



**Global Environmental
Compliance & Sustainability**

November 7, 2014

Reference No. 013968

Mr. Peter Ramanauskas
Project Manager for IND 0060306099
Land and Chemicals Division
U.S. EPA Region 5
77 West Jackson Blvd. (LU-9J)
Chicago, IL 60604-3507

Dear Mr. Ramanauskas:

Re: Monitoring and Maintenance Plan (MMP) – Downstream Parcels
GM CET Bedford Facility, IND 006036099
RCRA Corrective Action
Bedford, Indiana

Enclosed for your review, please find a copy of the report entitled Monitoring and Maintenance Plan (MMP) – Downstream Parcels. This document has been submitted by General Motors LLC (GM), in accordance with Paragraph 25 of the Administrative Order on Consent (AOC) with the United States Environmental Protection Agency, effective August 4, 2014 (AOC Docket No. RCRA-05-2014-0011).

Should you have any questions regarding this document, please do not hesitate to contact me at (313) 510-4328.

Yours truly,

General Motors LLC

A handwritten signature in cursive script, appearing to read 'Cheryl R. Hiatt'.

Cheryl R. Hiatt
Project Manager

Encl.

c.c.: See Attached Distribution List

GM Bedford Distribution List

		copy sent (y/n)
Peter Ramanauskas	U.S. EPA, Region 5	Yes
Brad Stimple	U.S. EPA, OSC	Yes
Gerald O'Callaghan (PDF)	IDEM Management	Yes
Cheryl Hiatt/Ed Peterson	GM WFG Remediation	Yes
James McGuigan (PDF)	CRA Project Manager	Yes
Katie Kamm (PDF)	CRA Oversight Engineer	Yes
Steve Jones (PDF)	CRA	Yes



**CONESTOGA-ROVERS
& ASSOCIATES**

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MONITORING AND MAINTENANCE PLAN (MMP) - DOWNSTREAM PARCELS

GM CET Bedford Facility
105 GM Drive
Bedford, Indiana

EPA ID# IND006036099
AOC Docket No. RCRA-05-2014-0011

Prepared for: GM LLC

Conestoga-Rovers & Associates

651 Colby Drive
Waterloo, Ontario N2V 1C2

November 7, 2014 • 013968 • Report No. 376



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AOC	Administrative Order on Consent
Bailey's Branch Creek	Bailey's Branch Creek at the upstream end of Pleasant Run Watershed
CA	Corrective Action
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CET	Castings Engines and Transmissions
CRA	Conestoga Rovers & Associates, Inc.
Facility	GM CET (formerly Powertrain) Bedford Facility
GCL	geosynthetic clay liner
GM	General Motors LLC
IDEM	Indiana Department of Environmental Management
IDNR	Indiana Department of Natural Resources
MMP	Monitoring and Maintenance Plan
PCB	polychlorinated biphenyl
RA	Removal Action
RACER	Revitalizing Auto Communities Environmental Response
RCRA	Resource Conservation and Recovery Act
Downstream Parcels	Parcels 15, 21, 24, 25, 29, 30, 36, 40, 72, 81, and 216
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

Section 1.0 Introduction

This Monitoring and Maintenance Plan (MMP) presents the procedures and protocols to conduct routine monitoring and maintenance activities for the --properties where the restoration is managed by General Motors LLC (GM). These properties are part of the Downstream Parcels listed in the Downstream Parcels Removal Action (RA) Work Plan, adjacent to Bailey's Branch Creek in the Pleasant Run Watershed (Bailey's Branch Creek) in Lawrence County, Indiana. This work was initiated by General Motors Corporation under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Administrative Order on Consent (AOC) (effective July 31, 2003, U.S. EPA Docket No. V--W--'03--C--747). The Downstream Parcels form part of the GM Castings Engines and Transmissions (CET; formerly Powertrain) Bedford Facility (Facility) RA Site as defined in the Administrative Order On Consent (AOC) under Section 3008(h) of the Resource Conservation and Recovery Act (RCRA); EPA Docket No. RCRA--05--2014--0011 effective, August 4, 2014 (RCRA AOC). For the purposes of the MMP, Parcels 15, 21, 24, 25, 29, 30, 36, 40, 72, and 81, and 216 are the --properties where the restoration is managed by GM.

The remaining Downstream Parcels (Parcels 13, 20, 23A, 27, 28A, 37, 38, 39, 76, and 78), were transferred to Revitalizing Auto Communities Environmental Response (RACER) Trust. RACER properties are not part of this MMP. The Downstream Parcels managed by GM are presented on Figure 1.1. The Site Plans for the Downstream Parcels are presented on Figures 1.2.1, 1.2.2, and 1.2.3.

This MMP has been prepared by Conestoga--Rovers & Associates, Inc. (CRA), on behalf of GM, and is submitted in accordance with Paragraph 25 of the RCRA AOC with the United States Environmental Protection Agency (U.S. EPA) and with the CERCLA AOC.

Section 2.0 Background

The RA for the Downstream Parcels included the excavation of impacted soil, verification that each excavated area achieved the CERCLA AOC cleanup criteria, staging of waste, waste characterization sampling and analysis, transportation and disposal of the material at appropriate facilities, backfilling of the excavations, and restoration of the GM owned and third--party owned properties. The RA will be described more fully in the Construction Certification Report for the Downstream Parcels (to be submitted in accordance with Paragraph 19 of the CERCLA AOC). Where applicable, restoration of third--party 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. These restoration elements are further

described in the following sections. Restoration as-built features are presented on Figures 2.1.1 through 2.1.9.

2.1 Backfilling and Basic Creek Bank Restoration

Clean fill, mixed with rock/gravel as appropriate for substrate, was placed near the creek channel in areas where soil was removed. In general, the top six inches were topsoil. The creek channel and creek overbank areas were restored using materials similar to those naturally present in the creek prior to the RA.

To prevent excessive erosion and to allow the creek banks to reach a naturally stable condition, planting was completed immediately after backfilling. The surface of the creek banks were overlain with a biodegradable erosion control protection (blankets, hydroseed with tackifier and straw) after planting to provide initial erosion protection for approximately two growing seasons.

The creek banks were sloped to provide stability during large flow events. In areas where the creek banks were originally unstable and showing visible signs of erosion (portions of the creek in Parcels 21, 24, and 25), the creek banks were protected either utilizing a natural, but constructed, bank stabilization structure (i.e., root wads, log deflectors, limestone slab banks, etc.) or were graded back to a slope no greater than 1V:2H.

Restoration of Tributary 3 and Bailey's Branch on Parcels 15 and 216, varied from the standard restoration as a result of polychlorinated biphenyl (PCB) impacts detected in water emanating from Spring 018 which are believed to originate from the entrained PCB-contaminated sediment/clay material residing within the hydrogeologically active bedrock fractures between the various swallet locations along Bailey's Branch/Tributary 3 and Spring 018. Restoration included sealing the creek channel with a layer of concrete, and geosynthetic clay liner (GCL) in some sections near Spring 018 on Parcel 15 to seal former swallet pathways in the main channel. This section of Bailey's Branch incorporated formed concrete bumps and nodules for the purpose of retaining sediments during baseflow conditions. Concrete sealing activities are summarized in the Concrete Sealing Construction Certification Report (CRA, February 20, 2014).

2.2 General Site Re-Vegetation

A variety of seed mixes were used to stabilize and provide ground cover for the restored areas. The specific mix used was dependent on the hydrologic regime, future use of the area, and the slope of the restored area. A pasture seed mix was used on those Parcels that are in areas that the Parcel owners identified as being previously part of their field area and where they had requested that native seed mixes and/or trees not be planted. The remaining seed mixes or

trees were designed to provide natural ground cover for a variety of different habitats (i.e., riparian forest, sloped forest, and emergent wetlands).

Shrubs and trees were planted on third--party owned Parcels that granted GM access. Re--vegetation features (trees and shrubs) are presented on Figures 2.1.1 through 2.1.9.

Section 3.0 Restoration Monitoring

The following sections outline monitoring guidelines for completing the MMP. Much of the Downstream Parcels area has been completed for many years and restoration has already taken hold. Restoration has occurred progressively on the individual Downstream Parcels since 2008, with informal inspections and maintenance on each Parcel since completion. The only Parcels which have not been complete for at least two years are Parcel 40 and Parcel 81, and the Parcel 216/Parcel 15 creek areas. Two monitoring events will be conducted, with one monitoring event each to be conducted, respectively, in the spring and autumn seasons of 2015. The owners of the Parcels will be given notice prior to accessing the Parcel for the purpose of restoration monitoring as required by the Access Agreements. Appendix A presents an example of the monitoring inspection forms. The monitoring form for vegetation was developed cooperatively with the U.S. Fish and Wildlife Service (USFWS), IDNR, and Indiana Department of Environmental Management (IDEM) for monitoring of select areas in the Upstream Parcels and will be used for monitoring of the Downstream Parcels.

3.1 Creek Stabilization

Stream stabilization is an important indicator of the success of the restoration. A walkthrough will be performed to visually inspect stability of the creek channel and banks within the Downstream Parcels. Inspectors will look for signs of erosion on creek banks (e.g., collapsed creek banks) and in--creek substrate. The presence or lack of riffle/pool sequences (where installed during the restoration) will also be documented. It should be noted that natural processes are expected to modify the creek through time and the weirs (i.e., current deflectors) placed during restoration may also be changed, moved or even removed, once natural processes take over. Signs of de--stabilization will be documented photographically and marked on a plan for purposes of planning additional maintenance/restoration to the creek, as necessary. It should also be noted that since the third--party properties are privately owned, GM does not have control over the current or future use of these Parcels. The third--party property owners may have modified the restoration features.

3.2 Vegetative Coverage

Areas adjacent to the restored creek channel (riparian zone) were re-vegetated by applying diverse mixes of native grasses and forbs and planting native shrubs and trees as described in the Construction Certification Report for the Downstream Parcels (to be submitted in accordance with the CERCLA AOC), to promote succession to re-establish native habitats. The approach for monitoring re-vegetation of the riparian zone is qualitative and similar to the approach developed cooperatively with the USFWS, IDNR, and IDEM for select areas in the Upstream Parcels. This qualitative approach consists of ground truthing designated areas for each cover type (e.g., floodplain forest, slope forest) on each Parcel and identifying the vegetation present. Ground truthing during the monitoring events will encompass the entire riparian area restored on each Parcel.

For grasses and forbs, the relative abundance of each species observed on each Parcel will be assigned a value between 1 and 6 based on the abundance categories of Simon et al. (2001). Table 3.1 identifies and defines the abundance categories described by Simon et al. (2001). Each species observed will be noted as either included in the specified seed mix or as a volunteer. Species identified by IDNR as invasive to southern Indiana will be noted. The percent aerial cover of grasses and forbs within each cover type will be estimated by visual inspection and recorded on the monitoring form.

For shrubs and trees, monitoring will consist of identifying species present and evaluating survival of seedlings and larger specimens planted in the Downstream Parcels. Survival of shrubs and trees will be assigned to one of four survival classes, as defined in Table 3.2. In addition to noting the survival of the specimens planted, shrubs and trees that have colonized each Parcel (volunteers), including invasive species, will be identified and noted.

3.3 Monitoring Frequency

Since a majority of the creek has undergone restoration and growth for several years, additional monitoring of the Downstream Parcels creek stability, vegetative coverage, and habitat features will be conducted for two events in total. A monitoring event will be conducted in May/June 2015 (spring) and October/November 2015 (autumn). Parcels 30 and 36 will not be monitored for vegetative species and features, as the property owners have conducted land use changes since restoration was completed on the property. If the progress of the restoration is satisfactory, GM will prepare a formal request to the U.S. EPA and IDEM to suspend all, or part of, the MMP for the Downstream Parcels.

Section 4.0 Restoration Maintenance

This section discusses alternative maintenance measures to address performance issues observed during monitoring. Maintenance measures will be dependent on the conditions encountered. No maintenance activities will occur until after all appropriate required permits have been applied for and received.

4.1 Creek Stabilization

Three possible maintenance measures will be considered for locations where instability of the creek banks and/or channel has been observed:

- i) Allow the creek to continue to progress naturally
- ii) Restore the creek according to the Downstream Parcels Restoration Plans and the as-recorded information collected
- iii) Restore the creek using alternative methods which may be more suitable to address the cause of the instability

Selection of the most appropriate maintenance measure will be made on a case-by-case basis and will consider the probability that further unwanted or unanticipated degradation will occur, possible negative impacts to creek, and possible cause(s) leading to the instability of the creek. Locations requiring additional restoration work will be monitored during the following monitoring period. If additional restoration efforts are needed, GM will need to apply for and receive the appropriate permits to do any repair work in the creek from Indiana, U.S. EPA and/or the Army Corps of Engineers prior to completion of repair work in the creek.

4.2 Vegetative Coverage

Where it is determined that vegetative coverage is not adequate, additional re-seeding or planting may be required. This could include replacement of shrubs or trees or re-seeding with or without a combination of creek stabilization controls to promote the "grow-in" (e.g., erosion controls, bank stabilizers).

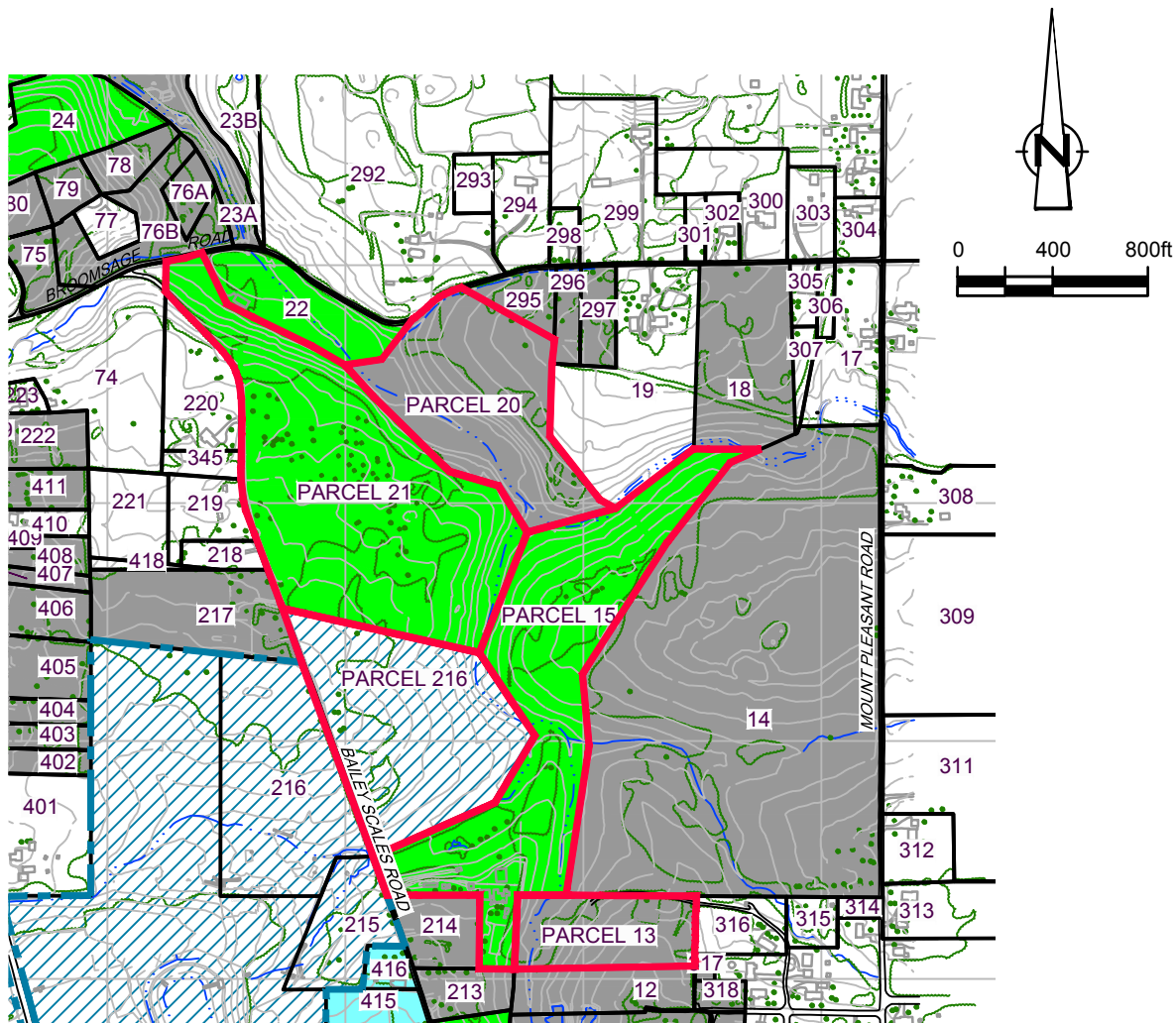
The presence and species of tree and shrub volunteers will be documented and compared to the densities and species of the planted tree whips and saplings. Where the property owner has elected to remove trees, or replaced vegetative cover (e.g. with crops), GM will document variances from the design. Any repairs to the restored areas will be done after all appropriate permits have been received for working in the creek.

Section 5.0 Reporting

Documentation of the two monitoring events in 2015 will be submitted in a single report. The report will summarize findings of both monitoring events completed and include the completed monitoring forms.-- If maintenance is required, all permits received to do the work and a summary of the work will also be included.

Section 6.0 References

Simon, T.P., Stewart, P.M., and Rothrock, P.E. 2001. Development of multimetric indices of biotic integrity of riverine and palustrine wetland plant communities along Southern Lake Michigan. Aquatic Ecosystem Health and Management 4: 293--309.



SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI.
APRIL 2001 AND CRA SURVEYS 2002 TO 2005

NOTE: BOUNDARY BETWEEN PARCELS 14 AND 15 SURVEYED BY BLEDSOE RIGGERT GUERRETTAZ (APRIL 2011). ADJACENT PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS. ADJOINING PROPERTY LINES MAY NOT ACCURATELY REPRESENT THE TRUE PROPERTY BOUNDARIES

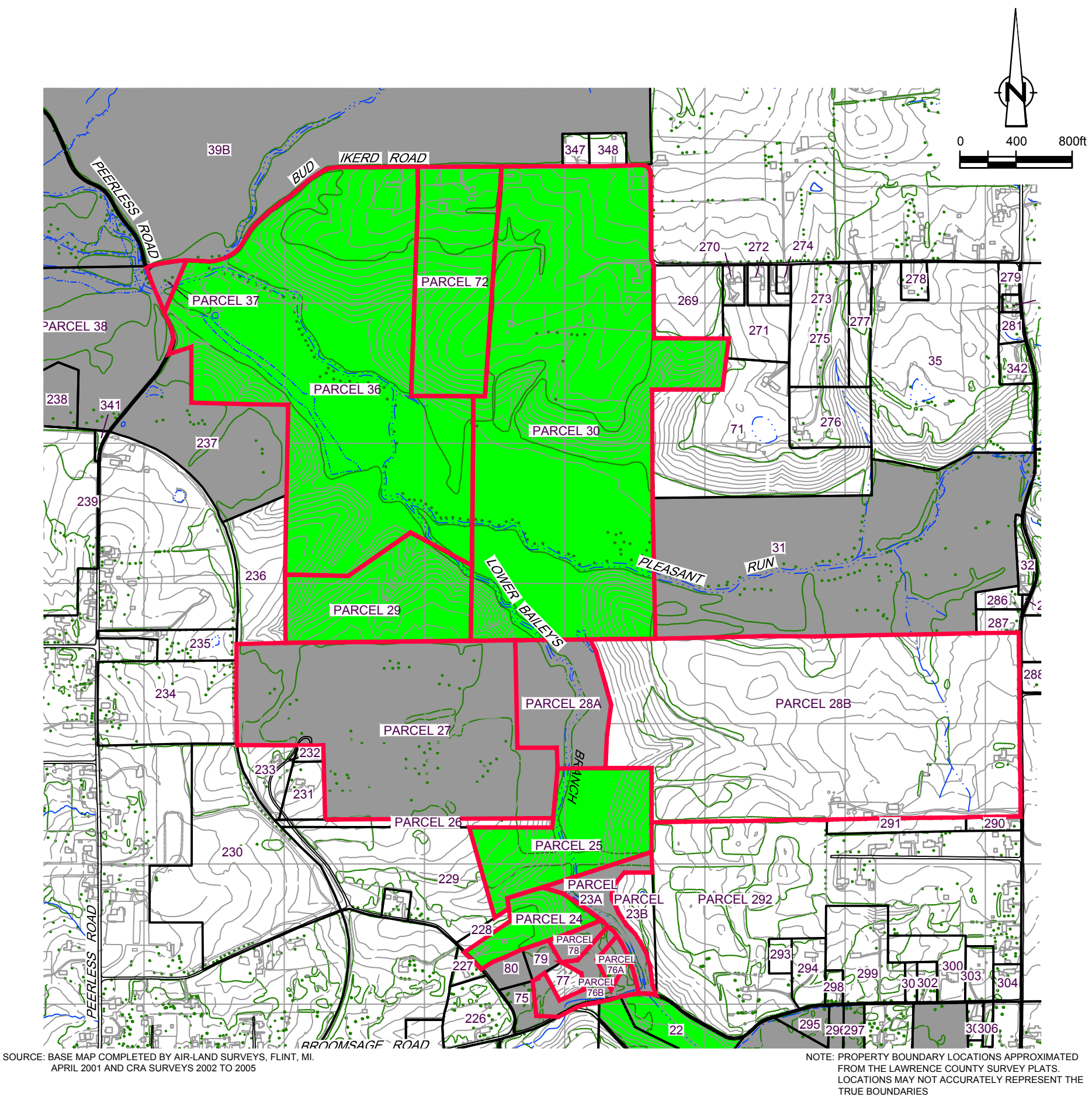
LEGEND

	EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)		APPROXIMATE DOWNSTREAM PARCEL BOUNDARY
	EXISTING VEGETATION		GM LLC FACILITY
	EXISTING BUILDINGS		PARCELS WHICH ARE OWNED BY GM LLC
	FENCE LINE		PARCELS WHICH ARE THIRD-PARTY OWNED OFF-SITE PROPERTIES (PROPERTIES NEVER OWNED BY GM)
	RAILROAD TRACKS		PROPERTIES MAINTAINED BY RACER TRUST
	DIRT ROADS		
	ROADS / PAVED AREAS		
	APPROXIMATE SURFACE WATER LOCATION		
	APPROXIMATE PARCEL BOUNDARY		

figure 1.2.1

SITE PLAN DOWNSTREAM PARCELS SOUTH OF BROOMSAGE ROAD MONITORING AND MAINTENANCE PLAN DOWNSTREAM PARCELS GM CET BEDFORD FACILITY *Bedford, Indiana*



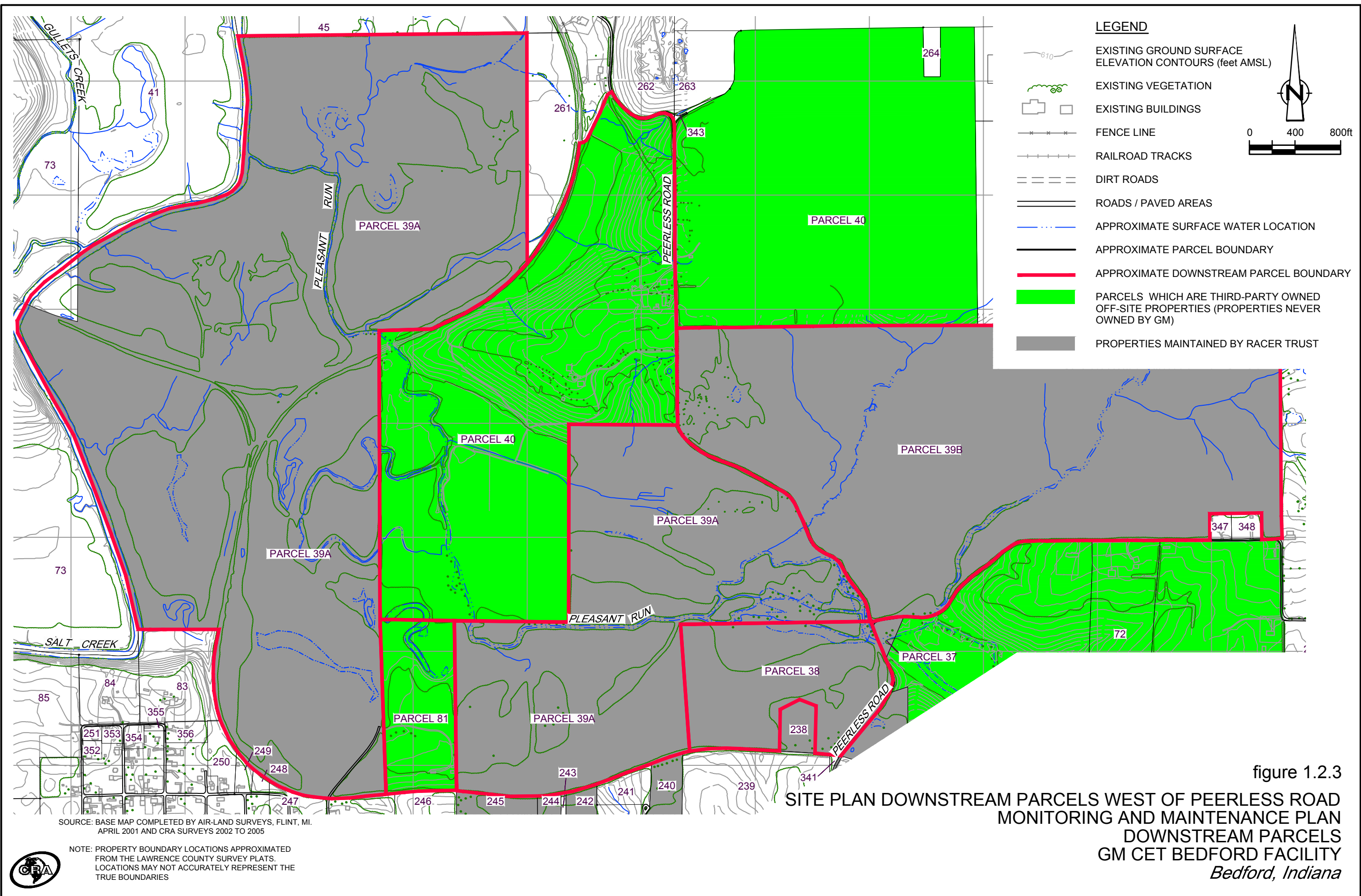


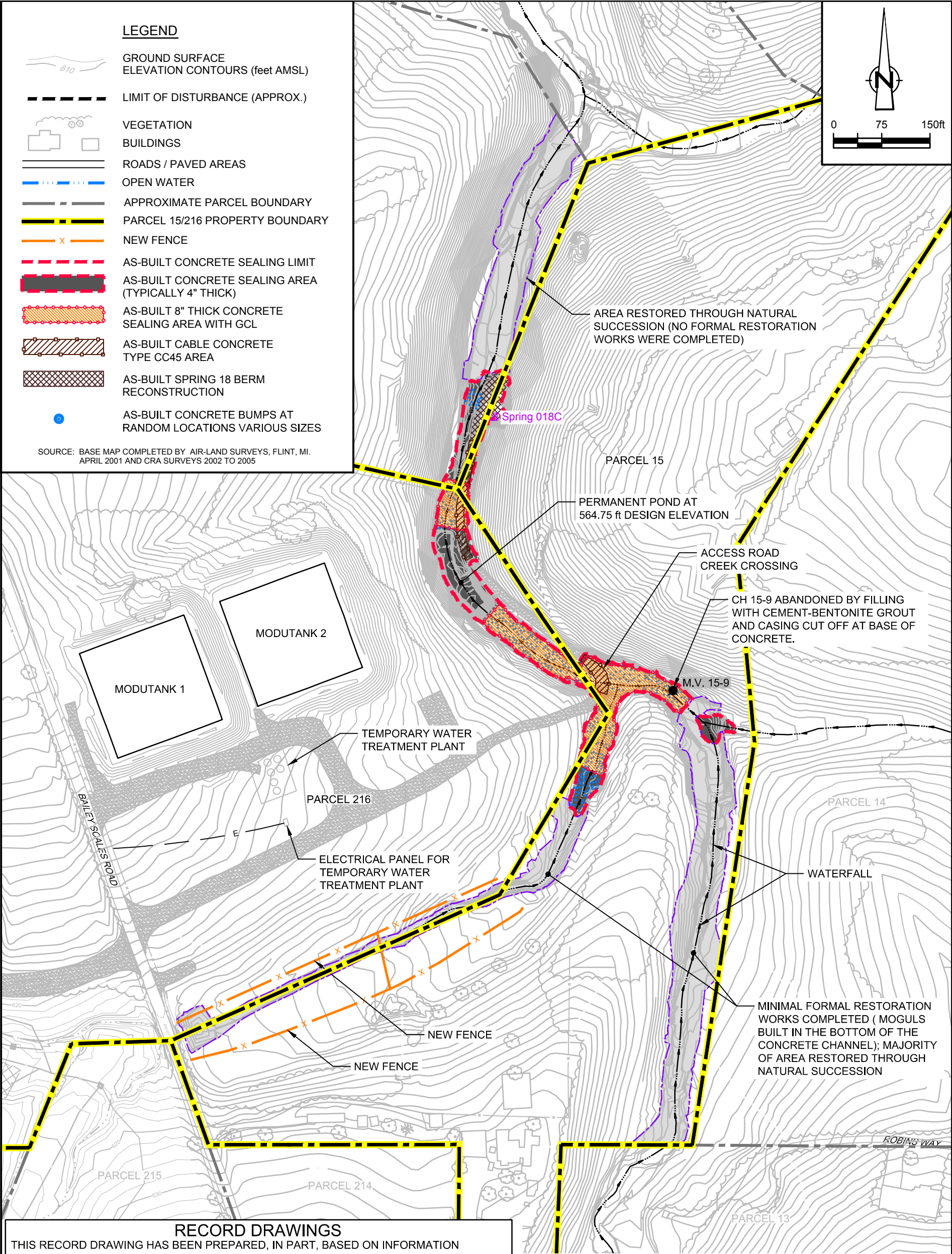
LEGEND

- | | | | |
|--|--|--|--|
| | EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL) | | APPROXIMATE SURFACE WATER LOCATION |
| | EXISTING VEGETATION | | APPROXIMATE PARCEL BOUNDARY |
| | EXISTING BUILDINGS | | APPROXIMATE DOWNSTREAM PARCEL BOUNDARY |
| | FENCE LINE | | PARCELS WHICH ARE THIRD-PARTY OWNED OFF-SITE PROPERTIES (PROPERTIES NEVER OWNED BY GM) |
| | RAILROAD TRACKS | | PROPERTIES MAINTAINED BY RACER TRUST |
| | DIRT ROADS | | |
| | ROADS / PAVED AREAS | | |

figure 1.2.2
SITE PLAN DOWNSTREAM PARCELS BETWEEN BROOMSAGE ROAD AND PEERLESS ROAD
MONITORING AND MAINTENANCE PLAN
DOWNSTREAM PARCELS
GM CET BEDFORD FACILITY
Bedford, Indiana







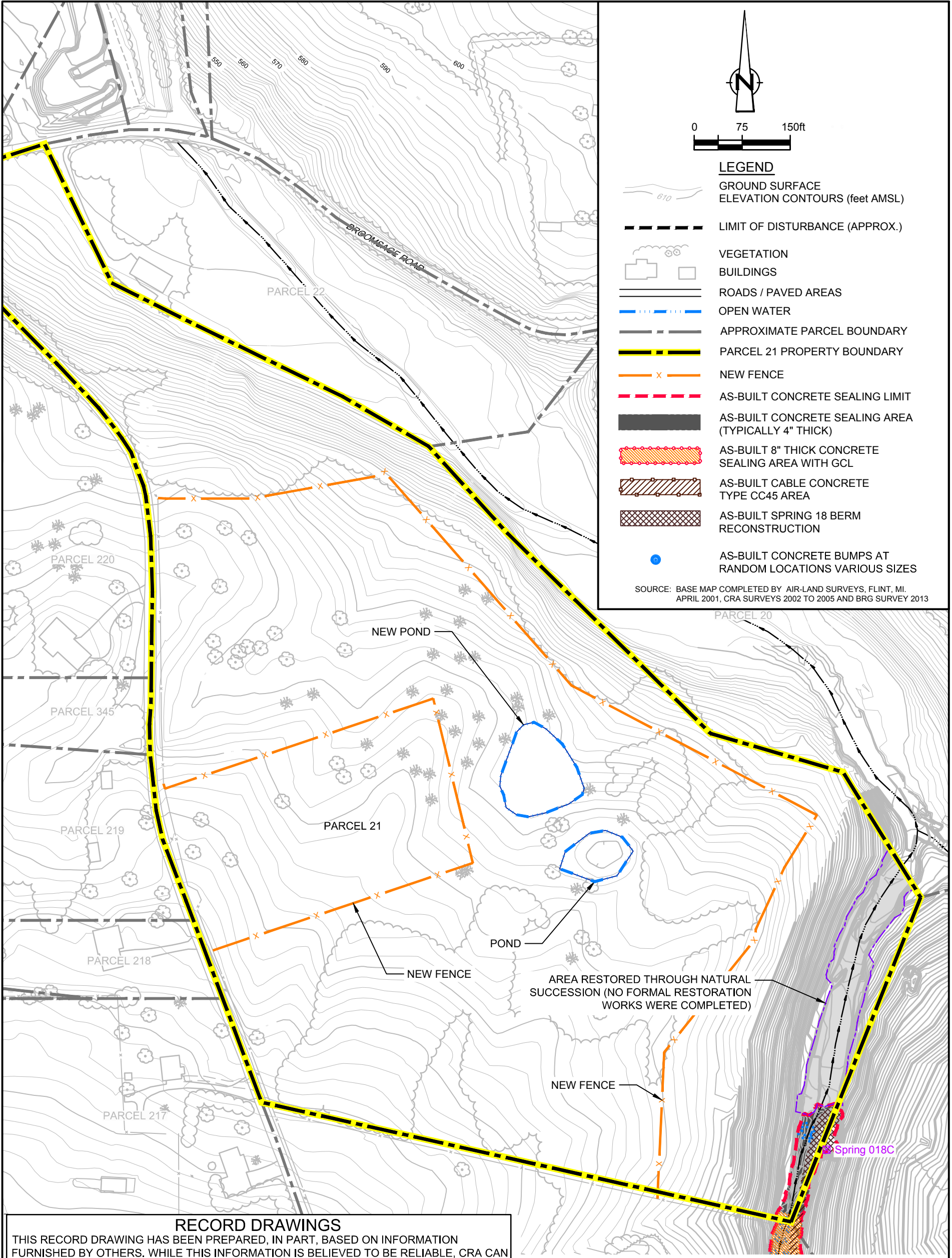
RECORD DRAWINGS

THIS RECORD DRAWING HAS BEEN PREPARED, IN PART, BASED ON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, CRA CAN NOT AND DOES NOT WARRANT ITS ACCURACY AND/OR COMPLETENESS, AND THUS SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THOSE RELYING ON THIS RECORD DRAWING ARE ADVISED TO OBTAIN VERIFICATION OF ITS ACCURACY AND/OR COMPLETENESS BEFORE USING IT FOR ANY PURPOSE.

NOTE: BOUNDARY BETWEEN PARCELS 14 AND 15 SURVEYED BY BLEDSOE RIGGERT GUERRETTAZ (APRIL 2011). ADJACENT PROPERTY BOUNDARY LOCATIONS APPROXIMATED FROM THE LAWRENCE COUNTY SURVEY PLATS. ADJOINING PROPERTY LINES MAY NOT ACCURATELY REPRESENT THE TRUE PROPERTY BOUNDARIES.



figure 2.1.1
SITE RESTORATION - PARCEL 15/216
MONITORING AND MAINTENANCE PLAN
DOWNSTREAM PARCELS
GM CET BEDFORD FACILITY
Bedford, Indiana



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figure 2.1.2

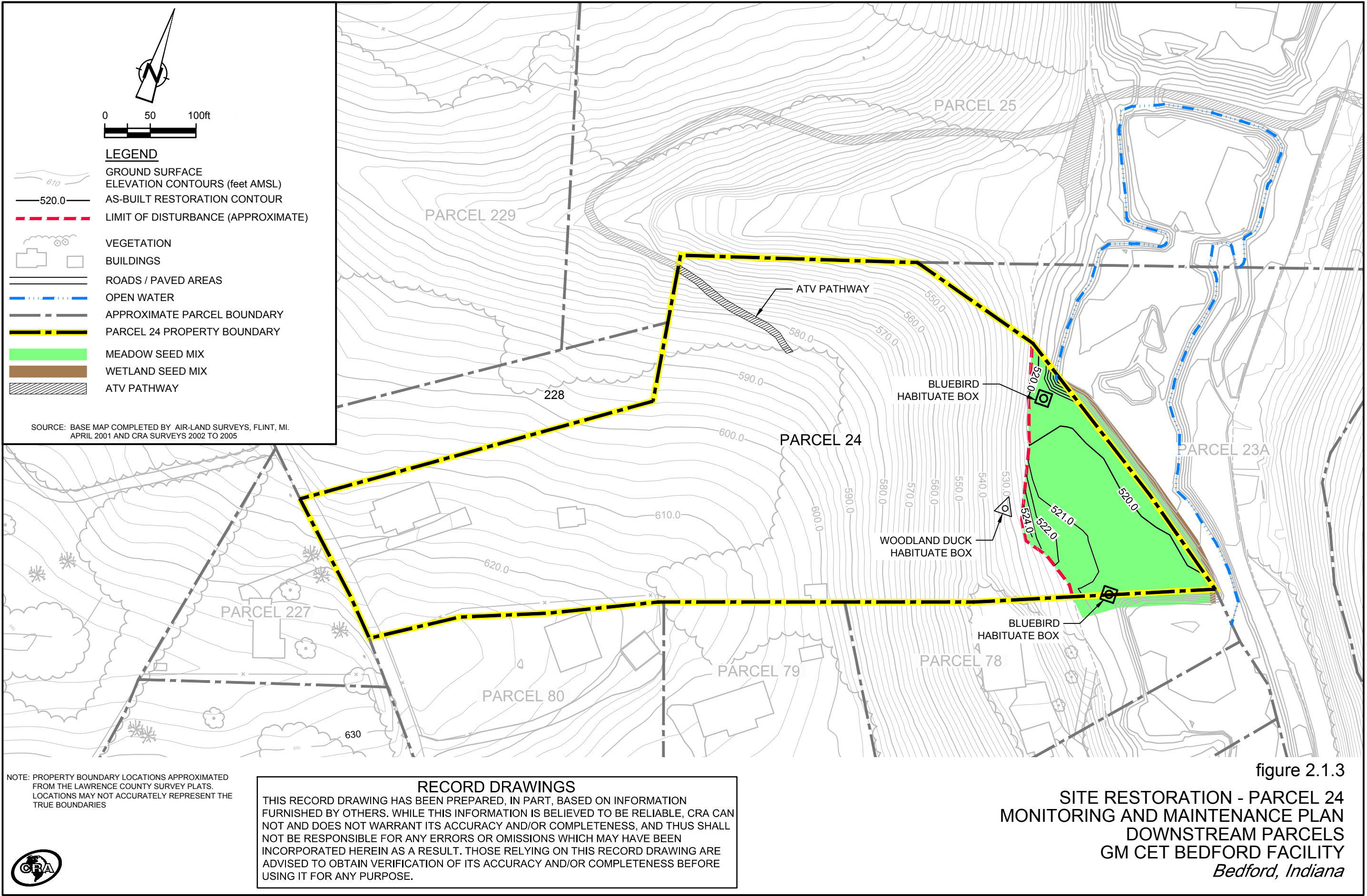
SITE RESTORATION - PARCEL 21

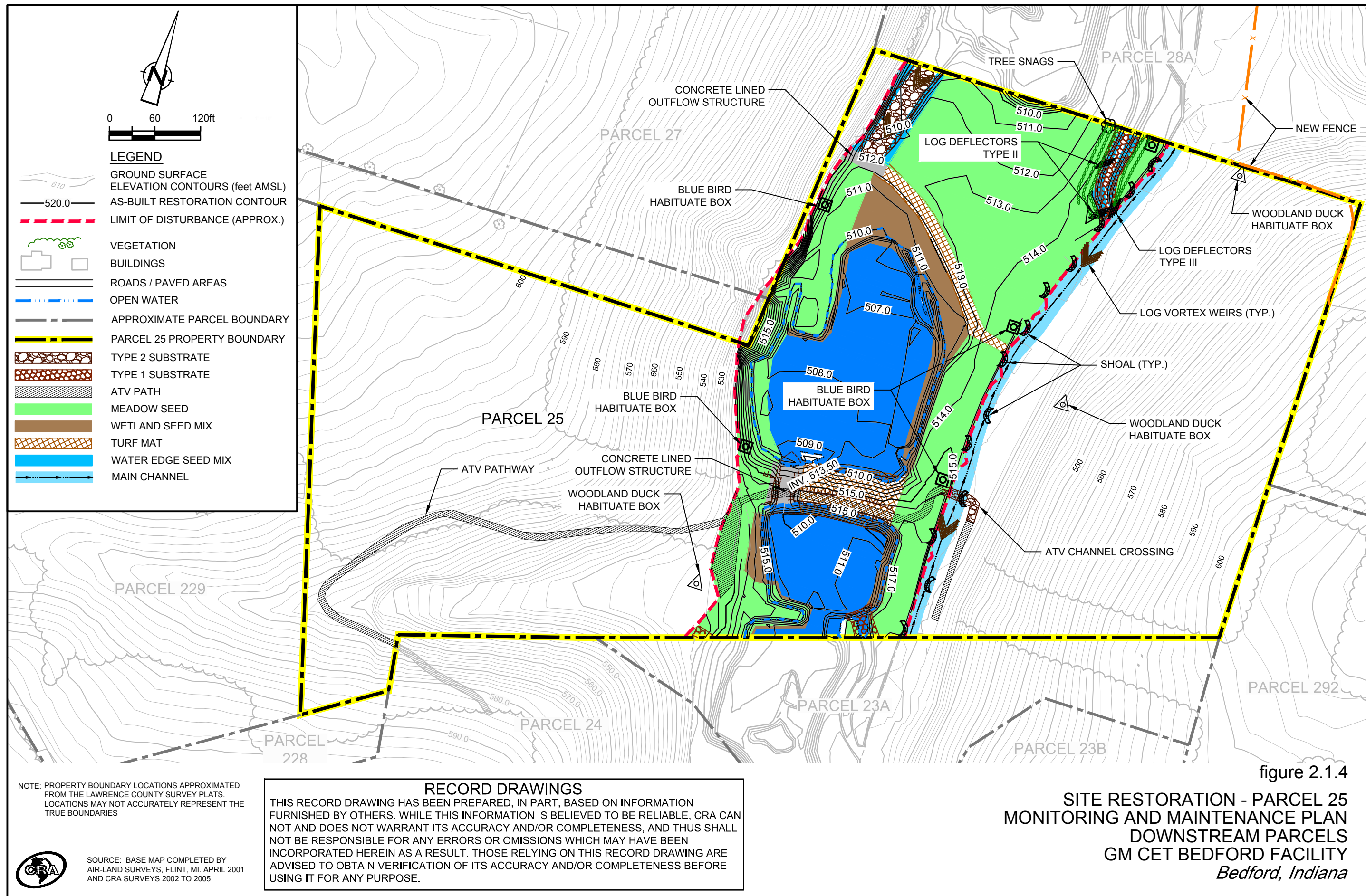
MONITORING AND MAINTENANCE PLAN

DOWNSTREAM PARCELS

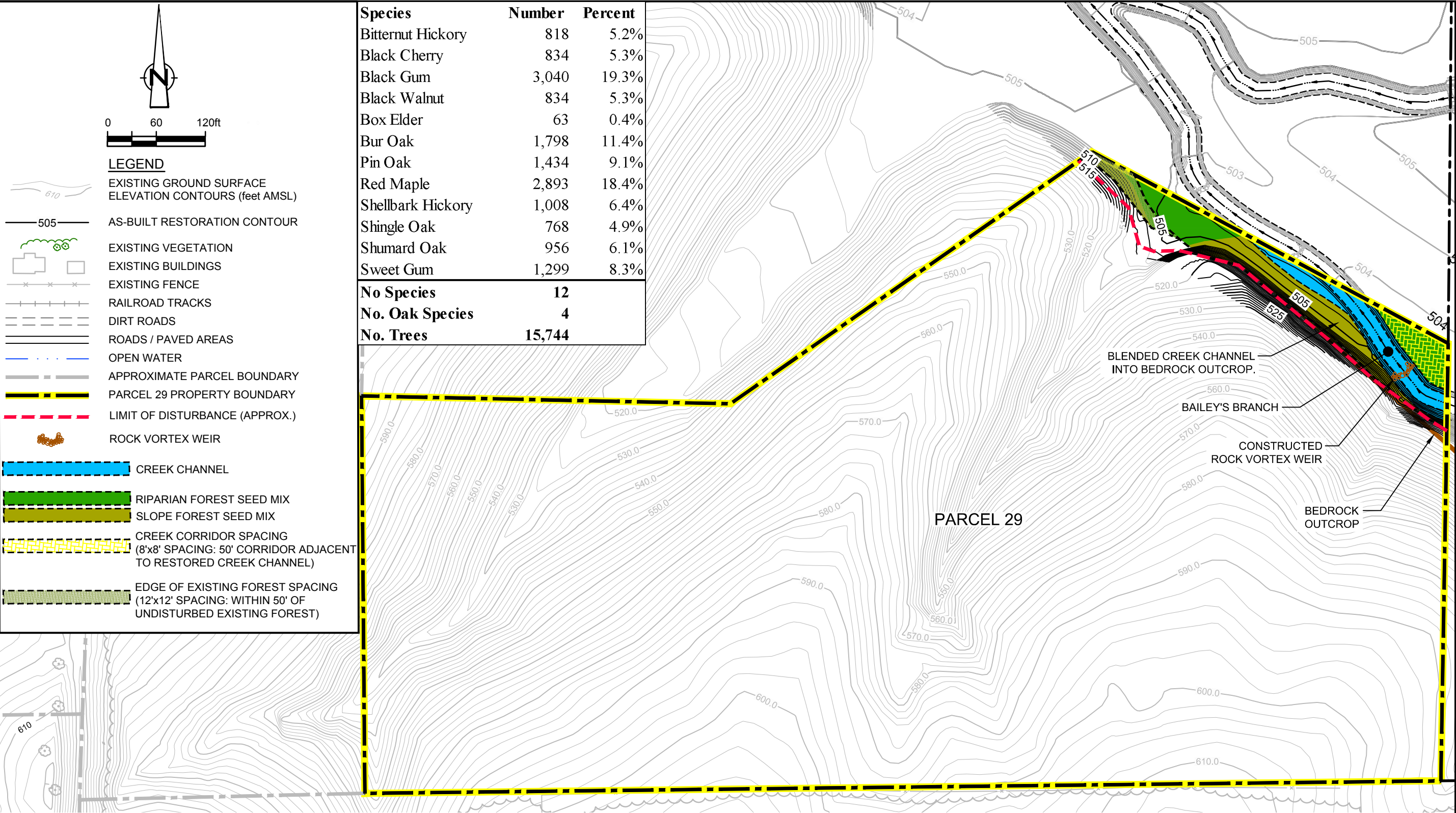
GM CET BEDFORD FACILITY

Bedford, Indiana





SOURCE: BASE MAP COMPLETED BY
 AIR-LAND SURVEYS, FLINT, MI. APRIL 2001
 AND CRA SURVEYS 2002 TO 2005



Species	Number	Percent
Bitternut Hickory	818	5.2%
Black Cherry	834	5.3%
Black Gum	3,040	19.3%
Black Walnut	834	5.3%
Box Elder	63	0.4%
Bur Oak	1,798	11.4%
Pin Oak	1,434	9.1%
Red Maple	2,893	18.4%
Shellbark Hickory	1,008	6.4%
Shingle Oak	768	4.9%
Shumard Oak	956	6.1%
Sweet Gum	1,299	8.3%
No Species	12	
No. Oak Species	4	
No. Trees	15,744	

0 60 120ft

LEGEND
EXISTING GROUND SURFACE
ELEVATION CONTOURS (feet AMSL)
505 AS-BUILT RESTORATION CONTOUR
EXISTING VEGETATION
EXISTING BUILDINGS
EXISTING FENCE
RAILROAD TRACKS
DIRT ROADS
ROADS / PAVED AREAS
OPEN WATER
APPROXIMATE PARCEL BOUNDARY
PARCEL 29 PROPERTY BOUNDARY
LIMIT OF DISTURBANCE (APPROX.)
ROCK VORTEX WEIR
CREEK CHANNEL
RIPARIAN FOREST SEED MIX
SLOPE FOREST SEED MIX
CREEK CORRIDOR SPACING
(8'x8' SPACING: 50' CORRIDOR ADJACENT
TO RESTORED CREEK CHANNEL)
EDGE OF EXISTING FOREST SPACING
(12'x12' SPACING: WITHIN 50' OF
UNDISTURBED EXISTING FOREST)

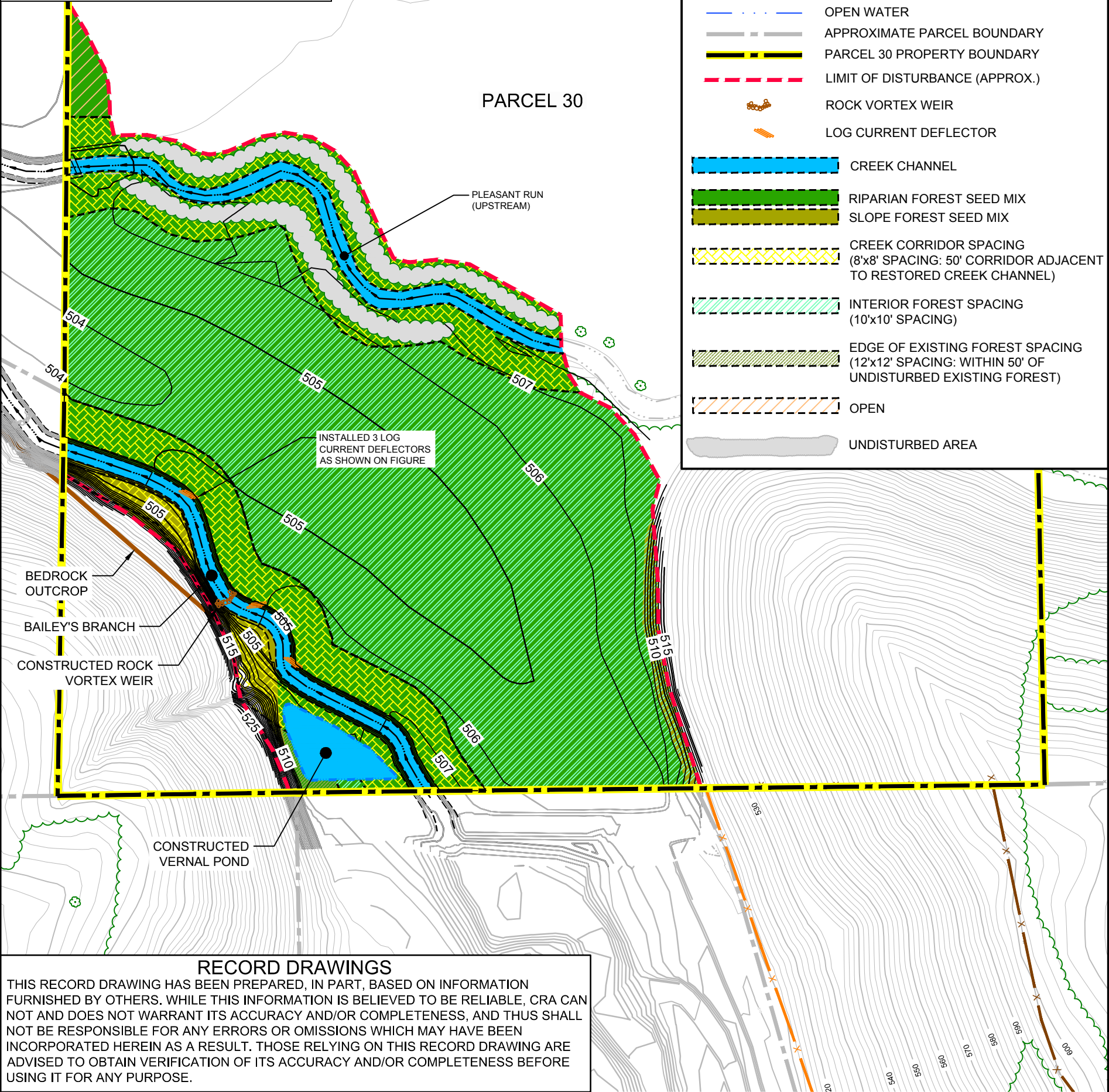
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SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001 AND CRA SURVEYS 2002 TO 2005

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figure 2.1.5
SITE RESTORATION - PARCEL 29
MONITORING AND MAINTENANCE PLAN
DOWNSTREAM PARCELS
GM CET BEDFORD FACILITY
Bedford, Indiana

Species	Number	Percent
Bitternut Hickory	818	5.2%
Black Cherry	834	5.3%
Black Gum	3,040	19.3%
Black Walnut	834	5.3%
Box Elder	63	0.4%
Bur Oak	1,798	11.4%
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No Species	12	
No. Oak Species	4	
No. Trees	15,744	



RECORD DRAWINGS

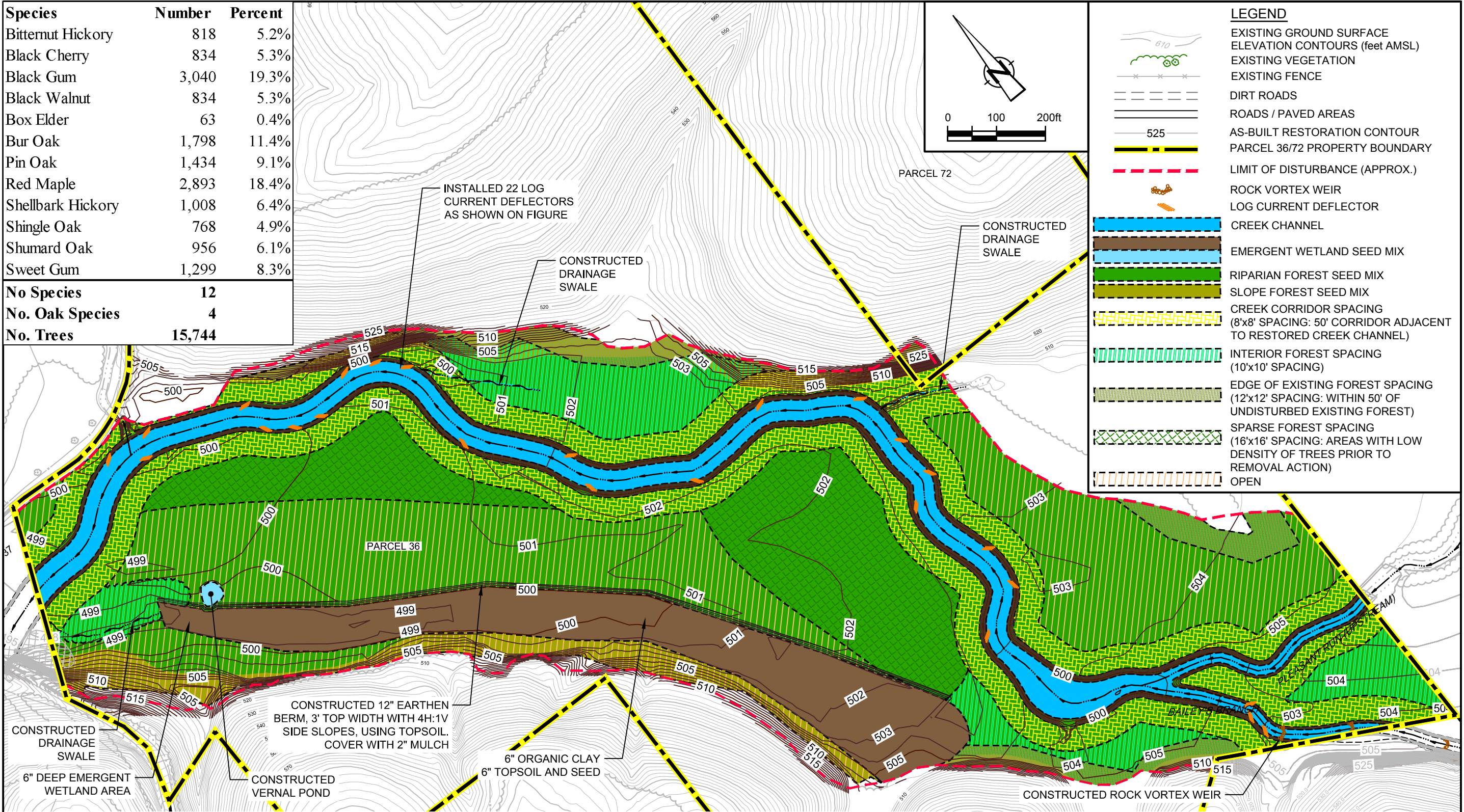
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CRA SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001 AND CRA SURVEYS 2002 TO 2005

figure 2.1.6
SITE RESTORATION - PARCEL 30
MONITORING AND MAINTENANCE PLAN
DOWNSTREAM PARCELS
GM CET BEDFORD FACILITY
Bedford, Indiana

Species	Number	Percent
Bitternut Hickory	818	5.2%
Black Cherry	834	5.3%
Black Gum	3,040	19.3%
Black Walnut	834	5.3%
Box Elder	63	0.4%
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Sweet Gum	1,299	8.3%
No Species	12	
No. Oak Species	4	
No. Trees	15,744	



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SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001 AND CRA SURVEYS 2002 TO 2005

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figure 2.1.7

SITE RESTORATION - PARCEL 36/72

MONITORING AND MAINTENANCE PLAN

DOWNSTREAM PARCELS

GM CET BEDFORD FACILITY

Bedford, Indiana

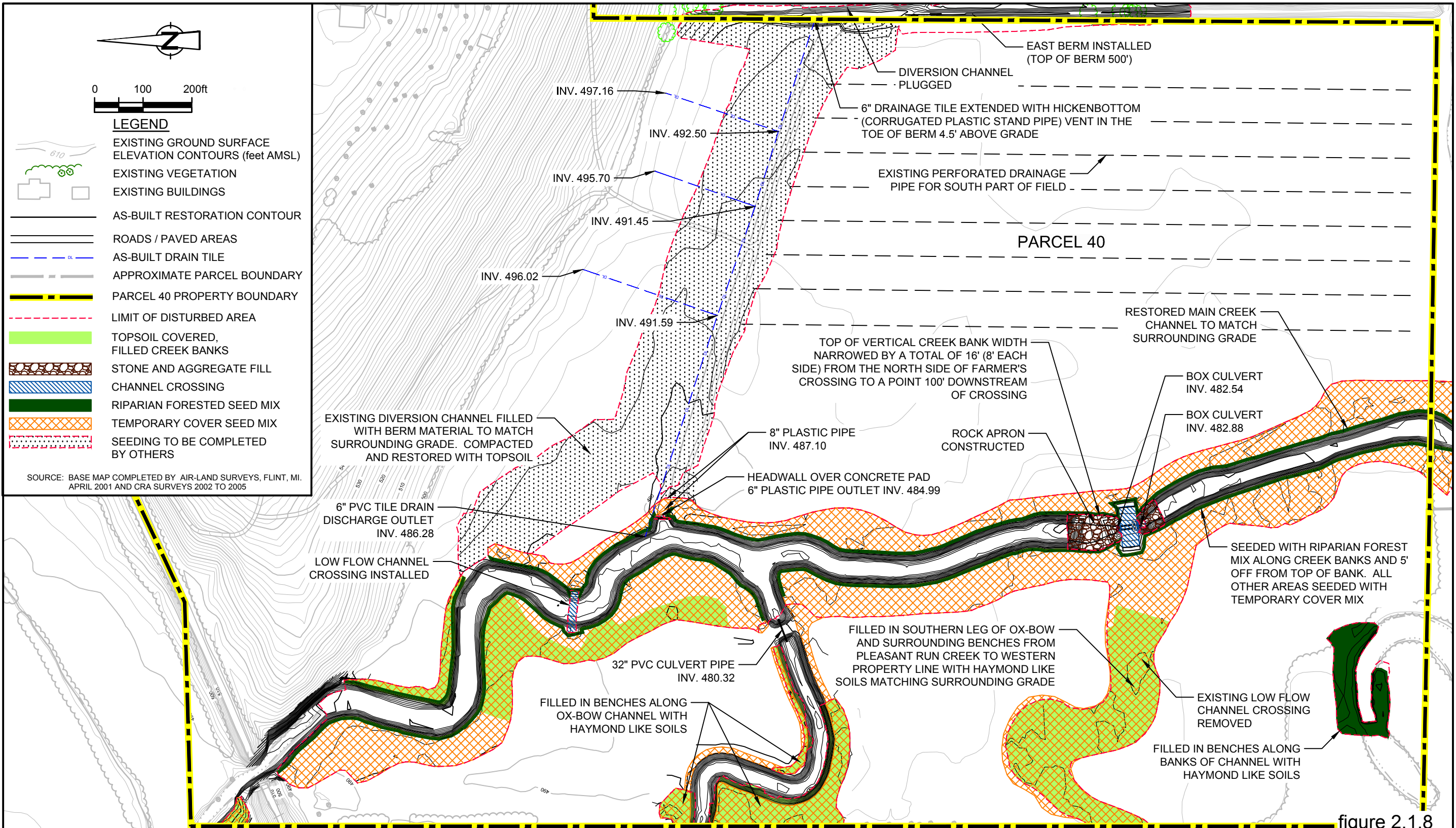


figure 2.1.8

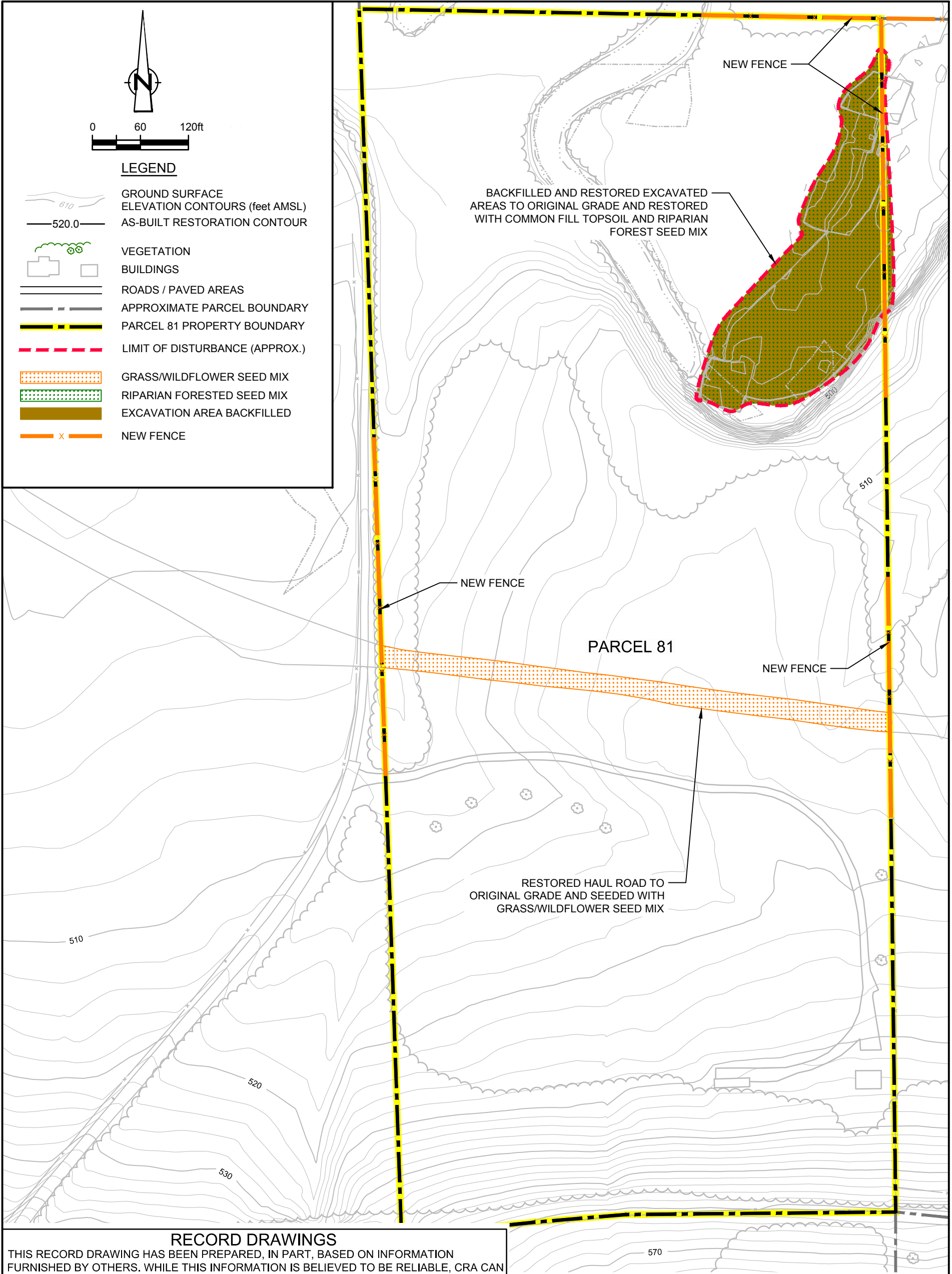
**SITE RESTORATION - PARCEL 40
MONITORING AND MAINTENANCE PLAN
DOWNSTREAM PARCELS
GM CET BEDFORD FACILITY
Bedford, Indiana**

RECORD DRAWINGS

THIS RECORD DRAWING HAS BEEN PREPARED, IN PART, BASED ON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, CRA CAN NOT AND DOES NOT WARRANT ITS ACCURACY AND/OR COMPLETENESS, AND THUS SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THOSE RELYING ON THIS RECORD DRAWING ARE ADVISED TO OBTAIN VERIFICATION OF ITS ACCURACY AND/OR COMPLETENESS BEFORE USING IT FOR ANY PURPOSE.



SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001 AND CRA SURVEYS 2002 TO 2005



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

SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001 AND CRA SURVEYS 2002 TO 2005

figure 2.1.9

SITE RESTORATION - PARCEL 81
MONITORING AND MAINTENANCE PLAN
DOWNSTREAM PARCELS
GM CET BEDFORD FACILITY
Bedford, Indiana

TABLE 3.1

**SPECIES ABUNDANCE CATEGORIES FOR GRASSES
DOWNSTREAM PARCELS REMOVAL ACTION MMP
GM CET BEDFORD FACILITY
BEDFORD, INDIANA**

<i>Abundance Rating</i>	<i>Abundance Category</i>	<i>Description</i>
1	Observed	1 individual of a species present
2	Rare	2-4 individuals of a species present
3	Rare/Common	>4 individuals of a species, but not enough to be categorized as "common"
4	Common	Species is easily located
5	Very Common	Species is slightly dominant; up to 25% of the plant community
6	Abundant	Species accounts for 25-100% of the plant community

Source: Simon et al., 2001

TABLE 3.2

**SURVIVAL CLASSES FOR TREES AND SHRUBS
DOWNSTREAM PARCELS REMOVAL ACTION MMP
GM CET BEDFORD FACILITY
BEDFORD, INDIANA**

<i>Survival Class</i>	<i>Range of Percent Survival</i>
1	0 – 25%
2	26 – 50%
3	51 – 75%
4	76 – 100%

Appendix A

Monitoring Forms

TABLE A.1

VEGETATION MONITORING FORM
DOWNSTREAM PARCELS REMOVAL ACTION MMP
GM CET BEDFORD FACILITY
BEDFORD, INDIANA

Inspector _____

Date/Time _____

Parcel/Cover Type _____

I. GRASSES

[illegible]

Percent Aerial Coverage of Grasses and Forbs _____

TABLE A.1

VEGETATION MONITORING FORM
DOWNSTREAM PARCELS REMOVAL ACTION MMP
GM CET BEDFORD FACILITY
BEDFORD, INDIANA

II. SHRUBS AND TREES

Taxon	Planted		Volunteer		Invasive	
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No
_____	Yes	No	Yes	No	Yes	No

Survival Class $\leq$ 25% 26-50% 51-75% > 75%
(Shrubs and Trees)

III. WILDLIFE OBSERVED

TABLE A.1

VEGETATION MONITORING FORM
DOWNSTREAM PARCELS REMOVAL ACTION MMP
GM CET BEDFORD FACILITY
BEDFORD, INDIANA

IV. NOTES
