

Hesselberg, Keesee & Associates, Inc., Consulting Elevator Engineers

February 22, 1993

Alameda County Health Care Services Agency Department of Environmental Health Hazardous Materials Division 80 Swan Way, Room 200 Oakland, CA 94621

Attention: LARRY SETO

Project: BRIDGEWATER CONDOMINIUMS

**545 PIERCE STREET** 

ALBANY, CA.

Subject: SUMMARY REPORT

HYDRAULIC ELEVATOR CLOSURE PLAN

Dear Larry:

This is our Summary Report on the Hydraulic Elevator Closure Plan for Elevator No. 1 in Building One for the above named project which was submitted to your office on January 19, 1993.

#### HISTORY

In late December of 1992, Otis Elevator conducted an annual 5-Year Safety Test as required by the State Elevator Code. During the testing, the elevator failed to hold its position with respect to the floor levels. After additional testing, it was discovered that the jack cylinder was leaking. Otis Elevator technicians quickly shut down the unit and notified building management.

#### CONSTRUCTION DOCUMENT PHASE

The Consulting Elevator Engineering firm of Hesselberg, Keesee & Associates (HKA) were engaged to advise the Homeowners' Association and to select a responsible contractor to perform this work on behalf of the Homeowner's Association. HKA's prime responsibility was to obtain the best quality of work and to control costs for the entire project. HKA worked closely with the enforcing agency, Alameda County Health Care Services, Department of Environmental Health, Hazardous Materials Division to bring the project to a close.

## NOTICE TO PROCEED

HKA submitted a Closure Plan to the Agency for approval on January 19, 1993. Bids from the elevator companies were received on Friday, January 15, 1993. The Board selected the lowest "responsible bidder" at a specially called meeting at 6:15 p.m. on January 15, 1993. A "Notice To Proceed" was given to Otis Elevator on Monday, January 18, 1993 in the amount of \$49,617.

BRIDGEWATER CONDOMINIUMS ALBANY, CA SUMMARY REPORT

## CYLINDER REMOVAL

Otis began work on Tuesday, January 19, 1993 to remove the existing cylinder. The jack was centered in the 24" rock hole with no backfill material. Oil and water was encountered at approximately 21' and extended down to a depth of 9' approximately. Removal of the jack was accomplished on Thursday, January 21, 1993 without significant problems. The jack was cut into five (5) pieces for removal from the elevator hoistway.

Pictures were taken of the cylinder pieces. HKA's observation of the defected areas confirmed the jack leak was caused by corrosion. The jack cylinder was definitely attacked by electrolytic or galvanic corrosion. Two holes were present in the lower two feet of the cylinder. The corrosion became less apparent in the upper section of the cylinder.

# HAZARDOUS MATERIAL REMOVAL

Following the removal of the defective cylinder, the Hazardous Material Removal Contractor, K.M. McRae, Inc., moved on site on Monday, January 25, 1993. The oil/water mixture was removed and stored in 55 gallon drums. Water samples were taken by ENGEO, a Geotechnical Consultant, in the presence of Larry Seto, Alameda County Hazardous Material Division on January 28. The hole was allowed to remain open overnight to determine if the hole would fill with water. On the morning of January 29, 1993, detergent was added to the remaining product in the hole along with additional water. This mixture was again pumped out into additional 55 gallon drums. A total of nine (9) drums were filled with waste oil and water mixture. The mixture was again sampled. Larry Seto gave the final approval to proceed with the jack replacement. A copy of ENGEO's report is included as Attachment No. 1.

## INSTALLATION OF STEEL AND PVC CASING

Once the hole was cleaned out, a new 11 gauge steel casing with closed bottom was installed along with a 15" PVC closed bottom casing for the dual containment requirement. This work was completed on Monday, February 1, 1993.

## INSTALLATION OF NEW JACK ASSEMBLY

Otis Elevator returned to the job on Wednesday, February 3, 1993 and installed the new jack cylinder within the PVC casing. The elevator was inspected on Friday, February 5, 1993 by HKA and the elevator returned to service.

It should be noted that both Otis and its Hazardous Material Sub-Contractor encountered good luck in the removal and replacement of the cylinder and no additional charges were encountered due to unforseen circumstances such as contaminated ground water, underground obstructions, etc.

BRIDGEWATER CONDOMINIUMS
ALBANY, CA
SUMMARY REPORT

## TRANSPORTATION OF HAZARDOUS MATERIALS

HKA contacted REMCO, a hazardous waste hauler to remove the nine (9) barrels of contaminated water and oil mixture on behalf of the Homeowner's Association. The materials were classed as "waste oil" and was shipped to an oil recycler instead of a hazardous waste site. REMCO's Bill Lading is attached as Attachment No. 2.

HKA and the Homeowner's Association of Bridgewater wishes to thank you for your corporation on this project. The actual construction time of 13 days was exceptional. Please let us know if we can be of further assistance to your group on future jobs.

Sincerely,

HESSELBERG, KEESEE & ASSOCIATES, INC.

∂ames H. Finley Principal

JHF/kr

pc: John Dreisbach

Bridgewater Condominiums

Enclosures:

Attachment No. 1-ENGEO Geotechnical Report

Attachment No. 2-Bill of Lading



# GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS

In Reply Please Refer to: 3644-F1

February 2, 1993

K. M. McRae, Inc. 238 Esther Court Hayward, CA 94544

Attention:

John McRae

Subject:

Bridgewater Condominiums

545 Pierce Street Albany, California

OBSERVATION OF ELEVATOR SHAFT DEWATERING

## Gentlemen:

As requested, we have provided field observation services associated with the retrofit of the elevator shaft, located within the Bridgewater Condominium Complex, in Albany, California. The purpose of the field observation services was to document site activities associated with the dewatering of the shaft. The scope of our services include:

- Observation of field work conducted by K.M. McRae personnel on January 28 and 29, 1993
- Measurement of fluid levels within the elevator shaft for evidence of ground-water recharge
- On-site meetings with Alameda County personnel regarding the scope and completion of the cleanup project
- O Preparation of this summary letter report

# Site Description

The subject property is located at 545 Pierce Street, in Albany, California. The site is a multi-unit condominium complex with appurtenant garage structures. The subject elevator unit is located in a lower parking garage below Building 1.

K. M. McRae, Inc.
Bridgewater Condominiums
OBSERVATION OF ELEVATOR SHAFT DEWATERING

3644-F1 February 2, 1993 Page 2

A leak was detected in the hydraulic system of the elevator unit during a routine 5-year safety test, which is required by the State Elevator Authority. Upon detection of the hydraulic leak, the unit was taken out of service. The volume of the lost hydraulic oil was estimated at less than 75 gallons. The  $\pm$  6-inch-diameter elevator piston unit was fixed within an uncased 24-inch-diameter boring. We understand from conversations with the property owner's elevator consultant that the  $\pm$  31 feet deep shaft was drilled in coherent bedrock material. According to K. M. McRae personnel, they found no backfill material around the shaft. During the period which the shaft was open, perched water accumulated in the shaft, along with the hydraulic oil which had leaked from the piston unit. The source of the perched water is believed to be subflow from recent precipitation and irrigation water.

# Field Activities

Primping and cleanup activities were conducted on January 28 and 29, 1993 by K. M. McRae Incorporated. A site specific health and safety plan was prepared by K. M. McRae and posted at the site prior to the initiation of work activities.

The static fluid level measured on January 28 was ± 21.5 feet below the cement floor of the elevator room. An estimated 8½ feet of hydraulic oil and an oil/water mixture was measured in the shaft.

A submersible electric pump was used to pump the fluids from the shaft into DOT approved 55-gallon steel drums. The initial 50 to 60 gallons of pumped fluid consisted of hydraulic oil with little or no water. The remaining 180 to 190 gallons of product consisted of an oil/water mixture. The fluids were evacuated to the extent practical down to the base of the shaft. The drums were labeled and stored in a bermed containment area, pending removal from the site by a licensed recycler.

The dewatered shaft was periodically inspected and measured with an electronic water level indicator and fiberglass tape. No evidence of ground-water recharge was observed. A residual mixture of oil and water (1 - 2 inches) remained at the bottom of the shaft.

Mr. Larry Seto, from the Alameda County Environmental Health Department, arrived on site after the completion of pumping activities. Mr. Seto requested that the residual product at the bottom of the shaft be removed using petroleum absorbent. Mr. Seto also requested that the sides and base of the shaft be washed with water to further remove residual oil which may remain.

On January 29, 1993, the shaft was inspected by ENGEO personnel for evidence of ground-water recharge. No indication of ground-water infiltration at depth was observed. No accumulation of measurable ground water in the shaft was recorded.

K. M. McRae, Inc.
Bridgewater Condominiums
OBSERVATION OF ELEVATOR SHAFT DEWATERING

3644-F1 February 2, 1993 Page 3

Solid chemical pads were placed within the shaft to absorb and remove the remaining hydraulic oil at the base of the shaft. Seven absorbent pads were used in the process. Following the removal of the absorbent pads, a biodegradable detergent/solvent (Big Orange<sup>11</sup>) was applied to the sidewalls of the shaft using a pressurized sprayer. Following the introduction of the detergent, approximately 220 gallons of water was pumped into and then removed from the shaft to further reduce the residual hydraulic oil concentrations. The pumped water was placed in labeled 55-gallon drums which were stored in the containment area.

Upon completion of the pumping activities, Mr. Seto inspected the shaft and approved the cleanup activities, indicating that the retrofit of the elevator unit could be undertaken. We understand the new hydraulic piston unit consists of a sealed steel casing lined with an internal sealed PVC casing.

We are pleased to have been of service to you on this project. If you have further questions, please contact our office.

Very truly yours,

ENGEO INCORPORATED

Reviewed by:

Shawn Munger

Senior Environmental Geologist

Brian Flaherry

**CEG 1256** 

	Certificate of Remediation  This is to certify that REMCO, in accordance with Title 22 CDOHS, has accepted							
) <u></u>	and has caused of H.C. material to be recycled under the guidelines of federal, state and local laws and regulations.							
	The H.C. material was received _2893 In receiving and processing the H.C. material and in providing this certificate, REMCO has relied upon and is relying upon (a) the representation of the generator that the H.C. material does not contain any materials classified as, and is not classified as "Hazardous Waste" under the applicable provisions of federal and California law and has been managed and may be treated as other than Hazardous Waste, and (b) the generator has independent written certifications from applicable governmental agencies of certified independent testing laboratories that the H.C. material does not contain any materials classified as, and is not classified as, "Hazardous Waste" under said applicable law.							
	REMCO shall indemnify, defend and hold harmless the generator from and against any enforcement actions by any governmental authority in the event that any of the representations by REMCO set forth in this certificate are materially inaccurate. Provided however that his indemnity shall be limited to a maximum of the amount paid to REMCO by the generator for processing this H.C. material.							
	SUPPLIER:  HKA  221 MAIN ST. SHITE 1580 Recycling For The Future  Recycling For The Future	1 (						
	SAN FRANCISCO, CA 94105 GENERATOR: BRIDGEWATER HOME OWNERS 2717 Goodrick Avenue  DATE: 2/8/93							
9 600 4611								

# ATTACHMENT Z

Shipper's No. 0570
STRAIGHT BILL OF LADING - SHORT FORM - ORIGINAL NOT NEGOTIABLE

RECEIVED, subject to the classifications and tariffs in effect on the date of Issue of this Original Bill of Lading, the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any period or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its note, otherwise to deliver to another carrier on the route to assistant on. It is mutually agreed, as to each party at any time interested in all or any of said property, thill every service to be performed herounder shall be subject to all terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Propert Cassifications in effect on the date heroid. If this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of facing, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

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