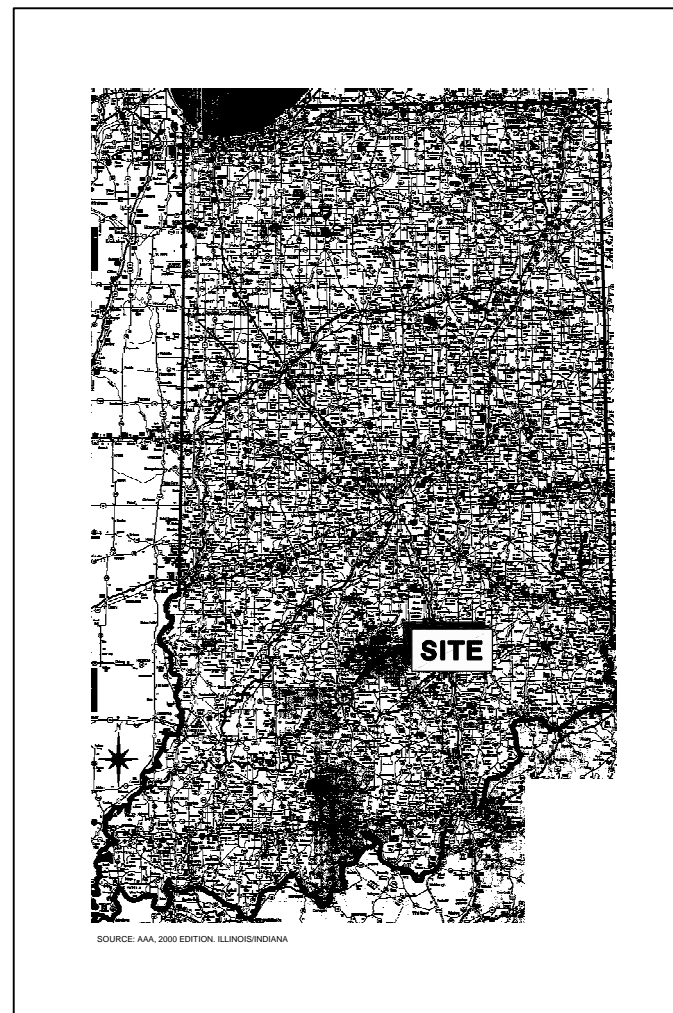


DOWNSTREAM PARCELS REMOVAL ACTION

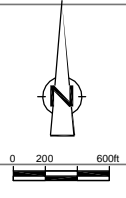
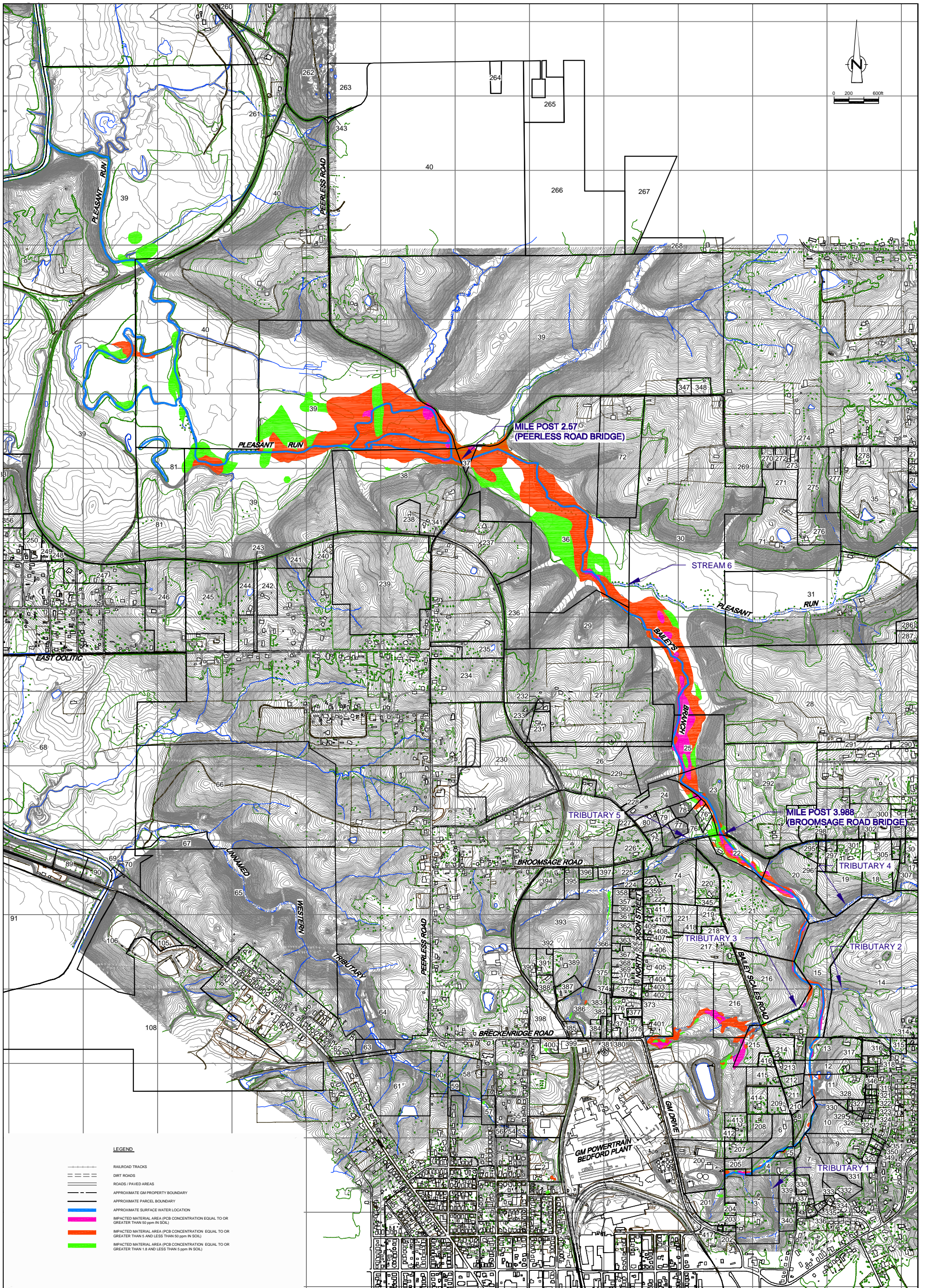
GM POWERTRAIN BEDFORD FACILITY BEDFORD, INDIANA



KEY PLAN

DWG. No.	REV. No.	DATE	TITLE	DWG. No.	REV. No.	DATE	TITLE	DWG. No.	REV. No.	DATE	TITLE
C-01	0	OCTOBER 2003	EXISTING CONDITIONS	C-10 A	0	OCTOBER 2003	SITE PREPARATION	C-15 A	0	OCTOBER 2003	SITE PREPARATION
C-02	0	OCTOBER 2003	SITE LOCATION	C-10 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-15 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL
C-03	0	OCTOBER 2003	SITE PLAN I	C-10 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-15 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT
C-04	0	OCTOBER 2003	SITE PLAN II	C-10 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-15 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN
C-05	0	OCTOBER 2003	KEY PLAN AND LOCATION MAP FOR SITE WORKS DRAWINGS	C-11 A	0	OCTOBER 2003	SITE PREPARATION	C-16 A	0	OCTOBER 2003	SITE PREPARATION
C-06 A	0	OCTOBER 2003	SITE PREPARATION	C-11 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-16 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL
C-06 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-11 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-16 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT
C-06 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-11 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-16 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN
C-06 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-12 A	0	OCTOBER 2003	SITE PREPARATION	C-17 A	0	OCTOBER 2003	SITE PREPARATION
C-07 A	0	OCTOBER 2003	SITE PREPARATION	C-12 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-17 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL
C-07 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-12 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-17 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT
C-07 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-12 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-17 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN
C-07 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-13 A	0	OCTOBER 2003	SITE PREPARATION	C-18 A	0	OCTOBER 2003	SITE PREPARATION
C-08 A	0	OCTOBER 2003	SITE PREPARATION	C-13 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-18 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL
C-08 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-13 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-18 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT
C-08 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-13 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-18 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN
C-08 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-14 A	0	OCTOBER 2003	SITE PREPARATION	C-19	0	OCTOBER 2003	DETAILS SHEET 1 OF 2
C-09 A	0	OCTOBER 2003	SITE PREPARATION	C-14 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-20	0	OCTOBER 2003	DETAILS SHEET 2 OF 2
C-09 B	0	OCTOBER 2003	SITE WORKS I SOIL EROSION AND SEDIMENT CONTROL	C-14 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-21	0	OCTOBER 2003	PCB CONTAMINATED SOIL STAGING FACILITY PLAN
C-09 C	0	OCTOBER 2003	SITE WORKS II STORMWATER MANAGEMENT	C-14 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN	C-22	0	OCTOBER 2003	PCB CONTAMINATED SOIL STAGING FACILITY SECTIONS
C-09 D	0	OCTOBER 2003	SITE WORKS III EXCAVATION PLAN								

DRAWING INDEX



- LEGEND**
- RAILROAD TRACKS
 - - - DIRT ROADS
 - == ROADS / PAVED AREAS
 - APPROXIMATE GM PROPERTY BOUNDARY
 - APPROXIMATE PARCEL BOUNDARY
 - APPROXIMATE SURFACE WATER LOCATION
 - IMPACTED MATERIAL AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
 - IMPACTED MATERIAL AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 5 AND LESS THAN 50 ppm IN SOIL)
 - IMPACTED MATERIAL AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.0 AND LESS THAN 5 ppm IN SOIL)

NO.	Revision	Date	Initial

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

**GM POWERTRAIN FACILITY
 BEDFORD INDIANA**

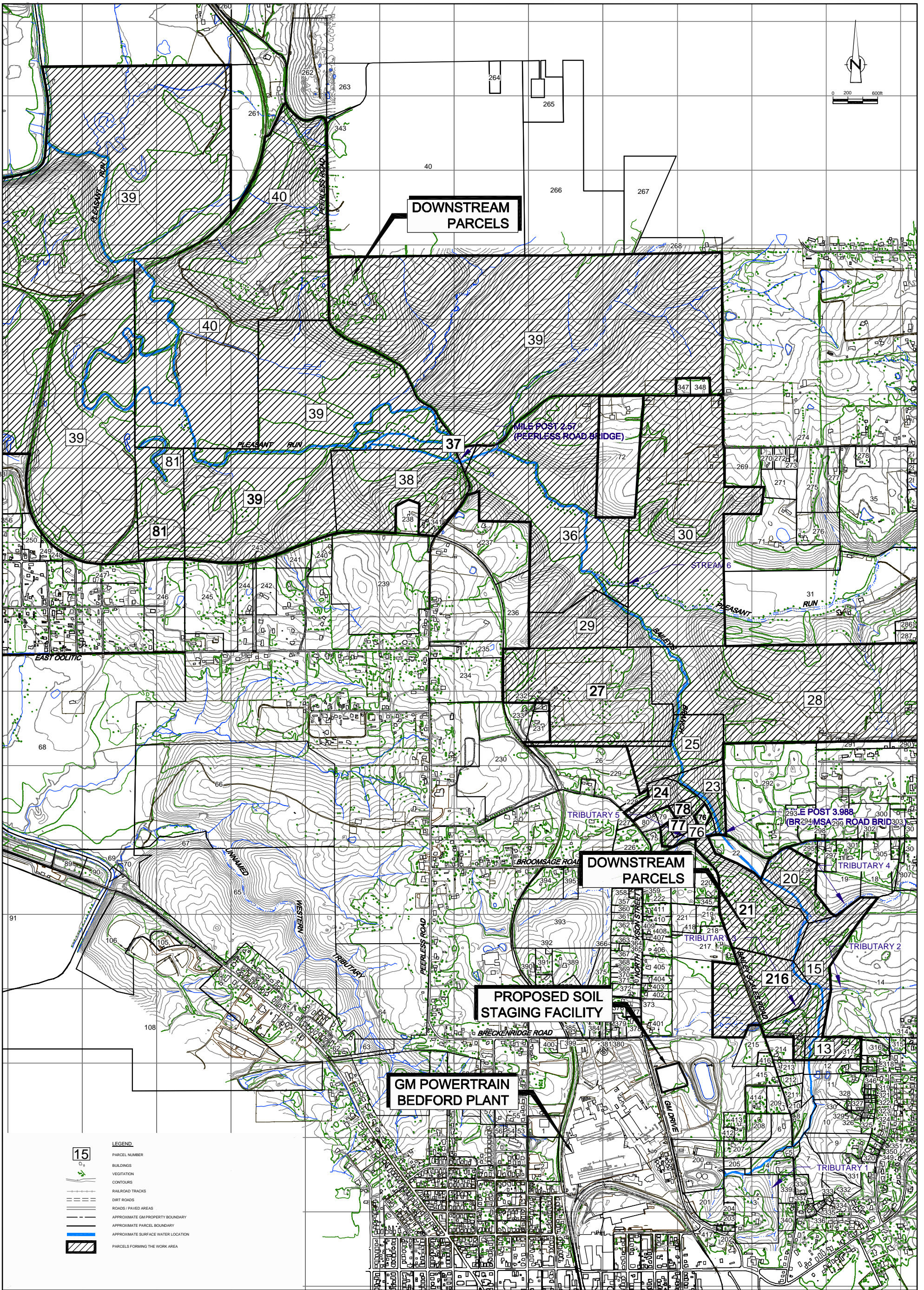
DOWNSTREAM PARCELS REMOVAL ACTION

EXISTING CONDITIONS

CRA CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: AS SHOWN	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-01



LEGEND

	PARCEL NUMBER
	BUILDINGS
	VEGETATION
	CONTOURS
	RAILROAD TRACKS
	DIRT ROADS
	ROADS / PAVED AREAS
	APPROXIMATE GM PROPERTY BOUNDARY
	APPROXIMATE PARCEL BOUNDARY
	APPROXIMATE SURFACE WATER LOCATION
	PARCELS FORMING THE WORK AREA

NO	Revision	Date	Initial

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

**GM POWERTRAIN FACILITY
BEDFORD INDIANA**

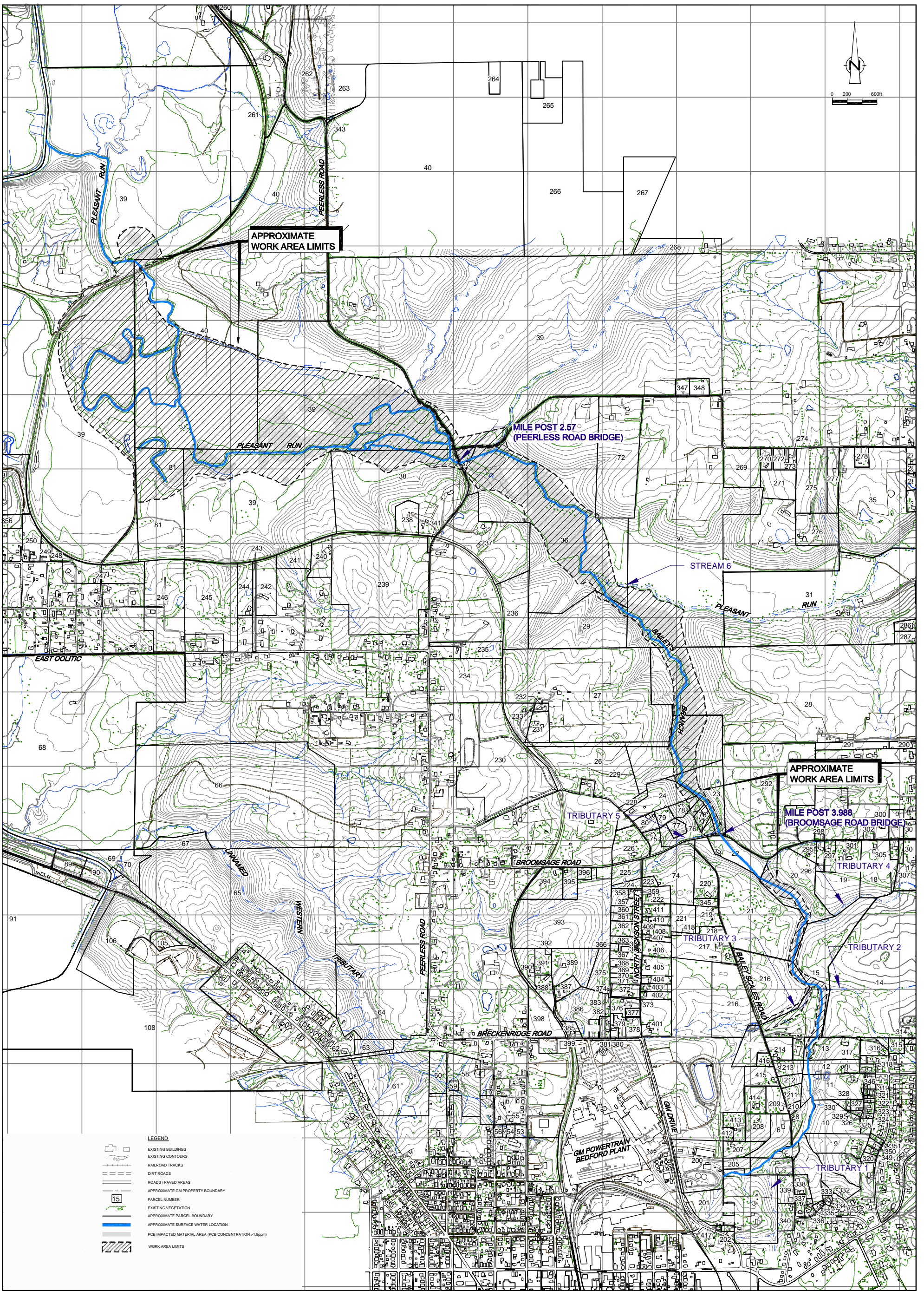
DOWNSTREAM PARCELS REMOVAL ACTION

SITE LOCATION

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: AS SHOWN	Project N#: 13968-00	Report N#: 046
		Drawing N#: C-02



NO.	Revision	Date	Initial

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

**GM POWERTRAIN FACILITY
BEDFORD INDIANA**

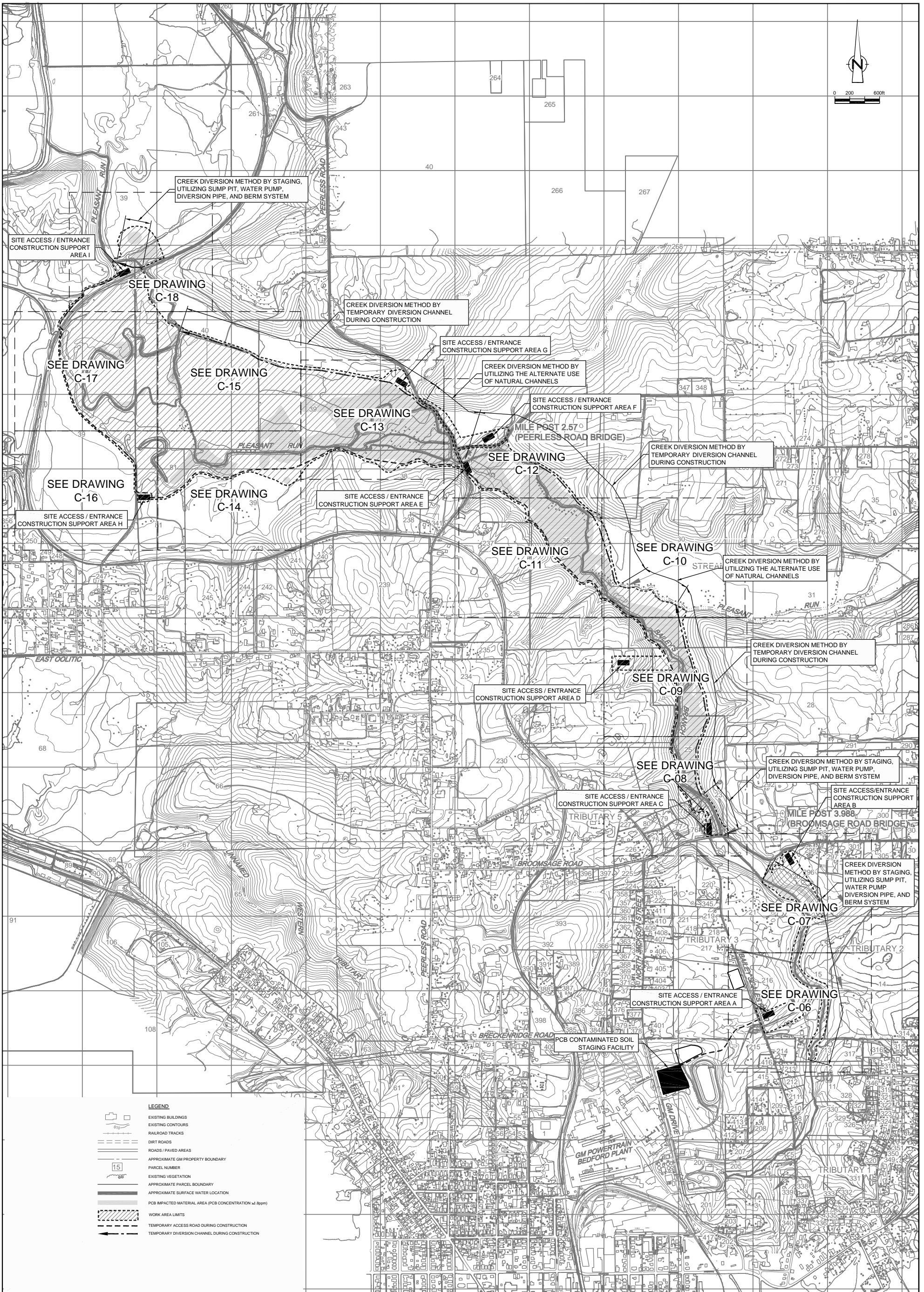
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PLAN I

CRA CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: AS SHOWN	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-03



NO.	Revision	Date	Initial

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

**GM POWERTRAIN FACILITY
 BEDFORD INDIANA**

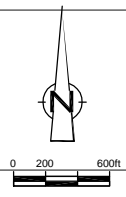
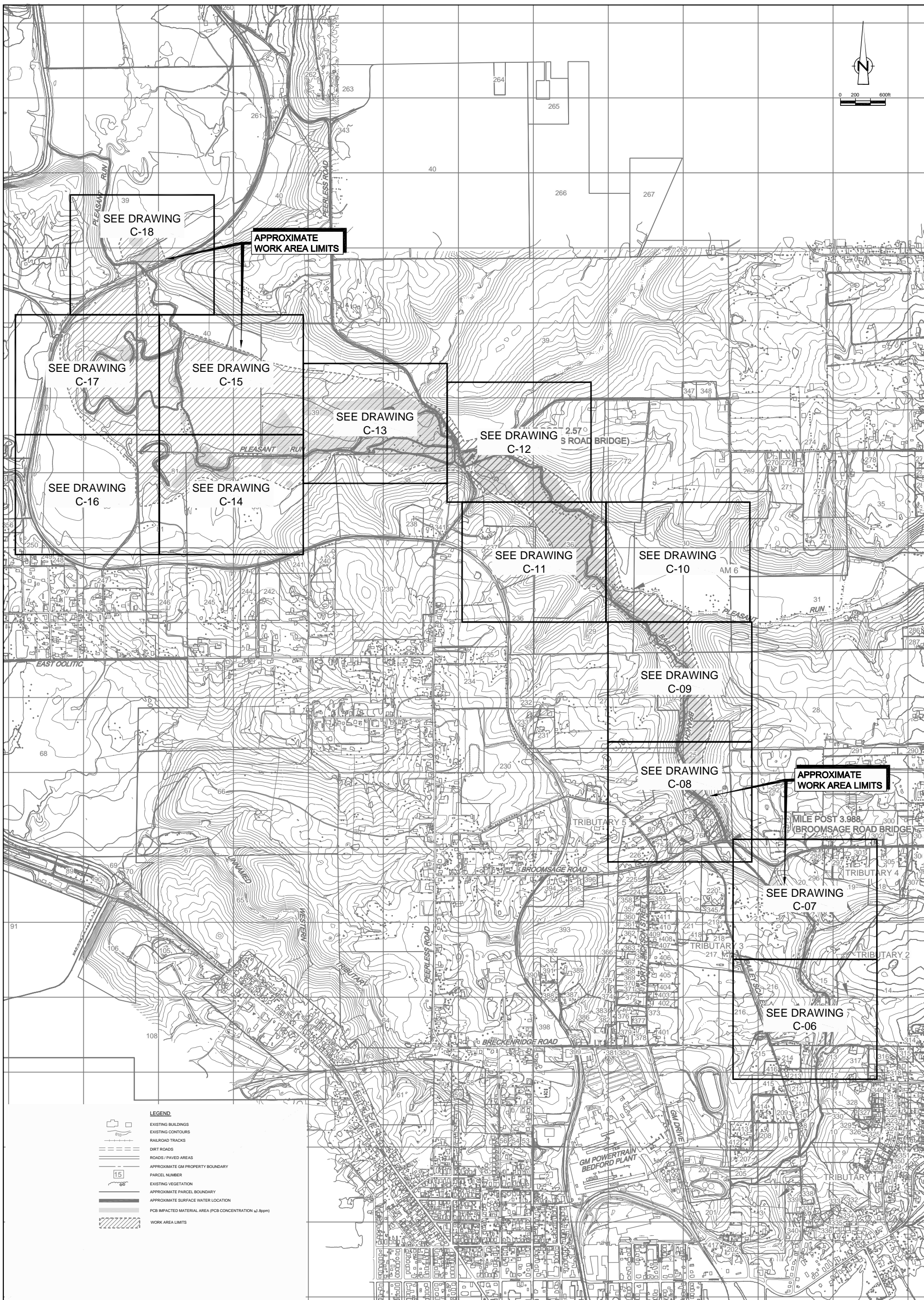
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PLAN II

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 600'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-04



- LEGEND**
- EXISTING BUILDINGS
 - EXISTING CONTOURS
 - RAILROAD TRACKS
 - DIRT ROADS
 - ROADS / PAVED AREAS
 - APPROXIMATE GM PROPERTY BOUNDARY
 - PARCEL NUMBER
 - EXISTING VEGETATION
 - APPROXIMATE PARCEL BOUNDARY
 - APPROXIMATE SURFACE WATER LOCATION
 - PCB IMPACTED MATERIAL AREA (PCB CONCENTRATION > .8ppm)
 - WORK AREA LIMITS

NO.	Revision	Date	Initial

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

**GM POWERTRAIN FACILITY
BEDFORD INDIANA**

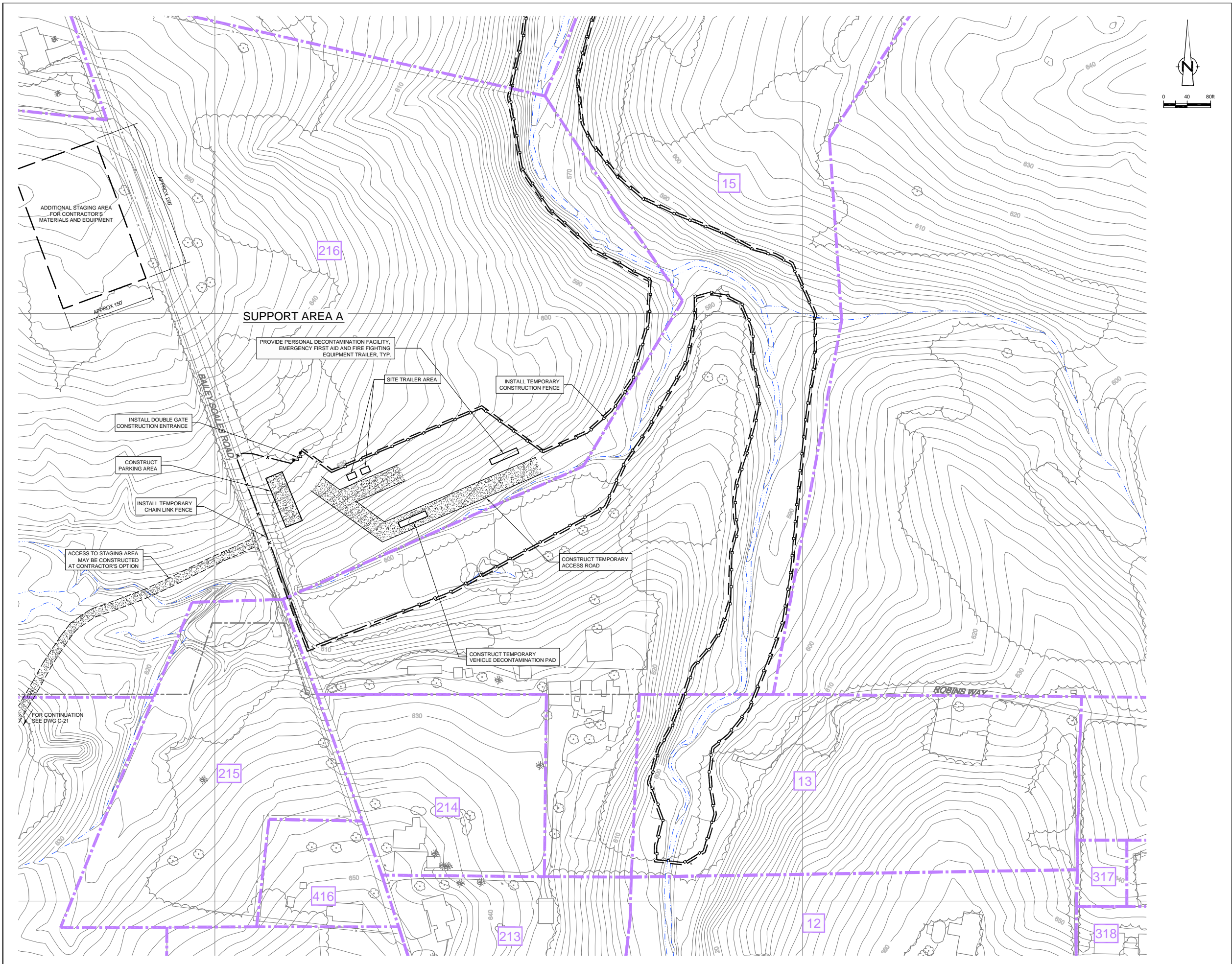
DOWNSTREAM PARCELS REMOVAL ACTION

**KEY PLAN AND LOCATION MAP
FOR SITE WORKS DRAWINGS**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 600'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-05



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE GM PROPERTY BOUNDARY
- APPROXIMATE SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED TEMPORARY ACCESS ROAD

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

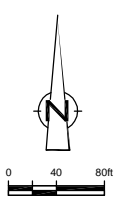
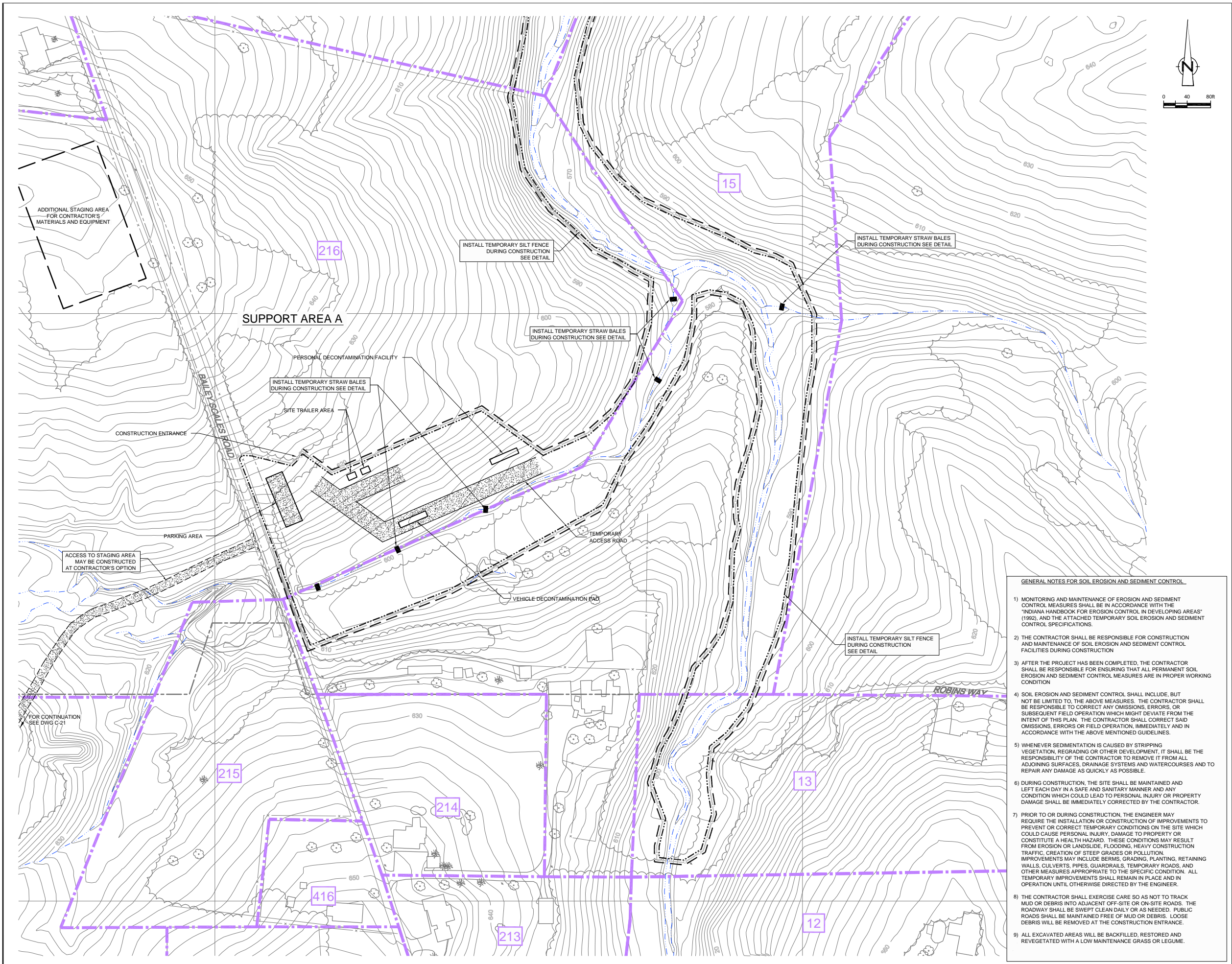
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PREPARATION



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: JULY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-06 A



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE GM PROPERTY BOUNDARY
	APPROXIMATE SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED TEMPORARY ACCESS ROAD
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
 - 3) AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING CONDITION.
 - 4) SOIL EROSION AND SEDIMENT CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ABOVE MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ANY OMISSIONS, ERRORS, OR SUBSEQUENT FIELD OPERATION WHICH MIGHT DEVIATE FROM THE INTENT OF THIS PLAN. THE CONTRACTOR SHALL CORRECT SAID OMISSIONS, ERRORS OR FIELD OPERATION, IMMEDIATELY AND IN ACCORDANCE WITH THE ABOVE MENTIONED GUIDELINES.
 - 5) WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE.
 - 6) DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
 - 7) PRIOR TO OR DURING CONSTRUCTION, THE ENGINEER MAY REQUIRE THE INSTALLATION OR CONSTRUCTION OF IMPROVEMENTS TO PREVENT OR CORRECT TEMPORARY CONDITIONS ON THE SITE WHICH COULD CAUSE PERSONAL INJURY, DAMAGE TO PROPERTY OR CONSTITUTE A HEALTH HAZARD. THESE CONDITIONS MAY RESULT FROM EROSION OR LANDSLIDE, FLOODING, HEAVY CONSTRUCTION TRAFFIC, CREATION OF STEEP GRADES OR POLLUTION. IMPROVEMENTS MAY INCLUDE BERMS, GRADING, PLANTING, RETAINING WALLS, CULVERTS, PIPES, GUARDRAILS, TEMPORARY ROADS, AND OTHER MEASURES APPROPRIATE TO THE SPECIFIC CONDITION. ALL TEMPORARY IMPROVEMENTS SHALL REMAIN IN PLACE AND IN OPERATION UNTIL OTHERWISE DIRECTED BY THE ENGINEER.
 - 8) THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO TRACK MUD OR DEBRIS INTO ADJACENT OFF-SITE OR ON-SITE ROADS. THE ROADWAY SHALL BE SWEEPED CLEAN DAILY OR AS NEEDED. PUBLIC ROADS SHALL BE MAINTAINED FREE OF MUD OR DEBRIS. LOOSE DEBRIS WILL BE REMOVED AT THE CONSTRUCTION ENTRANCE.
 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

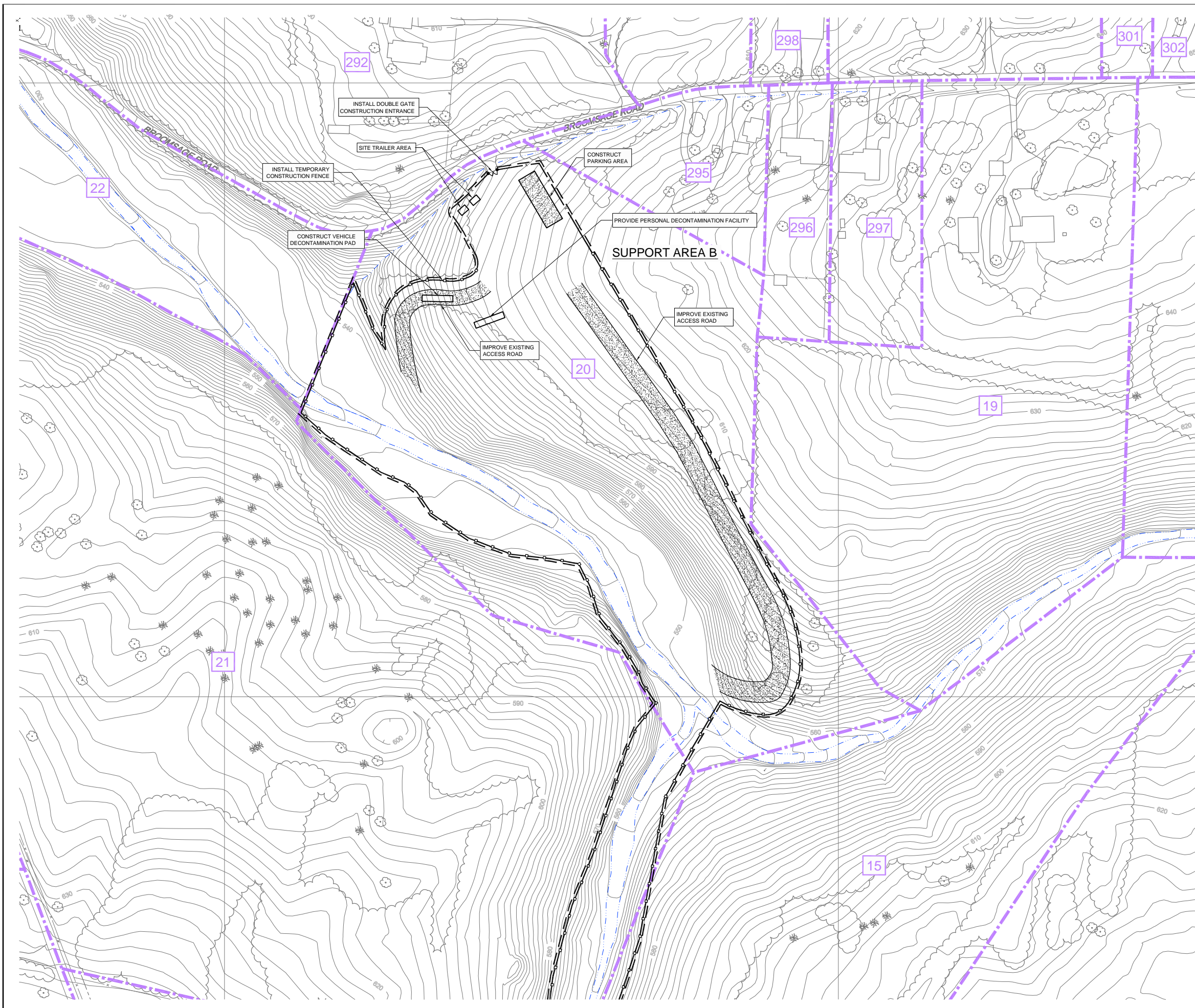
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS I
SOIL EROSION AND SEDIMENT CONTROL**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: JULY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-06 B



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE GM PROPERTY BOUNDARY
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED TEMPORARY ACCESS ROAD

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

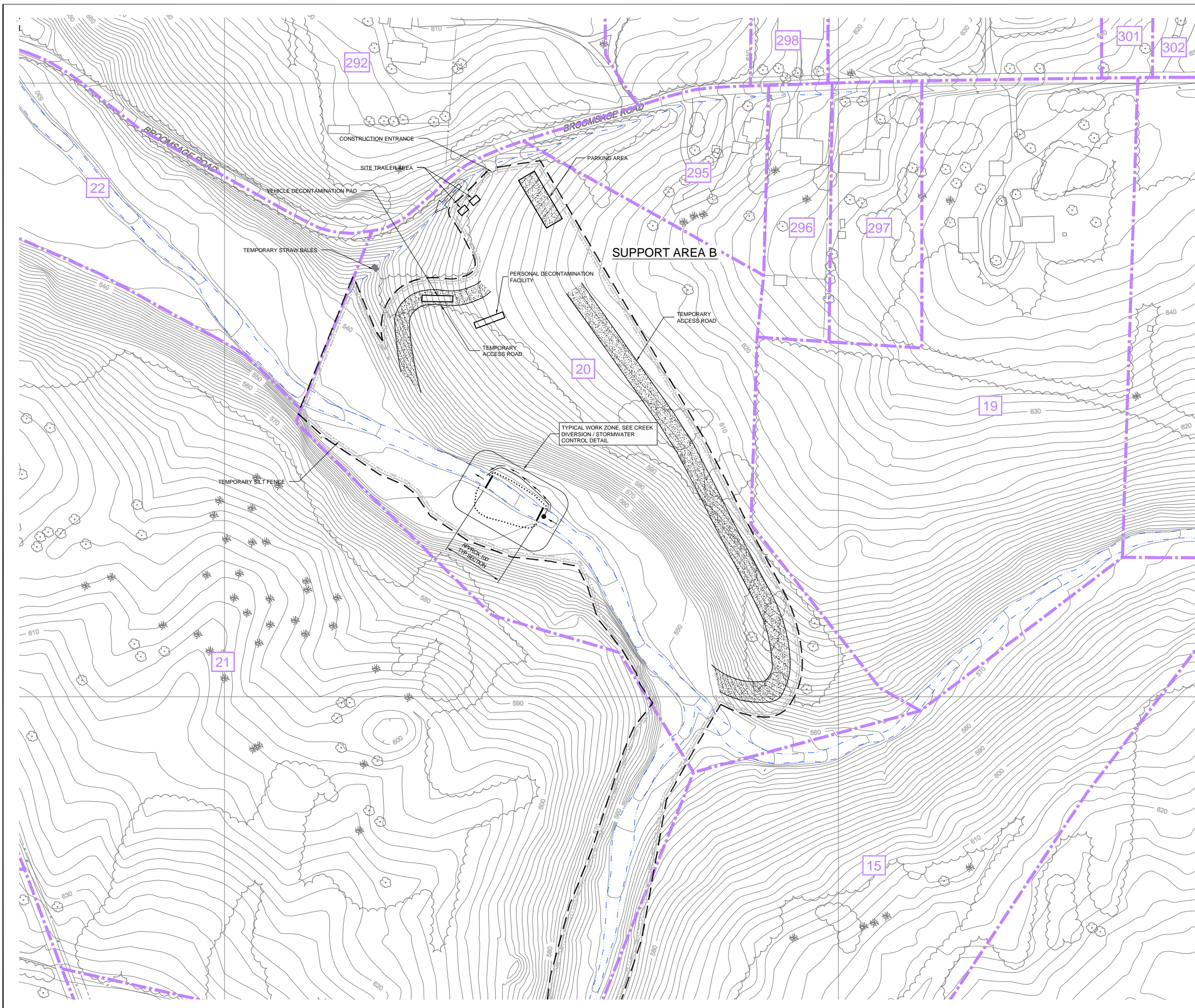
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PREPARATION



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: JULY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-07 A



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE GM PROPERTY BOUNDARY
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED TEMPORARY ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION
- FLOW FROM SUB-CATCHMENT
- SANDBAG DAM
- SUMP

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

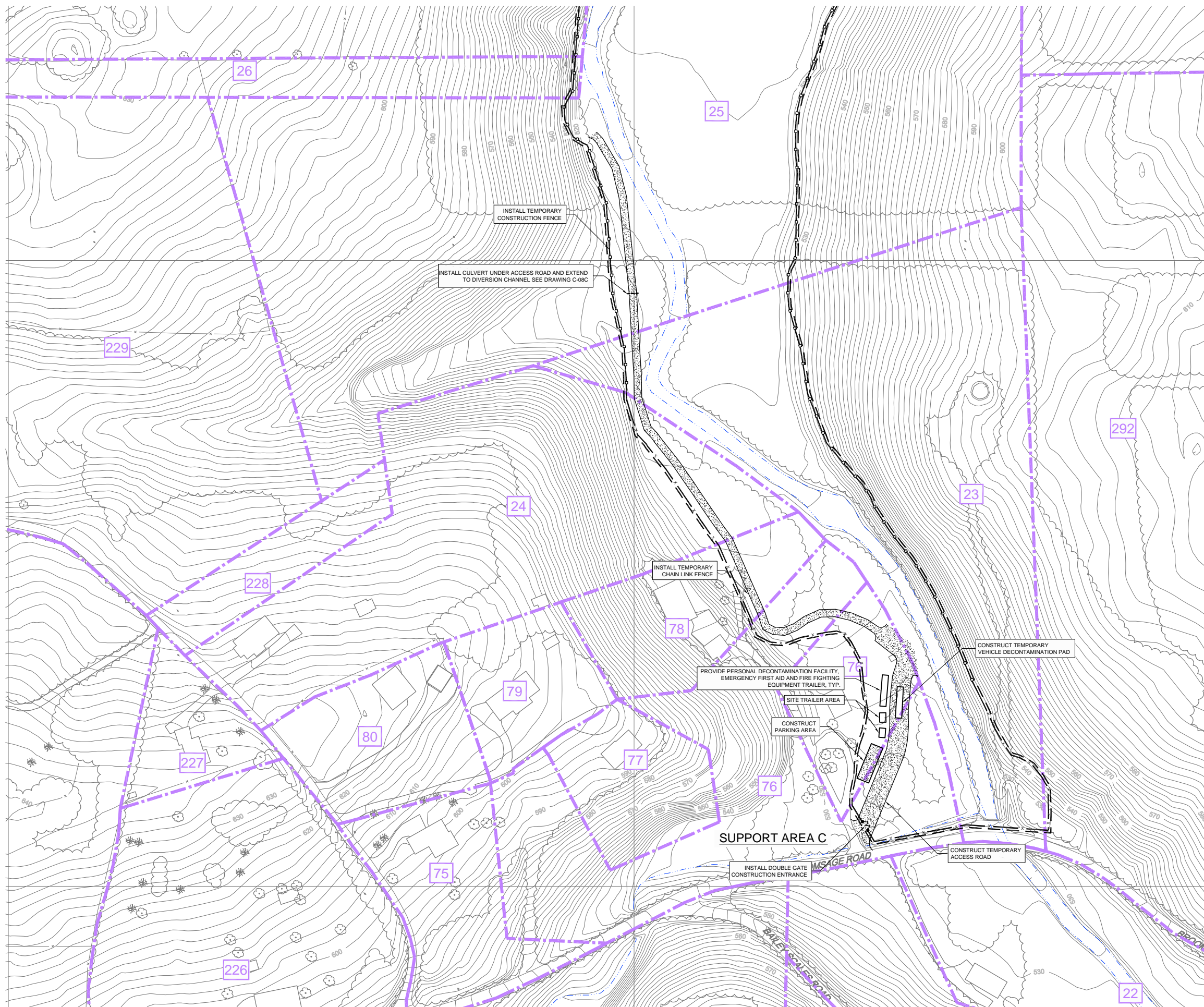
Status	Date	Initial

GM POWERTRAIN FACILITY
BEDFORD, INDIANA
DOWNSTREAM PARCELS REMOVAL ACTION
SITE WORKS II
STORMWATER MANAGEMENT



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: JULY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-07 C



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- CULVERT

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

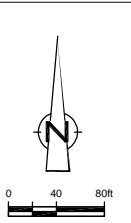
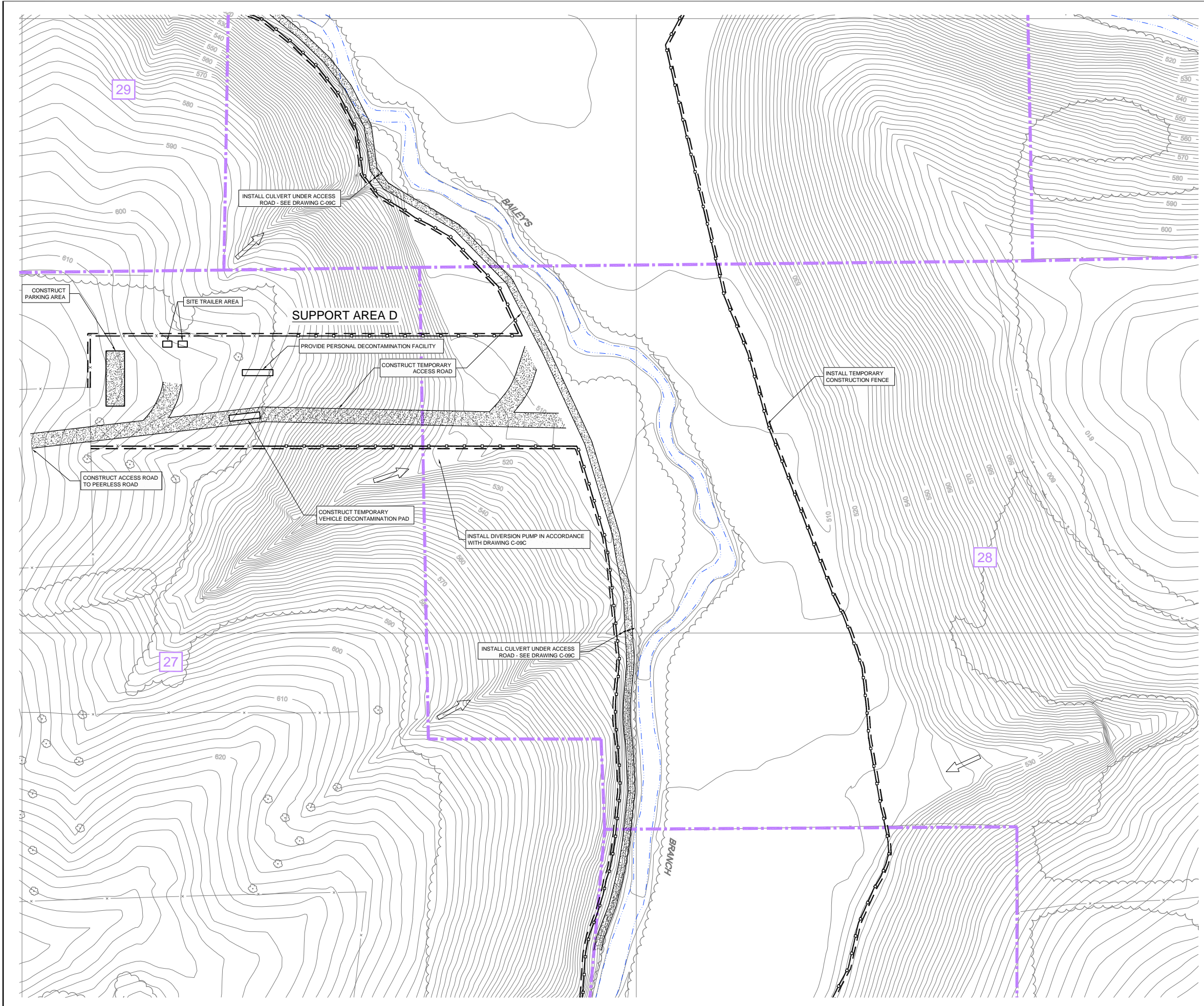
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PREPARATION

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-08 A



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- FLOW FROM SUB-CATCHMENT
- CULVERT

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

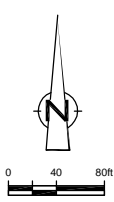
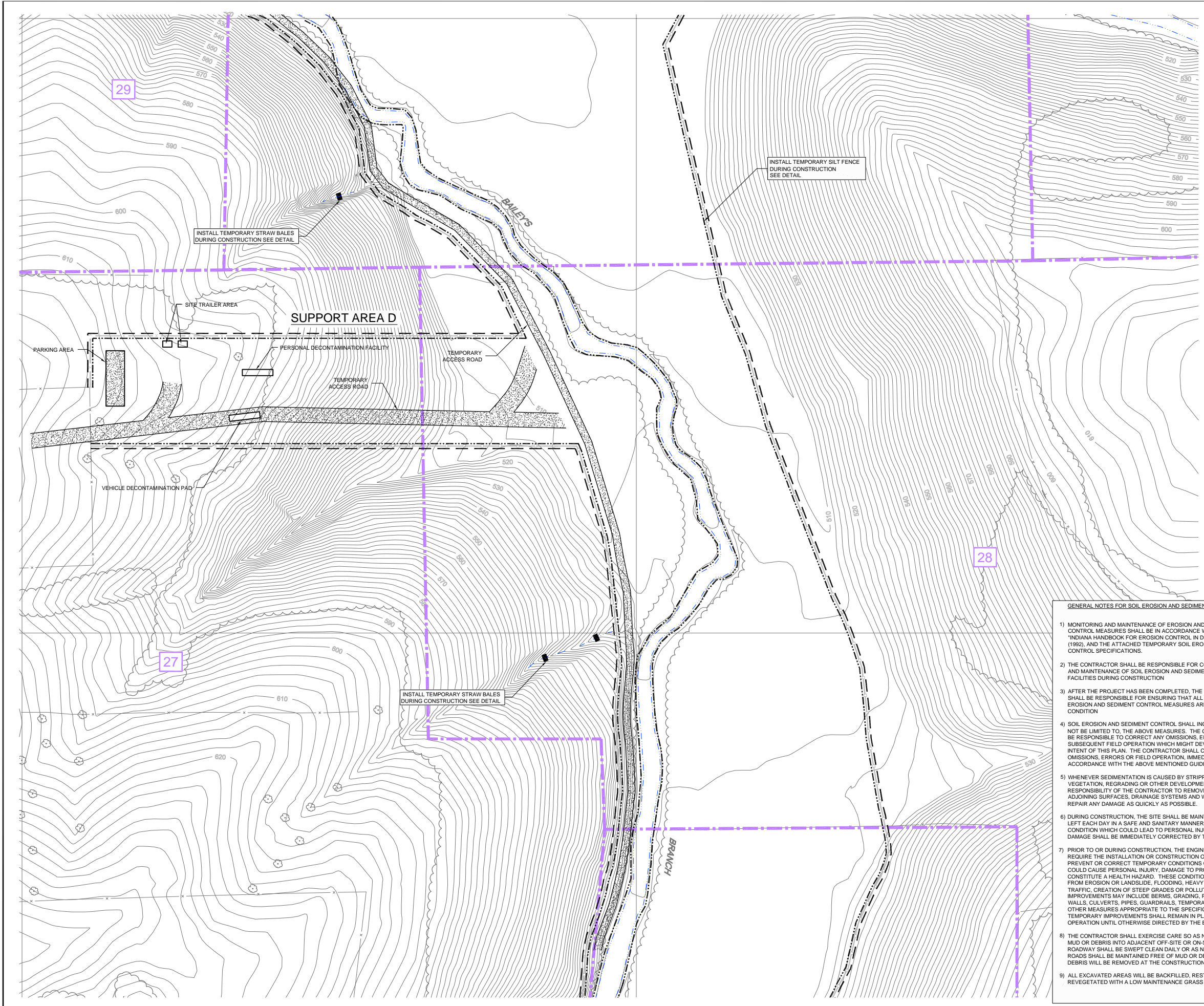
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PREPARATION



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-09 A



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED ACCESS ROAD
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION
	CULVERT

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

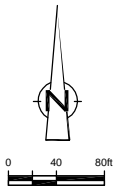
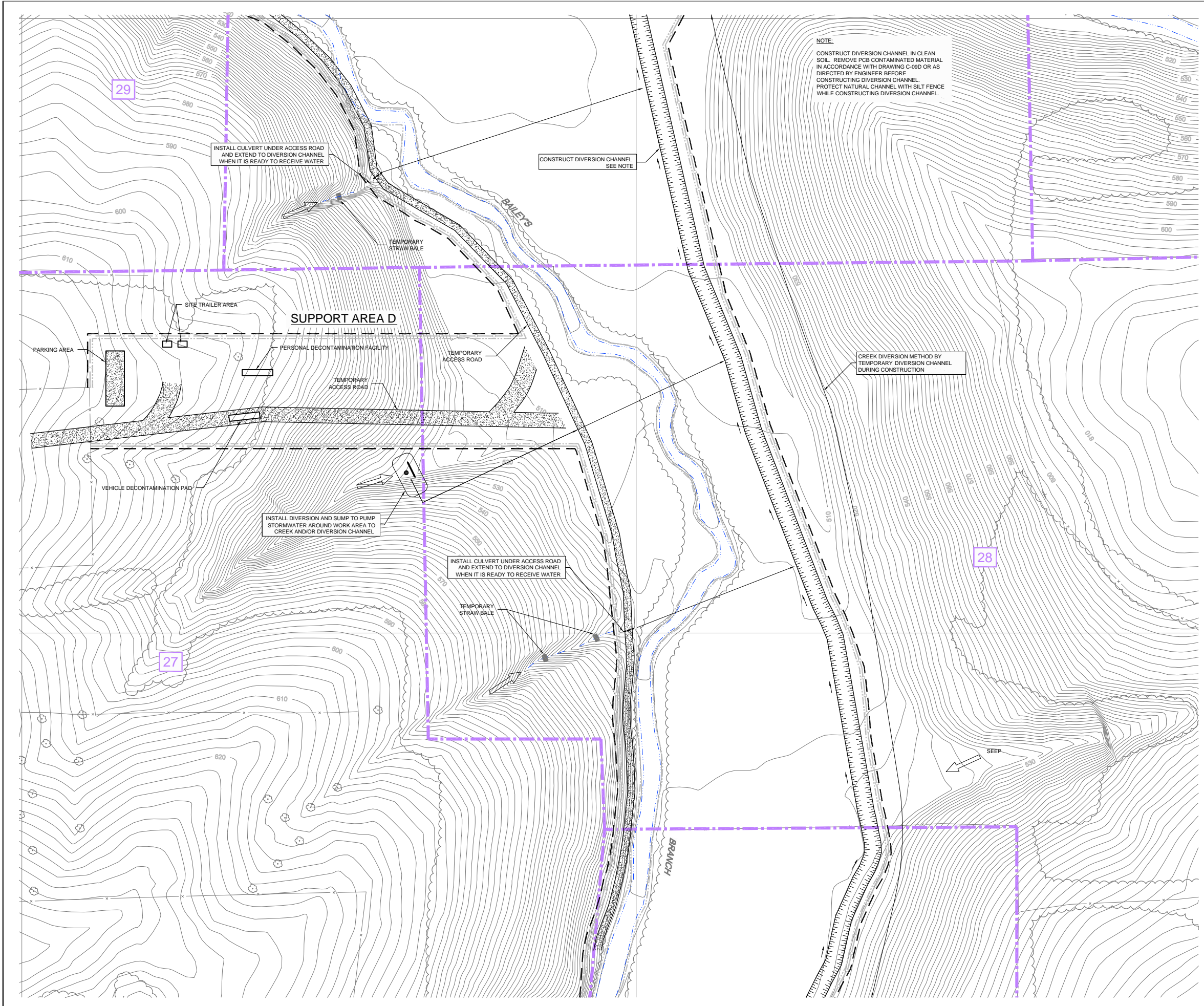
- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
 - 3) AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING CONDITION.
 - 4) SOIL EROSION AND SEDIMENT CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ABOVE MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ANY OMISSIONS, ERRORS, OR SUBSEQUENT FIELD OPERATION WHICH MIGHT DEVIATE FROM THE INTENT OF THIS PLAN. THE CONTRACTOR SHALL CORRECT SAID OMISSIONS, ERRORS OR FIELD OPERATION, IMMEDIATELY AND IN ACCORDANCE WITH THE ABOVE MENTIONED GUIDELINES.
 - 5) WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE.
 - 6) DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
 - 7) PRIOR TO OR DURING CONSTRUCTION, THE ENGINEER MAY REQUIRE THE INSTALLATION OR CONSTRUCTION OF IMPROVEMENTS TO PREVENT OR CORRECT TEMPORARY CONDITIONS ON THE SITE WHICH COULD CAUSE PERSONAL INJURY, DAMAGE TO PROPERTY OR CONSTITUTE A HEALTH HAZARD. THESE CONDITIONS MAY RESULT FROM EROSION OR LANDSLIDE, FLOODING, HEAVY CONSTRUCTION TRAFFIC, CREATION OF STEEP GRADES OR POLLUTION. IMPROVEMENTS MAY INCLUDE BERMS, GRADING, PLANTING, RETAINING WALLS, CULVERTS, PIPES, GUARDRAILS, TEMPORARY ROADS, AND OTHER MEASURES APPROPRIATE TO THE SPECIFIC CONDITION. ALL TEMPORARY IMPROVEMENTS SHALL REMAIN IN PLACE AND IN OPERATION UNTIL OTHERWISE DIRECTED BY THE ENGINEER.
 - 8) THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO TRACK MUD OR DEBRIS INTO ADJACENT OFF-SITE OR ON-SITE ROADS. THE ROADWAY SHALL BE SWEEPED CLEAN DAILY OR AS NEEDED. PUBLIC ROADS SHALL BE MAINTAINED FREE OF MUD OR DEBRIS. LOOSE DEBRIS WILL BE REMOVED AT THE CONSTRUCTION ENTRANCE.
 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE WORKS I
 SOIL EROSION AND SEDIMENT CONTROL**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-09 B



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION
- PROPOSED DIVERSION CHANNEL
- FLOW FROM SUB-CATCHMENT
- SANDBAG DAM
- SUMP
- CULVERT

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

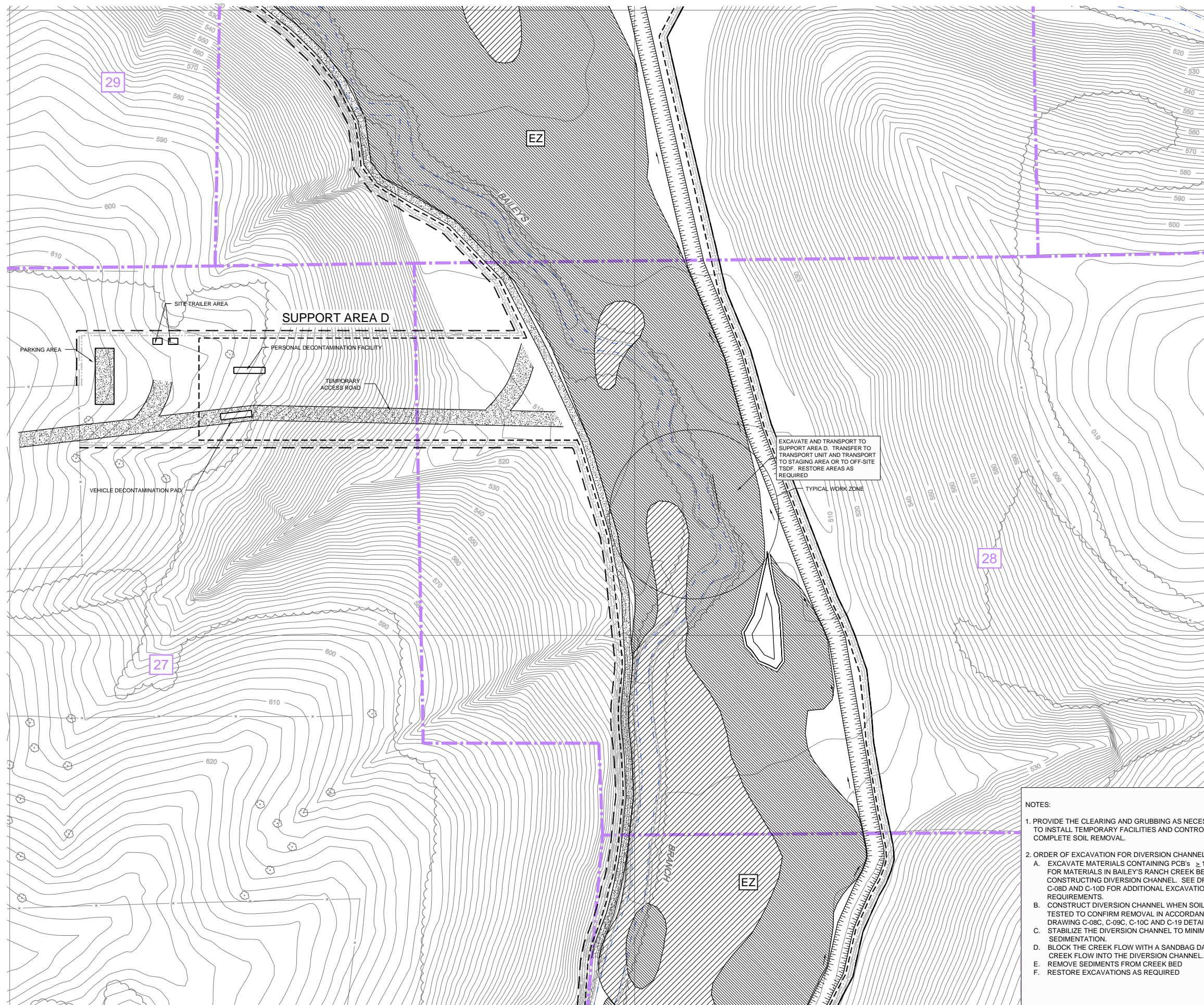
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**
DOWNSTREAM PARCELS REMOVAL ACTION
SITE WORKS II
STORMWATER MANAGEMENT



Source Reference:
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Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
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		Drawing N°: C-09 C



EXCAVATE AND TRANSPORT TO SUPPORT AREA D. TRANSFER TO TRANSPORT UNIT AND TRANSPORT TO STAGING AREA OR TO OFF-SITE TSDF. RESTORE AREAS AS REQUIRED

TYPICAL WORK ZONE

- NOTES:
- PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
 - ORDER OF EXCAVATION FOR DIVERSION CHANNEL WORK ZONE:
 - EXCAVATE MATERIALS CONTAINING PCB'S ≥ 1.8 ppm EXCEPT FOR MATERIALS IN BAILEY'S RANCH CREEK BED PRIOR TO CONSTRUCTING DIVERSION CHANNEL. SEE DRAWINGS C-08D AND C-10D FOR ADDITIONAL EXCAVATION REQUIREMENTS.
 - CONSTRUCT DIVERSION CHANNEL WHEN SOIL HAS BEEN TESTED TO CONFIRM REMOVAL IN ACCORDANCE WITH DRAWING C-08C, C-09C, C-10C AND C-19 DETAIL.
 - STABILIZE THE DIVERSION CHANNEL TO MINIMIZE SEDIMENTATION.
 - BLOCK THE CREEK FLOW WITH A SANDBAG DAM TO DIVERT CREEK FLOW INTO THE DIVERSION CHANNEL.
 - REMOVE SEDIMENTS FROM CREEK BED
 - RESTORE EXCAVATIONS AS REQUIRED

NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- PROPOSED DIVERSION CHANNEL
- EXCLUSION ZONE (EZ)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)
- EXCLUSION ZONE
- CULVERT

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

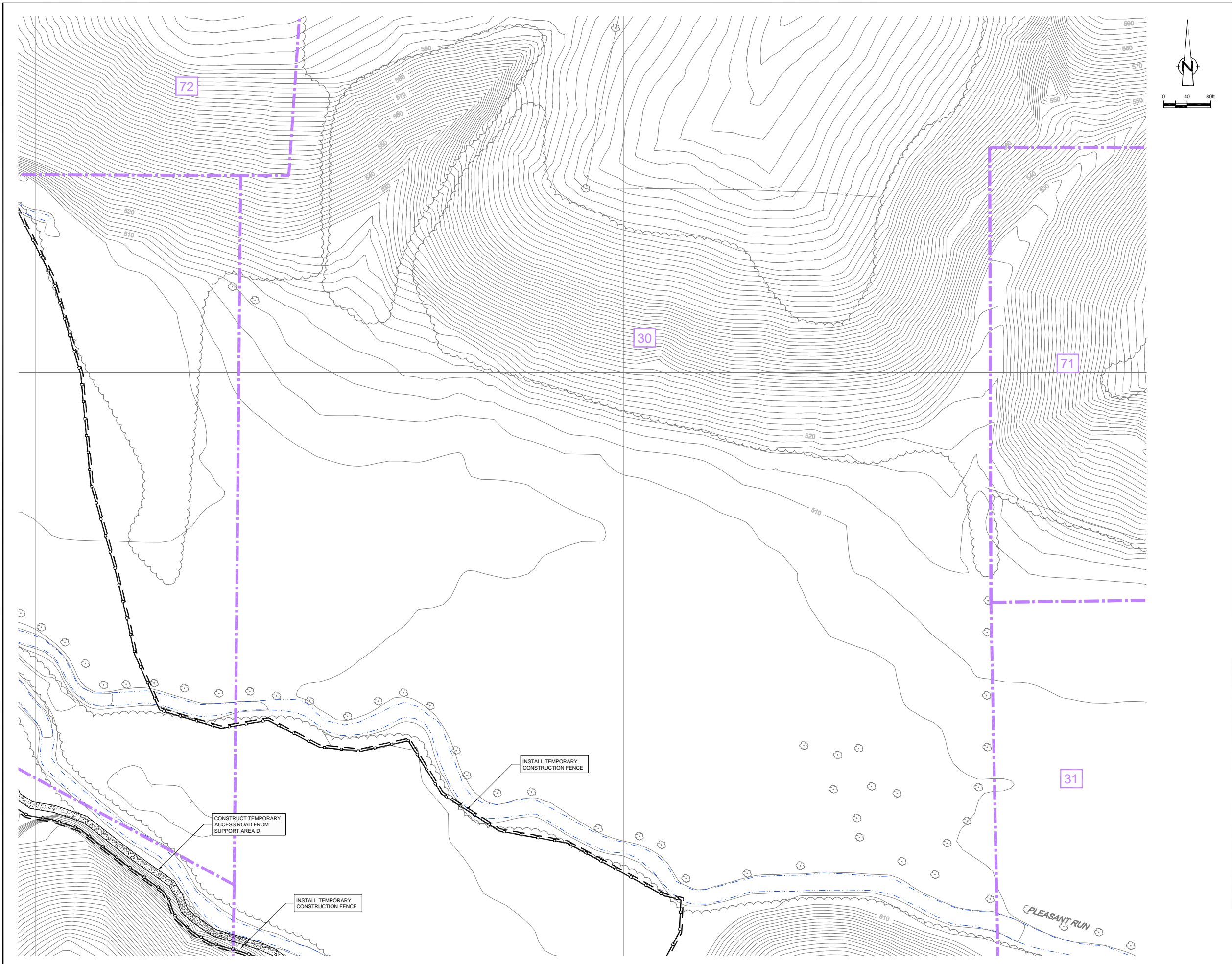
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS III
EXCAVATION PLAN**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-09 D



Nº	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

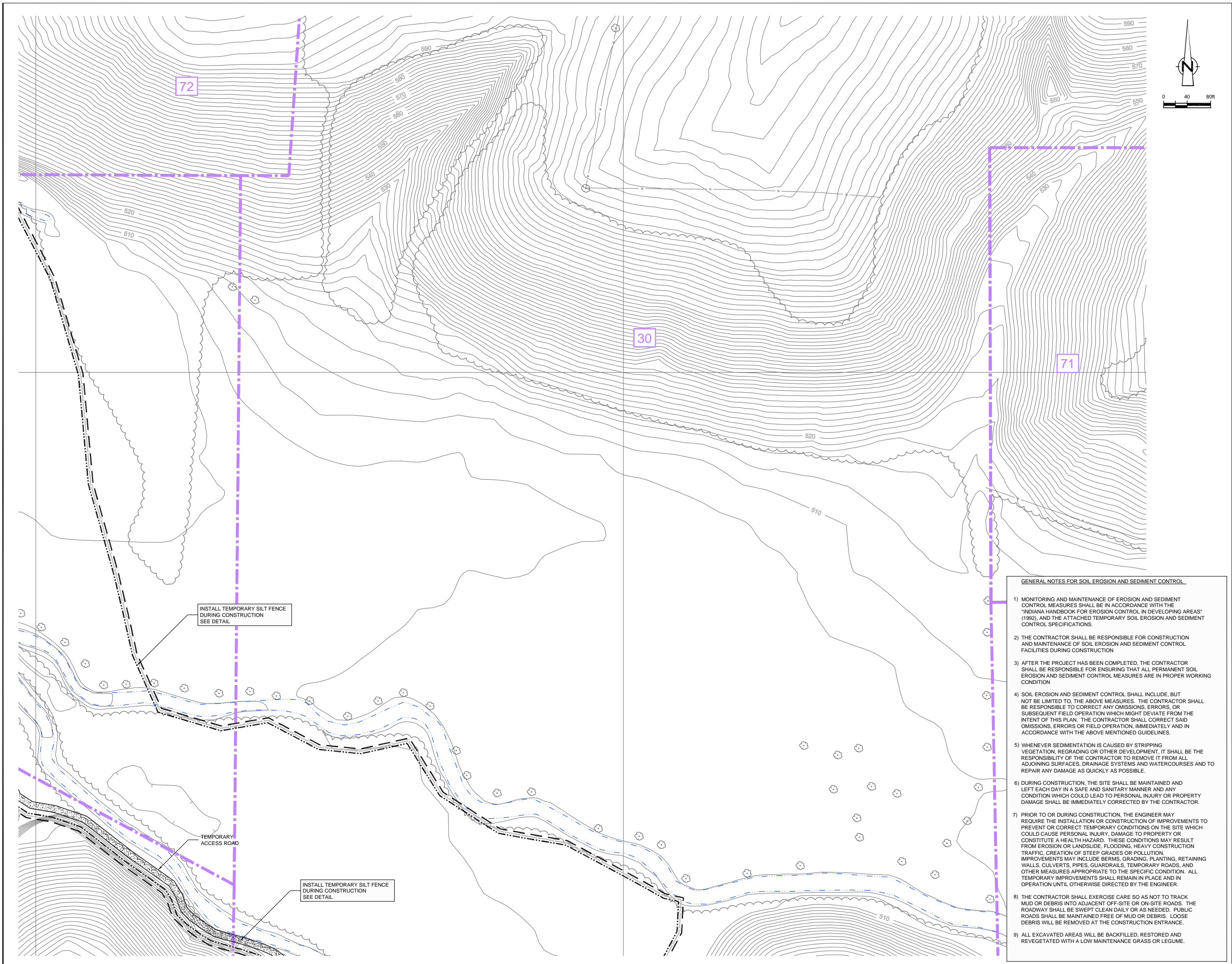
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE PREPARATION**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-10 A



72

30

71

INSTALL TEMPORARY SILT FENCE DURING CONSTRUCTION SEE DETAIL

TEMPORARY ACCESS ROAD

INSTALL TEMPORARY SILT FENCE DURING CONSTRUCTION SEE DETAIL

- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
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 - 6) DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
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 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.

NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

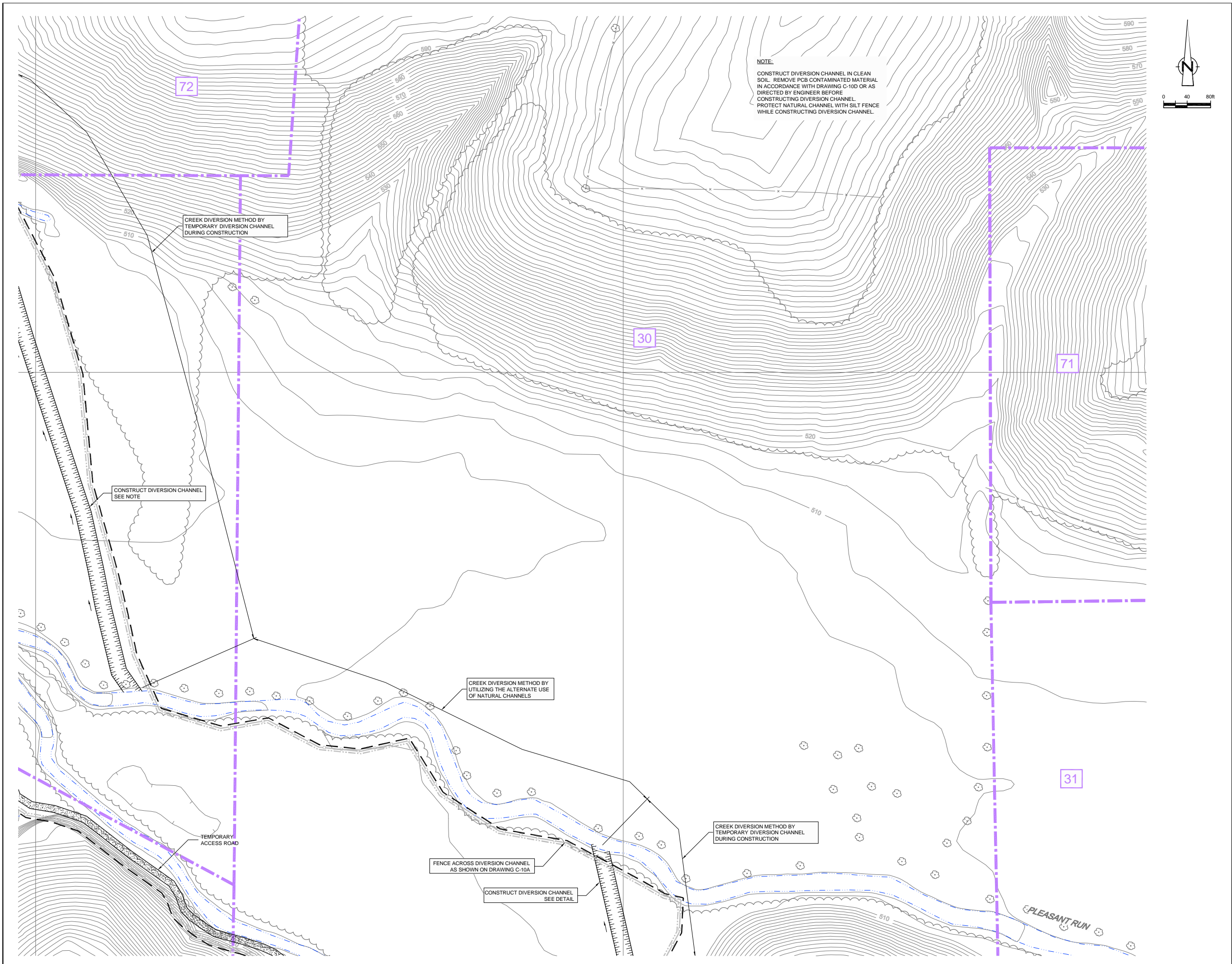
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS I
SOIL EROSION AND SEDIMENT CONTROL**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-10 B



NOTE:
 CONSTRUCT DIVERSION CHANNEL IN CLEAN SOIL. REMOVE PCB CONTAMINATED MATERIAL IN ACCORDANCE WITH DRAWING C-10D OR AS DIRECTED BY ENGINEER BEFORE CONSTRUCTING DIVERSION CHANNEL. PROTECT NATURAL CHANNEL WITH SILT FENCE WHILE CONSTRUCTING DIVERSION CHANNEL.

NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
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- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- PROPOSED DIVERSION CHANNEL

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

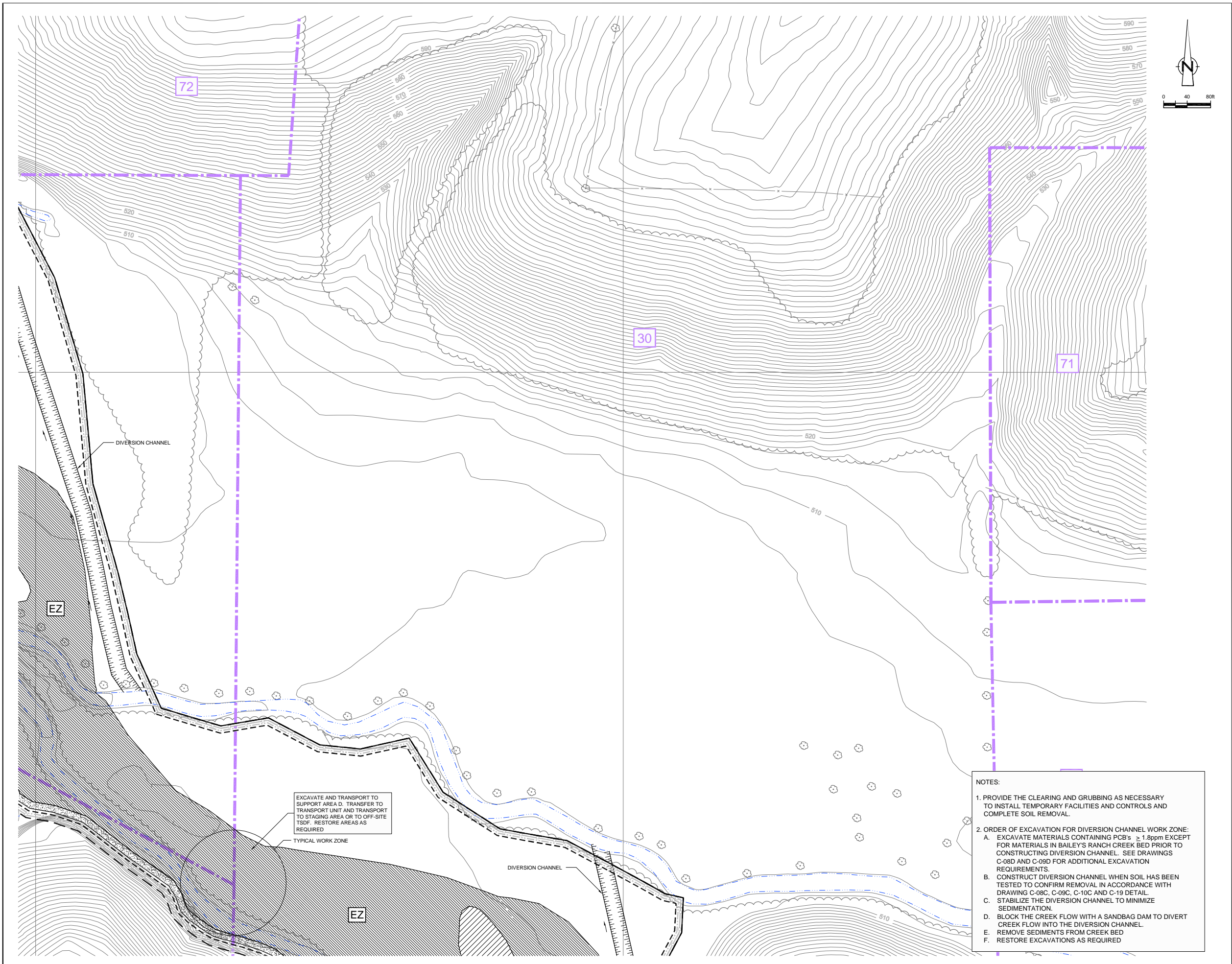
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE WORKS II
 STORMWATER MANAGEMENT**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-10 C



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
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- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
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- EXCLUSION ZONE
- CULVERT

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS III
EXCAVATION PLAN**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

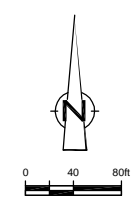
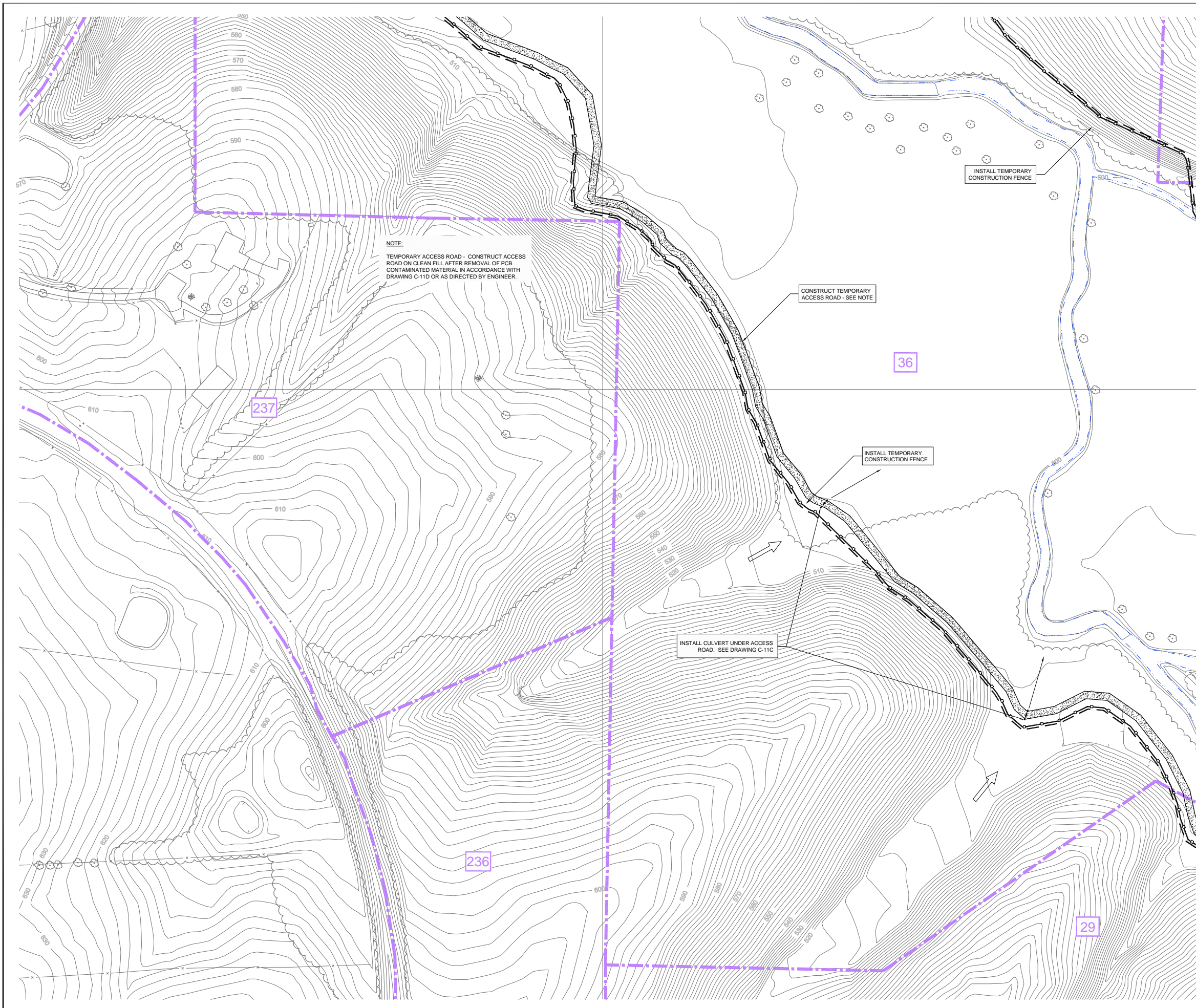
Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-10 D

NOTES:

- PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
- ORDER OF EXCAVATION FOR DIVERSION CHANNEL WORK ZONE:
 - EXCAVATE MATERIALS CONTAINING PCB'S ≥ 1.8 ppm EXCEPT FOR MATERIALS IN BAILEY'S RANCH CREEK BED PRIOR TO CONSTRUCTING DIVERSION CHANNEL. SEE DRAWINGS C-08D AND C-09D FOR ADDITIONAL EXCAVATION REQUIREMENTS.
 - CONSTRUCT DIVERSION CHANNEL WHEN SOIL HAS BEEN TESTED TO CONFIRM REMOVAL IN ACCORDANCE WITH DRAWING C-08C, C-09C, C-10C AND C-19 DETAIL.
 - STABILIZE THE DIVERSION CHANNEL TO MINIMIZE SEDIMENTATION.
 - BLOCK THE CREEK FLOW WITH A SANDBAG DAM TO DIVERT CREEK FLOW INTO THE DIVERSION CHANNEL.
 - REMOVE SEDIMENTS FROM CREEK BED
 - RESTORE EXCAVATIONS AS REQUIRED

EXCAVATE AND TRANSPORT TO SUPPORT AREA D. TRANSFER TO TRANSPORT UNIT AND TRANSPORT TO STAGING AREA OR TO OFF-SITE TSDF. RESTORE AREAS AS REQUIRED

TYPICAL WORK ZONE



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- FLOW FROM SUB-CATCHMENT
- CULVERT

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

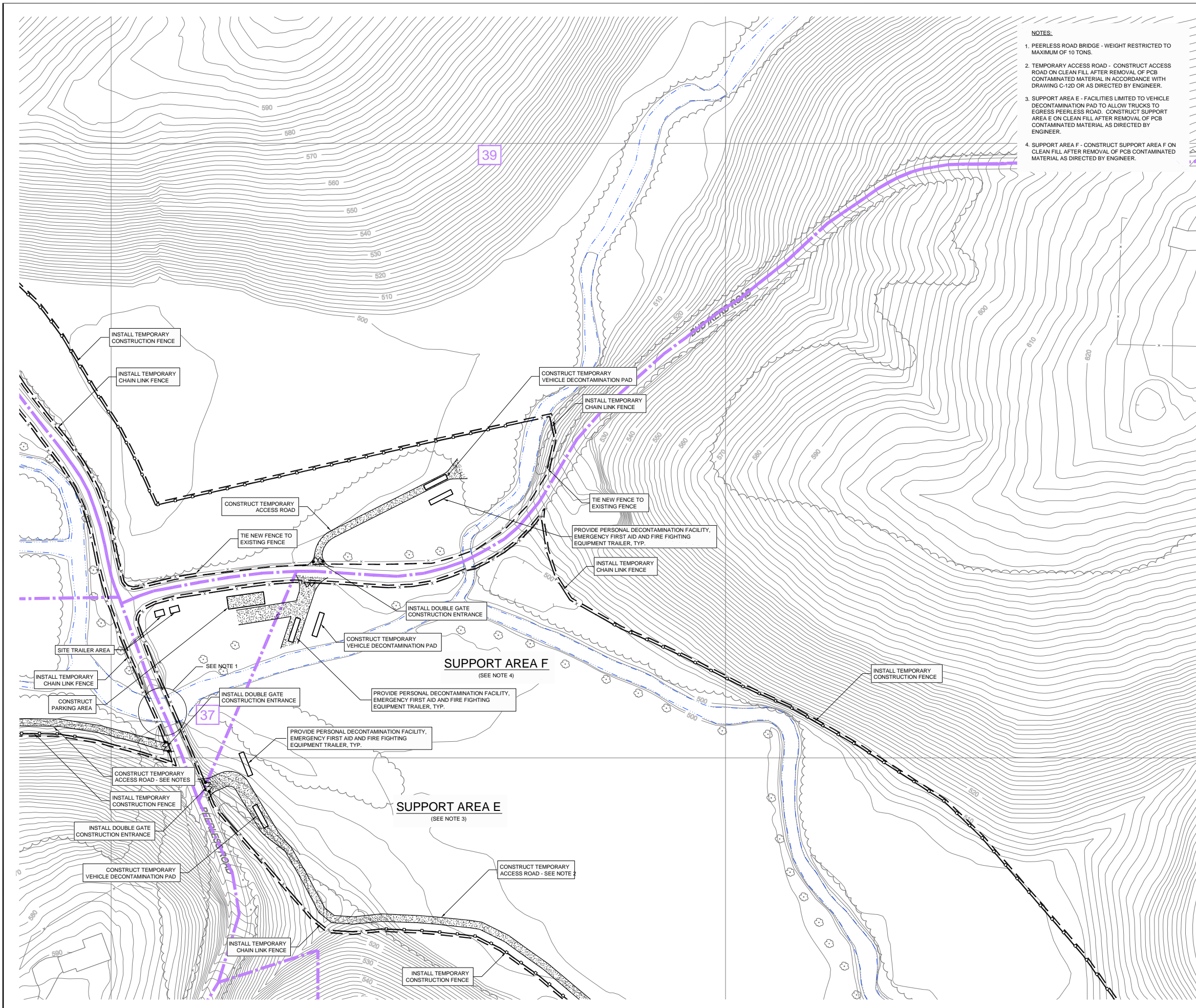
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE PREPARATION**

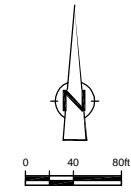


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 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-11 A



- NOTES:**
1. PEERLESS ROAD BRIDGE - WEIGHT RESTRICTED TO MAXIMUM OF 10 TONS.
 2. TEMPORARY ACCESS ROAD - CONSTRUCT ACCESS ROAD ON CLEAN FILL AFTER REMOVAL OF PCB CONTAMINATED MATERIAL IN ACCORDANCE WITH DRAWING C-12D OR AS DIRECTED BY ENGINEER.
 3. SUPPORT AREA E - FACILITIES LIMITED TO VEHICLE DECONTAMINATION PAD TO ALLOW TRUCKS TO EGRESS PEERLESS ROAD. CONSTRUCT SUPPORT AREA E ON CLEAN FILL AFTER REMOVAL OF PCB CONTAMINATED MATERIAL AS DIRECTED BY ENGINEER.
 4. SUPPORT AREA F - CONSTRUCT SUPPORT AREA F ON CLEAN FILL AFTER REMOVAL OF PCB CONTAMINATED MATERIAL AS DIRECTED BY ENGINEER.



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED ACCESS ROAD

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

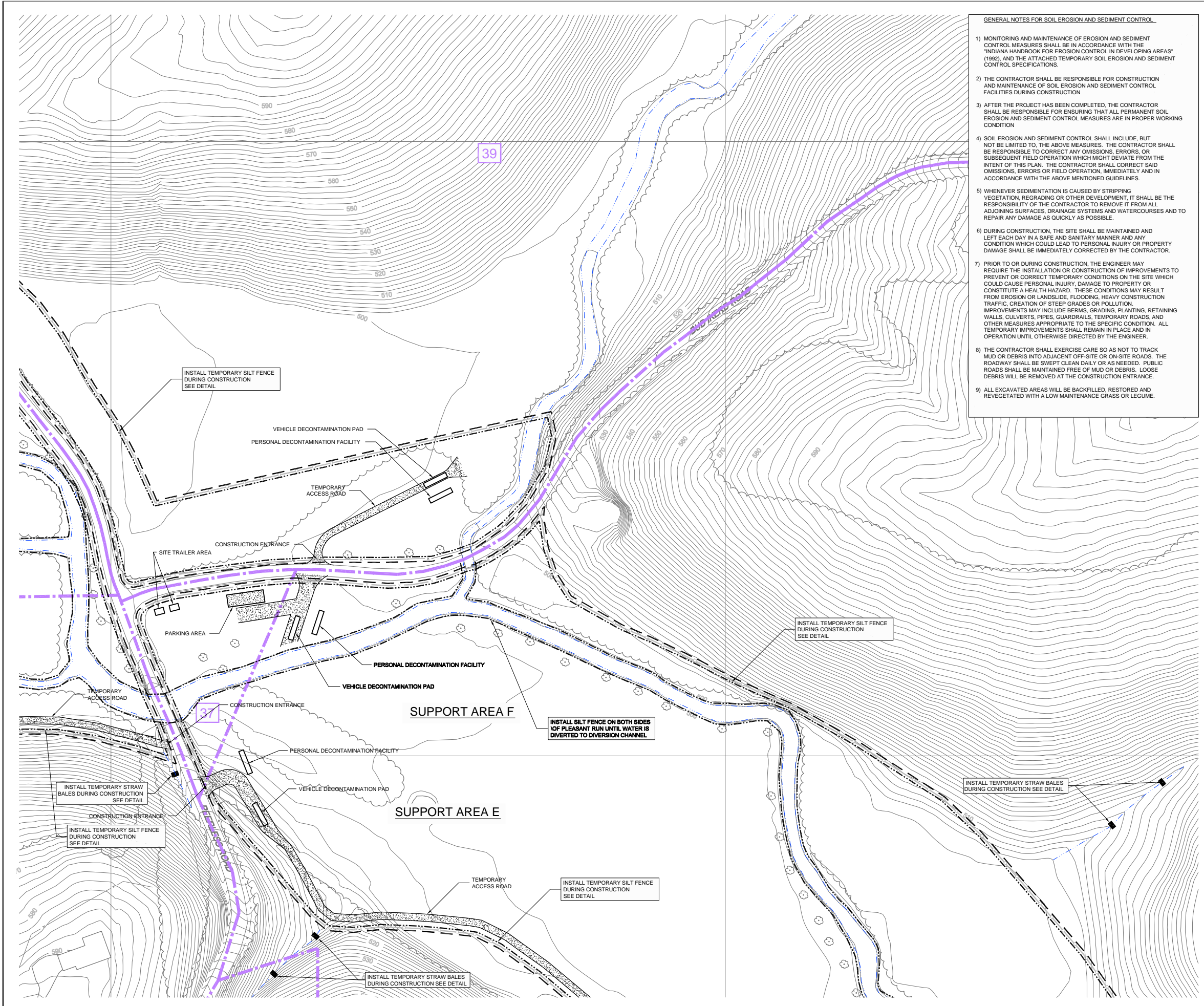
Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA
DOWNSTREAM PARCELS REMOVAL ACTION
SITE PREPARATION**

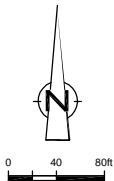


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Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-12 A



- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
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 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.



NO	Revision	Date	Initial

LEGEND

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	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED ACCESS ROAD
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

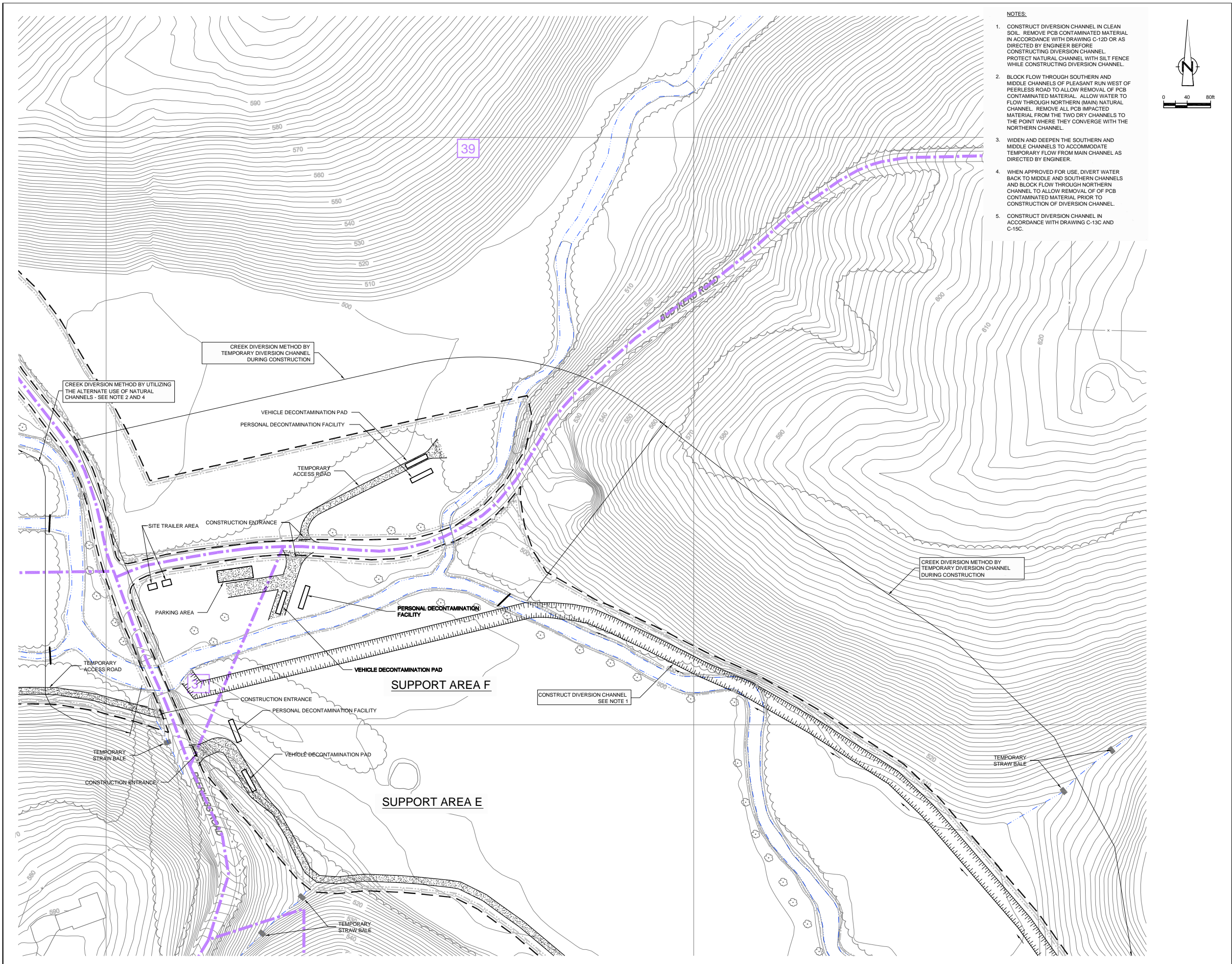
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS I
SOIL EROSION AND SEDIMENT CONTROL**

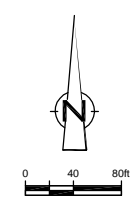


Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046 Drawing N°: C-12 B



- NOTES:**
1. CONSTRUCT DIVERSION CHANNEL IN CLEAN SOIL. REMOVE PCB CONTAMINATED MATERIAL IN ACCORDANCE WITH DRAWING C-12D OR AS DIRECTED BY ENGINEER BEFORE CONSTRUCTING DIVERSION CHANNEL. PROTECT NATURAL CHANNEL WITH SILT FENCE WHILE CONSTRUCTING DIVERSION CHANNEL.
 2. BLOCK FLOW THROUGH SOUTHERN AND MIDDLE CHANNELS OF PLEASANT RUN WEST OF PEERLESS ROAD TO ALLOW REMOVAL OF PCB CONTAMINATED MATERIAL. ALLOW WATER TO FLOW THROUGH NORTHERN (MAIN) NATURAL CHANNEL. REMOVE ALL PCB IMPACTED MATERIAL FROM THE TWO DRY CHANNELS TO THE POINT WHERE THEY CONVERGE WITH THE NORTHERN CHANNEL.
 3. WIDEN AND DEEPEN THE SOUTHERN AND MIDDLE CHANNELS TO ACCOMMODATE TEMPORARY FLOW FROM MAIN CHANNEL AS DIRECTED BY ENGINEER.
 4. WHEN APPROVED FOR USE, DIVERT WATER BACK TO MIDDLE AND SOUTHERN CHANNELS AND BLOCK FLOW THROUGH NORTHERN CHANNEL TO ALLOW REMOVAL OF PCB CONTAMINATED MATERIAL PRIOR TO CONSTRUCTION OF DIVERSION CHANNEL.
 5. CONSTRUCT DIVERSION CHANNEL IN ACCORDANCE WITH DRAWING C-13C AND C-15C.



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED ACCESS ROAD
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION
	PROPOSED DIVERSION CHANNEL
	SANDBAG DAM

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

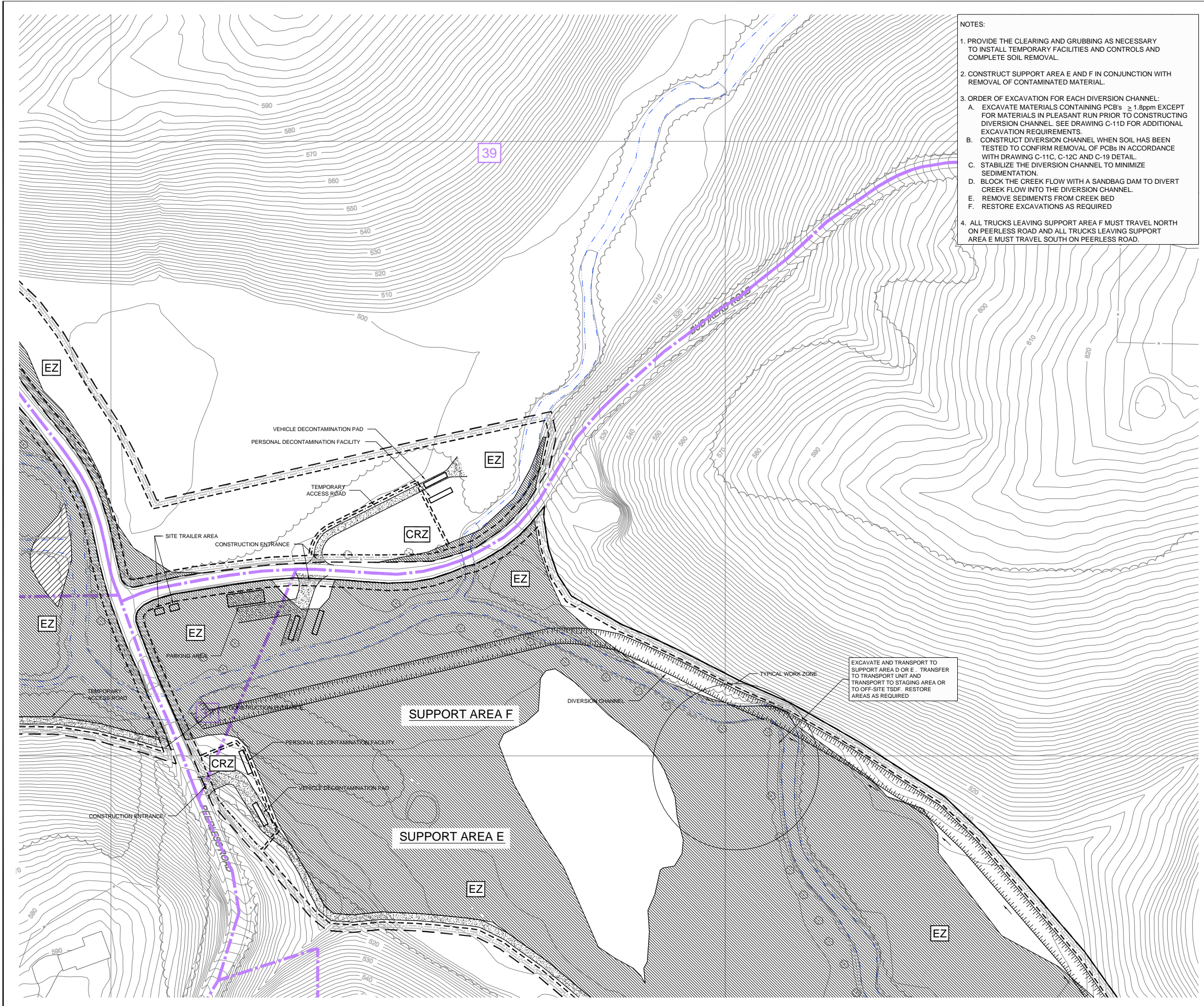
Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA
DOWNSTREAM PARCELS REMOVAL ACTION
SITE WORKS II
STORMWATER MANAGEMENT**

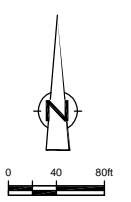


Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046 Drawing N°: C-12 C



- NOTES:**
1. PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
 2. CONSTRUCT SUPPORT AREA E AND F IN CONJUNCTION WITH REMOVAL OF CONTAMINATED MATERIAL.
 3. ORDER OF EXCAVATION FOR EACH DIVERSION CHANNEL:
 - A. EXCAVATE MATERIALS CONTAINING PCB'S ≥ 1.8 ppm EXCEPT FOR MATERIALS IN PLEASANT RUN PRIOR TO CONSTRUCTING DIVERSION CHANNEL. SEE DRAWING C-11D FOR ADDITIONAL EXCAVATION REQUIREMENTS.
 - B. CONSTRUCT DIVERSION CHANNEL WHEN SOIL HAS BEEN TESTED TO CONFIRM REMOVAL OF PCBs IN ACCORDANCE WITH DRAWING C-11C, C-12C AND C-19 DETAIL.
 - C. STABILIZE THE DIVERSION CHANNEL TO MINIMIZE SEDIMENTATION.
 - D. BLOCK THE CREEK FLOW WITH A SANDBAG DAM TO DIVERT CREEK FLOW INTO THE DIVERSION CHANNEL.
 - E. REMOVE SEDIMENTS FROM CREEK BED
 - F. RESTORE EXCAVATIONS AS REQUIRED
 4. ALL TRUCKS LEAVING SUPPORT AREA F MUST TRAVEL NORTH ON PEERLESS ROAD AND ALL TRUCKS LEAVING SUPPORT AREA E MUST TRAVEL SOUTH ON PEERLESS ROAD.



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- PROPOSED DIVERSION CHANNEL
- EXCLUSION ZONE (EZ)
- CONTAMINANT REDUCTION ZONE (CRZ)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)
- EXCLUSION ZONE
- CONTAMINATION REDUCTION ZONE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

--	--

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

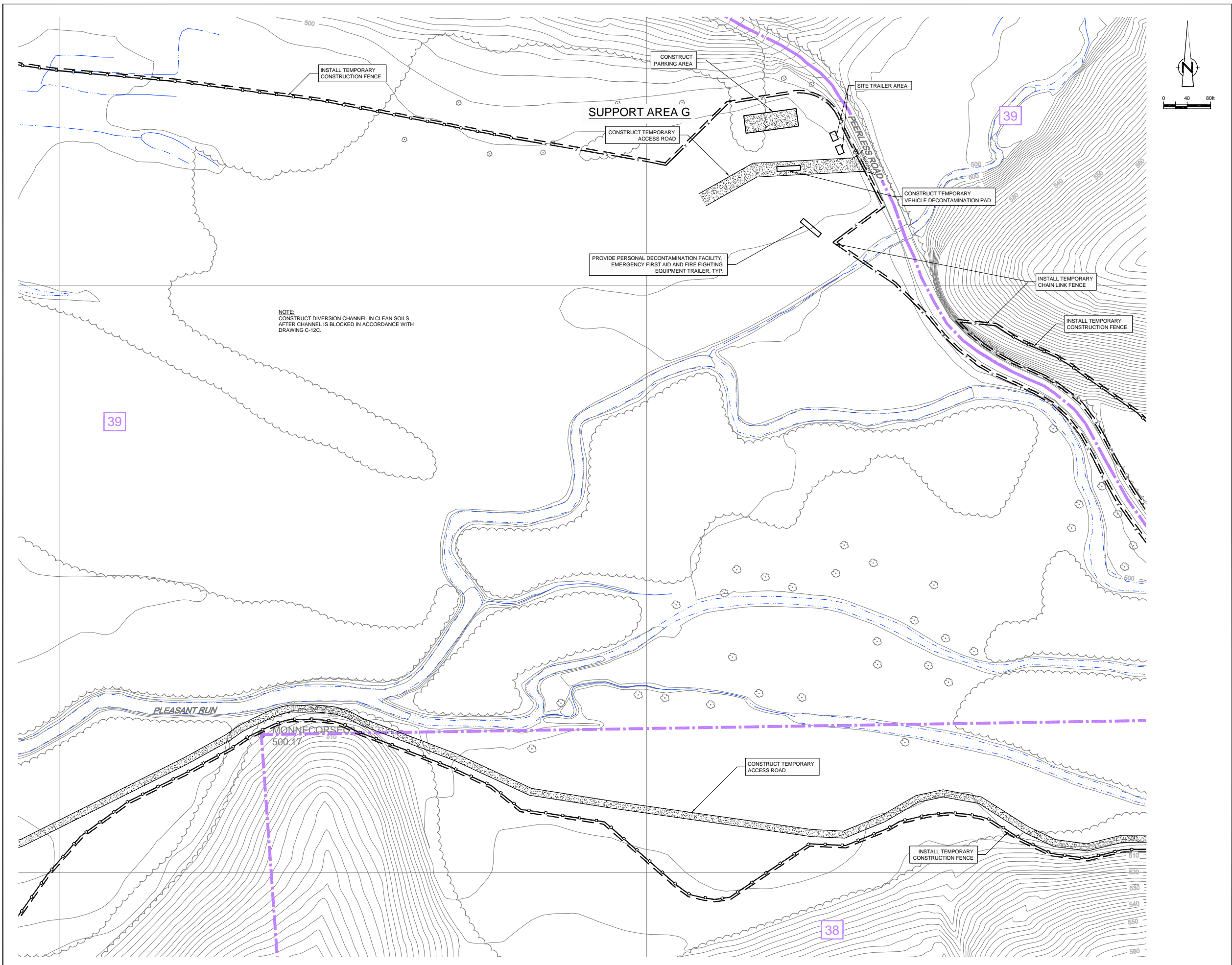
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS III
EXCAVATION PLAN**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-12 D



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

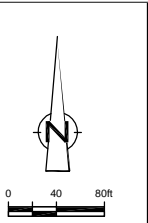
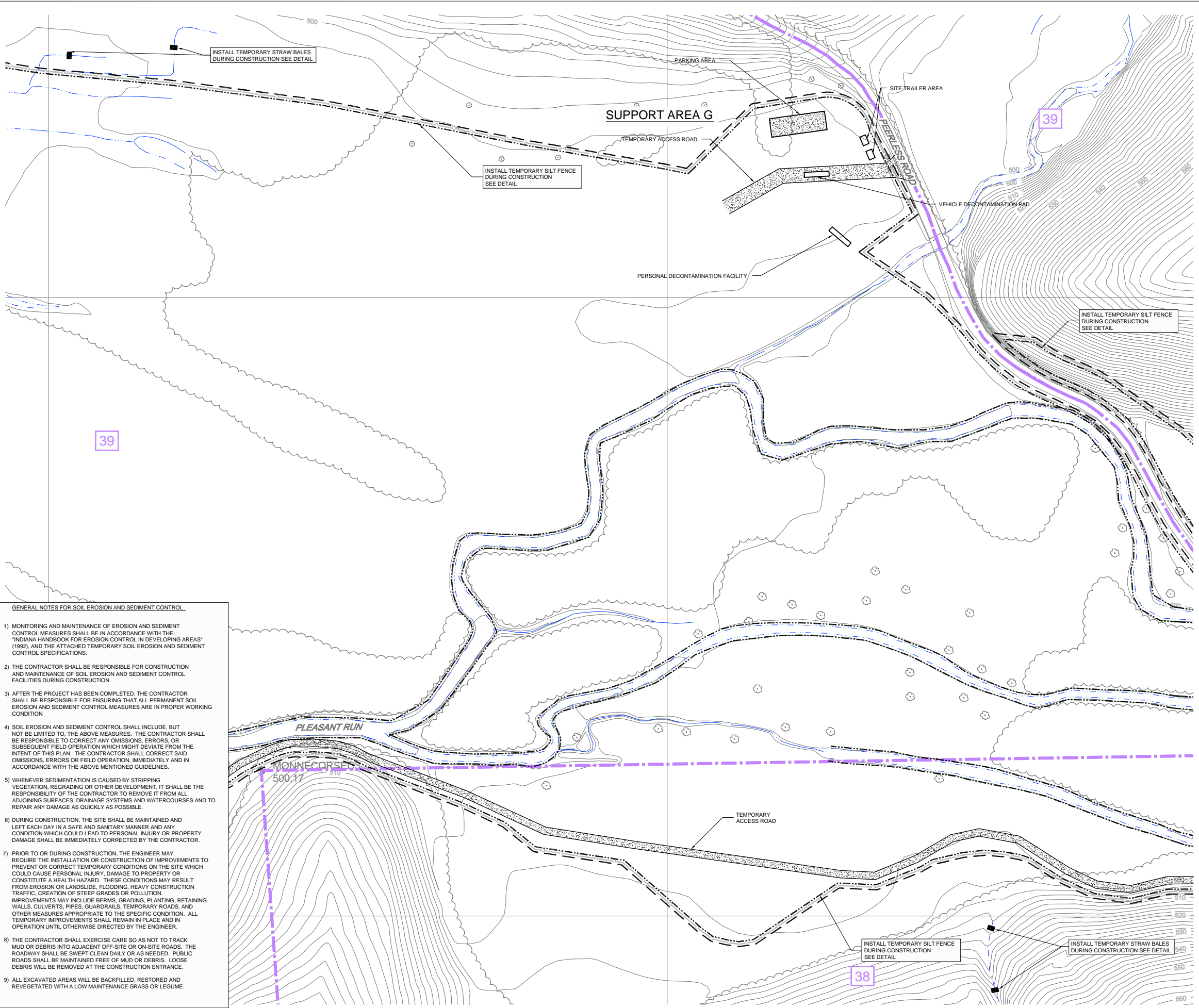
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PREPARATION



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-13 A



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED TEMPORARY ACCESS ROAD
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

--	--

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

DOWNSTREAM PARCELS REMOVAL ACTION

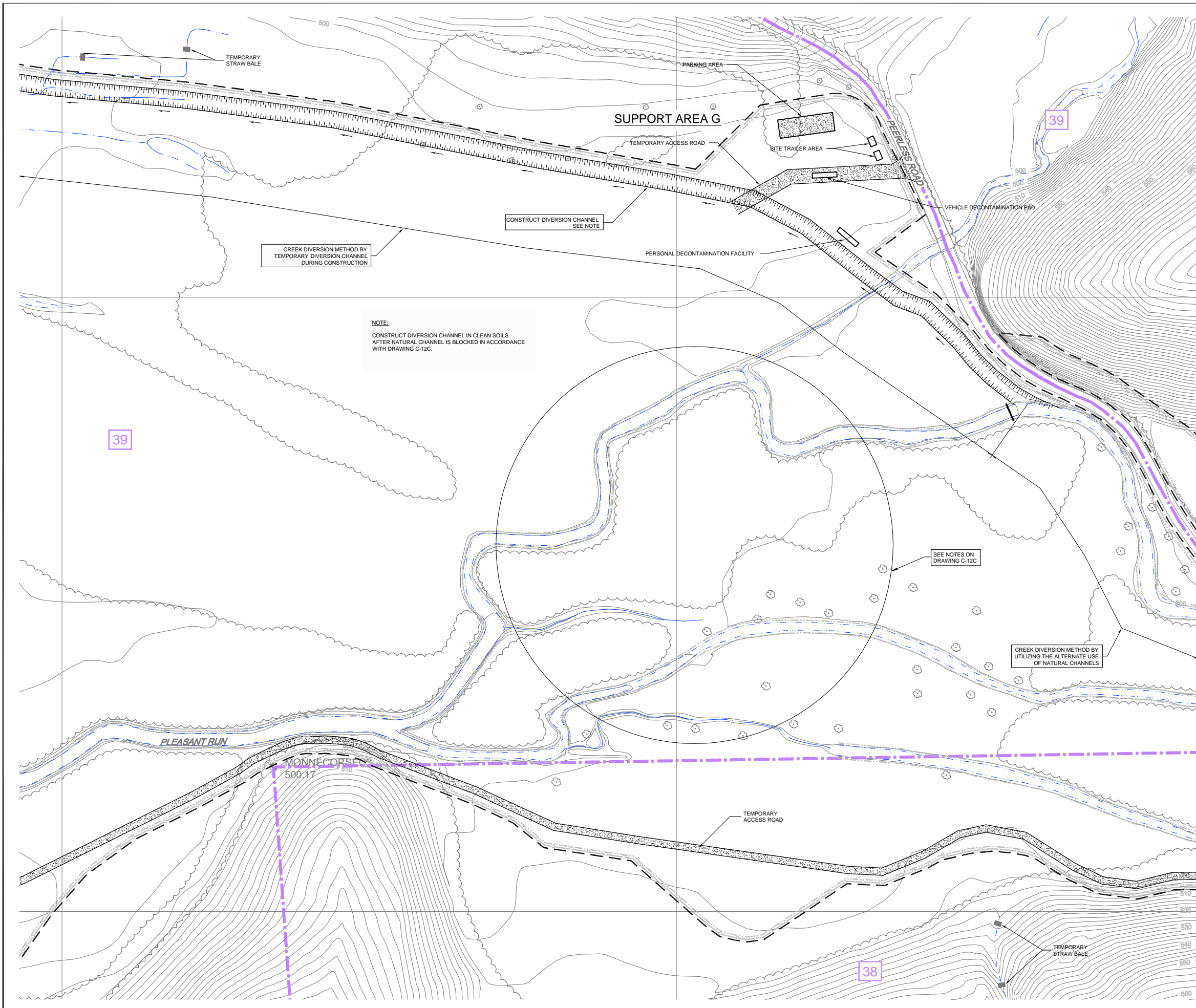
**SITE WORKS I
SOIL EROSION AND SEDIMENT CONTROL**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-13 B

- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
 - AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING CONDITION.
 - SOIL EROSION AND SEDIMENT CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ABOVE MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ANY OMISSIONS, ERRORS, OR SUBSEQUENT FIELD OPERATION WHICH MIGHT DEVIATE FROM THE INTENT OF THIS PLAN. THE CONTRACTOR SHALL CORRECT SAID OMISSIONS, ERRORS OR FIELD OPERATION, IMMEDIATELY AND IN ACCORDANCE WITH THE ABOVE MENTIONED GUIDELINES.
 - WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE.
 - DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
 - PRIOR TO OR DURING CONSTRUCTION, THE ENGINEER MAY REQUIRE THE INSTALLATION OR CONSTRUCTION OF IMPROVEMENTS TO PREVENT OR CORRECT TEMPORARY CONDITIONS ON THE SITE WHICH COULD CAUSE PERSONAL INJURY, DAMAGE TO PROPERTY OR CONSTITUTE A HEALTH HAZARD. THESE CONDITIONS MAY RESULT FROM EROSION OR LANDSLIDE, FLOODING, HEAVY CONSTRUCTION TRAFFIC, CREATION OF STEEP GRADES OR POLLUTION. IMPROVEMENTS MAY INCLUDE BERMS, GRADING, PLANTING, RETAINING WALLS, CULVERTS, PIPES, GUARDRAILS, TEMPORARY ROADS, AND OTHER MEASURES APPROPRIATE TO THE SPECIFIC CONDITION. ALL TEMPORARY IMPROVEMENTS SHALL REMAIN IN PLACE AND IN OPERATION UNTIL OTHERWISE DIRECTED BY THE ENGINEER.
 - THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO TRACK MUD OR DEBRIS INTO ADJACENT OFF-SITE OR ON-SITE ROADS. THE ROADWAY SHALL BE SWEEPED CLEAN DAILY OR AS NEEDED. PUBLIC ROADS SHALL BE MAINTAINED FREE OF MUD OR DEBRIS. LOOSE DEBRIS WILL BE REMOVED AT THE CONSTRUCTION ENTRANCE.
 - ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.



CREEK DIVERSION METHOD BY TEMPORARY DIVERSION CHANNEL DURING CONSTRUCTION

NOTE:
CONSTRUCT DIVERSION CHANNEL IN CLEAN SOILS AFTER NATURAL CHANNEL IS BLOCKED IN ACCORDANCE WITH DRAWING C-12C.

SEE NOTES ON DRAWING C-12C

CREEK DIVERSION METHOD BY UTILIZING THE ALTERNATE USE OF NATURAL CHANNELS

NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION
- PROPOSED DIVERSION CHANNEL
- SANDBAG DAM

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

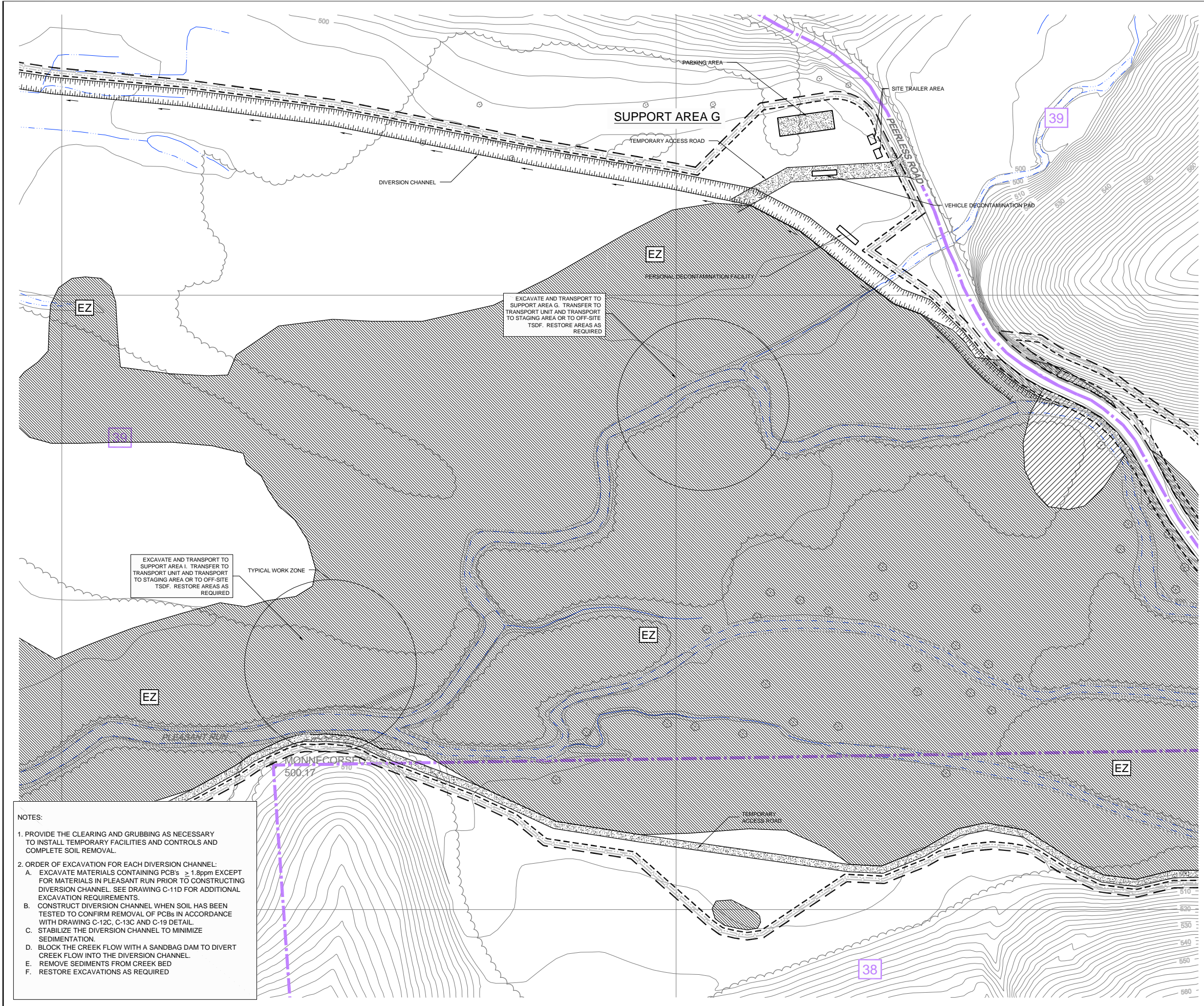
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS II
STORMWATER MANAGEMENT**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
	Drawing N°: C-13 C	



NO.	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
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- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- PROPOSED DIVERSION CHANNEL
- EXCLUSION ZONE (EZ)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)
- EXCLUSION ZONE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

DOWNSTREAM PARCELS REMOVAL ACTION

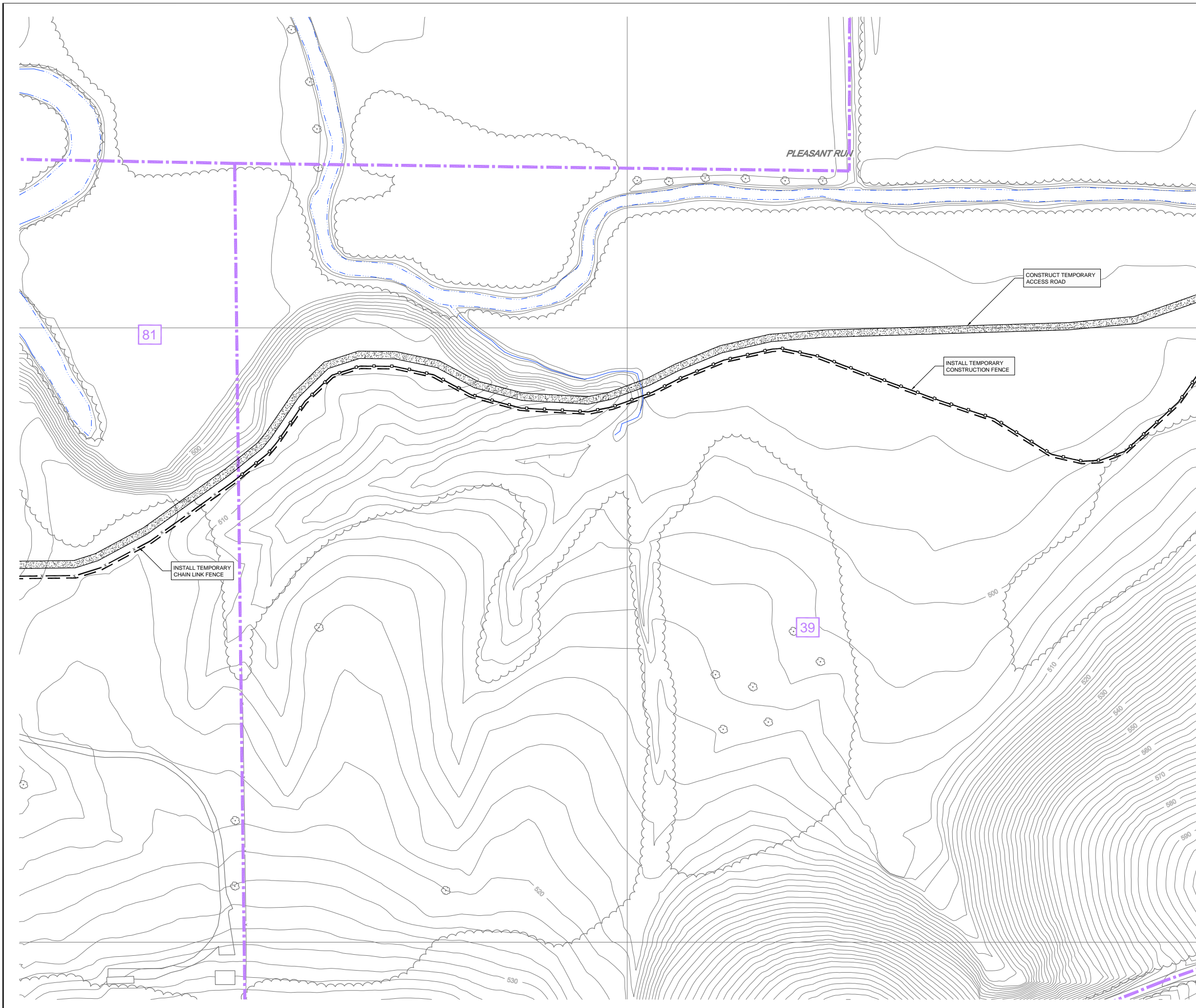
**SITE WORKS III
EXCAVATION PLAN**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-13 D

- NOTES:**
- PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
 - ORDER OF EXCAVATION FOR EACH DIVERSION CHANNEL:
 - EXCAVATE MATERIALS CONTAINING PCBs $\geq 1.8\text{ppm}$ EXCEPT FOR MATERIALS IN PLEASANT RUN PRIOR TO CONSTRUCTING DIVERSION CHANNEL. SEE DRAWING C-11D FOR ADDITIONAL EXCAVATION REQUIREMENTS.
 - CONSTRUCT DIVERSION CHANNEL WHEN SOIL HAS BEEN TESTED TO CONFIRM REMOVAL OF PCBs IN ACCORDANCE WITH DRAWING C-12C, C-13C AND C-19 DETAIL.
 - STABILIZE THE DIVERSION CHANNEL TO MINIMIZE SEDIMENTATION.
 - BLOCK THE CREEK FLOW WITH A SANDBAG DAM TO DIVERT CREEK FLOW INTO THE DIVERSION CHANNEL.
 - REMOVE SEDIMENTS FROM CREEK BED
 - RESTORE EXCAVATIONS AS REQUIRED



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

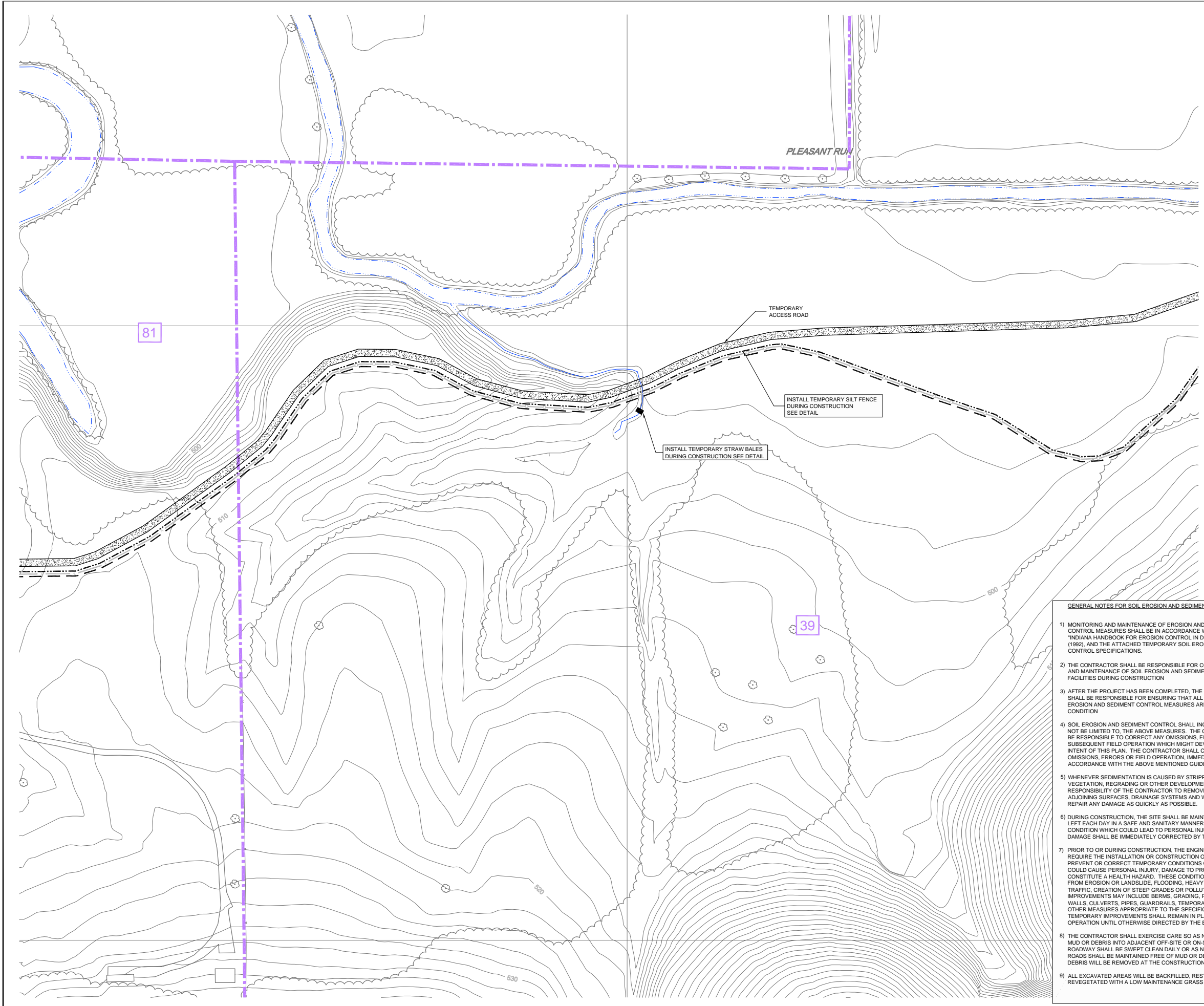
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE PREPARATION**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-14 A



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

DRAWING STATUS

Status	Date	Initial

- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
 - 3) AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING CONDITION.
 - 4) SOIL EROSION AND SEDIMENT CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ABOVE MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ANY OMISSIONS, ERRORS, OR SUBSEQUENT FIELD OPERATION WHICH MIGHT DEVIATE FROM THE INTENT OF THIS PLAN. THE CONTRACTOR SHALL CORRECT SAID OMISSIONS, ERRORS OR FIELD OPERATION, IMMEDIATELY AND IN ACCORDANCE WITH THE ABOVE MENTIONED GUIDELINES.
 - 5) WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE.
 - 6) DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
 - 7) PRIOR TO OR DURING CONSTRUCTION, THE ENGINEER MAY REQUIRE THE INSTALLATION OR CONSTRUCTION OF IMPROVEMENTS TO PREVENT OR CORRECT TEMPORARY CONDITIONS ON THE SITE WHICH COULD CAUSE PERSONAL INJURY, DAMAGE TO PROPERTY OR CONSTITUTE A HEALTH HAZARD. THESE CONDITIONS MAY RESULT FROM EROSION OR LANDSLIDE, FLOODING, HEAVY CONSTRUCTION TRAFFIC, CREATION OF STEEP GRADES OR POLLUTION. IMPROVEMENTS MAY INCLUDE BERMS, GRADING, PLANTING, RETAINING WALLS, CULVERTS, PIPES, GUARDRAILS, TEMPORARY ROADS, AND OTHER MEASURES APPROPRIATE TO THE SPECIFIC CONDITION. ALL TEMPORARY IMPROVEMENTS SHALL REMAIN IN PLACE AND IN OPERATION UNTIL OTHERWISE DIRECTED BY THE ENGINEER.
 - 8) THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO TRACK MUD OR DEBRIS INTO ADJACENT OFF-SITE OR ON-SITE ROADS. THE ROADWAY SHALL BE SWEEPED CLEAN DAILY OR AS NEEDED. PUBLIC ROADS SHALL BE MAINTAINED FREE OF MUD OR DEBRIS. LOOSE DEBRIS WILL BE REMOVED AT THE CONSTRUCTION ENTRANCE.
 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

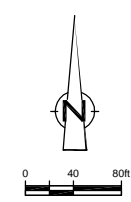
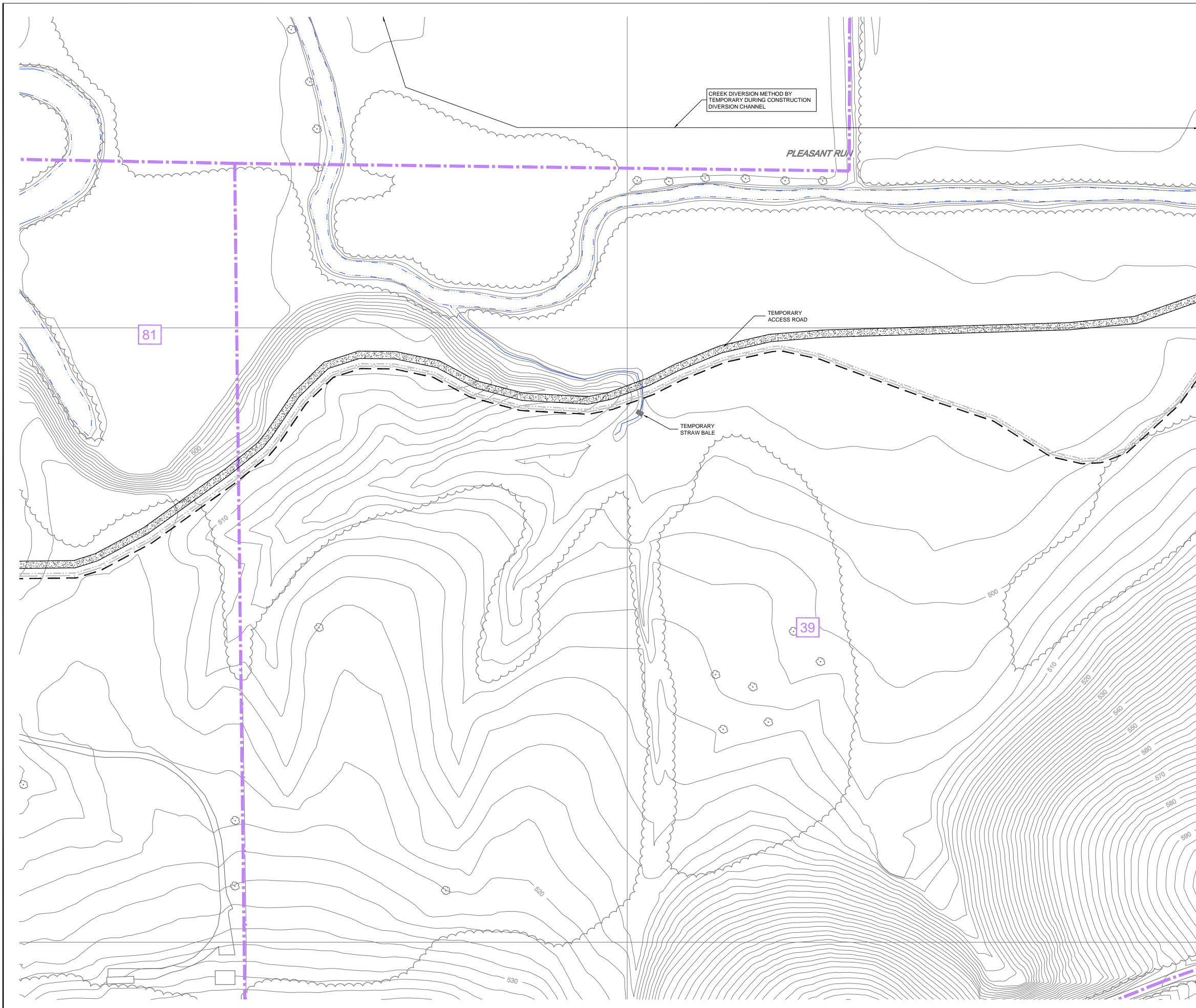
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS I
SOIL EROSION END SEDIMENT CONTROL**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046 Drawing N°: C-14 B



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**

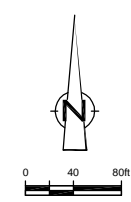
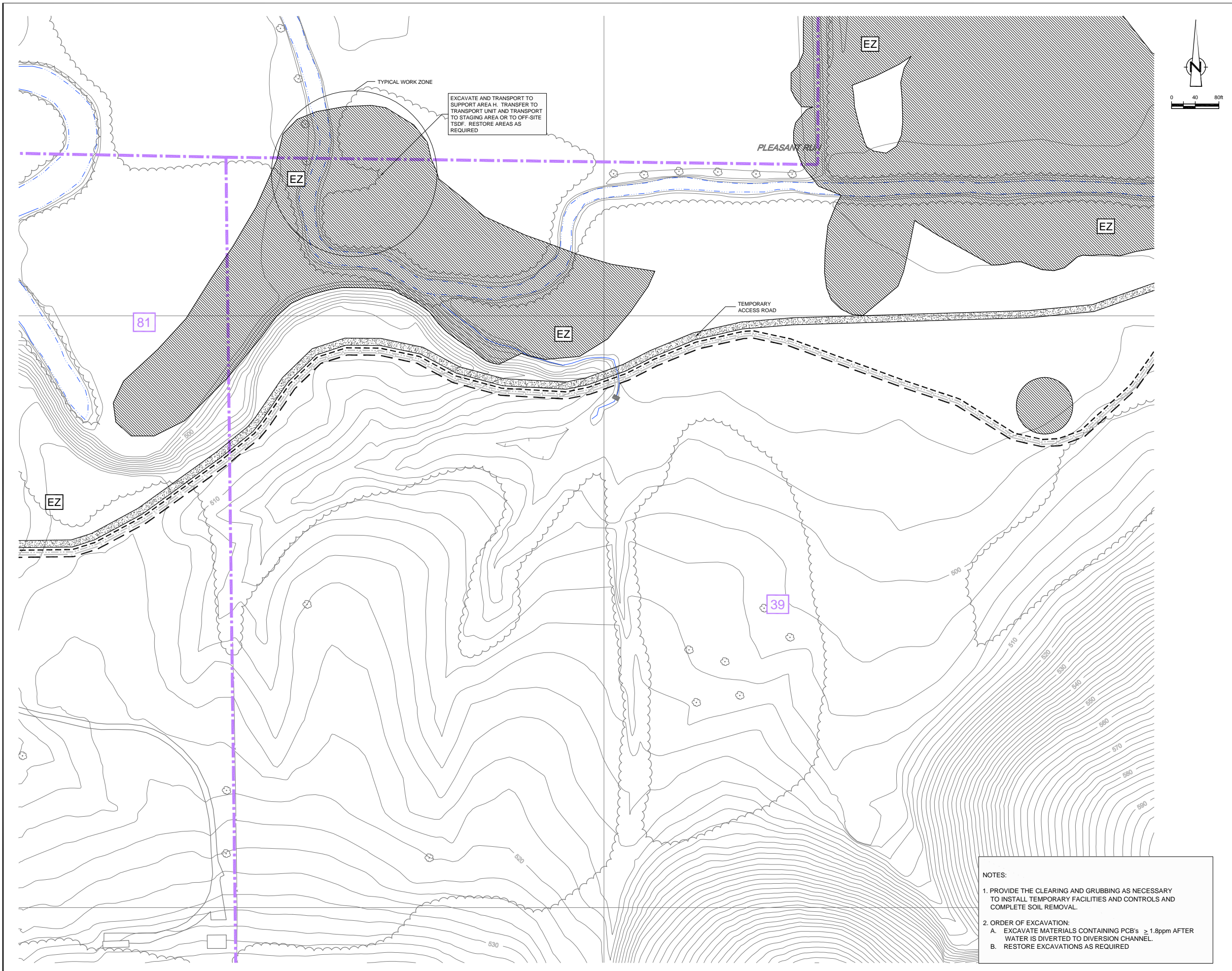
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS II
 STORMWATER MANAGEMENT**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-14 C



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- EXCLUSION ZONE (EZ)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)
- EXCLUSION ZONE

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**

DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS III
 EXCAVATION PLAN**

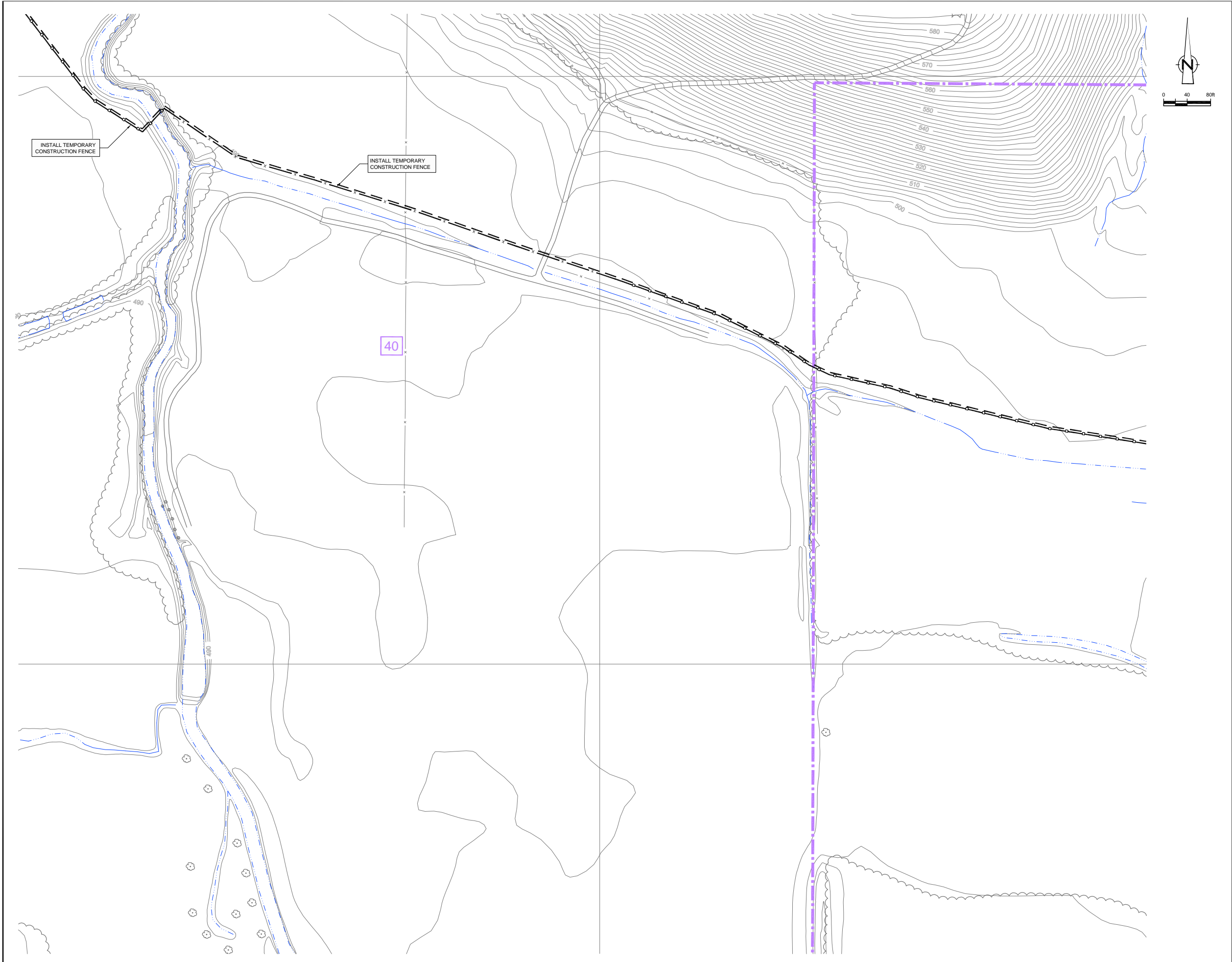


Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-14 D

NOTES:

- PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
- ORDER OF EXCAVATION:
 - EXCAVATE MATERIALS CONTAINING PCB's ≥ 1.8 ppm AFTER WATER IS DIVERTED TO DIVERSION CHANNEL.
 - RESTORE EXCAVATIONS AS REQUIRED



№	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
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- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

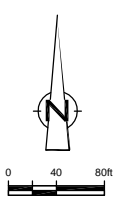
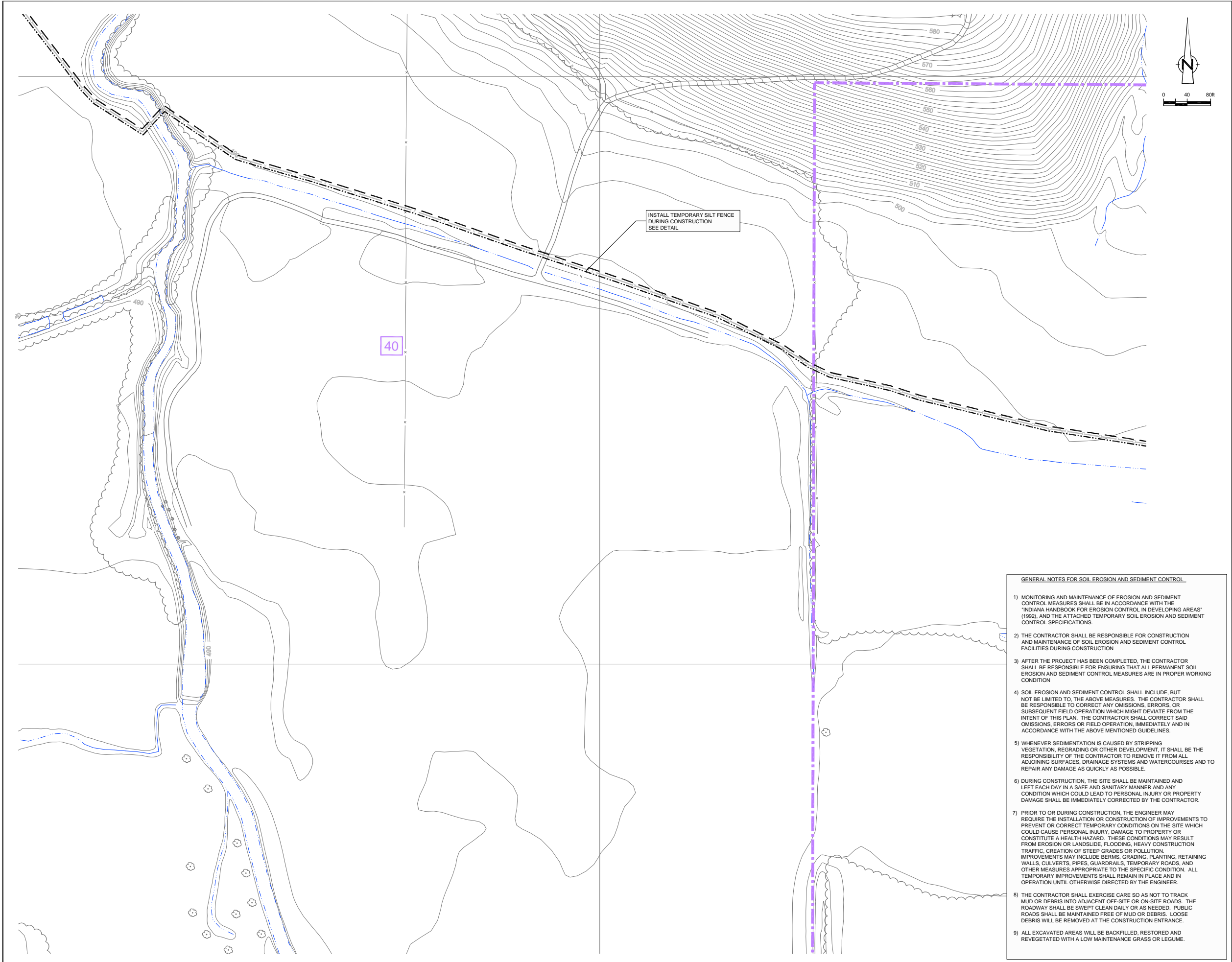
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE PREPARATION**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project №: 13968-00	Report №: 046
		Drawing №: C-15 A



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
 - 3) AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING CONDITION.
 - 4) SOIL EROSION AND SEDIMENT CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ABOVE MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ANY OMISSIONS, ERRORS, OR SUBSEQUENT FIELD OPERATION WHICH MIGHT DEVIATE FROM THE INTENT OF THIS PLAN. THE CONTRACTOR SHALL CORRECT SAID OMISSIONS, ERRORS OR FIELD OPERATION, IMMEDIATELY AND IN ACCORDANCE WITH THE ABOVE MENTIONED GUIDELINES.
 - 5) WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE.
 - 6) DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
 - 7) PRIOR TO OR DURING CONSTRUCTION, THE ENGINEER MAY REQUIRE THE INSTALLATION OR CONSTRUCTION OF IMPROVEMENTS TO PREVENT OR CORRECT TEMPORARY CONDITIONS ON THE SITE WHICH COULD CAUSE PERSONAL INJURY, DAMAGE TO PROPERTY OR CONSTITUTE A HEALTH HAZARD. THESE CONDITIONS MAY RESULT FROM EROSION OR LANDSLIDE, FLOODING, HEAVY CONSTRUCTION TRAFFIC, CREATION OF STEEP GRADES OR POLLUTION. IMPROVEMENTS MAY INCLUDE BERMS, GRADING, PLANTING, RETAINING WALLS, CULVERTS, PIPES, GUARDRAILS, TEMPORARY ROADS, AND OTHER MEASURES APPROPRIATE TO THE SPECIFIC CONDITION. ALL TEMPORARY IMPROVEMENTS SHALL REMAIN IN PLACE AND IN OPERATION UNTIL OTHERWISE DIRECTED BY THE ENGINEER.
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 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**

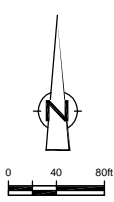
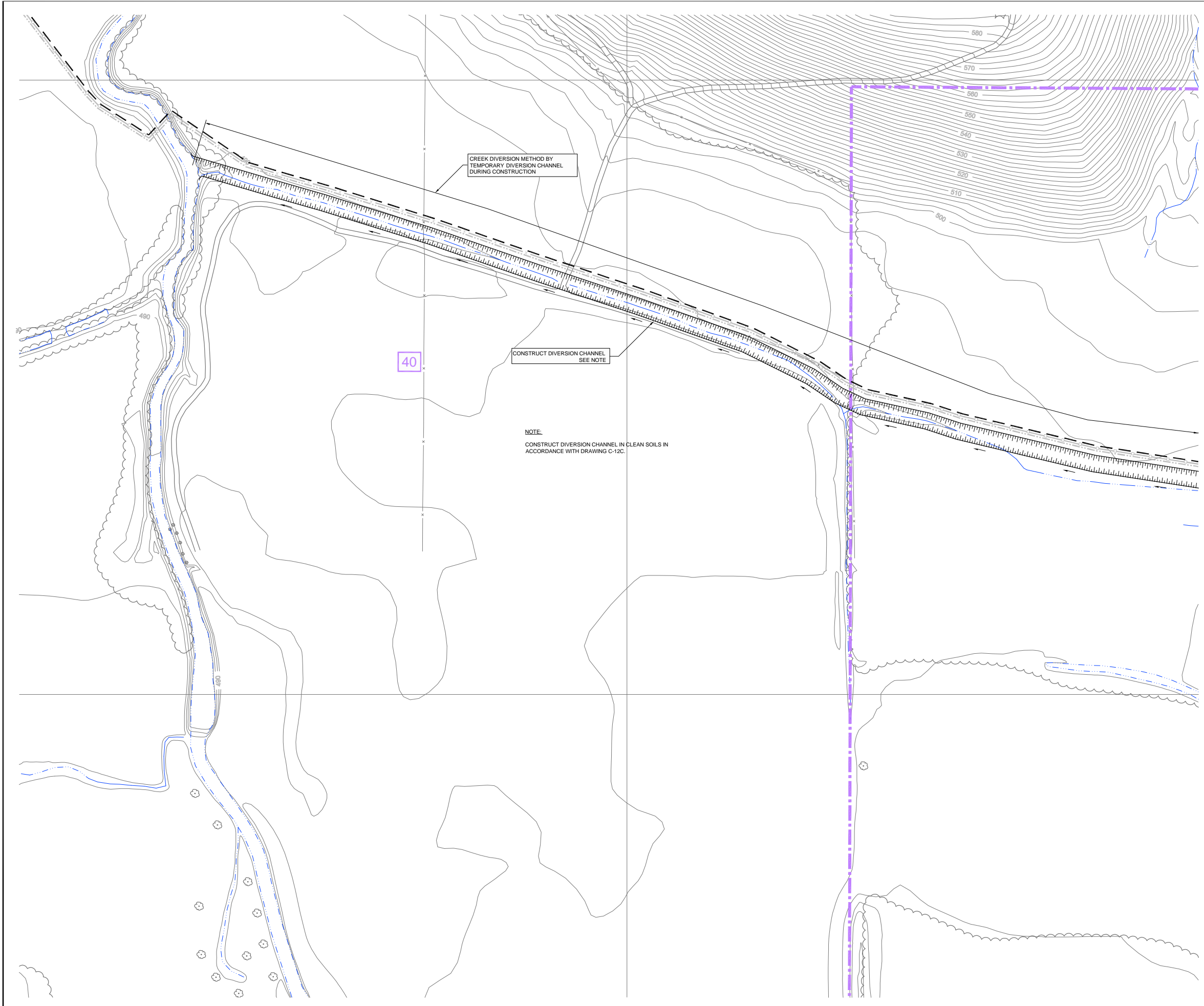
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS I
 SOIL EROSION AND SEDIMENT CONTROL**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-15 B



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED SILT FENCE
	TEMPORARY STRAW BALE DURING CONSTRUCTION
	PROPOSED DIVERSION CHANNEL

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

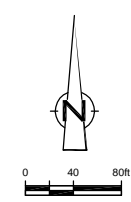
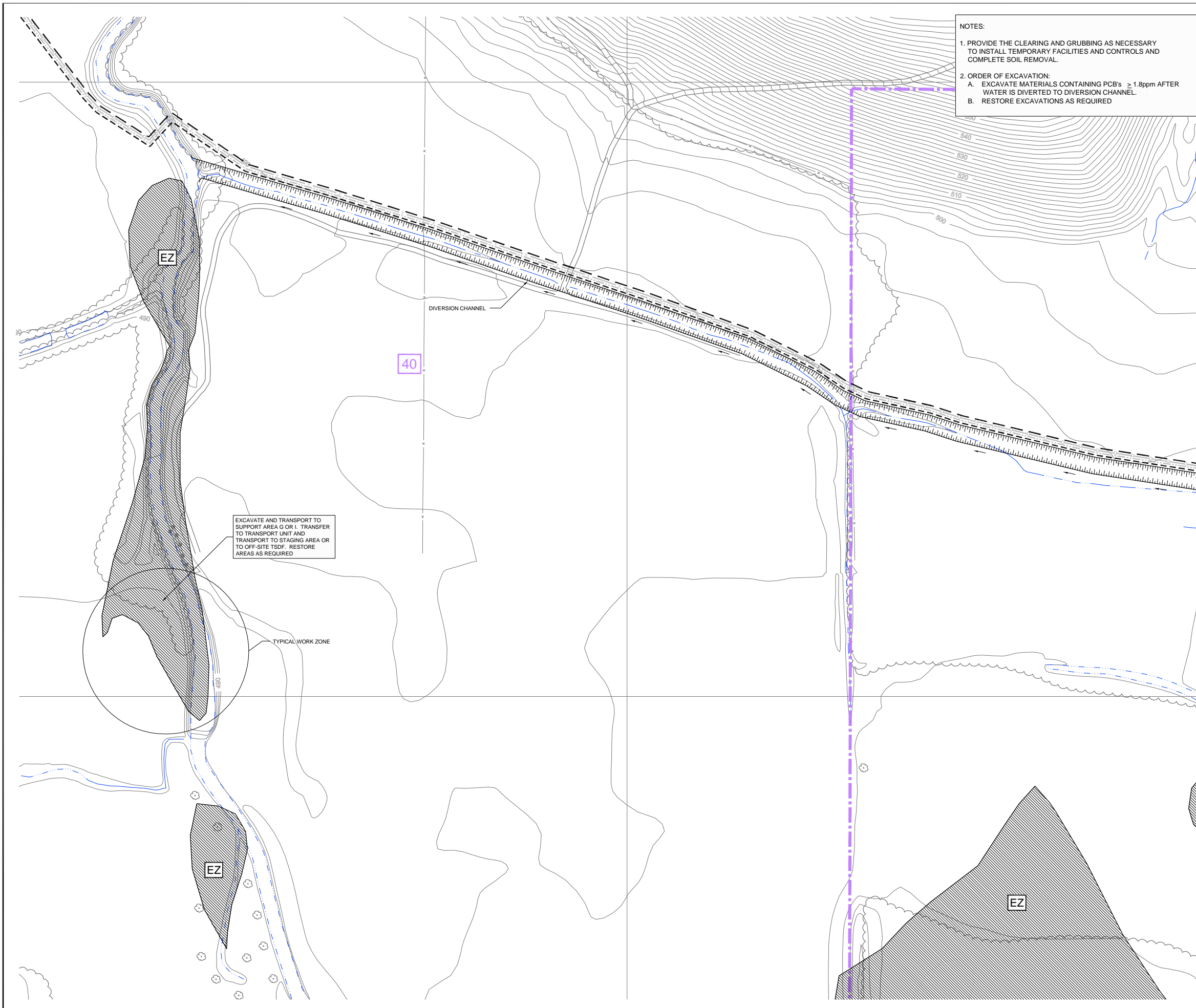
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS II
STORMWATER MANAGEMENT**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-15 C



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED SILT FENCE
- PROPOSED DIVERSION CHANNEL
- EXCLUSION ZONE (EZ)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 50 ppm IN SOIL)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)
- EXCLUSION ZONE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

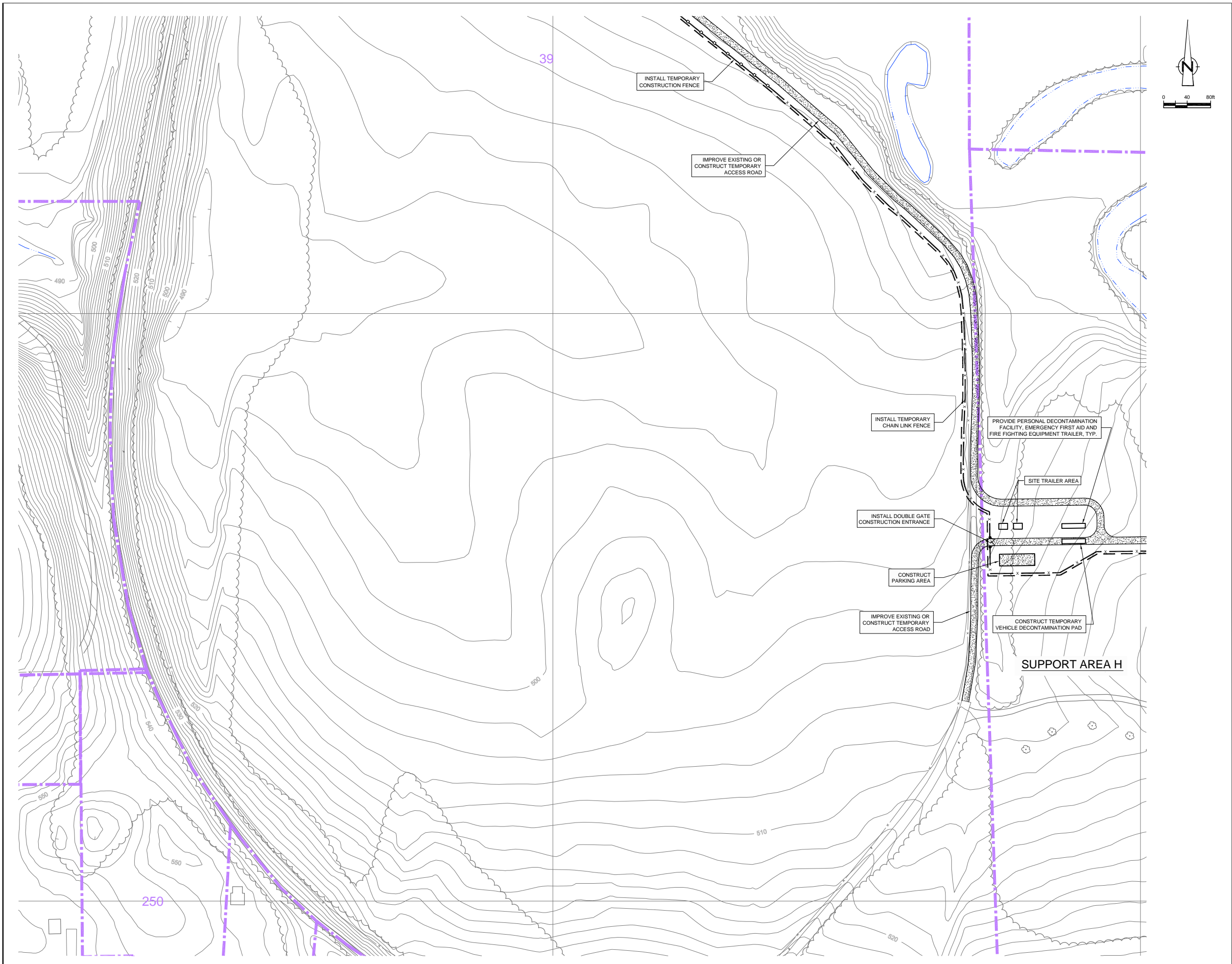
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS III
EXCAVATION PLAN**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-15 D



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

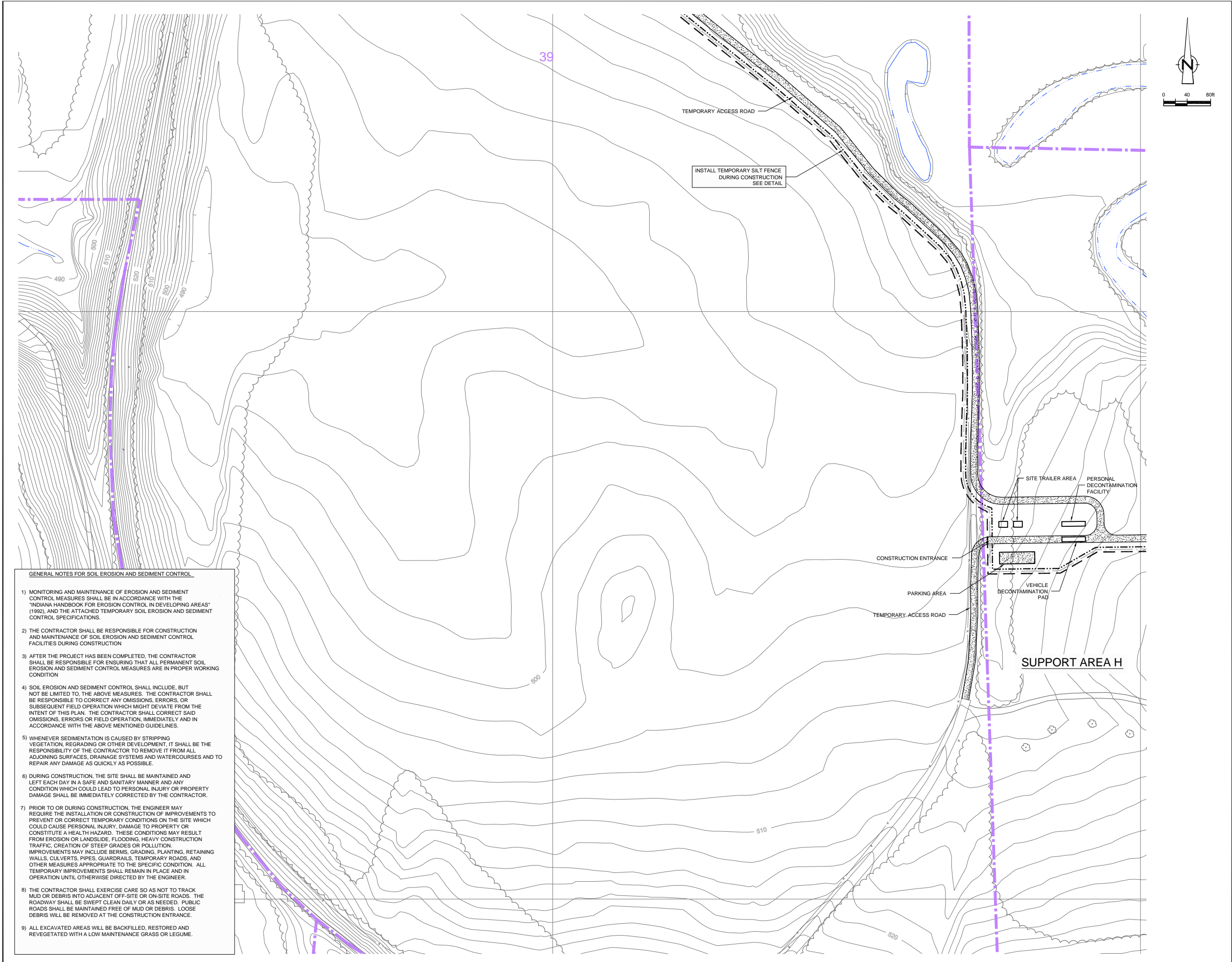
DOWNSTREAM PARCELS REMOVAL ACTION

SITE PREPARATION

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-16 A



GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL

- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
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NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED ACCESS ROAD
	PROPOSED SILT FENCE

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

DRAWING STATUS

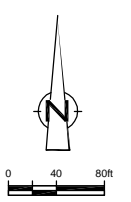
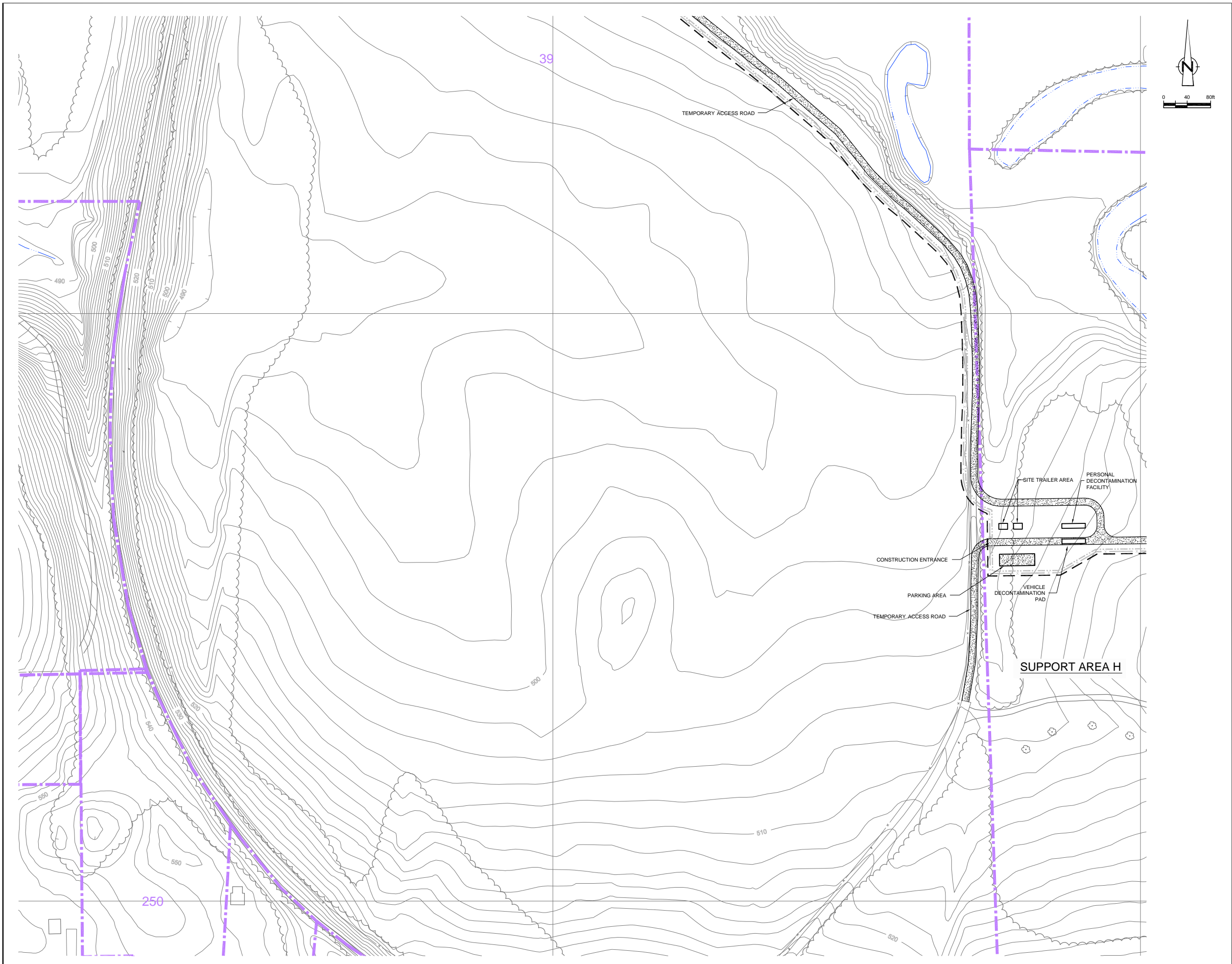
Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA
DOWNSTREAM PARCELS REMOVAL ACTION
SITE WORKS I
SOIL EROSION AND SEDIMENT CONTROL**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-16 B



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

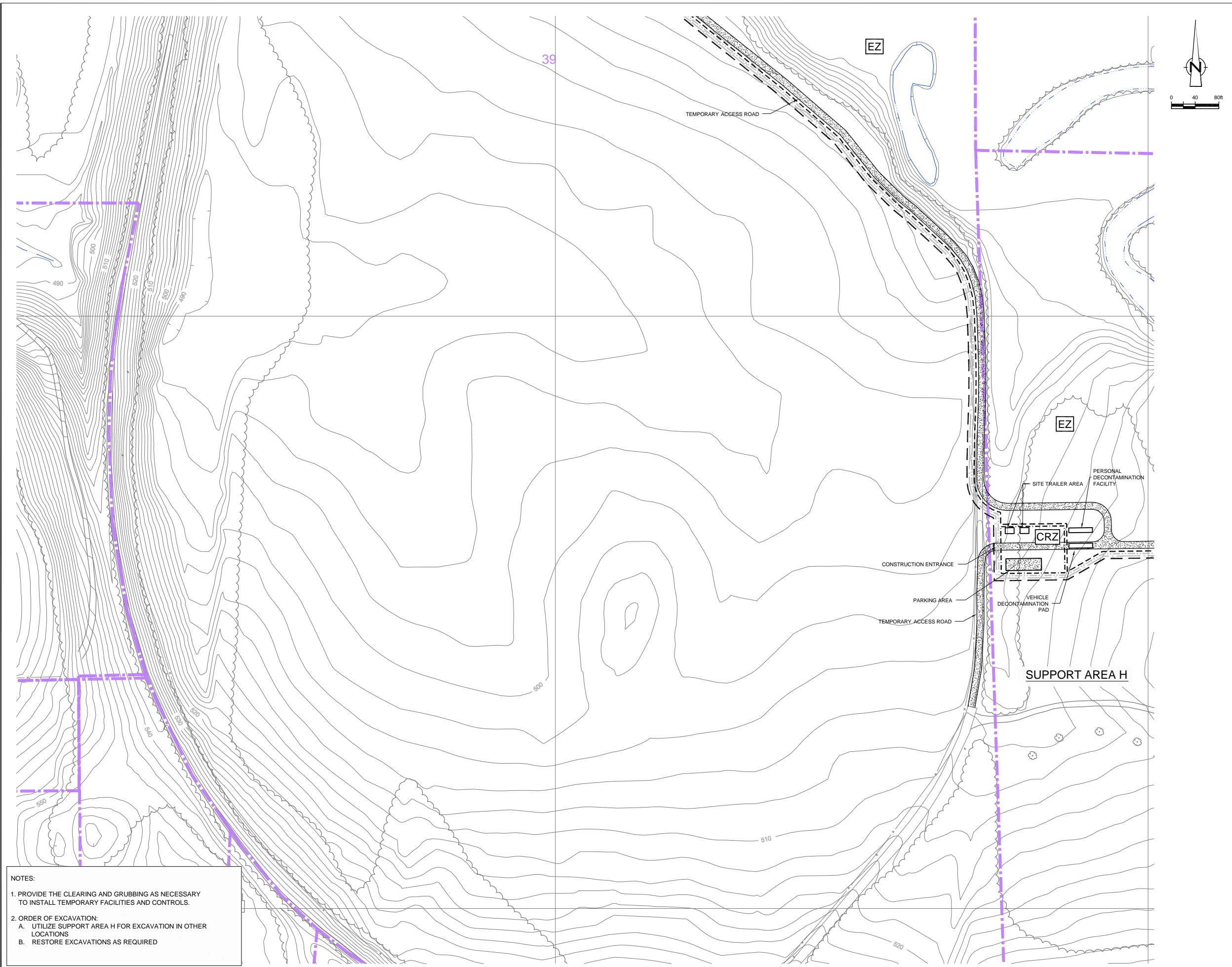
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS II
STORMWATER MANAGEMENT**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-16 C



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- EXCLUSION ZONE (EZ)
- CONTAMINANT REDUCTION ZONE (CRZ)
- EXCLUSION ZONE
- CONTAMINATION REDUCTION ZONE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

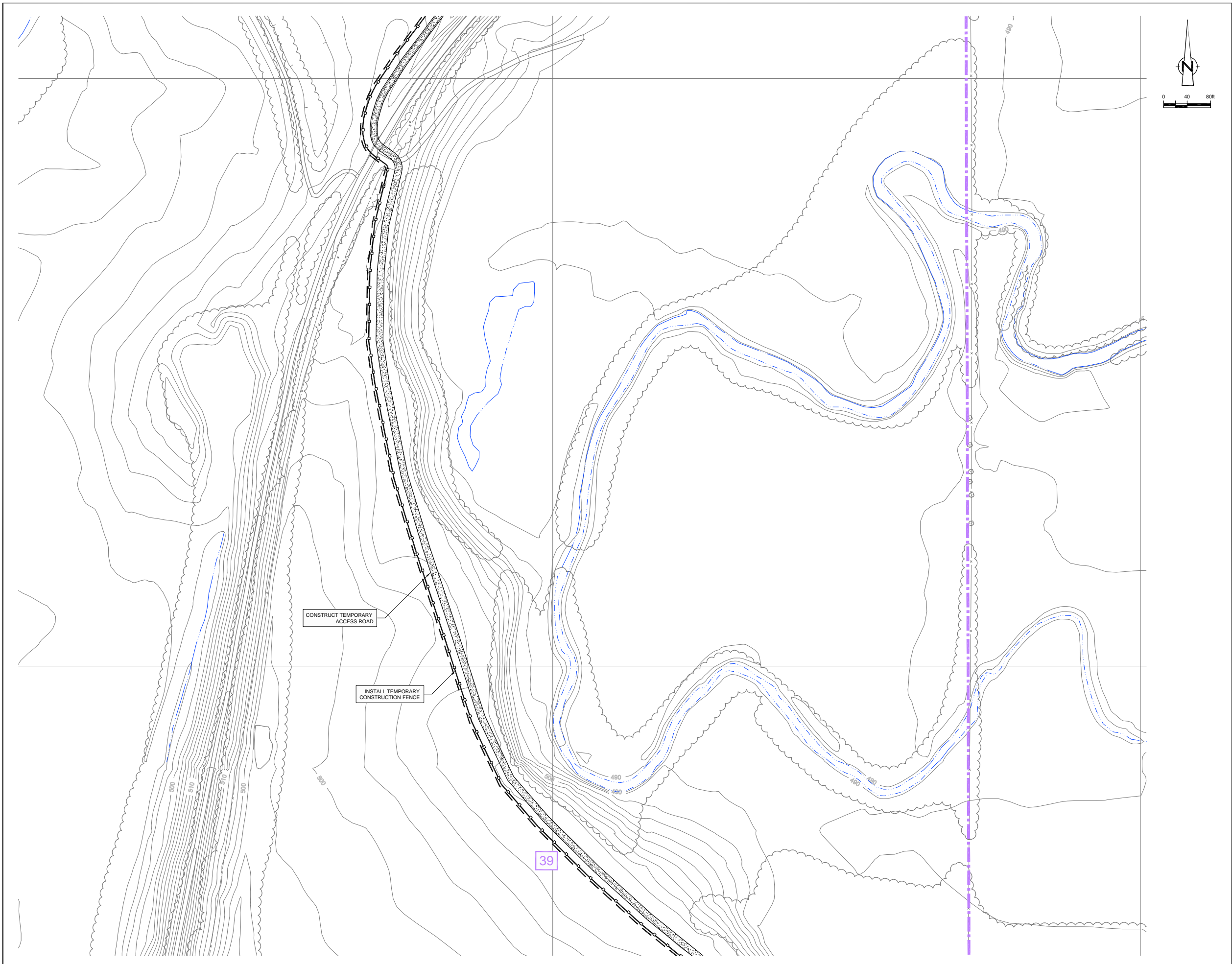
**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**
 DOWNSTREAM PARCELS REMOVAL ACTION
**SITE WORKS III
 EXCAVATION PLAN**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
	Drawing N°: C-16 D	

- NOTES:**
- PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS.
 - ORDER OF EXCAVATION:
 - UTILIZE SUPPORT AREA H FOR EXCAVATION IN OTHER LOCATIONS
 - RESTORE EXCAVATIONS AS REQUIRED



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

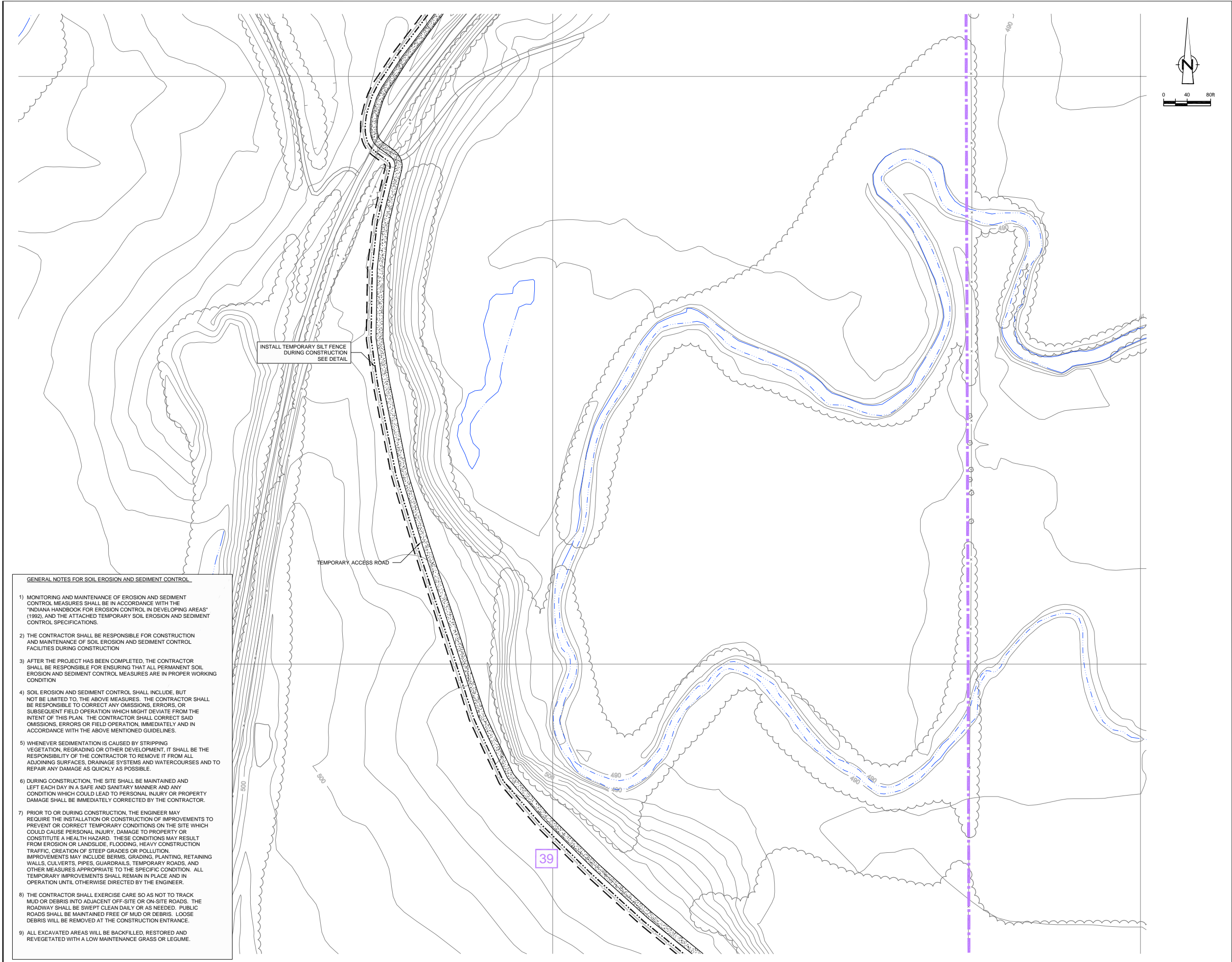
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE PREPARATION**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046 Drawing N°: C-17 A



- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
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NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

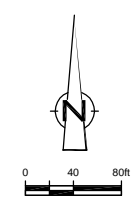
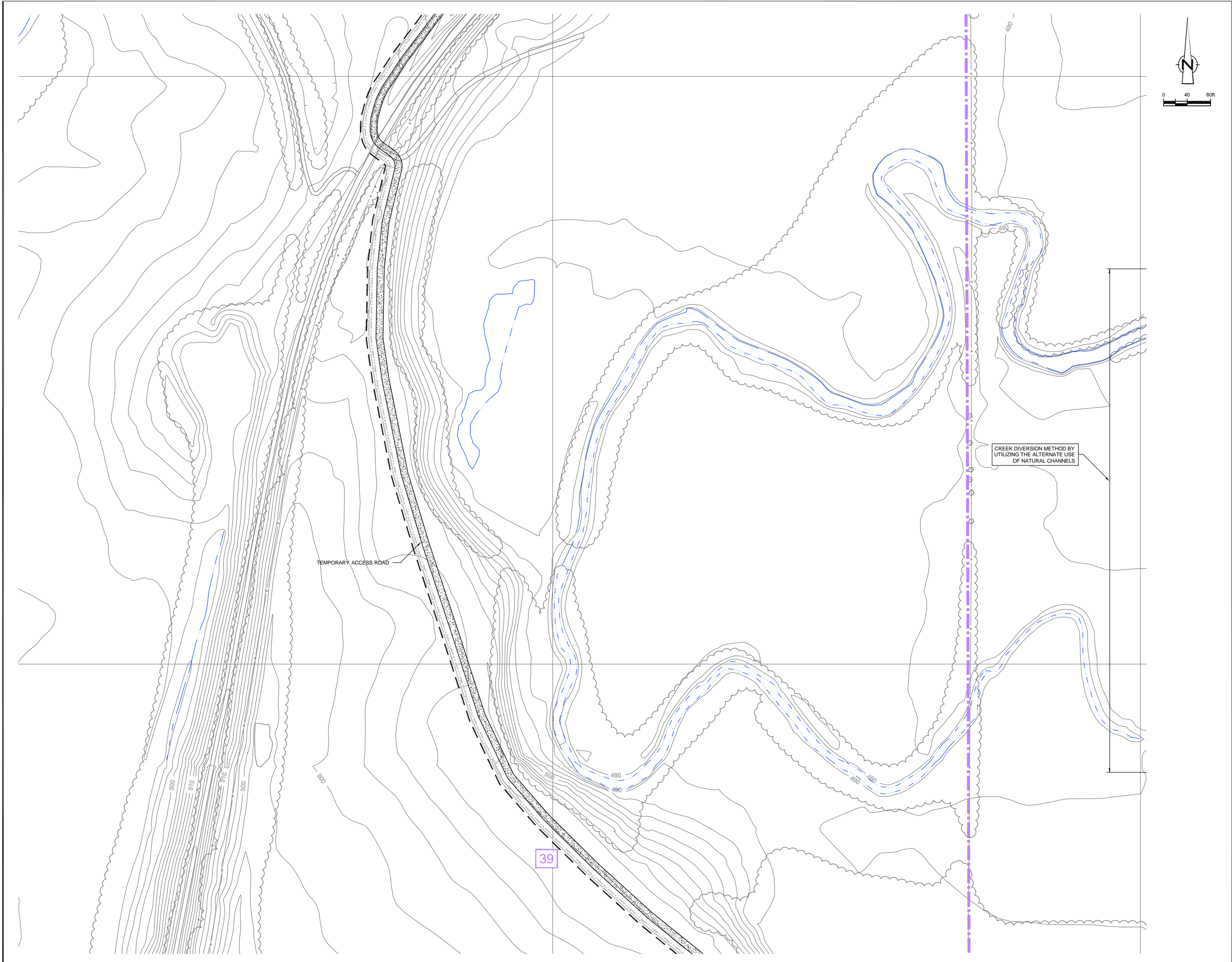
Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE WORKS I
 SOIL EROSION AND SEDIMENT CONTROL**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-17 B



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
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SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**

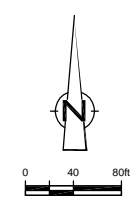
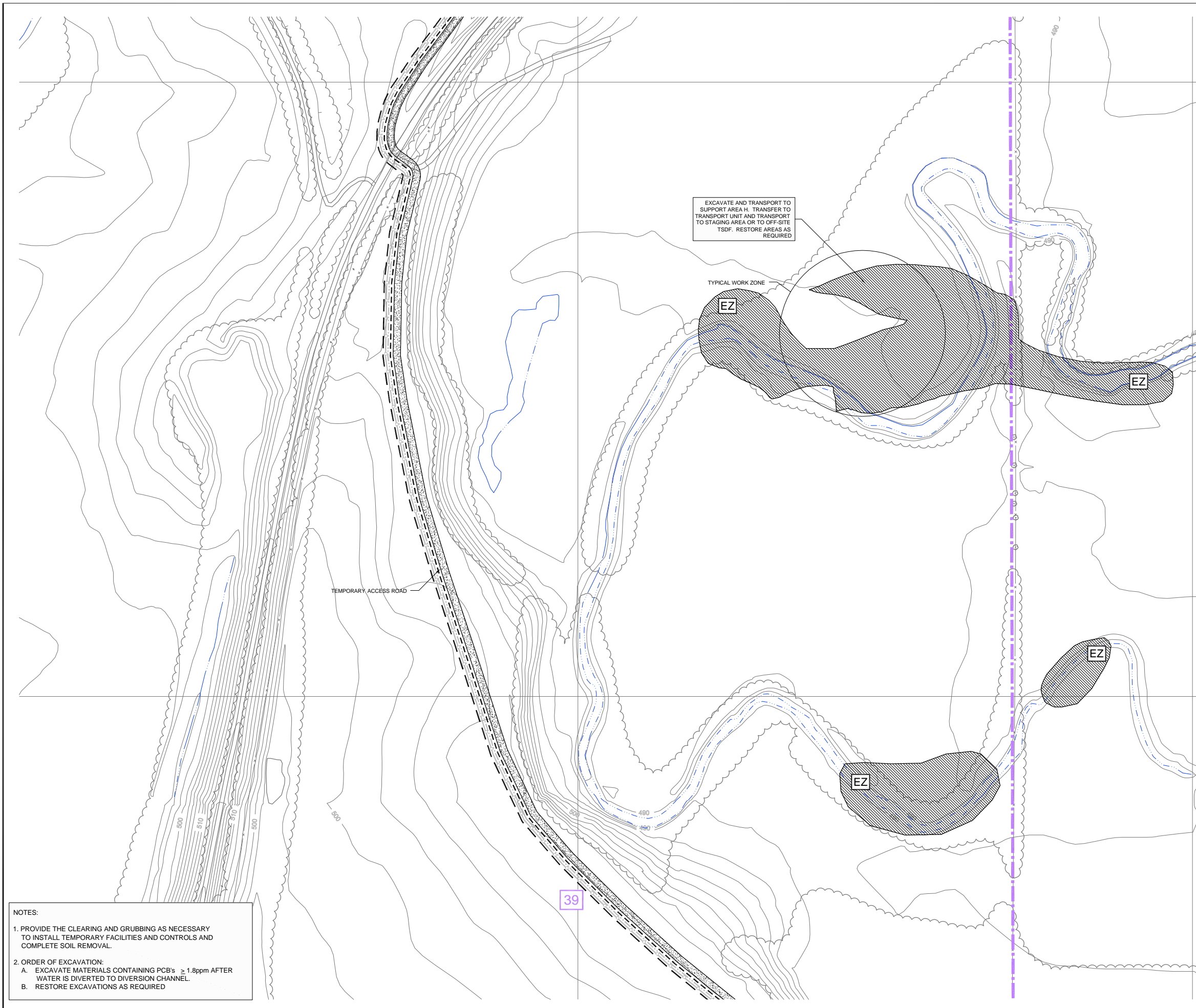
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS II
 STORMWATER MANAGEMENT**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-17 C



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
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- EXISTING ROADS / PAVED AREAS
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- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- EXCLUSION ZONE (EZ)
- EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)
- EXCLUSION ZONE

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA
 DOWNSTREAM PARCELS REMOVAL ACTION
 SITE WORKS III
 EXCAVATION PLAN**

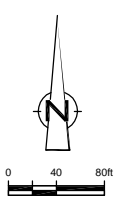
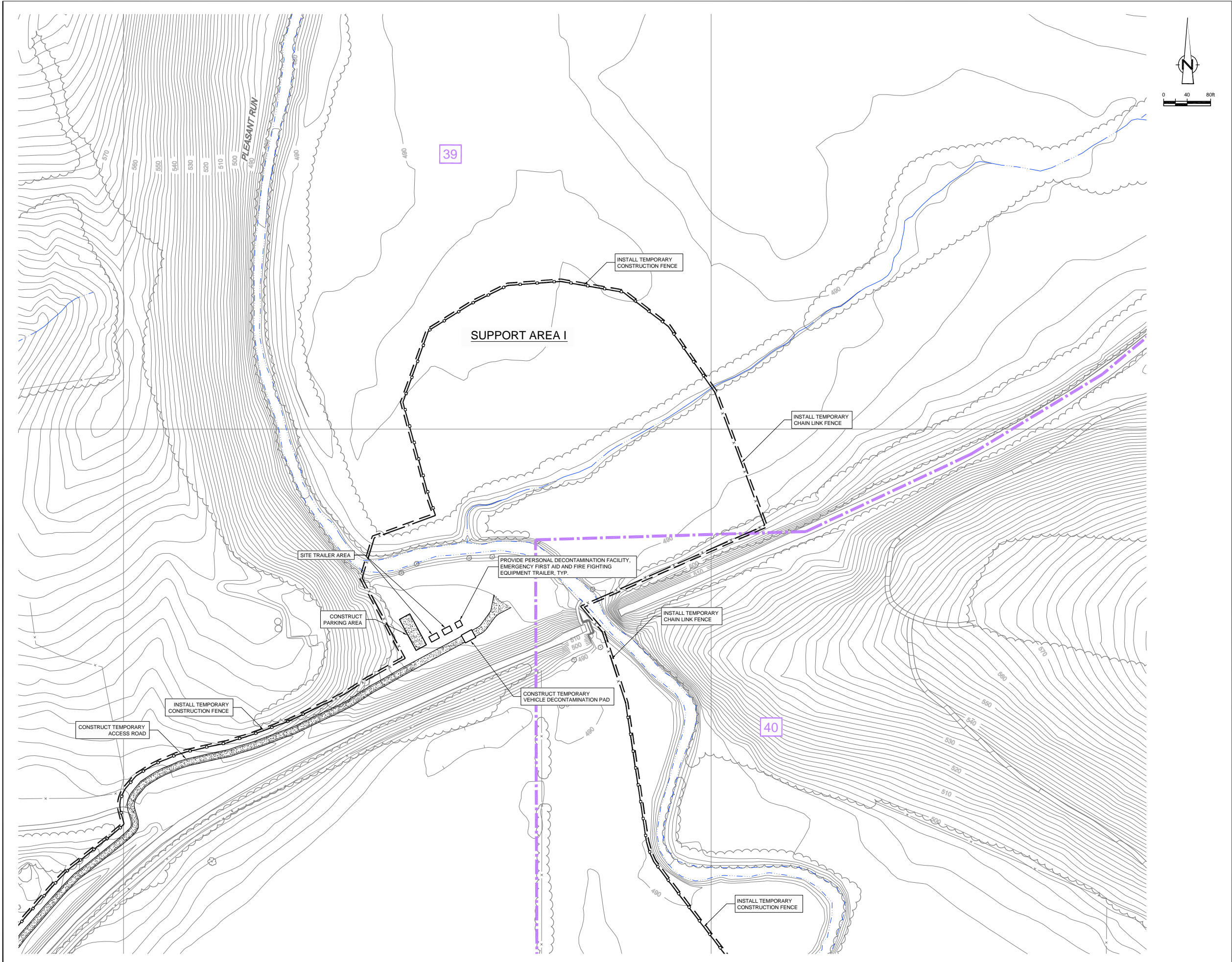


Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-17 D

NOTES:

1. PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
2. ORDER OF EXCAVATION:
 - A. EXCAVATE MATERIALS CONTAINING PCB'S ≥ 1.8 ppm AFTER WATER IS DIVERTED TO DIVERSION CHANNEL.
 - B. RESTORE EXCAVATIONS AS REQUIRED



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

--	--

DRAWING STATUS

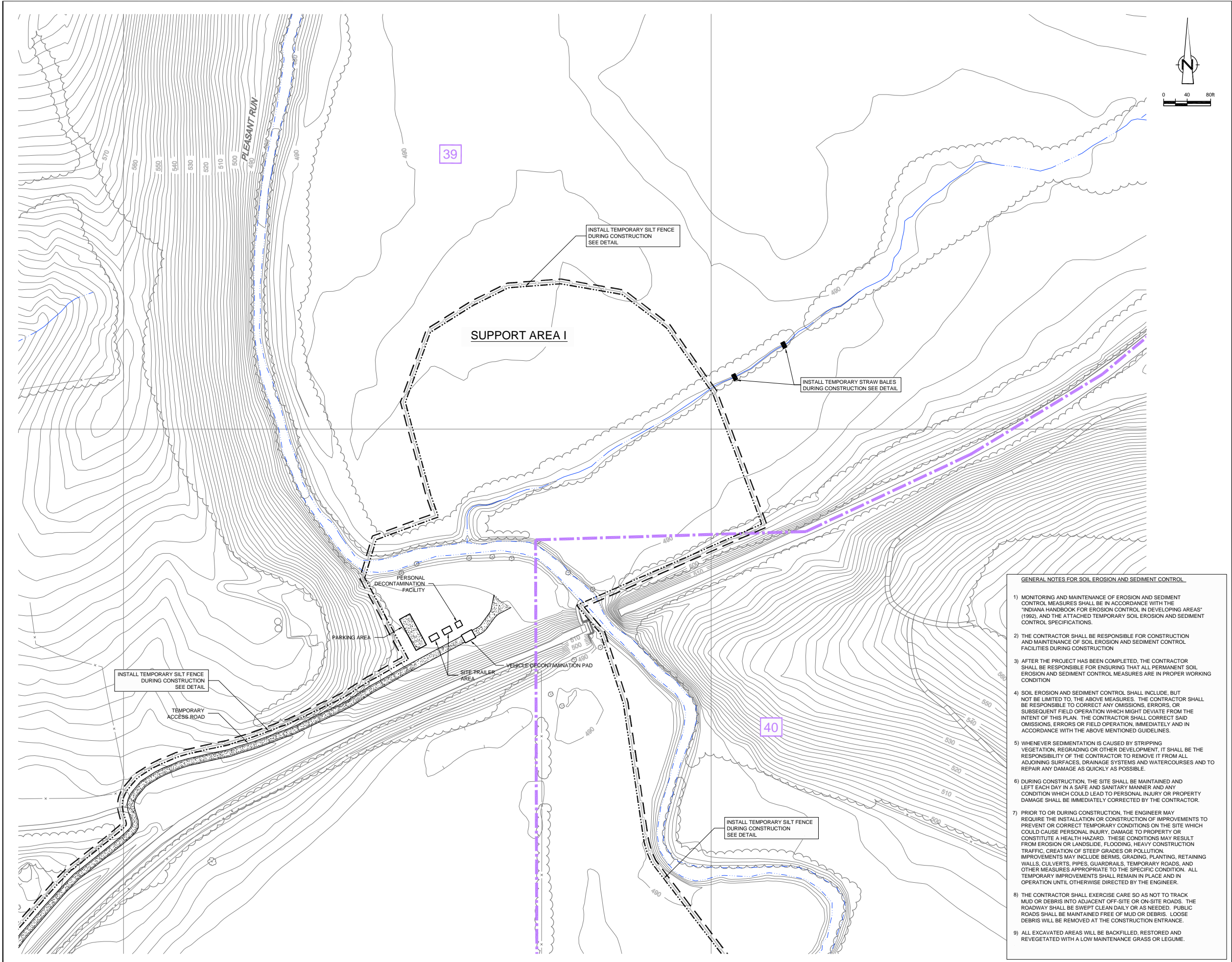
Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA
DOWNSTREAM PARCELS REMOVAL ACTION
SITE PREPARATION**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-18 A



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION
 THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved _____

DRAWING STATUS

Status	Date	Initial

- GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL**
- 1) MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" (1992), AND THE ATTACHED TEMPORARY SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS.
 - 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
 - 3) AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING CONDITION.
 - 4) SOIL EROSION AND SEDIMENT CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ABOVE MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ANY OMISSIONS, ERRORS, OR SUBSEQUENT FIELD OPERATION WHICH MIGHT DEVIATE FROM THE INTENT OF THIS PLAN. THE CONTRACTOR SHALL CORRECT SAID OMISSIONS, ERRORS OR FIELD OPERATION, IMMEDIATELY AND IN ACCORDANCE WITH THE ABOVE MENTIONED GUIDELINES.
 - 5) WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE.
 - 6) DURING CONSTRUCTION, THE SITE SHALL BE MAINTAINED AND LEFT EACH DAY IN A SAFE AND SANITARY MANNER AND ANY CONDITION WHICH COULD LEAD TO PERSONAL INJURY OR PROPERTY DAMAGE SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR.
 - 7) PRIOR TO OR DURING CONSTRUCTION, THE ENGINEER MAY REQUIRE THE INSTALLATION OR CONSTRUCTION OF IMPROVEMENTS TO PREVENT OR CORRECT TEMPORARY CONDITIONS ON THE SITE WHICH COULD CAUSE PERSONAL INJURY, DAMAGE TO PROPERTY OR CONSTITUTE A HEALTH HAZARD. THESE CONDITIONS MAY RESULT FROM EROSION OR LANDSLIDE, FLOODING, HEAVY CONSTRUCTION TRAFFIC, CREATION OF STEEP GRADES OR POLLUTION. IMPROVEMENTS MAY INCLUDE BERMS, GRADING, PLANTING, RETAINING WALLS, CULVERTS, PIPES, GUARDRAILS, TEMPORARY ROADS, AND OTHER MEASURES APPROPRIATE TO THE SPECIFIC CONDITION. ALL TEMPORARY IMPROVEMENTS SHALL REMAIN IN PLACE AND IN OPERATION UNTIL OTHERWISE DIRECTED BY THE ENGINEER.
 - 8) THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO TRACK MUD OR DEBRIS INTO ADJACENT OFF-SITE OR ON-SITE ROADS. THE ROADWAY SHALL BE SWEEPED CLEAN DAILY OR AS NEEDED. PUBLIC ROADS SHALL BE MAINTAINED FREE OF MUD OR DEBRIS. LOOSE DEBRIS WILL BE REMOVED AT THE CONSTRUCTION ENTRANCE.
 - 9) ALL EXCAVATED AREAS WILL BE BACKFILLED, RESTORED AND REVEGETATED WITH A LOW MAINTENANCE GRASS OR LEGUME.

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**

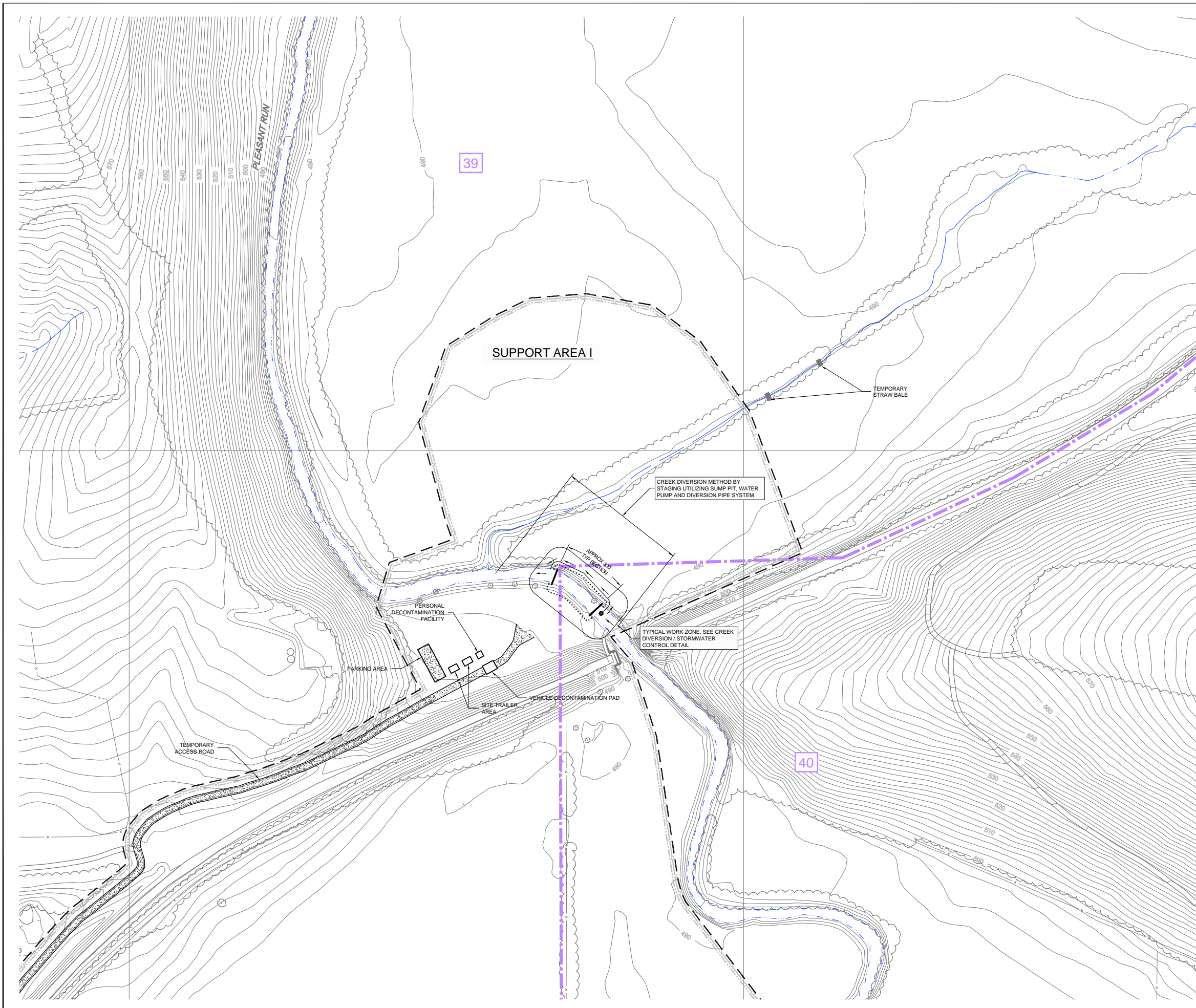
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS I
 SOIL EROSION AND SEDIMENT CONTROL**



Source Reference:
 BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046 Drawing N°: C-18 B



NO	Revision	Date	Initial

LEGEND

- EXISTING BUILDINGS
- EXISTING CONTOURS
- EXISTING ROADS / PAVED AREAS
- EXISTING VEGETATION
- EXISTING FENCE
- APPROXIMATE EXISTING SURFACE WATER LOCATION
- WORK AREA LIMITS
- PARCEL LIMIT
- PARCEL NUMBER
- PROPOSED TEMPORARY CHAIN LINK FENCE
- PROPOSED TEMPORARY CONSTRUCTION FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SILT FENCE
- TEMPORARY STRAW BALE DURING CONSTRUCTION

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

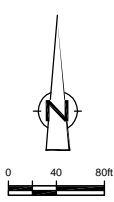
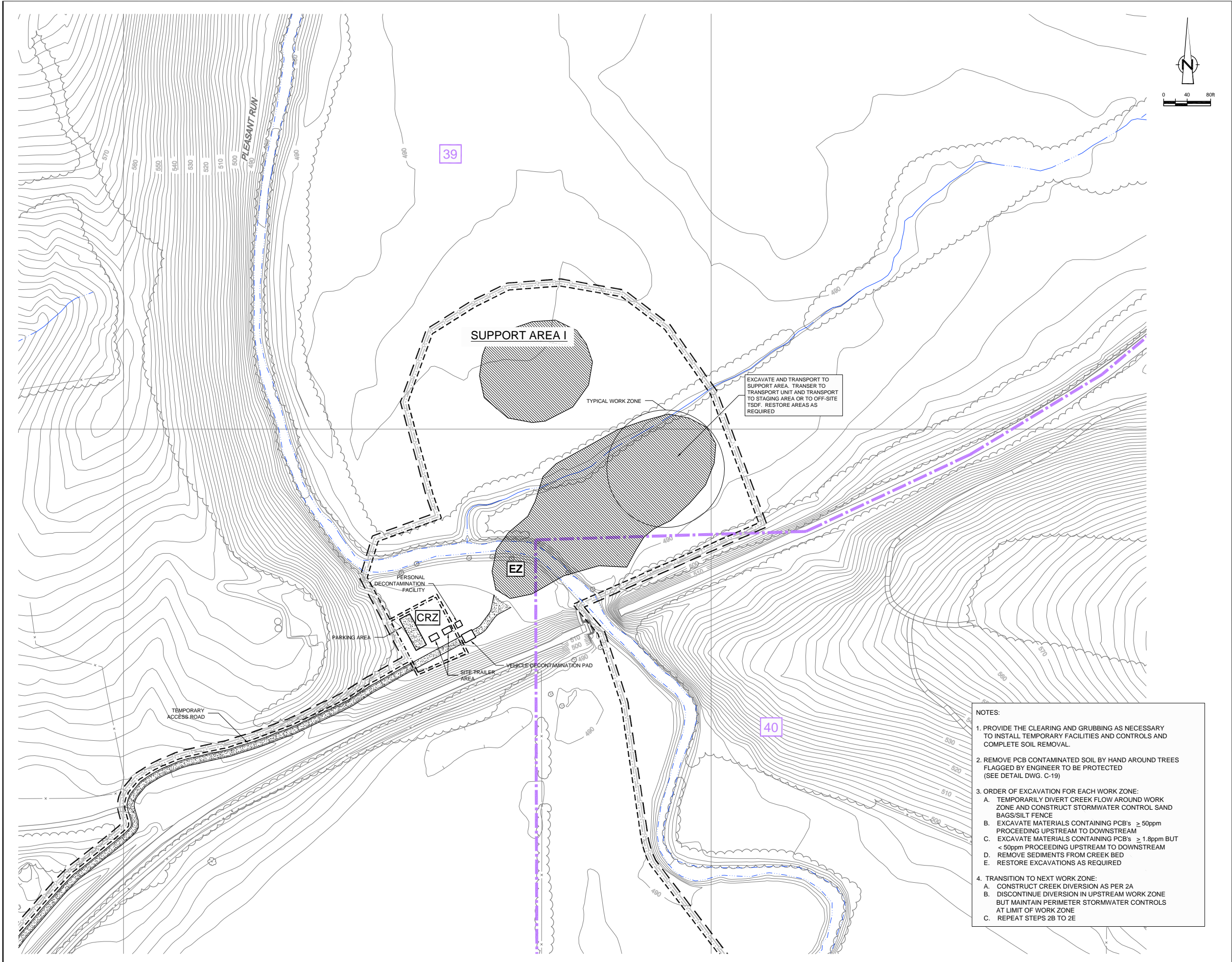
DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS II
STORMWATER MANAGEMENT**



Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046 Drawing N°: C-18 C



NO	Revision	Date	Initial

LEGEND

	EXISTING BUILDINGS
	EXISTING CONTOURS
	EXISTING ROADS / PAVED AREAS
	EXISTING VEGETATION
	EXISTING FENCE
	APPROXIMATE EXISTING SURFACE WATER LOCATION
	WORK AREA LIMITS
	PARCEL LIMIT
	PARCEL NUMBER
	PROPOSED TEMPORARY CHAIN LINK FENCE
	PROPOSED TEMPORARY CONSTRUCTION FENCE
	PROPOSED ACCESS ROAD
	PROPOSED SILT FENCE
	EXCLUSION ZONE (EZ)
	CONTAMINANT REDUCTION ZONE (CRZ)
	EXCAVATION/RESTORATION AREA (PCB CONCENTRATION EQUAL TO OR GREATER THAN 1.8 AND LESS THAN 50 ppm IN SOIL)

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

DOWNSTREAM PARCELS REMOVAL ACTION

**SITE WORKS III
EXCAVATION PLAN**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI. APRIL 2001

Project Manager: J.M.	Reviewed By: J.D.	Date: MAY 2003
Scale: 1" = 80'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-18 D

- NOTES:**
- PROVIDE THE CLEARING AND GRUBBING AS NECESSARY TO INSTALL TEMPORARY FACILITIES AND CONTROLS AND COMPLETE SOIL REMOVAL.
 - REMOVE PCB CONTAMINATED SOIL BY HAND AROUND TREES FLAGGED BY ENGINEER TO BE PROTECTED (SEE DETAIL DWG. C-19)
 - ORDER OF EXCAVATION FOR EACH WORK ZONE:
 - TEMPORARILY DIVERT CREEK FLOW AROUND WORK ZONE AND CONSTRUCT STORMWATER CONTROL SAND BAGS/SILT FENCE
 - EXCAVATE MATERIALS CONTAINING PCB's ≥ 50 ppm PROCEEDING UPSTREAM TO DOWNSTREAM
 - EXCAVATE MATERIALS CONTAINING PCB's ≥ 1.8 ppm BUT < 50 ppm PROCEEDING UPSTREAM TO DOWNSTREAM
 - REMOVE SEDIMENTS FROM CREEK BED
 - RESTORE EXCAVATIONS AS REQUIRED
 - TRANSITION TO NEXT WORK ZONE:
 - CONSTRUCT CREEK DIVERSION AS PER 2A
 - DISCONTINUE DIVERSION IN UPSTREAM WORK ZONE BUT MAINTAIN PERIMETER STORMWATER CONTROLS AT LIMIT OF WORK ZONE
 - REPEAT STEPS 2B TO 2E

39

20

40

SUPPORT AREA I

EXCAVATE AND TRANSPORT TO SUPPORT AREA. TRANSFER TO TRANSPORT UNIT AND TRANSPORT TO STAGING AREA OR TO OFF-SITE TSD. RESTORE AREAS AS REQUIRED

TYPICAL WORK ZONE

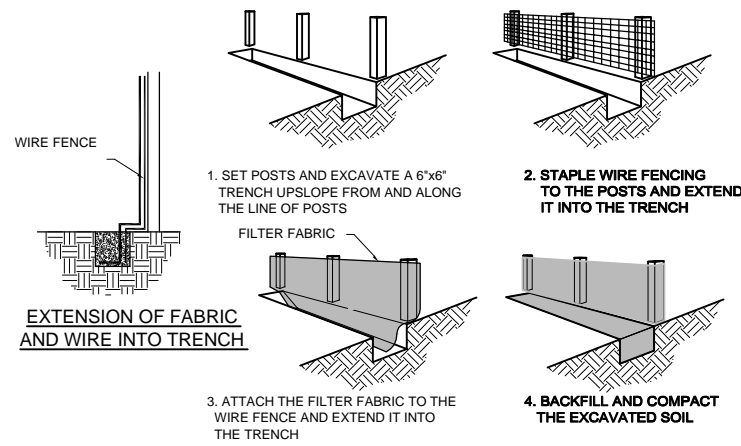
PERSONAL DECONTAMINATION FACILITY

PARKING AREA

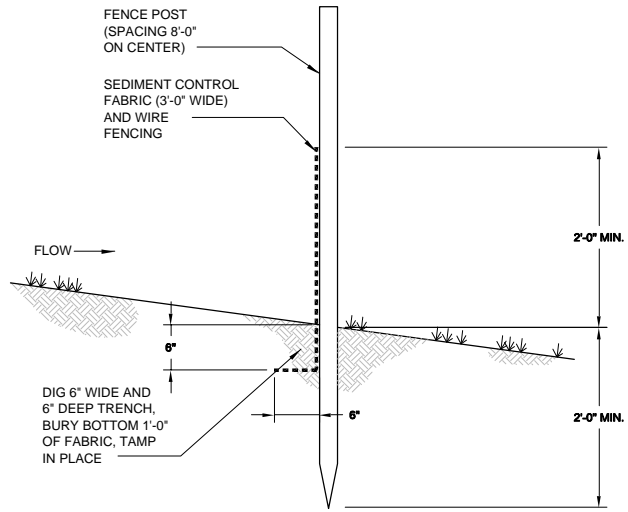
SITE-TRAILER AREA

VEHICLE DECONTAMINATION PAD

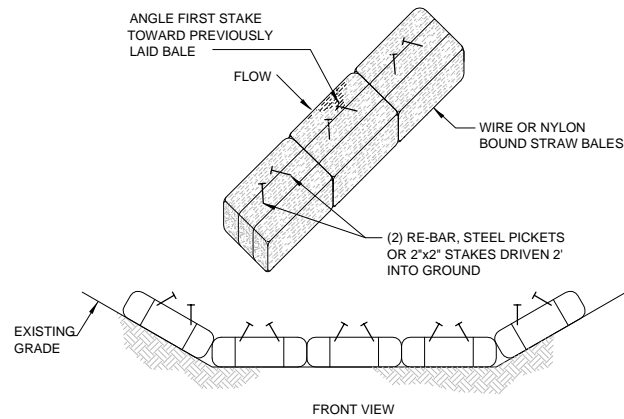
TEMPORARY ACCESS ROAD



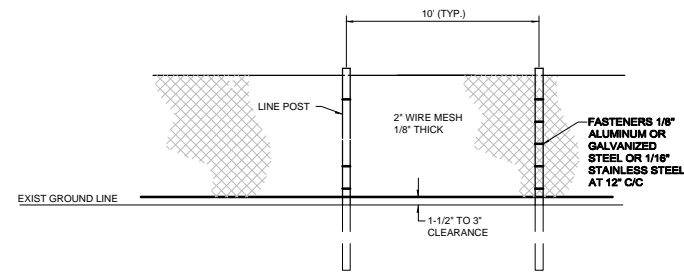
INSTALLATION SEQUENCE



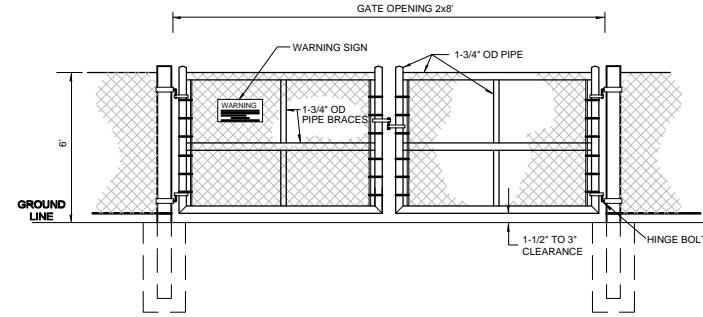
TEMPORARY CONSTRUCTION SILT FENCE DETAIL
NTS



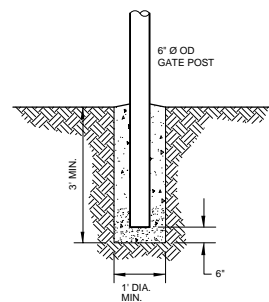
TEMPORARY CONSTRUCTION STRAW BALE DETAIL
NTS



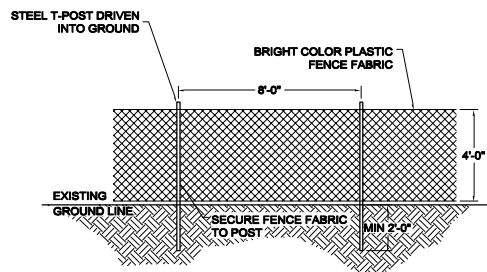
TEMPORARY CONSTRUCTION CHAIN LINK FENCE
NTS



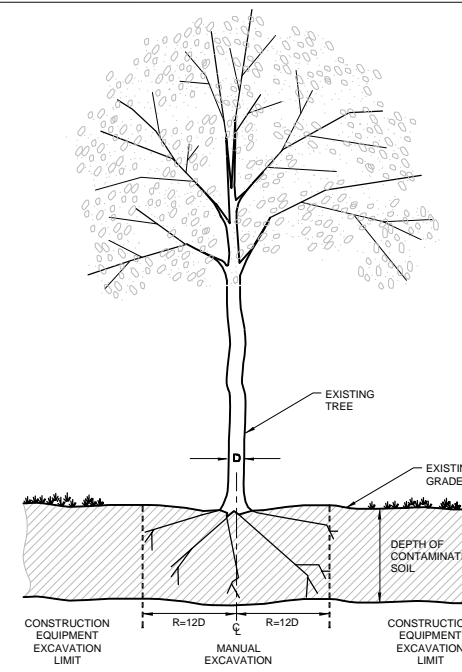
DOUBLE GATE / CONSTRUCTION ENTRANCE
NTS



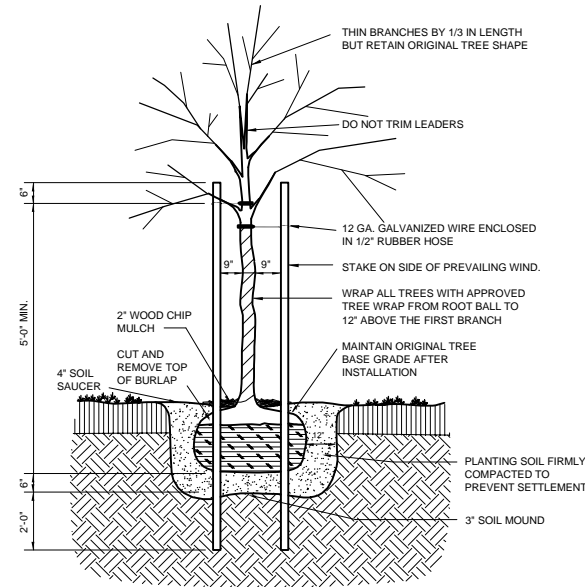
GATE POST DETAIL
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TEMPORARY CONSTRUCTION FENCE DETAIL



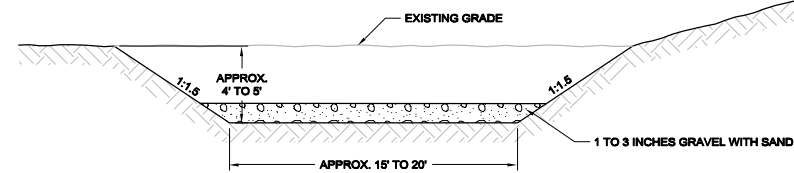
EXCAVATION AROUND EXIST. TREES
NTS



NOTE:

- PAINT ALL CUTS TO TREE ROOTS AND BRANCHES OVER 1/4" WITH APPROVED TREE WOUND PAINT
- DETAIL APPLIES TO TREES 3" CALIPER AND UNDER

TREE PLANTING SECTION
NTS



TEMPORARY DIVERSION CHANNEL DETAIL
NTS

NO	Revision	Date	Initial

SCALE VERIFICATION
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

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DRAWING STATUS

Status	Date	Initial

GM POWERTRAIN FACILITY BEDFORD, INDIANA

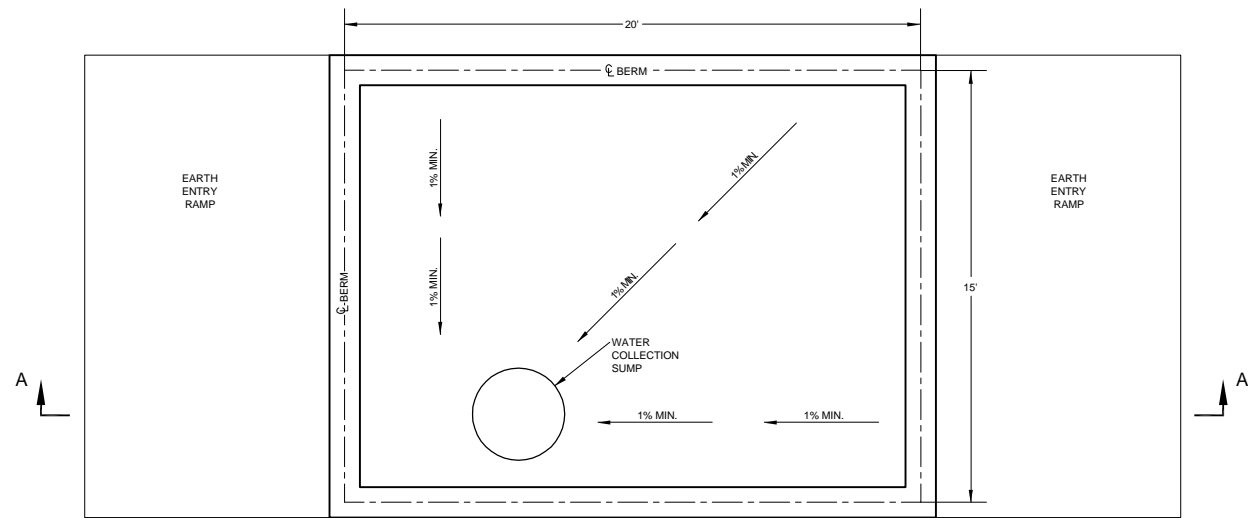
REMOVAL ACTION

DETAILS SHEET 1 OF 2

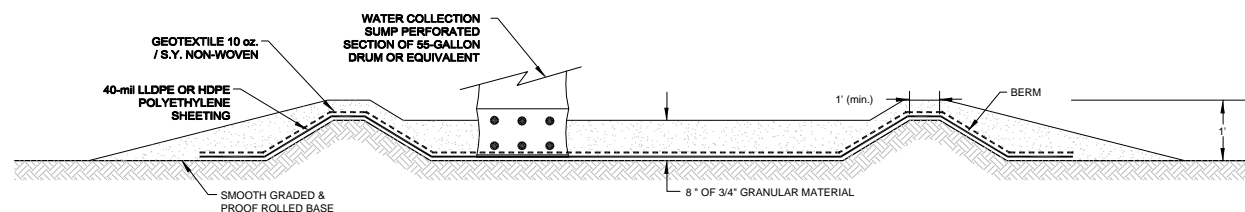
CONESTOGA-ROVERS & ASSOCIATES

Project Manager: J. MCGUIGAN	Reviewed By: R. MEDSGER	Date: MAY 2003
Scale: AS SHOWN	Project N°: 13968-00	Report N°: 046 Drawing N°: C-19

13968-00(046)(C)-WA060 OCT 28/2003



PLAN VIEW

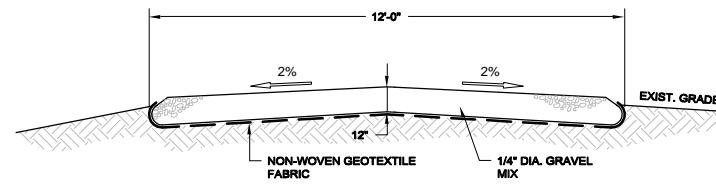


SECTION A-A'

NOTES:

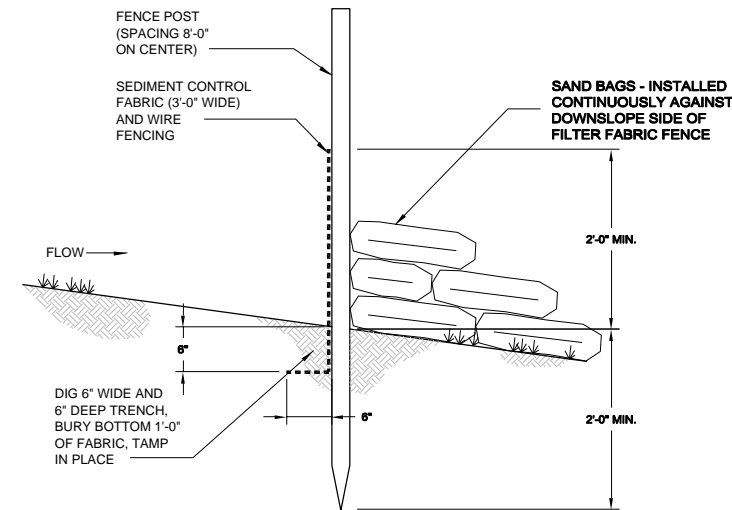
1. TEMPORARY DECONTAMINATION PAD TO BE CONSTRUCTED IN SUITABLE LOCATION CLOSE TO WORK AREAS, AS REQUIRED.
2. TEMPORARY DECONTAMINATION PAD GRANULAR MATERIAL AND SEDIMENTS FROM DECONTAMINATING EXCAVATION EQUIPMENT TO BE BACKFILLED WITHIN ON-SITE CONSOLIDATION AREA.

TYPICAL TEMPORARY VEHICLE DECONTAMINATION PAD DETAIL



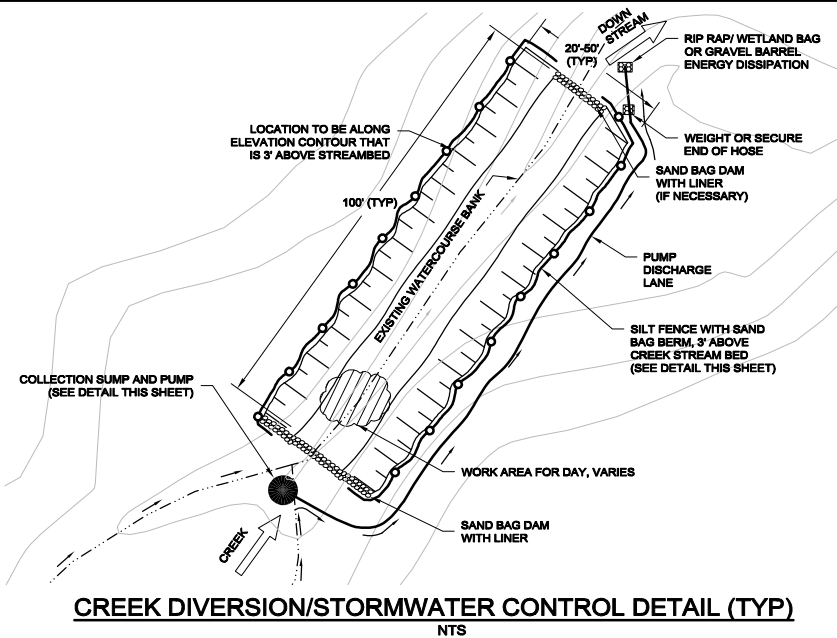
CONSTRUCTION ACCESS ROAD DETAIL

NTS



SILT FENCE REINFORCED BY SAND BAGS

NTS

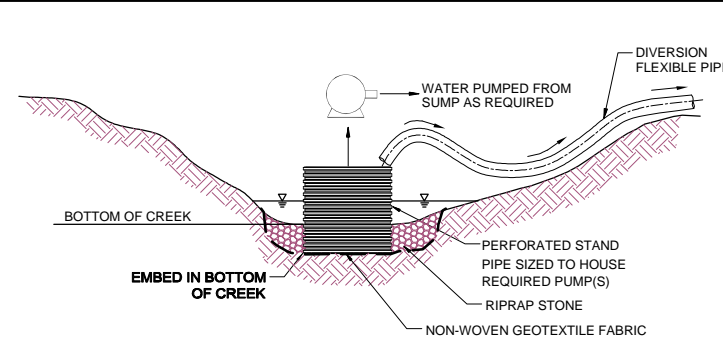


CREEK DIVERSION/STORMWATER CONTROL DETAIL (TYP)

NTS

NOTES:

1. INSTALL UPSTREAM SANDBAG (OR EQUIVALENT) CHECK DAM WITH GEOTEXTILE LINER ACROSS WATERCOURSE AND MATCH EXISTING BANKS.
2. INSTALL SO THAT FLOW UNDER OR BETWEEN BAGS IS PREVENTED BY OVERLAPPING THE STACKED BAGS AND ENTRENCHING THE BOTTOM SET.
3. SAND BAG BARRIERS SHALL BE REGULARLY INSPECTED AND MAINTAINED, AND ANY BREAKS OR UNDERCUTTING IN THE BARRIER SHALL BE PROMPTLY REPAIRED.
4. REMOVE SEDIMENT BEHIND THE BARRIER WHEN IT ACCUMULATES.
5. REPLACE BROKEN BAGS IMMEDIATELY.
6. INSTALL INSTREAM PUMP OR INTAKE LINE OF REMOTE PUMP IN SUMP LOCATED UPSTREAM OF WORK AREA. DISCHARGE WATER THROUGH OR INTO AN ENERGY DISSIPATER INTO THE WATERCOURSE SUFFICIENTLY DOWNSTREAM TO PREVENT WATER FLOWING BACK INTO WORK AREA. (USE TEMPORARY SANDBAG BACKWATER DAM IF NECESSARY.)
7. THE TEMPORARY DIVERSION METHOD MAY BE REVISED AS NECESSARY BY THE CONTRACTOR. CONTRACTOR'S REVISED DETAILS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY ENGINEER AND PERMITTING AGENCIES PRIOR TO CONSTRUCTION.
8. COLLECT SEEPAGE INTO EXCAVATION AREA. TRANSPORT TO THE WASTEWATER TREATMENT SYSTEM.



NOTES:

- A. SIZE THE DIVERSION PIPE, SUMP AND STANDPIPE IN THE FIELD.
- B. THE TEMPORARY DIVERSION METHOD MAY BE REVISED AS NECESSARY BY THE CONTRACTOR. CONTRACTOR'S REVISED DETAILS SHALL BE SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION.

TYPICAL SUMP PIT

NTS

NO.	Revision	Date	Initial

SCALE VERIFICATION	
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.	

DRAWING STATUS	
Approved	

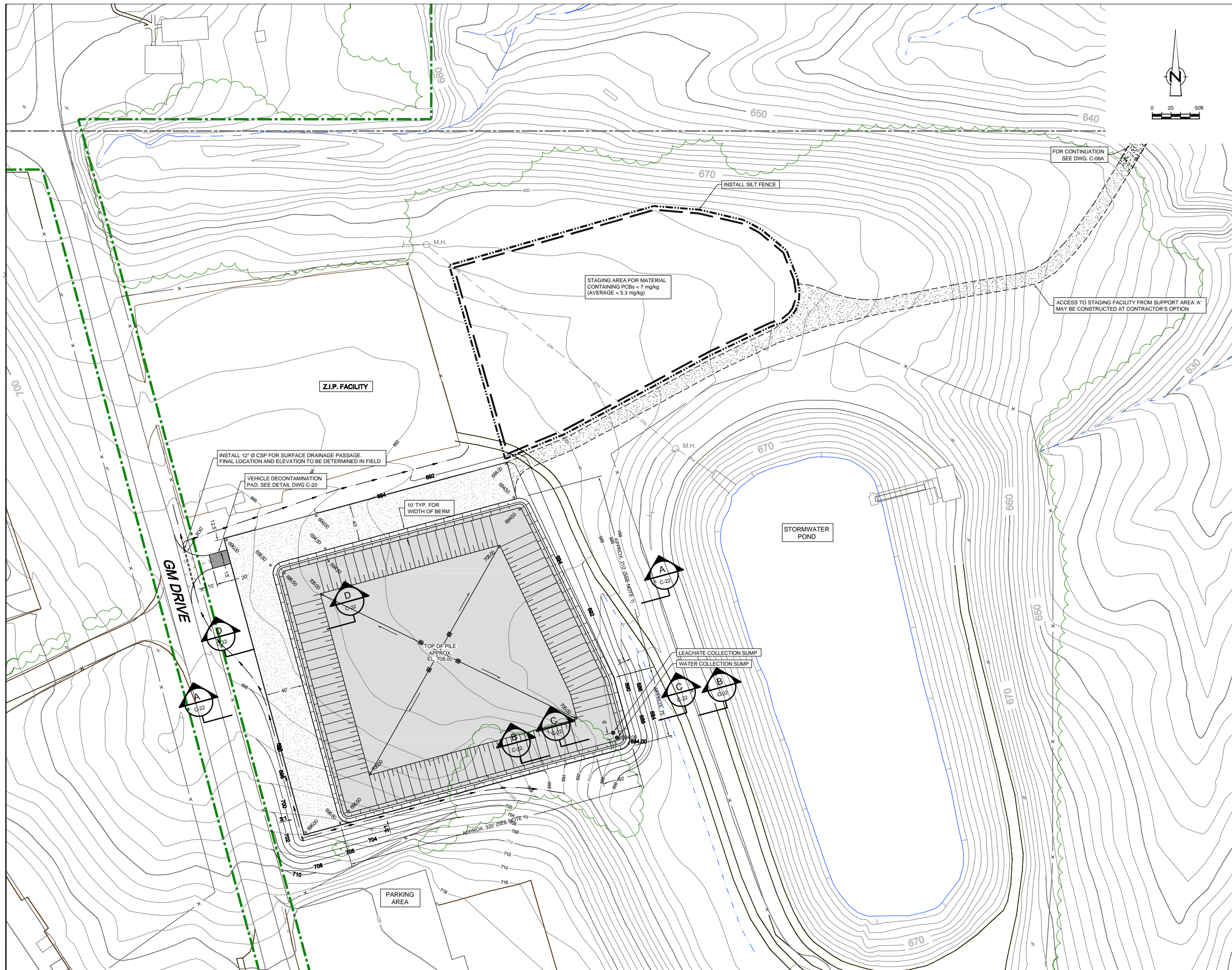
Status	Date	Initial

GM POWERTRAIN FACILITY
BEDFORD, INDIANA
REMOVAL ACTION
DETAILS
SHEET 2 OF 2

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager: J. McGUIGAN	Reviewed By: R. MEDSGER	Date: MAY 2003
Scale: AS SHOWN	Project N°: 13968-00	Report N°: 046 Drawing N°: C-20



NO	Revision	Date	Initial

LEGEND

- EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)
- EXISTING VEGETATION
- EXISTING POWER POLE
- EXISTING BUILDINGS
- RAILROAD TRACKS
- ROADS / PAVED AREAS
- APPROXIMATE GM PROPERTY BOUNDARY
- APPROXIMATE SURFACE WATER LOCATION
- EXISTING STORM SEWER
- FINAL GRADE CONTOUR
- DRAINAGE PATH
- NEW ACCESS ROAD
- CONTAMINATED SOIL PILE AREA
- EARTHEN BERM

NOTES:

1. FINAL FOOTPRINT, DIMENSIONS AND TOP LINER CONFIGURATION OF THE SOIL STAGING FACILITY WILL BE DETERMINED BASED ON FIELD CONDITIONS AND VOLUME OF MATERIAL TO BE STAGED.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
BEDFORD, INDIANA**

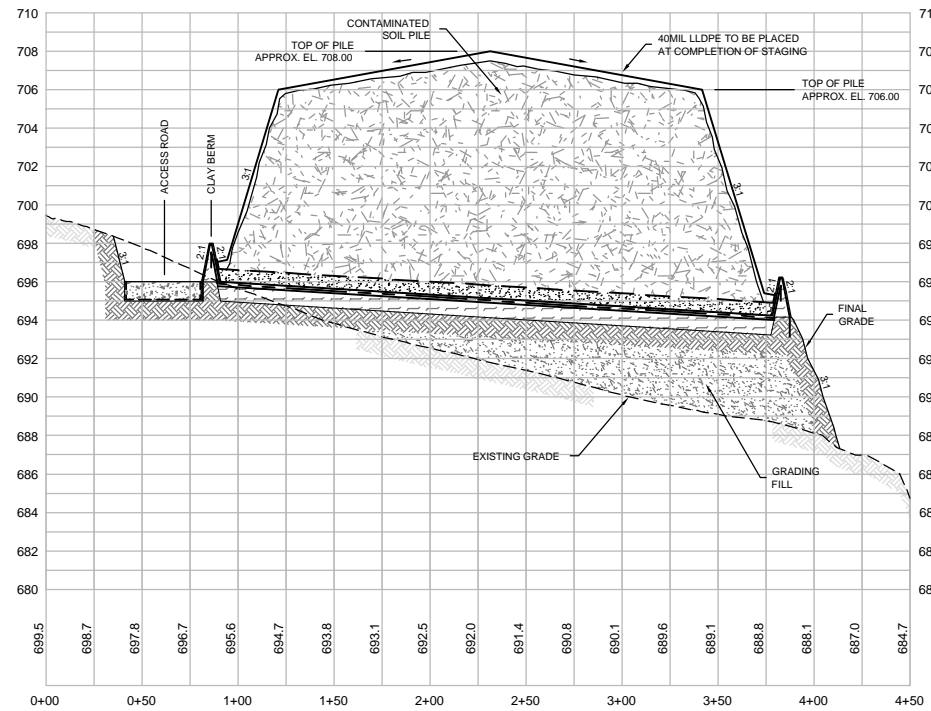
DOWNSTREAM PARCELS REMOVAL ACTION

**PCB CONTAMINATED SOIL
STAGING FACILITY PLAN**

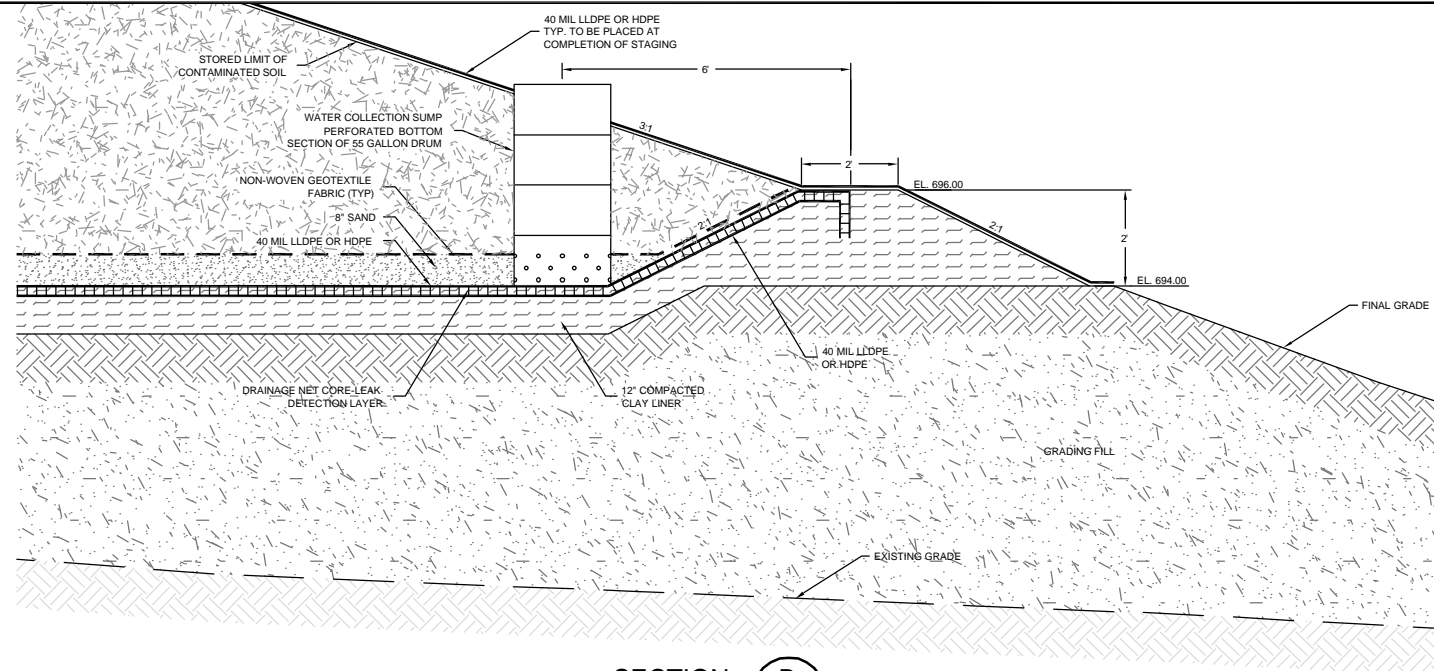
CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

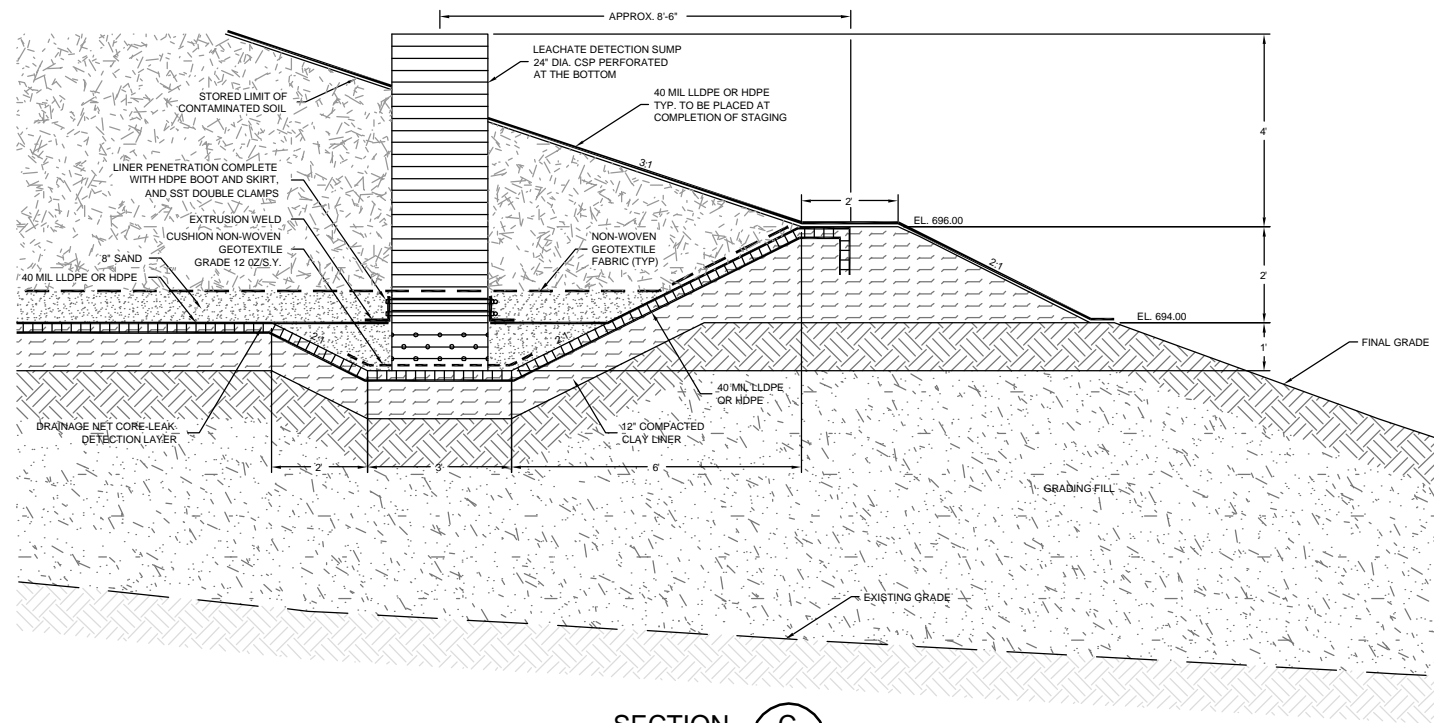
Project Manager: J. McGUIGAN	Reviewed By: J. DANIEL	Date: OCTOBER 2003
Scale: 1" = 50'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-21



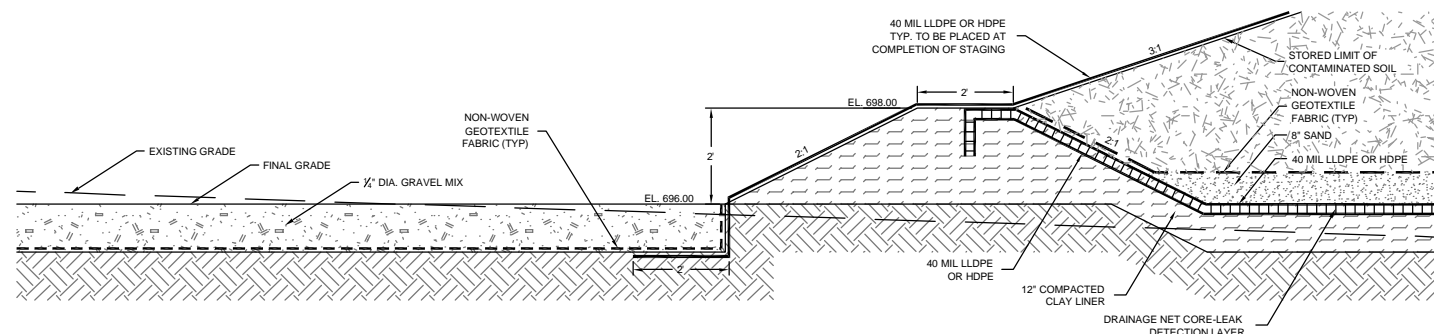
SECTION A
 HOR. 1" = 50'
 VER. 1" = 5'



SECTION B
 1" = 2'



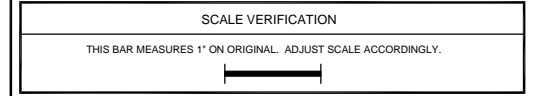
SECTION C
 1" = 2'



SECTION D
 1" = 2'

NO.	Revision	Date	Initial

NOTES:
 1. FINAL CAP CONFIGURATION BASED ON VOLUME OF MATERIAL PLACED.



Approved _____

DRAWING STATUS

Status	Date	Initial

**GM POWERTRAIN FACILITY
 BEDFORD, INDIANA**

DOWNSTREAM PARCELS REMOVAL ACTION

**PCB CONTAMINATED SOIL
 STAGING FACILITY SECTIONS**

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager: J. MCGUIGAN	Reviewed By: J. DANIEL	Date: OCTOBER 2003
Scale: HOR. 1" = 50' VER. 1" = 5'	Project N°: 13968-00	Report N°: 046
		Drawing N°: C-22