sf ratepayer advocates

Representing the public interest

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March 25, 2013

To: Jon Braslaw, Recology Sunset Scavenger, Assistant Group Manager
From: Peter Deibler, Rate Payer Advocate
Cc: Douglas Legg, Department of Public Works; Ann Carey
Subject: **Rate Payer Advocate – March 21st Workshop Follow-Up Request to Recology on the Refuse Rate Application**

Thank you for responding during the March 21st Workshop to requests noted in our March 14th memo, and for posting the presentation on your website. In particular, I appreciate that Recology developed and provided additional examples of how the proposed rate changes might affect real customers, as well as trends in the recycling stream.

One requested item was not explicitly covered. What are Recology's plans to develop, and make available a simple online total to allow ratepayers to determine how they can eliminate or minimize any rate impact? Perhaps you can begin with one for residential users, which is relatively straightforward. I realize that an apartment tool is more complex, with the added complications of distance/elevation fees and lock fees.

I have one other suggestion. Many comments we've received from the general public focus on the magnitude of the requested increase, and indicate skepticism regarding the need for it. I suggest Recology develop highly graphic, colorful, and succinct materials that complement "Where Rate Dollars Go" on your website by using bar graphs and/or pie charts to illustrate concepts such as:

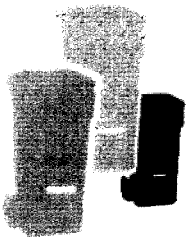
1. The changes in the relative tons of black, blue and green bin materials collected by Recology since the mid-2000's.
2. The economics of the black bin, and the relative roles of collection, (proposed) processing, and residue disposal.
3. The economics of the blue bin, and the relative roles of collection, processing, and material sales revenue.
4. The economics of the green bin, and the relative roles of collection, processing, and material sales revenue.
5. A comparison of black, blue and green bin economics.
6. Explanations of fixed and variable costs, and the role of each as components of total costs.

It is my belief that such materials would provide more background as to why Recology is proposing such a substantial increase, and why Recology believes the proposed changes to the rate structure are desirable.

Exh. 21

I suggest that Recology enter these materials into the formal record once the hearing process begins, and that they be a key introductory part of Recology discussion of the application. In addition, I suggest you post them to your website.

Thank you in advance for your efforts.



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Summary of Application

The following was posted March 18, 2013 to reflect Recology's final application, submitted March 14th.

SUMMARY OF FINAL APPLICATION

Recology's final rate application proposes changes in residential and apartment rates to be effective late summer, 2013. The City's Department of Public Works and the Rate Board will determine whether the proposed rates are just and reasonable, and if they will take effect.

Recology's application requests an adjustment to rates equal to an average of 21.51% for each residential and apartment customer.

Individual customer increases will vary depending on:

1. The level of service by volume – the total number and size of bins, and how often they are collected.
2. The type of service – how many of each type of bin, black (trash), blue (recyclables), and green (compostables), a customer has.

While all customers are required to have blue and green bins, they currently do not pay a direct charge for these services. Recology proposes to add a new, separate charge for the blue and green bins.

Recology proposes methods for customers to reduce the impact of increases in rates by adjusting their service levels.

Recology also proposes several changes in services it performs that do not directly affect customers, and that are described below.

Look below for how the proposed changes may affect you.

Proposed Residential Rates

Recology proposes the following changes in how they will charge for services for residential customers – single family homes and those living in buildings with up to five units:

1. Charge a flat fee of $5 per month per unit. This fee would be without regard to the amount, or type of service.
2. Apply separate charges for blue bin and green bin service based on volume. Instead of charging based solely on the amount of black bin service, Recology will also apply a direct charge for collection of the blue bin and the green bin. The proposed direct charges would be $2.00 for each 32 gallons of blue bin or green bin service. *Example: If you have 64 gallons of recycling and 32 gallons of composting, you will pay $6 per month for those services.*

Exh. 22

3. Make the 20 gallon black bin a better deal. To encourage use of the 20 gallon black bin and provide a means for minimizing the rate impact, Recology proposes a percentage increase for the 20 gallon black bin that is less than that for the 32 gallon black bin.

   Example 1: For a customer with three 32 gallon bins (one black, one blue, and one green), the proposed new monthly rate will be $34.51. The proposed new rate is about a 24% increase from the current $27.91 they are paying.

   $25.51 black bin + $5.00 flat fee + $2.00 blue bin + $2.00 green bin = $34.51

   Example 2: For a customer with one 20 gallon black bin, one 32 gallon blue and one 32 gallon green bin, the proposed new monthly rate will be $24.94. The proposed new rate is about a 16% increase from the current $21.49.

   $15.94 black bin + $5.00 flat fee + $2.00 blue bin + $2.00 green bin = $24.94

   Example 3: For a customer with three 32 gallon bins (one black, one blue, and one green), that switches to a 20 gallon black bin and adds a new 32 gallon blue bin for more recyclables, the proposed new monthly rate will be $26.94, a 3.5% reduction from the current $27.91 they are paying.

   $15.94 black bin + $5.00 flat fee + $4.00 two blue bins + $2.00 green bin = $26.94

Proposed Apartment Rates

Recology proposes the following changes in how they will charge for services for apartment customers – those living in buildings with six units or more:

1. Charge a flat fee of $5 per month per unit. This fee would be without regard to the amount, or type of service.
2. Apply separate charges for blue bin and green bin service based on volume. Recology proposes to charge $25.51 for each 32 gallon container collected weekly – whether a black, blue or green bin.
3. Provide discounts for use of blue and green bins. Recology proposes to provide discounts of up to 75%, less 10% of the volume charges (or a 65% maximum net discount) based on the relative amount of blue and green bin service. Discounts are intended to help offset the new charges for the blue and green bins. Recology states that the "less 10%" reflects the fact that the City's mandatory ordinance requires a minimum level of blue and green service.

   Example 1: A customer with 3 equal size bins (such as 32 gallon black, blue and green bins) receives a discount on their volume charges of 67% -10% = 57%. This customer will pay:

   $ 5.00 base fee
   $32.91 volume charge discount
   total volume charge of $25.51 x 3 = $76.53
   discount of 57% = .57x $76.53 = $43.62
   +____ total volume charge $76.53 – $43.62 discount = $32.91
   $37.91adjusted rate per month

   Example 2: If the above customer adds one more 32 gallon blue bin or green bin, they would receive a discount on their volume charges of 75% -10% = 65%. This customer will pay:

   $ 5.00 base fee
   $35.71 volume charge discount
   total volume charge of $25.51 x 4 = $102.04
   discount of 65% = .65 x $102.04 = $66.33
   +____ total volume charge = $102.04 – $66.33 discount = $35.71
   $40.71 adjusted rate per month

4. Two year cap on rate increases. Recology proposes to limit any 1st year increase to 25% of the customer's current rate, any 2nd year increase to 50% (e.g., another 25%) of the customer's current rate. The full charge, if greater than these caps will take effect in the 3rd year.

Changes in Services

The most significant change in service will not be visible to the public. Recology proposes to "process" the black bin, primarily to remove remaining plastics and compostable material before disposing of the remainder in a landfill.

Other proposed changes in service include:

1. Recology proposes to take over the abandoned waste collection program currently operated by the City's Department of Public Works.
2. Recology proposes to expand its responsibilities for maintenance of "City litter cans", the public containers found on many street corners and near bus stops.

以下翻譯是基於 2013 年 3 月 18 日貼在網站的資料，為 Recology 在 3 月 14 日提交的最終申請。

最終申請概要

Recology 的最後定價申請提議住宅和公寓費率的變更在 2013 年夏末生效。城市公共工程部和費率委員會將決定提議費率是否公正合理，以及是否能夠生效。

Recology 申請調整費率，相當於每個住宅和公寓客戶平均調高 21.51%。

個別客戶的漲幅取決於：

1. 服務量水準—垃圾桶的數量和大小，以及收集的頻率。

2. 服務類型—每種類型的垃圾桶各有幾個：黑色（垃圾）、藍色（可回收）和綠色（可分解）。

雖然要求所有客戶配有藍色和綠色垃圾桶，但是目前他們並沒有支付這些服務的費用。Recology 提議對藍色和綠色垃圾桶增加一筆新的收費。

Recology 為客戶提議方法，透過調整他們的服務等級來減少費率提高的影響。

Recology 也提議幾個服務方面的變更，不會直接影響到客戶，詳述如下。

請看下文得知提議的變更對您有什麼影響。

提議的住宅費率

對於住宅用戶（單一家庭和多達 5 個單位的樓房住戶）提供的服務，Recology 提議以下的收費變更：

1. 每單位每月固定收費 5 美元。這筆收費不計數量和服務類型。

2. 藍色和綠色垃圾桶根據容量單獨收費。與其根據黑色垃圾桶的數量進行收費，Recology 也會對藍色和綠色垃圾桶直接收費。提議的直接收費為每個 32 加侖藍色或綠色垃圾桶服務 2 美元。

   例子：如果您有 64 加侖的回收垃圾和 32 加侖的分解垃圾，您要為這些服務支付每月 6 美元的費用。

3. 使 20 加侖黑色垃圾桶變得更合算。為了鼓勵使用 20 加侖黑色垃圾桶，並提供使收費影響最小化的方案，Recology 提議 20 加侖黑色垃圾桶的百分比增額低於 32 加侖的黑色垃圾桶。

   例 1：如果一個客戶有三個 32 加侖的垃圾桶（一個黑色、一個藍色和一個綠色），提議的每月新收費為$34.51。提議的新費率大約比目前的$27.91 提高了 24%。

   黑色垃圾桶$25.51+固定收費$5.00 +藍色垃圾桶$2.00 +綠色垃圾桶$2.00 = $34.51

例 2：如果客戶有一個 20 加侖的黑色垃圾桶、一個 32 加侖的藍色垃圾桶和一個 32 加侖的綠色垃圾桶， 提議的每月新收費為$24.94。提議的新費率大約比目前的 $21.49 提高了 16%。

黑色垃圾桶$15.94+固定收費$5.00 +藍色垃圾桶$2.00 +綠色垃圾桶$2.00 = $24.94

例 3：如果一個客戶有三個 32 加侖的垃圾桶（一個黑色、一個藍色和一個綠色），可以換成 20 加侖的黑色垃圾桶，加上一個新的 32 加侖藍色垃圾桶供可回收垃圾使用，提議的新費率為$26.94，比他們目前支付的$27.91 降低了 3.5%。

黑色垃圾桶$15.94+固定收費$5.00 +兩個藍色垃圾桶$4.00 +綠色垃圾桶$2.00 = $26.94

提議的公寓費率

對於公寓客戶（多達六個單位的樓房住戶）提供的服務，Recology 提議以下的收費變更：

1. 每單位每月固定收費 5 美元。這筆收費不計數量和服務類型。

2. 藍色和綠色垃圾桶根據容量單獨計費。Recology 提議對每個每週收集一次的 32 加侖垃圾箱收費$25.51—無論是黑色、藍色還是綠色垃圾桶。

3. 對使用藍色和綠色垃圾桶提供折扣。Recology 提議根據藍色和綠色垃圾桶的服務數量，提供高達 75%的折扣，減去 10%的容量計費（或 65%的最大淨折扣）。這筆折扣旨在抵消新增收費對藍色和綠色垃圾桶服務的影響。Recology 聲明「減去 10%」反映了城市強制法令要求最低程度的藍色和綠色垃圾桶服務。

   例 1：一個客戶有 3 個相同尺寸的垃圾桶（例如 32 加侖黑色、藍色和綠色的垃圾桶）可以按照數量計費獲得 67% - 10% = 57%的折扣。該客戶要支付：

   $5.00 基本費用
   $32.91 容量折扣
   總容量收費為$25.51 x 3 = $76.53
   57%折扣 = .57x $76.53 = $43.62
   +____ 總容量收費 = $76.53 - $43.62 折扣 = $32.91
   每月的調整費率為$37.91

   例 2：如果上述客戶增加一個 32 加侖的藍色或綠色垃圾桶，他們會獲得容量的折扣為 75% - 10% = 65%。該客戶要支付：

   $5.00 基本費用
   $35.71 容量折扣
   總容量收費為$25.51 x 4 = $102.0454
   65%折扣 = .65 x $102.04 = $66.33
   +____ 總容量收費 = $102.04 - $66.33 折扣 = $35.71

   每月的調整費率為$40.71

4. 費率增加有 2 年上限。Recology 提議將第一年的增加限制為目前客戶費率的 25%，第二年的增加限制為目前客戶費率的 50%（例如，再漲 25%）。如果高於這些上限，全額收費會在第三年生效。

服務的變化

對於最大的服務變化，公眾不會察覺。Recology 提議「處理」黑色垃圾桶，主要是先清除剩餘的塑膠和分解材料，再送到垃圾掩埋場處理剩餘垃圾。

其他提議的服務變更包括：

1. Recology 提議接管目前由城市公共工程部門營運的廢棄垃圾收集項目。

2. Recology 提議拓展其職責範圍，維護「城市垃圾桶」，亦即在許多街頭和附近的公共汽車站發現的公共垃圾桶。

La siguiente traducción se basa en el material que se publicó 18 de marzo de 2013 en el sitio web para reflejar la solicitud final de Recology, presentada el 14 de marzo.

RESUMEN DE LA SOLICITUD FINAL

La solicitud final de tarifas de Recology propone cambios en las tarifas residenciales y de apartamentos que entrarán en vigor a finales del verano de 2013. El Departamento de Obras Públicas de la Ciudad y la Junta de Tarifas determinará si las tarifas propuestas son justas y razonables, y si entrarán en vigor.

La solicitud de Recology pide un ajuste a las tarifas igual a un promedio de 21.51% para cada cliente residencial y de apartamento.

Los aumentos de los clientes individuales variarán dependiendo de:

1. El nivel de servicio por volumen - el número total y el tamaño de los contenedores y la frecuencia con que se recojan.

2. El tipo de servicio - cuántos de cada tipo de contenedor, negro (basura), azul (reciclables) y verde (compostables), tiene el cliente.

Si bien todos los clientes están obligados a tener contenedores azules y verdes, actualmente no pagan una cuota directa por estos servicios. Recology propone añadir una nueva cuota adicional por los contenedores azules y verdes.

Recology propone métodos para que los clientes reduzcan el impacto de los aumentos en las tarifas ajustando sus niveles de servicio.

Recology también propone varios cambios en los servicios que realiza que no afectan directamente a los clientes, y que se describen más adelante.

Vea a continuación para saber cómo los cambios propuestos pudieran afectarlo a usted.

Tarifas propuestas para residencias

Recology propone los siguientes cambios en la forma en que se cobran los servicios para los clientes residenciales - casas unifamiliares y los que viven en edificios con un máximo de cinco unidades:

1. Cobrar una tarifa plana de $5 por mes por unidad. Esta tarifa se aplicaría sin tener en cuenta la cantidad o el tipo de servicio.

2. Aplicar cargos separados por el servicio de contenedor azul y contenedor verde basado en el volumen. En lugar de cobrar en base únicamente a la cantidad de servicio de contenedor negro, Recology también aplicará un cargo directo por la recogida del contenedor azul y del contenedor verde. Los cargos directos propuestos serían de $2.00 por cada 32 galones de servicio de contenedor azul o contenedor verde.

   Ejemplo, Si usted tiene 64 galones de reciclaje y 32 galones de compostaje, pagará $6 al mes por esos servicios.

3. Hacer que el contenedor negro de 20 galones sea una mejor opción. Para fomentar el uso del contenedor negro de 20 galones y ofrecer un medio para minimizar el impacto de la tarifa, Recology propone un aumento porcentual para el contenedor negro de 20 galones que es menor que para el contenedor negro de 32 galones.

   Ejemplo 1: Para un cliente con tres contenedores de 32 galones (uno negro, uno azul y uno verde), la nueva tarifa mensual propuesta sería de $34.51. La nueva tarifa propuesta representa un aumento de aproximadamente el 24% con respecto a la tarifa de $27.91 que pagan actualmente.

   $25,51 del contenedor negro + $ 5.00 tarifa plana + $ 2.00 del contenedor azul + $ 2.00 del contenedor verde = $34,51

   Ejemplo 2: Para un cliente con un contenedor negro de 20 galones, uno azul de 32 galones y uno verde de 32 galones, la nueva tarifa mensual propuesta sería de $24.94. La nueva tarifa propuesta representa un aumento de aproximadamente el 16% con respecto a la tarifa actual de $21.49.

   $15.94 del contenedor negro + $ 5.00 tarifa plana + $ 2.00 del contenedor azul + $ 2.00 del contenedor verde = $24.94

   Ejemplo 3: Para un cliente con tres contenedores de 32 galones (uno negro, uno azul y uno verde) quien cambia a un contenedor negro de 20 galones y agrega un contenedor nuevo azul de 32 galones para más reciclables, la nueva tarifa mensual propuesta sería de $26.94, lo que representa una reducción de aproximadamente el 3.5% con respecto a la tarifa de $27.91 que pagan actualmente

   $15.94 del contenedor negro + $5.00 tarifa plana + $4.00 de dos contenedores azules + $ 2.00 del contenedor verde = $26,94

Tarifas propuestas para apartamentos

Recology propone los siguientes cambios en la forma en que se cobran los servicios para los clientes en apartamentos - los que viven en edificios con seis o más unidades:

1. Cobrar una tarifa plana de $5 por mes por unidad. Esta tarifa se aplicaría sin tener en cuenta la cantidad o el tipo de servicio.

2. Aplicar cargos separados por el servicio de contenedor azul y contenedor verde basado en el volumen. Recology propone cobrar $25.51 por cada contenedor de 32 galones recogido semanalmente - ya sea un contenedor negro, azul o verde.

3. Ofrecer descuentos por el uso de los contenedores azules y verdes. Recology propone ofrecer descuentos de hasta el 75%, menos el 10% de los cargos por volumen (o un descuento neto máximo del 65%) basados en la cantidad relativa de servicio de contenedores azul y verde. Se pretende que los descuentos ayuden a compensar los nuevos cargos por los contenedores azules y verdes. Recology afirma que el descuento "menos el 10%" refleja el hecho de que la ordenanza obligatoria de la Ciudad requiere un nivel mínimo de servicio de contenedores azul y verde.

Ejemplo 1: Un cliente con 3 contenedores de igual tamaño (tales como los contenedores negro, azul y verde de 32 galones) recibe un descuento en sus cargos por volumen del 67% -10% = 57%. Este cliente pagará:

$5.00 de tarifa base
$32,91 de descuento del cargo por volumen
cargo total por volumen $25.51 x 3 = $76,53
descuento del 57% = .57 x $76.53 = $43.62
+____ cargo total por volumen $76.53 - $43.62 de descuento = $32.91
$37.91 por mes de tarifa ajustada

Ejemplo 2: Si el cliente anterior agrega un contenedor más azul o verde de 32 galones, recibiría un descuento en sus cargos por volumen del 75% -10% = 65%. Este cliente pagará:

$5.00 de tarifa base
$35.71 de descuento del cargo por volumen
cargo total por volumen $25.51 x 4 = $102.04
descuento del 65% = .65 x $102.04 = $66.33
+____ cargo total por volumen $102.04 - $66.33 de descuento = $35.71
$40.71 por mes de tarifa ajustada

4. Dos años de tope a los aumentos de tarifas. Recology propone limitar todo aumento del 1er año a 25% de la tarifa actual del cliente, y todo aumento del 2º año a 50% (es decir, otro 25%) de la tarifa actual del cliente. El cargo total, si es mayor a estos topes entrará en vigor hasta el 3er año.

Cambios en los servicios

El cambio más significativo en el servicio no será visible para el público. Recology propone "procesar" el contenedor negro, principalmente para quitar los plásticos restantes y el material compostable antes de desechar el resto en un vertedero.

Otros cambios propuestos en el servicio incluyen:

1. Recology propone hacerse cargo del programa de recolección de desechos abandonados actualmente operado por el Departamento de Obras Públicas de la Ciudad.

2. Recology propone ampliar sus responsabilidades por el mantenimiento de los "botes de basura de la ciudad", los contenedores públicos que se encuentran en muchas esquinas y cerca de paradas de autobús.

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March 14, 2013

To:	Douglas Legg, Manager, Finance, Budget and Performance, Department of Public Works
From:	Peter Deibler, Rate Payer Advocate
Cc:	Jon Braslaw, Recology; Ann Carey
Subject:	**Rate Payer Advocate – Initial Comments Regarding Recology's Refuse Rate Application**

Overview

It is the responsibility of the City's Department of Public Works (DPW) to perform a full review of the Recology application, and to provide a recommendation to the City's Rate Board regarding whether the proposed rates are just and reasonable. However, in representing the public interest the RPA is tasked with conducting a high level review of the application, and with forwarding questions and comments to DPW. This memo addresses Rate Payer Advocate (RPA) initial comments and questions based on review of Recology's Draft Refuse Rate Application.

We trust that DPW will take our comments into consideration in evaluating the application, requesting information and clarification from Recology, and in developing its recommendation. We welcome initial DPW comments on these issues during the 2nd public workshop on March 21st , and further discussion during the hearing process regarding these issues are being addressed. We anticipate having further comments and questions based on our pending review of the final application, review of questions submitted by DPW to Recology, and public written and oral discussion of the application by all parties during the 2nd public workshop on March 21st and throughout the hearing process.

The Applications

The draft application is comprised of two separate but related applications, one for collection, and one for processing, transport, and disposal. The following provides general comments that are applicable to both applications, as well as comments that are specific to the Recology Sunset Scavenger (RSS)/Recology Golden Gate (RGG) collection application, and the Recology San Francisco (RSF) processing, transport, and disposal application.

General Comments

1. **Implementation Schedule** – The application is for a period of at least five years. We suggest that Recology be requested to provide a detailed implementation schedule for each of the various

Exh. 23

collection, processing, transport and disposal activities that are anticipated to occur over the five years. We believe this will help facilitate understanding of increased expenses, and their timing.

2. **Expense Levels** – In general, initial expenses represent significant increases. However, few types of proposed expenses vary or decrease over time. It is likely that some of the new or increased expenses such as those associated with program start-up may be of a short-term nature, and can be decreased or eliminated in later years. Other expenses will not occur immediately upon award of a rate adjustment. We suggest requesting that Recology provide clear narrative discussion of major expense categories by program, with discussion of the extent to which expenses are short-term or ongoing.

3. **Staffing Levels** – Staffing is a significant portion of total expenses. In general, we see little or no discussion in support of the proposed staffing levels, whether for existing or expanded/new programs. While in some cases there are significant proposed increases in staffing, it is not clear why these initial levels are justified, or if the levels must be maintained over time. We suggest requesting that Recology provide a clear narrative discussion of staffing by program.

4. **Operating Expenses for Processing, Transfer and Disposal** – Aside from a decrease in leasing expenses, total operating expenses increase by $4.8 million. Are the reasons for these increases, and the specific underlying assumptions related to each line item clear to the City?

5. **Processing and Disposal Cost** – These significant costs are presented in the form of a single per-ton rate. Does the City have sufficient disaggregated information to understand and evaluate the individual components of this single pre-ton rate?

6. **Inconsistencies** – There are instances in which the narrative states that specific expenses are "not included in the base rate application", and yet they appear to be included in the expense schedules. Several examples are noted below. In general, we suggest that there be a careful review for consistency between the narrative and the numbers, and a check to ensure that excluded expenses are in fact excluded.

Collection Application

1. **Contingent Schedules 1 & 2 Zero Waste Facility Expansion and West Wing Project** – Page 7 of the narrative states that "these costs are not included in the base rate application". This appears to be inconsistent with the following inclusion of expenses for these programs in the base application, while they are also included in the contingent schedules. Please clarify.

    - Schedule 1 Zero Waste Facility Expansion provides for a $1.85 per ton (1.32%) increase over the $140.76 per ton, for increased total expenses of $479,783 for disposal and $621,419 for processing.

- Schedule 2 West Wing Project - Urban Organics provides for a $4.66 per ton (3.31%) increase over the $140.76 per ton, for increased total expenses of $1,206,712 for disposal and $1,562,943 for processing.

2. **Corporate Services, RGG Tab m.3** – Regarding "sustainability" expenses of $201,900, what service is provided, and what is the support narrative for the level of expenses?

3. **Legal and Professional Fees, RGG Tab m.2** – The schedule shows projected Legal Expenses and Other Professional Fees growing in excess of the 3% inflation factor. Why?

4. **Contract Services, RGG Tab L.5** – There is a total of $720,600 for the following expenses, a 3% increase over the prior yr. What are the reasons for the increases for each category?
   - Fantastic 3 $77,000,
   - General and Administrative $344,500,
   - Recycling Development and Sales $59,600, and
   - Equipment Installation and Services $239,500

5. **City Container Collection, RGG Tab L2 & G1** –Is the increased staffing of 12.6 FTE and the related expense of $1,586,236 fully explained, and do the staffing level and expenses accurately reflect City plans for transfer of this program to Recology, and demonstrate a savings to ratepayers for transfer of the program to Recology?

6. **Abandoned Waste Collection** - Do the proposed staffing levels and expenses for this program accurately reflect City plans for transfer of this program to Recology, and demonstrate a savings to ratepayers for transfer of the program to Recology?

7. **Processing Costs, RGG Tab K1** – Recycling tons and organics tons are projected to decrease and increase by relatively small amounts, respectively. However, the processing rate per ton is increased from $140.76 to $159.43. This increase of $18.67 per ton results in total annual increases in recycling processing expenses of $3,148,663, and in organics processing expenses of $3,732,392. Why? How do these compare to comparable costs at other facilities in other communities?

8. **Disposal Costs, RGG Tab J1** – Achieving zero waste will require decreasing reliance on disposal over time.
   - Why are disposal tons projected to increase? Is this due to an assumed rate of population growth? If yes, is this assumed rate reasonable and does it offset increased use of the blue and green bins and decreased use of the black bin?
   - How does the projected increase in disposal affect achievement of the zero waste by 2020?
   - The disposal rate per ton increases from $140.76 to $159.43, resulting in total increases in disposal cost of $4,980,290. Why?

- Does the disposal per-ton rate reflect transfer and disposal to Altamont Landfill, as well as future transfer/transport and disposal arrangements following the end of the current disposal agreement and prior to the next rate application? If not, how will the latter be reflected in the rates?

9. **Staffing, RGG Tab G1** – Additional headcount is not addressed in the narrative.

10. **Other, RGG Tab D**
    - "New Project Costs" of $1,370,282 include what?
    - "Line Supplies & Other Expense" includes a note indicating these are related to the RFID project. We suggest the City and Recology provide an overview of this project, which we understand could help shape future customer options and possibly provide increased collection efficiencies. What is the timing for developing such a program, what are its net cost benefits or impacts, and how will these be reflected in customer rates?

11. **Impound Account, RGG Tab f.2** –How is RGG's contribution to the Impound Account determined? At the 1st workshop there was discussion of the increased transfers to DPW and the Department of the Environment. We suggest that City staff provide an overview of program changes and related increased expenses.

Processing, Transport and Disposal Application

1. **Contingent Schedules 1 & 2 Zero Waste Facility Expansion and West Wing Project** – Page 7 of the narrative states that "these costs are not included in the base rate application". This appears to be inconsistent with the following inclusion of expenses for these programs in the base application, while they are also included in the contingent schedules. Please clarify.
    - RSF Tab L2 includes a new $2,100,000 for Brisbane License.
    - RSF Tab K1 includes $611,000 for Urban Organics
    - RSF Tab M2 provides for variation in engineering, legal and other professional fees from year to year. Why?

2. **Staffing, RSF Tab G.1** – Additional staffing is not addressed in the narrative.

3. **Impound Account, RSF Tab F2** What is the disbursement to "ECO" for $1,000,000? How is RSF's contribution to the Impound Account determined? At the 1st workshop there was discussion of the increased transfers to DPW and the Department of the Environment. We suggest that City staff provide an overview of program changes and related increased expenses.

sf ratepayer advocate

Representing the public interest

San Francisco Ratepayer Advocate
C/O HF&H Consultants
201 North Civic Drive, Suite 230
Walnut Creek, California 94596

Phone: (415) 554-6921
Email: ratepayeradvocatesf@hfh-consultants.com
Website: www.ratepayeradvocatesf.org

March 14, 2013

To: Jon Braslaw, Recology Sunset Scavenger, Assistant Group Manager
From: Peter Deibler, Rate Payer Advocate
Cc: Douglas Legg, Department of Public Works; Ann Carey
Subject: **Rate Payer Advocate – Requests to Recology Regarding the March 21st Workshop on the Refuse Rate Application**

The RPA Website ("January 17 Workshop Summary") summarizes the January 17th public workshop, noting that the Rate Payer Advocate (RPA) requested that Recology do the following:

1. Continue to make the added effort to clearly explain the application, and to avoid use of jargon.
2. Provide additional examples of how the proposed rate changes might affect real customers and to post them on their website. Recology agreed to do so, and also stated it would develop an online tool that allows individual customers to calculate the impact to their bill.
3. Recology stated that changes in customer behavior are impacting costs and revenues. An example was a decrease in the volume of newspapers. As readers increasingly shift to on-line information sources, there is less newspaper in blue bin, and less revenue from the sale of recycled newspapers. The RPA requested that the final application be very clear about these changes and their related impacts.

With regard to Item 1, we applaud Recology efforts to present complicated information in a clear manner, and appreciate your ongoing efforts in this regard. We request that Recology staff address Items 2 and 3 above during the March 21st workshop, including progress towards posting the additional rate impact examples and making the online tool available for public use.

We may have further comments, questions and requests following review of the final rate application.

Thank you in advance for your efforts.

Exh. 24

ratepayer advocate

Representing the public interest

January 17th Workshop Summary

The January 17th workshop was attended by about 25 individuals. Department of Public Works (DPW) staff provided a brief overview of the rate setting process. The Rate Payer Advocate (RPA) described the Advocate's role, read the Mission Statement, and provided contact information. Recology staff then presented the key aspects of the draft rate application and addressed questions. To learn more read the Summary of Recology's Draft Application and visit Recology's Zero Waste Rates website.

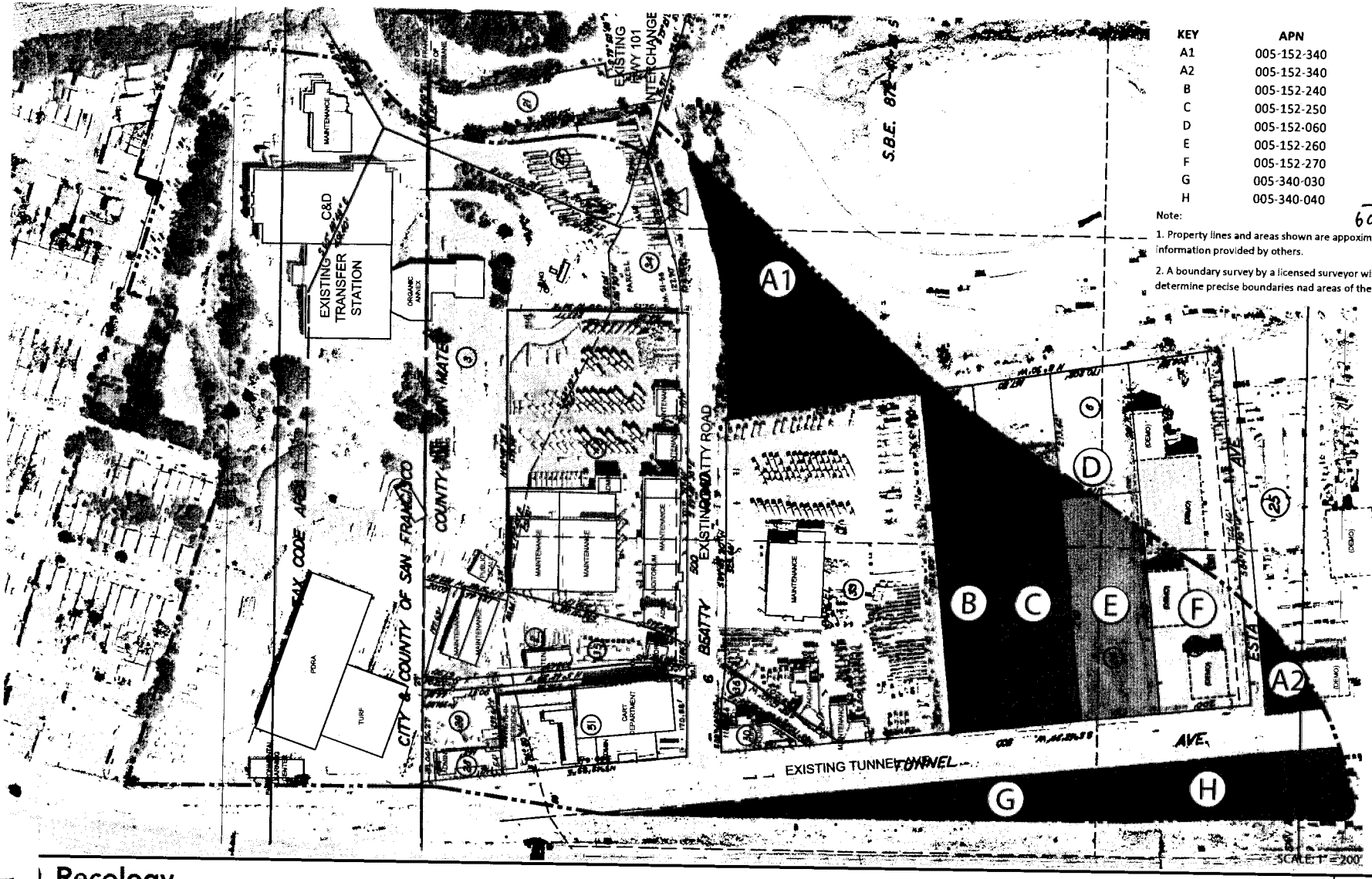
Members of the public asked questions and made comments about both the proposed rates and services. Key topics of interest included:

1. Increased public access to the rate application. The application is available for public review at DPW's office (Room 348, City Hall), during the hours of 9am to 5pm, Monday through Friday, excluding holidays; copies are also available here.
2. Recology's proposed increased role in the abandoned waste collection program, which City staff were supportive of.
3. Options for shared service for customers with small volumes of black bin material. Recology and City staff expressed general, ongoing support for providing options for shared service.
4. How other communities with high diversion are approaching service and rate issues, including "less than weekly" black bin collection. Recology and Department of the Environment staff noted they are closely monitoring other communities that are trying new approaches.
5. Specific questions about details of the application relating to issues such as staffing, management roles, and organizational structure. The questions were shared in writing with Recology staff who indicated they would review them.
6. Public availability of the application in Excel to facilitate review. Subsequent to the workshop, it has been agreed that subject to a confidentiality agreement with Recology, the RPA has access to Excel files of information developed by Recology in support of the rate application. The RPA will use this material as well as other information, to ask questions of Recology and the City during the March 21st workshop and the subsequent hearings. However, the RPA will not be duplicating the work of City staff and its consultants in conducting a detailed evaluation of the application.

The RPA requested that Recology:

1. Continue to make the added effort to clearly explain the application, and to avoid use of jargon.
2. Provide additional examples of how the proposed rate changes might affect real customers and to post them on their website. Recology agreed to do so, and also stated it would develop an online tool that allows individual customers to calculate the impact to their bill.
3. Recology stated that changes in customer behavior are impacting costs and revenues. An example was a decrease in the volume of newspapers. As readers increasingly shift to on-line information sources, there is less newspaper in blue bins, and less revenue from the sale of recycled newspapers. The RPA requested that the final application be very clear about these changes and their related impacts.

Exh. 25



KEY	APN	SQFT	ACRE
A1	005-152-340	132,500	3.04
A2	005-152-340	16,500	0.38
B	005-152-240	81,000	1.86
C	005-152-250	104,000	2.39
D	005-152-060	2,500	0.06
E	005-152-260	79,500	1.83
F	005-152-270	65,500	1.50
G	005-340-030	46,000	1.06
H	005-340-040	76,500	1.76
		604,000	13.88

Note:

1. Property lines and areas shown are appoximated based on information provided by others.

2. A boundary survey by a licensed surveyor will be required to determine precise boundaries nad areas of the parcels

Recology.

William McDonough + Partners
Architecture and Community Design

ARUP

nibbi brothers constructio

PROPOSED RECOLOGY PROPERTY
Parcel Map Overlay w/ Areas

DS - 190

November 09 2012

Exh. 26

METHODOLOGY FOR CALCULATION OF CARRYING COSTS FOR PLANT HELD FOR FUTURE USE

Contingent Schedule 1

Recology's Proposal:

- Recology is considering the purchase of certain property in Brisbane, adjacent to its existing Tunnel/Beatty Transfer Station, for development of a new Zero Waste facility. The property, shown on Attachment II, consists eight parcels totaling approximately 13.88 acres (604,000 sq. ft.) (the "**Property**").

- In Contingent Schedule I, Recology requests compensation in the rates for the annual carrying costs it would incur to hold the Property pending development.

- Recology proposes that Contingent Schedule I take effect if and when Recology takes title to the Property or a portion thereof. Because the Property consists of more than one parcel, if Recology takes title to some but not all of the parcels, Recology will advise DPW when Contingent Schedule I should take effect. Recology would be permitted to trigger Contingent Schedule I only once and the carrying costs for any subsequently purchased parcels would not be included.

- The "Purchase Price," for purposes of calculating Contingent Schedule I, would be the price paid by Recology for the parcels purchased as of the date Contingent Schedule I is triggered, as verified by DPW, but not to exceed a total of $15 million.

- Once triggered, Contingent Schedule I would remain in effect until Recology completes development of a Zero Waste facility, but no longer than fifteen years.

- If Recology sells the Property, or any of its parcels, without developing a Zero Waste facility, any gain on sale would be paid to ratepayers up to the total carrying costs previously included in rates. Any remaining gain would be retained by Recology. If the Property, or any of its parcels, is sold for less than it purchase price, Recology would not be entitled to compensation for the loss.

Carrying Cost Formula

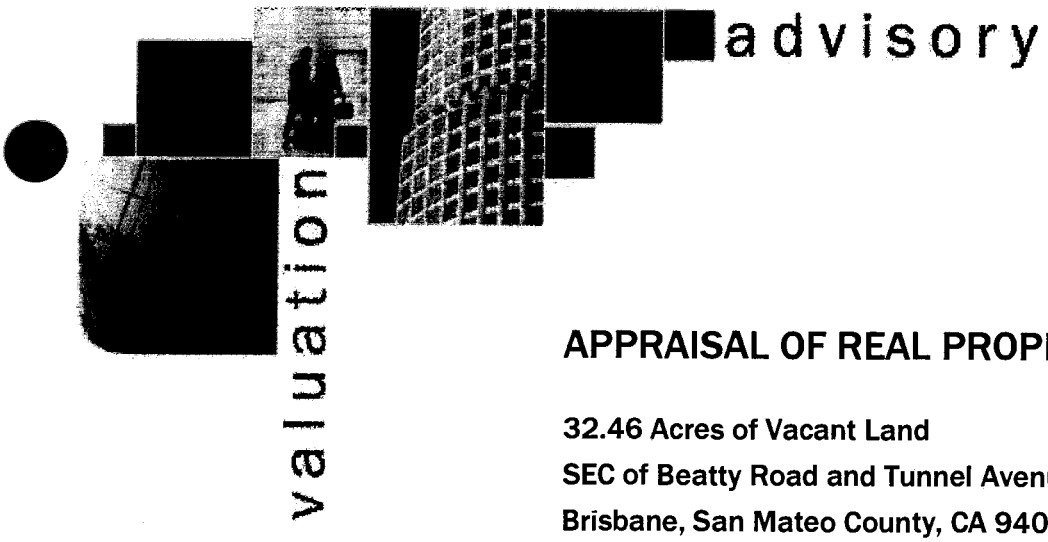
Maximum Purchase Price	**$15,000,000**
Weighted Average Cost of Capital	**8.25%**
Annual Carrying Cost	**$ 1,237,500**

The "Purchase Price"is an estimate based on a real estate appraisal by Cushman & Wakefield. *See Attachments I and II.*

The "Weighted Average Cost of Capital" (WACC) is calculated based on an industry average for publicly traded waste companies. *See Attachment III.*

Exh. 27

ATTACHMENT I

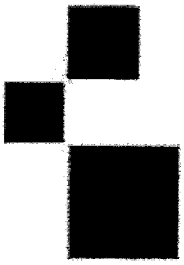


APPRAISAL OF REAL PROPERTY

32.46 Acres of Vacant Land
SEC of Beatty Road and Tunnel Avenue
Brisbane, San Mateo County, CA 94005

IN A SUMMARY APPRAISAL REPORT
As of August 14, 2012

Prepared For:
Recology
50 California Street, Suite 2400
San Francisco, CA 94111



Prepared By:
Cushman & Wakefield Western, Inc.
Valuation & Advisory
One Maritime Plaza, 9th Floor
San Francisco, CA 94111
C&W File ID: 12-38002-900170-001

CUSHMAN & WAKEFIELD.
VALUATION & ADVISORY

32.46 Acres of Vacant Land
SEC of Beatty Road and Tunnel Avenue
Brisbane, San Mateo County, CA 94005

CUSHMAN & WAKEFIELD®
ONE MARITIME PLAZA, 9TH FLOOR
SAN FRANCISCO, CA 94111

September 6, 2012

Mr. John Legnitto
Vice President, Group Manager
Recology
50 California Street, Suite 2400
San Francisco, CA 94111

Re: Appraisal of Real Property
In a Summary Report

32.46 Acres of Vacant Land
SEC of Beatty Road and Tunnel Avenue
Brisbane, San Mateo County, CA 94005

C&W File ID: 12-38002-900170-001

Dear Mr. Legnitto:

In fulfillment of our agreement as outlined in the Letter of Engagement, we are pleased to transmit our appraisal of the above property in a summary report dated September 6, 2012. The effective date of value is August 14, 2012.

This is a summary appraisal, which is intended to comply with the reporting requirements set forth under Standards Rule 2-2(b) of the Uniform Standards of Professional Appraisal Practice. As such, it presents limited discussions of the data, reasoning, or analyses used in the appraisal process to develop the appraisers' opinion of value. Additional supporting documentation concerning the data, reasoning, and analyses is retained in our files. The depth of discussion contained in this report is specific to the needs of the client and for the intended use stated below.

This appraisal report has been prepared in accordance with our interpretation of your institution's guidelines and the *Uniform Standards of Professional Appraisal Practice* (USPAP).

The subject property consists of eight parcels located along the south side of Beatty Road and the east side of Tunnel Avenue in Brisbane, California. These parcels have no or minimal improvements and surround a site owned by a Recology affiliate. A summary of the parcels follows:

APN	Ownership	SF	Acres	Comments
005-340-050 (por)	Oyster Point Properties	904,126	20.75588	SWC Corner Bayshore Freeway & Beatty Road
005-152-240	Tuntex USA Inc.	81,475	1.870409	East Side of Tunnel Ave
005-152-250	Tuntex USA Inc.	124,756	2.864004	East Side of Tunnel Ave
005-152-060	Tuntex USA Inc.	47,175	1.082989	Land Locked behind 260
005-152-260	Tuntex USA Inc.	80,760	1.853994	East Side of Tunnel Ave
005-152-270	Van Arsdale Harris Lumber	152,329	3.496993	East Side of Tunnel Ave
005-152-300	Papenhause	11,674	0.267998	P&F SEC Beatty & Tunnel
005-152-360	Papenhause	11,674	0.267998	P&F SEC Beatty & Tunnel
		1,413,969	32.46026	

Based on the agreed-to Scope of Work, and as outlined in the report, we developed the following opinion of Market Value:

Value Conclusions

Appraisal Premise	Real Property Interest	Date Of Value	Value Conclusion
Market Value As-Is	Fee Simple	8/14/2012	$35,000,000

Compiled by Cushman & Wakefield Western, Inc.

The value opinions in this report is are qualified by certain assumptions, limiting conditions, certifications, and definitions. The value opinions in this report is are qualified by the following extraordinary assumptions.

EXTRAORDINARY ASSUMPTIONS

For a definition of Extraordinary Assumptions please see the Glossary of Terms & Definitions. The use of extraordinary assumptions, if any, might have affected the assignment results.

We were not provided with a size estimate of the portion of parcel 005-340-050 to be valued. The size of this site is based on an estimate by the appraisers. The appraisers reserve the right to modify their value conclusion should better information regarding the size of this property becomes available.

This letter is invalid as an opinion of value if detached from the report, which contains the text, exhibits, and Addenda.

Respectfully submitted,

CUSHMAN & WAKEFIELD WESTERN, INC.

DRAFT

John P. Walsh, MAI
Director
CA Certified General Appraiser
License No. AG003248
jp.walsh@cushwake.com
(415) 658-3660 Office Direct
(415) 397-0933 Fax

CLIENT SATISFACTION SURVEY

As part of our quality monitoring campaign, attached is a short survey pertaining to this appraisal report and the service that you received. Would you please take a few minutes to complete the survey to help us identify the things you liked and did not like?

Each of your responses will be catalogued and reviewed by members of our national Quality Control Committee, and appropriate actions will be taken where necessary. Your feedback is critical to our effort to continuously improve our service to you, and is sincerely appreciated.

To access the questionnaire, please click on the link here:

http://www.surveymonkey.com/s.aspx?sm=_2bZUxc1p1j1DWj6n_2fswh1KQ_3d_3d&c=12-38002-900170-001

The survey is hosted by Surveymonkey.com, an experienced survey software provider. Alternatively, simply print out the survey attached in the Addenda of this report and fax it to (716) 852-0890.

Summary of Salient Facts and Conclusions

The subject property consists of eight parcels located along the south side of Beatty Road and the east side of Tunnel Avenue in Brisbane, California. These parcels have no or minimal improvements and surround a site owned by a Recology affiliate. A summary of the parcels follows:

APN	Ownership	SF	Acres	Comments
005-340-050 (por)	Oyster Point Properties	904,126	20.75588	SWC Corner Bayshore Freeway & Beatty Road
005-152-240	Tuntex USA Inc.	81,475	1.870409	East Side of Tunnel Ave
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005-152-360	Papenhause	11,674	0.267998	P&F SEC Beatty & Tunnel
		1,413,969	32.46026	

BASIC INFORMATION	
Common Property Name:	32.46 Acres of Vacant Land
Address:	SEC of Beatty Road and Tunnel Avenue Brisbane, CA 94005
County:	San Mateo
Property Ownership Entity:	Various

SITE INFORMATION		
Land Area:	**Square Feet**	**Acres**
Main Parcel	1,413,969	32.46
Total Land Area:	1,413,969	32.46
Site Shape:	Irregularly shaped	
Site Topography:	Level at street grade	
Frontage:	Average	
Site Utility:	Average	

MUNICIPAL INFORMATION

Assessment Information:	
Assessing Authority	San Mateo County
Assessor's Parcel Identification	Various
Current Tax Year	2011/2012
Taxable Assessment	$26,569,948
Current Tax Liability	$287,367
Are taxes current?	Taxes are current
Is a grievance underway?	Not to our knowledge
Subject's assessment is	Below market level
Zoning Information:	
Municipality Governing Zoning	City of Brisbane
Current Zoning	HC-Beatty Heavy Commercial District
Is current use permitted?	Yes
Current Use Compliance	Complying use

HIGHEST & BEST USE

As Vacant:
An Industrial/Office campus built to its maximum feasible building area

As Improved:
Demolish the existing structures and develop an Industrial/Office campus built to its maximum feasible building area.

VALUATION INDICES VALUE DATE	Market Value As-Is 8/14/2012
Land Value	
Indicated Value:	$35,000,000
Per Square Foot:	$24.75

FINAL VALUE CONCLUSION

Real Property Interest:	Fee Simple
Concluded Value:	$35,000,000

EXPOSURE AND MARKETING TIME

Exposure Time:	12 Months
Marketing Time:	12 Months

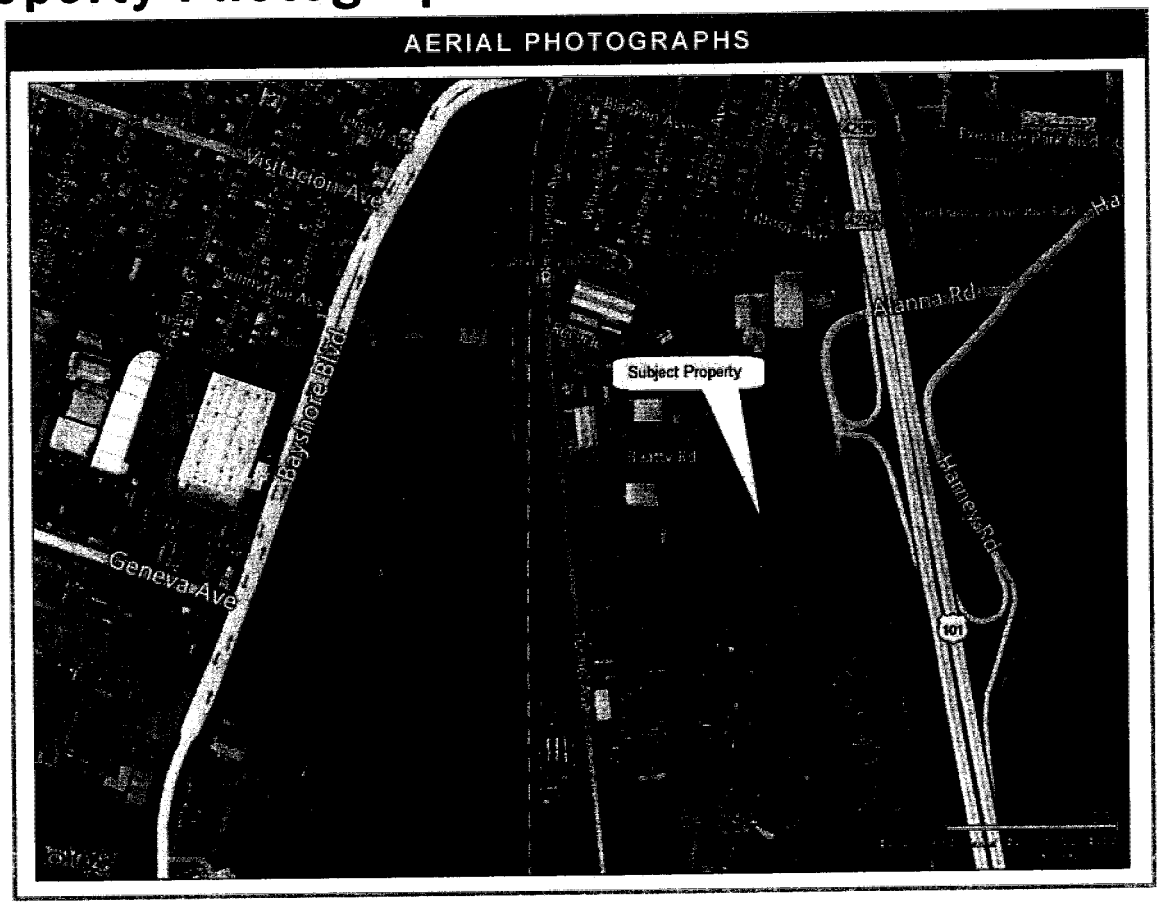
EXTRAORDINARY ASSUMPTIONS

For a definition of Extraordinary Assumptions please see the Glossary of Terms & Definitions. The use of extraordinary assumptions, if any, might have affected the assignment results.

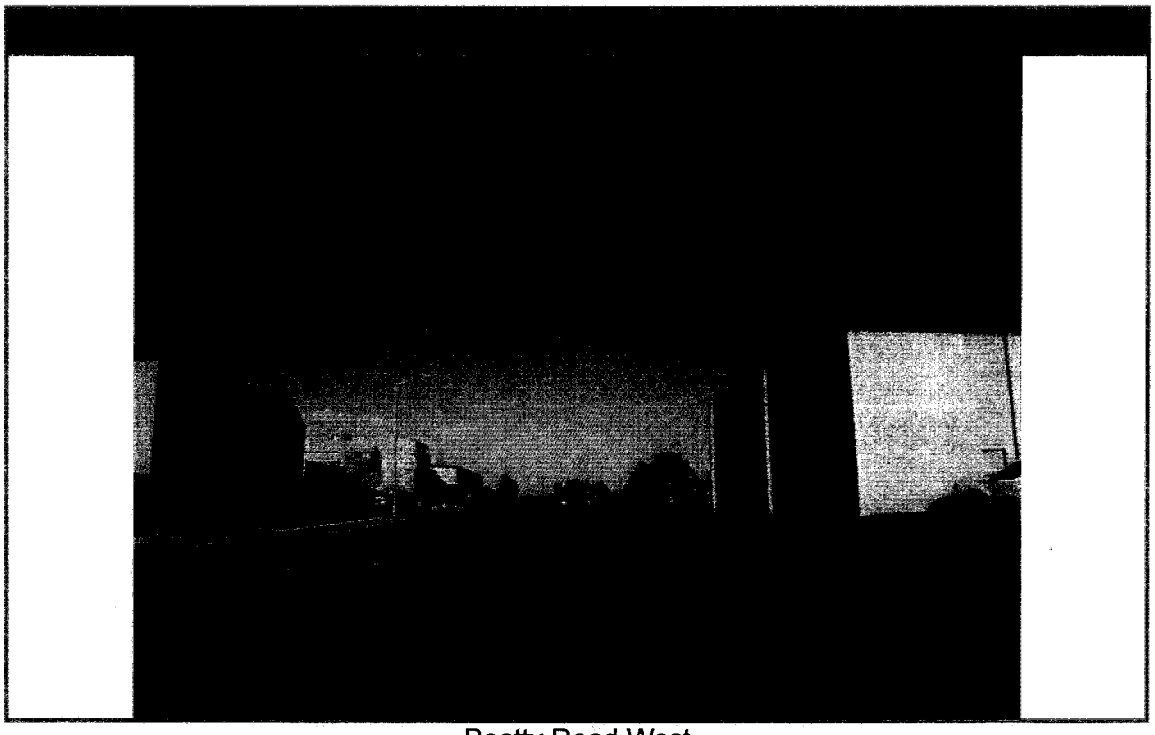
We were not provided with a size estimate of the portion of parcel 005-340-050 to be valued. The size of this site is based on an estimate by the appraisers. The appraisers reserve the right to modify their value conclusion should better information regarding the size of this property becomes available.

Property Photographs

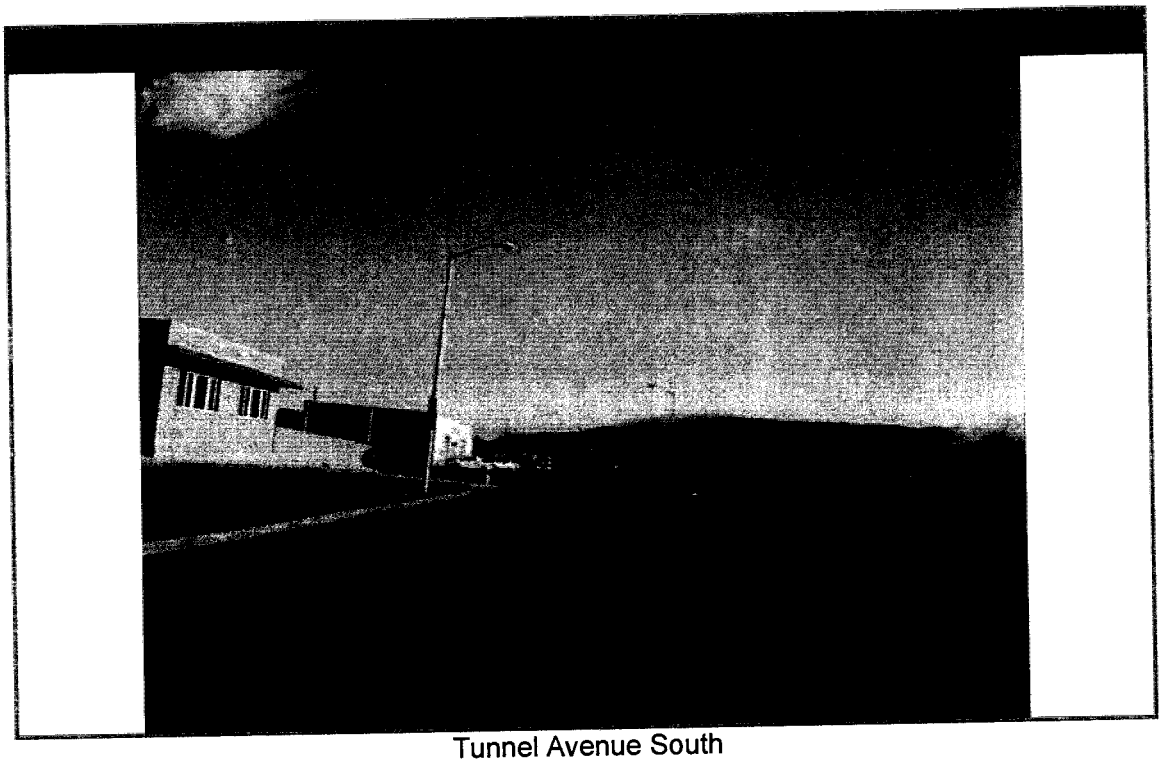
AERIAL PHOTOGRAPHS



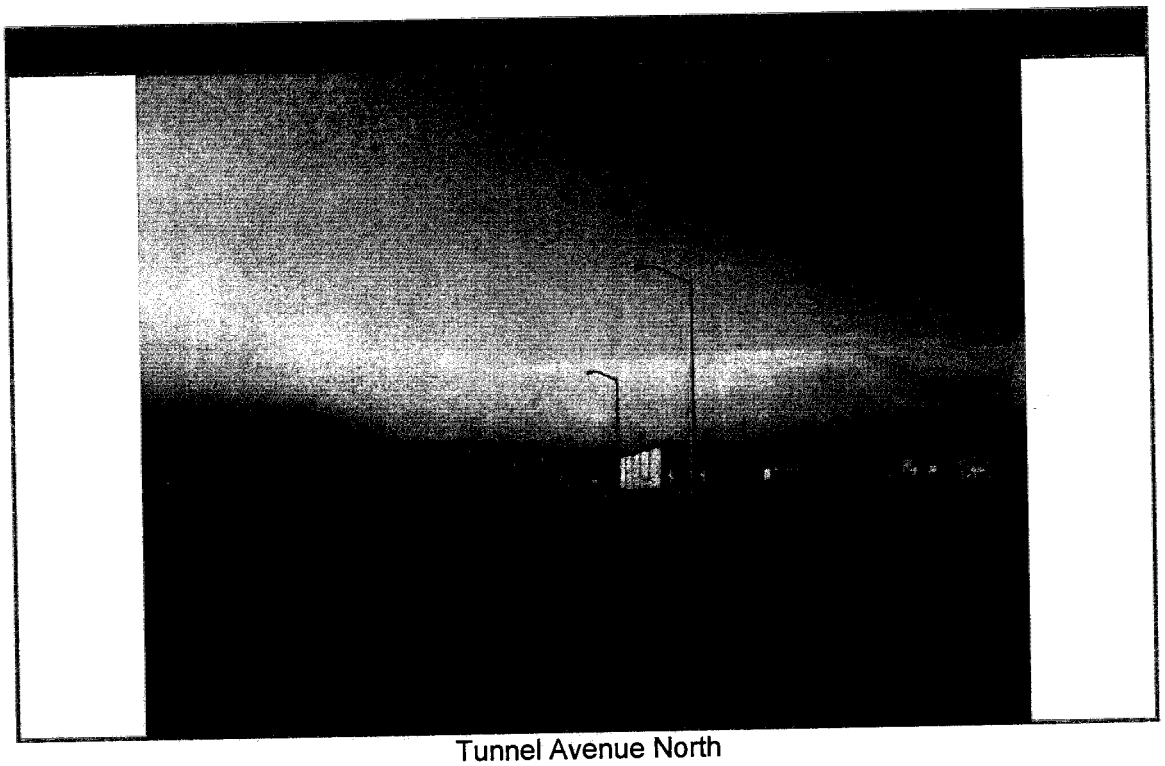
Beatty Road East



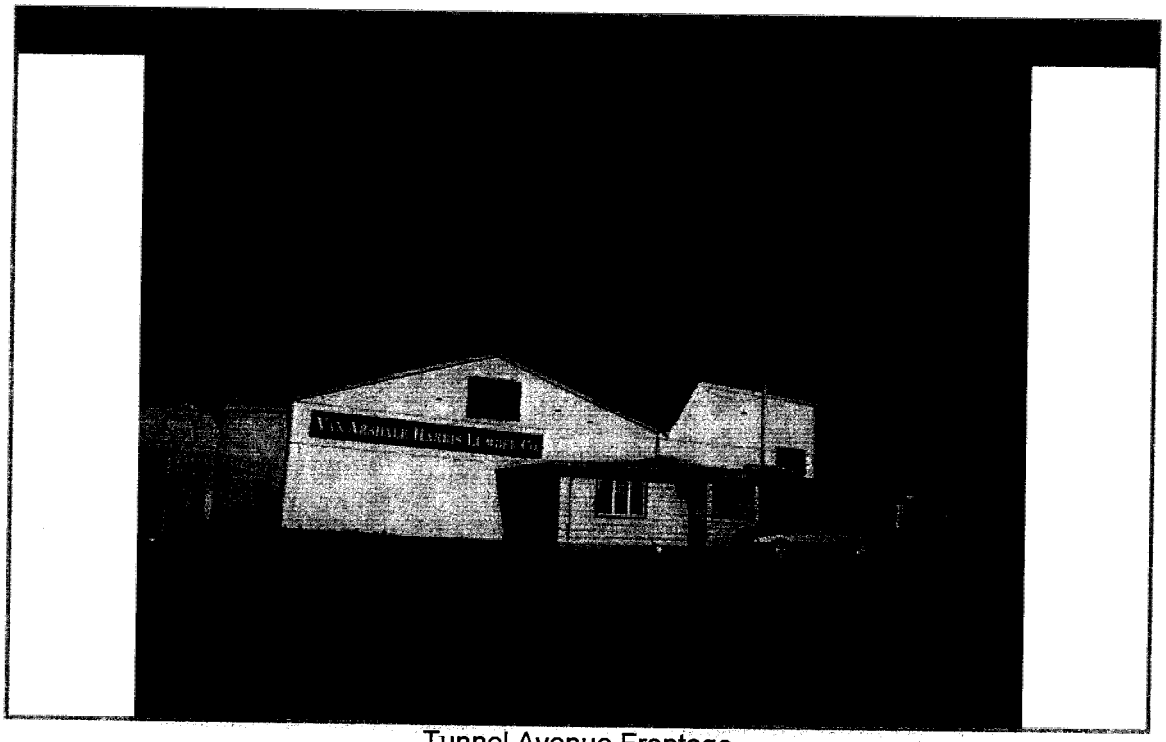
Beatty Road West



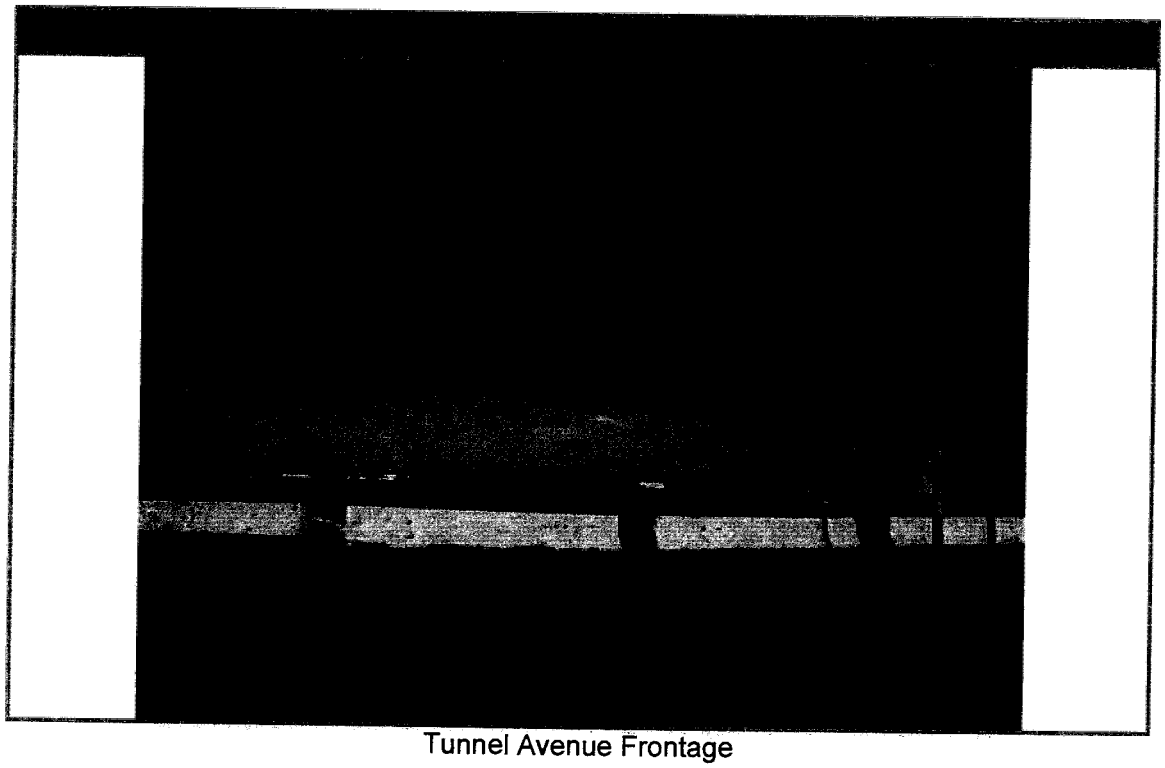
Tunnel Avenue South



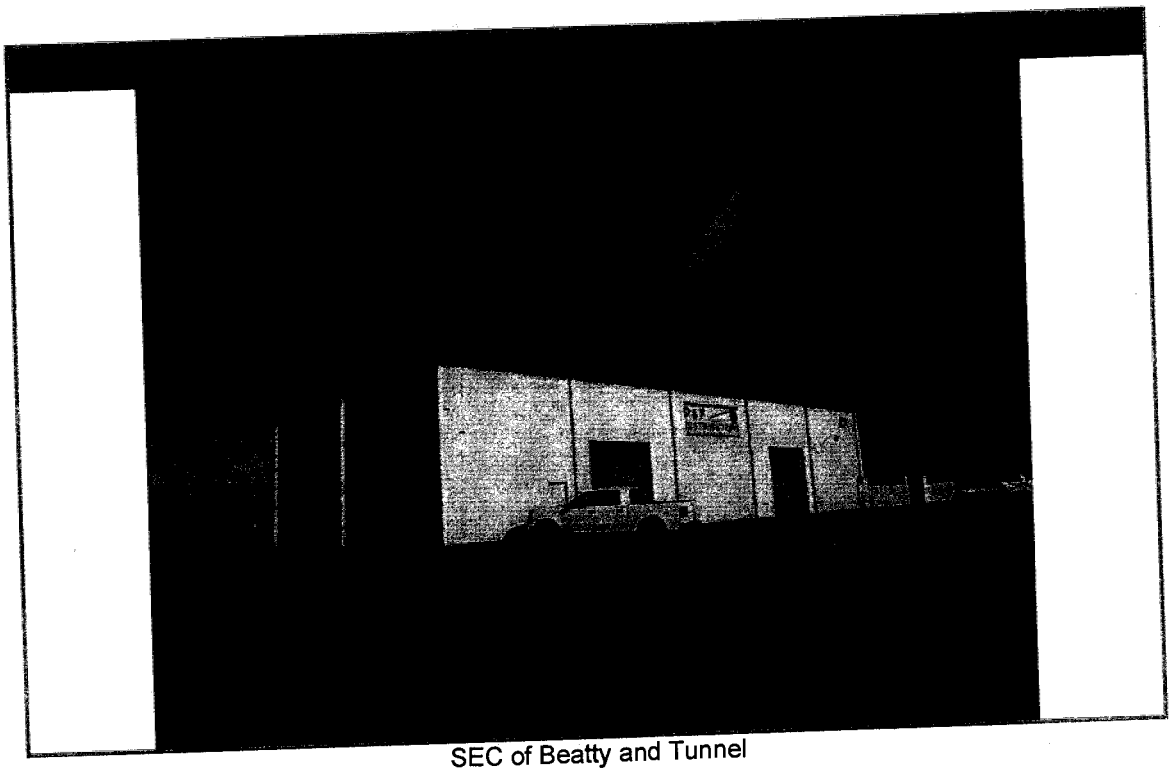
Tunnel Avenue North



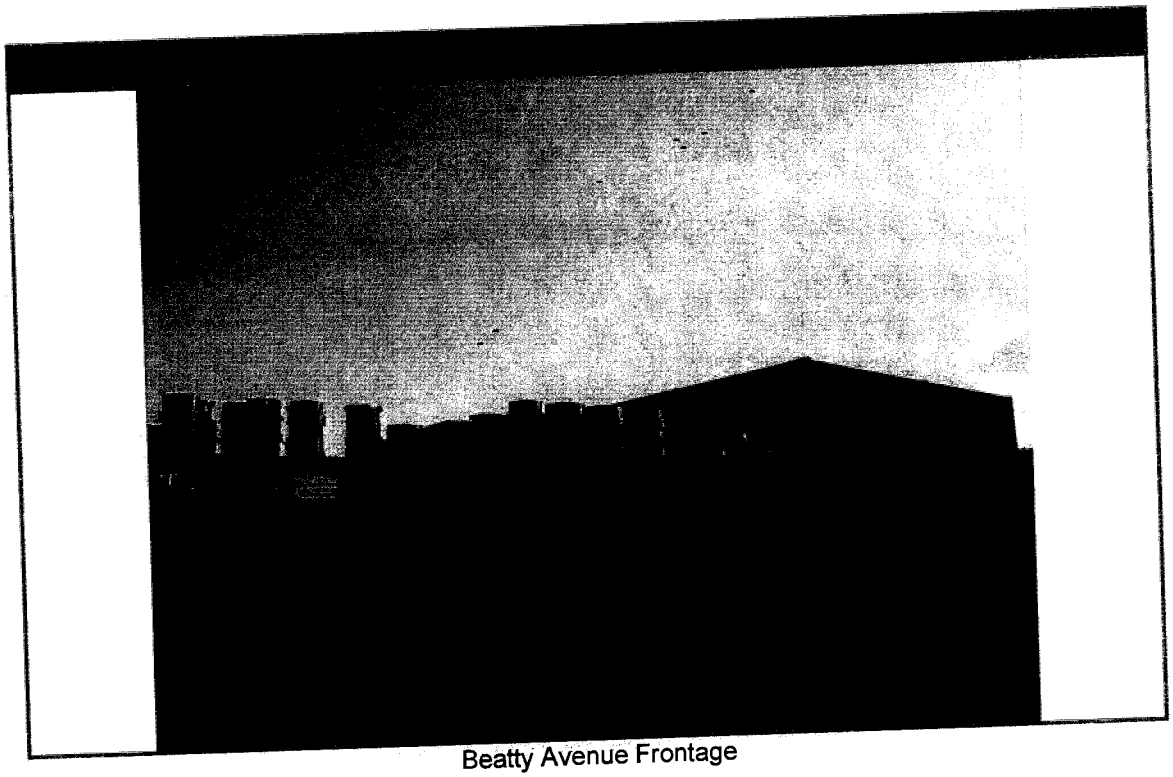
Tunnel Avenue Frontage



Tunnel Avenue Frontage



SEC of Beatty and Tunnel



Beatty Avenue Frontage

Corner of Beatty Road and Hwy 101

Corner of Beatty Road and Hwy 101

Table of Contents

Introduction

SCOPE OF WORK

This appraisal, presented in a summary report, is intended to comply with the reporting requirements outlined under the USPAP for a summary appraisal report.

Cushman & Wakefield Western, Inc. has an internal Quality Control Oversight Program. This Program mandates a "second read" of all appraisals. Assignments prepared and signed solely by designated members (MAIs) are read by another MAI who is not participating in the assignment. Assignments prepared, in whole or in part, by non-designated appraisers require MAI participation, Quality Control Oversight, and signature.

For this assignment, Quality Control Oversight was provided by Robert F. Farwell, MAI.

The scope of this appraisal is to value the fee simple interest. This required collecting primary and secondary data relevant to the subject property. Vacant land sales were researched in the subject's market, and the input of buyers, sellers, brokers, property developers and public officials was considered. A physical inspection of the property was made. In addition, the general regional economy as well as the specifics of the subject's local area was investigated.

The data have been thoroughly analyzed and confirmed with sources believed to be reliable, leading to the value conclusions in this report. The valuation process used generally accepted market-derived methods and procedures appropriate to the assignment.

This appraisal employs only the Sales Comparison Approach. Based on our analysis and knowledge of the subject property type and relevant investor profiles, it is our opinion that this approach would be considered necessary and applicable for market participants. Typical purchasers do not generally rely on the Cost or Income Capitalization Approaches when purchasing a property such as the subject of this report. Therefore, we have not employed the Cost Approach or the Income Capitalization Approach to develop an opinion of market value. The absence of these approaches does not diminish the reliability of the analysis.

IDENTIFICATION OF PROPERTY

Common Property Name: 32.46 Acres of Vacant Land

Location:	The subject property is located at the SEC of Beatty Road and Tunnel Avenue Brisbane, San Mateo County, Califomia 94005
Assessor's Parcel Number(s):	Various - See Site Description section for details
Legal Description:	The legal description was requested but not provided.

PROPERTY OWNERSHIP AND RECENT HISTORY

Current Ownership:	Various - See Site Description section for details
Sale History:	To the best of our knowledge, the property has not transferred within the past three years.
Current Disposition:	To the best of our knowledge, the property is not under contract of sale nor is it being marketed for sale.

DATES OF INSPECTION AND VALUATION

Effective Date(s) of Valuation:

As Is:	August 14, 2012
Date of Inspection:	August 14, 2012
Property Inspected by:	John P. Walsh, MAI – Exterior Only

CLIENT, INTENDED USE AND USERS OF THE APPRAISAL

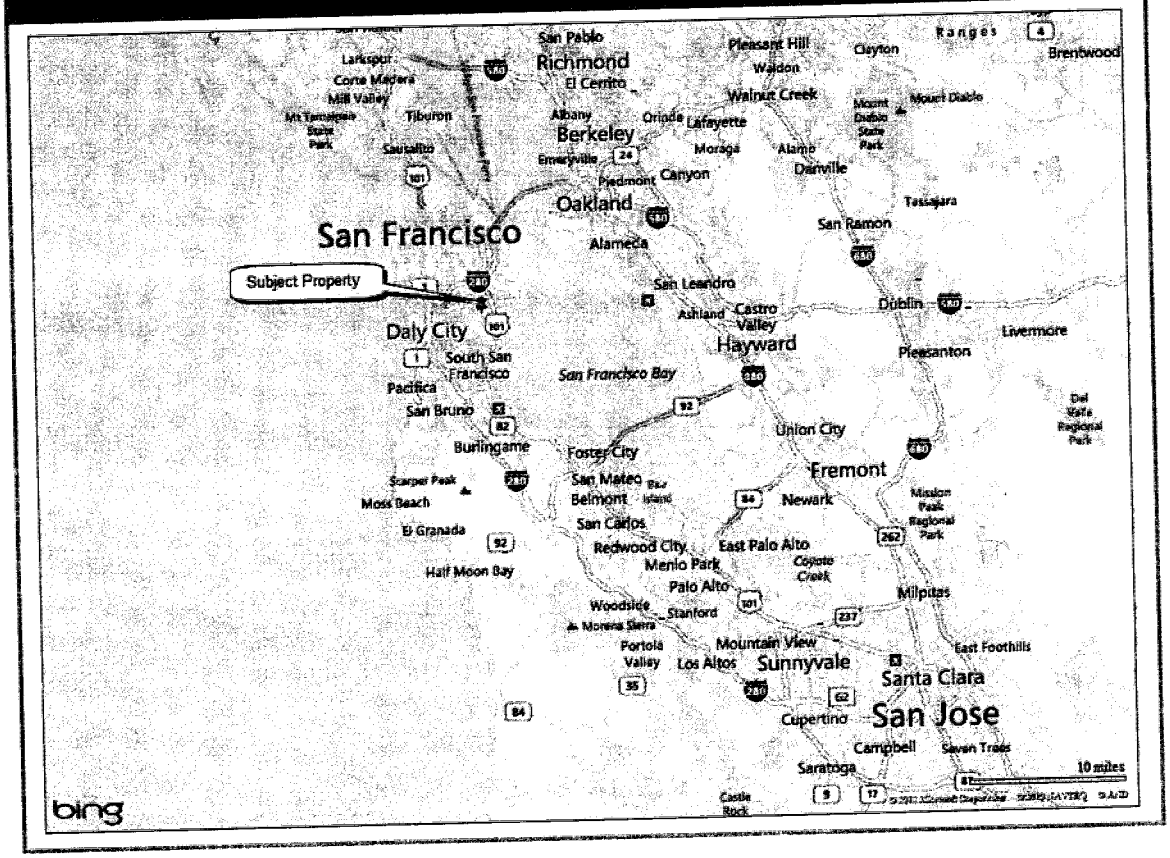
Client:	Recology
Intended Use:	This appraisal is intended to provide an opinion of the Market Value of the Fee Simple interest in the property for the use of the client in evaluating intemal decisions. This report is not intended for any other use.
Intended User:	This appraisal report was prepared for the exclusive use of Recology. Use of this report by others is not intended by the appraiser.

EXTRAORDINARY ASSUMPTIONS

We were not provided with a size estimate of the portion of parcel 005-340-050 to be valued. The size of this site is based on an estimate by the appraisers. The appraisers reserve the right to modify their value conclusion should better information regarding the size of this property becomes available.

GREATER SILICON VALLEY REGIONAL ANALYSIS

REGIONAL MAP

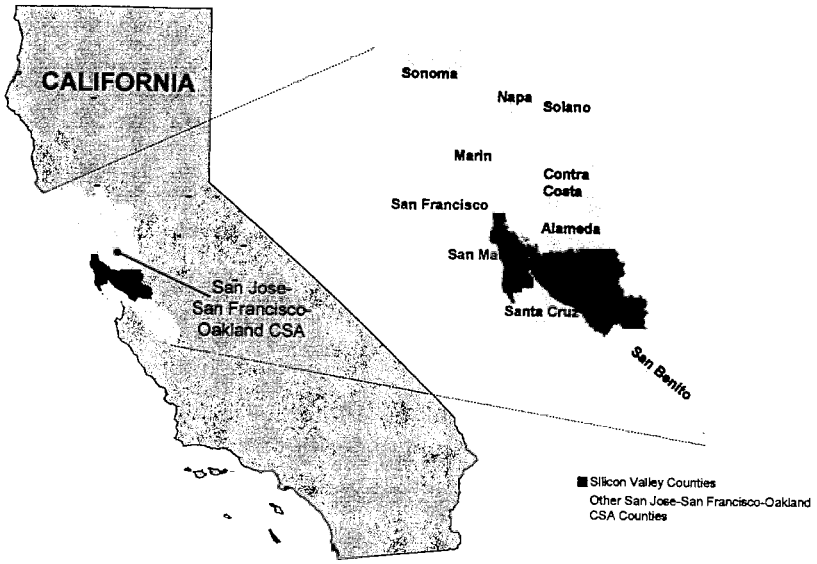


INTRODUCTION

MARKET DEFINITION

Silicon Valley encompasses 1,740 square miles of land and is comprised of San Mateo County and Santa Clara County. San Mateo County is essentially the peninsula formed by San Francisco Bay and the Pacific Ocean (save for the City and County of San Francisco at its northern tip). Santa Clara County lies at the south of San Francisco Bay and is much larger geographically than San Mateo County. Silicon Valley is part of the greater San Jose-San Francisco-Oakland Consolidated Metropolitan Statistical Area (CSA).

SAN JOSE-SAN FRANCISCO-OAKLAND, CA COMBINED STATISTICAL AREA (CSA)



Source: Claritas, Inc., Cushman & Wakefield Valuation & Advisory

CURRENT TRENDS

Thanks to strong growth in the high-technology industry, Silicon Valley's economic recovery strengthened in 2011, besting the recovery of the U.S. and California. Moody's Economy.com reports that San Jose's economy will reap the benefits over the next several quarters of a growing global market for internet-based business and consumer products. In order to capitalize, firms are expanding their Silicon Valley office space and payrolls, thus employment gains are being led by tech manufacturing and services. Healthcare is also supporting the labor market. The California Employment Development Department reported that the San Jose-Sunnyvale-Santa Clara MSA unemployment rate was 9.3 percent in March 2012, up over the prior quarter's 9.1 percent, and down from 10.3 percent in March 2011. California's unemployment in March 2012 was 11.0 percent, down from 11.9 percent a year prior.

Although there is optimism, some question whether there could be a bubble lurking under the region's recent rapid high-tech growth. An article in *The Mercury News* in October 2011, titled "Silicon Valley Economy More Diversified", suggests otherwise, "because the valley is diversified across a broader range of high tech than it was

in 2000, making the region better able to withstand the loss of a single company or trouble in one of its sectors," based on a study of high-tech startups by the Bureau of Labor Statistics. The article states, "Last year, the start of a new decade, high-tech entrepreneurs launched half as many companies, and across a broader range of businesses, than they did in 2000. Comparing 2010 to 2000, it's night and day. In 2000, there was a lot of optimism and a lot of money being thrown around, but in reality there weren't that many good companies. Today it's totally different. Silicon Valley now has these globally recognized tech companies—all the leaders are here."

Further highlights follows:

- According to PriceWaterhouseCoopers and National Venture Capital Association's fourth quarter 2011 report, Silicon Valley received the highest level of funding for all regions with $3.0 billion invested during the fourth quarter, and $11.6 billion invested in 2011. The software industry received the highest level of funding for all industries, and continued to do so in first quarter 2012, with $1.6 billion invested. The Life Sciences and Clean Technology sectors saw marked decreases in both dollars and number of deals in the first quarter of 2012. Tracy T. Lefterooff, global managing partner of the VC practice at PwC U.S. noted, "Venture capitalists remained cautious during the first quarter after a lackluster fourth quarter in the public markets, as evidenced by a shift from investing in earlier stage companies to a focus on later stage companies in first quarter. Given that we saw an improvement in the public markets during the first quarter, we could see VC's return to placing their bets on seed stage companies in the coming quarters."
- Moody's Economy.com also indicates that the strong outlook for Silicon Valley's tech industries bodes well for continued growth of personal income. The metro area has outpaced the rest of California and the U.S. in personal income growth since the end of 2009 as tech firms increased output and hiring amid recovering IT investment. The increasingly competitive battle for tech talent is an upside risk for income growth. For example, Google recently increased the pay of all its employees by 10 percent in 2011 in order to curb defections to other tech firms. The tech giant has plans to add several hundred high-paying positions to its Mountain View headquarters and Cisco Systems Inc. retains long-range plans for development and expansion in north San Jose.
- The commercial real estate market in Silicon Valley is benefitting from strong tech hiring as well, increasing demand for office space. Market conditions tightened in the first quarter of 2012, demonstrated by declining vacancy rates and positive absorption, however, leasing activity slowed to more sustainable levels in the first quarter of 2012 after phenomenal leasing activity occurred in 2011. The quality space was the first to go, leaving limited options in 2012.
- The local housing market continues to have some of the highest prices in the nation, however, as elsewhere, value deflation and foreclosures are significant issues. Moody's economy.com forecasts that the region's housing market will weaken further in 2012 and house prices will decline through the end of the year, for a total peak-to-trough decline of 35.0 percent.

DEMOGRAPHIC TRENDS

DEMOGRAPHIC CHARACTERISTICS

Both Santa Clara and San Mateo counties are considered highly desirable but expensive places to live, which is reflected in the region's demographics. When compared to the U.S., Silicon Valley differs in demographic aspects relative to income and education levels. Because of the region's innovation and high-tech industry, it is recognized as one of the most educated areas of the nation.

Further considerations follow:

- The median age of 37.0 years in Silicon Valley matches the U.S. median age of 37.0 years.
- Silicon Valley's labor pool is highly skilled and highly compensated, resulting in an exceptionally high average household income of $112,861—a staggering 67.0 percent above the U.S. average.
- Silicon Valley has a vastly higher percentage of households in the $100,000 plus annual income bracket—41.7 percent versus 18.3 percent for the U.S.
- About 44.0 percent of Silicon Valley's population has a bachelor or advanced degree, compared to just 27.7 percent for the nation.

The following chart compares the demographic characteristics of Silicon Valley with the demographic characteristics of the United States:

Demographic Characteristics
Silicon Valley vs. United States
2011 Estimates

Characteristic	Silicon Valley	U.S.
Median Age (years)	37.0	37.0
Average Annual Household Income	$112,861	$67,529
Median Annual Household Income	$85,674	$49,726
Households by Annual Income Level:		
<$25,000	11.4%	23.7%
$25,000 to $49,999	15.8%	26.6%
$50,000 to $74,999	16.6%	19.5%
$75,000 to $99,999	14.6%	11.9%
$100,000 plus	41.7%	18.3%
Education Breakdown:		
< High School	13.5%	15.1%
High School Graduate	17.2%	28.9%
College < Bachelor Degree	25.5%	28.3%
Bachelor Degree	25.5%	17.5%
Advanced Degree	18.4%	10.2%

Source: Claritas, Inc., Cushman & Wakefield Valuation & Advisory

Population

Silicon Valley, with a current population of roughly 2.5 million. It significantly lagged the U.S. in terms of population growth over the majority of the past ten years, only surpassing U.S. growth in 2007 through 2011. Higher costs of living and doing business factor into slower population growth in the region. Additionally, under the strains of the national recession and severe employment loss, combined with the ills of the nation's housing markets, migration declined throughout the nation, particularly in the western United States where the housing bubble was more extreme.

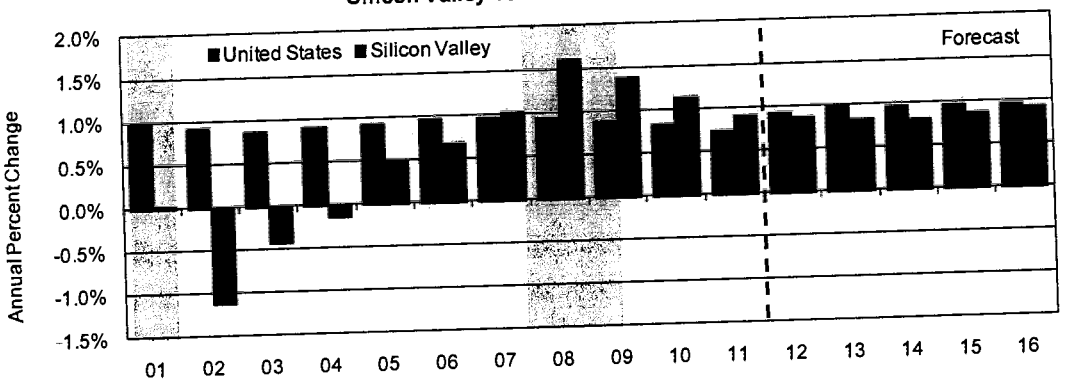
Over the long term, the region is expected to continue to attract highly educated workers due to its strong technology and innovation industries. Another lure is its proximity to the Bay Area's desirable amenities and lifestyles.

Further highlights are as follows:

- Silicon Valley's average annual growth rate between 2001 and 2011 of just 0.6 percent was below the 0.9 percent average annual growth for the U.S.
- Silicon Valley's population growth is forecast to continue to slightly under-perform the U.S. over the forecast period, averaging annual growth of 0.7 percent compared to the nation's forecast of 0.8 percent.

The following graph compares historical and projected population growth between Silicon Valley and the U.S. as a whole:

POPULATION GROWTH BY YEAR
Silicon Valley vs. United States, 2001-2016



Source: Data Courtesy of Moody's Economy.com and Cushman & Wakefield Valuation & Advisory
Note: Shaded bars indicate periods of recession

The following table shows Silicon Valley's annualized population growth:

Annualized Population Growth by County
Silicon Valley vs. San Francisco CSA Counties
2001-2016

Population (000's)	2001	2011	Forecast 2012	Forecast 2016	Compound Annual Growth Rate 01-11	Compound Annual Growth Rate 12-16
United States	284,625.2	311,319.6	314,211.5	326,565.9	0.9%	0.8%
San Jose-San Francisco-Oakland CSA	7,169.9	7,554.4	7,619.9	7,887.6	0.5%	0.3%
Silicon Valley	**2,393.7**	**2,529.7**	**2,551.5**	**2,640.5**	**0.6%**	**0.7%**
Santa Clara County	**1,688.1**	**1,804.2**	**1,821.3**	**1,887.3**	**0.7%**	**0.7%**
San Mateo County	**705.6**	**725.5**	**730.3**	**753.1**	**0.3%**	**0.6%**
Alameda County	1,469.5	1,528.5	1,542.9	1,601.9	0.4%	0.8%
Contra Costa County	971.0	1,066.3	1,078.7	1,126.3	0.9%	0.9%
San Francisco County	780.9	812.7	819.8	848.9	0.4%	0.7%
Sonoma County	465.3	490.0	495.7	518.1	0.5%	0.9%
Solano County	404.2	415.1	415.9	421.1	0.3%	0.2%
Santa Cruz County	256.0	264.0	264.9	269.6	0.3%	0.3%
Marin County	247.9	254.6	256.0	262.3	0.3%	0.5%
Napa County	126.8	137.9	138.8	143.0	0.8%	0.6%
San Benito County	54.6	55.6	55.6	55.9	0.2%	0.1%

Source: Data Courtesy of Moody's Economy.com, Cushman & Wakefield Valuation & Advisory

Households

Over the past decade, household formation trends in Silicon Valley closely tracked overall population growth. Although household growth has slowed since 2009 due to the recession, it is expected to pick-up and exceed population growth levels in 2012 through 2016.

Lower household growth was due in part, to a drop in household headship rates (a measure of the ratio of independent households to population) caused by "doubling up", as some people combined households to save money during difficult financial times. Another factor contributing to the drop was the number of households that lost their homes through foreclosure. Headship rates have declined across all metropolitan areas and across both native-born and immigrant households. The declines have been greater among native-bom households, although the rates for immigrant households have fallen as well.

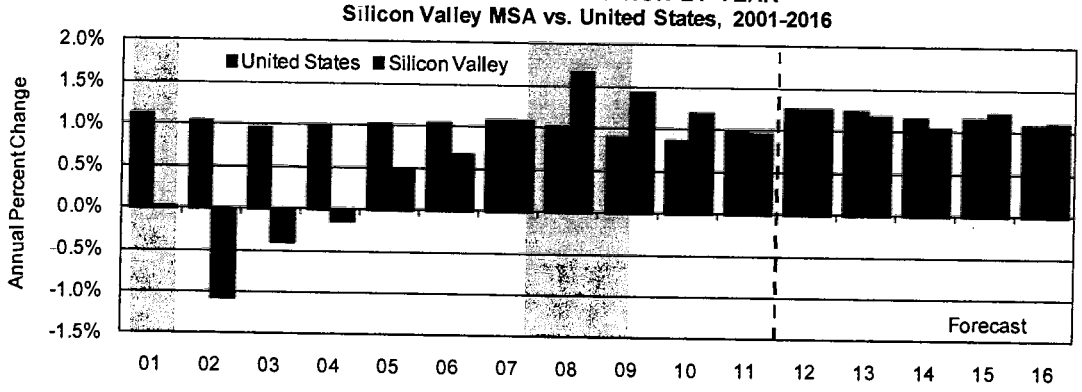
Trends of household formation also result from sociological factors such as longer life expectancies, increasing divorce rates, and young professionals postponing marriage.

Further considerations are as follows:

- From 2001 through 2011, the Silicon Valley MSA saw total households increase by an average annual rate of 0.6 percent, in-line with the 0.6 percent population growth indicated over the same time period. Similarly, over the past decade the U.S. saw total households increase at an average annual rate of 1.0 percent, also in-line with population growth of 0.9 percent nationally,
- Over the forecast period from 2012 through 2016, household formations are expected to increase in the U.S. and in Silicon Valley. The Silicon Valley MSA is projected to see average annual household growth of 0.9 percent, exceeding the average annual projected rate of population growth of 0.7 percent. The U.S. household figure is equal to the region at 0.9 percent, and slightly above the forecast 0.8 percent annual population growth.

The following graph compares historical and projected population growth between the Silicon Valley MSA and U.S. as a whole:

HOUSEHOLD FORMATION BY YEAR
Silicon Valley MSA vs. United States, 2001-2016



Source: Data Courtesy of Moody's Economy.com and Cushman & Wakefield Valuation & Advisory
Note: Shaded bars indicate periods of recession

ECONOMIC TRENDS

Gross Metro Product

Gross Metropolitan Product (GMP) is defined as the market value of all final goods and services produced within a metropolitan area in a given period of time, and is one measure of the economy of a metro area. Over the past decade, except during the period of 2001-2003, Silicon Valley's growth in gross product outpaced the U.S. However, as a result of the recession, Silicon Valley trended below the U.S., experiencing negative growth of 1.1 percent in 2009, the first time to do so in five years. In 2010, GMP increased significantly, exceeding the U.S. with 3.4 percent growth. In 2011, the region's GMP was 3.0 percent in 2011. In 2012, the GMP for the region is expected to increase at a very healthy rate of 5.1 percent.

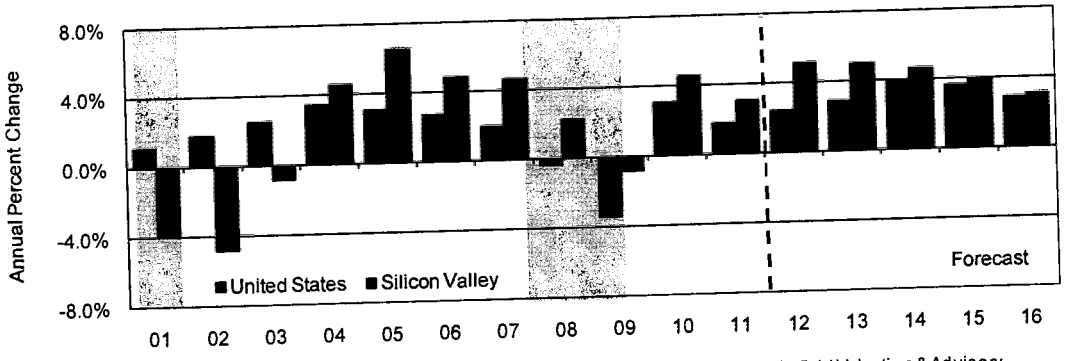
In 2011, the U.S. GDP (total goods and services produced in the nation) increased at an annual rate of 1.7 percent; the result of a still uncertain economy. In 2012, the U.S. GDP is forecast to increase at a rate of 2.5 percent.

Further considerations are as follows:

- Between 2001 and 2011, gross product for Silicon Valley increased at an average annual rate of 2.3 percent, compared to 1.6 percent for the nation.
- Over the forecast period from 2012 to 2016, Silicon Valley's gross product is expected to grow at an average annual rate of 3.3 percent, exceeding the forecasted U.S. average annual growth rate of 2.6 percent.

The following graph compares historical and projected real gross product growth by year for Silicon Valley and U.S. as a whole:

REAL GROSS PRODUCT GROWTH BY YEAR
Silicon Valley vs. United States, 2001-2016



Source: Data Courtesy of Moody's Economy.com and Cushman & Wakefield Valuation & Advisory
Note: Shaded bars indicate periods of recession

Employment Distribution

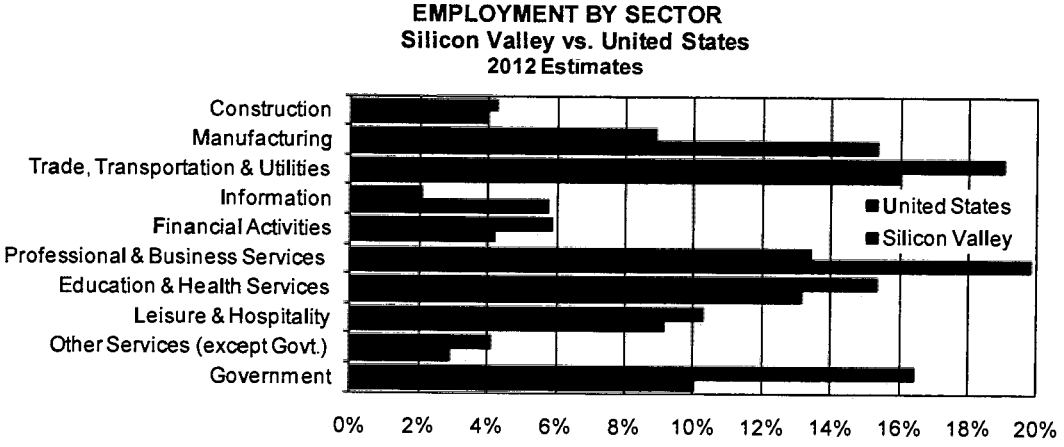
Silicon Valley's employment base is less diversified than the U.S. The most prominent employment sector in Silicon Valley, Professional and Business Services, accounts for 19.8 percent of employment, compared to 13.4 percent for the U.S. Manufacturing employment accounts for 15.3 percent of all employment within Silicon Valley, compared to 8.9 percent for the nation. Each of these sectors locally has substantial high-tech components, and makes up the information products and services sector, the region's most concentrated area of economic activity. Included in this sector are export-oriented industries such as computer software and hardware, internet and

information services, semiconductor and electronic components manufacturing, as well as communication services, and equipment manufacturing. As a still growing economy that lacks significant diversity across industrial sectors, Silicon Valley tends to exhibit more volatile growth than do more economically diversified markets.

Further considerations are as follows:

- The Silicon Valley region is less weighted in Education and Health Services, however this industry added 6,600 jobs year-over-year in March 2012. Another less weighted industry, Trade, Transportation and Utilities, also contributed year-over-year job gains of 4,100 jobs, due mostly to the addition of 3,000 jobs in retail trade.
- In contrast, another less weighted sector, Govemment, shed 1,200 jobs between March 2011 and March 2012. City and county govemment entities accounted for most of the cutbacks.

The following graph compares non-farm employment sectors for Silicon Valley and the United States as a whole:



Source: Data Courtesy of Moody's Economy.com and Cushman & Wakefield Valuation & Advisory

Major Employers

The dominant high-tech industry of Silicon Valley is further emphasized when examining a list of the region's largest employers. It spans several of the world's leading technology companies as well as research and development entities.

Further details follow:

- Silicon Valley is home to 11 of the 2011 Fortune 500 corporations, including Hewlett-Packard Company (ranked 11), Apple Inc. (35), Cisco Systems (62), Intel Corporation (56), Google (92), Oracle Corporation (96), Applied Materials (259), eBay (269), Yahoo (365), Sanmina-SCI Corporation (366), and Agilent Technologies (419). Cisco is the largest employer in Silicon Valley.
- As mentioned, the resurgent tech sector that is leading the recovery is further evidenced by recent hiring initiatives undertaken by Google, Cisco Systems, Apple, and others.

The following table lists Silicon Valley's largest employers:

Largest Private Employers
Silicon Valley, CA

Company	No. of Employees	Business Type
Cisco Systems, Inc.	17,100	Network & Communications
Stanford University	12,000	Education
Apple, Inc.	10,000	Computer Technology
Lockheed Martin Corporation	7,800	Information Technology
Stanford University Hospital & Clinics	7,300	Scientific Research & Technology
Google	6,000	Internet
Intel Corporation	5,100	Computer Electronics
Yahoo, Inc.	4,900	Internet
San Jose State University	4,700	Education
IBM Corporation	4,100	Computer Technology

Source: San Jose Business Journal, 2011 Book of Lists & Cushman & Wakefield Valuation & Advisory

Employment Growth

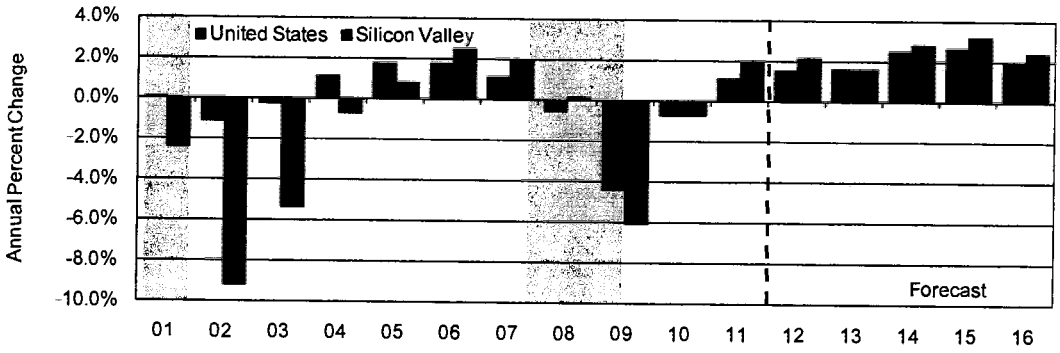
In 2006 and 2007, employment growth in Silicon Valley exceeded the United States, and employment growth was slightly above that of the negative growth of the U.S. in 2008 at 0.2 percent. However, like the rest of the nation, job losses in the Silicon Valley region accelerated by the end of 2008 and continued through 2010. However, in 2011, employment growth increased by 2.0 percent. Though unemployment is still high, employment loss slowed dramatically in 2011. Employment growth is forecast to increase by 2.1 percent in 2012, and as noted above, some sectors are experiencing sizeable employment gains. According to the most current report by the State of California Employment Development Department, between March 2011 and March 2012, total employment in the MSA grew by 29,400 jobs or 3.4 percent.

Further considerations are as follows:

- Between 2001 and 2011, Silicon Valley's total non-farm employment decreased at an average annual rate of negative -1.6 percent; the nation's growth was flat at 0.0 percent over the same time period.
- Silicon Valley employment is forecast to grow at an annual average rate of 2.0 percent from 2012 to 2016, exceeding the 1.7 percent growth forecast for the United States.

The following graph illustrates total non-farm employment growth per year, for Silicon Valley and the U.S.:

TOTAL EMPLOYMENT GROWTH BY YEAR
Silicon Valley vs. United States, 2001-2016



Source: Data Courtesy of Moody's Economy.com and Cushman & Wakefield Valuation & Advisory
Note: Shaded bars indicate periods of recession

Unemployment

The California Department of Employment reported the most current unemployment rate for the San Jose-Sunnyvale-Santa Clara MSA at 9.3 percent, which is below California's unemployment rate of 11.0 percent, but above and the U.S. unemployment rate of 8.2 percent.

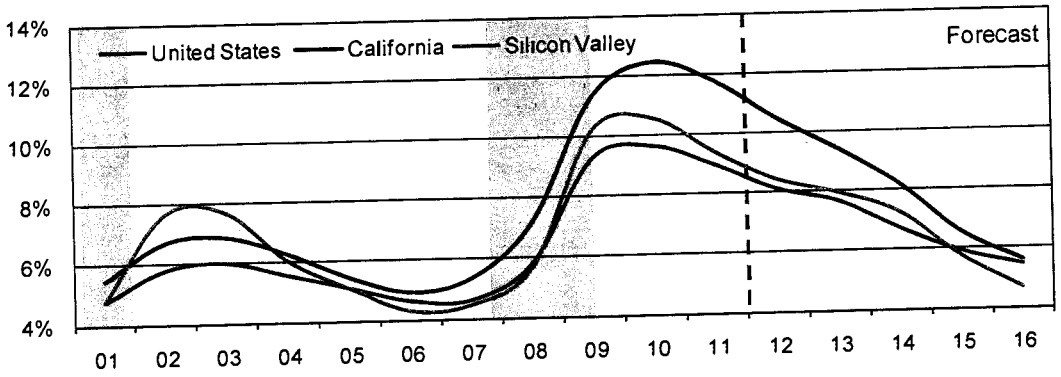
Through the late 1990s and early part of this decade, Silicon Valley's unemployment rate discounted the national average. However, with the 2001 economic recession and the corresponding loss of more than 300,000 jobs, Silicon Valley's unemployment rate escalated to levels well above that of the United States and California.

Further considerations are as follows:

- The jobless rate which had jumped from its low average of only 3.0 percent in 2000 to a peak of 10.5 percent in 2010. Since then, the unemployment rate has been slowing declining, and is forecast to continue downward through 2016.
- Silicon Valley's unemployment closely mirrored the United States from 2005 to 2008, but increased significantly above the U.S. through 2010. Between 2012 and 2015, Silicon Valley's unemployment is expected to trend between California and the U.S., and trend below the U.S. by 2016.

The following graph compares historical and projected unemployment levels for the Silicon Valley MSA, the state of California, and the U.S. as a whole:

UNEMPLOYMENT RATE BY YEAR
Silicon Valley MSA vs. California vs. United States, 2001-2016

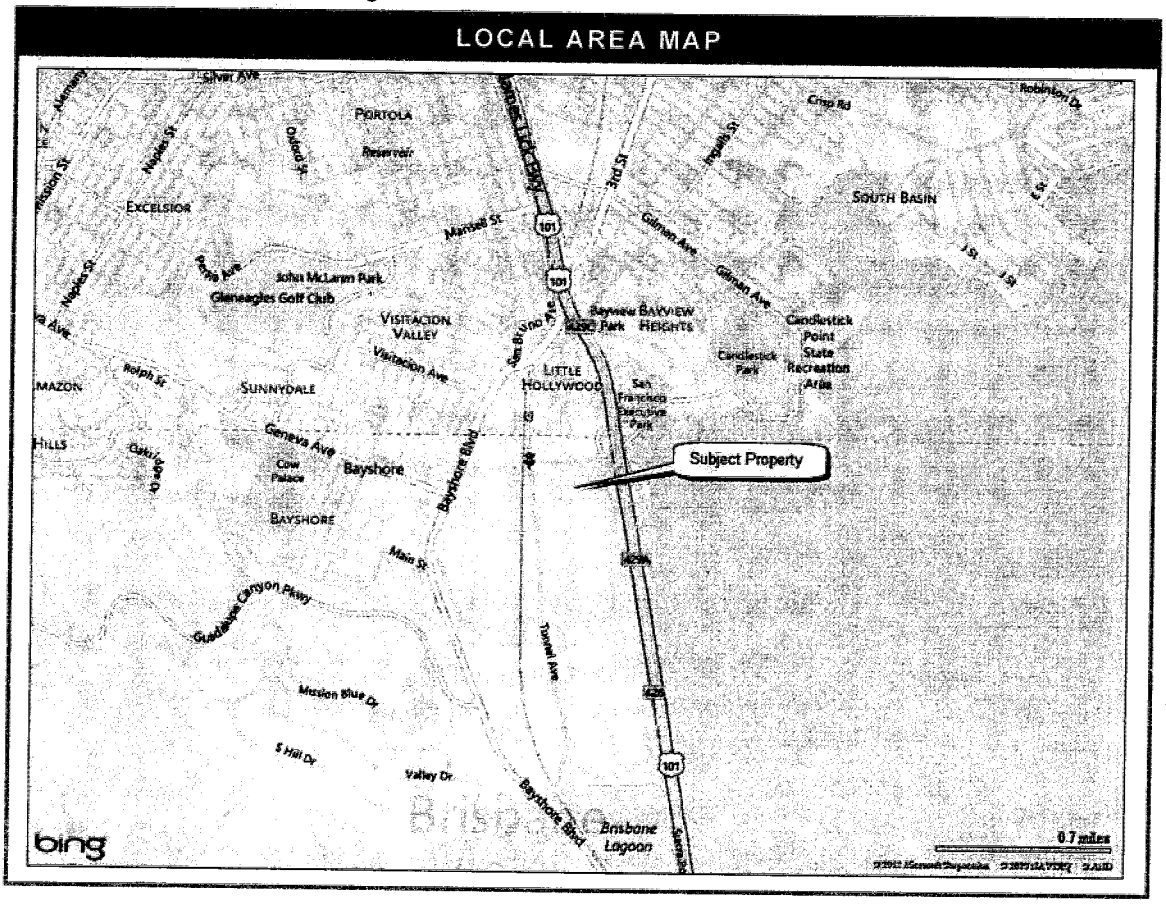


Source: Data Courtesy of Moody's Economy.com and Cushman & Wakefield Valuation & Advisory
Note: Shaded bars indicate periods of recession

CONCLUSION

Silicon Valley's economy continues to strengthen in 2012, with the technology sector leading growth in the region. Moody's Economy.com's year-end 2011 report expects San Jose's economy to reap the benefits over the next several quarters of a growing global market for internet-based businesses and consumer products. Strong tech hiring has helped the economy recoup half of all the jobs lost during the recession, compared with a quarter nationally. The region posted employment gains in several sectors, and job loss has moderated. Although unemployment in the region remains higher than the U.S., it continues to be lower than most California metros. Residential affluence, an educated work force and lifestyle amenities along with the established core of high-tech business remain assets of Silicon Valley, leading the way to a strong economy.

Local Area Analysis



LOCATION OVERVIEW

The property is located in the community of Brisbane. Brisbane is located in north San Mateo County adjacent to San Francisco. Generally, the boundaries of the immediate area are the San Francisco City limits to the north, the South San Francisco City limits to the south, the Daly City limits to the west and the San Francisco Bay to the west.

NEARBY AND ADJACENT USES

The subject's local area is primarily composed of vacant land and industrial uses. Recology operates a recycling center and transfer station on parcels north of Beatty Road. Recology also uses a parcel on the south side of Beatty Road for vehicle storage. Other significant uses in the area include office and residential properties located east of 101 along Harney Way. Candlestick Park, home of the 49ers, is approximately 1 mile to the northeast of the subject.

SPECIAL HAZARDS OR ADVERSE INFLUENCES

In addition to the previously mentioned transfer station and recycling center, the subject neighborhood contains contaminated former landfills and railroad yards that are in the process of being remediated.

LAND USE CHANGES

The subject is adjacent to and part of the Brisbane Baylands project. This 660 acre project represents the largest undeveloped parcel on the San Francisco Peninsula. This mixed-use project is the draft EIR phase. Proposed components include: retail, office, industrial, and open space uses. Copies of the developer and community input plans for the site are included in the addenda. Due to tepid demand and limited capital available for this type of project, it is uncertain if this development will come to fruition.

ACCESS

Local area accessibility is generally good, relying on the following transportation arteries:

Local:	Beatty Road is a two lane street flowing in an east-west direction through the subject neighborhood while Tunnel Avenue is a north-south flowing street in the neighborhood.
Regional:	There is a ramp to U.S. 101 at Beatty Road nearby the subject property. U.S. Highway 101 courses northward through San Francisco and on to the States of Oregon and Washington. It courses southward through San Jose in the Silicon Valley, terminating in Los Angeles.

The Bayshore Caltrain Depot is approximately a ¼ mile north of the subject property. Caltrain provides commuter rail service between San Francisco and San Jose. Municipal bus service is also available along Bayshore Boulevard. The San Francisco International Airport is approximately 5 miles to the south.

CONCLUSION

The neighborhood benefits from its strategic location near Highway 101 and the San Francisco International Airport providing easy access to the Financial District and other parts of the Bay Area. The neighborhood also offers adequate public transportation options.

New construction is constrained by the lack of available land and restrictive zoning ordinances. Therefore, the current and future demand for office and industrial space in this market will likely result in upward pressure on property values as the region continues to grow.

SILICON VALLEY R&D MARKET ANALYSIS

OVERVIEW - FIRST QUARTER 2012

A variety of factors influence the performance of a property in the market. In this section we provide an in-depth analysis of the U.S. Industrial Market, the local industrial market in which the subject property competes and its position within that market.

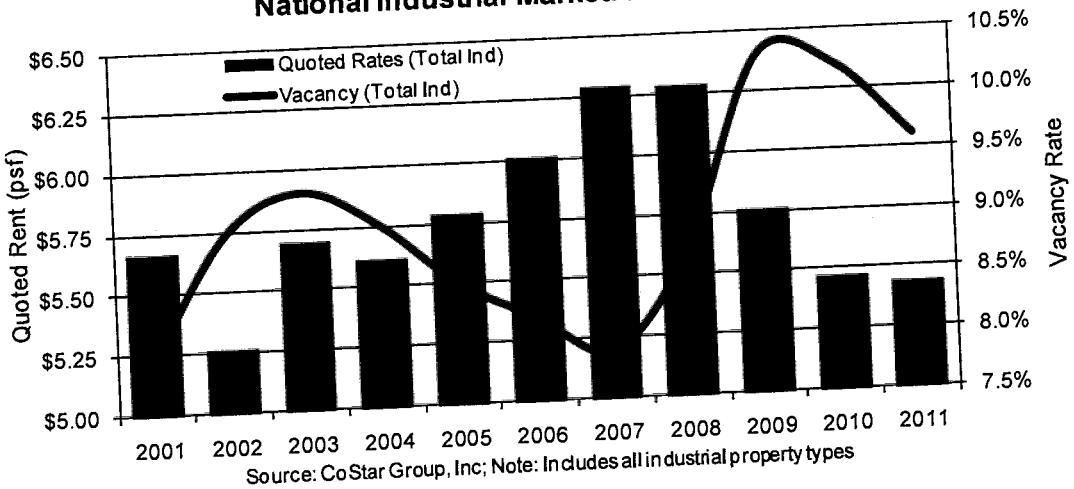
NATIONAL INDUSTRIAL MARKET STATISTICS

Following recessionary trends in 2008 and 2009, the U.S. industrial market began an initial phase of recovery in 2010. By the end of the fourth quarter of 2011, the national industrial market recorded approximately 37.1 million square feet of positive absorption according to CoStar, Inc. This marked the seventh consecutive quarter of positive absorption after five quarters of negative absorption over 2009 and early 2010. Absorption in 2011 exceeded any year since 2008, and surpassed net absorption in 2010 by approximately 10.2 million square feet. Subdued construction activity exerted downward pressure on vacancy, but was not enough to significantly alter rental rates. Lending restraints also helped deter new construction and allowed the market to recover more quickly.

According to CoStar, Inc., the national industrial market's fourth quarter 2011 vacancy rate was 9.6 percent, a decline of 20 basis points over the previous quarter and down from 10.3 percent over the fourth quarter of 2010. The fourth quarter 2011 quoted average asking rate increased marginally over third quarter levels to $5.44 per square foot, but ended the year $0.01 per square foot below first quarter levels. Overall, the average national industrial asking rental rate has declined by approximately 13.5 percent since its peak of $6.29 in 2007.

The following graph displays the historical vacancy and rental rates from 2001 to year-end 2011:

National Industrial Market: 2001 - 2011



Source: CoStar Group, Inc; Note: Includes all industrial property types

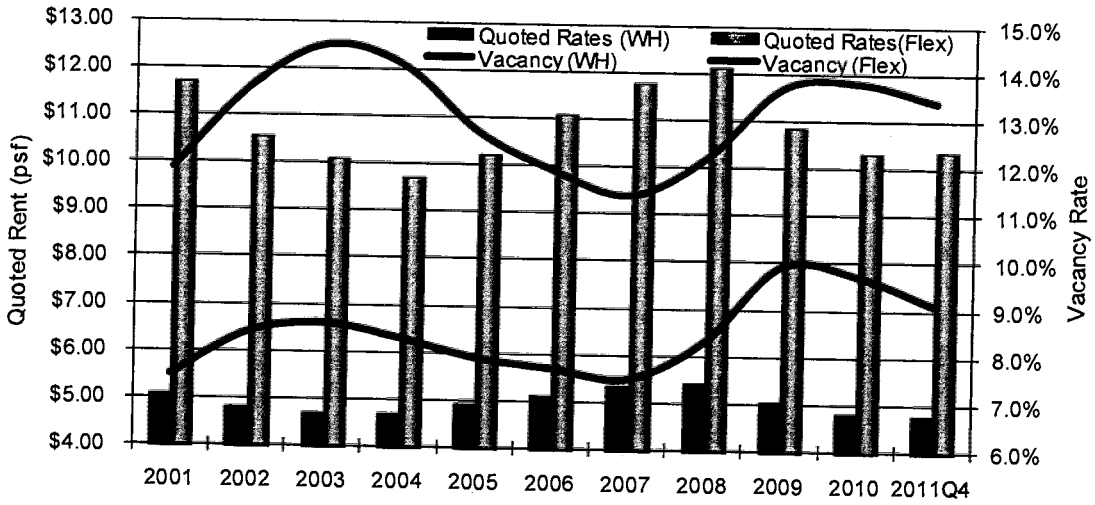
CoStar's industrial data is comprised of Warehouse and Flex space, both of which displayed similar patterns over the past decade. Flex space remained relatively stable between 2009 and 2011, with vacancy trending between 13.4 percent and 13.8 percent. Warehouse vacancy recorded a stronger decline in vacancy over the past two years, from 9.9 percent in 2009 to 9.1 percent by 2011. Warehouse rental rates have fallen 11.9 percent from

their peak in 2008, and reached $4.79 per square foot by the end of 2011. Asking rents for Flex space decreased 14.6 percent, to $10.36 per square foot over the same period of time.

By the fourth quarter of 2011, vacancy in the flex market declined by 50 basis points since the fourth quarter of 2010, reaching 13.4 percent by the end of 2011. Warehouse vacancy fell 70 basis points over the past four quarters, to 9.1 percent in the fourth quarter of 2011. Although rental rates in the flex market fell 0.3 percent to $10.36 per square foot in the fourth quarter of 2011 from the fourth quarter of 2010, rents have improved by 0.4 percent over third quarter levels. Warehouse rental rates did not experience the same level of improvement over the past year, and stagnated at $4.79 per square foot over the latter half of 2011, 0.6 percent below fourth quarter 2010 rent levels.

The following graph displays industrial vacancy and rental rates from 2001 to fourth quarter 2011:

National Industrial Market, Flex and Warehouse: 2001 - 2011Q4



Source: CoStar Group, Inc.

NATIONAL INDUSTRIAL INVESTMENT SALES MARKET

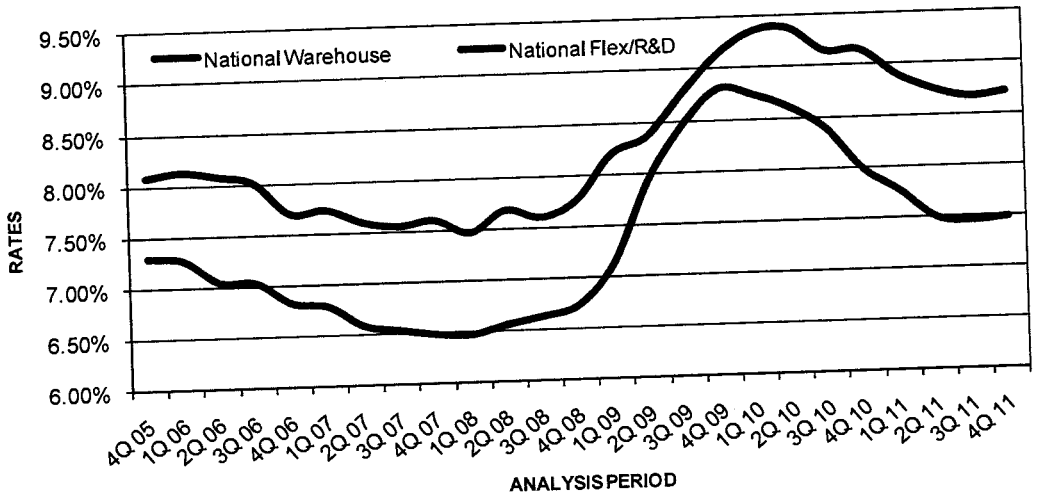
OVERALL RATES

Improving fundamentals appear to have stabilized the overall capitalization rate (OAR) for the national warehouse market. According to the PwC Real Estate Investor Survey, most investors predict that cap rates will hold steady around their fourth quarter 2011 level of 7.48 percent, indicating their concems regarding premature capital bidding up prices without support for underwriting. The national Flex/R&D market appears to have stabilized as well, and regions with a large technology presence such as San Jose, Silicon Valley, and Seattle are an appealing option for investors due to strong absorption and low vacancy rates.

The PwC Real Estate Investor Survey states that the national warehouse and flex/R&D OARs both bottomed in first quarter 2008 at an average of 6.47 percent and 7.47 percent, respectively. This was followed by rising OARs which peaked for warehouse properties in fourth quarter 2009 at 8.80 percent. Similarly, flex/R&D OARs peaked in first quarter 2010 at 9.38 percent. By the fourth quarter of 2011, national warehouse market OARs increased to 7.48 percent from 7.45 percent in the third quarter, while national flex/R&D OARs reached 8.71 percent, up from 8.67 percent in third quarter of 2011.

The following graph reflects national historical trends of average overall cap rates, as surveyed by the PwC Real Estate Investor Survey:

Historical Warehouse and Flex/R&D Overall Cap Rates

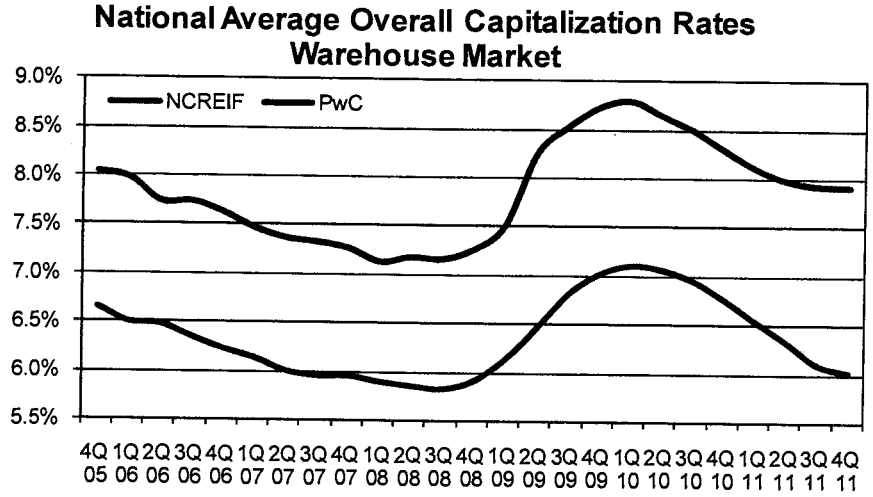


Source: PwC Real Estate Investor Survey

Both the PwC Real Estate Investor Survey and the National Council of Real Estate Investment Fiduciaries (NCREIF) methodologies offer unique perspectives on cap rate trends. The PwC Real Estate Investor Survey calculates its data based on a personal survey of major institutional equity real estate market participants. In contrast, NCREIF looks at data from actual appraisals included in their benchmark property return index. The index contains quarterly performance data for unlevered investment-grade income-producing properties which are owned by, or on behalf of, exempt institutions.

Despite displaying distinct rates, similar trends are apparent in both the PwC Real Estate Investor Survey and NCREIF data. According to NCREIF, cap rates declined until the end of 2007 and then began increasing precipitously at the end of 2008 until the end of 2009 when they began their descent. For the fourth quarter of 2011, the average warehouse cap rate stood at 6.02 percent according to NCREIF. The current rate is down 8 basis points from last quarter and down 74 basis points from the fourth quarter of 2010. According to NCREIF, the overall trend for OARs is expected to show further compression as the market recovers from recessionary trends.

The following graph compares national historical warehouse cap rate trends as reported by NCREIF and PwC:



Source: NCREIF and PwC

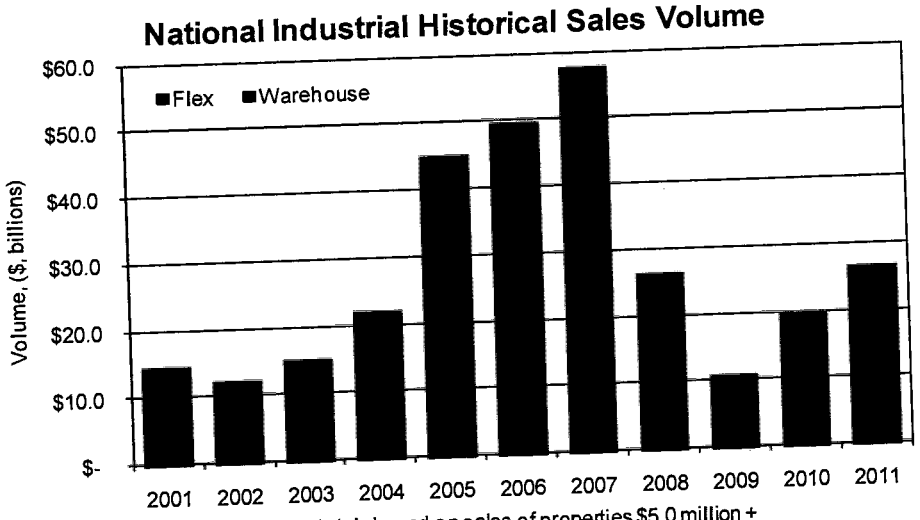
SALES VOLUME

Sales of industrial properties for the fourth quarter of 2011 were largely driven by the Warehouse sector. Flex properties are typically outsold by Warehouse properties in times of high unemployment or in the midst of (or immediately following) an economic downturn. As the economy improves and commerce increases, so does the demand for Warehouse space. Flex space, which is mostly used by office tenants that view the space as a less costly alternative to mainstream office space, does not thrive as well in this type of environment. Growth in the Flex market typically correlates to the health of local office markets and is subsequently not as well positioned as Warehouse space.

During 2011, a total of $26.7 billion of industrial space traded hands, with Warehouse accounting for 62.7 percent of the total transactions. Looking from a year-over-year perspective, total industrial volume increased by a notable 34.8 percent from the approximately $19.8 billion sales volume recorded over 2010. Nonetheless, the current pace remains slower than the 107.0 percent increase in industrial sales volume between 2009 and 2010.

2011 Flex property sales increased 58.0 percent over 2010 levels, to a sales volume of approximately $10.0 billion. Likewise, Warehouse sales totaled $16.7 billion in 2011, a 23.9 percent increase over 2010. Despite the notable volume growth in the industrial sector, the market continues to trend along cyclical pricing lows, which draw opportunistic investors.

The following graph reflects national industrial historical sales volume as surveyed by RCA from 2001 through 2011:



Source: Real Capital Analytics, totals based on sales of properties $5.0 million +

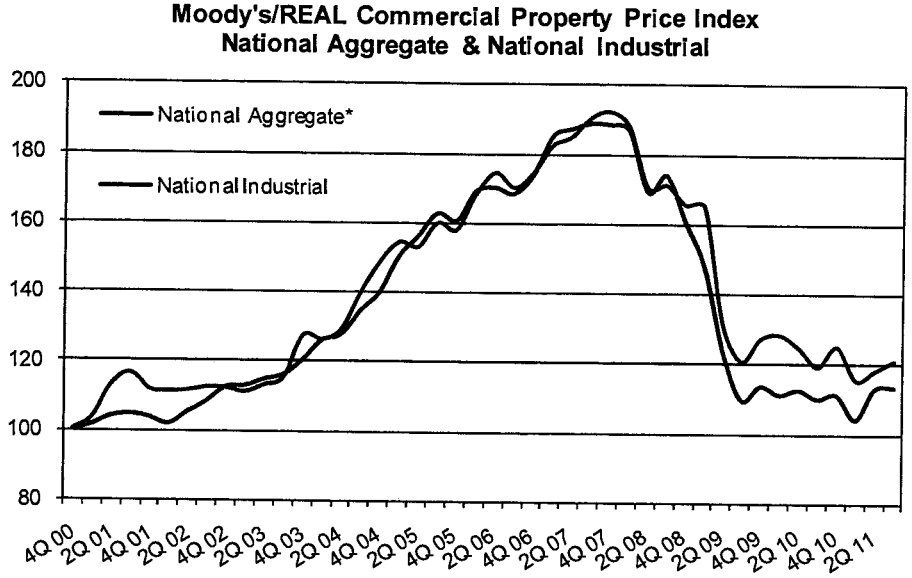
MOODY'S/REAL COMMERCIAL PROPERTY INDEX

The Moody's/REAL Commercial Property Index (CPPI) is a periodic same price change index of U.S. commercial investment properties. Developed by MIT's Center for Real Estate in conjunction with a consortium of firms including RCA and Real Estate Analytic, LLC (REAL), the index tracks price changes based on documented prices in completed, contemporary property transactions.

The current national index (November 2011) stands at 111.36, a decrease of 1.4 percent from October 2011. The national index is now 13.7 percent above the record low in April of 2011, but 42.0 percent below the peak in October 2007. Distressed transactions accounted for 25.9 percent of repeat sales through November of 2011, a continuation of recent trends.

The third quarter 2011 national industrial index (property type information is only released on a quarterly basis) is 120.95, up 2.4 percent from the previous quarter, but down 37.2 percent from its peak in fourth quarter 2007. Of all property types, the retail sector experienced the largest quarterly increase at 10.4 percent, compared to growth of just 1.2 percent in the office market.

The following graph displays the CPPI Index from fourth quarter 2000 to the third quarter of 2011:



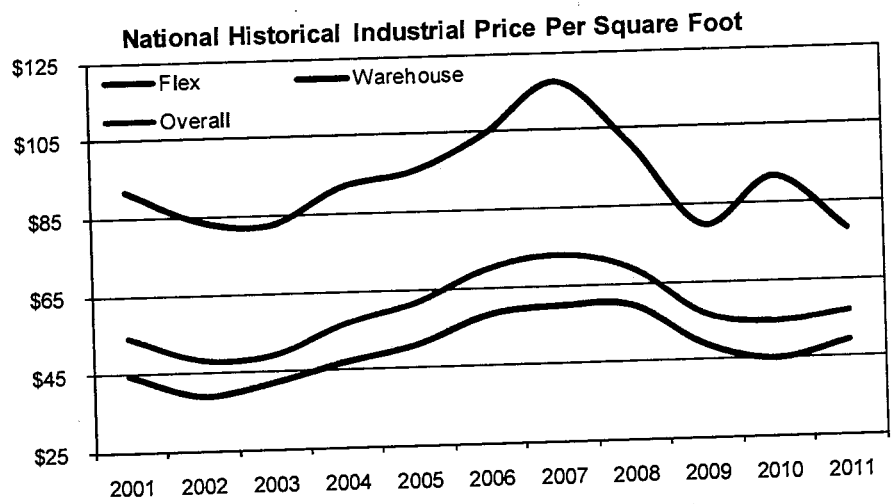
Source: Moody's/REAL CPPI; *National Aggregate reflects data as of November 2011

AVERAGE SALES PRICE PER SQUARE FOOT

Pointed disparities remain between the industrial subtypes. Warehouse asset values have improved while pricing for flex properties has varied widely. The good news; however, is that offering prices have remained fairly constant as the gap between asking and selling has narrowed. By the end of 2011, the average sales price per square foot for industrial properties was $57, approximately 3.6 percent above the average sales price per square foot in 2010.

In terms of industrial subtypes, the 2011 average sale price per square foot for flex properties was $78, 15.2 percent below the 2010 sale price. The year-end average warehouse sales price per square foot was $49, up 8.9 percent on a year-over-year basis.

The following graph reflects the national industrial historical average price per square foot trends as surveyed by RCA:



Source: Real Capital Analytics, totals based on sales of properties $5.0 million +

NATIONAL INDUSTRIAL MARKET SUMMARY

While a recovery is currently under way, economic uncertainties due to rising oil prices and the unraveling European economy will weaken consumer and business confidence in the near term. Industrial demand, which is dependent on rising consumer demand, will be measured so long as sovereign debt issues, rising gas prices and labor market stagnation persists. Despite these negatives, industrial market fundamentals have reached a bottom, sales volume is making a comeback and capitalization rate compression is occurring again. Distressed tenants looking for a way out will continue to be problematic, but should taper off as economic conditions gradually improve. With a strong infrastructure in place in most U.S. markets and the availability of natural resources, the long term investment outlook for the national industrial market is positive, as evidenced by the increasing manufacturing pay rolls and declining unemployment rate.

LOCAL INDUSTRIAL MARKET ANALYSIS

INTRODUCTION

Current Trends

In 2011, Silicon Valley exhibited one of the strongest recoveries in the U.S. One participant noted that for the year, Silicon Valley is running at the highest demand clip since the first three quarters of 2005, when the local commercial real estate market was coming out of the post dot-com hangover. The region's R&D market is no exception and continues to strengthen in 2012. Driven by the high tech sector, with companies such as Apple, Google and Cisco posting the most new job additions, employment grew by 2.3 percent year-over-year in March 2012 in Silicon Valley. In the Peninsula, high-tech employment grew by 4.8 percent during this period. Demand from tech users continues to sustain and fuel occupancy growth in the region.

Listed below are market indicators in the Silicon Valley R&D market in first quarter 2012:

- High-tech demand for space continues to sustain occupancy growth. The R&D market's overall vacancy rate decreased a notch over the prior quarter to 12.6 percent. Vacancy decreased from 15.3 percent in the first quarter of 2011.
- In first quarter, direct net asking rent was $1.17 per square foot per month (triple-net); an increase from the asking rent of $1.12 per square foot per month in the prior quarter. Asking rents increased $0.07 per square foot per month over the year-ago period. In this report all rents are quoted on a triple-net basis.
- Leasing activity picked up steam and grew significantly in 2011, posting 10.8 million square feet leased by year-end. In first quarter leasing activity totaled 2.6 million square feet, less than 2.9 million square feet leased during first quarter 2011.
- Minimal new supply during the recession helped keep inventory in check, aiding in market recovery as the economy rebounds. Two speculative data centers totaling 280,000 square feet (one building is 100,000 square foot, and another building is 180,000 square feet) were completed in third quarter 2011 in Santa Clara. In Sunnyvale, a 156,000 square foot building was also completed in third quarter 2011; it's major tenant is Intuitive Surgical. The second of two buildings in Santa Clara at 555 Reed Street totaling 180,000 square feet is still under construction in first quarter and is scheduled for completion in fourth quarter 2012. Also under construction is 192,000 square feet in Foster City for Gilead Sciences; completion is scheduled for third quarter 2013.

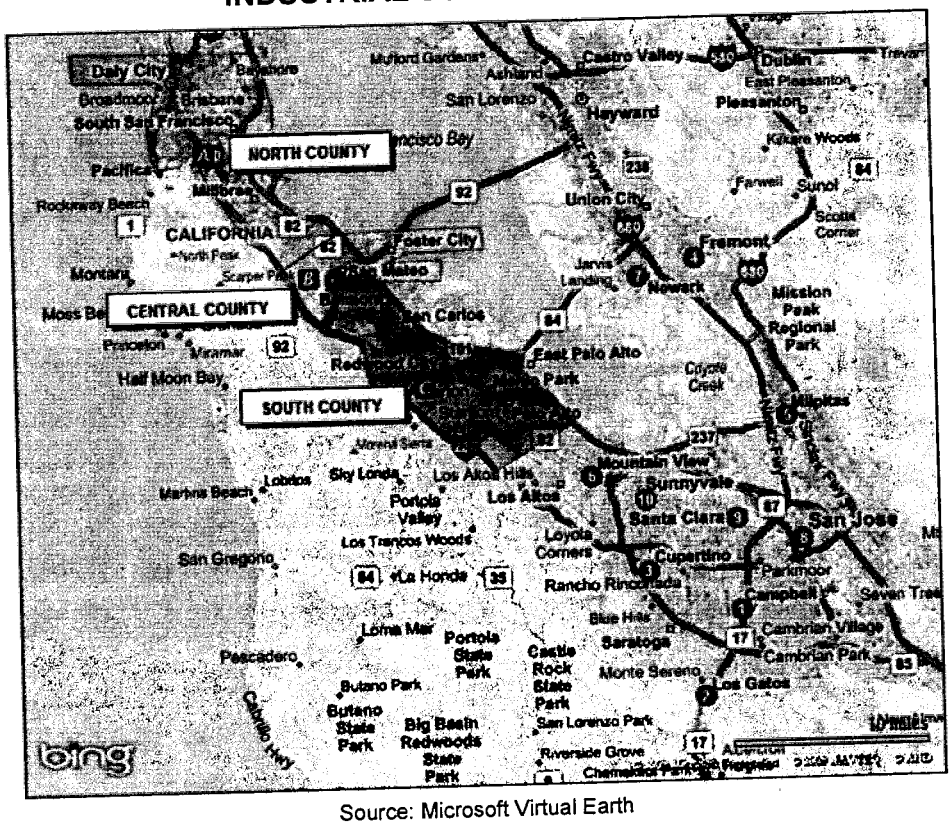
MARKET CHARACTERISTICS

The Silicon Valley R&D market consists of 175.2 million square feet in 13 submarkets located in San Mateo County, Santa Clara County and the southern portion of Alameda County. The following points further summarize market characteristics:

- The Silicon Valley R&D market is divided into two regions—the South Bay and the San Francisco Peninsula (Peninsula). The South Bay region, which is comprised of 10 submarkets, is predominantly located in Santa Clara County, but also includes the submarkets of Fremont and Newark in Alameda County. The Peninsula region consists of San Mateo County and is divided into three submarkets—North County, Central County and South County.
- Silicon Valley's largest R&D submarkets are located in the South Bay, which contains 152.2 million square feet of inventory. The San Jose submarket, with 43.9 million square feet of R&D inventory, is nearly twice the size of the South Bay's next largest submarkets—Sunnyvale and Santa Clara—which each contain roughly 25 million square feet of R&D space.
- The Peninsula region contains nearly 23.0 million square feet of R&D space, and that space is predominantly located adjacent to the South Bay region in the South County submarket.

The Silicon Valley/San Francisco Peninsula industrial submarket map is below:

SILICON VALLEY & SAN FRANCISCO PENINSULA INDUSTRIAL SUBMARKET MAP

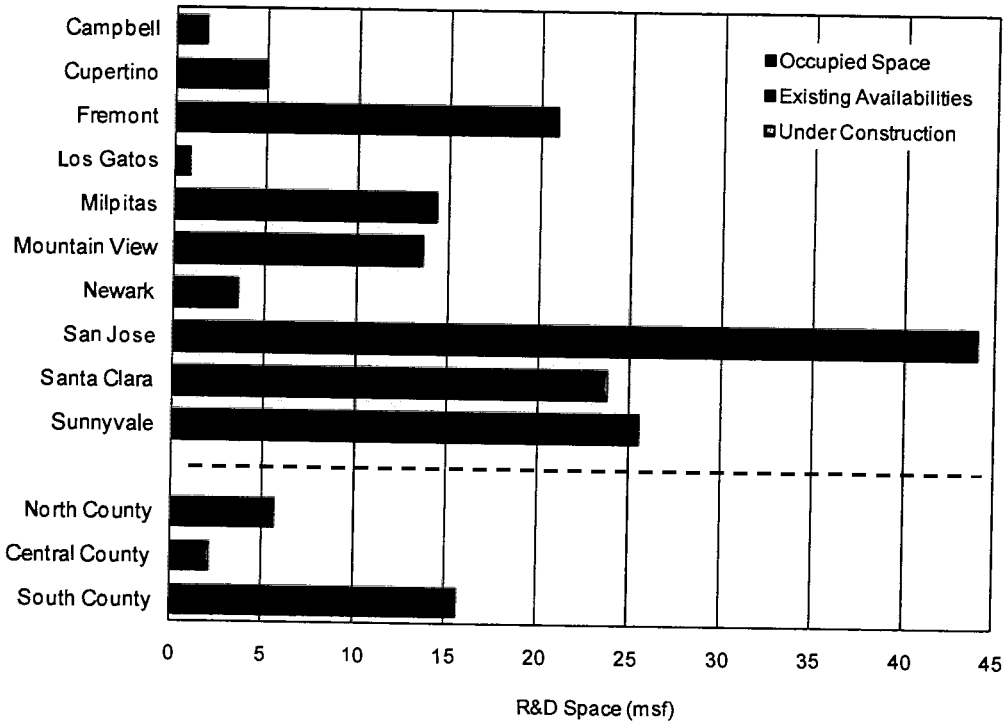


Source: Microsoft Virtual Earth

INDUSTRIAL SUBMARKETS	
SILICON VALLEY	SAN FRANCISCO PENINSULA
1. Campbell	A. North County
2. Los Gatos	B. Central County
3. Cupertino	C. South County
4. Fremont	
5. Milpitas	
6. Mountain View	
7. Newark	
8. San Jose	
9. Santa Clara	
10. Sunnyvale	

The following graph illustrates the breakdown of R&D inventory by major submarkets in Silicon Valley, followed by the R&D market statistics by submarket in Silicon Valley for first quarter 2012:

HIGH TECHNOLOGY INVENTORY BY MAJOR SUBMARKET
SILICON VALLEY
FIRST QUARTER 2012



Source: Cushman & Wakefield Research; compiled by C&W Valuation & Advisory

High Technology Market Statistics by Submarket Silicon Valley First Quarter 2012						
Market/Submarket	Industrial Inventory	Available Space	Overall Vacancy Rate	Under Construction	YTD Construction Completions	Direct Avg Asking Rent
SOUTH BAY						
Campbell	1,534,936	162,154	10.6%	0	0	$1.68
Cupertino	4,894,658	0	0.0%	0	0	$0.00
Fremont	20,836,308	3,882,261	18.6%	0	0	$0.70
Los Gatos	623,396	11,020	1.8%	0	0	$1.45
Milpitas	14,334,637	1,801,764	12.6%	0	0	$0.86
Mountain View	13,566,352	722,782	5.3%	0	0	$1.86
New ark	3,475,910	1,101,644	31.7%	0	0	$0.92
San Jose	43,865,456	6,610,089	15.1%	33,000	0	$1.04
Santa Clara	23,572,134	3,886,192	16.5%	180,000	0	$1.46
Sunnyvale	25,486,791	2,327,951	9.1%	0	0	$1.42
SOUTH BAY TOTALS	**152,190,578**	**20,505,857**	**13.5%**	**213,000**	**0**	**$1.14**
SAN FRANCISCO PENINSULA						
North County	5,553,086	373,480	6.7%	0	0	$2.00
Central County	1,863,994	40,766	2.2%	192,054	0	$0.96
South County	15,568,931	1,119,615	7.2%	0	0	$1.60
SAN FRANCISCO PENINSULA	**22,986,011**	**1,533,861**	**6.7%**	**192,054**	**0**	**$1.61**
SILICON VALLEY TOTALS	**175,176,589**	**22,039,718**	**12.6%**	**405,054**	**0**	**$1.17**

Source: Cushman & Wakefield Research; compiled by C&W Valuation & Advisory

Vacancy

Though vacancy is lower than during the dot-com industry implosion in 2001, the Silicon Valley R&D market has not dipped below double-digit vacancy in a decade. After peaking at 24.4 percent in 2003, Silicon Valley's R&D overall vacancy rate had decreased yearly by an average of 2.0 percentage points through 2008, ending the year at 14.2 percent. By year-end 2009, vacancy rose to 16.5 percent. In 2010, vacancy began to stabilize amid little new construction and moderating negative absorption, ending the year at 15.6 percent. In 2011, strength in the tech industry and increased demand for space pushed overall vacancy for the region down to 12.7 percent by fourth quarter, the lowest level it has been since 2001, and a decline of 2.9 percentage points over the prior year's fourth quarter vacancy. In first quarter, vacancy continued downward slightly to 12.6 percent. It is anticipated that as strong tech demand continues to drive growth, vacancy will fall below double digits by year-end 2012.

The following are points concerning vacancy in first quarter 2012 in the Silicon Valley R&D market:

- The overall vacancy rate continued downward in the South Bay, and increased slightly in the Peninsula over the prior quarter. South Bay's vacancy declined from 13.7 percent to 13.5 percent in first quarter; the Peninsula's single digit vacancy of 6.7 percent was up over the prior quarter's 6.2 percent.
- In the South Bay, three of the most desirable submarkets, Cupertino, Mountain View and Sunnyvale, had the lowest vacancies in first quarter at 0.0 percent, 5.3 percent, and 9.1 percent. Along the Peninsula, Central County had the lowest vacancy at 2.2 percent. South County exhibited the greatest decline in vacancy year-over-year, ending first quarter with 7.2 percent vacancy, down from 13.2 percent a year ago. This is due in part to Stanford Research Park in Palo Alto which remains a desirable market along the Peninsula, and where several noteworthy high-tech leases were signed in first quarter.

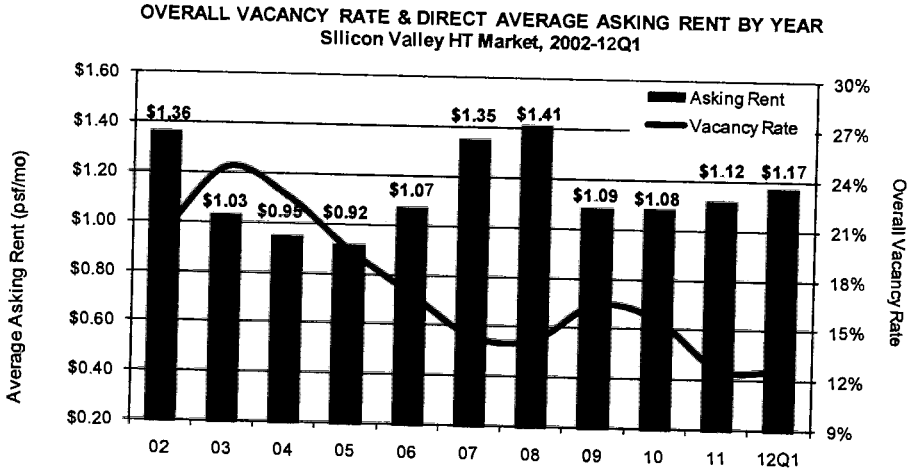
Asking Rents

In first quarter 2012, Silicon Valley's average asking direct net rent increased $0.05 over the prior quarter to $1.17 per square foot per month (triple-net) and over the prior year's $1.10 per square foot per month (triple-net). With an increase in tenants in the market rental rates are expected to trend upwards. Regarding R&D asking rents in Santa Clara County, one market participant noted, "While rents continue to be driven by premium product in a select few submarkets and not all trade areas are seeing such growth, we anticipate that the average asking rate will exceed the $1.30 per square foot mark by the close of 2012." Regarding the Peninsula, strong demand and limited supply in Palo Alto will be a major force in pushing rents up in and around Palo Alto. Note that all rents quoted are on a triple-net basis.

The following points summarize average asking rents in the Silicon Valley R&D market:

- Within any particular submarket, the average asking rent is influenced by the type of space currently available for lease and its level of build-out. The type of build-out can vary radically among various R&D properties, which can result in a wide variation in average asking rents across submarkets. During some periods, the type of build-out within the space available for lease can actually trump the supply and demand dynamics within a given submarket.
- As of first quarter 2011, in the South Bay, the Mountain View submarket had the highest average asking direct rent at $1.86 per square foot per month (triple-net), up from $1.67 per square foot per month in the prior quarter. Along the Peninsula, North County, which includes South San Francisco, had the highest average asking direct rent at $2.00 per square foot per month, up from $1.79 per square foot per month in the prior quarter.
- The Fremont submarket in South Bay had the lowest average asking rent at $0.70 per square foot per month, up slightly from $0.69 per square foot per month over the prior quarter.
- The Peninsula region's average asking rent was 41.2 percent higher than that in the South Bay region.

Historical R&D market trends in overall vacancy rates and direct average asking rents are shown in the following graph:



Source: Cushman & Wakefield Research; compiled by C&W Valuation & Advisory

Leasing Activity

In 2010, as the economy slowly began to stabilize, leasing activity in the greater Silicon Valley increased consecutively through each quarter, ending the year with nearly 8.4 million square feet leased. In 2011, leasing activity continued to be strong, totaling 10.8 million square feet by year-end, representing a 29.3 percent increase over the prior year. In the first quarter of 2012, high-tech space represented 61.7 percent of overall industrial leasing activity with more than 2.1 million square feet in the Silicon Valley submarkets. Cushman & Wakefield reported in the Silicon Valley Industrial Snapshot for first quarter 2012 that Apple continued to be a formidable competitor for companies considering a relocation or expansion in Cupertino, as several landlords reached out to Apple before marketing their buildings. Continued strong tech demand is expected to result in healthy leasing activity 2012.

Silicon Valley R&D leasing activity through first quarter 2012 is summarized as follows:

- The South Bay submarkets led Silicon Valley with the majority (81.0 percent) of the leasing in first quarter. The most leasing activity took place in San Jose with roughly 589,000 square feet, followed by the Sunnyvale submarket with 526,000 square feet.
- In first quarter, South County led the Peninsula with 484,000 square feet leased; total leasing in the Peninsula was just over 508,000 square feet. The high-tech industry is expected to drive growth in this market and remain healthy throughout year-end 2012.

The significant lease transactions signed during first quarter 2012 are listed below:

Signficant High Technology Market Lease Transactions
Silicon Valley
2012Q1

Building Address	Submarket	Tenant	Size (sf)
7333 Gatew ay Boulevard	Palo Alto, SRP	Barnes & Nobel, Inc.	208,000
1601 South California Avenue	Palo Alto, SRP	Theranos	139,000
3061 Zanker Road	San Jose, No. First St.	Advantest America, Inc.	116,000
10100-10200 North Tantau Avenue	Cupertino	Apple, Inc.	100,000
1001-1015 East Meadow Circle	Palo Alto, Non-SRP	Theranos	20,000

Source: Cushman & Wakefield Research; compiled by C&W Valuation & Advisory

Overall Net Absorption

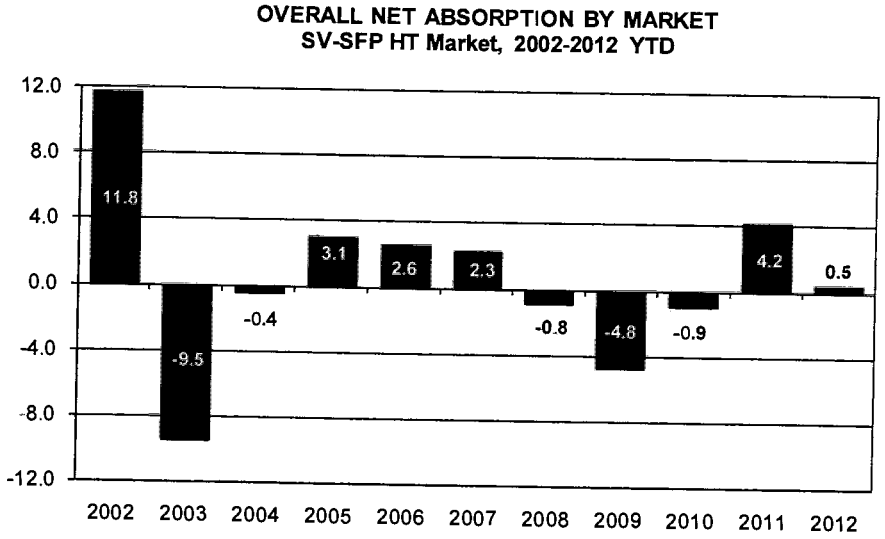
Through 2011, positive absorption grew significantly, exceeding levels not seen in a decade, with 4.2 million square feet absorbed by year-end. In first quarter 2012, positive absorption of 471,000 square feet was recorded, a 425.0 percent increase over 90,000 square feet of positive absorption in first quarter 2011. A market participant noted that demand from tech users continues to sustain and fuel occupancy growth in the region. The continued growth of Google, Apple, and a handful of others, have been the primary drivers behind R&D recovery in the Valley. This is critical to note because unlike the first tech boom, which was driven largely by venture capital start-ups with unproven business plans and money to burn, this tech boom, by contrast, is being driven by real businesses with real products and real profits.

Below are details of first quarter 2012 overall net absorption in the Greater Silicon Valley industrial market:

- Both South Bay and the Peninsula recorded positive absorption of 464,000 square feet and 6,800 square feet, respectively.
- In Silicon Valley, Milpitas and San Jose recorded the most absorption in first quarter at roughly 470,000 and 424,000 square feet. South County submarkets lead the way in the Peninsula with more than 18,000 square feet of absorption.

- The most negative absorption occurred in the Santa Clara submarket with 157,000 square feet returned to the market in first quarter.

The graph below summarizes overall net absorption from 2002 through first quarter 2012:



Source: Cushman & Wakefield Research; compiled by C&W Valuation & Advisory

Construction

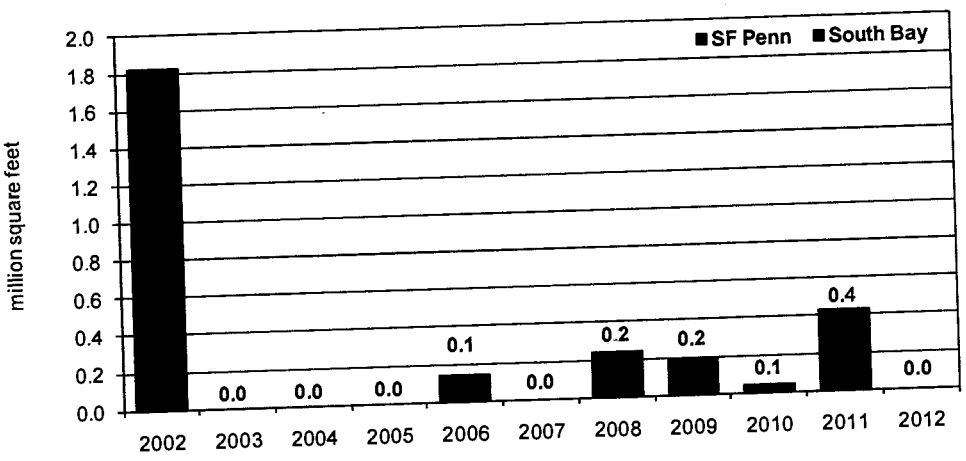
Since 2001, following the dot.com bust, the region's high-tech construction slowed significantly to 8.2 million square feet completed through 2011, when compared to the 41.5 million square feet that was built during the prior decade. The lack of new construction has helped keep inventory in check, and aid the market gain strength as the economy rebounds. Development will likely be moderate in the near-term.

The following points summarize construction in the Silicon Valley R&D market:

- Two speculative data centers totaling 280,000 square feet (one building is 100,000 square foot, and another building is 180,000 square feet) were completed in third quarter 2011 in Santa Clara. An additional 180,000 square foot speculative data center in Santa Clara (Reed Street Data Center, Phase II) remains under construction in first quarter 2012, with completion scheduled for fourth quarter 2012.
- In Sunnyvale, a 156,000 square foot building was also completed in third quarter 2011; its major tenant is Intuitive Surgical.
- Along the Peninsula, construction started in fourth quarter 2011 as Gilead Sciences, Inc. broke ground on a 192,000 square foot four-story biotech building. It is the first major expansion by Gilead on its longtime Lakeside Drive campus in Foster City. The project is scheduled for completion in third quarter 2013.
- In first quarter 2011, Cushman & Wakefield's research reported that the city of Santa Clara approved CoreSite Realty's plan to build three high-technology data centers totaling 360,000 square feet at its existing site in Santa Clara; however, no start date has been set.

The following graph summarizes construction completions from 2002 to first quarter 2012 in the Silicon Valley R&D Market:

CONSTRUCTION COMPLETIONS BY MARKET
SV-SFP HT Market, 2002-2012



Source: Cushman & Wakefield Research; compiled by C&W Valuation & Advisory

DEMAND ANALYSIS

Cushman & Wakefield's industrial market forecasts are derived using a regression model developed by our Research staff. The model is based on trends in historical occupancy and rental rate movements as well as factors such as employment growth, new construction and absorption tendencies. Please note that fourth quarter 2011 data is used in this analysis, as it was the most current data available at the time of publication.

Mathematical assumptions underlying our approach are as follows:

- Occupancy is a function of employment. For the historical portion of this analysis we use total nonfarm employment as defined by the U.S. Bureau of Labor Statistics (BLS), and utilizing North American Industry Classification System (NAICS) coding. For the forecast portion we use Moody's Economy.com's figures.
- Vacancy is a function of demand, available space and new supply (including both under construction and proposed projects).
- Rent is a function of overall and direct vacancy, taking into account both inflationary and deflationary tendencies, as well as current, historical, and anticipated trends.
- This mathematical approach limits subjectivity and the forecasts are statistically estimated to have an approximate 90.0 percent accuracy level. Please note that 11Q3 data is the most current available for this demand analysis.

Highlights of the high technology demand analysis are as follows:

- Economic data suggests that employment will grow over the next five years, peaking at 3.4 percent in 2015 in Silicon Valley, and peaking at 3.6 percent in 2015 in the Peninsula.

- Inventory will grow over the next five years with new construction totaling 2.7 million square feet in the Silicon Valley market by 2015, and 1.5 million square feet of new construction in the Peninsula beginning in 2013.
- Demand in Silicon Valley and the Peninsula is expected to be more moderate in 2012 versus 2011, and is forecast to pick up in 2014 and 2015. In Silicon Valley, the market will transition to an undersupply situation in 2012, and be significantly undersupplied by 2015. In the Peninsula, the market is expected to become increasingly undersupplied over the five-year period.
- Vacancy is expected to decline in the Silicon Valley, dropping from about 14.0 percent to 10.0 percent by 2015. Vacancy is also expected to decline in the Peninsula, dropping from about 6.0 percent to 5.0 percent.
- Looking at the greater Silicon Valley high technology industrial market as a whole, vacancy will continue to decline throughout the forecast period, and absorption will remain positive, but fluctuate modestly through 2015. The high-tech market is forecast to remain undersupplied in Silicon Valley and in the Peninsula through 2015.

The following tables and subsequent graphs outline details of the demand analysis for the Silicon Valley and San Francisco Peninsula's high-technology industrial markets:

Industrial Market Demand Analysis Silicon Valley 11Q4					
Item	2011	2012	2013	2014	2015
EMPLOYMENT					
Total Nonfarm Employment	874,965	892,116	905,935	935,189	966,616
Employment Growth Rate	2.6%	2.0%	1.5%	3.2%	3.4%
Net New Jobs	21,973	17,151	13,818	29,254	31,427
SUPPLY					
Year-end Inventory	243,696,851	243,982,851	244,267,851	245,438,585	247,341,061
New Construction High Technology	436,000	286,000	70,000	756,984	1,135,476
New Construction Total Industrial Market	1,045,000	286,000	285,000	1,170,734	1,902,476
High Technology					
Commercial Industrial Occupancy	132,675,123	134,366,680	135,553,074	137,451,030	139,889,032
Occupancy Rate	86.3%	87.3%	88.0%	88.8%	89.7%
Vacant/Available SF	20,987,757	19,582,200	18,465,806	17,324,834	16,022,308
Overall Vacancy Rate	13.7%	12.7%	12.0%	11.2%	10.3%
Overall Net Absorption	3,236,620	1,691,557	1,186,394	1,897,956	2,438,002
SF Over (Under) Supply	(253,973)	(1,699,066)	(2,825,137)	(4,070,751)	(5,530,240)
TOTAL MARKET					
Commercial Industrial Occupancy	217,330,698	219,332,390	220,908,236	223,473,601	226,915,559
Occupancy Rate	89.2%	89.9%	90.4%	91.1%	91.7%
Vacant/Available SF	26,366,153	24,650,461	23,359,615	21,964,984	20,425,502
Overall Vacancy Rate	10.8%	10.1%	9.6%	8.9%	8.3%
Overall Net Absorption	4,579,938	2,001,692	1,575,846	2,565,366	3,441,957
SF Over (Under) Supply	114,557	(1,640,670)	(2,952,868)	(4,475,546)	(6,214,926)

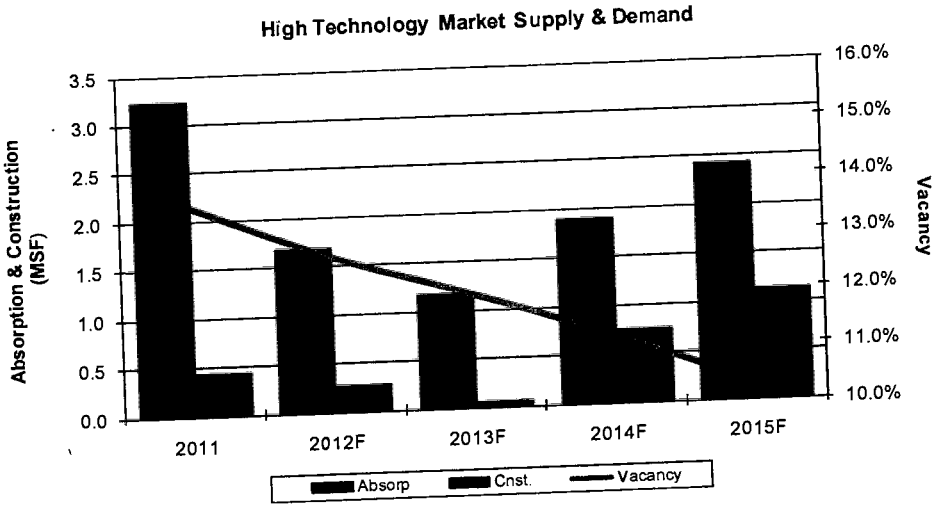
Source: Data Courtesy of Moody's Economy.com, Cushman & Wakefield Research

Note: Over (Under) Supply is based on historical stabilized occupancy trends within the market.

Absorption is based on a proprietary regression model using historical occupancy, rental rate movements, employment growth, new construction and absorption tendencies.

1.

2.



Source: Cushman & Wakefield Research

3.

4.

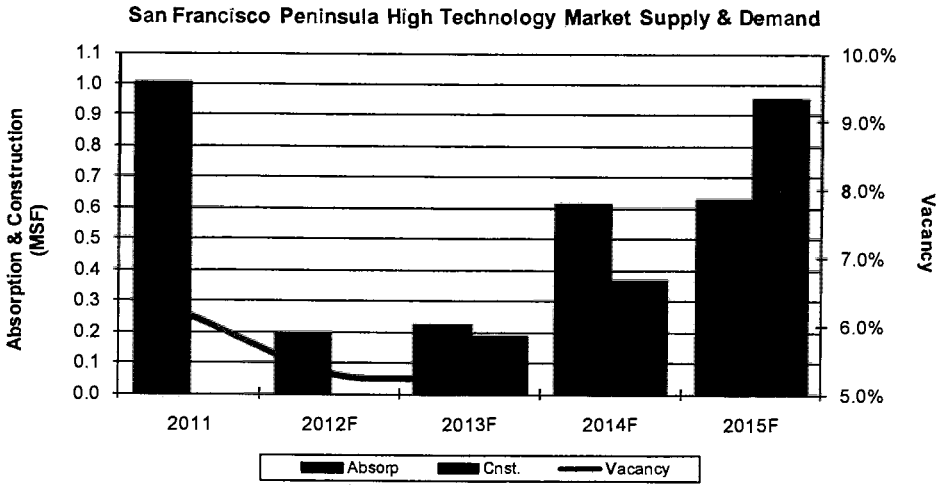
Industrial Market Demand Analysis San Francisco Peninsula 11Q4					
Item	2011	2012	2013	2014	2015
EMPLOYMENT					
Total Nonfarm Employment	943,010	962,089	978,643	1,013,109	1,049,751
Employment Growth Rate	0.8%	2.0%	1.7%	3.5%	3.6%
Net New Jobs	7,818	19,079	16,554	34,465	36,642
SUPPLY					
Year-end Inventory	64,944,113	64,944,113	65,248,867	65,785,758	66,998,158
New Construction High Technology	0	0	192,054	367,841	957,000
New Construction Total Industrial Market	26,840	0	304,754	536,891	1,212,400
High Technology					
Commercial Industrial Occupancy	21,552,043	21,747,568	21,971,811	22,590,950	23,225,640
Occupancy Rate	93.8%	94.7%	94.9%	96.0%	94.9%
Vacant/Available SF	1,412,664	1,217,139	1,184,950	933,652	1,255,962
Overall Vacancy Rate	6.2%	5.3%	5.1%	4.0%	5.1%
Overall Net Absorption	1,007,629	195,525	224,243	619,139	634,690
SF Over (Under) Supply	(1,020,784)	(1,216,309)	(1,268,849)	(1,559,125)	(1,338,223)
TOTAL MARKET					
Commercial Industrial Occupancy	60,835,586	61,202,235	61,757,014	62,767,866	63,747,560
Occupancy Rate	93.7%	94.2%	94.6%	95.4%	95.1%
Vacant/Available SF	4,108,527	3,741,878	3,491,853	3,017,892	3,250,598
Overall Vacancy Rate	6.3%	5.8%	5.4%	4.6%	4.9%
Overall Net Absorption	1,414,497	366,649	554,779	1,010,852	979,694
SF Over (Under) Supply	(755,634)	(1,122,283)	(1,399,135)	(1,921,787)	(1,805,375)

Source: Data Courtesy of Moody's Economy.com, Cushman & Wakefield Research

Note: Over (Under) Supply is based on historical stabilized occupancy trends within the market.

Absorption is based on a proprietary regression model using historical occupancy, rental rate movements, employment growth, new construction and absorption tendencies.

5.



Source: Cushman & Wakefield Research

6.

R&D Market Outlook

In 2011 and thus far in 2012, Silicon Valley's technology sector has been the key driver of the region's economy, as strong growth in internet and social media firms, and development of smart phone applications has fueled an increase of venture capital investments. The biotech sector is also a key component of the high-tech sector in the area and has been expanding as well, however, there have been lower levels of funding as venture capital investments were focused on software, media and entertainment firms. Increased employment in the tech sector will fuel tenant space requirements through 2012.

Additional details follow:

- The majority of first quarter leasing activity has taken place in the South Bay, totaling roughly 2.1 million square feet in the quarter. For the foreseeable future, the South Bay is expected to continue to dominate Silicon Valley's R&D leasing market activity. As large tech firms take down available space in the preferred markets, increased competition for space and higher asking rents will push demand to additional submarkets with available space.
- Investor demand is also expected to continue to increase. With more tenants in the market looking for space, both occupancies and rental rates are expected to improve in the near term. As noted in the PricewaterhouseCoopers' Investor Survey at year-end 2011 regarding the national R&D market, "Buyers looking for properties to acquire in this market remain focused on locations where technology companies either have a large presence or are expanding." Based on this criteria, Silicon Valley and the San Francisco Peninsula remain some of the most desirable metros for investors.

Property Analysis

SITE DESCRIPTION

APN	Ownership	SF	Acres	Comments
005-340-050 (por)	Oyster Point Properties	904,126	20.75588	SWC Corner Bayshore Freeway & Beatty Road
005-152-240	Tuntex USA Inc.	81,475	1.870409	East Side of Tunnel Ave
005-152-250	Tuntex USA Inc.	124,756	2.864004	East Side of Tunnel Ave
005-152-060	Tuntex USA Inc.	47,175	1.082989	Land Locked behind 260
005-152-260	Tuntex USA Inc.	80,760	1.853994	East Side of Tunnel Ave
005-152-270	Van Arsdale Harris Lumber	152,329	3.496993	East Side of Tunnel Ave
005-152-300	Papenhause	11,674	0.267998	P&F SEC Beatty & Tunnel
005-152-360	Papenhause	11,674	0.267998	P&F SEC Beatty & Tunnel
		1,413,969	32.46026	

Location: SEC of Beatty Road and Tunnel Avenue

Brisbane, San Mateo County, California 94005

The subject property is located on the south side of Beatty Road and the east side of Tunnel Avenue.

Shape: Irregularly shaped

Topography: Level at street grade

Land Area: 32.46 acres / 1,413,969 square feet

Frontage: The subject property has average frontage. along Tunnel Avenue, Beatty Road, and U.S. Highway 101.

Access: The subject property has average access.

Visibility: The subject property has average visibility.

Soil Conditions: We were not given a soil report to review. However, we assume that the soil's load-bearing capacity is sufficient to support existing and/or proposed structure(s). We did not observe any evidence to the contrary during our physical inspection of the property. Drainage appears to be adequate.

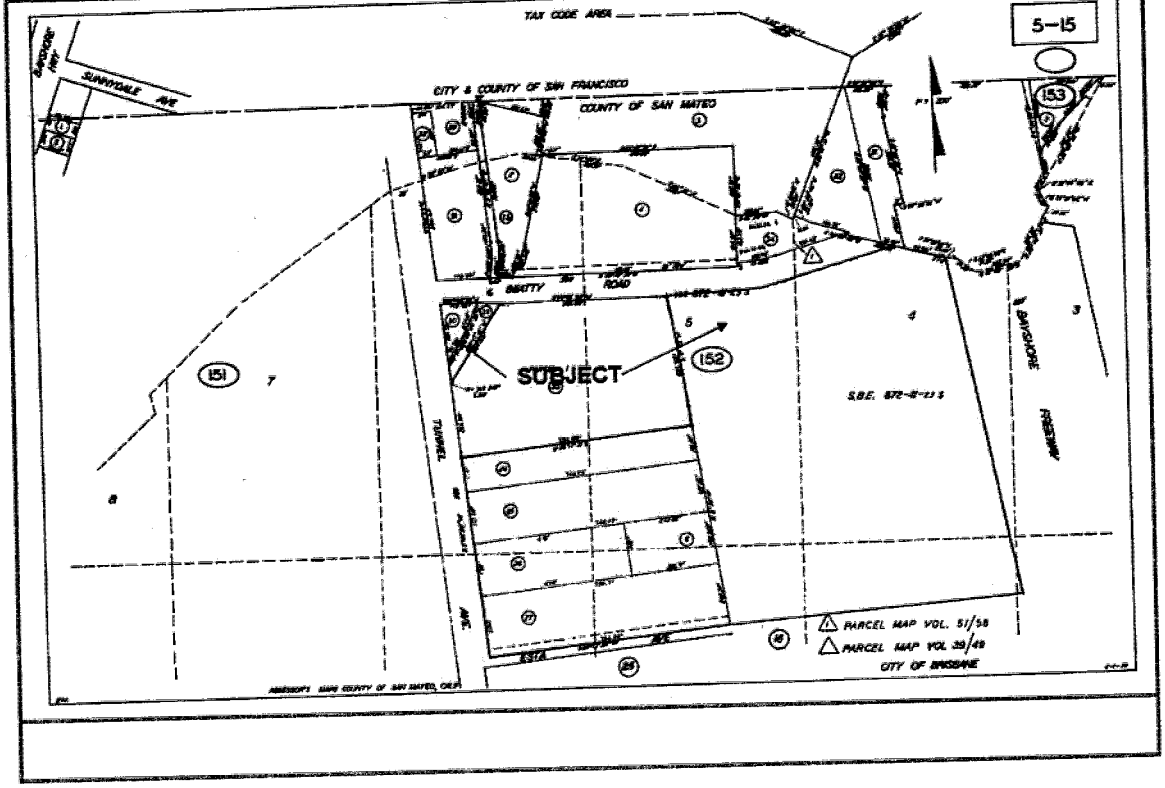
Utilities: Utility providers for the subject property are as follows:

Water	City of Brisbane
Sewer	City of Brisbane
Electricity	PG&E
Gas	PG&E
Telephone	AT&T

Site Improvements: None

Land Use Restrictions:	We were not given a title report to review. We do not know of any easements, encroachments, or restrictions that would adversely affect the site's use. However, we recommend a title search to determine whether any adverse conditions exist.
Flood Zone Description:	The subject property is located in flood zone C (Areas outside of a 100-year flood hazard) as indicated by FEMA Map 0603140001B, dated March 29, 1983.
Wetlands:	We were not given a wetlands survey to review. If subsequent engineering data reveal the presence of regulated wetlands, it could materially affect property value. We recommend a wetlands survey by a professional engineer with expertise in this field.
Seismic Hazard:	The site is not located in a Special Study Zone as established by California's Alquist-Priolo Geological Hazards Act.
Hazardous Substances:	We observed no evidence of toxic or hazardous substances during our inspection of the site. However, we are not trained to perform technical environmental inspections and recommend the hiring of a professional engineer with expertise in this field.
Overall Site Utility:	The subject site is functional for its current use.
Location Rating:	Average

SURVEY OR TAX MAP OR SITE PLAN



REAL PROPERTY TAXES AND ASSESSMENTS

CURRENT PROPERTY TAXES

The subject property is located in the taxing jurisdiction of San Mateo County. According to the local tax collector's office, taxes are current.

The assessment and taxes for the property are presented below:

CALIFORNIA ASSESSMENT AND TAX ANALYSIS

Assessor's Parcel Number:	Various
Assessing Authority:	San Mateo County
Current Tax Year:	2011/2012
Are taxes current?	Taxes are current
Is there a grievance underway?	Not to our knowledge
The subject's assessment and taxes are:	Below market level

ASSESSMENT INFORMATION

	2011/2012
Assessed Value	
Land:	$26,064,671
Improvements:	505,277
Total:	$26,569,948

TAX LIABILITY

Taxable Assessment	$26,569,948
Tax Rate	0.01062
Sub-Total	$282,199
Special Assessments	$5,167
Total Property Taxes	$287,367

Compiled by Cushman & Wakefield Western, Inc.

Total taxes for the property are $287,367. In California, assessed values are based on the assessed value as of 1975, or a later date, such as when a property was last sold or substantial renovation/construction occurred. This amount is then generally increased at 2.0 percent per year. Thus, assessed value typically only relates to market value as of a particular sale date. As a result, comparison of assessed value with other properties in the market is not material to this analysis. Therefore, no tax comparables are included herein.

This analysis assumes taxes are current to the date of value. The tax amount used in the analysis assumes taxes based on a market sale as of the appraisal date (assessed at the estimated market value of the property).

ZONING

GENERAL INFORMATION

The property is zoned HC-Beatty Heavy Commercial District by the City of Brisbane. A summary of the subject's zoning is provided below:

ZONING	
Municipality Governing Zoning:	City of Brisbane
Current Zoning:	HC-Beatty Heavy Commercial District
Zoning Change Applied For:	No
Zoning Variance Applied For:	No
Permitted Uses:	All uses require a permit. Permitted uses within this district include heavy equipment repair, meeting halls, offices, organics reload operations, outdoor storage of vehicles and equipment, outdoor storage of materials in association with bulk sales, and plastic pipe sales.
Prohibited Uses:	Prohibited uses within this district include residential and community facility uses

ZONING REQUIREMENTS	CODE	SUBJECT COMPLIANCE
Minimum Lot Area:	10,000 square feet	Complying
Maximum Building Height:	50 feet	Complying
Maximum Floor Area Ratio (FAR):	None Stated	Complying
Maximum Lot Coverage (% of lot area):	60.0%	Complying
Minimum Yard Setbacks		
Front (feet):	25	Complying
Rear (feet):	10	Complying
Side (feet):	10	Complying
Required On-Site Parking:		
Spaces per 1,000 square feet:	1.0 per 1,000	Complying

Compiled by Cushman & Wakefield Western, Inc.

We analyzed the zoning requirements in relation to the subject property, and considered the compliance of the existing or proposed use. We are not experts in the interpretation of complex zoning ordinances but based on our review of public information, the subject property appears to be a complying use.

Detailed zoning studies are typically performed by a zoning or land use expert, including attorneys, land use planners, or architects. The depth of our study correlates directly with the scope of this assignment, and it considers all pertinent issues that have been discovered through our due diligence.

We note that this appraisal is not intended to be a detailed determination of compliance, as that determination is beyond the scope of this real estate appraisal assignment.

Valuation

HIGHEST AND BEST USE

HIGHEST AND BEST USE DEFINITION

The Dictionary of Real Estate Appraisal, Fifth Edition (2010), a publication of the Appraisal Institute, defines the highest and best use as:

> The most probable use of a property which is physically possible, appropriately justified, legally permissible, financially feasible, and which results in the highest value of the property being valued.

To determine the highest and best use we typically evaluate the subject site under two scenarios: as vacant land and as presently improved. In both cases, the property's highest and best use must meet the four criteria described above. Since this property is land only, evaluating it as presently improved is not applicable.

HIGHEST AND BEST USE OF PROPERTY AS VACANT

We considered the legal issues related to zoning and legal restrictions. We also analyzed the physical characteristics of the site to determine what legal uses would be possible, and considered the financial feasibility of these uses to determine the use that is maximally productive. Considering the subject site's physical characteristics and location, as well as the state of the local market, it is our opinion that the Highest and Best Use of the subject site as vacant is an industrial/office campus built to its maximum feasible building area.

HIGHEST AND BEST USE OF PROPERTY AS IMPROVED

The Dictionary of Real Estate Appraisal defines highest and best use of the property as improved as:

> The use that should be made of a property as it exists. An existing improvement should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one.

In analyzing the Highest and Best Use of a property as improved, it is recognized that the improvements should continue to be used until it is financially advantageous to alter physical elements of the structure or to demolish it and build a new one.

It is our opinion that the small older structures on the site do not add value to the site. It is our opinion that the Highest and Best Use of the subject property as improved is demolish the existing structures and develop an industrial/office campus built to its maximum feasible building area..

VALUATION PROCESS

METHODOLOGY

There are three generally accepted approaches to developing an opinion of value: Cost, Sales Comparison and Income Capitalization. We considered each in this appraisal to develop an opinion of the market value of the subject property. In appraisal practice, an approach to value is included or eliminated based on its applicability to the property type being valued and the quality of information available. The reliability of each approach depends on the availability and comparability of market data as well as the motivation and thinking of purchasers.

The valuation process is concluded by analyzing each approach to value used in the appraisal. When more than one approach is used, each approach is judged based on its applicability, reliability, and the quantity and quality of its data. A final value opinion is chosen that either corresponds to one of the approaches to value, or is a correlation of all the approaches used in the appraisal.

We considered each approach in developing our opinion of the market value of the subject property. We discuss each approach below and conclude with a summary of their applicability to the subject property.

SUMMARY

This appraisal employs only the Sales Comparison Approach. Based on our analysis and knowledge of the subject property type and relevant investor profiles, it is our opinion that this approach would be considered necessary and applicable for market participants. Typical purchasers do not generally rely on the Cost or Income Capitalization Approaches when purchasing a property such as the subject of this report. Therefore, we have not employed the Cost Approach or the Income Capitalization Approach to develop an opinion of market value. The absence of these approaches does not diminish the reliability of the analysis.

LAND VALUATION

We used the Sales Comparison Approach to develop an opinion of land value. We examined current offerings and analyzed prices buyers have recently paid for comparable sites. If the comparable was superior to the subject, a downward adjustment was made to the comparable sale. If inferior, an upward adjustment was made.

The most widely used and market-oriented units of comparison for properties with characteristics similar to those of the subject is the price per square foot of land. All transactions used in this analysis are based on the most appropriate method used in the local market.

The major elements of comparison used to value the subject site include the property rights conveyed, the financial terms incorporated into the transaction, the conditions or motivations surrounding the sale, changes in market conditions since the sale, the location of the real estate, its utility and the physical characteristics of the property.

The comparables and our analysis are presented on the following pages. Comparable land sale data sheets are presented in the Addenda of this report.

SUMMARY OF LAND SALES

No.	Location	Assessors Parcel Number	Size (sf)	Size (Acres)	Potential Building Area	Proposed Use	Zoning	Site Utility	Public Utilities	Grantor	Grantee	Property Rights Conveyed	Sale Date	Sale Price	$/SF Land
	PROPERTY INFORMATION									TRANSACTION INFORMATION					
S	Subject Property	Various	1,413,969	32.46			HC-Beatty Heavy Commercial District	Average	All available						
1	8350 Pardee Drive, Oakland, CA	042-4415-003-14	811,523	18.63	370,000	Industrial	CIX-2	Good	All Available	CFS 2907 Oakland Pardee, LLC	Tarpon SPE I, LP	Fee Simple	2/12	$8,300,000	$10.23
2	44758-44788 Old Warm Springs Boulevard, Fremont, CA	519-1310-003-04,004-01 and 005-04	353,097	8.11	148,301	Office	GI	Good	All Available	Balch Enterprises Inc.	Serra Corporation (Bitney Springs LLC)	Fee Simple	12/11	$8,121,239	$23.00
3	Southwest corner of Cushing Parkway and Fremont Boulevard, Fremont, CA	Portion of 519-0850-122	675,180	15.50	200,000	Industrial	I-R	Good	All Available	Carl E and Mary Ann Berg	Delta Electronics	Fee Simple	10/11	$12,558,500	$18.60
4	151 Commonwealth Drive, Menlo Park, CA	055-243-240	527,076	12.10	250,000	Office	M2	Good	All Available	Diageo Americas Supply, Inc.	1031 EP4 Inc. (Sobrato Organization)	Fee Simple	8/11	$20,000,000	$37.95
5	3333 Scott Boulevard, Santa Clara, CA	216-31-078 through 081	1,318,165	30.21	735,000	Office	ML	Good	All Available	Applied Materials	Menlo Equities LLC	Fee Simple	7/11	$60,514,000	$45.98
6	1020-1090 Kifer Road, Sunnyvale, CA	205-50-001 and 036	771,099	17.70	289,885	Office	M-3	Good	All Available	Roland Lampert/Sunnyvale Industrial	Intuitive Surgical, Inc.	Fee Simple	5/11	$31,770,000	$41.20
7	101 Oyster Point Boulevard, South San Francisco, CA	015-010-740,-750,-760,-770,-780,-790	870,764	19.99	800,000	Office	WBC-SPD	Good	All Available	Genentech Oyster Point LLC	HCP Oyster Point III LLC	Fee Simple	4/11	$65,000,000	$74.65
	STATISTICS												4/11	$8,121,239	$10.23
	Low		353,097	8.11	148,301								2/12	$65,000,000	$74.85
	High		1,316,165	30.21	800,000								8/11	$29,466,248	$35.94
	Average		780,701	17.46	396,169										

Compiled by Cushman & Wakefield Western, Inc.

LAND SALE ADJUSTMENT GRID

		Economic Adjustments (Cumulative)					Property Characteristic Adjustments (Additive)					
No.	Price PSF Land & Date	Property Rights Conveyed	Conditions of Sale	Financing	Market[1] Conditions	PSF Land Subtotal	Location	Size	Public Utilities	Utility[2]	Other	Adj. Price PSF Land
1	**$10.23**	Fee Simple	Arm's-Length	None	Inferior	**$10.49**	Inferior	Similar	Similar	Similar	Similar	**$13.12**
	2/12	0.0%	0.0%	0.0%	2.6%	2.6%	25.0%	0.0%	0.0%	0.0%	0.0%	25.0%
2	**$23.00**	Fee Simple	Arm's-Length	None	Inferior	**$23.81**	Similar	Similar	Similar	Similar	Similar	**$23.81**
	12/11	0.0%	0.0%	0.0%	3.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3	**$18.60**	Fee Simple	Arm's-Length	None	Inferior	**$19.40**	Similar	Similar	Similar	Similar	Similar	**$19.40**
	10/11	0.0%	0.0%	0.0%	4.3%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4	**$37.95**	Fee Simple	Arm's-Length	None	Inferior	**$39.92**	Superior	Similar	Similar	Similar	Similar	**$29.94**
	8/11	0.0%	0.0%	0.0%	5.2%	5.2%	-25.0%	0.0%	0.0%	0.0%	0.0%	-25.0%
5	**$45.98**	Fee Simple	Arm's-Length	None	Inferior	**$48.55**	Superior	Similar	Similar	Similar	Similar	**$41.27**
	7/11	0.0%	0.0%	0.0%	5.6%	5.6%	-15.0%	0.0%	0.0%	0.0%	0.0%	-15.0%
6	**$41.20**	Fee Simple	Arm's-Length	None	Inferior	**$43.88**	Superior	Similar	Similar	Similar	Superior	**$35.10**
	5/11	0.0%	0.0%	0.0%	6.5%	6.5%	-15.0%	0.0%	0.0%	0.0%	-5.0%	-20.0%
7	**$74.65**	Fee Simple	Assemblage	None	Inferior	**$71.82**	Superior	Similar	Similar	Superior	Similar	**$35.91**
	4/11	0.0%	-10.0%	0.0%	6.9%	-3.8%	-25.0%	0.0%	0.0%	-25.0%	0.0%	-50.0%
	STATISTICS											
	$10.23	**- Low**									**Low -**	**$13.12**
	$74.65	**- High**									**High -**	**$41.27**
	$35.94	**- Average**									**Average -**	**$28.36**

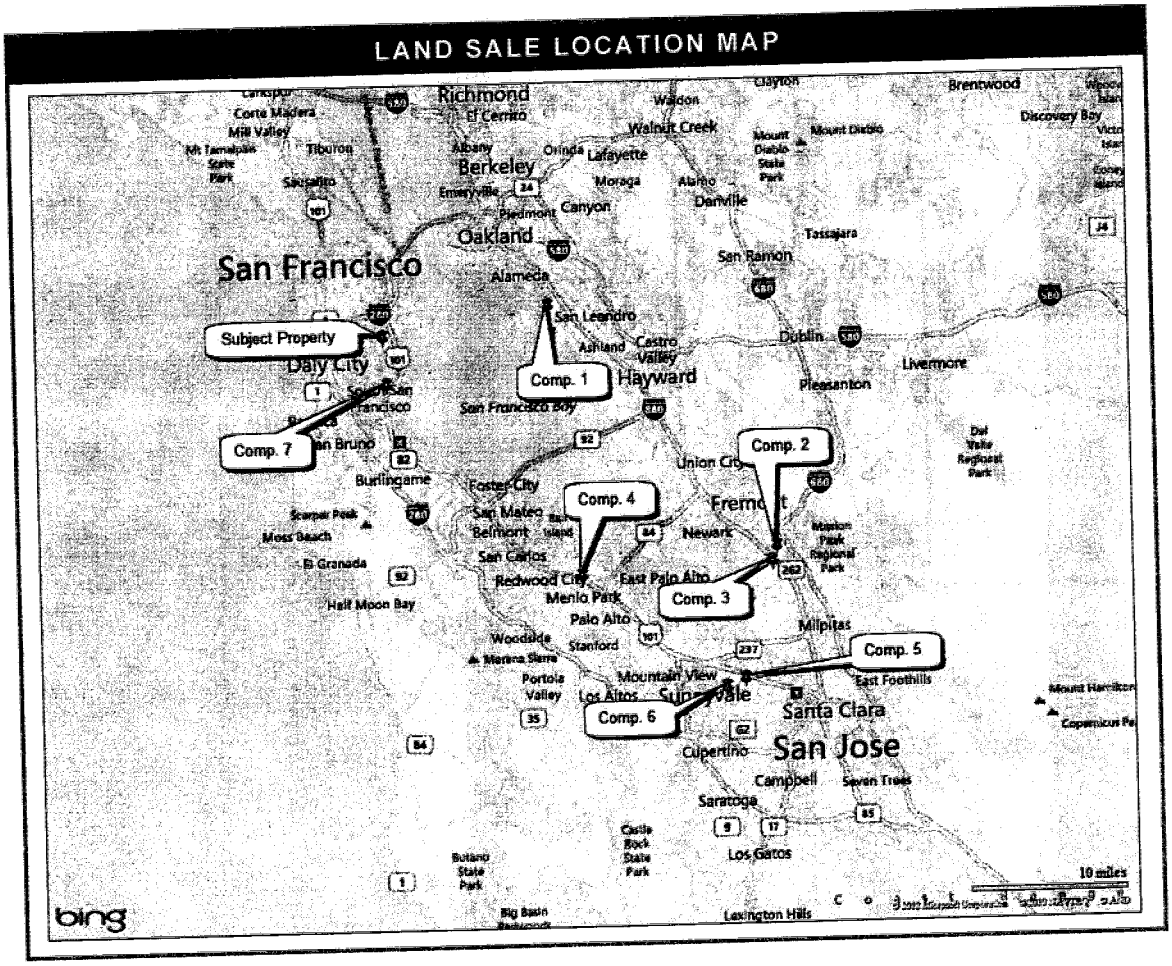
Compiled by Cushman & Wakefield Western, Inc.

(1) Market Conditions Adjustment Footnote

Compound annual change in market conditions: 5.00%
Date of Value (for adjustment calculations): 8/14/12

(2) Utility Footnote

Utility includes shape, access, frontage and visibility.



DISCUSSION OF COMPARABLE SALES

Comparable Sale No. 1

This comparable property is located at 8350 Pardee Drive, Oakland, CA, within the CIX-2 zoning district. The parcel contains 811,523 square feet, or 18.63 acres. The maximum building area that could be developed as-of-right is 370,000 square feet. CFS 2907 Oakland Pardee, LLC sold this property to Tarpon SPE I, LP in February 2012 for a total price of $8,300,000, or $10.23 per square foot of land area. This property has good utility, and all available public utilities. Its intended use at the time of sale was an industrial use. The comparable was excess parking for the seller. The site was a paved and fenced lot with yard lighting. The zoning allows for industrial, warehousing, and office uses. The buyer plans to construct a 370,000 square foot warehouse. It is proximate to both FedEx and UPS regional hubs. A significant upward adjustment is needed for the inferior location of this property.

After all adjustments this sale indicated a value of $13.12 per square foot.

Comparable Sale No. 2

Comparable No. 2 is located at 44758-44788 Old Warm Springs Boulevard, Fremont, CA, in the GI zoning district. It contains 353,097 square feet, or 8.11 acres, and its maximum FAR by current zoning is 0.42 times the lot area. The maximum building area that could be developed on this lot is 148,301 square feet. Balch Enterprises Inc. sold this property to Serra Corporation (Bitney Springs LLC) in December 2011 for a price of $8,121,239, or $23.00 per square foot of land area. Public utilities on this site are all available and its utility is good. The intended use of this site at the time of sale was office. The property is located on the southeast corner of Old Warm Springs Boulevard and Prune Avenue. The site is along the B.A.R.T. rail line and is near a planned B.A.R.T station. It was purchased vacant by an owner user who intends to build a R&D campus on the site. reportedly, the site can legally accommodate a 150,000-square foot office/R&D development.

After all adjustments this sale indicated a value of $23.81 per square foot.

Comparable Sale No. 3

Located at the Southwest corner of Cushing Parkway and Fremont Boulevard, Fremont, CA within the I-R zoning district, this property was sold from Carl E and Mary Ann Berg to Delta Electronics in October 2011 for $12,558,500, or $18.60 per square foot of land area. At the time of sale, this site was intended for an industrial use. It contains 675,180 square feet, or 15.50 acres and has a maximum building area of 200,000 square feet. The site has good utility, and public utilities are all available. The property is located about 400 feet west of Interstate 880. This was an "off-market" transaction. The buyer, who owns and occupies an R&D facility just east of the site at 4405 Cushing Parkway, purchased the property for the development of a 200,000-square foot, office/R&D development. The land area presented is the net developable land area.

After all adjustments this sale indicated a value of $19.40 per square foot.

Comparable Sale No. 4

This comparable property is located at 151 Commonwealth Drive, Menlo Park, CA within the M2 zoning district, and it encompasses 527,076 square feet, or 12.10 acres. Its maximum FAR is 0.47 times the lot area. The maximum building area that could be developed is 250,000 square feet. At the time of sale the intended use of this site was office. Diageo Americas Supply, Inc. sold the property to 1031 EP4 Inc. (Sobrato Organization) in August 2011 for a price of $20,000,000, or $37.95 per square foot of land area. This site has good utility, and public utilities are all available. The site is located along the east side of U.S. Highway 101 with good freeway visibility. At the time of sale, it was improved with a vacant, 182,961-square foot, single-story, manufacturing/warehouse building formerly used for tequila distilling and distribution. The property is surrounded by suburban, office developments. The buyer purchased the property for eventual redevelopment to an office facility to contain up to 250,000 square feet of gross building area. The buyer will incur undisclosed demolition costs. This is a superior location nearby the new Facebook Campus.

After all adjustments this sale indicated a value of $29.94 per square foot.

Comparable Sale No. 5

This lot is located at 3333 Scott Boulevard, Santa Clara, CA in the ML zoning district. Its size is 1,316,165 square feet, or 30.21 acres and its maximum zoning FAR is 0.56 times the lot area. The maximum permitted building area that could be developed is 735,000 square feet. Menlo Equities LLC acquired this property from Applied Materials in July 2011 for $60,514,000, or $45.98 per square foot of land area. The utility of this site is good with all available public utilities. The intended use of this site at the time of sale was office. The property is located one block south of U.S. Highway 101, on the northwest corner of Scott Boulevard and Lakeside Drive. The site also has frontage along the south side of Tannery Way. It is being purchased vacant by an investor for the development of 735,000 square feet of speculative, class "A" office space in five, four-story buildings. The sales

price reportedly is $60,514,000. Applied Materials originally had approvals to construct 860,000 square feet of office/R&D and manufacturing space on the site.

After all adjustments this sale indicated a value of $41.27 per square foot.

Comparable Sale No. 6

Comparable No. 6 was a sale from Roland Lampert/Sunnyvale Industrial to Intuitive Surgical, Inc., which occurred in May 2011 for a price of $31,770,000, or $41.20 per square foot of land area. Located at 1020-1090 Kifer Road, Sunnyvale, CA, and in the M-3 zoning district, this parcel contains 771,099 square feet, or 17.70 acres. This lot has a maximum FAR of 0.35 times the lot area with a maximum permitted building area of 269,885 square feet. The site has good utility and public utilities are all available. At the time of this sale, this site had intended office use. The site is located 1/2 block west of Lawrence Expressway. The site was improved with three industrial/R&D buildings collectively containing about 230,000 square feet of gross building area at the time of sale. The buildings were built between 1958 and 1979 and were partially occupied. However, the buyer acquired the site for redevelopment to an office/R&D campus for its own use. The actual sale price was $30,850,000. We estimated the costs to demolish the improvements at $920,000 ($4.00/SF). This sale is adjusted downward to account for the interim value of improvements.

After all adjustments this sale indicated a value of $35.10 per square foot.

Comparable Sale No. 7

This comparable property is located at 101 Oyster Point Boulevard, South San Francisco, CA, in the WBC-SPD zoning district. It encompasses 870,764 square feet, or 19.99 acres. The maximum permitted building area as-of-right is 800,000 square feet. Genentech Oyster Point LLC sold the property to HCP Oyster Point III LLC in April 2011 for a price of $65,000,000, or $74.65 per square foot of land area. The site has good utility and public utilities are all available. At the time of this sale the intended use of this site was office. The property is located adjacent to U.S. Highway 101 and the San Francisco Bay. The buyer owns an adjacent 900,000-square foot biotech campus and intends to construct 800,000 square feet of office/biotech space on the site. Following the sale, the parcel numbers were changed to 015-010-077, 078, 079, 082, 083, and 084. This sale is adjusted downward to account for an assemblage premium, its location adjacent the waterfront and freeway, and approvals to construct a high-density office/biotech campus on the site.

After all adjustments this sale indicated a value of $35.91 per square foot.

CONCLUSION OF SITE VALUE

After a thorough analysis, the comparable land sales reflect adjusted unit values ranging from a low of $13.12 per square foot to $41.27 per square foot, with an average of $28.36 per square foot.

Due to the subject's large size and the current undeveloped nature of the surrounding area, we reconcile to a price slightly below the average adjusted price per square foot. Therefore, we concluded that the indicated land value by the Sales Comparison Approach is:

AS IS VALUE CONCLUSION	Price PSF
Indicated Value	$25.00
SQFT Measure	x 1,413,969
Indicated Value	$35,349,225
Rounded to nearest $1,000,000	$35,000,000
$/SF Basis	$24.75
LAND VALUE CONCLUSION	$35,000,000
$/SF Basis	$24.75

Compiled by Cushman & Wakefield Western, Inc.

RECONCILIATION AND FINAL VALUE OPINION

VALUATION METHODOLOGY REVIEW AND RECONCILIATION

This appraisal employs only the Sales Comparison Approach. Based on our analysis and knowledge of the subject property type and relevant investor profiles, it is our opinion that this approach would be considered necessary and applicable for market participants. Typical purchasers do not generally rely on the Cost or Income Capitalization Approaches when purchasing a property such as the subject of this report. Therefore, we have not employed the Cost Approach or the Income Capitalization Approach to develop an opinion of market value. The absence of these approaches does not diminish the reliability of the analysis.

The approach indicated the following:

FINAL VALUE RECONCILIATION

Date of Value	Market Value As-Is August 14, 2012
Land Valuation	
Land Value	$35,000,000
Land Value PSF	$24.75
Final Value Conclusion	**$35,000,000**

Compiled by Cushman & Wakefield Western, Inc.

We gave most weight to the Sales Comparison Approach because this mirrors the methodology used by purchasers of this property type.

Value Conclusions

Appraisal Premise	Real Property Interest	Date Of Value	Value Conclusion
Market Value As-Is	Fee Simple	8/14/2012	$35,000,000

Compiled by Cushman & Wakefield Western, Inc.

EXPOSURE TIME AND MARKETING TIME

Based on our review of national investor surveys, discussions with market participants and information gathered during the sales verification process, a reasonable exposure time for the subject property at the value concluded within this report would have been approximately twelve (12) months. This assumes an active and professional marketing plan would have been employed by the current owner.

We believe, based on the assumptions employed in our analysis, as well as our selection of investment parameters for the subject, that our value conclusion represents a price achievable within twelve (12) months.

ASSUMPTIONS AND LIMITING CONDITIONS

"Report" means the appraisal or consulting report and conclusions stated therein, to which these Assumptions and Limiting Conditions are annexed.

"Property" means the subject of the Report.

"C&W" means Cushman & Wakefield, Inc. or its subsidiary that issued the Report.

"Appraiser(s)" means the employee(s) of C&W who prepared and signed the Report.

The Report has been made subject to the following assumptions and limiting conditions:

- No opinion is intended to be expressed and no responsibility is assumed for the legal description or for any matters that are legal in nature or require legal expertise or specialized knowledge beyond that of a real estate appraiser. Title to the Property is assumed to be good and marketable and the Property is assumed to be free and clear of all liens unless otherwise stated. No survey of the Property was undertaken.
- The information contained in the Report or upon which the Report is based has been gathered from sources the Appraiser assumes to be reliable and accurate. The owner of the Property may have provided some of such information. Neither the Appraiser nor C&W shall be responsible for the accuracy or completeness of such information, including the correctness of estimates, opinions, dimensions, sketches, exhibits and factual matters. Any authorized user of the Report is obligated to bring to the attention of C&W any inaccuracies or errors that it believes are contained in the Report.
- The opinions are only as of the date stated in the Report. Changes since that date in external and market factors or in the Property itself can significantly affect the conclusions in the Report.
- The Report is to be used in whole and not in part. No part of the Report shall be used in conjunction with any other analyses. Publication of the Report or any portion thereof without the prior written consent of C&W is prohibited. Reference to the Appraisal Institute or to the MAI designation is prohibited. Except as may be otherwise stated in the letter of engagement, the Report may not be used by any person(s) other than the party(ies) to whom it is addressed or for purposes other than that for which it was prepared. No part of the Report shall be conveyed to the public through advertising, or used in any sales, promotion, offering or SEC material without C&W's prior written consent. Any authorized user(s) of this Report who provides a copy to, or permits reliance thereon by, any person or entity not authorized by C&W in writing to use or rely thereon, hereby agrees to indemnify and hold C&W, its affiliates and their respective shareholders, directors, officers and employees, harmless from and against all damages, expenses, claims and costs, including attorneys' fees, incurred in investigating and defending any claim arising from or in any way connected to the use of, or reliance upon, the Report by any such unauthorized person(s) or entity(ies).
- Except as may be otherwise stated in the letter of engagement, the Appraiser shall not be required to give testimony in any court or administrative proceeding relating to the Property or the Appraisal.
- The Report assumes (a) responsible ownership and competent management of the Property; (b) there are no hidden or unapparent conditions of the Property, subsoil or structures that render the Property more or less valuable (no responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them); (c) full compliance with all applicable federal, state and local zoning and environmental regulations and laws, unless noncompliance is stated, defined and considered in the Report; and (d) all required licenses, certificates of occupancy and other governmental consents have been or can be obtained and renewed for any use on which the value opinion contained in the Report is based.
- The physical condition of the improvements considered by the Report is based on visual inspection by the Appraiser or other person identified in the Report. C&W assumes no responsibility for the soundness of structural components or for the condition of mechanical equipment, plumbing or electrical components.
- The forecasted potential gross income referred to in the Report may be based on lease summaries provided by the owner or third parties. The Report assumes no responsibility for the authenticity or completeness of lease information provided by others. C&W recommends that legal advice be obtained regarding the interpretation of lease provisions and the contractual rights of parties.

- The forecasts of income and expenses are not predictions of the future. Rather, they are the Appraiser's best opinions of current market thinking on future income and expenses. The Appraiser and C&W make no warranty or representation that these forecasts will materialize. The real estate market is constantly fluctuating and changing. It is not the Appraiser's task to predict or in any way warrant the conditions of a future real estate market; the Appraiser can only reflect what the investment community, as of the date of the Report, envisages for the future in terms of rental rates, expenses, and supply and demand.
- Unless otherwise stated in the Report, the existence of potentially hazardous or toxic materials that may have been used in the construction or maintenance of the improvements or may be located at or about the Property was not considered in arriving at the opinion of value. These materials (such as formaldehyde foam insulation, asbestos insulation and other potentially hazardous materials) may adversely affect the value of the Property. The Appraisers are not qualified to detect such substances. C&W recommends that an environmental expert be employed to determine the impact of these matters on the opinion of value.
- Unless otherwise stated in the Report, compliance with the requirements of the Americans with Disabilities Act of 1990 (ADA) has not been considered in arriving at the opinion of value. Failure to comply with the requirements of the ADA may adversely affect the value of the Property. C&W recommends that an expert in this field be employed to determine the compliance of the Property with the requirements of the ADA and the impact of these matters on the opinion of value.
- If the Report is submitted to a lender or investor with the prior approval of C&W, such party should consider this Report as only one factor, together with its independent investment considerations and underwriting criteria, in its overall investment decision. Such lender or investor is specifically cautioned to understand all Extraordinary Assumptions and Hypothetical Conditions and the Assumptions and Limiting Conditions incorporated in this Report.
- In the event of a claim against C&W or its affiliates or their respective officers or employees or the Appraisers in connection with or in any way relating to this Report or this engagement, the maximum damages recoverable shall be the amount of the monies actually collected by C&W or its affiliates for this Report and under no circumstances shall any claim for consequential damages be made.
- If the Report is referred to or included in any offering material or prospectus, the Report shall be deemed referred to or included for informational purposes only and C&W, its employees and the Appraiser have no liability to such recipients. C&W disclaims any and all liability to any party other than the party that retained C&W to prepare the Report.
- Any estimate of insurable value, if included within the agreed upon scope of work and presented within this report, is based upon figures derived from a national cost estimating service and is developed consistent with industry practices. However, actual local and regional construction costs may vary significantly from our estimate and individual insurance policies and underwriters have varied specifications, exclusions, and non-insurable items. As such, we strongly recommend that the Client obtain estimates from professionals experienced in establishing insurance coverage for replacing any structure. This analysis should not be relied upon to determine insurance coverage. Furthermore, we make no warranties regarding the accuracy of this estimate.
- By use of this Report each party that uses this Report agrees to be bound by all of the Assumptions and Limiting Conditions, Hypothetical Conditions and Extraordinary Assumptions stated herein.

CERTIFICATION OF APPRAISAL

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- John P. Walsh, MAI did make a personal inspection of the property that is the subject of this report.
- We have performed prior services involving the subject property within the three-year period immediately preceding the acceptance of the assignment.
- The service(s) include(s) a previous appraisal, one time within the prior three-year period immediately preceding the acceptance of the assignment.
- No one provided significant real property appraisal assistance to the persons signing this report. The following individuals provided significant real property assistance in preparing this appraisal: John P. Walsh, MAI
- As of the date of this report, John P. Walsh, MAI has completed the continuing education program of the Appraisal Institute.

DRAFT

John P. Walsh, MAI
Director
CA Certified General Appraiser
License No. AG003248
jp.walsh@cushwake.com
(415) 658-3660 Office Direct
(415) 397-0933 Fax

ADDENDA CONTENTS

ADDENDUM A: GLOSSARY OF TERMS & DEFINITIONS

The following definitions of pertinent terms are taken from *The Dictionary of Real Estate Appraisal*, Fifth Edition (2010), published by the Appraisal Institute, Chicago, IL, as well as other sources.

AS IS MARKET VALUE

The estimate of the market value of real property in its current physical condition, use, and zoning as of the appraisal date. (Proposed Interagency Appraisal and Evaluation Guidelines. OCC-4810-33-P 20%)

BAND OF INVESTMENT

A technique in which the capitalization rates attributable to components of a capital investment are weighted and combined to derive a weighted-average rate attributable to the total investment.

CASH EQUIVALENCY

An analytical process in which the sale price of a transaction with nonmarket financing or financing with unusual conditions or incentives is converted into a price expressed in terms of cash.

DEPRECIATION

1. In appraising, a loss in property value from any cause; the difference between the cost of an improvement on the effective date of the appraisal and the market value of the improvement on the same date. 2. In accounting, an allowance made against the loss in value of an asset for a defined purpose and computed using a specified method.

ELLWOOD FORMULA

A yield capitalization method that provides a formulaic solution for developing a capitalization rate for various combinations of equity yields and mortgage terms. The formula is applicable only to properties with stable or stabilized income streams and properties with income streams expected to change according to the J- or K-factor pattern. The formula is

RO = [YE – M (YE + P 1/Sn¬ – RM) – ΔO 1/S n¬] / [1 + ΔI J]

where

RO = Overall Capitalization Rate
YE = Equity Yield Rate
M = Loan-to-Value Ratio
P = Percentage of Loan Paid Off
1/S n¬ = Sinking Fund Factor at the Equity Yield Rate
RM =Mortgage Capitalization Rate
ΔO = Change in Total Property Value
ΔI = Total Ratio Change in Income
J = J Factor

Also called mortgage-equity formula.

EXPOSURE TIME

1. The time a property remains on the market. 2. The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal; a retrospective estimate based on an analysis of past events assuming a competitive and open market. See also marketing time.

EXTRAORDINARY ASSUMPTION

An assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser's opinions or conclusions.

Comment: Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

FEE SIMPLE ESTATE

Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the govemmental powers of taxation, eminent domain, police power, and escheat.

HYPOTHETICAL CONDITIONS

A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis.

Comment: Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

INSURABLE VALUE

A type of value for insurance purposes.

INTENDED USE

The use or uses of an appraiser's reported appraisal, appraisal review, or appraisal consulting assignment opinions and conclusions, as identified by the appraiser based on communication with the client at the time of the assignment.

INTENDED USER

The client and any other party as identified, by name or type, as users of the appraisal, appraisal review, or appraisal consulting report by the appraiser on the basis of communication with the client at the time of the assignment.

LEASED FEE INTEREST

A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease).

LEASEHOLD INTEREST

The tenant's possessory interest created by a lease. See also negative leasehold; positive leasehold.

MARKET RENT

The most probable rent that a property should bring in a competitive and open market reflecting all conditions and restrictions of the lease agreement, including permitted uses, use restrictions, expense obligations, term, concessions, renewal and purchase options, and tenant improvements (TIs).

MARKET VALUE

As defined in the Agencies' appraisal regulations, the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.

Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- Buyer and seller are typically motivated;
- Both parties are well informed or well advised, and acting in what they consider their own best interests;
- A reasonable time is allowed for exposure in the open market;
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.[1]

MARKETING TIME

An opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effective date of an appraisal. (Advisory Opinion 7 of the Appraisal Standards Board of The Appraisal Foundation and Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions" address the determination of reasonable exposure and marketing time.) See also exposure time.

MORTGAGE-EQUITY ANALYSIS

Capitalization and investment analysis procedures that recognize how mortgage terms and equity requirements affect the value of income-producing property.

OPERATING EXPENSES

Other Taxes, Fees & Permits - Personal property taxes, sales taxes, utility taxes, fees and permit expenses.

[1] "Interagency Appraisal and Evaluation Guidelines." Federal Register 75:237 (December 10, 2010) p. 77472.

Property Insurance – Coverage for loss or damage to the property caused by the perils of fire, lightning, extended coverage perils, vandalism and malicious mischief, and additional perils.

Management Fees - The sum paid for management services. Management services may be contracted for or provided by the property owner. Management expenses may include supervision, on-site offices or apartments for resident managers, telephone service, clerical help, legal or accounting services, printing and postage, and advertising. Management fees may occasionally be included among recoverable operating expenses

Total Administrative Fees – Depending on the nature of the real estate, these usually include professional fees and other general administrative expenses, such as rent of offices and the services needed to operate the property. Administrative expenses can be provided either in the following expense subcategories or in a bulk total. 1) Professional Fees – Fees paid for any professional services contracted for or incurred in property operation; or 2) Other Administrative – Any other general administrative expenses incurred in property operation.

Heating Fuel - The cost of heating fuel purchased from outside producers. The cost of heat is generally a tenant expense in single-tenant, industrial or retail properties, and apartment projects with individual heating units. It is a major expense item shown in operating statements for office buildings and many apartment properties. The fuel consumed may be coal, oil, or public steam. Heating supplies, maintenance, and workers' wages are included in this expense category under certain accounting methods.

Electricity - The cost of electricity purchased from outside producers. Although the cost of electricity for leased space is frequently a tenant expense, and therefore not included in the operating expense statement, the owner may be responsible for lighting public areas and for the power needed to run elevators and other building equipment.

Gas - The cost of gas purchased from outside producers. When used for heating and air conditioning, gas can be a major expense item that is either paid by the tenant or reflected in the rent.

Water & Sewer - The cost of water consumed, including water specially treated for the circulating ice water system, or purchased for drinking purposes. The cost of water is a major consideration for industrial plants that use processes depending on water and for multifamily projects, in which the cost of sewer service usually ties to the amount of water used. It is also an important consideration for laundries, restaurants, taverns, hotels, and similar operations.

Other Utilities - The cost of other utilities purchased from outside producers.

Total Utilities - The cost of utilities net of energy sales to stores and others. Utilities are services rendered by public and private utility companies (e.g., electricity, gas, heating fuel, water/sewer and other utilities providers). Utility expenses can be provided either in expense subcategories or in a bulk total.

Repairs & Maintenance - All expenses incurred for the general repairs and maintenance of the building, including common areas and general upkeep. Repairs and maintenance expenses include elevator, HVAC, electrical and plumbing, structural/roof, and other repairs and maintenance expense items. Repairs and Maintenance expenses can be provided either in the following expense subcategories or in a bulk total. 1) Elevator - The expense of the contract and any additional expenses for elevator repairs and maintenance. This expense item may also include escalator repairs and maintenance. 2) HVAC – The expense of the contract and any additional expenses for heating, ventilation and air-conditioning systems. 3) Electrical & Plumbing - The expense of all repairs and maintenance associated with the property's electrical and plumbing systems. 4) Structural/Roof - The expense of all repairs and maintenance associated with the property's building structure and roof. 5) Pest Control – The expense of insect and rodent control. 6). Other Repairs & Maintenance - The cost of any other repairs and maintenance items not specifically included in other expense categories.

Common Area Maintenance - The common area is the total area within a property that is not designed for sale or rental, but is available for common use by all owners, tenants, or their invitees, e.g., parking and its appurtenances, malls, sidewalks, landscaped areas, recreation areas, public toilets, truck and service facilities. Common Area Maintenance (CAM) expenses can be entered in bulk or through the sub-categories. 1) Utilities – Cost of utilities that are included in CAM charges and passed through to tenants. 2) Repair & Maintenance – Cost of repair and maintenance items that are included in CAM charges and passed through to tenants. 3) Parking Lot Maintenance – Cost of parking lot maintenance items that are included in CAM charges and passed through to tenants. 4) Snow Removal – Cost of snow removal that are included in CAM charges and passed through to tenants. 5) Grounds Maintenance – Cost of ground maintenance items that are included in CAM charges and passed through to tenants. 6) Other CAM expenses are items that are included in CAM charges and passed through to tenants.

Painting & Decorating - This expense category is relevant to residential properties where the landlord is required to prepare a dwelling unit for occupancy in between tenancies.

Cleaning & Janitorial - The expenses for building cleaning and janitorial services, for both daytime and night-time cleaning and janitorial service for tenant spaces, public areas, atriums, elevators, restrooms, windows, etc. Cleaning and Janitorial expenses can be provided either in the following subcategories or entered in a bulk total. 1) Contract Services - The expense of cleaning and janitorial services contracted for with outside service providers. 2) Supplies, Materials & Misc. - The cost any cleaning materials and any other janitorial supplies required for property cleaning and janitorial services and not covered elsewhere. 3) Trash Removal - The expense of property trash and rubbish removal and related services. Sometimes this expense item includes the cost of pest control and/or snow removal .4) Other Cleaning/Janitorial - Any other cleaning and janitorial related expenses not included in other specific expense categories.

Advertising & Promotion - Expenses related to advertising, promotion, sales, and publicity and all related printing, stationary, artwork, magazine space, broadcasting, and postage related to marketing.

Professional Fees - All professional fees associated with property leasing activities including legal, accounting, data processing, and auditing costs to the extent necessary to satisfy tenant lease requirements and permanent lender requirements.

Total Payroll - The payroll expenses for all employees involved in the ongoing operation of the property, but whose salaries and wages are not included in other expense categories. Payroll expenses can be provided either in the following subcategories or entered in a bulk total. 1) Administrative Payroll - The payroll expenses for all employees involved in on-going property administration. 2) Repair & Maintenance Payroll - The expense of all employees involved in on-going repairs and maintenance of the property. 3) Cleaning Payroll - The expense of all employees involved in providing on-going cleaning and janitorial services to the property 4) Other Payroll - The expense of any other employees involved in providing services to the property not covered in other specific categories.

Security - Expenses related to the security of the Lessees and the Property. This expense item includes payroll, contract services and other security expenses not covered in other expense categories. This item also includes the expense of maintenance of security systems such as alarms and closed circuit television (CCTV), and ordinary supplies necessary to operate a security program, including batteries, control forms, access cards, and security uniforms.

Roads & Grounds - The cost of maintaining the grounds and parking areas of the property. This expense can vary widely depending on the type of property and its total area. Landscaping improvements can range from none to extensive beds, gardens and trees. In addition, hard-surfaced public parking areas with drains, lights, and marked car spaces are subject to intensive wear and can be costly to maintain.

Other Operating Expenses - Any other expenses incurred in the operation of the property not specifically covered elsewhere.

Real Estate Taxes - The tax levied on real estate (i.e., on the land, appurtenances, improvements, structures and buildings); typically by the state, county and/or municipality in which the property is located.

PROSPECTIVE OPINION OF VALUE

A value opinion effective as of a specified future date. The term does not define a type of value. Instead, it identifies a value opinion as being effective at some specific future date. An opinion of value as of a prospective date is frequently sought in connection with projects that are proposed, under construction, or under conversion to a new use, or those that have not yet achieved sellout or a stabilized level of long-term occupancy.

PROSPECTIVE VALUE UPON REACHING STABILIZED OCCUPANCY

The value of a property as of a point in time when all improvements have been physically constructed and the property has been leased to its optimum level of long-term occupancy. At such point, all capital outlays for tenant improvements, leasing commissions, marketing costs and other carrying charges are assumed to have been incurred.

SPECIAL, UNUSUAL, OR EXTRAORDINARY ASSUMPTIONS

Before completing the acquisition of a property, a prudent purchaser in the market typically exercises due diligence by making customary enquiries about the property. It is normal for a Valuer to make assumptions as to the most likely outcome of this due diligence process and to rely on actual information regarding such matters as provided by the client. Special, unusual, or extraordinary assumptions may be any additional assumptions relating to matters covered in the due diligence process, or may relate to other issues, such as the identity of the purchaser, the physical state of the property, the presence of environmental pollutants (e.g., ground water contamination), or the ability to redevelop the property.

ADDENDUM B:
CLIENT SATISFACTION SURVEY

Survey Link: http://www.surveymonkey.com/s.aspx?sm=_2bZUxc1p1j1DWj6n_2fswh1KQ_3d_3d&c=12-38002-900170-001

C&W File ID: 12-38002-900170-001

Fax Option: (716) 852-0890

1. Given the scope and complexity of the assignment, please rate the development of the appraisal relative to the adequacy and relevance of the data, the appropriateness of the techniques used, and the reasonableness of the analyses, opinions, and conclusions:

__ Excellent
__ Good
__ Average
__ Below Average
__ Poor

Comments:_____

_____

_____

2. Please rate the appraisal report on clarity, attention to detail, and the extent to which it was presentable to your internal/external users without revisions:

__ Excellent
__ Good
__ Average
__ Below Average
__ Poor

Comments:_____

_____

_____

3. The appraiser communicated effectively by listening to your concerns, showed a sense of urgency in responding, and provided convincing support of his/her conclusions:

__ Not Applicable

__ Excellent
__ Good
__ Average
__ Below Average
__ Poor

Comments:_____

_____

_____

4. The report was on time as agreed, or was received within an acceptable time frame if unforeseen factors occurred after the engagement:

__ Yes
__ No

5. Please rate your overall satisfaction relative to cost, timing, and quality:

__ Excellent
__ Good
__ Average
__ Below Average
__ Poor

Comments:_____

_____

_____

6. Any additional comments or suggestions?

_____

_____

_____

_____

_____

_____

_____

7. Would you like a representative of Cushman & Wakefield's National Quality Control Committee to contact you?

__ Yes
__ No

Your Name: _____

Your Telephone Number: _____

Contact Information: Scott Schafer
Managing Director, National Quality Control
(716) 852-7500, ext. 121

ADDENDUM C:
ENGAGEMENT LETTER

Robert F. Farwell, MAI
Senior Director

CUSHMAN & WAKEFIELD.

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One Maritime Plaza, 9th Floor
San Francisco, CA 94111
1+415-658-3698 Tel
1+415-397-0933 Fax
robert.farwell@cushwake.com

July 24, 2012

Mr. John Legnitto
Vice-President, Group Manager, San Francisco Operations
RECOLOGY
50 California Street, Suite 2400
San Francisco, CA 94111

Re: 32.46 Acres of Vacant Land
SEC Tunnel Avenue & Beatty Road
Brisbane, CA 94005

Dear Mr. Legnitto:

Thank you for requesting our proposal for appraisal services. This proposal letter will become, upon your acceptance, our letter of engagement to provide the services outlined herein.

TERMS OF ENGAGEMENT

I. PROBLEM IDENTIFICATION

The Parties To This Agreement:	The undersigned Cushman & Wakefield affiliated company and RECOLOGY (herein at times referred to as "Client")
Intended Users:	The appraisal will be prepared for Recology and is intended only for the use specified below. The Client agrees that there are no other Intended Users.
Intended Use:	Internal review by the Client
Type of Opinion and Rights Appraised:	Market value of the Fee Simple Interest.
Date Of Value:	• Date of Inspection
Subject of the Assignment and Relevant Characteristics:	The property to be appraised is 32.46 Acres of Vacant Land. The property is located in Brisbane, CA.
Assignment Conditions:	The assignment is based upon the following assignment conditions: Extraordinary Assumption— The land size is correct.

II. ANTICIPATED SCOPE OF WORK

USPAP Compliance:	The undersigned Cushman & Wakefield affiliated company and/or its designated affiliate or subsidiary (herein at times "C&W") will develop an appraisal in accordance with USPAP and the Code of Ethics and Certification Standards of the Appraisal

Institute.

General Scope of Work:

- Property Inspection to the extent necessary to adequately identify the real estate
- Research relevant market data, in terms of quantity, quality, and geographic comparability, to the extent necessary to produce credible appraisal results
- Consider and develop those approaches relevant and applicable to the appraisal problem. Based on our discussions with the Client, we anticipate developing the following valuation approaches:
- Sales Comparison Approach

III. REPORTING AND DISCLOSURE

Scope of Work Disclosure: The actual Scope of Work will be reported within the report.

Reporting Option: The appraisal will be communicated in a Summary report.

Fee: $5,500. All invoices are due upon receipt. The Client shall be solely responsible for C&W's fees. Acknowledgement of this obligation is made by the countersignature to this agreement by an authorized representative.

Additional Expenses: Fee quoted is inclusive of expenses related to the preparation of the report.

Retainer: A retainer is not required for this assignment in order to commence work.

Report Copies: The final report will be delivered in electronic format. Up to three hard copies will be provided upon request.

Start Date: The appraisal process will initiate upon receipt of signed agreement, applicable retainer, and the receipt of the property specific data.

Acceptance Date: This proposal is subject to withdrawal if the engagement letter is not executed by the Client within four (4) business days.

Draft and Final Report Delivery: As requested, a draft version of the report will be delivered within twenty-one (21) days of your written authorization to proceed, assuming prompt receipt of necessary property information. The Client will have 5 days after delivery of the draft report within which to comment, after which a final report will be submitted and the fee will be due and payable.

Changes to Agreement: The identity of the Client, intended users, or intended use; the date of value; type of value or interest appraised; or property appraised cannot be changed without a new agreement.

Prior Services Disclosure: The engaging or principal appraiser has performed a previous appraisal of the subject property involving the subject property within the three years prior to this assignment.

Conflicts of Interest: C&W adheres to a strict internal conflict of interest policy. If we discover in the preparation of our appraisal a conflict with this assignment we reserve the right to withdraw from the assignment without penalty.

Further Conditions of Engagement: The Conditions of Engagement attached hereto are incorporated herein and are part of this letter of engagement.

Thank you for calling on us to render these services and we look forward to working with you.

Sincerely,
CUSHMAN & WAKEFIELD WESTERN , INC.

Robert F. Farwell, MAI
Senior Director

cc:

AGREED:
CLIENT: RECOLOGY

By: _____ Date: 7/31/12
Mr. John Legnitto

Title: Vice-President, Group Manager, San Francisco Operations

E-mail
Address/Phone &
Fax Nos.: jlegnitto@recology.com

cc: c/o michael.baker@arnoldporter.com / 415-471-3143

Information Needed to Complete the Assignment

We understand that you will provide the following information for our review, if available.

Physical Information

- Plot plan/survey and legal description
- Building plans/leasing plan/stacking plan
- Property Conditions Assessment Report
- Original construction and site acquisition costs
- Cost of any major expansions, modifications or repairs incurred over the past three years/capital expense budget
- On Site Contact—name and phone number—for property inspection

Financial Information

- Income & Expense Statements for three previous years plus year-to-date
- Pro forma operating budgets
- Most recent real estate tax bill or statement
- Argus diskette or other financial modeling file
- Sales history of the subject property over the past three years at a minimum

Supporting Documentation

- Leases and/or detailed Lease Abstracts
- Detailed Rent Roll including:
  - Commencement and Expiration Dates and options to renew
  - Leased Area
  - Base Rent and contractual increases (CPI, fixed steps, etc.)
  - Expense Recapture or Pass-through provisions including applicable base year amounts
  - Overage or Percentage Rent breakpoints and percentages, as applicable
  - Tenant Improvement (TI)costs
  - Concessions (free rent, other)
- Summary of recently negotiated unexecuted leases or letters of intent
- Delinquency report identifying tenants in arrears or in default

Other Documentation

- Copy of your guidelines or instructions to appraisers/consultants
- Supplemental Standards, if applicable (applies only to government agencies, government sponsored entities, other entities that establish public policy)
- Additional Information to be considered in the appraisal

CONDITIONS OF ENGAGEMENT

1) The Client and any Intended Users identified herein should consider the appraisal as only one factor together with its independent investment considerations and underwriting criteria in its overall investment decision. The appraisal cannot be used by any party or for any purpose other than as specified in this engagement letter.

2) Federal banking regulations require banks and savings and loan associations to employ appraisers where a FIRREA compliant appraisal must be used in connection with mortgage loans or other transactions involving federally regulated lending institutions, including mortgage bankers/brokers. Because of that requirement, this appraisal, if ordered independent of a financial institution or agent, may not be accepted by a federally regulated financial institution. This appraisal will be prepared in accordance with the Uniform Standards of Professional Appraisal Practice of The Appraisal Foundation, the Standards of Professional Practice and the Code of Ethics of the Appraisal Institute.

3) The appraisal report will be subject to our standard Assumptions and Limiting Conditions, which will be incorporated into the appraisal. All users of the appraisal report are specifically cautioned to understand any Extraordinary Assumptions and Hypothetical Conditions which may be employed by the appraiser and incorporated into the appraisal.

4) The appraisal report or our name may not be used in any offering memoranda or other investment material without the prior written consent of C&W, which may be given at the sole discretion of C&W. Any such consent, if given, shall be conditioned upon our receipt of an indemnification agreement from a party satisfactory to us and in a form satisfactory to us. Furthermore, Client agrees to pay the fees of C&W's legal counsel for the review of the material which is the subject of the requested consent. If the appraisal is referred to or included in any offering material or prospectus, the appraisal shall be deemed referred to or included for informational purposes only and C&W, its employees and the appraiser have no liability to such recipients. C&W disclaims any and all liability to any party other than the party which retained C&W to prepare the appraisal.

5) In the event the Client provides a copy of this appraisal to, or permits reliance thereon by, any person or entity not an identified Intended User at the time of the assignment and authorized by C&W in writing to use or rely thereon, Client hereby agrees to indemnify and hold C&W, its affiliates and the respective shareholders, directors, officers and employees, harmless from and against all damages, expenses, claims and costs, including attorney's fees, incurred in investigating and defending any claim arising from or in any way connected to the use of, or reliance upon, the appraisal by any such unauthorized person or entity.

6) The balance of the fee for the appraisal will be due upon delivery of a report. Payment of the fee is not contingent on the appraised value, outcome of the consultation report, a loan closing, or any other prearranged condition. Additional fees will be charged on an hourly basis for any work, which exceeds the scope of this proposal, including performing additional valuation scenarios, additional research and conference calls or meetings with any party, which exceed the time allotted by C&W for an assignment of this nature. If we are requested to stop working on this assignment, for any reason, prior to our completion of the appraisal, C&W will be entitled to bill the Client for the time expended to date at C&W's hourly rates for the personnel involved.

7) If C&W or any of its affiliates or any of their respective employees receives a subpoena or other judicial command to produce documents or to provide testimony involving this assignment in connection with a lawsuit or proceeding, C&W will use reasonable efforts to notify the Client of our receipt of same. However, if C&W or any of its affiliates are not a party to these proceedings, Client agrees to compensate C&W or its affiliate for the professional time and reimburse C&W or its affiliate for the actual expense that it incurs in responding to any such subpoena or judicial command, including attorneys' fees, if any, as they are incurred. C&W or its affiliate will be compensated at the then prevailing hourly rates of the personnel responding to the subpoena or command for testimony.

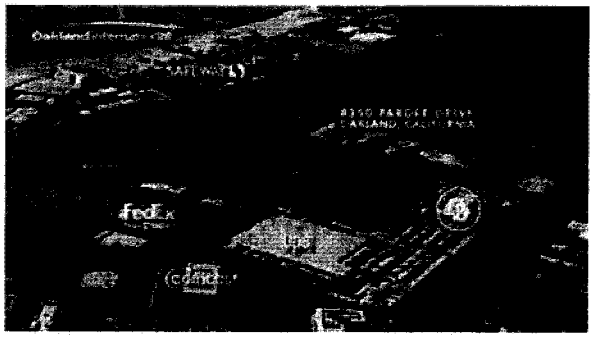
8) By signing this agreement Client expressly agrees that its sole and exclusive remedy for any and all losses or damages relating to this agreement or the appraisal shall be limited to the amount of the appraisal fee paid by the Client. In the event that the Client, or any other party entitled to do so, makes a claim against C&W or any of its affiliates or any of their respective officers or employees in connection with or in any way relating to this engagement or the appraisal, the maximum damages recoverable from C&W or any of its affiliates or their respective officers or employees shall be the amount of the monies actually collected by C&W or any of its affiliates for this assignment and under no circumstances shall any claim for consequential damages be made.

9) It is acknowledged that any opinions and conclusions expressed by the professionals of C&W or its affiliates during this assignment are representations made as employees and not as individuals. C&W's or its affiliate's responsibility is limited to the Client, and use of our product by third parties shall be solely at the risk of the Client and/or third parties.

10) The fees and expenses shall be due C&W as agreed in this letter. If it becomes necessary to place collection of the fees and expenses due C&W in the hands of a collection agent and/or an attorney (whether or not a legal action is filed) Client agrees to pay all fees and expenses including attorney's fees incurred by C&W in connection with the collection or attempted collection thereof.

ADDENDUM D:
COMPARABLE LAND SALE DATA SHEETS

8350 Pardee Drive
Oakland CA 94621
MSA: Oakland
Alameda County



Property Type:	Land
Property Subtype:	N/A
ID:	221519
APN:	042-4415-003-14

PROPERTY INFORMATION

Site Area (Acres):	18.63	Public Utilites:	All Available
Site Area (SqFt):	811,523	Electricity:	Yes
Zoning:	CIX-2	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Average	Gas:	Yes
Frontage:	Average	Proposed Use:	N/A
Visibility:	Average	Maximum FAR:	N/A
Shape:	Irregular	Building Area:	370,000
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

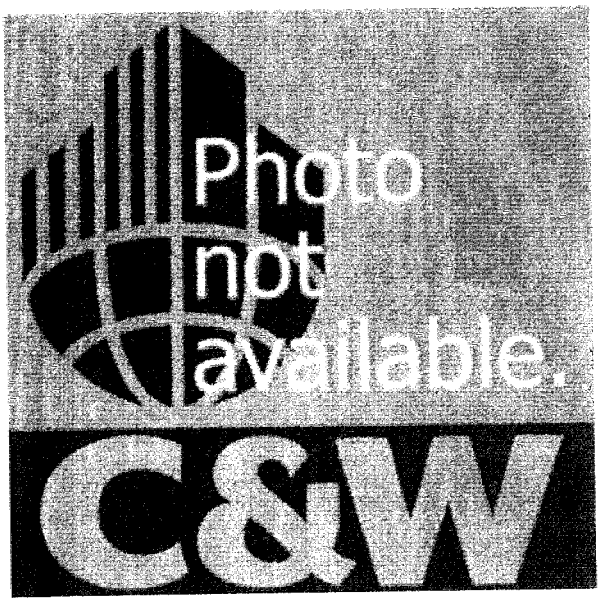
Sale Status:	Recorded Sale	Price per SqFt:	$10.23
Transaction Date:	2/2012	Price per Acre:	$445,518
Sale Price:	$8,300,000	Price per Building Area:	$22.43
Grantor:	CFS 2907 Oakland Pardee, LLC	Price per Potential Units:	N/A
Grantee:	Tarpon SPE I, LP		
Value Interest:	Fee Simple		
Condition of Sale:	None		

VERIFICATION COMMENTS

Costar 6535481; Doc #059846; CBRE marketing flyer

COMMENTS

The comparable was excess parking for the seller. The site was a paved and fenced lot with yard lighting. The zoning allows for industrial, warehousing, and office uses. The buyer plans to construct a 370,000 square foot warehouse. It is proximate to both FedEx and UPS regional hubs.



44758-44788 Old Warm Springs Boulevard
Fremont CA 94538
MSA: Oakland
Alameda County

Property Type:	Land
Property Subtype:	Industrial
ID:	220496
APN:	519-1310-003-04,004-01 and 005-04

PROPERTY INFORMATION

Site Area (Acres):	8.11	Public Utilites:	All Available
Site Area (SqFt):	353,097	Electricity:	Yes
Zoning:	GI	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Average	Gas:	Yes
Frontage:	Average	Proposed Use:	Office
Visibility:	Average	Maximum FAR:	0.42
Shape:	Rectangular	Building Area:	150,000
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

Sale Status:	Recorded Sale	Price per SqFt:	$16.99
Transaction Date:	12/2011	Price per Acre:	$740,193
Sale Price:	$6,000,000	Price per Building Area:	$40.00
Grantor:	Balch Enterprises Inc.	Price per Potential Units:	N/A
Grantee:	Serra Corporation (Bitney Springs LLC)		
Value Interest:	Fee Simple		
Condition of Sale:	None		

VERIFICATION COMMENTS

Chip Sutherland CBRE 408.453.7410

COMMENTS

The property is located on the southeast corner of Old Warm Springs Boulevard and Prune Avenue. The site is along the B.A.R.T. rail line and is near a planned B.A.R.T station. It was purchased vacant by an owner user who intends to build a R&D campus on the site. Reportedly, the site can legally accommodate a 150,000-square foot office/R&D development.

Southwest corner of Cushing Parkway and
Fremont Boulevard
Fremont CA
MSA: Oakland
Alameda County

Property Type:	Land
Property Subtype:	Industrial
ID:	213806
APN:	Portion of 519-0850-122

PROPERTY INFORMATION

Site Area (Acres):	15.50	Public Utilites:	All Available
Site Area (SqFt):	675,180	Electricity:	Yes
Zoning:	I-R	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Excellent	Gas:	Yes
Frontage:	Good	Proposed Use:	Industrial
Visibility:	Good	Maximum FAR:	N/A
Shape:	Irregular	Building Area:	200,000
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

Sale Status:	Recorded Sale	Price per SqFt:	$18.60
Transaction Date:	10/2011	Price per Acre:	$810,226
Sale Price:	$12,558,500	Price per Building Area:	$62.79
Grantor:	Carl E and Mary Ann Berg	Price per Potential Units:	N/A
Grantee:	Delta Electronics		
Value Interest:	Fee Simple		
Condition of Sale:	None		

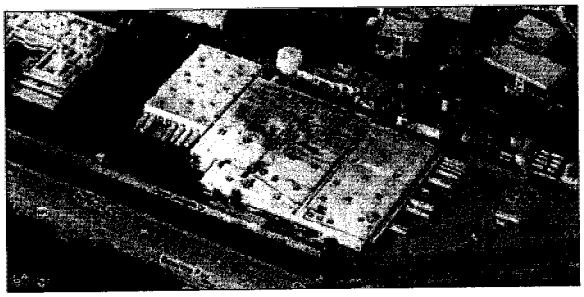
VERIFICATION COMMENTS

Sherman Chan - Listing broker CBRE 408.453.7488

COMMENTS

The property is located about 400 feet west of Interstate 880. This was an "off-market" transaction. The buyer, who owns and occupies an R&D facility just east of the site at 4405 Cushing Parkway, purchased the property for the development of a 200,000-square foot, office/R&D development. The land area presented is the net developable land area.

151 Commonwealth Drive
Menlo Park CA 94025
MSA: San Francisco
San Mateo County



Property Type:	Land
Property Subtype:	Office
ID:	209713
APN:	055-243-240

PROPERTY INFORMATION

Site Area (Acres):	12.10	Public Utilites:	All Available
Site Area (SqFt):	527,076	Electricity:	Yes
Zoning:	M2	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Average	Gas:	Yes
Frontage:	Good	Proposed Use:	Office
Visibility:	Good	Maximum FAR:	0.47
Shape:	Irregular	Building Area:	250,000
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

Sale Status:	Recorded Sale	Price per SqFt:	$37.95
Transaction Date:	8/2011	Price per Acre:	$1,652,893
Sale Price:	$20,000,000	Price per Building Area:	$80.00
Grantor:	Diageo Americas Supply, Inc.	Price per Potential Units:	N/A
Grantee:	1031 EP4 Inc. (Sobrato Organization)		
Value Interest:	Fee Simple		
Condition of Sale:	None		

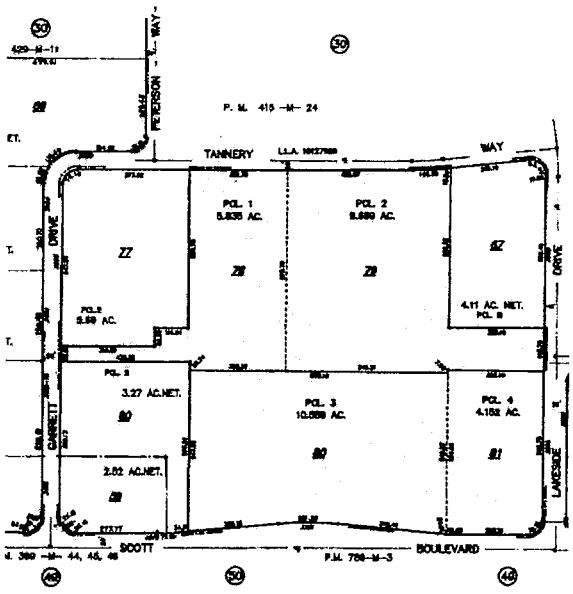
VERIFICATION COMMENTS

John Michael Sobrato, The Sobrato Organization

COMMENTS

The site is located along the east side of U.S. Highway 101 with good freeway visibility. At the time of sale, it was improved with a vacant, 182,961-square foot, single-story, manufacturing/warehouse building formerly used for tequila distilling and distribution. The property is surrounded by suburban, office developments.

The buyer purchased the property for eventual redevelopment to an office facility to contain up to 250,000 square feet of gross building area. The buyer will incur undisclosed demolition costs.



3333 Scott Boulevard
Santa Clara CA
MSA: San Jose
Santa Clara County

Property Type:	Land
Property Subtype:	Office
ID:	200730
APN:	216-31-078 through 081

PROPERTY INFORMATION

Site Area (Acres):	30.21	Public Utilites:	All Available
Site Area (SqFt):	1,316,165	Electricity:	Yes
Zoning:	ML	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Good	Gas:	Yes
Frontage:	Good	Proposed Use:	Office
Visibility:	Good	Maximum FAR:	0.56
Shape:	Rectangular	Building Area:	735,000
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

Sale Status:	Recorded Sale	Price per SqFt:	$45.98
Transaction Date:	7/2011	Price per Acre:	$2,002,781
Sale Price:	$60,514,000	Price per Building Area:	$82.33
Grantor:	Applied Materials	Price per Potential Units:	N/A
Grantee:	Menlo Equities LLC		
Value Interest:	Fee Simple		
Condition of Sale:	None		

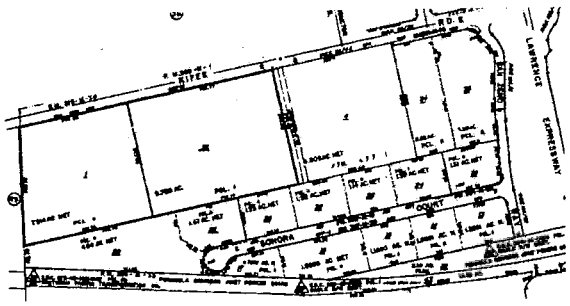
VERIFICATION COMMENTS

Confidential

COMMENTS

The property is located one block south of U.S. Highway 101, on the northwest corner of Scott Boulevard and Lakeside Drive. The site also has frontage along the south side of Tannery Way. It is being purchased vacant by an investor for the development of 735,000 square feet of speculative, class "A" office space in five, four-story buildings. The sales price reportedly is $60,514,000. Applied Materials originally had approvals to construct 860,000 square feet of office/R&D and manufacturing space on the site.

1020-1090 Kifer Road
Sunnyvale CA 94086
MSA: San Jose
Santa Clara County



Property Type:	Land
Property Subtype:	Office
ID:	195754
APN:	205-50-001 and 036

PROPERTY INFORMATION

Site Area (Acres):	17.70	Public Utilites:	All Available
Site Area (SqFt):	771,099	Electricity:	Yes
Zoning:	M-3	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Good	Gas:	Yes
Frontage:	Good	Proposed Use:	Office
Visibility:	Good	Maximurn FAR:	0.35
Shape:	Rectangular	Building Area:	269,885
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

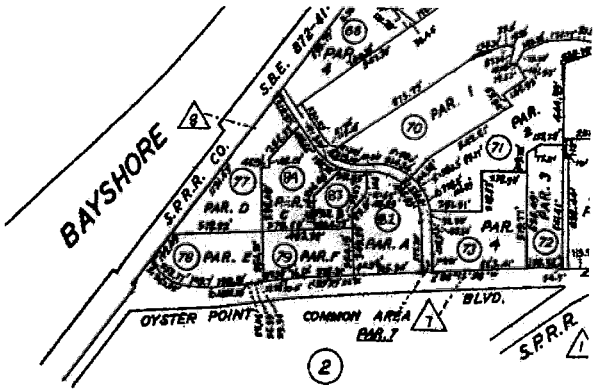
Sale Status:	Recorded Sale	Price per SqFt:	$41.20
Transaction Date:	5/2011	Price per Acre:	$1,794,713
Sale Price:	$31,770,000	Price per Building Area:	$117.72
Grantor:	Roland Lampert/Sunnyvale Industrial	Price per Potential Units:	N/A
Grantee:	Intuitive Surgical, Inc.		
Value Interest:	Fee Simple		
Condition of Sale:	N/A		

VERIFICATION COMMENTS

Document 3115284

COMMENTS

The site is located 1/2 block west of Lawrence Expressway. The site was improved with three industrial/R&D buildings collectively containing about 230,000 square feet of gross building area at the time of sale. The buildings were built between 1958 and 1979 and were partially occupied. However, the buyer acquired the site for redevelopment to an office/R&D campus for its own use. The actual sale price was $30,850,000. We estimated the costs to demolish the improvements at $920,000 ($4.00/SF).



The Cove
101 Oyster Point Boulevard
South San Francisco CA 94080
MSA: San Francisco
San Mateo County

Property Type:	Land
Property Subtype:	Office
ID:	197744
APN:	015-010-740,-750,-760,-770,-780,-790

PROPERTY INFORMATION

Site Area (Acres):	19.99	Public Utilites:	All Available
Site Area (SqFt):	870,764	Electricity:	Yes
Zoning:	WBC-SPD	Water:	Yes
Utility:	Good	Sewer:	Yes
Access:	Good	Gas:	Yes
Frontage:	Good	Proposed Use:	Office
Visibility:	Good	Maximum FAR:	N/A
Shape:	Irregular	Building Area:	800,000
Topography:	Level	Potential Units:	N/A

SALE INFORMATION

Sale Status:	Recorded Sale	Price per SqFt:	$74.65
Transaction Date:	4/2011	Price per Acre:	$3,251,627
Sale Price:	$65,000,000	Price per Building Area:	$81.25
Grantor:	Genentech Oyster Point LLC	Price per Potential Units:	N/A
Grantee:	HCP Oyster Point III LLC		
Value Interest:	Fee Simple		
Condition of Sale:	None		

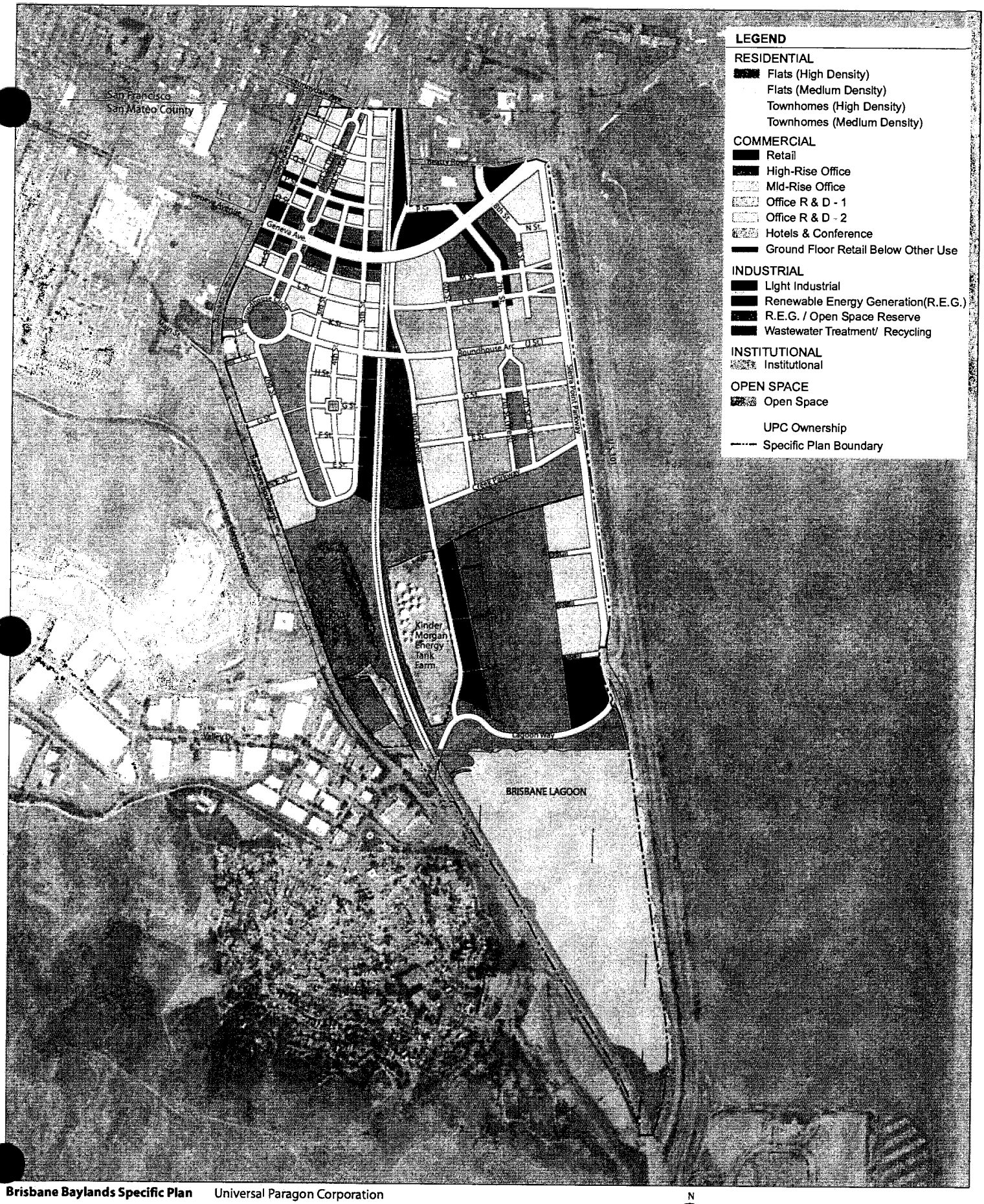
VERIFICATION COMMENTS

HCP Financials

COMMENTS

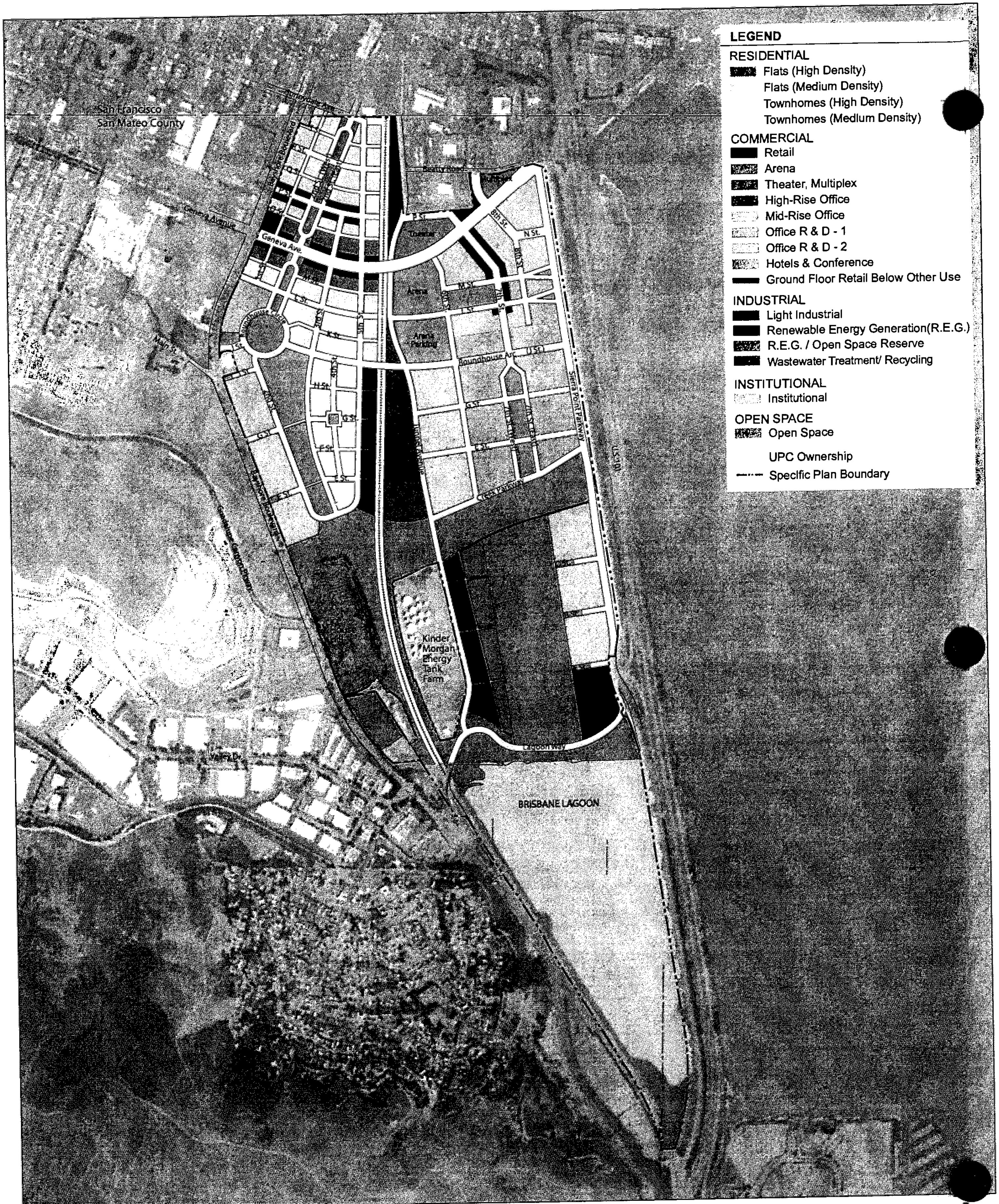
The property is located adjacent to U.S. Highway 101 and the San Francisco Bay. The buyer owns an adjacent 900,000-square foot biotech campus and intends to construct 800,000 square feet of office/biotech space on the site. Following the sale, the parcel numbers were changed to 015-010-077, 078, 079, 082, 083, and 084.

ADDENDUM E:
LAND USE OPTIONS



Brisbane Baylands Specific Plan Universal Paragon Corporation

4.2A LAND USE - BASE VARIANT



Brisbane Baylands Specific Plan   Universal Paragon Corporation

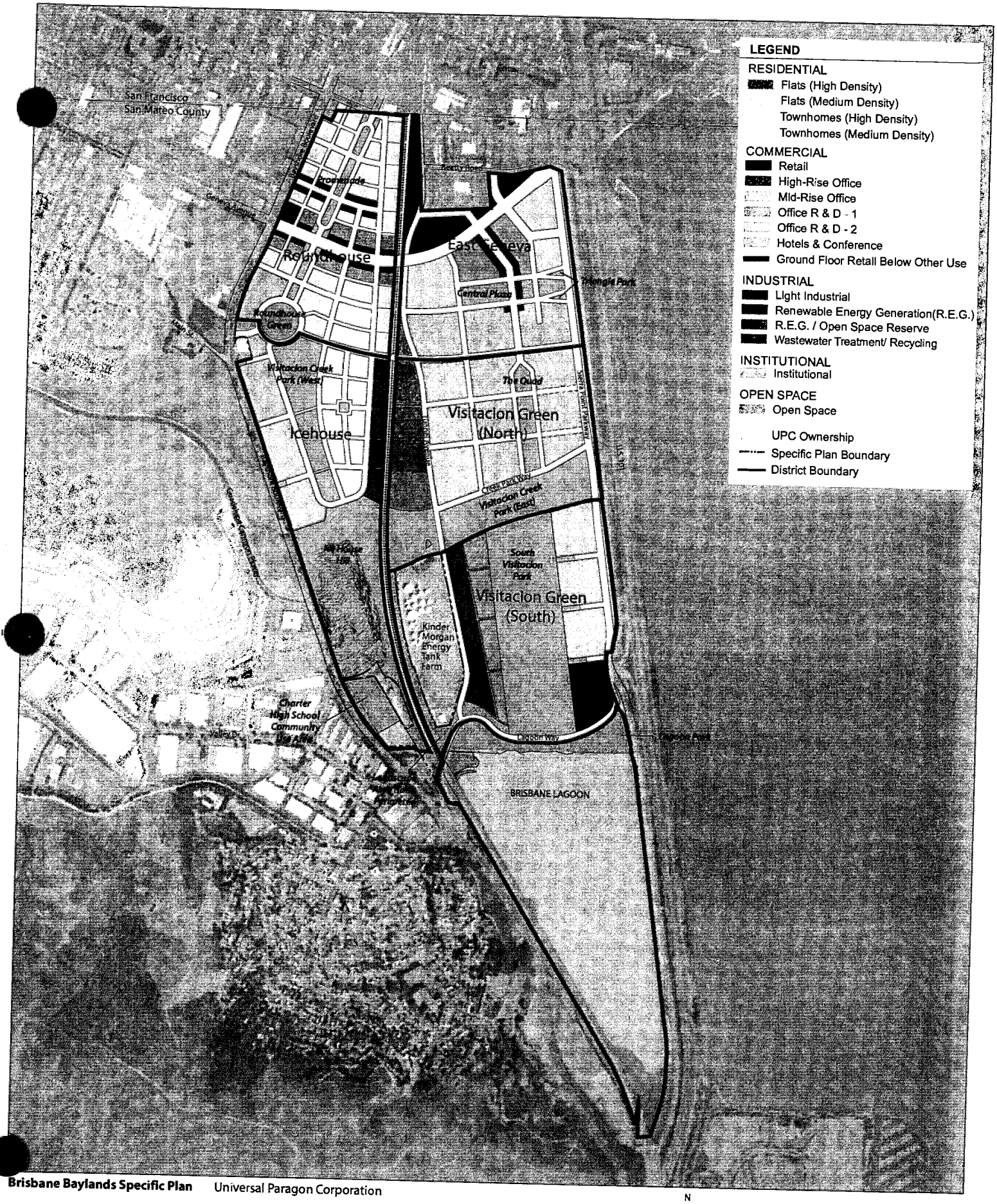
N

0 350 700 1400 feet

WRT

February 2011

4.2B LAND USE - ENTERTAINMENT VARIANT



4.3 DISTRICT CONCEPT

ADDENDUM F:
QUALIFICATIONS OF THE APPRAISERS

PROFESSIONAL QUALIFICATIONS

John P. Walsh, MAI

Director
Valuation & Advisory

Mr. Walsh joined Valuation & Advisory of Cushman & Wakefield, Inc. in 2007 and is a Director with Valuation & Advisory in Cushman & Wakefield's San Francisco office.

Experience

Prior to joining Cushman & Wakefield, Mr. Walsh was an appraiser with Hamilton, Ricci & Associates in San Francisco from 1998 to 2007. He was responsible for appraisal and consulting services on most types of income-producing and commercial properties, including affordable housing, development land, educational facilities, hotels and motels, industrial, multi-family, mixed-use, office, residential subdivisions, retail, senior housing, and special-use properties. The intended use of these assignments included: mortgage lending, corporate advisory, disposition and acquisition, tax appeal, litigation, and rent arbitration.

Mr. Walsh has been appraising since 1988 and previously held professional and managerial positions with the valuation departments of Security Pacific National Bank (acquired by Bank of America), First Deposit Bank (acquired by Wells Fargo), and The Pacific Bank (acquired by City National Bank).

Education

Mr. Walsh received his Bachelor of Science Degree in Finance from Santa Clara University in 1988 and was awarded an MBA from Golden Gate University in 1998.

Appraisal Education

Mr. Walsh has completed all educational and experience requirements needed for the MAI designation. He has also completed all the continuing education requirements of the Appraisal Institute and the State of California.

Memberships, Licenses and Professional Affiliations

Designated Member of the Appraisal Institute
Certified General Real Estate Appraiser, State of California (No. AG003248)

PROFESSIONAL QUALIFICATIONS

Robert F. Farwell, MAI

Senior Director
Valuation & Advisory

Mr. Farwell is a Senior Director with Cushman & Wakefield Western, Inc., Valuation & Advisory. He has been with Valuation & Advisory since 1997. In this capacity, Mr. Farwell is responsible for quality control for Northern California and Northern Nevada.

Prior to joining Cushman & Wakefield, Mr. Farwell was a principal with a full service valuation company with offices in Boston, Dallas and San Francisco from 1989 to 1997. Prior to opening his own firm, Mr. Farwell was a staff appraiser with Crosson & Dannis, Inc. a regional appraisal firm in Dallas, Texas. Assignments included commercial properties and land developments in the Southwest.

Experience

He has performed appraisal, appraisal review and consulting services on properties throughout the San Francisco Bay Area and specializes geographically in the San Francisco CBD and the San Francisco East Bay. Assignments include substantial work on core office properties in the San Francisco CBD and in Oakland/East Bay. He also has substantial experience with corporate headquarter campuses, feasibility analysis for proposed construction, multi-family, special purpose properties, land development and high-tech/biotechnology facilities. The intended use of these assignments includes mortgage lending, corporate advisory, disposition and acquisition, tax appeal, litigation, and rent arbitration.

He is qualified as an expert witness in Federal Bankruptcy Court for Northern District of California and the Central District of California.

Education

Bachelor of Science in Engineering (BSEE), San Jose State University;
MBA with finance emphasis, Southern Methodist University.

Appraisal Education

Mr. Farwell has completed all courses and experience requirements to qualify for the MAI designation. He has also completed the requirements of the continuing education program of the Appraisal Institute and all states for which he is certified.

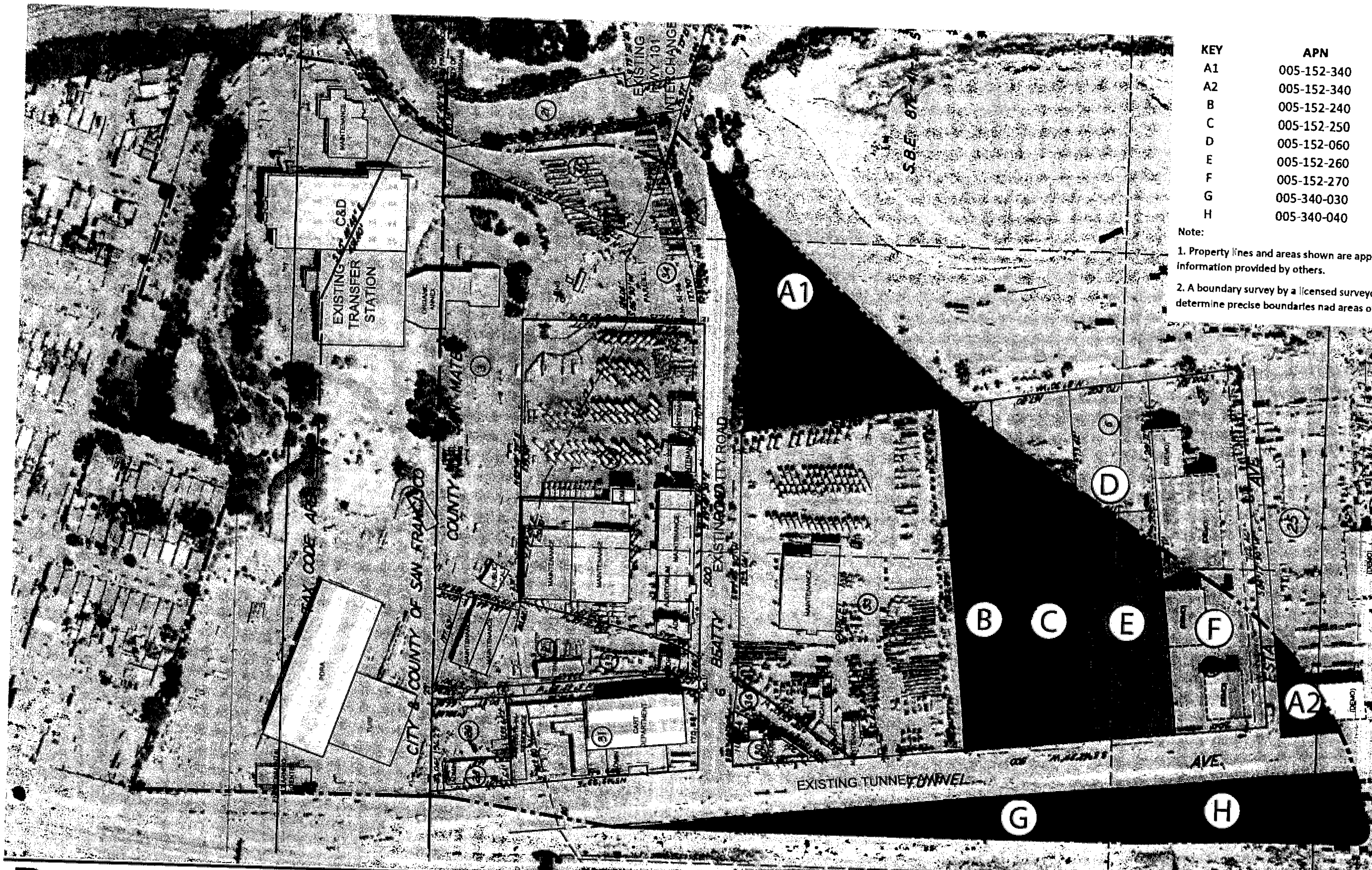
Memberships, Licenses and Professional Affiliations

Designated Member of the Appraisal Institute
Certified General Real Estate Appraiser, State of California (No. AG016033)
Certified General Real Estate Appraiser, State of Nevada (No. 05729)

Special Awards

During his tenure, Mr. Farwell was recognized as one of Cushman & Wakefield's Valuation & Advisory Top Producers, qualifying for Cushman & Wakefield's Achievement Conference in 2005, and 2007. Additionally, he was the recipient of the Cushman & Wakefield Northern California Mentor Award in 2005.

ATTACHMENT II



KEY	APN	SQFT	ACRE
A1	005-152-340	132,500	3.04
A2	005-152-340	16,500	0.38
B	005-152-240	81,000	1.86
C	005-152-250	104,000	2.39
D	005-152-060	2,500	0.06
E	005-152-260	79,500	1.83
F	005-152-270	65,500	1.50
G	005-340-030	46,000	1.06
H	005-340-040	76,500	1.76

Note:

1. Property lines and areas shown are appoximated based on information provided by others.

2. A boundary survey by a licensed surveyor will be required to determine precise boundaries nad areas of the parcels

SCALE 1" = 200'

0' 100' 200'

Recology.

William McDonough + Partners
Architecture and Community Design

ARUP

brothers constructio

PROPOSED RECOLOGY PROPERTY
Parcel Map Overlay w/ Areas

DS - 190

November 09 2012

102

ATTACHMENT III

Weighted Average Cost of Capital

I. Financial definition: The weighted average cost of capital (WACC) is defined as the rate that a company can be expected to pay to finance its assets. The WACC is the minimum acceptable return that a company must earn on existing asset base to satisfy creditors, owners and other providers of capital in order to secure investment.

WACC is the weighted cost of capital, measuring the cost of both debt and equity.

- *Cost of debt* is based on average interest rates payable on borrowed funds. While some debt is paid at variable rates and would therefore cause the rate to fluctuate, the cost of debt is determined as a fixed rate at the measurement date.
- *Cost of equity* is based on the Capital Assets Pricing Model (CAPM), adjusted for specific risks of the entity being measured (risk free rate, equity premium and size).
- *Weighting* is the percentage of equity and percentage of debt – totaling 100%.

II. Contingent Schedule I

For Contingent Schedule I, Recology used the WACC of large public waste industry companies, adjusted to reflect Recology's smaller size relative to the other entities. The calculation is as follows:

Industry WACC (from WikiWealth website)

Waste Management	6.60%
Republic Services	7.20%
Waste Connections	7.70%
Industry average	7.17%
Waste Connections (most similar)	7.70%
Weighted Industry Average	7.43%
Adjustment for size difference*	0.81%
Calculated WACC	8.24%
WACC used in Contingent Schedule I	**8.25%**

*Adjustment for size difference is based on Waste Connections' revenues being substantially higher than Recology's, resulting in an adjustment to their WACC per the following formula:
Small company adjustment = WACC x adjustment factor - weighted industry average
(7.70% x 1.54% = 8.24% – 7.43% = 0.81%)

Waste Management (Weighted Average Cost of Capital (WACC) Analysis)

Updates Automatically | Experiment With This Analysis

WACC	7%
WACC Inputs	
Risk Free Rate	4.5%
Cost of Debt	6.7%
Equity Risk Prem	5.0%
Alpha	0.0%
Country Risk Premium	0.0%
Industry WACC Calculation	
Beta (unlevered)	0.42
Industry D/E	59.5%
Tax Rate (5 yrs)	25.8%
Beta (relevered)	0.60
Cost of Debt (after-tax)	5.0%
Debt / Capital	37.3%
WAC (debt)	1.9%
Cost of Equity (capm)	7.6%
Equity / Capital	62.7%
WAC (equity)	4.7%
WACC Conclusion	6.6%

Calculation to Find the Industry Average Estimates for the WACC Calculation (Millions USD)

Name (click for report)	Price	Beta levered	Debt	Shares	Equity	Capital	Debt Equity	Debt Capital	Tax %	Beta unlever
Waste Management	$37	0.56	10,076	463	17,085	27,161	59.0%	37.1%	26.2%	0.3
Republic Services	$31	0.82	6,924	371	11,534	18,458	60.0%	37.5%	25.4%	0.5
Veolia Environnement	$12	1.77	23,854	505	6,307	30,161	378.2%	79.1%	21.4%	0.4
Stericycle	$96	0.29	1,414	85	8,121	9,535	17.4%	14.8%	31.4%	0.2
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Median (middle #)		0.69	8,500	417	9,828	22,810	59.5%	37.3%	25.8%	0.4

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Helpful Information for Waste Management's Analysis

What is the WACC Formula? Analyst use the WACC Discount Rate (weighted average cost of capital) to determine Waste Management's investment risk. WACC Formula = Cost of Equity (CAPM) * Common Equity + (Cost of Debt) * Total Debt. The result of this calculation is an essential input for the discounted cash flow (DCF) analysis for Waste Management. *Value Investing Importance?* This method is widely used by investment professionals to determine the correct price for investments in Waste Management before they make value investing decisions. This WACC analysis is used in Waste Management's discounted cash flow (DCF) valuation and see how the WACC calculation affect's Waste Management's company valuation.

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Porter's Five Forces
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Portfolio Analysis
People

Resources

Top 10 Best Buys
Best Stocks to Buy Portfolio
SWOT Analysis Generator
Five Forces Generator
Academic Resources

Republic Services (Weighted Average Cost of Capital (WACC) Analysis) Updates Automatically | Experiment With This Analysis

WACC 7%

WACC Inputs	
Risk Free Rate	4.5%
Cost of Debt	6.7%
Equity Risk Prem	5.0%
Alpha	0.0%
Country Risk Premium	0.0%
Industry WACC Calculation	
Beta (unlevered)	0.57
Industry D/E	36.9%
Tax Rate (5 yrs)	29.9%
Beta (relevered)	0.71
Cost of Debt (after-tax)	4.7%
Debt / Capital	26.9%
WAC (debt)	1.3%
Cost of Equity (capm)	8.1%
Equity / Capital	73.1%
WAC (equity)	5.9%
WACC Conclusion	7.2%

Calculation to Find the Industry Average Estimates for the WACC Calculation (Millions USD)

Name (click for report)	Price	Beta levered	Debt	Shares	Equity	Capital	Debt Equity	Debt Capital	Tax %	Beta unlever
Republic Services	$31	0.82	6,924	37(	11,534	18,458	60.0%	37.5%	25.4%	0.5:
Waste Mgmt										
WCA Waste	$-	0.87		24						
Waste Connections	$33	0.52	1,196	111	3,717	4,913	32.2%	24.3%	29.9%	0.4:
Casella Waste										
Waste Srvs	$-									
Perma-Fix Envrt Srvs	$1	1.43	19	56	52	71	36.9%	26.9%	20.0%	1.1(
Industrial Srvs of America	$3	1.77	29	7	20	49	142.9%	58.8%	38.6%	0.9
Avalon										
Clean Harbors	$51	0.45	539	53	2,684	3,223	20.1%	16.7%	30.8%	0.4(
0										
Median (middle #)		0.84	539	54	2,684	3,223	36.9%	26.9%	29.9%	0.5:

Helpful Information for Republic Services's Analysis

What is the WACC Formula? Analyst use the WACC Discount Rate (weighted average cost of capital) to determine Republic Services's investment risk. WACC Formula = Cost of Equity (CAPM) * Common Equity + (Cost of Debt) * Total Debt. The result of this calculation is an essential input for the discounted cash flow (DCF) analysis for Republic Services. *Value Investing Importance?* This method is widely used by investment professionals to determine the correct price for investments in Republic Services before they make value investing decisions. This WACC analysis is used in Republic Services's discounted cash flow (DCF) valuation and see how the WACC calculation affects Republic Services's company valuation.

WACC Ana

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About WikiWealth.com

WikiWealth.com is a collaborative research and analysis website that combines the sum of the world's knowledge to produce the highest quality research reports for over 5,000 stocks, ETFs, mutual funds, currencies, and commodities. To ensure quality,

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Commodity

Analysis

SWOT Analysis
Porter's Five Forces
Private Equity Investments
Portfolio Analysis
People

Resources

Top 10 Best Buys
Best Stocks to Buy Portfolio
SWOT Analysis Generator
Five Forces Generator
Academic Resources

Waste Connections (Weighted Average Cost of Capital (WACC) Analysis)

WACC 8%

Calculation to Find the Industry Average Estimates for the WACC Calculation (Millions USD)

WACC Inputs	
Risk Free Rate	4.5%
Cost of Debt	6.0%
Equity Risk Prem	5.0%
Alpha	0.0%
Country Risk Premium	0.0%
Industry WACC Calculation	
Beta (unlevered)	0.78
Industry D/E	47.5%
Tax Rate (5 yrs)	27.8%
Beta (relevered)	1.01
Cost of Debt (after-tax)	3.6%
Debt / Capital	32.2%
WAC (debt)	1.2%
Cost of Equity (capm)	9.6%
Equity / Capital	67.8%
WAC (equity)	6.5%
WACC Conclusion	7.7%

Name (click for report)	Price	Beta (levered)	Debt	Shares	Equity	Capital	Debt / Equity	Debt / Capital	Tax %	Beta (unlever
Waste Connections	$33	0.62	1,166	111	3,717	4,913	32.2%	24.3%	29.9%	0.4
Waste Mgmt										
Republic Svcs	$31	0.82	6,924	371	11,634	18,456	60.0%	37.5%	25.4%	0.6
Casella Waste										
WCA Waste	$-	0.87		24						
Waste Svcs	$-									
Perma-Fix Envrl Svcs	$1	1.43	19	58	52	71	36.9%	26.9%	20.0%	1.1
Industrial Scnsd America	$3	1.77	29	7	20	49	142.9%	58.8%	38.5%	0.9
0										
Avalon										
Rich Coast										
Median (middle #)		0.87	612	58	1,864	2,462	46.5%	32.2%	27.6%	0.7

Helpful Information for Waste Connections's Analysis

What is the WACC Formula? Analyst use the WACC Discount Rate (weighted average cost of capital) to determine Waste Connections's investment risk. WACC Formula = Cost of Equity (CAPM) * Common Equity + (Cost of Debt) * Total Debt. The result of this calculation is an essential input for the discounted cash flow (DCF) analysis for Waste Connections. *Value Investing Importance?* This method is widely used by investment professionals to determine the correct price for investments in Waste Connections before they make value investing decisions. This WACC analysis is used in Waste Connections's discounted cash flow (DCF) valuation and see how the WACC calculation affect's Waste Connections's company valuation.

WACC Ana

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2. The WACC calc Connections's WA no investment can better than risk fre beta is negative an significant proporti

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10th Floor
Three Embarcadero Center
San Francisco, CA 94111-4024

April 11, 2013

Mr. Mohammed Nuru
Director
San Francisco Department of Public Works
1 Dr. Carlton B. Goodlett Place
City Hall, Room 348
San Francisco, CA 94102

Re: Recology 2013 Rate Application: Contingent Schedule 1

Dear Mr. Nuru:

I write to provide some legal and regulatory context for Recology's proposal in Contingent Schedule 1 of its 2013 Rate Application to recover through rates costs it anticipates incurring to acquire property adjacent to its Tunnel/Beatty transfer station. As Recology has discussed with both the Department of Public Works and the Department of the Environment, Recology is interested in buying the property for future development of a new Zero Waste facility. Recology has been in discussions with the owner of the property and the City of Brisbane, where the property is located, and anticipates opportunities regarding the property could arise in the next year or two, before the plans for a new Zero Waste facility have been sufficiently developed to present to the City for review. Nonetheless, Recology's acquisition of the property would require it to make a significant capital investment. Therefore, Recology asks the DPW Director and the Rate Board to adopt a contingent rate schedule based on a ratemaking methodology the California Public Utilities Commission ("CPUC") has utilized in comparable situations when utilities in the State acquire property for future use.

In particular, Recology proposes that it be allowed to recover pre-development carrying costs arising from its contemplated land purchase. Recology proposes that cost recovery be allowed until a new facility is built and its costs incorporated as usual into ratemaking. Since the acquisition has not yet occurred, a rate increase to cover the allowed carrying costs would be contingent upon and triggered by Recology taking title to the land.

Exh. 28

Recology's proposal is analogous to the accounting and ratemaking practice of regulated utilities in California under a concept called "plant held for future use" ("PHFU"). While CPUC guidelines and decisions are, of course, not direct authority for ratemaking under San Francisco's Refuse Collection and Disposal Ordinance, they provide a useful framework for understanding the PHFU concept, and show that Recology's proposed Contingent Schedule 1 is based on tried and true public utility ratemaking solutions.

I. Plant Held For Future Use

The principle underlying the concept of "plant held for future use" is that it is sometimes—but not always—necessary and efficient for a regulated utility, as part of its long-term planning, to acquire and hold for a period of time property intended for a particular use in the future, but not presently needed. *See* CPUC Decision No. 89-12-057, 34 CPUC 2d 199, 270 (1989) (noting need "to balance the utility's natural desire for maximum possible flexibility in the planning and acquisition of future plant with the ratepayer's desire to avoid unnecessary or burdensome carrying costs of property which is held for an indefinite period or an indefinite purpose"). The CPUC has therefore allowed utilities to recover through rates the carrying costs incurred to buy and hold land slated for future use.

To balance the needs of the utility and the interests of ratepayers, the CPUC has established guidelines for determining when property purchased for future development is suitable for PHFU cost recovery and how cost recovery should be permitted.

II. CPUC Guidelines for "Plant Held For Future Use"

In 1987, the CPUC adopted "Plant Held For Future Use Guidelines" that it has not substantively modified since. *See* CPUC Decision No. 87-12-066, 26 CPUC 2d 392, App. B (Dec. 22, 1987) ("App. B"); *see also* CPUC Decision No. 89-12-057, 34 CPUC 2d 199, App. L (Dec. 20, 1989). These guidelines are as follows:

a. All items in PHFU must have a specific plan for use.[1]

b. The need for each item must be justified before being placed in PHFU.

c. If, at any time, the needs or plans for the use of an item change so that a specific plan for use no longer exists, the item shall be removed from PHFU.

[1] The discussion states that "[a] specific plan implies that the utility knows exactly what the item is going to be used for." App. B ¶3.

d. The maximum time period for maintaining any item in PHFU prior to its inclusion in a construction budget is shown on [a separate table] and varies from three to ten years depending on the type of plant.

e. If, after the allowed time period, an item has not been included in a construction budget, the item will be removed from PHFU until such time that it is included in a construction budget.[2]

f. The maximum forecast period for a project in a construction budget will be no more than five years.

g. Therefore, the maximum time any item could be maintained in PHFU prior to the start of construction will be 8 to 15 years depending on the type of plant. (App. B ¶2)

For electric and gas utilities, the time period that a property to be used for a "general plant" may be held as PHFU, according to the table mentioned in (d), is three years; a "power plant (new)" or "Transmission Line and Substation (related to new Power Plant)"—ten years; several other types of facilities—five years. *Id.*[3]

The CPUC emphasizes that PHFU decisions should be evaluated on a "case-by-case basis," and notes "there may be special cases where strict adherence to a set of guidelines . . . may not be appropriate." *Id.* ¶¶4, 5. In those special cases, to continue holding the property in PHFU longer than allowed under the guidelines, the utility must establish that "there is still a definite plan and need to retain the item in PHFU," that "economic analysis justifies the retention," and that there are "mitigating circumstances to require the retention." *Id.* ¶5.

III. Distribution of Gain on Sale of Property

A part of the concept of plant held for future use is the possibility that the intended future use may not be implemented for any number of reasons. In that case, the property at issue could be sold, and the question arises as to how to allocate any gains or losses from the sale between ratepayers and the utility's shareholders.

---

[2] The CPUC discussion of these guidelines states that "a construction budget project should (1) have been reviewed by the utility for need and cost; and (2) be part of the capital budget prepared by the utility annually and authorized by the utility's management." *Id.* App. B ¶4.

[3] In Decision No. 89-12-057, 34 CPUC 2d 199, 270 (1989), the CPUC extended the limit for a transmission line and substation *not* related to a new power plant from five years to ten years. There do not appear to have been any other modifications to the guidelines.

With respect to sale of utility assets generally (not just PHFU), the CPUC has often applied a "risk theory of allocations," which calls for the apportionment of gains or losses between the ratepayers and shareholders based on the extent to which each would have borne the risks of investment. *See In re Cal. Water Serv. Co.*, CPUC Decision 94-09-032, 56 CPUC 2d 4, at *8 (discussing *In re Pac. Gas & Elec. Co.*, CPUC Decision 85-11-018, 19 CPUC 2d 161). Developing on that concept, the CPUC has adopted a "rule of thumb" that ratepayers and shareholders will normally share any after-tax gains or losses from sale of non-depreciable property such as land, on a 50-50 basis. *See* CPUC Decision 06-05-041, 249 P.U.R. 4th 478 (May 25, 2006).[4] Importantly this rule of thumb is based on the assumption that ratepayers generally bear most of the risk of property acquisitions and a utility, therefore, needs to be incentivized to "manage its assets wisely." *Id.*

Section 728.1 Public Utilities Code provides a limit on the CPUC's discretion in allocating gains from the sale of property that has been held as "plant held for future use" by gas or electrical utilities. The statute provides that the portion of gains allocated to ratepayers "shall not be less that the amount the corporation has recovered through rates for carrying costs and other expenses of the property during the period it was carried in the plant held for future use, and shall not exceed the gain on the sale, net of any tax, resulting from the sale." Pub. Util. Code §728.1. Thus, under Section 728.1, the ratepayers are entitled to priority return of any carrying costs and other expenses paid to the gas or electric utility, while the CPUC retains discretion to distribute any remaining gains as it deems appropriate under the circumstances.

IV. Application of Plant Held for Future Use to Contingent Schedule 1

The CPUC has sometimes applied its "plant held for future use" guidelines in situations where it is useful to do so, even though they were not technically applicable. *See, e.g.,* CPUC Decision 97-11-074, 76 CPUC 2d 627, at *65 (regarding utility plans to sell generating assets but retain the land where the plant had been located, finding retained land to be "similar in nature to property that the utility previously held as Plant Held for Future Use" and finding that "the principles underlying PHFU treatment apply equally" to that land).

Similarly, Recology believes PHFU principles can provide helpful guidance here since Recology is proposing to buy land critical to advancing the City's Zero Waste goals. PHFU cost recovery provides a practical and fair way to facilitate needed steps toward achieving those goals.

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[4] This rule of thumb applies where the asset sold does not exceed $50 million in value, and the after-tax gain or loss does not exceed $10 million, or certain sales of an "extraordinary nature," such as sales of nuclear power plants. CPUC Decision 06-05-041.

Long-term, cost-effective planning requires that land be acquired when the opportunity arises since land is unique and may not be available when an urgent need later arises. Further, it is generally prudent that land be acquired as a first step in a development project, since it is virtually impossible to efficiently plan construction without first having ownership or control of the underlying land. At the same time, it would be unfair to expect Recology, a company with operations up and down the West Coast, to deploy its capital for the benefit of San Francisco without a mechanism in place to recover the costs in incurs before the City actually approves project development. While Recology's proposed use of the property is clear and definite — development of a new Zero Waste facility — it is presently unknown if the City will ultimately support and approve the development. PHFU cost-recovery marries the interests of Recology, the City, and ratepayers in effective long-term planning toward their shared Zero Waste goals, while balancing Recology's desire for a reasonable rate of return on investment during the time required for project review, approval and construction.

Here, the possible land acquisition is being contemplated specifically for the benefit of ratepayers and in pursuit of important City policies, that is, as a site for future Zero Waste facilities. The rate increase related to this acquisition would only go into effect if and when Recology takes title to the land. Recology has proposed that ratepayers receive a priority return of any carrying costs or other expenses recovered by the company while holding the property, consistent with the statutory requirement applicable to gas and electric utilities in Public Utilities Code Section 728.1. Recology proposes to bear all risk of any possible loss generated from such a sale, so it is fair, and consistent with the CPUC authority discussed above, that Recology retain any gains in excess of that priority payment of carrying costs.

In short, Contingent Schedule 1 is based on a well-established and long-recognized ratemaking methodology and would facilitate an important step towards achieving Zero Waste goals.

Respectfully submitted,

Michael J. Baker

From: John Glaub
Sent: Monday, February 04, 2013 12:20 PM
To: Robert Haley (robert.haley@sfgov.org); Jack Macy (Jack.Macy@sfgov.org); Douglas Legg (Douglas.Legg@sfdpw.org)
Cc: John Legnitto; Jon Braslaw; Mike Crosetti; Todd High; Stella Lui; Leno Bellomo
Subject: West Wing Conceptual Design Package

Robert, Jack, and Douglas,

Attached is the Conceptual Design Package for the West Wing of the Transfer Station. This is a scaled-back design from the facility considered in Contingent Schedule 2 of the draft application. The facility footprint is now within the triangular-shaped area of land between the west wall of the transfer station and the road down the hill on the west side. Here are a key points about this design alternative:

1. We now have project costs down to $6.6 million.

2. The floor area of the building is 11,500 square feet.

3. Building features include (1) an open-top, gravity loadout, (2) a heavy-duty floor similar to that used in the iMRF, (3) a clear-span structure (no interior columns), (4) high clearance for truck unloading, and (5) a push wall along the west facing wall and around the load out. All these features provide for a rugged and versatile waste handling facility.

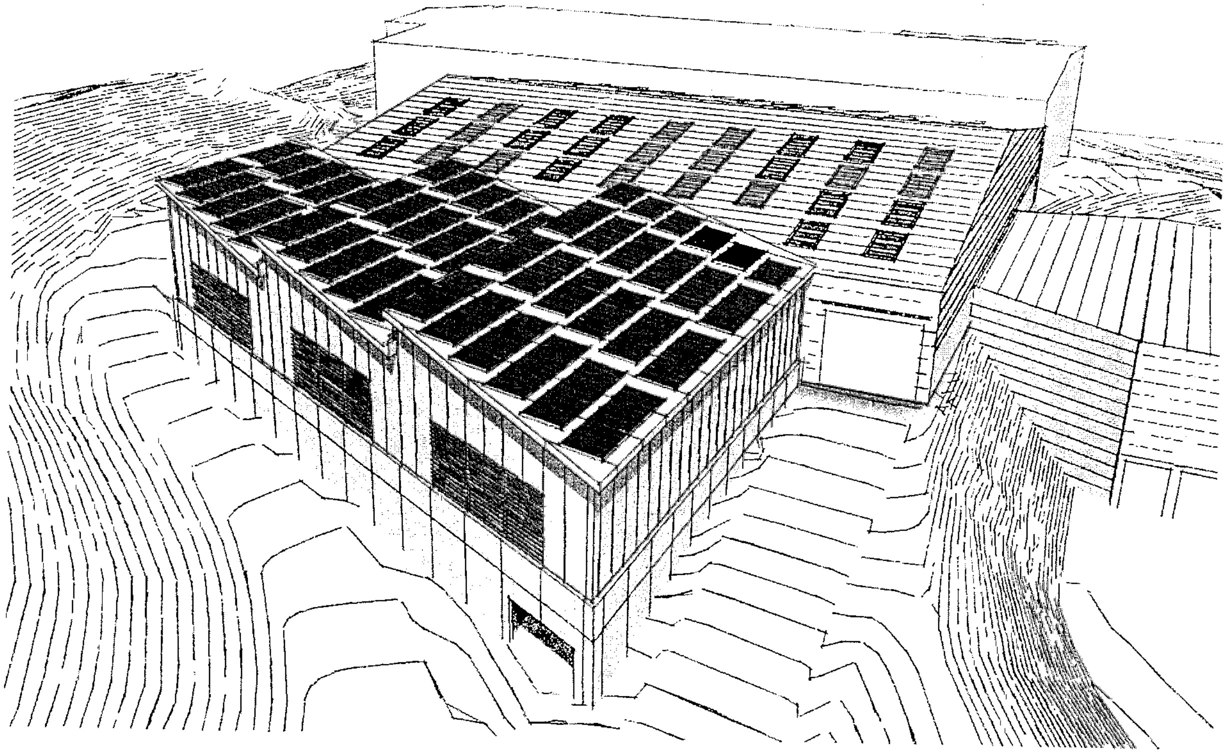
5. The roof has an aesthetic, saw-tooth design with light panels to the north. The roof design allows for adding solar panels in the future. Total roof height is below the top ridge of the transfer station.

6. With this design, there would be no impact on the existing road down the hill west of the facility.

I would be happy to answer any questions or walk you through other aspects of the design. We can do that at our Wednesday meeting or before if you prefer. We are working on Contingent Schedule 2 revisions.

John

Exh. 29

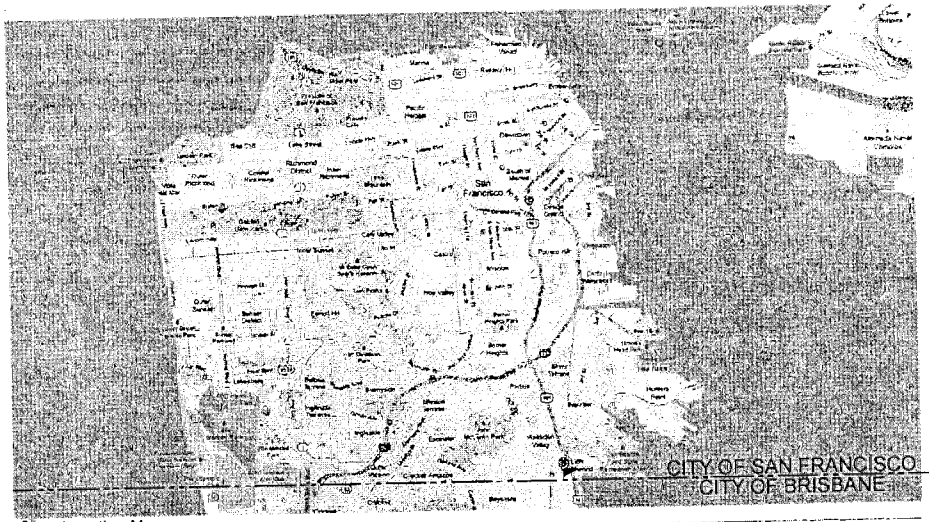


1 Project Image
N.T.S.

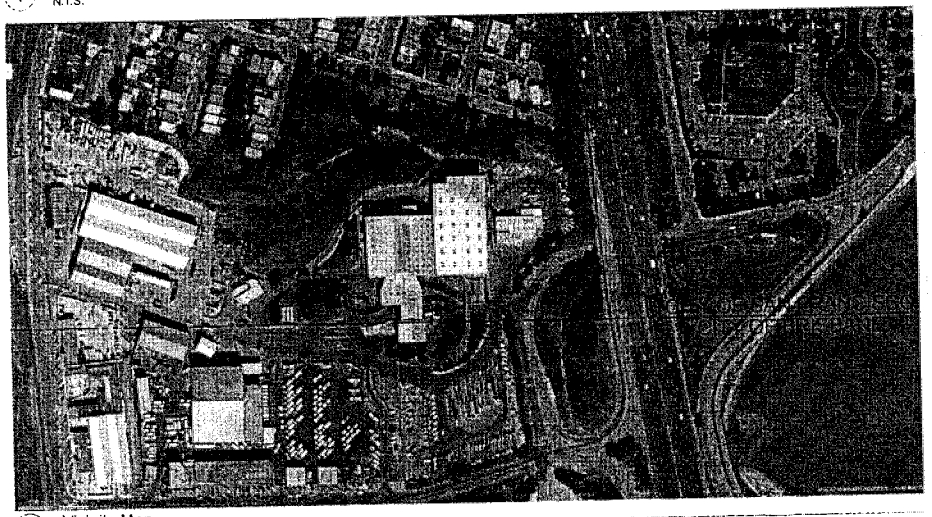
Project Information

Recology
501 Tunnel Avenue
San Francisco, CA 94134
(415) 330-1400

Drawing List



1 Location Map
N.T.S.



2 Vicinity Map
N.T.S.

3 Existing Aerial
N.T.S.

Recology.
William McDonough + Partners
Architecture and Community Design

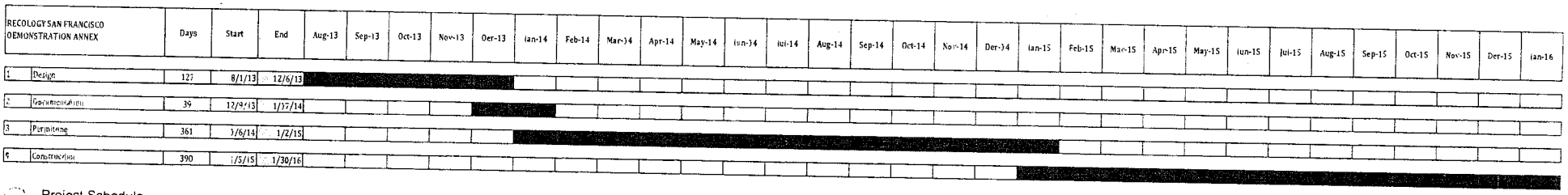
F M E

ARUP

LOCATION

project information: West Wing
client: Recology
location: 501 Tunnel Ave, San Francisco, CA
issue date: 01 Febuary 2013

DS - 101
DRAFT



1 Project Schedule
N.T.S.

	RECOLOGY SAN FRANCISCO WEST WING	SF	$ PER SQ FT	TOTAL $
1	Site Work	13,500	20.00	300,000
2	Foundation	11,500	140.00	1,600,000
3	Building	11,500	140.00	1,600,000
4	MEP	11,500	45.00	500,000
	Total Direct Costs			4,000,000
6	General Conditions, OH+P, Design Contingency, Escalation, Etc.		25% - 35%	1,400,000
	Construction Estimate Total			5,400,000
7	Construction Contingency, Design Fees, Permits, Licenses, Fees, Etc		20% - 25%	1,200,000
	Project Estimate Total			6,600,000

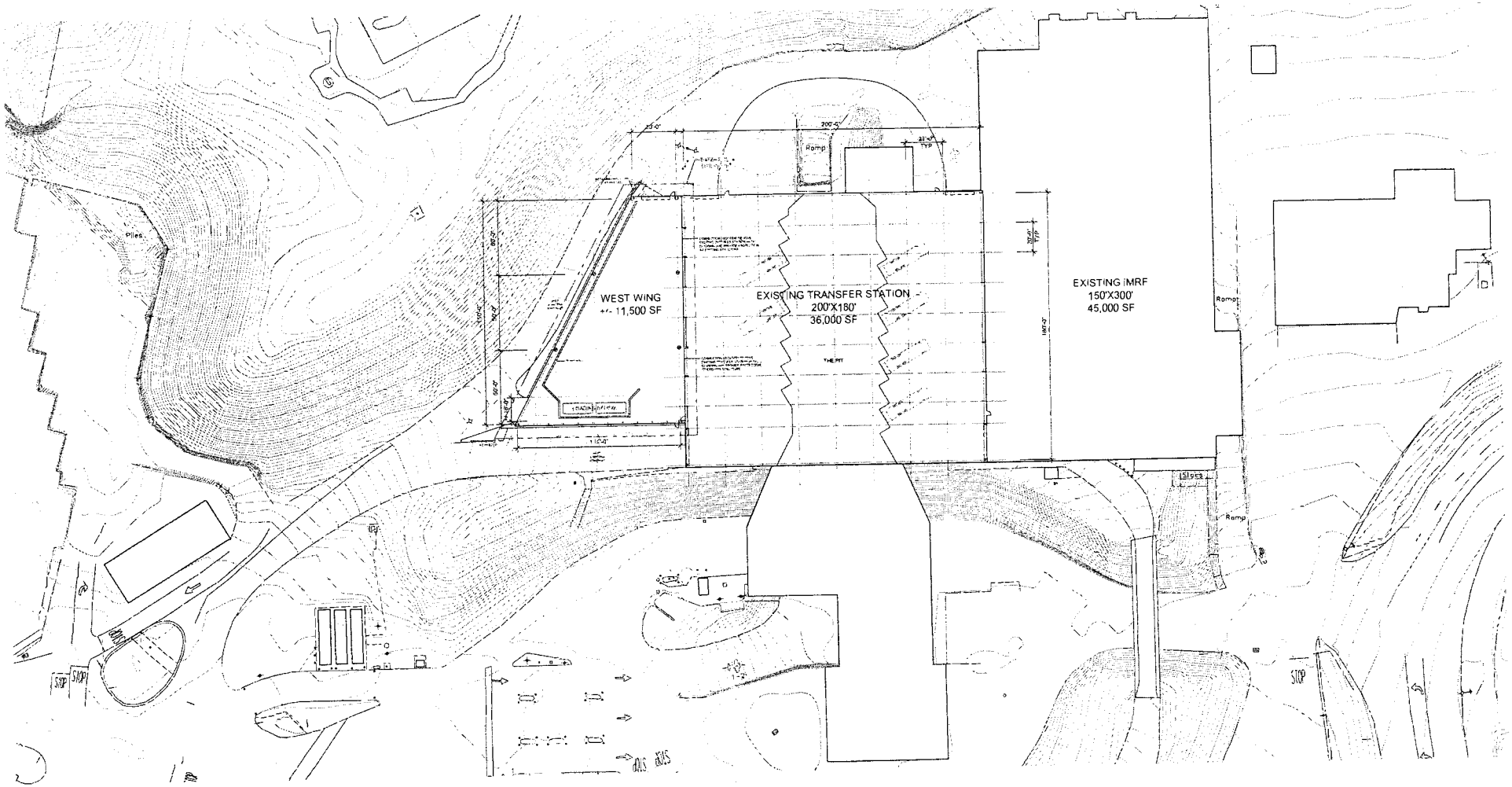
2 Cost Model
N.T.S.

Recology
William McDonough + Partners
Architecture and Community Design
F M E
ARUP

PRELIMINARY SCHEDULE AND COST MODEL

project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 102
DRAFT



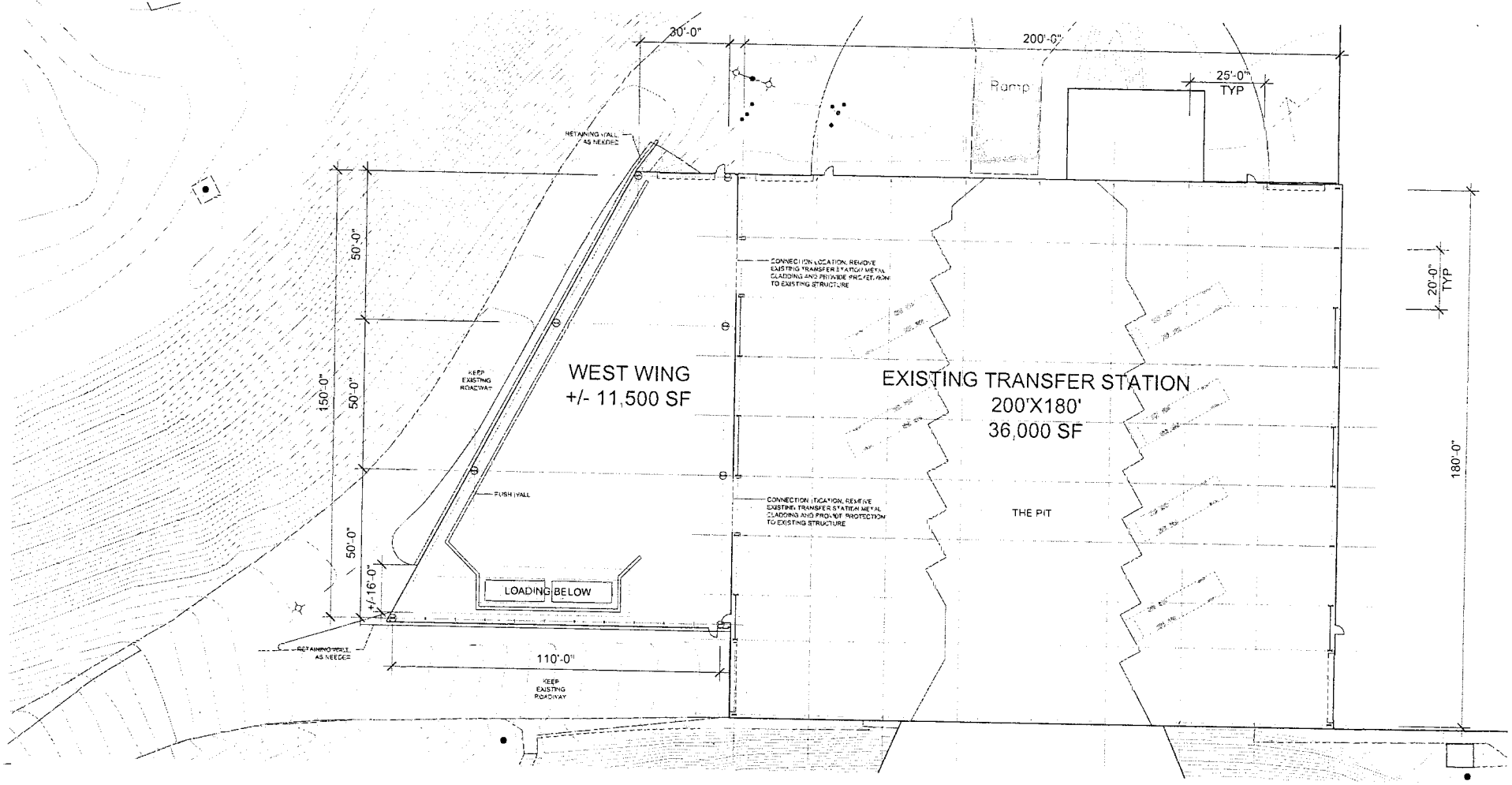
1 Site Plan
Scale: 1"=64'-0"

SITE PLAN

Recology
William McDonough + Partners
Architecture and Community Design
F M E
ARUP

project information West Wing
client Recology
location 501 Tunnel Ave,
San Francisco, CA
issue date 01 Febuary 2013

DS - 103
DRAFT



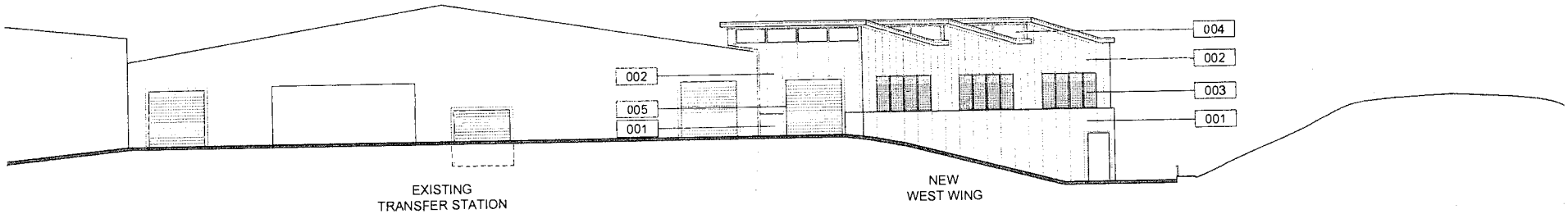
1 Floor Plan
Scale: 1"=32'-0"

Recology
William McDonough + Partners
Architecture and Community Design
ARUP

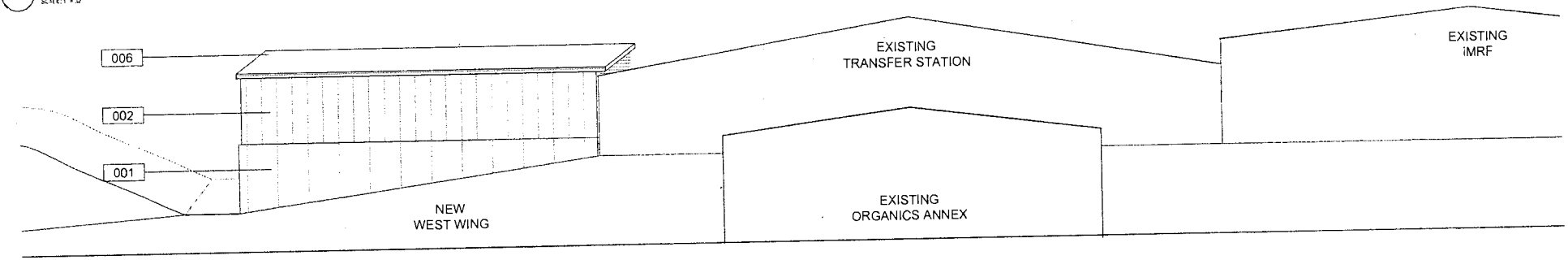
FLOOR PLAN

project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

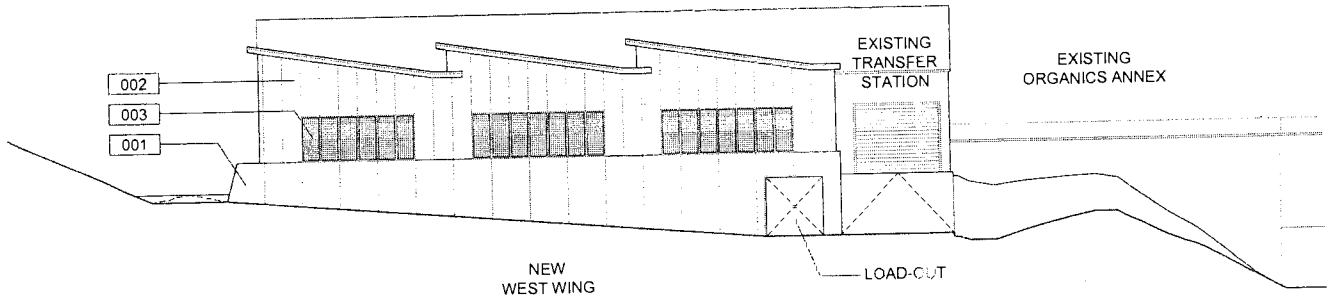
DS - 104
DRAFT



1 NORTH ELEVATION
SCALE: 1" = 32'



2 SOUTH ELEVATION
SCALE: 1" = 32'



3 WEST ELEVATION
SCALE: 1" = 32'

001 CONCRETE RETAINING WALL
002 METAL PANEL
003 LOUVERS
004 CLERESTORY WINDOWS
005 ROLL-UP DOOR
006 ROOFTOP SOLAR THERMAL + PV

4 MATERIALS LEGAND

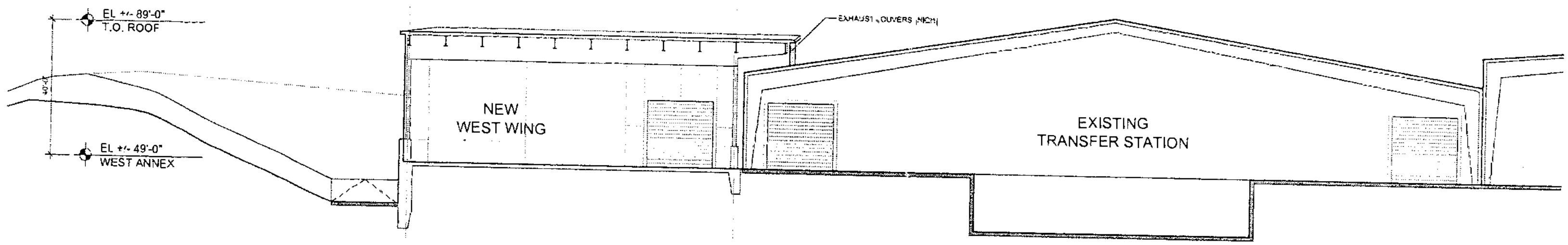
0' 8' 16' 32'

ELEVATIONS

Recology
William McDonough + Partners
Architecture and Community Design
F M E
ARUP

project information: West Wing
client: Recology
location: 501 Tunnel Ave, San Francisco, CA
issue date: 01 Febuary 2013

DS - 105
DRAFT



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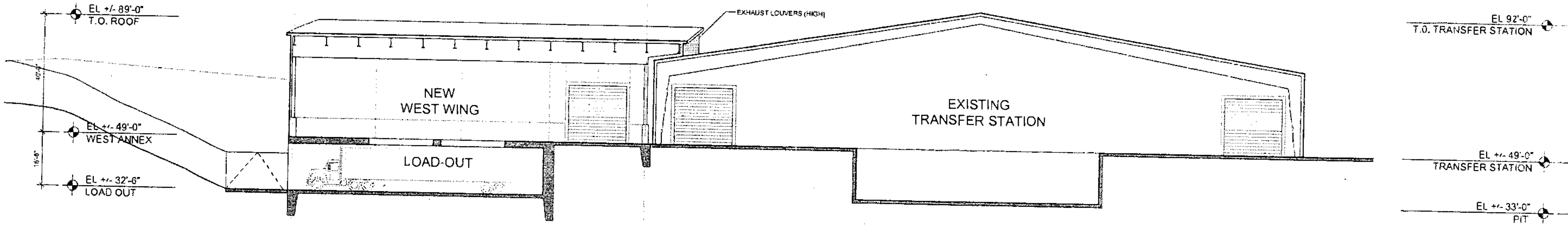
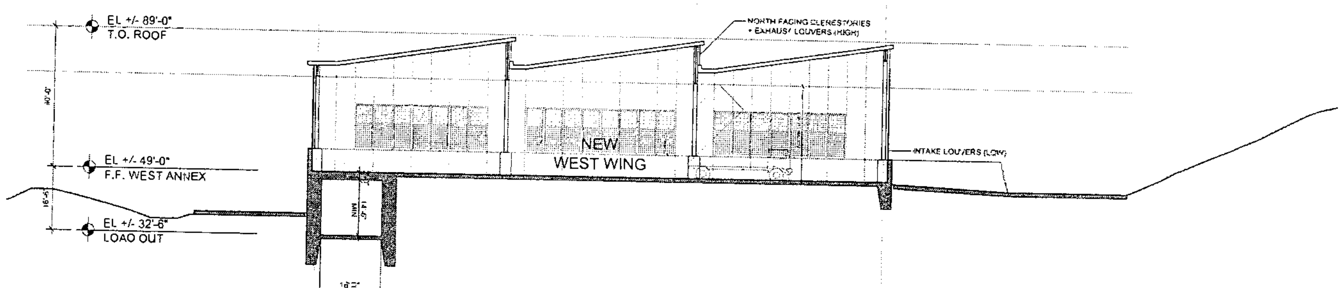
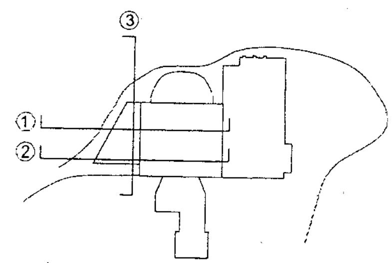


2 CROSS SECTION B



3 LONGITUDINAL SECTION



4 KEY PLAN

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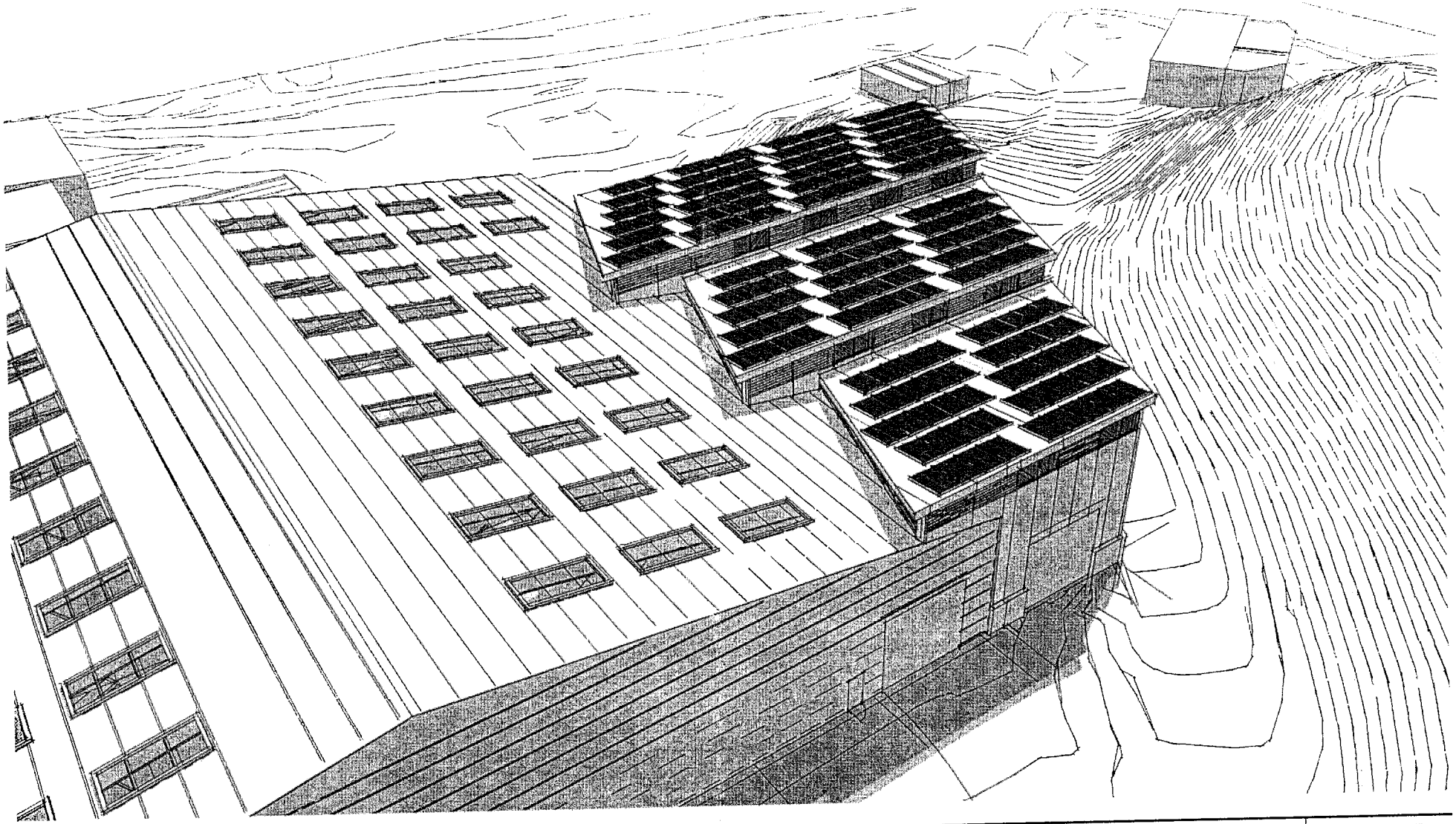
SECTIONS

project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 106
DRAFT



Recology

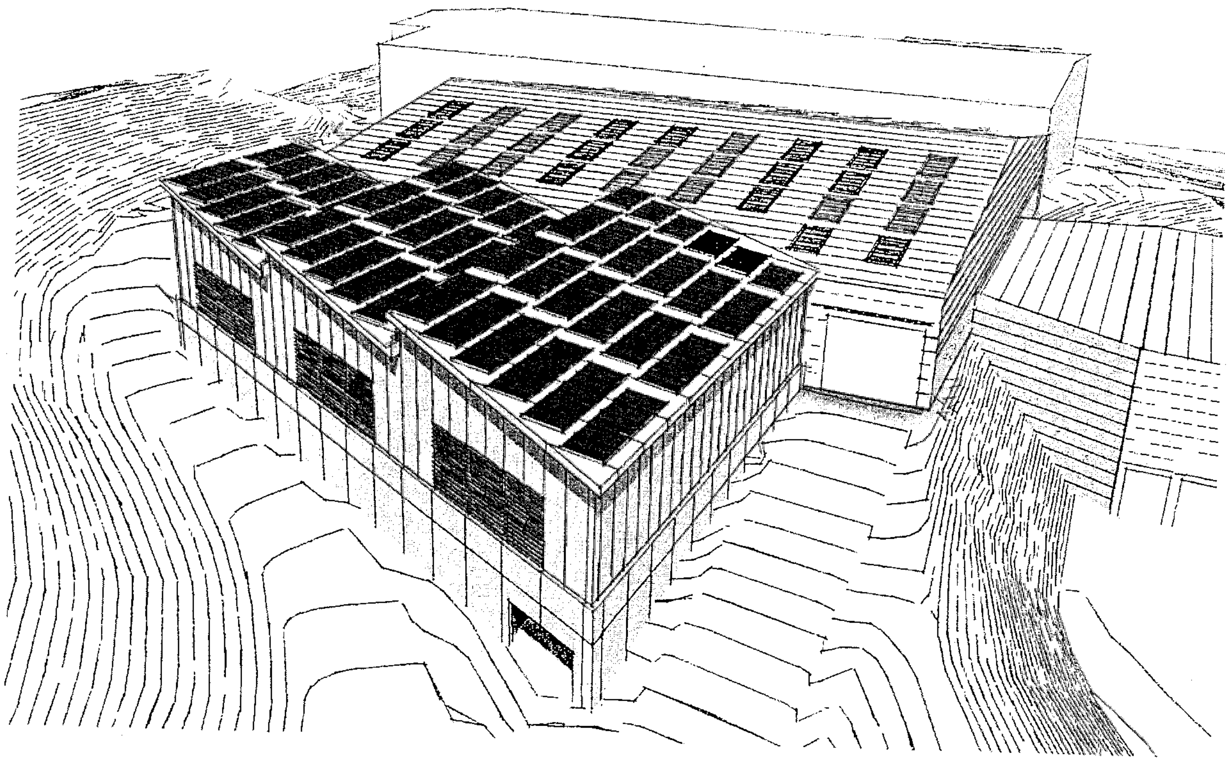
William McDonough + Partners
Architecture and Community Design

F M E
ARUP

AERIAL RENDERING
VIEW LOOKING SOUTHWEST

project information: West Wing
client: Recology
location: 501 Tunnel Ave, San Francisco, CA
issue date: 01 Febuary 2013

DS - 107
DRAFT



1 Project Image
N.T.S.

Project Information

Recology
501 Tunnel Avenue
San Francisco, CA 94134
(415) 330-1400

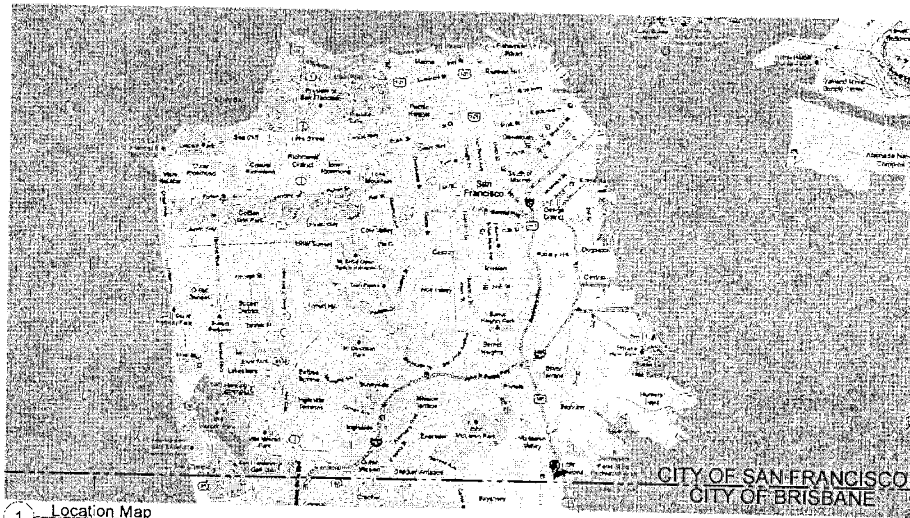
Drawing List

Recology.
William McDonough + Partners
Architecture and Community Design
F M E
ARUP

PROJECT INFORMATION

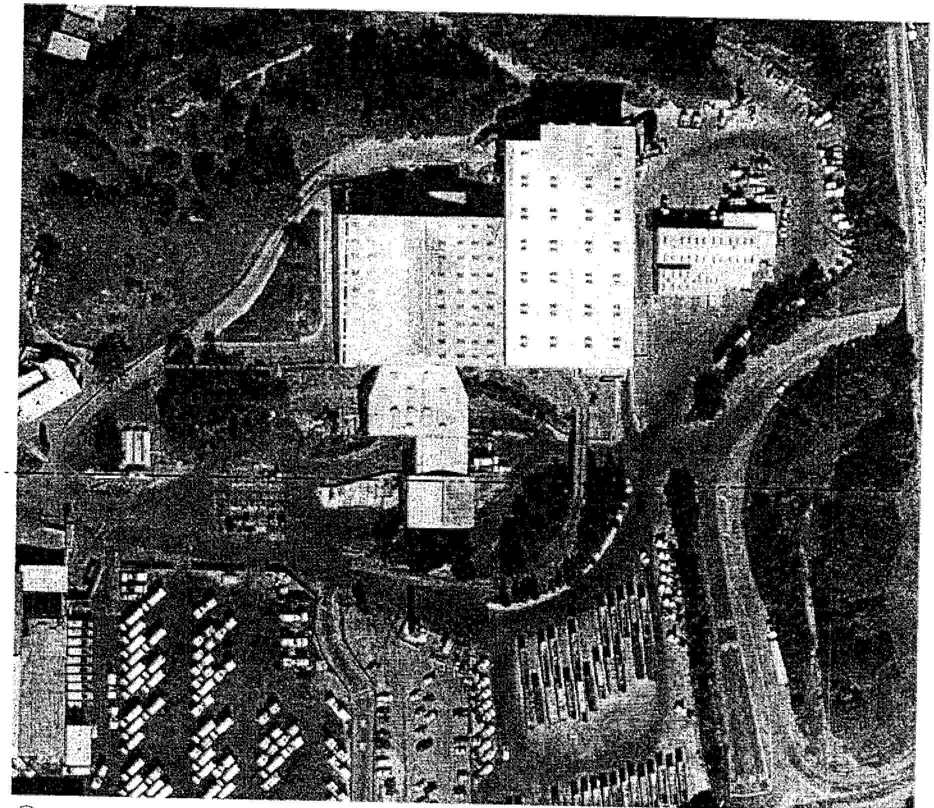
project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 100
DRAFT



1 Location Map
N.T.S.

2 Vicinity Map
N.T.S.



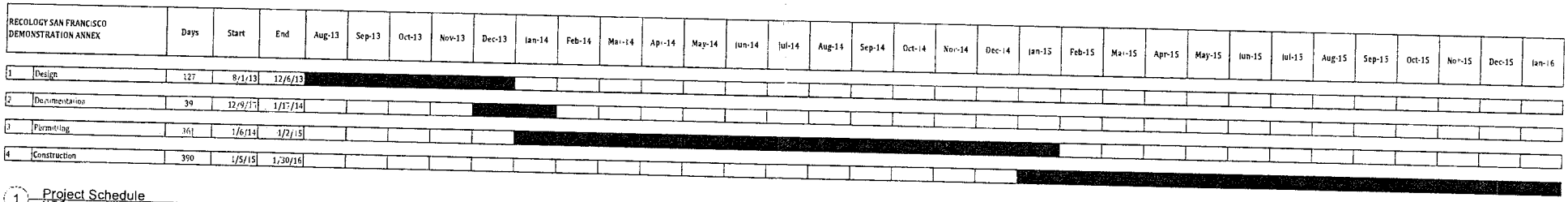
3 Existing Aerial
N.T.S.

Recology.
William McDonough + Partners
Architecture and Community Design
| F I M E | ARUP |

LOCATION

project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 101
DRAFT



1 Project Schedule
N.T.S.

	RECOLOGY SAN FRANCISCO WEST WING	SF	$ PER SQ FT	TOTAL $
1	Site Work	13,500	20.00	300,000
2	Foundation	11,500	140.00	1,600,000
3	Building	11,500	140.00	1,600,000
4	MEP	11,500	45.00	500,000
	Total Direct Costs			4,000,000
6	General Conditions, OH+P, Design Contingency, Escalation, Etc.		25% - 35%	1,400,000
	Construction Estimate Total			5,400,000
7	Construction Contingency, Design Fees, Permits, Licenses, Fees, Etc		20% - 25%	1,200,000
	Project Estimate Total			6,600,000

2 Cost Model
N.T.S.

Recology
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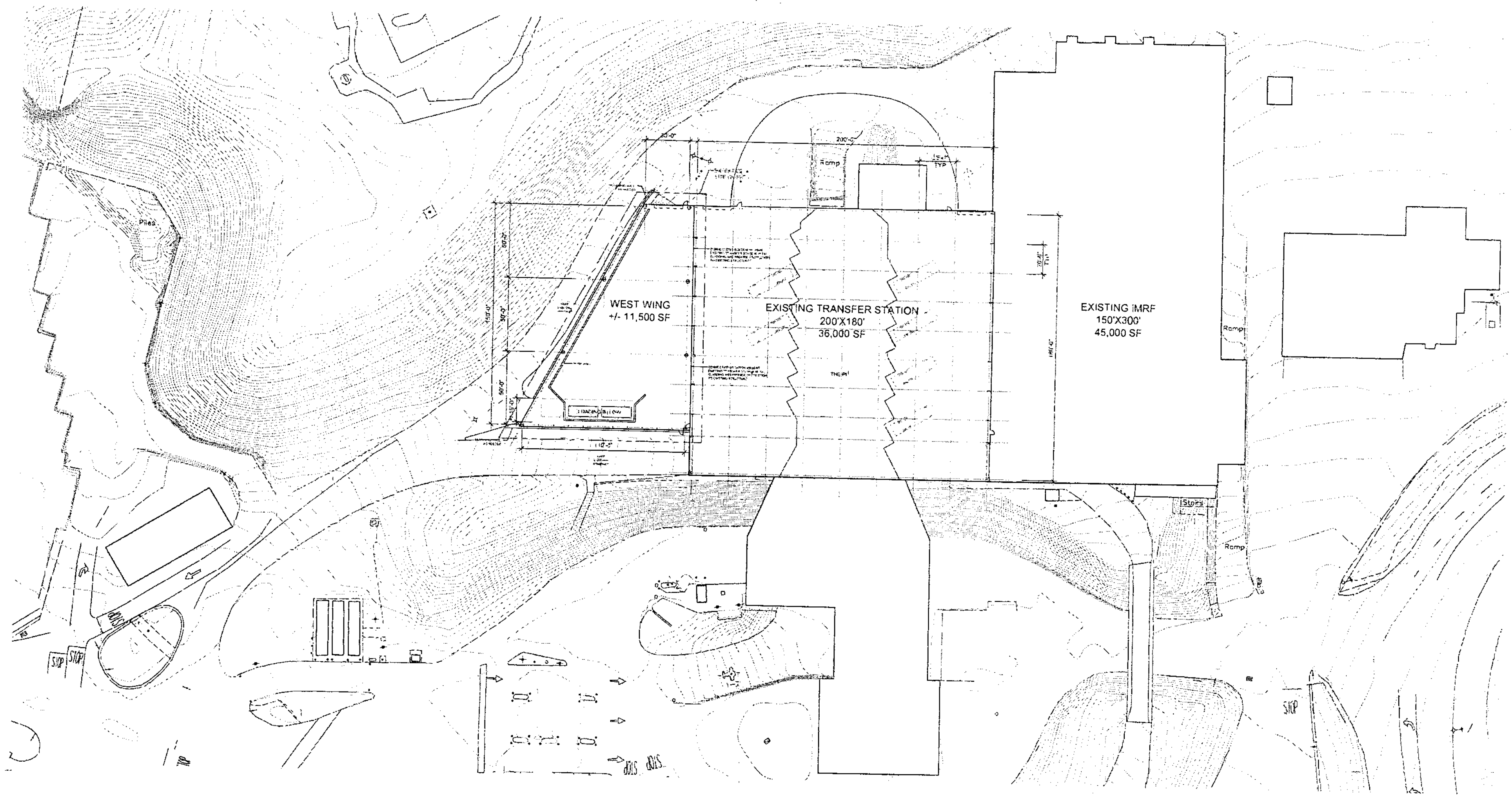
PRELIMINARY SCHEDULE AND COST MODEL

project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 102
DRAFT



1 Site Plan
Scale: 1"=64'-0"

Recology.
William McDonough + Partners
Architecture and Community Design

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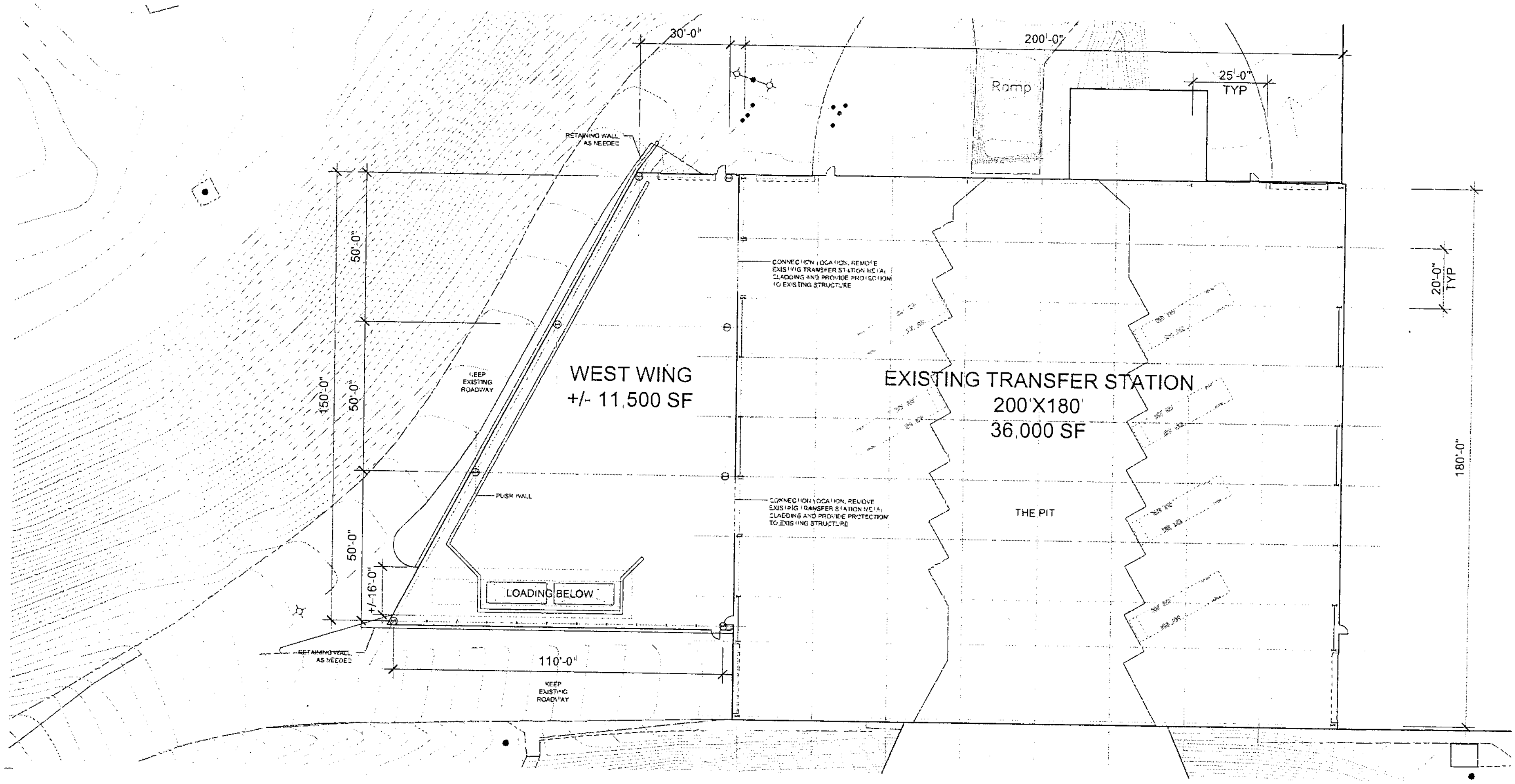
SITE PLAN

project information: West Wing
client: Recology
location: 501 Tunnel Ave, San Francisco, CA
issue date: 01 Febuary 2013

DS - 103
DRAFT



1 Floor Plan
Scale: 1"=32'-0"

Recology
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Architecture and Community Design

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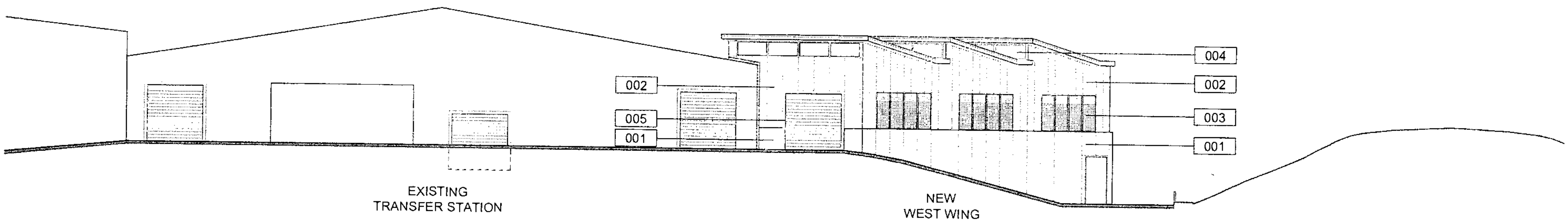
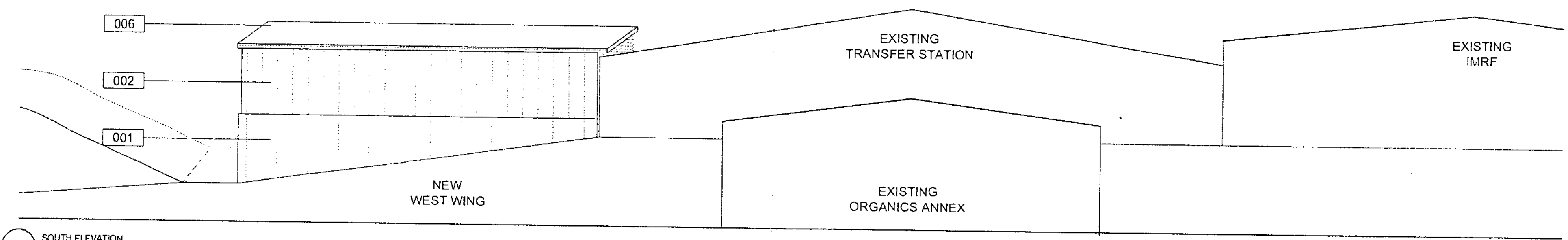
FLOOR PLAN

project information: West Wing
client: Recology
location: 501 Tunnel Ave, San Francisco, CA
issue date: 01 Febuary 2013

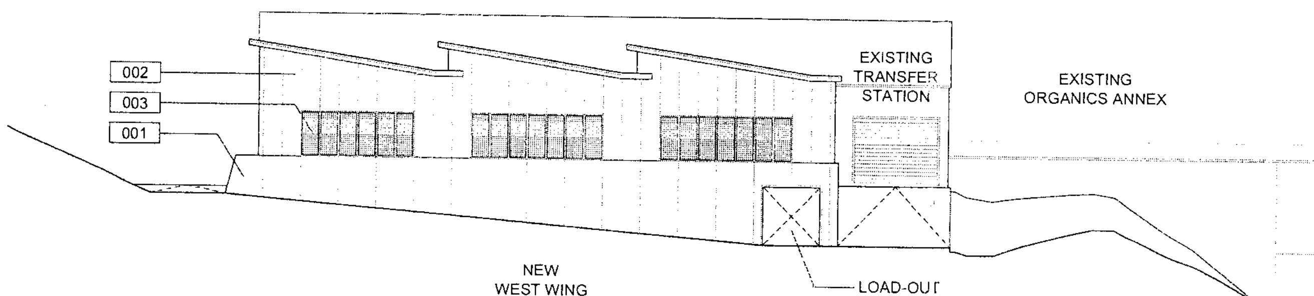
DS - 104
DRAFT



1 NORTH ELEVATION
SCALE: 1" = 32'



2 SOUTH ELEVATION
SCALE: 1" = 32'



3 WEST ELEVATION
SCALE: 1" = 32'

001	CONCRETE RETAINING WALL
002	METAL PANEL
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005	ROLL-UP DOOR
006	ROOFTOP SOLAR THERMAL + PV

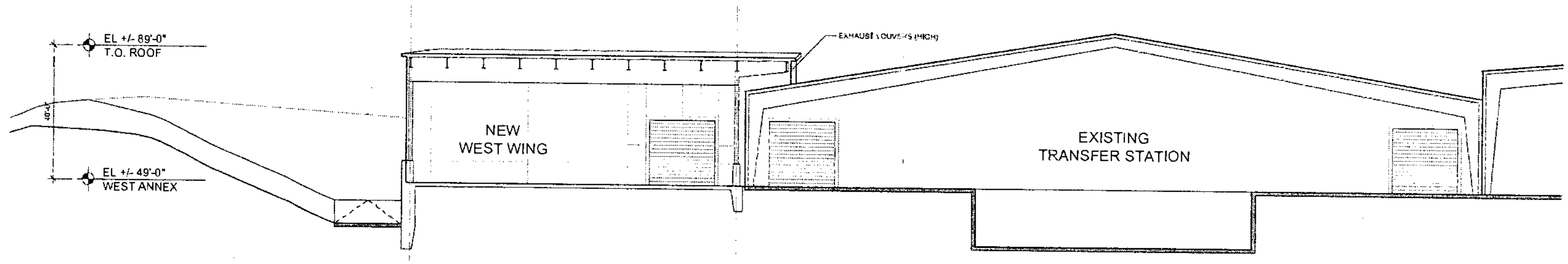
4 MATERIALS LEGAND

Recology
William McDonough + Partners
Architecture and Community Design
F M E
ARUP

ELEVATIONS

project information West Wing
client Recology
location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 105
DRAFT



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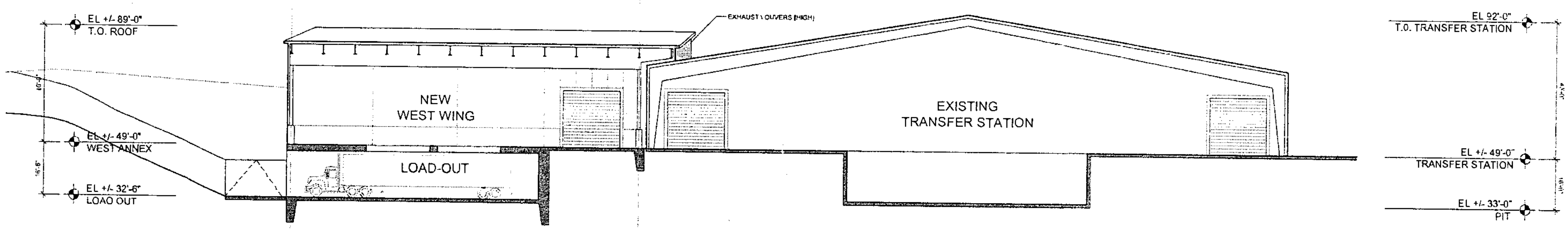
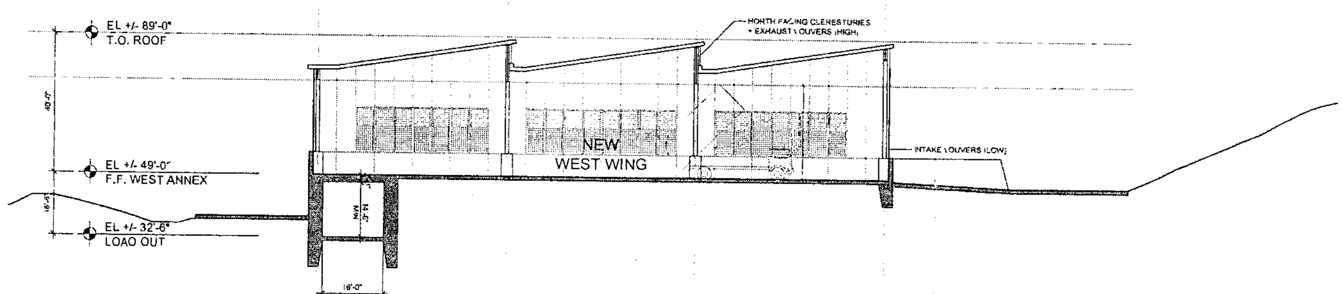


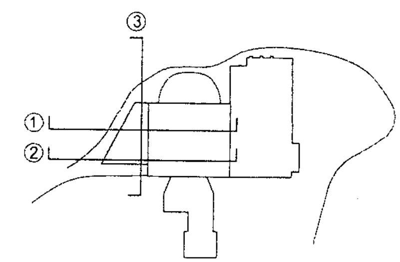
2 CROSS SECTION B

SCALE: 1" = 32'



3 LONGITUDINAL SECTION

SCALE: 1" = 32'



4 KEY PLAN

Recology
William McDonough + Partners
Architecture and Community Design

F I M E

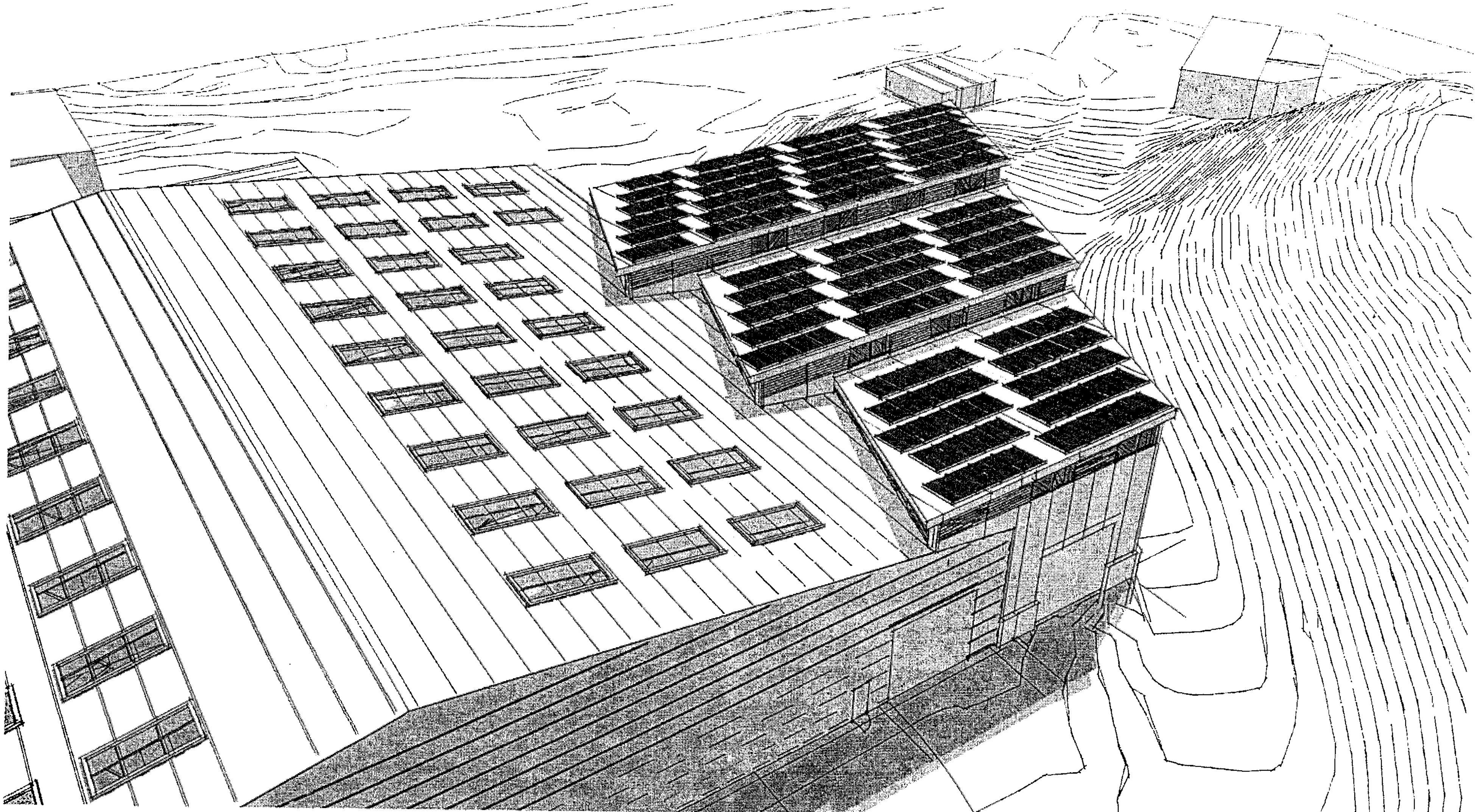
ARUP

SECTIONS

project information	West Wing
client	Recology
location	501 Tunnel Ave, San Francisco, CA
issue date	01 Febuary 2013

DS - 106

DRAFT



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Architecture and Community Design

FME

ARUP

AERIAL RENDERING
VIEW LOOKING SOUTHWEST

project information West Wing
client Recology

location 501 Tunnel Ave, San Francisco, CA
issue date 01 Febuary 2013

DS - 107
DRAFT

From: John Glaub
Sent: Thursday, February 07, 2013 12:34 PM
To: Jack Macy (Jack.Macy@sfgov.org)
Cc: Robert Haley (robert.haley@sfgov.org); Douglas Legg (Douglas.Legg@sfdpw.org); Leno Bellomo; Jon Braslaw
Subject: West Wing Cost Estimate

Jack,

I have attached three documents from TBD Consultants to further support the West Wing cost estimate.

1. A one-page summary with a breakdown of the General Conditions, Contractor's Overhead & Profit, Contingencies, etc.

2. The detailed TBD cost estimate on their letterhead (10 pages). This document also verbally describes their basis for cost estimating.

3. A list of cost estimating projects that TBD Consultants have prepared for projects in San Francisco, including many for the City and County of San Francisco (e.g., Moscone Center, Asian Arts Museum, California Academy of Sciences, Central Subway, Museum of Modern Art, Transbay Terminal, San Francisco General Hospital). They clearly have strong credentials for estimating construction costs in San Francisco.

I would also like to point out that the total building area is 13,500 square feet. The main floor area is 11,500 square feet, and the loadout area is 2,000 square feet. I had used the 11,500 figure in my communications when sending you the Conceptual Design Package.

Let me know if you have any questions.

John

Exh. 30

RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

Ref.	Section	System Quantity	Unit	$/Unit	Total Cost
	GFA Calculation:				
	Basement loading area	2,000	SF		
	Main Floor Level	11,500	SF		
	TOTAL FLOOR AREA	**13,500**	**SF**		
	TOTAL DIRECT CONSTRUCTION COSTS				4,018,644
	GENERAL CONDITIONS, OVERHEAD & PROFIT	16.00	%		642,983
	Sub-Total				4,661,627
	DESIGN CONTINGENCY	10.00	%		466,163
	Sub-Total				5,127,790
	ESCALATION				
	To mid point of construction	6.00	%		307,667
	CONSTRUCTION ESTIMATE TOTAL				**5,435,457**
	PROCESS EQUIPMENT (excluded)				
	CONSTRUCTION CONTINGENCY	6	%		326,127
	DESIGN FEES	10	%		543,546
	PERMITS, LICENSES, FEES	6	%		326,127
	PROJECT ESTIMATE TOTAL				**6,631,257**
	Cost/SF Construction Cost				402.63
	Cost/SF Project Cost				491.20

RECOLOGY

WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic

February 6, 2013

Prepared For:

Fee Munson Ebert

500 Montgomery Street
San Francisco
CA 94111

tbd consultants

111 Pine St, Suite 1315
San Francisco
CA 94111

TEL. (415) 981-9430
FAX. (415) 981-9434

EMAIL. info@tbdconsultants.com
WEB. www.tbdconsultants.com

Project Management | Construction Cost Management

PROJECT DESCRIPTION

The project consists of the West Wing expansion to the existing Transfer Station.

REFERENCE DOCUMENTATION

This Construction Cost Estimate was produced from conceptual master plan documentation, and discussions with the design team and building owner. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

BASIS FOR PRICING

This estimate reflects the fair construction value for this project and should not be construed as a prediction of low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared. Pricing assumes a procurement process with competitive bidding for all sub-trades of the construction work, which is to mean a minimum of 3 bids for all subcontractors and materials/equipment suppliers. If fewer bids are solicited or received, prices can be expected to be higher.

Subcontractor's markups have been included in each line item unit price. Markups cover the cost of field overhead, home office overhead and subcontractor's profit. Subcontractor's markups typically range from 15% to 25% of the unit price depending on market conditions.

General Contractor's/Construction Manager's Site Requirement costs are calculated on a percentage basis. General Contractor's/Construction Manager's Jobsite Management costs are also calculated on a percentage basis.

General Contractor's/Construction Manager's overhead and fees are based on a percentage of the total direct costs plus general conditions, and covers the contractor's bond, insurance, site office overheads and profit.

Unless identified otherwise, the cost of such items as overtime, shift premiums and construction phasing are not included in the line item unit price.

This cost estimate is based on standard industry practice, professional experience and knowledge of the local construction market costs. TBD Consultants have no control over the material and labor costs, contractors methods of establishing prices or the market and bidding conditions at the time of bid. Therefore TBD Consultants do not guarantee that the bids received will not vary from this cost estimate.

CONTINGENCY

Design Contingency *10%*

The Design Contingency is carried to cover scope that lacks definition and scope that is *anticipated* to be added to the Design. As the Design becomes more complete the Design Contingency will reduce.

Construction Contingency *6%*

The Construction Contingency is carried to cover the unforeseen during construction execution and risks that do not currently have mitigation plans. As risks are mitigated, Construction Contingency can be reduce, but should not be eliminated.

ESCALATION

Escalation has been included from this estimate to the assumed mid-point of construction.

EXCLUSIONS

- Items identified in the design as Not In Contract [NIC]
- Process equipment, piping, etc.
- Utility company back charges
- Owners contingency
- Construction or occupancy phasing or off hours' work.

ITEMS THAT MAY AFFECT THIS ESTIMATE

Such items include, but are not limited to the following:

- Modifications to the scope of work subsequent to the preparation of this estimate
- Unforeseen subsurface conditions
- Special requirements for site access, off-hour work or phasing activities
- Restrictive technical specifications, excessive contract or non-competitive bid conditions
- Sole source specifications for materials or products
- Bid approvals delayed beyond the anticipated project schedule

RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

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	GFA Calculation:				
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	GENERAL CONDITIONS, OVERHEAD & PROFIT	16.00	%		642,983
	Sub-Total				4,661,627
	DESIGN CONTINGENCY	10.00	%		466,163
	Sub-Total				5,127,790
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	PROCESS EQUIPMENT (excluded)				
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	Cost/SF Construction Cost				402.63
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RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

Ref.	Section	System Quantity	Unit	$/Unit	Total Cost
A10	**FOUNDATIONS**				
	FOUNDATIONS				
	Basic footings	11,500	SF	18.84	216,660
	SPECIAL FOUNDATIONS				
	Premium for piling	11,500	SF	18.29	210,335
	SLAB ON GRADE				
	Structural slab on grade	11,500	SF	27.75	319,125
	Premium for retaining wall at perimeter	164	LF	500.00	82,000
	FOUNDATIONS				828,120
A20	**BASEMENT CONSTRUCTION**				
	BASEMENT EXCAVATION				
	None required				
	Excavation and disposal	1,778	CY	30.00	53,340
	Earthwork support adjacent road	4,212	SF	50.00	210,600
	BASEMENT WALLS				
	None required				
	Concrete basement retaining wall	7,845	SF	60.00	470,700
	Waterproofing to walls	7,845	SF	12.00	94,140
	BASEMENT CONSTRUCTION				828,780
B10	**SUPERSTRUCTURE**				
	FLOOR CONSTRUCTION				
	Upper floor construction	2,000	SF	45.00	90,000
	ROOF CONSTRUCTION				
	Steelwork in roof structure	57	Ton	4,350.00	247,624
	Roof decking	11,500	SF	6.00	69,000
	SUPERSTRUCTURE				406,624
B20	**EXTERIOR CLOSURE**				
	EXTERIOR WALLS				
	Metal panel faced exterior wall	10,330	SF	40.00	413,200
	Louvered panels	1,150	SF	60.00	69,000
	EXTERIOR WINDOWS				
	Clerestory windows	1,112	SF	75.00	83,400
	EXTERIOR DOORS				
	Single exterior door, frame and hardware	2	EA	2,600.00	5,200
	Roll-up shutter door	649	SF	74.43	48,305

RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

Ref.	Section	System Quantity	Unit	$/Unit	Total Cost
	EXTERIOR CLOSURE				619,105
B30	**ROOFING**				
	ROOF COVERINGS				
	Roof coverings, sloped, allowance	11,500	SF	12.00	138,000
	Edging and flashing	776	LF	17.50	13,580
	ROOF OPENINGS				
	Not required				
	ROOFING				151,580
C10	**INTERIOR CONSTRUCTION**				
	PARTITIONS				
	Push wall	2,801	SF	85.00	238,085
	INTERIOR DOORS				
	Not required				
	SPECIALTIES				
	Specialties to process areas	13,500	SF	3.00	40,500
	INTERIOR CONSTRUCTION				278,585
C20	**STAIRCASES**				
	STAIR CONSTRUCTION				
	Not required				
	STAIR FINISHES				
	Not required				
	STAIRCASES				
C30	**INTERIOR FINISHES**				
	WALL FINISHES				
	Wall finishes to process areas	13,500	SF	1.50	20,250
	FLOOR FINISHES				
	Floor finishes to process areas	13,500	SF	3.00	40,500
	CEILING FINISHES				
	Ceiling finishes to process areas	13,500	SF	1.00	13,500
	INTERIOR FINISHES				74,250
D10	**CONVEYING SYSTEMS**				

RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

Ref.	Section	System Quantity	Unit	$/Unit	Total Cost
	ELEVATORS & LIFTS				
	Not required				
	ESCALATORS & MOVING WALKS				
	Not required				
	OTHER CONVEYING SYSTEMS				
	Not required				
	CONVEYING SYSTEMS				
D15	**MECHANICAL**				
	PLUMBING				
	Plumbing to process areas	13,500	SF	5.00	67,500
	HVAC				
	Ventilation only to process areas	13,500	SF	5.50	74,250
	FIRE PROTECTION				
	Fire protection to process areas	13,500	SF	4.75	64,125
	MECHANICAL				205,875
D50	**ELECTRICAL**				
	ELECTRICAL DISTRIBUTION				
	Included below				
	LIGHTING & BRANCH WIRING				
	Electrical services to process areas	13,500	SF	25.00	337,500
	COMMUNICATION & SECURITY				
	Included above				
	SPECIAL ELECTRICAL SYSTEMS				
	Included above				
	ELECTRICAL				337,500
E10	**EQUIPMENT**				
	EQUIPMENT				
	Process equipment included elsewhere				
	Miscellaneous equipment, allow	13,500	SF	0.36	4,860
	EQUIPMENT				4,860
E20	**FURNISHINGS**				
	FIXED FURNISHINGS				
	Not required				

RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

Ref.	Section	System Quantity	Unit	$/Unit	Total Cost
	MOVABLE FURNISHINGS				
	Not required				
	FURNISHINGS				
F10	**SPECIAL CONSTRUCTION**				
	SPECIAL STRUCTURES				
	Not required				
	OTHER SPECIAL CONSTRUCTION				
	Not required				
	RECORDING INSTRUMENTATION				
	Not required				
	BUILDING AUTOMATION SYSTEMS				
	Not required				
	OTHER SPECIAL CONTROLS				
	Not required				
	SPECIAL CONSTRUCTION				
F20	**SELECTIVE BUILDING DEMOLITION**				
	BUILDING DEMOLITION				
	Remove exterior wall cladding to form opening	775	SF	5.00	3,875
	Miscellaneous demolition and alteration work connecting new building to existing	153	LF	70.00	10,710
	HAZARDOUS COMPONENTS ABATEMENT				
	Not required				
	SELECTIVE BUILDING DEMOLITION				14,585
G	**BUILDING SITE WORK**				
	SITE PREPARATION				
	Site clearance, preparation	11,200	SF	1.80	20,160
	Hazmat remediation to site	11,200	SF	1.50	16,800
	Site levelling and grading	11,200	SF	2.85	31,920
	Bulk excavation and disposal	920	CY	30.00	27,600
	SITE IMPROVEMENT				
	Concrete paving	9,700	SF	12.00	116,400
	Roads and carparking	1,500	SF	10.00	15,000
	Curb	150	LF	30.00	4,500
	Sitework specialties	11,200	SF	0.25	2,800
	SITE/MECHANICAL UTILITIES				
	Site drainage	11,200	SF	1.00	11,200
	New utility connections to building excluded				

RECOLOGY
WEST WING EXPANSION
SAN FRANCISCO, CA

Schematic
Floor Area: 13,500 SF
February 6, 2013
By: GEC

Ref.	Section	System Quantity	Unit	$/Unit	Total Cost
	SITE ELECTRICAL UTILITIES				
	Site lighting	11,200	SF	2.00	22,400
	New utility connections to building excluded				
	OTHER SITE CONSTRUCTION				
	Not required				
	BUILDING SITE WORK				268,780
	TOTAL DIRECT COSTS				4,018,644
	GENERAL CONDITIONS, OVERHEAD & PROFIT	16.00	%		642,983
	Sub-Total				4,661,627
	DESIGN CONTINGENCY	10.00	%		466,163
	Sub-Total				5,127,790
	ESCALATION				
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	PROJECT ESTIMATE TOTAL				**6,631,257**
	Cost/SF Construction Cost				402.63
	Cost/SF Project Cost				491.20

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

100 Broderick Street - Seismic Renovation, San Francisco, CA
101 California Street Office Building TI, San Francisco, CA
1275 Market Street, San Francisco, CA
1290 20th Ave - Seismic Renovation, San Francisco, CA
152 - 7th Avenue, San Francisco, CA
1690 North Point - Seismic Renovation, San Francisco, CA
2001 Market Street Concrete Review, San Francisco, CA
201 Folsom, San Francisco, CA
2079 Market Street - Seismic Renovation, San Francisco, CA
235 Church Street Seismic, San Francisco, CA
2550 Van Ness, San Francisco, CA
300 Spear C.O. review, San Francisco, CA
300 Spear Street, C.O. Phase 2 Services, San Francisco, CA
300 Spear Street, rebar estimate, San Francisco, CA
301 Mission Street, San Francisco, CA
333 Brannon, San Francisco, CA
333 Harrison Street Concrete Bid Review, San Francisco, CA
350 Mission Street, San Francisco, CA
350 Mission, San Francisco, CA
450 Golden Gate, water damage, San Francisco, CA
50 UN Plaza, San Francisco, CA
500 Stanyan Street - Seismic Renovation, San Francisco, CA
531 Howard, San Francisco, CA
55 Hawthorne Suite 700, San Francisco, CA
601 OFarrell Street - 915 Pierce - Seismic Renovation, San Francisco, CA
601 OFarrell Street - Seismic Renovation, San Francisco, CA
631 Howard & 55 Hawthorne Street, San Francisco, CA
631 Howard 3rd Floor Leasing Options, San Francisco, CA
631 Howard 5th Floor - Clean Demo - Warm Shell, San Francisco, CA
631 Howard 5th Floor, San Francisco, CA
631 Howard Floors 3-5 Seismic Upgrades, San Francisco, CA
631 Howard Loading Dock, San Francisco, CA
631 Howard Lobby Renovation, San Francisco, CA
631 Howard Tishman Shoring Agreement, San Francisco, CA
631 Howard Tri-Level Space PM Services, San Francisco, CA
631 Howard Tri-Level Tenant Improvements, San Francisco, CA
65 Funston Ave & 1163-1167 Gorgas Ave, San Francisco, CA
676 Geary Street - Seismic Renovation, San Francisco, CA
680 Folsom Street, San Francisco, CA
701 Taylor- Seismic Renovation, San Francisco, CA
706 Mission Street, San Francisco, CA
795 Pine Street - Seismic Renovation, San Francisco, CA
800 Market Street, San Francisco, CA
835 Market Street Hotel & Club Residences, San Francisco, CA
850 Francisco St, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

850-888 Brannon Street, San Francisco, CA
901 Market, San Francisco, CA
ADA Upgrades, Presidio, San Francisco, CA
Animal Research Facility, UC San Francisco, San Francisco, CA
Antibody Drug Conjugate Production Facility, San Francisco, CA
Archaeology Center, Presidio, San Francisco, CA
Argonne CDC, San Francisco School District, San Francisco, CA
Argonne ES school upgrade, SF School District, San Francisco, CA
Asian Arts Museum (historic renovation), San Francisco, CA
Asset Valuation Parking Lots & Roadways, San Francisco, CA
BAHA MTA Building 390 Main Street, San Francisco, CA
Baker Beach Residential Upgrades, San Francisco, CA
Balboa Park ADA Upgrades, San Francisco, CA
Balboa Park Restroom Upgrades, San Francisco, CA
Balboa Park T&M, San Francisco, CA
Barclays Global Investors - 400 Howard, San Francisco, CA
Bayer Best-Fit Study, San Francisco, CA
Bayer GDD Facility - Research and Vivarium, San Francisco, CA
Bill Graham Civic Auditorium, San Francisco, CA
Bldg 67 - Seismic Strengthening, San Francisco, CA
Boeddeker, San Francisco, CA
Boedecker II, San Francisco, CA
Boeddeker III, San Francisco, CA
Boeddeker Park – Concept B Design, San Francisco, CA
Boedekker Park - New Build, San Francisco, CA
Boys & Girls Club, Kitchen Remodel, South San Francisco, CA
Broadway Gate Landscaping, San Francisco, CA
Bryant Street Pier Redevelopment, San Francisco, CA
Building 100, Presidio Main Post, San Francisco, CA
Building 101 - 3 Seismic Options, San Francisco, CA
Building 101- Radiators & Basement, San Francisco, CA
Building 102, Presidio Main Post, San Francisco, CA
Building 104, Presidio Main Post, San Francisco, CA
Building 1167 Rehabilitation, San Francisco, CA
Building 130 (Presidio Chapel), San Francisco, CA
Building 1808, Wedenmeyer Street, Presidio, San Francisco, CA
Building 2 Funston Avenue, Presidio, San Francisco, CA
Building 211 Interiors, San Francisco, CA
Building 39 Parking Stalls, San Francisco, CA
Building 4 ADA Upgrades, San Francisco, CA
Building 50 Budget and Scope Alignment, San Francisco, CA
Building 649, Presidio, San Francisco, CA
Building 682 (includes 681 & 683), Presidio, San Francisco, CA
Building 813 Hunters Point Shipyard, San Francisco, CA
Building 920 Cost Comparison, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

Building Valuation Models, San Francisco, CA
Buildings 1183-85 Arbitration, San Francisco, CA
Buildings 1202 & 1204, San Francisco, CA
Buildings 36, 210, 643 & 1028, San Francisco, CA
Buildings 662 & 663 (Stable Buildings), San Francisco, CA
Buildings 920 & 934, San Francisco, CA
Burk Education Building Remodel and Addition, SF State University, San Francisco, CA
California Academy of Sciences, San Francisco, CA
CASC Garden, San Francisco, CA
Cathedral School for Boys, San Francisco, CA
Celgene, 1500 Owens St, Tenant Improvement, San Francisco, CA
Cemetery Overlook, Presidio, San Francisco, CA
Central Subway Final Design #3, San Francisco, CA
Child Care Center, Allerton Ave., South San Francisco, CA
China Basin Seismic Evaluation for Insurance Purposes, San Francisco, CA
City College - Chinatown/North Beach, San Francisco, CA
City College Performing Arts, San Francisco, CA
City College Performing Arts, San Francisco, CA
City Place, San Francisco, CA
Clinical Cell Banking, San Francisco, CA
Clinical Packaging Relocation, San Francisco, CA
Coastail Trail Roadway, San Francisco, CA
Coastal Trail Roadway, San Francisco, CA
Coastal Trail, San Francisco, CA
Conrad House - 3 Bldg. Renovation, San Francisco, CA
Crescent Heights - 10th & Market, San Francisco, CA
Crime Lab & ME Project, San Francisco, CA
Crissy Field Overlook, San Francisco, CA
Denver Health Care, San Francisco, CA
Design Services for Health Services - As Needed Basis, San Francisco, CA
Divco Miscellaneous Projects, San Francisco, CA
Doyle Drive Landscaping Improvements, San Francisco, CA
DPH Southeast Health Center Master Plan, San Francisco, CA
Dragonfly Creek Asset Valuation, San Francisco, CA
E Coli Initial Purification, San Francisco, CA
Elevator on Presidio Building 34, San Francisco, CA
FAIS 50CD - 66 Page, San Francisco, CA
FAIS Feasibility Study, San Francisco, CA
FBI SF New Construction, San Francisco, CA
Federal Bldg. & Post Office - Renovation & Seismic Upgrade, San Francisco, CA
FibroGen, Mission Bay, San Francisco, CA
Fillmore Center, San Francisco, CA
Fire Station # 2 Upgrade and Retrofit, South San Francisco, CA
Fire Station # 4 Upgrade and Retrofit, South San Francisco, CA
Firestation One, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

Forensic Sciences Division - Crime Lab Test Fit, San Francisco, CA
Fort Mason Buildings 235, 238 & 239, San Francisco, CA
Fort Scott - Site Work, San Francisco, CA
Fort Scott Building 1201, San Francisco, CA
Fort Scott Cost Studies, San Francisco, CA
Fort Scott Housing C Presidio, San Francisco, CA
Foundry Square Building 3, San Francisco, CA
Four Seasons Hotel at Yerba Buena Tower, San Francisco, CA
Francisco Street Reservoir Site, San Francisco, CA
Frederick Douglas Haynes Apartment Renovation, San Francisco, CA
G John Shea Federal Bldg & US Bankruptcy Court, San Francisco, CA
GEDC Family Housing Building, San Francisco, CA
Genentech - Hydrogenation Building, South San Francisco, CA
Genentech Building 41 T.I., South San Francisco, CA
Genentech Building 42 T.I., South San Francisco, CA
Genentech Building 44 T.I., South San Francisco, CA
Genentech Building 46 Fit Out, South San Francisco, CA
Genentech Building 47 Fit Out, South San Francisco, CA
Genentech Building 48 Fit Out, South San Francisco, CA
Genentech Building 50 Process Development Expansion, South San Francisco, CA
Genentech FRC III, South San Francisco, CA
Genentech Hilltop A Office Building Project, South San Francisco, CA
Genentech Misc Estimating Support, South San Francisco, CA
Genentech Misc. Preconstruction Services, South San Francisco, CA
Genentech Office Building, South San Francisco, CA
Genentech Seismic Study, San Francisco, CA
Genentech, Building B46, South San Francisco, CA
Genentech, estimator services, South San Francisco, CA
Genentech, Estimator-Benchmarking services, South San Francisco, CA
Genentech, Insurance Revue, South San Francisco, CA
Genentech, MEP Cost Consulting, South San Francisco, CA
Genentech, Misc Services, South San Francisco, CA
German Consulate, San Francisco, CA
GGU SF Remodel, San Francisco, CA
GNE - Building 15 Fl 4 West Side FRCII, South San Francisco, CA
Golden Gate Park - Music Concourse Underground Parking, San Francisco, CA
Golden Gateway Apartments exterior renovation, San Francisco, CA
Grizzly Gulch, San Francisco Zoo, San Francisco, CA
GSA Appraiser's Building & Tenant Improvements (of historic bldg.), San Francisco, CA
GSA Region 9: 50 U.N. Plaza (historic bldg.), San Francisco, CA
Heritage Center, Presidio, San Francisco, CA
Hilton Hotel, Main Lobby Renovation, San Francisco, CA
Hostel Lodgings at 1095 Market Street, San Francisco, CA
Hotel 480 at Union Square (Marriott), San Francisco, CA
Hotel Vitale Renovations, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

HULT International Business School, San Francisco, CA
Hunters Point Naval Shipyard, Piers & Docks Improvement, San Francisco, CA
Hunters Point, Blocks 50 - 54, San Francisco, CA
Hyatt Regency Lobby Renovation, San Francisco, CA
Immigrant Point Overlook, San Francisco, CA
Infantry Terrace Landscape Renovation, San Francisco, CA
Infantry Terrace, San Francisco, CA
Insurance Replacement Costs, Letterman Digital Arts, San Francisco, CA
Japan Center, San Francisco, CA
Jean Parker ES, SF School District, San Francisco, CA
John Adams Campus, City College historic restoration, San Francisco, CA
Junipero Serra Annex CDC, San Francisco, CA
Junipero Serra Elementary School, San Francisco, CA
Kaiser Permanente South San Francisco, Infrastructure, South San Francisco, CA
Kaiser Permanente, Replacement San Francisco Medical Office Building, San Francisco, CA
Lafayette Elementary School, San Francisco, CA
Laguna Honda Hospital Replacement Program-Senior Housing Feasibility, San Francisco, CA
Laguna Honda Hospital Replacement, San Francisco, CA
Laguna Honda-Dialysis Observation Renovation, San Francisco, CA
Landscaping Improvements at Portola Neighborhood, San Francisco, CA
Landscaping Renovation at Infantry Terrace, San Francisco, CA
Letterman Center for the Digital Arts – Office and Lab Development, San Francisco, CA
Lincoln Blvd Improvements, San Francisco, CA
Little Embarcadero Lighting & Site Improvements, San Francisco, CA
Lovers Lane Improvements, San Francisco, CA
Lucas Arts Building C Expansion, San Francisco, CA
Lyon Street Boundary Wall Repair, San Francisco, CA
Main Parade Ground, San Francisco, CA
Main Parade Ground, San Francisco, CA
Main Post Parking, San Francisco, CA
Main Post Utilities, San Francisco, CA
Maritime Museum Fountain Renovation, San Francisco, CA
Market Square, San Francisco, CA
Mason Street Buildings 1183 to1186 - Cost Estimating & Expert Witness, San Francisco, CA
Medical Examiner 1 Newhall Street, San Francisco, CA
Miscellaneous Projects 2011, San Francisco, CA
Mission Bay Blocks 2 & 3W Due Diligence Study, San Francisco, CA
Mission Bay Infrastructure, San Francisco, CA
Monroe Elementary School, San Francisco, CA
Montgomery Street Barracks Landscape, San Francisco, CA
Moscone Center Expansion, San Francisco, CA
Moscone Phase III, San Francisco, CA
Mt Zion MOB, San Francisco, CA
Museum of Modern Art, San Francisco, CA
Nektar Therapeutics, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

New Treatment Spa, San Francisco, CA
Newcomer School Renovation, San Francisco, CA
Novartis Exit M Building Demolition and Various Renovations, San Francisco, CA
Off Street Parking E Cavalry Stables, Stilwell Hall, Bldg 649, San Francisco, CA
Old St. Marys Cathedral - Seismic Strengthening of Historic Bldg., San Francisco, CA
On Call PM Support at Presidio, San Francisco, CA
Ortega Elementary School, San Francisco, CA
Pacific Overlook, San Francisco, CA
Pacific Primary School, San Francisco, CA
Palace of Fine Arts historic restoration, San Francisco, CA
Parkway/Sequoia Project Review, San Francisco, CA
Paul Goode Field, San Francisco, CA
Paul Leonard and Sutro Library, San Francisco, CA
Philip Burton Federal Bldg. & US Courthouse, San Francisco, CA
Phillip Burton Federal Building, 16th Floor TI, San Francisco, CA
PHSH Site Utilities, San Francisco, CA
PHSH Sitework & Landscape, San Francisco, CA
Pier 27 Cruise Terminal, San Francisco, CA
Pier 30 - 32 Expansion, San Francisco, CA
Pier 43.5 Bay Trail Link, San Francisco, CA
Pier 70, San Francisco, CA
Piers 26, 28, 29 Reuse Study, San Francisco, CA
Presidio - Building 1202, San Francisco, CA
Presidio - Building 1808, San Francisco, CA
Presidio - Main Post Master Schedule, San Francisco, CA
Presidio - Main Post Parking & Building Demolition, San Francisco, CA
Presidio - Montgomery Street Barracks Landscaping & Surface Parking, San Francisco, CA
Presidio - Quartermaster Reach Culverts, San Francisco, CA
Presidio - Quartermaster Reach Restoration Project, San Francisco, CA
Presidio - Visitors Center & Main Post ADA Upgrades, San Francisco, CA
Presidio - Widening of Armistead Road, San Francisco, CA
Presidio - WWII West Coast War Memorial, San Francisco, CA
Presidio Asset Valuation 2012, San Francisco, CA
Presidio Bldg 45 - Main Post Chapel, San Francisco, CA
Presidio Bldg 50 - Heritage Museum, San Francisco, CA
Presidio Blvd Overlook, San Francisco, CA
Presidio Building 101 Historic Restoration, San Francisco, CA
Presidio Building 102 Tenant Improvement, San Francisco, CA
Presidio Building 102, San Francisco, CA
Presidio Building 1330, San Francisco, CA
Presidio Building 1578 Underpinning, San Francisco, CA
Presidio Building 1807, San Francisco, CA
Presidio Building 1808, San Francisco, CA
Presidio Building 220 Suite D, San Francisco, CA
Presidio Building 3 Funston Ave, San Francisco, CA

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Cost Estimating Projects in San Francisco

Presidio Building 386, San Francisco, CA
Presidio Building 42, San Francisco, CA
Presidio Building 640, San Francisco, CA
Presidio Building 643, 644, 649, San Francisco, CA
Presidio Building 644, San Francisco, CA
Presidio Building 924 PO 10914, San Francisco, CA
Presidio Buildings 11 to16 Funston Ave Rehabilitation, San Francisco, CA
Presidio Buildings 1160, 1163, 1167 & 1170, San Francisco, CA
Presidio Buildings 42 & 45 Moraga Ave - Building 951 Hoffman Street, San Francisco, CA
Presidio Cost Consulting Estimating Services, San Francisco, CA
Presidio Cost Mgmt & Scheduling Services, San Francisco, CA
Presidio East Mason St Project 04031-B, San Francisco, CA
Presidio Gorgas Warehouse Entries, San Francisco, CA
Presidio Green Study, San Francisco, CA
Presidio Habitat Restoration Projects, San Francisco, CA
Presidio Lodge, San Francisco, CA
Presidio Main Parade Phase 1, San Francisco, CA
Presidio Main Post - Building 102 Seismic Strengthening, San Francisco, CA
Presidio Mason Street Warehouses, San Francisco, CA
Presidio Officers Club - Rehabilitation, San Francisco, CA
Presidio On Call Estimating Services, San Francisco, CA
Presidio Thornburg Road, San Francisco, CA
Presidio Transit Center Building 215, San Francisco, CA
Presidio Trust - Crissy Field Youth Campus Program, San Francisco, CA
Presidio Trust As Needed Services, San Francisco, CA
Presidio Visitors Center, San Francisco, CA
Presidio Water Treatment Plant, San Francisco, CA
Presidio-Dining Room, Arguello Room, Bldg 50, San Francisco, CA
Presidio-Museum Exhibit, San Francisco, CA
Press Club - Four Seasons, San Francisco, CA
Project Controls Software Implementation, South San Francisco, CA
Property Valuation-Insurance Replacement Value, San Francisco, CA
Prototype Production Line, San Francisco, CA
Recology Master Plan, San Francisco, CA
Recycled Water Plant, San Francisco, CA
RHAA Sports Fields Upgrade, San Francisco, CA
Rincon Center, San Francisco, CA
River Otter Exhibit, San Francisco, CA
RN-74 at 301 Mission Street, San Francisco, CA
Rob Hill Campground Bath House & Activity Pavilion, San Francisco, CA
Rob Hill Campground Phase 2 Enhancements, San Francisco, CA
Roche Genentech Project Controls Support Services, South San Francisco, CA
Rooftop Alternate, SF School District, San Francisco, CA
Rosewood Hotel, San Francisco, CA
Russian Hill Terrace, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

Rutter Center Mediation Support, UCSF, San Francisco, CA
S.F. General Hospital, San Francisco, CA
San Francisco Bible Church, San Francisco, CA
San Francisco Christian Center, ADA Upgrades, San Francisco, CA
San Francisco Day School, San Francisco, CA
San Francisco General Hospital, San Francisco, CA
San Francisco General Hospital, San Francisco, CA
San Francisco SPCA, San Francisco, CA
Scheduling Services - Public Health Services Hospital District, San Francisco, CA
Seismic Renovation - Project Costs, San Francisco, CA
Seismic Renovation: 737 Pine Street, San Francisco, CA
Senior MEP Estimator Services, South San Francisco, CA
SF 1840 Clay Street - Seismic Renovation, San Francisco, CA
SF Lawton Alternative School, San Francisco, CA
SF SPCA Roberts Medical Center, San Francisco, CA
SF VA Medical Center, VMU Replacement, San Francisco, CA
SF Zoo Rhino & Hippo Exhibit, San Francisco, CA
SFCC Recycling Center (Presidio Bldg 1242), San Francisco, CA
SFFD Fire House Number One, San Francisco, CA
SFGH - 100% SD, San Francisco, CA
SFGH - Emergency Generator, San Francisco, CA
SFGH ALDA1001 Elevator Upgrades, San Francisco, CA
SFGH Bldg 30, 2nd Flr Renovation, San Francisco, CA
SFGH Fire Alarm study, San Francisco, CA
SFGH Potrero/West Expansion, Hospital Expansion, San Francisco, CA
SFIA - Boarding Area "G", San Francisco, CA
SFIA - New International Terminal, San Francisco, CA
SFIA - Security & Special System, San Francisco, CA
SFIA - SFO BART Study, San Francisco, CA
SFIA - United Airlines Terminal, San Francisco, CA
SFIA Boarding Area A, San Francisco, CA
SFMOMA Museum Expansion, San Francisco, CA
SFO ALRS, AdTrans, San Francisco, CA
SFO Bay Bridge Toll Operation Building, San Francisco, CA
SFO Boarding Area D renovation, San Francisco, CA
SFO North Terminal renovation, San Francisco, CA
SFO Parking Lot DD Conversion, San Francisco, CA
SFPUC Administration Building, San Francisco, CA
SFPUC-Francisco St Reservoir, San Francisco, CA
SFUSD, School for the Arts Master Plan, Renovation, San Francisco, CA
Shell ADA Class Action, San Francisco, CA
Sheridan Road Retaining Wall, San Francisco, CA
Shih Yu-Lang Central YMCA, San Francisco, CA
South Beach Marina, San Francisco, CA
South of Market Development, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

Spear Street Phase 1 Construction Costs Audit, San Francisco, CA
St Bonafice Friary, San Francisco, CA
St Dominics Parking Structure, San Francisco, CA
St Francis Hotel Lobby Remodel, San Francisco, CA
St Lukes School masonry spall protection, San Francisco, CA
St Patricks Church, San Francisco, CA
St. Marys Medical Center - Cancer Center, San Francisco, CA
Stern Grove Concert Facility, San Francisco, CA
Sundance Cinema, Presidio, San Francisco, CA
Supplemental Enhancement, El Polin Spring Area, San Francisco, CA
Supply Chain Mgmt Global Schedule, San Francisco, CA
tBP Miscellaneous Cost Estimating Services, San Francisco, CA
The Beacon Remedial Works - Consulting Services, San Francisco, CA
The Cannery, San Francisco, CA
Third Street Light Rail Transit P2, San Francisco, CA
Thornburgh Utility Improvements - Mixed Use Development, San Francisco, CA
Trans Bay Cable, Pittsburg & San Francisco, CA
Transamerica Building, Elevator Study, San Francisco, CA
Trans-Bay Stadium, San Francisco, CA
Transbay Terminal Permits Study, San Francisco, CA
Transbay Terminal, BART tunnel, San Francisco, CA
Transbay Terminal, Escalation Study, San Francisco, CA
Transbay Terminal, Phase 1, San Francisco, CA
Transbay Terminal, Phase 2, San Francisco, CA
Transbay Terminal, Utility Relocation, San Francisco, CA
Transbay Tower, San Francisco, CA
U.S. Court of Appeals / Post Office - Renov. & Seismic Upgrade, San Francisco, CA
U.S. Federal Courts Planning Study, San Francisco & Oakland, CA
UA HVAC renovation, SFO, San Francisco, CA
UC Hall Housing Reuse Study, San Francisco, CA
UCSF - CSB 5th TI, San Francisco, CA
UCSF Agabian Lab, San Francisco, CA
UCSF Distance Med Educ and Health Care Facility, San Francisco, CA
UCSF Health Science East 15th Floor Remodel, San Francisco, CA
UCSF Laboratory Remodel, San Francisco, CA
UCSF Medical Sciences Remodel projects, San Francisco, CA
UCSF Mission Bay Campus, Community Center, San Francisco, CA
UCSF Mission Bay Medical Center, San Francisco, CA
UCSF Mission Bay Research Building 19A, San Francisco, CA
UCSF Mission Bay Research Building 19B, San Francisco, CA
UCSF Mission Bay, Review of DL Estimate, San Francisco, CA
UCSF Parnassus ACC7 Opthamology, San Francisco, CA
UCSF School of Dentistry-lab renovation, San Francisco, CA
UCSF, Moffit & Long Hospitals - SB1953 Upgrades, San Francisco, CA
UCSF, Mt. Zion Hospitals - New OR suites, MEP Upgrades, San Francisco, CA

TBD CONSULTANTS
Cost Estimating Projects in San Francisco

United Airlines Proposed Relocation for Flight Operations, San Francis, San Francisco, CA
United States Mint, San Francisco, CA
Urban School, San Francisco, CA
USF Campion Hall HVAC Review, San Francisco, CA
USF School of Law - Kendrick Hall Remodel, San Francisco, CA
USF, Campion Hall Renovation, San Francisco, CA
USF, New Science Lab., San Francisco, CA
USF, Science Laboratory Master Plan, San Francisco, CA
Utilities Demolition - Presidio Building 1040, San Francisco, CA
Veritas Portfolio, San Francisco, CA
Veterans Admin Medical Center - SF Water Tower Study, San Francisco, CA
Veterans War Memorial, San Francisco, CA
Virology Labs, San Francisco, CA
Virology Programming/Schematic, South San Francisco, CA
War Memorial Veterans Building, San Francisco, CA
Washington/Park Intersection, San Francisco, CA
Westin Hotel, Market Street, San Francisco, CA
WWII West Coast War Memorial, San Francisco, CA
Wyman Avenue Residence, San Francisco, CA
Yerba Buena redevelopment, San Francisco, CA
Yoshis Restaurant, San Francisco, CA