Via Email – D13-SMB-D13-BRIDGES@USCG.MIL

April 24, 2022

B.J. Harris, Commander
Thirteenth Coast Guard District
915 2nd Avenue, Room 3510
Seattle, WA

RE: Columbia Business Center – Vancouver, Washington

Dear Commander Harris:

Thank you for the opportunity and solicitation of comments related to navigation on the Columbia River from maritime stakeholders. We understand that the solicitation specifically focuses on maritime stakeholders with current and or future vertical navigation clearance requirements of greater than 116 feet (air draft and air gap). Columbia Business Center is a maritime transportation system stakeholder, as the primary facility upstream of the Interstate Bridge Replacement project that has utilized and relied on the existing 178' vertical navigation clearance for 80 years. If the Interstate Bridge Replacement vertical navigation clearance were lowered to 116 feet it would permanently, materially adversely impact the viability of Columbia Business Center for existing and future uses, in particular, heavy manufacturing in multiple existing and future industries related to national security, climate change, energy and critical regional and national infrastructure. The negative impacts to the local and regional economy would be substantial, as evidenced by recent lease extension negotiations in which some of our tenants required lease termination rights if the bridge vertical navigation clearance was materially reduced. Columbia Business Center is not able to be "relocated" to address the deleterious effects that would be caused by a 32% reduction in vertical navigation clearance as proposed for the Interstate Bridge Replacement. Nor are their alternative navigation routes available that can provide navigational access to Columbia Business Center for vessels and cargos having air draft requirements of greater than 116 feet. Replacing the I-5 bridge over the Columbia River with a bridge with a height of only 116', with an expected useful life spanning decades, will unreasonably obstruct navigation necessary for the passage of ever larger ships and larger structures that could otherwise be manufactured at our facility.

Description of Columbia Business Center

Columbia Business Center ("CBC") is one of the largest and most unique, privately owned industrial facilities on the West Coast, with over 220 acres of waterfront property housing two million square feet of outside storage/laydown/fabrication space, rail services, barge/water access and 2.4 million square feet of building space in 27 buildings that are home to more than 100 tenants.

With an ideal location along the Columbia River, CBC's reputation as a vital business center for manufacturing was established in early 1942, when the Kaiser shipyard launched the first of the more than 140 ships constructed for the United States Navy during World War II from what is now CBC's facility. At the peak of operations over 38,000 people were employed here, effectively tripling the population of Vancouver, which is why it is still affectionately referred to locally as "the Kaiser Shipyard". Blending vintage buildings with new is part of the unique character of Columbia Business Center, enabling it to suit a diverse range of manufacturing businesses from heavy manufacturers and other related and supporting enterprises to beverage distributors and electrical contractors.

The same reasons that Columbia Business Center's location was chosen for Kaiser Shipyard's heavy manufacturing facility make it an unmatched and irreplaceable facility for multiple categories of existing and future, large scale, high value projects. The versatility and scale of CBC is unmatched on the West Coast as many high-bay, specialized buildings are rail-served by a BNSF main-line and larger projects can be fabricated in specialized buildings and expansive outdoor laydown/fabrication space and then loaded out on the Columbia River by way of the active barge slip to local, regional, and international destinations. CBC is strategically located on the Columbia River waterway connected to the Pacific Ocean, off Highway 14 and minutes away from both the I-5 and I-205 freeways, with shopping, restaurants, walking trails and many other amenities at Columbia Business Center's doorstep. CBC's dynamic history, location and facilities contribute to its vibrant tenant base centered around heavy industry and a high occupancy rate.

Location

CBC is geographically located in a one-of-a-kind location in the Pacific Northwest and on the West Coast. Key locational attributes, which combine to create this unique industrial node include:

- 6,200 lineal feet of Columbia River shoreline, with direct marine connection access to national and international waterways via two heavy duty barge slips and in-water piers;
- Less than one mile from Interstate 5, minutes from Interstate 205 and directly connected to the primary east-west highway in Clark County (State Route 14);
- CBC is located adjacent to Burlington Northern Santa Fe's mainline. The mainline is serviced by a direct spur access and is less than three miles from the Vancouver Rail Yard;
- Portland Airport, downtown Vancouver, downtown Portland, Port of Vancouver and Port of Portland are all located within a fifteen-mile radius;
- Business (38,000 in a ten-mile radius) and residential densities are generally much higher around CBC compared to other industrial parks in the greater Vancouver/Portland region, making businesses more convenient to customers, suppliers and employees;
- Being located in Vancouver, Washington also provides a business-friendly competitive advantage in an increasingly competitive global economy, such as: no state corporate or personal income tax, a talented workforce with low labor costs compared to other West Coast locations, lower business costs such as property taxes and utility costs, and a cost of living that is among the lowest on the West Coast.

Amenities

CBC has countless amenities on-site that combine to create efficiencies, collaboration, and large-scale fabrication. With two million square feet of outside storage space adjacent to buildings, rail and barge slips, CBC accommodates staging, fabrication and assembly, storage and parking needs. Over 1,800 parking spaces and outside storage permit varying requirements, and large-scale project surges of employment. On-site businesses benefit from a card lock fueling station, commercial truck wash, truck scale, multi-carrier broadband/telecommunication infrastructure and an on-site property management and engineering staff to provide fast, responsive business support.

Off-site amenities benefit businesses and employees with restaurants, hotels, shopping, parks, trails and civic pillars all within walking distance or a short drive.

Multi-Modal Transportation

CBC is unique in offering the full menu of transportation alternatives including barge, rail and third-party logistics to meet all types and sizes of inbound and outbound demands for moving products.

Columbia River access facilitates the movement of products which are too large to truck or ship by rail. On-site barge access accommodates river and ocean-going vessels up to 400 feet in length, and with air drafts up to 178 feet tall. Outside storage capacity near the barge slips allows for unprecedented scale outdoor fabrication/assembly, staging and storage. CBC's barge facilities are private and do-it-yourself in nature, eliminating red tape and outside controls and restrictions.

With a mainline connection to Burlington Northern Santa Fe's North American network, inputs and outputs for on-site businesses are efficiently accessible and delivered. Rail car delivery within CBC to many of the buildings is provided by a short-line provider who offers cost, efficiency and flexibility which would not be achievable with a national carrier, including; twice a day rail switching, lower demurrage, storage, inter-building switching and flexibility for unusual requests.

Buildings

The core of CBC over the past 80 years has been its capability to manufacture heavy, over-sized fabricated structures. With nearly 1 million square feet of heavy manufacturing space, combined with the rare combination of amenities above, CBC has accommodated construction of naval warships, yachts, oil rigs, bridge and dam components, and mass transit infrastructure. Dating back to its origins as a Kaiser shipyard and continuing to this day, the facilities at CBC allowed for prefabrication and special construction methods to efficiently produce products key to US national security and infrastructure. What makes this possible?

- High bay buildings with up to 50' of clearance and clear spans of 72'.
- Heavy duty steel structures, crane served up to 25 tons.
- Heavy duty power infrastructure.
- Scale of building size and quantity to allow for multiple contractors and/or subcontractors to collaborate on all scale of projects.
- Rail connected to buildings.
- Outside storage adjacency for material staging, component staging and assembly, and large-scale fabrication requiring clear heights over 50'.
- Proximity and connectivity to marine transportation accommodating over-sized barges and air drafts of up to 178'.
- Pro-active, well-capitalized ownership that continues to invest in the buildings and facilites to ensure that they arefit to purpose for today and tomorrow's heavy manufacturing needs.

Past, Current and Future Navigation Requirements

Columbia Business Center has housed many occupants and industries in the past and currently houses over 100 tenants. CBC will undoubtedly continue to have occupants in the future who rely on maritime navigational access to the CBC facility. Whether the first occupant, Kaiser Shipyards; current tenants such as Greenberry Industrial, JT Marine, Thompson Metal Fab, or Vigor Industrial; or future tenants, it has always been the case that the vertical navigation clearance requirements of 178 feet under the Interstate 5 bridge have been critical to deliver products to and from markets. In the remainder of this

section, several of these industries are discussed relative to their existing and/or future occupancy, vertical navigation clearance requirements, and operation at Columbia Business Center.

Energy – Oil/Gas

CBC is an ideal facility for the fabrication and delivery of key infrastructure for some of the world's largest oil and gas companies. Given the current and projected growth in the oil and gas industry, this trend is expected to accelerate and continue for the foreseeable future.

Past and Current Use

CBC is uniquely suited for the fabrication of over-sized oil and gas projects as one of the few facilities in the United States that has and continues to house, multiple producers in this industry. CBC has the largest clustering of these heavy manufacturing prime suppliers and producers in the United States (current tenants include Thompson Metal Fab – www.tmfab.com , Greenberry Industrial – www.greenberry.com , and Vigor – www.vigor.net), and often times they will collaborate on a project. As an example, CBC was the facility at which the largest land-based oil rig was constructed (at the time in 2011), and shipped via barge to the North slope of Alaska. This project would not have been possible without key elements at CBC, including but not limited to: co-location of general and sub-contractors on-site for efficient procurement (painting, mechanical/plumbing, electrical, etc.) and execution; specialized buildings and infrastructure (including over-sized clear height, bridge crane capability, climate controlled space); laydown and rig-up yard of over 12 acres for testing and assembly prior to shipment; roll on, over-sized 3,500 ton capacity barge slip for delivery of products that are not able to be delivered via other means of transportation due to size constraints. The shipment of this project required vertical navigation clearance of 161 feet (141 feet air draft and 20-foot air gap) on a 400 foot long ocean going barge whose free-board varied from 20-28 feet.

Future

By enabling the competitive, efficient provisioning of large-scale oil and gas related infrastructure, CBC will continue to play a central role in ensuring energy security for the United States for the foreseeable future. The oil and gas industry is forecast to continue to grow significantly in both the short and long term, with surging demand due to continued exponential worldwide population growth and associated hydrocarbon use in power generation, transportation, manufacturing, and many other essential industries. In the immediate term, "US land oil & gas operators report plans to drill 19.9% more wells in 2022 versus 2021 and Canadian oil & gas operators report plans to drill 33% more wells. Oil and gas operators worldwide report plans to increase the number of wells drilled in 2022 by 14.2% in response to growing demand and improved oil prices…Oil and gas demand is expected to continue to increase over the next ten years and additional investment in the industry will be required to meet global demand."[1] In the near term, "the global offshore drilling market size is slated to reach USD 56.97 billion by 2026, exhibiting a CAGR of 7.9% during the forecast period. Surging demand for electricity worldwide is expected to drive the growth of this market."[2] For the longer term forecast through 2050, "Oil and

[1] Kimberlite International Oilfield Research (July 23, 2021). *US Land Drilling to Increase 19.9% in 2022.* https://www.kimberliteresearch.com/single-post/us-land-drilling-to-increase-19-9-in-2022

[2] Fortune Business Insights (October 6, 2021). *Offshore Drilling Market to Rise at 7.9% CAGR till 2026; Increasing Demand for Hydrocarbons Worldwide to Prove Beneficial for the Market.* https://www.globenewswire.com/news-

gas will play a very important role in the energy mix throughout our forecasting period. Although we expect renewable energy sources to take an increasing share of this mix, we forecast oil and gas to account for 44% of the world's primary energy supply in 2050, down from 53% today. Investment will be needed to add new oil and gas production capacity, and to operate existing assets safely and sustainably over this period to deliver output levels that can meet predicted demand."[3] With energy security as a primary focus of federal policy, the future of continued robust domestic investment in hydrocarbon supply and capacity is assured. Also, oil rigs are growing in dimensions in response to new technologies such as direction drilling in oil fields.

With nine of the 10 tallest oil platforms[4] being fabricated in the United States, and with the manufacturing trends referenced herein, including pre-fabrication, on-shoring and scale efficiency, CBC's location and over-size facility capabilities will continue for decades to come to enable the provisioning of key hydrocarbon infrastructure to serve this future growth. As evidenced by past shipments from CBC for this industry, and given the trend for larger oil rigs, beam widths of up to 200 feet or more and required air drafts in excess of 150 feet will be required in the future.

Energy – Wind

Since CBC has proven to be well-suited for heavy fabricators that have or are actively pursuing projects related to alternative energy sources, in particular wind energy, given the forecasted exponential growth in this industry, wind energy projects are a prime area for future production at CBC.

Past and Current Use

CBC is uniquely suited for the delivery of large-scale wind energy projects. Some of the heavy manufacturing cluster businesses at CBC have already entered this burgeoning industry (ie. https://vigor.net/services/emerging-clean-energy-technology), and others are currently pursuing this energy segment. This would be not be possible without the locational and physical attributes that CBC includes, such as: co-location of general and sub-contractors on-site for efficient procurement (painting, mechanical/plumbing, electrical, etc.) collaboration and execution; specialized buildings and infrastructure (including over-sized clear height, bridge crane capability, climate controlled space); laydown and rig-up yard of over 12 acres for testing and assembly prior to shipment; roll on, over-sized capacity barge slip for delivery of products that are not able to be delivered via other means of transportation due to size constraints. As stated by the Global Wind Energy Council this year, "With floating offshore wind now ready to scale, we have the opportunity to grow offshore wind in many more markets. We can also couple existing maritime and petrochemical expertise in these markets and help to transition this into low carbon technology like floating offshore wind...floating offshore wind can benefit from oil and gas expertise in foundation construction and skills in delivering huge engineering

release/2021/10/06/2309297/0/en/Offshore-Drilling-Market-to-Rise-at-7-9-CAGR-till-2026-Increasing-Demand-for-Hydrocarbons-Worldwide-to-Prove-Beneficial-for-the-Market-Fortune-Business-Insights.html

[3] DNV GL (2017). *Oil and Gas Forecast to 2050. https://www.ourenergypolicy.org/wp-content/uploads/2017/09/DNV-GL_Energy-Transistion-Outlook-2017_oil-gas_lowres-single_3108_3.pdf*

[4] https://en.wikipedia.org/wiki/List_of_tallest_oil_platforms

projects in deep water locations."[5] With CBC's history of maritime and petrochemical focus and companies associated therewith, this trend is already playing out at CBC.

Future

To illustrate the exponential growth anticipated in this clean energy segment, the International Energy Association roadmap calls for offshore wind annual installations to increase 13-fold from 2020 to 2030, with installed capacity growing to 2,000 gigawatts by 2050 to meet its 1.5 degree Celsius scenario.[6] The White House has a recently stated goal of deploying 30 gigawatts of offshore wind by 2030, which would be enough energy to power 10.43 million homes. Today, the United States only has a few offshore wind turbines located on the East Coast. As national climate adviser, Gina McCarthy stated, "It's an announcement that will set the stage for the long-term development of clean energy and the growth of a brand-new, made-in-America industry. Now we are thinking big and bold." According to the White House, these wind farm facilities will create tens of thousands of jobs in fields of renewable energy installers, steelworkers, and manufacturers.[7]

The West Coast is seen as key to the attainment of these off-shore wind energy goals and objectives (especially given West Coast states' ambitious greenhouse gas emission reduction goals), as the deep waters have the potential to produce a significant amount of energy. The Global Wind Energy Council identified the US Pacific Coast as one of the top five markets in the world with the right conditions to emerge quickly as a strong floating wind market.[8] The US Department of Energy's recent research and development publication, titled Wind Manufacturing and Supply Chain, concludes:

> "As the size and complexity of wind turbines grow, so do the manufacturing process requirements and component transportation costs which, in turn, increase the need for local manufacturers who can overcome technical and logistical challenges. Currently, the average utility-scale wind turbine contains roughly 8,000 parts, including blades up to 100 meters (over 300 feet) in length and towers over 80 meters (262 feet) high, roughly the height of the Statue of Liberty. New towers are being made even taller to capture stronger winds at higher elevations...As the demand for renewable energy increases and wind turbines are "scaled-up" to even larger sizes, American manufacturers must find ways to overcome infrastructure and logistics constraints to lower the cost of wind energy. These constraints include highway underpass heights limiting the size of wind towers, availability of cranes able to lift and install nacelles, and the trucking fleet's difficulty in transporting longer wind blades. A study released by the Energy Department, Enabling Wind Power Worldwide, concluded that the technological innovations enabling development of very large wind turbines have significant potential to

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[5] Global Wind Energy Council (March 2022). *Floating Offshore Wind – A Global Opportunity.* https://gwec.net/floating-offshore-wind-a-global-opportunity/

[6] Global Wind Energy Council (March 2022). *Floating Offshore Wind – A Global Opportunity.* https://gwec.net/floating-offshore-wind-a-global-opportunity/

[7] NPR (May 25, 2021). *Biden Administration Strikes A Deal To Bring Offshore Wind to California. https://www.npr.org/2021/05/25/1000210550/biden-administration-strikes-deal-to-bring-offshore-wind-to-california*

[8] Global Wind Energy Council (March 2022). *Floating Offshore Wind – A Global Opportunity.* https://gwec.net/floating-offshore-wind-a-global-opportunity/

reduce the cost of wind energy. However, transportation and logistics challenges are limiting the size and height of towers and turbines that can be deployed throughout the country."[9]

A WindFloat Atlantic project's floating structure completed nearly two years ago and constructed at shipyards measured 100 feet high and 165 feet wide.[10] With the industry pointing towards increasing the size of wind farm installations as necessary for reducing costs and enabling efficiency, it is anticipated that the floating platforms required for deep water installations will continue to increase in size. It is reasonable to assume that the size of such structures could be equal or greater in size than drill rig platforms and assemblies in the offshore oil industry, since they are able to be delivered and installed in deep water environments. Since the existing bridge's vertical navigation clearance of 178 feet has been critical to the preservation of capacity at Columbia Business Center for construction of structures for the oil and gas industry, it is safe to assume that wind energy structures will require similar vertical navigation clearance.

Further, the Global Wind Network, in an analysis prepared for the Department of Energy (U.S. Wind Energy Manufacturing and Supply Chain: A Competitive Analysis), concluded as key findings that the lowest logistics costs for wind tower production and offshore wind farms would be at locations that have water transport access and are close to the wind farms.[11] Columbia Business Center's location and facilities check all of the boxes for low-cost, efficient potential wind farm energy manufacturing with:

- Water transport access to the entire West Coast (identified and targeted as one of the top future wind producing areas in the world).
- Existing high air draft (178') for movement of large-scale wind energy infrastructure and projects.
- Specialized heavy manufacturing buildings (clear heights, crane capacity, climate controlled, scale of manufacturing area)
- Voluminous outdoor assembly staging and storage with unlimited height capacity, with roll-on adjacency to barge access.
- Historic and current clustering of industry/tenants with heavy manufacturing experience in large scale project delivery in the same and related industries.

Columbia Business Center is poised to serve as a critical production facility for wind energy farms to meet urgent federal and state sustainability, energy independence and national security priorities.

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[9] Department of Energy. *Wind Manufacturing and Supply Chain.* https://www.energy.gov/eere/wind/wind-manufacturing-and-supply-chain#:~:text=The%20U.S.%20Department%20of%20Energy,competing%20in%20the%20global%20market.

[10] *The last platform of the world's first semi-submersible floating wind farm sets sail* (May 20, 2020). https://www.edpr.com/sites/edpr/files/2020-05/The%20last%20platform%20of%20the%20world%E2%80%99s%20first%20semi-submersible%20floating%20wind%20farm%20sets%20sail.pdf

[11] Global Wind Network (June 15, 2014). *U.S. Wind Energy Manufacturing and Supply Chain: A Competitive Analysis Prepared for: U.S. Department of Energy.* https://www.energy.gov/sites/default/files/2014/09/f18/U.S.%20Wind%20Energy%20Manufacturing%20and%20Supply%20Chain%20Competitiveness%20Analysis_0.pdf

Infrastructure

CBC has proven to be an ideal facility for the fabrication and delivery of key infrastructure for the US transportation system. Given the current and projected growth in this industry, this trend is expected to accelerate and continue for the foreseeable future.

Past and Current Use

Columbia Business Center has been and continues to be a center for production of large scale local, state and federal transportation facilities and infrastructure. Examples of such projects include bridges, dams, and public transit infrastructure. Construction of such projects would be not be possible without the locational and physical attributes that CBC includes, such as: the scale of buildings/size allow for the co-location of general and sub-contractors on-site for efficient procurement (painting, mechanical/plumbing, electrical, etc.) collaboration and execution; specialized buildings and infrastructure (including over-sized clear height, bridge crane capability, climate controlled space); laydown and assembly yard of over 12 acres for fabrication prior to shipment; roll on, over-sized capacity barge slip for delivery of products that are not able to be delivered via other means of transportation due to size constraints.

Future

Earlier this year the US Department of Transportation announced a historic bridge investment of over $27 billion with the approval of bi-partisan infrastructure law. U.S. Transportation Secretary Pete Buttigieg stated, "The Biden-Harris Administration is thrilled to launch this program to fix thousands of bridges across the country – the single largest dedicated bridge investment since the construction of the interstate highway system. Modernizing America's bridges will help improve safety, support economic growth, and make people's lives better in every part of the country – across rural, suburban, urban, and tribal communities."[12] Numerous publications by the Federal Highway Administration highlight the need and promote the bridge construction industry to strategically continue to focus on pre-fabrication of bridges and their components off-site as they can be assembled quickly, can reduce design time and cost, minimize forming, reduce lane closure time and/or possibly eliminate the need for a temporary bridge. One of the primary logistical challenges of pre-fabrication is transportation of such partially assembled or fully assembled bridge components as they become taller and heavier. With water access via roll-on barge infrastructure to the domestic market with 178' air draft clearance, CBC is uniquely suited to serve as an efficient production facility into the future to meet the strategic objectives of the historic investments in bridge and transportation infrastructure by the US Department of Transportation and the Federal Highway Administration.

Bulk Transportation

Columbia Business Center is an optimal location for bulk transportation of a variety of goods and services. Due to CBC's multi-modal connectivity to national marine, rail, and trucking corridors, industry is able to utilize the most efficient means for movement of goods as demands change.

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[12] U.S. Department of Transportation Federal Highway Administration (January 14, 2022). *DOT Announces Historic Bridge Investment Under Bipartisan Infrastructure Law. https://highways.dot.gov/newsroom/dot-announces-historic-bridge-investment-under-bipartisan-infrastructure-law*

Past and Current Use

Columbia Business Center was established nearly 80 years ago because of its location on the Columbia River (marine access), adjacency to a Burlington Northern mainline (rail service), and proximity and connectivity to Interstate 5 and Highway 14 (truck access). Expansive (2 million square feet) of outdoor storage and staging areas have allowed for container storage and materials staging adjacent to water, rail and truck access. In addition, with over 2.4 million square feet of building area (the majority of which is rail served) cross-loading, materials storage and re-packaging and value add can easily be accomplished. Often times due to the size and scale of CBC, tenants are working together to most efficiently execute on logistics of moving goods/products. A sampling of current tenant industries at CBC that rely on bulk transportation includes: wood products, commercial auto industry, steel supply, agricultural products.

Future

Although CBC has not in the past housed a container ship facility, it is possible that this use could make sense at CBC in the years ahead. CBC is attractive to users for water-based movement of goods and cargo due to its private operation and lack of union labor/longshoreman and restrictions. With the unprecedented demand and backlog currently being experienced at United States ports as an example, the future may hold opportunities for privately owned and managed facilities like CBC, with its proximity to deep water and multi-modal capacity. According to a case specific analysis by the International Transportation Forum:

> "Container ships are the work-horses of the globalized economy: although they represent only one eighth of the total world fleet they are essential for the transport of consumer goods around the world. Container ships have grown bigger at a rapid pace over the last decades, faster than any other ship type. In one decade, the average capacity of a container ship has doubled. The largest container ship at this moment can carry 19,200 containers, but ships with capacity of more than 21,000 containers have been ordered and will be operational in 2017. Larger container ships have generated cost savings for carriers, decreased maritime transport costs and as such facilitated global trade in the past. However, larger ships require adaptations of infrastructure, equipment and cause larger peaks in container traffic ports, with wide-ranging impacts."[13]

The largest container ships today can be over 1,200 feet long, over 160 foot beam, with air drafts on average of 174 feet. Communities both nationally and internationally have been paying close attention to air draft in particular as a governor for existing and future commerce. As is the case with the Talmadge Memorial Bridge in Savannah, Georgia (as stated by Griff Lynch the Georgia Port Authority's executive director), "We have a bridge that would prevent those (supersized) vessels from calling our ports. Ports around the world, and around the U.S. are fixing that problem today. They are building a

[13] International Transportation Forum (April 30, 2015). *The Impact of Mega-Ships. https://www.itf-oecd.org/sites/default/files/docs/15cspa_mega-ships.pdf*

bigger bridge. We need to do the same thing in Savannah."[14] Similar restrictions to air draft are becoming of more import across the world, as referenced in a recent Journal of Commerce article, "Container shipping stakeholders are pressing the Hong Kong government to adjust the air draft clearance restriction of an iconic Hong Kong suspension bridge, which they say is impacting calls by mega-vessels to the Shenzhen and Hong Kong cluster."[15] With the current air draft restriction for CBC being the I-5 bridge at 178', CBC's location could prove to be an ideal spot in the future for the current mid-size container ship.

Ship Building

CBC was originally constructed by Kaiser Shipyards for the manufacturing of Liberty ships for the US Navy, and such production of ships at or adjacent to Columbia Business Center continues to this day, and will continue for the foreseeable future.

Past and Current Use

Columbia Business Center was originally established to construct ships, due to its proximity to the navigable waters of the Columbia River and Pacific Ocean, and connectivity to other modes of transportation allowing for access to abundant resources. Numerous ship building and related industries have located at CBC since the 1940's and continue to utilize CBC's facilities for ship building today, such as Christensen Shipyards, J.T. Marine (www.jtmarineinc.com) and Vigor Industrial (www.vigor.net). Since it was constructed originally for fabricating large ships, CBC has all of the requisite specialized infrastructure and attributes to allow for this to occur, such as: water transport access nationally and internationally via the Columbia River and Pacific Ocean, 178 feet of vertical navigation clearance for all varieties and sizes of defense related private industry and luxury vessels, in-water capacity for dry docks and over-water crane, specialized heavy manufacturing buildings (clear heights, crane capacity, climate controlled, scale of manufacturing area), adjacent voluminous outdoor assembly staging and storage with unlimited height capacity, with roll-on adjacency to barge access. As an illustration of the importance of maintaining the existing vertical navigation air clearance, CBC tenant JT Marine has a vessel that matches the 178-foot clearance of the existing lift span.

Future

CBC will continue to be a core piece of the national hub in Vancouver, Washington for the ship building industry for the foreseeable future. CBC has continued to invest in its facilities to ensure that future defense and private sector business and individual ship manufacturing needs can be met at its location. One of CBC's tenants (Vigor) recently significantly expanded its presence and workforce to accommodate a 10 year US Army contract for landing craft. CBC has a long history of serving as a center for supplying ships for US national defense, and this trend is projected to continue for decades to come. In addition, CBC is likely to serve as a fabrication facility for other varieties of marine vessels used for all

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[14] Savannah Morning News (December 15, 2018). *Savannah's bridge: Growth could erase the Talmadge. https://www.savannahnow.com/story/news/2018/12/16/savannahs-bridge-growth-could-erase-talmadge/6611001007/*

[15] The Journal of Commerce (May 17, 2017). *Industry says Hong Kong bridge draft hurting mega-ship clearance. https://www.joc.com/port-news/asian-ports/port-hong-kong/industry-urges-hong-kong-lift-bridge-air-draft_20170517.html#:~:text=A%20study%20commissioned%20by%20the,challenges%20for%2018%2C000%2DTEU%20vessels.*

manner of commerce and private luxury. All varieties of ships are being built larger and larger to accommodate the changes and drive for efficiency in transportation, maintenance, in-water construction and other marine-related needs. In the luxury yacht market, "The market is telling us that yards are building bigger and bigger sheds to build bigger and bigger yachts."[16] CBC is uniquely suited to serve as an efficient production facility into the future to meet the strategic objectives of the US Department of Defense, and the needs of the ship building industry in many other categories. In order for this production capacity to continue to exist at Columbia Business Center, it is essential that the vertical navigation clearance of the existing I-5 bridge of 178 feet be maintained.

Heavy Manufacturing Trends

Some of the biggest trends in the construction and manufacturing industries have, and will continue to have, implications that are critical to the maintenance of the current air draft under the Interstate 5 bridge of 178', in order for Columbia Business Center's facilities to serve as the platform for production of goods and products that will serve to support the national security and core infrastructure for the US national economy.

First, there has been industry-wide growth and focus on pre-fabrication or off-site construction due to realized savings in time, money and improved quality control. This trend has, and will continue to impact, the heavy industry sectors and their ability to remain competitive. Fortunately, this trend is well-accommodated at CBC, as given its specialized combination of attributes and connection to the Columbia River with a 178' air draft capacity, larger pre-fabricated projects can be supplied to the local, regional and national markets.

Second, the ongoing importance, and permanence of reshoring has been recently highlighted by the COVID-19 pandemic. Major industries across the US will be more and more focused on working with local, regional and national purveyors for all elements of large and mega projects to better ensure quality, service and fulfillment certainty and speed. We anticipate this trend in manufacturing coupled with CBC's unique capacity (including marine access with a 178' air draft capacity) and location on the West Coast near its major markets will make it an attractive location for reshoring and economic growth.

Conclusion

At the peak of operations at CBC during World War II, over 38,000 people were employed on-site, effectively tripling the population of Vancouver at the time. Although the Portland/Vancouver area has grown significantly since that time, CBC has remained one of the single largest economic drivers in the region, and the largest privately owned industrial park on the West Coast. CBC accounts for approximately $2 billion in annual revenue and provides more than 3,300 jobs county-wide. Taken together CBC businesses directly and indirectly account for 5-6% of Clark County's annual economic output. Some other key economic metrics from CBC:

- Average salary of $80,100 (2019), a pay rate 60% above the rest of Clark County,
- Manufacturing represents 15% of the number of CBC firms, but accounts for an estimated 87%, of direct on-site business revenues and 51% of employment for the business center,

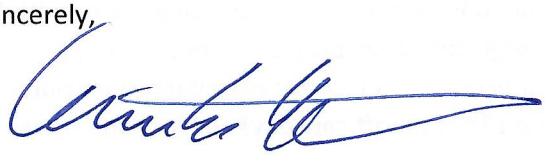
[16] CNN (November 25, 2021). *10 of the world's biggest superyachts. https://www.cnn.com/travel/article/worlds-biggest-superyachts/index.html*

- CBC businesses pay over $10 million/year in local and state taxes.[17]

Columbia Business Center has been a regional economic engine for the Pacific Northwest for 80 years, and its value as such has only increased with time due to the near impossibility of being able to find a comparable location that is properly zoned and could be entitled to accommodate all of the same infrastructure, amenities and connections to marine and rail corridors. Columbia Business Center will continue to be a center for heavy industrial manufacturing for the foreseeable future, as heavy industry will play an increasingly important role in the nation and global economy. Ownership has been investing millions of dollars on an annual basis to upgrade the facilities and maintain its functionality for today and far beyond, as evidenced by the continued high occupancy and retention rate of tenants. The City of Vancouver has a no net loss policy for industrial lands and a limited supply of heavy industrial zoned property, so CBC is protected as an industrial sanctuary from conversion to other uses (in addition all of the parcels at CBC have recorded covenants restricting future use for residential).

Columbia Business Center is a water dependent land use facility less than one mile upstream of the proposed Interstate Bridge Replacement. CBC would be a severely, permanently impacted marine stakeholder if the vertical navigation clearance were lowered to 116 feet. Both national and international examples substantiate that lowering the vertical navigation clearance of a bridge is contrary to past and current trends of navigation requirements and will unreasonably obstruct navigation necessary for the passage of larger vessels and transport of larger cargos. Given past, present, and future possible uses at Columbia Business Center we request that the current air draft capacity of 178' be maintained or increased.

Sincerely,



Lance E. Killian, Manager

Columbia Business Center

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[17] E.D. Hovee & Company, LLC (May 23, 2019). *Economic & Fiscal Benefits of Vancouver's Columbia Business Center*