



Department of  
Environmental  
Conservation

# FINAL STATEMENT OF BASIS CORRECTIVE MEASURES SELECTION

Former Lockheed Martin-French Road Facility

Operable Units 01 & 02

Site No. 633036A

EPA ID No. NYD000521971

Utica, Oneida County

March 2015

PREPARED BY

DIVISION OF ENVIRONMENTAL REMEDIATION

# **DECLARATION STATEMENT – STATEMENT OF BASIS FINAL CORRECTIVE MEASURES SELECTION**

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Former Lockheed Martin- French Road Facility  
Utica, Oneida County  
USEPA ID No. NYD000521971  
DEC Site No. 633036A  
OU1 and OU2

March 2015

## **Statement of Purpose and Basis**

This document presents the final corrective measures for the Former Lockheed Martin Facility Site as set forth in the Statement of Basis (SB) for the site. The final corrective measures were selected in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Parts 373.

The Statement of Basis (SB) was made available for public comment between December 29, 2015 and February 12, 2015. Comments were received on the corrective measures proposed in the Statement of Basis (SB). A Responsiveness Summary that includes responses to those comments was prepared and is included in Appendix A of this final Statement of Basis.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former Lockheed Martin Facility site and is included in Appendix B of the final Statement of Basis (SB).

## **Description of Final Corrective Measures**

The elements of the selected final corrective measures are as follows:

### ***1. Remedial Design***

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

## ***2. Excavation***

Excavation and off-site disposal of contaminant source areas, including:

- Soil exceeding the soil cleanup objectives for the protection of groundwater in the FNPD yard in the northeast corner of the site. Based on past sampling, the total excavated area will be approximately 2,100 square feet, to a depth of approximately 15 feet. Approximately 1,170 cubic yards of soil will be removed from the site.
- Sampling also identified three other isolated locations where commercial soil standards were exceeded in shallow (0-0.5 feet) soil samples. These areas will also be excavated to a depth of one foot. Side wall and bottom confirmation soil sampling will be required to achieve the commercial SCOs. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and complete the backfilling of the excavation. The top six inches of soil will be of sufficient quality to maintain a vegetation layer

## ***3. Cover System***

A site cover consisting of buildings, pavement, and sidewalks currently exists over the vast majority of the eastern portion of the site (approximately 21 acres (40%) of the site). It will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

The western portion of the site (approximately 10 acres) remains undeveloped and has not been used for site operations. This area of the site was evaluated using field inspection, geophysical techniques and some limited sampling that shows the area achieves unrestricted use SCOs for VOCs, SVOCs, metals and PCBs. Based on the results, the intent is to separate this parcel from the site after the Statement of Basis is finalized.

The center of the site (approximately 24 acres) consists of a partially wooded area and paved parking area. Geophysics, test pits and surface sampling have been performed. One isolated area exceeds commercial SCOs and that area will be addressed by excavation. Upon post-excavation confirmation of commercial SCOs, this portion of the site will achieve commercial SCOs and a maintenance of a cover system will not be required.

#### ***4. Continued Operation of the Sub-Slab Vapor Mitigation System***

The sub-slab depressurization system in the north-eastern portion of the Main Manufacturing building will be required to continue operation to prevent the migration of vapors into the building from groundwater until NYSDEC, in consultation with NYSDOH, determines that it is no longer needed.

#### ***5. Continued Operation of the Groundwater Collection & Treatment System***

Groundwater collection and treatment has been implemented to treat contaminants in groundwater and to ensure contaminated groundwater does not migrate off-site. Collection of the groundwater will continue until groundwater standards are achieved in the groundwater monitoring wells.

#### ***6. Institutional Control***

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

#### ***7. Site Management Plan***

A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The environmental easement discussed above

Engineering Controls: The site cover system, groundwater collection and treatment system and the sub-slab depressurization (and associated vapor treatment) system discussed above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining groundwater contamination;
  - a provision for further investigation (and remediation if necessary) to refine the nature and extent of contamination in the following areas where access was previously hindered: under the Main Manufacturing Building and under the maintenance building and pole barn in the Former Northern Perimeter Ditch area if and when the buildings are demolished or when the buildings become inactive;
  - descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
  - a provision for evaluation of the potential for soil vapor intrusion should the on-site buildings (pole barn and one story maintenance building) become occupied and for any new buildings developed on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion;
  - provisions for the management and inspection of the identified engineering controls;
  - maintaining site access controls and Department notification; and
  - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater, soil vapor and indoor air to assess the performance and effectiveness of the remedy, including a provision for implementing actions recommended to address exposures;
  - a schedule of monitoring and frequency of submittals to the Department; and
  - monitoring for vapor intrusion for any new buildings developed on the site or if existing buildings (pole barn and one story maintenance building) become reoccupied, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
  - maintaining site access controls and Department notification; and
  - providing the Department access to the site and O&M records.

Based on the administrative record compiled for this corrective action the Department, in consultation with NYSDOH, has determined that the selected remedy at this site is appropriate and will be protective of human health and the environment.

**New York State Department of Health Acceptance**

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

**Declaration**

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 30, 2015

Date



Robert W. Schick, P.E., Director  
Division of Environmental Remediation

# FINAL STATEMENT OF BASIS

Former Lockheed Martin-French Road Facility  
Utica, Oneida County NY  
EPA ID: NYD 000521971  
Site No. 633036A  
OU1 and OU2

March 2015

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## INTRODUCTION

This Statement of Basis (SB) selects continued operation of the groundwater treatment and collection system, continued operation of the sub-slab depressurization system, continued monitored natural attenuation of groundwater, institutional controls consisting of an environmental easement and site management plan and source removal from an isolated area in the northeast corner of the site as the remedy to address environmental contamination associated with the Resource Conservation and Recovery Act (RCRA) corrective action at the former Lockheed Martin-French Road site. This remedy is intended to address groundwater contamination, soil vapor contamination below the main building, a small source area (known as the Former Northern Perimeter Ditch yard) where contaminated soil remains in place near the northeast boundary of the site, and three isolated areas where surface soils exceed commercial use soil clean-up objectives (SCOs).

The purpose of this SB is to provide background information related to the site contamination and investigation, and to present the remedy selected by the New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), and the basis for its selection.

## FACILITY BACKGROUND

**Location:** The former Lockheed Martin - French Road site is located in a mixed use urban area, approximately three miles southwest of downtown Utica. The site is at the junction of French Road and Chenango Road, just off NYS Route 12. The site is located within two municipalities, the City of Utica and the Town of New Hartford (Figure 1).

**Site Features:** The site consists of approximately 55 acres. The primary site feature is a 500,000 square foot building which is now occupied by Con-Med, a medical supplies manufacturer. The extreme western portion of the site is wooded; the areas immediately west and east of the main building are used for parking (Figure 2).

**Current Zoning:** The site is zoned for light industrial use or planned development extraordinary by the City of Utica. The parcels in the Town of New Hartford are zoned for manufacturing. Adjacent to the site are an office park to the north, commercial to the east, road frontage to the south and a NYSDOT maintenance facility to the west. Existing zoning allows light industrial or commercial use of the property.

Past Uses of the Site: General Electric (GE) bought the site in the early 1950's, and used it for manufacturing, assembling and testing electrical components for the defense and aerospace industry. GE sold its aerospace business in 1993 to Martin Marietta, which merged with Lockheed in 1995. Groundwater in the northeast portion of the site, known as the Solvent Dock area, and along the former northern perimeter ditch has been impacted by volatile organic compounds (VOCs). The former solvent dock once included a 275 gallon tank that stored waste spent solvents. The tank was removed in 1990. The former ditch was an open drainage swale which received storm water from the area north of the manufacturing building and conveyed the water to a manhole before discharge to the municipal storm sewer. GE began an investigation in this area in 1991. A groundwater collection and treatment system was installed in 1996, which utilizes an air-stripper to remove VOCs prior to discharge to the municipal storm water system. The system continues to operate.

A two acre site known as the West Lot is located within the site boundaries. The West Lot, where solvents were dumped and burned in the 1950s and 1960s, has been remediated as a separate site under the State Superfund program (Site #633036) It is currently in site management as a class 4 site. Remediation included excavation of contaminated soil and pumping and treating contaminated groundwater. These steps were taken in the 1990's to early 2000's. Although the West Lot has been previously treated as a separate site, it is the Department's intent to develop a single site management plan for both the West Lot and the remainder of the French Road property

#### OPERABLE UNITS:

The site has been managed as two OUs.

OU1 includes the majority of the site and includes several areas of concern, among them the Solvent Dock Area located on the north side of the main manufacturing building, the Main Manufacturing Building, and the Greater West Lot. The Solvent Dock Area was the location of a former underground solvent tank that was found to be in poor condition when removed in 1991. Groundwater contamination extends beneath the northeastern portion of the Main Manufacturing building. The Greater West Lot is located west of the main manufacturing building and includes a parking lot, an undeveloped 10 acre parcel at the extreme western boundary of the property and the area surrounding the former 2 acre burn pit known as the West Lot (Site 633036). Investigation and remediation efforts at the West Lot were previously completed as part of the State Superfund site. (Figure 3).

OU2 includes a smaller portion of the site known as the Former Northern Perimeter Ditch (FNPD) Area. It encompasses a rectangular area along the property border north of the existing site maintenance building and enclosed metal storage building (pole barn) and south of the perimeter fence.

Site Geology and Hydrology: There is a fill layer (approximately 5-10 feet (ft) thick) and undifferentiated overburden both consisting of silt, sand, and gravel (max thickness 20 ft), underlain by till consisting of dense gray-brown silty clay with fine sand and gravel (approximately 20-40 ft thick) that includes some gray clay lenses. The top of Utica Shale bedrock depth is approximately 30-52 feet below grade. Groundwater at the site is shallow across the site, ranging from 4-10 feet below grade, with the deeper groundwater near the southwest border of the site. Groundwater generally flows northeast and east in the eastern half of the site and to the south in the western half of the site.



## **ENFORCEMENT STATUS**

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Lockheed Martin

Lockheed Martin signed a Consent Order for Corrective Action (CO 6-20080321-5) relating to the Facility in June of 2008. The Order obligates the responsible party to perform corrective measures and provide financial assurance for completing corrective action. Five specific areas of concern listed in the Order are on-site soils, groundwater, soil vapor, evaluation of the pre-existing groundwater treatment system and miscellaneous tanks. Soil vapor and miscellaneous tanks were primarily located in OU1; soils primarily in OU2 and groundwater and the pre-existing system groundwater treatment system in both of the OUs. Additional detail is included in the Attachments to the Order.

## **ENVIRONMENTAL ASSESSMENT**

Nature and Extent of Contamination:

Based on investigations of groundwater, soil, soil vapor and indoor air conducted since 1991 for VOCs, semi-volatile organic compounds (SVOCs), metals and PCB/pesticides, the primary contaminants of concern are PCBs, tetrachloroethene (also called perchloroethene (PCE)), trichloroethene (TCE) and the breakdown products including cis-dichloroethene (DCE) and chloroethene (vinyl chloride VC).

Groundwater: In the 1990's, groundwater concentrations up to 11,000 parts per billion (ppb) PCE and 830 ppb TCE were found. Additional groundwater monitoring conducted more recently identified TCE in groundwater up to 5,500 ppb and cis-DCE up to 35,000 ppb. The groundwater standard for both TCE and cis-DCE is 5 ppb. No other contaminants of concern were found in groundwater and no contaminants are leaving the site via the groundwater pathway.

Soil: Contaminant concentrations for soils in the northeast corner of the site in the vicinity of the Former Northern Perimeter Ditch Area have been shown to range up to 210 ppm for PCE and 36 ppm for TCE. These contaminants were found between 7 and 12 feet below the surface. Due to the levels of groundwater contamination for these compounds, the protection of groundwater SCOs of 1.3 ppm for PCE and 0.47 ppm for TCE are applicable in this area. Soil sampling along the property boundary in this area verified that these contaminants were not present at the property boundary, so off-site soil contamination is not a concern. In addition, surface soil sampling in 2013 identified three locations where the commercial SCO of 1 ppm of PCBs is exceeded. The maximum PCB concentration measured was 3.5 ppm. (See Figure 4 and 5). No other contaminants in soil exceeded Commercial SCOs.

The western portion of the site (approximately 10 acres) remains undeveloped and has not been used for site operations. This area of the site was evaluated using field reconnaissance and geophysical techniques and some limited sampling that shows the area achieves unrestricted use SCOs for VOCs, SVOCs, metals and PCBs (pesticides were not analyzed as they were not a concern). Based on the results, the intent is to separate this parcel from the site after the Statement of Basis is finalized.

Soil Vapor and Indoor Air: Soil vapor underlying portions of the on-site building have been impacted by TCE and PCE at levels that warranted vapor mitigation. Initial indoor air and sub-slab soil vapor samples were taken in 2006. Sub-slab TCE ranged to 680 ug/m<sup>3</sup>, PCE up to 21,000 ug/m<sup>3</sup>. Indoor air values were up to TCE 73 ug/m<sup>3</sup> and PCE 97 ug/m<sup>3</sup>. However, TCE was in use in the facility at that time. Off-site soil vapor was sampled and there is no concern for off-site migration of soil vapor.

## **HEALTH ASSESSMENT**

The site is partially fenced, which restricts public access to portions of the site. However, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A sub-slab depressurization system (systems that ventilate/remove the air beneath the building) has been installed in a portion of the on-site building to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the building. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

## **INTERIM CORRECTIVE MEASURES**

Groundwater: The contaminated groundwater is currently collected by a groundwater collection system. The system was installed in 1996 and remains operational. The system consists of three legs of perforated pipe that direct groundwater to manholes where it is then pumped through an air stripper to remove the chlorinated VOCs. The clean wastewater is discharged through a NYSDEC regulated wastewater discharge point. A groundwater monitoring program is also in place.

The groundwater collection system was designed and installed to address areas below the main manufacturing building, the east parking lot and the former northern perimeter ditch. Groundwater is collected via collection trenches designed to capture the vertical fluctuation of the groundwater table, and directed to manholes where it is pumped to the treatment system. Collection of the groundwater will continue until groundwater standards are achieved in the groundwater monitoring wells.

The extracted groundwater is treated using air stripping to remove volatile contaminants. The groundwater contacts an air stream to volatilize contaminants from groundwater to air. The extracted air stream containing the volatile contaminants is treated using vapor-phase granular activated carbon prior to discharge to the atmosphere. Following treatment, the groundwater is discharged to the municipal stormwater system in accordance with a NYS SPDES permit.

Soil Vapor: As a result of elevated concentrations of VOCs, primarily TCE and PCE, in sub-slab soil vapor samples and indoor air, a sub-slab depressurization system (SSDS) was installed in the eastern portion of the large on-site industrial building, where manufacturing operations had previously been located, in July 2008. Soil vapor sampling conducted in the remaining portions of the building did not indicate a concern related to soil vapor intrusion.

In 2011, the SSDS was expanded and now consists of eight (8) sub-slab depressurization sumps connected to a regenerative vacuum blower and the effluent air is treated through granular activated carbon. It has been verified that the SSDS creates sufficient negative pressure differential under the eastern portion of the building to prevent soil vapor intrusion (Figure 6).

In addition, sampling indicates that there has been a significant reduction in the indoor air concentrations of both PCE and TCE. However, in 2013, 4 of 15 locations exhibited TCE indoor air values from 1.8 to 2.5 ug/m<sup>3</sup>. These detections, which are below the current air guidance value of 5 ug/m<sup>3</sup> but above expected background levels, are most likely attributed to a residual presence of TCE in building materials from the past use of TCE at the facility and are not the result of soil vapor intrusion.

### **SUMMARY OF ALTERNATIVES**

Several alternatives to address the remaining site contamination were evaluated. To address contaminated groundwater, options included continued operation of the groundwater collection and treatment system, as well as expansion of the collection system. Use of in-situ groundwater treatment was evaluated. During the pilot test, the radius of influence (meaning the sideways migration of the injected solution) was determined to be five feet, and the amount of substrate injected over six days was limited to only 320 gallons. These parameters reflect tight soils that limit contact between injected compound and the contaminated groundwater, making in-situ groundwater treatment infeasible.

To address VOC soil contamination in the FNPD yard, No Excavation, Partial (Focused) Excavation and Complete Soil Excavation alternatives were considered. All alternatives included continued operation of the groundwater collection and treatment system, continued operation of the sub-slab depressurization system, institutional controls, site management and continued soil vapor and groundwater monitoring as part of the final remedy. Alternatives ranged in cost from \$979,000 (no excavation), \$1,385,000 (partial excavation) and \$1,969,000 (complete excavation). The Corrective Measures Study Report describes alternatives, considerations and expected costs in more detail.

The primary difference in remedial alternatives for this site would be the amount of soil excavation needed in the FNPD yard. The Department has selected a remedy for the site that includes complete excavation of the identified soil contamination to achieve the Groundwater Protection SCOs. See Figure 5. The Department has determined that complete excavation of this source area is necessary based on its accessibility and the concentrations of VOCs that significantly exceed protection of groundwater SCOs for soil. By removing this source area it is expected that the groundwater contamination in this area will decrease rather than remain at elevated levels if no action is taken. As noted above, the existing treatment systems for contaminated groundwater and soil vapor will continue operation, and institutional controls and site management will ensure that these systems are maintained and operated effectively.

### **SCOPE AND EVALUATION OF CORRECTIVE MEASURE(S)**

The Department has selected the following remedy for the site.

The selected remedy will require full excavation of the FNPD yard source area (approximately 2,100 square feet to a depth of 15 feet or 1,170 cubic yards) containing chlorinated VOCs, continued operation of the groundwater collection and treatment system, excavation of isolated surface soils, maintenance of the existing site cover system, continued operation of the sub-slab depressurization system, institutional

controls and site management as the final remedy. This option addresses the source area, located between 7 and 12 feet deep, near the ditch, and continues treatment of groundwater prior to its discharge from the site. The sub-slab depressurization system will continue operation to prevent exposures to soil vapor within the north-eastern portion of the Main Manufacturing Building. Both the groundwater and sub-slab depressurization systems will be operated, maintained and monitored. Institutional controls in the form of an environmental easement and site management plan will ensure these controls continue and remain effective.

Please refer to the attached RAO table which describes how the remedy achieves each RAO.

**REMEDIAATION OBJECTIVES**

The remedial objectives and actions to attain them are found in the following table:

Remedial Objectives	Remedial Action
1. Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards	<p>Will be achieved through an institutional control (environmental easement) and Site Management Plan that will prohibit groundwater use at the Site.</p> <p>Achieved by availability and connection of the site to the municipal public water supply.</p>
2. Prevent contact with, or inhalation of volatiles from, contaminated groundwater	<p>The Site Management Plan will include protocols to safely handle groundwater during potential future excavation activities to protect construction and utility workers</p> <p>The Site Management Plan will require continued monitoring of groundwater to assess contaminant concentrations over time and ensure the plume does not migrate off-site.</p> <p>An interim corrective measure consisting of a sub-slab depressurization system has already been implemented to prevent exposures or the potential for exposures as a result of soil vapor intrusion in the north-eastern portion of the main manufacturing building. The Site Management Plan will require continued operation, maintenance and monitoring of this system.</p> <p>The Site Management Plan will include a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site, along with existing site buildings (maintenance building and pole barn) including provisions for implementing actions recommended to address exposures related to soil vapor intrusion</p>
3. Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.	<p>An interim corrective measure (a groundwater collection and treatment system) has been implemented at the site. The Site Management Plan will include provisions for periodic groundwater monitoring to monitor effectiveness of the collection system with regard to concentrations and plume boundaries.</p>

Remedial Objectives	Remedial Action
4. Remove the source of ground or surface water contamination	Source removal (excavation) of a source area identified in the Former Northern Perimeter Ditch Area where soil exceeds protection of groundwater and commercial soil cleanup objectives (SCOs).
5. Prevent the discharge of contaminants to surface water	An interim corrective measure (a groundwater collection and treatment system) has been implemented at the site. Contaminated groundwater is collected and undergoes air-stripping to remove volatile chemical contaminants. Treated groundwater is monitored in accordance with a NYS water discharge permit prior to discharge to the municipal stormwater system.
6. Prevent ingestion/direct contact with contaminated soil	<p>Excavation of a source area identified in the Former Northern Perimeter Ditch Area where soil exceeds protection of groundwater and commercial soil cleanup objectives (SCOs).</p> <p>An existing Restrictive Use Agreement (RUA) prohibits use of the site for residential purposes.</p> <p>Soils in isolated locations where commercial soil cleanup objectives are exceeded will be excavated.</p> <p>The existing Site Cover System (consisting of buildings, asphalt and clean soil) will be maintained on the eastern portion of the site.</p>
7. Prevent inhalation exposure from contaminants volatilizing from contaminants in soil.	<p>Excavation of a source area identified in the Former Northern Perimeter Ditch Area where soil exceeds protection of groundwater and commercial soil cleanup objectives (SCOs).</p> <p>An interim corrective measure consisting of a sub-slab depressurization system has already been implemented to prevent exposures or the potential for exposures as a result of soil vapor intrusion in the north-eastern portion of the main manufacturing building. The Site Management Plan will require continued operation, maintenance and monitoring of this system.</p> <p>The Site Management Plan will include a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site, along with existing site buildings (maintenance building and pole barn) including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.</p>
8. Prevent migration of contaminants that would result in groundwater or surface water contamination	<p>Source removal (excavation) of a source area identified in the Former Northern Perimeter Ditch Area where soil exceeds protection of groundwater soil cleanup objectives and commercial (SCOs).</p> <p>Soils in isolated locations where commercial soil cleanup objectives are exceeded will be excavated</p>
9. Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site	An interim corrective measure consisting of a sub-slab depressurization system has already been implemented to prevent exposures or the potential for exposures as a result of soil vapor intrusion in the north-eastern portion of the main manufacturing building. The Site Management Plan will require continued operation, maintenance and monitoring of this system.

Remedial Objectives	Remedial Action
	The Site Management Plan will include a provision for evaluation of the potential for soil vapor intrusion should the on-site buildings (pole barn and one story maintenance building) become occupied and for any new buildings developed on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion

## **FINAL CORRECTIVE MEASURES**

This remedy addresses remaining environmental contamination at the former Lockheed Martin –French Road site. The elements of the final corrective measures address groundwater contamination, soil vapor below the north-eastern portion of the main building (and possible future soil vapor concerns in other parts of the site), and excavation of contaminated soil near the northeast corner of the site. Provisions for institutional controls and site management are also included.

### ***1. Remedial Design***

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

### ***2. Excavation***

Excavation and off-site disposal of contaminant source areas, including:

- Soil exceeding the soil cleanup objectives for the protection of groundwater in the FNPD yard in the northeast corner of the site. Based on past sampling, the total excavated area will be approximately 2,100 square feet, to a depth of approximately 15 feet. Approximately 1,170 cubic yards of soil will be removed from the site.

- Sampling also identified three other isolated locations where commercial soil standards were exceeded in shallow (0-0.5 feet) soil samples. These areas will also be excavated to a depth of one foot. Side wall and bottom confirmation soil sampling will be required to achieve the commercial SCOs. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and complete the backfilling of the excavation. The top six inches of soil will be of sufficient quality to maintain a vegetation layer

### ***3. Cover System***

A site cover consisting of buildings, pavement, and sidewalks currently exists over the vast majority of the eastern portion of the site (approximately 21 acres (40%) of the site). It will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

The western portion of the site (approximately 10 acres) remains undeveloped and has not been used for site operations. This area of the site was evaluated using field inspection, geophysical techniques and some limited sampling that shows the area achieves unrestricted use SCOs for VOCs, SVOCs, metals and PCBs. Based on the results, the intent is to separate this parcel from the site after the Statement of Basis is finalized.

The center of the site (approximately 24 acres) consists of a partially wooded area and paved parking area. Geophysics, test pits and surface sampling have been performed. One isolated area exceeds commercial SCOs and that area will be addressed by excavation. Upon post-excavation confirmation of commercial SCOs, this portion of the site will achieve commercial SCOs and a maintenance of a cover system will not be required.

### ***4. Continued Operation of the Sub-Slab Vapor Mitigation System***

The sub-slab depressurization system in the north-eastern portion of the Main Manufacturing building will be required to continue operation to prevent the migration of vapors into the building from groundwater until NYSDEC, in consultation with NYSDOH, determines that it is no longer needed.

### ***5. Continued Operation of the Groundwater Collection & Treatment System***

Groundwater collection and treatment has been implemented to treat contaminants in groundwater and to ensure contaminated groundwater does not migrate off-site. Collection of the groundwater will continue until groundwater standards are achieved in the groundwater monitoring wells.

## **6. Institutional Control**

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

## **7. Site Management Plan**

A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed above.

Engineering Controls: The site cover system, groundwater collection and treatment system and the sub-slab depressurization (and associated vapor treatment) system discussed above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining groundwater contamination;
- a provision for further investigation (and remediation if necessary) to refine the nature and extent of contamination in the following areas where access was previously hindered: under the Main Manufacturing Building and under the maintenance building and pole barn in the Former Northern Perimeter Ditch area if and when the buildings are demolished or when the buildings become inactive;
- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion should the on-site buildings (pole barn and one story maintenance building) become occupied and for any new buildings developed on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.



- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - o monitoring of groundwater, soil vapor and indoor air to assess the performance and effectiveness of the remedy, including a provision for implementing actions recommended to address exposures;
  - o a schedule of monitoring and frequency of submittals to the Department; and
  - o monitoring for vapor intrusion for any new buildings developed on the site or if existing buildings (pole barn and one story maintenance building) become reoccupied, as may be required by the Institutional and Engineering Control Plan discussed above.
  
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
  - o compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
  - o maintaining site access controls and Department notification; and
  - o providing the Department access to the site and O&M records.

Based on the administrative record compiled for this corrective action the Department, in consultation with NYSDOH, has determined that the remedy at this site is appropriate and will be protective of human health and the environment.

The estimated cost for implementation of the remedy is \$1,969,000. The estimated capital costs are \$1,089,000 and the operation and maintenance costs for thirty years are estimated at \$880,000.

### **PUBLIC PARTICIPATION**

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Utica Public Library  
303 Genesee Street  
Utica, NY 13501

NYSDEC Central Office  
625 Broadway – 12<sup>th</sup> Floor  
Albany, NY 12233-7017

Information about the comment period and citizen participation actions for this site is found in the responsiveness summary section of the Statement of Basis (see Appendix A).

### **Receive Site Citizen Participation Information by Email**

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>.

# **APPENDIX A**

## **Responsiveness Summary**

# RESPONSIVENESS SUMMARY

## Former Lockheed Martin Facility Corporation Utica, Oneida County Site No.633036A

The Statement of Basis for the Former Lockheed Martin Facility site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was placed in the document repository on December 23, 2014.

This responsiveness summary responds to all questions and comments related to the Statement of Basis that were raised during the public comment period, which ran from December 29, 2014 to February 12, 2015. The following are the written comments received, with the Department's responses:

*Stantec Consulting Services Inc. submitted a letter on behalf of Lockheed Martin, dated February 12, 2015, which included the following comments related to the Statement of Basis (the comments are presented verbatim as received):*

Comment 1: Page 6, under the heading “Remediation Objectives,” in the table summarizing remedial objectives and actions: Item 2, 4th paragraph indicates “for any future buildings developed on the site,..”.  
Comment: This sentence should read “for any future **occupied** buildings developed on the site,..”

Response 1: The evaluation (of the potential for soil vapor intrusion for any future buildings developed on the site) takes into account whether or not the building is occupied when determining whether additional actions are needed.

Comment 2: Page 9, Item #2 – “Excavation,” first bullet: “Soil exceeding the soil cleanup objectives for the protection of groundwater in the FNPD yard in the northeast corner of the site. Based on past sampling, the total excavated area will be approximately 2,100 square feet, to a depth of approximately 15 feet. Approximately 1,170 cubic yards of soil will be removed from the site.”

Comment: It may not be a valid assumption that all soil within the identified “footprint” of contamination or to the prescribed depth of 15 ft. is impacted at “exceedance” levels that warrant removal and offsite disposal. It is our opinion that the actual limits of the impacted area and proposed excavation should be more thoroughly evaluated through additional subsurface exploration prior to implementing the remedy. A series of test borings and/or test pits with associated soil sampling/analyses will provide a more focused characterization of

conditions and may result in a smaller area(s) of impact that warrant excavation. Accordingly, Lockheed Martin proposes to perform a pre-design subsurface investigation, the details of which would be provided to NYSDEC/NYSDOH in advance for review and approval. Results of that investigation would then be used to further define or refine the area for remedial actions.

It may also be feasible to segregate soils into distinct stockpiles during excavation based on field screening with a photoionization detector (PID), and the resulting piles could then be sampled and analyzed (in accordance with guidance provided in NYSDEC's DER-10 guidance document) to determine if the soils actually exceed Protection of Ground Water SCOs. Stantec has employed this approach at other cleanup sites under NYSDEC oversight.

Response 2: The estimated quantities noted in the Statement of Basis were taken from the Corrective Measures Study submitted by Lockheed Martin. The Corrective Measure Implementation Plan will include details of any pre-design studies and design implementation specifics (such as soil segregation and waste disposal protocols).

Comment 3: Page 9, Item #2 – “Excavation,” second bullet: “Sampling also identified three other isolated locations where commercial soil standards were exceeded in shallow (0-0.5 feet) soil samples. These areas will also be excavated to a depth of one foot. Side wall and bottom confirmation soil sampling will be required to achieve the commercial SCOs. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and complete the backfilling of the excavation. The top six inches of soil will be of sufficient quality to maintain a vegetation layer.”

Comment: Lockheed Martin disagrees with the requirement for removal of soil at the locations where PCBs were detected at levels above Commercial SCOs but below Industrial SCOs, because these soils do not pose an unacceptable risk of harm under the current Industrial site use. It is noted that requirements of the Cover System obligate that site redevelopment install soil cover as necessary to allow for soil that meets commercial use SCOs. As this provision will protect users against the potential for more sensitive use in the future, it is unclear as to what objective is achieved by removing these limited soils under current industrial use.

Response 3: In accordance with 375-1.8(f)(9), soil remedies are intended to address current or reasonably anticipated future use. As indicated in the Statement of Basis, the existing zoning of the site allows light industrial or

commercial uses. In addition, the areas where commercial soil cleanup objectives exceeded are shallow and accessible, meaning that they can be addressed for nominal cost as part of the larger scale soil excavation.

Comment 4: Page 9, item #3 – “Cover System,” first paragraph: “It will be maintained to allow for commercial use of the site. Any site redevelopment...”

Comment: This entry should read “It will be maintained to allow for **potential** commercial use of the site. Any **commercial** site redevelopment...”

The above “Cover System” edits are provided to clarify that the site’s current use is industrial and soil meets industrial SCOs. A cover system may be useful under changed future conditions to commercial use but is not necessary for current industrial use.

Response 4: As described in the Statement of Basis, existing zoning allows for light industrial or commercial use, so the wording will not be changed.

Comment 5: Page 9, Item #3, second paragraph: “The western portion of the site (approximately 10 acres) remains undeveloped and has not been used for site operations. This area of the site was evaluated using field inspection, geophysical techniques and some limited sampling that shows the area achieves unrestricted use SCOs for VOCs, SVOCs, metals and PCBs. Based on the results, the intent is to separate this parcel from the site after the Statement of Basis is finalized.”

Comment: Lockheed Martin requests that NYSDEC expand on its intent to separate the western ten-acre portion of the property from the regulated site. Would the current owner or a future owner be allowed to develop this portion of the site for other than commercial/industrial purposes? Also, how are the exact limits of this area defined?

Response 5: Use of the portion of the site proposed for separation would not be restricted by the Department’s remedy but would still need to be consistent with the zoning in place at the time of separation. The limits of this area will be determined when a metes and bounds survey for the environmental easement is performed.

Comment 6: Page 10, Item #4: “The sub-slab depressurization system in the eastern portion of the Main Manufacturing building will be required to continue operation to prevent the migration of vapors into the building from groundwater until NYSDEC, in consultation with NYSDOH, determines that it is no longer needed.”

Comment: The determination of when cessation of SSDS operation can occur should be based on a tangible criteria. Lockheed welcomes the opportunity to work with NYSDEC/NYSDOH to establish clearer guidelines for establishing SSDS shut-down criteria.

Response 6: Comment noted. The appropriate criteria to cease operation of the SSDS can be discussed during development of the Site Management Plan. In general, the New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion in the State of New York – October, 2006 will be followed, specifically section 4.5.

Comment 7: Page 10/11, Item #7: “A Site Management Plan is required, which includes the following:

a. An Institutional and Engineering Control Plan....this plan includes, but may not be limited to:

Bullet 2: “a provision for further investigation (and remediation if necessary) to refine the nature and extent of contamination in the following areas where access was previously hindered: under the Main Manufacturing Building and under the maintenance building and pole barn in the Former Northern Perimeter Ditch area if and when the buildings are demolished or when the buildings become inactive; ...”

Comment: Neither site investigation data (including drilling and sampling within the footprints of these structures) nor periodic groundwater and soil vapor monitoring data obtained to date have indicated the likely presence of any additional contaminant sources beneath these buildings. We request the DEC delete or qualify this provision in the Statement of Basis.

Response 7: Contaminated soil vapor under the main building may indicate a source from either soil or groundwater. For the pole barn and maintenance building, there may be sources based on the elevated groundwater contamination in the vicinity.

Comment 8: Bullet 4: “...and for any new buildings developed on the site, ... This sentence should read “...and for any new **occupied** buildings developed on the site....”

Response 8: See Response 1.

Comment 9: Bullet 6: “Maintaining access controls...”  
We request that NYSDEC clarify this “access controls” requirement. Under the current Industrial site use, the soil contaminant levels do not pose an unacceptable exposure risk, per NYSDEC’s Part 375 SCOs. We ask that NYSDEC clarify the requirement for access control. Further, it

is our opinion that access control should be the responsibility of site owners and occupants, and not tied to soil contaminant levels that have been demonstrated to be acceptable for the current site use.

Response 9: The Statement of Basis (SB) does not specify who is required to maintain access controls, and this is included as standard wording to ensure that access controls are addressed during the development of the Site Management Plan. Access controls are determine by access agreement with the current owner/occupant.

Comment 10: Page 11, Item #7b: “a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to: Bullet 1: “monitoring of groundwater, soil vapor and indoor air to assess the performance and effectiveness of the remedy, including a provision for implementing actions recommended to address exposures;”

Comment: In discussions of the findings of the 2014 Annual Vapor Intrusion Study results, NYSDEC indicated that Lockheed Martin may no longer be required to perform annual vapor intrusion monitoring studies, pending the 2015 annual study results, and that assessment of the SSDS effectiveness from that point forward could be based on demonstration of maintaining sufficient vacuum in the sub-slab environment. We request that the Statement of Basis reflect this observation.

Response 10: See Response 6.

Comment 11: Page 11, Item 7c: “an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to: Bullet 2: “Maintaining access controls...”  
Comment: Same as Comment 6C (sp.7C) above.

Response 11: See Response 9.

***Con Med submitted a letter dated February 11, 2015, which included the following comments related to the Statement of Basis:***

Comment 12: I. Excavation of soils in the FNPD. Comments I. A and B dealt with the proposed excavation of soils in the Former Northern Perimeter Ditch (FNPD) area. ConMed suggested further investigation of the pole barn floor drain, questioned whether the soil contamination extends beneath the buildings and indicated a willingness to consider removal of the pole



barn should additional investigation show contamination below the building.

- Response 12: The Department anticipates that some additional delineation of soil contamination may occur during pre-design studies associated with development of the Remedial Design workplan. Further investigation of the floor drain and the area surrounding the floor drain (beneath the pole barn floor) may be necessary and would also occur during pre-design studies. The necessity of removing the pole barn can be determined once the pre-design studies are completed.
- Comment 13: ConMed expressed concern (item I.C) that planning and performing the excavation must be closely coordinated with them, since the ConMed facility generates a significant portion of the company's revenues. In addition, appropriate measures are requested to protect the health and safety of ConMed employees, particularly in the former Guard House.
- Response 13: The Department agrees that the remedy will require close coordination with ConMed to ensure that normal business operations remain uninterrupted. Some of the foreseeable logistical issues, such as truck routes, waste segregation, and air monitoring are standard elements of the Remedial Design workplan. All work will be done in accordance with an approved Community Air Monitoring Plan (CAMP) which also applies to the Con Med employees or any persons not directly involved in the remedial efforts. The Community Air Monitoring Plan (CAMP) will be developed during design and the draft CAMP will be shared with ConMed for input before it is approved. Results of the air monitoring will be reviewed by both the Departments of Environmental Conservation and Health. Arrangements will be made to share this data with Con Med's Health and Safety Officer.
- Comment 14: II. Former Guard House. ConMed previously requested confirmation that there is no risk to its employees working in the Former Guard House (Customer Complaints Office) and notes that NYSDEC responded by email on January 30, 2015 affirming that there is no concern for soil vapor intrusion in the former Guard House. ConMed enclosed January 2015 indoor air sampling results from this structure (collected by GHD) to ascertain whether further investigation is necessary, and noted that in August 8 2010, ambient air sampling results detected TCE, PCE and DCE.
- Response 14: The Con Med data does not change the NYSDOH's previous conclusion, as based on the review of project related sub-slab vapor and indoor air sample results, that no further actions are needed regarding soil vapor intrusion at the soil vapor intrusion at the Guard House building.

The Community Air Monitoring Plan (CAMP) will be in effect during ground-intrusive remedial activities and will include threshold levels for VOCs in ambient air.

- Comment 15: III Existing SSDS/ Soil Vapor Intrusion  
In bullet (1), ConMed requests clarification that the SVI system is mitigating the north east portion of the main manufacturing building.
- Response 15: Agreed. Wording in the SB has been revised.
- Comment 16: Bullets 2 and 3 request further information and justification for statements relative to residual presence of CVOCs, primarily trichloroethylene (TCE), in the Main Manufacturing Building. ConMed requests clarification that there is no direct correlation with indoor air detections of TCE and the past use of TCE by ConMed. It also requests identification of areas where Lockheed Martin used TCE at the site.
- Response 16: The origin of these detections, which are below the current air guidance value of 5 ug/m<sup>3</sup> but above the expected levels in indoor air, are unknown. There is the possibility that they might be the result of residual contamination in building material due to the past use of this solvent. During Site Management, there will be a need for continued evaluation of the source of TCE detected in indoor air and whether the residual presence of TCE in building material is the source as opposed to soil vapor intrusion.
- The Department has no specific information regarding Lockheed Martin processes that may have used TCE. Former operational areas (potential source areas) were considered during the Consent Order negotiation. As part of the continuing indoor air evaluation, these areas may be re-evaluated.
- Comment 17: Bullet 4, sub-bullets 1 – 3 refer to the extent of soil vapor sampling in the Main Manufacturing Building, and notes that NYSDEC has previously indicated that there was no need to extend the SSDS system into other portions of the main manufacturing building. ConMed has provided, as an attachment to the comments, results of indoor air sampling conducted in the building and requests confirmation that no further investigation is warranted.
- Response 17: NYSDOH has reviewed of the indoor air results provided by ConMed. These air results do not indicate that there were site-related contaminants at levels of concern for that sampling period. However, without concurrent sub-slab vapor results, we are unable to determine from the

Con Med air results alone if soil vapor intrusion is occurring or has the potential to occur. The detections of TCE are low and generally below levels that are commonly detected in indoor air. Based on ConMed's concerns, the potential for soil vapor intrusion to occur into other portions of the ConMed building (western end) could be re-evaluated during Site Management.

- Comment 18:           Bullet 4, last sub-bullet, ConMed states that there may be unidentified historic sources in the remaining 2/3 of the manufacturing building where investigations and sampling were not completed. ConMed requests wording changes to the Statement of Basis to note "that the Statement of Basis does not preclude the possibility of future findings that other historical sources may have contributed, or may be contributing now or in the future, to air conditions in the remaining 2/3 of the building."
- Response 18:           The Statement of Basis and the Remedy elements in Section 7 of the Statement of Basis does not distinguish portions of the building, so the entire Main Manufacturing Building is addressed by the Statement of Basis. The Site Management Plan required by Item 7 of the remedy, includes a provision that future investigation of soil under the Main Manufacturing Building may be necessary if the building is removed. Also, see the Response to Comment 17.
- Comment 19:           IV Excavation of discrete surface soil areas. This comment requests further details regarding the remediation of the surface soil locations and a demarcation layer.
- Response 19:           The specifics of the surface soil area excavation will be documented in the remedial design workplan, and may include pre-excavation delineation or post-excavation confirmation sampling. The details regarding a demarcation layer will also be included in the remedial design workplan. If an area is not being disturbed, a demarcation layer will not be required to be installed.
- Comment 20:           V Maintenance of Soil Cover. Bullet 1 - The Statement of Basis proposes that the western-most portion of the site be removed from the site and the program. The comment requests clarification that Lockheed Martin will remain responsible if future contamination is found on that portion of the site.
- Response 20:           Lockheed Martin is required by the existing Consent Order to conduct corrective measures at the whole site. If this area is released and contamination is later found, the site owner at the time could accept responsibility (via an Order) or the area would be included as a P-site

under Superfund. If the area were found to be contaminated, the Department would pursue the responsible parties for cost recovery.

Comment 21: Bullet 2 - The second and third solid bullets request clarification of Lockheed Martin responsibilities during future intrusive activities below the soil cover, and questions whether soil cover will be maintained after excavation of the discrete areas of surface soil contamination.

Response 21: As described in the Enforcement Section of the Statement of Basis, Lockheed Martin is the Potentially Responsible Part (PRP) under Consent Order with the Department for a full Corrective Measures Program. The details of Lockheed Martin's continuing obligations are addressed in the existing Consent Order. The Consent Order does not terminate until corrective measures are complete. Corrective measures include long-term operation, maintenance and monitoring of engineering controls.

The soil cover will be required to be maintained as an engineering control after excavation of the discreet contaminated surface soil only if confirmation samples indicate exceedance of commercial SCOs at the bottom endpoint sample. If all soil exceeding commercial SCOs is not removed, a soil cover will be required. The specifics will be part of the design documents.

Comment 22: VI Soil Vapor Evaluation of Existing and Future Buildings. The comment suggests that the Statement of Basis and Site Management Plan clarify that the future actions including the evaluation and implementation of appropriate mitigation and/or remedial measures for those building are the responsibility of Lockheed Martin.

Response 22: See Response 21.

Comment 23: VII Environmental Easement/Site Management Plan. There are four parts of this comment, including that ConMed has not agreed to the placement of an Environmental Easement or to the components of the Site Management Plan (SMP) described in the Statement of Basis, that a map be provided showing the area proposed for removal from the site as well as the area subject to the SMP, that future actions are Lockheed Martin's responsibility and clarification of the extent of the Soil Excavation Plan.

Response 23: The comments indicating that ConMed has not agreed to the Environmental Easement or to the components of the SMP are noted.

See Response 21 regarding Lockheed Martin's responsibility for future actions.

Figure 4 of the Statement of Basis provides a depiction of the property that is proposed for removal from the site. The Soil Excavation Plan would apply to areas of remaining groundwater contamination, which is not limited to the area around the maintenance building.

Comment 24: VIII GCTS Continued Operation & Maintenance (Engineering Control). The comment concerns Monitored Natural Attenuation as a component of the remedial action at the site.

Response 24: The existing interim groundwater monitoring program includes MNA parameters (pH, ORP, DO and specific conductance). Although MNA is not specifically noted in the Statement of Basis or proposed to be implemented as a component of the remedy, MNA parameters may be continue to be collected as part of the post-remediation groundwater monitoring program. The SMP will address the long term groundwater monitoring requirements.

Comment 25: IX Further Investigation and Remediation. The comment requests that the Statement of Basis and SMP clearly indicate that Lockheed Martin is responsible for future investigation and remediation if necessary and that ConMed has not hindered access by Lockheed Martin to other areas of the building and property.

Response 25: See Response 21 regarding Lockheed Martin's responsibility for future actions. The comment that ConMed has not hindered access is noted.

Comment 26: X Financial Assurance. The comment notes that financial assurance is mentioned as an element of the Consent Order, and requests information on the mechanism, basis of dollar value, and amount.

Response 26: Financial Assurance is required by the Consent Order. Currently, the amount of the financial assurance is \$3,500,000. The amount of the financial assurance will be updated as the remedy is implemented.

**APPENDIX B**

**ADMINISTRATIVE RECORD**

# Administrative Record

Former Lockheed Martin –French Road Facility  
Utica, Oneida County  
EPA ID No. NYD 000521971  
Site No. 633036A

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## Documents

1. NYSDEC 2008. Order on Consent Index Number CO6 20080321-5 October 3, 2008
2. ARCADIS 2009. Corrective Measures Study Report for the Solvent Dock Area. Former Lockheed Martin French Road Facility, Utica, New York. March 2009.
3. ARCADIS 2009. Tank Status Report- Revised. Former Lockheed Martin French Road Facility, Utica, New York. March 2009.
4. ARCADIS 2009. Corrective Measures Study Addendum, Corrective Measures Study Report for the Solvent Dock Area. Former Lockheed Martin French Road Facility, Utica, New York. July 2009.
5. ARCADIS 2010. Supplemental Investigation Report. Solvent Dock Area. Former Lockheed Martin French Road Facility Utica, New York, January 2010.
6. ARCADIS 2010. Report on Final Closure Activities of Wastewater Treatment Plan, Former Lockheed Martin French Road Facility, Utica, New York, August 2010.
7. ARCADIS 2011. Former Northern Perimeter Ditch Supplemental Investigation Report. Former Lockheed Martin French Road Facility, Utica, New York, March 2011.
8. ARCADIS 2011. Former Northern Perimeter Ditch Feasibility Study Report. Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, June 2011.
9. ARCADIS 2013. Pre-Design Activities Report Former Northern Perimeter Ditch, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, February 2013.
10. ARCADIS 2013. Feasibility Report Addendum Former Northern Perimeter Ditch, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, February 2013.
11. ARCADIS 2013. Former Northern Perimeter Ditch Off-Site Vapor Intrusion Pathway Evaluation Report. Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, April 2013.
12. ARCADIS 2013. Remedial Construction Certification, Groundwater Collection and Treatment System, Former Lockheed Martin facility, Utica, NY. September 2013.

## Administrative Record

### Former Lockheed Martin –French Road Facility

Utica, Oneida County

EPA ID No. NYD 000521971

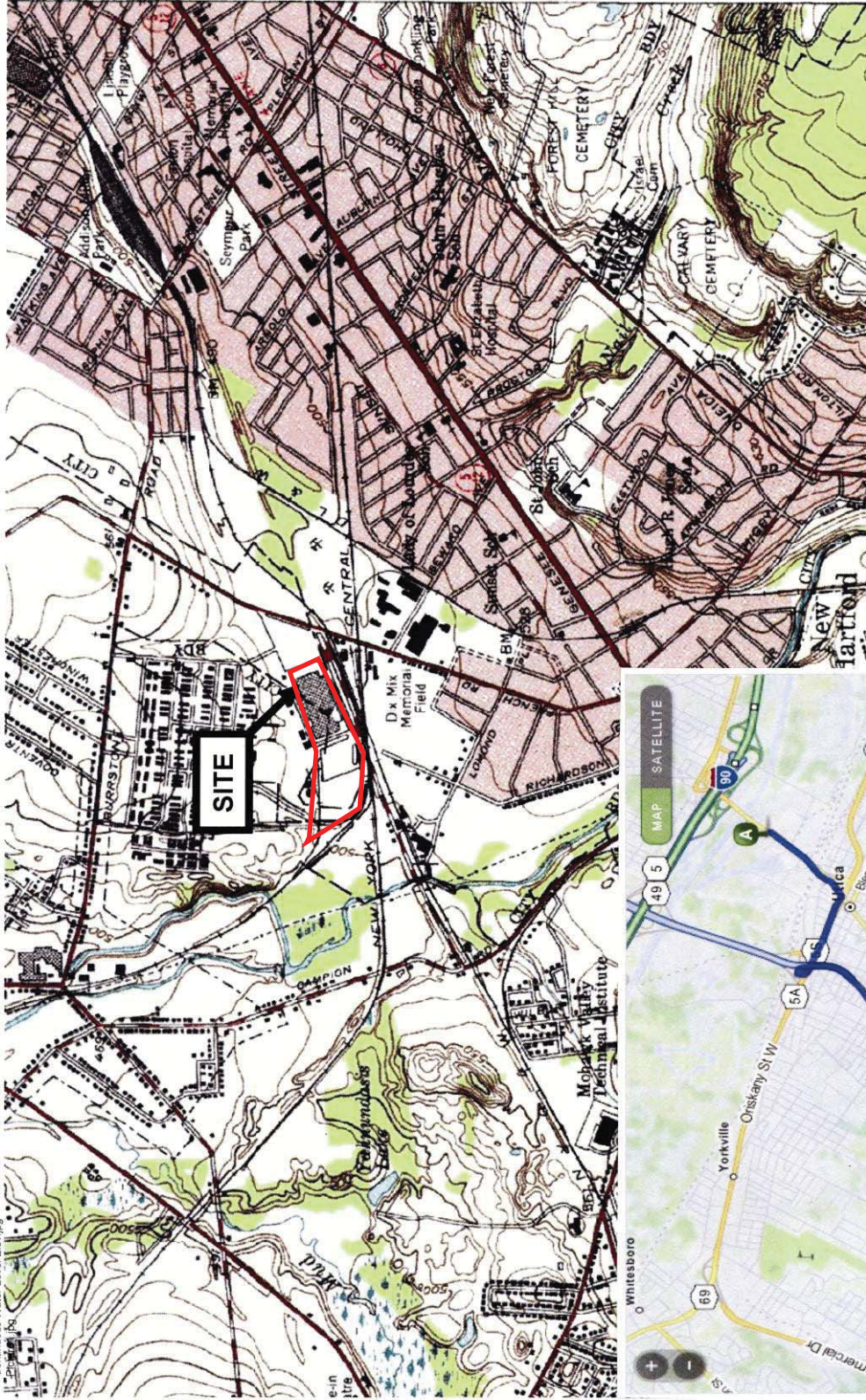
Site No. 633036A

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13. ARCADIS 2013. Summary Report of Surface Soils Sampling Activities Former Lockheed Martin French Road Facility, Utica, New York, December 2013.
14. ARCADIS 2013. Corrective Measures Study. Former Northern Perimeter Ditch Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York. December 2013.
15. ARCADIS 2013. Remedial Construction Certification, Sub-Slab Depressurization System, Former Lockheed Martin Facility, Utica, NY. January 2014.
16. ARCADIS 2014. 2013 Annual Groundwater Monitoring Report, Former Lockheed Martin French Road Facility, Utica, New York. February 2014.
17. STANTEC 2014. Annual Vapor Intrusion Study, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, NY. May 2014.
18. ARCADIS 2009. West Lot Site Supplemental Investigation Report, Lockheed Martin, West Lot Site, Utica, NY. April 2009.

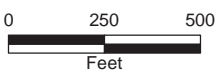
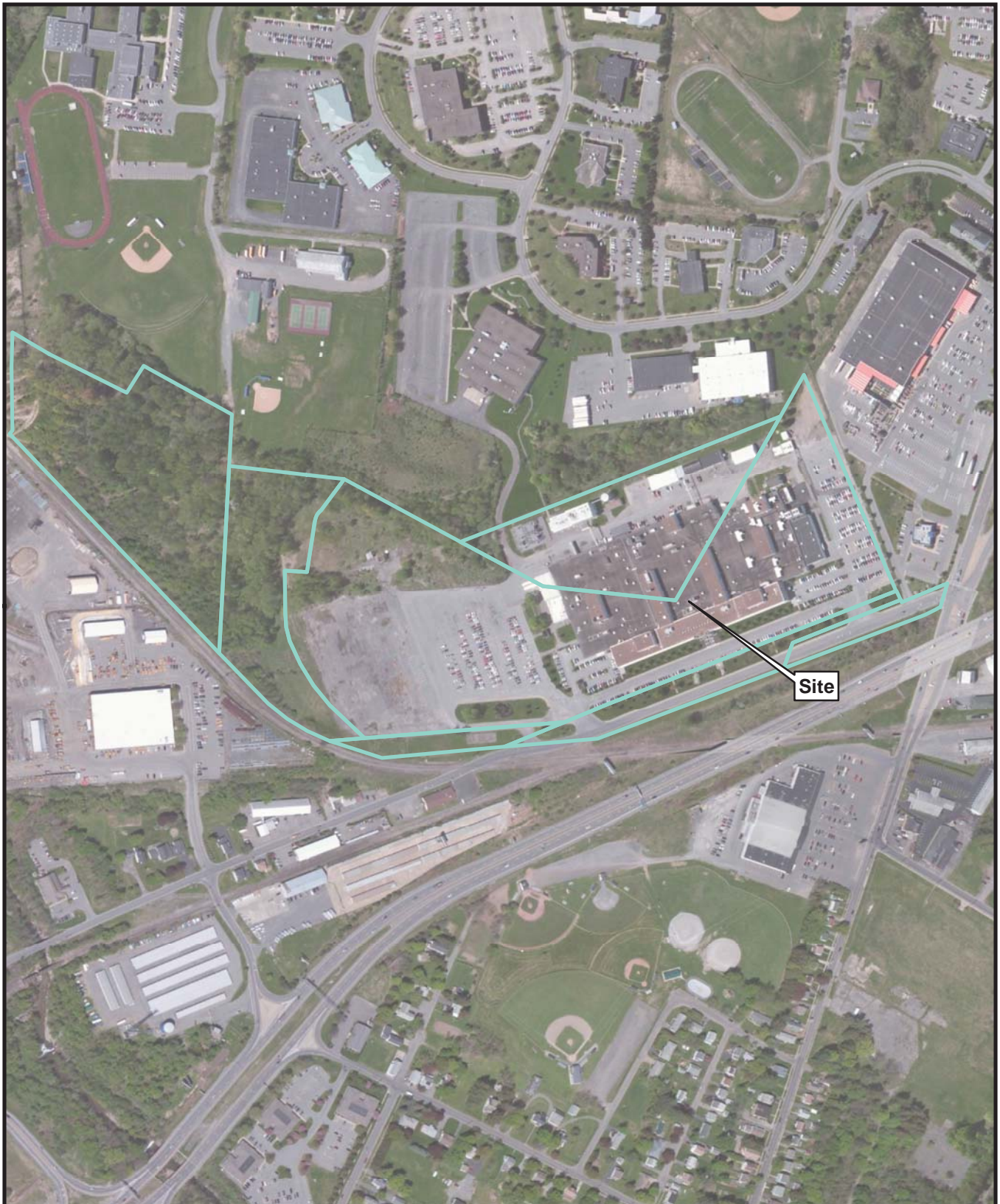


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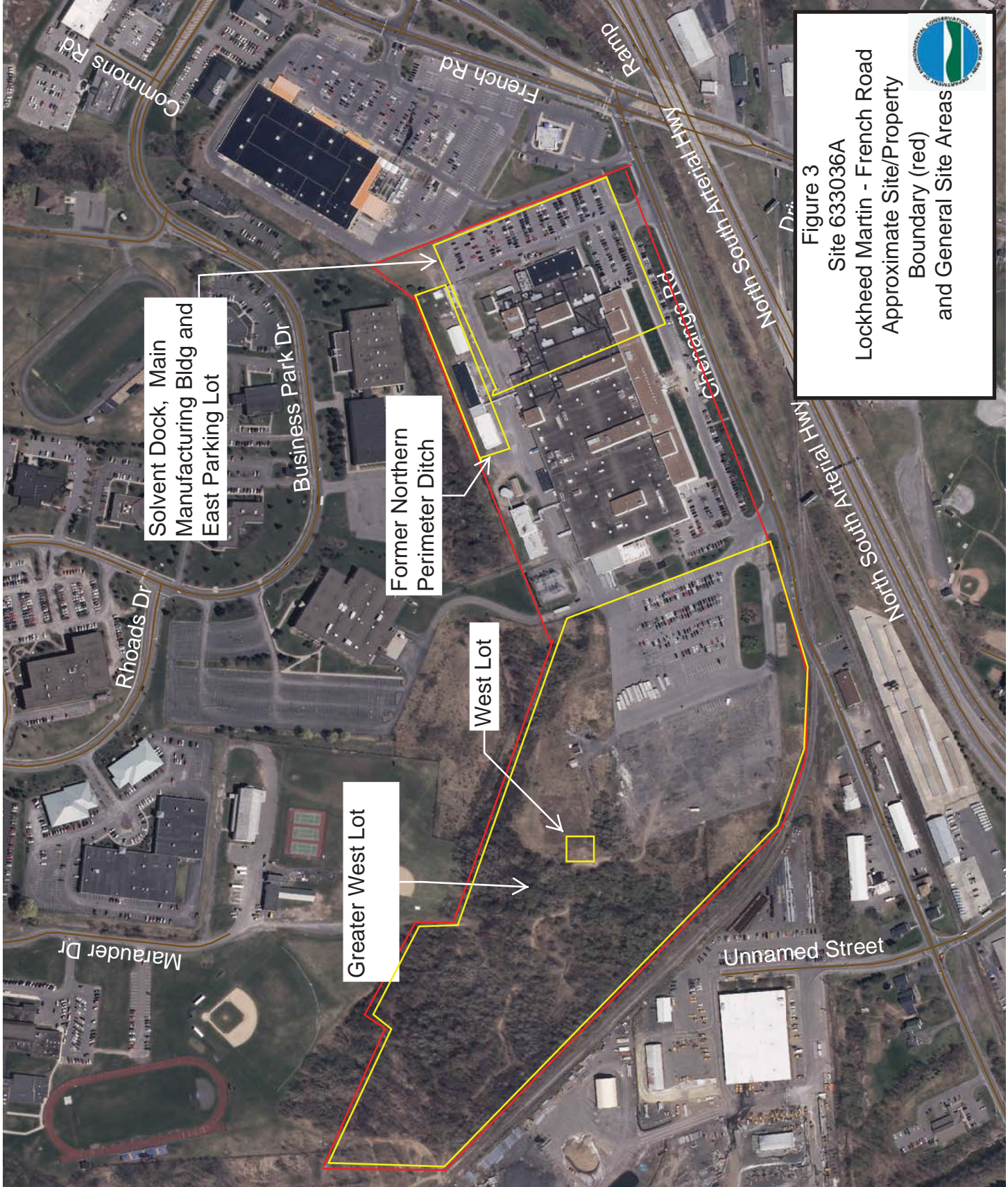
**SUPPLEMENTAL INVESTIGATION REPORT**  
 FORMER LOCKHEED MARTIN, FRENCH ROAD PROPERTY  
 UTICA, NEW YORK

**SITE LOCATION MAP**



**Figure 2**  
**Site Map**  
Former Lockheed Martin French Road  
City of Utica, Oneida County  
Site No. 633036a





Solvent Dock, Main  
Manufacturing Bldg and  
East Parking Lot

Former Northern  
Perimeter Ditch

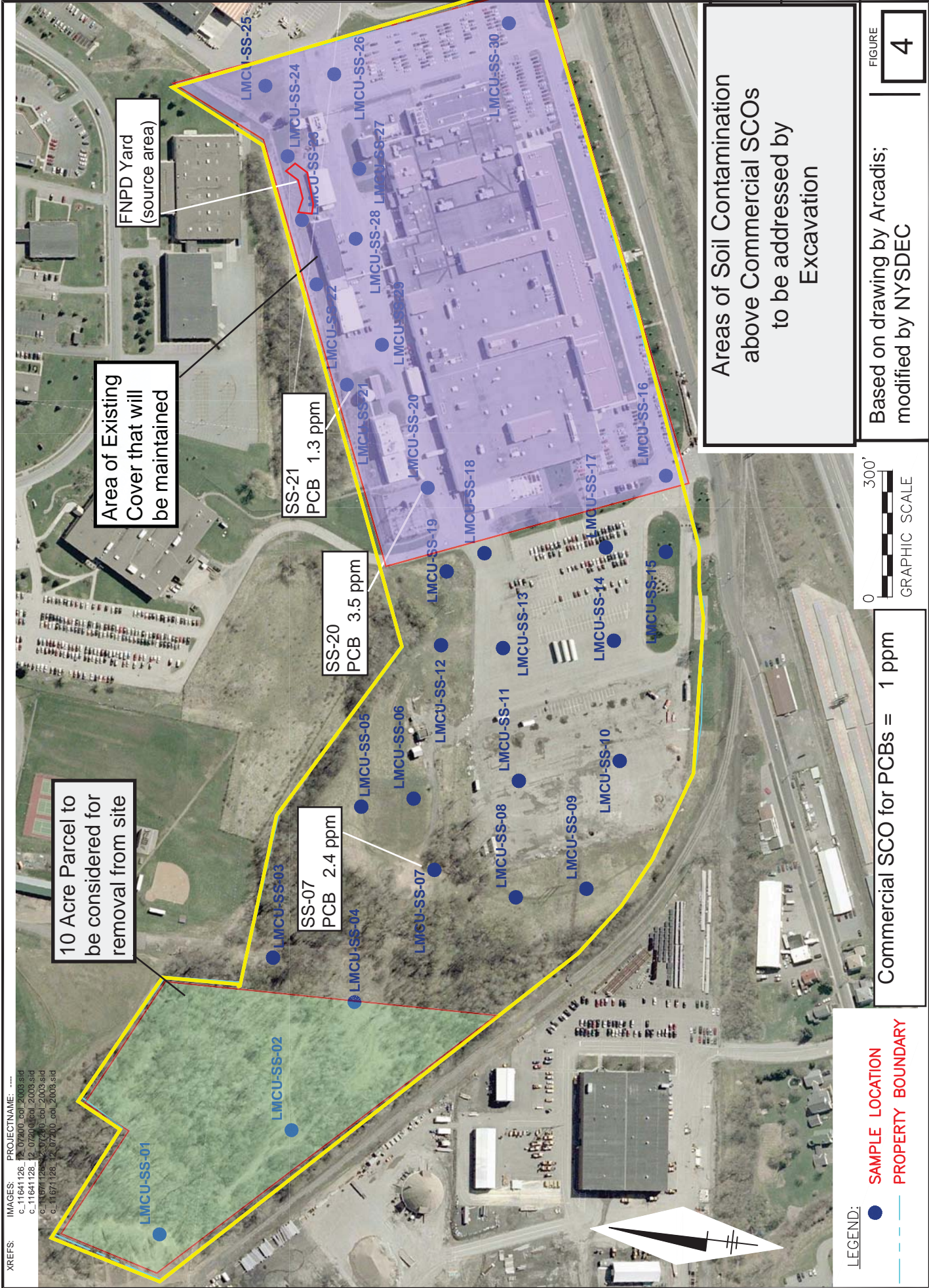
West Lot

Greater West Lot

Figure 3  
Site 633036A  
Lockheed Martin - French Road  
Approximate Site/Property  
Boundary (red)  
and General Site Areas



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10 Acre Parcel to be considered for removal from site

Area of Existing Cover that will be maintained

FNPD Yard (source area)

SS-07  
PCB 2.4 ppm

SS-20  
PCB 3.5 ppm

SS-21  
PCB 1.3 ppm

Areas of Soil Contamination above Commercial SCOs to be addressed by Excavation

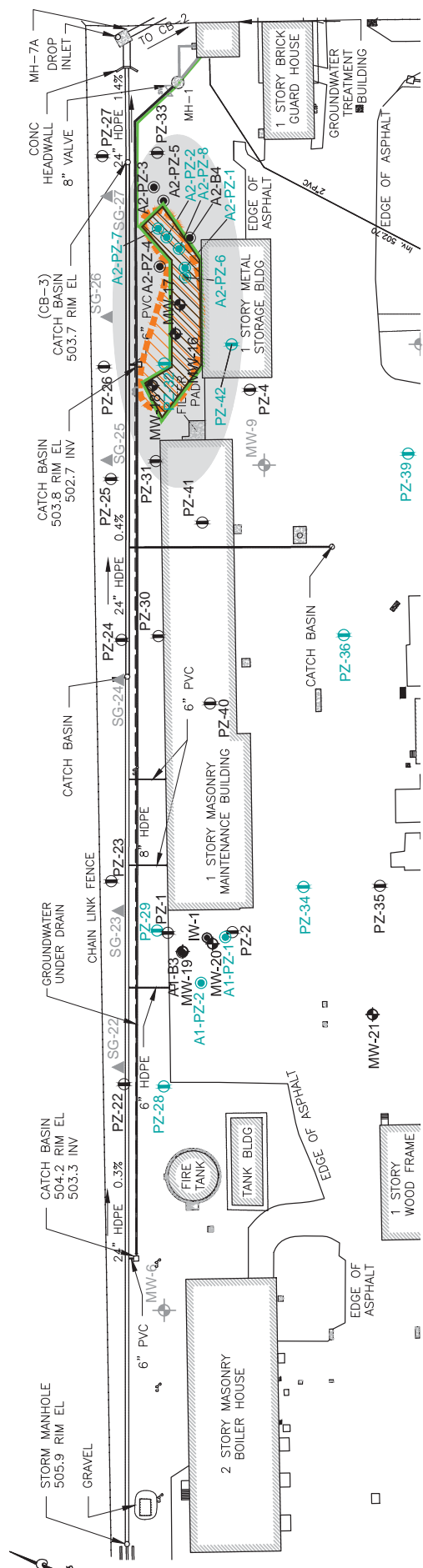
Commercial SCO for PCBs = 1 ppm

LEGEND:  
 ● SAMPLE LOCATION  
 --- PROPERTY BOUNDARY



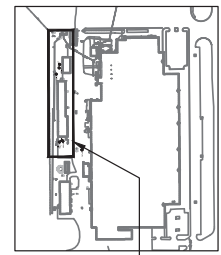
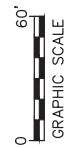
FIGURE  
**4**

Based on drawing by Arcadis; modified by NYSDEC



**LEGEND:**  
 MW-4 Sewer Valve Location  
 MW-39 Monitoring Well Location  
 PZ-1 Piezometer Location  
 A2-PZ-4 Soil Boring/Piezometer Location (Focus Areas A1 and A2)  
 SG-23 Soil Gas Probe Location  
 Well Exceeded the NYSDEC TOQS 1:1.1 Ambient Water Quality Standards  
 Area 2  
 Approximate Extent of MNA Area  
 Existing Groundwater Collection and Treatment System (GCCTS)  
 Proposed Excavation to 15 Feet  
 Temporary Dewatering Treatment

**NOTE:**  
 1. SAMPLE LOCATION A2-B4 WAS NOT SURVEYED. LOCATION IS APPROXIMATE.

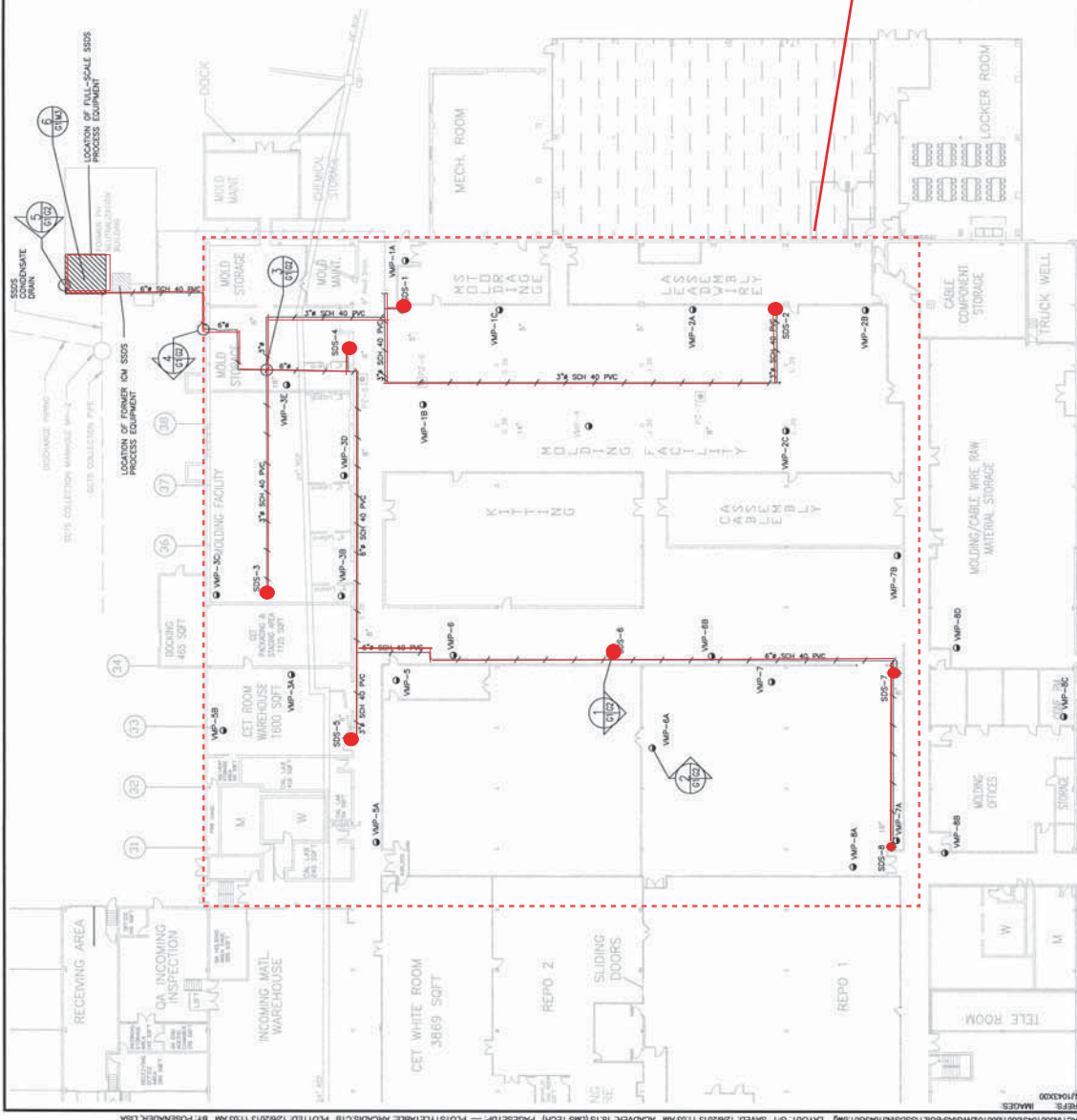




- LEGEND**
- ① 1/2" = 1' LOCATION OF EXISTING PERIMETER
  - ⊕ SSS-1 LOCATION OF SUBSLAB DEPRESSURIZATION SUMP (SSS)
  - WMP-1A LOCATION OF VACUUM MONITORING POINT (WMP)
  - LOCATION OF SUBSLAB DEPRESSURIZATION ABOVE GRADE PIPING 6"Ø HEADER
  - LOCATION OF SUBSLAB DEPRESSURIZATION ABOVE GRADE PIPING 3"Ø LATERALS
  - SLAB THICKNESS BASED ON RECORD DRAWINGS PROVIDED BY COMED CORPORATION AND/OR FIELD OBSERVATIONS
  - BUILDING COLUMN LINE IDENTIFICATION
  - ACTIVE FACILITY STORM SEWER



Area of Sub-Slab System



**Figure 6**

**FORMER LOCKHEED MARTIN FRENCH ROAD FACILITY • UTICA, NEW YORK**  
**SUB-SLAB DEPRESSURIZATION SYSTEM**  
**SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT**

GENERAL

THIS DRAWING IS A REPRODUCTION OF THE ORIGINAL DRAWING.

USE TO VERIFY REPRODUCTION SCALE.