Feasibility Study for Adaptive Reuse

of the Existing Oakland Army Base Warehouses

April 13, 2012

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GROUP

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April 13, 2012

Pat Cashman, OAB Project Manager
City of Oakland
Department of Planning, Building, and Neighborhood Preservation
250 Frank H. Ogawa Plaza, Suite 5313
Oakland, CA 94612

RE: Feasibility Study of Potential Reuse of Existing Warehouses

Dear Mr. Cashman:

Item 12.0 of the Schedule of Performance (Exhibit D) of the Exclusive Negotiating Agreement (ENA) between the City of Oakland and the Prologis/CCIG Joint Venture requires that the Developer submit to the Agency "a detailed feasibility study of the potential reuse of existing warehouse structures (and/or salvage and reuse of building materials) as part of the Project" prior to the execution of the LDDA.

Assessment History

Since the closure of the Oakland Army Base, a number of studies have been conducted to determine the viability of preserving the existing historic warehouses on the site. However, in 2002, the Oakland Army Base Area Redevelopment Plan Environmental Impact Report determined that preservation of the warehouses was infeasible, and thus demolition was a significant and unavoidable impact. Mitigation measures were adopted to govern such deconstruction.

Based on the Mitigation Monitoring and Reporting Program, the requirements of Mitigation Measures 4.6-9 and 4.6-15 of the Oakland Army Base Area Redevelopment Plan Environmental Impact Report stipulate a program to salvage architectural features and building components within the Oakland Army Base Historic District. Mitigation Measure 4.6-15 further stipulates that a professional architectural historian shall determine which architectural elements should be retained.

To achieve the intent of Mitigation Measures 4.6-9 and 4.6-15, an Architectural Salvage Assessment was undertaken in 2006 to document and assess from the perspective of historical architectural significance all contributing buildings within the OARB Historic District. A major finding documented by the report was the overall use of standardized, utilitarian design in most of the World War II-era contributing structures within the Oakland Army Base Historic District, resulting in few architectural elements of individual distinction. As a result, the salvage of wood, the primary material in these structures, is deemed to be a greater salvage opportunity, in terms of inherent value and adaptability for generic reuse, than the recycling of particular architectural elements.

In 2006, a Feasibility Study of Adaptive Reuse for Auto Dealership Activities for the OAB Warehouses was done, and four major findings were found:

1. Five of the eleven contributors to the OARB Historic District that lie within the East Gateway subarea appeared to be suitable for reuse as auto dealerships – Buildings 808, 812, 821, 822 and 823.
2. From an architectural design perspective, the programmatic and technological needs of a major auto dealership could be met in any one of these five historic OARB structures, including remnant of Building 808.
3. Some, but not all, of these five historic OARB buildings could be retained for dealership use. The buildings are too closely spaced to provide them simultaneously with adequate space for roadways, parking, outdoor display and vehicles, and clearly visible logotype signage. Identifying potential groupings of two or more adaptively reused buildings would require further site analysis.
4. Auto dealership industry input concerning reuse of the OARB structures was mixed. Based upon responses from various consultations with industry representative, it remains uncertain whether auto manufacturers would approve new franchises in historic OARB structures should they be rehabilitated.

At that time, it was concluded that Buildings 808 and 812 had potential for adaptive reuse. They possess lofty interior spaces with exposed heavy timber structural elements, providing an industrial/loft aesthetic that was believed could appeal to prospective auto sellers and purchasers.

From December 2007 to September 2008, the Port of Oakland deconstructed Building 802, one of the historic warehouses of the Oakland Army Base. Zaccor Companies of Alameda, CA, was paid a sum of $604,547 to perform the work. According to the record of payment, Zaccor was able to salvage 75% of the siding lumber and 90% of the roofing lumber, plus meet the minimum goals for East Bay Reuse, Recycled Construction, and Additional Waste Stream Diversions. However, they were unable to meet initial lumber and salvage reuse minimum goals for Architectural Elements. Today the site of Building 802 is used for truck parking and container storage.

In 2009, Oakland Maritime Support Services (OMSS), under an ENA with the City of Oakland for the development of 15 acres of the East Gateway into Ancillary Maritime Services (AMS), performed a feasibility study of the adaptive reuse of the warehouses to determine whether any of the warehouses, or portions of the warehouses, could be adaptively reused and incorporated into their proposed project. The analysis showed that it was not feasible to preserve/reuse any of the 800-series warehouses for OMSS purposes for the following reasons.

1. The angle of the buildings presents significant inefficiencies for parking and circulation and general functionality of the site
2. The buildings cannot be moved because of the raised concrete slab floor and raised loading bays

3. The buildings cannot be used for truck parking because of the raised concrete slab floor, the narrow column spacing, and the uneven surface asphalt flooring with lower than standard strength
4. None of the buildings would be suitable for reuse as office space because the width/depth of these buildings is too large for a modern office
5. The vertical clearance height is 18 feet, where the current standard is 28 to 35 feet
6. The amount of space remaining for truck parking is substantially reduced from OMSS current operations
7. The proposed operations of the truck parking facility, and ancillary uses, would be severely compromised
8. It is financially infeasible to preserve/reuse any of the 800-series warehouses

Although a portion of warehouse 807 could theoretically be retained, it was determined that it would materially adversely impact the operations of the proposed truck center. Hence, the report concluded it is not feasible to preserve any of the 800-series warehouses. However, materials from the deconstructed buildings could be incorporated into new construction. In 2009, City Staff concurred with the results of this study, and many of its findings still hold today.

2012 Turner Construction Deconstruction Analysis

As part of the Infrastructure Master Plan for the redevelopment of the Oakland Army Base (dated February 15, 2012 and revised April 1, 2012), Turner Construction Company performed a *Deconstruction Analysis for the Oakland Army Base Project* (dated February 2, 2012), in which they 1) assessed the feasibility of reconstructing the warehouses to meet current codes, 2) developed a salvage study and work plan in the event of deconstruction, and 3) identified a list of resources used for their analysis. The portion of the *Deconstruction Analysis* pertinent to the deconstruction of the warehouses is attached as **Exhibit A**.

In the Analysis, Turner recommends that the warehouses be deconstructed in accordance with the current Master Plan, which will allow for a uniform soil treatment, improved traffic flow, construction of modernized facilities, and an improved railyard for a respectively lower cost per square foot than a complete retrofit of the existing warehouse buildings. Additionally, the Master Plan allows for a potential capacity of 2,000,000 SF of warehouse development which is approximately 500,000 more SF of capacity than what exists today.

To reach this conclusion, Turner assessed the feasibility of salvage of the existing warehouses for reuse in the development of the Oakland Army Base and compared the cost with that of new construction. The warehouses, built in the early 1940s, require a significant amount of restoration including seismic upgrades, abatement, rework of utility connections, and improvements must be made to address the subsiding soil conditions underneath the buildings. The warehouse buildings are built entirely on filled land and have been sinking over the past 70 years, causing poor drainage and continuous maintenance issues at the approaches of the buildings.

The most feasible way to address the subsidence issue and entertain the re-use of the existing warehouse buildings would be to build a retaining wall around the warehouse buildings. The proposed Master Plan pad elevation (+13) is between 2' and 4' higher than current pad elevation which would equate to a comparable size retaining traffic around the warehouse buildings. Utility connections will have to be upgraded at the building locations to compensate for the increased pad elevation and the sinking warehouse buildings.

Also, the current warehouses likely do not meet ASCE 31 seismic guidelines (Refer to Biggs Cardosa's Seismic Retrofit and Rehabilitation Report). To upgrade the existing buildings to meet current standard, steel seismic bracing will be required in the interior of the buildings to support the structure. Seismic upgrades will likely involve footing and slab rework to support the bracing as well as increased sheer support at the interior and exterior walls which may involve removal and abatement of exterior wall materials. The seismic bracing may limit storage space in the warehouse and affect the building's interior traffic.

The hard costs to retrofit the existing warehouses in accordance with the recommendations above are listed in Table 1:

Table 1: Hard Cost to Retrofit Existing Warehouses 1,480,185 Total SF
Source: Turner Deconstruction Analysis (2/2/12)

		Unit Price	Unit	Count		Total
Seismic Retrofit/Bracing/Reroof	$	33.00	SF	1,480,185	$	48,846,105
Slab Improvements/Corrections	$	6.00	SF	1,480,185	$	8,881,110
Energy Upgrades	$	2.00	SF	1,480,185	$	2,960,370
Abatement	$	1,168,097.00	LS	1	$	1,168,097
Lighting Upgrades	$	0.50	SF	1,480,185	$	740,093
Fire-Life Safety Upgrades	$	5.00	SF	1,480,185	$	7,400,925
Utility Connections	$	3,500.00	EA	80	$	280,000
Siding Improvements/Window Repair	$	20.00	SF	455,000	$	9,100,000
Retaining Wall around Buildings	$	400.00	LF	7,500	$	3,000,000
Mechanical Upgrades	$	5.00	SF	1,480,185	$	7,400,925
Fire Protection Upgrades	$	5.00	SF	1,480,185	$	7,400,925
Total Hard Cost for Retrofit of Structures					**$**	**97,178,550**
$/SF					$	65.65

2012 CCIG Reuse Feasibility Study and Broker Opinion of Value

In March of 2012, in order to determine whether the preservation of the warehouses could be justified at these costs, Prologis/CCIG inserted these costs into the Oakland Global Trade and Logistics Center financial model. However, certain soft costs were excluded from the retrofit option. The markups due to associated soft costs for the retrofit are listed in Table 2 below:

Table 2: Prologis/CCIG Estimate of Soft Costs (Markup)			**$ 37,415,950**
Included:			
Predevelopment Allocation Estimate	4.89%		
Architectural & Structural	2.84%		
Civil, Soils, Staking		NIC in retrofit	
Municpal Fees (Bldg. Permits)	3.34%		
Utility Fees	1.14%		
Jobs Housing Fee		NIC in retrofit	
Environmental		NIC in retrofit	
Development Fee	3.90%		
Title (CLTA, ALTA, Escrow)	0.62%		
County Transfer Tax		NIC in retrofit	
Legal	0.45%		
Course of Construction Insurance	1.24%		
Possessory Interest Taxes to Stabilization		NIC in retrofit	
Operating Expenses to Stabilization	0.82%		
Development Carry	7.91%		
Base Building (including on-site)		above	
Site Work	0.00%		
Tenant Improvements	11.36%		
Total Cost for Retrofit of Structures			**$134,594,500**
$/SF			$ 90.93

CCIG used its expertise in the local market to develop a projected net operating income (NOI) for the NNN lease of the retrofitted structures, rehabbed at the projected cost derived from Turner Construction and Prologis/CCIG's assumptions above. The following were also included:

Table 3: Project Proforma for Retrofitted Warehouses (Assumptions)				1,480,185	Total SF
Source: CCIG (3/23/12)					
	Income Assumptions				
NNN Rent (pre-retrofit) to Developer	$ 0.00 *	PSF	* Assumed vacant upon LDDA due to safety (or pass-thru obligation)		
NNN Rent (post-retrofit)	$ 0.50	PSF	(per month)		
Projected Rent Growth	3%	annually	(compounded)		
	Expense Assumptions				
Absorption	18	months		Vacancy	20%
Net Expenses (pre-retrofit)	$ 0.18	PSF	(per month)		
Net Expenses (post-retrofit)	$ 0.05	PSF	(per month)		
Leasing Commissions	3%	amortized			

Using these assumptions, the financial model produced the following analysis of potential Return on Cost (ROC) for the project between execution of the lease agreement and 2020:

Table 4: Project Proforma for Retrofitted Warehouses (NOI) Source: CCIG (3/23/12)			1,480,185 Total SF				
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**
SF Retrofitted to Date	233,640	467,280	700,920	934,560	1,168,200	1,401,840	1,480,185
Construction Cost to Date	$21,245,087	$42,490,174	$63,735,261	$84,980,347	$106,225,434	$127,470,521	$134,594,500
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Rent Revenue to Developer	$ -	$ 577,558	$ 1,784,654	$ 3,063,657	$ 4,417,793	$ 5,850,420	$ 7,365,029
Less Leasing Commissions	$0	($17,327)	($53,540)	($91,910)	($132,534)	($175,513)	($220,951)
Less Net Expenses	($2,328,059)	($1,963,580)	($1,599,102)	($1,234,624)	($870,145)	($841,104)	($888,111)
Net Operating Income	$(2,328,059)	$(1,403,349)	$ 132,013	$ 1,737,124	$ 3,415,114	$ 4,833,804	$ 6,255,967
Return on Cost (%)	-10.96%	-3.30%	0.21%	2.04%	3.21%	3.79%	4.65%

In order to meet Prologis/CCIG's underwriting criteria, the project would need to meet a minimum 11% return on cost threshold. Under this scenario, the project fails to do so. **Therefore, such an investment could not be justified at this time.**

In addition, on April 6, 2012, California Capital & Investment Group (CCIG), a local leader in commercial brokerage, provided a Broker's Opinion of Value (BOV) for the subject property. The analysis was based upon the assumptions provided in Turner's Deconstruction Analysis and Prologis/CCIG's development proforma, referenced above.

CCIG found that if the Developer were required to salvage and retrofit the warehouses, they would hold a current market value of - $60,000,000, or - $41 PSF. Therefore, purchase or lease of the subject property under those conditions would be financially infeasible. The BOV is attached as **Exhibit B**.

Operational evaluation

The subject site is located with direct proximity to deep water access, is rail served, and is located on a heavy weight corridor. The proposed uses of the site were dictated by the highest an best use for the site, feasibility of entitlement, neighboring uses and community objectives for good paying entry level jobs on Oakland's working waterfront. The uses proposed fall into a category of ancillary maritime support services including but not limited to trans-loading, deconsolidation, refrigerated and freezer storage, general purpose warehouse activities and truck parking on the subject site. These activities require new purpose built facilities with high cube, high throughput design to be commercial viable and meet a host of regulatory requirements including and not limited to enhanced fire life safety systems and energy efficiency.

Operationally the introduction of new state of the art buildings will enhance safety, job creation, the local economy and promote conservation protecting the environment. Attempting to retrofit and adapt the existing structures to support this activity would be grossly inefficient, expensive, and difficult to achieve a reasonable operating platform to support the modern trade and logistics operations noted above.

Due to the site preparation required to introduce new construction to the site there is far more efficiency and enhanced system performance by a uniform properly sequenced soil program and deployment of new core infrastructure improvements. The costs to work around the existing structures provide temporary utilities, and make allowances for elevation changes are cost prohibitive.

Conclusion

Based on the above studies and their findings, it can be concluded that to salvage the warehouses on the Oakland Army Base would be too costly and that demolition of the buildings is a more feasible option. CCIG proposes to deconstruct the warehouses in accordance with the findings of the Oakland Army Base Area Redevelopment Plan Environmental Impact Report and the associated Mitigation Measures.

If you have any questions about these reports or our findings, please don't hesitate to contact our office.

Best Regards,

Phil Tagami, President
California Capital & Investment Group
CCIG Oakland Global, LLC

CALIFORNIA CAPITAL & INVESTMENT GROUP

THE ROTUNDA BUILDING, 300 FRANK OGAWA PLAZA, SUITE 340, OAKLAND, CA 94612 OFFICE 510.268.8500 FACSIMILE 510.225.3954

Exhibits Attached:

Exhibit A: Turner Construction Deconstruction Analysis for the Oakland Army Base Project

Exhibit B: CCIG Broker's Opinion of Value for the Existing Oakland Army Base Warehouses

Exhibit A: Turner Construction Deconstruction Analysis
for the Oakland Army Base Project

February 13, 2012

Turner

Deconstruction Analysis for the Oakland Army Base Project

Buildings 802, 803, 804, 805, 806, 807, 808, 812, 821, 822, and 823

Oakland, California

Submitted to:

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Prepared by:

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Project Number 18698M0

February 2, 2012

Deconstruction Analysis for the Oakland Army Base Project

Buildings 803, 804, 805, 806, 807, 808, 812, 821, 822, and 823

Oakland, California

Executive Summary

The following report is a deconstruction analysis of the warehouse structures currently located on the Oakland Army Base. The warehouse buildings that pertain to this report are recognized as Buildings 803, 804, 805, 806, 808, 812, 821, 822, and 823. Buildings 803 through 808 are consider "800 series" warehouse structures that are about 234,000 square feet in size. Buildings 812, 821, 822, and 823 are referred to as "small" warehouse buildings and range from 18,000 to 20,000 square feet in size and are located exclusively on the City of Oakland property. All of Building 803 and the majority of Building 804 are located on the Port of Oakland Property. Buildings 805 – 808 share relatively equal real estate between the City of Oakland and the Port of Oakland.

This report contains four parts to it:

1.) Summary and feasibility of deconstruction vs. upgrade of existing structures
2.) Warehouse Deconstruction Study by KJB Management including salvage study and work plan for deconstruction
3.) Appendices of resources used for this analysis

Part I

Feasibility of Deconstruction Vs. Upgrade of Existing Warehouse Structures

Consideration was taken into the salvage the existing warehouses for reuse in the development of the Oakland Army Base. The warehouses built in the early 1940s require a significant amount of restoration including seismic upgrades, abatement, rework of utility connections, and fire/life safety improvements to meet current building standards. Most significantly, improvements must be made to address the subsiding soil conditions underneath the buildings. The warehouse buildings are built entirely on filled land and have been sinking over the past 70 years causing poor drainage and continuous maintenance issues at the approaches of the buildings.

Subsidence

The OAB Master Plan addresses the subsidence issue with soil improvement methods such as surcharging, wicking, and deep dynamic compaction (DDC) over the majority of the site where development takes place. These methods offer a permanent solution to the subsidence but can only occur prior to new development. The most feasible way to address the subsidence issue and entertain the re-use of the existing warehouse buildings would be to build a retaining wall around the warehouse buildings. The proposed Master Plan pad elevation (+13) is between 2' and 4' higher than current pad elevation which would equate to a comparable size retaining wall approximately 7500 feet in length. A retaining wall of this size will likely restrict the flow of traffic around the warehouse buildings. Utility connections will have to be upgraded at the building locations to compensate for the increased pad elevation and the sinking warehouse buildings.

Seismic Upgrades

The current warehouses likely do not meet ASCE 31 seismic guidelines. To upgrade the existing buildings to meet current standards, steel seismic bracing will be required in the interior of the buildings to support the structure. Seismic upgrades will likely involve footing and slab rework to support the bracing as well as increased sheer support at the exterior walls which may involve removal and abatement of exterior wall materials. The seismic bracing will limit storage space in the warehouse and affect the building's interior traffic.

Railyard

The current Master Plan anticipates the improvement and expansion of the Knight Railyard which is adjacent to the eastern edges of the warehouses. The anticipated layout of the Railyard encroaches into the existing warehouse footprint. At a minimum, partial deconstruction of the 800 Series warehouses would be needed to accommodate the new plan.

Cost Comparison

The following is a cost comparison for the salvage and reuse of the existing warehouse in comparison to the Master Plan's build-out of new warehouses.

Cost Comparison for Salvage of Existing Warehouses vs. New Construction

Oakland Army Base

	Building Cost		Area	Cost
NEW WAREHOUSES	$ 49	PSF	1480185	$ 72,529,065
Demo				
Building Deconstruction	$ 7.00	PSF	1480185	$ 10,355,034
Slab Deconstruction	$ 0.72	PSF	1480185	$ 1,061,492
Total Cost for NEW WAREHOUSES				$ 83,945,591
$/SF				$ **56.71**
RETROFIT				
Seismic Retrofit/Bracing	$ 33.00	SF	1,480,185	$ 48,846,105
Slab Improvements	$ 6.00	SF	1,480,185	$ 8,881,110
Energy Upgrades	$ 2.00	SF	1,480,185	$ 2,960,370
Abatement	$ 1.00	LS	1	$ 1,168,097
Lighting Upgrades	$ 0.50	SF	1,480,185	$ 740,093
Fire-Life Safety Upgrades	$ 5.00	SF	1,480,185	$ 7,400,925
Utility Connections	$3,500.00	Ea	80	$ 280,000
Siding Improvements	$ 20.00	SF	455,000	$ 9,100,000
Retaining Wall around Buildings	$ 400.00	LF	7,500	$ 3,000,000
Mechanical Upgrades	$ 5.00	SF	1,480,185	$ 7,400,925
Fire Protection Upgrades	$ 5.00	SF	1,480,185	$ 7,400,925
Total Cost for RETROFIT of Structures				$ 97,178,550
S/SF				**$ 65.65**

CONCULSION and RECOMMENDATION

In conclusion, it is Turner's recommendation that the warehouses be deconstructed in accordance with the Master Plan. This will allow for a uniform soil treatment, improved traffic flow, construction of modernized facilities, and an improved railyard for a respectively lower cost per square foot than a complete retrofit of the existing warehouse buildings. Additionally, the Master Plan allows for a potential capacity of 2,000,000 SF of warehouse development, which is approximately 500,000 more SF of capacity than what exists today.

PART II-

Seismic Retrofit and Rehabilitation Report
Oakland Army Base Warehouse Buildings
Oakland, CA

Prepared for
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Prepared by
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February 13, 2012

BCA

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EXECUTIVE SUMMARY

The evaluation presented below is part of a study being performed for the Oakland Army Base redevelopment project. Six large warehouse buildings measuring 1300'± by 180'± in plan, along with several other smaller warehouse structures are being considered for possible rehabilitation and retrofit as part of the redevelopment.

The scope of this study was to perform a seismic evaluation of a typical existing warehouse building, identify seismic deficiencies, develop a conceptual seismic retrofit scheme to mitigate the deficiencies, and identify any deterioration or damage observed during our site visit. Refer to Appendix A for photos of the existing building. It is our understanding that this report will provide the basis for preparing an order-of magnitude cost estimate for the proposed seismic retrofit and repair work. This study was based on available drawings, reports and limited visual observation of the existing conditions.

For the purpose of this study we selected Building Number S805 as a representative warehouse building. This building was constructed in 1942 as a single story timber framed structure with diagonally sheathed shear walls and roof diaphragm. Since the original construction, the building has undergone no significant structural modifications.

Our seismic evaluation has concluded that the existing building does not meet the "life safety' requirements of ASCE-31. The structure may not maintain its vertical load carrying capacity during a design level earthquake. Significant existing seismic deficiencies include highly overstressed shear and roof diaphragms from lateral loading in both principal directions, an inadequate connection between the low and high roof diaphragms at the clerestory, and overstressed foundations at the interior walls for loading in the transverse direction.

Non-structural deficiencies may be present but have not been evaluated as seismic assessment of non-structural components of the building is beyond the scope of this study.

To mitigate the seismic deficiencies identified, it is recommended that a systematic seismic upgrade of the building be completed. In summary, the seismic retrofit work would entail adding plywood to the roof diaphragm, connecting the high and low roof diaphragms together with bracing or shear walls, adding interior longitudinal steel braced frames, new structural plywood sheathing to all existing walls, installing/strengthening collectors in-line with the shear walls, braced frames and diaphragms, and foundation work. These upgrades will decrease the stress levels in the existing shear walls and roof diaphragms to acceptable levels. Refer to Appendix B for sketches of the proposed conceptual seismic retrofit scheme.

Additional recommendations for rehabilitation of the structures include replacement of damaged and/or deteriorated exterior siding, adding and/or repairing weatherproofing to the walls of the structure, replacing damaged windows, repairing or replacing doors, replacing the roofing, and repairing damaged concrete stem walls. In addition,

consideration should be given to replace the existing AC pavement with a concrete slab-on-grade.

PROJECT BACKGROUND

This study was performed as part of the Oakland Army Base redevelopment project. Six large warehouse buildings along with several other smaller warehouse structures are being considered for possible rehabilitation and retrofit for re-use.

The primary purpose of this review is to assess the probable seismic performance of a typical warehouse structure at the Oakland Army Base, identify potential seismic deficiencies in its primary lateral load-resisting system, develop a conceptual seismic retrofit scheme for a "typical bay" within the structure, and prepare preliminary details that may be used to prepare an order-of-magnitude construction cost for planning purposes. For this evaluation, a representative warehouse building (Building Number S805) was selected and evaluated for expected seismic response. Within the representative building, a "typical bay" spanning between transverse partition walls was evaluated for both transverse and longitudinal loads. The evaluation results and retrofit recommendation provided below are for this "typical bay".

Seismic assessment for anchorage and/or bracing of non-structural elements – such as ceilings, partitions, architectural elements, mechanical/electrical/plumbing piping and equipment, etc. is beyond the scope of this study and was not performed.

This investigation consisted of a review of available as-built drawings, a site visit to verify existing conditions, and preparation of preliminary structural calculations and retrofit details. Structural calculations and conceptual retrofit recommendations were prepared following the guidelines in ASCE-31 "Seismic Evaluation of Existing Buildings" and ASCE-41 "Seismic Rehabilitation of Existing Buildings" for the evaluation and conceptual retrofit respectively.

BUILDING DESCRIPTION

The warehouse building was constructed in 1942 as single story timber framed shear wall building with diagonally sheathed walls and roof diaphragm. No significant structural modifications appear to have been undertaken on the structure since its original construction. The building is rectangular in plan with a total length of approximately 1300'± and a width of 180'±. Transverse partition wall spacing varies between 242'± and 264'±. The "typical bay" used in this evaluation has a partition wall spacing of 264'±. The roof of the building has a split level due to a clerestory located in the middle third of the roof diaphragm. The height of the low slope roof at the clerestory is approximately 28'±, and the heights at the lower rooflines on each side are approximately 20'± above finish floor.

The interior of the structure is primarily open, with a few mezzanine levels near the walls creating separate storage spaces and office areas. The finish floor consists of 6" of AC paving that slopes from the center of the building out to the exterior side walls. Recent photos of the existing building are provided in Appendix A to this report. More detailed descriptions of the building components are provided under "Description of Building Framing System" and "Field Observation" below.

AVAILABLE DOCUMENTS

The following documents were available for our review:

Drawings

- "Deconstruction of Building 802" prepared by the Port of Oakland, dated 10-15-07. Project number AA-3999, Sheet numbers G1, D1, C1, C2, and C3.
- "Oakland Port & General Depot, Warehouse" prepared by the U.S. Army Corp of Engineers, dated Feb 12, 1942. Sheet numbers 1, 3, 4, 5, 6, 7, 8, 9, 10, and 12.
- "Floor Plan – BLDG 802" prepared by Headquarters Oakland Army Terminal Plant Engineer, with revisions dated 13 Sept 1960 and 16 Apr 1961. One sheet.
- "Repairs to Warehouse – BLDG S-806" prepared by Headquarters Western Area Military Traffic Management and Terminal Service, dated January 27, 1970. Plan number 3657, sheets 1-5.
- "Vault for Classified Cargo Warehouse – BLDG S-806" prepared by Headquarters Western Area Military Traffic Management and Terminal Service, dated July 30, 1968. Plan number 3604.1, sheets 1-5.
- "Oakland Port – Warehouse Area, Box Factory" prepared by the U.S. Army Corp of Engineers, dated March 27, 1968. Sheets S-1 and one other sheet provided, sheet number could not be ascertained.
- "Oakland Port – Warehouse Area, Inflammable Warehouse #1 & #2" prepared by the U.S. Army Corp of Engineers, dated March 27, 1962. Sheets S-3 and one other sheet provided, sheet number could not be ascertained.

DESCRIPTION OF BUILDING FRAMING SYSTEM

Overall Building

The building is a single story timber framed structure typical of commercial and industrial type buildings. The rectangular plan has overall dimensions of approximately 1300' ± by 180'± with 12' wide loading docks at each side of the building. Refer to Appendix B for a Partial Foundation plan and Partial Roof plan. At the clerestory, the roof purlins span longitudinally to timber trusses that are supported on timber columns spaced at 52'±, located on gridlines C and D. At the lower side roofs, the purlins rest on timber beams that are supported by timber columns spaced at 32'±, located on gridlines

A, B, E, and F. The timber columns are in turn supported by spread footings with concrete pedestals, with a typical longitudinal bay spacing of 22'±.

The finish floor consists of AC paving that slopes from the center of the structure out towards the side walls. A continuous 4' ± tall by 12'± wide loading dock supported by concrete retaining walls runs the full length of both side walls. A canopy roof covers the loading dock on each side of the building.

Timber framed interior partition walls in the transverse direction extend full height to the roof framing and are supported on concrete stem walls and strip footings. These walls are spaced between 242'± and 264'± apart creating separate areas within the warehouse. The exterior side and end walls are also supported on continuous concrete strip footings that are integral with the spread footings supporting timber posts.

All walls have 3x8 studs at 4'± on center with diagonal sheathing under horizontal siding. The walls are not insulated, and it was not clear if a moisture barrier was installed between the horizontal siding and diagonal sheathing.

Foundation System

The building foundation system consists of isolated 5'± square spread footings supporting interior 10x12 timber posts, and continuous strip footings at the perimeter walls and interior partition walls. Concrete retaining walls with spread footings support the loading dock. The finished floor consists of a 6" thick AC pavement.

Vertical Load System

The roof construction consists of diagonal sheathing supported on 4x12 purlins at 4'± on center. The purlins rest on an 8'± deep timber truss at the clerestory, and 10x22 timber beams or partition stud walls at the lower side roofs. All stud walls are framed with 3x8 studs at 4'± on center.

Lateral Load System

Lateral loads on buildings result primarily from wind pressure and earthquake inertial forces acting on structural and non-structural elements. Out-of-plane forces acting on exterior walls are transferred to the roof diaphragm, then to the shear walls oriented parallel with the direction of the earthquake or wind loads. These elements then transfer the forces to the foundation system and soil.

For loads in the transverse direction, the diagonally sheathed roof diaphragm spans between the end walls and/or interior transverse partition walls. These transverse shear walls then transfer the lateral demands down to the foundation and soil. Under longitudinal loading the diaphragm spans between the side walls; no interior walls in this direction are present. At the clerestory roof separation, 3x4 timber bracing was provided to transfer lateral loads from the high roof to the low roof.

The diagonally sheathed walls in both directions contain large openings to allow access to and from the loading dock or between typical bays in the warehouse. The large openings reduce the amount of available shear wall to resist lateral loading.

FIELD OBSERVATION

Building assessments are limited by the available construction documents and by the level of access possible for the observation of structural elements and in-place construction details. The structural elements that were observed during the field observation appeared to be in general conformance with the codes and standard practices in effect at the time of construction. The building appears to be in generally good physical condition, consistent with its age. The materials and construction methods employed are of reasonable quality and appear adequate for their intended use, except as noted below:

Some cracking of the exterior strip footings/retaining walls was observed (approximately 10 locations), indicating that some minor differential settlement has occurred. Additionally, several of the stem walls adjacent to the loading doors (at approximately 40% of the doors) are damaged. This may have occurred from impact and/or differential settlement. In general the foundation system appears to be carrying existing loads with no significant deficiencies; however we recommend epoxy injection of the cracks and repair of the damaged stem walls noted above.

Approximately 20% of the timber posts have developed longitudinal splits that originate from the single row of bolts at the bottom connections, and extend up to the roof beams. This appears to be from shrinkage of the timber; however stress concentrations from the single row of bolts at the connection may also have contributed. The posts appear to be adequately carrying the existing roof loads; however the split posts should be repaired or replaced.

Some leaks were observed in the roof and exterior walls. At one location in the building observed, the leaking roof has caused significant deterioration of the diagonal sheathing at the exterior wall. There are also damaged windows that allow rain inside the building. The painted exterior horizontal siding is showing some signs of wear and deterioration, especially at unprotected end walls. The exterior finishes on the entire structure should be inspected and repaired. If no waterproofing exists under the exterior horizontal siding, consideration should be given to removing the siding, repairing the diagonal sheathing, adding building paper, and replacing the horizontal siding.

Minor cracking and undulations of the finished floor AC pavement was observed. Although the floor appears to be in relatively good condition, modern facilities of this type typically have a concrete floor system in order to accommodate storage of heavy materials and to provide resistance to wheel loading from forklifts. Consideration should

be given for replacing the AC pavement with a concrete slab-on-grade for improved performance.

EVALUATION OF EXISTING LATERAL LOAD SYSTEM

Description of Seismic Evaluation Methods

The initial purpose of this study was to evaluate the potential seismic deficiencies in the existing building and to determine the potential seismic risk and performance prior to developing conceptual seismic strengthening schemes to mitigate any deficiencies and risks found. For this evaluation, the methods outlined in ASCE/SEI 31-03 Seismic Evaluation of Existing Buildings were used.

A number of building performance levels are specified in ASCE-31. The "life safety" performance level uses ground motions with the a 10% chance of being exceeded in 50 years, described as the Basic Service Earthquake 1 Hazard Level (BSE-1). The life safety performance level is described as "the post-earthquake damage state in which significant damage to the structure has occurred, but some margin against either partial or total structural collapse remains. Some structural elements and components are severely damaged, but this has not resulted in large falling debris hazard.... It should be possible to repair the structure; however, for economical reasons this may not be practical." This performance level provides a similar level of safety as the California Building Code, but may result in higher levels of damage.

The seismic performance criteria of ASCE-31 employ a three-tiered approach to building evaluation as follows:

- Tier 1 – screening phase to identify potential seismic deficiencies,
- Tier 2 – evaluation phase to confirm potential deficiencies using ASCE/SEI 31-03 evaluation procedures,
- Tier 3 – evaluation phase to perform a detailed evaluation of the existing structure.

Desired Performance Level

In general, a Tier 1 evaluation is used to first identify potential deficiencies using a standard checklist of evaluation statements and "Quick Check" procedures. These potential deficiencies are often then further evaluated using the more complex and less conservative procedures of a Tier 2 evaluation to confirm if the deficiency is indeed present. A Tier 3 evaluation can also be carried out using more complex procedures to verify if the deficiency is present. For this building, a Tier 1 evaluation was carried out followed by a Tier 2 evaluation of potential deficiencies identified during the "Quick Check" procedures.

The Tier 1 evaluation quickly identified potential deficiencies in the building's seismic load path and highly stressed shear walls and diaphragms. The follow up Tier 2 evaluation of these elements confirmed the seismic deficiency and a rough level of strengthening was determined.

Evaluation Summary

In general, the existing building does not meet the Life Safety performance criteria at the BSE-1 Earthquake Hazard Level. Based on the available information and our preliminary analysis, the following deficiencies have been determined to be of significance in our seismic evaluation:

Shear Walls: The building has significant overstress in both the longitudinal and transverse shear walls. The diagonally sheathed walls were designed for a much lower seismic coefficient when compared to today's standards and the large openings result in high stress in the walls. Water damage to some areas of the existing diagonal sheathing from the leaking roof and walls has also reduced the wall capacity. The soil supporting strip footings under the transverse walls is also overstressed, and additional footing width is required to resist compression loading from the ends of the shear walls.

Roof Diaphragms and Continuity: Similar to the stress in the shear walls, the diagonally sheathed diaphragms are overstressed due to the increase in seismic demands since the original design, and the long spans between supports. Furthermore, the discontinuity between the low and high roof, with no continuous roof chord or collectors creates a potential for damage and partial collapse at this location.

Non-Structural Performance

An evaluation of non-structural components was not performed for this evaluation. In general, it is assumed that mechanical equipment and architectural components that will be replaced or added as part of any non-structural upgrades will be attached to the building frame following the current CBC requirements.

SEISMIC RETROFIT STRATEGY

According to our review and based on the information above, the existing warehouse building does not meet the code-prescribed structural performance level. This finding is based on apparent seismic deficiencies in the building structure's seismic load path as well as the results of our seismic evaluation. The structure may not maintain its vertical load carrying capacity during a design level earthquake.

It is recommended that the roof diaphragms be strengthened with an overlay of structural plywood to resist the demands associated with the large spans between shear walls. Note that this will require removal and replacement of the entire roofing system.

Shear elements should be constructed at the clerestory wall to transfer longitudinal forces between upper and lower diaphragms. This may consist of additional bracing or infilling windows with structural panel shear walls.

Additional shear walls are needed at both the exterior walls and interior partition walls in the transverse direction. For these walls to be effective in resisting the seismic demands, additional wall studs will be needed to create a maximum stud spacing of 24". Layers of structural panel sheathing are recommended as shown on the Conceptual Retrofit Details provided in Appendix B to this report. Any damaged diagonal sheathing should also be replaced. Interior shear walls will also need hold down anchors and additional concrete footings at wall ends.

We recommend installation or strengthening of chords and collectors in-line with the shear walls to ensure satisfactory lateral load distribution from the roof diaphragms to the shear walls.

Appendix B includes sketches illustrating the proposed conceptual retrofit scheme. It should be noted that the concept retrofit plans represent just one possible scheme and should be considered illustrative of the likely extent of a complete seismic retrofit for the building. These sketches have not been coordinated with architectural or building services requirements.

RECOMMENDATIONS

To mitigate the potential for life-safety hazards it is recommended that a systematic seismic upgrade of the building be completed. This would generally consist of connecting the upper and lower building diaphragms together by adding steel bracing, adding plywood to the upper and lower roof diaphragms, adding wall studs and structural plywood to the interior and exterior walls, and adding collectors, hold downs and footings. These upgrades will reduce the overstress in the existing diaphragms and shear walls. Note that many of the existing building finished will be disturbed by the proposed retrofit and will have to be replaced. Refer to Appendix B for the proposed seismic retrofit scheme.

Based on observations during our site visit, the following repair/rehabilitation recommendations are also provided:

- Epoxy inject cracks at the exterior concrete stem walls (approximately 10 locations observed at this structure).
- Repair damaged concrete stem walls near the loading doors (Observed at approximately 40% of loading doors).
- Repair or replace split interior posts (Approximately 20% of posts).
- Replace damaged windows and building finishes, and weatherproof the structure.
- Repair and/or replace exterior doors.

- Consider replacing the AC pavement at the finish floor with concrete for improved performance.
- Replace roofing.
- Repair horizontal siding.
- Consider the need for adding building paper underneath horizontal siding.
- Repair diagonal sheathing at exterior walls.

We are not aware of any current building code requirements that would make the recommended work mandatory. However, this seismic upgrade may be required if the extent of structural or non-structural modifications to the building completed over a number of years exceed certain threshold values. We recommend that this be reviewed with the appropriate building official as the scope of planned upgrades is refined.

PROFESSIONAL DISCLAIMER

Biggs Cardosa Associates, Inc. has performed this seismic evaluation on behalf of BKF Engineers for the purpose of determining the potential seismic risks present in the existing building. The evaluation was based on a limited site observation of interior and exterior areas, along with a review of information provided.

Physical testing was not performed and is outside the scope of this assignment. Intrusive testing was neither authorized nor performed. Deficiencies may exist which were not observed.

This evaluation was based on limited information, as described above. This report has been prepared using the same degree of care and skill ordinarily exercised for this type of professional service by structural engineers practicing in this area at this time. No other warranty, expressed or implied, is made as to the professional advice in this report.

Appendix A

Building Photos

Photo 1: End Wall Elevation (West Wall)

Photo 2: Side Wall Elevation (South Wall)

Photo 3: Roof Truss at Clearstory

Photo 4: Framing at Low Roof

Photo 5: Wall/Roof Sheathing

Photo 6: Clearstory Bracing

Photo 7: Damaged Stem Wall at Door

Photo 8: Typical Interior Partition Wall

Photo 9: Cracking at Stem Wall (Interior)

Photo 10: Cracking at Stem Wall (Exterior)

Photo 11: Water Damaged Sheathing

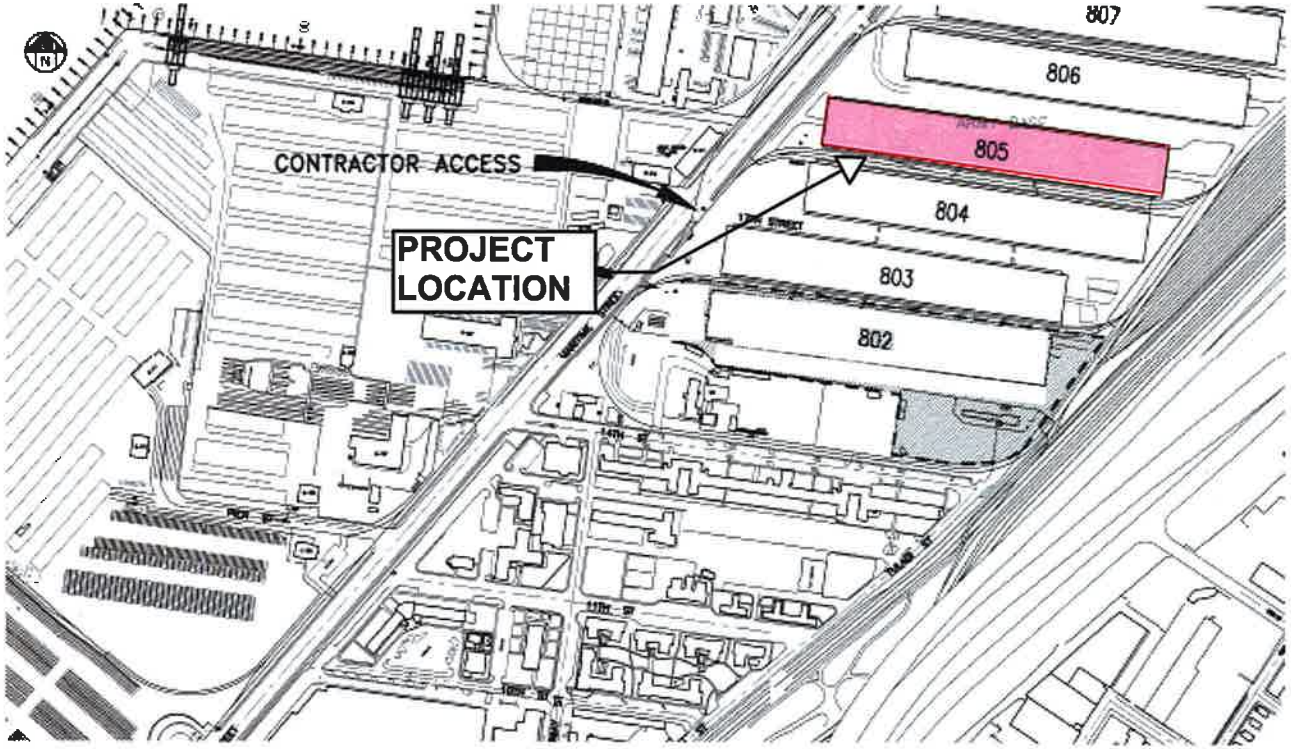
Photo 12: Leak at Roof

Photo 13: Weathered Siding

Photo 14: Damaged Window

Appendix B

Conceptual Seismic Retrofit Drawings



VICINITY MAP

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SITE PLAN

OAB WAREHOUSE BUILDINGS CONCEPT SEISMIC RETROFIT

OAKLAND, CALIFORNIA

DESIGNED BY: YKS	DATE: 2.9.12		
DRAWN BY: MLT	SCALE: AS SHOWN		
CHECKED BY: TMS	JOB No.: 2011216.2		
SHEET 1 OF 4			
DRAWING No.		REV. No.	
A	T1		

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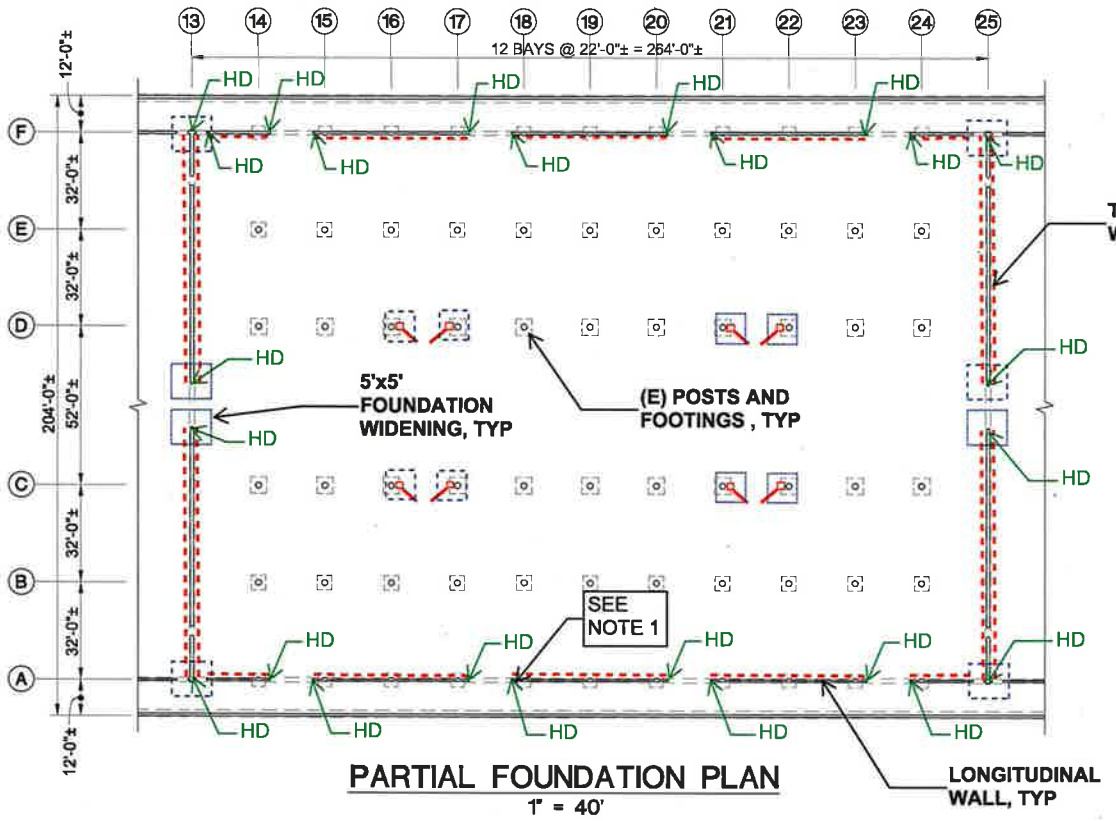

PARTIAL FOUNDATION PLAN

1" = 40'

NOTES:

1. REPAIR DAMAGE CONCRETE STEM WALL WHERE OCCURS.
2. INFILL EXISTING WALL OPENING AND APPLY NEW WALL SHEATHING.
3. NEW WALL STUDS AND WALL SHEATHING.

LEGEND

- NEW 15/32" STRUC 1 WALL SHEATING, NEW STUDS BETWEEN EXISTING STUDS, NEW 3/4" DIA. ANCHOR BOLTS @ 1' O.C.
- NEW FOUNDATION
- HD — NEW HOLDOWN
- NEW STEEL COLUMNS & BRACED FRAME

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PARTIAL FOUNDATION PLAN

OAB WAREHOUSE BUILDINGS
CONCEPT SEISMIC RETROFIT

OAKLAND, CALIFORNIA

DESIGNED BY: YKS	DATE: 2.9.12		
DRAWN BY: MLT	SCALE: AS SHOWN		
CHECKED BY: TMS	JOB No.: 2011216.2		
SHEET 1 OF 4			
DRAWING No.		REV. No.	
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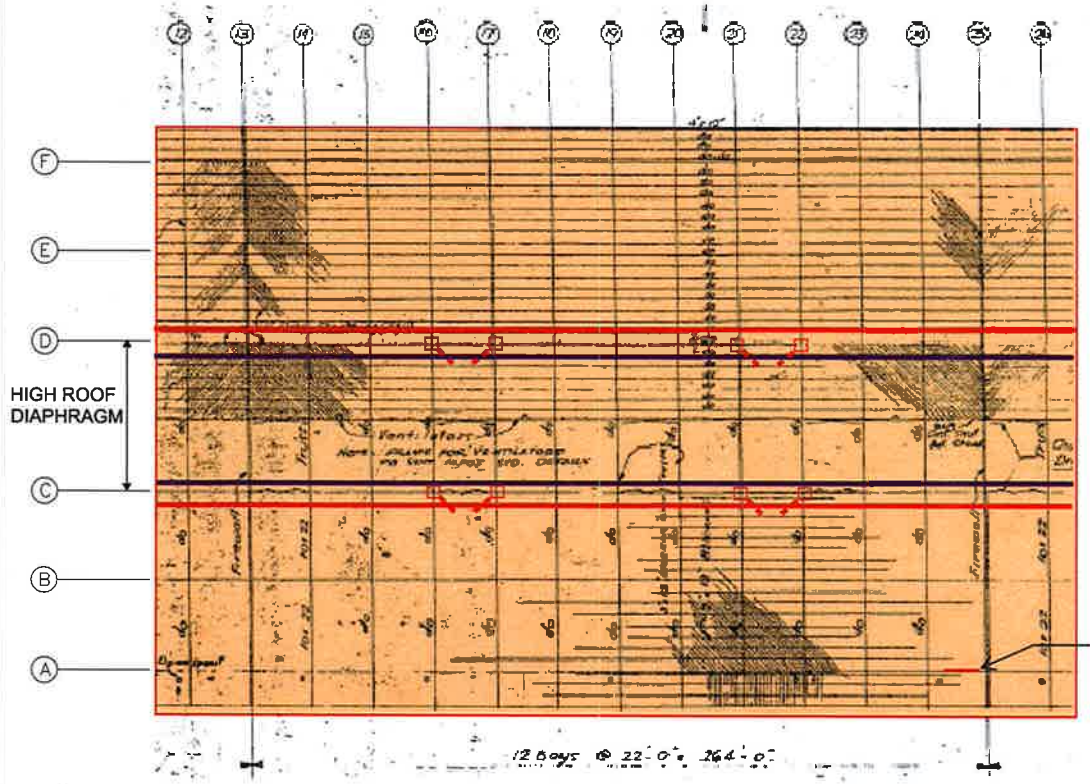
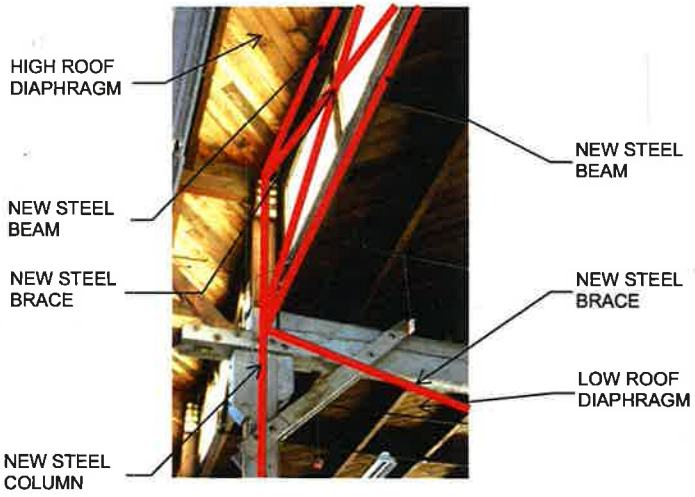
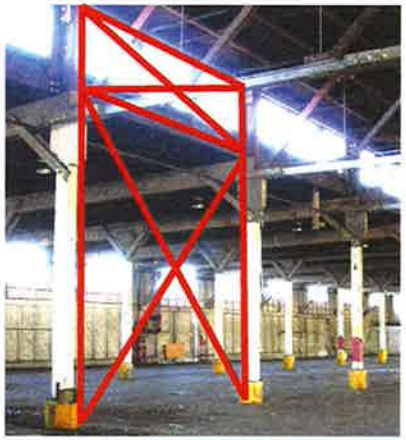
20112162S1 2011216.2







PARTIAL ROOF FRAMING PLAN

NO SCALE

LEGEND

- NEW 15/32" STRUC 1 ROOF SHEATING OVER EXISTING DIA. SHEATHING.
- NEW CONTINUOUS SIMPSON CMST METAL STRAP AT HIGH ROOF SHEATHING.
- NEW CONTINUOUS SIMPSON CMST METAL STRAP AT LOW ROOF SHEATHING.
- NEW STEEL COLUMN AND BRACED FRAME BELOW

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PARTIAL ROOF FRAMING PLAN

OAB WAREHOUSE BUILDINGS
CONCEPT SEISMIC RETROFIT

OAKLAND, CALIFORNIA

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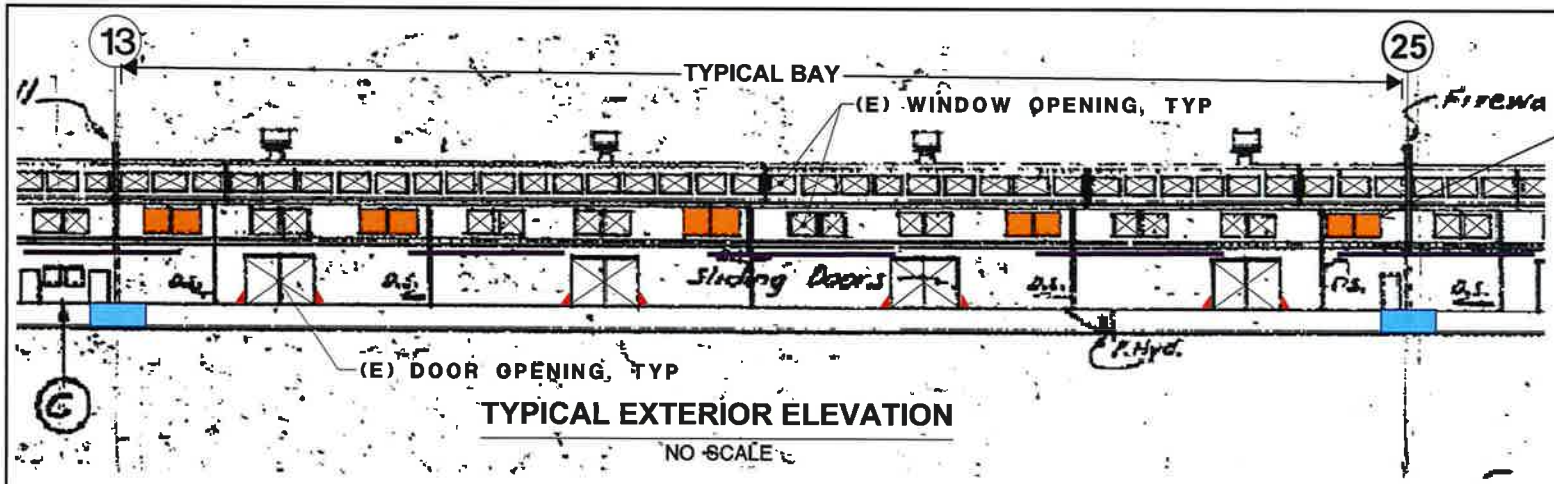
SHEET	2	OF	4
DRAWING No.		REV. No.	
A	S2		

20112162S2 2011216.2



TYPICAL EXTERIOR ELEVATION

NO SCALE

LEGEND

- INFILL EXISTING OPENING WITH 3X STUDS @ 24" O.C.
- NEW BLOCKING AND SIMPSON CMST STRAPS AT WALL
- NEW FOUNDATION
- NEW HOLDOWN

NOTES:

1. INFILL EXISTING WALL OPENING AND APPLY NEW WALL SHEATHING, SEE S1 AND S2.

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TYPICAL EXTERIOR ELEVATION

OAB WAREHOUSE BUILDINGS
CONCEPT SEISMIC RETROFIT

OAKLAND, CALIFORNIA

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SHEET	3	OF	4
DRAWING No.			REV. No.
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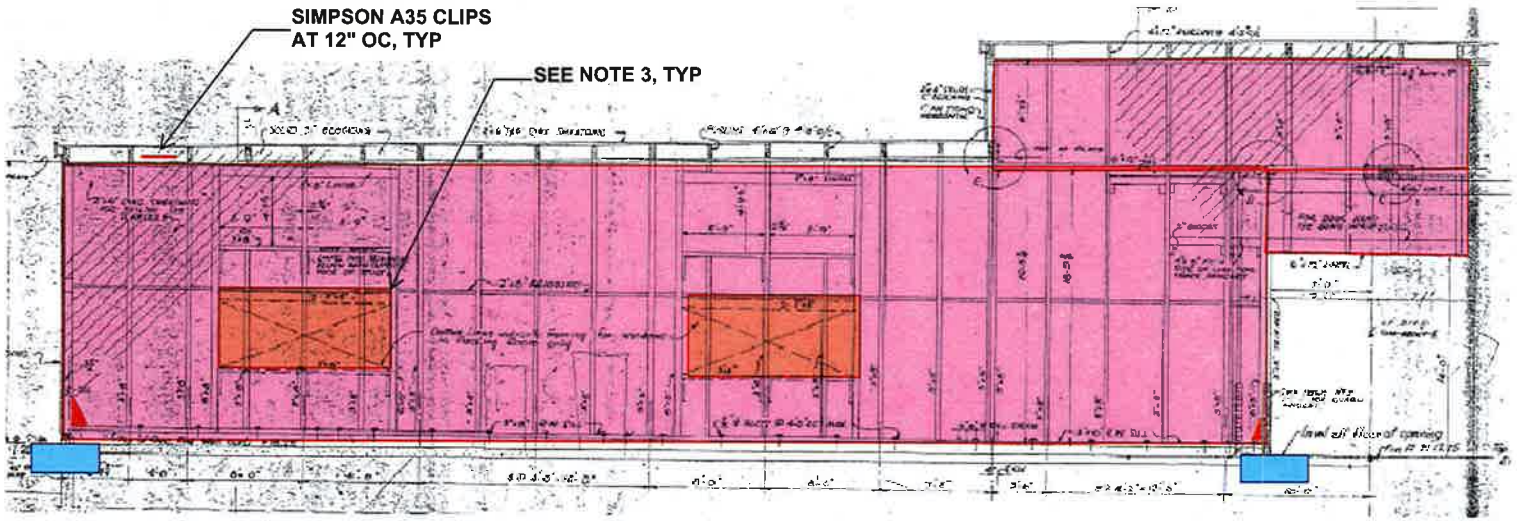
20112162S3 2011216.2



TYPICAL PARTIAL INTERIOR WALL ELEVATION

NO SCALE

LEGEND

NEW 15/32" STRUC 1 WALL SHEATING, NEW STUDS AT 48" OC BETWEEN EXISTING STUDS, NEW 3/4" DIA. ANCHOR BOLTS @ 1' O.C.

FOUNDATION WIDENING

NEW HOLDOWN

INFILL EXISTING WALL OPENING

NOTES:

1. INFILL EXISTING WALL OPENING.
2. ADD NEW STUDS AND APPLY NEW WALL SHEATHING.
3. SIZE AND LOCATION OF EXISTING OPENING VARIES

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TYPICAL INTERIOR ELEVATION

OAB WAREHOUSE BUILDINGS
CONCEPT SEISMIC RETROFIT

OAKLAND, CALIFORNIA

DESIGNED BY: YKS	DATE: 2.9.12		
DRAWN BY: MLT	SCALE: AS SHOWN		
CHECKED BY: TMS	JOB No.: 2011216.2		
SHEET 4 OF 4			
DRAWING No.: A S4	REV. No.:		

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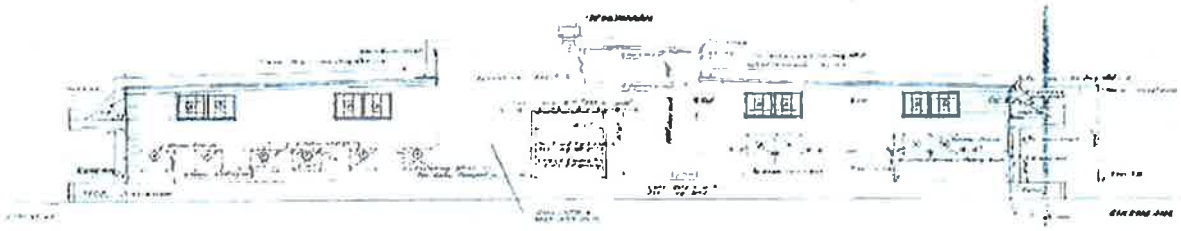
PART III

Warehouse Deconstruction Study

Oakland Army Base



Prepared by:

KJB Management

January 2012

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1. Statement of Purpose

2. Historical Overview

3. Architectural Characteristics

4. Salvage Potential

5. Work Plan

6. Conclusion

7. Acknowledgments

Purpose

The purpose of this study is to determine the procedure and cost for dismantling warehouses 803-808, 812, 821-823 at the Oakland Army Base.

VICINITY MAP

2. Historical Overview

The warehouses were built in 1941-2942 and served to transfer rail and truck shipments to and from ships at the base.

3. Architectural Features

Large Warehouses (803-808)

-Built Nov '41-Jun'42

-180'x1,298'=233,640 sf

-Column spacing along length of the building is 22' O.C.

-Column spacing along the width of the building is 32', 32', 52', 32', 32'

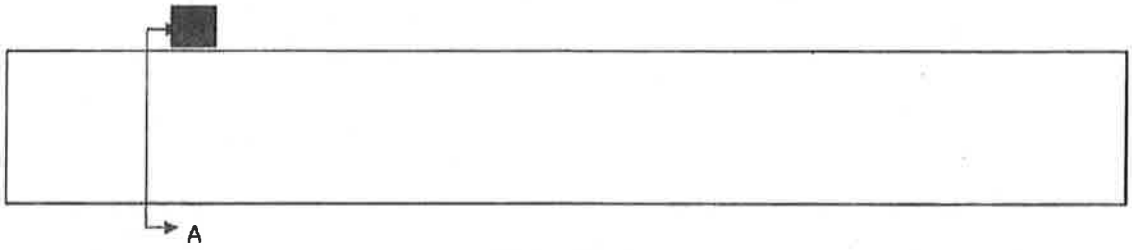
-Height=18'

-Only alterations that have been made were to the windows and interior offices

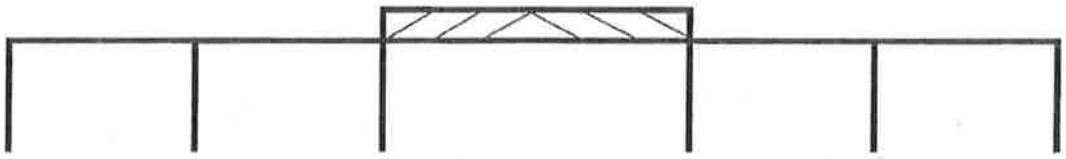
-Framing is select structural grade Douglas fir

-Siding & window sashes are redwood

-Slab 5' above grade



Plan View



Section A-A

Small Warehouses (812,821,822,823)

812

-Built 1944

-64'x280'= 18,345 sf

-Slab on grade

-2 rows of double columns @ 14' OC

-3 longitudinal bays 16', 32', 16'

-Has a rolling crane

-Has transite panels on the monitor

821, 822, 823

-Built 1942-1943

-250'x80'=20,000 sf

- 2 rows of columns

- Longitudinal bays 20', 40', 20'

4. Salvage Potential

The warehouses were built during World War II, so metal for construction purposes was scarce. Therefore, the warehouses are comprised almost entirely of wood. Most of the wood is in good condition and has salvage potential for new floors and architectural features. Dismantling the warehouses, as oppose to demolishing it, would divert waste from the landfill and reduce the need for more trees to be cut down. The table below shows the dimensions and quantities of timber in one of the large warehouses. The small warehouses are of similar construction, with a smaller quantity of material.

Item	Nominal Dimension	Count
Main Beam	10"x22"x31.8'	216
Inner Beam Column	10"x12"x15'	108
Truss Column	10"x12"x25'	108
Beam Column (Exterior Wall)	6"x8"x18'	108
Interior Purlins	4"x12"x22'	2773
Exterior Purlins	4"x12"x22'	472
Exterior Beam	6"x10"x10'	108

Truss Member A	6"x8"x8'	108
Truss Member B	6"x6"x9'	216
Truss Member C	6"x12"x27'	108
Truss Member D	6"x8"x50'	54
Truss Member E	6"x12"x53'	54
Truss Bracing A	6"x8"x22'	59
Truss Bracing B	3"x6"x24'	59
Truss Bracing C	3"x4"x52'	59

5. Work Plan

Hazardous materials abatement

Prior to deconstruction, the hazardous materials need to be removed from the building. The warehouses have very little build out, but based on the 1999 Asbestos survey, the build out break room and office areas have asbestos floor tile. There is assumed to be asbestos transite pipe and fire doors. The large warehouses were not included in the lead survey, but based on the age, can be assumed to have lead based paint. Most of the paint will remain on the wood during deconstruction, but the loose and peeling paint will need to be removed.

Bldg	ACM VCT (sf)	fire doors (ea)	transite pipe (LF)
803		4	30
804	16	4	30
805	5800	4	300
806	1300		
807	760	4	120
808	1365	4	

Bldg	ACM VCT (sf)	lead paint	woven tape (SF)	joint packing (EA)	pipe covering (LF)	transite piping (LF)	transite siding (SF)	roofing (SF)
812	1309	X	40	12	7	30	21788	
821		X				64		7500
822		X						
823		X				30	1200	

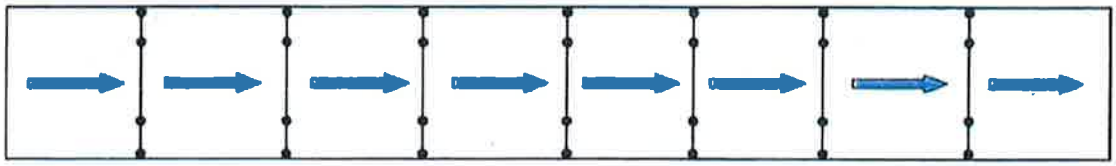
Roof Removal

The general method for deconstruction will be to work from the top down. This means that the roof and sheathing will be removed first. The roofing will be removed with a roof scraping walk behind machine, and then the nails will be removed from the sheathing by hand, so that the planks can be kept intact for salvage.

Figure 5.1- Roof sheathing removal

Figure 5.2- Roof sheathing from below

Interior Deconstruction



The remaining deconstruction will occur bay by bay as illustrated above, using the methods described below. Each bay, between trusses, will be completely dismantled before moving on to the next bay.

Figure 5.3

Beam Removal

Next the purlins and beams connecting the columns will be cut or unbolted at the connections and removed with a forklift. The beam removal will start at one end of the building and proceed along the length of the building.

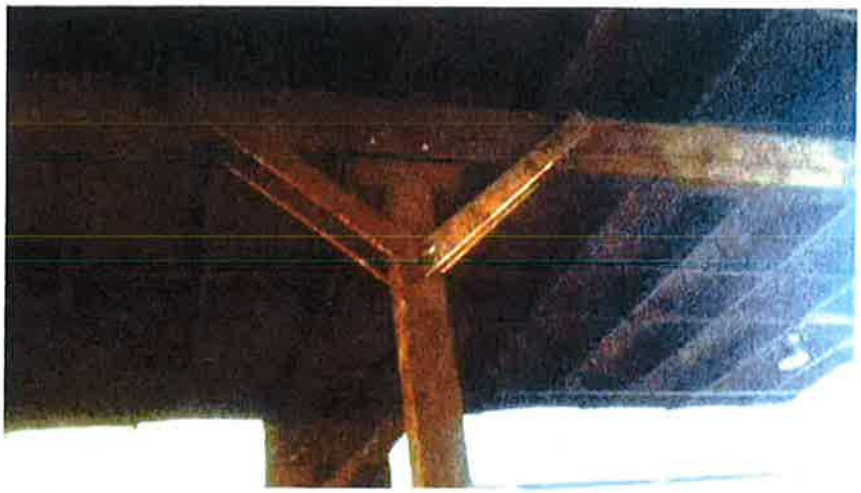


Figure 5.4 Beam to column connection

Figure 5.5 Beam removal

Truss Removal

The most cost effective way to dismantle the truss would be to remove the whole truss from the structure, and then unbolt the members once the truss is on the ground.

Figure 5.6 Trusses with roof purlins and sheathing in the background

Figure 5.7 Truss removal

Column Removal

The columns will be cut where they intersect with the concrete base, and then carefully lowered to the ground with a forklift, where they can then be stacked for shipment. The column removal will proceed along the length of the building.

Figure 5.8-Column to pier connection

Wall Removal

Finally, the walls will carefully be lowered to the ground in 22' sections and disassembled for salvage. The windows will be removed and disposed of as construction debris.

6. Conclusion

Deconstructing the warehouses is an environmentally sound way to remove the warehouses from the army base site. Further investigation needs to be done at the time of deconstruction about possible uses for this wood. The current salvaged wood market has a plethora of stock warehoused due to the increased interest in recycling and the diminished construction market. Investigation into uses overseas and beyond the local market will be needed for the vast quantity of wood from the warehouses.

7. Acknowledgments

I would like to acknowledge the people who have complete studies of the warehouse and whose documents provided me with a wealth of information for this feasibility study.

"Construction & Demolition Recycling." http://stopwaste.org/home/index.asp?page=775. Alameda County Waste Management Authority.

Oakland Army Base. Annual Asbestos Survey. October 1999.

Woodruff Minor. "Architectural Salvage Assessment." December 7, 2006.

Southward, Mathew J. "Subject: Building 802 Deconstruction Project-Deconstruction Results Report." March 6, 2009.

I would also like to thank Marc Mandel at Cross Roads Lumber for his vast knowledge about salvage potential for the wood.

KJB Management Services

The estimated duration is 90 days for each of the large warehouses (803-808) and 30 days for each of the small warehouses. (Total duration is 22 months).

Large Warehouse Deconstruction

	week											
	1	2	3	4	5	6	7	8	9	10	11	12
Abatement	X	X										
Roof			X	X	X							
Beam						X	X	X	X	X	X	X
Truss						X	X	X	X	X	X	X
Column						X	X	X	X	X	X	X
Wall						X	X	X	X	X	X	X

Note that the beams, trusses, columns and walls will be removed bay by bay, and therefore occur throughout the later part of the project

Small Warehouse Deconstruction

	week			
	1	2	3	4
Abatement	X			
Roof		X		
Beam			X	X
Truss			X	X
Column			X	X
Wall			X	X

See Warehouse Deconstruction Plan for detailed scope and procedure.

This estimated duration does not include demolition of the concrete slab or foundation.

Sincerely,

Rachel Baylson

rbaylson@alarconbohm.com

510-893-4405 x229

PART IV

OAB02 OAKLAND ARMY BASE
Oakland, CA

ARCHITECTURAL DIMENSIONS

DOCUMENTS BY DOCUMENT DATE - OAB HISTORIC DECONSTRUCTION STUDIES

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1744	F-10	History > Historic Documents > Remediation	**1/26/2012**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Hazardous Materials Survey - Bldg S833**	Report	SCA Environmental	☐	9/28/2009

Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building S833 - General Purpose Administration
Prepared for Weiss Associates and Port of Oakland

SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at buildings S833 general purpose administration on December 29, 2006

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1611	F-10	History > Historic Documents > Remediation	**10/1/2011**	**Remedial Design and Implementation Plan for Bldg. 991 RAP Site**	Report	Baseline		12/9/2011

Remedial Design and Implementation Plan for Building 991 RAP Site

The RAP Site requires investigation and remediation because pesticide concentrations in soil in the eastern portion o the RAP site exceeded remediation goals approved by the department of toxic substances control and therefore, may pose a potential health risk to future workers or nearby ecological receptors.

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1598	F-10	History > Historic Documents > Remediation	**9/29/2011**	**Evaluation of One year of Groundwater Monitoring Results**	Report	Baseline	☐	12/9/2011

Evaluation of one year of groundwater monitoring results frollowing remedial action, volatile organic compounds in groundwater at the eastern end of building 807 remedial action plan site, former Oakland Army Base - Economic development conveyance area

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\BASELINE\092911_MEMORANDUM_ONE YEAR GROUNDWATER MONITORING RESULTS BLDG 807.pdf

1599	F-10	History > Historic Documents > Remediation	**4/27/2011**	**Transmittal of March 2011 Quarterly Groundwater Monitoring Data for Groundwater Bldg 807**	Report	Baseline	☐	12/9/2011

Transmittal of March 2011 quarterly groundwater monitoring data for groundwater at the eastern end of building 807 remedial action plan site, former Oakland Army Base - economic development conveyance area.

This memorandum transmits the data collected during the third quarterly groundwater monitoring event conducted at the volatile organic compounds in groundwater at the eastern end of building 807 remedial action plan site following the remedial actions completed in March 2010.

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Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1612	F-10	History > Historic Documents > Remediation	**1/24/2011**	**Memorandum of proposed Remediation Goals - Bldg 991**	memo	Baseline		12/9/2011

Proposed remediation goals for Dieldrin, Endrin and Lindane in Soil, building 991 remedial action plan site.

This memorandum proposed site-specific soil remediation goals for certain chlorinated pesticide compounds for bldg. 991 RAP site

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1600	F-10	History > Historic Documents > Remediation	**1/17/2011**	**Transmittal of 12/10 Quarterly Groundwater Monitoring data for Bldg 807**	Report	Baseline	☐	12/9/2011

Transmittal of December 2010 quarterly groundwater monitoring data for groundwater at the eastern end of building 807 remedial action plan site, former Oakland Army Base- Economic development conveyance area

This Memorandum transmits the data collected during the second quarterly groundwater monitoring even conducted at the volatile organic compounds in groundwater at the eastern end of building 807 remedial action plan site following the remedial actions completed in March 2010.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\BASELINE\011711_MEMORANDUM_QUARTERLY GROUNDWATER MONITORING DATA BLDG 807.pdf

1601	F-10	History > Historic Documents > Remediation	**11/8/2010**	**Transmittal of 9/10 Quarterly Groundwater Monitoring data for Groundwater at Bldg. 807**	Report	Baseline	☐	12/9/2011

Transmittal of September 2010 Quarterly Groundwater Monitoring Data for Groundwater at the Eastern End of Building 807 Remedial Action Plan Site, Former Oakland Army Base - Economic Development Conveyance Area

This memorandum transmits the at collected during the first quarterly groundwater monitoring event conducted at the VOC's in groundwater at the eastern end of building 807 remedial action plan site following the remedial actions completed in March 2010

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\BASELINE\110810_MEMORANDUM_QUARTERLY GROUNDWATER MONITORING DATA BLDG 807.pdf

1602	F-10	History > Historic Documents > Remediation	**10/1/2010**	**Remedial Action Implementation Report for VOCs In Groundwate at Eastern End of Building 807 RAP Site**	Report	Baseline	☐	12/8/2011

Remedial Action Implementation Report for VOC's in Groundwater at Eastern End of Building 807 RAP Site

The Final remedial action plan for the former Oakland Army Base-Economic Development Conveyance area identified VOCs in groundwater at the Eastern End of the building 807 as a RAP site. The RAP Site required investigation and remediation because vinyl chloride concentration in the groundwater exceed Remediation goals established in the RAP and therefore, may pose a potential health risk to future commercial workers from inhalation of indoor air.

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Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1603	F-10	History > Historic Documents > Remediation	**10/1/2009**	**Remedial Design and Implementation Plan for VOCs in Groundwater at Eastern End of Building 807 RAP**	Report	Baseline		12/9/2011

Remedial Design and Implementation Plan for VOCs in Groundwater at Eastern End of Building 807 RAP Site

The final RAP for the fromer OARB-EDC area identified VOCs in groundwater at the eastern end of building 807 as a RAP site. The RAP site required investigation and remediation because vinyl chloride concentrations in the groundwater exceed remediation goals established in the RAP and therefore may pose a potential health risk to future commercial workers from inhalation of indoor air.

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1745	F-10	History > Historic Documents > Remediation	**6/8/2009**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Haz. Materials Survey**	Report	SC Environmental	☐	9/28/2009

Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building 991 Prepared for the Port of Oakland

SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at building 991 on May 29, 2009

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1009	F-10	History > Historic Documents > Remediation	**4/24/2009**	**DTSC - VOCs in Groundwater Bldgs 808, 823**	Enviromental Impact Report	EKI	☐	

Completion Report summarizing groundwater monitoring activities and requests closure for the Remedial Action Plan Site known as VOCs in Groundwater at Buildings 808 and 823 located on the former OAB, Economic Development Conveyance Area.

T:\OAB02- OAKLAND ARMY BASE\PROJECT MANAGEMENT\ENTITIES\EKI - Erler & Kalinowski\FinalCR808-823RAPSite_24April2009.pdf

1748	F-10	History > Historic Documents > Warehouse Studies	**3/6/2009**	**Bldg. 802 Deconstruction Project - Deconstruction Results Report**	Report	Port of Oakland		3/3/2010

Building 802 Deconstruction Project - Deconstruction Results Report

This letter report summarizes the results of the project to deconstruct and salvage materials from the Port of Oakland's deconstruction of Building 820.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\PORT\Building 802 Decostruction\0753_SOUTHWORTH_030609_Bldg 802 Deconstruction Report.pdf

1756	F-10	History > Historic Documents > Warehouse Studies	**3/6/2009**	**Building 802 Deconstruction Project - Deconstruction Results Report**	Letter/Memo	Port of Oakland	☐	9/28/2009

This letter report summarizes the results o the project to deconstruct and salvage materials from the Port of Oakland's deconstruction of Bldg 802 at the former Oakland Army Base.

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Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1638	F-10	History > Historic Documents > Warehouse Studies	**10/20/2008**	**East Gateway Portion - Landmarks Preservation Advisory Board Staff Report**	Report	City of oakland		

Landmarks Preservation advisory Board Staff Report
Proposal: Consideration of the feasibility analysis for the reuse of the 800-series warehouses on the former Oakland Army Base as per mitigation measure 4.6-1 of the Oakland army base redevelopment plan environmental impact report and design review for the proposed new construction for the Oakland Maritime support Services facility, which involves demolition of portions of the 800-series warehouses.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\102008_Landmarks Preservation Advisory Board Staff Report.pdf

1479	F-10	History > Historic Documents > Warehouse Studies	**8/28/2008**	**Feasibility Analysis for the Reuse of the 800-Series Warehouses and the OMSS Truck Parking Proposal**	Study			12/7/2011

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\8-11-08 Summary of Reuse Fesibility Studies.pdf

868	F-10	History > Historic Documents > Remediation	**8/27/2008**	**DTSC - Bldg 807 - Remedial Design**	Letter/Memo	DTSC		

Response with comments to the May 2007 Remedial Design and Implementation Plan for VOCs in Groundwater at Western End of Building 807 Rap Site.

T:\OAB02- OAKLAND ARMY BASE\PROJECT MANAGEMENT\AGENCIES\DTSC - Department of Toxic Substancees Control\082708_Bldg 807 RAP SITE RDIP for VOCs in GW.pdf

1890	F-10	History > Historic Documents > Warehouse Studies	**8/22/2008**	**OMSS Transportation Services Facility Feasibility Assessment**	Report	Oakland Maritime Suppor	☐	

Old Document superceeded by attachement in Landmarks Prservation Advisory Board - Staff Report dated 10/22/08

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1697	F-10	History > Historic Documents > Warehouse Studies	**8/14/2008**	**Deconstruction of Building 802 Lumber Salvage & Re-Use Report**	Report	Zaccor Companies, Inc.	☐	1/5/2011

Deconstruction of Building 802
Former Oakland Army Base,Outer Harbor
Final Lumber Salvage & Re-Use Report

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806	F-10	History > Historic Documents > Remediation	**6/18/2008**	**DTSC - Bldg. 808 & 823 - RAP Certification**	Approval Letter	DTSC	☑	

Building 808 and 823 Remedial Action Plan Site - Certification. VOC's in Ground water. Final Determination that all removal /remedial actions have been completed.

T:\OAB02- OAKLAND ARMY BASE\PROJECT MANAGEMENT\AGENCIES\DTSC - Department of Toxic Substancees Control\Bldg 808+823 Remedial Action Certification 6-18-09.pdf

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1698	F-10	History > Historic Documents > Warehouse Studies	**4/3/2008**	**Deconstruction of Building 802 Lumber Salvage & Re-Use Plan**	Report	Zaccor Companies, Inc.	☐	1/5/2011

Deconstruction of Building 802
Former Oakland Army Base,Outer Harbor
Final Lumber Salvage & Re-Use Plan

Plan states that all salvaged lumber is being provided to Vintage Timberworks, Inc. for resale within the construction re-use market.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\PORT\Building 802 Decostruction\Lumber Salvage and Re-use Plan.pdf

1746	F-10	History > Historic Documents > Remediation	**4/1/2008**	**Hazardous Materials Demolition Survey Bldg. 780**	Report	Winzler & Kelly		9/28/2009

Hazardous Materials Demolitions Survey Building 780
Prepared for: Port of Oakland

The purpose of this survey as to screen for asbestos, lead and/or other potentially hazardous building materials to support the upcoming building demolition project.

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1747	F-10	History > Historic Documents > Remediation	**4/1/2008**	**Hazardous Materials Demolition Survey Bldg. 762**	Report	Winzler & Kelly		9/28/2009

Hazardous Materials Demolitions Survey Building 762
Prepared for: Port of Oakland

The purpose of this survey as to screen for asbestos, lead and/or other potentially hazardous building materials to support the upcoming building demolition project.

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1700	F-10	History > Historic Documents > Warehouse Studies	**1/28/2008**	**Deconstruction of Building 802 Lumber Salvage & Re-Use Plan**	Report	Zaccor Companies, Inc.	☐	1/5/2011

Deconstruction of Building 802
Former Oakland Army Base,Outer Harbor
Schedule of Values

Table delineating schedule of values for deconstruction of Building 802

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Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1693	F-10	History > Historic Documents > Warehouse Studies	**10/15/2007**	**Deconstruction of Building 802 Invitation to Bid Drawings**	Miscellaneous	Port of Oakland		1/5/2011

Outer Harbor
Deconstruction of Building 802
Former Oakland Army Base

Drawings from the Port of Oakland for Building 802, relating to its deconsturction. Includes:
1) G1 - Title Sheet, Location Plan, & Vicinity Map
2) D1 - Site Demolition Plan
3) C1 - Floor Plan
4) C2 - Elevations
5) C3 - Typical Details & Truss Sections

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1695	F-10	History > Historic Documents > Warehouse Studies	**10/15/2007**	**Deconstruction of Building 802 Contract Project Manual**	RFP/RFQ	Port of Oakland		1/5/2011

Contract Project Manual
Deconstruction of Building 802
Former Oakland Army Base
Outer Harbor

Invitation to Bid
Work performing abatement of asbestos-containing materials, loose and peeling lead-based paints, PCB-containing lighting ballasts, mercury-containing fluorescent lighting fixtures, and other miscellaneous wastes; deconstructing Building 802, excluding the asphalt floor and all foundation components; facilitating the salvage and re-use of lumber; meeting or exceeding Port goals for local workforce development; and performing all associated work, all in accordance with the Contract Documents.

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915	F-10	History > Historic Documents > Remediation	**8/21/2007**	**USEPA - Review Letter - Building 807 - VOCs in Groundwater**	Letter/Memo	USEPA	☐	

USEPA review and comments of the Draft Remedial Design and Implementation Plan for VOCs in Groundwater at Eastern End of Building 807 RAP Site, Former Oakland Army Base - EDC Area, Oakland, California, May 2007

T:\OAB02- OAKLAND ARMY BASE\PROJECT MANAGEMENT\AGENCIES\USEPA - United States Enviormental Protection Agency\0697_USEPA_080107_Review of Draft RDIP VOCs in GW at Bldg 807.pdf

1610	F-10	History > Historic Documents > Remediation	**4/2/2007**	**Summary Groundwater Monitoring Report VOCs near Bldgs 808 & 823**	Report	Northgate Environmental	☐	12/9/2011

Summary groundwater Monitoring Report VOCs in Groundwater Near Building 808/823

In accordance with PDIM, this summary groundwater monitoring report presents data for four successive quarters, from December 2005 through September 2006

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Northgate\040207_SUMMARY GROUNDWATER MONITORING REPORT.pdf

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1604	F-10	History > Historic Documents > Remediation	**2/5/2007**	**Pre-Design Investigation Report VOCs in Groundwater - Bldg 807**	Report	Northgate Environmental	☐	12/9/2011

Pre-Design Investigation Report Vocs in Groundwater at Easter End of Building 807

This report has been prepared to document field activities and sampling results of the investigation proposed in Northgate's September 19, 2005 Pre-Design investigation Memorandum for VOCs in Groundwater at Eastern End of Building 807 and VOCs in Groundwater near Buildings 808 and 823.

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1519	F-10	History > Historic Documents > Warehouse Studies	**2/1/2007**	**Deconstruction of WWII-Era Wood Framed Buildings**	Report	Army Corps of Engineers	☐	12/15/2011

Public Works Technical Bulletin 200-1-45
Published by the US Army Corps or Engineers

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\ACE - Deconstruction of WWII Era Wood Framed Buildings\020107_Deconstruction of WWII-Era Wood Framed Buildings.pdf

1722	F-10	History > Historic Documents > Remediation	**1/23/2007**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Hazardous Materials Survey Bldg. 825 Shed**	Report	SCA Environmental	☐	9/28/2009

Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building 825 Shed
Prepared for Weiss Associates and Port of Oakland

SCA Environmental, Inc conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at building 825 shed on December 28, 2006

1723	F-10	History > Historic Documents > Remediation	**1/23/2007**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Hazardous Materials Survey Bldg. 828**	Report	SCA Environmental	☐	9/28/2009

Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building 828 Former Service Station
Prepared for Weiss Associates and Port of Oakland

SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at building 828 Former Service Station on December 28, 2006

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Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1724	F-10	History > Historic Documents > Remediation	**1/23/2007**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Hazardous Materials Survey - Bldg. 830**	Report	SCA Environmental		9/28/2009
				Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building 830 Vehicle Maintenance Shop Prepared for Weiss Associates and Port of Oakland SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at building 830 Vehicle Maintenance Shop on December 28, 2006 T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\SCA\012307_Asbestos_Lead Bldg_830.pdf				
1725	F-10	History > Historic Documents > Remediation	**1/23/2007**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Hazardous Materials Survey Bldg 832 - Shed**	Report	SCA Environmental	☐	
				Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building 832 Shed Prepared for Weiss Associates and Port of Oakland SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at building 832 shed on December 28, 2006 T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\SCA\012307_Asbestos_Lead Bldg_832.pdf				
1726	F-10	History > Historic Documents > Remediation	**1/23/2007**	**Summary Report: Bulk Asbestos, Lead-Based Paint and Hazardous materials Survey Bldg.834**	Report	SCA Environmental	☐	9/28/2009
				Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Building 834 Former Motor Pool Administration Offices Prepared for Weiss Associates and Port of Oakland SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at building 834 Former Motor Pool Administration Offices on December 28, 2006 T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\SCA\012307_Asbestos_Lead Bldg_834.pdf				
1743	F-10	History > Historic Documents > Remediation	**1/23/2007**	**Summary Report: Bulk Asbestos, Lead-Based Paint and haz. Material Survey - Bldgs. 838 & 839**	Report	SCA Environmental	☐	9/28/2009
				Summary Report: Bulk Asbestos, Lead-based Paint and Hazardous Materials Survey Oakland Army Depot Buildings 838 & 839 Vehicle Storage Prepared for Weiss Associates and Port of Oakland SCA Environmental, Inc. conducted a survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the OAB at buildings 838 & 839 vehicle storage on December 28, 2006 T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\SCA\012307_Asbestos_Lead Bldgs. 838 and 839.pdf				

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
892	F-10	History > Demolition > Deconstruction/Salvage	**12/7/2006**	**Architectural Salvage Assessment**	Study	Woodruff Minor		5/26/2009

Architectural Salvage Assessment for Contributing Buildings, Oakland Army Base Historic District, Oakland, California
This report assesses the architectural features and building components of the eighteen (18) contributing buildings within the Oakland Army Base (OARB) Historic District. Compiled for the Port of Oakland Environmental Planning and Permitting Department and the City of Oakland Community & Economic Development Agency, the report is intended to serve as a guide for salvage operations undertaken by the Port and the City pursuant to the demolition and/or deconstruction of district contributors within their respective jurisdictions.

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1720	F-10	History > Historic Documents > Remediation	**10/26/2006**	**Pre-Demolitions Hazardous Materials Survey Building 803**	Report	IHI Environmental	☐	9/28/2009

Pre-Demolition Hazardous Materials Survey Building 803 OAB
Submitted to Port of Oakland Engineering Division

pre-demolition hazardous materials survey was conducted by IHI Environmental of building 803 on the OAB, The survey was conducted in response to a request by Ms. Dawn Crater and under the terms and conditions of the existing contract between IHI and the Port of Oakland.

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1721	F-10	History > Historic Documents > Remediation	**10/26/2006**	**Pre-Demolition Hazardous Materials Survey Building 804**	Report	IHI Environmental	☐	9/28/2009

Pre-Demolition Hazardous Materials Survey Building 804 OAB
Submitted to Port of Oakland Engineering Division

pre-demolition hazardous materials survey was conducted by IHI Environmental of building 804 on the OAB, The survey was conducted in response to a request by Ms. Dawn Crater and under the terms and conditions of the existing contract between IHI and the Port of Oakland.

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874	F-10	History > Demolition > Deconstruction/Salvage	**10/5/2006**	**Adaptive Reuse Study - Auto Dealership - East Gateway**	Study	Stolz & Minor	☐	12/16/2009

Feasibility Study of Adaptive Reuse for Auto Dealership Acitivities

This report has been prepared for the Oakland Community & Economic Development Agency (CEDA) to study the technological feasibility of reusing eleven historic buildings on the former Oakland Army Base (OARB) as automobile dealerships. All of the buildings are situated within the boundaries of the proposed OARB Auto Mall Project. The report is an outgrowth of the OARB Supplemental Environmental Impact Report—Auto Mall Project (November 2006), and is meant to partially satisfy
Mitigation Measure 4.6-14 from the Oakland Army Base Redevelopment Plan Environmental Impact
Report (2002), as it relates to the Auto Mall Project.

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Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1719	F-10	History > Historic Documents > Remediation	**9/26/2006**	**Pre-Demolition Hazardous Materials Survey, Bldg. 802**	Report	IHI Environmental	☐	2/3/2010
				Pre-Demolition Hazardous materials Survey, Building 802, Oakland Army Base, Oakland, California A pre-demolition hazardous materials survey was conducted by IHI Environmental of building 802 on the OAB, The survey was conducted in response to a request by Ms. Dawn Crater and under the terms and conditions of the existing contract between IHI and the Port of Oakland. T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\IHI Environmental\092606_Pre-Demo Bldg 802.pdf				
1717	F-10	History > Historic Documents > Remediation	**6/21/2006**	**March 2006 Groundwater Monitoring Event Report. RAP Sites _ Former USTs 11/12/13 & 11A/12A/13A Area**	Report	Northgate Environmental	☐	9/28/2009
				March 2006 Groundwater Monitoring Event Report, Remedial Action Plan Sites, Former USTs 11/12/13 and 11A/12A/12A Area, Easter end of Building 807, and Building 808/823, Former Oakland Army Base Economic Development Conveyance Area Northgate performed groundwater monitoring activities on March 20, 2006 through March 22, 2006. Field activities consisted of measuring water levels in 28 monitoring wells, sampling 5 monitoring wells for petroleum hydrocarbons as gasoline (TPH-g, sampling 17 monitoring wells for selected VOCs and sampling 8 monitoring wells for bioremediation parameters. T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Northgate\062106_GWM March 2006.pdf				
1782	F-10	History > Historic Documents > Remediation	**2/24/2006**	**September 2005 Groundwater Monitoring Event Report USTs 11/12/13 & 11A/12A/13A - Bldg 991 & 807**	Report	Northgate Environmental	☐	9/28/2009
				September 2005 Groundwater Monitoring Event Report USTs 11/12/13 and 11A/12A/13A Area, Building 991 and 991 AST Area, Eastern End of Building 807, and Suspected UST Locations 673, 678, 682, 686, and 688 - EDC Area				
871	F-10	History > Historic Documents > Remediation	**10/24/2005**	**Pre-Design Investigation Memo, VOCs in GW - Bldgs. 807, 808 and 823**	Approval Letter	DTSC	☑	
				Approved request for additional investigations to aid the Pre-Design Investigation for VOCs in Groundwater near Buildings 807, 808 and 823 T:\OAB02- OAKLAND ARMY BASE\PROJECT MANAGEMENT\AGENCIES\DTSC - Department of Toxic Substancees Control\102405_Letter Predesign Inv Memo VOCs in gw 807, 808, 823.pdf				
1605	F-10	History > Historic Documents > Remediation	**9/19/2005**	**Pre-Design Investigation Memorandum VOC's in Groundwater - Bldg. 807, 808 & 823**	Report	Northgate Environmental	☐	12/9/2011
				Pre-Design Investigation Memorandum VOCs in Groundwater at Eastern End of Building 807 and VOCs in Groundwater Near Buildings 808 and 823 On behalf of the OBRA, Northgate Environmental Management, Inc has prepared this Pre-Design Investigation Memorandum for 2 remedial action plan sites at the OAB. The 2 sites include the VOCs in groundwater at eastern end of building 807 site and the VOCs in groundwater near building 808 and 823.				

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1441	F-10	History > Historic Documents > Remediation	7/5/2005	**Building 991 Pre-Design Investigation Field Implementation Report**	Report	Northgate Environmental	☐	11/30/2011

Building 991 Pre-Design Investigation Field Implementation Report .
Building 991 Area
Former Oakland Army Base

Building 991 Pre-Design Investigation Field Implementation Report to document field activities performed by Northgate at the Building 991 area. Prepared in accordance with EKI memorandum called "Pre-Design Investigation Memorandum, Building 991 Area, Former Oakland Army Base-EDC Area, Oakland, CA" dated 5/23/05. The field investigation was performed to collect soil and groundwater samples.

AD received from the City Library 11/30/11

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Northgate\Building 991 Pre_Design 6-5-05.pdf

1712	F-10	History > Historic Documents > Conveyance	5/23/2005	**Pre-design Investigation memorandum, Building 991 Area, EDC Area**	Report	Erler & Kalinowski, Inc.	☐	9/28/2009

Pre-design Investigation memorandum Building 991 Area Former Oakland Army Base - EDC Area

On behalf of the Oakland Base Reuse Authority, Erler & Kalinowski, Inc. prepared this memorandum to describe a focused, pre-design investigation the OBRA is planning to implement at the Building 991 area at the former Oakland Army Base in Oakland, California. The investigation described in this memorandum addresses the Building 991 Area as a RAP Site to be remediated in accordance with the Final Remedial Action Plan. The Site is shown in dark green on Figure 4-7 of the RAP and includes the existing Building 991, which is planned for demolition, and its adjacent concrete railcar wash pad.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\EKI\052305_Pre-design Investigation_Bldg 991.pdf

1606	F-10	History > Historic Documents > Remediation	5/14/2004	**Final Groundwater Monitoring Plan: USTs 11/12/13 & 11A/12A/13A, Bldg. 991 AST & 807**	Report	Erler & Kalinowski, Inc.	☐	12/9/2011

Final Groundwater Monitoring Plan: UST 11/12/13 and 11A/12A/13A, Building 991 AST, and Eastern End of Building 807

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\EKI\051404_FINAL GROUNDWATER MONITORING PLAN BLDGS 991 807.pdf

1687	F-10	History > Historic Documents > Warehouse Studies	4/18/2002	**OAB Historic Building Reuse Alternatives Report - DRAFT**	Report	OBRA	☐	12/13/2011

DRAFT OAB Historic Building Reuse Alternatives Report
Buildings 1, 60, 88, 99, 808, and 812

The Historic Building Reuse Alternatives Report provides an analysis of the physical suitability and cost of rehabilitating and reusing a number of historic structures on the former Oakland Army Base (OAB). It does not provide an analysis of feasibility of building rehabilitation in terms of meeting the objectives of the Amended Draft Final Reuse Plan for the Oakland Army Base. It also includes cost estimates for demolition and/or deconstruction and salvage, and in some cases, the relocation of buildings.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\OBRA\Historic Buildings Reuse Alternatives Report OBRA 4-18-2002.pdf

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1757	F-10	History > Historic Documents > Warehouse Studies	**10/9/2000**	**Historic Preservation Feasibility Study**	Report	Ripley Architects		9/28/2009

OAB Historic Preservation Feasibility Study

This report has been prepared by Ripley Architects to summarize their initial review of Historic structures on the OAB which is being transferred to the OARA.

The purpose of the condition survey report is to present the findings of the inspection concisely a to the present condition of the buildings and evaluation of their adherence to the uniform building code.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\100900_Historic Preservation Feasibility Study.pdf

1567	F-10	History > Historic Documents > Warehouse Studies	**10/6/2000**	**Structural Assessment Buildings 1, 60, 88 & 812**	Report	Rutherford & Chekene	☐	12/8/2011

Structural Assessment Buildings 1, 60, 88 & 812 Oakland Army Base

Rutherford & Chekene has performed a limited structural assessment of four buildings, Building 1 - Administration, Building 60 - Cafeteria, Building 88 and Building 812 as input to a larger study of the reuse potential of existing buildings at the Oakland Army Base. The evaluation has consisted of a structural assessment of the buildings as the currently exist and has included filed observations by an experienced Structural Engineer, review of available drawings and reports, and limited seismic analysis.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Warehouse Studies\Structural Asessment Bldgs 1, 60, 88 and 812.pdf

999	F-10	History > Historic Documents > Remediation	**10/1/1999**	**ARMY - Annual Asbestos Survey - 1999**	Report	US Army		8/28/2009

ANNUAL ASBESTOS SURVEY, OAKLAND ARMY BASE, OAKLAND, CALIFORNIA, OCTOBER 1999
The Sacramento District of the Army Corps of Engineers conducted a reinsertion of asbestos previously identified in buildings initially surveyed in 1989. The Army Corps of Engineers conducted an asbestos survey of buildings which were not previously inspected and verified a previous survey of Building 790. The survey conducted in 1989 was verified in 1996. Category I materials listed in the 1996 inspection were reinspected in 1997 to determine condition.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\ACE\100199_ANNUAL ASBESTOS SURVEY.pdf

1613	F-10	History > Historic Documents > Remediation	**12/29/1997**	**Final Report OAB Bldg. 991 Diesel Spill Site Investigation and Restoration**	Report	Chow Engineering, Inc.	☐	12/9/2011

Final Report: Oakland Army Base building 991 Diesel Spill site Investigation and Restoration.

Chow Engineering has completed a subsurface investigation, soil excavation, groundwater handling and disposal, and site restration at the OAB buildg 991.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\ACE\122997_FINAL REPORT OARB BLDG 991 DIESEL SPILL SITE.pdf

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
980	F-10	History > Historic Documents > Remediation	**10/1/1997**	**1997 LEAD BASED PAINT SURVEY**	Report	U.S. Army		3/16/2010

Naval Facilities Engineering Command performed comprehensive inspections of the interior and exterior of residences, yards, common buildings, and grounds in May, 1995. Lead-based paint can be a serious. source of lead exposure to children via ingestion. Adults can be exposed to lead in paint if improper cleaning or abatement techniques occur. Lead-based paint with levels above the action limits was evident throughout the interior of alt EM and Capehart Quarters. Adding to the potential hazard is the fact that some surfaces are mutable, in areas of high potential! contact for children, and susceptible to friction
and/or impact. Lead in soil was found at only two units. Several pieces of equipment on the playgrounds behind Buildings 675, 676, and 772 were found to contain lead-based paint. The report recommended abatement for the following components:
EM Quarters - Bathroom 1 door molding and window sill, bedroom 2 window sill. Capehart Quarters - Bathroom 1 door, bedroom 1 floor, living room wall, stairway handrail.

In 1996 the Sacramento District of the Army Corps of Engineers conducted screening samples for lead based paint in various buildings. This report includes a composite of the 1995 and 1996 surveys.

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1534	F-10	History > Historic Documents > Remediation	**10/1/1997**	**ARMY - Asbestos Survey Update - 1997**	Report	U.S. Army Corps of Engin	☐	12/13/2011

ANNUAL ASBESTOS SURVEY, OAKLAND ARMY BASE, OAKLAND, CALIFORNIA, OCTOBER 1997
The Sacramento District of the Army Corps of Engineers conducted a reinsertion of asbestos previously identified in buildings initially surveyed in 1989. Screening samples for lead-based paint were collected in various buildings. Of the four paint bulk samples taken for lead analysis, one was positive, and three were negative. Of the eight bulk samples collected for asbestos analysis, three were positive and five were negative. Several Priority Level I areas (asbestos-containing materials which should be abated due to ease of public access or poor condition) remain from the previous survey.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\ACE\100197_ASBESTOS SURVEY UPDATE.pdf

1607	F-10	History > Historic Documents > Remediation	**8/25/1997**	**Final Report - Additional Field Investigation Bldg. 807**	Report	Kleinfelder West, Inc.	☐	12/9/2011

Final Report Additional Field Investigation Building 807

Kleinfelder was contracted by the US ACE, Sacramento District, to conduct an additional field investigation at building 807. The objectives of the AFI were to review data from previous investigation at the site, collect and analyze additional soil and water samples to assess the lateral and vertical extent of chlorinated solvents in the subsurface, perform aquifer and dual-phase extraction tests to evaluate potential remedial techniques, prepare a screening level risk assessment and assemble the pertinent information on building 807 in on document to support recommendations for future actions

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Kleinfelder\082597_FINAL REPORT ADDITIONAL FIELD INVESTIGATION_BUILDING 807.pdf

1614	F-10	History > Historic Documents > Conveyance	**11/1/1996**	**Final Preliminary Site Characterization Report Bldg. 991**	Report	Kleinfelder West, Inc.	☐	12/9/2011

Volume I Final Preliminary Site Characterization Report OAB Building 991

This soil and groundwater investigation was performed at the OAB in the vicintiy of building 991.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\ACE\110096_FINAL PRELIMINARY SITE CHARACTERIZATION REPORT_VOL I.pdf

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
995	F-10	History > Historic Documents > Remediation	**9/1/1996**	**ARMY - Asbestos Survey - 1996**	Report	US Army		12/13/2011

ASBESTOS SURVEY, OAKLAND ARMY BASE, OAKLAND, CALIFORNIA
U. S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT, 1996
The Sacramento District of the Army Corps of Engineers conducted an asbestos inspection of twenty-five buildings and a verification inspection for asbestos in forty-four buildings previously inspected in 1989. Screening samples for lead-based paint were collected in various buildings. Of the three hundred screening samples taken for lead-based paint, sixty-eight (68) were positive, two hundred sixty-eight (268) were negative, and sixteen (16) were inconclusive. Of the seven bulk paint samples collected, five were positive and two were negative for lead-based paint. Of the twenty-five bulk samples collected for asbestos analysis, five were positive and twenty were negative. Only two previously unidentified friable asbestos-containing materials were identified.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\ACE\1996_ASBESTOS SURVEY.pdf

1608	F-10	History > Historic Documents > Remediation	**9/1/1996**	**Final Work Plan for Additional Field Investigation - Bldg 807**	Report	Kleinfelder West, Inc.		12/9/2011

Final Work Plan for Additional Field Investigation building 807

This work plan was prepared to guide the field investigation activities for the supplemental characterization of building 807.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Kleinfelder\090096_FINAL WORK PLAN FOR ADDITIONAL FIELD INVESTIGATION BLDG 807.pdf

1615	F-10	History > Historic Documents > Remediation	**3/21/1995**	**Site Characterization Report Site 807**	Report	Kleinfelder West, Inc.		12/9/2011

Site Characterization Report Site 807

Kleinfelder was contracted by Jacobs to perform a soil and groundwater investigation at the OAB site 807.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Kleinfelder\032195_SITE CHARACTERIZATION REPORT_SITE 807.pdf

1609	F-10	History > Historic Documents > Remediation	**3/1/1994**	**Oakland Army Base Site 807 Site Characterization Work Plan**	Report	Jacobs Engineering	☐	12/9/2011

Oakland Army Base Site 807 Site Characterization Work Plan

This work plan was prepare to guide the remedial investigation activities for the characterization of the site 807 at OAB.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\Jacobs\030094_SITE CHARACTERIZATION WORK PLAN SITE 807.pdf

1000	F-10	History > Historic Documents > Remediation	**10/20/1993**	**ARMY - Bldg. 807 - Site Investigation Report**	SIR	US Army		

This report presents the results, conclusions, and recommendations of the site investigation conducted in the paved area between Building 807 and the Knight Railroad Yard at Oakland Army Base (OAB). The purpose of the site investigation is to define the lateral and vertical extent of soil contamination at the site and to determine if groundwater in the area is contaminated.
Contamination has occurred the site. The soil at the site has low concentrations of contaminates. The groundwater at the site contains high concentrations of halogenated volatile hydrocarbons. The concentrations of the contaminates in the groundwater are many times higher than the concentration of the same contaminate in the soil. Two of the compounds, vinyl chloride and trans-1,2- dichloroethene, were detected at concentrations above 100 ppb. At the investigation site, the risk to humans is minimal as long as the site remains paved.

T:\OAB02- OAKLAND ARMY BASE\PROJECT MANAGEMENT\AGENCIES\ARMY - Department of the Army\0421_ARMY_102093_Bldg 807 Site Inv Rpt.pdf

Inv#	Location	Phase > Goal > Issue	Doc Date	Document	Type	Author	Approval	Received
1533	F-10	History > Historic Documents > Remediation	2/1/1990	**ARMY - Prioritization Asbestos Assessment Study**	Study	U.S. Army Corps of Engin	☐	12/13/2011

Prioritization Asbestos Assessment Study
Report Number S70114

Describes materials found and provides recommendations for managing them; discusses the options and costs for abatement of asbestos-containing materials; contains detailed information on the locations, types, and quantities of all materials sampled, and costs for removal of all asbestos-containing materials and replacement with nonasbestos materials.

T:\OAB02- OAKLAND ARMY BASE\HISTORY\HISTORIC DOCUMENTS\Remediation\ACE\020190_PRIORITIZATION ASBESTOS ASSESSMENT STUDY.pdf

Exhibit B: CCIG Broker Opinion of Value
for the Existing Oakland Army Base Warehouses

April 13, 2012

CALIFORNIA CAPITAL & INVESTMENT GROUP

THE ROTUNDA BUILDING, 300 FRANK OGAWA PLAZA, SUITE 340, OAKLAND, CA 94612 OFFICE 510.268.8500 FACSIMILE 510.225.3954

SALE BROKER OPINION OF VALUE

OAB - 123 Oakland Army Base | Oakland

April 13, 2012

CALIFORNIA
CAPITAL & INVESTMENT
GROUP

THE ROTUNDA BUILDING | 300 Frank Ogawa Plaza, Suite 340 | Oakland, CA 94612 | Telephone 510.268.8500 | Facsimile 510.834.5380

OAKLAND ARMY BASE *OAB - 123*

Oakland, CA

INDUSTRIAL | SALE

BROKER OPINION OF VALUE

This BOV, or Broker Opinion of Value, has been prepared for the City of Oakland and is intended to show the current market value of Oakland Army Base for the purpose of valuing the Property if the building were required to be salvaged and retrofitted to current code consistent with estimates provided by Turner Construction in the Oakland Army Base Master Plan. The valuation may change as more information is discovered about the property that effect the underlying assumptions used to create it. This Broker Opinion of Value is provided as a courtesy from California Capital & Investment Group as a reference and is not represented as or provided as a substitute for an appraisal performed by a licensed appraiser.

Industrial Building

($60,000,000) (($41) PSF) | +/- 1,480,185 Sq Ft

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PROPERTY DETIALS

Property Name	**OAB - 123**
Property Address	Oakland Army Base
	Oakland, CA
Parcel Number(s)	
Property Type	Industrial Wood
Description	Industrial - Warehouse / Flex
Year Built / Renovated	1941 /
Rentable Sq Ft	1,480,185 SqFt
Lot Size (Sq Ft)	43,560 SqFt
Location	East Bay | Oakland-West

OPERATING STATEMENT SUMMARY

	Monthly	*Annual*
CURRENT		0% CURRENT OCCUPANCY (0 SQ FT)
Income	$0 ($0.00)	$0 ($0.00)
Expense	$266,433 ($0.18)	$3,197,200 ($2.16)
NOI	**($266,433)** (($0.18))	**($3,197,200)** (($2.16))
STABILIZED		80% STABILIZED OCCUPANCY (1,184,148 SQ FT)
Income	$592,074 ($0.50)	$7,104,888 ($6.00)
Expense	$74,009 ($0.05)	$888,111 ($0.60)
NOI	**$518,065 ($0.35)**	**$6,216,777 ($4.20)**

ZONING (CIX 1):

GENERAL PLAN (Oakland Army Base):

ESTIMATED INVESTOR VALUE

STABILIZED VALUE

Stabilized NOI	$6,216,777 ($4.20 Per Sq Ft)
CAP Rate	8.50%
Stabilized Value	**$73,138,553 ($49 Per Sq Ft)**

COST TO STABILIZE

Average TI for Occupied	$0.00 PSF | $0 Total | $0 Interest
Average TI for Vacant	$90.93 PSF | $107,674,578 Total | $6,460,475 Int
Interest Expense	($7,200,000)
Leasing Commission	$3,552,444 ($3 Per Leased Sq Ft)
Stabilization Risk Premium	$22,097,499 (20%)
NOI During Stabilization	($4,795,799.40)
LESS TOTAL COST	**$137,380,795**
INVESTOR VALUE	**($64,242,242) (($43) Per Sq Ft)**

ASSUMPTIONS

Months to Stabilize	18
Current Occupancy	0% (0 Sq Ft)
Market Occupancy	80% (1,184,148 Sq Ft)
Interest Rate (I/O)	8.00%

NOTE: This assumes that that an investor purchases the subject property and does not require the 8.50% return (stabilized CAP Rate) during the stabilization period. The valuation also does not include an increase to NOI during the stabilization period. The rent is assumed to be $0.00 per rentable square foot and is projected to be $0.50 per square foot once stabilized with expenses at $0.18 per square foot currently and $0.05 when stabilized.

ESTIMATED USER VALUE

STABILIZED VALUE

Stabilized NOI	$6,216,777 ($4.20 Per Sq Ft)
Owner User CAP Rate	6.75%
Stabilized Value	**$92,100,400 ($62 Per Sq Ft)**

COST TO STABILIZE

Average TI for Occupied	$0.00 PSF | $0 Total
Average TI for Vacant	$90.93 PSF | $134,593,222 Total
Interest Expense	N/A
Leasing Commission	N/A
Stabilization Risk Premium	N/A
NOI During Stabilization	N/A
LESS TOTAL COST	**$134,593,222**
OWNER/USER VALUE	**($42,492,822) (($28) Per Sq Ft)**

ASSUMPTIONS

NOTE: There are many ways to triangulate the value of a property from the perspective of an owner/user and Investor. Invariably the difference in value can be ultimately be reduced to a difference in CAP rates. Owner/users will typically pay more for space that they occupy versus the typical market lease rate. This is a result of many factors including pride of ownership, tax advantages and the possibility of the property appreciating in value. This increased value is reflected in our decreased CAP rate. An advantage of selling to an owner/ user is that they typically will not deduct expenses to stabilize such as negative NOI during stabilization period, interest on TI's and other holding costs. The spread in CAP rates for owner/users and investors varies depending on type of property, current market condition and other factors. This method of analysis has been fairly reliable as a guide to valuing properties that are owner/user opportunities, especially when checked against lease vs own scenarios and market comparables.

RECENT TRANSACTIONS

	LIST INFORMATION		SALE INFORMATION		ADJUSTMENTS	
	**1001 24th St | Oakland**		Sale Date	Mar-23-11	Adjustment %	($91,500) (-10%)
	Asking Price		Sale Price	$915,000	Adjusted Comp Value	$823,500
	List Date		Price Per Sq Ft	$81 | $183 Land	Adjusted Price Per Sq Ft	$73 | $165 Land
	(Building|Land) Sq Ft	11,318 | 5,000	Comments:			
	Occupancy at Close	(SQ FT)				
	Property Type					
	**3015 Adeline St | Oakland**		Sale Date	Apr-20-11 400 Days	Adjustment %	$364,000 (40%)
	Asking Price	$1,361,750	Sale Price	$910,000 -50% Bid Ask	Adjusted Comp Value	$1,274,000
	List Date	Mar-10	Price Per Sq Ft	$43 | $29 Land	Adjusted Price Per Sq Ft	$61 | $40 Land
	(Building|Land) Sq Ft	20,950 | 31,800	Comments:			
	Occupancy at Close	(SQ FT)				
	Property Type	Warehouse				
	**601 Brush Street | Oakland**		Sale Date	Aug-18-10 109 Days	Adjustment %	($450,000) (-30%)
	Asking Price	$1,755,000	Sale Price	$1,500,000 -17% Bid Ask	Adjusted Comp Value	$1,050,000
	List Date	May-10	Price Per Sq Ft	$110 | $71 Land	Adjusted Price Per Sq Ft	$77 | $50 Land
	(Building|Land) Sq Ft	13,600 | 21,000	Comments:			
	Occupancy at Close	0% (0 SQ FT)				
	Property Type	Warehouse				
	**3420 Louise St | Oakland**		Sale Date	Sep-13-10	Adjustment %	$0 (0%)
	Asking Price		Sale Price	$947,600	Adjusted Comp Value	$947,600
	List Date		Price Per Sq Ft	$73 | $59 Land	Adjusted Price Per Sq Ft	$73 | $59 Land
	(Building|Land) Sq Ft	13,000 | 16,160	Comments:			
	Occupancy at Close	(SQ FT)				
	Property Type	Manufacturing				
	**1001 24th St | Oakland**		Sale Date	Mar-23-11	Adjustment %	($91,500) (-10%)
	Asking Price		Sale Price	$915,000	Adjusted Comp Value	$823,500
	List Date		Price Per Sq Ft	$81 | $183 Land	Adjusted Price Per Sq Ft	$73 | $165 Land
	(Building|Land) Sq Ft	11,318 | 5,000	Comments:			
	Occupancy at Close	(SQ FT)				
	Property Type					

AVERAGE BUILDING SIZE: 14,037	**AVERAGE LOT SIZE: 15,792**	**AVG SALE PRICE PSF: $78**	**AVG ADJUSTED SALE PRICE PSF: $71**
SUBJECT PROPERTY 1,480,185	**43,560**		**($41)**

PENDING & ON-MARKET LISTINGS

	LIST INFORMATION		ADJUSTMENTS	
On Market				
	**1618 28th Street | Oakland**		Adjustment %	()
	Asking Price	$3,400,000	Adjusted Comp Value	
	List Date	Sep-11 | 217.00 Days	Adjusted Price Per Sq Ft	| Land
	(Building|Land) Sq Ft	40,000 | 83,964	Comments:	
	Occupancy at Close	0% (0 SQ FT)		
	Property Type	Industrial - Warehouse/Manufacturing		
	**1776-1790 11th St | Oakland**		Adjustment %	$52,500 (5%)
	Asking Price	$1,050,000	Adjusted Comp Value	$1,102,500
	List Date	Aug-11 | 248.00 Days	Adjusted Price Per Sq Ft	$55 | $68 Land
	(Building|Land) Sq Ft	20,000 | 16,250	Comments:	
	Occupancy at Close	0% (0 SQ FT)		
	Property Type	Industrial - Warehouse / Flex,Industrial - Warehou		
	**3442 Adeline St | Oakland**		Adjustment %	($115,000) (-5%)
	Asking Price	$2,300,000	Adjusted Comp Value	$2,185,000
	List Date	Apr-11 | 353.00 Days	Adjusted Price Per Sq Ft	$76 | $52 Land
	(Building|Land) Sq Ft	28,925 | 41,900	Comments:	
	Occupancy at Close	(SQ FT)		
	Property Type	Warehouse		
	**2811 Adeline St | Oakland**		Adjustment %	($371,317) (-20%)
	Asking Price	$1,856,585	Adjusted Comp Value	$1,485,268
	List Date	Feb-11 | 413.00 Days	Adjusted Price Per Sq Ft	$76 | $77 Land
	(Building|Land) Sq Ft	19,543 | 19,166	Comments:	
	Occupancy at Close	(SQ FT)		
	Property Type	Office - Flex		

AVERAGE BUILDING SIZE: 27,117		**AVERAGE LOT SIZE: 40,320**	**AVG ASK PRICE PSF: $78**	**AVG ADJUSTED SALE PRICE PSF: $69**
SUBJECT PROPERTY	**1,480,185**	**43,560**		**($41)**