

N62604.AR.001388  
NCBC GULFPORT  
5090.3a

FINAL WORK PLAN FOR EDWARDS ROAD RESTORATION WITH TRANSMITTAL NCBC  
GULFPORT MS  
10/7/2004  
TETRA TECH



**TETRA TECH NUS, INC.**

661 Andersen Drive • Pittsburgh, PA 15220  
Tel 412.921.7090 • Fax 412.921.4040 • www.tetrattech.com

PITT-10-4-019

October 7, 2004

Project Number N4512

Commander  
Southern Division  
Naval Facilities Engineering Command  
Attn: Art Conrad (Code OPT1)  
2155 Eagle Drive  
North Charleston, SC 29406

Reference: CLEAN Contract No. N62467-94-D-0888  
Contract Task Order 0278

Subject: Transmittal of Final Work Plan  
Edwards Road Restoration  
Naval Construction Battalion Center, Gulfport, Mississippi

Dear Mr. Conrad:

Please find attached one (1) copy of the subject work plan. Copies of this work plan have also been sent as indicated below.

If you have any questions or comments regarding this document, please call me at (412) 921-8401 or Robert Fisher at (850) 385-9899.

Very truly yours,

Jason J. Brown  
Task Order Manager

JJB/jjb

Enclosure

c: Mr. G. Crane, NCBC Gulfport (3 copies)  
Ms. D. Humbert (cover letter only)  
Mr. M. Perry/File (1 copy)

**WORK PLAN - EDWARDS ROAD RESTORATION  
NAVAL CONSTRUCTION BATTALION CENTER, GULFPORT, MISSISSIPPI**

**INTRODUCTION**

This letter Work Plan discusses the proposed activities and rationale for performing road repair work near the Naval Construction Battalion Center (NCBC) Gulfport in Gulfport, Mississippi. This document has been prepared by Tetra Tech NUS, Inc. (TtNUS) for the Southern Division (SOUTHDIV) Naval Facilities Engineering Command (NAVFAC) under the Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) Program, Contract Number N62467-94-D-0888, Contract Task Order (CTO) 0278.

**BACKGROUND**

Site 8 occupies approximately 30 acres in the north-central section of NCBC Gulfport. From 1968 to 1977, the site was used by the U.S. Air Force for the storage of approximately 850,000 gallons of herbicide orange (HO). It was originally believed that only 12 acres of the site, designated as Site 8A, had been used for HO storage, but two additional storage areas were later identified including 17-acre Site 8B and 1-acre Site 8C.

In 1977, the Air Force disposed of the entire liquid HO inventory by high-temperature incineration at sea. During 1987 and 1988, approximately 30,000 cubic yards (yd<sup>3</sup>) of dioxin-contaminated soil at Site 8 was treated by high-temperature incineration, and the resulting ash was stored on Site 8A. Dioxin concentrations in the ash were less than the dioxin delisting concentration criterion of 1.0 microgram per kilogram ( $\mu\text{g}/\text{kg}$ ) set by the Mississippi Department of Environmental Quality and the ash was officially delisted in 1998.

As a result of the spills and leaks that occurred during the years of HO storage, dioxin has migrated through the system of on-base ditches to the off-base swampland located across 28<sup>th</sup> Street from Outfall 3 (see Figure 1). This finding was determined through six phases of sampling conducted by the Navy from April 1997 to February 1999 to establish the extent of on-base and off-base dioxin-contaminated sediment. During these sampling events, the swamp located north of Outfall 3 was the only off-base area found to have been impacted by dioxin.

In November and December 2001 (TtNUS, 2002), TtNUS excavated a section of the off-base dioxin-contaminated sediment located on property owned by H.A. Edwards (Edwards property). As part of excavation activities, a haul road was constructed to the excavation area by extending 58<sup>th</sup> Avenue north approximately 450 feet to the southern branch of Turkey Creek (see Figure 2). The haul road was then

extended approximately 700 feet along the southern and eastern edge of the contaminated sediment area. The haul road was constructed with a base of cut timber, and native soil was used to fill the voids. A surface layer of gravel/limestone was then spread and compacted above the soil layer. After the impacted sediment was excavated from the Edwards property, verification sampling showed that the remaining dioxin concentrations were below the regulatory threshold criterion.

Since the completion of excavation activities in December 2001, rainfall has resulted in erosion of the haul road causing the formation of ruts within the road. The most extensive erosion has been observed along the northern side of the east-west section of the haul road that borders the 2001 excavation area. After excavation activities were performed, surface water as deep as 3 feet ponded along the northern side of the road. Ponding has not been observed on the southern side of the haul road.

### **PLANNED ACTIVITIES**

The haul road will need to remain in useable condition over the next 2 years because it will be used during excavation activities on the properties of two other landowners located to the west and southwest of the Edwards property. To this end, road restoration activities will involve the repair of ruts created from erosion. As part of this task, soil will be trucked in and placed in the eroded areas/ruts. Additionally, a culvert will be placed within a section of road that suffered washout during a past rainfall event.

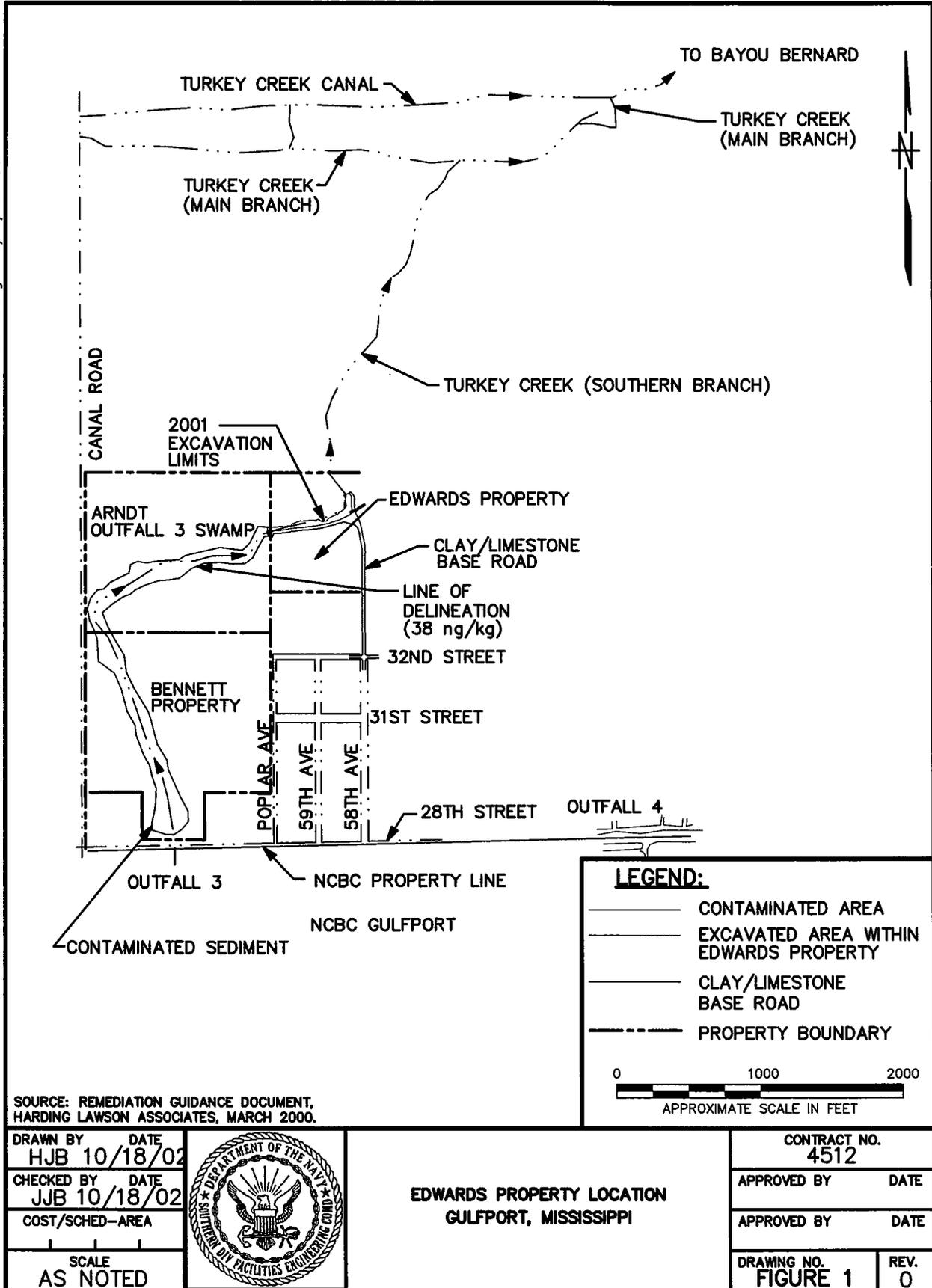
The north-south portion of the haul road has not shown erosional problems. Sufficient rip-rap and vegetative growth have been observed along the sides of this portion of road; consequently, it does not require repairing or shoring. Furthermore, the section of the haul road located east of the 2001 excavation area will not be addressed by repair or shoring activities because this section will not be used during future excavation activities. Although shoring and stabilization activities were originally planned for the northern side of the east-west stretch of road, sufficient vegetation has grown along the sideslopes of the road. As a result, shoring work is not needed for any portion of the road.

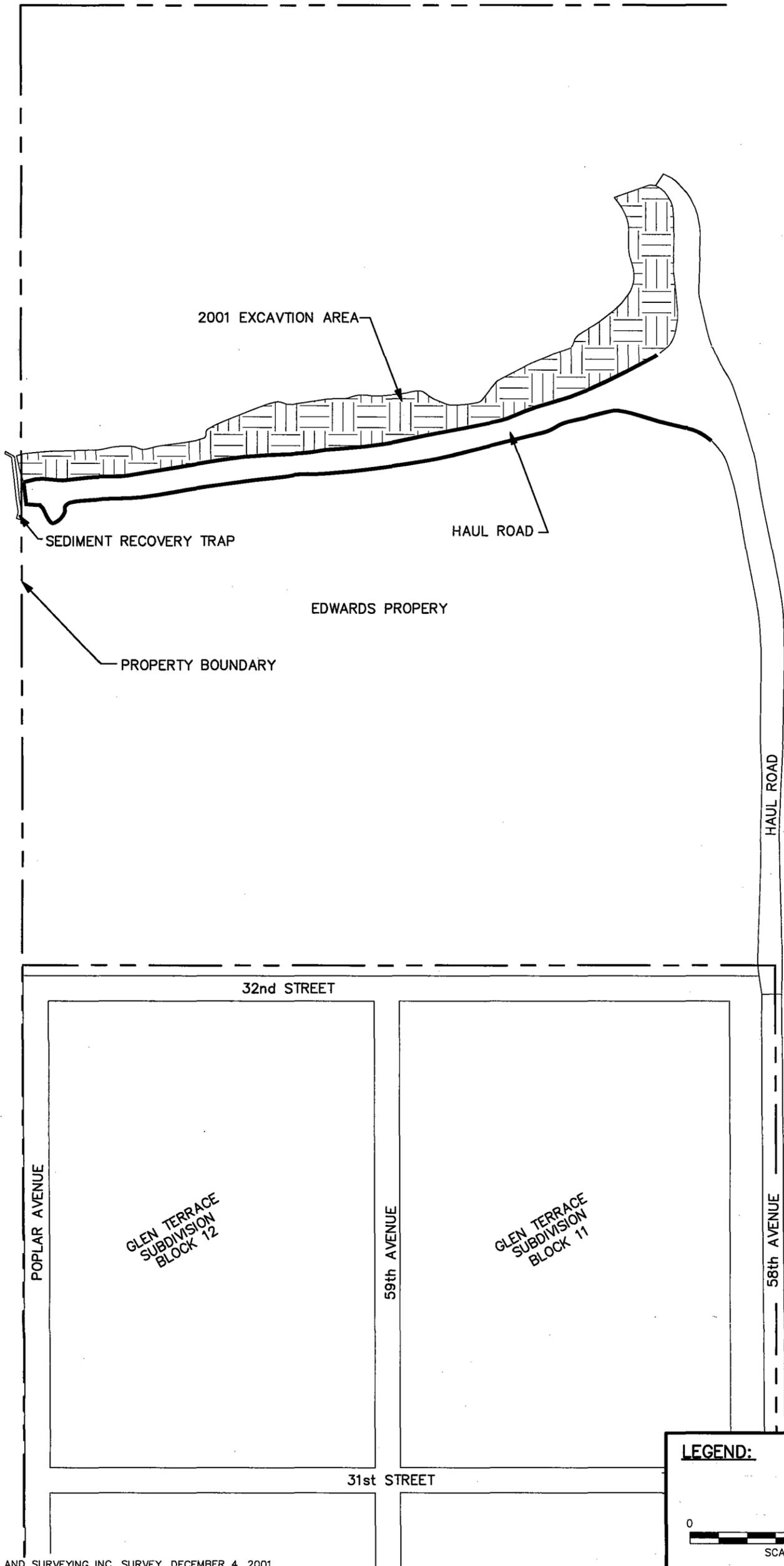
Field personnel will mobilize to the site during the week of October 11, 2004. Road repair activities are anticipated to be completed by the end of this week.

### **REFERENCES**

Tetra Tech NUS, Inc., 2002. Excavation and Confirmation Sampling Report for the Edwards Property, Gulfport, Mississippi, August.

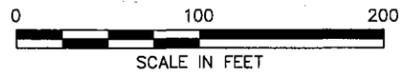
ACAD: 4512CF02.dwg 10/18/02 HJB PIT





SOURCE: LAND SURVEYING INC. SURVEY, DECEMBER 4, 2001.

**LEGEND:**



DRAWN BY HJB	DATE 10/18/02
CHECKED BY JJB	DATE 10/18/02
COST/SCHED-AREA	
SCALE AS NOTED	



**EDWARDS PROPERTY LAYOUT  
GULFPORT, MISSISSIPPI**

CONTRACT NO. 4512	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2	REV. 0