



**Worldwide Facilities Group
Remediation Team**

November 23, 2004

Reference No. 13968

Mr. Peter Ramanauskas
Project Manager for IND 0060306099
Waste, Pesticide and Toxins Division
U.S. EPA Region 5
77West Jackson Blvd. (DW-8J)
Chicago, IL 60604-3590

Dear Mr. Ramanauskas:

Re: GM Powertrain – Bedford Plant, IND 006036099
Voluntary RCRA Corrective Action
RCRA Facility Investigation Work Plan: Addendum No. 7
GM Powertrain Group, Bedford Indiana Plant
Bedford, Indiana

Please find enclosed a RCRA Facility Investigation (RFI) Work Plan: Addendum No. 7 (RFI Work Plan: Addendum No. 7) for the Performance-Based RCRA Corrective Action project at the GM Bedford Powertrain – Bedford Plant, 105 GM Drive, Bedford, Indiana. This RFI Work Plan: Addendum No. 7 is being submitted pursuant to the Performance-Based Corrective Action Agreement between the U.S. EPA and General Motors, signed March 20, 2001, and amended October 1, 2002.

Should you have any questions regarding this document, please do not hesitate to contact me at 248-753-5799.

Yours truly,

General Motors Corporation

Cheryl R. Hiatt
Project Manager

MKK/rcc/23
Encl.

c.c.: See Attached Distribution List

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GM Bedford Distribution List

		copy sent (y/n)
Peter Ramanauskas	U.S. EPA - Waste, Pesticide and Toxins Division, Project Manager	yes
Brad Stimple	U.S. EPA – Emergency Response Branch, On-Scene Coordinator	yes
Ken Rhame	U.S. EPA – Emergency Response Branch On-Scene Coordinator	yes
Stacey DeLaReintrie	Tetra Tech EM Inc.	yes
John Bassett	Earth Tech	yes
John Gunter (5 copies)	IDEM Management	yes
Dan Sparks	U.S. Fish and Wildlife Service	yes
Lori Pruitt	U.S. Fish and Wildlife Service	yes
Ed Peterson	GM WFG Remediation	yes
Cheryl Hiatt	GM WFG Remediation	yes
Jim McGuigan	CRA Project Coordinator	yes
Rick Bodishbaugh	Exponent	yes
C.Y. Jeng	ENVIRON	yes

RCRA Facility Investigation Work Plan: Addendum No. 7

Hourly Parking Lot (AOI 21) Surface Soil Delineation

This Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) Work Plan: Addendum No. 7 (RFI Work Plan: Addendum No. 7) has been prepared in accordance with the Performance-Based Corrective Action Agreement (Agreement), signed with the United States Environmental Protection Agency (U.S. EPA) for the Bedford Facility on March 20, 2001, as amended on October 1, 2002. This Agreement states that General Motors (GM) will work with the U.S. EPA to identify and define the nature and extent of releases of hazardous waste and/or hazardous constituents at or from the Bedford Facility.

The purpose of this RFI Work Plan: Addendum No. 7 is to delineate the extent of elevated polychlorinated biphenyls (PCBs), lead, and mercury in surface soil identified during implementation of the RFI Work Plan Addendum No. 3 (Hourly Parking Lot). Specifically, two areas (Areas 1 and 2) southwest of the intersection of GM Drive and Breckenridge Road were identified to contain elevated concentrations of PCBs in surface soil. Also, samples collected from borings B-X102Y258 and B-X114Y258 exhibited lead and mercury, respectively, within the surficial soil (Area 3). Therefore, additional horizontal delineation of surface soil in these areas is proposed. A fourth area (Area 4) was identified to exhibit elevated PCB concentrations within the surficial soil during previous investigations. This area will be further defined vertically during implementation of this RFI Work Plan: Addendum No. 7. All additional delineation activities are necessary in order to evaluate potential interim measures activities (e.g., soil removal, additional stormwater management, etc.).

A fifth area (filled area north of Breckenridge Road) was also noted to contain PCBs greater than 5.3 mg/kg both at the surface and at 6-8 feet below ground surface (bgs). Additional samples were collected in this area during completion of test pits, as part of the RFI Work Plan Addendum No. 4. This area will be further investigated under a separate work plan in the near future.

Areas 1 and 2

The attached Figure 1 presents the soil sample locations for the work that was completed under the RFI Work Plan Addendum No. 3. Table 1 presents the final, validated soil data for these sampling locations. As presented in Table 1, two locations in the area southwest of the GM Drive/Breckenridge Road intersection exhibited elevated PCB concentrations in the surficial soil (B-X129Y247 and B-X143Y193B). Tables 2 and 3 present additional samples collected from the storm sewer collection system prior to cleaning.

Figure 2 and Figure 3 present the two locations described above in greater detail. These figures present the proposed soil borings to be completed to further delineate the extent of contaminants in the surficial soil. Twelve soil borings surrounding each previous sample location will be advanced to a depth of approximately ten feet bgs (or bedrock surface, whichever is shallower). These borings will be advanced using a hydraulic-push drill rig (e.g., GeoProbe™ or similar). Soil samples will be collected every two feet during advancement. Initially, a soil sample from the upper three intervals (0-2'; 2-4', and 4-6' bgs) at each of the proposed borings will be submitted to Severn-Trent Laboratories (STL) for analysis of PCBs by EPA method 8082 on a one-week turnaround basis.

If the preliminary results from these initial samples indicate that the area has been sufficiently defined, then additional samples will not be submitted for analysis. If, based on preliminary data from the proposed investigation, there are areas where adequate definition is not obtained after all samples have been analyzed (if needed), additional sampling will be completed by continuing to step out in a similar fashion (i.e., approximate 10 feet increments) and submitting the appropriate samples for laboratory analysis.

Area 3

Elevated concentrations of lead and mercury were detected within the surface soil at two locations south of Breckenridge Road (lead at B-X102Y258 and mercury at B-X114Y258). Figure 4 presents the location of these borings and the proposed additional delineation samples. Additional delineation of the surface soil will be completed through the advancement of soil borings located approximately 10 to the east, south, west, and north of each of the original locations. Surficial soil samples will be submitted for analysis of the Target Analyte List (minus the earth metals). Samples will be submitted to STL on a one-week turnaround basis.

Area 4

Soil samples will be collected continuously to bedrock, as near as possible to the monitoring well location MW-X045Y258 (see Figure 5 for the location of Area 4). Soil samples will be collected in accordance with the original RFI Work Plan to delineate this area vertically. Soil samples will be submitted to STL for the RFI list of parameters on a one-week turnaround basis.

All investigative, sampling, health & safety, and quality procedures will be conducted in accordance with the existing RCRA Facility Investigation Work Plan (CRA, 2001), and supporting documents.

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Based on verbal approval from the U.S. EPA provided on October 12, 2004, the work described above has been implemented. The preliminary results and proposed IM for this area will be transmitted once the data are received. Validated results will follow once completed.

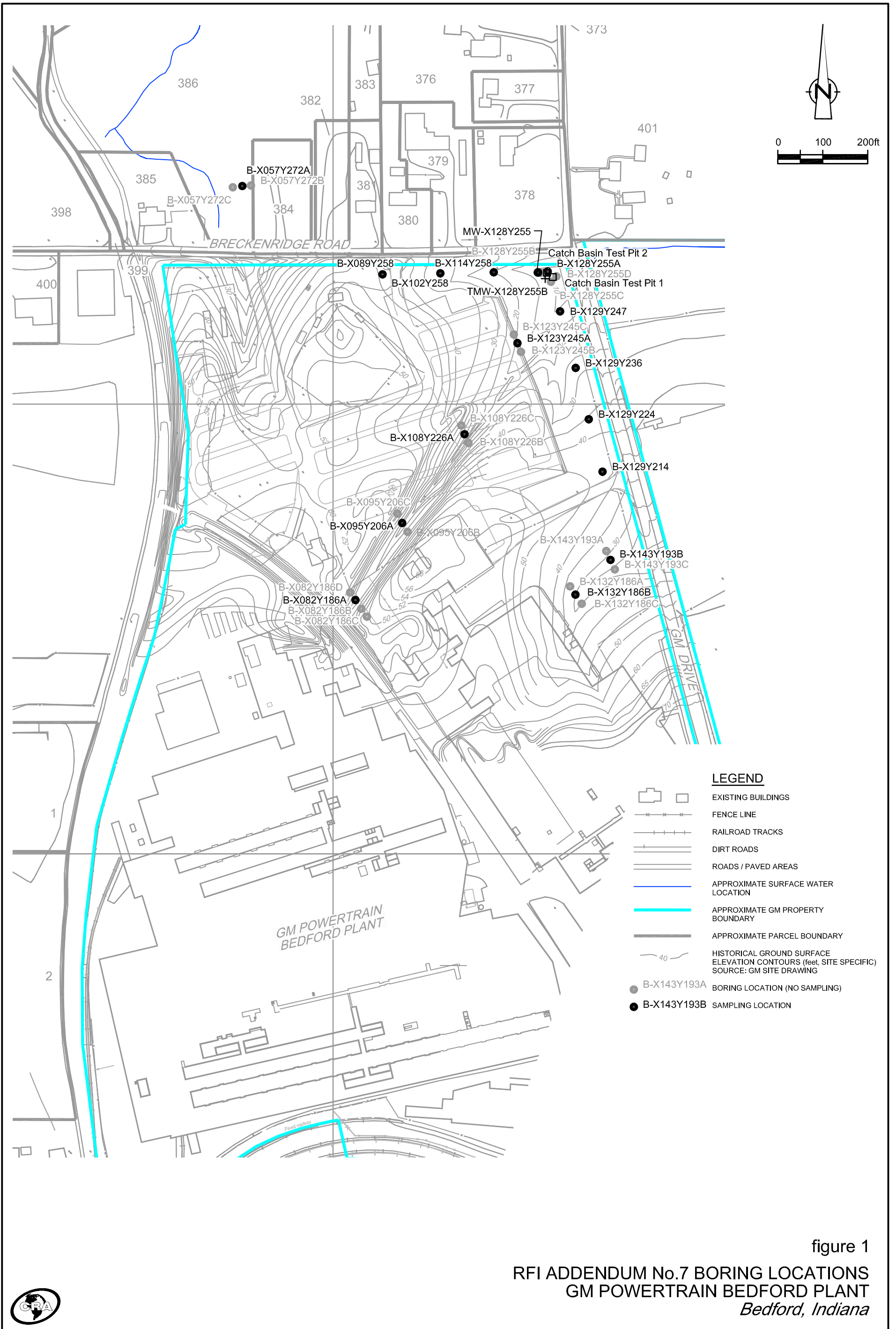


figure 1
 RFI ADDENDUM No.7 BORING LOCATIONS
 GM POWERTRAIN BEDFORD PLANT
 Bedford, Indiana



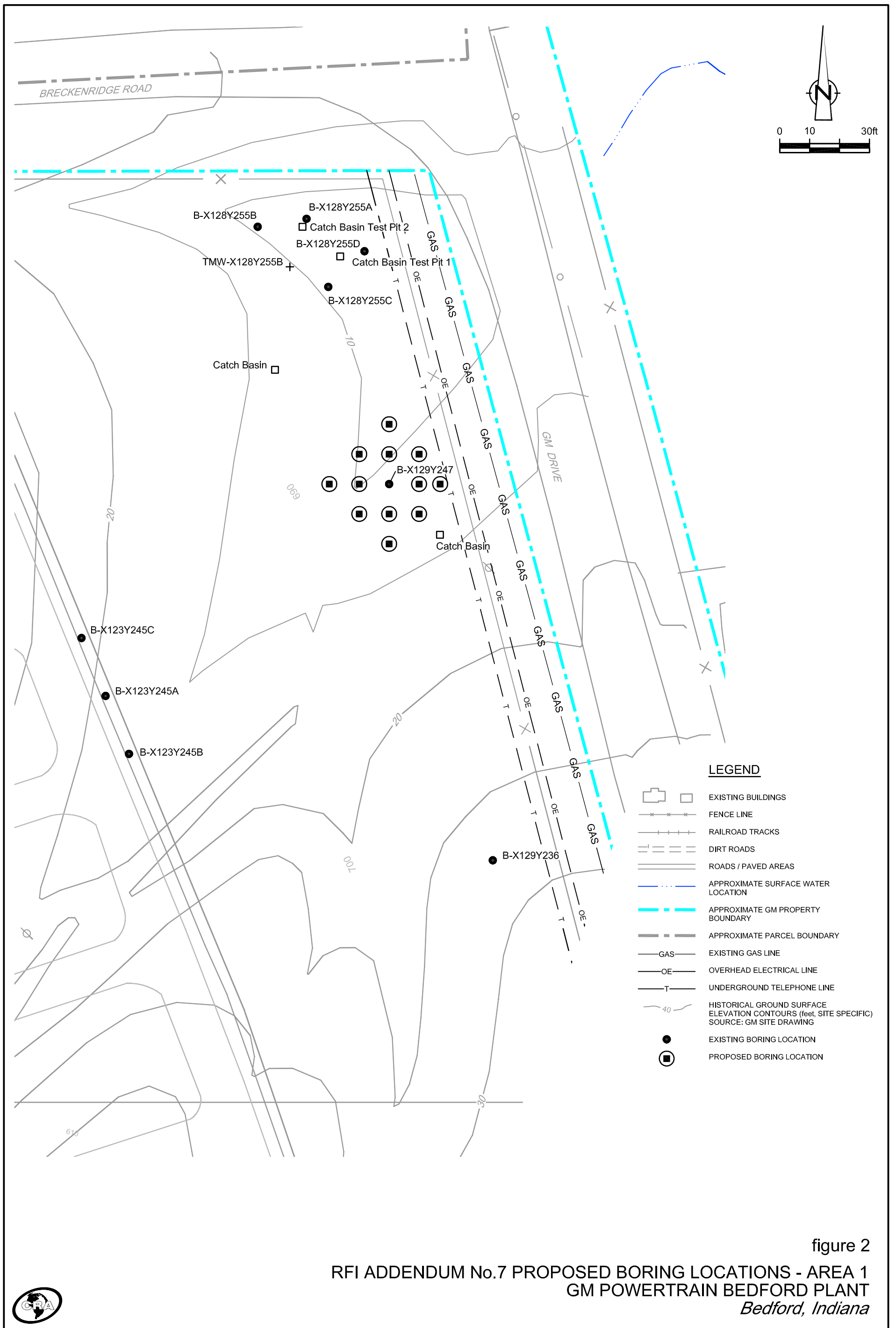


figure 2
 RFI ADDENDUM No.7 PROPOSED BORING LOCATIONS - AREA 1
 GM POWERTRAIN BEDFORD PLANT
 Bedford, Indiana



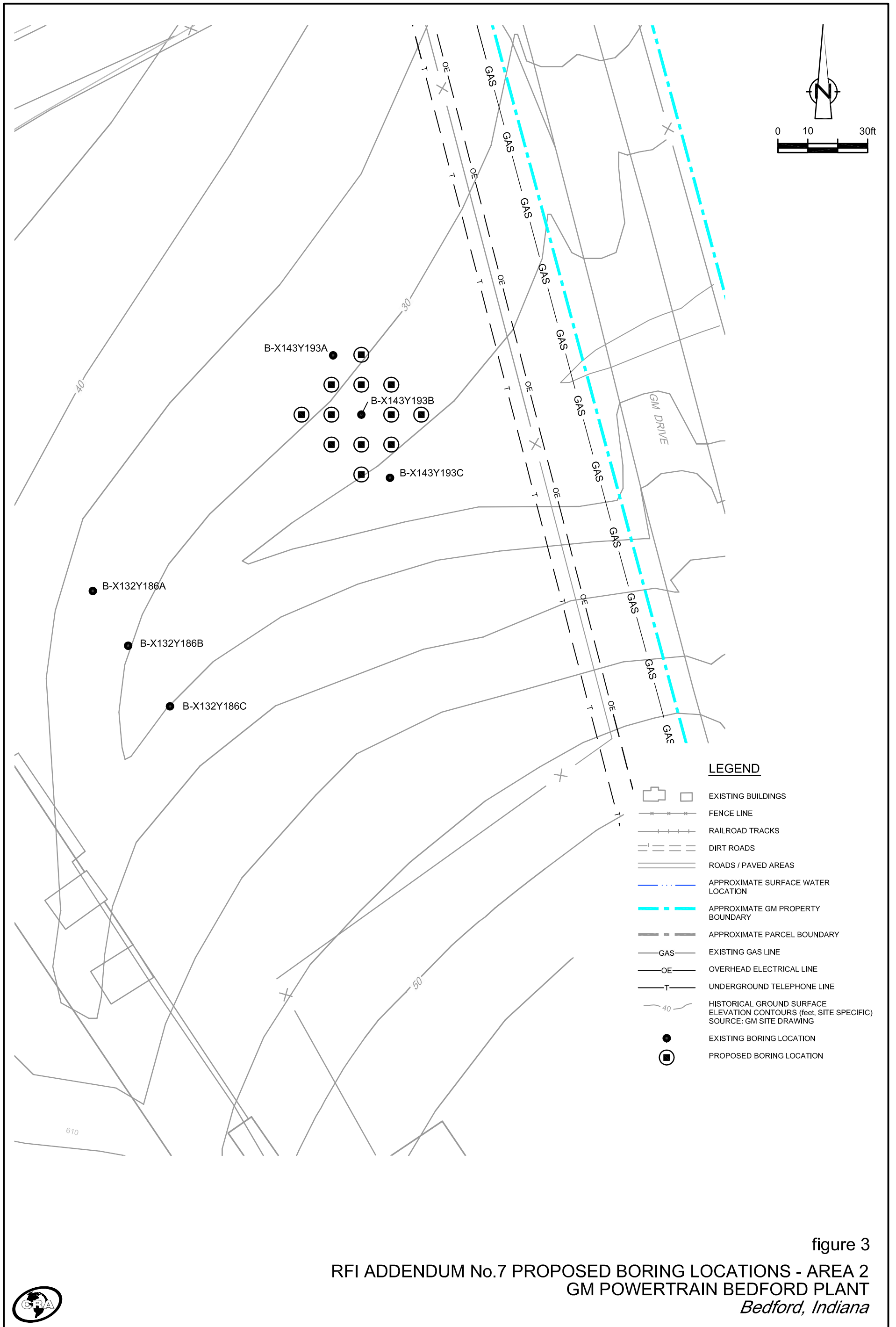
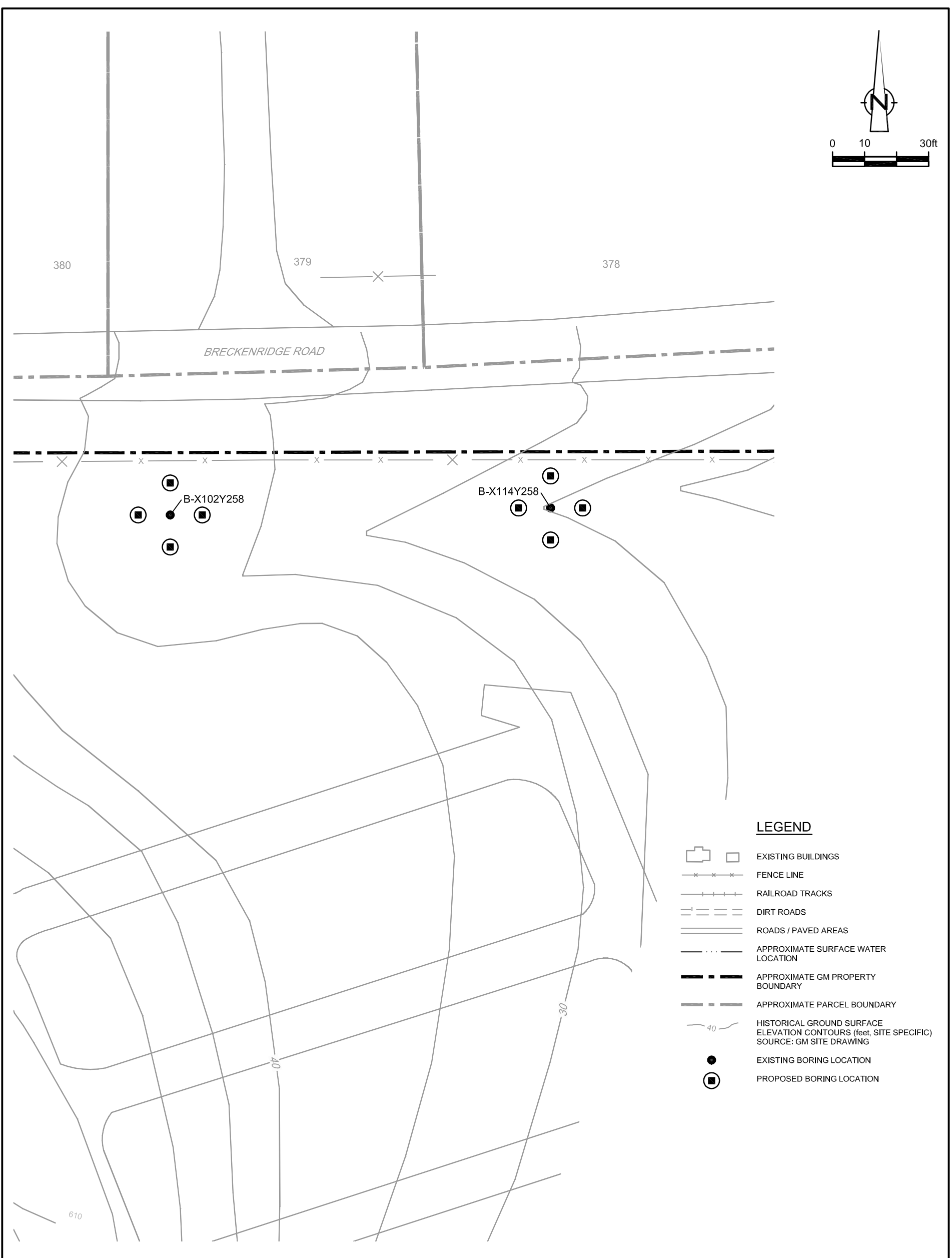
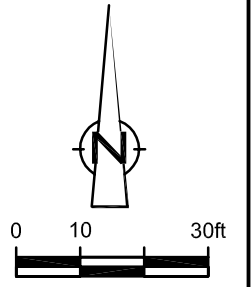


figure 3
 RFI ADDENDUM No.7 PROPOSED BORING LOCATIONS - AREA 2
 GM POWERTRAIN BEDFORD PLANT
 Bedford, Indiana



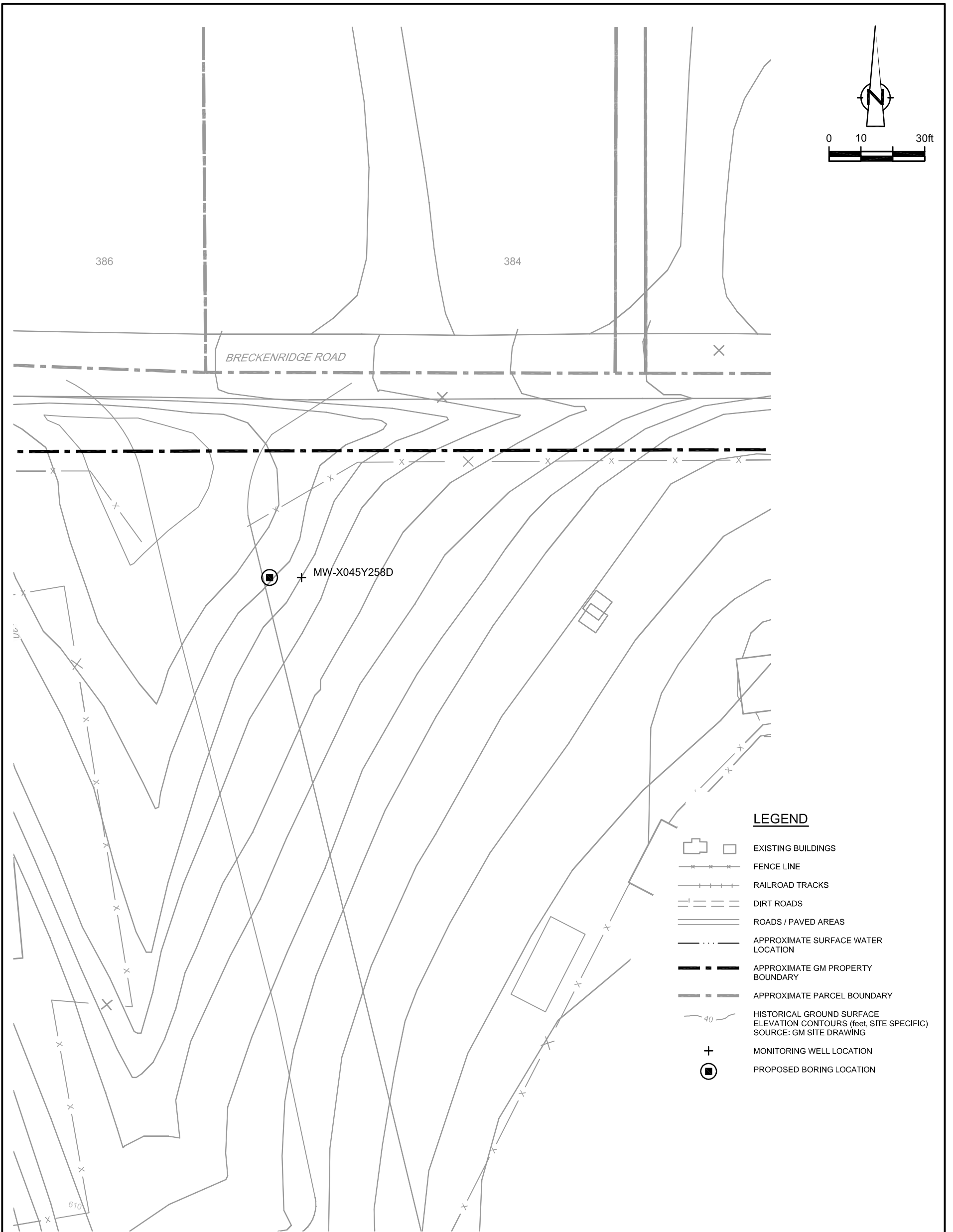


LEGEND

- EXISTING BUILDINGS
- FENCE LINE
- RAILROAD TRACKS
- DIRT ROADS
- ROADS / PAVED AREAS
- APPROXIMATE SURFACE WATER LOCATION
- APPROXIMATE GM PROPERTY BOUNDARY
- APPROXIMATE PARCEL BOUNDARY
- HISTORICAL GROUND SURFACE ELEVATION CONTOURS (feet, SITE SPECIFIC) SOURCE: GM SITE DRAWING
- EXISTING BORING LOCATION
- PROPOSED BORING LOCATION

figure 4
RFI ADDENDUM No.7 PROPOSED BORING LOCATIONS - AREA 3
GM POWERTRAIN BEDFORD PLANT
Bedford, Indiana





LEGEND












-  EXISTING BUILDINGS
-  FENCE LINE
-  RAILROAD TRACKS
-  DIRT ROADS
-  ROADS / PAVED AREAS
-  APPROXIMATE SURFACE WATER LOCATION
-  APPROXIMATE GM PROPERTY BOUNDARY
-  APPROXIMATE PARCEL BOUNDARY
-  HISTORICAL GROUND SURFACE ELEVATION CONTOURS (feet, SITE SPECIFIC) SOURCE: GM SITE DRAWING
-  MONITORING WELL LOCATION
-  PROPOSED BORING LOCATION

figure 5

RFI ADDENDUM No.7 PROPOSED BORING LOCATIONS - AREA 4
GM POWERTRAIN BEDFORD PLANT
Bedford, Indiana

