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NAS BRUNSWICK
5090.3a

FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDINGS 58, 124 AND 151 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
3/19/2010
NAS BRUNSWICK

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

March 19, 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

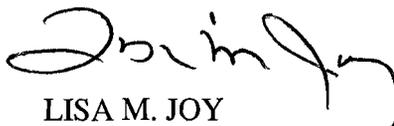
Subj: Final RCRA Partial Closure Report for Buildings 58, 124 Parcel, and 151 Parcel

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Buildings 58, 124 Parcel, and 151 Parcel 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 Buildings 58, 124 Parcel, and 151 Parcel

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

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 58 – NEW TACAN
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
MARCH 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 58, at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

Building 58, known as the new Tactical Air Navigation (TACAN) system, is a tower with navigation antenna that serves as a navigation system providing heading and distance for aircraft. It is located in the Weapons area on an unnamed dirt road east of Ordnance Road and west of Old Gurnet Road (see Figure 1). It was constructed in 2005 and consists of an uncoated, galvanized-steel tower with a platform equipped with a top-mounted antenna and electronics equipment building. The facility features a stationary, emergency generator located at ground level. A site plan is attached (see Figure 2). Photographs of the facility are provided as an attachment to this report.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (TtNUS) 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 58, including past use and operations at those locations.

According to NAS Brunswick Environmental Department personnel, since its construction in 2005, the sole use of Building 58 has been as a TACAN system. There is no record of hazardous waste operations at Building 58.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous operation records. Aerial photographs dated 1958, 1978, 1984, and 1989 (all produced by James W. Sewall Company) were reviewed along with Public Works Department site base maps dated 1946, 1952, 1956, 1962, 1983, 1989, and 2006 to provide historical information.

The review of aerial photos and site base maps did not show any buildings or structures previously located at or near the current Building 57 position. The area is shown as a wooded area on all aerial photographs reviewed.

According to the NAS Brunswick transformer database, no transformers are associated with Building 58. No underground storage tanks (USTs) were associated with Building 58. One 100-gallon diesel above ground tank (A58.1) is present at Building 58 to fuel the emergency diesel generator.

4. SITE VISIT AND INVESTIGATION

A Building 58 site visit was conducted by Mr. Brandon Smith, P.E., Mr. James Forrelli, P.E., and Ms. Chelsea Fellows-Swenson, of TtNUS on January 22, 2010. 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. TtNUS personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. The Building 58 location was visually inspected for signs of hazardous waste generation or storage activity. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- At the time of inspection, Building 58 was in excellent condition.
- No evidence of current or past hazardous waste generation activities was observed.
- No evidence of hazardous waste residues was observed.
- No signs of a past release (staining, unusual odors, etc.) were observed and no structural modifications, which could conceal signs of a past release, were observed.
- No hazardous waste storage areas or hazardous waste accumulation areas were observed.
- No transformers that could be a potential source of PCB contamination in the event of a leak were observed.

Based on the records research findings and site visit observations, it was determined that neither further inspection nor sampling of Building 58 is required to complete the MEDEP hazardous waste closure requirements.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations, and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation activity or hazardous waste accumulation or storage activity was conducted at Building 58.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

No underground storage tanks or above ground storage tanks, except the AST described in Section 3, were observed in the immediate vicinity of Building 58.

7. LIMITATIONS

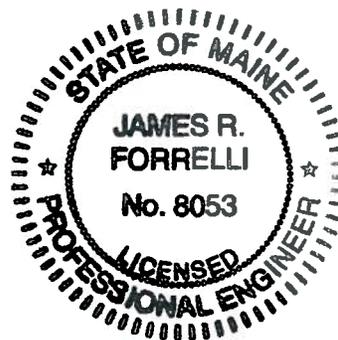
This investigation of the hazardous waste closure requirement applies to the Building 58 footprint (as shown on Figure 2) only. It does not apply to the land surrounding or the groundwater underlying Building 58.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at Building 58, NAS Brunswick, Maine. Therefore, the hazardous waste closure of Building 58 was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.



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

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

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

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

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

Master/Historical Underground Storage Tank Inventory. NAS Brunswick, Maine. 02/05/96.

Public Works Department, 1946. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1946," NAS Brunswick, Maine. June 30, 1946.

Public Works Department, 1952. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1952," NAS Brunswick, Maine. June 30, 1952.

Public Works Department, 1956. General Station Map, Enclosure 2. , NAS Brunswick, Maine. 1956.

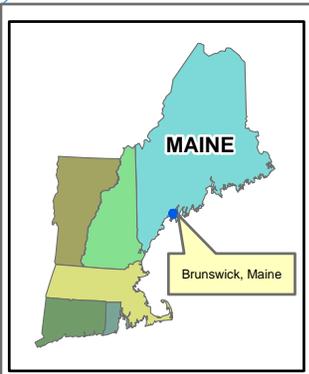
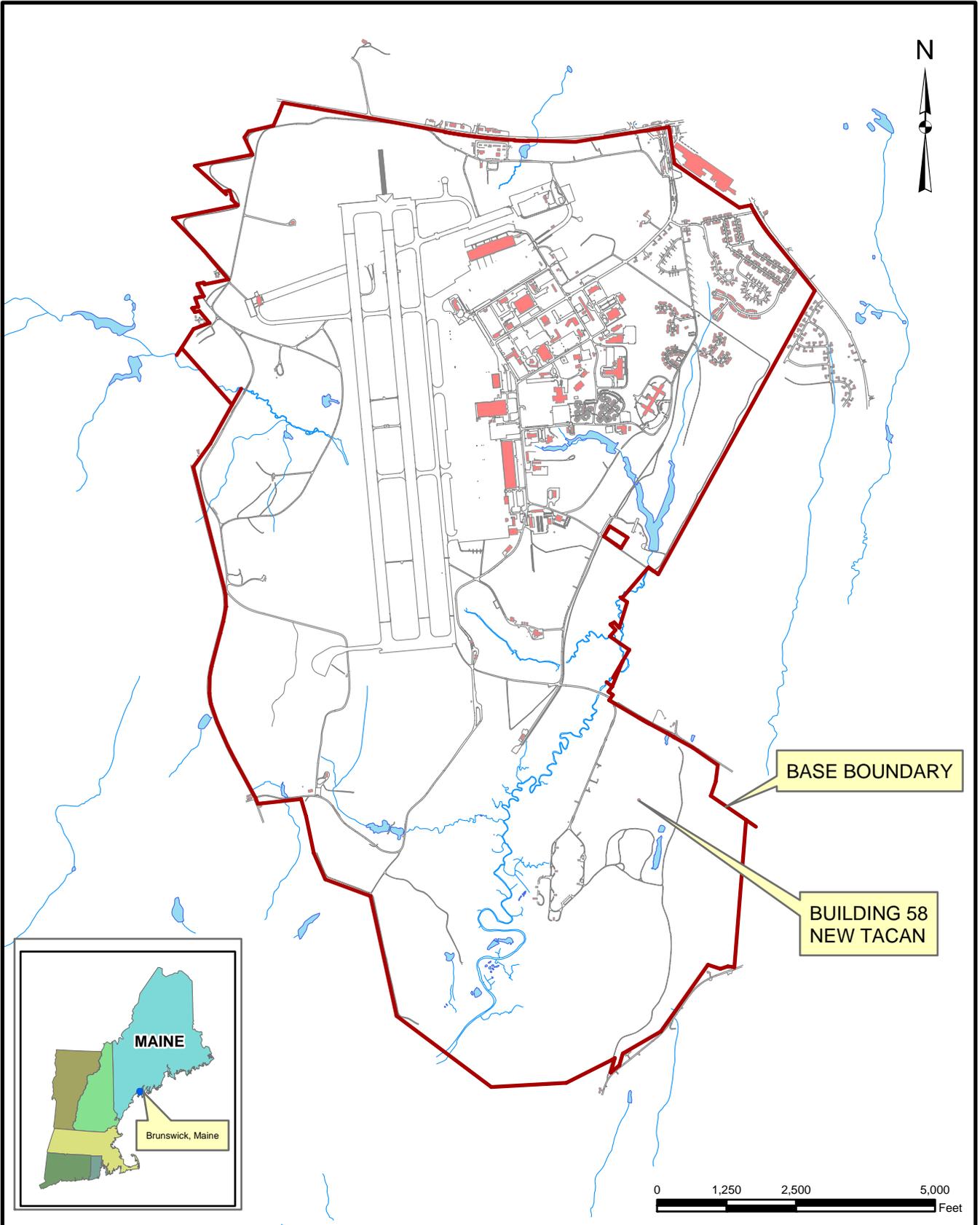
Public Works Department, 1962. "Map of Streets," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. 1962.

Public Works Department, 1983. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. May 5, 1983.

Public Works Department, 1989. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. Revised April 2, 1989.

Public Works Department, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine. 2006.

Public Works Department. 2010. Transformer Database. NAS Brunswick, Maine. 2010.



BASE BOUNDARY

BUILDING 58
NEW TACAN

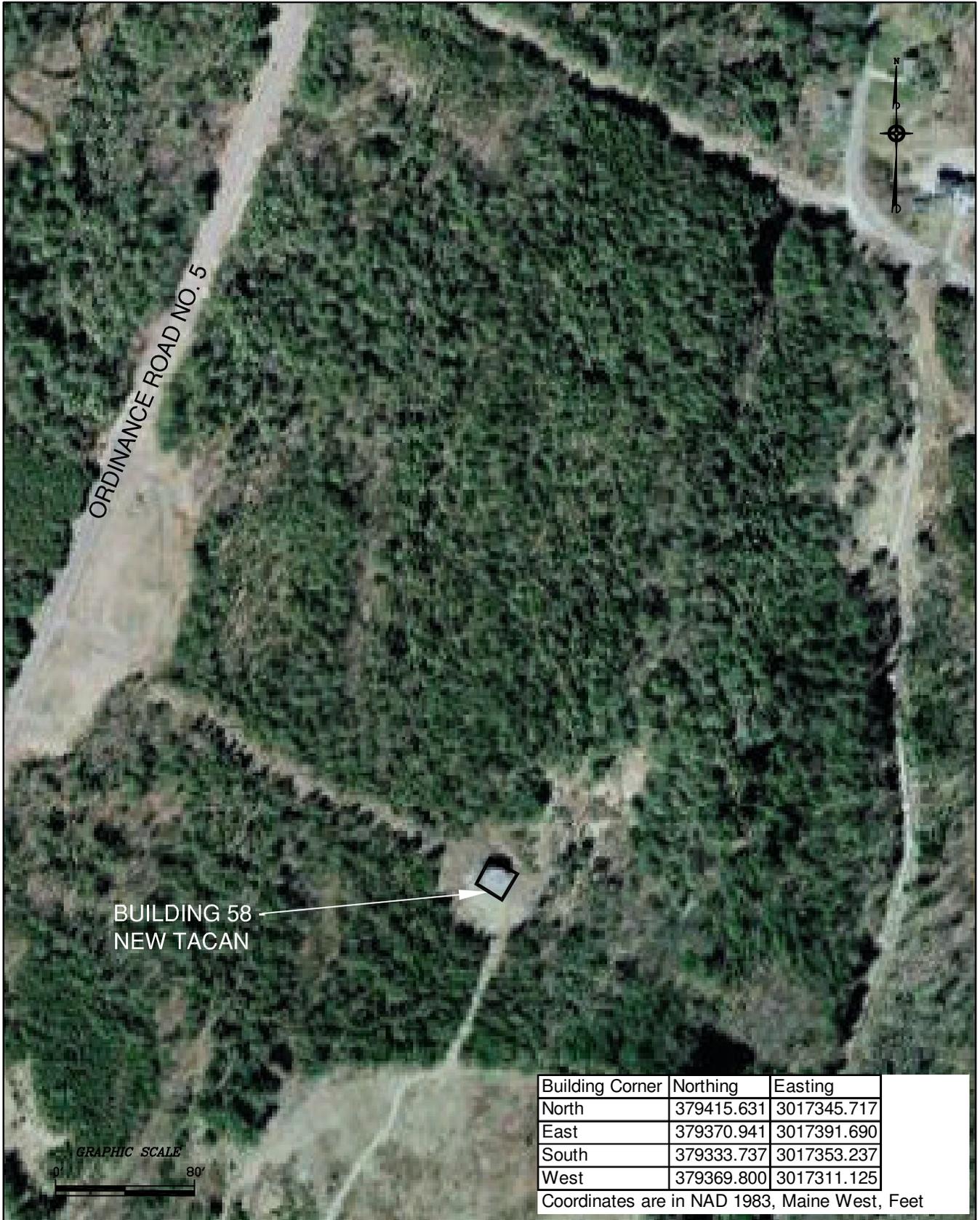
0 1,250 2,500 5,000 Feet



Tetra Tech NUS, Inc.

SITE LOCATION MAP
 BUILDING 58 - NEW TACAN
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:_NASB_BLDG_58_LOCUS.MXD	
REV 0	DATE 03/10/10
FIGURE NUMBER 1	



BUILDING 58
NEW TACAN



Building Corner	Northing	Easting
North	379415.631	3017345.717
East	379370.941	3017391.690
South	379333.737	3017353.237
West	379369.800	3017311.125

Coordinates are in NAD 1983, Maine West, Feet



TETRA TECH NUS, INC.

SITE LOCATION MAP
BUILDING 58 – NEW TACAN
RCRA PARTIAL CLOSURE REPORT
NAS BRUNSWICK, MAINE

SCALE
AS NOTED

FILE
\\.\NASB_BLDG_58_ORTHO.DWG

REV	DATE
0	02/08/10

FIGURE NUMBER
FIGURE NO. 2

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 1/22/2010

Personnel: James Forrelli, P.E. / Brandon Smith, P.E. / Chelsea Fellows-Swenson

Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: New TACAN
 Function: Tactical Air Navigation (TACAN) system
 Size: Unknown
 Year of Construction: 2005

Building 58 is located in the weapons area at NAS Brunswick, on an unnamed dirt road east of Ordnance Road and west of Old Gurnet Road. It was constructed in 2005 and consists of an uncoated, galvanized-steel tower with a platform equipped with a top-mounted navigation antenna and electronics equipment building beneath. The facility features a stationary, emergency generator located at ground level.

Building 58 was used as a TACAN system for it's entire history.

No hazardous waste was generated during the operations in Building 58, according to NASB personnel.

Power is provided to the electronics building via an overhead electrical drop.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 58.

At the time of the site visit, the tower appeared in excellent condition.
 No evidence of current or past hazardous waste generation activities was observed.
 No evidence of hazardous waste residues was observed.
 No signs of a past release (staining, 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.
 No transformers that could be a potential source of polychlorinated biphenyls (PCBs) contamination in the event of a leak were observed.

HAZARDOUS WASTE STORED / GENERATED

No hazardous waste was stored or generated at Building 58, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No potential PCB-containing transformers were identified during the site inspection or review of the NASB transformer database.

APPLICABLE REPORTS / DOCUMENTS

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

1946 plan - Location of Building 58 is outside the base boundary.

1952 plan - Same as 1946 plan

1956 plan - No buildings are present in the current location of Building 58.

1958 aerial - Wooded area, no buildings present at location of Building 58.

1962 plan - Only shows the industrial area north of Building 58 location.

1978 aerial - same as 1958 aerial.

1983 plan - No buildings are present in the current location of Building 58.

1984 aerial - same as 1978 aerial.

1989 plan - same as 1983 plan.

1989 aerial - same as 1984 aerial.

1993 aerial - same as 1989 aerial

2006 plan - Building 58 in current location.

No USTs were present at Building 58 according to NASB records.

One 100 gallon diesel AST (A58.1) is present at Building 58 to fuel the emergency diesel generator.

HAZARDOUS WASTE STORAGE RECORDS

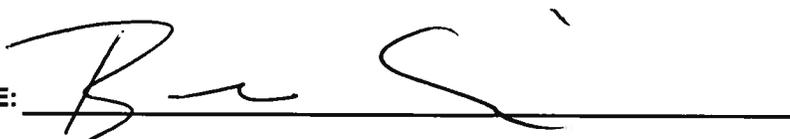
No hazardous waste was historically stored at Building 58, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

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

(SEE ATTACHED PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 58 – NAS Brunswick January 22, 2010
Building 58 – New TACAN with associated electronics building and emergency generator.



No. 2 Building 57 – NAS Brunswick January 22, 2010
Building 58 – New TACAN tower base and emergency generator and associated electronics building.

**RCRA PARTIAL CLOSURE REPORT
for
BUILDING 124 – WATER STORAGE TANK - GL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
MARCH 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) Resource Conservation and Recovery Act (RCRA) or hazardous waste closure requirements have been completed for Building 124 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 124 parcel is located in the northern portion of NAS Brunswick (see Figure 1). The parcel is located south of Seahawk Avenue and directly south of Building 42.

Building 124, known as Water Storage Tank - GL, is a former fire protection water supply reservoir that occupies the western area of the 0.15-acre parcel. The entire parcel is grass-covered. Constructed in 1944, Building 124 occupies an area of 3,721 square feet and the reservoir has a storage capacity of 250,000 gallons. There are two wood framed manhole access covers located on top of the tank. The tank was taken out of service around 1998. Visual inspection by Mr. D. Bruce Smith of NAS Brunswick Environmental Department confirmed the tank is empty. A site plan is attached (see Figure 2). NAS Brunswick plans of the tank are also attached.

Building 124 was used as water storage for fire suppression at former Hangars 2 and 3. Water was pumped via the pump house (Building 42) which is directly north. The earth-covered tank is 11-feet tall and partially below grade on a 12-inch thick slab foundation.

A photograph of the Building 124 exterior is provided as an attachment to this report.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (TtNUS) 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 the Building 124 parcel, including past use and operations at that location.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous operation records. Aerial photographs dated 1958, 1978, 1984, 1989, 1993, and 1997 (all produced by James W. Sewall Company) were reviewed to provide historical information. All available historical aerial photographs show the Building 124 parcel in its current location and form.

According to the NAS Brunswick transformer database, no transformers are associated with Building 124.

No underground storage tanks (USTs) or above ground storage tanks (ASTs) are associated with Building 124 according to NAS Brunswick records. No accidental releases were identified in the NAS Brunswick or MEDEP spill records.

No groundwater investigations have been conducted in the vicinity of the Building 124 parcel; therefore groundwater characterization information for the parcel is not available.

4. SITE VISIT AND INVESTIGATION

A site visit was conducted by Mr. Brandon Smith, P.E., Ms. Chelsea Fellows-Swenson and Ms. Mindi Messmer, of TtNUS on January 21, 2010. The purpose of the visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. TtNUS personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. The Building 124 location (the tank reservoir was not accessed) was visually inspected for signs of hazardous waste generation or storage activity. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- The tank at the time of the site visit appeared in good condition.
- No evidence of current or past hazardous waste generation activities was observed.
- No evidence of hazardous waste residues was observed.
- No signs of a past release (staining, unusual odors, etc.) or structural modifications that could conceal signs of a past release were observed.
- No hazardous waste storage or accumulation areas were observed.
- No potential PCB-containing transformers were identified during the site inspection or review of the NAS Brunswick transformer database.

Based on the records research findings and site visit observations, it was determined that neither further inspection, nor sampling, of the Building 124 parcel is required to complete the MEDEP hazardous waste closure requirements.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation activity or hazardous waste accumulation or storage activity was conducted at Building 124.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

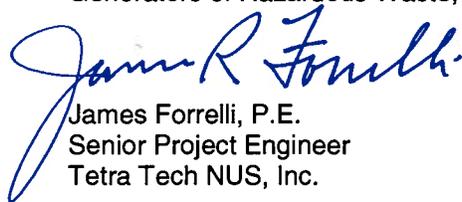
No USTs or ASTs have been utilized at the Building 124 parcel according to NAS Brunswick records. No other tanks were observed in the immediate vicinity of Building 124.

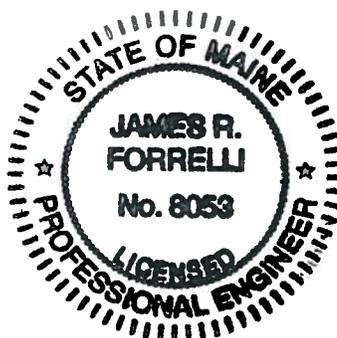
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 124 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at the Building 124 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 124 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.


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

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

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

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

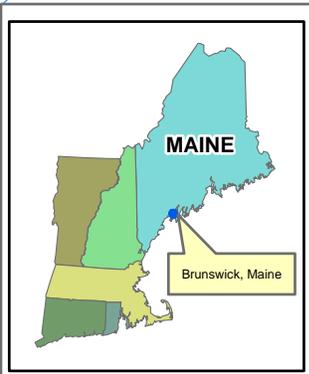
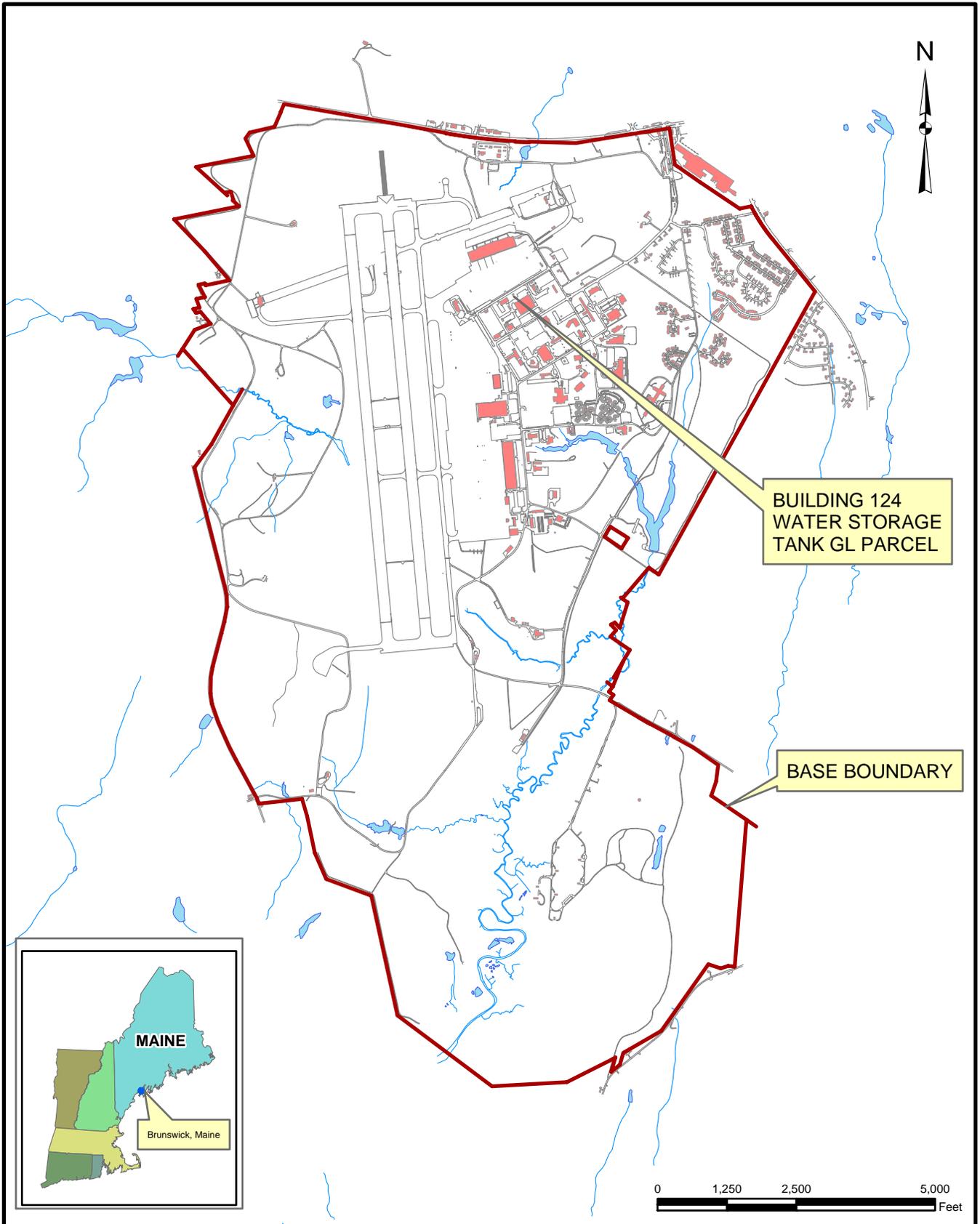
James W. Sewall Company, 1989. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 2, 1989.

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

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

BNAS Reuse Master Plan Property Condition Assessment. Mid-Coast Regional Redevelopment Authority, Brunswick, ME. 2006.

Master/Historical Underground Storage Tank Inventory. NAS Brunswick, Maine. 02/05/96.

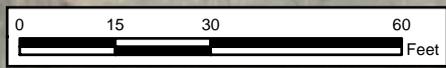


SITE LOCATION MAP
BUILDING 124 - WATER STORAGE TANK GL PARCEL
RCRA PARTIAL CLOSURE REPORT
NAS BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_124_LOCUS.MXD	
REV 0	DATE 03/05/10
FIGURE NUMBER 1	



Legend
 Parcel Boundary



Building Corner	Northing	Easting
North	388454.465	3015099.916
East	388407.325	3015129.074
South	388379.139	3015080.477
West	388426.764	3015052.290

Coordinates are in NAD 1983, Maine West, Feet

 Tetra Tech NUS, Inc.	SITE PLAN BUILDING 124 - WATER STORAGE TANK GL PARCEL RCRA PARTIAL CLOSURE REPORT NAVAL AIR STATION BRUNSWICK, MAINE	SCALE AS NOTED
		FILE \..NASB_BLDG_124_ORTHO.MXD
		REV DATE 0 03/10/10
		FIGURE NUMBER 2

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 1/21/2010
Personnel: Brandon Smith, P.E. / Chelsea Fellows-Swenson / Mindi Messmer
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Storage Tank - Ground Level
 Function: Water storage tank
 Size: 3,721 SF
 Year of Construction: 1944

Building 124 is located south of Seahawk Avenue directly south of Building 42 at NAS Brunswick. It was constructed in 1944 and served as a water storage tank for its entire history. Building 124 consists of a 3,721 square-foot, 250,000 gallon capacity water storage tank.

Building 124 was used as water storage for fire suppression at Hangars 2 and 3. Water was pumped via the pump house (Building 42) which is directly north. The tank is 11 feet tall and partially below grade on a 12-inch thick slab foundation and is covered with earth and grass.

No hazardous waste was generated during the operations in Building 124, according to NASB personnel.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 124.

The tank at the time of the site visit appeared in good condition.
 No evidence of current or past hazardous waste generation activities was observed.
 No evidence of hazardous waste residues was observed.
 No signs of a past release (staining, 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.

HAZARDOUS WASTE STORED / GENERATED

No hazardous waste was stored or generated at Building 124, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No potential PCB-containing transformers were identified during the site inspection or review of the NASB transformer database.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos were reviewed for past property uses:

- 1958 - Building 124 present with Building 42 to the north.
- 1978 - same as 1958.
- 1984 - same as 1978.
- 1989 - same as 1984, footprint of tank is more visible.
- 1993 - same as 1989.
- 1997 - same as 1993 (infrared photos though).

No USTs were present at Building 124 according to NASB records.

No ASTs, with the exception of Building 124 itself, were present at Building 124.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 124, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

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

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:

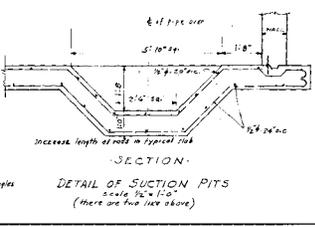
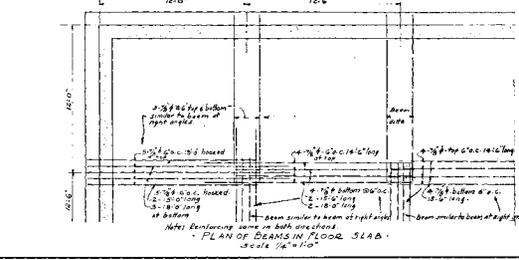
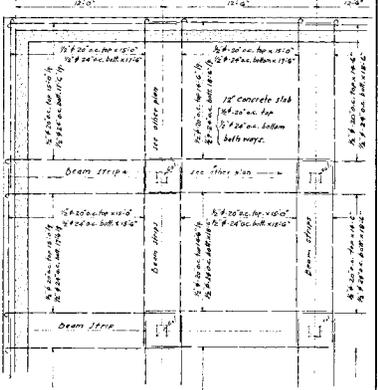
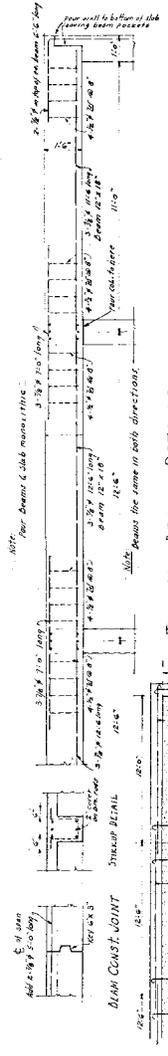
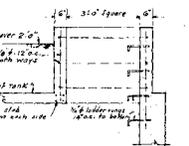
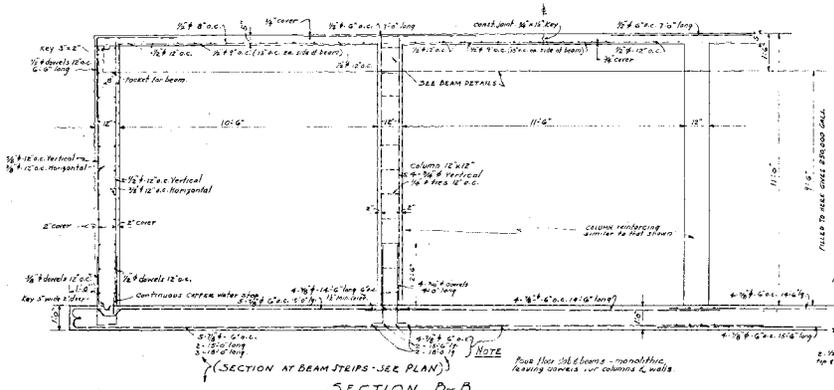
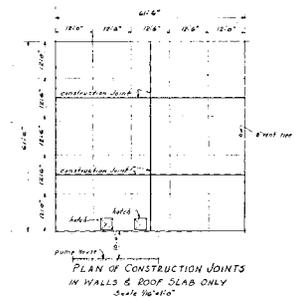
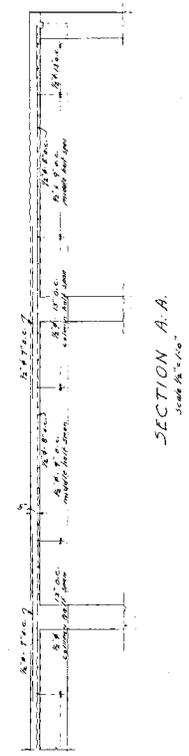
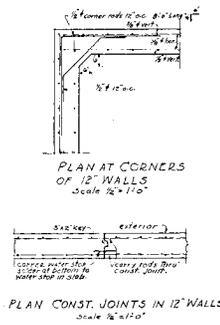
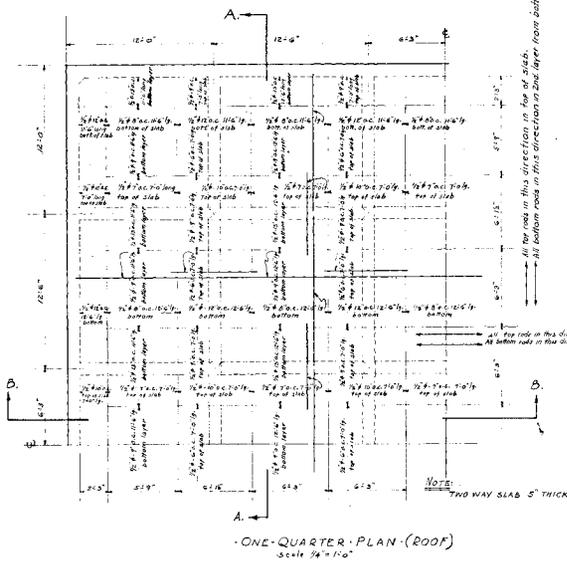


Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 124 – Water Storage Tank - GL – NAS Brunswick January 21, 2010
Building 124 Water Tank – Exterior (south elevation)



NOTE:
THIS TANK IS DESIGNED FOR A SOIL BEARING OF 1000 LBS PER SQ. FT.
SEE PIPING PLAN FOR SLEEVES AND OPENINGS.

Revision	Date	By

Drawn by: E.S.O.
Checked by: Chief Engr.
Supervisor: Design Supt. G.T.R.

N.S. BRUNSWICK MAINE
ADDITIONAL WATER SUPPLY
FOR FIRE PROTECTION

RESERVOIR PLANS AND SECTIONS

ALONZO J. HARRIS, ARCHITECT-ENGINEER
SACONN MAINE

Approved 24 JUNE 1944

Y & D Drawing No. 342,355

Public Works Officer.

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 151 – NOSC PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
MARCH 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) Resource Conservation and Recovery Act (RCRA) or hazardous waste closure requirements have been completed for the Building 151 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 151 parcel is located in the north-central portion of NAS Brunswick (see Figure 1). The approximately 2.8-acre parcel (see Figure 2) is bordered to the northwest by Fitch Avenue and the Old Navy Fuel Farm Area (ONFF) area; to the northeast by athletic fields and Building 150, a former reserve training center; to the southeast by Building 645, the former medical/dental clinic; and to the southwest by Sewell Street and Building 512, the former officer's quarters. The parcel contains Building 151, known as the Naval Operations Service Center (NOSC) building, adjacent grass-covered area and an asphalt-paved parking lot located on the south side of the building.

The Building 151 parcel surface topography is relatively flat. The land slopes gradually to the south toward the Building 645 area. The difference in elevation between the northeast and southwest corner of the parcel is approximately 3 feet.

Building 151, located in the northern portion of the parcel, was constructed in 2002 and consists of a 24,480 square-foot, two-story structure on a concrete slab foundation. A building floor plan is provided as Figure 3. The building served as a Naval Reserve training facility with the first floor containing administrative and conference spaces, a drill hall, and a garage supply area. The second floor contains additional administrative, storage, classroom spaces and a small medical exam area. Photographs of the Building 151 exterior and interior are provided in an attachment. Building 151 is heated by a natural gas boiler.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (TtNUS) 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 151 parcel including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel, since its construction in 2002, the sole use of Building 151 has been as a Naval Reserve training facility.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous operation records. Aerial photographs dated 1958, 1978, 1984, and 1989 (all produced by James W. Sewall Company) were reviewed along with Public Works Department site base maps dated 1946, 1952, 1956, 1962, 1983, 1989, and 2006 to provide historical information.

Hazardous materials were stored in the garage area (Room 124) in flammable cabinets, according to NASB personnel. No hazardous waste was generated, with the exception of

universal waste, during the operations in Building 151, according to NAS Brunswick personnel. A small concrete-block building, located in the parking lot south of Building 151, is also used for hazardous materials storage.

Building 151 is visible on the 2006 site plan (Public Works Department, 2006). Between 1943 and 1989, the Officer's Club (the former Building 38) and its parking lot, which were demolished in the 1990s, are visible at the Building 151 parcel location. (Note that building identification number 38 was later reassigned to the present Pass and ID Office, located outside the main gate.)

Floor plan drawings for the former Building 38 indicate that the facility was used as a club with areas designations including dining and lounge rooms on the first floor and club and storage rooms on the basement level (Public Works Department, 1959).

Between 1946 and 1962, four Air Force buildings are located on the Building 151 parcel south of Building 38. These buildings are identified from north to south as: Building 13(AF), Building 14A(AF), Building 16(AF), and Building 11(AF). Review of available NAS Brunswick records has not revealed any information regarding the use of the former Air Force buildings. Based on the aerial photographs and the known use of the buildings in the area within the 1940s to 1960s timeframe, the usage of the four former Air Force buildings is presumed to be non-industrial. Starting with the 1962 facility drawing, the Air Force buildings are no longer present, and Building 645 (Medical/Dental) parking lot occupies the southern portion of the Building 151 parcel.

According to the NAS Brunswick transformer database, one non-polychlorinated-biphenyl (non-PCB)-containing transformer, containing a dielectric fluid with less than 1 part per million (ppm) PCB, is associated with Building 151.

The Initial Assessment Study (IAS) prepared in 1983 by the Naval Energy and Environmental Support Activity (NEESA) lists NAS Brunswick PCB-containing transformers; the former Building 38 was not listed as a location with a PCB-containing transformer. In addition, based on available documentation and discussions with NAS Brunswick Environmental Department personnel there have not been any documented leaks or releases from any transformers in past use at the Building 151 parcel.

No underground storage tanks (USTs) or above ground storage tanks (ASTs) have been utilized at Building 151 parcel according to NAS Brunswick records. No accidental releases were identified in the NAS Brunswick or MEDEP spill records relating to Building 151 parcel.

Information concerning groundwater underlying the Building 151 parcel is available in a recent ONFF groundwater monitoring report prepared by Ecor Solutions Inc. (ESI). The ONFF, located north and upgradient of Building 151, was decommissioned in 1993 and remediated in 2000. Groundwater samples are collected from a network of wells, including one located on the Building 151 parcel, to monitor dissolved phase hydrocarbon migration in groundwater. The April and October 2008 monitoring results indicate that groundwater is encountered at about 3 to 7 feet below grade and flows to the southeast from the ONFF across Fitch Avenue and the Building 151 Parcel (ESI, 2009). Total benzene, toluene, ethylbenzene and xylene (BTEX) concentrations have not been detected in groundwater samples collected since 2004. Although diesel range organics (DRO) were detected in groundwater samples collected in 2008, with the exception of one well located side gradient to the north (MW-NASB-702), the detections were entirely attributed to interferences associated with naturally occurring organic carbon compounds (ESI, 2009).

NAS Brunswick Instruction 5090.1C establishes institutional controls for the base that includes an interim soil restriction zone for the ONFF site (NAS Brunswick, 2008). The instruction specifies the use of administrative controls that restrict excavation/disturbance of soils within the zone. The ONFF interim soil restriction zone covers the northern portion of the Building 151 parcel;

however, there is no data that indicates petroleum-contaminated soil is present at the parcel. The ONFF interim soil restriction zone boundary extends south of Fitch Avenue due to previous groundwater DRO detections for wells located within the Building 151 parcel.

4. SITE VISIT AND INVESTIGATION

Site visits were conducted by Mr. Brandon Smith, P.E., and Mr. James Forrelli, P.E., of TtNUS on January 22, 2010 and February 9, 2010. The purpose of the visits was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. The building interior was observed during the January site visit. Snow cover at the time of the January site visit prevented direct observation of the exterior grounds, necessitating the second visit in February to observe the grounds. TtNUS personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. The Building 151 parcel location was visually inspected for signs of hazardous waste generation or storage activity. Photographs taken during the site visit are provided in the attachments to this report. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- The building was not occupied at the time of the site visit and appeared in excellent condition.
- No evidence of current or past hazardous waste generation activities was observed.
- No evidence of hazardous waste residues was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) nor structural modifications that could conceal signs of a past release were observed.
- No hazardous waste storage or accumulation areas were observed.
- One concrete pad-mounted transformer was identified at the southwest corner of Building 151. No evidence of a past leak from this transformer was observed. (As discussed in Section 3, according to the NAS Brunswick transformer database the insulating oil in this transformer contains less than 1 ppm PCB.)

Based on the available information regarding historical activities at the Building 151 parcel, there is no evidence that groundwater underlying the parcel has been adversely impacted by a release from within the parcel. However, groundwater at the Building 151 parcel may have been previously impacted by dissolved-phase hydrocarbon migration from the off-parcel, upgradient ONFF source area, a known NAS Brunswick groundwater contamination area. Current monitoring data indicate that these impacts have been largely mitigated.

Based on the records research findings and site visit observations, it was determined that neither further inspection nor sampling of Building 151 parcel is required to complete the MEDEP hazardous waste closure requirements.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation activity or hazardous waste accumulation or storage activity was conducted at Building 151 parcel, with the exception of universal waste including batteries and computer monitors.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

No USTs or ASTs have been utilized at the Building 151 parcel according to NAS Brunswick records. No other tanks were observed in the immediate vicinity of the Building 151 parcel. The facility space is heated by a natural-gas-fired furnace; natural gas is supplied through pipeline by the local gas utility company.

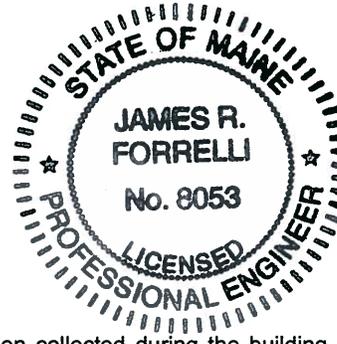
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 151 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at the Building 151 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of Building 151 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.


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

Ecor Solutions, Inc. (ESI). 2009. Final Groundwater Monitoring Report, April 2008 and October 2008 Sampling Events, Old Navy Fuel Farm, Naval Air Station Brunswick, Maine. September.

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

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

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

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

BNAS Reuse Master Plan Property Condition Assessment. Mid-Coast Regional Redevelopment Authority, Brunswick, ME. 2006.

Master/Historical Underground Storage Tank Inventory. NAS Brunswick, Maine. 02/05/96.

Naval Air Station (NAS) Brunswick, 2008. Naval Air Station Brunswick Instruction 5090.1C From: Commanding Officer, Subj: Restriction on Soil Excavation, Groundwater Use, and Remedial Component Disturbance. March 5, 2008.

Naval Energy and Environmental Support Activity (NEESA). 1983. Initial Assessment Study of Naval Air Station, Brunswick, Maine (NEESA 13-031). June.

Public Works Department, 1946. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1946," NAS Brunswick, Maine. June 30, 1946.

Public Works Department, 1952. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1952," NAS Brunswick, Maine. June 30, 1952.

Public Works Department, 1956. General Station Map, Enclosure 2. , NAS Brunswick, Maine. 1956.

Public Works Department, 1959. "Building Number 38 Floor Plan (First Floor Plan), Public Works Department Drawing No. 561." NAS Brunswick, Maine. Revised May 20, 1966.

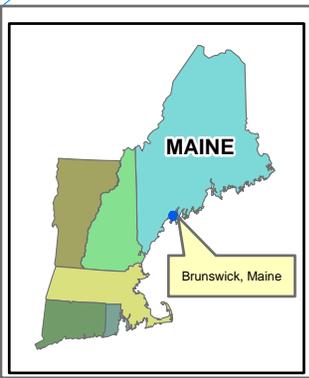
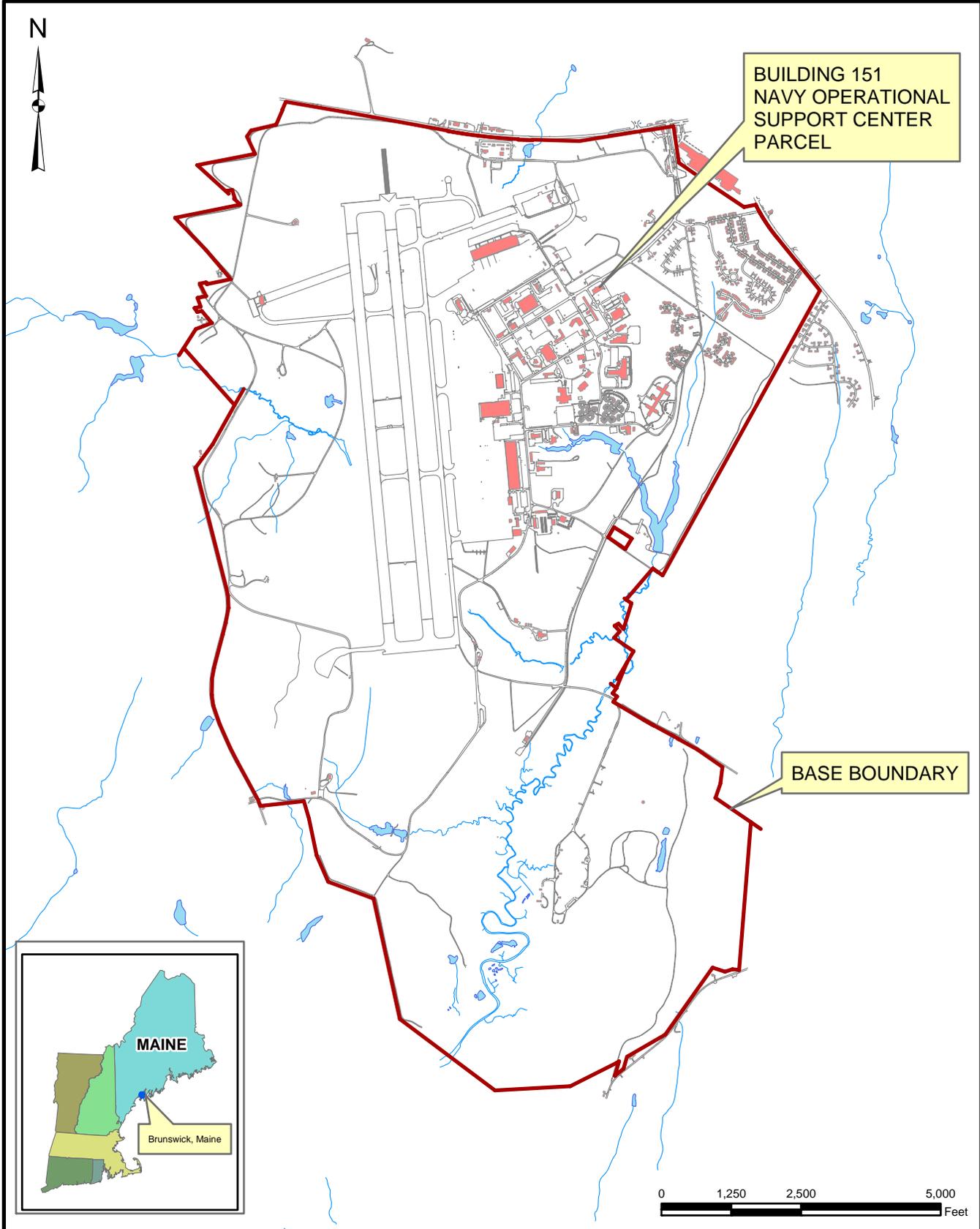
Public Works Department, 1959. "Building Number 38 Floor Plan (Basement), Public Works Department Drawing No. 562." NAS Brunswick, Maine. Revised January 8, 1971.

Public Works Department, 1962. "Map of Streets," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. 1962.

Public Works Department , 1983. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. May 5, 1983.

Public Works Department , 1989. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. Revised April 2, 1989.

Public Works Department, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine. 2006.

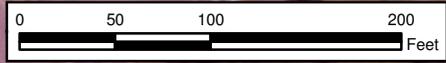


Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 151- NAVY OPERATIONAL SUPPORT CENTER PARCEL
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE	
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FIGURE NUMBER	
1	

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Legend

Parcel Boundary

Building Corner	Northing	Easting
North	388631.387	3016585.400
East	388557.420	3016632.406
South	388461.996	3016472.470
West	388534.532	3016426.778

Coordinates are in NAD 1983, Maine West, Feet

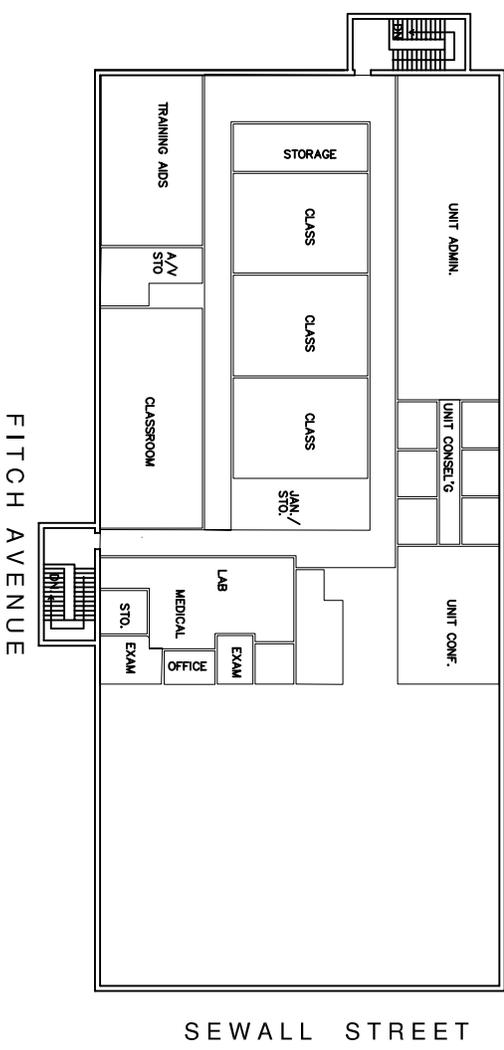


Tetra Tech NUS, Inc.

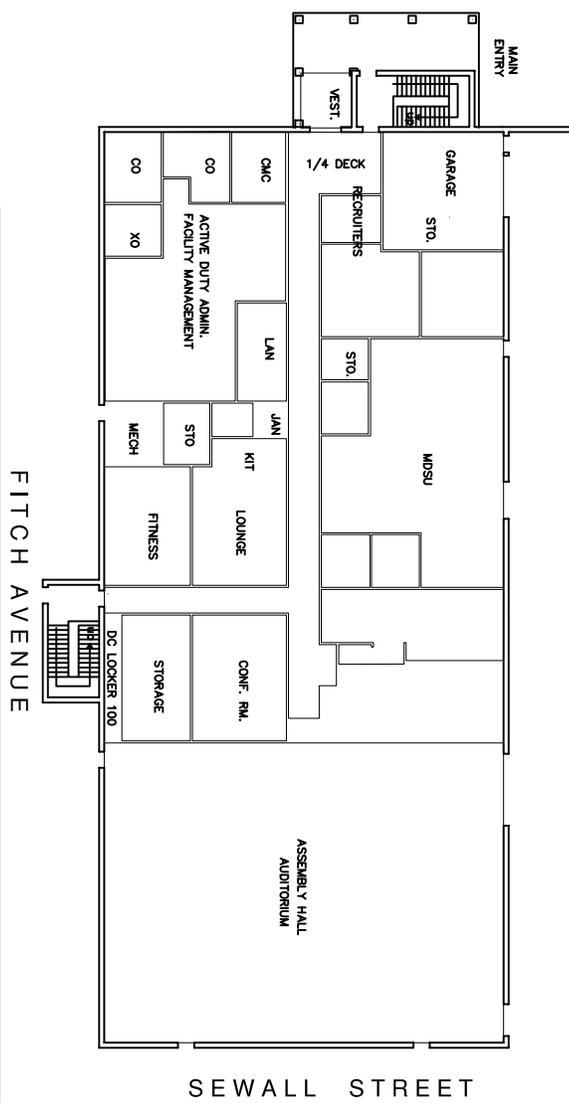
SITE LOCATION MAP
BUILDING 151 - NAVY OPERATIONAL SUPPORT CENTER PARCEL
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
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FIGURE NUMBER	
FIGURE NO. 2	

SECOND FLOOR PLAN



FIRST FLOOR PLAN



SOURCE:
 NAVAL RESERVE CENTER REPLACEMENT FACILITY;
 SHERIDAN CORPORATION; PORTLAND, MAINE;
 6-28-00



TETRA TECH NUS, INC.

FLOOR PLAN
 BUILDING 151 – NOSC PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
 AS NOTED

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DATE
 02/15/10

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FIGURE NUMBER
 FIGURE NO. 3

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 1/22/2010
Personnel: James Forrelli, P.E. / Brandon Smith, P.E. / Chelsea Fellows-Swenson
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Navy Operational Support Center (NOSC)
 Function: Naval Reserve Training Building
 Size: 24,480 SF
 Year of Construction: 2002

Building 151 is located southeast of the intersection of Fitch Avenue and Sewall Street at NAS Brunswick. It was constructed in 2002 and served as a Naval Reserve training facility for its entire history. Building 151 consists of a 24,480 square-foot, two story building on a slab foundation.

Building 151 was used as a Naval Reserve Training Building. Building 151 contains administrative and conference spaces, a drill hall, and a garage supply area on the first floor. The second floor is additional administrative, storage, classroom spaces and a small medical exam area.

Hazardous materials were stored in the garage area (Room 124) in flam cabinets, according to NASB personnel. No hazardous waste was generated, with the exception of universal waste, during the operations in Building 151, according to NASB personnel. A small cinder block hazardous materials storage building is also located south of Building 151 and was empty.

Building 151 is heated by a natural gas boiler.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 151.

The building was not occupied at the time of the site visit and appeared in excellent condition. Office furniture was still present.

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

No evidence of hazardous waste residues was observed.

No signs of a past release (staining, 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.

One transformers that could be a potential source of polychlorinated biphenyls (PCBs) contamination in the event of a leak were observed on the southwest corner of Building 151.

HAZARDOUS WASTE STORED / GENERATED

No hazardous waste was stored or generated at Building 151, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The NASB transformer database lists the following transformer associated with Building 151:
 225 KVA Pad-Mounted - Square D Serial No. 010465-VA1 - Non-PCB containing

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:
1946 plan - Building 38 present - Officers Club
1952 plan - Building 38 present - Officers Club
1956 plan - Building 38 present - Officers Club
1958 aerial - Building 38 present with gravel drive/parking on the east side.
1962 plan - Building 38 present - Officers Club
1978 aerial - Building 38 present with larger parking area extending to the southeast of the building.
1983 plan - Building 38 present with parking area from 1978 aerial
1984 aerial - same as 1978 aerial
1989 plan - same as 1983 plan
1989 aerial - same as 1978 aerial
2006 plan - Building 151 present in location of former Building 38.

No USTs/ASTs were present at Building 151 according to NASB records.

HAZARDOUS WASTE STORAGE RECORDS

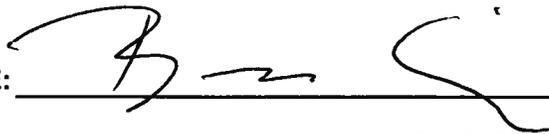
No hazardous waste was historically stored at Building 151, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

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

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Buildings 151 Parcel – NAS Brunswick
Building 151 NOSC – Main entrance/northeast exterior

February 9, 2010



No. 2 Buildings 151 Parcel – NAS Brunswick
Building 151 NOSC – southwest exterior

February 9, 2010

PHOTOGRAPHS



No. 3 Buildings 151 Parcel – NAS Brunswick
Building 151 NOSC - southeast exterior

February 9, 2010



No. 4 Buildings 151 Parcel – NAS Brunswick
Building 151 NOSC parking lot

February 9, 2010

PHOTOGRAPHS



No. 5 Buildings 151 Parcel – NAS Brunswick January 22, 2010
Building 151 NOSC - Garage (former hazardous material storage area)



No. 6 Buildings 151 Parcel – NAS Brunswick January 22, 2010
Building 151 NOSC - classroom