#	ISSUE	RESPONSE
Ч	What is the Port role as a landlord in monitoring Pembina commitments?	The Port assures the protection of safety, health and the environment through careful pre- transaction due diligence and the inclusion of appropriate obligations on our tenant through the property lease. Ongoing Port due diligence may result in additional protective requirements. The Port and Pembina contemplate that the Pembina lease will address each of the following areas of focus.
		 Compliance with state, federal and local laws and regulations Requires compliance with all applicable laws and regulations, with a particular focus on safety, health and environmental laws.
		 Facility design and operation Requires review and approval of facility design plans before facility construction can begin. The Port intends to use a third party expert to conduct this review. Requires the development of an operations management plan, subject to Port review and
		 approval, before facility operation can begin. Requires that improvements be maintained in good working order, with a particular focus on fire suppression and safety equipment.
		 <u>Safety & Health</u> Requires the development and implementation of a safety management plan. Requires the development of an emergency management plan.
		 Environmental performance Requires the development of a Spill Prevention and Response (SPAR) Plan. Requires the development of a stormwater management plan. Requires the prevention and correction of any damage from any hazardous substance release.

Port of Portland Response to PSC Questions Regarding the Terminal 6 Text Amendment 2/13/15

		 <u>Reporting & Agency Oversight</u> Requires prompt reporting of violations of any safety, health and environmental law and appropriate government agency oversight of corrective action.
		 Auditing and monitoring Requires periodic preventative auditing of safety, health and environmental, health, safety, legal and regulatory compliance.
		Remedies for default Provides self-help and other contractual remedies for any threatened or actual breach of lease obligations.
		<u>Financial assurances</u>Requires a financial guaranty to assure performance with all lease terms.
		 <u>Insurance</u> Requires multiple types of insurance coverage to address significant risks be carried throughout the term of the lease.
7	Describe Pembina and Port insurance coverage for a catastrophic event.	Under its lease with the Port, Pembina would be required to carry multiple types of insurance to cover losses associated with a variety of risks including a catastrophic event. Evidence of such insurance would be provided to the Port at time of contract inception and regularly thereafter.
		To supplement this coverage, the Port carries its own insurance to cover losses associated with a catastrophic event not covered by the lessee. The Port has a comprehensive, professionally administered risk management program that uses a combination of self-insurance and commercial insurance to provide protection from losses involving property, liability, personnel and financial/net income. The Port purchases various types of insurance coverages and regularly evaluates the limits of coverage as well as any self-insured retention/deductibles. Insurance coverage options available in the market can vary and the Port adds, modifies or cancels insurance coverages based upon Port risks, business operations and market conditions.

3 Why is this site not good for jobs that could have a higher jobs/acre? (non-marine industrial).	od for jobs Te	 The 61 acre Pembina site, adjacent to the Port's marine terminals, has excellent rail and deep-water dock access, and secondary access on N. Marine Drive to Interstate 5, and is ideally suited to marine industrial uses. Due to site constraints (100 year flood plain, environmental overlays, BPA transmission towers, and easements) and the long, narrow configuration of the site, only 40 net urenorumbered acres are available for development. These constraints break the site into small, neor-contiguous, development footprints. The design of the proposed Pembina propane export facility maximizes use of what is an otherwise constrained site. At the Port's request, Mark Childs from Capacity Commercial (industrial broker) and Steve Wells from trammel Crow (industrial developer) toured and reviewed maps of the Terminal 6 site to assess whether another higher jobs/acre industrial use could occur on the site. Key issues identified by these parties included: N. Suttle Road is the only access to and through the site which can best be described as unimproved. For development with any significant increase in traffic, road improvements would be required to bring the approximately <i>Y</i> mile Port portion of <i>N</i>. Suttle Road to City standards and make the site developable. In addition, there would be improvements required to the non-Port portion of <i>N</i>. Suttle Road to City standards and make the site developable. In addition, there would be improvements required to the non-Port portion of <i>N</i>. Suttle Road to City standards and make the site developable. In addition, there would be improvements required to the non-Port portion of <i>N</i>. Suttle Road to City standards and make the site developable. In addition, there would how states state to asses. This would include defining traffic lanes and driveways, creating positive storm drainage, and improvement cot store approximately <i>Y</i> amile port portion of <i>N</i>. Suttle Road to City istandards and make the site developable. In addition, there would no trowerse stor	
		for the raw land. The development investments would require a sizable development return which cannot be accommodated with smaller building footprints.	

		 Mr. Wells of Trammel Crow indicated that the shape of the site makes it impossible to build modern warehouse/distribution facilities, and smaller flex buildings would require good site visibility from the street. Either of these uses would need good roadway access. As a result, Mr. Wells does not believe that there is any potential for developing industrial buildings on the site. Uses that do not have frequent heavy vehicle traffic or a high volume of passenger vehicles might benefit from the site. This includes: outside long-term storage, infrequent heavy equipment or auto auctions, contractor storage yards, or similar uses that may or may not employer more workers than the proposed propane export facility use. Aggregate, concrete, or asphalt plants could fit on the site and could employ a number of operators and drivers. Metal scrap yards and recycling facilities, could also be options. For all these options, traffic to the site would need to be limited or managed so as not to trigger N. Suttle Road street improvements.
		Although not cited in the broker/developer comments, sewer/water/utility connections from N. Marine Drive under the Union Pacific railroad tracks or extending down N. Suttle Road would need to be provided to the site. These utility connections would require easements through properties which are owned by others and reserved for future uses. Utility access represents an additional development cost. Structural fill and reload required to bring the eastern portion of the site, where the rehandling facility is located, to the level of the balance of the site also would be needed as well.
		Based on the assessment of Mr. Wells and Mr. Childs, the development potential of this site for other non-marine industrial uses is very limited. Attached are letters summarizing Mr. Childs' and Mr. Wells' findings. Also attached is a potential site development concept developed by Mr. Childs.
4	Why is this site not good for other marine industrial jobs that could have a higher jobs/acre?	History, site constraints, and marine industrial market conditions affect the quality and quantity of investment and employment at the Pembina site. Historic use and investment has been minimal, limiting economic and employment impacts. Market and site conditions support cargo usage, the nature of which is lower job densities that may be tied to large capital investments (Pembina) or low
ъ	How do the projected jobs per acre for Pembina compare to other similar harbor bulk	investment levels (auto terminals). The result of the higher capital investment is a sizable increase in the local tax base, especially when no subsidies by Pembina are being pursued.
	terminals?	Over the past 15 years, this site has been used by the Port as an auto overflow yard and dredge rehandling facility. Very few jobs were directly associated with either use. Nor was any property tax revenue being generated. The site is too small to handle a loop track required by grain terminals or other bulk commodities.

Prior to the Port's ownership, the site was used as yard space for a log peeling operation and more recently as an asphalt batch plant. Pembina's intensity of investment on 40 acres of Terminal 6 is greater than that at any other bulk cargo terminal at the Port.
The forecasted demand for marine dependent industrial land is based on cargo volume growth, which by nature is land intensive with lower job densities. While job density at nearby auto and bulk terminals is low, it is important to remember what is stated in the City of Portland's Economic Opportunity Analysis (2014 and prior drafts), "employment may not be the best indicator of land needs in the harbor," nor is it the measure of success for the Pembina terminal. Port terminals by their very nature are points of ingress and egress for products. The amount of employment associated with the activity is dependent on the site, the nature of the product, handling and the method of consolidating and transference to ship.
 The Bureau of Planning and Sustainability and the Planning and Sustainability Commission have developed and reviewed multiple planning documents that describe the diverse nature of marine access dependent businesses. These include: River Plan North Reach, River Plan/North Reach, The Industrial District Atlas, The West Hayden Island Project Plan, The West Hayden Island ESEE, The Portland Harbor Industrial Land Supply Analysis, and Various versions of the Portland Economic Opportunity Analysis.
Collectively, these documents acknowledge that economic conditions, market opportunities and site characteristics affect development proposed on marine industrial lands. Some marine terminal sites, such as Canpotex and Pembina, include acreage for rail infrastructure, which decreases their job density capacity. Other terminal sites, such as Columbia Grain, use adjacent rail yards to break trains and shuttle product to the terminal.
bulk and liquid bulk commodities. These are cargo based land uses that by their nature are river- dependent, require large sites and have low job densities (relative to urban commercial/office

		development or manufacturing). What varies, and yet has the highest impact on government revenues, is the capital investment by cargo/terminal type.
		The average annual salary for the 40 Pembina direct on-site permanent facility jobs ranges from \$70,000 to \$120,000, or an average of roughly \$100,000. This is nearly twice the harbor and regional average wage level (\$53,000 and \$49,000, respectively). This does not include the wages for other direct jobs accounted for in the projects overall economic impact.
		Assuming a buildable development area of 40 acres, the proposed number of jobs per acre is:
		 40 direct, on-site Pembina employees, - a ratio of 1.0 job per acre. 92 total Pembina and other off-site direct jobs, including the pilots, rail, chandlers, linesmen, etc a ratio of 2.3 jobs per acre. 147 total direct and indirect jobs - a ratio of 3.67 jobs per acre.
		In addition, project-related construction jobs are expected to number 600-800 lasting for a period of approximately two years.
		 Projected investment for the facility is \$500,000,000 – the largest single private development investment in the City of Portland. The value of this investment in capital infrastructure results in a contribution to the local tax base of \$11.5 million/year. The tax revenue outcome could annually fund the equivalent of: 30+ City of Portland public safety positions, and
		 30+ public school teachers, and 20+ Multnomah County deputy sheriffs, and 60 Portland Development Commission storefront improvement grants.
٥	Documentation that Text Amendment only applies to T6 (based on navigation channel access)	The size and type of vessels suitable for a propane export facility include Very Large Gas Carriers (VLGC), Large Gas Carriers (LGC) and Medium Gas Carriers (MGC). Fully loaded drafts required for this range of vessels is from 9 to 12 meters (approximately 29.5 to 40 feet). The only location within the City of Portland with this depth of draft that is subject to the environmental overlay zone and suitable for propane export is Terminal 6.
		Any location on the Oregon Slough upstream of Terminal 6 is too shallow to accommodate a suitable

propane export vessel. Any location on the main stem of the Columbia River upstream of the BNSF
rail bridge and the Vancouver Upper Turning Basin is also too shallow to accommodate a suitable
propane export vessel.
Please see the attached memorandum and chart for additional clarification.

TO: Tom Armstrong

FROM: Tom Bouillion

RE: Additional Documentation re: Applicability of the ESEE to T6 (Site 72a)

DATE: February 13, 2015

Attached is additional documentation supporting the applicability of the proposed Terminal 6 text amendment and associated ESEE analysis to Terminal 6 (site 72a).

Specifically, the ESEE analysis states that "there are approximately 22 lots zoned IH on the Columbia River that could have a river-dependent industrial use. Only the lots owned by the Port of Portland (Terminal 6) have the capability of exporting propane because only the lots on Terminal 6 have access to a navigation channel that is deep enough to accommodate the ships that will be used to export the propane."

Given the vessel requirements needed to serve a propane export facility that would be provided for through this proposed text amendment, Terminal 6 is the only location subject to the environmental overlay zone within the City of Portland suitable for this use.

Types of vessels used in in the transport of propane include very large gas carriers (VLGC); large gas carriers (LGC); medium gas carriers (MGC) and small gas carriers (SGC).

The following provides a description of the characteristics of each vessel type:

<u>VLGC</u>: Very Large Gas Carrier – an LPG tanker with a capacity of at least 60,000 m^3 . VLCG required draft (fully loaded): 11m

LGC: Large Gas Carrier – an LPG tanker with a capacity of between 40,000 and 59,999 m³. LCG required draft (fully loaded): 12m

<u>MGC:</u> Medium Gas Carrier – an LPG tanker with a capacity of at least 20,000 m^3 and less than 40,000 m^3 . MGC required draft (fully loaded): 9m

<u>SGC:</u> Small Gas Carrier – an LPG tanker with a capacity of more than 5,000m³ and less than 20,000 m³. SGC required draft (fully loaded): 7m

(Source: http://www.shipfinance.dk/en/SHIPPING-RESEARCH/Tankskibe/LPG-Tankskibe/Segmenter).

As noted above, liquefied gases, including propane (LPG), are transported in different sized vessels to serve a variety of markets. "Different sizes of LPG tankers are used in different trades. The largest vessels, which typically are around 80,000 cubic meters, are used in the deep-sea trade, for example from the Arabian Gulf to Japan. Medium sized vessels are used in the shorter haul trades, whilst the very

smallest trades are used to distribute LPG and other petrochemical gases within the regions, especially Asia and Northwest Europe."(Source: <u>http://www.globalsecurity.org/military/systems/ship/tanker-types.htm)</u>.

Pembina has proposed to use a VLGC with a loaded draft requirement of approximately 40'. Although not proposed by Pembina, in theory smaller vessels could also be used for propane export, including large gas carriers (LGC) and medium gas carriers (MGC). Characteristics of small gas carriers (SGC), including small size; small cargo capacity and relatively high cost to operate per volume of cargo, make SGC vessels unsuitable for the propane export trade.

Given that the range of vessels is from VLGC to MGC, with a required fully loaded draft ranging from 9 to 12 meters (approximately 29.5 to 43 feet), the only location subject to the environmental zoning overlay within the City of Portland suitable for propane export is Terminal 6.

The attached NOAA Navigation Chart for the Port of Portland (Chart 18526, last corrected 12/23/2014), is labeled as "Areas 30 feet or Deeper" or "Areas 29 feet or Shallower".

More specifically, any location on the Oregon Slough upstream of Terminal 6 is too shallow to accommodate a suitable propane export vessel. Any location on the main stem of the Columbia River upstream of the BNSF rail bridge and the Vancouver Upper Turning Basin is also too shallow to accommodate a suitable propane export vessel.

Any of the 22 lots referenced in the ESEE analysis zoned IH on the Columbia River that could have a river-dependent industrial use would not be suitable for a propane export facility due to the lack of sufficient river depth to accommodate suitable vessels.



February 9, 2015

VIA EMAIL

Andre Baugh, Chair Portland Planning and Sustainability Commission 1900 SW Fourth Avenue, Suite 7000 Portland, OR 97201

Re: Review of Terminal 6 Waterfront Site

Dear Chair Baugh:

This letter is in response to the Portland Planning and Sustainability Commission's request that there be an independent assessment of alternative industrial uses for the 61 acre waterfront site (40 net acres) that is being proposed for a propane export facility in Rivergate adjacent to Terminal 6. The purpose is to evaluate whether there are potential uses that might create more jobs per acre than the proposed facility. We have reviewed the site information, toured the area, and used our extensive development experience in responding to your request. As you are aware, Trammell Crow Company has developed a broad array of office, industrial and retail buildings, including a number of buildings on Port of Portland properties. We are very familiar with Rivergate property, its infrastructure, and the marketplace.

Existing Uses

Rivergate is a highly successful industrial area within a submarket that is largely focused on warehouse/distribution, and marine and rail freight facilities. The land is zoned for heavy industrial uses. There is no viable market opportunity in this area for a stand-alone office or other uses with very high employment density. Manufacturing uses with a moderate number of employees, mainly food processing and light assembly, make up a small portion of the overall tenant base in Rivergate. Those uses, including Purdy Brush, Ajinimoto, Beall Trailers, and Oregon Metal Slitters, are located along the main streets (N. Lombard and N. Marine Drive) with good access for employees and product, including limited public transit. Warehouse/distribution facilities are the primary uses, with a relatively low number of employees given the amount of square footage of the buildings. These are highly mechanized and generate substantial heavy truck traffic.

Site Constraints

Although we would normally be intrigued by the availability of a 61 acre industrial site in Rivergate, this site has serious constraints to development of most industrial uses. Access by street is very difficult, the site is long and narrow, the waterfront location further narrows the property, and site visibility is lacking. Flood plain and environmental overlays limit development of the site to approximately 40 acres.

There is only one public street access – North Suttle Road- and that can best be described as unimproved. Any significant increase in traffic would force a full improvement of that street to define traffic lanes and driveways, support frequent heavy trucks, create positive storm drainage, and

improve rail crossings. It is unlikely that the existing industries along Suttle Road would initiate and pay for any upgrades. In addition to this, the street or a substantial driveway would have to be extended into the site. These access improvements would be a requirement not only to accommodate more employees, but to obtain financing for many industrial projects. We have not calculated the cost of necessary roadway improvements, but believe that it would make development of the site infeasible.

The shape of the site makes it impossible to build modern warehouse/distribution facilities, and smaller flex type buildings would require good site visibility from the street. Either of these uses would need good roadway access. For these reasons, we do not see any potential for developing industrial buildings on this site.

Opportunities

However, the site has excellent rail access, is filled above the 100 year flood plain, and all underground utilities are available. Uses that don't have frequent heavy vehicle traffic or a high volume of passenger vehicles might benefit from the site. Outside long-term storage, infrequent heavy equipment or auto auctions, contractor storage yards, or similar uses may or may not employ more workers than the proposed use. Traffic from such uses could trigger Suttle Road improvements if not limited or managed. Aggregate, concrete, or asphalt plants could fit on the site and would employ a number of operators and drivers, but the volume of heavy truck traffic might quickly overwhelm Suttle Road. Metal scrap yards, recycling facilities, and the like would be consistent with the current development of the Suttle Road area, but again access would be the constraint. Beyond these few uses that admittedly may not provide more employment or limit truck traffic, it is difficult to cite an appropriate example that exists in the Portland area.

In conclusion, it appears to us that the site is best suited for development that depends on rail and marine terminal access and that can function with limited roadway access. Improvement of the roadway to access the site would be, in our view, too expensive, and even with such improvements, the size, shape, and location of the property make it unsuitable for industrial buildings.

Please feel free to call me to discuss.

Sincerely,

Jules

Steve Wells Senior Managing Director

cc: Susan Anderson – City of Portland Tom Armstrong – City of Portland



805 SW Broadway Suite 700 Portland, Oregon 97205 t: 503.326.9000 f: 503.425.1006 www.capacitycommercial.com

February 10, 2015

Andre Baugh, Chair Portland Planning and Sustainability Commission 1900 SW Fourth Avenue, Suite 7000 Portland, OR 97201

Re: North Rivergate Industrial Land Spine Property Development Potential

Dear Chair Baugh and Planning and Sustainability Commission Members:

This letter is in response to the January 13, 2015, Portland Planning and Sustainability Commission's request for an independent assessment of other industrial uses for the proposed propane export facility site. The site is a well located piece of industrial property. At just two miles from the Interstate 5 Marine Drive freeway interchange, it is very close to the major north/south west coast transportation route. The property is adjacent to the Columbia River and railroad tracks that serve the Port's Marine Terminals 5 and 6, as well as Rivergate Industrial District rail users. The land is mostly flat with good street access for most of the way from the freeway to the site. However, the last leg of the trip on N. Suttle Road from the freeway to the site is challenging, as are many other characteristics of the site for classic industrial building development.

Due to the long, narrow configuration of the site and lack of depth, only small buildings dispersed along the total length of the spine are feasible. These challenging site development characteristics are detailed below and in the attached potential development concept for the site:

Poor Access

Access is via N. Suttle Road, a poorly maintained road with very dated buildings and heavy industrial businesses. The existing rail road track restricts any alternate site access. It is not a preferred or attractive access road companies want for investment, employees or customers traveling to their new building. Further, the road necks down at the Marine Drive overpass, probably adding additional costs to constructing an access road.

<u>Hidden</u>

Excepting the Suttle Road single access point, the property is hidden from view by buildings and rail cars north of Marine Drive.

Wildlife Issues

While the property fronts the scenic slough, noise and lighting issues surrounding an industrial trucking operation force the back of the buildings to front the slough.

Poor Sight Lines

The view south from the property is largely rail cars and backs of large warehouses.

Segregated Sites

Due to the varying depth of the site and wetland impact, the buildable lots are spread throughout the parcel, adding to costs.

Warehouse Image

Due to the entrance image and general sight lines, manufacturing companies and their financial partners are not going to want to invest at this location. In addition, there is no available adjacent property to accommodate future expansion. Any development at this site will probably be for distribution uses, assuming development cost hurdles can be overcome.

Poor Site Coverage

Because of the long configuration of the property, the 350,000 square foot of developable buildings on 40 net acres results in only a 20% Site Coverage Ratio. Industrial development requires a 40% site coverage ratio to be economically viable and pay market rates for the raw land.

Road Construction

A roadway of 1¼ miles (6,600 feet) would need to be constructed from the end of Suttle Road to the west end of the site at a cost of approximately \$5,000,000. The extraordinary development costs results in a property acquisition and development that are financially infeasible. Obtaining financing for the significant capital required to develop this site would be very difficult.

Small Buildings

Due to the long, narrow site configuration, only small buildings can be constructed on the site. These building are very expensive because they cannot benefit from the economies of scale for typical large industrial buildings. For the half dozen buildings currently under construction in the Columbia Corridor, the smallest building is around 200,000 square feet due to the economies of scale required to justify construction. The estimated value of the improvements, above the value of the land, would be around \$27,000,000.

Based on my assessment of the site, grounded in over 25 (resume attached) years as an industrial broker, the development potential of this site is very limited. The economics simply do not pencil with the net developable acres and the aggregated development costs. Assuming development costs and access issues can be overcome, build out for a distribution use would be the most likely market-based development.

In contrast, the proposed Pembina facility offers the potential for the City to capitalize on the unique combination of rail access, deep-water dock, and a very challenging industrial site to realize the tax benefit of a \$500,000,000 investment, along with the skilled laborers to construct the facility, and 40 good paying jobs.

I strongly recommend pursuing the marine-dependent propane terminal opportunity at this property.

Sincerely,

Mark Childs Senior Vice President Capacity Commercial Group

Attachment

- Development Map
- Resume

cc: Susan Anderson, Portland Bureau of Planning and Sustainability

MARK CHILDS, SIOR	Capacity Commercial Group 805 SW Broadway, Suite 700 Portland, OR 97205	Phone: 513.542.435U Fax: 503.425.1006 Email: markc@capacitycommercial.com POSITIONS HFI D	Contemporation of the second s Second second sec	Integrated Corporate Property Services- Founder/President Real estate brokerage services Industrial facility design Relocation/Relayout project management	Grubb & Ellis- Associate Broker Senior Marketing Consultant Top Producer Member- Red Tie Club Rookie of the Year	Cook- Newhouse & Associates- Principal Managed 15 person engineering arm of A/E Company Project Manager of 260,000 SF Microsoft project Project Manager of 1,000,000+ SF of Boeing projects	Tektronix- Production Manager/Senior Industrial Engineer Installed MAS II MRP system module Managed 12 master schedulers/production planners Designed 250,000 SF warehouse layout Provided general manufacturing engineering services	Bachelor of Science: Industrial Engineering Oregon State University, Corvallis, OR	Masters In Business Administration Portland State University, Portland, OR Real Estate Broker- State of Oregon Real Estate Broker- State of Washington
MARI	apacity C 05 SW Bro ortland, 0	Phone: 503.542.43 Fax: 503.425.1006 Email: markc@cap POSITIONS HFLD	2009-Present	1994-2009	.989-1994	1984-1989	1978-1983	EDUCATION 1978	1982 LICENSES
									CAPACITY COMMERCIAL GROUP
	PARTIAL CLIENT LIST Americold ARAMARK	boeing Bridgestone/Firestone Credence Electric Lightwave, Inc.	FEI Company Freightliner Corp. Fujitsu Computer Products	Gresham Transfer Gresham Transfer Household Finance Corporation Infocus Corporation	Johnstone Supply Microsoft Mitsubishi Silicon Multifoods	Oregon International Airfreight Oregon State University Pixelworks	Quadrant Precision Manufacturing R.R. Donnelly Company Roadmaster Seattle Coffee Company Solectron	Sun Microsystems Teeny Foods Tektronix, Inc. Trailblazer Foods	Triad Speakers Westinghouse Widmer Brewing Xerox

	Mark Childs Profile	Mark Childs is a Senior Vice President at Capacity Commercial Group. Previous to Capacity, Mr. Childs founded Integrated Facility Services in 1994 which evolution and more date form ICBC Mr. Childs' forms in a Industrial/	High Tech clients, using his rate back ground to assist his clients with their total territies of the second to assist his clients with their total ferrities of the provided to the tech second to assist his clients with their total material assists and the second to assist his clients with the	lacinities solutions. Frevious to starting integrated racinity services, mark joined the Portland office of Grubb and Ellis in the late '80's, where he was rookie of the wear and left as the ton producer in the office	Mark Childs is a 5th generation Oregonian, having attended Marshall	High School, obtained an Industrial Engineering Degree from Oregon State, and a Masters in Business Administration from Portland State. Mark has also	been Certified at the Fellow Level in Production and Inventory Control and been registered as a Professional Engineer, plus was an Inaugural Year inductee into	the Academy of Distinguished Engineers in the Conege of Engineering at Uregon State University.	Mark's career includes working at Tektronix as a Senior Industrial	Engineer and Production Planning Manager, and consulting nationally in the field of manufacturing and distribution mechanization and automation as a Partner	in the architectural/engineering firm of Cook Newhouse and Associates. As a	Manufacturing consultant, mark worked with Conjipames such as poeing, which sold. Abbot Labs, and General Mills to improve their productivity and operations.	Mark has been recognized by the Portland Commercial Association of	Realtors as a Top Producer. Furthermore, Mark has won National Awards for largest High Tech deals in the CORFAC Network.	Mark's interests include spending time with his wife and three kids, inclusion to the horizon locates of the second secon	involvement with reductioning at criterich, reduing critish e work business reduct groups, plus taking time for golfing, water skiing, snow skiing, hockey, and classic	muscle cars.			AT OF O	
C.s		Ortohar 18 1908	January 2, 1996		May 9th, 1985*	March 22nd, 1985*	September 30, 1983*														
MARK CHILDS, SIOR	AWARDS AND CERTIFICATES	College Of Engineering Oregon Stater Award Academy of Distinguished Engineers	Society of Industrial and Office Realtors	The American Production and Inventory Control Society Certified at the fellow level in		 Licensed Professional Engineer Industrial Engineering 	 Institute of Industrial Engineers Senior Member 	*- Expired		COMMUNITY INVOLVEMENT	President of the Board	birch Community Services Providing food to 10,000 people on a weekly basis	 Member 	Oregon Association of Realtors National Association of Industrial & Office Parks	Portland Business Alliance Columbia River Economic Development Council	Activities	Christ @ Work Business Group Leader	COMMUNICATION OF LACCULIVE LEGALESSIND TEAM		aad	









NOTES:

GROSS SITE ACRES EAST SIDE 22.3 ACRES & WEST SIDE 32.5 ACRES TOTAL GROSS ACRES-54.8 ACRES

NET ACRES (LESS FLOODPLAIN AND ENVIRONMENTAL ZONE) EAST SIDE 21.9 ACRES WEST SIDE 18.8 ACRES TOTAL NET =40.7 ACRES

TERMINAL 6 ACCESS ROAD FROM UNIMPROVED SUTTLE ROAD TO WEST PORTION OF SITE APPROXIMATELY 5,500 LINEAR FEET.

FULL STREET PUBLIC STREET IMPROVEMENTS SUTTLE ROAD 550 FEET

ALL PUBLIC UTILITIES SANITARY SEWER AND WATER LOCATED IN MARINE DRIVE 900 FEET SOUTH OF THE SITE.

February 9, 2015

VIA EMAIL

Andre Baugh, Chair Portland Planning and Sustainability Commission 1900 SW Fourth Avenue, Suite 7000 Portland, OR 97201

Re: Review of Terminal 6 Waterfront Site

Dear Chair Baugh:

This letter is in response to the Portland Planning and Sustainability Commission's request that there be an independent assessment of alternative industrial uses for the 61 acre waterfront site (40 net acres) that is being proposed for a propane export facility in Rivergate adjacent to Terminal 6. The purpose is to evaluate whether there are potential uses that might create more jobs per acre than the proposed facility. We have reviewed the site information, toured the area, and used our extensive development experience in responding to your request. As you are aware, Trammell Crow Company has developed a broad array of office, industrial and retail buildings, including a number of buildings on Port of Portland properties. We are very familiar with Rivergate property, its infrastructure, and the marketplace.

Existing Uses

Rivergate is a highly successful industrial area within a submarket that is largely focused on warehouse/distribution, and marine and rail freight facilities. The land is zoned for heavy industrial uses. There is no viable market opportunity in this area for a stand-alone office or other uses with very high employment density. Manufacturing uses with a moderate number of employees, mainly food processing and light assembly, make up a small portion of the overall tenant base in Rivergate. Those uses, including Purdy Brush, Ajinimoto, Beall Trailers, and Oregon Metal Slitters, are located along the main streets (N. Lombard and N. Marine Drive) with good access for employees and product, including limited public transit. Warehouse/distribution facilities are the primary uses, with a relatively low number of employees given the amount of square footage of the buildings. These are highly mechanized and generate substantial heavy truck traffic.

Site Constraints

Although we would normally be intrigued by the availability of a 61 acre industrial site in Rivergate, this site has serious constraints to development of most industrial uses. Access by street is very difficult, the site is long and narrow, the waterfront location further narrows the property, and site visibility is lacking. Flood plain and environmental overlays limit development of the site to approximately 40 acres.

There is only one public street access – North Suttle Road- and that can best be described as unimproved. Any significant increase in traffic would force a full improvement of that street to define traffic lanes and driveways, support frequent heavy trucks, create positive storm drainage, and

improve rail crossings. It is unlikely that the existing industries along Suttle Road would initiate and pay for any upgrades. In addition to this, the street or a substantial driveway would have to be extended into the site. These access improvements would be a requirement not only to accommodate more employees, but to obtain financing for many industrial projects. We have not calculated the cost of necessary roadway improvements, but believe that it would make development of the site infeasible.

The shape of the site makes it impossible to build modern warehouse/distribution facilities, and smaller flex type buildings would require good site visibility from the street. Either of these uses would need good roadway access. For these reasons, we do not see any potential for developing industrial buildings on this site.

Opportunities

However, the site has excellent rail access, is filled above the 100 year flood plain, and all underground utilities are available. Uses that don't have frequent heavy vehicle traffic or a high volume of passenger vehicles might benefit from the site. Outside long-term storage, infrequent heavy equipment or auto auctions, contractor storage yards, or similar uses may or may not employ more workers than the proposed use. Traffic from such uses could trigger Suttle Road improvements if not limited or managed. Aggregate, concrete, or asphalt plants could fit on the site and would employ a number of operators and drivers, but the volume of heavy truck traffic might quickly overwhelm Suttle Road. Metal scrap yards, recycling facilities, and the like would be consistent with the current development of the Suttle Road area, but again access would be the constraint. Beyond these few uses that admittedly may not provide more employment or limit truck traffic, it is difficult to cite an appropriate example that exists in the Portland area.

In conclusion, it appears to us that the site is best suited for development that depends on rail and marine terminal access and that can function with limited roadway access. Improvement of the roadway to access the site would be, in our view, too expensive, and even with such improvements, the size, shape, and location of the property make it unsuitable for industrial buildings.

Please feel free to call me to discuss.

Sincerely,

Jules

Steve Wells Senior Managing Director

cc: Susan Anderson – City of Portland Tom Armstrong – City of Portland