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1. Introduction

This remediation plan addresses exterior cleanup activities at the Akron Airdock facility, a historic airship hangar located on the former Lockheed Martin

4. Remediation Conducted From 2003-Present

Since the initial discovery of non-liquid PCB at the Airdock in 2003 and continuing to the present, LMC has successfully planned and implemented a voluntary remediation program to manage the RPM roofing and siding material that contains Aroclor 1268. In conjunction with the appropriate regulatory notification and approval process, the voluntary remedial approach has focused on: (1) source control to prevent releases of PCBs from the roof and siding material and removal of concentrated areas of PCBs on the grounds, and (2) cleanup of PCBs from the stormwater conveyance and discharge systems.

The general conceptual approach appeared in Lockheed Martin's June 8, 2005, submittal to U.S. EPA Region 5: "Airdock Exterior Remediation Plan and Schedule." Initial remedial measures included removing visible siding debris from the ground surface surrounding the Airdock, clean

of PCBs from the interior of the Airdock. LMC has already begun to implement the interior cleanup, which is scheduled to be completed by the end of 2007.

5. Remaining Exterior Remediation Plan

Areas subject to the remaining elements of the exterior remediation plan are depicted on Figure 2. The general concepts outlined in the remaining plan are consistent with the June 8, 2005, *Airdock Exterior Remediation Plan*. The VAP risk assessment (Tetra Tech 2007) provides support for a risk-based disposal application under §761.61 (c) for exterior areas with PCB impacts. Remaining remedial activities and the applicable cleanup standards, as appropriate, for each activity are described below. Details of certain remedy elements will be presented in future risk-based approvals.

5.1 Source Control Activities

This section describes activities to contro

Activity restrictions will be established through an Environmental Covenant for (1) the entire parcel and (2) specific portions of the parcel known as Identified Areas. The anticipated activity restrictions are:

(1) Parcel Restrictions:

- § Notification through Airdock PCB Awareness Briefing
- § Facility permitting plan for workers and contractors
- § Prohibition on groundwater extraction and use for potable purposes

(2) Identified Area Restrictions:

- § Risk Mitigation Plan for construction workers involved with subsurface activities at VAP Identified Area 1
- § Risk Mitigation Plan for construction workers involved with subsurface activities at VAP Identified Area 9

In addition, the use of the Airdock will be limited by the restrictions contained in the superseding CAFO.

5.2 Soil Excavation and Disposal

Preliminary risk analysis of existing sampling data indicates that risk goals will be met following the excavation and removal of soil with PCB concentrations greater than 25 mg/kg in two areas: the Southeast Area and the SC-8 Hot Spot. A separate risk-based approval request will be submitted to EPA with details on the proposed removal action during the third quarter of 2007.

5.2.1 Southeast Area and Sample SC-8 Hot Spot (On-Parcel)

A soil removal action will occur in the grassy area directly outside the southeastern area of the Airdock (Figure 3) and from an isolated area below pavement on the northwest corner of the Airdock (designated with the box labeled F1 on Figure 2). Soil samples have been collected from 20 locations at different depth intervals and analyzed for PCBs, including Aroclor 1268. The sampling and analysis data show that PCB concentrations in soil decline rapidly with depth and distance away from the building, a pattern consistent with the non-mobility of the chemical.

The property-specific risk assessment (Tetra Tech 2007) demonstrates that removal of soil with PCBs from the 250- by 25-foot area and from isolated hot spot SC-8 will meet risk and hazard goals under the VAP, and consequently meet a risk-based cleanup approach under §761.61(c). Confirmatory soil samples will be collected from the excavated areas upon completion of the soil removal action in the Southeast Area and SC-8 Hot Spot area to confirm that the average PCB levels in soil meet the risk and hazard goals. Details of the risk

5.3 Pavement

5.3.1 Debris Removal and Pavement Cleaning

Following the siding replacement and soil removal actions, pavement cleaning will occur as a presumptive remedy to remove remaining loose siding and roofing debris and particles. The area to be cleaned includes all paved surfaces on the exterior Airdock parcel and a buffer zone of 100 feet beyond the parcel boundary (Figure 2, Area D). The 100-foot zone beyond the Airdock property line encompasses the drainage divide surrounding the Airdock. The cleaning activity will include sweeping, vacuuming, and power washing the paved surfaces using manual and mechanical means depending upon the condition of the pavement and access limitations. Cleaning will be conducted to a visual standard. Solids and liquids generated during the cleaning activity will be properly managed and disposed of.

5.3.2 Pavement Management

Consistent with the non-liquid nature of Aroclor 1268 and its insoluble properties, sampling data from 34 pavement cores collected across and adjoining the parcel demonstrate that PCB concentrations in pavement are insignificant, with an overall average concentration of 0.18 mg/kg and a maximum on-property concentration of 1.9 mg/kg. Based on these data—and considering that the entire 19-acre Airdock parcel, including the paved apron, will be subject to industrial land use and activity restrictions as described in Section 5.1.3—all existing pavement will be managed under the blanket assumption that it contains < 50 parts per million (ppm) PCBs. LMC advised U.S. EPA of this approach in a letter dated June 27, 2005

Pavement will be repaired, removed, and replaced according to facility plans as needed, with no additional sampling. Pavement waste generated during facility repairs and improvements will undergo one or more of the following:

- § Disposal off site as non-PCB waste at a permitted Subtitle D disposal facility
- § Storage on site without TSCA controls or time limitations
- § Recycling on site (for example, as backfill).

None of the paved surfaces on the 19-acre Airdock parcel is considered a cap under TSCA. No operations and maintenance will be required for the paved surfaces on the parcel (other than the cleaning described in Section 5.3.1). No additional samples will be collected of removed pavement or of the ground beneath the removed pavement. No TSCA notification, storage, labeling, transportation, manifesting, or recordkeeping requirements will apply to the pavement on-property.

Lockheed Martin has been in contact with the City of Akron to understand the legal and technical options for replacement and repair or removal of this storm drain extension. Once these issues have been resolved, negotiations with the private property owner will begin and a plan will be formulated to properly identify and remove accumulated sediments that may contain PCBs.

5.4.2 Stormwater Pollution Prevention Plan (SWP3) Update

A post-cleaning stormwater sampling point is anticipated as the northernmost manhole (point H(c)) of the Plant A West (PAW) 24-30-inch storm sewer depicted on Figure 2. Background sampling will also occur for possible PCB loading to the sewer system from legacy releases or from other active sources (see upstream manhole sampling points designated “H(d)” on Figure 2).

The sampling data will be used to evaluate compliance with the surface water criterion for PCBs (VAP) and also the TSCA decontamination standard for water discharging to navigable waters in accordance with §761.79 (b)(1)(ii). The sampling data will be used to evaluate the potential load of PCB 1268 to Haley’s Ditch through a mass balance approach.

5.5 *North Skimmer Pond and Haley’s Ditch*

Cleanup plans for releases of PCB 1268 and other PCB Aroclors in areas north of the storm sewer discharge point will be developed in the final phase of the remediation project. Several factors—including historical or “legacy” spills and releases, access, ownership, and drainage issues—require a coordinated approach with other stakeholders to developing a suitable cleanup plan.

The North Skimmer Pond was constructed in the early 1970s to serve as a retention basin and oil separator for treatment of industrial discharges draining from the northern end

controlled by a fence. Access to the north portion of Haley's Ditch that was sampled in 2006 is not controlled (all of the lots in the investigation area are undeveloped). Lockheed Martin has secured access agreements with relevant private property owners to install a fence to restrict access to additional portions of Haley's Ditch. The proposed fence alignment is shown in Figure 4 and is currently under construction. Completion of fence installation is anticipated by the end of second quarter 2007.

5.5.2 Focused Feasibility Study and Remedial Design

A focused feasibility study will be conducted to evaluate removing soil and sediment in the retention pond, Haley's Ditch floodplain, and stream channel. Pre-design studies such as sampling and profiling the soil and sediment for disposal and evaluating the hydrology and drainage patterns of the watershed will be performed during the pre-design stage.

6. Exterior Remediation Schedule

A general schedule for the various remaining exterior activities is summarized below.

Year	Major Activity
2007	Soil excavation plan; pavement cleaning; SWP3 update; north motor houses and fire pump house residing
2008	Sewer repair, cleaning, and sampling; Airdock pin house residing
2009	Haley's Ditch remediation

7. References

Blasland, Bouck & Lee, Inc. (BBL). 2005. Draft Remedial Action Plan, Exterior Areas, Airdock Facility, Akron, Ohio. Prepared for: Lockheed Martin Corporation, Manassas, Virginia. March 10.

Lockheed Martin Corporation (LMC) 2005a. Technical Description of Robertson Protected Metal, Report #MPE-21876PR-2 by John F. Brewer, Senior Staff Chemical Engineer. January 4.

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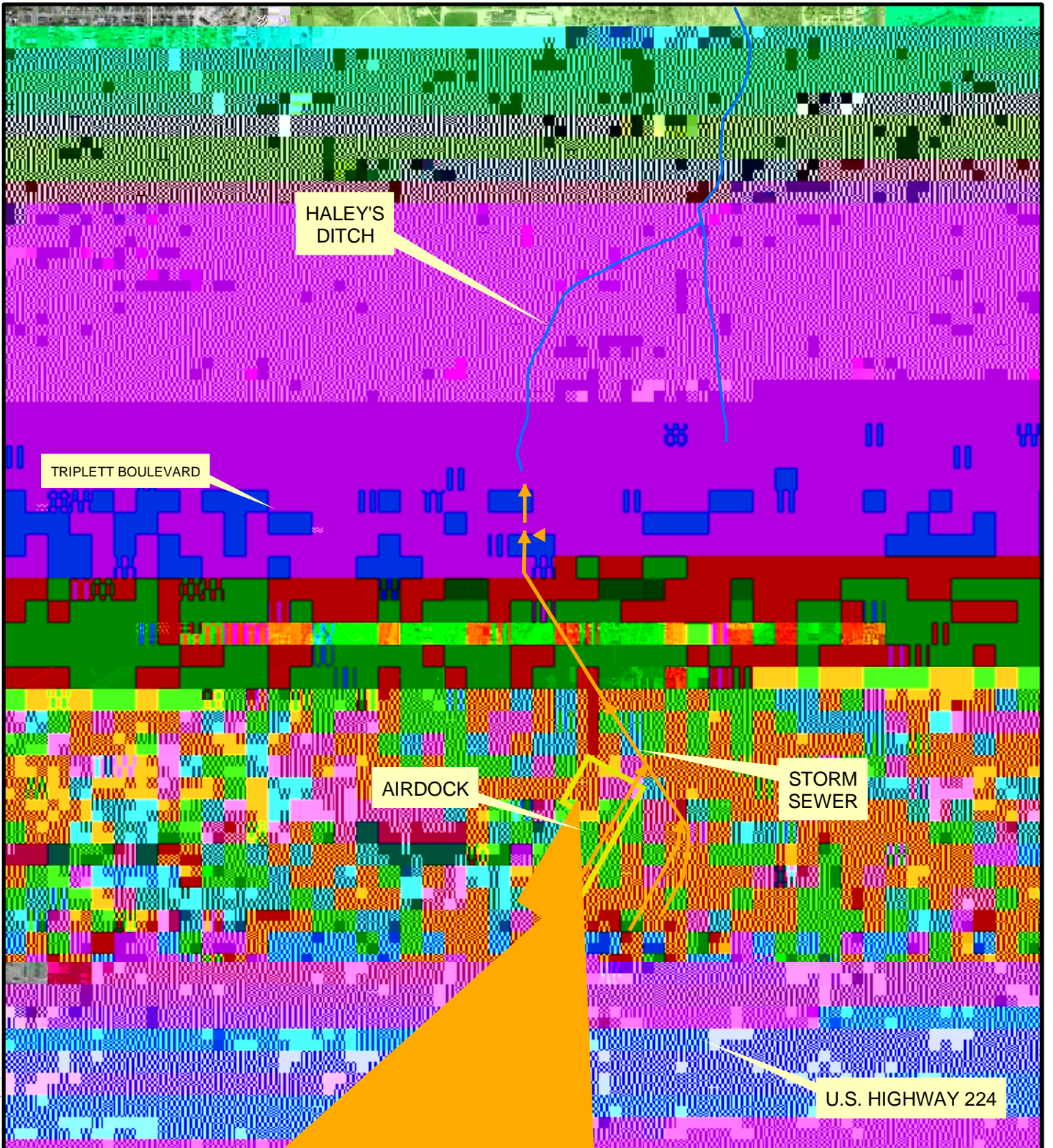
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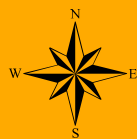
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FIGURES



LEGEND

 APPROXIMATE



AKRON AIRDOCK FACILITY
AKRON, OHIO

FIGURE 1
SITE AERIAL PHOTOGRAPH



2007-04-13 s:\cadd\ps8101airdock_rap_1.mxd TTEM-NV joel.peters

SOURCE: SUMMIT COUNTY GIS AERIAL PHOTOGRAPHY, 2000, AND SUMMIT COUNTY GIS, 2004.

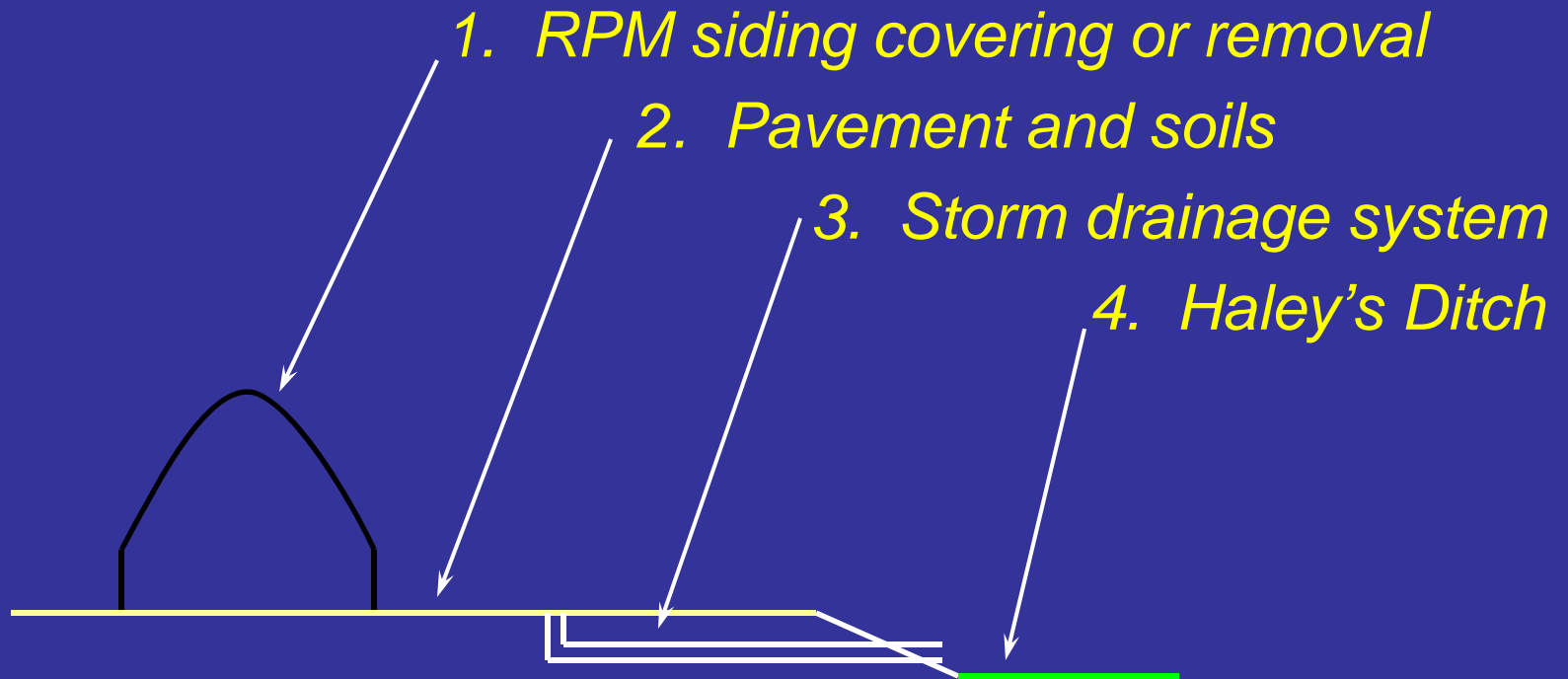
LEGEND

- (Parcel Storm Sewer Sampling Location
- (Upstream Storm Sewer Sampling Location



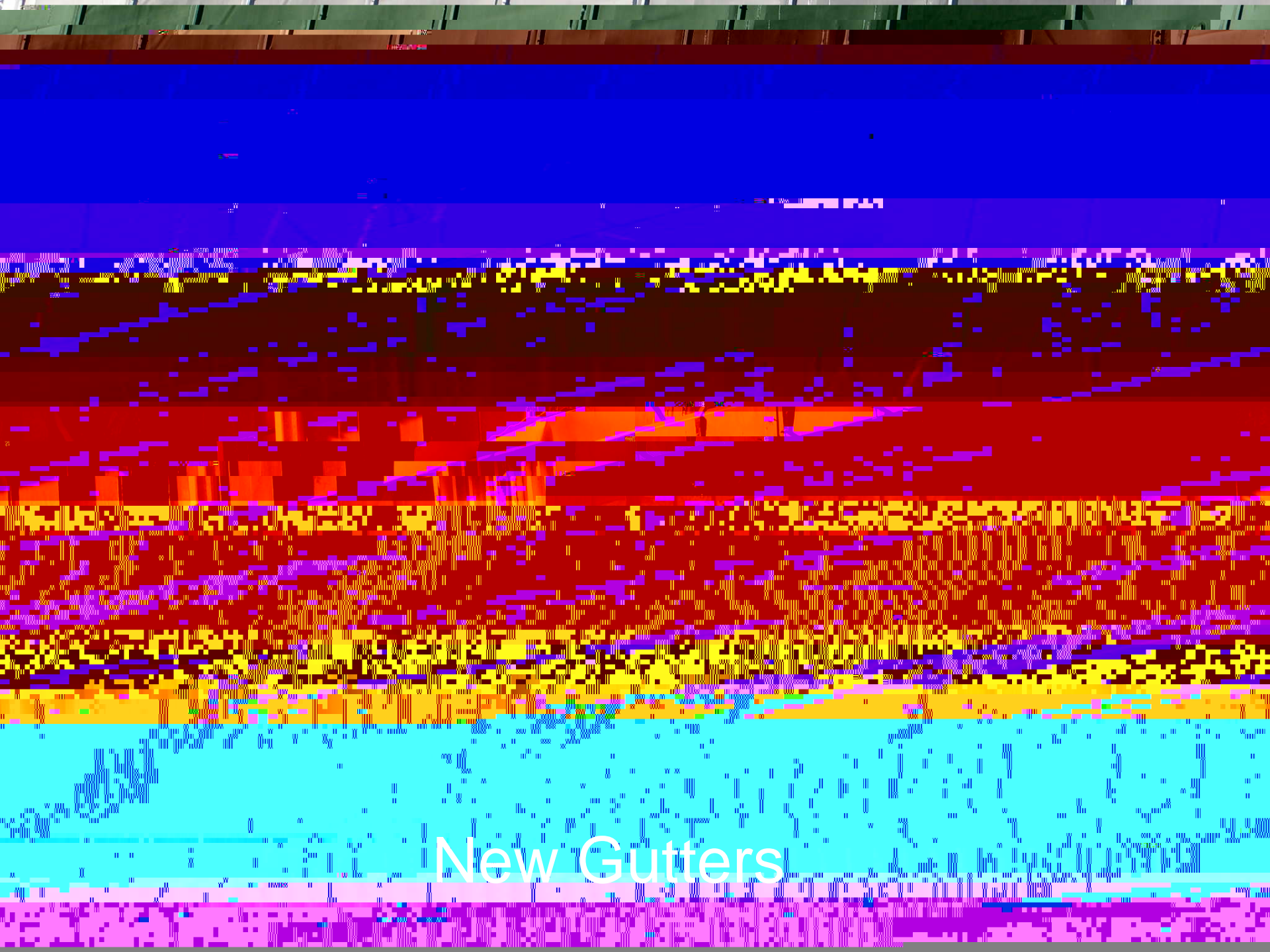
Exterior Cleanup Approach

Work from source outwards:



Exterior Progress to Date

- *Removed visible surface debris from around the Airdock, cleaned accessible storm drain manholes and installed and maintained storm drain filters*
- *Replaced Gutters (1,920 feet) and completed roof and door covering with rubber membrane (693,000 sq.ft.)*
- *Completed Vertical siding replacement (2,400 feet, 24 feet tall equal to 57,600 square feet) and replaced siding on two south motor houses and substation*
- *Demolished Plant M link and Northeast Loading Dock*
- *Collected and analyzed samples to characterize concrete, soils, pavement and other media to develop action plans as needed*

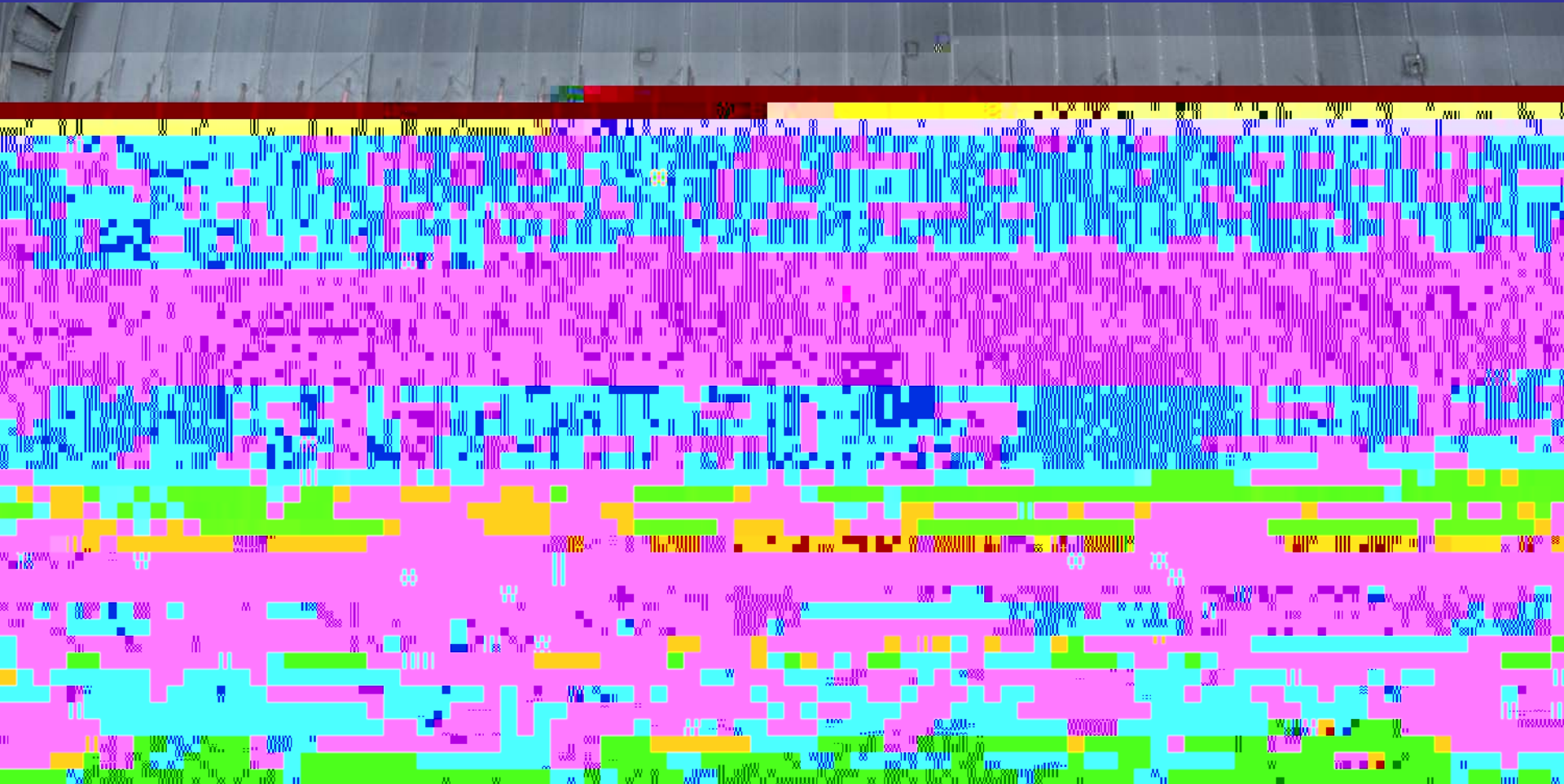


New Gutters



SW Door Membrane
Installation, July 2005

Original Siding



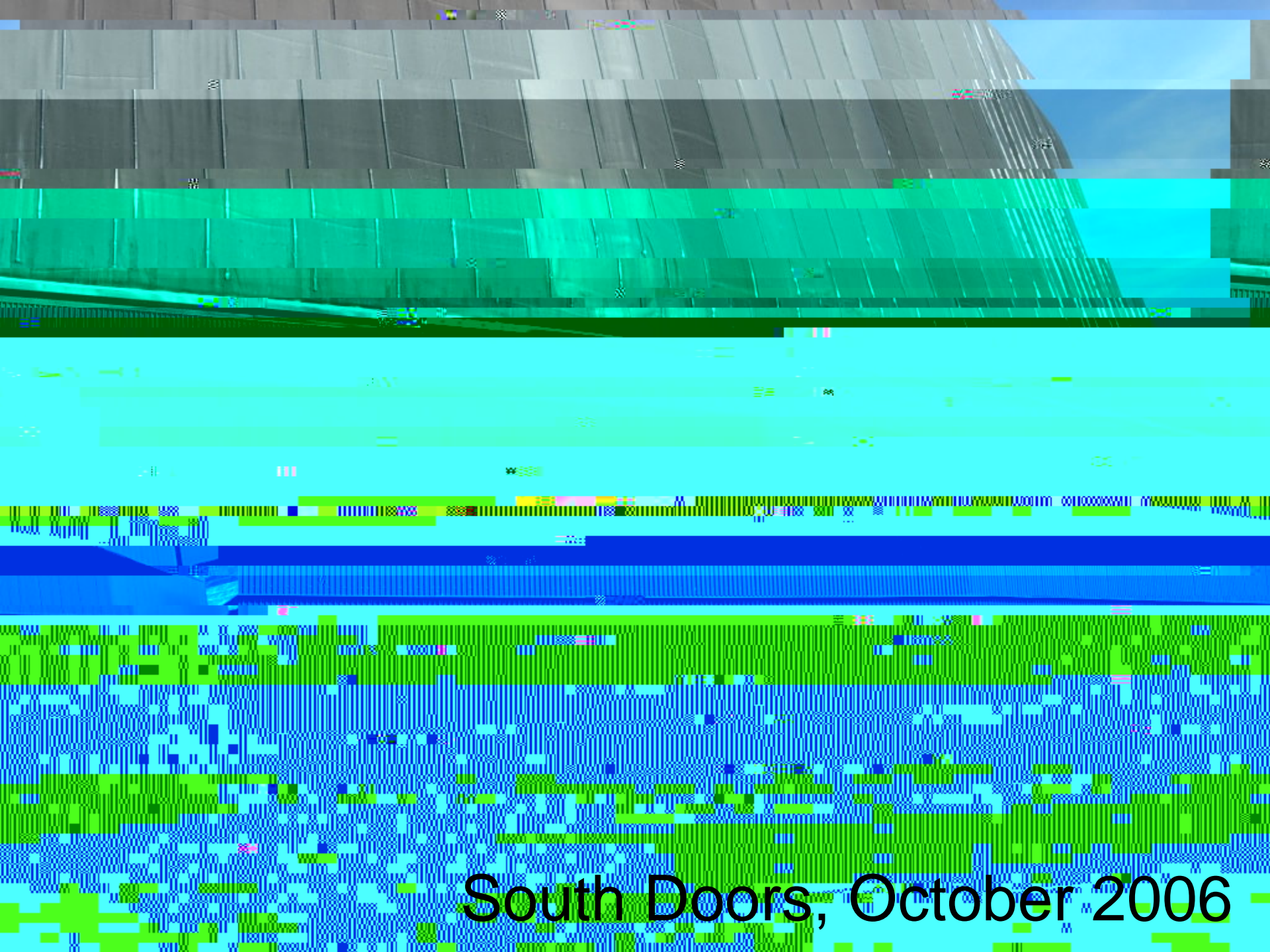
1E-2E, April 2004

New Siding

1E-2E, October 2006



New Siding
West Wall, October 2006



South Doors, October 2006



South West Motor House, October 2006

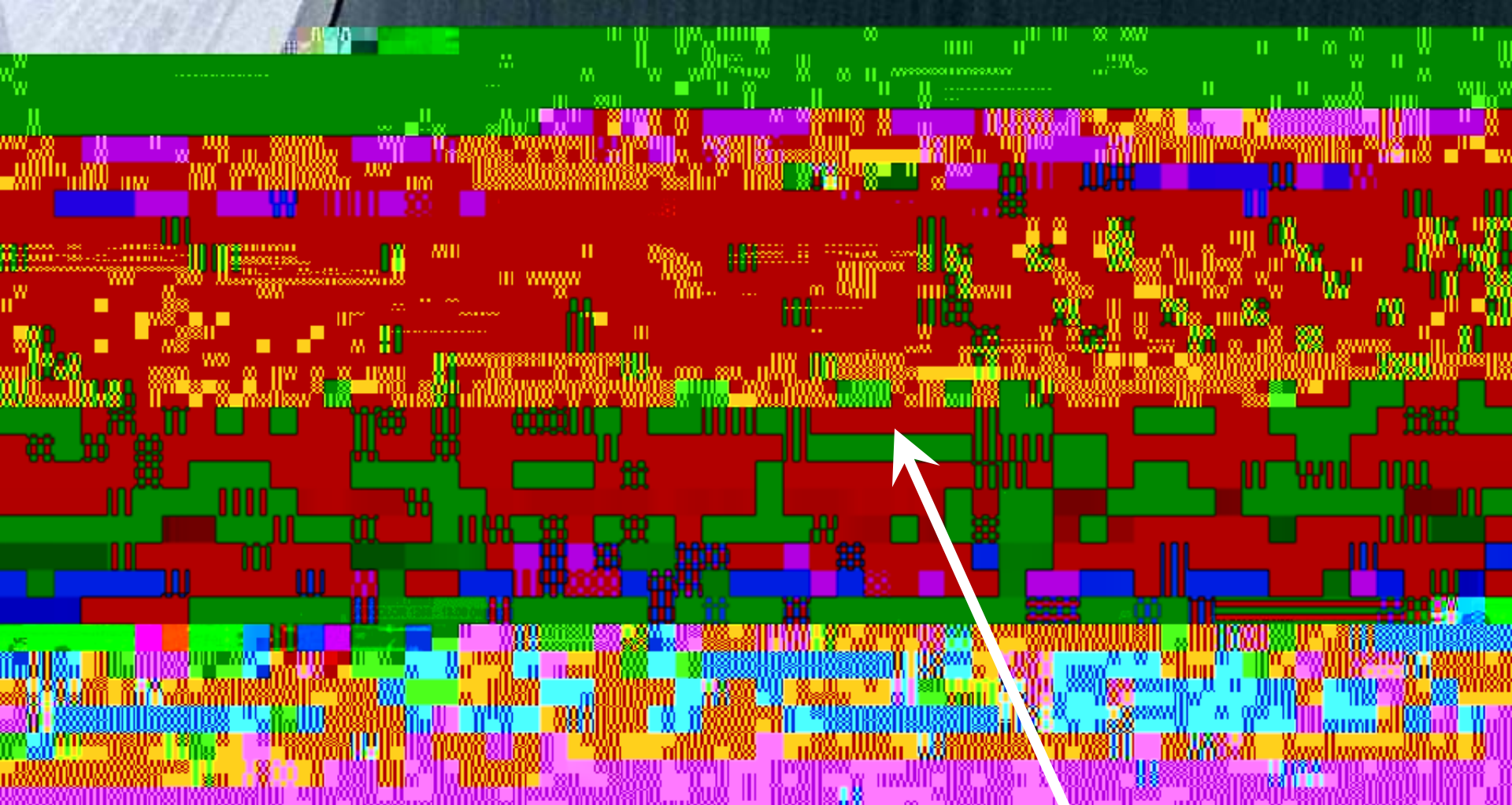


Substation, October 2006

2007 Exterior Activities Underway

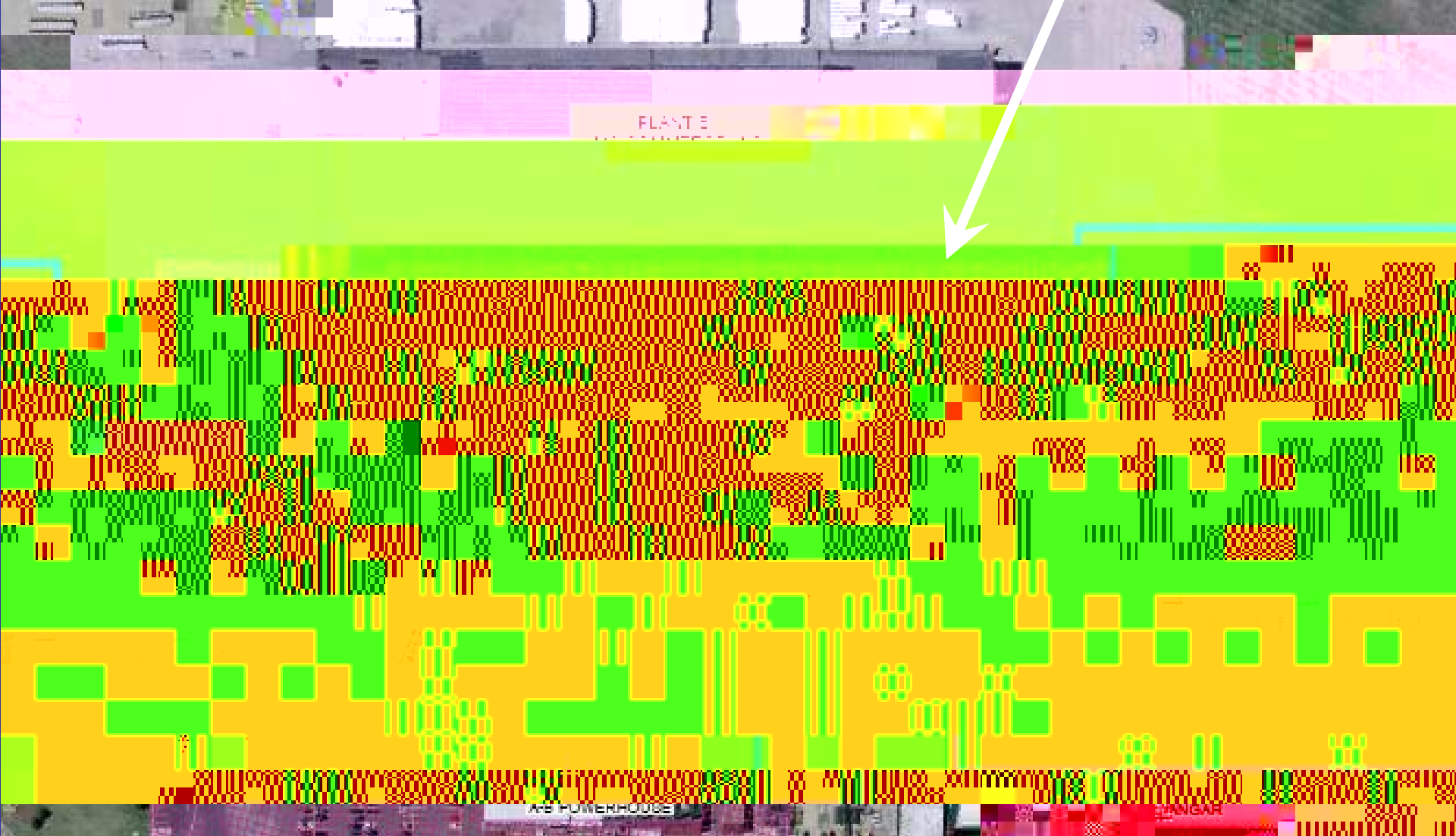
- *Complete fire damage repair of NE door*
- *Replace siding on both north motor houses and fire pump house*
- *Install fence around northern portion of Haley's Ditch*

Planned 2007 Exterior Activities



Soil Excavation Area

Pavement Cleaning Area



2008 and 2009 Exterior Plans

- *Replace pin house siding on Airdock roof*
- *Clean all storm drains*
- *Remediate Haley's Ditch as required*



Risk-Based Remedy

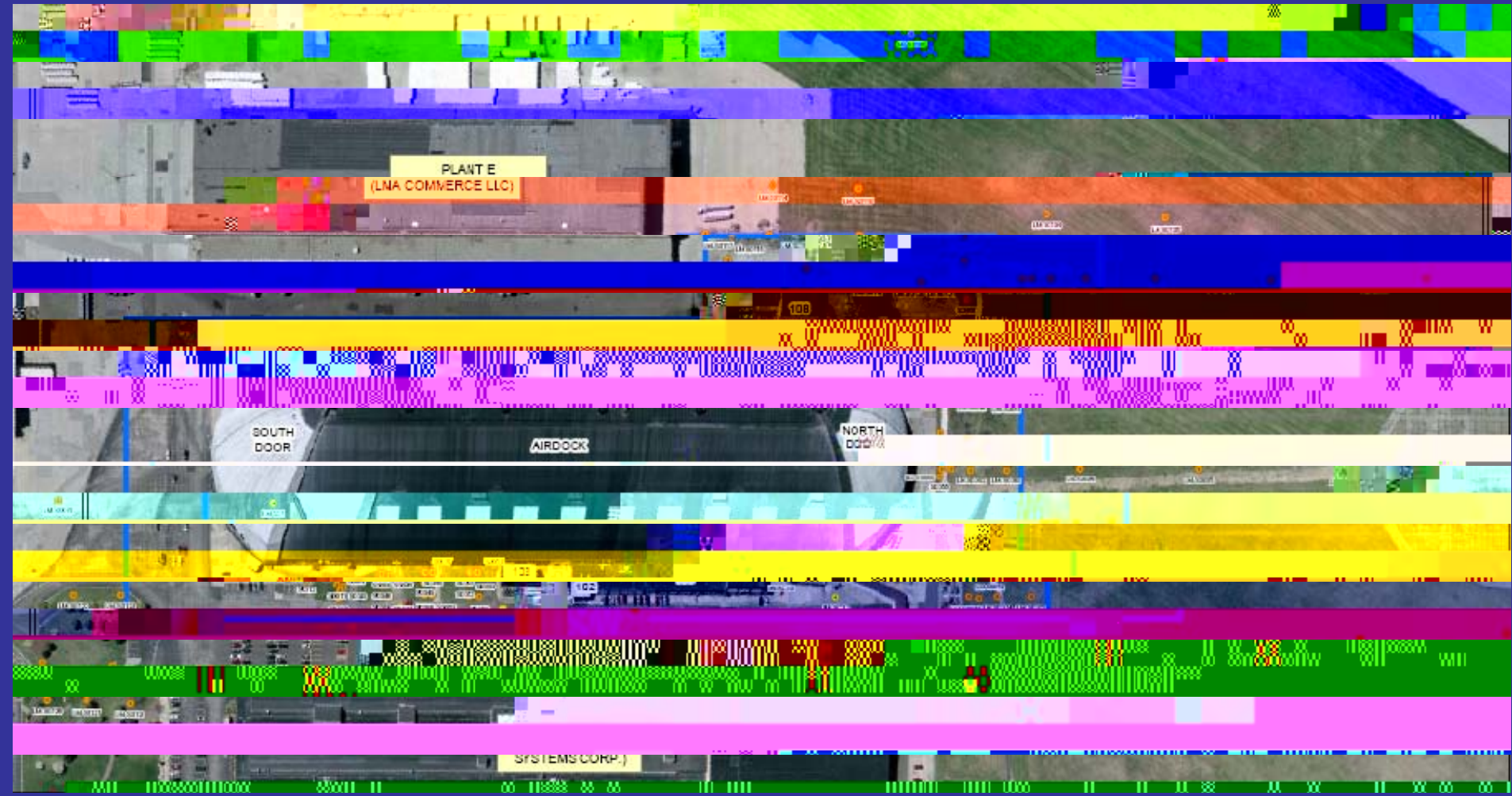


Current Assessment Of Risk

- *Receptors – restricted on-parcel to occupational exposures; potential unrestricted access on adjoining parcels*
- *Followed standard risk assessment methods utilized by Ohio EPA under the VAP and US EPA guidance*

Soil Samples Collected 2003-2006

Preliminary Risk Assessment Sample Data Set
156 samples on-parcel; 34 samples off-parcel



Current Residual Risk (Industrial Workers)

Analysis Of Parcel Other Than Areas Intended For Excavation

	<i>On Parcel</i>	<i>Off Parcel</i> No further action planned
<i>Average PCB in Soil (ppm)</i>	1.8	0.34
<i>Risk</i>	2E-06	4E-07
<i>Hazard Index</i>	0.17	0.031

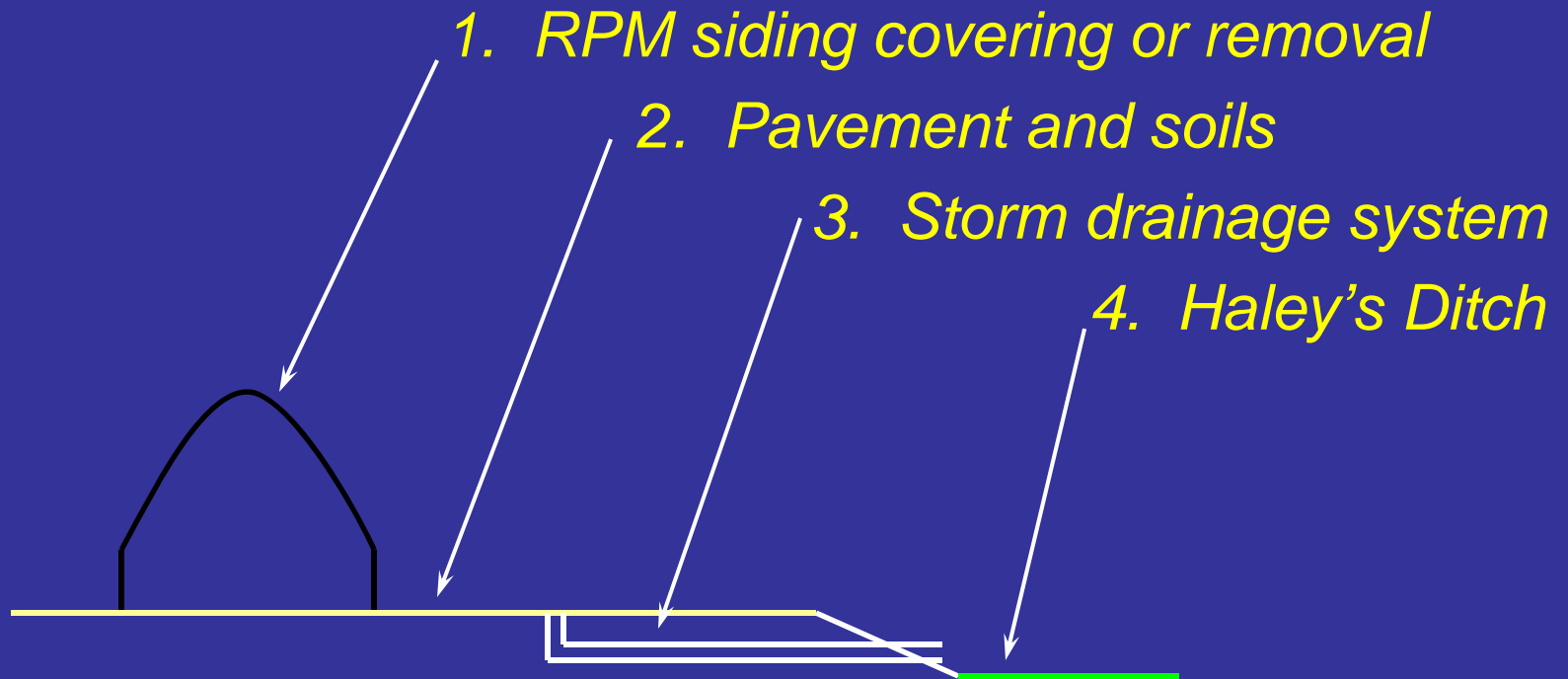
Preliminary Risk Outcome

Analysis Of Parcel Other Than Area Intended For Excavation

- *Risk Goals for Restricted Access Satisfied On Parcel for Industrial and Construction Workers*
- *Risk Goals for Unrestricted Access Satisfied Off Parcel for Industrial and Construction Workers*
- *Risk Goals for Unrestricted Access Satisfied Off Parcel for Hypothetical Residential Receptor*

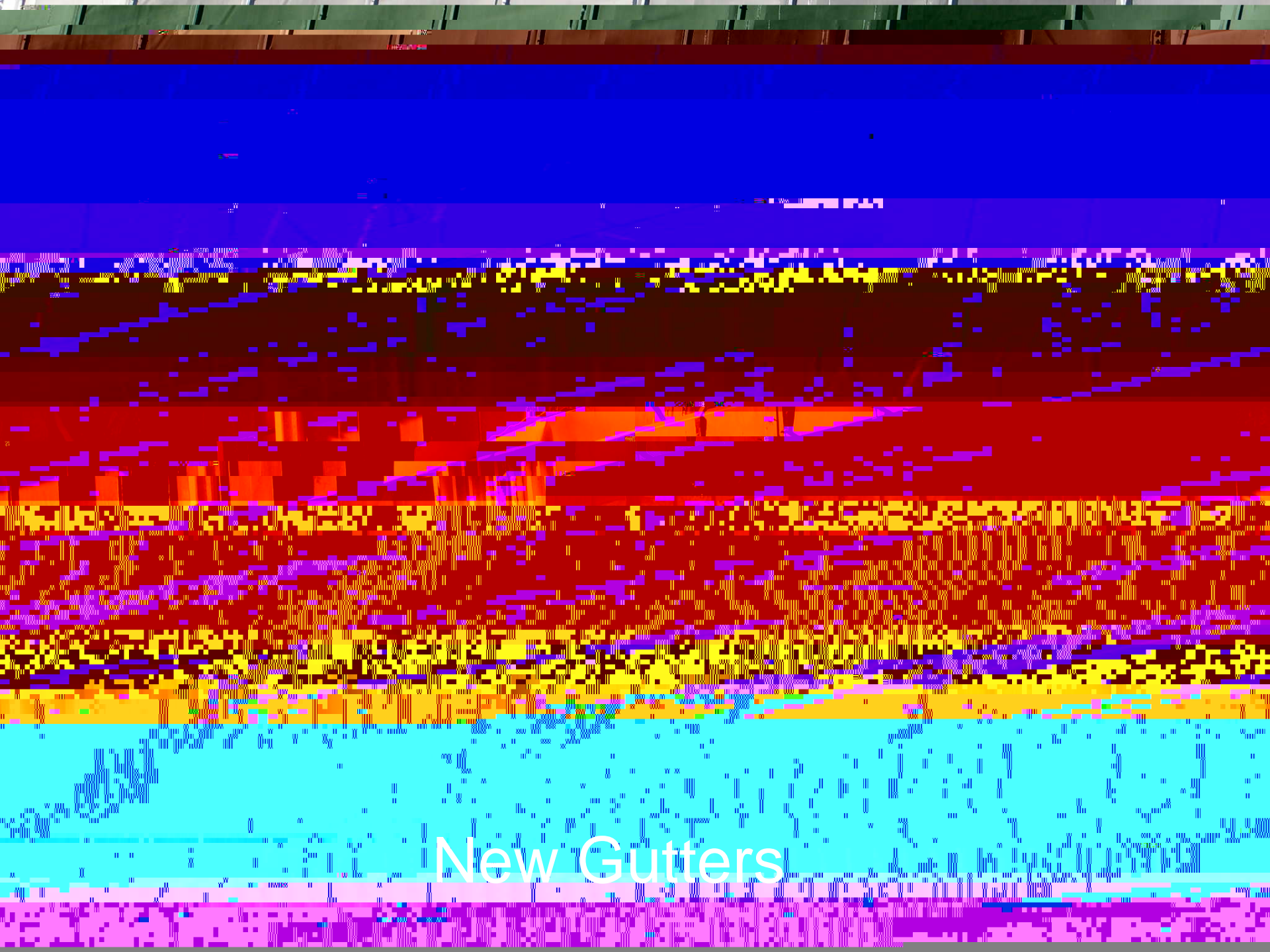
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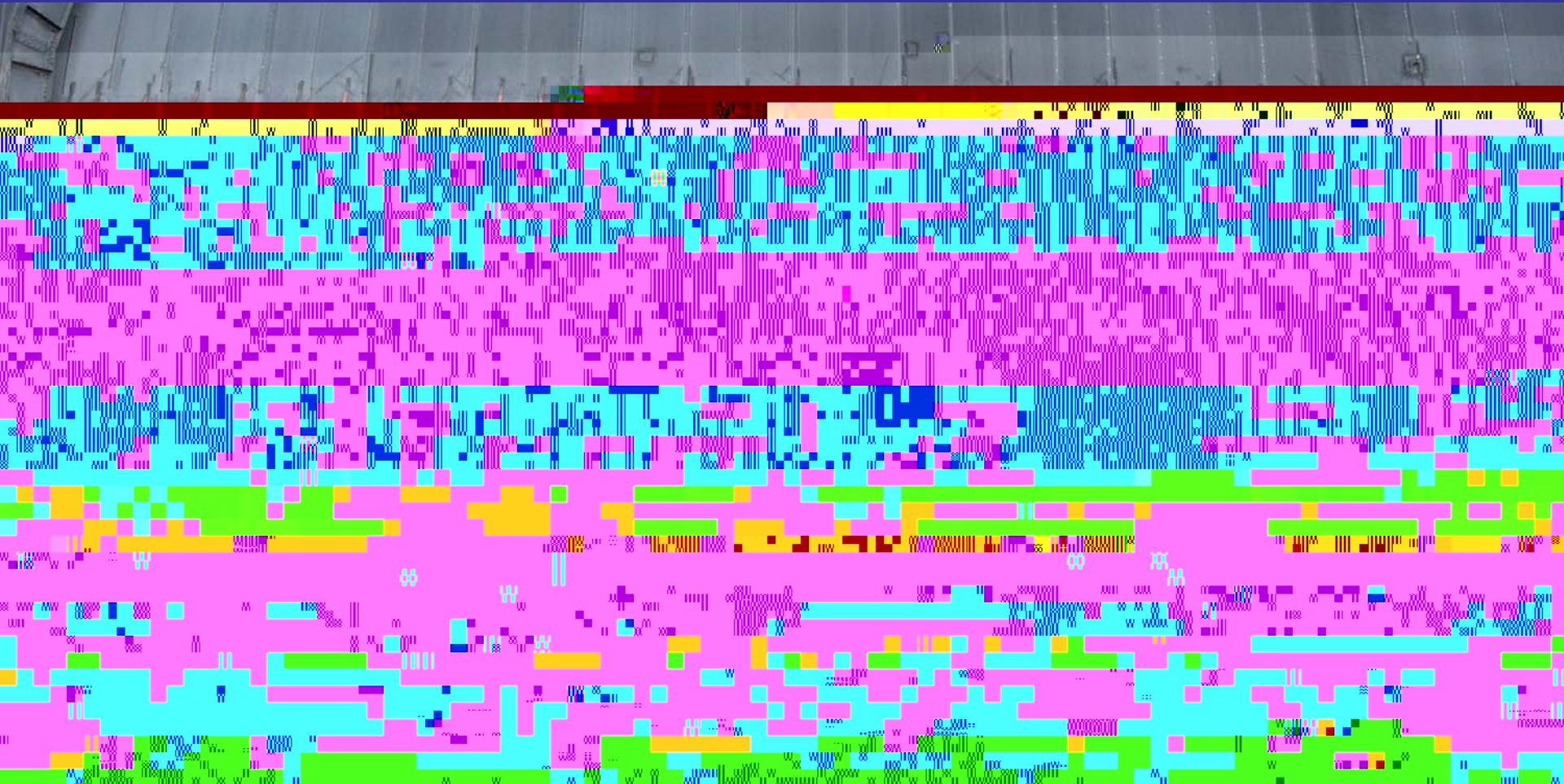


New Gutters



SW Door Membrane
Installation, July 2005

Original Siding



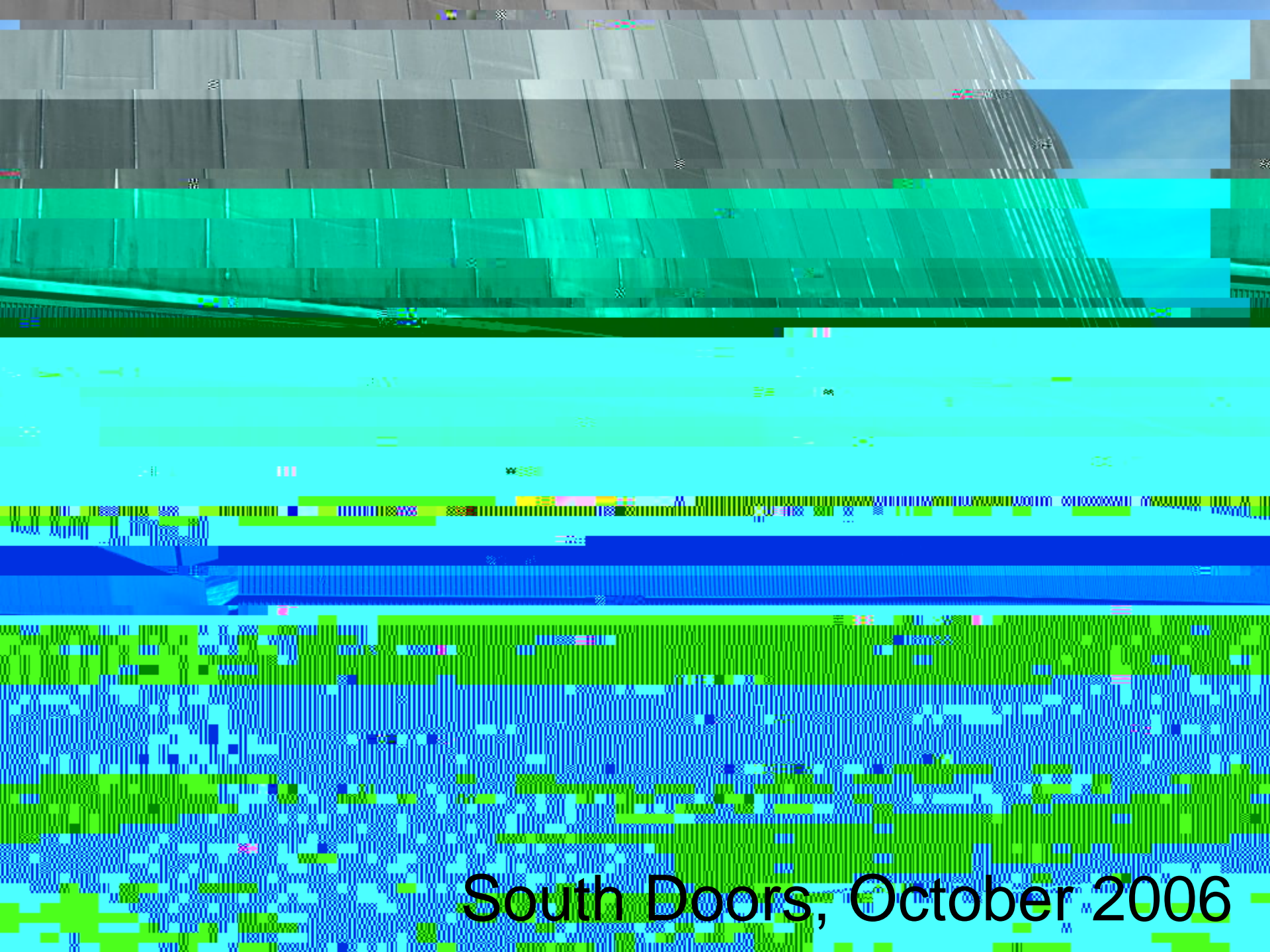
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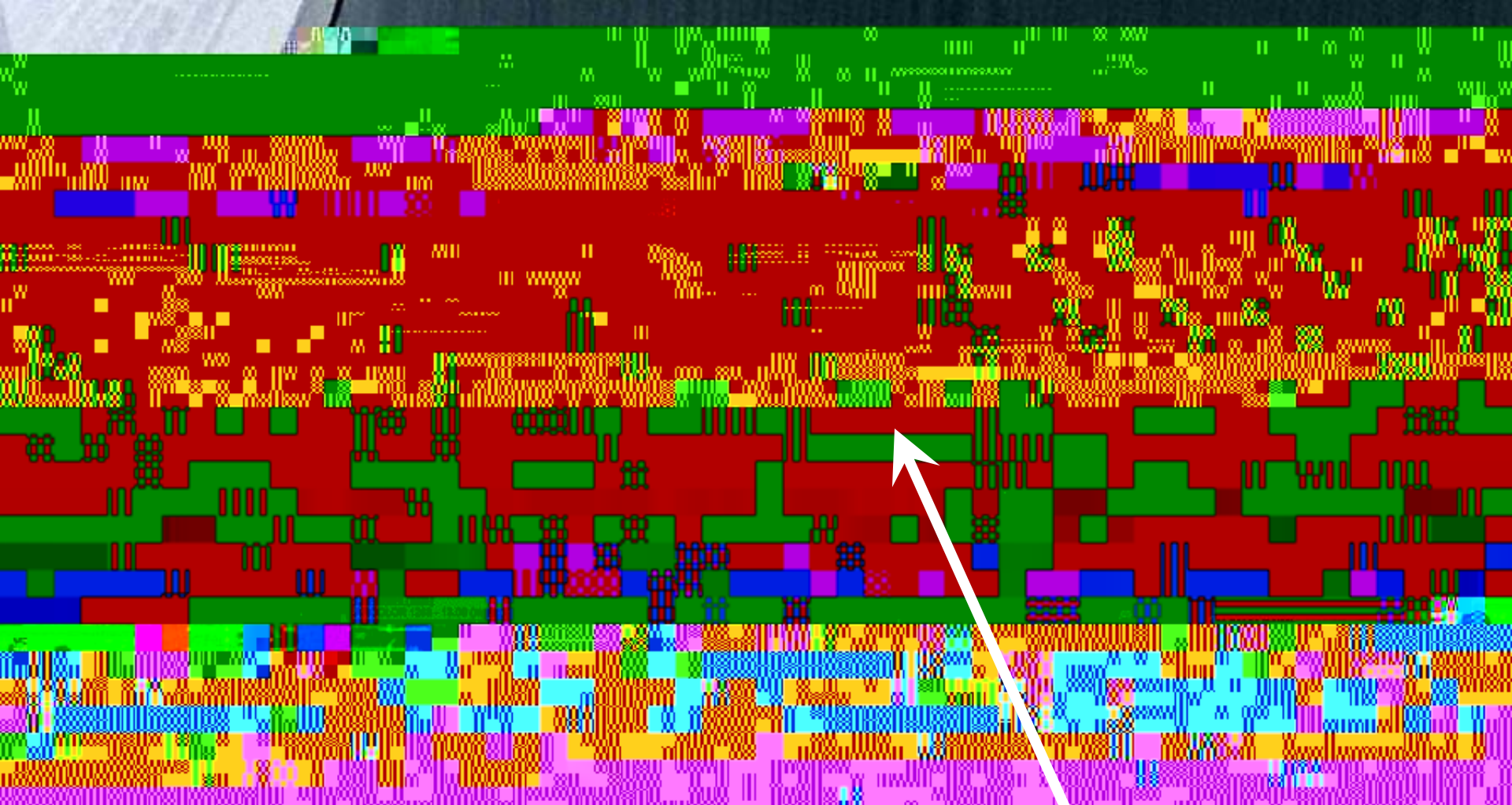


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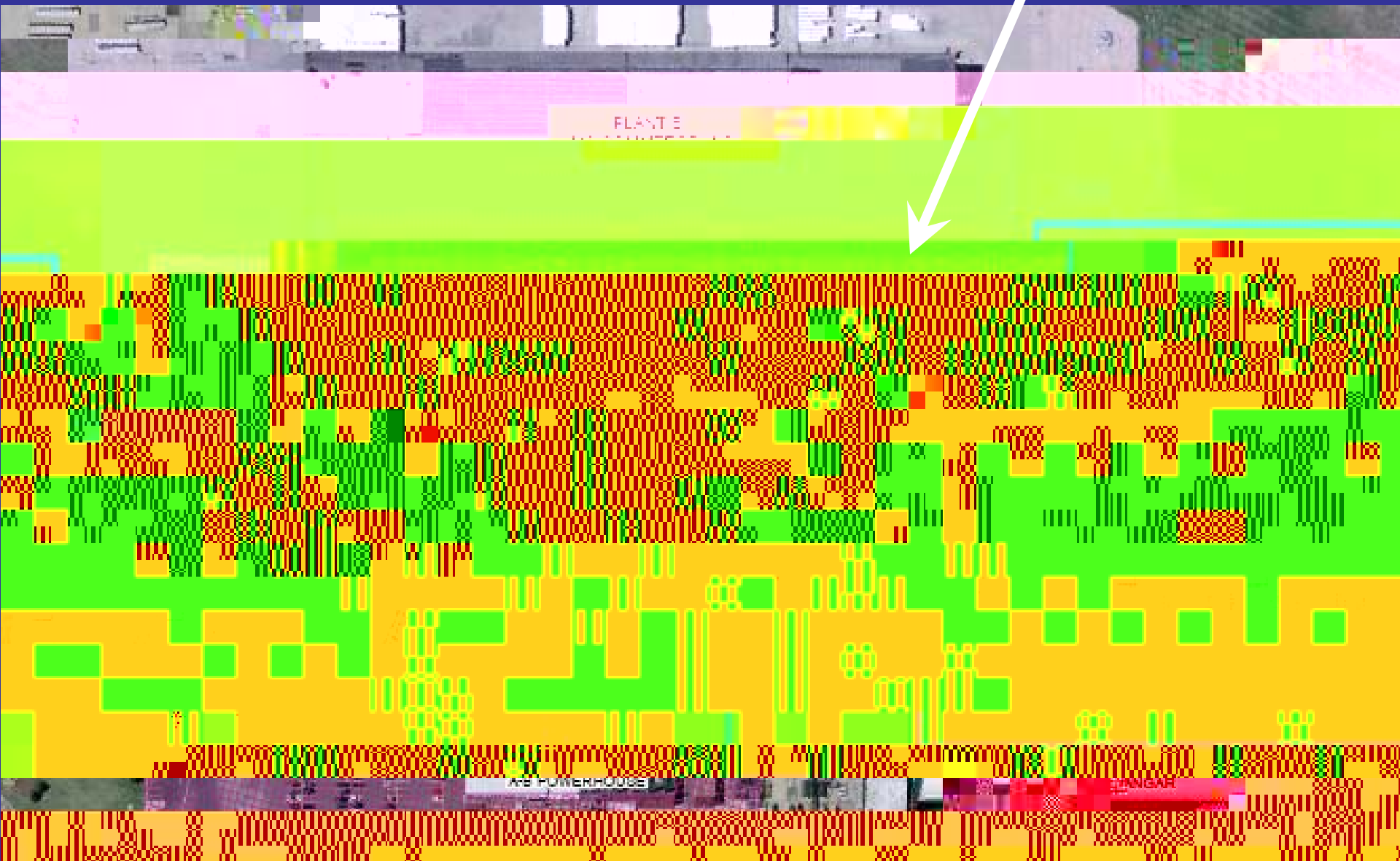
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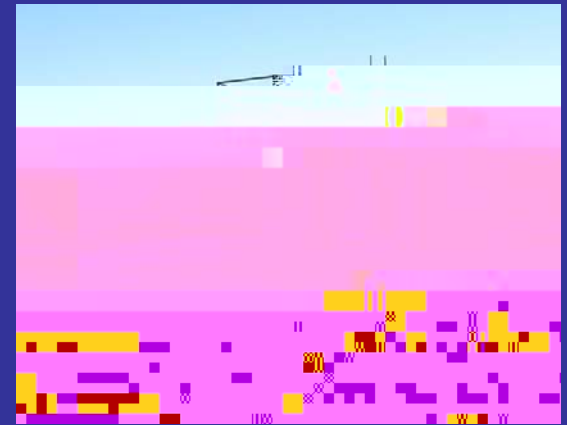
Soil Excavation Area

Pavement Cleaning Area

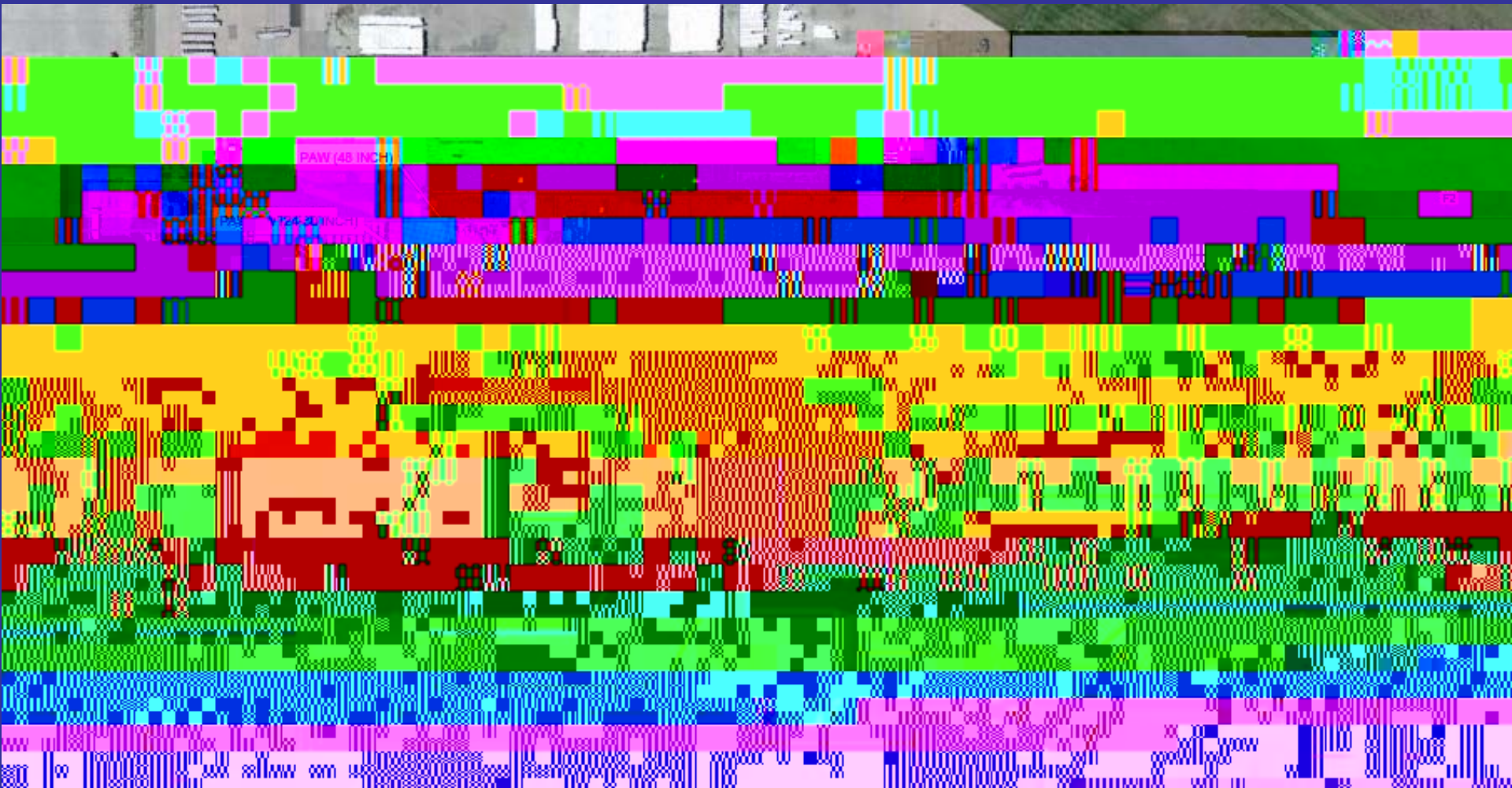


2008 and 2009 Exterior Plans

- *Replace pin house siding on Airdock roof*
- *Clean all storm drains*
- *Remediate Haley's Ditch as required*



Risk-Based Remedy

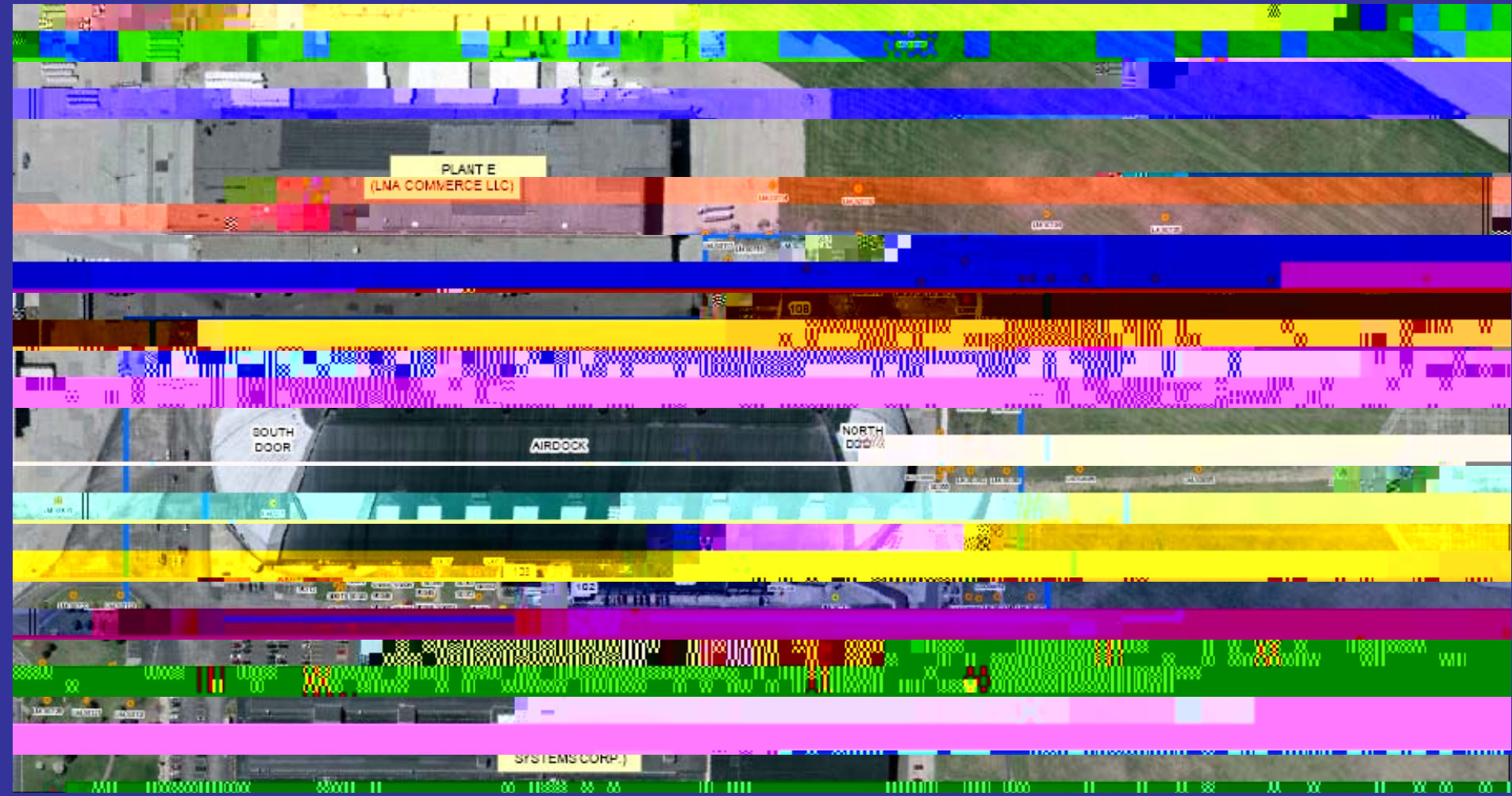


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<i>Average PCB in Soil (ppm)</i>	1.8	0.34
<i>Risk</i>	2E-06	4E-07
<i>Hazard Index</i>	0.17	0.031

Preliminary Risk Outcome

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