

**RESOURCE CONSERVATION AND RECOVERY ACT
CURRENT CONDITIONS SUMMARY**

**FORMER GM ROMULUS ENGINEERING CENTER
37350 ECORSE ROAD
ROMULUS, MICHIGAN
USEPA ID #MID000809905**

by

**Haley & Aldrich of Michigan, Inc.
Ann Arbor, Michigan**

for

**Revitalizing Auto Communities
Environmental Response Trust
Ypsilanti, Michigan**

**File No. 37515-003
30 December 2011**

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1	Site Locus
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LIST OF ACRONYMS AND ABBREVIATIONS

AOI	Area of Interest
BGS	Below Ground Surface
CCS	Current Conditions Summary
DMP	Data Management Plan
EI	Environmental Indicators
FSP	Field Sampling Plan
GM	General Motors
Haley & Aldrich	Haley & Aldrich of Michigan, Inc.
LNAPL	Light Non-aqueous Phase Liquid
DNALP	Dense Non-aqueous Phase Liquid
mL/min	Milliliters per minute
MDEQ	Michigan Department of Environmental Quality
MDNR	Michigan Department of Natural Resources
MDNRE	Michigan Department of Natural Resources and Environment
MI	Michigan
Michigan 10 Metals	Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Mercury, Selenium, Silver, and Zinc
Part 201	Part 201 of Michigan's Natural Resources and Environmental Protection Act of 1994 (as amended)
PAHs	Polycyclic Aromatic Hydrocarbons
PBA	Performance Based Agreement
PCBs	Polychlorinated Biphenyls
POTW	City of Livonia publicly-owned treatment works
RCRA	Resource Conservation and Recovery Act
QAPP	Quality Assurance Project Plan
RFI	RCRA Facility Investigation
TAL	Target Analyte List
TCL	Target Compound List
UCL	Upper Confidence Limit
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1. INTRODUCTION

1.1 General

Revitalizing Auto Communities Environmental Response Trust (RACER) of Ypsilanti, Michigan is working with Michigan Department of Environmental Quality (MDEQ) to characterize and address areas impacted by hazardous waste and/or constituents at the former General Motors (GM) Romulus Engineering Center, a property located at 37350 Ecorse Road in Romulus, Wayne County, Michigan (the Site). In support of this effort, RACER will investigate, and as necessary, remediate all releases of hazardous wastes or constituents at or from the Site. This work will include the following actions:

- Preparation of a report covering all areas of the Site, which summarizes current conditions of the Site with respect to prior investigations, historic operations, and physical setting, as well as past treatment, storage or disposal of hazardous waste or hazardous constituents; and
- Investigation of the Site to identify the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the Site which may pose an unacceptable risk to human health or the environment.

Haley & Aldrich of Michigan, Inc. (Haley & Aldrich) has prepared this document on behalf of RACER to serve as a Current Conditions Summary of the Site.

1.2 Scope of Current Conditions Summary

This Current Conditions Summary (CCS) documents the current environmental conditions at the Site based on an assessment completed primarily by reviewing available Site and regulatory agency files and historic aerial photographs, and observing and documenting current conditions through a Site visit. Former Site personnel with knowledge of historic operations were not available for interviews. Eight (8) areas where hazardous waste or hazardous constituents were potentially treated, stored or disposed (released) were identified and are designated as Areas of Interest (AOIs).

AOIs where a release of hazardous waste or hazardous constituents was known or is probable are recommended for further investigation as proposed herein. This information is summarized in Table I.

2. SITE BACKGROUND

2.1 General Site Information

The Site, measuring approximately 72 acres in size, is located at 37350 Ecorse Road in Romulus, Michigan and is immediately adjacent and to the west of the active General Motors Corporation Powertrain (GMPT) – Romulus Plant, which is located at 36880 Ecorse Road and is owned and operated by General Motors LLC. The Site is a vacant parcel with the concrete slab of the former Romulus Engineering Center remaining, a paved access road and areas of vegetation. The parcel is a generally rectangular-shaped tract of land that is situated in a mixed industrial / commercial / residential area. Figure 1 shows the location of the Site and the surrounding topographic features.

According to documents provided by RACER, the Site was originally included in the Part A Permit application for the GMC Detroit Diesel Allison Romulus Plant (subsequently known as CPC Romulus Engine Operations, currently known as the GMPT – Romulus plant), MID 000809905, located at 36880 Ecorse Road. Those documents include correspondence from CPC Romulus Engine Operations to U.S. EPA Region 5 dated April 9, 1988, that states, “The original 1980 Permit Application included two buildings, engineering laboratory and parts warehouse that are no longer serviced under MID00080995. They are covered under separate MID07432802, because of GMC organizational changes.” A hand-marked site plan accompanying the 1980 Permit Application identifies the Romulus Engineering Center as “Engineering Lab”.

2.2 Historical Operations

A single building constructed in several phases of additions and measuring a total of approximately 196,000 square feet in size (former facility) under roof, occupied the Site until June 2010, when it was demolished. Historic operations at the Site included dynamometer testing of engines and other engineering operations. Dynamometer diesel engine testing operations were conducted on twenty-four dynamometers in two separate wings of the former facility, both located in the eastern portion of the facility and referenced as Test Cell “D” Wing and Test Cell “E” Wing (see Figure 2). The air emissions from the dynamometers exhausted through a common stack. Two additional dynamometers were operated in a cold test trailer, which was located exterior to and between the D and E test cell wings. Two natural gas fired boilers were operated at the Site. The former facility also housed a vehicle test garage, offices, parts warehousing, maintenance shops, a computer room, and a shipping dock. Figure 2 shows “drum product storage” shed located to the north and west of the shipping dock. No other information concerning the drum product storage shed has been identified at this time. The Site included the following:

- Aboveground storage tank (AST) farm consisting of four (4) 20,000-gallon aboveground diesel fuel storage tanks, diesel fuel distribution lines and a pump station equipped with a sump;
- Closed underground storage tank (UST) of 10,000 gallon capacity formerly used for storage of used oil;
- Industrial waste pump house;
- Cooling tower;

- Cold test trailer;
- Baghouse;
- Drummed-product storage shed; and
- Overhead trestles for process wastewater and electricity line conveyances.

The Remediation Cost Estimate Summary (CES) (RACER document for MLC ID 1002, October 27, 2009, Rev. May 2010) references discussions between Motors Liquidation Company (MLC) and MDNRE in which “MDNRE has indicated that they believe the Chip House is located within the Romulus Engineering Center property that is owned by MLC....” The Chip House is actually located at GMPT and is identified as SWMU #7 in the Preliminary Assessment/Visual Site Inspection (PA/VSI) (PRC Environmental Management, Inc., July 1992) for GMPT.

2.3 Physical Setting

The Site is bound to the south by Ecorse Road, to the east by GMPT, to the west by commercial property, and to the north by a wooded tract of land, north of which is an agricultural tract of land. A stream identified as the McClaughrey Drain runs outside of the property fence at the western boundary of the Site. The McClaughrey Drain once crossed the north and west areas of the Site parcel and was re-routed to border the parcel approximately 50 feet from the property boundary on the western side of the Parcel. The McClaughrey Drain is located within the Rouge River watershed and discharges to the Lower Rouge River. A stormwater detention pond and regulated outfall owned and operated by GMPT is located to the northeast of the Site.

The Site is assessed as commercial land and zoned by the City of Romulus as M-2, General Industrial District. According to Article 8 of the City of Romulus zoning ordinance, activities permitted in M-2 districts include manufacturing, assembly and fabrication of large-scale or specialized industrial operations likely to produce external physical effects. M-2 districts are areas designated for use where heavy industrial users have access to major roadways, utilities and other infrastructure.

Information reviewed in preparation of this CCS included a Phase II Environmental Site Assessment report prepared by Encore Environmental Consortium, LLC (EEC) (October 2007). The Phase II report included a summary of reports and documentation concerning response to a diesel fuel release at the Site in 2007. EEC’s summary of that information included indication from facility personnel that areas impacted by the diesel fuel release included a “federally designated wetland area” at the Site; however, no area of the Site is identified on the National Wetland Inventory or the MDEQ Wetland online database. It is not currently known whether the area identified by facility personnel as a “federally designated wetland” is actually a designated wetland. Response to the fuel release are described to include among other tasks, construction of a berm surrounding the “federally designated wetland”, product recovery, and removal of debris and vegetation from that area; construction of two French drains and a sump near the AST pump pad and “wetland area”; and excavation of impacted soil in areas outside of the bermed “wetland area”. It is not known whether the French drains and sump remain at the former AST Farm area. It is not known whether residual contaminants remain in the areas impacted by the release.

Undeveloped areas of the parcel previously maintained as grassy lawn have naturalized since cessation of operations and grounds maintenance. Vegetative overgrowth, cattails, brambles, heavy brush, wooded areas, and standing surface water were observed in several areas across the Site. Sheen was observed on standing water in several areas of the northeastern area of the Site. Upon touching the sheen, it was observed to break apart easily and did not appear to be viscous; hence, the sheen is believed to be associated with natural degradation processes and not of a petroleum origin.

The Site is located at approximately 664 feet above mean sea level and topographically, is generally flat with minor depressions, primarily on the eastern side of the parcel. Properties surrounding the Site are located at elevations similar to the Site, increasing slightly in all directions. The City of Romulus Municipal Water Department provides drinking water to the Site.

The Environmental Data Resources Inc. (EDR[®]) report for the Site describes surface soil texture as loamy fine sand with fine sand and silty clay loam to depths of three feet, somewhat poorly drained to poorly drained, and partially hydric. Previous reports associated with the Site describe the soil as consisting primarily of brown sandy silt and sand from ground level to approximately 5 feet below ground surface (bgs), and brown clay from approximately 5 feet bgs to approximately 15 feet bgs. Underlying the surface, shallow, and deep soils are bedrock deposits classified as Paleozoic Era, Devonian System and Upper Devonian Series. According to USGS Mineral Resources Online Spatial Data, bedrock is classified as the Traverse Group, a Middle Devonian formation consisting primarily of limestones interbedded with shales.

2.4 Previous Investigations

Based on review of available records, investigations of the Site have been limited to an investigation of a diesel fuel release from an AST farm in 2007 and an Underground Storage Tank Site Assessment associated with in-place closure of a 10,000 gallon used oil UST in 1992.

2.4.1 Diesel Fuel Spill Investigation

Four 20,000-gallon aboveground diesel fuel storage tanks were previously located at the Site. According to documents provided for this review, a release of approximately 2,100 gallons of diesel fuel was discovered on April 27, 2007. The released fuel entered an area identified by facility personnel as a “federally designated wetland area” located south of the AST farm. The dimensions of the wetland area were reported to be approximately 200 feet by 120 feet at the time of the release.

MDEQ was verbally notified of the spill on April 27, 2007 and was notified in writing on May 7, 2007. EQ Industrial Services (EQ) was retained by General Motors to respond to and clean up the release. Cleanup activities were conducted between April 27, 2007 and May 8, 2007. Response and cleanup activities reportedly included containment, product recovery and removal of impacted vegetation and material from in and around the wetland area. Containment and product recovery activities included construction of an earthen berm along the west and south boundaries of the wetland area and construction of two French drains and a sump equipped with an electrical pump to the north of the wetland area, between the AST farm and wetland. Skimming, dewatering of the wetland and use of absorbent materials were also employed to contain and recover the spilled fuel. The area surrounding the AST farm pump pad was also impacted by the diesel fuel release and response activities included

excavation of impacted soils. EQ reportedly estimated that approximately 90% of the spill was recovered.

A focused Phase II Environmental Site Assessment was initiated by Encore Environmental Consortium (Encore) on August 16, 2007. Encore's ESA included collection of thirteen hand-augured shallow (e.g. maximum depth 2.5 feet below ground surface (bgs)) soil samples from within the wetland area, five hand-augured shallow soil samples from the area surrounding the wetland area observed to be impacted by the release, and four deeper (maximum depth 5 feet bgs) soil samples collected by direct push technology using a truck-mounted Geoprobe® rig. The Phase II report describes the soil as consisting primarily of brown sandy silt and sand from ground level to approximately 5 feet below ground surface (bgs), and brown clay from approximately 5 feet bgs to approximately 15 feet bgs, the extent of depth explored in the area of their investigation.

According to the Encore report, soil samples were analyzed for benzene, ethylbenzene, toluene and xylenes (collectively BTEX) and trimethylbenzene isomers (TMBs); polynuclear aromatic hydrocarbons (PAHs); and total petroleum hydrocarbon diesel range organics (TPH-DRO). Laboratory analytical data for the sampling events were compared to Michigan Part 201 (Environmental Remediation) and Part 213 (Leaking Underground Storage Tanks) Generic Cleanup Criteria as promulgated under the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451. Cleanup criteria do not exist for TPH. Encore reported that the analytical results did not indicate exceedences of Michigan Industrial and Commercial II, III and IV Soil Cleanup Criteria and Risk-Based Screening Levels (RBSLs), or Michigan Residential and Commercial I Soil Cleanup Criteria RBSLs. Detected concentrations of PAHs in shallow soil samples collected from within the wetland area and outside the wetland area were reported as considerably less than the most stringent Michigan cleanup criteria.

The Encore report indicates shallow soils within the wetland area were impacted by TPH-DRO, as were soils outside of the wetland area where the spill was reportedly observed to have spread.

2.4.2 Underground Storage Tank Site Assessment

According to publically available records from MDEQ for the Site, a fiberglass reinforced plastic UST formerly used for storage of used oil was closed in place at the Site, filled with cement, and a site assessment completed. The tank was reported to have been closed in place rather than removed from the ground, due to its proximity to the facility's baghouse and other structural features, the integrity of which may have become compromised by removal of the UST. As part of the Site Assessment, soil samples were collected from the proximity of the tank location and analyzed for BTEX and PAHs. Laboratory analytical results indicated no evidence of contamination associated with the UST.

3. INFORMATION REVIEWED

To identify AOIs, Haley & Aldrich reviewed available RACER records of past investigations/assessments, Site As-Builts and plans, and records obtained from the Michigan Department of Environmental Quality, the City of Romulus, and the City of Romulus Fire Department.

Additionally, an environmental database search was performed for a 1-mile radius of the Site. According to EDR[®], no coverage exists for the subject property for Sanborn fire insurance maps; however, aerial photographs for 1937, 1940, 1949, 1957, 1961, 1967, 1972, 1985, 1999, 2000, 2005, and 2006 were reviewed to identify potential environmental conditions.

4. AREAS OF INTEREST

4.1 General

Areas of Interest (AOIs) are areas associated with the Site where there is the potential that hazardous waste or hazardous constituents have been released to the environment. Table 1 summarizes the 8 AOIs identified for the Site. For discussion purposes, each AOI has been assigned a number. The AOIs identified in Table I will be used for discussion purposes throughout the RCRA Corrective Action process. Table I also provides the location and description of each AOI, along with other information, which is discussed later in this document. Figure 3 illustrates the approximate locations of each of the 8 AOIs. Photographs taken of select AOIs and other areas of and near the Site are included in Appendix A.

4.2 Selection Criteria for AOIs Requiring Additional Investigation

As stated above, AOIs are areas associated with the Site where there is the potential that hazardous waste or hazardous constituents have been released to the environment. The identification of AOIs retained for further investigation was based on the following:

- Areas with a confirmed release to the environment;
- Areas with a probable release based on visual evidence or interview with knowledgeable personnel;
- Areas where a release to the environment is possible because a release pathway could not be ruled out (e.g., where oils were visibly present and/or historically used and impact of fluids discharging into sumps or trenches may have resulted in degradation of the integrity of that system and no evidence to the contrary was available, such systems were considered AOIs warranting further investigation); and/or
- Areas with the likely presence of free product, regardless of its composition.

AOIs were eliminated from further investigation based on the following:

- Areas where no hazardous waste or hazardous constituents were reportedly managed;
- Areas where no release pathway to the environment was identified or no evidence of release was observed, documented, reported, or suspected;
- Areas where, based on the volumes of materials managed, the potential for release was considered *de minimis*; and/or
- Areas that were determined not to exist at the Site.

Further investigation of AOIs may include the following:

- Additional research and review of available historic information and Site records; and/or

- Intrusive soil and/or groundwater investigations, including laboratory analyses of soil and/or groundwater samples.

A summary of the 8 AOIs identified for this Site and the recommendations for further action are summarized in Table I.

5. CONCLUSIONS

Eight AOIs have been identified by reviewing GM records and publically available records, and observing site conditions. Further investigation is recommended for six AOIs, as summarized in Table I.

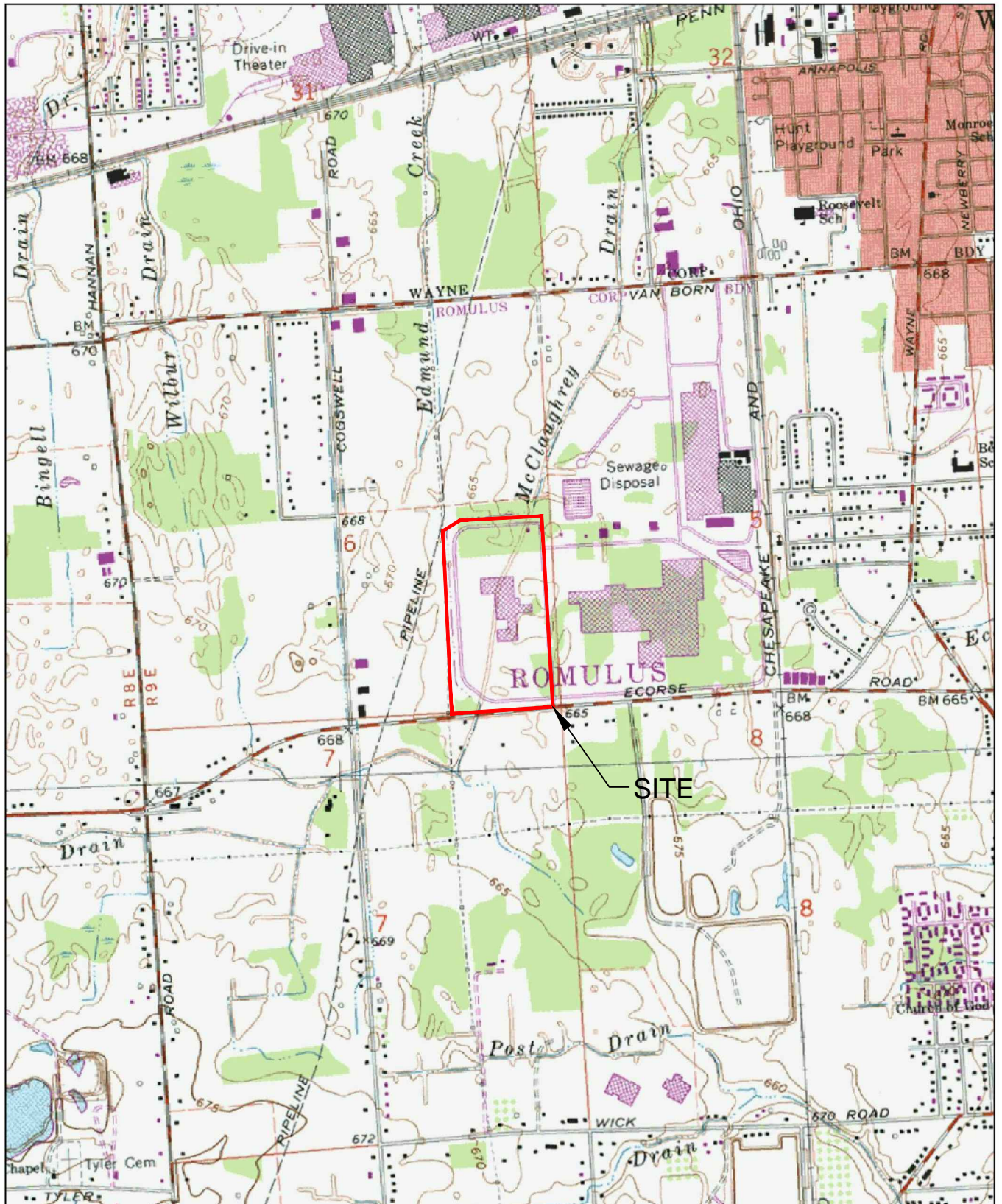
PRIMARY REFERENCES

1. ARCADIS-US, Inc., Remediation Cost Estimate Summary, 27 October 2009, Revised May 2010.
2. City of Romulus, Department of Building & Safety, Demolition Permit No: PDE100011, Project Number: JMP100037, 37350 Ecorse Road, Romulus, MI, 48174, 14 May 2010.
3. Encore Environmental Consortium LLC, Phase II Environmental Site Assessment GMPT – Romulus Engineering Center AST Fuel Distribution Area, 3750 Ecorse Road, Romulus, MI 48174, 31 October 2007.
4. Environmental Data Recourses, Inc., Aerial Photo Decade Package, Inquiry Number 3176434.5, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 4 October 2011.
5. Environmental Data Recourses, Inc., Building Permit Report, Inquiry Number 3176434.11, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 29 September 2011.
6. Environmental Data Recourses, Inc., Sanborn Map Report, Inquiry Number 3176434.3, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 29 September 2011 (no maps available).
7. Environmental Data Recourses, Inc., City Directory Abstract, Inquiry Number 3176434.6, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 4 October 2011.
8. Environmental Data Recourses, Inc., Historical Topographic Map Permit Report, Inquiry Number 3176434.4, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 30 September 2011.
9. Environmental Data Recourses, Inc., Property Tax Map, Inquiry Number 3176434.8, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 29 September 2011.
10. Environmental Data Recourses, Inc., Radius Map Report With GeoCheck®, Inquiry Number 3176434.2s, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 30 September 2011.
11. General Motors Corporation, CPC Romulus Engine Operations, Correspondence to USEPA Region 5, Update on Hazardous Waste Activities Under Interim Part A TSD Permit for MID000809905, 9 April 1988.
12. GM Power Train Division, Correspondence from USEPA Region 5, Visual Site Inspection GM Power Train Division (formerly GMC CPC Romulus Engine OPS) Romulus Engine Operations, MID 000 809 905, 21 January 1992.
13. MDEQ, Air Permit System, SRN M4781, Two Active and two voided permits, 37350 Ecorse Road, Romulus, MI 48174.
14. MDEQ, Underground Storage Tank Database, Registration for Underground Storage Tanks, Facility Number 0036941, CPC Romulus Engineering Center, 37350 Ecorse Road, Romulus, MI 48174, 18 November 1990.

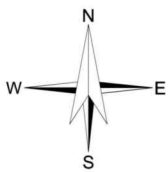
15. MDEQ, Underground Storage Tank Database, Underground Storage Tank Site Assessment Report, Facility Number 36941, General Motors – Power Train Division, 37350 Ecorse Road, Romulus, MI 48174, 7 December 1992.
16. MDEQ, Waste and Hazardous Waste Materials Division, Site Identification and Verification Form, MID000809905, MLC Romulus Engineering Center, 36880 Ecorse Road, Romulus, MI 48174-1395, 29 June 2011.
17. PRC Environmental Management, Inc., Preliminary Site Assessment/Visual Site Inspection General Motors Corporation (GM) Powertrain Division Romulus Engine Operations (Formerly GM Chevrolet-Pontiac-Canada Group, Romulus Engine Operations) Romulus, Michigan, MID 000 809 905 Final Report, 9 July 1992.
18. U.S. Geologic Survey (USGS) Mineral Resources Online Spatial Data, Integrated Geologic Map Databases for the United States: Minnesota, Wisconsin, Michigan, Illinois, and Indiana, <http://pubs.usgs.gov/of/2004/1355/>.

TABLE I
CURRENT CONDITIONS SUMMARY
AREAS OF INTEREST (AOIs) PROPOSED INVESTIGATIONS
RACER SITE #1002
CPC ROMULUS ENGINEERING CENTER

AOI #	AOI Title	Location	Basis For AOI Designation	Description / Components	AOI Approximate Dimensions (ft, unless indicated otherwise) (Length x Width x Depth)	Photos	Materials Managed	Further Action Recommended (Yes or No)
01	Former AST Farm Area	Northeast area of Site	Site walk /RACER documents	Former diesel storage tanks (four 20,000-gallon tanks). Area impacted by release included: area identified as "federally designated wetland", area surrounding tank farm and "wetland", former pump house and sump. Response included installation of French drain and sump for remediation. It is not known whether these components remain at the Site.	"Wetland area" at time of release described as 200x120; French drains described as 15x2.5x3.5 and 30x2.5x3.5; Concrete pad 16x20	8-11, 13-16	Diesel fuel	Yes
02	Former Industrial Waste Pump House	Northeast area of Site	Site walk /Facility drawings	Industrial wastewater conveyance from Romulus Engineering Center via overhead trestle to onsite WWTP at GMPT plant. Staining observed on concrete pad. Former below grade feature, possibly a sump, and staining were observed in the concrete pad.	Concrete pad 16x20; 3x3 (depth unk.)	18-20	Diesel fuel, industrial waste, oily waste	Yes
03	Former Pump House	Northeast area of Site	Site walk /Facility drawings	Feature identified on Site Plan as pump house. Use of pump house unknown; possibly associated with oil or fuel conveyance. Area of former pump house pad was covered by standing water at time of Site reconnaissance and could not be observed.	Dimensions unknown. Area inaccessible at time of Site reconnaissance.	25	Diesel fuel, oils	Yes
04	Evidence of Release in Test Cell "D" Wing Area	Southeast test cell	Site walk	Area of dark staining and oily residue observed on concrete and gravel near northeast corner of former Test Cell "D" Wing. Staining may be associated with demolition or subsequent activities.	4x4	27, 28	Fuel, oil	Yes
05	Evidence of Release in Test Cell "E" Wing Area	Northeast test cell	Site walk	Staining observed on concrete and gravel near southwest area of the Test Cell "E" Wing. Staining may be associated with demolition or subsequent activities.	6x4	31, 32	Fuel, oil	Yes
06	Area of Closed UST	East side of Site, central between Test Cell "E" Wing and Test Cell "D" Wing	MDEQ FOIA - Storage Tank Records	MDEQ Facility ID 00036941. UST installed September 1978, last used/closed in 1992. Closed in place due to proximity to adjacent structures. Filled with cement. Tank Site Assessment performed with no detections of BTEX or PAHs in surrounding soils.	Unknown	22	Used oil	No
07	Former Drum Product Storage Shed	Northwest area of Facility; North of Shipping Dock	Facility drawings	Unknown	Unknown	35	Unknown	Yes
08	GMPT Chip House	Northeast area of GM Powertrain - Romulus Plant 36880 Ecorse Rd.	PA/VSI for GM Powertrain Division Romulus Engine Operations Romulus, Michigan, MID 000 809 905 9 July 1992	RCES document mentions potential for the Chip House to have been present at the Romulus Engineering Center Site; however, the Chip House is located at a neighboring facility. The Chip House is identified as PA/VSI SWMU #7 at the GMPT facility, located at 36880 Ecorse Road, Romulus, MI.	75x45	NA	NA	No



SITE COORDINATES: 42°15'20"N 83°24'32"W



U.S.G.S. QUADRANGLE: WAYNE, MI

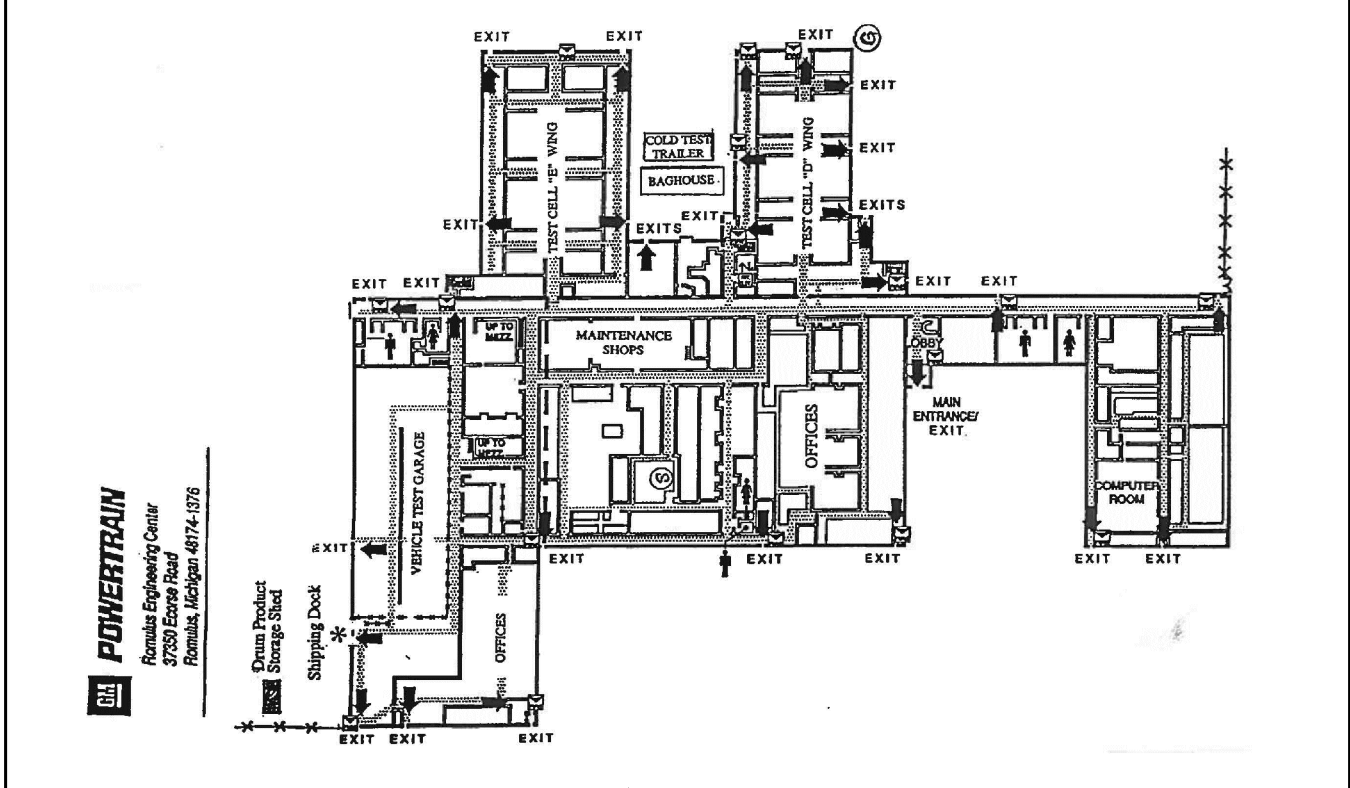
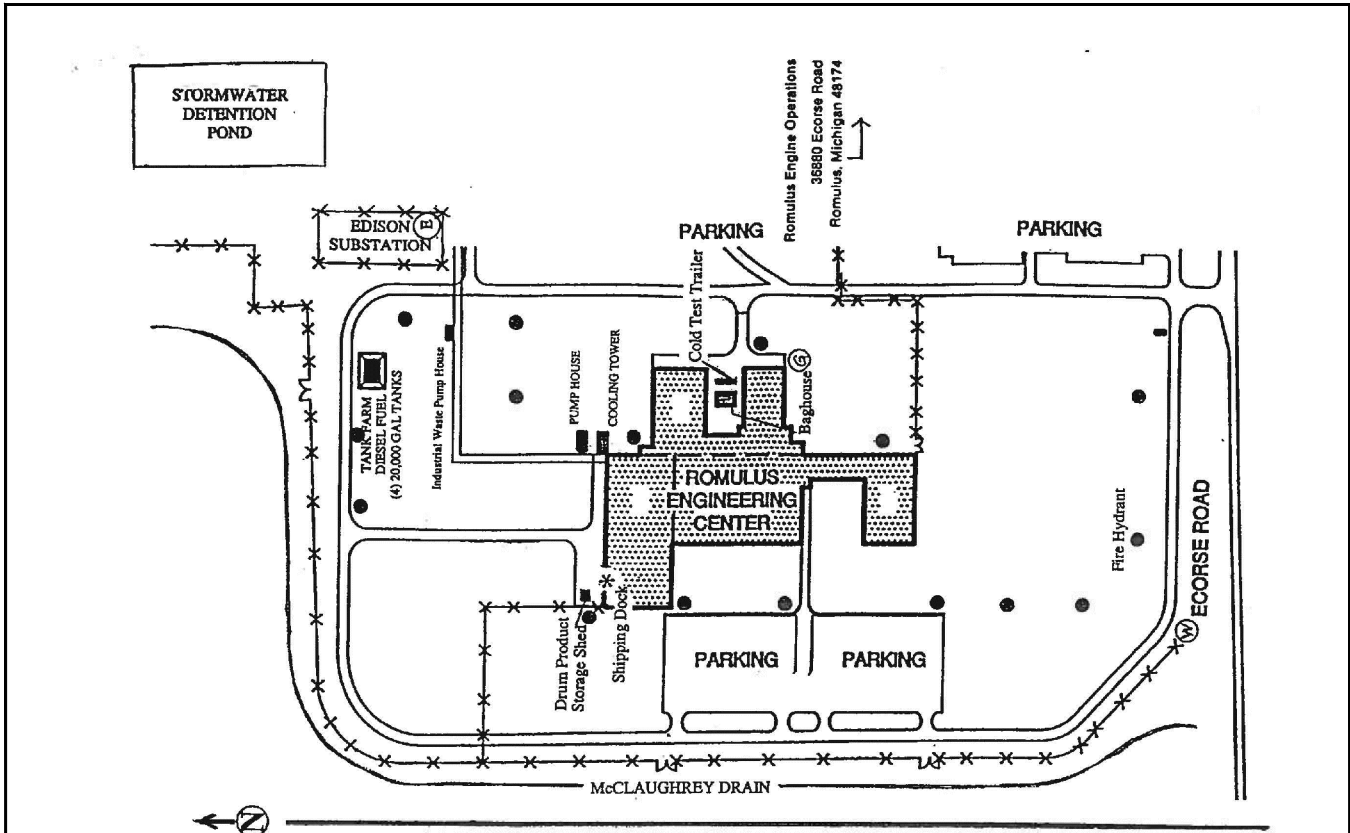
HALEY & ALDRICH

FORMER ROMULUS ENGINEERING CENTER
 RACER SITE ID 1002
 37350 ECORSE ROAD
 ROMULUS, MICHIGAN

SITE LOCUS

SCALE: 1:24,000
 DECEMBER 2011

FIGURE 1



POWERTRAIN
 Romulus Engineering Center
 37350 Ecorse Road
 Romulus, Michigan 48174-1376

NOTES:

1. BASEMAP SOURCE: CITY OF ROMULUS DEPARTMENT OF BUILDING & SAFETY DEMOLITION PERMIT PDE100011, ISSUED MAY 14, 2010.

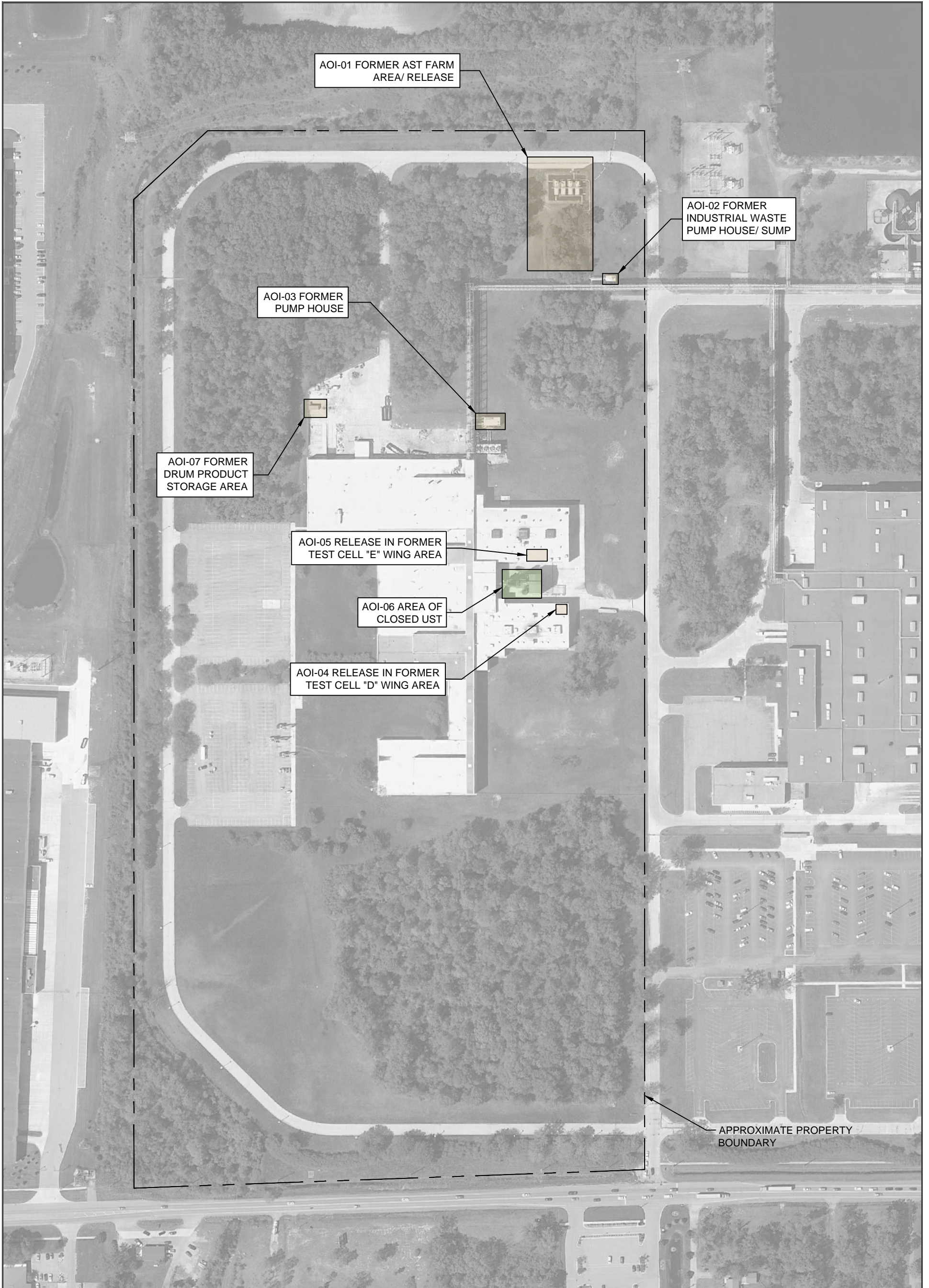
HALEY & ALDRICH FORMER ROMULUS ENGINEERING CENTER
 RACER SITE ID 1002
 37350 ECORSE ROAD
 ROMULUS, MI

SITE PLAN

SCALE: NOT TO SCALE
 DECEMBER 2011

FIGURE 2

G:\37515_RACER\003\CAD\37515_003_SITE_PLAN.DWG



AOI-01 FORMER AST FARM
AREA/ RELEASE

AOI-02 FORMER
INDUSTRIAL WASTE
PUMP HOUSE/ SUMP

AOI-03 FORMER
PUMP HOUSE

AOI-07 FORMER
DRUM PRODUCT
STORAGE AREA

AOI-05 RELEASE IN FORMER
TEST CELL "E" WING AREA

AOI-06 AREA OF
CLOSED UST

AOI-04 RELEASE IN FORMER
TEST CELL "D" WING AREA

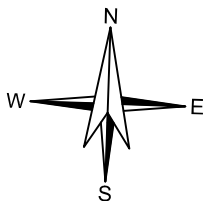
APPROXIMATE PROPERTY
BOUNDARY

LEGEND

- NO FURTHER INVESTIGATION
- FURTHER INVESTIGATION RECOMMENDED

NOTES:

1. AERIAL PROVIDED BY GOOGLE EARTH PRO, DATED MAY 9, 2010.
2. AOI-08 NOT SHOWN ON FIGURE; NOT LOCATED AT THIS SITE.



FORMER ROMULUS ENGINEERING CENTER
RACER SITE ID 1002
37350 ECORSE ROAD
ROMULUS, MI

AOI LOCATIONS

SCALE: AS SHOWN
DECEMBER 2011

FIGURE 3

APPENDIX A
SITE PHOTOGRAPHS



Photograph 1. Entrance to Site from Ecorse Road. Photo taken facing east, along Ecorse Road.



Photograph 2. Swale located on north side of Ecorse Road, south of Site access road. Photo taken facing west.



Photograph 3. Entrance to access road to Site. Gates are maintained locked to deter unauthorized entry. Photo taken facing west.



Photograph 4. Entrance to access road to Site. Photo taken facing west.



Photograph 5. Entrance to access road to neighboring General Motors Power Train (GMPT) plant. Photo taken facing northeast.



Photograph 6. Commercial business (credit union) located on south side of Ecorse Road, across from entrance to Site.



Photograph 7. Industrial business located on north side of Ecorse Road, northwest side of Site.



Photograph 8. (AOI-01) Photo taken at northeastern area of Site, facing south. Gravel is present in former AST area.



Photograph 9. (AOI-01) Area identified by facility personnel as wetland, northeast area of Site, located immediately south of former AST area. Photo taken facing southeast.



Photograph 10. (AOI-01) Close-up of sheen observed in “wetland area” located south of former AST area. Sheen had no noticeable petroleum odor. Sheen was friable and is believed to be associated with biological degradation of organic matter.



Photograph 11. (AOI-01) "Wetland area" south of former AST area. Photo taken facing north.



Photograph 12. Photo taken in northeastern area of Site, facing eastern property boundary (note fence in background). Standing water in former lawn area north of former facility structure.



Photograph 13. (AOI-01) Sections of pipe observed crossing “wetland area” located south of former AST area.



Photograph 14. (AOI-01) Section of pipe observed in “wetland area” located south of former AST farm. Photo taken at northern edge of wetland area, facing south.



Photograph 15. (AOI-01) Pump pad concrete pad, located southeast of AST area. Photo taken facing west.



Photograph 16. (AOI-01) Pump pad concrete pad, located southeast of AST area. Photo taken facing east.



Photograph 17. Photo taken facing east at location of former overhead trestle to GMPT.



Photograph 18. (AOI-02) Concrete pad at former industrial waste pump house. Note staining on concrete. Photo taken from southwest edge of feature, facing east.



Photograph 19. (AOI-02) Concrete pad at former industrial waste pump house. Note staining on concrete and sump feature. Photo taken from northeast edge of feature, facing west. Red colored objects appear to be metal fragments of a former hydrant.



Photograph 20 (AOI-02) Close-up of staining on concrete pad at former industrial waste pump house.



Photograph 21. Standing water and vegetation that has developed in place of former lawn/grassy area (as observed in aerial photos) located north of former Test Cell "E" Wing. Photo taken facing west, toward former vehicle test garage.



Photograph 22. Standing water and vegetation that has developed in former lawn/grassy area, located north of former Test Cell "E" Wing. Photo taken facing southwest.



Photograph 23. Standing water and vegetation that has developed in former lawn/grassy area, located north of former east entrance to facility. Photo taken facing south.



Photograph 24. Standing water in wooded area located immediately south of former Test Cell "D" Wing.



Photograph 25. (AOI-06) Access to east area of facility, leading to area of baghouse, cold test trailer and closed UST. Photo taken facing east.



Photograph 26. Concrete footprint of former facility. Photo taken facing west from area approximately central to "D" and "E" Test Cell Wings.



Photograph 27. (AOI-04) Dark, oily staining observed on concrete in eastern portion of former facility. Location believed to be outside of southeast corner of Test Cell "D" Wing. Material may be associated with building demolition or post-demolition activities.



Photograph 28. (AOI-04) Note dark, oil staining on concrete in eastern portion of former facility. Photo taken facing south. Location believed to be outside of southeast corner of Test Cell "D" Wing.



Photograph 29. Concrete tile features in footprint of former facility. Areas believed to be former dynamometer testing areas and tiled aisles, Test Cell "E" Wing. Photo taken near eastern area of former facility, facing west.



Photograph 30. Light staining observed on concrete in footprint of former facility.



Photograph 31. (AOI-05) Staining observed on concrete and gravel in footprint of former facility. Location believed to be northeast area of Test Cell "E" Wing.



Photograph 32. (AOI-05) Staining observed on concrete and gravel in east central portion of former facility footprint. Location believed to be northeast area of Test Cell "E" Wing. Photo taken facing east.



Photograph 33. Storm drain located at edge of former exterior concrete parking area, north side of former facility footprint.



Photograph 34. Southwestern-most corner of former facility. Photo taken facing south. Objects in background believed to be components of former fire suppression system.



Photograph 35. (AOI-07) Area of former shipping dock and drum storage shed. Photo taken facing west.



Photograph 36. Photo taken at northwestern area of Site, through fence facing wooded tract located to north of Site.



Photograph 37. Photo taken from parking lot located on west side of Site, facing east across former facility footprint.



Photograph 38. Photo of northwestern boundary of Site, facing neighboring industrial site on west.