

# CONSTRUCTION CERTIFICATION REPORT WESTERN TRIBUTARY INTERIM MEASURE

GENERAL MOTORS POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Prepared for:
General Motors Corporation

DISCLAIMER:

SOME FORMATTING CHANGES MAY HAVE OCCURRED WHEN THE ORIGINAL DOCUMENT WAS PRINTED TO PDF; HOWEVER, THE ORIGINAL CONTENT REMAINS UNCHANGED.

NOVEMBER 2008 Ref. no. 013968 (223) Prepared by: Conestoga-Rovers & Associates

651 Colby Drive Waterloo, Ontario Canada N2V 1C2

Office: (519) 884-0510 Fax: (519) 884-0525

web: <a href="http://www.CRAworld.com">http://www.CRAworld.com</a>

#### TABLE OF CONTENTS

			<u>Page</u>	
1.0	INTRODUCTION			
1.0	1.1	GENERAL		
	1.2	PROJECT BACKGROUND		
	1.3	PRE-INTERIM MEASURE SITE DESCRIPTION		
	1.4	CLEANUP OBJECTIVES		
	1.5	PROPERTY ACCESS		
	1.6	REPORT ORGANIZATION		
2.0	SCOPE	OF WORK	6	
3.0		ESTIGATIVE/DELINEATION SAMPLING/		
	SITE CH	IARACTERIZATION ACTIVITIES	9	
4.0	INTERIM MEASURE ACTIVITIES		10	
	4.1	SITE PREPARATION	10	
	4.2	ENVIRONMENTAL CONTROLS	10	
	4.2.1	FUGITIVE DUST CONTROL	10	
	4.2.2	EROSION CONTROL	11	
	4.2.3	SURFACE WATER/STORMWATER CONTROL	11	
	4.3	SOIL EXCAVATION, VERIFICATION SAMPLING, AND		
		BACKFILLING/FINAL GRADING	12	
	4.3.1	PROPOSED EXCAVATION LIMITS	12	
	4.3.2	DISCRETE CHARACTERIZATION SAMPLING		
		DURING EXCAVATION	12	
	4.3.3	SOIL EXCAVATION	13	
	4.3.4	VERIFICATION SAMPLING	14	
	4.3.5	VERIFICATION SAMPLING DATA QUALITY SUMMARY	15	
	4.3.6	BEDROCK REMOVAL	16	
	4.3.7	BACKFILLING/FINAL GRADING	16	
	4.4	STOCKPILE SAMPLING/WASTE CHARACTERIZATION	17	
	4.5	TRANSPORTATION AND DISPOSAL OF WASTE	18	
	4.5.1	TRANSPORTERS AND DISPOSAL SITES	18	
	4.5.2	PREPARATION OF OFF-SITE TRANSPORT VEHICLES	19	
	4.5.3	MANIFESTING, LABELING, AND DOCUMENTATION	19	
	4.6	AIR QUALITY MONITORING	21	
	4.6.1	AIR MONITORING BACKGROUND		
	4.6.2	AIR MONITORING RESULTS	22	
	4.6.2.1	TSP	22	
	4.6.2.2	PCB	22	

#### TABLE OF CONTENTS

			<u>Page</u>
5.0	RESTO	RATION ACTIVITIESGRADING, MORPHOLOGY, AND FUNCTION	
	5.2		
6.0	SUMMARY		25
7.0	REFERENCES		26
8.0	CONSTRUCTION CERTIFICATION		27

# LIST OF FIGURES (Following Text)

FIGURE 1.1	SITE LOCATION
FIGURE 1.2	SITE PLAN
FIGURE 3.1.1	PARCEL 2 INVESTIGATIVE SAMPLE LOCATIONS
FIGURE 3.1.2	PARCEL 53 INVESTIGATIVE SAMPLE LOCATIONS
FIGURE 3.1.3	PARCEL 57 INVESTIGATIVE SAMPLE LOCATIONS
FIGURE 3.1.4	PARCEL 58 INVESTIGATIVE SAMPLE LOCATIONS
FIGURE 3.1.5	PARCELS 60/61 INVESTIGATIVE SAMPLE LOCATIONS
FIGURE 4.1.1	PARCEL 2 COMPLETED EXCAVATION TOPOGRAPHY
FIGURE 4.1.2	PARCEL 53 COMPLETED EXCAVATION TOPOGRAPHY
FIGURE 4.1.3	PARCEL 57 COMPLETED EXCAVATION TOPOGRAPHY
FIGURE 4.1.4	PARCELS 58/60 COMPLETED EXCAVATION TOPOGRAPHY
FIGURE 4.2.1	PARCEL 2 POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS
FIGURE 4.2.2	PARCEL 53 POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS
FIGURE 4.2.3	PARCEL 57 POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS
FIGURE 4.2.4	PARCELS 58/60 POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS
FIGURE 4.3.1	PARCEL 2 POST EXCAVATION VERIFICATION FINAL SAMPLE SUMMARY
FIGURE 4.3.2	PARCEL 53 POST EXCAVATION VERIFICATION FINAL SAMPLE SUMMARY
FIGURE 4.3.3	PARCEL 57 POST EXCAVATION VERIFICATION FINAL SAMPLE SUMMARY
FIGURE 4.3.4	PARCELS 58/60 POST EXCAVATION VERIFICATION FINAL SAMPLE SUMMARY

# LIST OF FIGURES (Following Text)

FIGURE 4.4.1	PARCEL 2 COMPLETED BACKFILL TOPOGRAPHY
FIGURE 4.4.2	PARCEL 53 COMPLETED BACKFILL TOPOGRAPHY
FIGURE 4.4.3	PARCEL 57 COMPLETED BACKFILL TOPOGRAPHY
FIGURE 4.4.4	PARCELS 58/60 COMPLETED BACKFILL TOPOGRAPHY
FIGURE 4.5	PERIMETER AIR MONITORING LOCATIONS
FIGURE 5.1.1	PARCEL 2 SITE RESTORATION
FIGURE 5.1.2	PARCEL 53 SITE RESTORATION
FIGURE 5.1.3	PARCEL 57 SITE RESTORATION
FIGURE 5.1.4	PARCELS 58/60 SITE RESTORATION

### LIST OF TABLES (Following Text)

TABLE 3.1	SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS
	3.1.1 PARCEL 2
	3.1.2 PARCEL 53
	3.1.3 PARCEL 57
	3.1.4 PARCEL 58
	3.1.5 PARCEL 60/61
TABLE 4.1	EXCAVATION SUMMARY
TABLE 4.2	VERIFICATION SAMPLING RESULTS AND DATA QUALITY SUMMARIES
TABLE 4.3.1	PARCEL 2 TSP AIR MONITORING ANALYTICAL RESULTS SUMMARY
TABLE 4.3.2	PARCEL 2 PCB AIR MONITORING ANALYTICAL RESULTS SUMMARY
TABLE 6.1	MASTER WESTERN TRIBUTARY PARCELS SUMMARY TABLE

#### LIST OF APPENDICES

APPENDIX A	PHOTOGRAPHIC LOG
APPENDIX B	LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTS (INVESTIGATIVE, STOCKPILE, AND VERIFICATION SAMPLES)
APPENDIX C	MATERIAL TRACKING C.1 MATERIAL TRACKING SPREADSHEET C.2 MATERIAL TRACKING MANIFEST FOR HERITAGE C.3 MATERIAL TRACKING MANIFEST FOR SRLF

#### LIST OF TERMS AND ACRONYMS

AAQMP Ambient Air Quality Monitoring Plan AOC Administrative Order on Consent

BOL Bill of Lading
CA Corrective Action

CCR Current Conditions Report

City City of Bedford

CRA Conestoga-Rovers & Associates Inc.

50-ft by 50-ft 50 foot by 50 foot

EPA Environmental Protection Agency
Facility GM Powertrain Bedford Facility
General Motors Corporation

≥50 mg/kg PCBs greater than or equal to 50 mg/kg PCBs

HASP Health and Safety Plan

Heritage Heritage Environmental Services LLC Facility
IDEM Indiana Department of Environmental Management

IM Interim Measure

<50 mg/kg PCBs less than 50 mg/kg PCBs mg/kg Milligram per kilogram PCBs polychlorinated biphenyls QAPP Quality Assurance Project Plan

RA Removal Action

RCRA Resource Conservation and Recovery Act

Report Construction Certification Report SES Sevenson Environmental Services, Inc.

Site Parcels 2, 53, 57, 58, 60, and 61

SOW Scope of Work

SRLF Sycamore Ridge Landfill
TSCA Toxic Substances Control Act
U.S. Bulk U.S. Bulk Transport, Inc.
TSPs total suspended particulates

U.S. EPA United States Environmental Protection Agency U.S. DOT United States Department of Transportation

μg/m³ Microgram per meter cubed
Verification area 50-ft by 50-ft surveyed area/grid

Work Plan Western Tributary Parcels 2, 53, 57, 58, 60, and 61 - Interim Measure

Work Plan

#### 1.0 INTRODUCTION

#### 1.1 GENERAL

This document presents the Construction Certification Report (Report) for Parcels 2, 53, 57, 58, 60, and 61 (Site), which are located on the unnamed Western Tributary adjacent to the General Motors Corporation (GM) Powertrain Bedford Facility (Facility) in Bedford, Indiana. The work associated with the remediation of the Western Tributary was outlined in the United States Environmental Protection Agency (U.S. EPA) approved Western Tributary Interim Measure (IM) Work Plan (Work Plan) dated January 13, 2006. Parcel 53 was not part of the originally approved Work Plan but was included after additional investigative samples collected on the Parcel delineated an area above the residential cleanup objective which needed to be excavated. Parcel 58 was not part of the originally approved Work Plan, but was subsequently included as dictated by the excavation and verification sampling results on Parcel 60, and is contiguous to and east of Parcel 60.

Conestoga-Rovers & Associates Inc. (CRA) has prepared this Report on behalf of GM in accordance with the Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) activities being conducted under the Performance Based Agreement (effective March 20, 2001, as amended October 1, 2002 and February 28, 2007) between U.S. EPA and GM for the Facility. This Report documents the completion of the IM activities, in accordance with the Work Plan. The IM was implemented starting in February 2006 and completed in June 2007. The Work Plan implementation involved the sampling and analysis of soil; identification and characterization of material containing polychlorinated biphenyls (PCBs); excavation of impacted soil and bedrock; verification and waste characterization sampling and analysis; transportation and placement of the excavated material at appropriate U.S. EPA approved disposal facilities; backfilling of the excavations; and restoration of the Site. A photographic log of pre- and post-excavation Site conditions is presented in Appendix A.

The Site location is presented on Figure 1.1. A Site Plan for Parcels 2, 53, 57, 58, 60, and 61 is presented on Figure 1.2.

#### 1.2 PROJECT BACKGROUND

Activities in the Site IM included:

- excavating and removing soil containing PCBs exceeding the cleanup criteria, identified in the initial CA investigation;
- verifying through sampling that the cleanup criteria were met;
- disposing of the excavated material at appropriate U.S. EPA approved facilities; and
- restoring the remediated areas of the Western Tributary Parcels.

#### 1.3 PRE-INTERIM MEASURE SITE DESCRIPTION

The Site is located at the upper end of an unnamed tributary to Salt Creek, referred to here as the Western Tributary. The Western Tributary flows to the northwest from property located immediately west of the Facility (headwaters beginning on Parcel 2) and ultimately discharges to Salt Creek approximately 8,900 feet from the headwaters (Figure 1.2 presents the locations of the Parcels and the Western Tributary).

Parcel 2 is located along the western boundary of the Facility; bordered by a residential area to the west and south, bordered by the Facility to the east, and bordered by a trucking company (Parcel 1) to the north. Parcel 2 is owned by GM. The property includes a church and a residence, which are currently in use.

Parcel 53 is located approximately 480 feet west of the western boundary of the Facility, and bordered by M Street to the east, 1st Street to the south, and residential properties to the west and north. The property is owned by the City of Bedford (City) and houses a water treatment facility that is no longer in use. Remediation of Parcel 53 was not originally part of the Western Tributary IM. Additional investigative samples collected in February and March of 2007 indicated an area in excess of the residential cleanup criteria requiring excavation. Although the property is not currently utilized for residential purposes, GM applied the residential cleanup standard to this Parcel. Access to the property for sampling and remediation was coordinated with the City to facilitate the cleanup.

Parcel 57 is located approximately 800 feet west of the western boundary of the Facility. Parcel 57 is a residential property and is bordered by residential properties to the north and south. Parcel 57 is bordered to the east by 'N' Street, and to the west by Parcel 58.

Parcel 58 is located approximately 1,200 feet west of the western boundary of the Facility. Parcel 58 is a residential property bordered to the west by Parcel 60, to the east by Parcel 57 and residential properties, and to the north and south by residential properties. Parcel 59 is located within the Parcel 58 boundary and houses a municipal sanitary sewer lift station. Remediation of Parcel 58 was not originally part of the Western Tributary IM. However, verification sampling during the excavation of Parcel 60 identified the need to progress the excavation onto Parcel 58 in order to remove impacted soils and sediment above the cleanup objectives.

Parcels 60 and 61 are located approximately 2,000 feet west of the western boundary of the Facility. Parcels 60 and 61 are residential properties and are bordered by Parcel 58 to the east, by Parcel 62 and a residential area to the north, by residential area to the west, and by an open field to the south.

The Western Tributary begins at Parcel 2 as a shallow ditch/swale and develops into a more defined ravine as it progresses through adjacent properties to the northwest, including Parcels 53, 57, 58, 60, and 61. Flow in the Western Tributary is heavily influenced from surface water during storm events. The flow is therefore highly variable and intermittent in nature, particularly at the upper end of the tributary.

#### 1.4 CLEANUP OBJECTIVES

The cleanup criteria selected for the Western Tributary Parcels were 1.8 milligrams per kilogram (mg/kg) for stream bank material and 1.0 mg/kg for creek sediments. These criteria were selected based on the U.S. EPA-approved Administrative Order on Consent (AOC) for the Bailey's Branch and Pleasant Run Creek Removal Action (RA) and developed for unrestricted use on residential properties. Both criteria are considered conservative in their application in this IM based upon the actual conditions of the Site. Based on discussions with U.S. EPA, stream bank material has been defined as the material located horizontally to a distance 2 feet from the edge of the stream channel, and vertically down to the top elevation of the streambed following sediment removal.

#### 1.5 PROPERTY ACCESS

Prior to implementing the IM for the Western Tributary Parcels, access was obtained from the owners of Parcels 57, 60, and 61 for the IM implementation. Parcel 2 was owned by GM prior to the initiation of IM activities. Access was obtained from the owners of Parcels 53 and 58 when it was determined that access to the parcels would be necessary to complete excavations.

Communication with the Parcel owners prior to implementation of the IM on their property included:

- review of work activities to be completed, including identification of anticipated work areas;
- review of trees/significant vegetation which required clearing to complete the IM.
  Those trees required to be cleared were marked in the field and reviewed with the
  owner prior to clearing, however, some additional vegetation was cleared as the
  actual cleanup progressed;
- review of restoration activities;
- follow-up visits during re-establishment of vegetation, to address outstanding issues and make repairs, as necessary; and
- following completion of the IM, miscellaneous additional activities, including periodic monitoring of re-established vegetation and stream stabilization progress.

#### 1.6 REPORT ORGANIZATION

This Report is organized in the following sections:

- i) Section 1.0 presents the Site location and background, pre-Interim Measure Site description, cleanup objectives, property access, and organization of the Report;
- ii) Section 2.0 presents a summary of the Scope of Work (SOW) for the IM implementation;
- iii) Section 3.0 presents a summary of investigative/delineation sampling and Site characterization activities;
- iv) Section 4.0 presents the IM activities implemented during the work including Site preparation; environmental controls including fugitive dust, erosion, and stormwater; soil excavation, verification sampling, backfilling, and final grading;

- stockpile sampling and waste characterization; transportation and disposal of waste; and ambient air quality information and data;
- v) Section 5.0 provides details of the restoration activities conducted;
- vi) Section 6.0 provides a summary of IM activities for each of the Western Tributary Parcels;
- vii) Section 7.0 presents references cited in this Report; and
- viii) Section 8.0 provides certification of the Work Plan completion.

#### 2.0 SCOPE OF WORK

This section provides a summary of the IM activities that were conducted at the Site. CRA provided construction oversight on behalf of GM during the implementation of the IM, including collection and management of related data, and development and preparation of this Report. CRA provided overall project management and coordination between GM, the selected environmental contractor (Sevenson Environmental Services, Inc., (SES)), the Facility, property owners, U.S. EPA, and the Indiana Department of Environmental Management (IDEM).

The IM field activities were initiated following review and approval of the Work Plan by U.S. EPA, and in coordination with IDEM, following the procurement of any necessary permits, access agreements, and contractors. These activities included:

- utility locates;
- mobilization of construction and waste disposal facilities, material, equipment, and personnel necessary to perform the work;
- provision and maintenance of construction facilities and temporary controls;
- Site preparation including:
  - emergency first aid facility,
  - fire suppression equipment,
  - construction of decontamination facilities,
  - break facilities,
  - the provision of temporary utilities,
  - construction of access roads,
  - temporary staging areas for removed material,
  - clearing and grubbing of existing vegetation (as required),
  - work zone identification (construction and silt fences), and
  - construction of temporary staging facilities at the Facility;
- implementation of environmental controls;
- implementation of a Site-specific Health and Safety Plan (HASP);
- diversion of creek (sequential in work zones);
- implementation of stormwater controls (berms);

- soil excavation, handling, and backfilling including:
  - layout of initial excavation limits of areas of PCB concentrations greater than 1.8 mg/kg,
  - excavation of soil to achieve 1.8 mg/kg PCBs,
  - layout of verification sampling grids,
  - collection of soil characterization and verification samples for PCBs,
  - additional excavation and sampling, as necessary, to meet the cleanup goals, and
  - backfilling/grading, and restoration of excavated and disturbed areas, as required, with appropriate material;
- removal and handling of sediment deposits in creek bed and stream bank material, to bedrock or 1 mg/kg PCBs, while creek is diverted;
- removal and handling of bedrock where sediment-filled fractures exceed the sediment criteria of 1 mg/kg PCBs;
- transportation of waste materials less than 50 (<50) mg/kg PCBs to the East Plant Area for use as fill material as part of the East Plant Area IM;
- transportation and disposal of waste materials greater than or equal to 50 (≥50) mg/kg PCBs to an approved disposal facility (Heritage Environmental Services LLC Facility located in Roachdale, Indiana (Heritage));
- removal of miscellaneous debris (e.g., tree stumps, vegetation), and staging and disposal at an approved off-Site facility (Sycamore Ridge Landfill in Terra Haute, Indiana (SRLF));
- fugitive air emissions monitoring;
- ambient air quality monitoring;
- water management;
- stream monitoring;
- IM closeout activities including:
  - cleanup/restoration of support areas,
  - restoration of excavation areas,
  - final decontamination of construction equipment and temporary facilities, and
  - management of waste waters; and
- demobilization of temporary facilities and equipment from the Site.

Sampling and analytical procedures utilized during implementation of this IM were consistent with the existing Quality Assurance Project Plan (QAPP) (CRA November 5, 2001, with modifications December 12, 2004, and July 25, 2006) for the Facility as approved by U.S. EPA.

Wherever possible, resources already in place for the East Plant Area IM or the Creek RA (e.g., trailers, support zones, etc.) were used in conjunction with the Western Tributary IM.

#### 3.0 RFI INVESTIGATIVE/DELINEATION SAMPLING/ SITE CHARACTERIZATION ACTIVITIES

Prior to the initiation of excavation activities investigative/delineation surficial soil and sediment sampling was completed within the floodplain and creek areas of the Western Tributary Parcels under the CA. Figures 3.1.1, 3.1.2, 3.1.3, 3.1.4, and 3.1.5 identify the location of investigative samples collected for each of the Parcels. PCBs were identified at varying concentrations at select locations within the creek and floodplain area of the Parcels. The results of this initial delineation sampling were compared to the cleanup objectives and utilized to develop the proposed initial excavation limits included in the Western Tributary IM Work Plan.

Generally, PCB concentrations were present in locations near the creek and concentrations generally decreased as the distance from the Plant and creek increased. As well, PCB concentrations generally decreased as elevation above the creek increased. A summary of investigative sample results for each of the Western Tributary Parcels is presented in Tables 3.1.1, 3.1.2, 3.1.3, 3.1.4, and 3.1.5. No results greater than or equal to 50 mg/kg PCBs (≥50 mg/kg PCBs) were detected during the initial investigative/delineation sampling.

All delineation sampling, sample analysis, and data validation were completed in accordance with the U.S. EPA approved Work Plans and QAPP.

#### 4.0 INTERIM MEASURE ACTIVITIES

This section presents activities implemented as part of the Western Tributary IM.

#### 4.1 <u>SITE PREPARATION</u>

Site preparation activities were completed for each work area following the receipt of all necessary property access agreements and prior to initiating intrusive work activities. These activities are discussed in detail in Section 4.0 of the U.S. EPA approved Work Plan. Wherever possible, resources in place for the East Plant Area IM and Creek RA were used in conjunction with the Western Tributary IM.

#### 4.2 ENVIRONMENTAL CONTROLS

Prior to the initiation of intrusive activities, environmental controls were put in place to control the migration of potentially impacted dust, sediments, or surface water from leaving the work areas. These controls are described in the following subsections.

#### 4.2.1 FUGITIVE DUST CONTROL

For the duration of the IM, the contractor was responsible for the control of fugitive particulates generated by excavation, transportation, and backfilling of soil. These control measures included the following:

- maintaining fugitive air emissions control measures to prevent the generation of fugitive air emissions;
- covering work areas with interim plastic sheeting at the end of each work day until sample results met cleanup criteria;
- covering excavation areas with plastic sheeting until restoration activities began;
- maintaining covers over material stockpiles and temporary storage containers (roll-off boxes);
- inspecting vehicles leaving work areas, and decontaminating as necessary;
- sweeping and wetting of paved portions of the transportation routes;
- using appropriate covers on trucks hauling and importing material;
- seeding and erosion control (straw) placement in restored areas; and

• monitoring air at the work perimeter for total suspended particulates (TSPs) and PCBs, and making adjustments to the work practices described above, as required. A summary of the air monitoring results is presented in Section 4.6 of this Report.

#### 4.2.2 EROSION CONTROL

Due to the size of the work area at Parcels 2 (approximately 0.11 acres), 53 (approximately 0.003 acres), 57 (approximately 0.01 acres), and 58/60 (approximately 0.02 acres), the work under this IM was exempt from Rule 5 of the erosion protection permit requirements (minimum 1 acre disturbed area). However, the contractor utilized construction methods that minimized the amount of exposed soil within the excavation area, to the extent practical. In areas where slopes exceeded a 5-percent grade, the contractor employed siltation fences, straw bales, or clay dams, to prevent erosion and migration of silt, mud, sediment, and other debris from the work areas.

Silt fences, clay dams and/or straw bales were placed in ditches and along perimeter areas (including those adjacent to the unnamed Western Tributary) to prevent sediments from migrating off of the Site.

#### 4.2.3 SURFACE WATER/STORMWATER CONTROL

Surface water and stormwater controls, including clay dams and bypass pumps and piping to control run-on from upland areas and upstream portions of the creek were constructed prior to initiating excavation, and modified or relocated, as appropriate, during the work to redirect stormwater and creek water. Implementation of surface water and stormwater controls prior to and during excavation activities controlled the potential for off-Site releases and minimized the amount of stormwater contacting potentially contaminated material. Stormwater that contacted an open excavation area or excavated material was considered impacted water, and as such was collected for treatment. The water was contained, collected into frac tanks, and transported to SES's water treatment facility on Parcel 216 for treatment and eventual discharge.

### 4.3 SOIL EXCAVATION, VERIFICATION SAMPLING, AND BACKFILLING/FINAL GRADING

#### 4.3.1 PROPOSED EXCAVATION LIMITS

The layout of the initial excavation limits were established prior to initiation of removal activities, based on CA investigative samples. The preliminary limits were surveyed on the Western Tributary Parcels using markers (e.g., stakes, survey paint, and survey flags) prior to excavation activities.

Figures 3.1.1, 3.1.2, 3.1.3, 3.1.4, and 3.1.5 present the proposed limits of excavation that were based on the initial delineation sample results.

### 4.3.2 DISCRETE CHARACTERIZATION SAMPLING DURING EXCAVATION

In addition to the initial delineation sampling, during the soil excavation phase grab characterization sampling was conducted at discreet locations to characterize the existing levels of PCBs to guide the excavation activities. Samples collected for characterization purposes were analyzed for PCBs and compared against the applicable cleanup criterion.

The procedure for characterization sampling involved the following steps:

- i) Inspections were conducted of soils present near the extent of the excavated area. These soils may have included creek bank soils, residual soils remaining along areas of exposed bedrock, or soils within bedrock fractures not specifically sampled as part of the grid system employed by the verification sampling program. Where appropriate, additional characterization samples were collected in areas where the potential for additional PCB impact was suggested by visual evidence, or by a review of existing characterization data and Site conditions. Characterization samples collected were discrete grab samples.
- ii) Areas excavated to bedrock were cleaned with a power-washer to remove residual soil or sediments from the rock surfaces. The water was contained, collected into frac tanks, and transported to SES's water treatment facility on Parcel 216. The surface was then inspected for cracks containing oily sediments or residue. Where necessary, additional characterization samples of material in

12

identified fractures were collected to determine if removal of bedrock, to eliminate the fracture and the impacted material, was necessary.

All characterization sample analysis and data validation were completed in accordance with the U.S. EPA approved QAPP.

#### 4.3.3 SOIL EXCAVATION

The scheduling of excavation activities was coordinated so that activities were completed promptly following Site preparation and implementation of stormwater controls.

The contractor performed excavation activities in accordance with the following:

- i) Excavation work was conducted along creek segments approximately 100 feet (or less as dictated by the Work Plan) in length.
- ii) Excavations were performed after surface water had been diverted around work areas.
- iii) Tasks were conducted in an orderly and safe manner such that the movement and double handling of materials was minimized.
- iv) In areas previously delineated as less than 50 mg/kg PCBs (<50 mg/kg PCBs) soils/sediments were excavated, stockpiled, and resampled in accordance with the stockpiling methods outlined in Section 4.4 and as detailed in the May 10, 2005 letter to U.S. EPA. Once the stockpile sampling confirmed that composite samples from these soils were <50 mg/kg PCBs the soil was transported to the East Plant Area.
- v) One characterization sample (see Section 4.3.2) collected from in-situ soils adjacent to the initial excavation on Parcel 53 had a detection of ≥50 mg/kg PCBs. The sample location and surrounding 5 foot area were excavated to an approximate 6 foot depth and placed directly into a truck for transportation and disposal at Heritage. No other ≥50 mg/kg PCBs soils were encountered or removed from any other Western Tributary Parcel as part of the Work Plan implementation.
- vi) To the extent possible, excavation proceeded from upstream to downstream and, where possible, proceeded from high ground to lower areas, to prevent stormwater runoff being directed from an impacted area to a remediated area.

- vii) Excavation areas were graded to direct stormwater runoff away from excavations.
- viii) Measures necessary for dust emission control from excavation, soil handling, and transportation activities were carried out.
- ix) In-creek sediment removal was coordinated with soil removal.

The final limits of soil excavation for each of the Western Tributary Parcels were established based on the verification of the removal of soil containing PCBs above the cleanup criteria. The completed excavation topography for each Western Tributary Parcel is presented in Figures 4.1.1, 4.1.2, 4.1.3, and 4.1.4. The estimated volume of material excavated for each of the Western Tributary Parcels is presented in Table 4.1. These volumes were calculated using Autodesk LandDesktop® by comparing the pre-excavation survey to the post-excavation survey.

Excavation conducted on Parcel 58 was a result of the extension of excavation activities to the east from Parcel 60. The planned excavation on Parcel 60 was extended approximately 50 feet into Parcel 58 based on verification sampling results.

#### 4.3.4 <u>VERIFICATION SAMPLING</u>

Throughout the soil excavation phase, verification sampling was conducted to evaluate the limits of the excavation and to confirm cleanup goals were met. After the initial removal limits were excavated and removed, verification samples were collected along the excavation floor and sidewalls. If the results indicated the cleanup criteria were not met, additional excavation was conducted. Soil samples collected from the Western Tributary Parcels outside of the stream channel were analyzed for PCBs to determine if the applicable cleanup criterion for PCBs of 1.8 mg/kg had been achieved. An expedited turnaround time for PCB analysis was utilized for verification sample analyses to minimize the time that the excavated area was required to remain open.

The procedure for verification sampling of floodplain soil within the Parcels involved the following steps:

i) Each impacted section of creek was enclosed in an approximate 50 foot by 50 foot (50-ft by 50-ft) surveyed area/grid (verification area). The areas were centered and aligned parallel to the creek where possible. The approximately 50-ft by

- 50-ft grids were adjusted in size or grouped together to meet the geometry of the creek or the contaminated area.
- ii) In each 50-ft by 50-ft verification area, soil was excavated where existing Site characterization data identified PCBs at concentrations exceeding 1.8 mg/kg. Post-excavation verification samples consisted of a 5-point composite sample collected from the top 4 inches of the excavated surface in each 50-ft by 50-ft grid. Grids excavated entirely to bedrock were considered to have zero residual PCBs (see Section 4.3.5).
- iii) For areas where the depth of the outermost sidewall of the excavation was greater than six inches, composite soil samples were collected from the sidewalls for every 25 linear foot section of wall as a 5-point composite sample with sample aliquots collected approximately every ten linear feet of sidewall. In each 50-ft by 50-ft grid, composite sample analyses were reviewed to ensure that no composite result exceeded 1.8 mg/kg PCBs. If any of the results exceeded this limit, additional excavation was performed in the corresponding grid.
- iv) When no composite sample exceeded 1.8 mg/kg, then the 50-ft by 50-ft area was deemed to have met the cleanup criterion and no further excavation was necessary.
- v) Sediment and creek centerline samples were evaluated in the manner described above against the criterion of 1.0 mg/kg PCBs.

Post excavation verification sample summary results for the Western Tributary Parcels are presented on Figures 4.2.1, 4.2.2, 4.2.3, and 4.2.4. Sample results are also presented in Table 4.2. Final round sample summaries of Western Tributary Parcels verification sampling are presented on Figures 4.3.1, 4.3.2, 4.3.3, and 4.3.4. Laboratory analytical reports and chain of custody documents are presented in Appendix B.

#### 4.3.5 <u>VERIFICATION SAMPLING DATA QUALITY SUMMARY</u>

A total of 279 samples were collected for verification purposes, which included 36 field duplicate sample sets. The rate of field duplicate collection met the 10% minimum requirement outlined in the approved QAPP. Based on data quality assessment and validation there were a few minor issues associated with the verification samples presented in the Work Plan. Data quality issues observed included the following:

• Seven (7) samples plus one duplicate sample were qualified as estimated values due to a violation of the laboratory control sample (LCS)/laboratory control sample

duplicate (LCSD) relative percent difference (RPD) between the LCS and LCSD. The percent recoveries determined were 103% and 73% for the LCS and LCSD, respectively, both within the control limits of 46 to 130%. The RPD was reported as 34% which is outside of the RPD control limit of 30%; and

• Of 36 duplicate sample sets collected, two (2) sample sets were in violation of the field duplicate precision requirements and were qualified as estimated (J) values.

The data quality objectives (DQO) in terms of precision, accuracy, representativeness, completeness, and comparability (PARCC) were met during the verification sampling event. There were no major data quality issues encountered and the minor issues observed did not impact data quantitative usability. No further analysis or sampling is required beyond this discussion. Table 4.2 presents the verification sampling results and data quality outliers.

#### 4.3.6 BEDROCK REMOVAL

Areas of the stream where excavations proceeded down to bedrock were cleaned with a high-pressure washer to remove additional sediment/soil and oily residues not accessible with a hydraulic excavator. Wash water was contained and sent to Sevenson's water treatment plant prior to discharge.

The cleaned bedrock was then left exposed a couple of days to allow the bedrock to dry. After this time period, the bedrock was reinspected for bedrock fractures containing sediment and to determine whether oily residues were present. Sediment and residue in fractures were sampled consistent with the characterization sampling procedures outlined in Section 4.3.3 to determine if the material was above the criterion.

Bedrock with fractures containing material above the cleanup objective was physically removed to competent bedrock. Sediment sampled within the bedrock fractures were <50 mg/kg PCBs and the sediment and bedrock was stockpiled and sampled in accordance with the stockpile sampling plan. The bedrock face was then cleaned again with a high-pressure washer and inspected. The process was repeated until the surface passed the inspection.

#### 4.3.7 BACKFILLING/FINAL GRADING

Once an excavation area was determined to meet the cleanup goal, the excavation was backfilled as soon as practical. Excavations were backfilled with clean fill from off-Site sources approved by U.S. EPA. Fill sources were characterized prior to importation to ensure they were acceptable, based on chemical analysis. Only material that met the chemical and quality assurance requirements of the project QAPP were allowed to be used as backfill. The area was then covered with clean topsoil, seed, and straw consistent with the restoration plans.

Following backfilling and seeding, straw was placed as an erosion control for the areas completed. Seeding utilizing native vegetative species was conducted during the appropriate season (to promote/allow growth). The estimated volume (tons) of soil backfilled for each Western Tributary Parcel is presented in Table 4.1. These volumes were calculated using Autodesk LandDesktop®. The as-recorded drawing for each work area is presented on Figures 4.4.1, 4.4.2, 4.4.3, and 4.4.4.

#### 4.4 STOCKPILE SAMPLING/WASTE CHARACTERIZATION

Waste soil from the excavation activities that exhibited <50 mg/kg PCB concentrations was stockpiled, characterized and placed in the East Plant Area for use as grading fill. Based on laboratory analytical results, all soil excavated during implementation of the Western Tributary IM was determined to be <50 mg/kg PCBs, with the exception of a single characterization sample collected on Parcel 53. The >50 mg/kg sample from Parcel 53, along with the surrounding soil, was excavated and placed directly into a truck for transportation and disposal at Heritage.

Excavated material was sampled in accordance with the stockpile sampling plan as modified in the May 10, 2005 letter to U.S.EPA. The general procedure for characterization of stockpiled/staged soil involved the following steps:

- i) If all the delineation samples within the Parcel had PCB concentrations of <50 mg/kg then the soil generated from the excavation areas was transported to a staging pad within the East Plant Area designed to meet Toxic Substances Control Act (TSCA) requirements or placed into a container (lined roll-off box);
- ii) Each stockpile consisted of a maximum of 500 tons (approximately 27 truck loads). A minimum of one sample was composited for areas previously delineated as 5 to 10 mg/kg PCBs; two samples were composited for areas

- delineated as 10 to 25 mg/kg PCBs; and 3 samples were composited for areas delineated as 25 to <50 mg/kg PCBs. No samples were collected in areas delineated as <5 mg/kg PCBs;
- iii) Where space was restricted excavated material was containerized in drums or 30 cubic yard roll-off boxes;
- iv) If multiple stockpiles were staged, then each stockpile would remain segregated to prevent mixing of the soil. No additional soil was added after sampling was completed; and
- v) Soil was staged until sample results confirmed the material was <50 mg/kg PCBs, whereupon it was transferred to an approved fill area within the East Plant Area.

#### 4.5 TRANSPORTATION AND DISPOSAL OF WASTE

Soils/sediment with concentrations <50 mg/kg PCBs were directly loaded into drums, roll-off boxes, or trucks and transported to the East Plant Area for staging, stockpile sampling, and placement. Soil from a characterization sample location on Parcel 53 that exhibited a PCB concentration ≥50 mg/kg, along with the surrounding soil, was direct loaded into a truck for transportation to Heritage. Tree stumps located within the excavation limits were excavated; segregated and stockpiled; and samples were collected from the soil on the tree stumps for waste characterization for disposal. The stumps were transported off-Site upon approval for disposal to the SRLF.

#### 4.5.1 TRANSPORTERS AND DISPOSAL SITES

All materials that had concentrations <50 mg/kg PCBs were transported using transporters licensed for general transportation of sanitary wastes. Soils removed from the Western Tributary Parcels with concentrations <50 mg/kg PCBs were transported using Hoosier Transport, Inc., and U.S. Bulk Transport, Inc. (U.S. Bulk) and placed in U.S. EPA approved fill areas within the East Plant Area for use as grading fill as part of the East Plant Area IM.

Tree stumps were stockpiled, sampled and transported off-to SRLF by Relco Trucking.

One truckload of ≥50 mg/kg PCBs soil was transported by U.S. Bulk. U.S. Bulk is licensed by U.S. EPA, U.S. Department of Transportation (U.S. DOT), and the State of

18

Indiana for the transport of soils with concentrations ≥50 mg/kg PCBs. The transporter operated in compliance with applicable State and federal hazardous waste transportation requirements (i.e., 40 CFR Part 263). Soils were disposed at Heritage which was approved by U.S. EPA and IDEM for disposal of ≥50 mg/kg PCBs soil from the cleanup at the Facility.

#### 4.5.2 PREPARATION OF OFF-SITE TRANSPORT VEHICLES

Each vehicle leaving the Site was decontaminated, and then inspected for exterior cleanliness, secured tarps, proper placarding, manifest/documentation, and to ensure there were no signs of material spillage from the vehicle and/or trailer. This information was recorded on a Truck Inspection Report for each vehicle.

During transportation activities over public roads, transportation was conducted in compliance with Federal, State, and local regulations concerning shipping materials, including the following:

- i) the number for each transport vehicle/container was displayed visibly;
- ii) the box of the transport vehicle/container was clean of loose debris or foreign material prior to loading;
- the box or container was lined with a minimum of one layer of 3-mil (one thousandths of an inch) polyethylene sheeting continuous along the bottom and sides. The liner was placed on the floor, extending up the sides, and draped over the sideboards. The liner was pushed into the corners to prevent tearing during loading and transport;
- iv) the materials were loaded in a manner which did not damage the polyethylene liner; and
- v) following loading, the liner was folded over the loaded materials prior to securing the load with an approved tarpaulin in a manner to prevent loss of materials or fugitive dust emissions.

CRA completed a Truck Inspection Report for each loaded vehicle leaving the Site. The Truck Inspection Report recorded information such as truck number, manifest number (if applicable), type and origin of waste soil, vehicle condition, and other pertinent information. Recent Truck Inspection Report forms are located in the CRA Field Trailer on-Facility. Forms have been sent to CRA's Waterloo, Ontario office for long-term filing.

19

#### 4.5.3 MANIFESTING, LABELING, AND DOCUMENTATION

All waste stump material <50 mg/kg PCBs designated for off-Site disposal was manifested prior to leaving the Site using a non-hazardous waste manifest specific to the SRLF. GM retained the Generator manifest copy, the Generator Bill of Lading (BOL) copy, the scale ticket copies, and the Truck Inspection Report. Upon disposal at the SRLF, the Return to Generator copies of the manifest and BOL, as well as the Certificate of Disposal, were sent to CRA for cross check (to insure the materials reached their destination) and filing. Copies were provided to GM.

All waste material with ≥50 mg/kg PCBs designated for off-Site disposal was manifested prior to leaving the Site. The manifest forms were consistent with 40 CFR Part 262 "Environmental Protection Agency (EPA) Hazardous Waste Generator Standards", 40 CFR Part 263 "EPA Hazardous Waste Transporter Standards", 40 CFR Part 268, "Land Disposal Restriction Standards", 40 CFR Part 761, "EPA Polychlorinated Biphenyls Rules", and the State of Indiana regulations. GM retained the Generator manifest copy, the BOL copy, the scale ticket copy, and the Truck Inspection Report. Upon disposal at Heritage, the Return to Generator copies of the manifest and BOL, as well as the Certificate of Disposal, were sent to CRA for cross check (to insure the materials reached their destination) and filing. Copies were provided to GM.

A customized version of CRA's Waste Manager software database program was used to track individual waste containers from generation through disposal. Specifically, the program tracks container start dates, container locations, container contents, regulatory storage/disposal timeframes, container labeling requirements, approved disposal locations, approved waste stream profiles, and shipping documentation, including generating manifests and tracking receipt of returned manifests.

For all loads of <50 mg/kg PCBs transported off-Site or to the East Plant Area, in addition to the tracking for off-Site disposal described above, CRA maintained two daily logs; a log book, and a daily spreadsheet, summarizing all materials transported from the Western Tributary Parcels to the SRLF or the East Plant Area. These logs recorded information such as total volume/weight of material transported, waste source, description, transporter, and date shipped.

The spreadsheet tracking material removed from the Western Tributary Parcels is included in Appendix C.1. Appendix C.2 contains the manifest and tracking materials for the ≥50 mg/kg PCB load transported for disposal at Heritage. Appendix C.3

contains the manifest and tracking materials for the stump materials transported for disposal at SRLF. The materials sent to the SRLF were a mix of primarily Parcel 22 stumps and a small portion of Western Tributary stump materials.

Analytical results for stockpile sampling can be found in Appendix B.

#### 4.6 AIR QUALITY MONITORING

#### 4.6.1 AIR MONITORING BACKGROUND

An air monitoring program at the perimeter of the Parcel 2 excavation was conducted to evaluate potential public exposure to fugitive air emissions. In order to verify that no unacceptable emissions occurred, air monitoring for the emission of PCBs and TSPs was conducted daily around the Parcel 2 perimeter during excavation activities at locations between excavation areas and the closest potential receptors. The perimeter air monitoring program was in addition to air monitoring for contractor health and safety, including personnel air monitoring conducted by the contractor as described in the Ambient Air Quality Monitoring Plan (AAQMP) (CRA, 2004) and amendments.

According to the AAQMP (CRA, 2004) as amended at the time of work completion, PCB and TSP monitoring was performed around the active work area on a 24-hour basis. The air-monitoring program yielded average concentrations in the ambient air for the selected compounds over each 24-hour period. Concentrations of PCBs and TSPs were determined by measuring the volume of air and amount of contaminant collected onto absorbent media, or filters, over a 24-hour period. Meteorological readings (i.e., temperature, humidity, and barometric pressure) were recorded daily from nearby weather stations to correct and reduce (for reporting) the measured data to ambient conditions.

PCB sampling was completed utilizing U.S. EPA Method TO-4A (U.S. EPA, January 1999). TSP sampling was completed using U.S. EPA's Reference Method for Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method) (40 CFR Part 50 Appendix B).

PCB and TSP samples were obtained from four sampling stations positioned around the active work areas. The locations for each air monitoring station (labeled as Group 11) are presented on Figure 4.5. Group 11 air monitoring stations were located at the

western border of Parcel 2, the southern end of the West Plant Area, and two stations were located on the East Plant Area northeast of Parcel 2.

Due to the limited size of the excavations, low initial delineation PCB sample concentrations (<10 mg/kg PCBs), prior Site experience, and the distance to residential receptors, no perimeter air monitoring was conducted for the IM activities on Parcels 53, 57, 58, and 60.

#### 4.6.2 AIR MONITORING RESULTS

#### 4.6.2.1 TSP

TSP results for air monitoring Group 11 related to Parcel 2 are presented in Table 4.3.1. TSP results were evaluated against the upwind concentration in each air-monitoring group. The Action Level for TSP (shown as 100% Allowable on the Table) is defined as 67-percent in excess of the upwind ambient air concentration based on IDEM, Title 326, Article 6, Rule 4 of the Indiana Administrative Code.

As presented in Table 4.3.1 no TSP exceedances were observed at air monitoring Stations 26 or 27, which were located adjacent to Parcel 2. On occasion exceedances were observed at air monitoring Station 1B, located at the northwest corner of the ZIPP Lot. We do not believe these observed exceedances were related to the IM activities on Parcel 2, but rather were related to dust generated by truck traffic within the unpaved ZIPP trucking parking lot.

#### 4.6.2.2 PCB

PCB results for Group 11 are presented in Table 4.3.2. PCB results for all four air-monitoring stations were well below the Stop Work Action Level of 1 microgram per meter cubed ( $\mu g/m^3$ ) for the duration of the work.

#### 5.0 RESTORATION ACTIVITIES

The objectives of the IM Restoration Activities were as follows:

- comply with Access Agreement requirements for non-GM owned Parcels;
- restore disturbed areas generally to the pre-existing geomorphology and function;
   and
- re-vegetate areas with native plant species, after review with the Parcel owner (private or GM-owned).

Restoration of vegetation and habitat occurred on two types of Parcels: privately-owned Parcels and GM-owned Parcels. Restoration of privately owned Parcels was based on Access Agreements signed by the individual Parcel owners and GM. Although the Access Agreements contain similar elements, each privately owned Parcel had some unique restoration requests/requirements. Figures 5.1.1, 5.1.2, 5.1.3, and 5.1.4 present the restoration features of the Western Tributary Parcels.

#### 5.1 GRADING, MORPHOLOGY, AND FUNCTION

Common fill and topsoil were used to grade areas where soil was removed. The top six inches of the backfill was topsoil. Creek substrate (12 inch minus rock mix) was placed in the Parcels 58/60 creek channel to return the excavated portion to generally similar pre-existing grades. The creek channel and affected upland slope areas were restored to a similar geomorphology using materials similar to those naturally present in the creek prior to the IM.

To prevent excessive erosion and to allow the creek banks to reach a naturally stable condition, planting was completed immediately after construction. The surface of the creek banks were overlain with straw after planting to provide initial erosion protection.

#### 5.2 <u>SITE RE-VEGETATION</u>

Two seed mixes (grass and slope forest) were used to stabilize and provide ground cover for the restored areas. The specific mix used was dependant on the hydrologic regime, past and future use of the area, and the slope of the restored area. A grass seed mix was used on Parcels 2, 53, 57, and 61. A slope forest seed mix was used on

Parcels 58 and 60 and was designed to provide natural ground cover that is generally similar to pre-excavation conditions.

24

#### 6.0 **SUMMARY**

A summary of the IM activities for each Parcel which identifies the total number of delineation and verification samples collected, quantity of soil excavated, and quantity of soil backfilled is presented in Table 6.1.

#### 7.0 <u>REFERENCES</u>

- CRA, Ambient Air Quality Monitoring Plan (AAQMP), November 2004.
- CRA, Current Conditions Report, May 25, 2001.
- CRA, Quality Assurance Project Plan (QAPP), November 5, 2001.
- CRA, Quality Assurance Project Plan (QAPP) Revision 1, December 12, 2004.
- CRA, Quality Assurance Project Plan (QAPP), Revision 2, July 25, 2006.
- CRA, Western Tributary Parcels 2, 57, 60, and 61 Interim Measures Work Plan, January 13, 2006.
- Indiana Department of Environmental Management, February 2001, Risk Integrated System of Closure Technical Resource Guidance Document.
- McGuigan, J. (CRA), Letter to Brad Stimple (U.S. EPA), May 10, 2005.
- U.S. EPA, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Compendium Method TO-4A Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using High Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/ Multi-Detector Detection (GC/MD), January 1999.

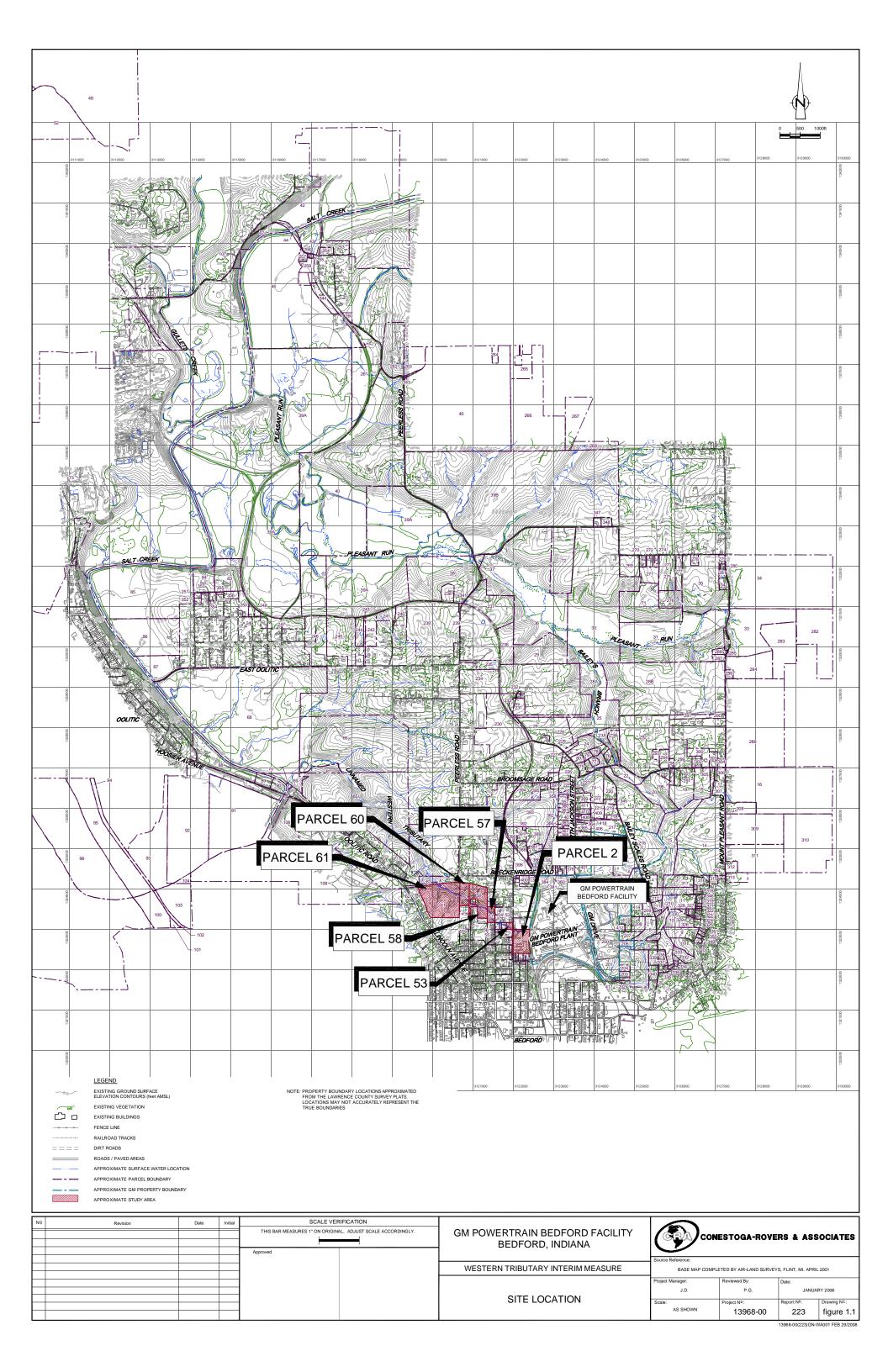
#### 8.0 CONSTRUCTION CERTIFICATION

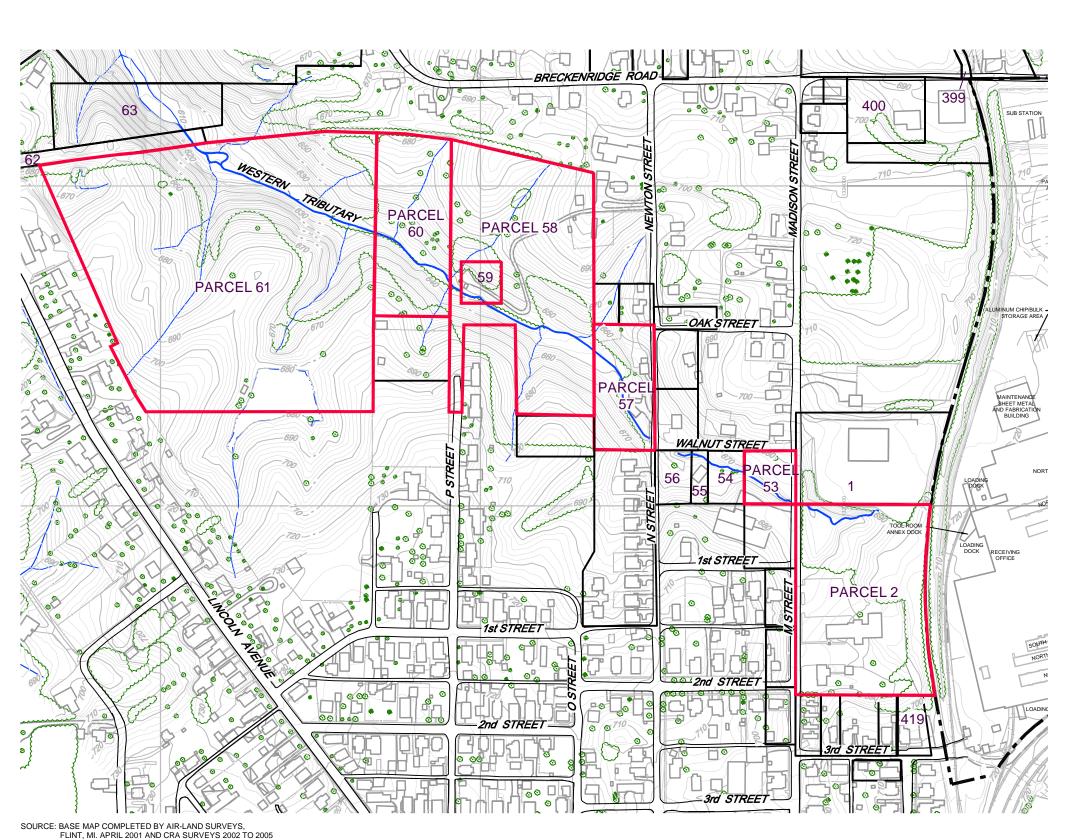
Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this Report, the information submitted is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

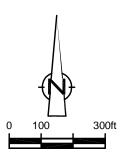
Respectfully Submitted,

James J. McGuigan, P.E.

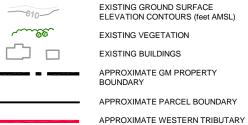
Glenn Turchan, M.A. Sc., P. Eng







#### **LEGEND**



INTERIM MEASURE PARCEL BOUNDARY

WESTERN TRIBUTRARY LOCATION

STREAMS

DIRT ROADS

FENCE LINE
RAILROAD TRACKS

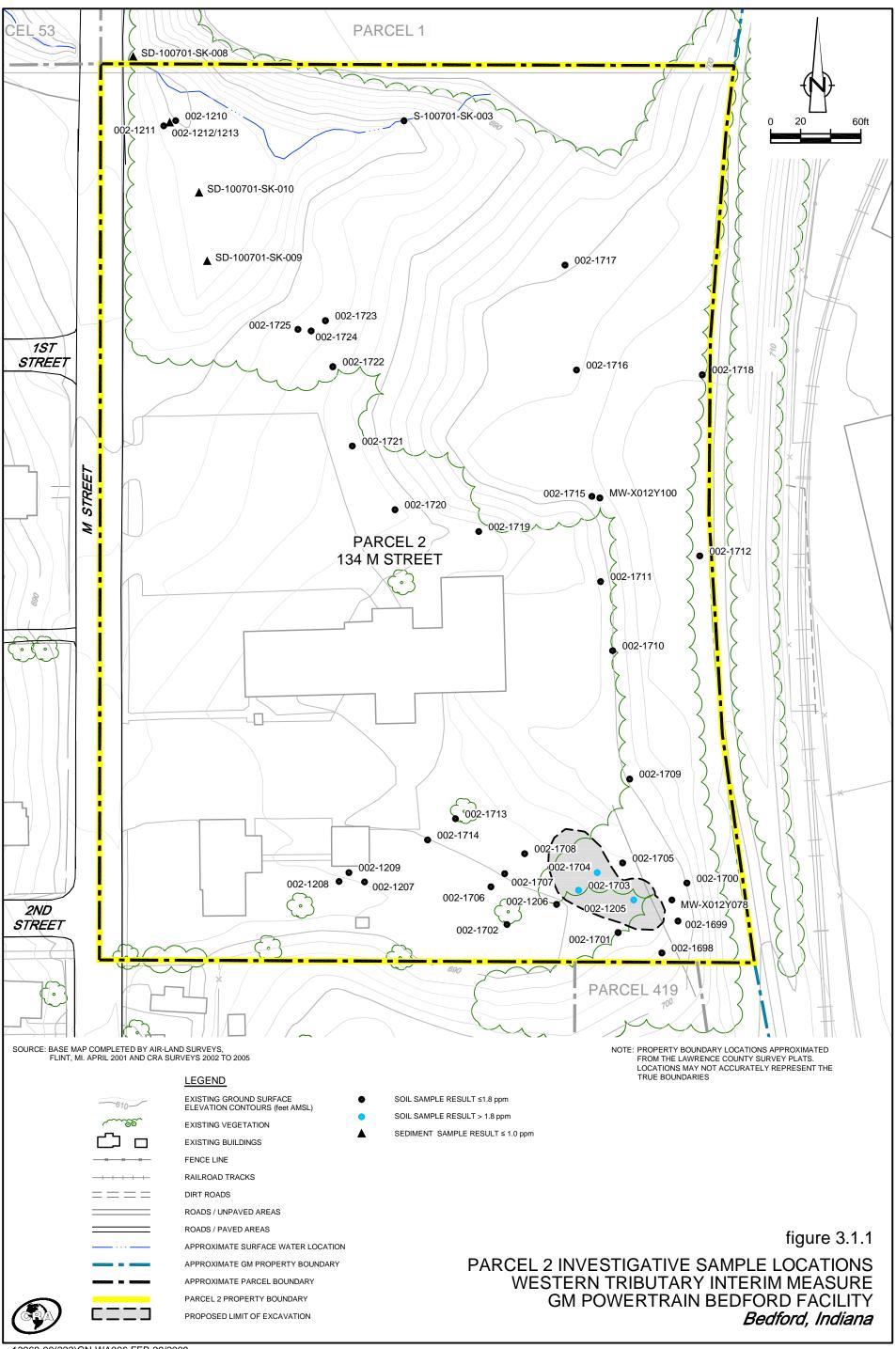
ROADS / PAVED AREAS

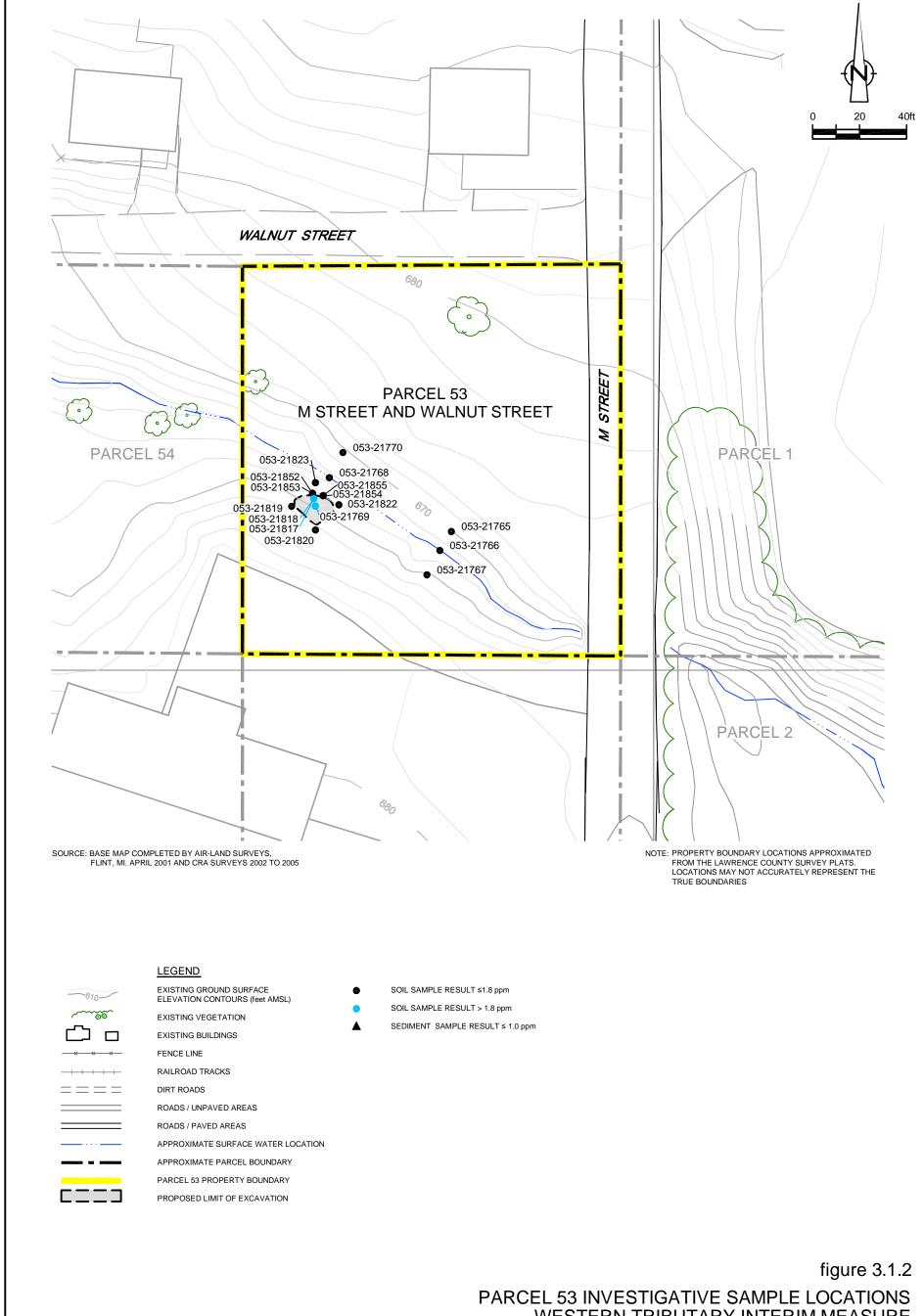
figure 1.2

SITE PLAN WESTERN TRIBUTARY INTERIM MEASURE GM POWERTRAIN BEDFORD FACILITY Bedford, Indiana



NOTE: PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS. LOCATIONS MAY NOT ACCURATELY REPRESENT THE TRUE BOUNDARIES

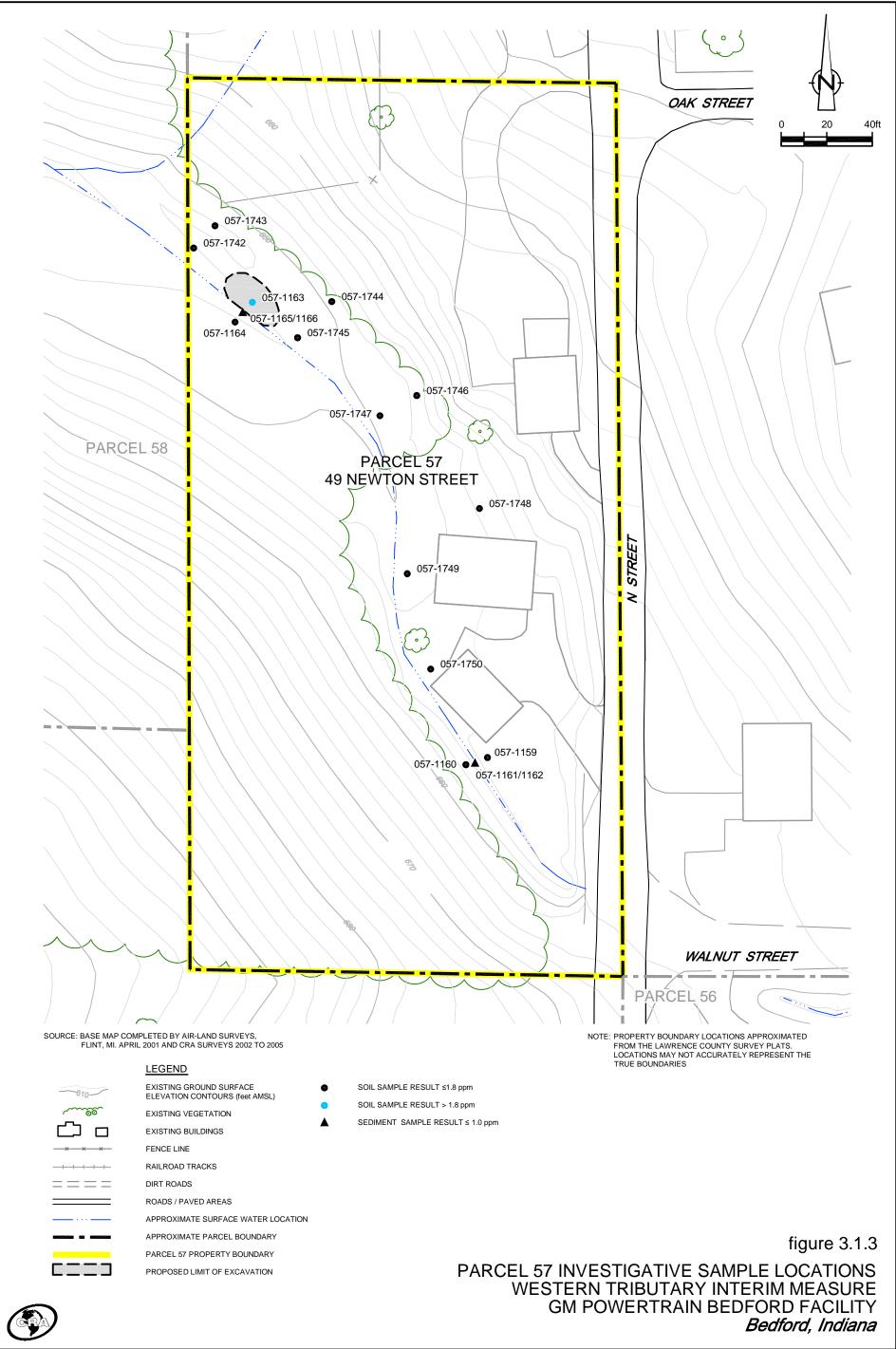


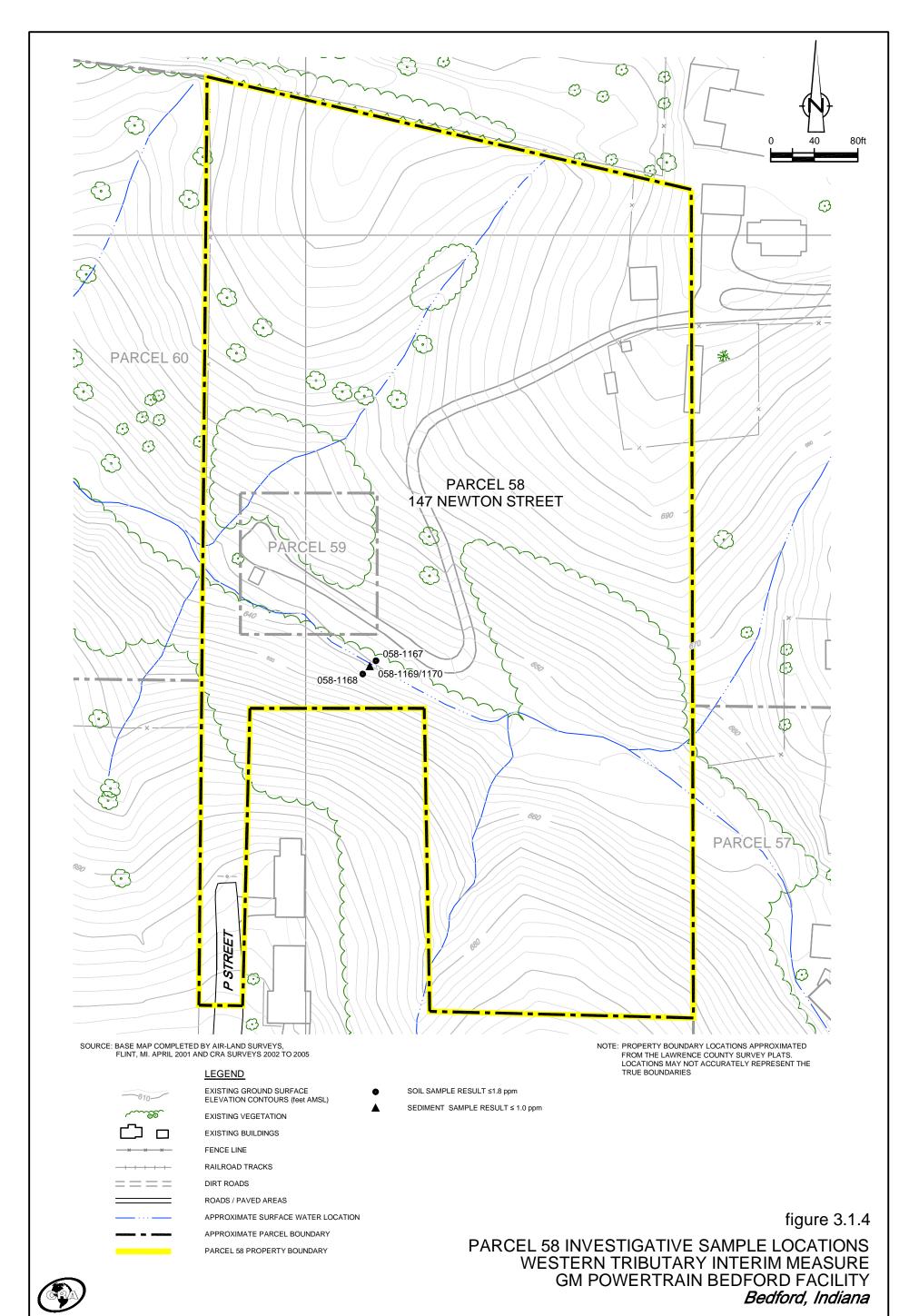


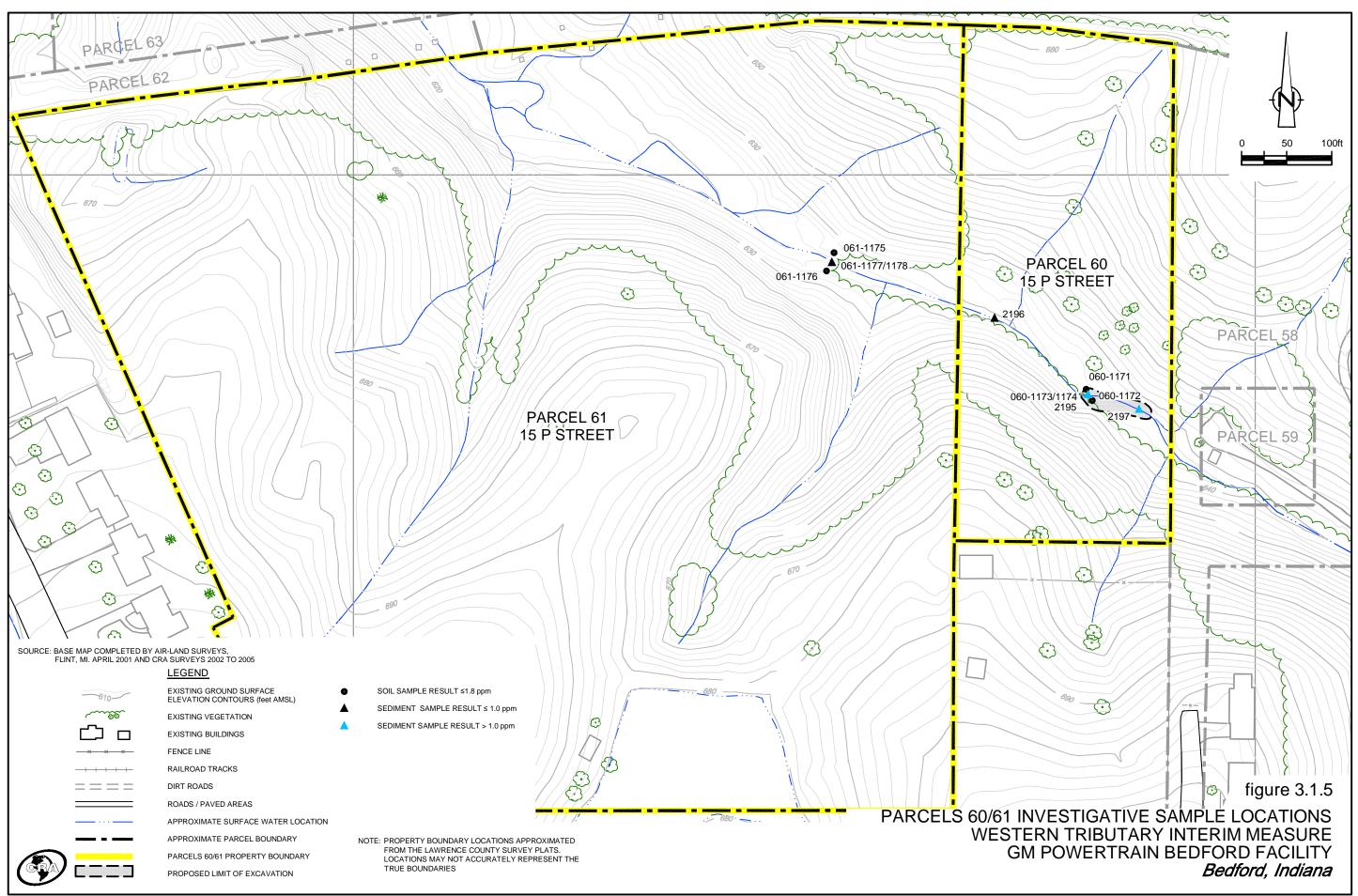


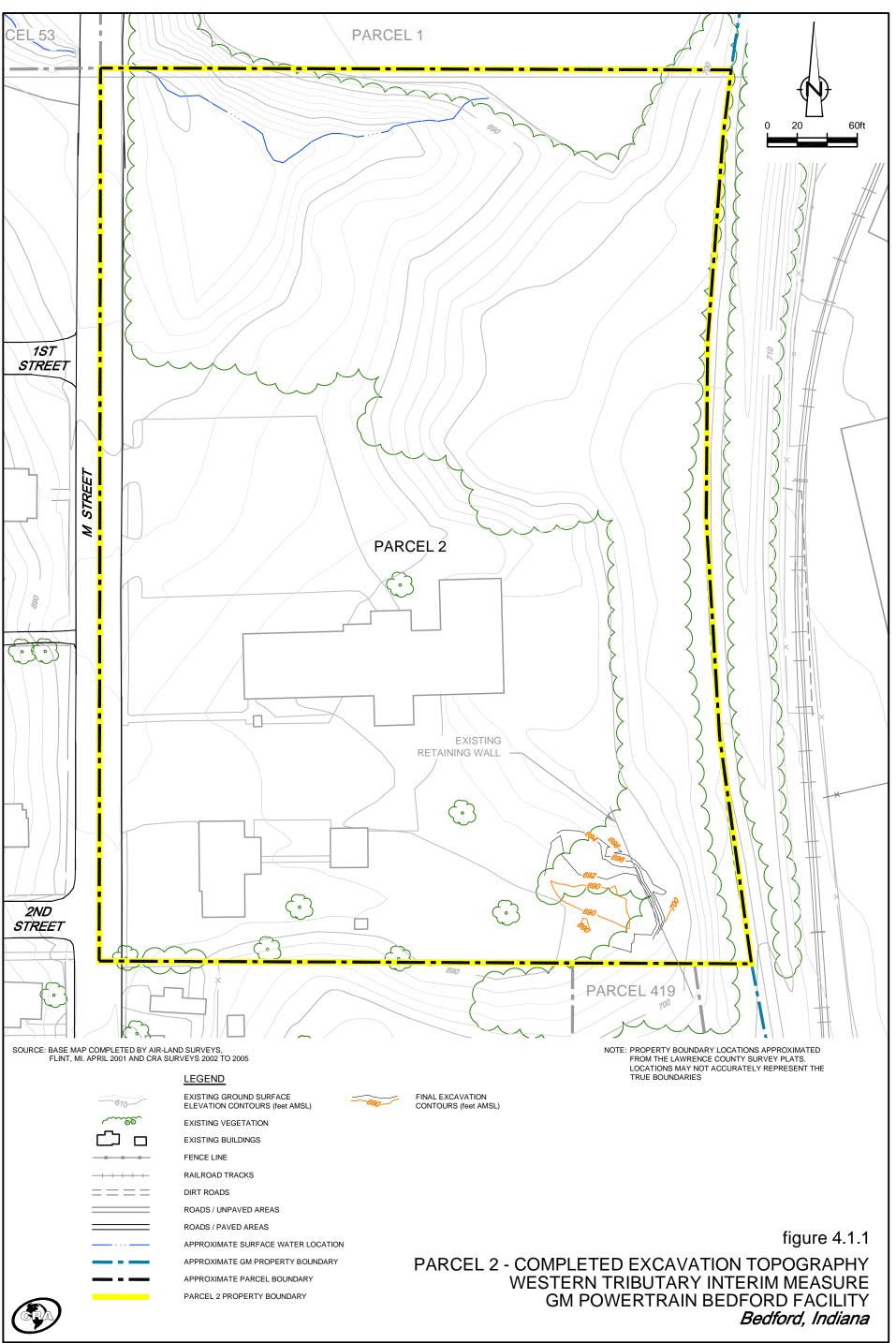
WESTERN TRIBUTARY INTERIM MEASURE **GM POWERTRAIN BEDFORD FACILITY** 

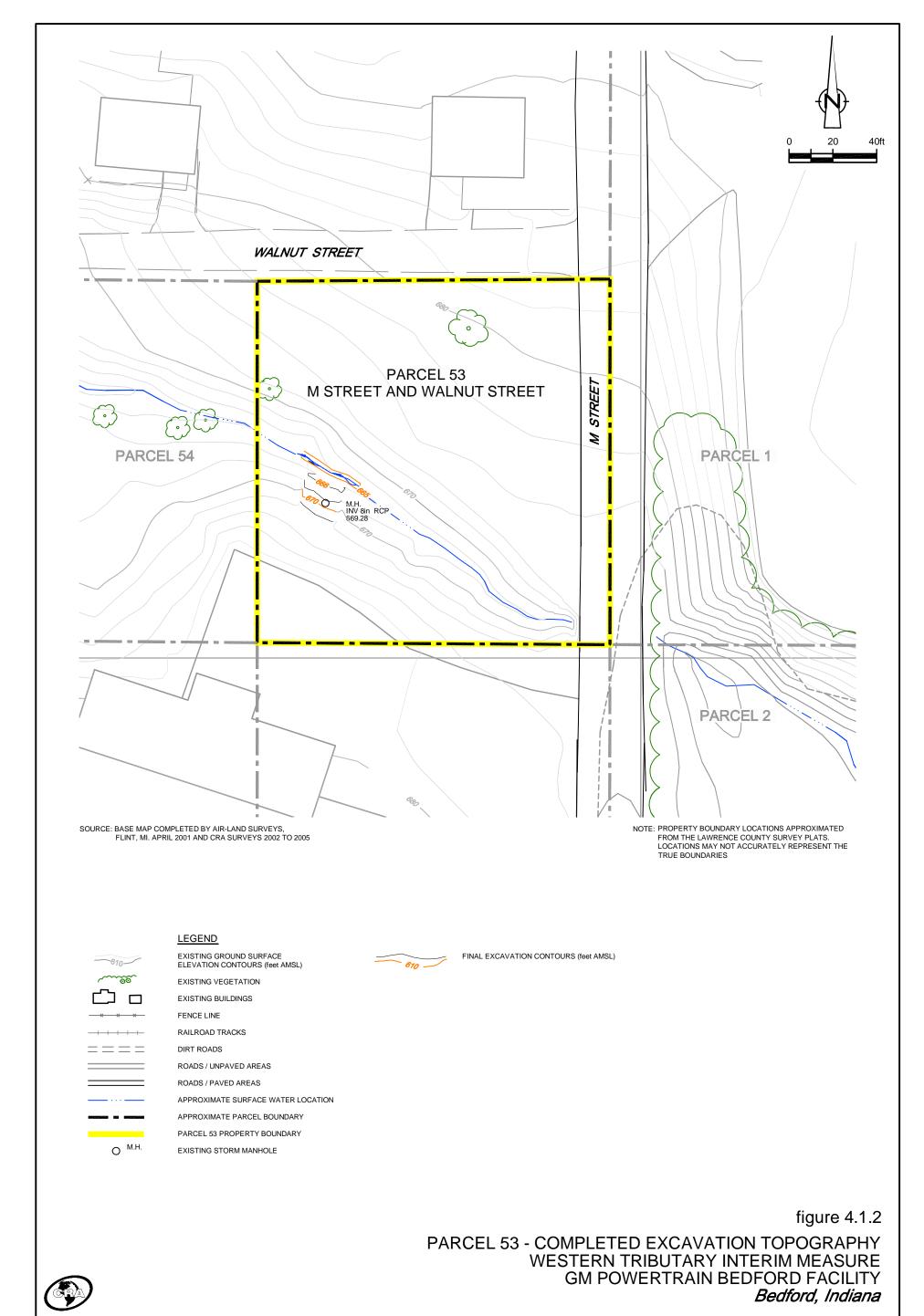
Bedford, Indiana

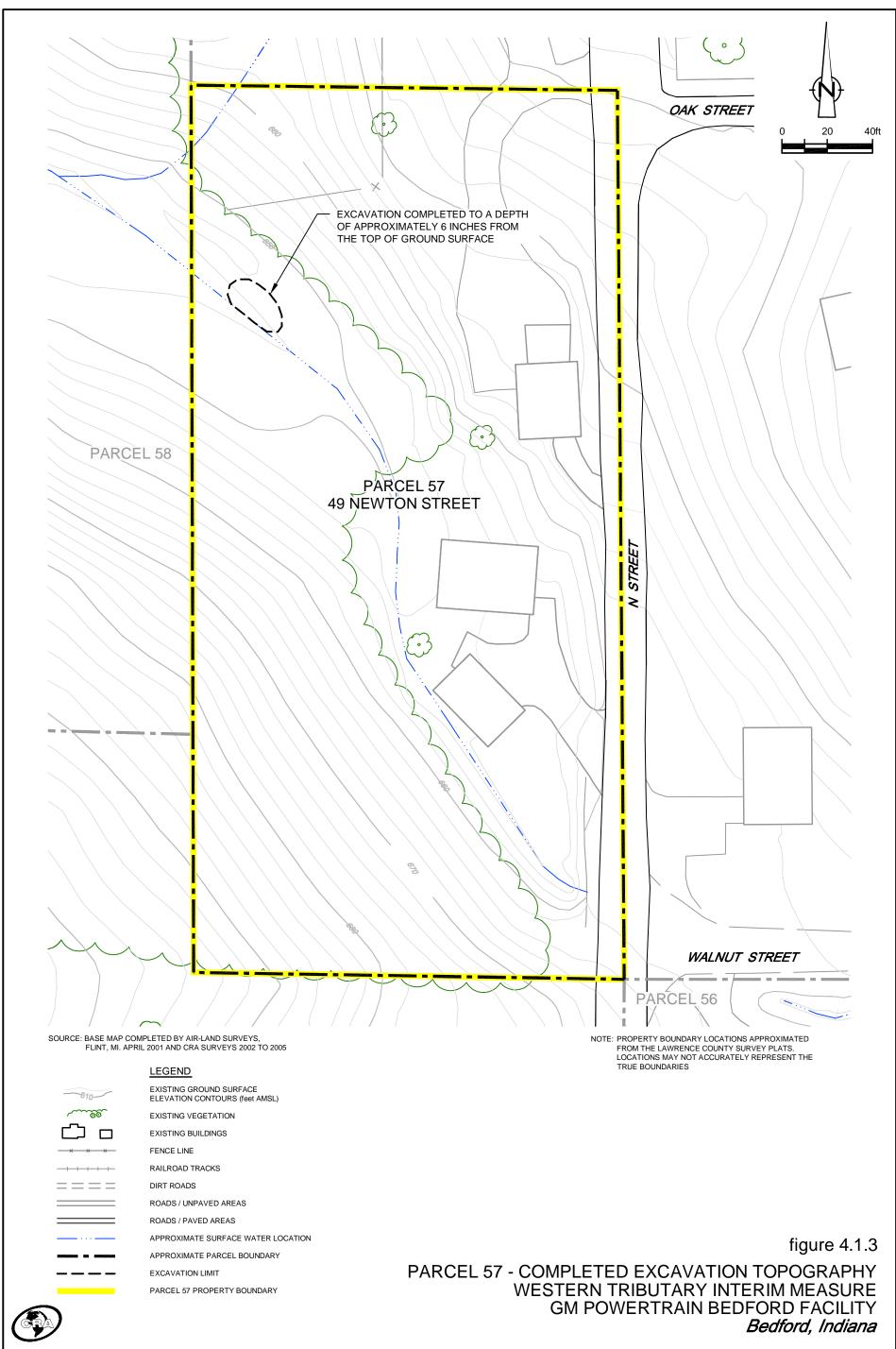


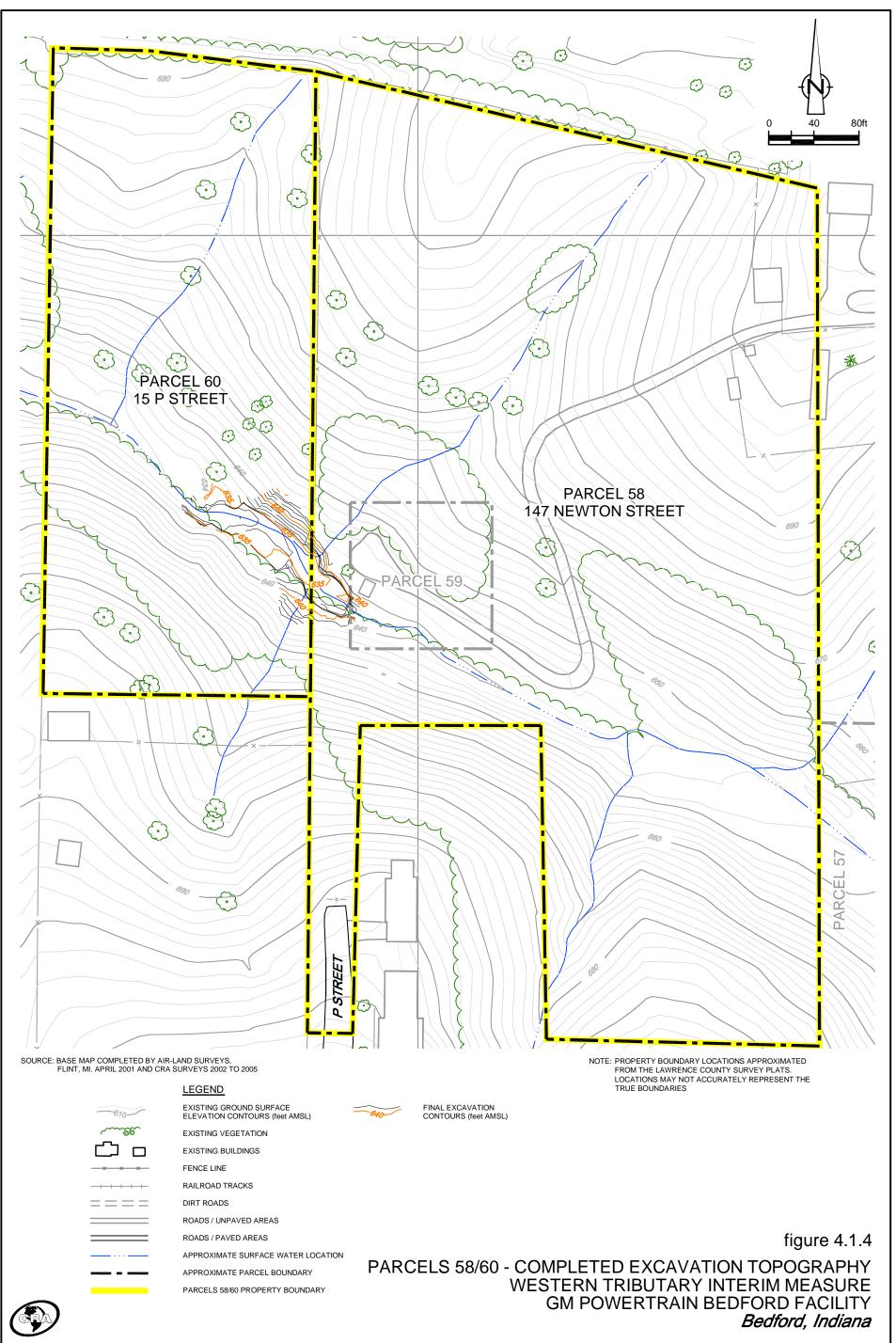


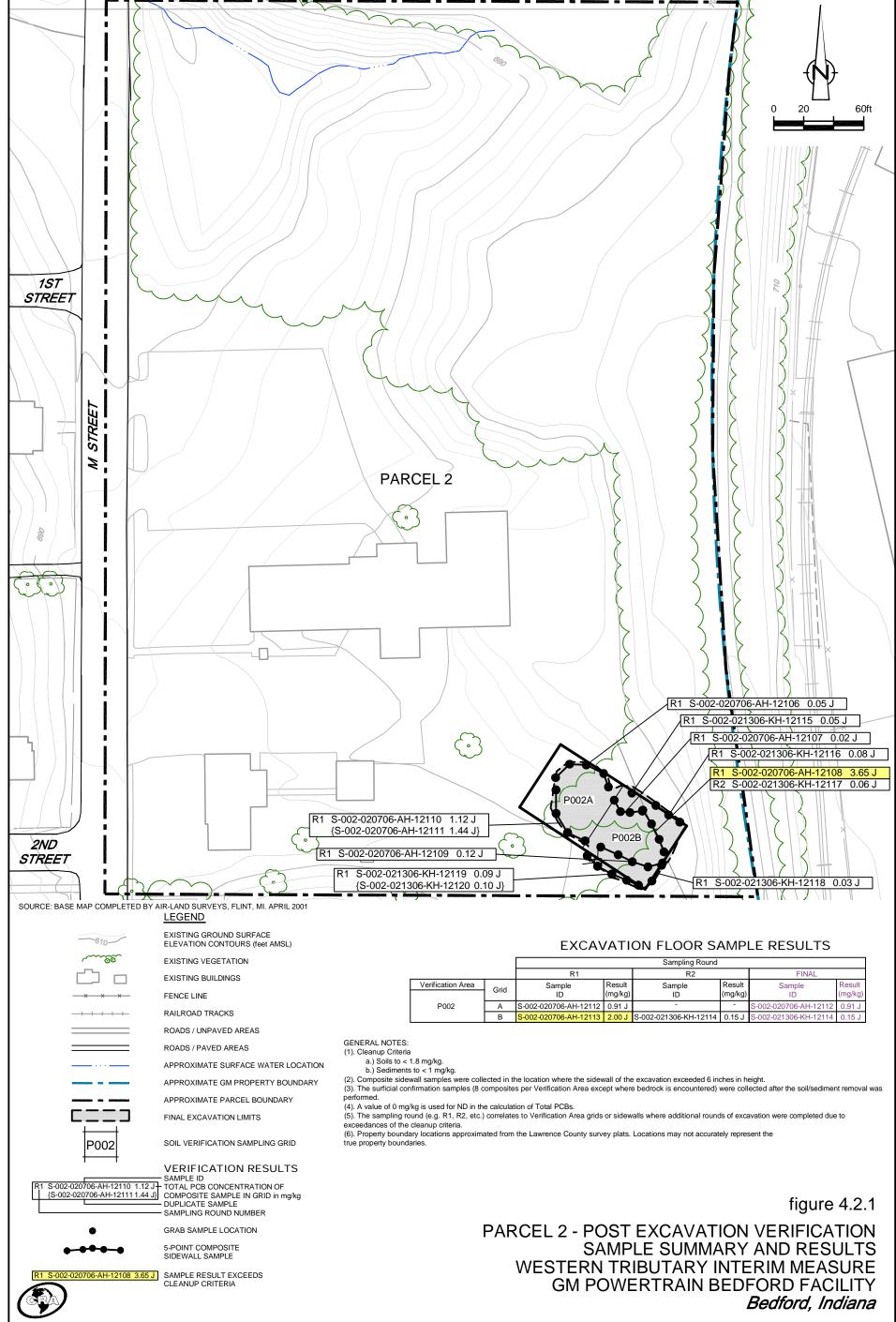


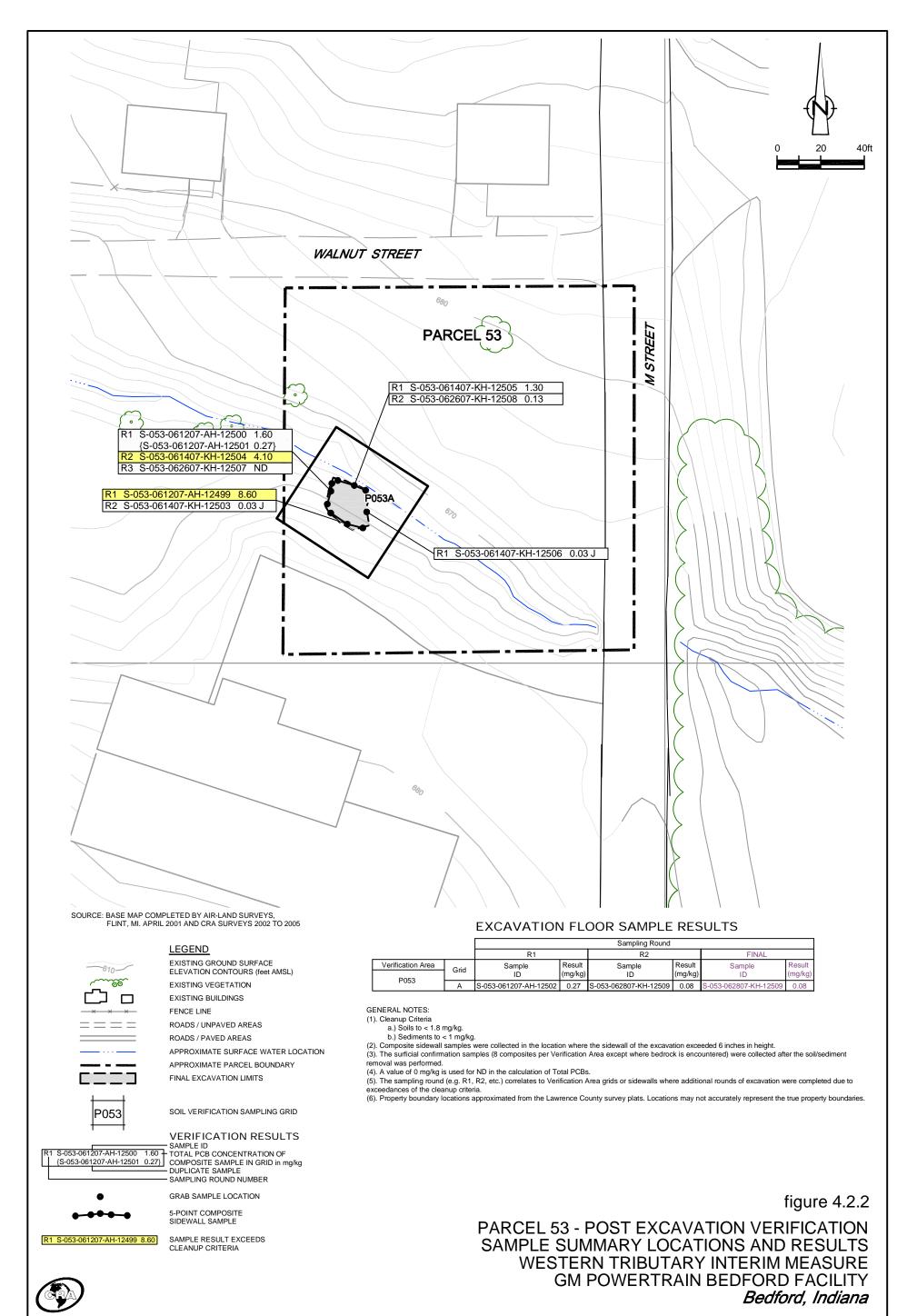












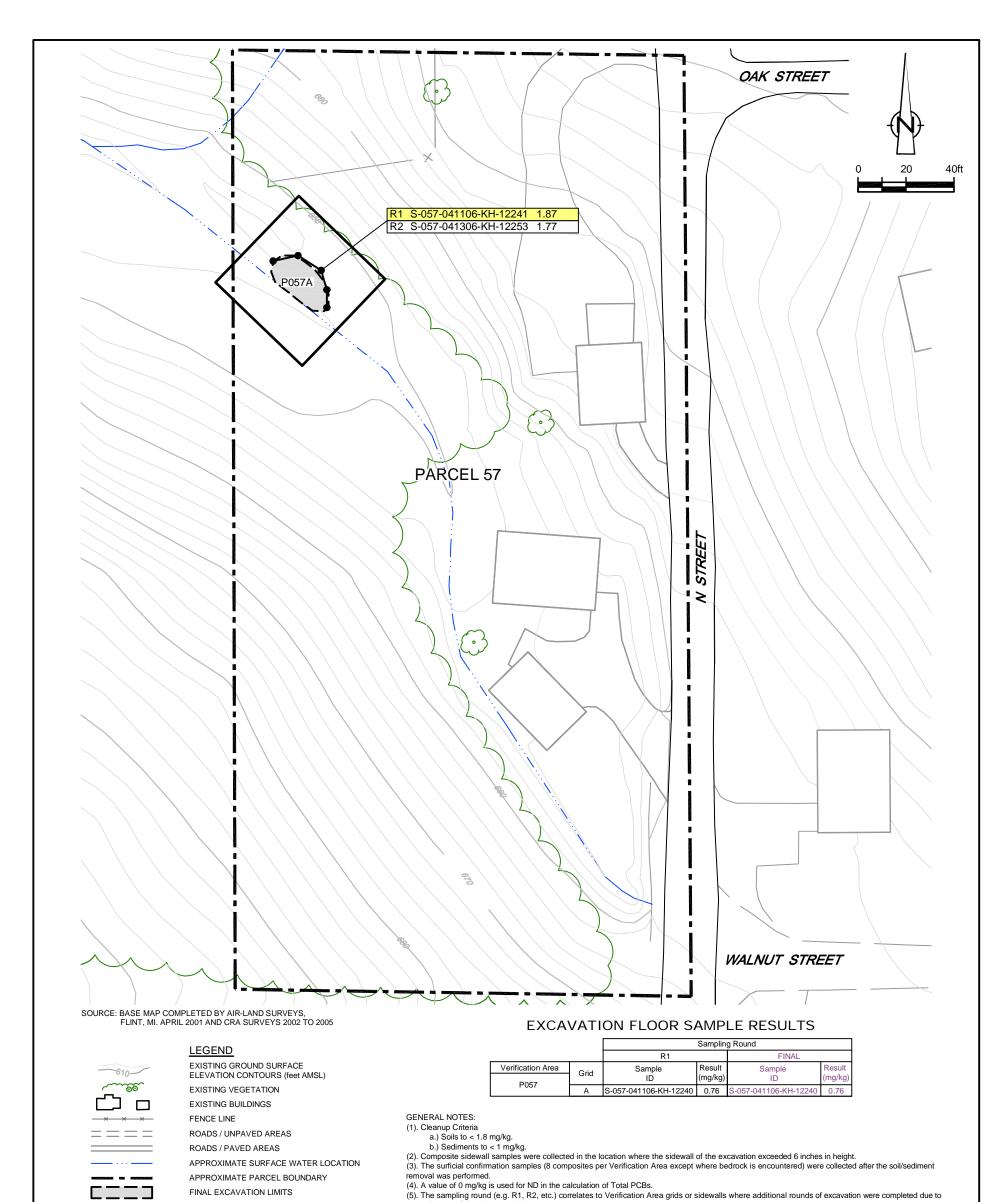


figure 4.2.3

PARCEL 57 - POST EXCAVATION VERIFICATION SAMPLE SUMMARY LOCATIONS AND RESULTS WESTERN TRIBUTARY INTERIM MEASURE **GM POWERTRAIN BEDFORD FACILITY** Bedford, Indiana

exceedances of the cleanup criteria.

(6). Property boundary locations approximated from the Lawrence County survey plats. Locations may not accurately represent the true property boundaries.



SOIL VERIFICATION SAMPLING GRID

S-030-080605-CH-8881 5.97

P057

VERIFICATION RESULTS SAMPLE ID TOTAL PCB CONCENTRATION OF (S-030-080605-CH-8882 2.86 J)

COMPOSITE SAMPLE IN GRID in mg/kg

DUPLICATE SAMPLE

SAMPLING ROUND NUMBER



GRAB SAMPLE LOCATION

5-POINT COMPOSITE SIDEWALL SAMPLE

R1 S-057-041106-KH-12241 1.87

SAMPLE RESULT EXCEEDS CLEANUP CRITERIA

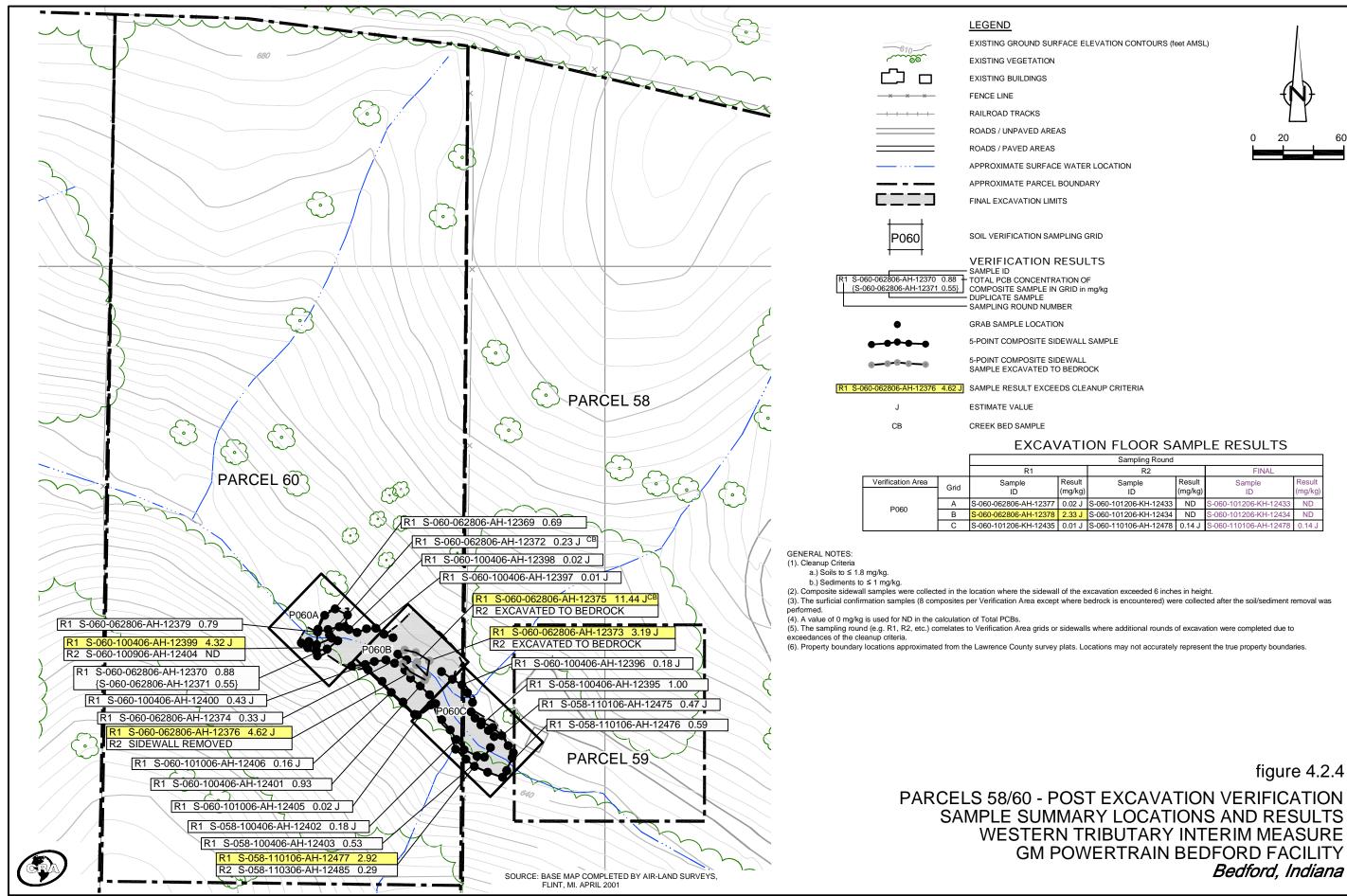
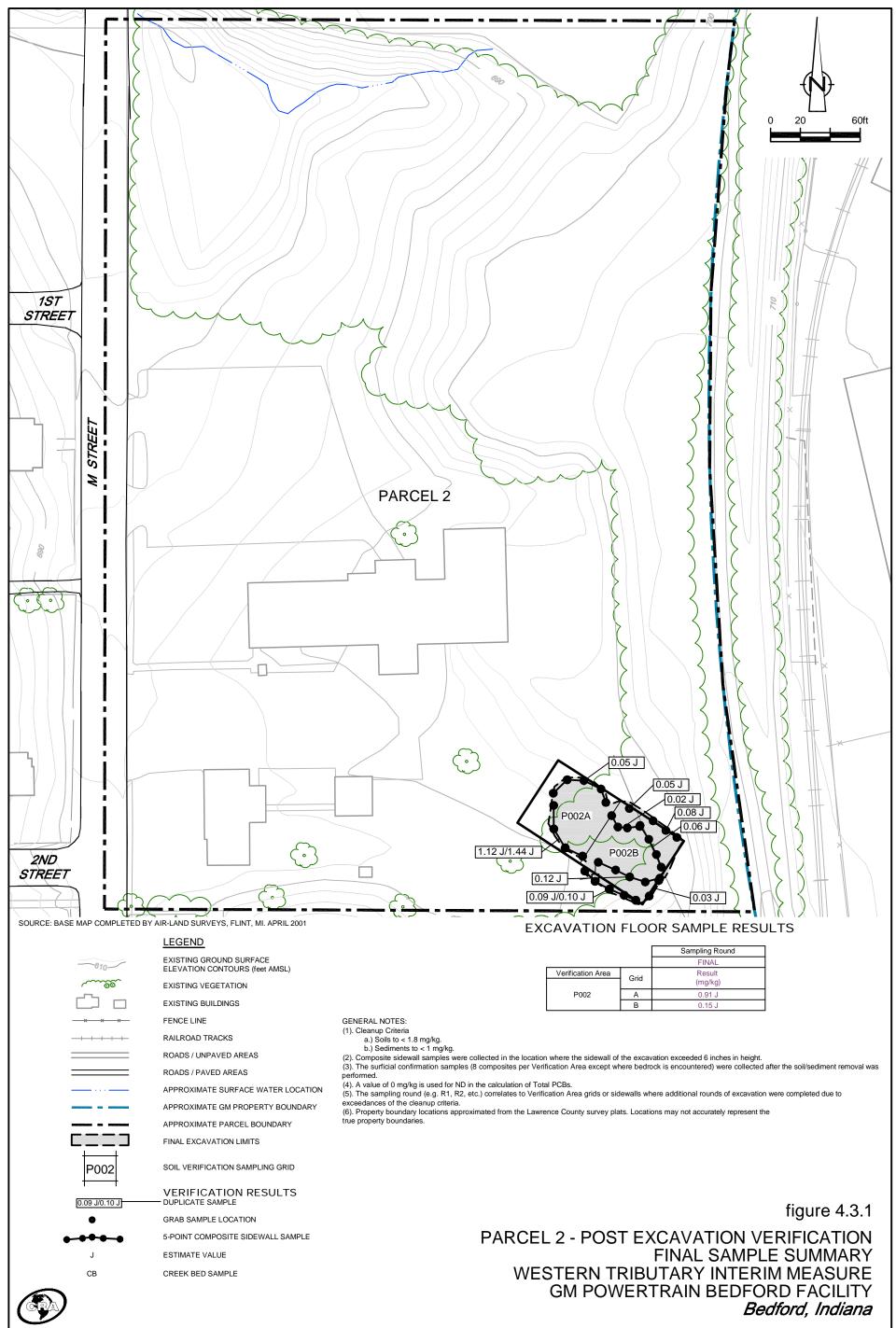
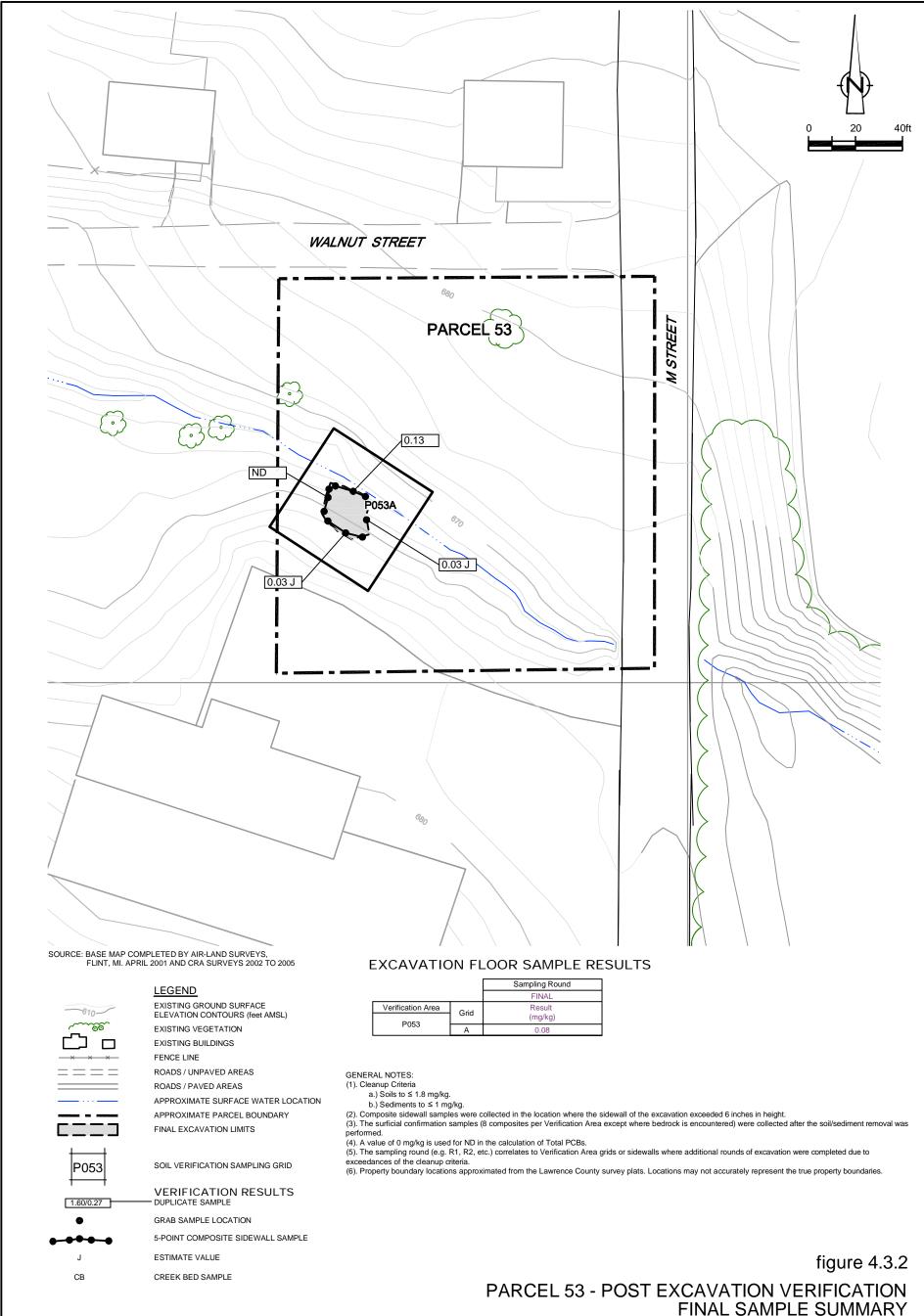
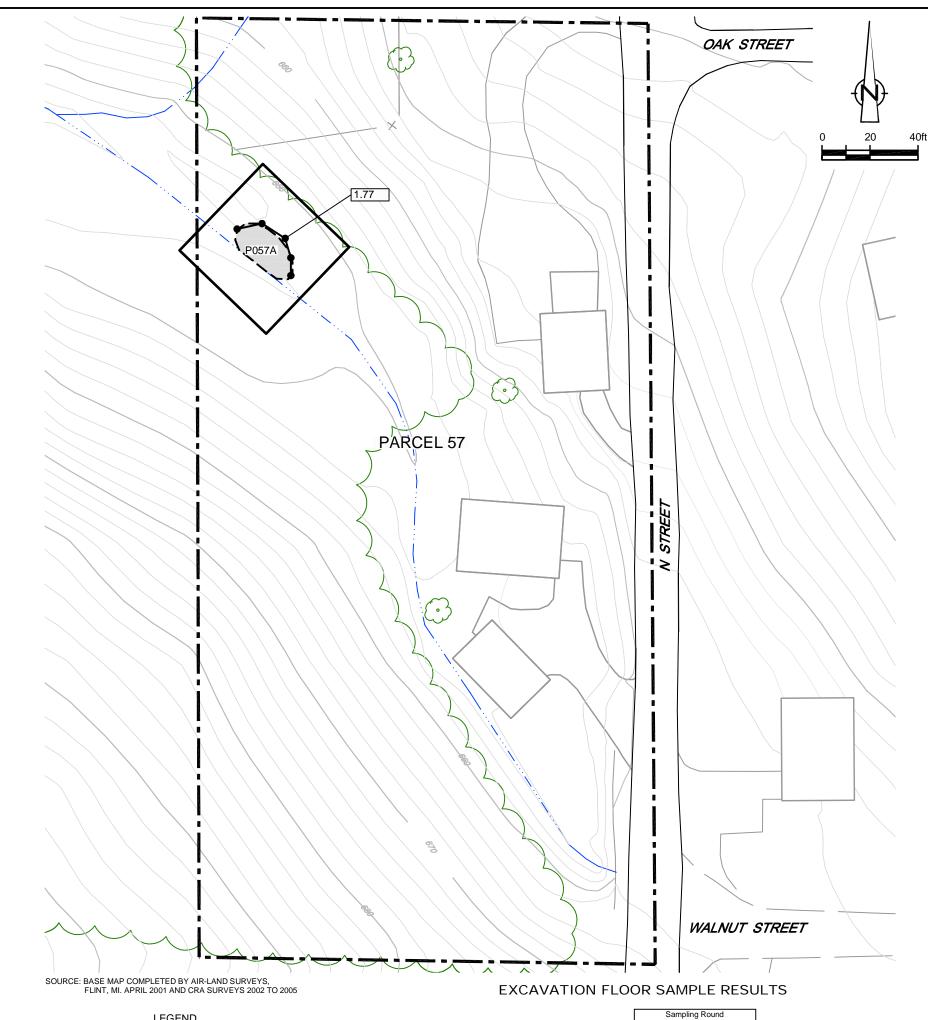


figure 4.2.4





PARCEL 53 - POST EXCAVATION VERIFICATION FINAL SAMPLE SUMMARY WESTERN TRIBUTARY INTERIM MEASURE GM POWERTRAIN BEDFORD FACILITY Bedford, Indiana



**LEGEND** 

EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)

EXISTING VEGETATION EXISTING BUILDINGS

FENCE LINE

ROADS / UNPAVED AREAS ROADS / PAVED AREAS

APPROXIMATE SURFACE WATER LOCATION

APPROXIMATE PARCEL BOUNDARY

FINAL EXCAVATION LIMITS

SOIL VERIFICATION SAMPLING GRID

CB

P057

====

VERIFICATION RESULTS GRAB SAMPLE LOCATION 5-POINT COMPOSITE SIDEWALL SAMPLE

ESTIMATE VALUE CREEK BED SAMPLE

		Sampling Round
		FINAL
Verification Area	Grid	Result
P057	Gild	(mg/kg)
F037	Α	0.76

GENERAL NOTES:

(1). Cleanup Criteria a.) Soils to < 1.8 mg/kg. b.) Sediments to < 1 mg/kg.

(2). Composite sidewall samples were collected in the location where the sidewall of the excavation exceeded 6 inches in height.

(3). The sufficial confirmation samples (8 composites per Verification Area except where bedrock is encountered) were collected after the soil/sediment

removal was performed.

removal was performed.

(4). A value of 0 mg/kg is used for ND in the calculation of Total PCBs.

(5). The sampling round (e.g. R1, R2, etc.) correlates to Verification Area grids or sidewalls where additional rounds of excavation were completed due to exceedances of the cleanup criteria.

(6). Property boundary locations approximated from the Lawrence County survey plats. Locations may not accurately represent the true property boundaries.

figure 4.3.3

PARCEL 57 - POST EXCAVATION VERIFICATION FINAL SAMPLE SUMMARY WESTERN TRIBUTARY INTERIM MEASURE **GM POWERTRAIN BEDFORD FACILITY** Bedford, Indiana



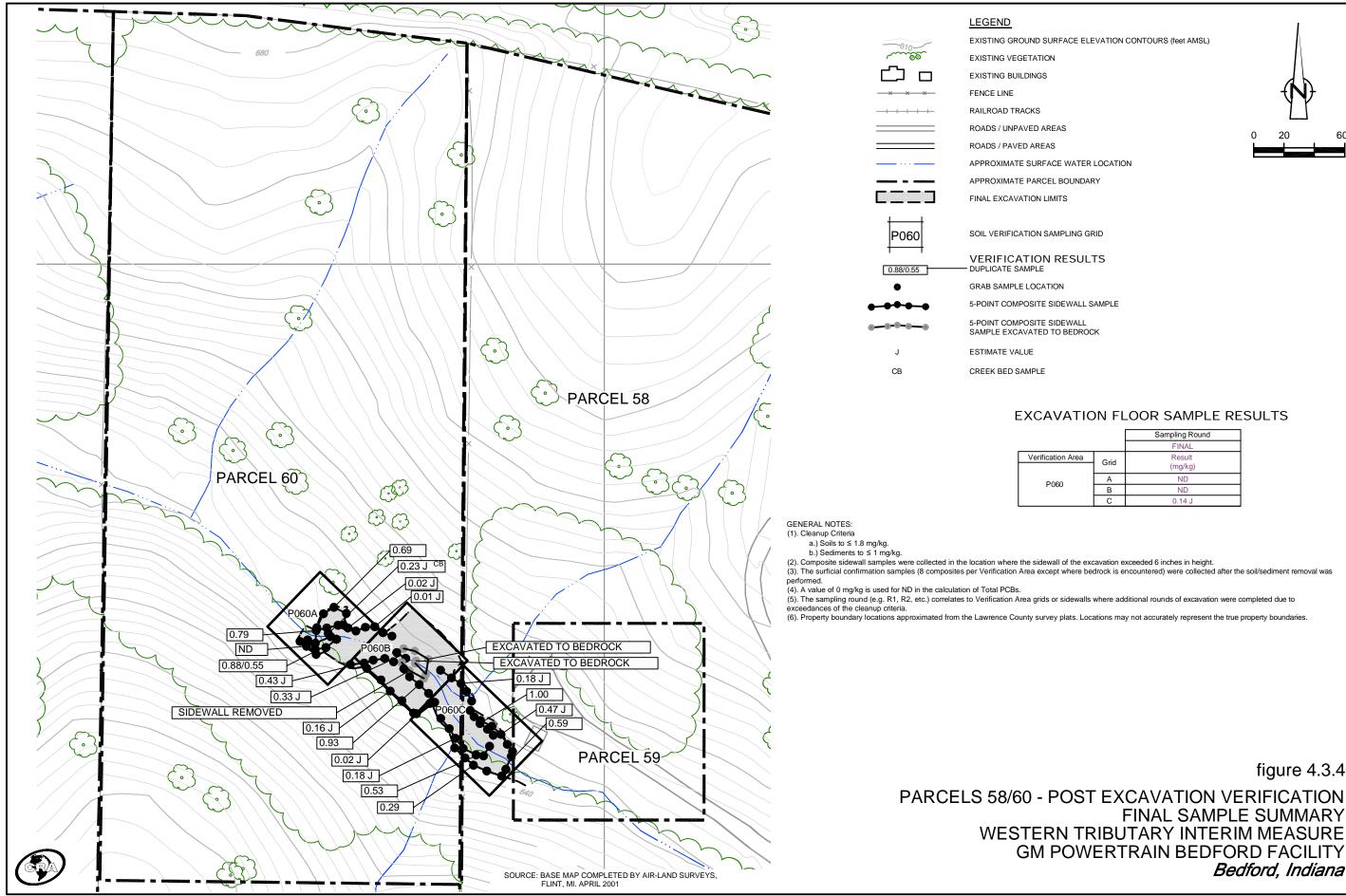
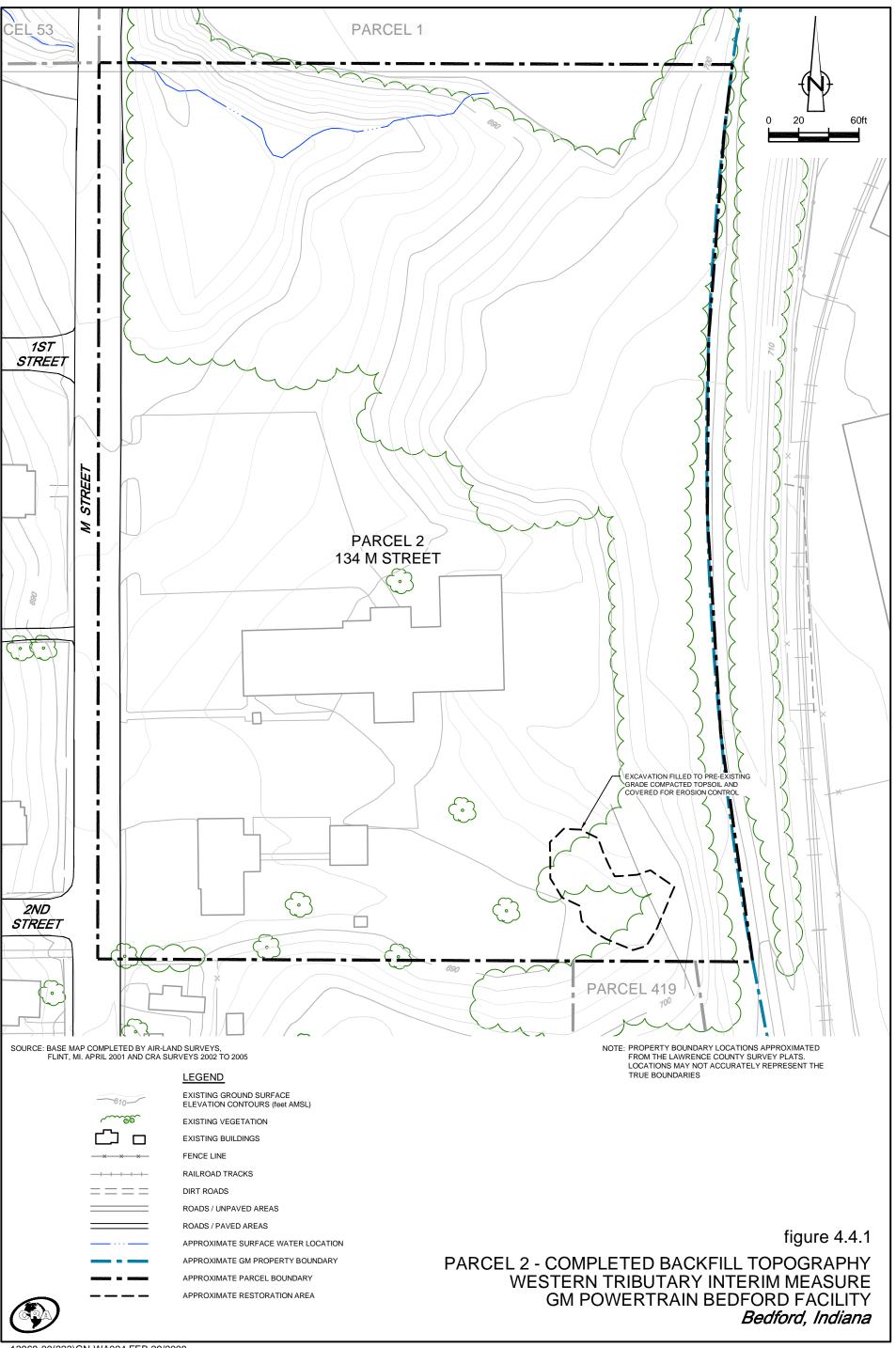
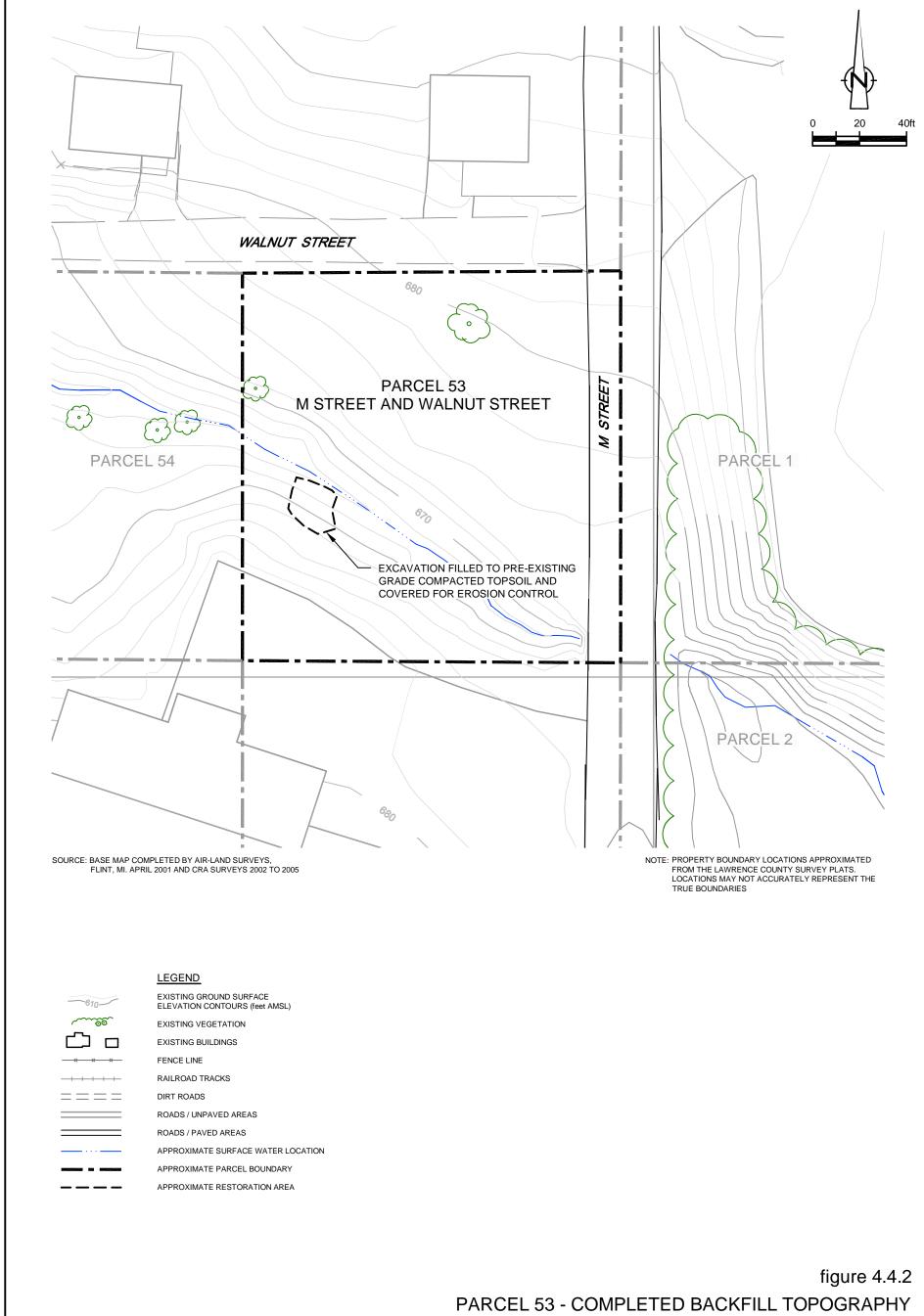


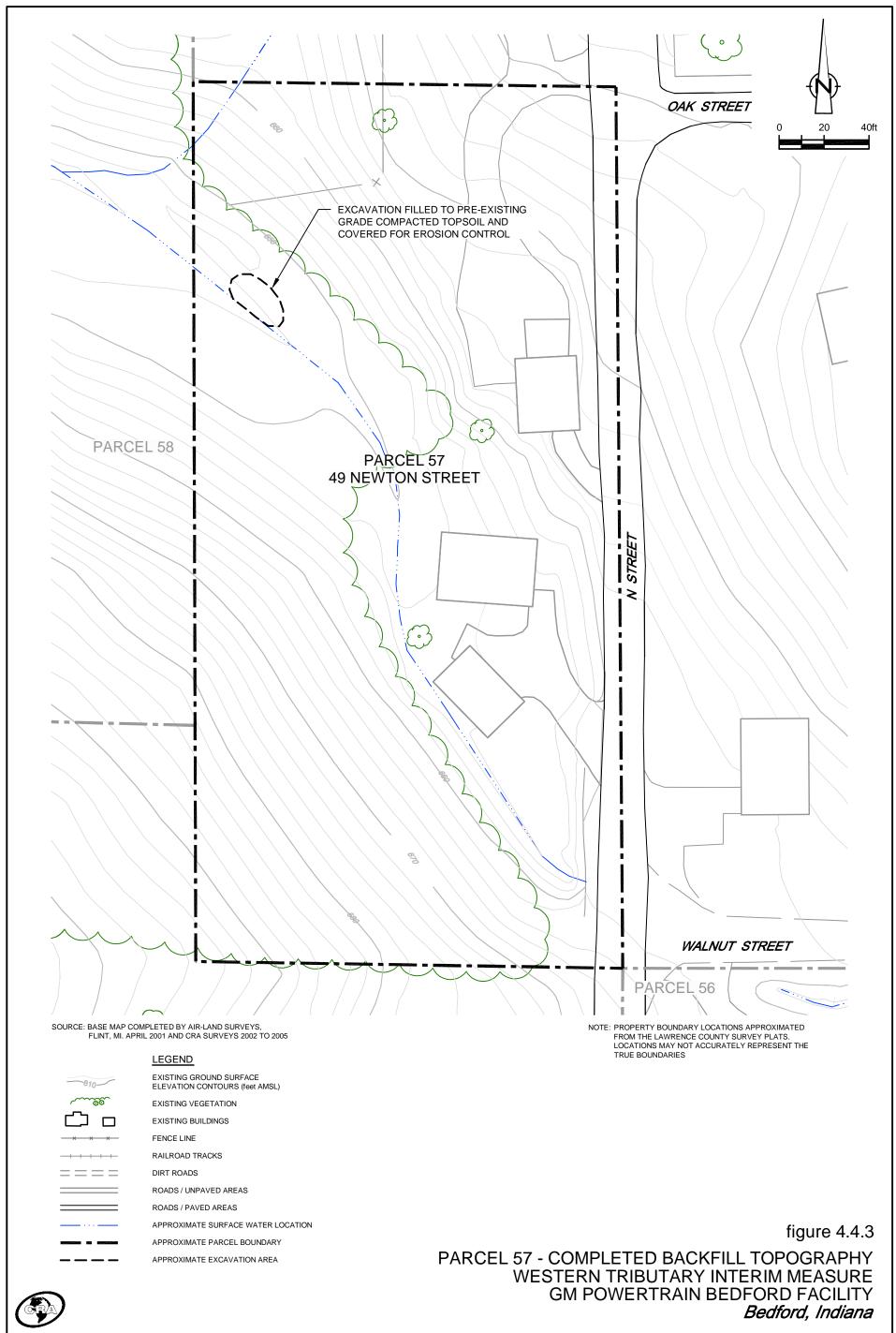
figure 4.3.4

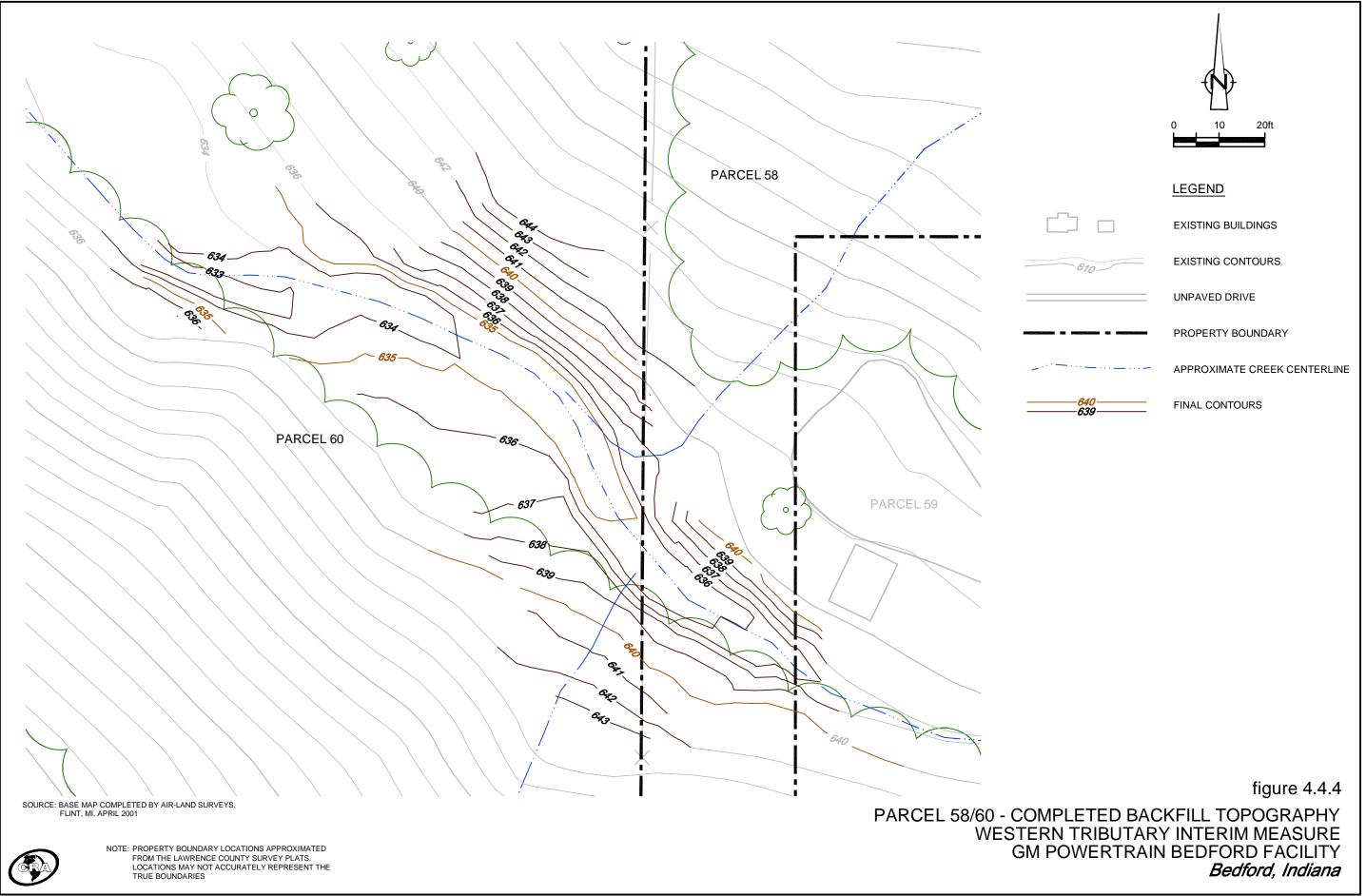
Bedford, Indiana

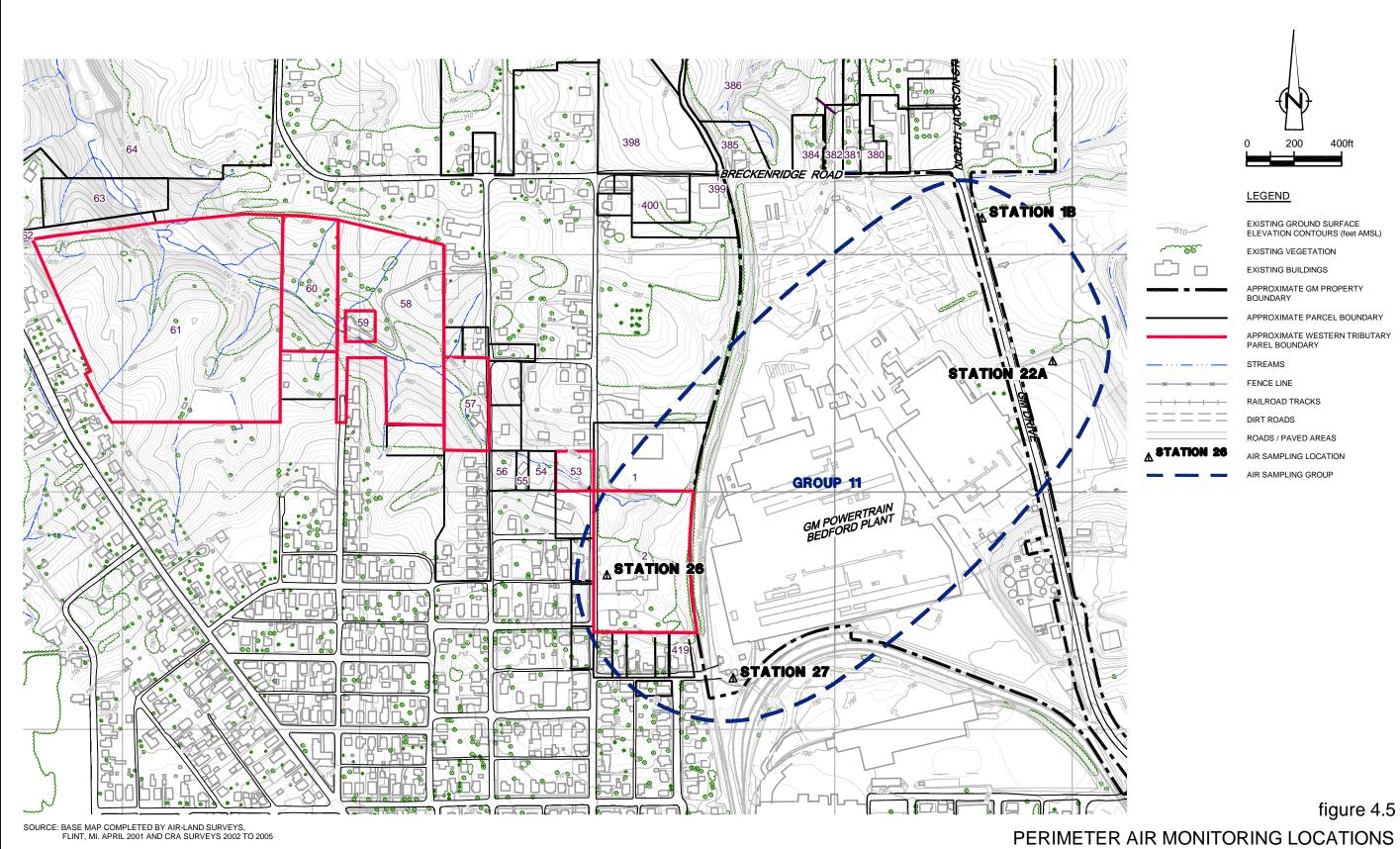




WESTERN TRIBUTARY INTERIM MEASURE **GM POWERTRAIN BEDFORD FACILITY** Bedford, Indiana

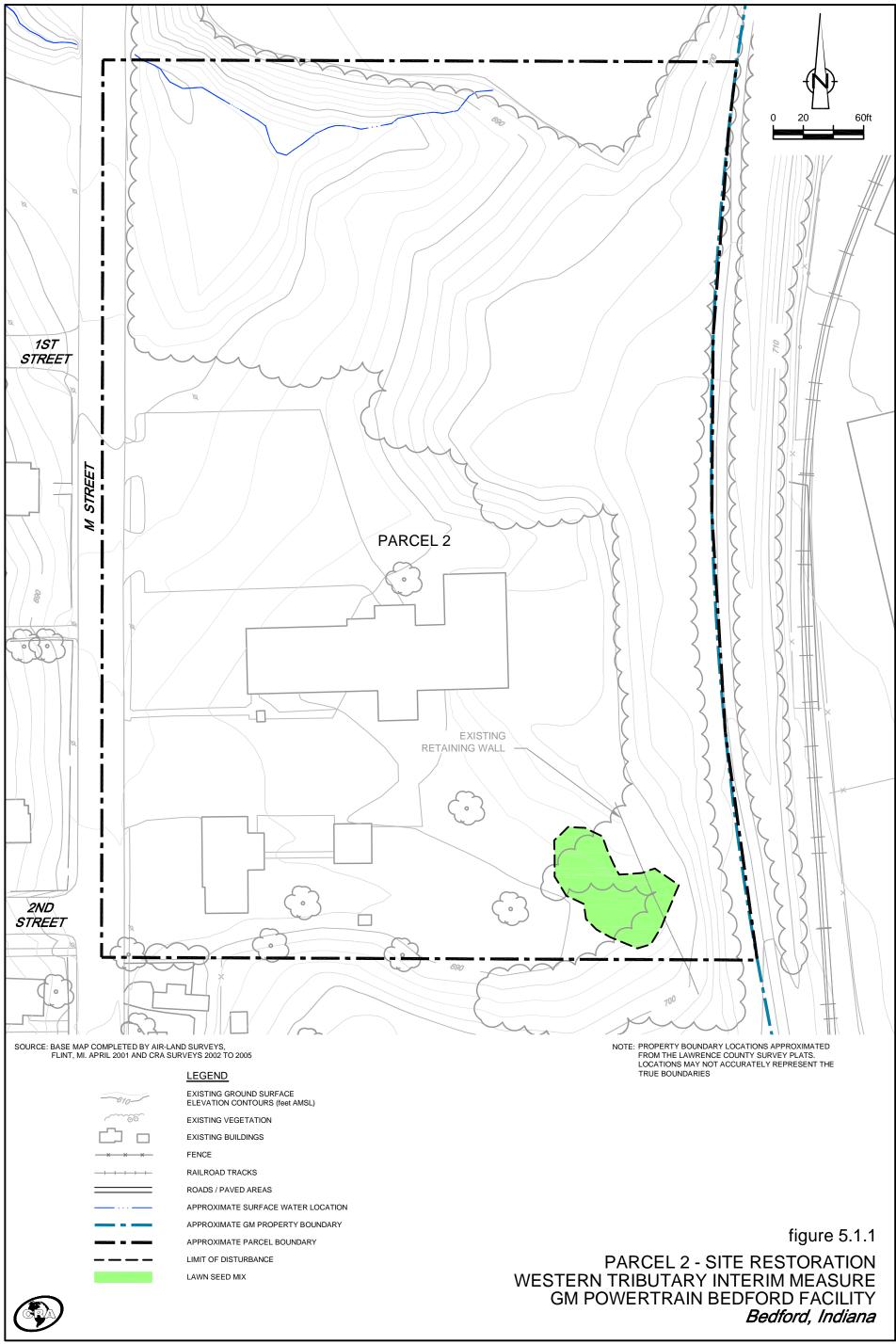


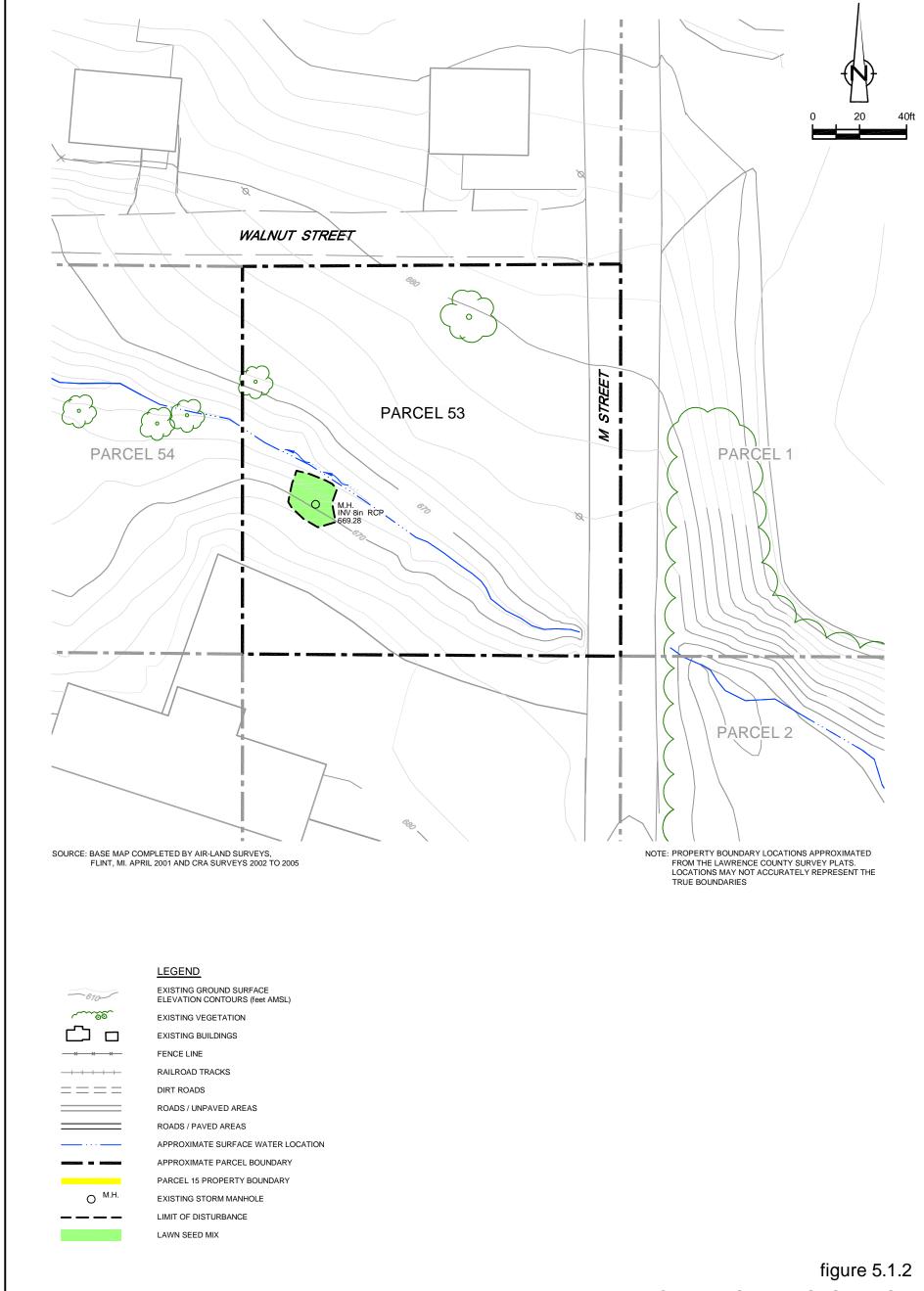




NOTE: PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS. LOCATIONS MAY NOT ACCURATELY REPRESENT THE TRUE BOUNDARIES

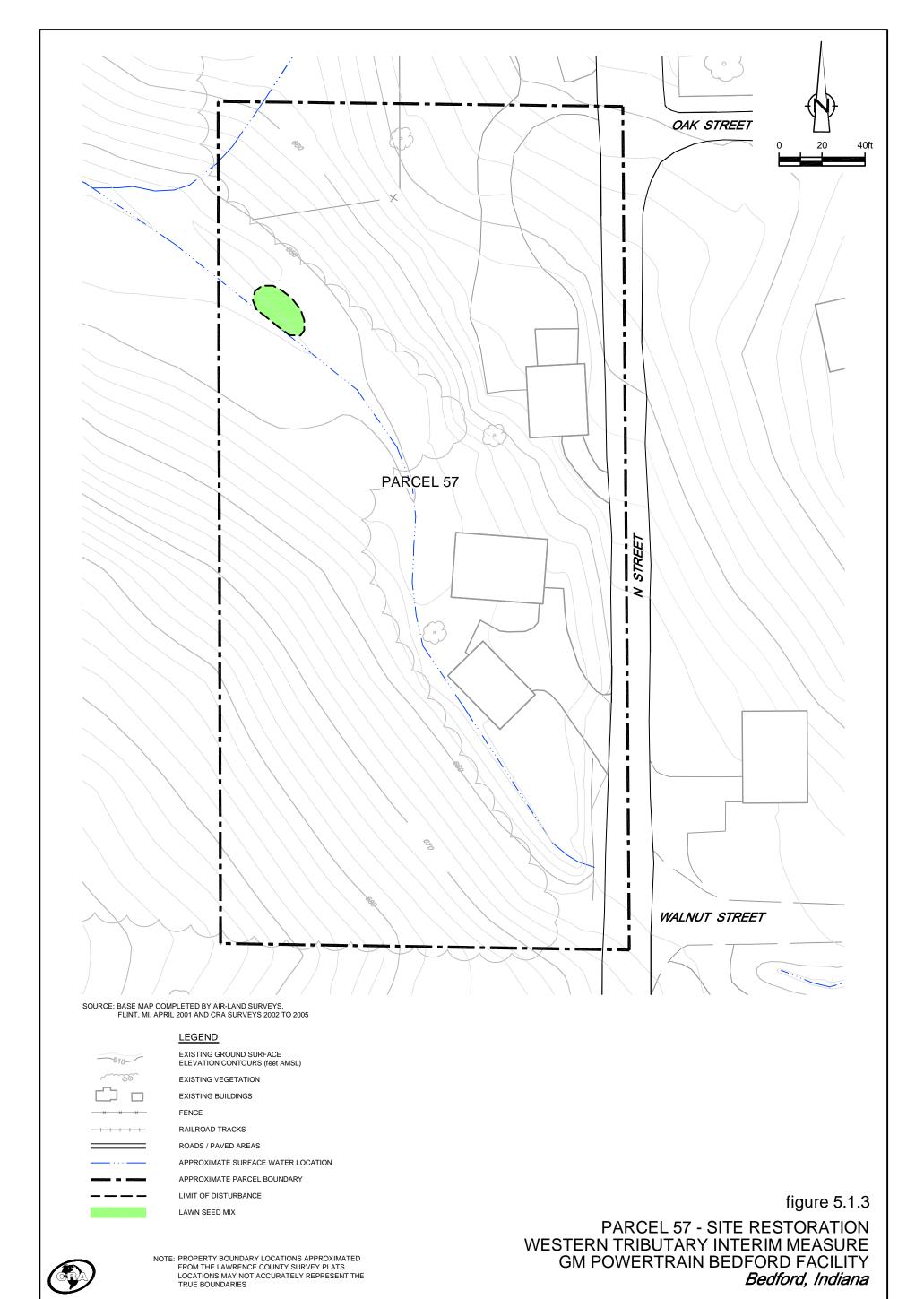
PERIMETER AIR MONITORING LOCATIONS
WESTERN TRIBUTARY INTERIM MEASURE
GM POWERTRAIN BEDFORD FACILITY
Bedford, Indiana

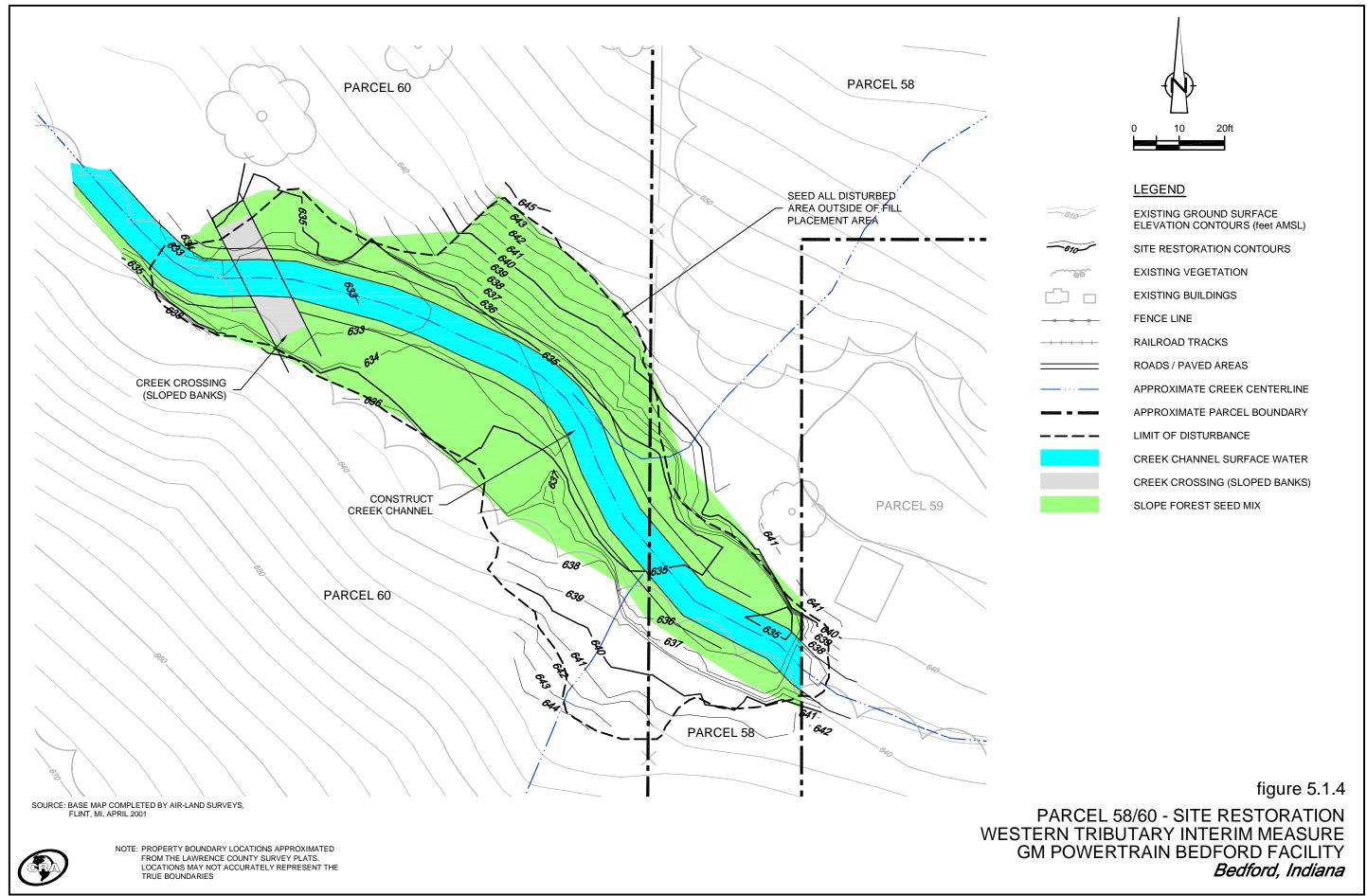






PARCEL 53 - SITE RESTORATION WESTERN TRIBUTARY INTERIM MEASURE GM POWERTRAIN BEDFORD FACILITY Bedford, Indiana





# PARCEL 2 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area:		P002	P002	P002	P002	P002	P002	P002	P002	P002
Sample Location:		002-1205	002-1206	002-1207	002-1208	002-1209	002-1209	002-1210	002-1210	002-1211
Sample ID:		S-02-030502-JW-1205	S-02-030502-JW-1206	S-02-030502-JVV-1207	S-02-030502-JW-1208	S-02-030502-JVV-1209	S-02-030502-JW-1209A	S-00-030502-LM-1210	S-00-030502-LM-1210A	S-00-030502-LM-1211
Sample Date:		3/5/2002	3/5/2002	3/5/2002	3/5/2002	3/5/2002	3/5/2002	3/5/2002	3/5/2002	3/5/2002
Sample Depth:		0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)	0-0.5(ft)	0.5-0.83(ft)	0-0.33(ft)	0-0.33(ft)	0-0.33(ft)
		•	•		•	•	•	•	(Duplicate)	•
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016)	mg/kg	1 U	0.23 U	0.049 U	0.047 U	0.051 U	0.042 U	0.084 U	0.068 U	0.068 U
Aroclor-1221 (PCB-1221)	mg/kg	1 U	0.23 U	0.049 U	0.047 U	0.051 U	0.042 U	0.084 U	0.068 U	0.068 U
Aroclor-1232 (PCB-1232)	mg/kg	1 U	0.23 U	0.049 U	0.047 U	0.051 U	0.042 U	0.084 U	0.068 U	0.068 U
Aroclor-1242 (PCB-1242)	mg/kg	1 U	0.23 U	0.049 U	0.047 U	0.051 U	0.042 U	0.084 U	0.068 U	0.068 U
Aroclor-1248 (PCB-1248)	mg/kg	10	1.2	0.049 U	0.047 U	0.016 J	0.042 U	0.056 J	0.08	0.11
Aroclor-1254 (PCB-1254)	mg/kg	1 U	0.23 U	0.049 U	0.047 U	0.051 U	0.042 U	0.084 U	0.068 U	0.068 U
Aroclor-1260 (PCB-1260)	mg/kg	1.3	0.17 J	0.049 U	0.047 U	0.051 U	0.042 U	0.023 J	0.038 J	0.035 J
Total PCBs	mg/kg	11.3	1.37 J	0	0	0.016 J	0	0.079 J	0.118 J	0.145 J
Total Solids	%	66.2	73.0	67.0	69.6	64.4	79.1	39.5	48.5	48.4

Notes:

U - Not present at or above the associated value.

# PARCEL 2 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P002 002-1212/1213 SD-00-030502-LM-1212 3/5/2002	P002 002-1698 S-02-041202-JW-1698 4/12/2002 0-0.33(ft)	P002 002-1699 S-02-041202-JW-1699 4/12/2002 0-0.33(ft)	P002 002-1700 S-02-041202-JW-1700 4/12/2002 0-0.33(ft)	P002 002-1701 S-02-041202-JW-1701 4/12/2002 0-0.33(ft)	P002 002-1702 S-02-041202-JW-1702 4/12/2002 0-0.33(ft)	P002 002-1702 S-02-041202-JW-1702A 4/12/2002 0-0.33(ft) (Duplicate)	P002 002-1703 S-02-041202-JW-1703 4/12/2002 0-0.33(ft)	P002 002-1704 S-02-041202-JW-1704 4/12/2002 0-0.33(ft)
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.05 U 0.05 U 0.05 U 0.05 U 0.22 0.05 U	0.043 U 0.043 U 0.043 U 0.043 U 0.029 J 0.043 U 0.019 J	0.057 U 0.057 U 0.057 U 0.057 U 0.044 J 0.057 U 0.025 J	0.054 U 0.054 U 0.054 U 0.054 U 0.12 J 0.054 U 0.084 J	0.046 U 0.046 U 0.046 U 0.046 U 0.083 0.046 U 0.046 U	0.049 U 0.049 U 0.049 U 0.049 U 0.049 U 0.049 U 0.049 U	0.048 U 0.048 U 0.048 U 0.048 U 0.048 U 0.048 U	2.3 U 2.3 U 2.3 U 2.3 U 45 2.3 U 2.9	2.2 U 2.2 U 2.2 U 2.2 U 20 2.2 U 1.3 J
Total PCBs	mg/kg	0.029 J	0.019 J	0.069 J	0.204 J	0.083	0.049 0	0.048 0	47.9	21.3 J
Total Solids	%	66.1	75.9	58.0	61.2	71.6	67.8	68.7	71.4	73.5

Notes:

U - Not present at or above the associated value.

# PARCEL 2 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P002 002-1705 S-02-041202-JW-1705 4/12/2002 0-0.33(ft)	P002 002-1706 S-02-041202-JW-1706 4/12/2002 0-0.33(ft)	P002 002-1707 S-02-041202-JW-1707 4/12/2002 0-0.33(ft)	P002 002-1708 S-02-041202-JW-1708 4/12/2002 0-0.33(ft)	P002 002-1708 S-02-041202-JW-1708A 4/12/2002 0-0.33(ft) (Duplicate)	P002 002-1709 S-02-041202-JW-1709 4/12/2002 0-0.33(ft)	P002 002-1710 S-02-041202-JW-1710 4/12/2002 0-0.33(ft)	P002 002-1711 S-02-041202-JW-1711 4/12/2002 0-0.33(ft)	P002 002-1712 S-02-041202-JW-1712 4/12/2002 0-0.33(ft)
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016)	mg/kg	0.041 U	0.046 U	0.047 U	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.043 U
Aroclor-1221 (PCB-1221)	mg/kg	0.041 U	0.046 U	0.047 U	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.043 U
Aroclor-1232 (PCB-1232)	mg/kg	0.041 U	0.046 U	0.047 U	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.043 U
Aroclor-1242 (PCB-1242)	mg/kg	0.041 U	0.046 U	0.047 U	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.043 U
Aroclor-1248 (PCB-1248)	mg/kg	0.017 J	0.042 J	0.17	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.074
Aroclor-1254 (PCB-1254)	mg/kg	0.041 U	0.046 U	0.047 U	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.043 U
Aroclor-1260 (PCB-1260)	mg/kg	0.041 U	0.046 U	0.047 U	0.043 U	0.045 U	0.043 U	0.044 U	0.044 U	0.04 J
Total PCBs	mg/kg	0.017 J	0.042 J	0.17	0	0	0	0	0	0.114 J
Total Solids	%	79.7	71.9	69.9	76.0	73.4	76.5	74.4	75.3	76.6

Notes:

U - Not present at or above the associated value.

# PARCEL 2 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P002 002-1713 S-02-041202-JW-1713 4/12/2002 0-0.33(ft)	P002 002-1714 S-02-041202-JW-1714 4/12/2002 0-0.33(ft)	P002 002-1716 S-02-041202-JW-1716 4/12/2002 0-0.33(ft)	P002 002-1717 S-02-041202-JW-1717 4/12/2002 0-0.33(ft)	P002 002-1718 S-02-041202-JW-1718 4/12/2002 0-0.33(ft)	P002 002-1719 S-02-041202-JW-1719 4/12/2002 0-0.33(ft)	P002 002-1720 S-02-041202-JW-1720 4/12/2002 0-0.33(ft)	P002 002-1720 S-02-041202-JIV-1720A 4/12/2002 0-0.33(ft) (Duplicate)	P002 002-1721 S-02-041202-JW-1721 4/12/2002 0-0.33(ft)
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.047 U 0.047 U 0.047 U 0.047 U 0.026 J 0.047 U 0.047 U 0.026 J	0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U	0.044 U 0.044 U 0.044 U 0.044 U 0.062 0.044 U 0.044 U	0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U	0.058 U 0.058 U 0.058 U 0.058 U 0.08 0.058 U 0.041 J 0.121 J	0.046 U 0.046 U 0.046 U 0.046 U 0.036 J 0.046 U 0.046 U	0.045 U 0.045 U 0.045 U 0.045 U 0.045 U 0.045 U 0.045 U	0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U	0.041 U 0.041 U 0.041 U 0.041 U 0.041 U 0.041 U 0.041 U
Total Solids	%	70.7	76.5	75.4	74.9	56.8	72.1	73.3	74.5	79.6

Notes:

U - Not present at or above the associated value.

# PARCEL 2 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P002 002-1722 S-02-041202-JW-1722 4/12/2002 0-0.33(ft)	P002 002-1723 S-02-041202-JW-1723 4/12/2002 0-0.33(ft)	P002 002-1724 S-02-041202-JW-1724 4/12/2002 0-0.33(ft)	P002 002-1725 S-02-041202-JW-1725 4/12/2002 0-0.33(ft)	P002 002-1715 S-02-041202-JW-1715 4/12/2002 0-0.33(ft)	P002 SD-100701-SK-008 SD-100701-SK-008 10/7/2001 0-0.33(ft)	P002 SD-100701-SK-009 SD-100701-SK-009 10/7/2001 0-0.33(ft)	P002 S-100701-SK-003 S-100701-SK-003 10/7/2001 0-0.33(ft)	P002 SD-100701-SK-010 SD-100701-SK-010 10/7/2001 0-0.33(ft)
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016)	mg/kg	0.047 U	0.048 U	0.054 U	0.043 U	0.047 U	0.09 U	0.051 U	0.29 U	0.12 U
Aroclor-1221 (PCB-1221)	mg/kg	0.047 U	0.048 U	0.054 U	0.043 U	0.047 U	0.09 U	0.051 U	0.29 U	0.12 U
Aroclor-1232 (PCB-1232)	mg/kg	0.047 U	0.048 U	0.054 U	0.043 U	0.047 U	0.09 U	0.051 U	0.29 U	0.12 U
Aroclor-1242 (PCB-1242)	mg/kg	0.047 U	0.048 U	0.054 U	0.043 U	0.047 U	0.09 U	0.051 U	0.29 U	0.12 U
Aroclor-1248 (PCB-1248)	mg/kg	0.047 U	0.048 U	0.21	0.043 U	0.047 U	0.41	0.098	0.68	0.067 J
Aroclor-1254 (PCB-1254)	mg/kg	0.047 U	0.048 U	0.054 U	0.043 U	0.047 U	0.09 U	0.051 U	0.29 U	0.12 U
Aroclor-1260 (PCB-1260)	mg/kg	0.047 U	0.048 U	0.054 U	0.043 U	0.047 U	0.09 U	0.051 U	0.13 J	0.12 U
Total PCBs	mg/kg	0	0	0.21	0	0	0.41	0.098	0.81 J	0.067 J
Total Solids	%	70.0	68.9	61.0	76.8	70.7	73.3	64.3	57.8	53

Notes:

U - Not present at or above the associated value.

# PARCEL 53 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area:		P053								
Sample Location:		053-21765	053-21766	053-21767	053-21768	053-21769	053-21770	053-21770	053-21817	053-21818
Sample ID:		S-053-021407-CH-21765	S-053-021407-CH-21766	S-053-021407-CH-21767	S-053-021407-CH-21768	S-053-021407-CH-21769	S-053-021407-CH-21770	S-053-021407-CH-21771	S-053-022707-CL-21817	S-053-022707-CL-21818
Sample Date:		2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/27/2007	2/27/2007
Sample Depth:		0-0.33(ft)	1-1(ft)							
								(Duplicate)		
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016)	mg/kg	0.049 U	0.038 U	0.052 U	0.044 U	2.4 U	0.049 U	0.05 U	0.88 U	0.23 U
Aroclor-1221 (PCB-1221)	mg/kg	0.049 U	0.038 U	0.052 U	0.044 U	2.4 U	0.049 U	0.05 U	0.88 U	0.23 U
Aroclor-1232 (PCB-1232)	mg/kg	0.049 U	0.038 U	0.052 U	0.044 U	2.4 U	0.049 U	0.05 U	0.88 U	0.23 U
Aroclor-1242 (PCB-1242)	mg/kg	0.049 U	0.038 U	0.052 U	0.044 U	2.4 U	0.049 U	0.05 U	0.88 U	0.23 U
Aroclor-1248 (PCB-1248)	mg/kg	0.044 J	0.12	0.017 J	0.27	2.4 U	0.049 U	0.05 U	0.88 U	0.23 U
Aroclor-1254 (PCB-1254)	mg/kg	0.049 U	0.038 U	0.052 U	0.044 U	40	0.049 U	0.05 U	22	3
Aroclor-1260 (PCB-1260)	mg/kg	0.03 J	0.024 J	0.052 U	0.033 J	2.4 U	0.049 U	0.05 U	0.88 U	0.23 U
Total PCBs	mg/kg	0.074 J	0.144 J	0.017 J	0.303 J	40	0	0	22	3
Total Solids	%	67.4	86.8	63.4	75.7	68.8	67.5	66.2	75.1	73.2

Notes

U - Not present at or above the associated value.

# PARCEL 53 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P053 053-21819 S-053-022707-CL-21819 2/27/2007 0-0.33(ft)	P053 053-21820 S-053-022707-CL-21820 2/27/2007 0-0.33(ft)	P053 053-21820 S-053-022707-CL-21821 2/27/2007 0-0.33(ft) (Duplicate)	P053 053-21822 S-053-022707-CL-21822 2/27/2007 0-0.33(ft)	P053 053-21823 S-053-022707-CL-21823 2/27/2007 0-0.33(ft)	P053 053-21852 S-053-030207-MD-21852 3/2/2007 1-1(ft)	P053 053-21853 S-053-030207-MD-21853 3/2/2007 2-2(ft)	P053 053-21854 S-053-030207-MD-21854 3/2/2007 1-1(ft)	P053 053-21855 S-053-030207-MD-21855 3/2/2007 2-2(ft)
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.042 U 0.042 U 0.042 U 0.042 U 0.042 U 0.042 U 0.042 U 0.042 U	0.041 U 0.041 U 0.041 U 0.041 U 0.0099 J 0.041 U 0.041 U 0.0099 J	0.042 U 0.042 U 0.042 U 0.042 U 0.014 J 0.042 U 0.042 U 0.042 U	0.046 U 0.046 U 0.046 U 0.046 U 0.046 U 0.046 U 0.046 U	0.047 U 0.047 U 0.047 U 0.047 U 0.047 U 0.13 0.047 U	0.041 U 0.041 U 0.041 U 0.041 U 0.041 U 0.041 U 0.041 U 0.041 U	0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U	0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U 0.044 U	0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U
Total Solids	%	77.8	80.0	78.5	71.1	70.2	79.7	76.8	74.6	77.6

Notes

U - Not present at or above the associated value

# PARCEL 57 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P057 057-1159 S-00-030402-GS-1159 3/4/2002 0-0.33(ft)	P057 057-1160 S-00-030402-GS-1160 3/4/2002 0-0.33(ft)	P057 057-1161/1162 SD-00-030402-JH-1161 3/4/2002	P057 057-1161/1162 SD-00-030402-JH-1161A 3/4/2002	P057 057-1163 S-00-030402-GS-1163 3/4/2002 0-0.33(ft)	P057 057-1164 S-00-030402-GS-1164 3/4/2002 0-0.33(ft)	P057 057-1164 S-00-030402-GS-1164A 3/4/2002 0-0.33(ft)	P057 057-1165/1166 SD-00-030402-JH-1165 3/4/2002	P057 057-1742 S-57-041602-GS-1742 4/16/2002 0-0.33(ft)
зитри Берии.		0-0.55()(1)	0-0.33(jt)		(Duplicate)	0-0.55()(1)	0-0.55()(1)	(Duplicate)		0-0.55(JI)
Parameters	Units									
PCBs										
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248)	mg/kg mg/kg mg/kg mg/kg mg/kg	0.043 U 0.043 U 0.043 U 0.043 U 0.12	0.037 U 0.037 U 0.037 U 0.037 U 0.038	0.04 U 0.04 U 0.04 U 0.04 U 0.31	0.045 U 0.045 U 0.045 U 0.045 U 0.37	0.21 U 0.21 U 0.21 U 0.21 U 1.9	0.043 U 0.043 U 0.043 U 0.043 U 0.02 J	0.042 U 0.042 U 0.042 U 0.042 U 0.019 J	0.043 U 0.043 U 0.043 U 0.043 U 0.3	0.23 U 0.23 U 0.23 U 0.23 U 0.23 U
Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	mg/kg mg/kg	0.043 U 0.034 J	0.037 U 0.03 J	0.04 U 0.04 U	0.045 U 0.086	0.21 U 0.44	0.043 U 0.043 U	0.042 U 0.042 U	0.043 U 0.038 J	0.23 U 0.3
Total PCBs	mg/kg	0.154 J	0.068 J	0.31	0.456	2.34	0.02 J	0.019 J	0.338 J	1.3
Total Solids	%	77.5	88.7	81.5	72.6	76.8	76.1	79.5	75.9	70.5

#### Notes:

U - Not present at or above the associated value.

J - Estimated concentration.

# PARCEL 57 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P057 057-1743 S-57-041602-GS-1743 4/16/2002 0-0.33(ft)	P057 057-1743 S-57-041602-GS-1743A 4/16/2002 0-0.33(ft) (Duplicate)	P057 057-1744 S-57-041602-GS-1744 4/16/2002 0-0.33(ft)	P057 057-1745 S-57-041602-GS-1745 4/16/2002 0-0.33(ft)	P057 057-1746 S-57-041602-GS-1746 4/16/2002 0-0.33(ft)	P057 057-1747 S-57-041602-GS-1747 4/16/2002 0-0.33(ft)	P057 057-1748 S-57-041602-GS-1748 4/16/2002 0-0.33(ft)	P057 057-1749 S-57-041602-GS-1749 4/16/2002 0-0.33(ft)	P057 057-1750 S-57-041602-GS-1750 4/16/2002 0-0.33(ft)
Parameters	Units		(Duplicate)							
PCBs										
Aroclor-1016 (PCB-1016)	mg/kg	0.051 U	0.096 U	0.05 U	0.086 U	0.043 U	0.043 U	0.042 U	0.043 U	0.043 U
Aroclor-1221 (PCB-1221)	mg/kg	0.051 U	0.096 U	0.05 U	0.086 U	0.043 U	0.043 U	0.042 U	0.043 U	0.043 U
Aroclor-1232 (PCB-1232)	mg/kg	0.051 U	0.096 U	0.05 U	0.086 U	0.043 U	0.043 U	0.042 U	0.043 U	0.043 U
Aroclor-1242 (PCB-1242)	mg/kg	0.051 U	0.096 U	0.05 U	0.086 U	0.043 U	0.043 U	0.042 U	0.043 U	0.043 U
Aroclor-1248 (PCB-1248)	mg/kg	0.31	0.75	0.21	0.81	0.043 U	0.42	0.042 U	0.18	0.21
Aroclor-1254 (PCB-1254)	mg/kg	0.051 U	0.096 U	0.05 U	0.086 U	0.043 U	0.043 U	0.042 U	0.043 U	0.043 U
Aroclor-1260 (PCB-1260)	mg/kg	0.085	0.19	0.05 U	0.23	0.043 U	0.14	0.042 U	0.086	0.08
Total PCBs	mg/kg	0.395	0.94	0.21	1.04	0	0.56	0	0.266	0.29
Total Solids	%	65.1	68.5	66.0	77.0	77.3	77.5	78.9	76.3	76.8

Notes:

U - Not present at or above the associated value.

J - Estimated concentration.

# PARCEL 58 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area:		P058	P058	P058
Sample Location:		058-1167	058-1168	058-1169/1170
Sample ID:		S-00-030402-GS-1167	S-00-030402-GS-1168	SD-00-030402-JH-1169
Sample Date:		3/4/2002	3/4/2002	3/4/2002
Sample Depth:		0-0.33(ft)	0-0.33(ft)	
Parameters	Units			
PCBs				
A 1 404 ( (DCD 404 ()	/1	0.045.11	0.050 II	0.047.11
Aroclor-1016 (PCB-1016)	mg/kg	0.045 U	0.053 U	0.047 U
Aroclor-1221 (PCB-1221)	mg/kg	0.045 U	0.053 U	0.047 U
Aroclor-1232 (PCB-1232)	mg/kg	0.045 U	0.053 U	0.047 U
Aroclor-1242 (PCB-1242)	mg/kg	0.045 U	0.053 U	0.047 U
Aroclor-1248 (PCB-1248)	mg/kg	0.12	0.053 U	0.27
Aroclor-1254 (PCB-1254)	mg/kg	0.045 U	0.053 U	0.047 U
Aroclor-1260 (PCB-1260)	mg/kg	0.045 U	0.053 U	0.052
Total PCBs	mg/kg	0.12	0	0.322
Total Solids	%	73.4	62.5	70.8

#### Notes:

U - Not present at or above the associated value.

J - Estimated concentration.

#### **TABLE 3.1.5**

### PARCEL 60/61 SUMMARY OF INVESTIGATIVE SAMPLE ANALYTICAL RESULTS GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Sample Area: Sample Location: Sample ID: Sample Date: Sample Depth:		P060 060-1171 S-00-030402-GS-1171 3/4/2002 0-0.33(ft)	P060 060-1172 S-00-030402-GS-1172 3/4/2002 0-0.33(ft)	P060 060-1173/1174 SD-00-030402-JH-1173 3/4/2002	P060 2196 SD-042403-LM-2196 4/24/2003 0-0.33(ft)	P060 2197 SD-042403-LM-2197 4/24/2003 0-0.33(ft)	P060 P061 2195 SD-042403-LM-2195 4/24/2003 0-0.33(ft)	P060 P061 2195 SD-042403-LM-2195A 4/24/2003 0-0.33(ft) (Duplicate)	P061 061-1175 S-00-030402-GS-1175 3/4/2002 0-0.33(ft)	P061 061-1176 S-00-030402-GS-1176 3/4/2002 0-0.33(ft)	P061 061-1177/1178 SD-00-030402-JH-1177 3/4/2002
Parameters	Units										
PCBs											
Aroclor-1016 (PCB-1016)	mg/kg	0.046 U	0.044 U	0.092 U	0.21 U	0.27 U	0.56 U	0.63 U	0.045 U	0.048 U	0.045 U
Aroclor-1221 (PCB-1221)	mg/kg	0.046 U	0.044 U	0.092 U	0.21 U	0.27 U	0.56 U	0.63 U	0.045 U	0.048 U	0.045 U
Aroclor-1232 (PCB-1232)	mg/kg	0.046 U	0.044 U	0.092 U	0.21 U	0.27 U	0.56 U	0.63 U	0.045 U	0.048 U	0.045 U
Aroclor-1242 (PCB-1242)	mg/kg	0.046 U	0.044 U	0.092 U	0.21 U	0.27 U	0.56 U	0.63 U	0.045 U	0.048 U	0.045 U
Aroclor-1248 (PCB-1248)	mg/kg	0.089	0.47	1.2	0.29	1.1	7.5	7.4	0.027 J	0.02 J	0.33
Aroclor-1254 (PCB-1254)	mg/kg	0.046 U	0.044 U	0.092 U	0.21 U	0.27 U	0.56 U	0.63 U	0.045 U	0.048 U	0.045 U
Aroclor-1260 (PCB-1260)	mg/kg	0.024 J	0.14	0.07 J	0.21 U	0.27 U	0.56 U	0.63 U	0.045 U	0.048 U	0.06
Total PCBs	mg/kg	0.113 J	0.61	1.27 J	0.29	1.1	7.5	7.4	0.027 J	0.02 J	0.39
Total Solids	%	71.7	74.8	72.0	77.5	61.4	59.5	52.1	73.8	68.9	72.7

#### Notes:

U - Not present at or above the associated value.

J - Estimated concentration.

#### TABLE 4.1

# EXCAVATION SUMMARY GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

<u>Parcel</u>	Excavated Volume (1)	Excavated Tonnage (1)(2)	Est	imated Tonnage of S	Soil Removed <sup>(3)</sup>	Backfill Tonnage (4)
	(cubic yards)	(tons)	< 50 mg/kg	> 50 mg/kg	Total	
2	158	221.20	408.92	0	408.9	315.1
53	3.08	4.31	-	5	9.7	7.0
57	6.38	8.93	-	-	NA	8.9
58	335	469.00	322	0	322.2	395.6
60/61	135	189.00	130	0	129.9	159.4
TOTALS	637	892			870.7	886

#### Notes:

- 1. Volumes/tonnage calculated using AutoCAD LandDesktop®.
- 2. Used conversion of 1 cubic yard = 1.4 tons in tonnage conversion tons
- 3. Tonnages based on weigh-scale tickets.
- 4. Backfill Volume is an average of the two tonnage calculation methods.
- NA Not Available. No scale tickets completed

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status		P002 002-12106 S-002-020706-AH-12106 2/7/2006 (0-0.33) FT A6B07335 Final	;	P002 002-12107 S-002-020706-AH-12107 2/7/2006 (0-0.33) FT A6B07335 Final		P002 002-12108 S-002-020706-AH-12108 2/7/2006 (0-0.33) FT A6B07335 Excavated		P002 002-12109 S-002-020706-AH-12109 2/7/2006 (0-0.33) FT A6B07335 Final		P002 002-12110 S-002-020706-AH-12110 2/7/2006 (0-0.33) FT A6B07335 Final		P002 002-12110 S-002-020706-AH-12111 2/7/2006 (0-0.33) FT Duplicate A6B07335 Final		P002 002-12112 S-002-020706-AH-12112 2/7/2006 (0-0.33) FT A6B07335 Final	
PCBs	Units														
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1244 (PCB-1244) Aroclor-1254 (PCB-1254) Aroclor-1250 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.044 U 0.044 U 0.044 U 0.044 U 0.047 J 0.044 U 0.044 U 0.047 J	LCS LCS	0.041 U 0.041 U 0.041 U 0.041 U 0.024 J 0.041 U 0.041 U 0.024 J	LCS	0.43 U 0.43 U 0.43 U 0.43 U 3.4 J 0.43 U 0.25 J 3.65 J	LCS LCS	0.04 U 0.04 U 0.04 U 0.04 U 0.12 J 0.04 U 0.12 J	LCS	0.041 U 0.041 U 0.041 U 0.041 U 1 J 0.041 U 0.12 1.12 J	LCS	0.042 U 0.042 U 0.042 U 0.042 U 1.3 J 0.042 U 0.14 1.44 J	LCS LCS	0.043 U 0.043 U 0.043 U 0.043 U 0.82 J 0.043 U 0.093	LCS LCS
Wet															
Total Solids	%	74.7		80.8		76.4		81.9		79.7		79.4		77.1	
QC Summary		Minor Issues		Minor Issues		Minor Issues		Minor Issues		Minor Issues		Minor Issues		Minor Issues	

#### Notes:

U - Not present at or above the associated value.

J - Estimated concentration.

LCS - Laboratory control sample percent recovery violation.

BRL - Below laboratory report limit.

FDP - Field duplicate sample precision violation.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status		P002 002-12113 S-002-020706-AH-12113 2/7/2006 (0-0.33) FT A6B07335 Excavated		P002 002-12114 S-002-021306-KH-12114 2/13/2006 (0-0.33) FT A6B13187 Final		P002 002-12115 S-002-021306-KH-12115 2/13/2006 (0-0.33) FT A6B13187 Final		P002 002-12116 S-002-021306-KH-12116 2/13/2006 (0-0.33) FT A6B13187 Final		P002 002-12117 S-002-021306-KH-12117 2/13/2006 (0-0.33) FT A6B13187 Final		P002 002-12118 S-002-021306-KH-12118 2/13/2006 (0-0.33) FT A6B13187 Final		P002 002-12119 S-002-021306-KH-12119 2/13/2006 (0-0.33) FT A6B13187 Final	
Excavated Status	Units	Excavatea		rinai		Finai		Finai		rmai		Final		Finai	
PCBs	amis														
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1244) Aroclor-1254 (PCB-1254) Aroclor-1250 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.051 U 0.051 U 0.051 U 0.051 U 1.8 J 0.051 U 0.2 2 J	LCS	0.042 U 0.042 U 0.042 U 0.042 U 0.12 0.042 U 0.03 J 0.15 J	BRL BRL	0.039 U 0.039 U 0.039 U 0.039 U 0.03 J 0.039 U 0.016 J 0.046 J	BRL BRL BRL	0.041 U 0.041 U 0.041 U 0.041 U 0.045 0.041 U 0.034 J 0.079 J	BRL BRL	0.039 U 0.039 U 0.039 U 0.039 U 0.043 0.039 U 0.013 J 0.056 J	BRL BRL	0.041 U 0.041 U 0.041 U 0.041 U 0.031 J 0.041 U 0.041 U 0.031 J	BRL BRL	0.042 U 0.042 U 0.042 U 0.042 U 0.066 0.042 U 0.02 J 0.086 J	BRL BRL
Wet															
Total Solids	%	65.3		79.2		85.4		80.4		84.4		79.6		77.7	
QC Summary		Minor Issues		No Issues		No Issues		No Issues		No Issues		No Issues		No Issues	

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status		P002 002-12119 S-002-021306-KH-12120 2/13/2006 (0-0.33) FT Duplicate A6B13187 Final	P053 053-124 S-053-061207-A 6/12/200 (0-0.33) i A7F123: Excavat	AH-12499 S-053-061207-AH-12. 17 6/12/2007 FT (0-0.33) FT 23 A7F12323	500	P053 053-12500 S-053-061207-AH-12501 6/12/2007 (0-0.33) FT Duplicate A7F12323 Excavated		P053 053-12502 5-053-061207-AH-12502 6/12/2007 (0-0.33) FT A7F12323 Excavated	P053 053-12507 S-053-062607-KH-12507 6/26/2007 (0-0.33) FT A7F26282 Final	P053 053-12508 S-053-062607-KH-12508 6/26/2007 (0-0.33) FT A7F26282 Final
PCBs	Units									
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.042 U 0.042 U 0.042 U 0.042 U 0.073 0.042 U 0.023 J 0.096 J	0.37 U 0.37 U 0.37 U 0.37 U 0.37 U 8.6 BRL 0.37 U BRL 8.6	0.079 U 0.079 U 0.079 U 0.079 U 1.6 J	FDP FDP	0.039 U 0.039 U 0.039 U 0.039 U 0.039 U 0.27 J 0.039 U	FDP FDP	0.04 U 0.04 U 0.04 U 0.04 U 0.04 U 0.27 0.04 U 0.27	0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U	0.041 U 0.041 U 0.041 U 0.041 U 0.041 U 0.13 0.041 U 0.13
Wet										
Total Solids	%	79.1	88.2	83.0		85.2		81.8	76.6	79.9
QC Summary		No Issues	No Issu	es Minor Issues		Minor Issues		No Issues	No Issues	No Issues

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status		P057 057-12240 S-057-041106-KH-12240 4/11/2006 (0-0.33) FT A6D11342 Final	P057 057-12241 S-057-041106-KH-12241 4/11/2006 (0-0.33) FT A6D11342 Excavated	P057 057-12253 S-057-041306-KH-12253 4/13/2006 (0-0.33) FT A6D13349 Final	P058 058-12395 S-058-100406-AH-12395 10/4/2006 (0-0.33) FT A6f04342 Final	P058 058-12402 S-058-100406-AH-12402 10/4/2006 (0-0.33) FT A6f04342 Final	P058 058-12403 S-058-100406-AH-12403 10/4/2006 (0-0.33) FT A6J04342 Final	P058 058-12475 S-058-110106-AH-12475 11/1/2006 (0-0.33) FT A6K01295 Final	
	Units								
PCBs									
Aroclor-1016 (PCB-1016)	mg/kg	0.047 U	0.045 U	0.22 U	0.041 U	0.043 U	0.045 U	0.042 U	
Aroclor-1221 (PCB-1221)	mg/kg	0.047 U	0.045 U	0.22 U	0.041 U	0.043 U	0.045 U	0.042 U	
Aroclor-1232 (PCB-1232)	mg/kg	0.047 U	0.045 U	0.22 U	0.041 U	0.043 U	0.045 U	0.042 U	
Aroclor-1242 (PCB-1242)	mg/kg	0.047 U	0.045 U	0.22 U	0.041 U	0.043 U	0.045 U	0.042 U	
Aroclor-1248 (PCB-1248)	mg/kg	0.63	1.6	1.5	0.9	0.16	0.47	0.44	
Aroclor-1254 (PCB-1254)	mg/kg	0.047 U	0.045 U	0.22 U	0.041 U	0.043 U	0.045 U	0.042 U	
Aroclor-1260 (PCB-1260)	mg/kg	0.13	0.27	0.27	0.096	0.019 J	BRL 0.062	0.027 J	BRL
Total PCBs	mg/kg	0.76	1.87	1.77	0.996	0.179 J	BRL 0.532	0.467 J	BRL
Wet									
Total Solids	%	70.5	73.3	73.9	79.7	76.4	74.1	78.6	
QC Summary		No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type		P058 058-12476 S-058-110106-AH-12476 11/1/2006 (0-0.33) FT	P058 058-12477 S-058-110106-AH-12477 11/1/2006 (0-0.33) FT	P058 058-12485 S-058-110306-4H-12485 11/3/2006 (0-0.33) FT	P060 060-12369 S-060-062806-AH-12369 6/28/2006 (0-0.33) FT	P060 060-12370 S-060-062806-AH-12370 6/28/2006 (0-0.33) FT	P060 060-12370 S-060-062806-AH-12371 6/28/2006 (0-0.33) FT Duplicate	s	P060 060-12372 5-060-062806-AH-12372 6/28/2006 (0-0.33) FT	
Sample Delivery Group		A6K01295	A6K01295	A6K03349	A6F28330	A6F28330	A6F28330		A6F28330	
Excavated Status	17. 14	Final	Excavated	Final						
PCBs	Units									
Aroclor-1016 (PCB-1016)	mg/kg	0.039 U	0.23 U	0.042 U	0.039 U	0.042 U	0.043 U		0.048 U	
Aroclor-1221 (PCB-1221)	mg/kg	0.039 U	0.23 U	0.042 U	0.039 U	0.042 U	0.043 U		0.048 U	
Aroclor-1232 (PCB-1232)	mg/kg	0.039 U	0.23 U	0.042 U	0.039 U	0.042 U	0.043 U		0.048 U	
Aroclor-1242 (PCB-1242)	mg/kg	0.039 U	0.23 U	0.042 U	0.039 U	0.042 U	0.043 U		0.048 U	
Aroclor-1248 (PCB-1248)	mg/kg	0.5	2.6	0.23	0.57	0.73	0.49		0.2	
Aroclor-1254 (PCB-1254)	mg/kg	0.039 U	0.23 U	0.042 U	0.039 U	0.042 U	0.043 U		0.048 U	
Aroclor-1260 (PCB-1260)	mg/kg	0.086	0.32	0.056	0.12	0.15 J	FDP 0.058 J	FDP	0.034 J	BRL
Total PCBs	mg/kg	0.586	2.92	0.286	0.69	0.88 J	FDP 0.548 J	FDP	0.234 J	BRL
Wet										
Total Solids	%	84.7	70.9	78.5	85.0	78.6	76.6		68.3	
QC Summary		No Issues		No Issues						

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status		P060 060-12373 S-060-062806-AH-12373 6/28/2006 (0-0.33) FT A6F28330 Excavated		P060 060-12374 S-060-062806-AH-12374 6/28/2006 (0-0.33) FT A6F28330		P060 060-12375 S-060-062806-AH-12375 6/28/2006 (0-0.33) FT A6F28330 Excavated		P060 060-12376 S-060-062806-AH-12376 6/28/2006 (0-0.33) FT A6F28330 Excavated		P060 060-12377 S-060-062806-AH-12377 6/28/2006 (0-0.33) FT A6F28330		P060 060-12378 S-060-062806-AH-12378 6/28/2006 (0-0.33) FT A6F28330		P060 060-12379 \$-060-062806-AH-12379 6/28/2006 (0-0.33) FT A6F28330
PCBs	Units													
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1250 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.21 U 0.21 U 0.21 U 3.1 0.21 U 0.21 U 0.092 J 3.192 J	BRL BRL	0.04 U 0.04 U 0.04 U 0.04 U 0.3 0.04 U 0.027 J 0.327 J	BRL BRL	0.93 U 0.93 U 0.93 U 0.93 U 11 0.93 U 0.44 J 11.44 J	BRL BRL	0.42 U 0.42 U 0.42 U 0.42 U 4.3 0.42 U 0.32 J 4.62 J	BRL BRL	0.05 U 0.05 U 0.05 U 0.05 U 0.02 J 0.05 U 0.02 J	BRL BRL	0.22 U 0.22 U 0.22 U 0.22 U 2.2 0.22 U 0.13 J 2.33 J	BRL BRL	0.043 U 0.043 U 0.043 U 0.043 U 0.69 0.043 U 0.1 0.79
Wet Total Solids	%	79.1		83.3		70.9		79.1		65.8		74.4		77.5
QC Summary		No Issues		No Issues		No Issues		No Issues		No Issues		No Issues		No Issues

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status		P060 060-12396 S-060-100406-AH-12396 10/4/2006 (0-0.33) FT A6J04339 Final		P060 060-12397 S-060-100406-AH-12397 10/4/2006 (0-0.33) FT A6J04339 Final		P060 060-12398 S-060-100406-AH-12398 10/4/2006 (0-0.33) FT A6J04339 Final		P060 060-12399 S-060-100406-AH-12399 10/4/2006 (0-0.33) FT A6J04339 Excavated		P060 060-12400 S-060-100406-AH-12400 10/4/2006 (0-0.33) FT A6J04339 Final		P060 060-12401 S-060-100406-AH-12401 10/4/2006 (0-0.33) FT A6/04339 Final	P060 060-12404 S-060-100906-AH-12404 10/9/2006 (0-0.33) FT A6/10265 Final
PCBs	Units												
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.045 U 0.045 U 0.045 U 0.045 U 0.14 0.045 U 0.038 J 0.178 J	BRL BRL	0.043 U 0.043 U 0.043 U 0.043 U 0.012 J 0.043 U 0.043 U 0.012 J	BRL BRL	0.043 U 0.043 U 0.043 U 0.043 U 0.021 J 0.043 U 0.043 U 0.021 J	BRL BRL	0.48 U 0.48 U 0.48 U 0.48 U 4.1 0.48 U 0.22 J 4.32 J	BRL BRL	0.045 U 0.045 U 0.045 U 0.045 U 0.41 0.045 U 0.022 J 0.432 J	BRL BRL	0.044 U 0.044 U 0.044 U 0.044 U 0.87 0.044 U 0.062 0.932	0.045 U 0.045 U 0.045 U 0.045 U 0.045 U 0.045 U 0.045 U 0.045 U
Wet													
Total Solids	%	72.9		76.2		76.3		69.0		74.1		74.5	72.7
QC Summary		No Issues		No Issues		No Issues		No Issues		No Issues		No Issues	No Issues

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

TABLE 4.2

Area Sample Location Sample Identification Sample Date Sample Depth Sample Type Sample Delivery Group Excavated Status	Units	P060 060-12405 S-060-101006-AH-12405 10/10/2006 (0-0.33) FT A6J10283 Final		P060 060-12406 S-060-101006-AH-12406 10/10/2006 (0-0.33) FT A6J10283 Final		P060 060-12433 S-060-101206-KH-12433 10/12/2006 (0-0.33) FT A6J12319 Final	P060 060-12434 S-060-101206-KH-12434 10/12/2006 (0-0.33) FT A6J12319 Final	P060 060-12435 S-060-101206-KH-12435 10/12/2006 (0-0.33) FT A6J12319 Excavated		P060 060-12478 S-060-110106-AH-12478 11/1/2006 (0-0.33) FT A6K01297 Final	
PCBs	umts										
Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1242) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260) Total PCBs	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.041 U 0.041 U 0.041 U 0.041 U 0.015 J 0.041 U 0.041 U 0.015 J	BRL BRL	0.043 U 0.043 U 0.043 U 0.043 U 0.13 0.043 U 0.026 J 0.156 J	BRL BRL	0.048 U 0.048 U 0.048 U 0.048 U 0.048 U 0.048 U 0.048 U 0	0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U 0.043 U	0.044 U 0.044 U 0.044 U 0.044 U 0.013 J 0.044 U 0.044 U 0.013 J	BRL BRL	0.048 U 0.048 U 0.048 U 0.048 U 0.11 0.048 U 0.029 J 0.139 J	BRL BRL
Wet											
Total Solids	%	80.8		76.7		68.6	77.2	75.8		68.5	
QC Summary		No Issues		No Issues		No Issues	No Issues	No Issues		No Issues	

#### Notes:

U - Not present at or above the associate

J - Estimated concentration.

LCS - Laboratory control sample percen

BRL - Below laboratory report limit.

**TABLE 4.3.1** 

# PARCEL 2 TSP AIR MONITORING ANALYTICAL RESULTS SUMMARY GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Unit_ID	STATION 1B TSP-12	STATION 22A TSP-9	STATION 26 TSP-4	STATION 27 TSP-10
_				
2/3/2006	001	1110	1000	
Total Volume(m3)	991	1113	1022	
Average Flow(m3/min)	0.85	0.98	0.92	
TSP Concentration(mg/m3)	0.2324	0.0657	0.0616	
Percent of Allowable(%)	226	64	UPWIND	
2/6/2006				
Total Volume(m3)	1296	1420	1290	
Average Flow(m3/min)	0.98	1.11	0.99	
TSP Concentration(mg/m3)	0.2555	0.0511	0.0499	
Percent of Allowable(%)	307	61	UPWIND	
, ,				
2/7/2006				
Total Volume(m3)	1416	249	1522	1269
Average Flow(m3/min)	0.95	*	1.03	0.84
TSP Concentration(mg/m3)	0.4869	*	0.065	0.0388
Percent of Allowable(%)	449	*	UPWIND	36
2/8/2006				
2/8/2006	1422	1697	NR	1168
Total Volume(m3)			NR NR	
Average Flow(m3/min) TSP Concentration(mg/m3)	0.91 0.4157	1.11 0.082	NR NR	0.89 0.0456
Percent of Allowable(%)	383	76	NR NR	0.0456 42
rercent of Allowable(%)	363	76	INK	42
2/10/2006				
2/10/2006 Total Volume(m3)	1429	1372	1534	1109
Average Flow(m3/min)	0.9	0.88	0.99	0.83
TSP Concentration(mg/m3)	0.7528	0.0916	0.0875	0.071
Percent of Allowable(%)	635	0.0910	74	UPWIND
referred Allowable(%)	033	//	74	OI WIND
2/23/2006				
Total Volume(m3)	1170	1159	1291	1142
Average Flow(m3/min)	0.81	0.82	0.97	0.84
TSP Concentration(mg/m3)	0.2163	0.0893	0.5856	0.0468
Percent of Allowable(%)	22	9	UPWIND	5

### Notes:

<sup>\* -</sup> Results not reported due to machine malfunction

### **TABLE 4.3.2**

# PARCEL 2 PCB AIR MONITORING ANALYTICAL RESULTS SUMMARY GM BEDFORD POWERTRAIN FACILITY BEDFORD, INDIANA

Unit_ID	STATION 1B PUF-7	STATION 22A PUF-3	STATION 26 PUF-8	STATION 27 PUF-9
2/3/2006				
Total Volume(m3)			256	
Total PCB Mass(ug)			0	
PCB Concentration(ug/m3)			ND(0.0029)	
Percent of Allowable(%)				
2/6/2006				
Total Volume(m3)			299	325
Total PCB Mass(ug)			0	0
PCB Concentration(ug/m3)			ND(0.0025)	ND(0.0023)
Percent of Allowable(%)				
2/7/2006				
Total Volume(m3)	357	19	339	422
Total PCB Mass(ug)	1.2	*	0	0
PCB Concentration(ug/m3)	0.0034	*	ND(0.0022)	ND(0.0018)
Percent of Allowable(%)	0	*		

#### Notes

ND - Non detect

<sup>\* -</sup> Results not reported due to machine malfunction

### **TABLE 6.1**

# MASTER WESTERN TRIBUTARY PARCELS SUMMARY TABLE GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Parcel	Delineation and Verification Samples Collected	Quantity of Soil Excavated (tons) <sup>1</sup>	Quantity of Soil Backfilled (tons) <sup>1</sup>
2	58	221	221 <sup>(2)</sup>
53	28	4	10
57	21	9	9
58	9	469	336
60/61	34	189	138

### Note:

- 1. Quantities of Soil Excavated and Backfilled were calculated using Autodesk LandDesktop®.
- 2. Restored to pre-excavation

### APPENDIX A

PHOTOGRAPHIC LOG



PHOTO 01: PARCEL 2 - PRE-CONSTRUCTION CONDITIONS OF SWALE (FACING SOUTHEAST). MARCH 2003



PHOTO 02: PARCEL 2 - PRE-CONSTRUCTION CONDITIONS OF SWALE (FACING SOUTHEAST). MARCH 2003





PHOTO 03: PARCEL 2 - EXCAVATION PREPARATION TO PROTECT THE LAWN (FACING WEST). FEBRUARY 2006



PHOTO 04: PARCEL 2 - AIR MONITORING STATION ON PARCEL 2 (FACING NORTH). FERUARY 2006





PHOTO 05: PARCEL 2 - BRUSH/BRANCHES BEING LOADED FOR DISPOSAL AT SYCAMORE RIDGE LANDFILL (FACING SOUTHEAST). FEBRUARY 2006



PHOTO 06: PARCEL 2 - EXCAVATION PROGRESS (FACING EAST). FEBRUARY 2006





PHOTO 07: PARCEL 2 - RETAINING WALL EXCAVATION (FACING SOUTHEAST). FEBRUARY 2006



PHOTO 08: PARCEL 2 - TARPED EXCAVATION AREA (FACING EAST). FEBRUARY 2006





PHOTO 09: PARCEL 2 - IMPORTED FILL MATERIAL FOR RESTORATION (FACING WEST). FEBRUARY 2006



PHOTO 10: PARCEL 2 - HYDROSEEDING OF RESTORATION (FACING EAST). FEBRUARY 2006





PHOTO 11: PARCEL 2 - EROSION CONTROL MATING PLACED OVER RESTORATION (FACING EAST), MARCH 2006



PHOTO 12: PARCEL 53 - PRE-CONSTRUCTION CONDITIONS OF PARCEL 53. JUNE 2007





PHOTO 13: PARCEL 53 - EXCAVATION AREA (FACING NORTH). JUNE 2007



PHOTO 14: PARCEL 53 - EXCAVATION PROGRESS (FACING NORTHWEST). JUNE 2007





PHOTO 15: PARCEL 53 - CRA SAMPLERS COLLECTING VERIFICATION AND CHARACTERIZATION SOIL SAMPLES (FACING NORTHWEST). JUNE 2007



PHOTO 16: PARCEL 53 - OVERLOOKING RESTORATION. JULY 2007





PHOTO 17: PARCEL 53 - OVERLOOKING RESTORATION. JULY 2007



PHOTO 18: PARCEL 57 - SETTING UP OF PERIMETER FENCE AROUND THE EXCAVATION AREA (FACING SOUTH). APRIL 2006





PHOTO 19: PARCEL 57 - HAND EXCAVATION OF TOP 4 TO 6 INCHES OF SOIL (FACING WEST), APRIL 2006



PHOTO 20: PARCEL 57 - LIMITS OF INITIAL EXCAVATION (FACING EAST). APRIL 2006





PHOTO 21: PARCEL 57 - HAND EXCAVATION AND PLACEMENT INTO DRUMS FOR SOIL REMOVAL (FACING EAST). APRIL 2006



PHOTO 22: PARCEL 57 - TARPING OF THE EXCAVATION (FACING WEST). APRIL 2006





PHOTO 23: PARCEL 57 - GRADING THE RESTORED AREA PRIOR TO SEEDING (FACING WEST). APRIL 2006



PHOTO 24: PARCEL 60 & 61 - PRE-EXCAVATION PREPARATIONS. STAKING THE EXCAVATION LIMIT (FACING NORTHWEST). JUNE 2006





PHOTO 25: PARCEL 60 - PRE-EXCAVATION PREPARATIONS. DAMING UPSTREAM WATERS FOR DIVERSION (FACING NORTH). JUNE 2006



PHOTO 26: PARCEL 60 - EXCAVATION PROGRESS IN STREAM (FACING SOUTHEAST). JUNE 2006





PHOTO 27: PARCEL 60 - EXCAVATION PROGRESS ON BANK (FACING NORTH). JULY 2006



PHOTO 28: PARCEL 61 - LOADING ROLL-OFF BOX WITH EXCAVATED CREEK MATERIAL (FACING NORTH) JULY 2006





PHOTO 29: PARCEL 60 - LOOKING ALONG THE CREEK AT EXCAVATION TO BEDROCK (FACING EAST). JULY 2006



PHOTO 30: PARCEL 60 & 61 - EXCAVATION AREA TARPED (FACING WEST). JULY 2006





PHOTO 31: PARCEL 60 - BREAKING OUT ROCK IN THE CREEK (FACING NORTHEAST) SEPTEMBER 2006



PHOTO 32: PARCEL 60 - ROCK REMOVED FROM THE CREEK BED. OCTOBER 2006





PHOTO 33: PARCEL 60 - POWERWASHING THE EXPOSED BEDROCK ALONG THE CREEK (FACING EAST). OCTOBER 2006



PHOTO 34: PARCEL 60 & 61 - BREAKING OUT ROCK IN THE CREEK WITH A HYDRAULIC RAM (FACING SOUTH).

NOVEMBER 2006





PHOTO 35: PARCEL 60 - LOOKING ALONG THE CLEAN CREEK EXCAVATION (FACING WEST). NOVEMBER 2006



PHOTO 36: PARCEL 60 - BACKFILLING CREEK WITH IMPORTED FILL MATERIAL FOR RESTORATION (FACING WEST). NOVEMBER 2006





PHOTO 37: PARCEL 60 - TOPSOIL PLACEMENT IN RESTORATION (FACING WEST). NOVEMBER 2006



PHOTO 38: PARCEL 60 - RESTORED CREEK CHANNEL. STRAW IN PLACE FOR EROSION CONTROL (FACING EAST). NOVEMBER 2006





PHOTO 39: PARCEL 60 & 58 - OVERLOOKING RESTORATION (FACING NORTH). NOVEMBER 2006



PHOTO 40: PARCEL 60 - RESTORED DRIVEWAY (FACING SOUTH). NOVEMBER 2006





PHOTO 41: PARCEL 60 - REPAVED DRIVEWAY (FACING NORTH). NOVEMBER 2006



PHOTO 42: PARCEL 61 - REINSTALLED CATTLE FENCE NOVEMBER 2006



### APPENDIX B

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTS (INVESTIGATIVE, STOCKPILE, AND VERIFICATION SAMPLES)

#### APPENDIX C

#### MATERIAL TRACKING

- C.1 MATERIAL TRACKING SPREADSHEET
- C.2 MATERIAL TRACKING MANIFEST FOR HERITAGE
- C.3 MATERIAL TRACKING MANIFEST FOR SRLF

C.1 MATERIAL TRACKING SPREADSHEET

**APPENDIX C.1** 

# PARCEL 2 MATERIAL TRACKING GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Date	Time	Waste Description	Waste Source	Truck #	Transporter	Landfill Weight (lb)	Contractor
	111110		- Source	Truck "	11 unoporter	reight (to)	Continuetor
2/7/2006	9:08:44	Soil <50 ppm	P002	10376	K+A	31,280	Sevenson
2/7/2006	9:20:35	Soil <50 ppm	P002	10377	K+A	33,160	Sevenson
2/7/2006	9:51:32	Soil <50 ppm	P002	10376	K+A	32,720	Sevenson
2/7/2006	10:07:50	Soil <50 ppm	P002	10377	K+A	28,760	Sevenson
2/7/2006	10:30:33	Soil <50 ppm	P002	10376	K+A	30,300	Sevenson
2/7/2006	10:52:16	Soil <50 ppm	P002	10377	K+A	28,000	Sevenson
2/7/2006	11:18:08	Soil <50 ppm	P002	10376	K+A	29,040	Sevenson
2/7/2006	11:30:56	Soil <50 ppm	P002	10377	K+A	28,340	Sevenson
2/7/2006	11:59:07	Soil <50 ppm	P002	10376	K+A	30,280	Sevenson
2/7/2006	12:04:57	Soil <50 ppm	P002	10377	K+A	26,780	Sevenson
2/7/2006	13:41:16	Soil <50 ppm	P002	10376	K+A	25,800	Sevenson
2/7/2006	13:49:29	Soil <50 ppm	P002	10377	K+A	26,080	Sevenson
2/7/2006	14:18:23	Soil <50 ppm	P002	10376	K+A	29,620	Sevenson
2/7/2006	14:32:05	Soil <50 ppm	P002	10377	K+A	29,140	Sevenson
2/7/2006	14:57:35	Soil <50 ppm	P002	10376	K+A	29,860	Sevenson
2/7/2006	15:11:51	Soil <50 ppm	P002	10377	K+A	30,900	Sevenson
2/7/2006	15:38:00	Soil <50 ppm	P002	10376	K+A	35,700	Sevenson
2/10/2006	14:29:12	Soil <50 ppm	P002	10376	K+A	32,720	Sevenson
2/10/2006	14:44:18	Soil <50 ppm	P002	10377	K+A	26,640	Sevenson
2/10/2006	15:09:51	Soil <50 ppm	P002	10376	K+A	31,680	Sevenson
2/10/2006	15:29:45	Soil <50 ppm	P002	10377	K+A	30,940	Sevenson
2/10/2006	15:57:22	Soil <50 ppm	P002	10376	K+A	38,060	Sevenson
2/10/2006	16:09:45	Soil <50 ppm	P002	10377	K+A	37,040	Sevenson
2/10/2006	16:40:14	Soil <50 ppm	P002	10376	K+A	36,680	Sevenson
2/10/2006	16:58:09	Soil <50 ppm	P002	10377	K+A	39,400	Sevenson
2/10/2006	17:15:07	Soil <50 ppm	P002	10376	K+A	38,920	Sevenson

TOTAL 817,840

#### APPENDIX C.1

# PARCEL 53 MATERIAL TRACKING SPREADSHEET GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

	Date			Waste	Waste			Landfill	
_	Shipped	Load No.	Manifest No.	Description	Source	Truck No.	Transporter	Weight (lbs)	Contractor
_									
	6/26/2007	1644750	92785WAS	Soil > 50 ppm	Parcel 53	67	U.S. Bulk Transport Inc.	10,780	Sevenson
_		·		·			TOTAL	10,780	

APPENDIX C.1

#### MATERIAL TRACKING SPREADSHEET GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

		Waste	Waste			Landfill	
Date	Time	Description	Source	Truck #	Transporter	Weight (lbs)	Contractor
6/30/2006	7:52:00	Soil <50 ppm	60, 61	99	Hoosier	28,840	Sevenson
6/30/2006	8:33:46	Soil <50 ppm	60, 61	99	Hoosier	15,600	Sevenson
7/10/2006	8:54:00	Soil <50 ppm	60, 61	99	Hoosier	45,300	Sevenson
7/10/2006	9:55:00	Soil <50 ppm	60, 61	99	Hoosier	43,680	Sevenson
7/10/2006	-	Soil <50 ppm	60, 61	99	Hoosier	46,940	Sevenson
7/18/2006	10:59:00	Soil <50 ppm	60, 61	99	Hoosier	47,440	Sevenson
7/18/2006	12:13:00	Soil <50 ppm	60, 61	99	Hoosier	45,480	Sevenson
7/18/2006	13:37:00	Soil <50 ppm	60, 61	99	Hoosier	43,360	Sevenson
9/20/2006	7:46 AM	Soil <50 ppm	60 & 61	99	Hoosier	29,200	Sevenson
9/20/2006	9:37 AM	Soil <50 ppm	60 & 61	99	Hoosier	31,460	Sevenson
9/20/2006	9:39 AM	Soil <50 ppm	60 & 61	99	Hoosier	30,080	Sevenson
9/20/2006	10:16 AM	Soil <50 ppm	60 & 61	99	Hoosier	36,560	Sevenson
9/26/2006	9:02 AM	Soil <50 ppm	60 & 61	6	Hoosier	36,980	Sevenson
9/26/2006	10:29 AM	Soil <50 ppm	60 & 61	6	Hoosier	31,340	Sevenson
9/27/2006	7:55 AM	Soil <50 ppm	60 & 61	99	Hoosier	31,420	Sevenson
9/27/2006	8:41 AM	Soil <50 ppm	60 & 61	99	Hoosier	29,800	Sevenson
9/27/2006	10:33 AM	Soil <50 ppm	60 & 61	99	Hoosier	35,260	Sevenson
10/4/2006	9:21 AM	Soil <50 ppm	60 & 61	1010	Hoosier	28,840	Sevenson
10/4/2006	9:25 AM	Soil <50 ppm	60 & 61	104	Hoosier	33,460	Sevenson
10/4/2006	9:47 AM	Soil <50 ppm	60 & 61	1010	Hoosier	25,080	Sevenson
10/4/2006	10:03 AM	Soil <50 ppm	60 & 61	104	Hoosier	27,900	Sevenson
10/6/2006	11:13 AM	Soil <50 ppm	60-61	1011	Hoosier	35,980	Sevenson
10/6/2006	12:03 PM	Soil <50 ppm	60-61	1010	Hoosier	33,060	Sevenson
10/11/2006	9:27 AM	Soil <50 ppm	60 & 61	N/A	Hoosier	36,900	Sevenson
10/11/2006	10:10 AM	Soil <50 ppm	60 & 61	N/A	Hoosier	37,280	Sevenson
10/11/2006	10:42 AM	Soil <50 ppm	60 & 61	N/A	Hoosier	31,660	Sevenson
10/13/2006	8:56 AM	Soil <50 ppm	60 & 61	106	Hoosier	32,840	Sevenson
10/13/2006	9:33 AM	Soil <50 ppm	60 & 61	106	Hoosier	40,140	Sevenson
10/20/2006	8:50 AM	Soil <50 ppm	61	99	Hoosier	29,520	Sevenson
11/2/2006	8:31 AM	Soil <50 ppm	61	106	Hoosier	39,000	Sevenson
11/2/2006	9:06 AM	Soil <50 ppm	61	106	Hoosier	40,280	Sevenson
11/6/2006	8:44 AM	Soil <50 ppm	60	106	Hoosier	35,120	Sevenson
11/6/2006	9:12 AM	Soil <50 ppm	60	99	Hoosier	28,900	Sevenson
11/8/2006	10:33 AM	Soil <50 ppm	60	1010	Hoosier	31,420	Sevenson

TOTAL 1,176,120

C.2 MATERIAL TRACKING MANIFEST FOR HERITAGE

TIE	ease pr	int or type. (Form desig	ned for use on (	elite (12-pitch) ty	pewriter.)						Form	Approved	. OMB No	. 2050-003
1	UNII	FORM HAZARDOUS ASTE MANIFEST				2. Page 1 of	1	ergency Respons			Tracking Nu	nber	3.3%	terial delection and participation of the
NAME OF TAXABLE PARTY.		enerator's Name and Mailin	i NIAAA a Address	6036099	***************************************	1		(800)53! tor's Site Addres		than mailing addre	<u> </u>	7 D J W	(4 <u>)</u>	***************************************
***************************************	1 0	ENERAL MOTO	IRS CORP	. / JEFF	MICHOLS (C)	RA)	GEI	YERAL M	TORS.	CORPORAT	ION /	TIP	RIENK	S
***************************************		'.O. BOX 126 Medforo, in	47421				- 10°		LVE IN 474	21				
	Gene	erator's Phone:	12)279-	7404			l GE	NI 2195						
		ansporter 1 Company Nam								U.S. EPA ID I			DESCRIPTION OF THE PROPERTY OF THE PARTY OF	***************************************
NAME AND DESCRIPTION OF	7 Trs	J.S. BLA.K TR ensporter 2 Company Name	ANSPORT	<u>IMC</u>		***************************************	-	***************************************	All of the state o		187347	515		······································
oleanne market	1. 110	anaportor z Company Nam	c							U.S. EPA ID I	vumber			
	8. De	signated Facility Name and	d Site Address			Webser (4) carrended postago	***************************************			U.S. EPA ID I	Vumber			-
		ERITAGE ENV	IRONNEN	TAL SERV	ICES LLC									
		370 W. COUN OACHDALE, I	N 46172							IND	780503£	770		
		ty's Phone: 🧗	<u> 65) 435-1</u>				***********	γ	·			***************************************		
	9a. HM	9b. U.S. DOT Description and Packing Group (if a	on (including Propo (nv))	er Shipping Name,	Hazard Class, ID Number,			10. Conta	7	11. Total	12. Unit	13,	Waste Cod	es
-	-	1.	(3))					No.	Туре	Quantity	Wt./Vol.	***************************************		
GENERATOR	X	RG, POLY	CHLORIN	ATED BIP	HENVIS SOLI TION WASTE :	10,9,		1	DT	1	K L	***************************************	government of the second secon	Preferencesconomicaco
RA		UNUS432,PUI	II,(PCB	REMEDIA	TION WASTE	761.61	(0)			5018	STATE OF THE PARTY			
E		2.							<b>†</b>					
9		The first of the f						No. of the contract of the con		-	-	rs-0073737 X 2018 V		·
		3.	***************************************						<u> </u>					_
		,							***************************************					
		TOTAL STATE OF THE										······································		-
		4.							<del> </del>					_
		de vicinio de la companio del companio de la companio del companio de la companio della companio de la companio della companio										~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Manager States and Sta	
												1		
	14.5	pecial Handling Instructions	s and Additional In	tormation		meta mana atau	er ann à la siè se	traker over det liet. Leve	d on this and one con-		1			
	1 2	ERG# 171 1 1.W12 03466	.EAKLIE: 27 T#164	ol DHIE 1 14750	# HEMUVAL F	-KUM St	:MVI(	JE FOR I	/1SF05	ALICA 9	167		SE	25.
		474	wike-pa											
	15. (	GENERATOR'S/OFFEROR	R'S CERTIFICATI	ON: I hereby decla	are that the contents of this	s consignment	are fully a	and accurately de	scribed abov	e by the proper shi	inning name	and are clas	sified nack	<u>36731</u> kaned
	1	marked and labeled/placard Exporter, I certify that the co	ded, and are in all	respects in proper	condition for transport acc	cording to appli	cable inte	rnational and nat	ional governi	nental regulations.	If export ship	ment and I	am the Prin	тагу
		certify that the waste minir	mization statemen	it identified in 40 Cl	FR 262.27(a) (if I am a larg	ge quantity gen	neagment ierator) or	: of Consent. : (b) //if Lam a sma	all quantity ge	nerator) is true.				
	Gener	ator's/Offeror's Printed/Typ	ed Name			Sig	nature	Daniel Commencer	a - marine	**************************************	Actividad de la companya de la comp	Mor	ith Day	/ Year
↓		EFF AICHOS	<u>OF_CRA</u>	AGENT F	TOR I'M		-est.		W.				12/	107
INT		ernational Shipments		to U.S.		Export from	U.S.	Port of er	,			Nata -		
R		porter signature (for export ansporter Acknowledgment		rials	v	· ···		Date leavi	ing U.S.:	<del></del>				***************************************
RE	Ł	orter 1 Printed/Typed Nam	,			Sig	nature			-	***************************************	Mon	th Day	Year
TR ANSPORTER						VALUE PRODUCTION OF THE PERSON	10	41				12		100
A	Transp	oorter 2 Printed/Typed Nam	ne 🦯			Sig	nature			***************************************	······	Mon	th Day	Year
			**************************************			<u> </u>				Herein in i	Chimelatic medie som aksemskammen som menskale i och			
1		screpancy	processing	***************************************			-		-	(ini barratananananananananananananananananana			-	
	18a. D	iscrepancy Indication Spac	ce L Quar	ntity	<b></b> Туре			Residue		Partial Reje	ection		Full Rej	ection
							***	wifout Dufaces	\$2					
≥	18b. A	Iternate Facility (or Genera	tor)	· · · · · · · · · · · · · · · · · · ·			Nić	nifest Reference	: Number:	U.S. EPA ID N	umber			
믕														
FA		's Phone:												
HE	18c. Si	gnature of Alternate Facility	y (or Generator)									Mor	nth Day	y Year
GNA	50.11.	2 . X4( / P)	and the second s	***************************************				-						
DESIGNATED FACILITY	19. Ha:	zardous Waste Report Mar	ragement Method	Codes (i.e., codes	for hazardous waste treati	ment, disposal	, and recy	cling systems)	introduction and the second and the second	l A	TOTAL TOTAL CONTROL OF THE STREET OF THE STR		ANALYS CONTRACTOR OF THE PARTY	
			H132	An .		٥.				4,				
MATCHICAGOLOGIA	20. Des	signated Facility Owner or		ation of receipt of h	azardous materials covere	d by the manif	est excen	t as noted in Item	1 18a	***************************************			Mikitodomikloninessustassussussussussussussussussussussussussu	simurimir-rum-rumanasas
NAME OF TAXABLE PARTY O		/Typed Name				Commence of the Commence of th	nature	. Jo nata ii iici	. 100			Mon	th Day	Year
+						00000000						4440000	al-forman	BURRALANCE



11 W. Morris St.	
ianapolis, IN 46231	
1	01 W. Morris St. Jianapolis, IN 46231 17) 243-0811 D093219012

4132 Pompano Road Charlotte, NC 28216 (704) 392-6276 NCD121700777

15330 Canal Bank Road, N.E. Lemont, IL 60439 (630) 739-1151 ILD085349264 S523 NE 38th Street Kansas City, MO 64161 (816) 453-4321 MOD981505555

A 4370 W. Co. Rd. 1275N Roachdale, IN 46172 (765) 435-2704 IND980503890

5400 N. Detroit Ave. Toledo, OH 43611 (419) 476-0942 OHD005045992 54 Avenue D Williston, VT 05495 (802) 860-1200 VTD982766537

☐ 5122 East Storey Rd. Coolidge, AZ 85228 (520) 723-4167 AZD081705402

370 W. Co. Rd 1275 N Roachdale, IN 46172 (765) 435-2704 Subtitle D Landfill

# CERTIFICATE OF TREATMENT AND DISPOSAL

HERITAGE ENVIRONMENTAL SERVICES, LLC CERTIFIES AND ASSURES TO OUR CUSTOMERS THAT THE TRANSACTION DESCRIBED BELOW, INCLUDING TREATMENT AND/OR STORAGE AND/OR RECLAMATION AND/OR DISPOSAL HAS BEEN HANDLED IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS.

Heritage Environmental Services, LLC certifies that the transaction described by the identifying information below has been conducted as described. Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supevisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

**GENERATOR:** 

General Motors - Powertrain Division

105 GM Drive

Bedford IN 47421

**EPA ID NUMBER:** 

IND006036099

Wastestream:

2195-12 PCB Remediation Waste (Soil)

**Disposal Method:** 

Landfilled

RECEIVED

**Disposal Date:** 

26-Jun-07

CRA, INC.

Manifest:

92785WAS

Net Kg:

4900

KENNETH S. PRICE, CHAIRMAN

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

Distribution: CRA SES

DATE: 6/26/0	> 7.			LOAD #:	164 47	50	: -	
TIME IN: 7:46 am.	TIME OUT: §	3:46 cm	٠,	MANIFEST #	000092	785	WAS	7
WAS	ТЕ ТҮРЕ			WASTE PROF	FILE NO:	2	195-12	
SOIL < 50 ppm PCBs	YES	(NO.)		WASTE DESC	CRIPTION:			
SOIL > 50 ppm PCBs	(YES)	NO		Soil >5	0 ppm PCBs			
TRASH / DEBRIS	YES	(NO)		WORK AREA				
OTHER:	(YES)	NO		Parcel	/ Area:	73	-2	2 8
TEMPERATURE (°F): 73	WIND (mph)	0-5	5 - 10	10 - 15	CLEAR CI	LOUDY	RAIN	SNOW
LOADING INFORMATI	ON:							
EQUIPMENT:	Sevenson - CA	Γexcavator			NOTES:		***************************************	
MATERIAL:	Soil	· · · · · · · · · · · · · · · · · · ·						
LOCATION:	Staging Pad/St	ockpile: *///	4.					
PERSONNEL:	Sevenson excav	ator operator	r/laborers					
LOAD WEIGHT (LBS):	GROSS: 37	240	TARE:	2620	0	NET:	1104	0.
TRANSPORTER INFORM	MATION:							
TRUCKING COMPANY:	U.S. Bulk Trans	port, Inc.						
TRUCK #:	67	-						
TRAILER #:	- Salar							
FINAL INSPECTION:								<del></del>
DRIVER HAS PROPER PAPE	ERWORK:	YES NO	D LOAD	COVERED / S	SECURED:	<	YES	NO
LINER INSTALLED:	2	YES) NO	TRUCI	K & TRAILER (	CLEAN:	-	VES)	NO
PROPER PLACARDS USED:	2	res no	OTHE	R:				
SES REPRESENTATIVE:			(	CRA REPRESE	NTATIVE:			
PRINT: RANGE &	AMBELL	dinana.			Pete Bridcut			
SIGN:			New Colonials	BIGN:	3			

#### GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421

se We <sub>b</sub>		SCALE HICKEI: (565)
	2	VENDOR:
	S O S O S O S O S O S O S O S O S O S O	MATERIAL: So; (.
	<b></b>	SHIPPER NO.: 164 4750. SIGNED IN:
37240 lb		LOT NO.: SES.
8:46 AM <b>06 26 0</b> 7	<u>E</u>	CARRIER: USBully SIGNED OUT:
26200		TRAILER:
	80°0, 2 2 0, 1 0, 2 40, 2°00, 2000	IN TRACTOR P67 OUT TRACTOR NUMBER:
	DUNNAGE	REMARKS:
11040	NET	

C.3 MATERIAL TRACKING MANIFEST FOR SRLF

#### APPENDIX C.3

# PARCEL 22 STUMP MATERIAL TRACKING SPREADSHEET GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA

Date			Waste	Waste			Landfill	
Shipped	Load No.	Manifest No.	Description	Source	Truck No.	Transporter	Weight (lbs)	Contractor
								_
2/7/2006	22213	22213	Chipped stumps/soil < 50 ppm	Parcel 22A	562	Relco Systems	25,660	Sevenson
2/7/2006	22214	22214	Chipped stumps/soil < 50 ppm	Parcel 22A	831	Relco Systems	36,240	Sevenson
2/7/2006	22215	22215	Chipped stumps/soil < 50 ppm	Parcel 22A	562	Relco Systems	35,760	Sevenson
2/8/2006	22216	22216	Chipped stumps/soil < 50 ppm	Parcel 22A	717	Relco Systems	47,100	Sevenson
2/9/2006	22217	22217	Chipped stumps/soil < 50 ppm	Parcel 22A	562	Relco Systems	34,040	Sevenson
2/11/2006	22218	22218	Chipped stumps/soil < 50 ppm	Parcel 22A	562	Relco Systems	31,700	Sevenson
2/11/2006	22219	22219	Chipped stumps/soil < 50 ppm	Parcel 22A	562	Relco Systems	42,260	Sevenson
4/21/2006	22273	22273	Chipped stumps/soil < 50 ppm	Parcel 22A	834	Relco Systems	35,540	Sevenson

288,300

GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421

SCALE TICKET: 52483
VENDOR:

MATERIAL:

SHIPPER NO.: 27213

SIGNED IN:

LOT NO.:

26430

\$150 Pro-

TRAILER:

IN TRACTOR
NUMBER:

OUT TRACTOR NUMBER:

SIGNED OUT:

**REMARKS:** 

NET

CARRIER:



# NON-HAZARDOUS WASTE MANIFEST

#### GENERATOR INFORMATION

#### CUSTOMER/BILLING INFORMATION

General Motors

Billing Name: Encore

Address:

105 GM Drive

Address:

2000 Centerpointe Pkwy, 1st Floor

City:

Bedford

**Cobalt Station** 

Zip:

47421

County: Lawrence

State: IN

Mail Code 483-520-190

Pontiac State: MI Zip: 4834

Site Location: Same as generator

City: County:

Oakland

Generator Contact: Kim Crame

Generator Phone: 812-279-7404

Consultant/Contractor: Conestoga-Rovers & Assoc. Consultant/Contractor Address: GM Drive & 4th Street

Consultant/Contractor Phone: 812-277-8960

Bedford IN 47421

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Waste <50ppm PCBs	309089	09/08/2005	7000-15780
EXCAV ID			

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers Phone: 937-237-1097 Truck#

Trailer # 18

ind for dutation and the form Mike Leathers Mul

SON STREET

Relia

Zhone.. I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge. Weeking 1 Black

Driver's Name (print or type)

Signature

Date (MM/DD/YY)

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Oty Received:

Address: 5621 E. Cottom Road-Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)





CRA. INC.

#### NON-HAZARDOUS WASTE MANIFEST

GENERA	TOR	INFOR	ΛĪ	ATT	N
		1 1 1 1 7 1 7 1 7 1	7 E.	~~ * * *	

CUSTOMER/BILLING INFORMATION

Generator Name: General Motors

105 GM Drive

Address:

Billing Name: Encore 2000 Centerpointe Pkwy. 1st Floor

Address: City:

Zip:

Bedford 47421

Cobalt Station

City:

Mail Code 483-520-190 Pontiac State: MI Zip: 48341

Site Location: Same as generator

County: Lawrence

State: IN

County:

Oakland

Generator Contact: Kim Crame Consultant/Contractor: Conestoga-Rovers & Assoc.

Bedford IN 47421

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Consultant/Contractor Address: GM Drive & 4th Street

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Chipped Stumps Waste <50ppm PCBs and soil	309089	09/08/2005	JY022 - 193260
EXCAVID P22A Per Taushaung			. 47

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

#### TRANSPORTER INFORMATION

Company ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Truck# 562

Compand:

SOM Street

Belford, Indiana 47431

Contact: Hite Leathers

Relco

Phone: (812) a79 - 9789 Trailer # 1848 937-237-1097 Phone: I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

191; Chow 1 126 m K. Driver's Name (print or type)

Name (print or type)

Signature

Date (MM/DD/YY)

2/7/06

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Oty Received:

Address: 5621 E. Cottom Road-Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Signature

Date (MM/DD/YY)

222804

16156Z

#### Distribution: CRA SES

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

DATE:	217/66	LOAD#:	2223
TIME IN: 754	тімеоит: 854	MANIFEST #:	Same
WAST	ГЕ ТҮРЕ	WASTE PROFI	LE NO: 512088
SOIL < 50 ppm PCBs	YES NO	WASTE DESCI	RIPTION:
SOIL > 50 ppm PCBs	YES NO	Chipped Stump	ps and Soil with PCB < 50 ppm
TRASH / DEBRIS	YES (NO)	WORK AREA:	$\sim \sim 10^{-1}$
OTHER: Tree Stumps	YES NO	Parcel / Area:	22A
TEMPERATURE (°F): 35	WIND (mph): (0-5) 5-	- 10 10 - 15	CLEAR CLOUDY RAIN SNOW
LOADING INFORMATION	ON:		
EQUIPMENT:	Sevenson - CAT excavator		NOTES:
MATERIAL:	Chipped Stumps and Soil		
LOCATION:	Staging Pad/Stockpile:	NA	
PERSONNEL:	Sevenson excavator operator/la	aborers	
LOAD WEIGHT (LBS):	GROSS: 63260	TARE: 3683(	NET: 26430
TRANSPORTER INFOR	MATION:		
TRUCKING COMPANY:	Relco Systems		
TRUCK #:	562		
TRAILER #:	1846	*	
FINAL INSPECTION:			
DRIVER HAS PROPER PAP	PERWORK: YES NO	LOAD COVERED /	SECURED: YES NO
LINER INSTALLED:	(YES) NO	TRUCK & TRAILER	CLEAN: YES NO
PROPER PLACARDS USED	: N/A YES NO	OTHER:	
SES REPRESENTATIVE:		CRA REPRES	ENTATIVE:
PRINT: Dan Sekanovich	1 A	PRINT:	Taushauna Moore
SIGN:		SIGN:	

<i>723</i> <del>1</del> 0 15	VENDOR:	
34.PM 02 07 06	MATERIAL:  SHIPPER NO.:	tree stumps
	SHIPPER NO.: 333	SIGNED IN:
36340	LOT NO.:	1,3
	CARRIER:	SIGNED OUT:
	TRAILER: 1848	
	IN TRACTOR NUMBER: 93/	OUT TRACTOR NUMBER:
DUNN	AGE REMARKS:	L



# NON-HAZARDOUS WASTE MANIFEST

#### **GÊNERATOR INFORMATION**

# **CUSTOMER/BILLING INFORMATION**

Cobalt Station

Mail Code 483-520-190

Generator	Name:	General Motor
A d.d		10000

Address:

105 GM Drive

City: Zip.

Bedford

State: IN

47421

Site Location: Same as generator

County: Lawrence

City:

Address:

Pontiac State: MI Oakland

Zip: 48341

2000 Centerpointe Pkwy, 1st Floor

County:

Billing Name: Encore

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Generator Phone: 812-279-7404 Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Bedford IN 47421

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Charge Street Street Waste <50ppm PCBs (1.14) See 1	<del>309089</del>	09/08/2005	3600016
EXCAV ID			

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Phone: 937-237-1097

Truck#

Trailer # | S | |

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Driver's Name (print or type)

Signature

Date (MM/DD/YY)

# DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Oty Received:

Contact white training

Address: 5621 E. Cottom Road- Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)





# CRA. INC.

#### NON-HAZARDOUS WASTE MANIFEST

#### **GENERATOR INFORMATION**

#### CUSTOMER/BILLING INFORMATION

Generator Name: General Motors Address:

105 GM Drive

City: Zip:

Bedford 47421

State: IN

County: Lawrence

Billing Name: Encore Address:

City:

County:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

Pontiac State: MI Zip: 48341

Oakland

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight		
Waste <50ppm PCBs and Soil	309089	09/08/2005	36000 16		
EXCAV ID PaaA					

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

09/07/06

Name (print or type)

Signature

Date (MM/DD/YY)

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Phone: 937-237-1097

Truck# 831

Trailer #

Company: Kelio Systems
Address: So North M Street
Bedford, IN 4742/
Contact Nike Leathers

Phone: (812)279-9789

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Driver's Name (print or type)

Signature L. Sighwel.

Date (MM/DD/YY)

# **DISPOSAL SITE INFORMATION**

Site Name: Sycamore Ridge Landfill Operating Number: 84-06

Address: 5621 E. Cotton Road-Pimento IN 47866

Oty Received:

223092

I hereby acknowledge/receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

11/7/10

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

DATE:	2/7/66		LOAD#:	22214		
TIME IN: 1334	тіме оит: 1434		MANIFEST #:	Same		
W	ASTE TYPE		WASTE PROF	ILE NO: 512088	***************************************	
SOIL < 50 ppm PCBs	YES NO		WASTE DESC	RIPTION:	< 50 ppm	
SOIL > 50 ppm PCBs TRASH / DEBRIS	YES NO		WORK AREA	:		
OTHER: Tree Stumps	YES NO		Parcel Area:	- Jah		
TEMPERATURE (°F):	WIND (mph) (0-5)	5 - 1	.0 10 - 15	CLEAR CLOUDY	RAIN	SNOW
LOADING INFORMA	ATION:					
EQUIPMENT:	Sevenson - CAT excavator			NOTES:		
MATERIAL:	Chipped Stumps and Soil					
LOCATION:	Staging Pad/Stockpile:	r	JΑ			:
PERSONNEL:	Sevenson excavator operato	or/lab	orers			
LOAD WEIGHT (LBS):	GROSS: 72340	Т	ARE: 363	40 NET:	36	00 <i>0</i>
TRANSPORTER INF	ORMATION:	<del></del>				
TRUCKING COMPANY	: Relco Systems					
TRUCK #:	831					
TRAILER#:	1848					
FINAL INSPECTION	:					
DRIVER HAS PROPER	PAPERWORK: (YES) N	10 L	OAD COVERED /	SECURED:	(YES)	NO
LINER INSTALLED:	(YES) N	T Ov	RUCK & TRAILER	CLEAN:	(YES)	NO
PROPER PLACARDS U	SED: N/A YES N	vo c	OTHER:			
SES REPRESENTATIVE	:		CRA REPRES	ENTATIVE:	W	
PRINT: Dan Sekano	vich /		PRINT:	Taushauna Moore		
SIGN:			SIGN:			

GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421

# SCALE TICKET: 52517

73620 1b <b>9</b>	VENDOR:	2006-2008-2008-2008-2008-2008-2008-2008-
5:34 PN 02 07 06 Ö	MATERIAL: Treesturns	
<b>E</b> B	SHIPPER NO.: 2 2215	SIGNED IN:
<u> </u>	LOT NO.:	
36830 EAR	CARRIER: RELCO	SIGNED OUT:
<u> </u>	TRAILER: 1846	
	IN TRACTOR	OUT TRACTOR NUMBER:
DUNNAGE	REMARKS:	
36790 NET		

# RECEIVED MAY 0 8 2006

REPUBLIC SERVICES, INC.

# CRA, INC.

# NON-HAZARDOUS WASTE MANIFEST

#### GENERATOR INFORMATION

#### CUSTOMER/BILLING INFORMATION

Generator Name: General Motors

Address:

City:

105 GM Drive

Bedford State: IN

Zip: 47421 County: Lawrence

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4<sup>th</sup> Street

Bedford IN 47421

Billing Name: Encore

Address:

City:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

County:

Pontiac State: MI Zip: 48341

Oakland

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight		
PCB Remediation Chipped Stumps Waste <50ppm PCBs and Soil	309089	09/08/2005	36790 (net)		
EXCAVID P22A					

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste. 02/07/06

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

# TRANSPORTER INFORMATION Company Relia Systems Address 50 North M Sti

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Phone:

937-237-1097

Truck# 562 Contact. Mike Leathers BEREION MYZI

Trailer # 1846 Phone: (812) 279-9789

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Tichael Blank Driver's Name (print or type)

Signature

Date (MM/DD/YY)

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill Operating Number: 84-06

Address: 5621 E. Cottom Road-Pimento IN 47866

Oty Received:

TON = 18.1 # 222924

I hereby acknowledge receipt of the above described materials

re tourse

Signature

Date (MM/DD/YY)

The sea of the Co



#### NON-HAZARDOUS WASTE MANIFEST GENERATOR INFORMATION CUSTOMER/BILLING INFORMATION Generator Name: General Motors Billing Name: Encore Address: 105 GM Drive Address: 2000 Centerpointe Pkwy, 1st Floor City: Bedford State: IN Cobalt Station Zip: 47421 County: Lawrence Mail Code 483-520-190 Pontiac State: MI Zip: 48341 City: Site Location: Same as generator County: Oakland Generator Contact: Kim Crame Generator Phone: 812-279-7404 Consultant/Contractor: Conestoga-Rovers & Assoc. Consultant/Contractor Phone: 812-277-8960 Consultant/Contractor Address: GM Drive & 4th Street Contact: Jeff Nichols Bedford IN 47421 Waste Name/ Republic Services **Expiration Date** Material Spilled Volume/Weight Approval # PCB Remediation 309089 09/08/2005 Waste <50ppm PCBs 36,740 (ret EXCAV-ID P222 Attach additional sheet if necessary I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste Jeff Nichols, of CRA, Agent for General Motors Name (print or type) Signature Date (MM/DD/YY) TRANSPORTER INFORMATION Company: ONYX Industrial Services, Inc. Relie Additions Address: 6151 Executive Blvd MIT NOTH M ST. Huber Heights, OH 45424 Balazi, Wing Mai Contact: Dave Bowers Truck# 55 937-237-1097 Trailer # 1844 6 I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge. Driver's Name (print or type) Signature Date (MM/DD/YY) DISPOSAL SITE INFORMATION Site Name: Sycamore Ridge Landfill Operating Number: 84-06 Oty Received: Address: 5621 E. Cottom Road-Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

Distribution: CRA SES

DATE: 2/7/	06		MATERIA SOL	T	LOAD#:	22 21 5			THE PROPERTY OF THE PARTY OF THE PARTY.
			······································	1					
TIME IN: 1634	TIME OUT:	1734		Charles and the Control of the Contr	MANIFEST #	<sup>‡:</sup> Same			
WAS	ТЕ ТҮРЕ			WINDS CO.	WASTE PRO	FILE NO:	512088		
SOIL < 50 ppm PCBs	(YES)	NO		1	WASTE DES	CRIPTION:			
SOIL > 50 ppm PCBs	YES	No		A CONTRACTOR OF THE CONTRACTOR	Chipped Stu	mps and Soil	with PCB <	50 ppm	
TRASH / DEBRIS	YES	No	)		WORK ARE				
OTHER: Tree Stumps	YES	NO			Rarcel Area	1: 22 P	and the same of th		
TEMPERATURE (°F): 35	WIND (mph)	0-5	) 5	- 10	10 - 15	CLEAR	CLOUDY	RAIN	SNOW
LOADING INFORMATI	ON:								
EQUIPMENT:	Sevenson - CA	T excavato	)r			NOTES:			
MATERIAL:	Chipped Stum	***************************************		***************************************					
LOCATION:	Staging Pad/S			A					
PERSONNEL:	Sevenson exca	vator oper	ator/la	aborers					
LOAD WEIGHT (LBS):	GROSS: 7	-3620	>	TARE	: 3683	0	NET:	367	90
TRANSPORTER INFORM	MATION:								
TRUCKING COMPANY:	Relco Systems								
TRUCK #:	5	,2							
TRAILER#:	180	+6		<u>.</u>					
FINAL INSPECTION:			-						
DRIVER HAS PROPER PAPI	ERWORK:	(YES)	NO	LOAE	COVERED /	' SECURED:		(ES)	NO
LINER INSTALLED:		(ES)	NO	TRUC	K & TRAILEF	R CLEAN:		(YES)	NO
PROPER PLACARDS USED:	(7A)	YES	NO	ОТНЕ	R:				
SES REPRESENTATIVE:					CRA REPRES	SENTATIVE:			- X
PRINT: Dan Sekanovich	4		······································	N.	PRINT:	Taushauna	Moore		
SIGN:	**************************************			ooting open was a second	SIGN:	YAVT	W.	**************************************	

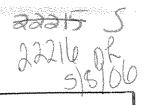
GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421

SCALE TICKET: 52580

	VENDOR:
84840 1b	MATERIAL:
10:12 AM 02 08 06	SHIPPER NO.:
	LOT NO.:
37380	CARRIER: R.
	TRAILER:
	IN TRACTOR NUMBER:
DU	NNAGE REMARKS:
47460	NET

VENDOR:	
MATERIAL: TYPE S	stumps
SHIPPER NO.:	SIGNED IN:
LOT NO.:	Jeall THAIRING
CARRIER: Relie	SIGNED OUT:
TRAILER: 1846	
IN TRACTOR NUMBER: 7/7	OUT TRACTOR NUMBER:
REMARKS:	





#### NON-HAZARDOUS WASTE MANIFEST

#### GENERATOR INFORMATION

#### CUSTOMER/BILLING INFORMATION

Generator Name: General Motors

105 GM Drive

Address: City:

Bedford

State: IN

Zip:

47421

County: Lawrence

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Billing Name: Encore

Address:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

City:

Pontiac State: MI Zip: 48341

Oakland County:

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

×17/0 6

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Chipped Stumps Waste < 50ppm PCBs and Soil	309089	09/08/2005	4746016
EXCANID POSA			

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify. that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

#### TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address:

6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Bedford, IN 47421 Mike Leathers

50 North M Street

Relco Systems

937-237-1097 Phone:

Phone (812) 279-9789 Trailer #717

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Driver's Name (print or type)

Signature

Date (MM/DD/YY)

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Jong/ANS Calles

Operating Number: 84-06

Otv Received: TON こ

Address: 5621 E. Cottom Road-Pimento IN 47866

\* 772377

I hereby acknowledge receipt of the above described materials OL WILL

TOCKER

Signature

Date (MM/DD/YY)

Name (print or type)

RELAND



201816 M

	SERVICES, IN	******	
NON-HAZ	ZARDOUS WAST	E MANIFEST	
GENERATOR INFORMATION	CUSTO	MER/BILLING IN	FORMATION
Generator Name: General Motors Address: 105 GM Drive City: Bedford State: IN Zip: 47421 County: L: Site Location: Same as generator	Address	Cobalt Stati Mail Code Pontiac Stat	483-520-190
	rs & Assoc. Consul	tor Phone: 812-279 tant/Contractor Pho t: Jeff Nichols	
Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Waste <50ppm PCBs	309089	09/08/2005	4746016
EXCAV-ID P >> /			
Attach additional sheet if necessary I hereby certify that the above informati that no changes have been made to any last shipment of the waste.  Jeff Nichols, of CRA, Agent for General Motors	on is true and accurate relevant raw material or	to the best of my ki	nowledge. I also certify ating process, since the
Name (print or type)	Signature	Date	(MM/DD/YY)
TRAN	SPORTER INFO	RMATION	
I certify no hazardous waste or other reg custody. The waste transported in this ve	Truck#/ <u>************************************</u>	owingly introduced	to the waste while in my
Driver's Name (print or type)	Signature	Date (	MM/DD/YY)
DIS	POSAL SITE INF	ORMATION	
Site Name: Sycamore Ridge Landfill C	Operating Number: 84-0	6 Qty Received	•

I hereby acknowledge receipt of the above described materials

Name (print or type) Date (MM/DD/YY) Signature

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

Distribution: CRA SES

		1816 MT
DATE:	218106	LOAD#: 22275 20016
TIME IN: 9\7	TIME OUT: [6]	MANIFEST #: Same
WAS	ТЕ ТҮРЕ	WASTE PROFILE NO: 512088
SOIL < 50 ppm PCBs	YES NO	WASTE DESCRIPTION:
SOIL > 50 ppm PCBs	YES (NO)	Chipped Stumps and Soil with PCB < 50 ppm
TRASH / DEBRIS	YES NO	WORK AREA:
OTHER: Tree Stumps	(YES ) NO	Parcel / Area:
TEMPERATURE (°F): 35	WIND (mph) 0 - 5 5	- 10 10 - 15 CLEAR CLOUDY RAIN SNOW
LOADING INFORMATI	ON:	
EQUIPMENT:	Sevenson - CAT excavator	NOTES:
MATERIAL:	Chipped Stumps and Soil	
LOCATION:		JA
PERSONNEL:	Sevenson excavator operator/la	aborers
LOAD WEIGHT (LBS):	GROSS: 84840	TARE: 37380 NET: 47460
TRANSPORTER INFOR	MATION:	
TRUCKING COMPANY:	Relco Systems	
TRUCK #:	7(7)	
TRAILER#:	1846	
FINAL INSPECTION:		
DRIVER HAS PROPER PAPI	ERWORK: (YES) NO	LOAD COVERED / SECURED: YES NO
LINER INSTALLED:	YES NO	TRUCK & TRAILER CLEAN: YES NO
PROPER PLACARDS USED:	N/A YES NO	OTHER:
SES REPRESENTATIVE:		CRA REPRESENTATIVE:
PRINT: Dan Sekanovich		PRINT: Taushauna Moore
BIGN:		SIGN:

GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421

# SCALE TICKET: 52684

SS	VENDOR:	
71940 15 10:40 AM 02 09 06	MATERIAL: Tree	stumps.
<u> </u>	SHIPPER NO.:	SIGNED IN:
<u>u</u>	LOT NO.:	50,1
36830 RA	CARRIER: REICO	SIGNED OUT:
	TRAILER: SHE	
	IN TRACTOR NUMBER:	OUT TRACTOR NUMBER:
DUNNAGE	REMARKS:	
35010 NET		

CRA, INC.



#### NON-HAZARDOUS WASTE MANIFEST

#### **GENERATOR INFORMATION**

#### CUSTOMER/BILLING INFORMATION

Generator Name: General Motors

Address: 105 GM Drive City:

Zip:

Bedford State: IN

47421 County: Lawrence

Address:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

City: County: Pontiac State: MI Zip: 48341

Oakland

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Billing Name: Encore

13. 1841

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Waste <50ppm PCBs	309089	09/08/2005	35010 16
EXCAVIDP22A			

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

#### TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address:

6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave-Bowers

937-237-1097 Phone:

1111 1

Company fello systems Address: 50 North M Street Bedford, IN

Truck# 562 Contact: Mike Leathers Trailer # 1898 Phone: (812) 279-9789

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge. 75 le 20 ha

Driver's Name (print or type)

Signature

Date (MM/DD/YY)

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill Operating Number: 84-06

Address: 5621 E. Cottom Road- Pimento IN 47866

Oty Received:

51/11 B

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature/

Date (MM/DD/YY)

2-11-06



#### NON-HAZARDOUS WASTE MANIFEST

# **GENERATOR INFORMATION CUSTOMER/BILLING INFORMATION**

Generator Name: General Motors Address:

105 GM Drive

City:

Bedford

State: IN

Zip:

47421

Site Location: Same as generator

County: Lawrence

City:

Address:

Oakland

Pontiac State: MI Zip: 48341

2000 Centerpointe Pkwy, 1st Floor

County:

Billing Name: Encore

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Cobalt Station

Mail Code 483-520-190

Contact: Jeff Nichols

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Waste <50ppm PCBs	309089	09/08/2005	3 50 0 16
EXCAVID P22A			

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

#### TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address:

6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Truck#

Phone:

937-237-1097

Trailer # \*\* 🗐

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Driver's Name (print or type)

Signature

Date (MM/DD/YY)

# **DISPOSAL SITE INFORMATION**

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Oty Received:

WI TRACTICENS

BARRON TO NOTAL MISTORY

Brd Brd M

Address: 5621 E. Cottom Road-Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

4 (2000)

Distribution: CRA SES

DATE: 2/9	106			LO	AD#:	22 2 [	7		
TIME IN: 0940	TIME OUT: 1040			MA	NIFEST	#: Same			
WAS	TE TYPE			WA	STE PRO	OFILE NO:	512088		
SOIL < 50 ppm PCBs	(YES)	NO		WA	STE DE	SCRIPTION:			
SOIL > 50 ppm PCBs	YES	(NO)		Chi	pped Stı	ımps and Soi	l with PCB <	50 ppm	
TRASH / DEBRIS	YES	(NO)		WC	RK ARE	A:			
OTHER: Tree Stumps	(YES)	NO		Par	cel)/ Are	ea: 22	A		
TEMPERATURE (°F): 25	WIND (mph)	(0-5)	5 - 1	0 1	0 - 15	CLEAR	CLOUDY	RAIN	SNOW
LOADING INFORMATI	ON:								
EQUIPMENT:	Sevenson - CA	T excavator			***************************************	NOTES:			***************************************
MATERIAL:	Chipped Stum	ps and Soil							
LOCATION:	Staging Pad/St	tockpile:	WA	***	***************************************				
PERSONNEL:	Sevenson excar	vator operat	tor/labo	orers					
LOAD WEIGHT (LBS):		1840		ARE:	368	30	NET:	350	10
TRANSPORTER INFORM	MATION:								
TRUCKING COMPANY:	Relco Systems								
TRUCK#:	562	2_							
TRAILER#:	184			***************************************					
FINAL INSPECTION:									
DRIVER HAS PROPER PAPI	ERWORK:	(ÉŜ)	NO LO	OAD CC	VERED	/ SECURED:		YES	NO
LINER INSTALLED:	(	(YES)	NO TI	RUCK &	TRAILE	R CLEAN:		(YES	NO
PROPER PLACARDS USED:	(V/A)	YES	NO O	THER:					***************************************
SES REPRESENTATIVE:				CR/	A REPRE	SENTATIVE			
PRINT: Dan Sekanovich				PRI		Taushaun			
SIGN: Grant neger	£01 5	E.		SIG		^	ĪΛ		***************************************
	A					W			

# GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421 69560 15- , 9:11 AM 02 11 06 37300

32260

DUNNAGE

NET

VENDOR:		
MATERIAL:	Tree s	tumps
SHIPPER NO.:	22215	SIGNED IN:
LOT NO.:	S	$\leq (\gamma_i)$
CARRIER:	FL(ICY	SIGNED OUT:
TRAILER:	11 2	
IN TRACTOR NUMBER:	100 miles (100 miles) 100 miles (100 miles)	OUT TRACTOR NUMBER:
REMARKS:		

SCALE TICKET:

53048

Zip: 48341

CRA. INC

#### NON-HAZARDOUS WASTE MANIFEST

#### **GENERATOR INFORMATION**

#### CUSTOMER/BILLING INFORMATION

Generator	Name:	General General	<u>Moto</u>	TS.
-----------	-------	-----------------	-------------	-----

Address: 105 GM Drive

City:

Zip:

Bedford

47421

State: IN

County: Lawrence

Billing Name: Encore

Address:

County:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

Pontiac State: MI Oakland

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Chipped Stumps Waste <50ppm PCBs and Soil	309089	09/08/2005	32260 16
EXCAV ID PAAA			

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

2/11/06

Name (print or type)

Signature

Date (MM/DD/YY)

#### TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

: Metro systems: 50 North M St. Bodford, IN 47421

Truck# 562 Contact: Mike Leathers Trailer # 1842 Phone: (812) 279-9789 Phone: 937-237-1097

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

White 1754 mk Driver's Name (print or type)

Signature

Date (MM/DD/YY)

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Address: 5621 E. Cottom Road- Pimento IN 47866

Qty Received:

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

XXX562



A STATE OF STREET	4 181 ( ) 83	** **********	<b>MATION</b>	
_ H   U H L	A 1 1 1 2		A A E E E E A A E	
			ATWENT AND A	

<b>CUSTOME</b>	R/BILLING	INFORMA	TION
----------------	-----------	---------	------

GENERATOR INFORMATION	CUSTO	MER/BILLING IN	FORMATION
Generator Name: General Motors Address: 105 GM Drive City: Bedford State: IN Zip: 47421 County: Site Location: Same as generator	Addres	Cobalt Station  Mail Code 4  Pontiac State	183-520-190
Generator Contact: Kim Crame Consultant/Contractor: Conestoga-Ro Consultant/Contractor Address: GM D Bedfor	vers & Assoc. Consu	ator Phone: 812-279 ltant/Contractor Pho ct: <u>Jeff Nichols</u>	
Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
PCB Remediation Waste <50ppm PCBs	309089	09/08/2005	3426016
EXCAV ID > > A			
that no changes have been made to ar last shipment of the waste.  Jeff Nichols, of CRA, Agent for General Motors  Name (print or type)	y relevant raw material of Signature		ting process, since the 2/11/04/(MM/DD/YY)
TRA	NSPORTER INFO	RMATION	
Company: ONYX Industrial Service Address: 6151 Executive Blvd Huber Heights, OH 45424 Contact: Dave Bowers Phone: 937-237-1097 I certify no hazardous waste or other recustody. The waste transported in this	Truck#	nowingly introduced tified above, to the be	to the waste while in my est of my knowledge.
Driver's Name (print or type)	Signature		MM/DD/YY)
Site Name: Sycamore Ridge Landfill Address: 5621 E. Cottom Road- Pime I hereby acknowledge receipt of the ab	· · · · · · · · · · · · · · · · · · ·		**************************************
Name (print or type)	Signature	Date (N	MM/DD/YY)

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

Distribution: CRA SES

DATE: 2/11	106	LOAD#:	22.2(8		
TIME IN: 0811	TIME OUT: 0911	MANIFEST #:	Same		
WAS	ТЕ ТҮРЕ	WASTE PROF	FILE NO: 512088		
SOIL < 50 ppm PCBs	(ES) NO	WASTE DESC	RIPTION:		
SOIL > 50 ppm PCBs	YES NO		ps and Soil with PCI	B < 50 ppm	
TRASH / DEBRIS	YES (Ô	WORK AREA			······································
OTHER: Tree Stumps	YES NO	(arcel) Area:	22.4		
TEMPERATURE (°F): 25	WIND (mph): (0-5)	5 - 10 10 - 15	(LEAR) CLOUD	Y RAIN	SNOW
LOADING INFORMATI	ON:	-1			
EQUIPMENT:	Sevenson - CAT excavator		NOTES:		
MATERIAL:	Chipped Stumps and Soil				
LOCATION:	Staging Pad/Stockpile: W	<b>F</b> 7-			
PERSONNEL:	Sevenson excavator operator/				
LOAD WEIGHT (LBS):	GROSS: 69560	TARE: 373	OO NET:	322	6D
TRANSPORTER INFOR	MATION:				
TRUCKING COMPANY:	Relco Systems				
TRUCK #:	562				
TRAILER#:	1842			•	
FINAL INSPECTION:					
DRIVER HAS PROPER PAPI	erwork: (YES) no	LOAD COVERED / S	SECURED:	(YES)	NO
LINER INSTALLED:	(YES) NO	TRUCK & TRAILER	CLEAN:	YES)	NO
PROPER PLACARDS USED:	N/A YES NO	OTHER:			
SES REPRESENTATIVE:		CRA REPRESE	NTATIVE:		
PRINT: Dan Sekanovich		-	Taushauna Moore		##70 (ACC)
SIGN: Simul, Ma	40/ V.	SIGN:	h- W	educinite damindra mammana per de de la	
		W.	et and the second s		

GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421

SCALE TICKET: 53050

80400 15 10:50 AM 02 11 06	VENDOR:					
SOTOU 10 10:50 AM 02 11 05 	MATERIAL: Tree sh	umps				
2	SHIPPER NO.: 22219	CICNEDING				
ш	LOT NO.:					
38100 <u>a</u>	CARRIER:	SIGNED OUT:				
	TRAILER: 1836					
	IN TRACTOR NUMBER: 562	OUT TRACTOR NUMBER:				
DUNNAGE	REMARKS:					
42800 NET						



#### NON-HAZARDOUS WASTE MANIFEST

<b>GENER</b>	AT	OR	INF	OR	ΛA	TI	ON

**CUSTOMER/BILLING INFORMATION** 

Generator Name: General Motors

Address:

105 GM Drive

City: Zip:

Bedford

State: IN

47421

County: Lawrence

Address:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

City:

Pontiac State: MI

Zip: 48341

Site Location: Same as generator

County:

Oakland

Billing Name: Encore

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

2/11/06

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight		
PCB Remediation Chapped Waste <50ppm PCBs	309089 512088	09/08/2005	42300 B		
EXCAVID Paan					

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address:

6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Truck# 562

Address: SO North MSt. Bedford IN 47421

Phone:

937-237-1097

Trailer # 1830

Contact: Mile Leathers

company: Relea Susteins

Phone: 937-237-1097 Trailer #\_1830 Phone: (\$12)279-9786 I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Mika Blank Driver's Name (print or type)

Signature

Date (MM/DD/YY)

07/11/06

#### DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Otv Received:

Address: 5621 E. Cottom Road-Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature /

\* 224960

Zip: 48341



# NON-HAZARDOUS WASTE MANIFEST

# GENERATOR INFORMATION

# **CUSTOMER/BILLING INFORMATION**

Address:

Generator Name: General Motors

City:

105 GM Drive

**Bedford** 

State: IN

Zip:

<u>47421</u> County: Lawrence

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Billing Name: Encore

Address:

City:

County:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

Pontiac State: MI Oakland

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
CB Remediation Vaste <50ppm PCBs	309089	09/08/2005	42300 Ib
XCAV ID PaaA			
XCAV ID PARAMETER Additional sheet if pagesses			

n additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

WORTH MST.

Bedford, IN 47421

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Phone:

Contact: Dave Bowers 937-237-1097

Truck# < ( > Trailer # 19 3/

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Driver's Name (print or type)

Signature

Date (MM/DD/YY)

# DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Qty Received:

Address: 5621 E. Cottom Road- Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

Distribution: CRA SES

DATE:	. 10 10		ARTONICALINGAÇOS							
	1/04				LOAD #:		22219			
TIMEIN: 6950	TIME OUT:	1060			MANIFES	ST #:	Same		MANUSCO CONTRACTOR CON	
WAS	STE TYPE				WASTE P	'ROFI	LE NO:	512088		
SOIL < 50 ppm PCBs	YES)	NO		-	WASTE D				*****	
SOIL > 50 ppm PCBs	YES	(NO)		The state of the s	l			with PCB <	50 ppm	
TRASH / DEBRIS	YES	NO			WORK AI	REA:	······································		·····	
OTHER: Tree Stumps	YES	NO			Rarcel A	rea:	2	2A		
TEMPERATURE (°F): 25	WIND (mph):	(0-3)	5	- 10	10 - 15		CLEAR	CLOUDY	RAIN	SNOW
LOADING INFORMATI	ON:									
EQUIPMENT:	Sevenson - CA	T excavator					NOTES:		·····	
MATERIAL:	Chipped Sturr									
LOCATION:	Staging Pad/S		NA	<del></del>						
PERSONNEL:	Sevenson exca		or/la	borers						
LOAD WEIGHT (LBS):		24KO		TARE:		100	>	NET:	423	
TRANSPORTER INFOR	MATION:									
TRUCKING COMPANY:	Relco Systems			······································		***************************************			V	<del></del>
TRUCK #:	56	2								
TRAILER#:	and S.	36								
FINAL INSPECTION:									······································	
DRIVER HAS PROPER PAPI	ERWORK:	(YES) N	NO	LOAD	COVERED	) / SE	ECURED:		(YES)	NO
LINER INSTALLED:		(ES) N	NO	TRUCI	C & TRAIL	ER C	LEAN:		YES	NO
PROPER PLACARDS USED:	(V/À)	YES N	NO	OTHE	₹:					
SES REPRESENTATIVE:				(	CRA REPR	ESEN	JTATIVE:			
PRINT: Dan Sekanovich	200.5Caaaaayyy (1900)				PRINT:		aushauna l	Moore		3000 - 10
SIGN: Since Me	<u>4004</u> fo	1 \$00			ign:	4-00	for TV	Pro-000000	MARCO (1900) - 2000 (1900) - 1900 (1900) - 1900 (1900) - 1900 (1900) - 1900 (1900) - 1900 (1900) - 1900 (1900)	

GM POWERTRAIN, Bedford Plant, 105 GM Drive, Bedford, Indiana 47421 82484 SCALE TICKET: **VENDOR:** SECTIONS SECTION SECTI 7326U ID 10#20 AM 04 21 06 **MATERIAL:** SIGNED IN: SHIPPER NO.: LOT NO.: CARRIER: SIGNED OUT: TRAILER: IN TRACTOR **OUT TRACTOR** NUMBER: NUMBER: DUNNAGE REMARKS: 36120 NET

# RECEIVED

MAY 0 8 2006



CRA, INC.

# NON-HAZARDOUS WASTE MANIFEST

#### **GENERATOR INFORMATION**

# CUSTOMER/BILLING INFORMATION

Generator Name: General Motors

Address:

105 GM Drive

City: Zip:

Bedford 47421

State: IN

County: Lawrence

Site Location: Same as generator

Generator Contact: Kim Crame

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: GM Drive & 4th Street

Bedford IN 47421

Billing Name: Encore

Address:

City:

County:

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

Pontiac State: MI

Zip: 48341

Oakland

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Waste Name/ Material Spilled PCB Remediation	Republic Services Approval #	Expiration Date	Volume/Weight
Waste <50ppm PCBs and Soil	309089	09/08/2005	30120 18
EXCAV ID P12 P36 B			

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

Signature

Date (MM/DD/YY)

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address: 6151 Executive Blvd

Huber Heights, OH 45424

Contact: Dave Bowers

Phone: 937-237-1097

Truck# Trailer #

波.

SO North M Street Bedford, 1N 47421

Mike Leathers

(812) 279-9789 Phone: I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

My/Mal Driver's Name (print or type)

Signature

Date (MM/DD/YY)

# DISPOSAL SITE INFORMATION

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Qty Received:

Company: Relea Systems

Address: 5621 E. Cottom Road-Pimento IN 47866 I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

2/1/06



2273

# NON-HAZARDOUS WASTE MANIFEST

GENERATOR IN	FORMATION
--------------	-----------

#### CUSTOMER/BILLING INFORMATION

Generator	Name:	<u>General</u>	Motors
4 9 4			

Address: City:

105 GM Drive

Zip:

Bedford 47421 State: IN

County: Lawrence

Billing Name: Encore Address: 2000 Ce

2000 Centerpointe Pkwy, 1st Floor

Cobalt Station

Mail Code 483-520-190

City:

Pontiac State: MI Zip: 48341

County: Oakland

Generator Contact: Kim Crame

Site Location: Same as generator

Consultant/Contractor: Conestoga-Rovers & Assoc.

Consultant/Contractor Address: <u>GM Drive & 4<sup>th</sup> Street</u>
Bedford IN 47421

Generator Phone: 812-279-7404

Consultant/Contractor Phone: 812-277-8960

Contact: Jeff Nichols

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/Weight
 PCB Remediation Waste <50ppm PCBs	309089	09/08/2005	30120161
EXCAV ID # 2 P36B	10		

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jeff Nichols, of CRA, Agent for General Motors

Name (print or type)

/Signature

Date (MM/DD/YY)

Systems

Benford IN 4 THA

LANTIMAYS

KA VARIAN SIYEET

# TRANSPORTER INFORMATION

Company: ONYX Industrial Services, Inc.

Address:

6151 Executive Blvd

Huber Heights, OH 45424

Phone:

937-237-1097-

Truck#

Trailer #19

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Driver's Name (print or type)

Contact: Dave Bowers-

Signature

Date (MM/DD/YY)

Mina

# **DISPOSAL SITE INFORMATION**

Site Name: Sycamore Ridge Landfill

Operating Number: 84-06

Oty Received:

Address: 5621 E. Cottom Road-Pimento IN 47866

I hereby acknowledge receipt of the above described materials

Name (print or type)

Signature

Date (MM/DD/YY)

# Truck Inspection/Loading Report GMPT Bedford Plant Bedford, Indiana

Distribution:
CRA
ENTACT
SES

- allot	17						ense ense	° C
DATE: 04/2//	<u> </u>			LOAD #:	222 7	73		
TIME IN: 920 am	TIME OUT:	1020 ar		MANIFEST #	Samo			
					Jame		######################################	····
WAS	STE TYPE		P 1999	WASTE PRO	FILE NO:	512	2088	
SOIL < 50 ppm PCBs	YES	NO		WASTE DESC	RIPTION:			<del></del>
SOIL > 50 ppm PCBs	YES	NÕ	**	Chippe	ed Stumps	and Soil with	PCBs <5	i0 ppm
TRASH / DEBRIS	YES	NO	, and a second	WORK AREA			<del></del>	****
OTHER: Tree Stumps	YES	NO		Parcel	/ Area:	22		
TEMPERATURE (°F):60	WIND (mph)	(0-5)	5 - 10	10 - 15	CLEAR	(LOUDY)	RAIN	SNOW
LOADING INFORMAT	ION:							
EQUIPMENT:	SES ENTACT-CA	AT excavator			NOTES:		<del>*************************************</del>	
MATERIAL:	Soil							
LOCATION:	Staging Pad/S	Stockpile: 🖊	UA		•			
PERSONNEL:	SES ENTACT exca			3	Walker Commencer			
LOAD WEIGHT (LBS):	GROSS:		TARI	· · · · · · · · · · · · · · · · · · ·		NET:		P
TRANSPORTER INFOR	MATION:							
	U.S. Bulk Tran	enort Inc	***************************************	Reico	<b>)</b>	<del>*************************************</del>		
TRUCK #:	O.O. Dunk Ital	isport, nic.		Q. 5(	**************************************			
TRAILER #:				18	K			
FINAL INSPECTION:								
DRIVER HAS PROPER PAPI	EDWODK.	YES N		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			<u> </u>	
	DZ	(IES) N	IO LOAI	O COVERED / S	SECURED:		YES)	NO
LINER INSTALLED:	36/31/06	YES N	O TRUC	CK & TRAILER	CLEAN:	Š	YES	NO
PROPER PLACARDS USED:	(N/A)	YES N	о Отні	ER:				
ENTACT REPRESENTATIVE	7.							
			Í	CRA REPRESE	NTATIVE		1	,
PRINT: Eynthia Hudson	DON SE	<u>Kanovi</u>		PRINT:	Shelly Goz	id LOYA	ali	0/64
SIGN:		egy particular de la companya de la	SHIP KERANGAN PERBANGAN PER	SIGN:		*		