ALVISO

Contents

Dear San Jose City Council,

I am a chip design engineer. I became involved in the Midpoint at 237 [1] project at my neighbor's request. I have written six letters to the planning department regarding the Midpoint at 237 project, each after extensive research.

You can find much background information about the project on the special city web page created by the planning department. http://www.sanjoseca.gov/index.aspx?NID=4123

Requested outcome

Midpoint at 237 depends on your approval of rezoning permit PDC14-004 and project permit PD14-007. I suggest that the permit application, as is, should be denied, but if you deem it worthy, should be allowed with reasonable limitations including,

PDC14-004 rezoning:

- Land use restriction preventing warehouse distribution activity
- Hours of operation restricted to 7:00 am (shortly after the first train whistle comes through town) to 10:00 pm (shortly before the last train whistle comes through town), in order to give residents 9 hours for sleeping

PD14-007 permit:

- A limit of a maximum of 55 loading docks

Informational resources

Urban Land Institute (ULI) is the most widely used source of independent research on industrial real estate markets and technical details of building design. The permit applicant, developer Trammell Crow, impugned my research because I previously cited a first edition ULI guide published in 2003. The third edition, published in 2012, also supports my conclusions.

[2] Professional Real Estate Development: The ULI Guide to the Business, 3rd Edition
Richard Peiser, David Hamilton
© 2012

The following two books are also valuable references relevant to the Midpoint project.

[3] Change in Manufacturing – Research and Industrial Challenges
H. ElMaraghy, T. AlGeddawy, A. Azab, W. ElMaraghy
© 2012

[4] The Definitive Guide to Warehousing: Managing the Storage and Handling of Materials and Products in the Supply Chain
Scott B. Keller, Brian C. Keller
© 2014

Warehousing vs manufacturing

Your City of San Jose Envision 2040 Master Plan [5] directs planning to promote manufacturing jobs. The applicant proposes to build three high-tech warehouses, ideal for an automated storage and retrieval system, which might create very few jobs. They have described the buildings as manufacturing buildings. Though manufacturing, or even office cubicles, can be set up in a warehouse that does not change the fact that it is a warehouse.

The following table shows the specifics of the proposed project on the attributes most commonly used by experts to distinguish warehousing from manufacturing.

	Manufacturing	Warehousing
Good for	• 2.5 parking spaces per 1000 sq feet • ability to go up to 40% office buildout • 2500 amp electric service • design for suite subdivision	• 1:5500 loading dock to sq foot ratio • > 100,000 square feet per building • 130 foot deep truck courts • maximized ceiling height • thick, level concrete floor
Bad for	• grid of pillars roof support • excessive building volume for HVAC	

Trammell Crow and the City Planning department have both stated the buildings would be poorly suited for warehousing. When I separately asked John Greer, Trammell Crow project representative, Rebecca Bustos, the assigned planner, and Nanci Klein, the applicant's advocate, neither responded to my email.

Parking spaces

The property is oddly shaped. The three buildings, as shown in the plan set, maximize the possible floor area of rectangular buildings within the property. The plan set fills the remaining property area, including statutory setbacks and triangular areas with parking spaces, which happens to bring the buildings up to a 2.5 parking spaces per 1000 sq feet ratio, the statutory norm for manufacturing.

Office buildout

As the applicant state, the buildings could support up to 40% office space, which is more than the norm for manufacturing. However, they could support as little as 15% office space, the norm for warehousing.

Electric service

2500 amp electric service is necessary for manufacturing but does not preclude warehousing.

Suite subdivision

The project design allows for subdividing the three buildings into as many as 11 suites for small manufacturers. It is unlikely that 11 tenants would all maximize the use of their loading docks simultaneously, which means that the truck noise, traffic, and pollution would be far less than the worst possible case, in which the buildings are used by a single tenant as a large distribution center. The neighboring community is worried about that worst-case possibility.

Loading dock ratio

According to the NAIOP Terms and Definitions: North American Office and Industrial Market [6], an industry organization of which Trammell Crow is a member, a ratio of 1:15,000 loading docks per square feet would distinguish a warehouse from a manufacturing facility. According to ULI, a ratio of 1:10,000 square feet would make the distinction. The current plan set shows 78 loading docks (and 12 drive-in doors). That is a dock to square foot ratio of 1:5500. Having 55 loading docks would yield a ratio of 1:10,000 and provide five docks to each of 11 small manufacturers. Having 37 loading docks would yield a ratio of 1:15,000 and provide each of 11 small manufacturers three or four loading docks, which is plenty for small suite manufacturing operations.

Truck courts

Truck courts of 130 feet are standard for warehousing because they accommodate the turning radius of big rigs with standard 53 foot trailers while other trailers are parked and serviced at adjacent loading docks.

Ceiling height

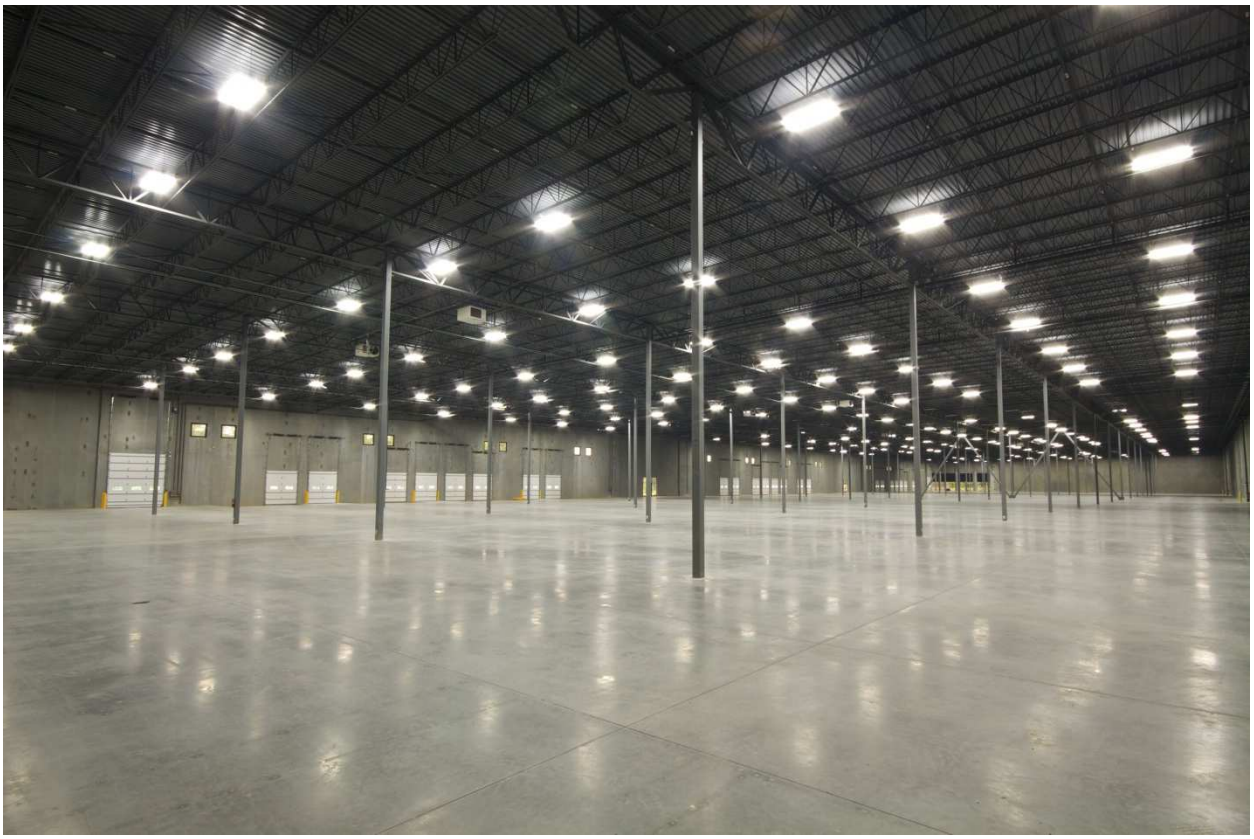
The applicant previously noted that the internal ceiling clear height is 28 feet, which is less than the industry average of 36 feet for warehousing, as a reason that the building is not a warehouse. In fact, 28 feet is the maximum height legally allowable on the site. Flood laws require a 12 foot dirt build-up. The building has a typical 5 foot ceiling clear height to roof peak distance, and the Alviso Master Plan [7] limits the allowable height of buildings in close proximity to the village to a height of 45 feet.

> 45 feet max roof height – 12 feet dirt build-up – 5 feet clear to roof height
> = 28 feet maximum ceiling clear height

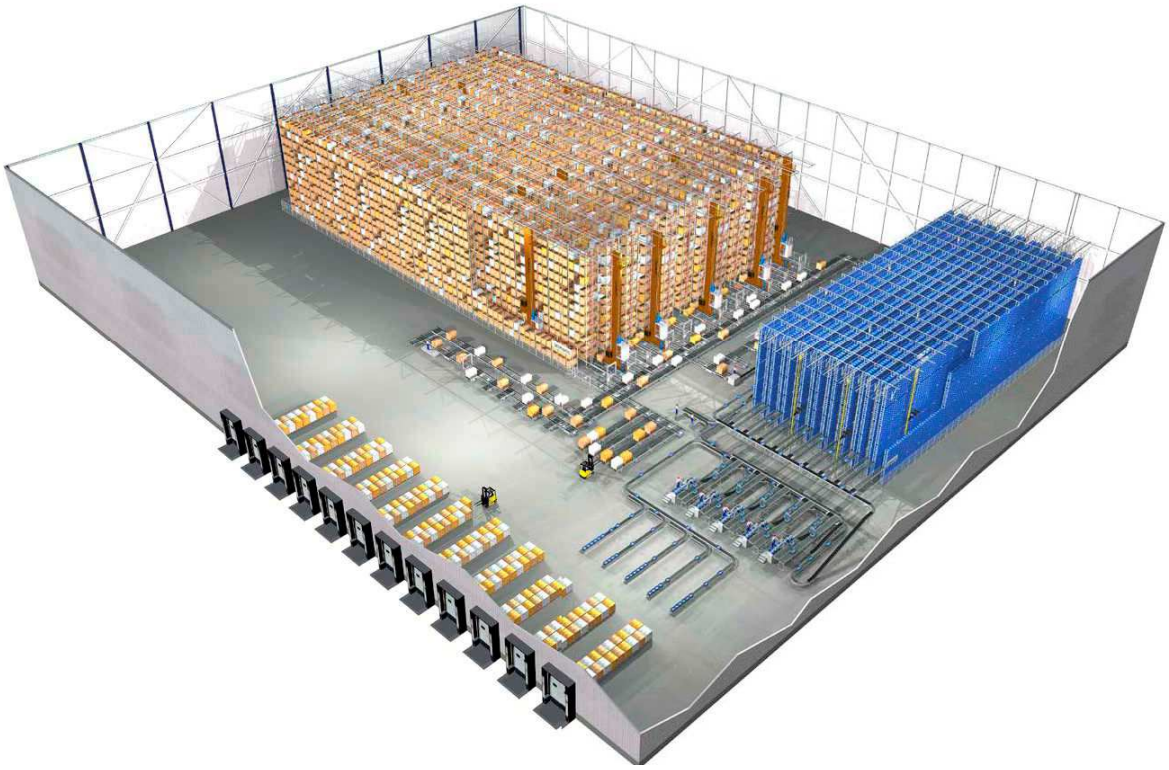
Manufacturing facilities generally have ceiling clear height of less than 18 feet (as below).

Grid of pillars

The plan set shows the buildings as using a grid of pillars type of construction. That is the least expensive kind of industrial building construction.



A grid of pillars style design (picture above) is conducive to high-tech automated storage/retrieval systems (picture below) that minimize human activity, and therefore provide few jobs. Furthermore, a grid of pillars limits the usefulness of the buildings for large manufacturing machinery or flexible assembly lines needed for prototyping or high-tech manufacturing processes.



Excessive volume

The buildings shown in the plan set, with maximum height ceilings, maximize volume. That is maximizes usefulness for warehousing. Such volume is generally wasteful of energy for heating and air condition, but more importantly reduces the effectiveness of ventilation system for removal of dust or gaseous manufacturing byproducts. Such unnecessarily height ceilings can have a negative health impact on workers.

Warehousing vs manufacturing conclusion

None of the attributes that are good for manufacturing preclude the use of the buildings as warehouses, but conversely the attributes that make the building useful for warehousing diminish its usefulness for manufacturing.

The permit applicant is proposing to build three warehouses.

Wind direction

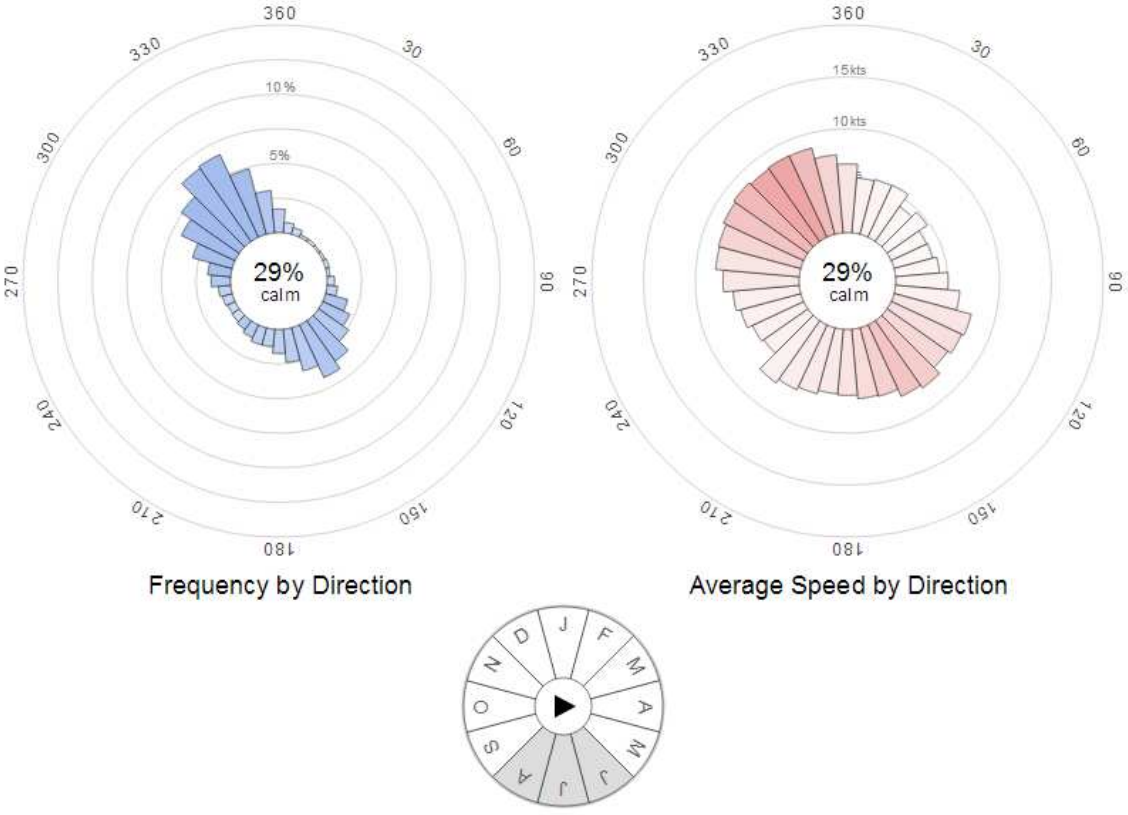
The original Cisco Project EIR [8] only considered wind regarding:

(i) The effect of neighboring pollution on the project site; and
(ii) The effect of construction on neighboring properties.

Wind direction was not considered in the Cisco EIR or the Midpoint Project EIR Addendum [9] concerning the effect of pollution emitted by diesel trucks on the site if used for warehouse distribution.

According to the web page http://windhistory.com/station.html?KSJC [10] the prevailing winds at San Jose airport during the school year are from about 320 degrees from north. It is about 345 degrees at Moffett Field. Calm and low speed winds are common. Below are the wind roses from the web site for each airport.

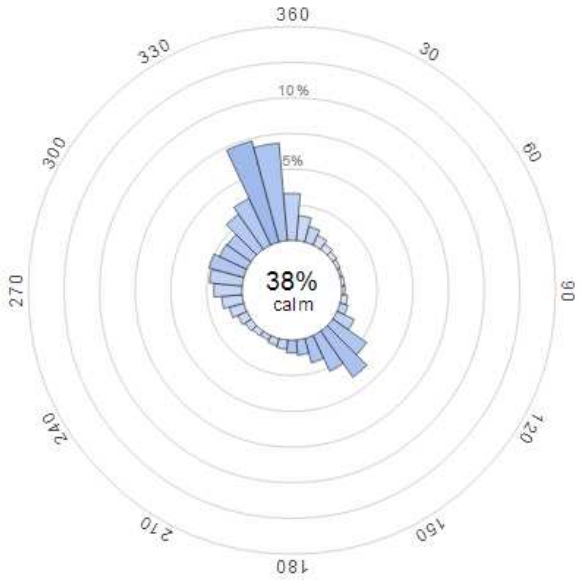
KSJC: San Jose International Airport



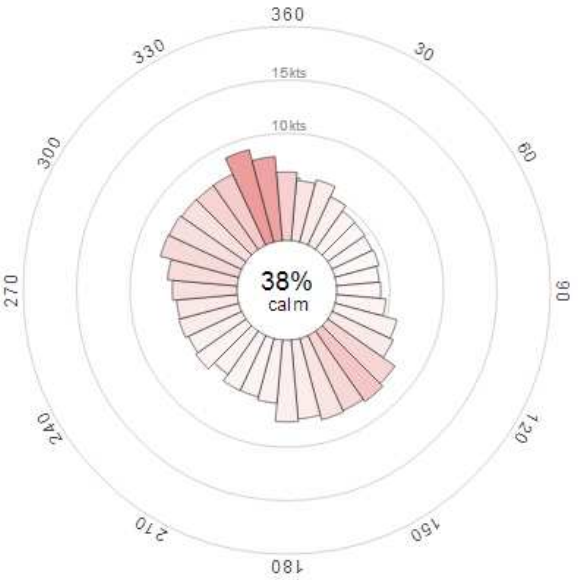
Frequency by Direction

Average Speed by Direction

KNUQ: Moffett Field



Frequency by Direction



Average Speed by Direction

Below is a sketch-up of the building plan with the direction of wind flow from approximately 330 degrees from north. Air from the windward side of the westerly building will be shunted leftward, pour off the leftmost corner of the building, and move directly towards the George Mayne Elementary School.

It is therefore a concern of the community that diesel exhaust emitted on the northwestern side of the buildings, into low wind speed from the end of a shunting building directly upwind of the elementary school, park, and swimming pool will pose a health risk to children.

Environmental impact analysis

The Cisco project had a thorough EIR with very detailed studies. The Midpoint project's addendum to the Cisco project EIR is brief, vague, and flawed.

For traffic impacts, noise impacts to neighbors, air quality impacts, biological resource impacts, and hazardous materials impacts, the planner checked the box indicating exactly the same impact for the Midpoint warehousing/manufacturing project as compared to the Cisco office campus project. That is hard to believe.

The Midpoint project EIR addendum relies on studies prepared by experts selected by the applicant. The applicant changed the plan set in February 2014. Several studies were prepared based on the earlier plan set and several based on the final plan set.

Noise

The noise study [11] used, for an estimation of the noise of a truck back-up beeper, the expert's measurements from another unspecified project that he studied for a different developer.

Traffic

The traffic study [12] comparing the Midpoint project to the Cisco project drew numbers from the San Jose Traffic Impact Analysis Handbook [11]. It was done based on a plan set with two warehouse buildings before the final plan set was created with three buildings. The study compared **manufacturing**

facility numbers to **R&D** numbers. Actually, the proposed allowed worst-case usage for the Midpoint buildings is as a **warehouse** and the Cisco plan was for **office** buildings.

The applicant and planner assumed that the number of vehicle trips per day to and from the Midpoint facility would be less than the number for the Cisco project. Though the Cisco project would have employed more workers, and therefore had more car trips, those trips would have been once in and once out per day. Trucks at the Midpoint facility might run throughout the day and night. One trip in and out per day for each of the Midpoint parking spaces, combined with continuous loading dock truck servicing might actually cause more vehicle trips per day.

Furthermore, the types of vehicles would be different. Trucks are noisier, their diesel exhaust is unhealthier, and they create certain road hazards that cars do not.

Air quality

The rezoning application reduces the amount of bicycle parking, the Midpoint project has no shower facilities for bikers as the Cisco project had, there are no on-site day care facilities or retail at the Midpoint project. These are all causes for increased vehicle per day traffic, and associated air pollution.

No study addressed the amount of diesel, as opposed to gasoline.

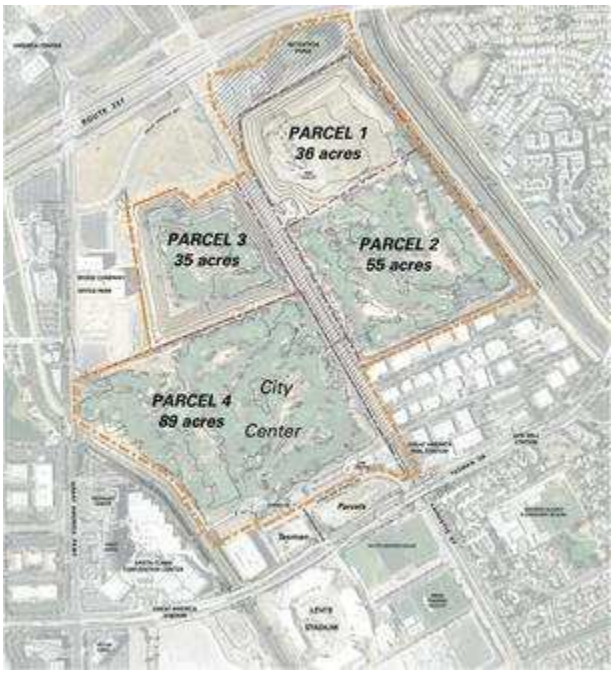
No study addressed wind direction.

Further considerations

Some guidelines in The Alviso Master Plan are vague. With respect to guidelines that are specific, the Alviso Master Plan is merely suggestive. However, the Midpoint at 237 project plan sets is clearly incompatible with the spirit of the Alviso Master Plan, particularly with regard to the nuisances that a warehouse distribution facility would likely cause to the neighboring residential and office uses.

The Water Pollution Control Plant Master Plan [12] rezoning will open up the Zanker Road area of Alviso, which is far from the residential uses, to development of a small amount of office space surrounded by industrial uses. The Midpoint project would put a small amount of industrial amid residential and office uses. That would be a failure of city planning that diminishes the value of both the Midpoint industrial project near North 1st Street and the future office project near Zanker Road.

The Santa Clara City Center project, near Levi's Stadium, will create high-end mixed-use development just over the border from Alviso.



This creates an opportunity for office and commercial development in Alviso that would have increased value due to the proximity. Warehouse distribution or manufacturing in Alviso will have no benefit boost from the neighboring developments in Santa Clara.

The current glut of high-density residential in North San Jose caters to office workers. Alviso presents an opportunity to create jobs for those workers in San Jose. Passing up that opportunity means that those workers will find jobs in neighboring cities, further hurting San Jose's resident to jobs imbalance.

The trucks currently bringing in dirt to build have caused significant damage to Nortech Parkway and Disk Drive. Those roads were not built for the weight and traffic volume of those heavy trucks. The city's budget for road repair is already stretched. Use of Nortech Parkway and Disk Drive for warehouse distribution trucking would require a rebuild of the roads for the newly intended use or ongoing repeated future road repair at the city's expense.

Conclusion

You should deny the PDC14-004 rezoning permit application and instead the land rezone for office uses. Such a use would be more compatible with the existing residential and office uses and the expected neighboring development in Santa Clara and more economically beneficial to the city in the long run.

However, if not fully denying, you should allow the rezoning and project permit with the following reasonable restrictions.

PDC14-004 rezoning:

- Land use restriction preventing warehouse distribution activity

- Hours of operation restricted to 7:00 am (shortly after the first train whistle comes through town) to 10:00 pm (shortly before the last train whistle comes through town), in order to give residents 9 hours for sleeping

PD14-007 permit:

- A limit of a maximum of 55 loading docks for a loading dock to square foot ratio of 1:10,000, which distinguishes a warehouse from a manufacturing building according to expert definitions

Thank you for your careful consideration.

Jonah Probell
jonah@probell.com
408-475-0512

References

[1] [Online]. Available: http://www.sanjoseca.gov/index.aspx?NID=4123.

[2] D. H. Richard Peiser, Professional Real Estate Development: The ULI Guide to the Business, 3rd Edition, 2012.

[3] T. A. A. A. W. E. H. ElMaraghy, Change in Manufacturing - Research and Industrial Challenges, 2012.

[4] B. C. K. Scott B. Keller, The Definitive Guid to Warehousing: Managing the Storage and Handling of Materials and Products in the Supply Chain, 2014.

[5] City of San Jose Envision 2040 Master Plan.

[6] N. A. o. O. a. I. Properties, NAIOP Terms and Definitions: North American Office and Industrial Market, 2012.

[7] C. o. S. Jose, Alviso Master Plan, 1999.

[8] C. Systems, Integrated Final Environmental Impact Report PDC99-054, 2000.

[9] C. o. S. Jose, Midpoint at 237 Office and Industrial Project, 2014.

[10] WindHistory.com. [Online]. Available: http://windhistory.com/station.html?KSJC.

[11] E. Salter, Addendum Appendix B, Midpoint at 237 Loading Dock Noise Study, 2014.

[12] G. B. &. R. D. Rio, EIR Addendum Appendix A: Memorandum, 2013.

[13] C. o. S. Jose, Traffic Impact Analysis Handbook, 2009.

[14] C. o. S. Jose, San Jose/Santa Clara Water Pollution Control Plant Master Plan - Draft Environmental Impact Report, 2013.

[15] [Online]. Available: http://uli.org/.