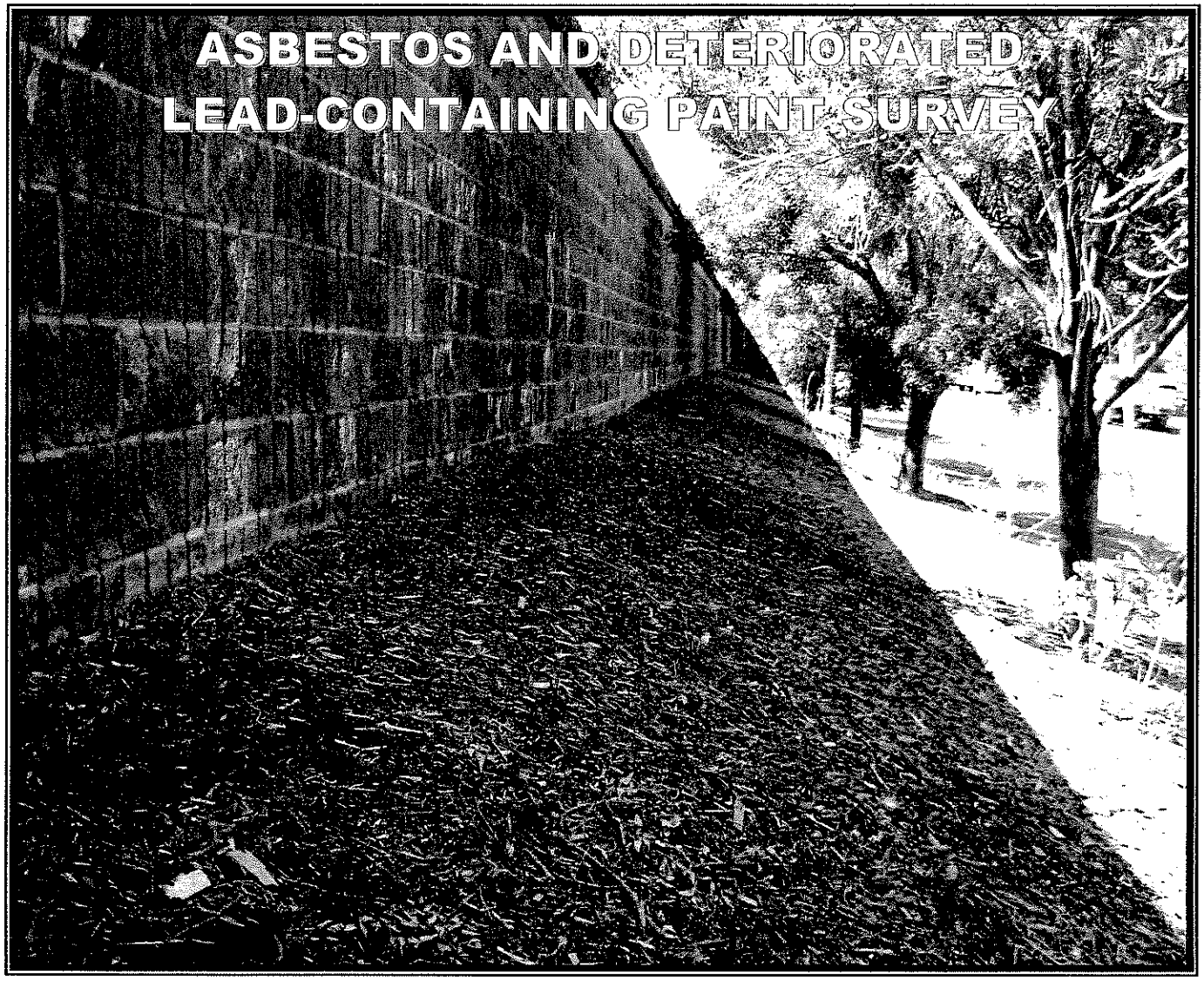


TAM TRAIL SOUNDWALLS
SAN RAFAEL, CALIFORNIA

PREPARED FOR:
NOLTE ASSOCIATES
1731 N. FIRST STREET, SUITE A
SAN JOSE, CALIFORNIA 95112

PREPARED BY:
GEOCON CONSULTANTS, INC.
2356 RESEARCH DRIVE
LIVERMORE, CALIFORNIA 94550

GEOCON

GEOCON PROJECT NO. E8348-06-01

AUGUST 2006

Project No. E8348-06-01
August 15, 2006

Mr. Mike McNeely
Engineering Manager
Nolte Associates
1731 N. First Street, Suite A
San Jose, California 95112

Subject: ASBESTOS AND DETERIORATED LEAD PAINT SURVEY REPORT
TAM TRAIL SOUNDWALLS ON STATE ROUTE 101
SAN RAFAEL, MARIN COUNTY, CALIFORNIA

Dear Mr. McNeely:

We have performed an asbestos and deteriorated lead-containing paint (LCP) survey of the subject site. The scope of services we provided included surveying representative areas of the State Route (SR) 101 soundwalls between 2nd Street and San Pedro Road at the subject site for suspect asbestos-containing materials and deteriorated LCP, collecting bulk samples, and submitting the samples to a laboratory for analysis.

This report summarizes the services performed and laboratory analytical results.

Please call us if you have any questions.

Sincerely,

GEOCON CONSULTANTS, INC.

David A. Watts, CAC
Project Scientist

Richard W. Day, CEG, CHG
Regional Manager

DAW:RWD:rjk

(5) Addressee

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Site Description

The project locations consist of the State Route (SR) 101 soundwalls between 2nd Street and San Pedro Road in San Rafael, Marin County, California. The approximate project locations are depicted on the Vicinity Map, Figure 1, and Site Plan, Figure 2.

1.2 General Objectives

The purpose of the survey was to assess the potential presence and quantity of asbestos and deteriorated lead-containing paint (LCP) at the project locations in advance of soundwall demolition activities associated with the TAM Trail Project. The information obtained from this investigation will be used by Nolte Associates for waste profiling, coordinating asbestos and deteriorated LCP disturbance activities, and estimating associated costs within the proposed project work areas.

2.0 BACKGROUND

2.1 Asbestos

The *Code of Federal Regulations (CFR),* 40 CFR 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Federal Occupational Safety and Health Administration (FED OSHA) classify asbestos-containing material (ACM) as any material or product that contains *greater than* 1% asbestos. Nonfriable ACM is classified by NESHAP as either Category I or Category II material defined as follows:

- **Category I** – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.
- **Category II** – all remaining types of nonfriable asbestos-containing material not included in Category I that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Regulated asbestos-containing material (RACM), a hazardous waste when friable, is classified as any material that contains *greater than* 1% asbestos by dry weight *and* is:

- Friable; or
- Category I material that has become friable; or
- Category I material that has been subjected to sanding grinding, cutting or abrading; or
- Category II nonfriable material that has a high probability of becoming crumbled, pulverized, or reduced to a powder during demolition or renovation activities.

Activities that disturb materials containing *any* amount of asbestos are subject to certain requirements of the Cal/OSHA asbestos standard contained in Title 8, CCR Section 1529. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor, but associated waste labeling is not required if the material contains 1% or less asbestos. When the asbestos content of a material exceeds 1%, virtually all requirements of the standard become effective.

Materials containing more than 1% asbestos are also subject to NESHAP regulations (40 CFR Part 61, Subpart M). RACM (friable ACM and nonfriable ACM that will become friable during demolition operations) must be removed from buildings prior to demolition. Certain nonfriable ACM and materials containing 1% or less asbestos may remain in buildings during demolition; however, there are waste handling/disposal issues and Cal/OSHA work requirements that may make it cost ineffective to do so. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

With respect to potential worker exposure, notification, and registration requirements, Cal/OSHA defines asbestos-containing construction material (ACCM) as construction material that contains more than 0.1% asbestos (Title 8, CCR 341.6).

2.2 Lead Paint

Construction activities (including demolition) that disturb materials or paints containing *any* amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, Section 1532.1. Deteriorated paint is defined by Title 17, CCR, Division 1, Chapter 8, §35022 as a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from a component. Demolition of a deteriorated LCP component would require waste characterization and appropriate disposal. Intact LCP on a component is currently accepted by most landfill facilities; however, contractors are responsible for segregating and characterizing waste streams prior to disposal.

For a solid waste containing lead, the waste is classified as California hazardous when: 1) the total lead content equals or exceeds the respective Total Threshold Limit Concentration (TTLC) of 1,000 milligrams per kilogram (mg/kg); or 2) the soluble lead content equals or exceeds the respective Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/l) based on the standard Waste Extraction Test (WET). A waste has the potential for exceeding the lead STLC when the waste's total lead content is greater than or equal to ten times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when total lead is detected at a concentration greater than or equal to 50 mg/kg, and assuming that 100 percent of the total lead is soluble, soluble lead analysis is required. Lead-containing waste is classified as "Resource, Conservation, and Recovery Act" (RCRA) hazardous, or Federal hazardous, when the soluble lead content equals or exceeds the Federal regulatory level of 5 mg/l based on the Toxicity Characteristic Leaching Procedure (TCLP).

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability; however, for the purposes of this investigation, toxicity (i.e., lead concentrations) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or other criteria. Waste that is classified as either California hazardous or RCRA hazardous requires management as a hazardous waste.

Potential hazards exist to workers who remove or cut through LCP coatings during demolition. Dust containing hazardous concentrations of lead may be generated during scraping or cutting materials coated with lead-containing paint. Torching of these materials may produce lead oxide fumes. Therefore, air monitoring and/or respiratory protection may be required during the demolition of materials coated with LCP. Guidelines regarding regulatory provisions for construction work where workers may be exposed to lead are presented in the Title 8, CCR, Section 1532.1.

2.3 Previous Survey Activities

Previous survey reports of the soundwalls were not available for review.

2.4 As-Built Plans

As-built plans of the soundwalls were not available for review.

3.0 SCOPE OF SERVICES

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2006), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Health Services (DHS), certification numbers I-1734 and M-1734 (expiration December 4, 2006) performed the asbestos and deteriorated LCP survey on July 21, 2006.

3.1 Asbestos

Suspect ACM were grouped into homogeneous areas with representative samples randomly collected from each. In addition, each potential ACM was evaluated for friability and condition (evidence of deterioration, physical damage, and water damage). A total of six bulk asbestos samples were collected.

Geocon's procedures for inspection and sampling are discussed below:

- Collected bulk asbestos samples after first wetting friable material with a light mist of water. The samples were then cut from the substrate and transferred to a labeled container. Note that when multiple samples were collected, the sampling locations were distributed throughout the homogeneous area (spaces where the material was observed).
- Relinquished bulk asbestos samples to EMSL Analytical, Inc., a California-licensed laboratory, for asbestos analysis in accordance with EPA Test Method 600/R-93/116 using polarized light microscopy (PLM) under standard chain-of-custody procedures. EMSL Analytical, Inc. is a laboratory accredited by the National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program (NIST-NVLAP) for bulk asbestos fiber analysis. The laboratory analyses were performed on a 7-workday turn-around-time.

Geocon sample identification numbers, material descriptions, approximate quantities, friability assessments, conditions, and photographic references are summarized as portions of Table 1. Sample locations are presented in Figure 2. Photographs of suspect asbestos-containing materials are presented with the Site Photographs.

3.2 Lead Paint

Mr. Watts observed no deteriorated suspect LCP on the soundwalls during field activities. Consequently, no paint samples were collected.

4.0 INVESTIGATIVE RESULTS

Asbestos was not detected in samples of suspect materials collected during the survey. The laboratory results for the asbestos samples are summarized on Table 1. Reproductions of the laboratory report and chain-of-custody documentation are presented in Appendix A.

As discussed in Section 3.2, Geocon observed no deteriorated LCP during the survey. Consequently, no paint samples were analyzed.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on our findings, Geocon recommends the following:

5.1 Asbestos

Since no suspect ACM was detected during the asbestos survey, the Cal/OSHA asbestos standard does not apply for planned demolition activities of the soundwalls. In addition, soundwall demolition debris would not be considered as a California hazardous waste based on asbestos content.

In accordance with Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2, written notification is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

5.2 Lead Paint

Geocon recommends that all paints within the project limits be treated as lead-containing for purposes of determining the applicability of the Cal/OSHA lead standard during any future maintenance, renovation, and demolition activities. This recommendation is based on the fact that lead is still an ingredient of industrial paints. Construction activities (including demolition) that disturb materials containing *any* amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR Section 1532.1. Geocon recommends the use of personnel who have lead-related construction certification as supervisors or workers, as appropriate, from the California DHS for personnel performing "trigger tasks" as defined in Title 8 CCR Section 1532.1(d). Common trigger tasks include manual scraping or sanding, heat gun applications, power tool cleaning, spray painting with lead paint, abrasive blasting, welding, cutting, grinding, and torch burning. Contractors should consult the Cal/OSHA lead standard for additional guidance. In accordance with Title 8, CCR, Section 1532.1(p), written notification to the nearest Cal/OSHA district office is required at least 24 hours prior to certain lead-related work.

6.0 REPORT LIMITATIONS

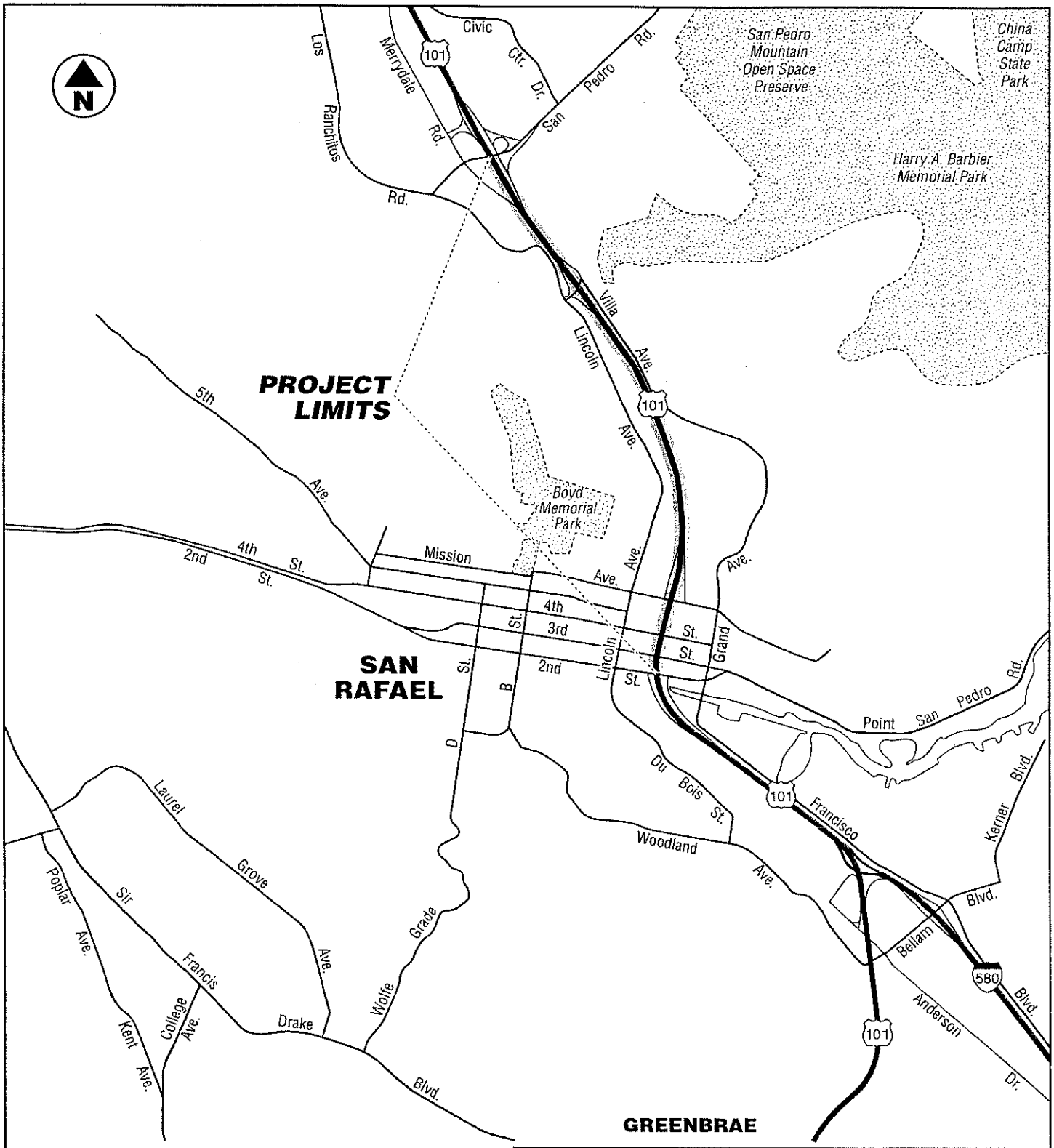
This asbestos and deteriorated LCP survey was conducted in conformance with generally accepted standards of practice for identifying and evaluating asbestos and LCP in structures. Due to the nature of surveys, asbestos and LCP use, and laboratory analytical limitations, some ACM or deteriorated LCP may not have been identified. Spaces such as voids, crawlspaces, and pipe chases, may have been concealed to Geocon's investigator. Previous renovation work may have been concealed or covered spaces or materials, or may have partially demolished materials and left debris in inaccessible areas. Additionally, renovation activities may have partially replaced ACM with indistinguishable non-ACM. Asbestos and/or deteriorated LCP may exist in areas not accessible or sampled in conjunction with this project.

During renovation or demolition operations, suspect ACM and/or deteriorated LCP may be uncovered which are different from those accessible for sampling during this assessment. Personnel in charge of renovation/demolition should be alerted to note materials uncovered during such activities that differ substantially from those included in this or previous assessment reports. If suspect and/or deteriorated LCP are found, additional sampling and analysis should be performed to determine if the materials contain asbestos or lead.

This report has been prepared exclusively for Nolte Associates. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. This report does not constitute a standard, specification, or regulation.



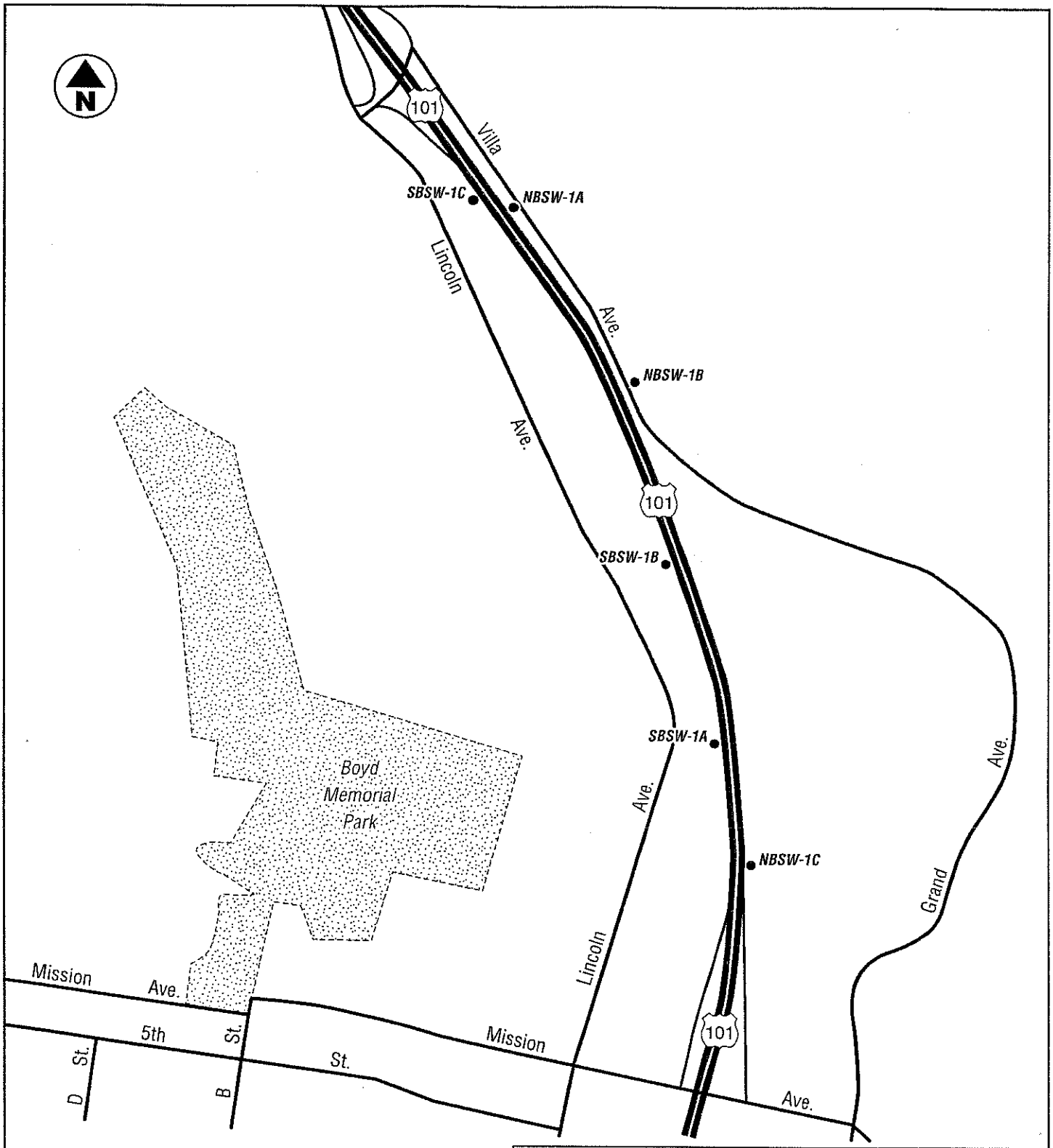
GEOCON
CONSULTANTS, INC.
2356 RESEARCH DRIVE – LIVERMORE, CA. 94550
PHONE 925 371-5900 – FAX 925 371-5915

TAM Trail

San Rafael, California

VICINITY MAP

E8348-06-01	August 2006	Figure 1



LEGEND: ● Approximate Asbestos Sample Location

SBSW Southbound Soundwalls

NBSW Northbound Soundwalls

0 1/4

Scale in Miles

GEOCON
CONSULTANTS, INC.
2356 RESEARCH DRIVE – LIVERMORE, CA. 94550
PHONE 925 371-5900 – FAX 925 371-5915

TAM Trail

San Rafael,
California

SITE PLAN

E8348-06-01	August 2006	Figure 2

TABLE 1
SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS - ASBESTOS
TAM TRAIL SOUNDWALLS ON STATE ROUTE 101 IN SAN RAFAEL, MARIN COUNTY, CALIFORNIA

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116

Sample No.	Description of Material	Approximate Quantity	Friable	Condition	Site Photo	Asbestos Content
SBSW-1A	Southbound soundwall joint fill material	NA	NA	NA	1 & 3	ND
SBSW-1B						ND
SBSW-1C						ND
NBSW-1A	Northbound soundwall joint fill material	NA	NA	NA	2 & 3	ND
NBSW-1B						ND
NBSW-1C						ND

Notes:
NA = Not applicable (no asbestos detected)
ND = No asbestos fibers detected

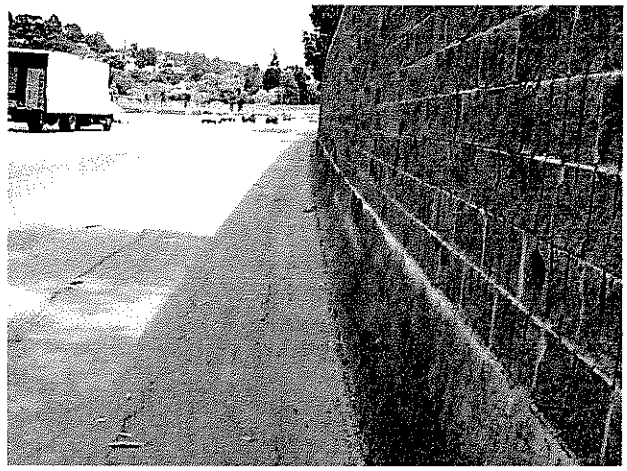


Photo 1 – Southbound SR 101 soundwall

Photo 2 – Northbound SR 101 soundwall

Photo 3 – Typical soundwall joint

GEOCON
CONSULTANTS, INC.
2356 Research Drive, Livermore, California 94550
PHONE (925) 371-5900 – FAX (925) 371-5915

PHOTOGRAPHS 1, 2, & 3		
TAM Trail San Rafael, California		
E8348-06-01		August 2006

APPENDIX A

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone: (510) 895-3675 Fax: 5108953680 Email: milpitaslab@emsl.com

Attn: **David Watts**
Geocon Consultants
2356 Research Drive
Livermore, CA 94550

Fax: (925) 371-5915 Phone: (925) 371-5900

Project: **E8348-06-01 / Tam Trail, Building No. Soundwalls, SR 101, Marin County, CA**

Customer ID: GECN21
Customer PO: E8348-06-01
Received: 07/26/06 12:00 PM
EMSL Order: 090603781

EMSL Proj:
Analysis Date: 8/2/2006
Report Date: 8/2/2006

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos %	Fibrous	Non-Asbestos %	Non-Fibrous	Asbestos % Type
SBSW-1A, Joint fill material *090603781-0001*		Brown, Black Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	None Detected
SBSW-1B, Joint fill material *090603781-0002*		Brown, Black Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	None Detected
SBSW-1C, Joint fill material *090603781-0003*		Brown, Black Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	None Detected
NBSW-1A, Joint fill material *090603781-0004*		Brown, Black Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	None Detected
NBSW-1B, Joint fill material *090603781-0005*		Brown, Black Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	None Detected
NBSW-1C, Joint fill material *090603781-0006*		Brown, Black Fibrous Homogeneous	98%	Cellulose	2%	Non-fibrous (other)	None Detected

Analyst(s)

Lansing Wong (6)

or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client.Samples received in good condition unless otherwise noted.

Analysis performed by EMSL San Leandro (NVLAP #101048-3)

Chain of Custody Form

0003781

Project No.: E8348-06-01 Client Name: GEOCON

Analyze sample sets until positive: ☐ Yes ☒ No

Report Results to: D. WATTS Office Location: LIVERMORE, CA Analytical Fee (per sample): $ STD PLM Date(s) Inspected: 21 July 2006

Consultants Ph. #: (925) 371-5900 Consultants Fax #: (925) 371-5915 Other Comments: STD TAT

Site Name: TAM TRAIL Building No. SOUNDWALLS (STC 101) Site Address: MARIN COUNTY, CA

Material Code	Sample Number: Site No.	Sample Number: Bldg. No.	Sample Number: Material Link No.	Samples Collected: A	B	C	D	E	F	G	H	I	J	K	Not Sampled	Material Description
		SBSW	1	X	X	X										JOINT FILL MATERIAL
		NBSW	1	X	X	X										" " "

Relinquished by: Print Name: D. WATTS Received by: Print Name: USPS

Signature: Date/Time: 24 July 2006 0600 Signature: Date/Time: 24 July 2006 0600

Relinquished by: Print Name: Received by: Print Name:

Signature: Date/Time: Signature: Date/Time: 7/26/06 US Mail 12pm

6

Flooring
- CFT = Ceramic floor tile grout/mastic (M)
- F = Floor material-Generic(M)
- FMAS = Floor mastic(M)
- FT = Vinyl composite tile floor (M)
- FS = Vinyl composite sheet floor (M)
- FLC = Floor leveling compound (M)
- TERR = Terrazzo flooring (M)

Wall/Ceiling/Other
- ACOU = Textured acoustical (sprayed) (S)
- BBM = Baseboard mastic (M)
- CM = Ceiling (unspecified type) (M)
- CS = Ceiling (unspecified type) (S)
- CP = Ceiling panel - Lay-in (M)
- CMAS = Ceiling mastic (M)
- CT = Ceiling tile - Splined or nailed (M)
- CTG = Ceiling tile - Glued (M)
- CWT = Ceramic wall tile grout & mastic(M)
- DEBM = Debris (unspecified) (M)
- DEBS = Debris (unspecified) (S)
- DEBT = Debris (unspecified) (TSI)
- DOOR = Door core insulation - Fire door (M)
- OFM = Other friable material (M)
- OFS = Other friable material (S)
- ONFM = Other nonfriable material (M)
- ONFS = Other nonfriable materials (S)
- PL = Plaster (wall or ceiling) (S)
- SHR = Sheetrock (no joint compound) (M)
- SHRJC = Sheetrock with joint compound (M)
- STUC = Stucco (S)
- FP = Structural fireproofing (S)
- TRAN = Transite panel (M)
- TX = Surface texturing on walls/ceiling (S)
- WM = Wall (unspecified type) (M)
- WS = Wall (unspecified type) (S)
- WT = Wall tile - Splined or nailed (M)
- WTG = Wall tile - Glued on (M)

Piping/TSI
- FI = Fitting insulation (type not specified) (TSI)
- FICHW = Fitting - Chilled water system (TSI)
- FICON = Fitting - Condensate (TSI)
- FIDCW = Fitting - Domestic cold water (TSI)
- FIDHW = Fitting - Domestic hot water (TSI)
- FIHHW = Fitting - Heating hot water (TSI)
- FISTM = Fitting - Steam (TSI)
- DI = Duct insulation (TSI)
- DTAPE = HVAC - Duct joint tape/compound (M)
- DFLEX = HVAC - Flexible duct/flex duct joint (M)
- DFLUE = Mech. equipment - Flue insulation (TSI)
- MGSKT = Mech. equipment-Gasket (M)
- MTANK = Mech equipment-Tank insulation (TSI)
- PI = Pipe insulation (type not specified) (TSI)
- PICHW = Pipe insulation-Chilled water system (TSI)
- PICON = Pipe insulation-Condensate (TSI)
- PIDCW = Pipe insulation-Domestic cold water (TSI)
- PIDHW = Pipe insulation-Domestic hot water (TSI)
- PIHHW = Pipe insulation-Heating hot water (TSI)
- PISTM = Pipe insulation-Steam (TSI)
- PTRAN = Pipe-Transite (M)

Roofing
- RF = Roofing material (M)
- RFAG = Asphalt and gravel (M)
- RFAT = Asphalt roof tile (M)
- RFFLS = Flashing (M)
- RFFLT = Felt material (M)
- RFMAS = Penetration mastic (M)
- RFROL = Rolled sheet type (M)
- RTRAN = Transite shingle (M)

(M) = Miscellaneous material
(S) = Surfacing material
(TSI) = Thermal System Insulation