

**AREA 9, PHASE III
ABANDONED OUTFALL LINE
SUPPLEMENT TO
EXCAVATION PLAN - PART TWO**

**ACCELERATED REMOVAL OF DEBRIS FROM THE MIDDLE
OF THE GREAT MIAMI RIVER**

**FERNALD CLOSURE PROJECT
FERNALD, OHIO**



SEPTEMBER 2004

U.S. DEPARTMENT OF ENERGY

**21140-PL-0003
ADDENDUM 1
REVISION A
DRAFT**

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LIST OF ACRONYMS AND ABBREVIATIONS

DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
FCP	Fernald Closure Project
WAO	Waste Acceptance Organization

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1
2
3 **1.0 INTRODUCTION**

4 This supplement to Area 9, Phase III Abandoned Outfall Line Excavation Plan Part Two outlines
5 accelerated removal of uncontrolled debris from the middle of the Great Miami River. Because of the
6 level of contamination observed inside the pipe and lower water level in the river, the U.S. Department of
7 Energy (DOE) plans to accelerate the removal of debris in the first part of October 2004 ahead of formal
8 approval of the rest of the Excavation Plan, Part Two. Debris to be removed consists of approximately 60
9 feet of pipe partially encased in concreted and associated concrete debris. Because of dry weather in
10 September, the river water level is currently low. Therefore, most of the debris to be removed is visible
11 above water level and could be accessed from the east bank of the river.

12 The following sections describe the activities in support of removing this debris.

13
14 **2.0 JURISDICTIONAL AGENCIES AND PROPERTY OWNERS**

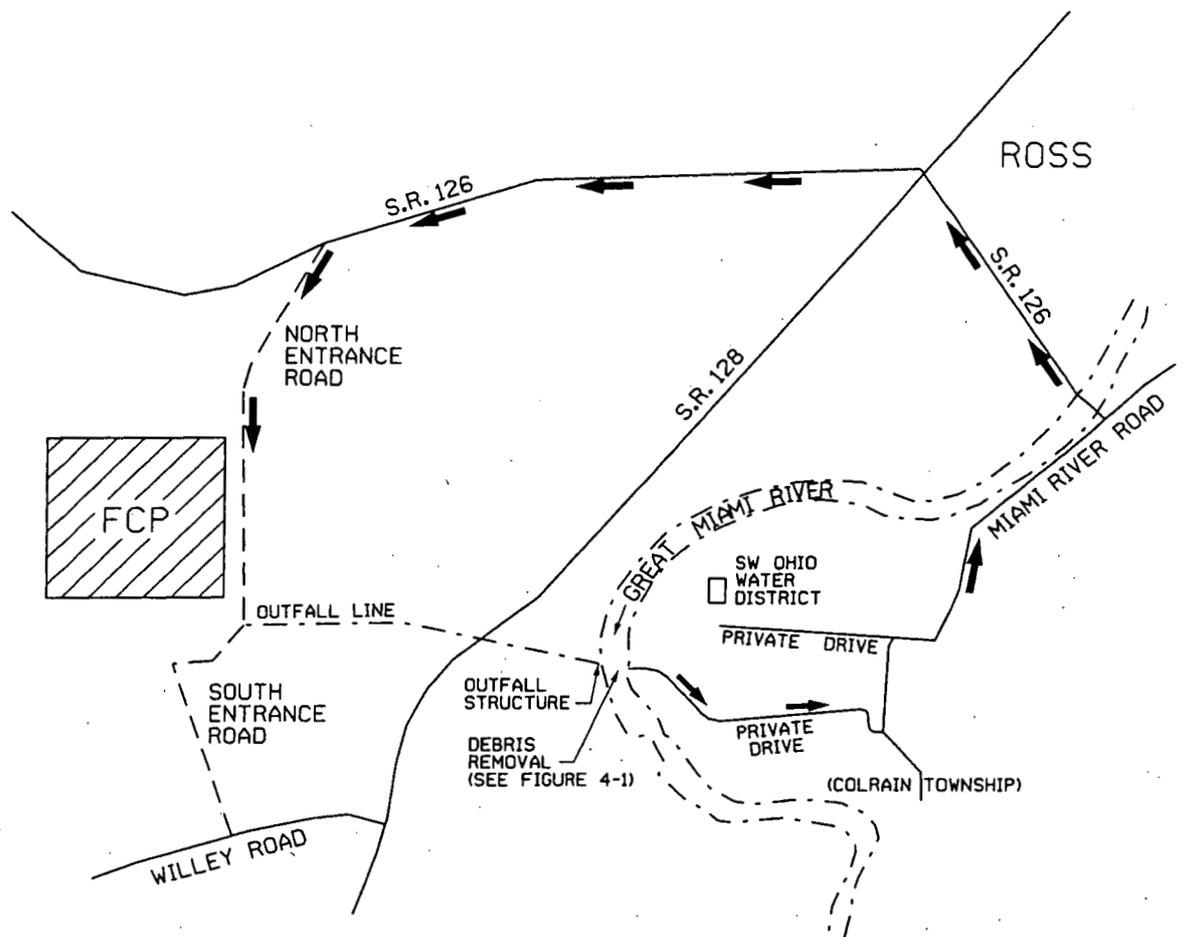
15
16 Activities required in support of accelerated removal of debris are coordinated with the following
17 jurisdictional agencies and property owners:

18
19 **2.1 Coordination with Jurisdictional Agencies**

- 20 • U.S. Army Corp of Engineer, Cincinnati, Ohio (See letter Appendix A)
- 21
- 22 • Hamilton County, Cincinnati, Ohio (See letter Appendix A)
- 23
- 24 • Ohio Environmental Protection Agency (Discussed in Technical Information Exchange Meeting,
25 September 28, 2004)
- 26
- 27 • U.S. Environmental Protection Agency (Discussed in Technical Information Exchange Meeting,
28 September 28, 2004)
- 29
- 30 • Ohio Department of Transportation (Meeting, September 16, 2004)
- 31
- 32 • Archeologist Evaluation of Ramp Area (Historical Surveys)
- 33
- 34 • Ohio Public Utility Commission (Telephone call September 24, 2004)
- 35
- 36 • Ohio Historical Preservation (See letter Appendix A)
- 37
- 38 • U.S. Department of Transportation Permit for Hauling Hazardous Waste on Public Roads
39 (Telephone call)

1 2.2 Coordination with Property Owners

2 Permission from Colerain Township (including insurance coverage) has been obtained to access the east
3 bank of river for removal of debris through the Colerain Township property (Figure 2-1). Similar
4 permission (including insurance coverage) has also been obtained from Southwestern Ohio Water District
5 for alternate access to east river bank. To access debris in the middle of the river from top of east river
6 bank, an access ramp will be graded at the east river bank. Staging area at the top of east bank and access
7 ramp will be located within the existing pipeline easement.



HAUL ROUTE FROM
EAST RIVER BANK TO FCP

FIGURE 2-1

3.0 SITE PREPARATION

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The following activities will be performed as part of the site preparation for removal of the debris in the middle of the Great Miami River associated with the abandoned outfall line.

- Prepare Excavation Plans and Traveler Requirements and Brief Personnel to Project Requirements
- Ready Equipment, Materials, and Labor Prior to Remediation
- Contact Jurisdictional Agencies and Affected Property Owners Prior to Remediation
- Conduct "Walk Your Space" Review of Work Area and Define/Correct Noted Hazards
- Protect Existing Underground and Above Grade Utilities
- Locate and Stake Pipeline Easement at the Top of East River Bank and Work Area
- Clear Access at the East River Bank (Cut Vegetation)
- Cut Temporary Access Ramp to River on East River Bank
- Install Postings and Construction Fencing Along Top of East River Bank
- Station Ring Buoys, and Buoyant Work Vests
- Establish Staging Area at Top of East River Bank within the Pipeline Easement
- Control Access to the Ramp and Staging Area
- Stage Equipment and Materials (Heavy Equipment: Excavator, Excavator Equipped with Grapple Attachment, and Wheel Loader with Fork Attachment) at Top of East River Bank within Pipeline Easement
- Procure Water Tight 40-Foot Sealand Container with Removable Top Sections and with Liner (hereinafter called container) and Flatbed Trailer and Stage at the Staging Area at Top of East River Bank within Pipeline Easement
- Radiological Compliance shall Perform an Empty Before Loading Survey (Radiological Scan of the Empty Container when Container is Delivered).

4.0 DEBRIS REMOVAL

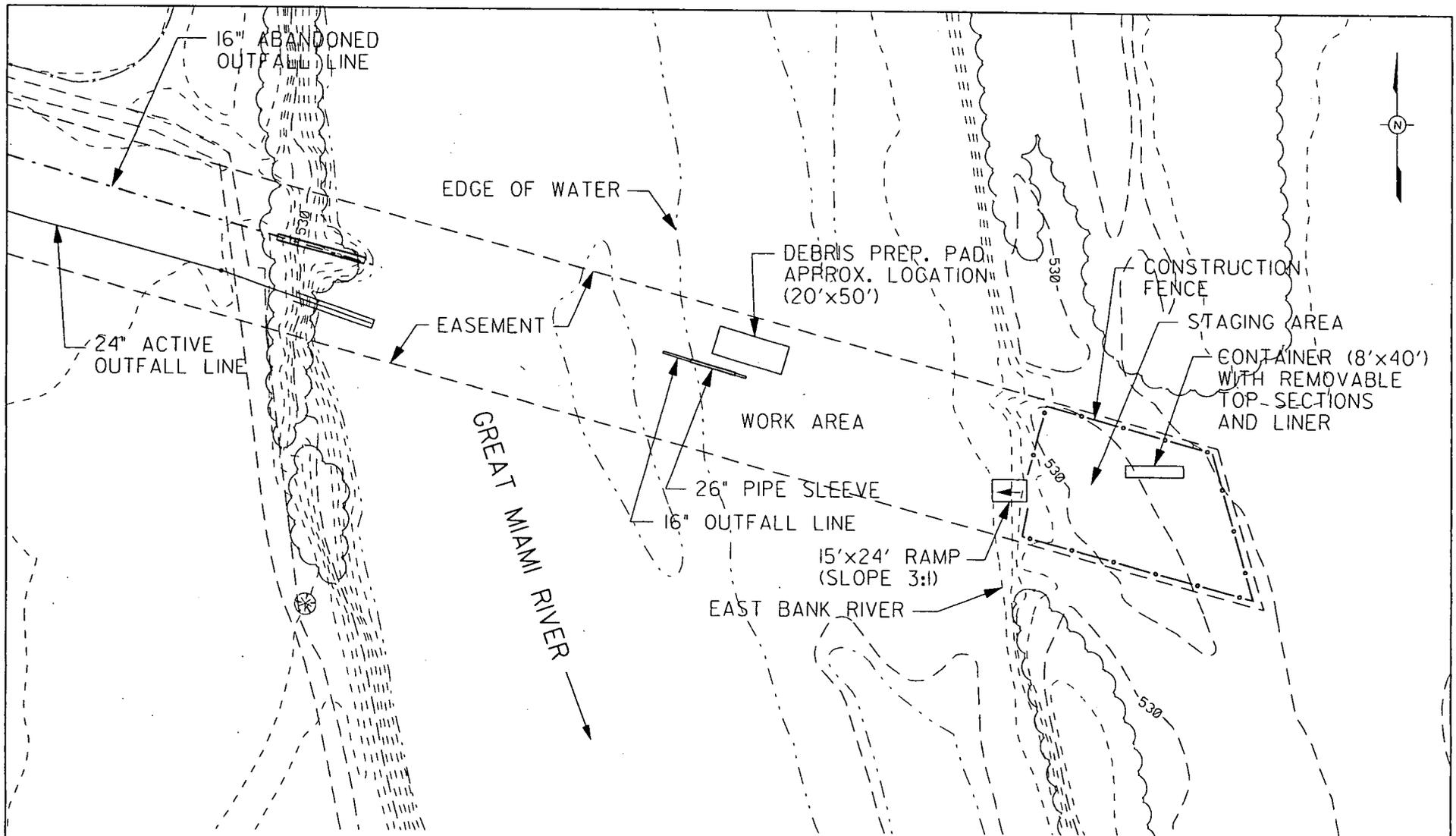
The methodology for removing the debris including pipe from the middle of the river will be as follows:

After completion of site preparation activities, construction equipment will be moved to the work area (Figure 4-1). Before start of debris removal, a debris preparation pad will be located upon the dry riverbed adjacent to debris to be removed. This debris preparation pad will be approximately 25 foot by 50 foot and will include a geotextile fabric covered by plastic liner. Wooden cribbing will be placed on the geotextile fabric and plastic liner. Portions of the plastic liner and geotextile fabric will be held down with sand bags, if required. Additional sand bags may be used to reduce the spread of contamination by placing the sandbags down slope of the debris preparation pad. Plastic sheeting will be placed over the cribbing for wrapping pipe and pipe sleeve.

The excavator will remove the large concrete debris around pipe and pipe sleeve, haul to the staging area and place in the container. Before hauling debris to the staging area, visual inspection of the debris will be performed by Waste Acceptance Organization (WAO). If the debris is too large to safely move in one load, then the debris will be broken into a smaller size.

The excavator will return to the work area and begin to remove the sections of pipe and pipe encasement. The excavator will loosen the pipe and pipe encasement from the riverbed. If the length of pipe and pipe encasement is longer than 40 feet in length, the pipe encasement will be lifted from the riverbed, sloped towards the river, and pipe lengths outside the pipe encasement will be broken. Before breaking of pipe, the open end of pipe will be wrapped with plastic. After the pipe is broken, the other end of pipe will be wrapped in plastic. The section of pipe will be placed on the plastic liner and cribbing on the preparation pad to wrap the pipe section with plastic liner. After the lengths of pipe outside the pipe encasement longer than 40 feet in length are broken, the pipe encasement will be lifted from the riverbed (while lifting, the pipe encasement will be sloped towards the river to drain water). The upper end of the pipe encasement will be wrapped in plastic and following draining; the other end will be wrapped in plastic.

The pipe encasement will be placed on the plastic liner and cribbing on the preparation pad to wrap the pipe encasement with plastic liner. The debris preparation pad will be examined to assure that it was not damaged from the debris.



GENERAL WORK AREA
 FOR REMOVAL OF DEBRIS FROM
 THE GREAT MIAMI RIVER

FIGURE 4-1

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1 For pipe or pipe encasement that are partially or fully submerged in the river, the pipe or pipe encasement
2 will be slowly lifted out of the river, sloped towards the river to allow the water inside the pipe to slowly
3 drain, maintaining sediments in the pipe. The pipe will be placed on the cribbing and the ends will be
4 wrapped in plastic sheeting. The excavator will then lift the pipe or pipe encasement section and haul it to
5 the staging area and place in the container. Any piece that approaches 40 feet in length will be sized
6 reduced on the debris preparation pad prior to being moved to assure it will fit into the container.

7
8 Nearing the end of the work shift, the preparation pad will be removed from the riverbed and placed in the
9 container. Pipe sediments and debris fragments captured on the debris preparation pad will be disposed
10 along with the plastic sheeting and geotextile fabric. Any construction waste material will be cleaned up,
11 wrapped in plastic, and placed in the container. The waste material in the container will then be covered
12 and the container lid will be placed onto the container at the end of each working shift.

13
14 The container will not be moved back to the Fernald Closure Project (FCP) until either the remediation
15 work has been completed in the riverbed or the riverbank is in jeopardy of being flooded by rising river
16 water.

17
18 Radiological and real-time monitoring coverage will be made available during debris removal.

19
20 The removal of lead from the pipe joints will be performed after the debris has been transported back to
21 the FCP.

22 23 5.0 SHIPMENT

24
25 The carrier will be scheduled in advance to haul the loaded container to the FCP site.

26
27 Once the debris and piping associated with the abandoned outfall line has been removed from the middle
28 of the river and containerized, preparation will be made to ship the material back to the FCP for further
29 disposal. First the lid will be secured on the top of the container, then Radiological Compliance will
30 perform an initial/outgoing radiological survey on the exterior surfaces of the flatbed, container, and haul
31 truck to free release standards prior to shipment.

32
33 Prior to shipment, FCP transportation personnel will generate the required paperwork [Shipping Papers
34 (Manifest) and Emergency response Information], place the proper placards on the haul truck, and inspect

1 the waste container and haul truck for compliance with the U.S. Department of Transportation (DOT)
2 hazardous materials regulations. Once the container and haul truck have been cleared to haul the waste
3 materials to the FCP, the haul truck will leave the staging area using the Colerain Township private drive
4 near work area then proceed on public roadways to the North Access Road of the FCP Site. Figure 2-1
5 shows the route for hauling the abandoned outfall debris located in the middle of the river from the river
6 back to the FCP. No road improvements are required to establish this haul route.

7
8 Once on site, the waste material will be unloaded at Soil Pile 7. The placards will be removed from the
9 haul truck and container. The container, flat bed, and haul truck will be decontaminated. A radiological
10 survey will be performed on the container, flatbed, and truck to free release standards. The container and
11 flatbed supplier will be notified in writing that the container and flatbed have been cleaned, placards
12 removed, and decontaminated per governing DOT/EPA/TSCA/NRC (Reg. Guide 1.86) and supplier
13 standards.

14
15 **6.0 SAMPLING**

16
17 After the debris and piping have been removed from the work area and the container has been hauled
18 back to the FCP, real-time monitoring will be performed in the work area, staging area, and travel path
19 from the work area to the staging area including the ramp. Physical sampling will be addressed in the
20 Certification Design Letter.

21
22 **7.0 RESTORATION**

23
24 After the excavation and debris removal has been completed and the real-time monitoring performed, the
25 ramp will be filled in and the riverbank, staging area and access drive will be restored approximately to
26 their pre-excavation condition. The construction equipment will be radiologically scanned and
27 transported back to the FCP site. Prior to leaving, a clean up of the general work area will be performed.
28 A walk-down of the general work area will be performed by Fluor Fernald and DOE personnel at the end
29 of the restoration activities. Opportunity will be provided to the other to jurisdictional agencies for a final
30 walk-down of the general work area.

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8.0 ADDITIONAL CONTROLS

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If the river rises quickly during remediation activities, then disturbed and excavated debris, cribbing, and plastic/geotextile fabric from the work area will be hauled to the staging area and placed into the container. Unused plastic wrap and geotextile fabric will be moved to the staging area. Equipment and personnel will be moved to top of riverbank. At the end of each work shift, the access ramp and staging area will be secured with construction safety fence and locking gates into the immediate area.

Ring buoys, life vests, and a boat (Skiff) will be staged at the work area when a drowning hazard is possible (when personnel are within 5 feet of water that is 3 feet or more in depth).

Archeological surveys in work area and staging area will be performed before start of remediation.

Additional archeological support, if needed, will be available during the remediation.

APPENDIX A
REFERENCE LETTERS



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DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS, OHIO FIELD OFFICE
10557 MCKELVEY ROAD
CINCINNATI, OHIO 45240-3929
<http://www.lrl.usace.army.mil>

August 19, 2004

Operations Division
Regulatory Branch (North)
ID No. 200401074-dmm

Mr. M. D. Powell
Fluor Fernald, Inc.
Post Office Box 538704
Cincinnati, OH 45253-8704

Dear Mr. Powell:

This is in regard to your letter of August 10, 2004, concerning the proposed remediation of an abandoned outfall structure. The proposed project is located on the right descending bank of the Great Miami River at Mile 24.1 in Crosby Township, Hamilton County, Ohio. We have reviewed the submitted data relative to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

We have determined that, in accordance with our regulations, this remediation activity required by the Environmental Protection Agency on a Comprehensive Environmental Response, Compensation, and Liability Act site does not require a Department of the Army permit.

Our comments on this project are limited to only those effects which may fall within our area of jurisdiction and thus does not obviate the need to obtain other permits from other Federal, state or local agencies.

If you have any questions, please contact Ms. Denise Marmer by writing to the above address or by calling 513-825-4518. Any future correspondence should reference our assigned Identification Number 200401074-dmm.

Sincerely,

Max Hagan
Team Leader
Ohio Field Office

Copy furnished:

✓ Charles Van Arsdale



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LETTER OF TRANSMITTAL

HAMILTON COUNTY DEPARTMENT OF PUBLIC WORKS

138 East Court Street, Room 800

Cincinnati, Ohio 45202

Phone: (513) 946-4750

FAX: (513) 946-4744

To: Warren Hopper	Date: 7-8-04	Job #:
Floua Fernald Inc;	Attention:	
P.O. Box 538704	Re:	
Cincinnati, OH 45253		

WE ARE SENDING YOU (X) ATTACHED () UNDER SEPARATE COVER VIA _____ THE FOLLOWING ITEMS:

- PRINTS
- PLANS
- MYLARS
- OTHER
- COPY OF LETTER

COPIES	DATE	NO.	DESCRIPTION
1	7/8/04		Remediation of Abandoned Outfall line

REASON FOR TRANSMITTAL:

- FOR APPROVAL
- FOR YOUR USE
- AS REQUESTED
- APPROVED AS NOTED
- APPROVED AS SUBMITTED
- RETURNED FOR CORRECTIONS
- FOR REVIEW & COMMENT

REMARKS:

Approved Set of Plans

BY: Ed Weber SIGNED: [Signature]

PLEASE NOTIFY US AT ONCE IF ENCLOSURES ARE NOT AS NOTED

PUBLIC WORKS

APPROVED FOR COMPLIANCE WITH
 STORM DRAINAGE Ed Miller DATE 7-16-2004
 FLOOD PLAIN A. Monahan DATE 7/6/04
 EARTHWORKS Ed Miller DATE 07/06/04
 REGULATIONS OF HAMILTON COUNTY
PWFLO40039

LEGEND

-  WOODED AREA
-  TREE
-  ELECTRIC TOWER
-  FENCE
-  MAJOR CONTOUR
-  MINOR CONTOUR
-  STORM MANHOLE
-  VALVE
-  FIRE HYDRANT
-  RAILROAD
-  EASEMENT LINE

DRAWING INDEX

DRAWING NO.	SHEET NO.	DESCRIP
99X-5500-G-00775	G-1	MASTER LAY
99X-5500-G-00776	G-2	PHASE I (SHE
99X-5500-G-00777	G-3	PHASE I (SHE
99X-5500-G-00797	G-4	HAUL ROAD PLAN
99X-5500-G-00778	G-5	DETA
99X-5500-G-00799	G-6	PHASE -II (SH
99X-5500-G-00800	G-7	PHASE III (S)
99X-5500-G-00801	G-8	PHASE III (S)
99X-5500-G-00802	G-9	STATE ROUTE 128

NO.	REVISIONS	DATE	DWN. BY	APPD. NO.	NO.	REVISIONS	DATE	DWN. BY	APPD. NO.	REF. DWG.
					0	ISSUED CERTIFIED FOR CONSTRUCTION		6/24/04	RML	

FP5.DGN 5/30/03

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Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000 Fax: 614/298-2037

Visit us at www.ohiohistory.org

FERNALD _____
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FILE: 5401.8

LIBRARY: _____

August 5, 2004



OHIO
HISTORICAL
SOCIETY
SINCE 1885

Ed Skintik
Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Re: Sanitary Outfall Line
Fernald Environmental Management Project, Ohio

Dear Mr. Skintik,

This is in response to correspondence from your office dated June 24, 2004 (received June 24) regarding the above referenced project. The comments of the Ohio Historic Preservation Office (OHPO) are submitted in accordance with provisions of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 [36 CFR 800]).

The project involves removal of an existing sewer outfall line. As we discussed in telephone conversations in early July, there are important archaeological sites on either side of the disturbed right-of-way. Caution is needed throughout this project to avoid impacting these important cultural resources. We appreciate your willingness to coordinate with local avocational archaeologists to avoid archaeological deposits and to assist in assuring that the project doesn't impact work they have in progress at the Charles Cone Farmstead archaeological site. I think that it would be helpful to add basic site location information on construction plans to alert current and future project engineers of the presence of known archaeological sites near this right-of-way. Based on the information provided in your correspondence and by local archaeologists, we concur with your finding that there will be no historic properties affected by the proposed project. No further coordination with this office is necessary for this project unless there is a change in the scope of work. In addition, if new or additional properties are discovered, this office should be notified [36 CFR 800.13].

Any questions concerning this matter should be addressed to David Snyder at (614) 298-2000, between the hours of 8 am. to 5 pm. Thank you for your cooperation.

Sincerely,

David Snyder

David Snyder, Archaeology Reviews Manager
Resource Protection and Review

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uch Van Arsdale
my Snyder
met Porter (record)
DMS/ds
ck Mc Cormack

Post-It® Fax Note 7871		Date 8/10/04	# of pages 1
To <i>Wayne Kuntz</i>	Co./Dept	From <i>Eric Woods</i>	Co.
Phone # <i>4640</i>		Phone # <i>7500</i>	
Fax # <i>4528</i>		Fax # <i>7540</i>	

Ed Snyder
Received
8/10/04
pm

Kumthekar, Uday

From: Vanarsdale, Chuck
Sent: Tuesday, September 28, 2004 2:41 PM
To: Kumthekar, Uday; McCormack, John; Neumann, Christopher
Cc: Greg Snyder (E-mail); Vanarsdale, Chuck
Subject: Texas Gas Transmission pipe

FYI

I contacted Clyde Childress of Texas Gas today (9/28) at 2:30pm. I explained that we would be accessing the ramps that were constructed by the Colerain Twp. contractor over the Texas Gas transmission pipeline. I told him we will have an excavator, dozer, and rolloff box truck traversing over the pipeline ramp. He was appreciative of the notification and had no problem with our efforts, as long as we used the ramps.

Chuck



GREATER CINCINNATI
WATER WORKS

A Service of The City of Cincinnati

**Greater Cincinnati
Water Works**
The Standard for Excellence

4747 Spring Grove Avenue
Cincinnati, Ohio 45232-1986
513-591-7890 Phone
513-591-7967 Fax

David E. Rager
Director

Paul E. Tomes
Chief Engineer

Customer Service
513-591-7700
513-591-7730 TDD

Emergency Service
513-591-7700
513-591-7905 TDD

August 31, 2004

Mr. Chuck Van Arsdale MS-64
Fluor Fernald
P.O. Box 538704
Cincinnati, Ohio 45253-8704

Subject: Storm Sewer Crossing @ Route 128

Mr. Van Arsdale:

Your plans for the above subject project have been reviewed by our office. The Cincinnati Water Works has water mains and appurtenances in the area. At this time, we do not foresee any conflicts with our existing facilities and your proposed work. However, the contractor must use caution when working in the area of our facilities. Proper protection and support must be exercised when our facilities are uncovered.

We request that Mr. Mark Niehe, Supervisor of Inspection, be contacted a minimum of two (2) business days prior to the start of work so that our water mains and appurtenances may be located in the field. He can be reached at 591-7870.

Please keep us updated as to the contract letting and construction scheduling. If you have any questions, please contact Ken Culpin at 591-7866, or myself at 591-7862.

Sincerely,

Russell A. Weber, P.E.

Russell A. Weber, P.E.
Supervising Engineer
Water Works Engineering

RAW: KLC

cc: Engineering File
W.W. Inspection

cc: Uday Kumbhakar
File
Equal Opportunity Employer