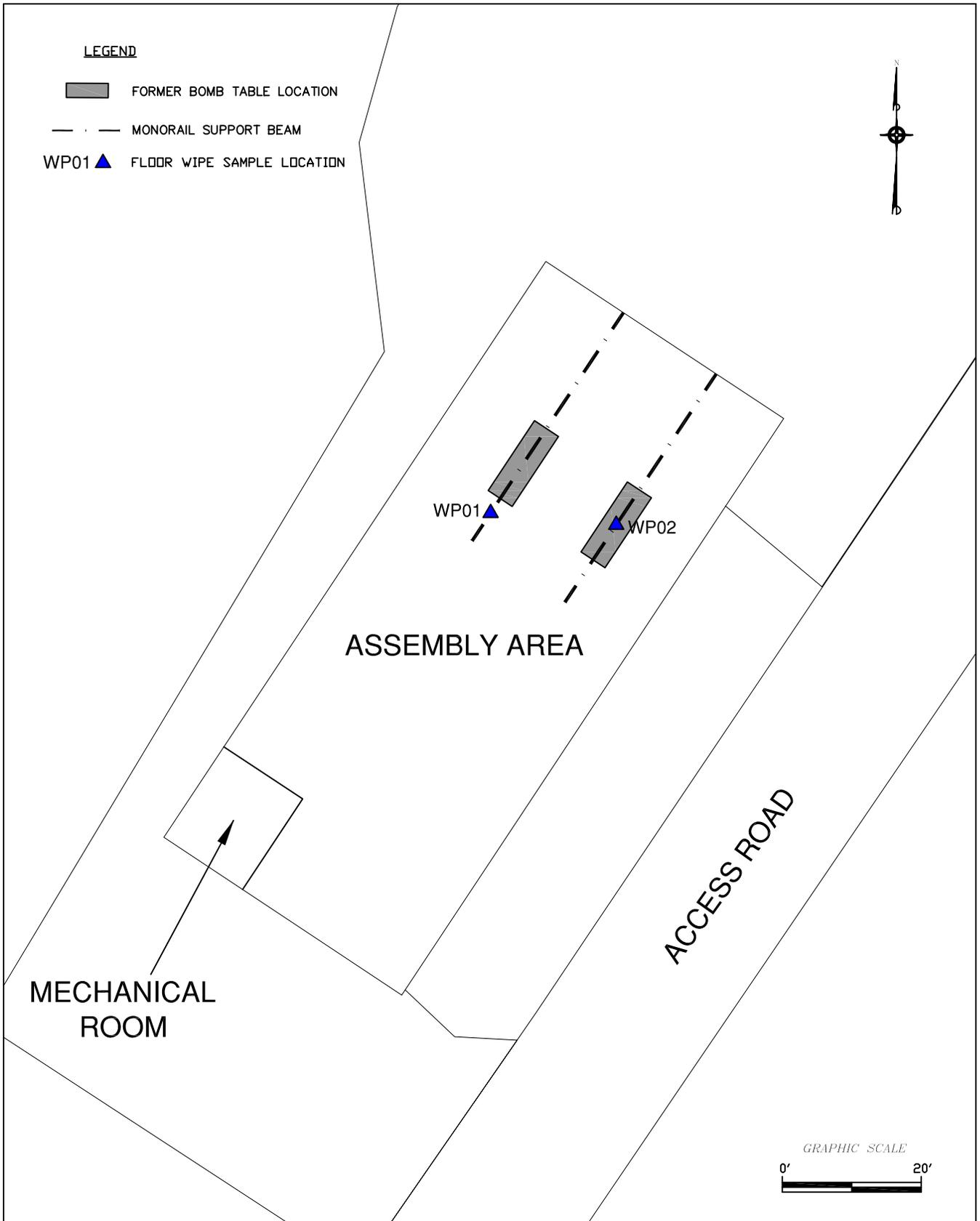
SCALE
AS NOTED

FILE
L:\NASB_BLDG_145_SITE_MAP.MXD

REV	DATE
0	12/10/10

FIGURE NUMBER
FIGURE NO. 2

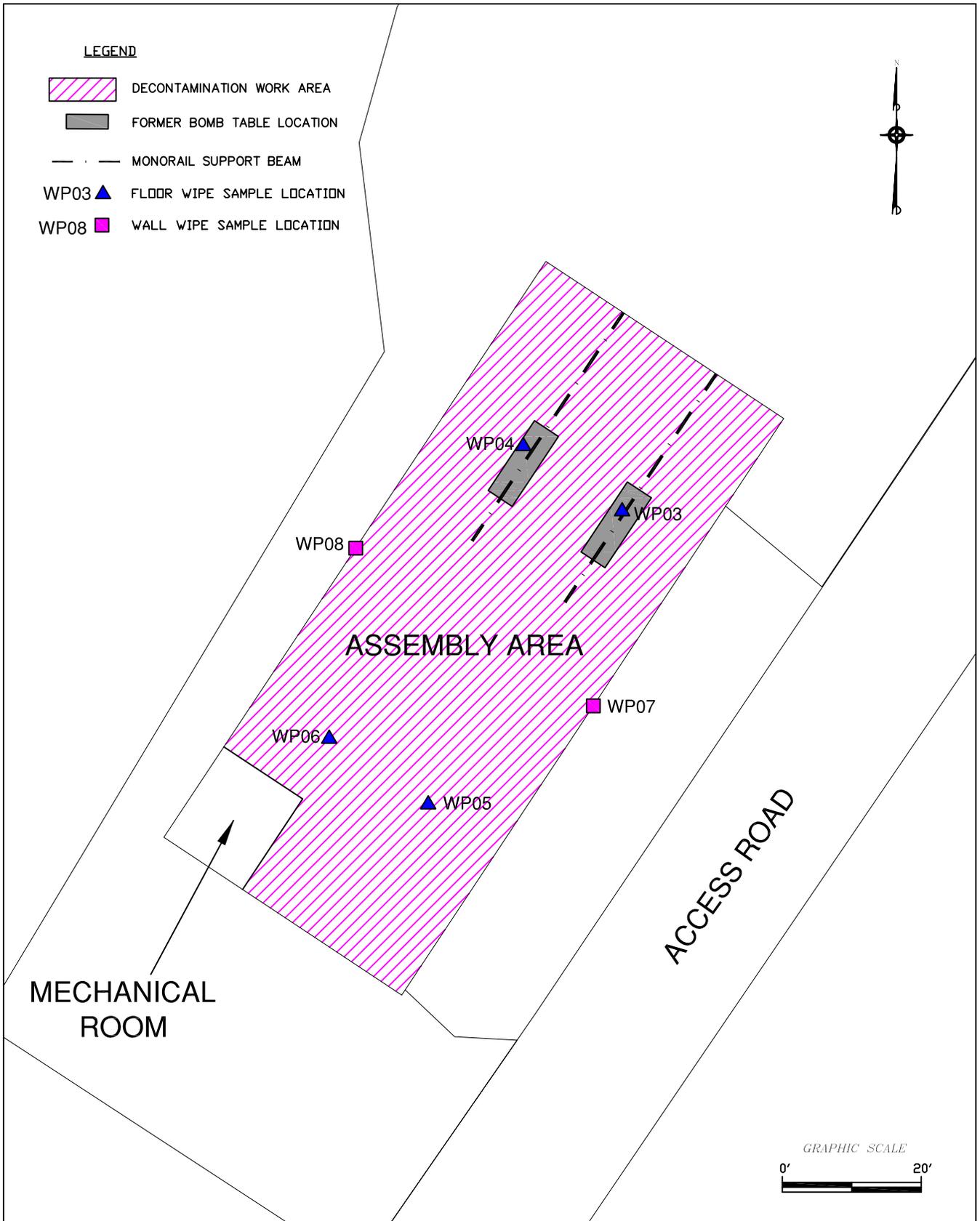
- LEGEND**
-  FORMER BOMB TABLE LOCATION
 -  MONORAIL SUPPORT BEAM
 - WP01  FLOOR WIPE SAMPLE LOCATION



PRE-CLEANING SAMPLING LOCATIONS
 BUILDING 77 - WEAPONS BUILD-UP FACILITY
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\NASB_BLDG_77_PRE.DWG	
REV 0	DATE 12/09/10
FIGURE NUMBER 3	

- LEGEND**
-  DECONTAMINATION WORK AREA
 -  FORMER BOMB TABLE LOCATION
 -  MONORAIL SUPPORT BEAM
 - WP03  FLOOR WIPE SAMPLE LOCATION
 - WP08  WALL WIPE SAMPLE LOCATION

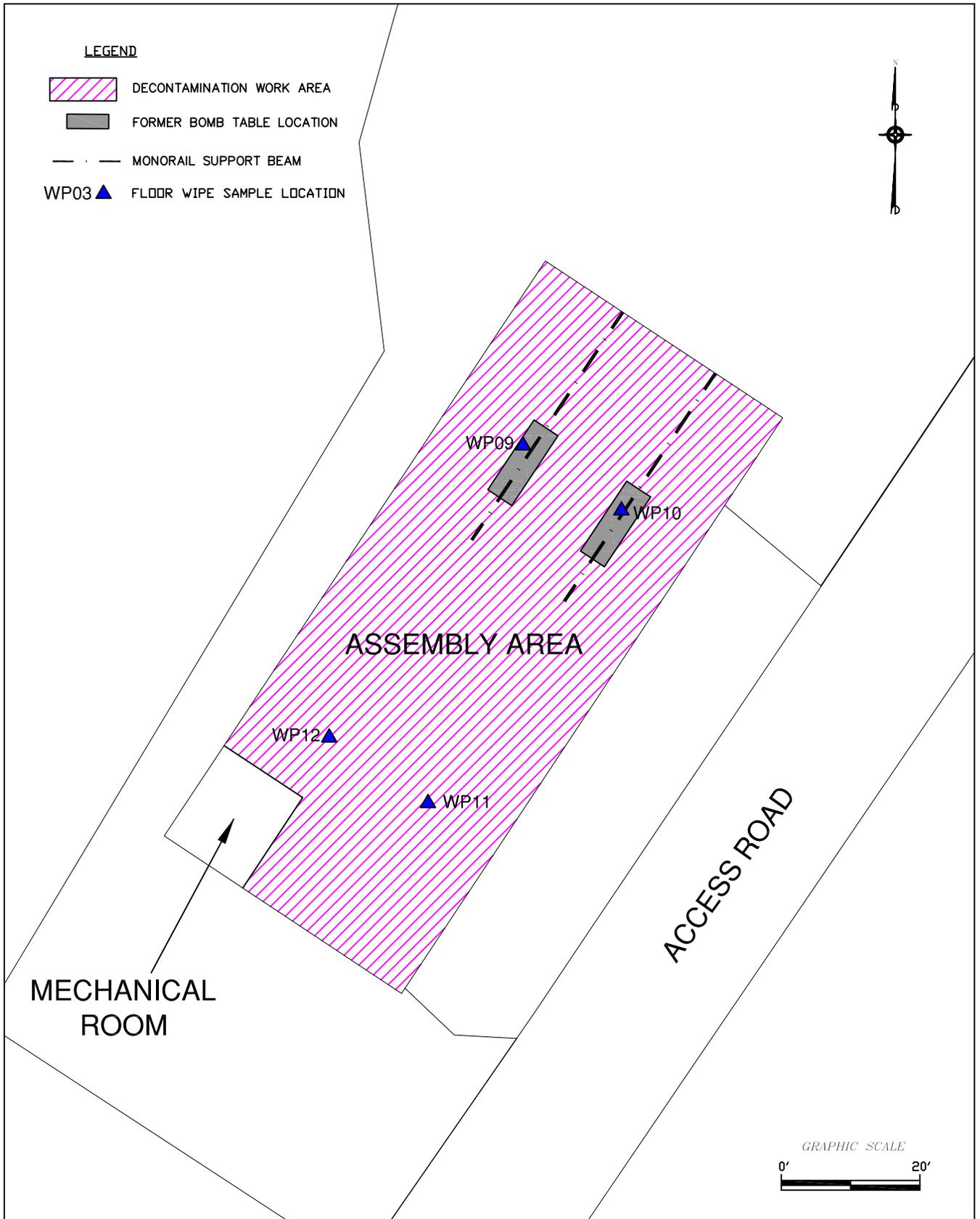


POST-CLEANING SAMPLES - EVENT 1
 BUILDING 77 - WEAPONS BUILD-UP FACILITY
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE



SCALE AS NOTED	
FILE \\.\NASB_BLDG_77_POST1.DWG	
REV 0	DATE 12/09/10
FIGURE NUMBER 4	

- LEGEND**
-  DECONTAMINATION WORK AREA
 -  FORMER BOMB TABLE LOCATION
 -  MONORAIL SUPPORT BEAM
 - WP03  FLOOR WIPE SAMPLE LOCATION



POST-CLEANING SAMPLES - EVENT 2
 BUILDING 77 - WEAPONS BUILD-UP FACILITY
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\NASB_BLDG_77_POST2.DWG	
REV 0	DATE 12/09/10
FIGURE NUMBER 5	

**HWSA INSPECTION FORM
HAZARDOUS WASTE STORAGE AREAS CLOSURE
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 6/03/10

Personnel: Chelsea Fellows / James Forrelli, P.E. / Mindi Messmer

Weather: Cloudy, Showers, 60s

GENERAL BUILDING INFORMATION / USES

Building Name: Building 77 – Weapons Build-Up Facility

Function: Weapons Build-Up Facility

Size: 4,000 SF

Year of Construction: 1993

Building 77 is located in the southern portion of NAS Brunswick southeast of the runway. Building 77 is located at the end of an access road southwest of the intersection of Merriconeag Road and New Gurnett Road in the Weapons Area, west of Ordinance Road and Mere Brook. The Anti-Underwater Warfare (AUW) compound is located north of Building 145 and New Gurnett Road. It is located within the fenced weapons area and is surrounded by undeveloped, wooded land.

It was constructed in 1993 and served as a weapons build-up facility for its entire history.

Building 77 consists of a 4,000 SF two room, one level building on a concrete slab foundation. Building 77 has a metal exterior and roof with three overhead garage doors and three floor drains situated north to south along the center line of the building. Building 77 was heated by #1 fuel oil.

HWSA INSPECTION / CONDITION

No record of hazardous waste stored at Building 77.

At the time of inspection, Building 77 was vacant and in good condition. The interior consisted of 2 main rooms (bay area and boiler room). Work benches that held down bombs while being assembled had been removed.

No evidence of current or past hazardous waste generation activities was observed.

No evidence of hazardous waste residues was observed.

Several stains (likely oil) were observed in the building interior on the floor.

No signs of a past release on the exterior of the building (unusual odors, stressed vegetation, etc.) were observed.

No modifications to the structure, which may conceal signs of a past release, were observed.

No hazardous waste storage areas or hazardous waste accumulation areas were observed.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No transformer that could be a potential source of polychlorinated biphenyls (PCBs) contamination in the event of a leak was observed.

One pole-mounted transformer was observed during the site visit at Building 77 on the southeastern side of the building. This transformer was not listed in the NASB transformer database.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos were reviewed for past uses:

Available historical aerial photos and historical site plans were reviewed for past uses:

1943 map – Building 145 area not shown.

1946 map – Same as 1943 map.

1952 map – Same as 1943 map.

1953 aerial – Wooded area.

1956 map – Vacant wooded area.

1957 map - cleared area and railroad tracks are shown in the area of Building 145.

1958 aerial – Building 145 shown. Building 77 area appears to be a dirt road. A vehicle is visible northeast of approximate Building 77 area.

1975 map – Area not shown.

1978 aerial – Same as 1958 aerial except an additional structure is visible to the west of Building 145.

1978 map – Building 145 and adjacent railroad tracks shown.

1979 map – Building 145 area not shown on map.

1981 aerial - Building 145 shown. Dirt road loop to the east of B145. Paved area west of B145 along with a possible square structure to the west at the edge of the pavement. Other possible vehicles visible to the northwest and west of B145. B77 area is wooded and undeveloped.

1984 aerial – Same as 1981 aerial. Structure visible to the west of B145.

1989 aerial – same as 1984 aerial.

1993 aerial – Building 77 and Building 145 visible. The structure to the west of B145 is no longer visible.

1997 aerial – Same as 1993 aerial.

2006 map – Building 145 shown in current configuration.

According to the NASB underground storage tank (UST) database, one 600 gallon #2 fuel oil UST (registration #10045-492) was installed September 1992, removed in July 1997. The UST was replaced with a 500 gallon double-walled, vaulted #1 fuel oil above ground storage tank (AST) (registration #10045-500) with underground piping left in place. The AST is located north of Building 77 and scheduled to be removed in July 2010. There are no additional USTs, ASTs or oil-water separators (OWS) registered to Building 77.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 77 according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

The Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith Hazardous Waste Manager.

(SEE ATTACHED SITE SKETCH AND HWSA SKETCH)

(SEE ATTACHED PHOTOGRAPHS)

INSPECTOR SIGNATURE: Chelsea Fellows

PHOTOGRAPHS



No. 1 Building 77 Weapons Build-Up Facility – NAS Brunswick June 3, 2010
Weapons Build-Up Facility north elevation; Building 145 – Loading Platform visible the left background



No. 2 Building 77 Weapons Build-Up Facility – NAS Brunswick June 3, 2010
Weapons Build-Up Facility southeast elevation with pole-mounted transformer to the right background



No. 3 Building 77 Weapons Build-Up Facility – NAS Brunswick October 25, 2010
Weapons Build-Up Facility southwest interior area; wipe sample (WP-12) location shown in foreground.



No. 4 Building 77 Weapons Build-Up Facility – NAS Brunswick December 2, 2010
Weapons Build-Up Facility interior viewed from south (post-cleaning); closed storage tank in the northwest corner



No. 5 Building 77 Weapons Build-Up Facility – NAS Brunswick December 2, 2010
Weapons Build-Up Facility interior northwest corner closed storage tank (in temporary storage after removal from vault)



No. 6 Building 77 Weapons Build-Up Facility – NAS Brunswick June 3, 2010
Vaulted heating oil storage tank system north of Building 77 (prior to tank removal)