Lockheed Martin
Maritime Systems & Sensors
1210 Massillon Road Akron, OH 44315
Telephone 330-796-2800

LOCKHEED MARTIN

August 28, 2008

Mr. Rod Beals
Northeast Regional Office
Ohio Environmental Protection Agency
2110 East Aurora Road
Twinsburg, Ohio 44078

Re: Lockheed Martin Corporation Akron
Airdock Exterior Remediation Program
Storm Drain Debris Removal Plan

Dear Mr. Beals:

Thank you for agreeing to meet with Lockheed Martin in your office today to discuss the Airdock Remediation Program progress. For your information and awareness, I have attached our plan, dated June 24, 2008, for removing debris from the storm drain system that serves the Airdock and all down gradient storm drains to Triplett Boulevard.

If you have any questions or require additional information, please feel free to contact me at 330-796-8751.

Sincerely,

David Gunnarson

Attachment: Storm Drain Debris Removal Plan

cc: Norma Horowitz, Summit County Port Authority

ARCADIS
Infrastructure, environment, facilities

Imagine the result

Lockheed Martin Corporation

Storm Drain Debris Removal Plan

Akron, Ohio

June 24, 2008

ARCADIS

for Rich Price

Signature 1 Name
Title Project Manager

Signature 2 Name
Title Project Manager.

Signature 3 Name
Title

Storm Drain Debris Removal Plan

Akron, Ohio

Prepared for:
Lockheed Martin Corporation

Prepared by:
ARCADIS
6723 Towpath Road
P.O. Box 66
Syracuse
New York 13214-0066
Tel 315.449.3105
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Our Ref.:
B0038062.0000

Date:
June 24, 2008

1. Introduction

The following Work Plan describes the processes and procedures to be followed to complete Storm Drain Debris Removal work activities at the Akron Airdock (Airdock).

2. Health and Safety

It is the policy of ARCADIS to provide a safe and healthful work environment. No aspect of operations is of greater importance than injury and illness prevention. A fundamental principle of safety management is that all injuries, illnesses, and incidents are preventable. ARCADIS will take every reasonable step to eliminate or control hazards in order to minimize the possibility of injury, illness, or incident.

The site specific Health and Safety Plan (HASP) (ARCADIS, May 16, 2008) will be modified for the work to be completed. The modified HASP will prescribe the procedures that must be followed during activities at the Site. Generally, personnel in the established work zone will wear appropriate PPE for Level D work.

Operational changes that could affect the health and safety of personnel, the community, or the environment will not be made without the prior approval of the Project Manager (PM) and the Health and Safety Officer (HSO). The HASP will be reviewed periodically to ensure that it is current and technically correct. Changes in site conditions or the scope of work will require a review and modification to the HASP. Such changes will be completed in the form of an addendum or a revision to the plan. ARCADIS will also follow Lockheed Martin health and safety requirements.

3. Project Team

3.1 ARCADIS Personnel

ARCADIS will maintain an On-Site Construction Supervisor during the project. The Construction Supervisor will be responsible for providing project status updates to the ARCADIS Project Manager, providing oversight of daily project activities, documenting project activities, supervising the project safety program, conducting safety meetings, completing safety audits, and monitoring work activities for compliance with the HASP. The On-Site Construction Supervisor will have authority to stop or alter work if an unsafe condition exists.

3.2 Subcontractor Personnel

Project activities will be performed by Royal Environmental (Royal). Royal will provide all equipment and personnel necessary to complete project activities. Royal will have a 5-6 man crew onsite performing the activities along with a full time project manager conducting supervisory and oversight activities during the course of the project.

3.3 Lockheed Martin Personnel

Lockheed Martin will maintain overall project responsibility including security, property access and health and safety. Lockheed Martin will also be responsible for sample analysis, waste disposal, and coordination with the various land owners.

A list of key project management personnel is provided below:

Company/Organization	Title	Name	Phone No.
Lockheed Martin	Project Coordinator	David Gunnarson	(330) 796-8751 (Akron) (703) 367-5022
	Onsite Coordinator	Steve Vardavas	(330) 796-2185
ARCADIS	Project Officer	Richard Difiore	(315) 671-9265
	Project Manager	Richard Price	(315) 671-9247
	Assistant Project Manager	Mark Hurban	(412) 231-6624 x566
	Field Manager	Mike Courtney	(248) 761-8137
	Quality Assurance (QA) Coordinator	Keith Stang	(412) 231-6624 x573
Royal Environmental	President	Lyle Grant	(315) 447-4555
TestAmerica-Canton, OH	Project Manager	Mark Loeb	(330) 966-9387

4. Scope of Work

Storm Drain Debris Removal will be performed on four sections (as illustrated on Figure 1) of storm drain that service the Airdock which consist of the following:

- PAW-48" (Plant "A" West 24-inch-diameter to 48-inch-diameter) – Extending north from an unidentified manhole (located 59 feet south of MH-PAW-48-2) on the south end to where PAW-48" connects with the Airport East West storm drain line

- PAE-24" – 30" (Plant "A" West – 24-inch-diameter to 30-inch-diameter) – Extending north from manhole MH-PAW-1 to where PAW-24" - 30" connects with the Airport East West storm drain line

- PAE-24" – 30" (Plant "A" East – 24-inch-diameter to 30-inch-diameter) – Extending north from manhole MH-PAE-1 on the south end to where PAE-24" 30" connects with the Airport East West storm drain line.

- Airport East West Storm Drain – Extending west from MH-PAE-7 to the outlet at Haley's Creek

- Manholes and catch basins associated with the storm drain pipe sections being cleaned

The storm Drain Debris Removal will be performed to a visually cleaned standard. The cleaning activities are intended to remove the sediment from the subject pipelines.

4.1 Overview

The four drain lines consist of the following segments:

Pipe Size (inches in diameter)	Distance (in feet)	Pipe Type
PAW-48"		
24	59	RCP
36	362	RCP
48	1,262	RCP
PAW-24" – 30"		
24	1,148	RCP
30	793	Brick
PAE-24" – 30"		
24	509	VCP
30	813	Brick
Airport East West Storm Drain Line		
48	438	Brick
54	16	Brick
48	204	Brick
54	128	Brick
57	500	Brick
60	1,000	Brick
63	680	Brick (Assumed)
66	300	Brick (Assumed)
Triplet Boulevard Culvert	100	Cast Concrete

4.2 Site Preparation Activities

Prior to storm Drain Debris Removal activities, various site preparation activities will be performed. Anticipated site preparation activities include, but are not limited to, the activities identified below:

- Set up temporary water treatment area consisting of a 20,000 gallon portable steel settling tank with internal baffles, bag filters to remove fines and liquid-phase, granular activated carbon (GAC) vessels which will filter water used to clean the storm sewer prior to discharge into 20,000 gallon portable steel tanks. These 20,000 gallon tanks will act as reservoirs for filtered water as shown on Figure 2.

- Stage storm Drain Debris Removal supplies including but not limited to sand bags, pumps, shovels, sleds, water hose, etc.

- Establish a potable water supply at the west side of the Air Dock.

- Establish water hose discharge connection from the filtered water portable steel tank to the 12-inch-diameter sanitary drain manhole as shown on Figure 2.

- Installation of a temporary 1,500 feet long access road (if required due to surface conditions) as shown on Figure 1 to facilitate storm Drain Debris Removal activities. The temporary access road will be constructed using geotextile fabric overlain by approximately 6-inches of run-of-crusher stone.

4.3 Execution

Hydraulic cleaning will be performed on storm drain sections up to 48-inches in diameter. Storm drain sections 48-inches or larger will be manually cleaned focusing on solids removal followed by final hydraulic cleaning. Cleaning activities will be conducted from upstream to downstream along each storm drain segment as shown on Figure 3 and as described below:

- Prior to commencement of storm Drain Debris Removal, ARCADIS will establish bypass pumping of dry weather flow around the section of storm drain being cleaned. Cleaning activities will not be conducted during rain events to minimize the amount water requiring bypass. Bypass pumps and hoses shall be water-tight and free of leaks. Bypass pumps are expected to consist of either a two-inch 160 gallon per minute (gpm) trash pump or where feasible, a two-inch submersible

pump set in a sump established by sandbags; Power for operating the pumps will be supplied by a gas powered generator.

- Prior to commencement of Storm Drain Debris Removal, ARCADIS will isolate the section of drain to be cleaned through the use of drain plugs and/or sand bags. These plugs will assure that flow from upstream is effectively eliminated from the section being cleaned, and water used during flushing of the section is captured and removed from the drain and is not allowed to travel further downstream. All water and debris entering the downstream plugged manhole will be removed using a vacuum truck.

- Hydraulic cleaning of each storm drain section, 30-inches in diameter or smaller will be performed using water jet / vacuum sewer cleaning truck. This truck is self contained and utilizes a high pressure / high volume water spray along with an integral vacuum. The unit operates by utilizing high pressure, high volume water produced by a pump located on the truck to propel a nozzle with rear thrust jets connected to a light weight hose. UPON PLACING THE NOZZEL AND HOSE IN THE PIPE, THE WATER DRIVES THE NOZZEL ALONG THE DRAIN, BLASTING LOOSE AND back FLUSHING it to the access manhole. The vacuum recovery system is then employed to vacuum up the debris and rinse water and store it within the collector body of the truck for transport to the debris staging / water treatment area. No chemicals will be used for cleaning activities.

- Each storm drain section, 48-inches in diameter or larger, will be cleaned by physically entering and manually removing debris. Debris will be conveyed by sled to the downgradient manhole for removal. Confined space entry procedures will be employed for all tasks requiring storm drain entry. Once gross removal of material is complete, the line will be flushed utilizing the water jet / vacuum truck as described above to remove any remaining finer material.

- If the static elevation of the surface of Haley's Creek backs up into the pipe, manual cleaning of the 66-inch diameter section of storm drain (as shown on Figure 1) will be conducted to that point.

- ARCADIS will transfer all water collected during the storm Drain Debris Removal from the vacuum truck into a 20,000-gallon capacity epoxy lined, steel settling tank. This tank will be configured with internal baffles and weirs to promote settling of suspended particulates in the water. Water from the settling tank will be pumped through a series of bag filters to remove fine sediment and then filtered by

liquid phase carbon prior to discharge into one of a minimum of two 20,000-gallon filtered water tanks. These tanks will act as a reservoir which when full will be sampled for polychlorinated biphenyls (PCBs) prior to discharge through a flow meter, to the 12-inch diameter sanitary drain within adjacent manhole (MH-2) shown on Figure 2. Only filtered water with non-detect PCB results will be allowed to be discharged. Storage water with PCB results above the detection limit will be refiltered. It is estimated that approximately 10,000 gallons of water per day may be generated from high pressure water spray cleaning and storm drain groundwater infiltration. The actual number of filtered water storage tanks will be determined based on site conditions. Upon completion of cleaning activities, ARCADIS will clean the water storage tanks.

- In addition to cleaning storm drain pipe sections, ARCADIS will also pressure wash each manhole and catch basin associated with the storm drain pipe section being cleaned. This will be accomplished using the hand held pressure washing wand which is integral to the jetter / vacuum truck.

- ARCADIS will make provisions to connect to an on-site water source located on the Airdock property identified and in a manner approved by Lockheed Martin.

4.4 Inspection

Following cleaning of each storm drain section and before demobilizing from a cleaned storm drain section, ARCADIS will conduct post cleaning video inspection activities using a video camera supplied by ARCADIS to confirm that the pipe is free of visible sediment and debris. Video inspections will be conducted via robotic video equipment in pipe diameters less than 48-inch and via hand held video equipment in pipe diameters greater than 48-inch. ARCADIS will maintain a video inspection log and provide 3 copies of logs and electronic video recording on CD to Lockheed Martin at conclusion of the project. Confined space entry procedures will be employed for all video inspection tasks requiring storm drain entry.

4.5 Equipment Decontamination

Decontamination of equipment and personnel will be performed in areas to be designated by ARCADIS' Field Manager. Appropriate procedures and methods will be employed to properly decontaminate project-related equipment, including, trucks, hand-tools, temporary water storage tanks, water treatment equipment, etc., that

contact PCB-containing site media. At a minimum, the following procedures will be followed:

- Unless otherwise directed by ARCADIS' Field Manager, any equipment to be taken off-site by the contractor(s) will be subject to a final visual check by ARCADIS' Field Manager and cleaning (if necessary) at a designated location. Provisions must be made to prevent off-site tracking of materials (e.g., onto public roadways, etc.).

- If any equipment has been in contact with PCB-containing site media, equipment decontamination will be performed in a designated decontamination area. This decontamination area(s) will be lined with 40 mil (nominal thickness) polyethylene sheeting. The decontamination area will be sloped to a sump to allow for the collection of wash water. Water collected from the decontamination activities will be containerized and subsequently treated/disposed as described in Subsection 4.3.

- Each piece of equipment will be observed by ARCADIS' Field Manager for visible sediments or other debris prior to its departure from the site. Any observed sediment or other debris will be removed and disposed of in a manner consistent with the materials that were contacted or removed from that area. ARCADIS' Field Manager will collect surface wipe samples to confirm the effectiveness of the cleaning procedures.

- All material used in equipment washing, including (but not necessarily limited to) detergent solution, rinsate, rinse water, towels, disposable equipment and polyethylene sheeting will be collected and managed as described in Subsection 4.6. Use of solvent (e.g., hexane) or acid solutions will not be allowed without prior approval by Lockheed Martin's on-site representative.

4.6 Waste Management

Storm Drain Debris Removal activities will generate the following waste materials that will require appropriate management:

- Wash water and debris generated during the storm Drain Debris Removal activities

- Equipment cleaning rinsate

- Personal protective equipment (PPE) and associated debris

The management of these wastes is discussed below. Copies of manifests and certificates of disposal will ultimately be retained at the site.

4.6.1 Wash Water and Debris from Storm Drain Debris Removal

As discussed above, wash water and recovered debris generated during the storm Drain Debris Removal activities will be removed from the downstream access point by a vacuum truck. Wash water will be filtered and tested for PCBs as described in section 4.3. Approval for the off-site POTW disposal of the water will be obtained by Lockheed Martin prior to initiating the field activities.

Solids and debris collected during storm Drain Debris Removal will be transferred into 20-cubic-yard capacity steel roll-off box containers provided by Lockheed Martin. Access to the steel roll-offs will require construction of a temporary run-of-crusher stone ramp. After water is decanted into the filter system, the vacuum truck will transfer solid materials directly into the roll off box. The roll-off box containers will be specially constructed filter boxes double lined with polyethylene plastic liners and will be provided with a tarp canopy free of rips or cuts. Each roll-off will be set up with a filter lined dewatering sump at the lowest elevation of the roll-off to collect residual water. The dewatering sump will consist of a section of 12-inch diameter polyvinyl chloride (PVC) pipe, with slotted openings in the bottom section, placed upright in the low end of the roll-off. Each roll-off will be dewatered until it can be transported off-site in accordance with applicable rules and regulations for Toxic Substance Control Act (TSCA) material disposal. Approval of the off-site TSCA material disposal will be obtained prior to initiating field activities.

As a potential option depending on the volume of coarser material encountered during Storm Drain Debris Removal activities, ARCADIS will evaluate the cost benefit of sorting all debris and deposing coarser materials larger than one-inch square as construction and debris (C&D) material. Coarser materials collected during the Storm Drain Debris Removal would be sorted from finer materials by placing all debris onto a one-inch square wire screen set up at an angle over the roll off. Fine materials (smaller than one-inch square) passing through the screen into the roll-off box will be disposed as TSCA material as described above. Coarser materials (larger than one-inch square) that fall to the back side of the roll-off will be disposed as C&D material and disposed at a facility selected by Lockheed Martin.

4.6.2 Equipment Cleaning Rinsate

Water used to wash out equipment, will be collected and transferred to the on-site temporary water storage tank. Rinsate will then be filtered and tested for PCBs. If PCB test results are non-detect, wash water will be discharged to 12-inch sanitary manhole MH-2 as described in Section 4.3 above.

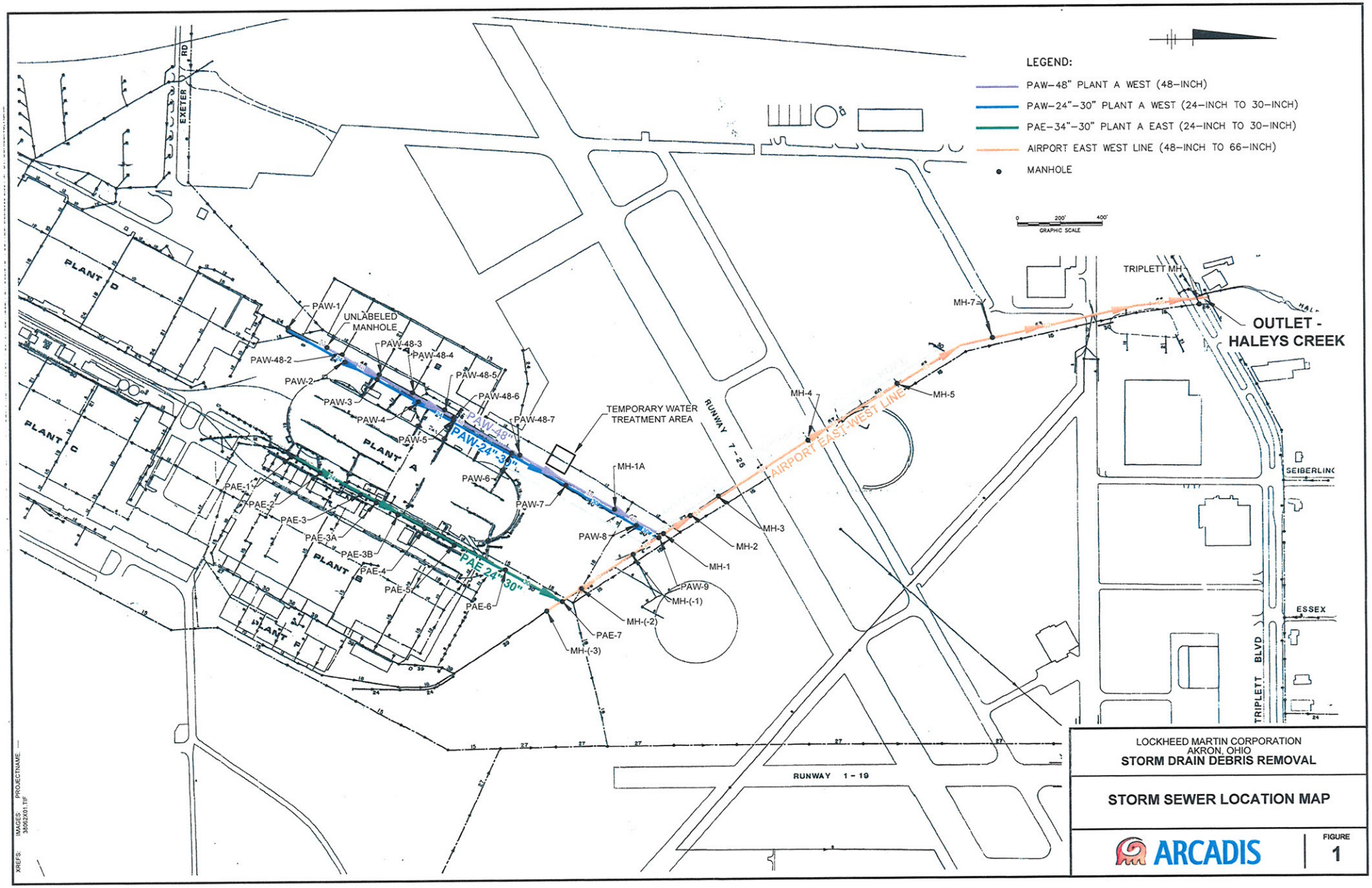
4.6.3 PPE and Associated Debris

PPE and associated debris will be placed in appropriate dump trailers and rolloffs. PPE and associated debris associated with TSCA material (if any) will be managed separately as TSCA waste.

5.0 Schedule

Storm Drain Debris Removal activities are anticipated to commence on July 28, 2008. Storm Drain Debris Removal activities are expected to be completed by September 26, 2008.

Figures



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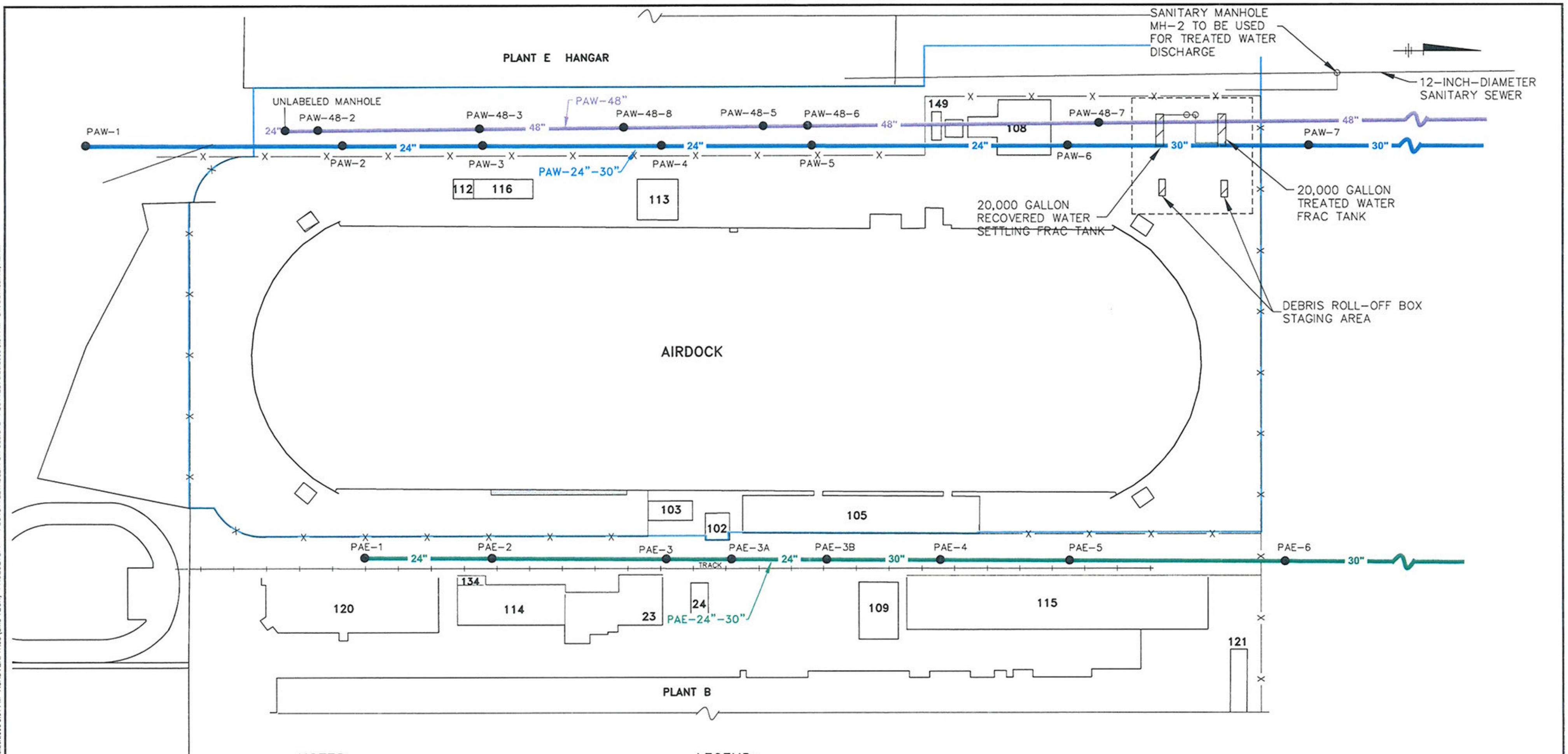
LOCKHEED MARTIN CORPORATION
AKRON, OHIO
STORM DRAIN DEBRIS REMOVAL

STORM SEWER LOCATION MAP

ARCADIS

FIGURE 1



NOTES:

1. BASE MAP IS DIGITIZED FROM A COMPILATION OF SCANNED IMAGES FROM DRAWINGS OBTAINED FROM GOODYEAR AEROSPACE CORPORATION, PLANT ENGINEERING, DATED SEPTEMBER 1979, BY GPD, INC. @ 1"=20'.
2. FEATURES IN THE SOUTHWESTERN AREA ARE FROM A WESTON SOLUTIONS UNNAMED MAP, DATED MAY 04.
3. ALL LOCATIONS ARE ASSUMED APPROXIMATE ONLY.

LEGEND:

- FENCELINE
- 120 BUILDING NUMBER AND OUTLINE
- TRACK
- OWNED BY MEGGITT
- OWNED BY LMA COMMERCE LLC
- PAW-48" PLANT A WEST (48-INCH)
- PAW-24"30" PLANT A WEST (24-INCH TO 30-INCH)
- PAE-24'-30" PLANT A EAST (24-INCH TO 30-INCH)

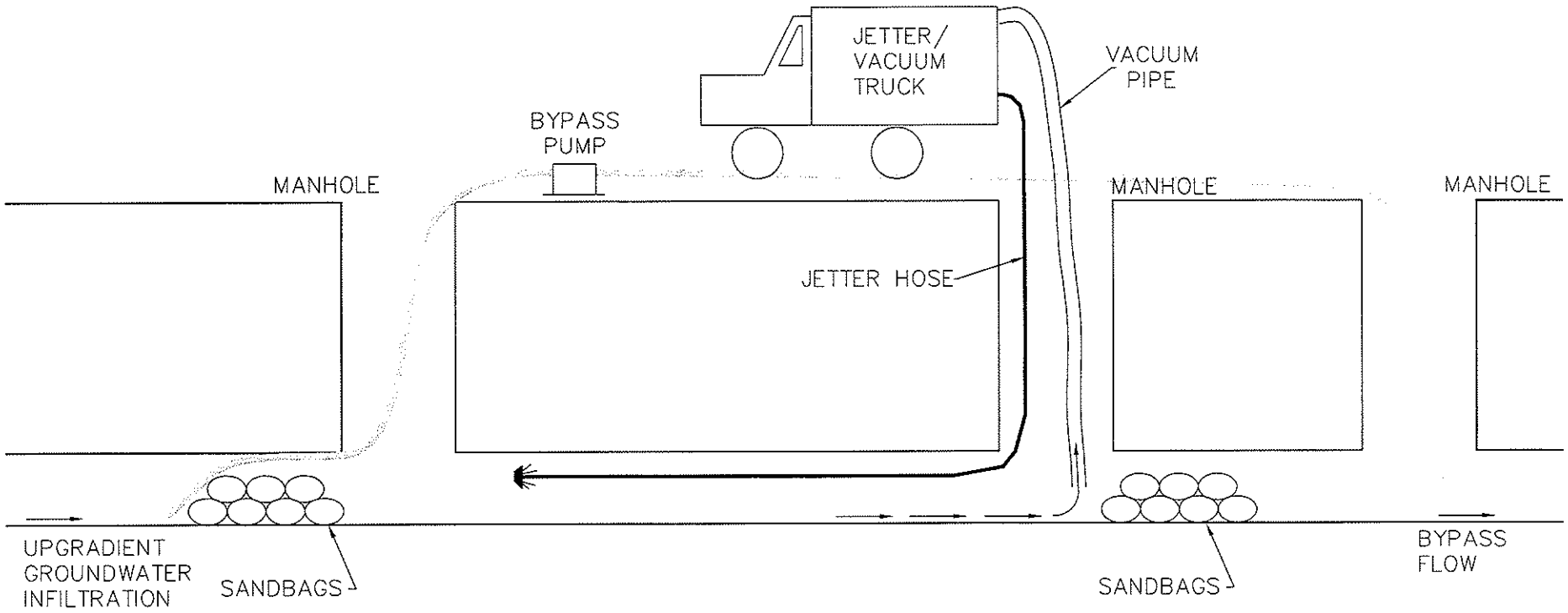
LOCKHEED MARTIN CORPORATION
AKRON, OHIO
STORM DRAIN DEBRIS REMOVAL

ON-SITE STORM DRAIN LOCATION MAP

ARCADIS

FIGURE
2

CITY:Syracuse DIV/GROUP:Env-141 DB:AMS LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\CAD\ACT\B0038062\0000\000001\DWG\38062B01.dwg LAYOUT: 3 SAVED: 6/26/2008 4:15 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/26/2008 4:32 PM BY: SCHILLING, ADAM
XREFS: IMAGES: PROJECTNAME: ----



JETTER PROPELS HOSE UP PIPE TO BE CLEANED. TRUCK PULLS HOSE BACK WHILE FLUSHING DEBRIS DOWNSTREAM FOR COLLECTION BY THE VACUUM.

LOCKHEED MARTIN CORPORATION
AKRON, OHIO
STORM DRAIN DEBRIS REMOVAL

STORM SEWER CLEARING DETAIL

ARCADIS

FIGURE
3